

## Appendix A

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

Product Name: Tablet

Trade Mark: N/A

Test Model: HyTab Pro 10LA2

#### Environmental Conditions

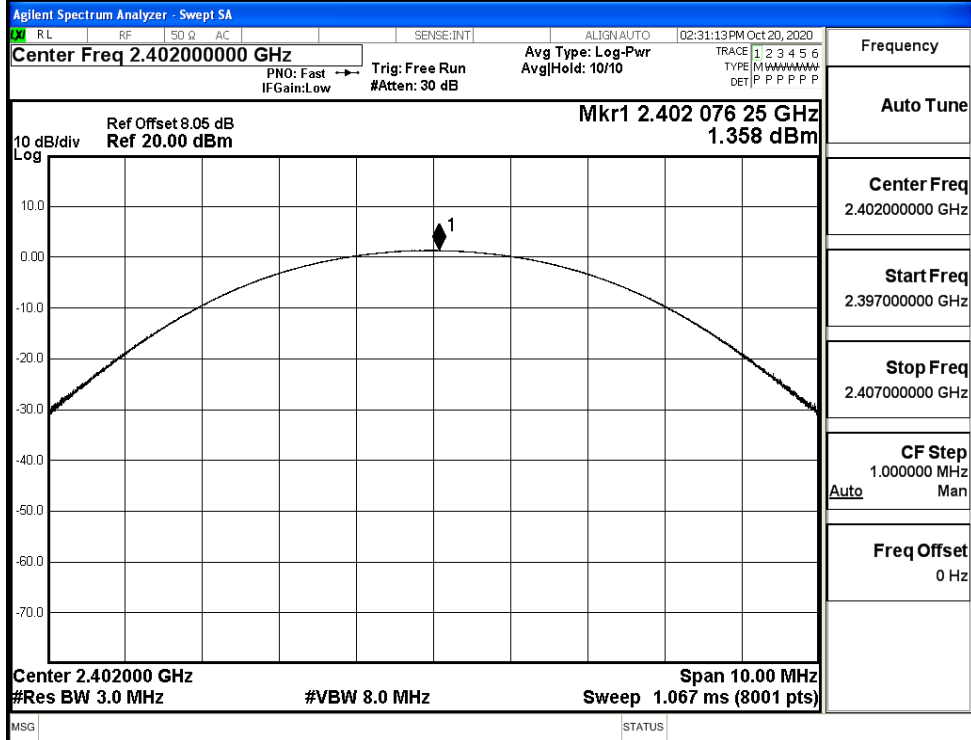
Temperature:	22.3° C
Relative Humidity:	54.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

#### A.1 Maxmum Conducted Peak Output Power

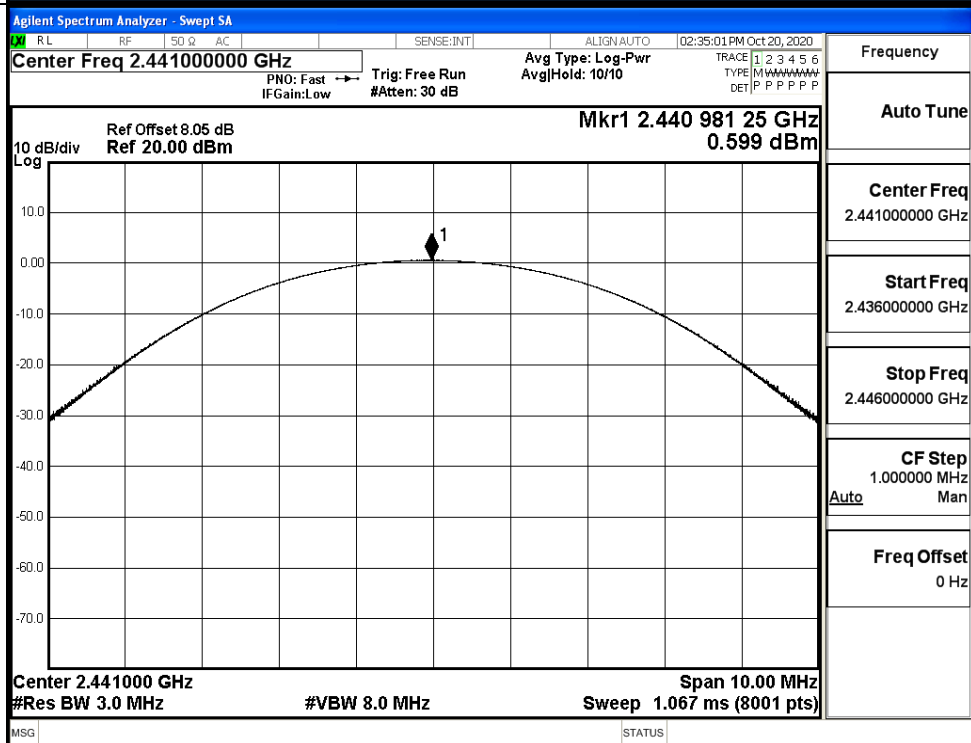
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	1.358	21	PASS
	MCH	0.599	21	PASS
	HCH	-0.854	21	PASS
$\pi/4$ DQPSK	LCH	1.226	21	PASS
	MCH	0.702	21	PASS
	HCH	-0.745	21	PASS
8DPSK	LCH	1.163	21	PASS
	MCH	0.767	21	PASS
	HCH	-0.802	21	PASS

Test Graphs

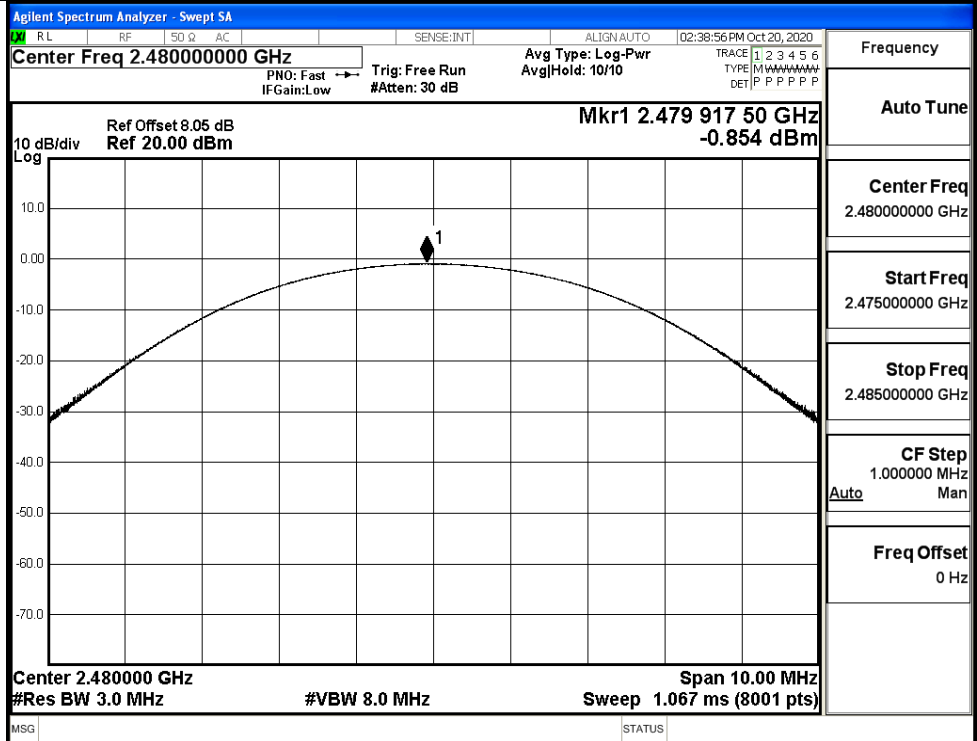
GFSK/LCH



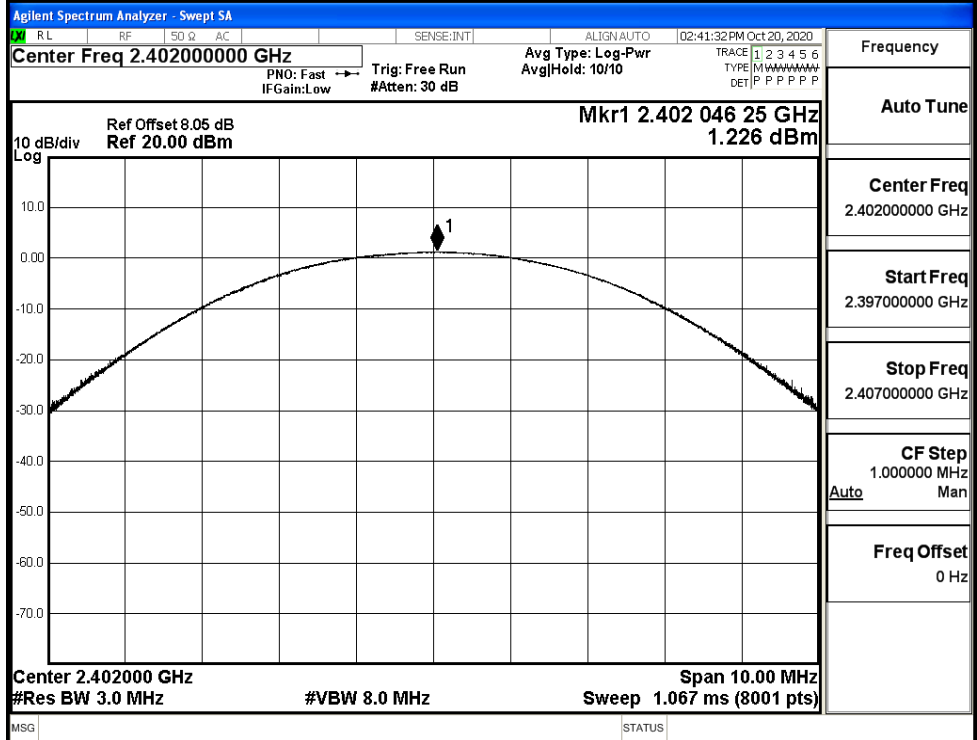
GFSK/MCH



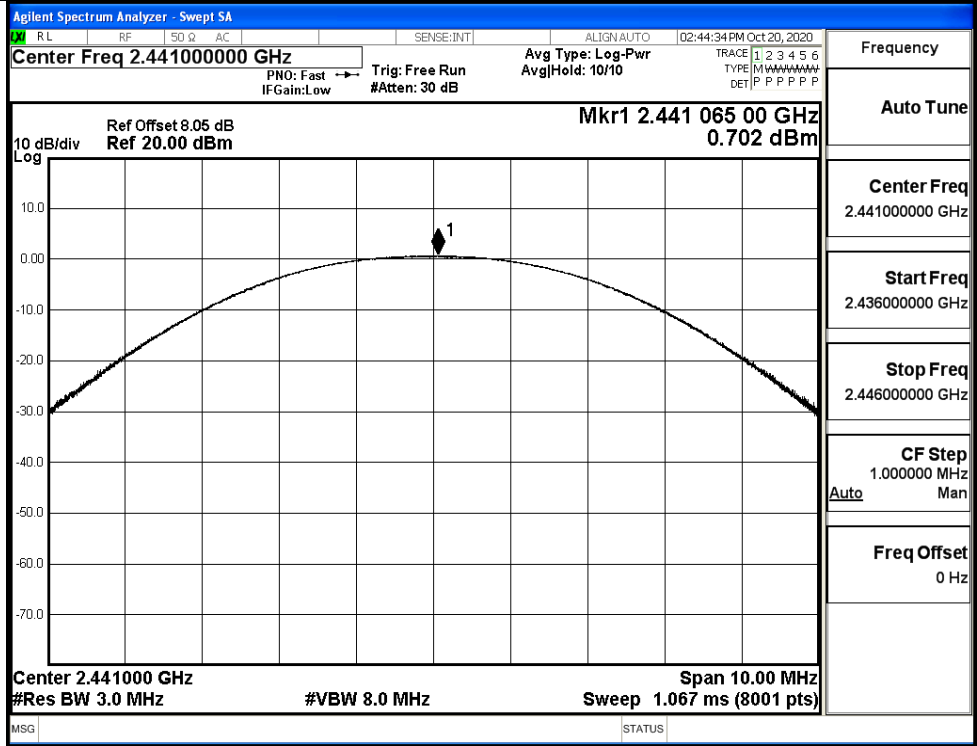
GFSK/HCH



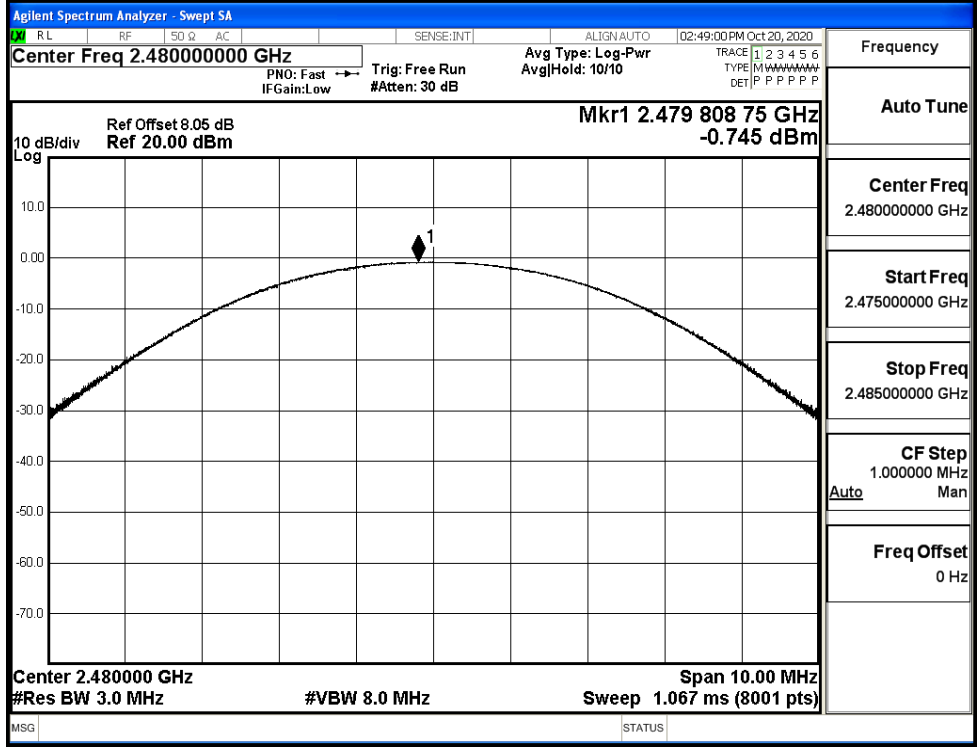
$\pi/4$ DQPSK/LCH



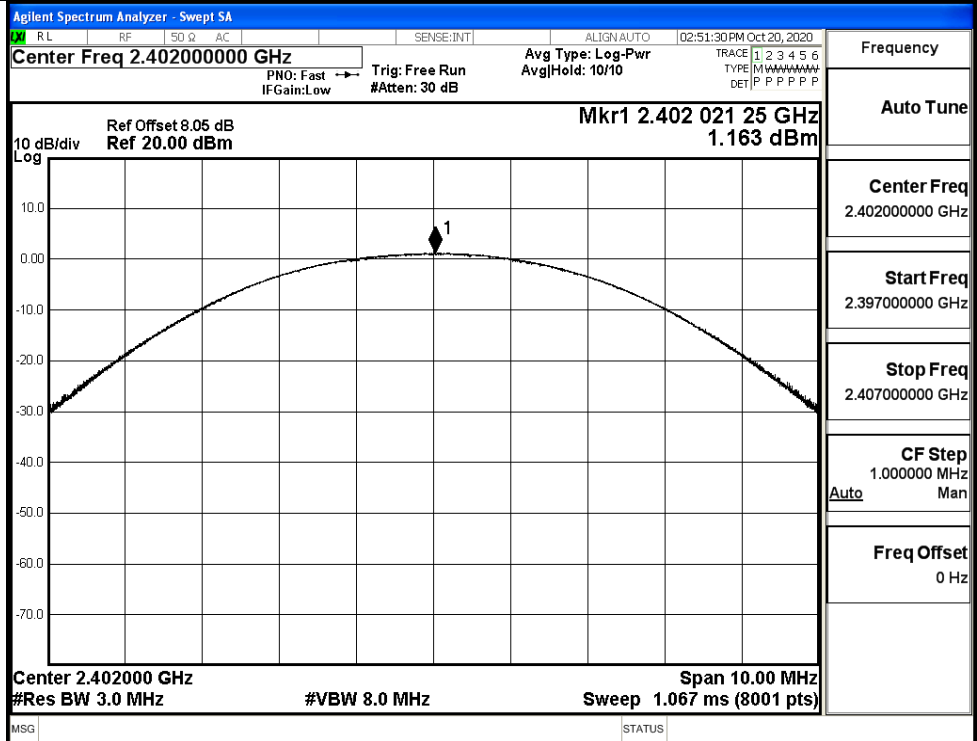
$\pi/4$ DQPSK/MCH



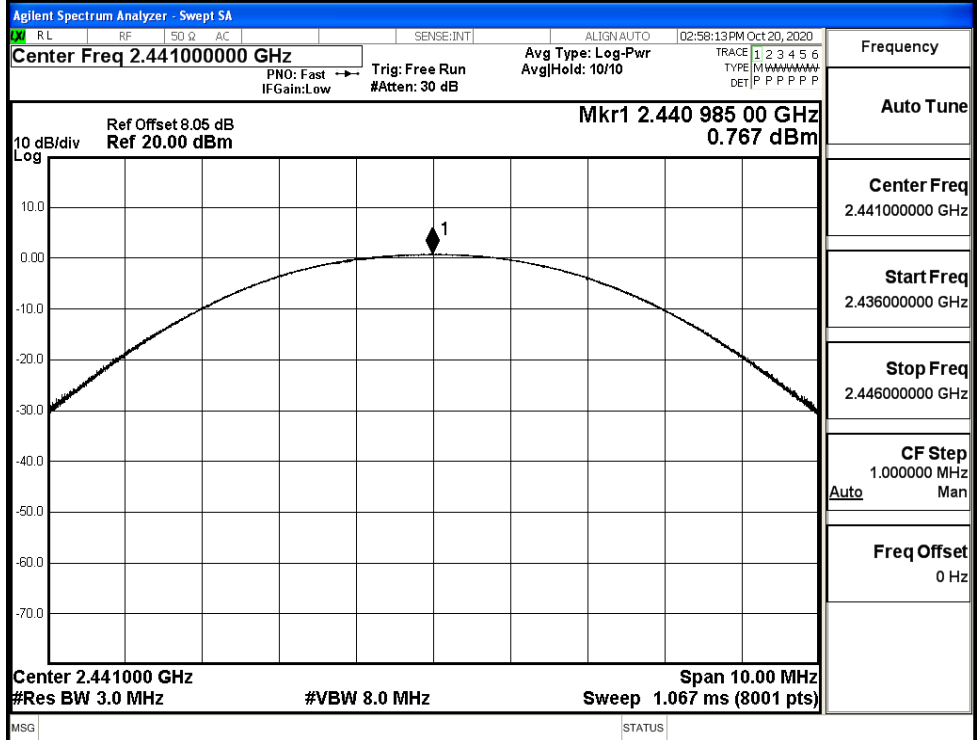
$\pi/4$ DQPSK/HCH



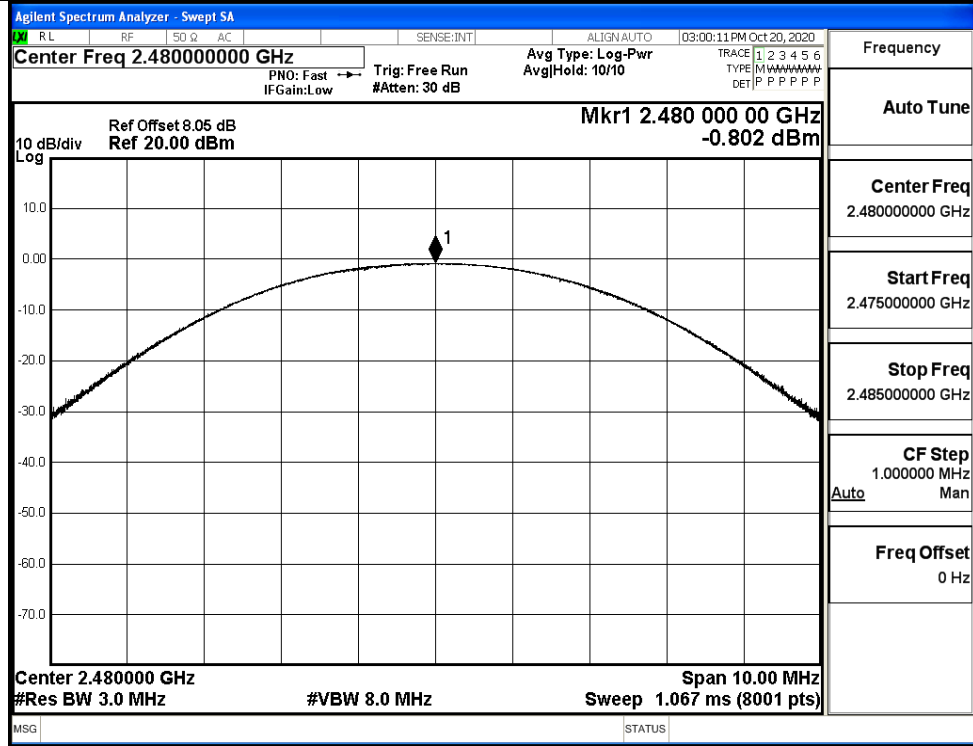
8DPSK/LCH



8DPSK/MCH

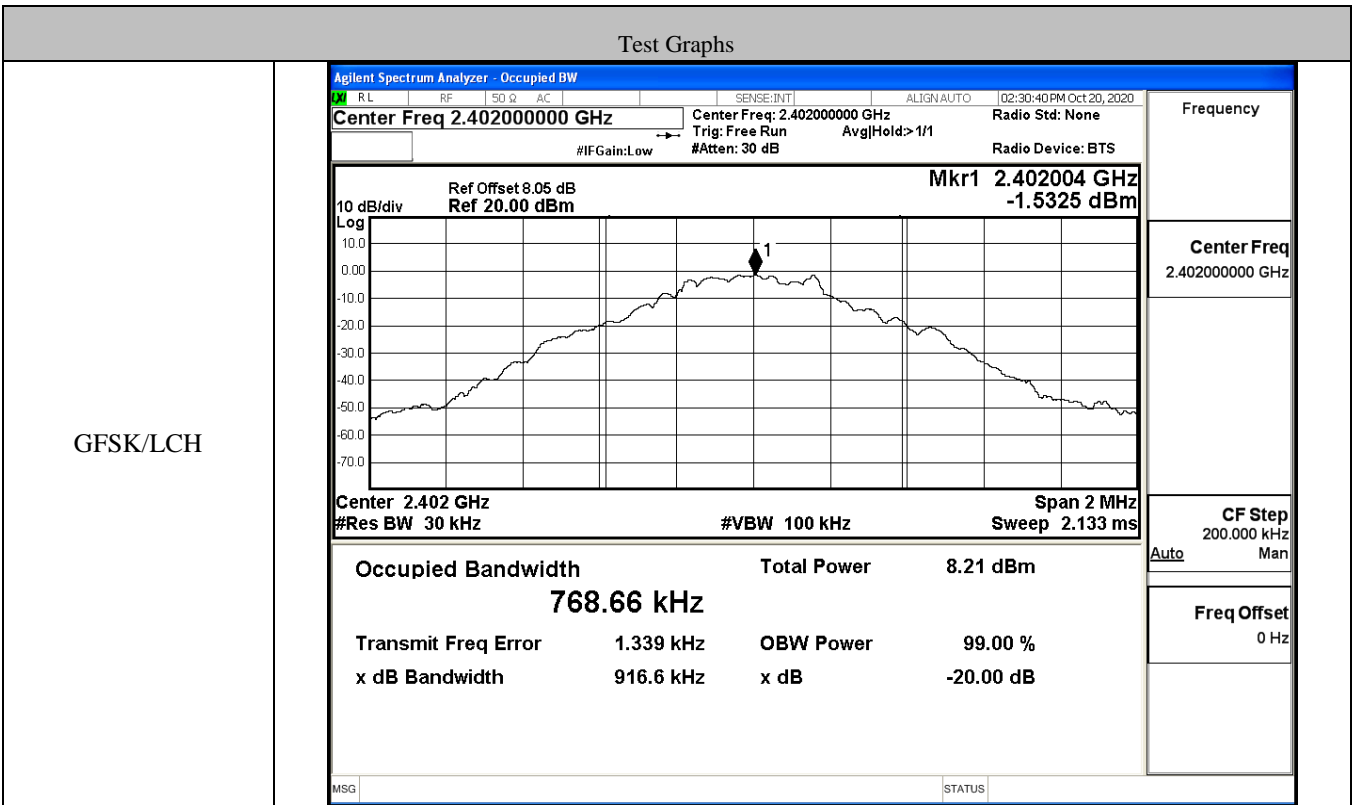


8DPSK/HCH

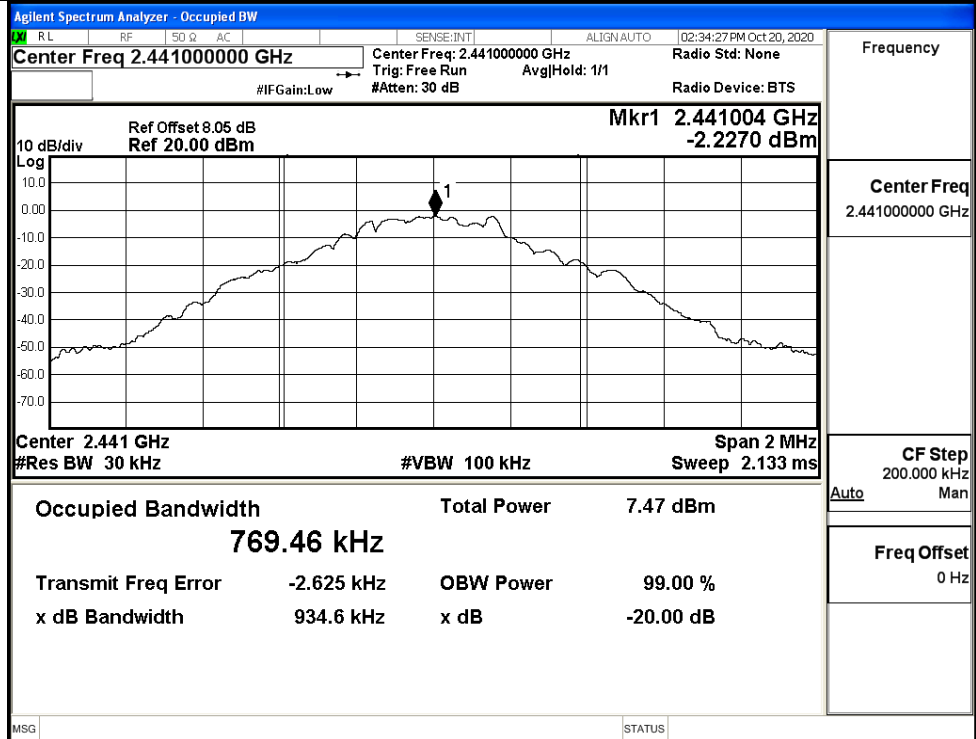


**A.2 20dB Bandwidth**

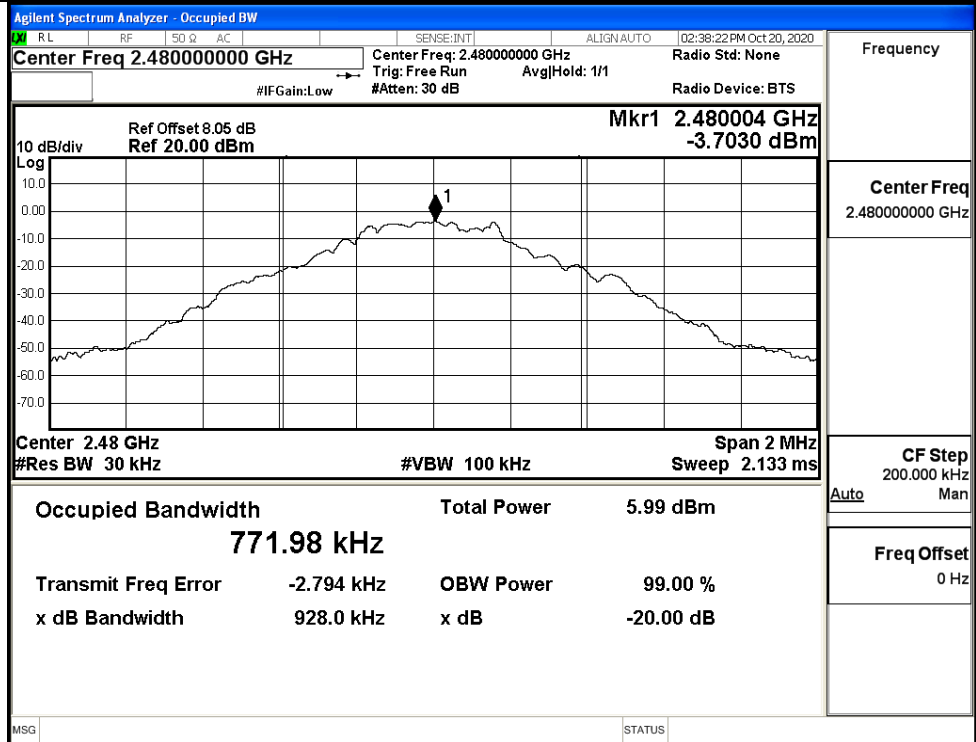
Mode	Channel	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.9166	Not Specified	PASS
	MCH	0.9346	Not Specified	PASS
	HCH	0.9280	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.281	Not Specified	PASS
	MCH	1.282	Not Specified	PASS
	HCH	1.283	Not Specified	PASS
8DPSK	LCH	1.287	Not Specified	PASS
	MCH	1.288	Not Specified	PASS
	HCH	1.290	Not Specified	PASS



GFSK/MCH

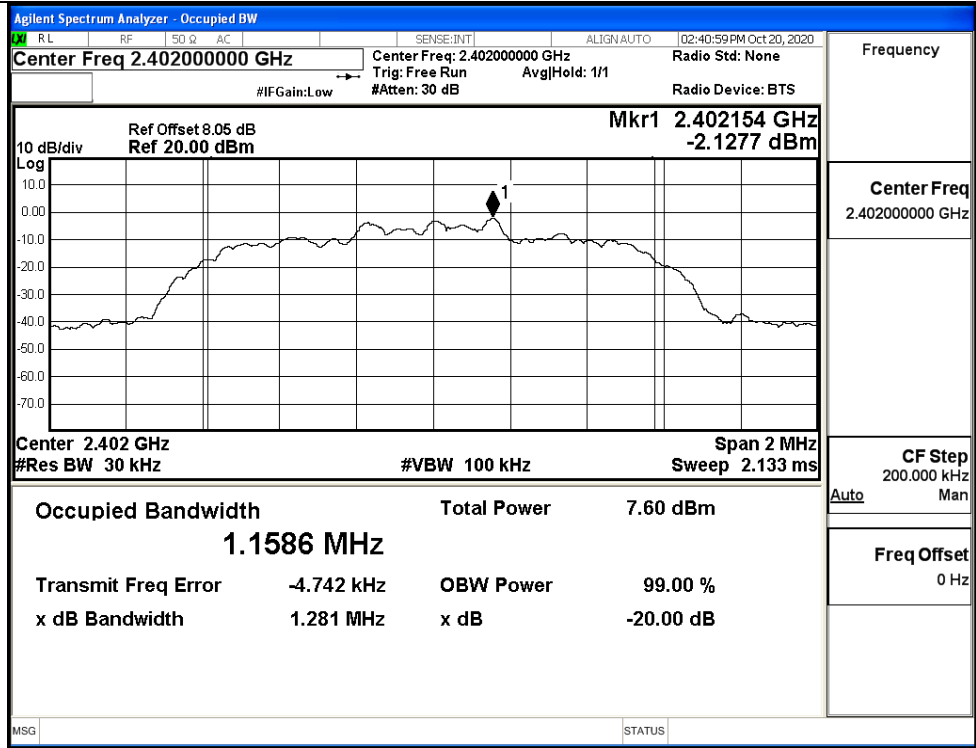


GFSK/HCH

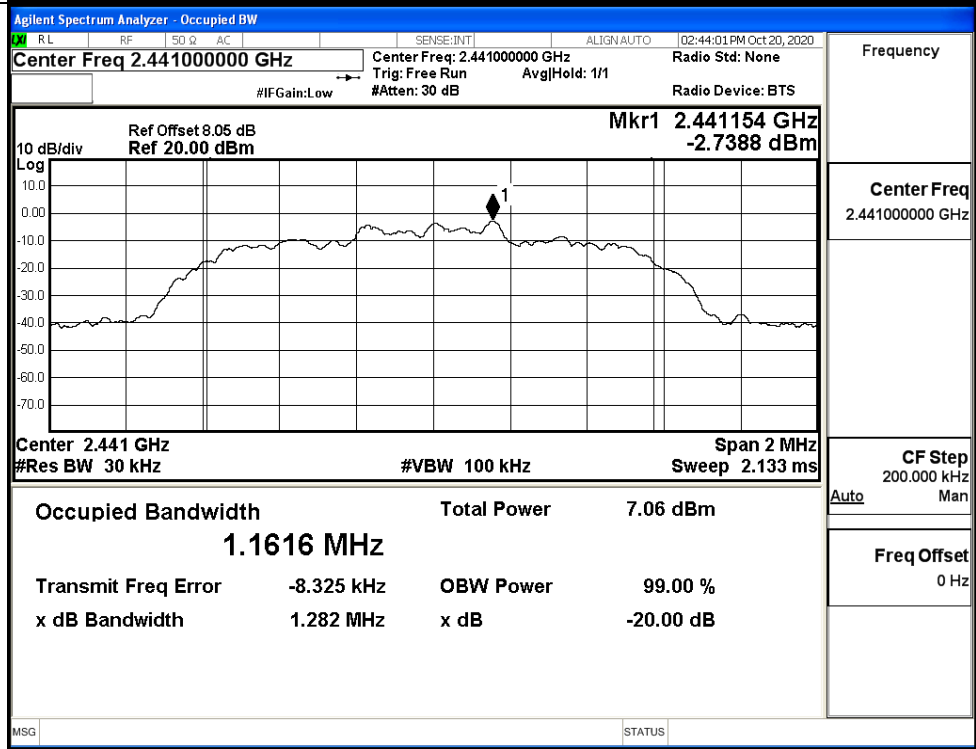




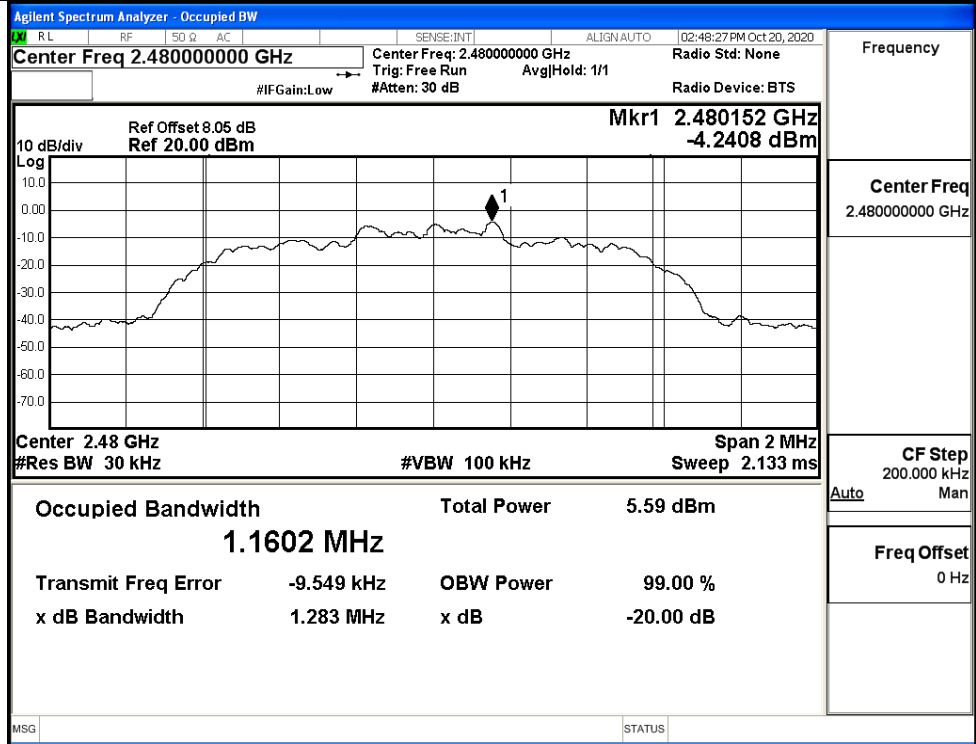
$\pi/4$ DQPSK/LCH



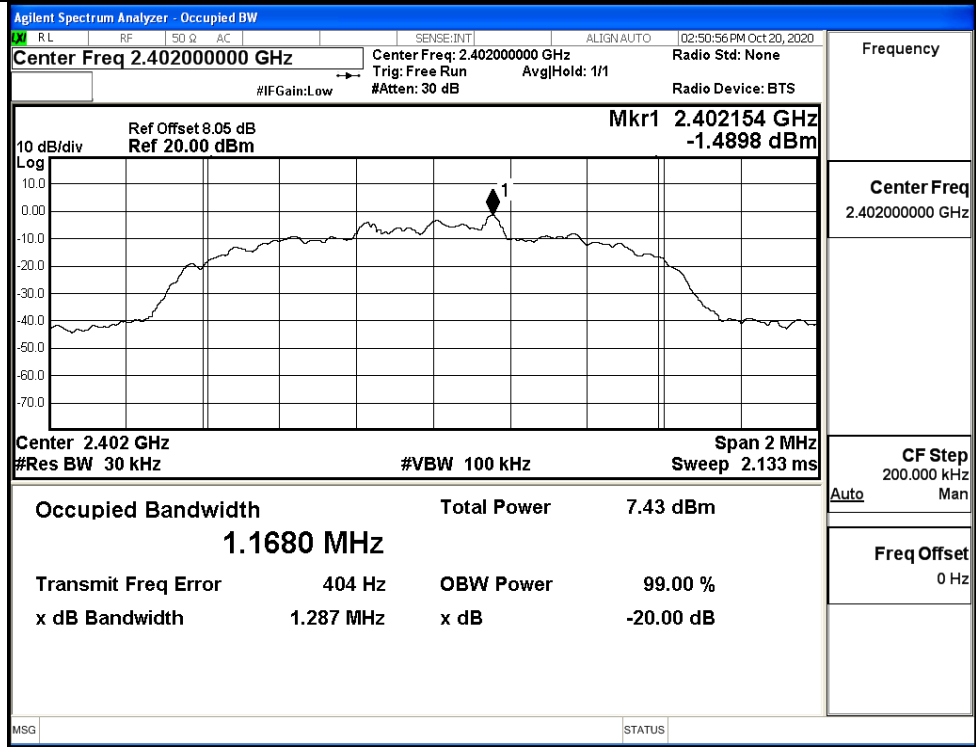
$\pi/4$ DQPSK/MCH



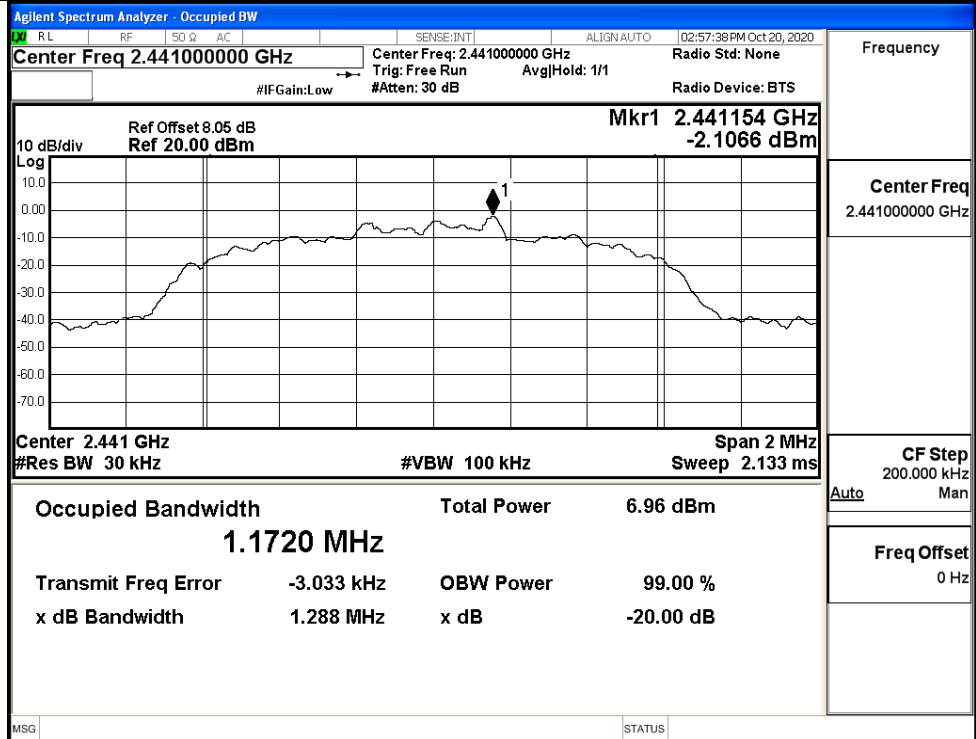
$\pi/4$ DQPSK/HCH



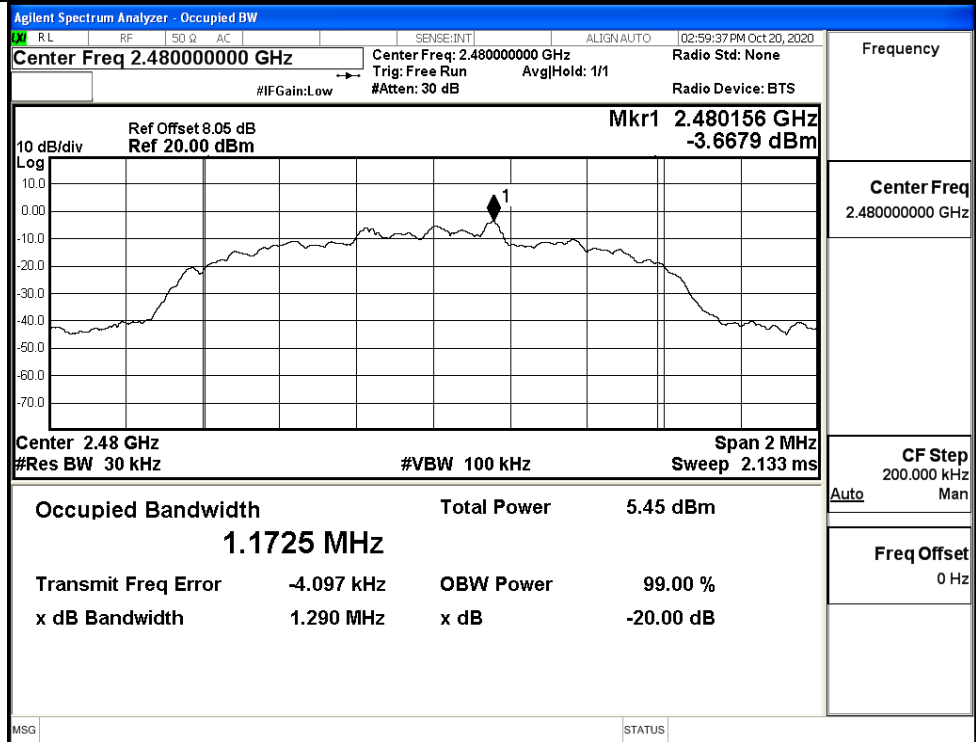
8DPSK/LCH



8DPSK/MCH



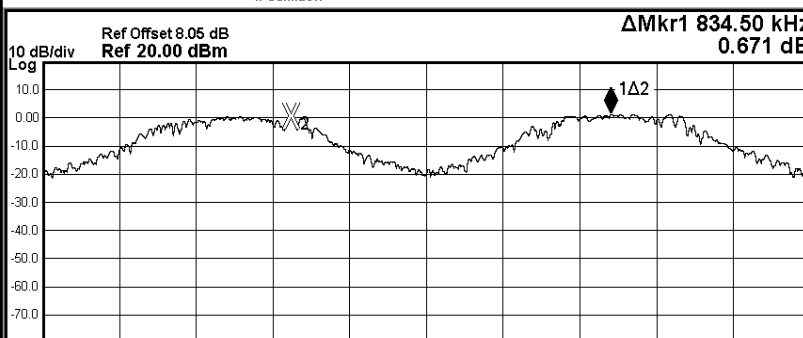
8DPSK/HCH



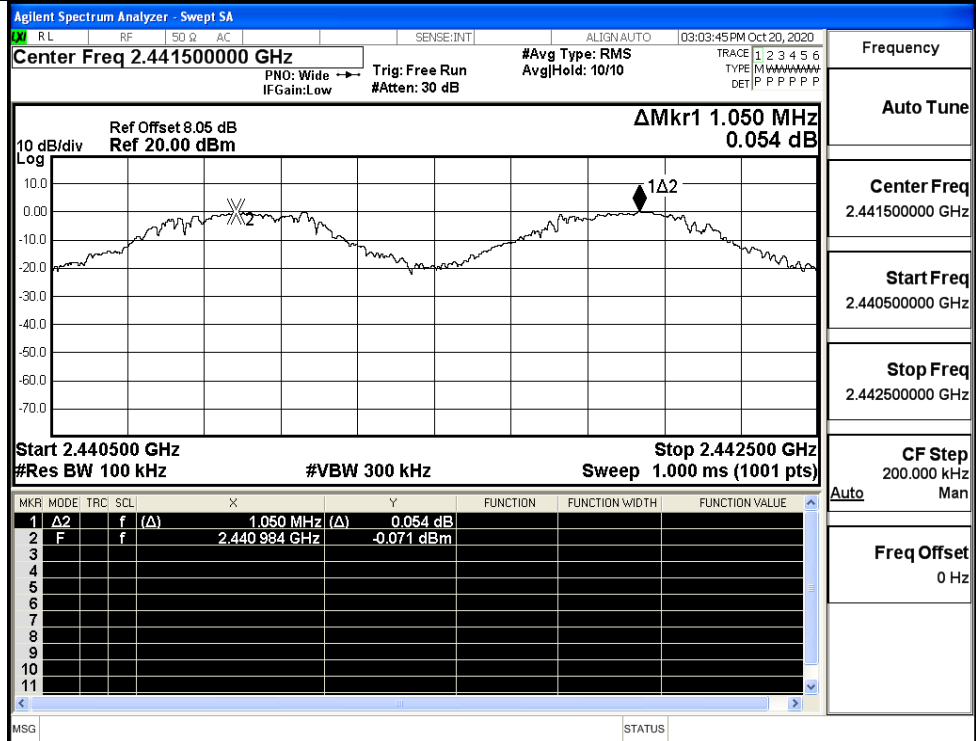
### A.3 Carrier Frequency Separation

Mode	Channel	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.834	0.611	PASS
	MCH	1.050	0.623	PASS
	HCH	0.950	0.619	PASS
$\pi/4$ DQPSK	LCH	0.976	0.854	PASS
	MCH	0.934	0.855	PASS
	HCH	1.198	0.855	PASS
8DPSK	LCH	1.226	0.858	PASS
	MCH	0.926	0.859	PASS
	HCH	1.116	0.860	PASS

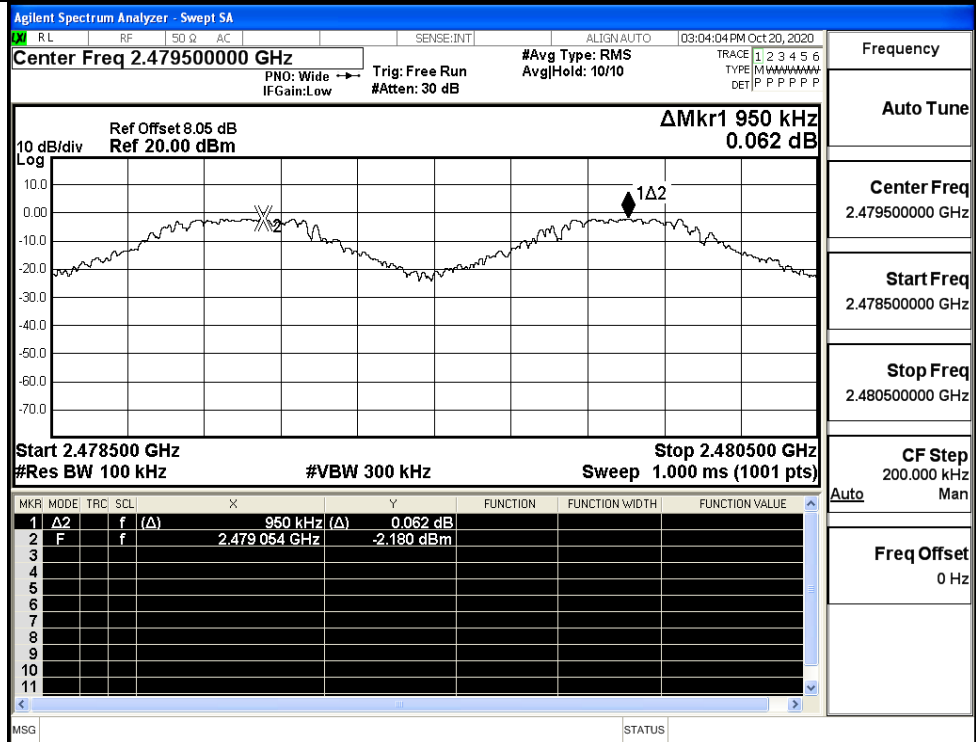
Test Graphs

GFSK/LCH	Agilent Spectrum Analyzer - Swept SA	RL RF 50 $\Omega$ AC SENSE:INT ALIGN AUTO 03:02:51 PM Oct 20, 2020 <b>Center Freq 2.402500000 GHz</b> Avg Type: Log-Pwr PNO: Wide Trg: Free Run AvgHold: 10/10 IFGain:Low #Atten: 30 dB	Frequency 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	
	Ref Offset 8.05 dB Ref 20.00 dBm 10 dB/div Log 	$\Delta$ Mkr1 834.50 kHz 0.671 dBm		
	Start 2.401500 GHz #Res BW 100 kHz #VBW 300 kHz Stop 2.403500 GHz Sweep 1.067 ms (8001 pts)	MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE 1 $\Delta$ 2 f ( $\Delta$ ) 834.50 kHz ( $\Delta$ ) 0.671 dBm 2 F f 2.40214700 GHz 0.635 dBm 3 4 5 6 7 8 9 10 11		
	MSG	STATUS		

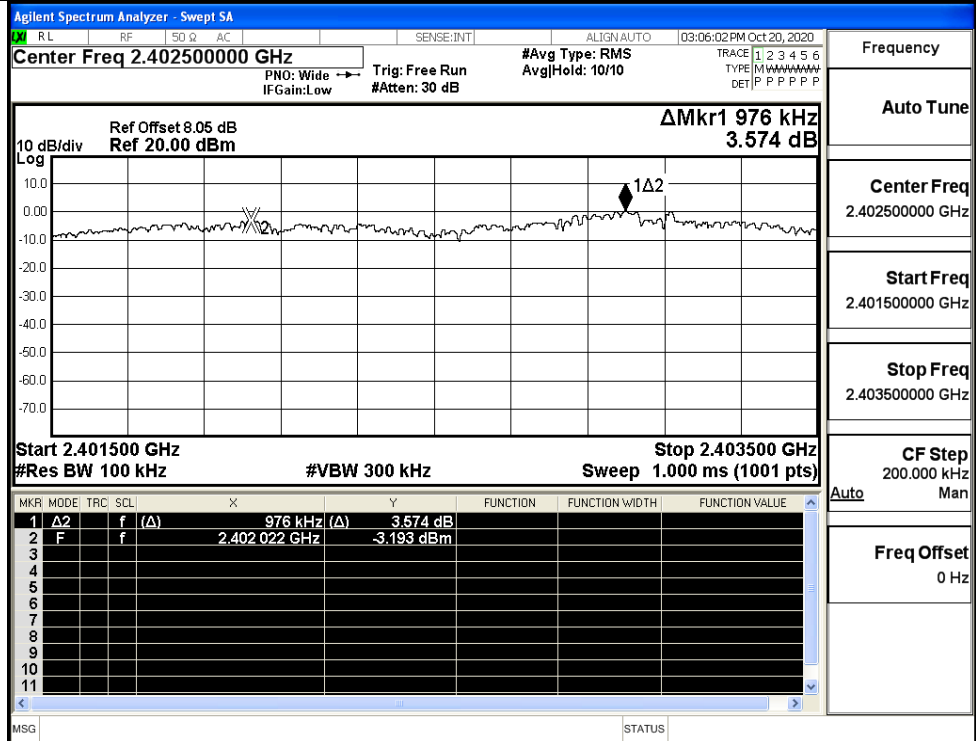
GFSK/MCH



GFSK/HCH

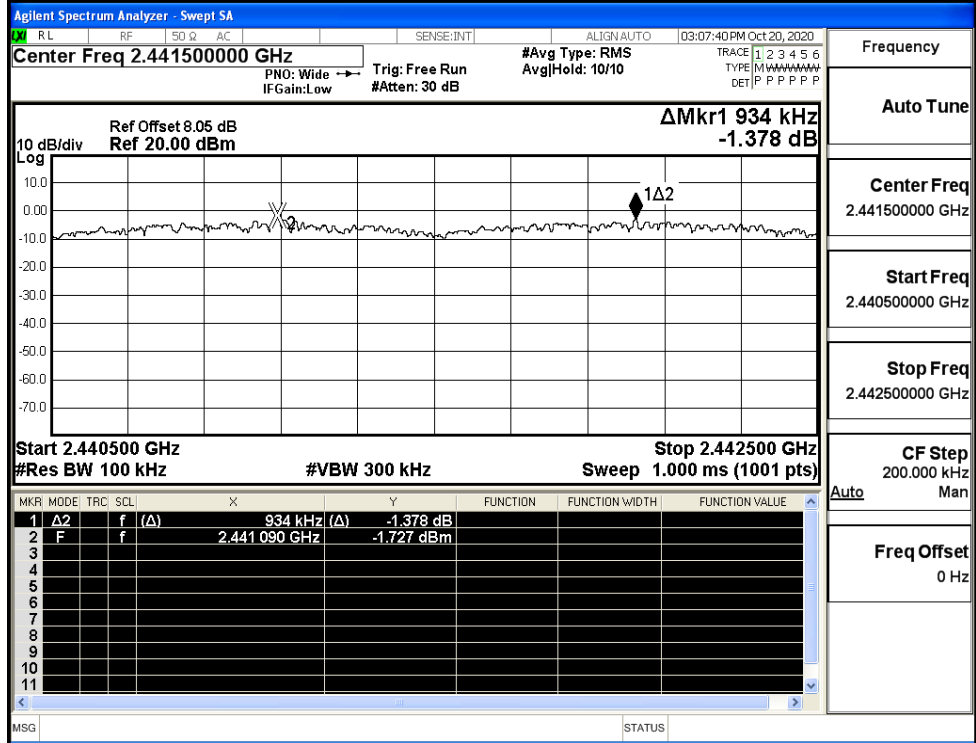


$\pi/4$ DQPSK/LCH



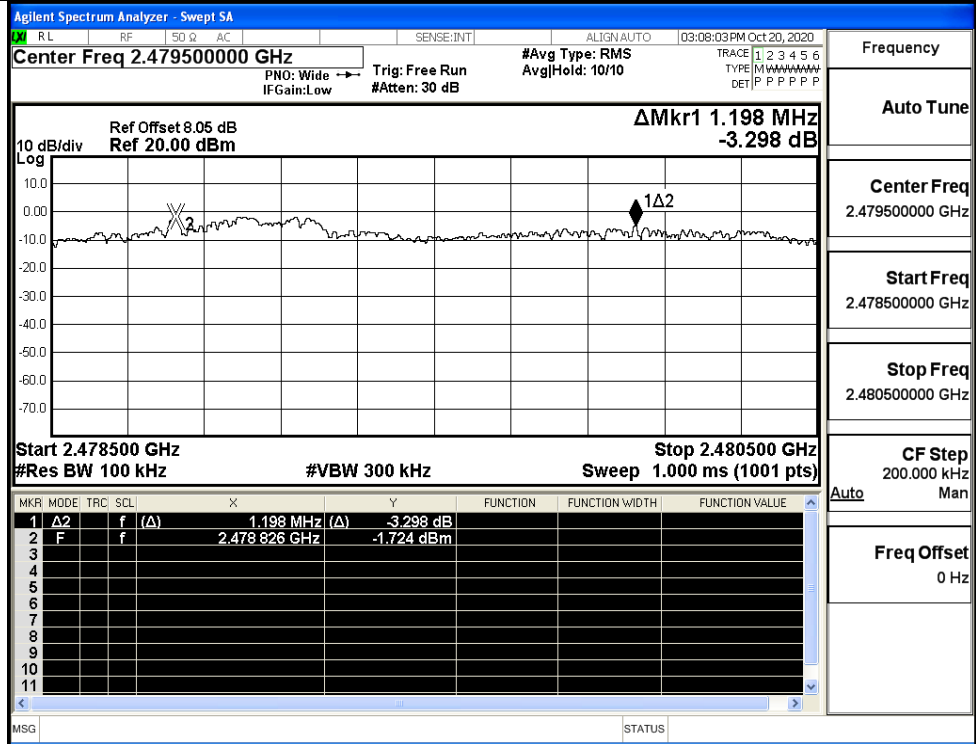
Frequency  
Auto Tune  
Center Freq  
2.402500000 GHz  
Start Freq  
2.401500000 GHz  
Stop Freq  
2.403500000 GHz  
CF Step  
200.000 kHz  
Man  
Freq Offset  
0 Hz

$\pi/4$ DQPSK/MCH



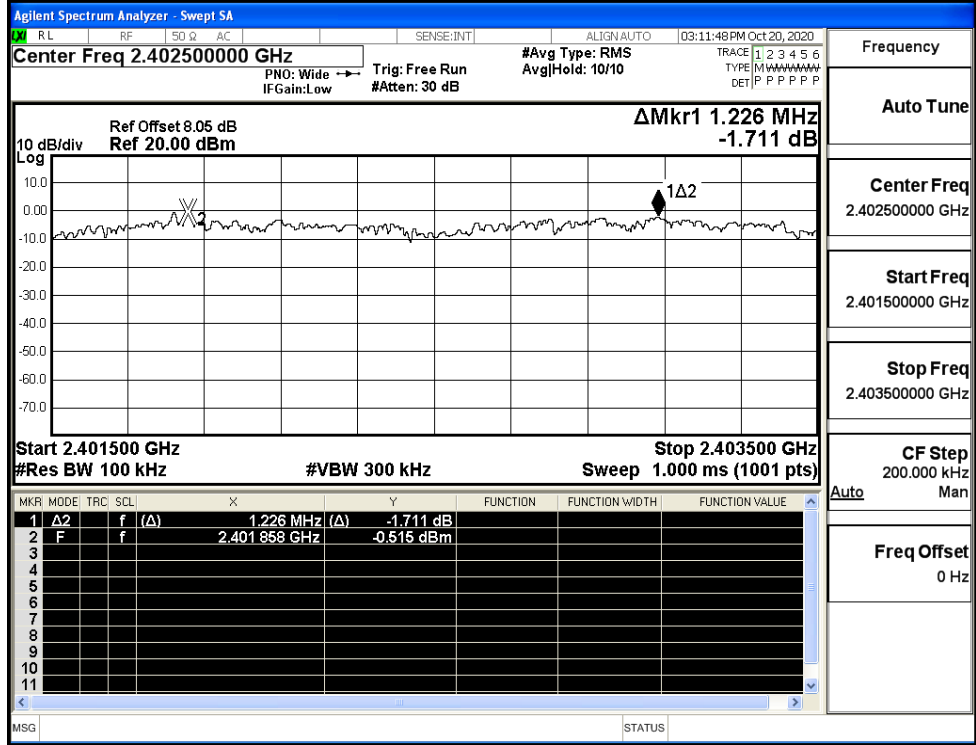
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Auto Tune  
Center Freq  
2.441500000 GHz  
Start Freq  
2.440500000 GHz  
Stop Freq  
2.442500000 GHz  
CF Step  
200.000 kHz  
Man  
Freq Offset  
0 Hz

$\pi/4$ DQPSK/HCH



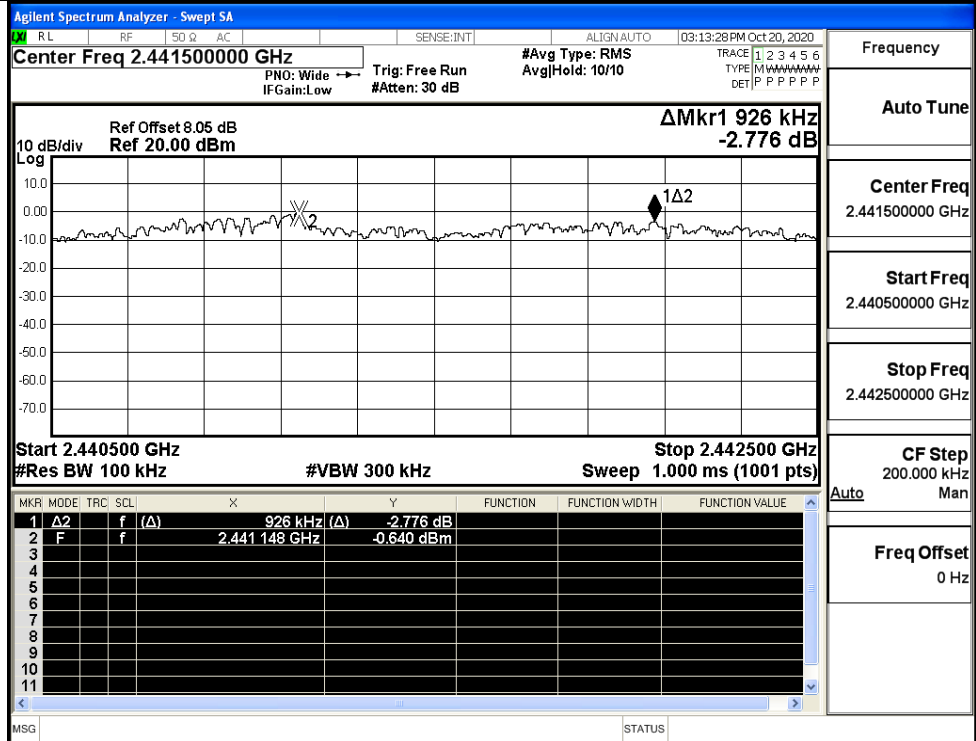
Frequency
Auto Tune
Center Freq 2.479500000 GHz
Start Freq 2.478500000 GHz
Stop Freq 2.480500000 GHz
CF Step 200.000 kHz
Auto
Freq Offset 0 Hz

8DPSK/LCH

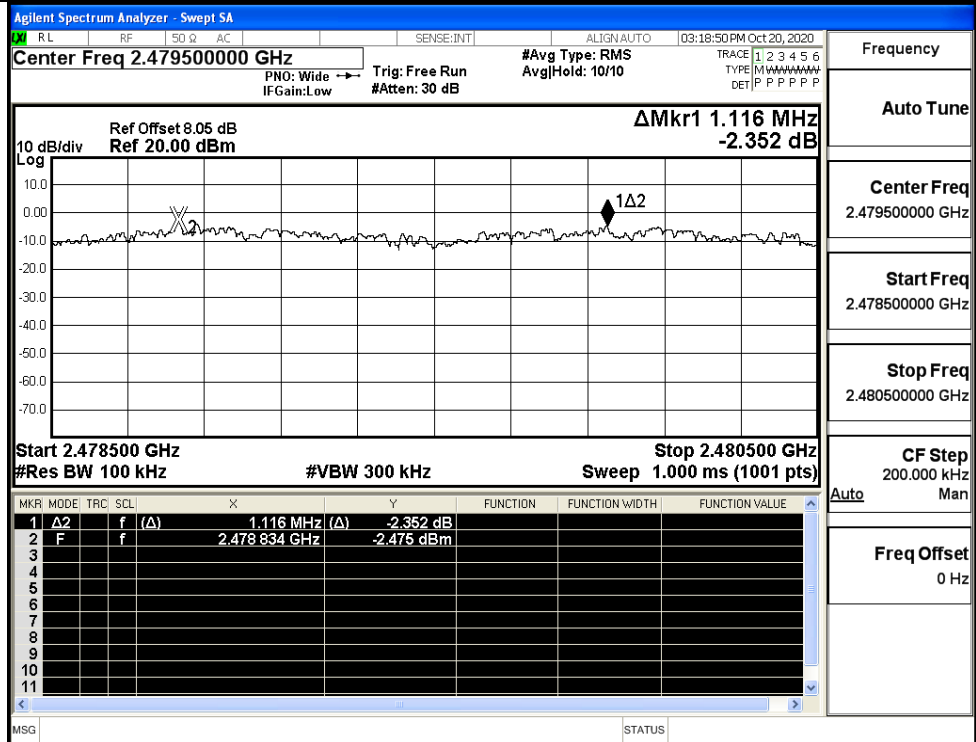


Frequency
Auto Tune
Center Freq 2.402500000 GHz
Start Freq 2.401500000 GHz
Stop Freq 2.403500000 GHz
CF Step 200.000 kHz
Auto
Freq Offset 0 Hz

8DPSK/MCH



8DPSK/HCH





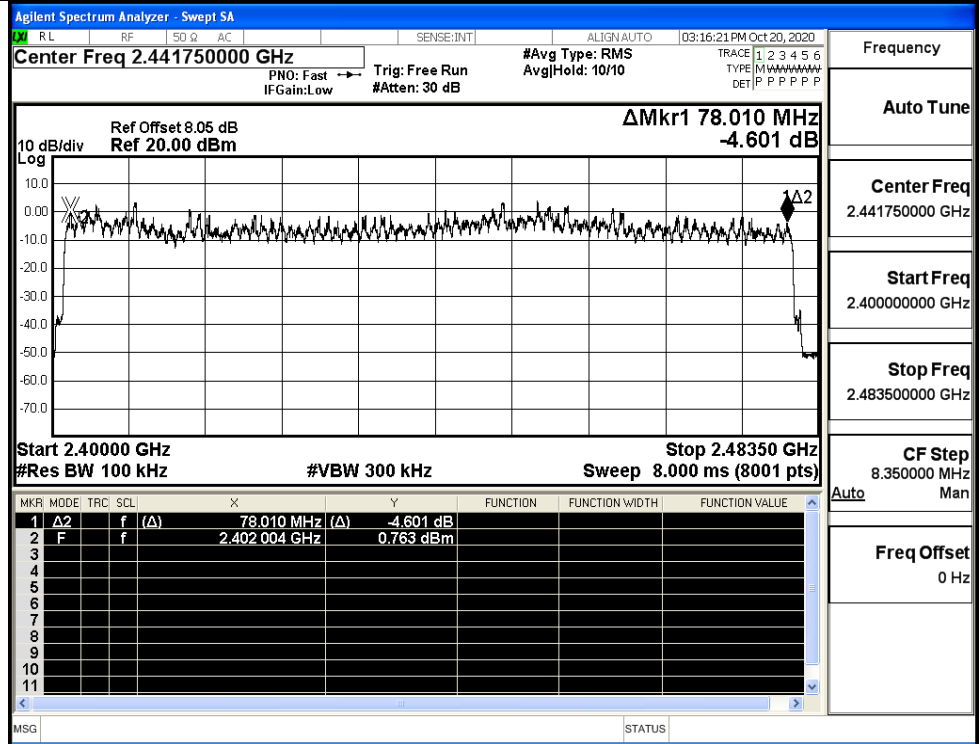
**A.4 Hopping Channel Number**

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

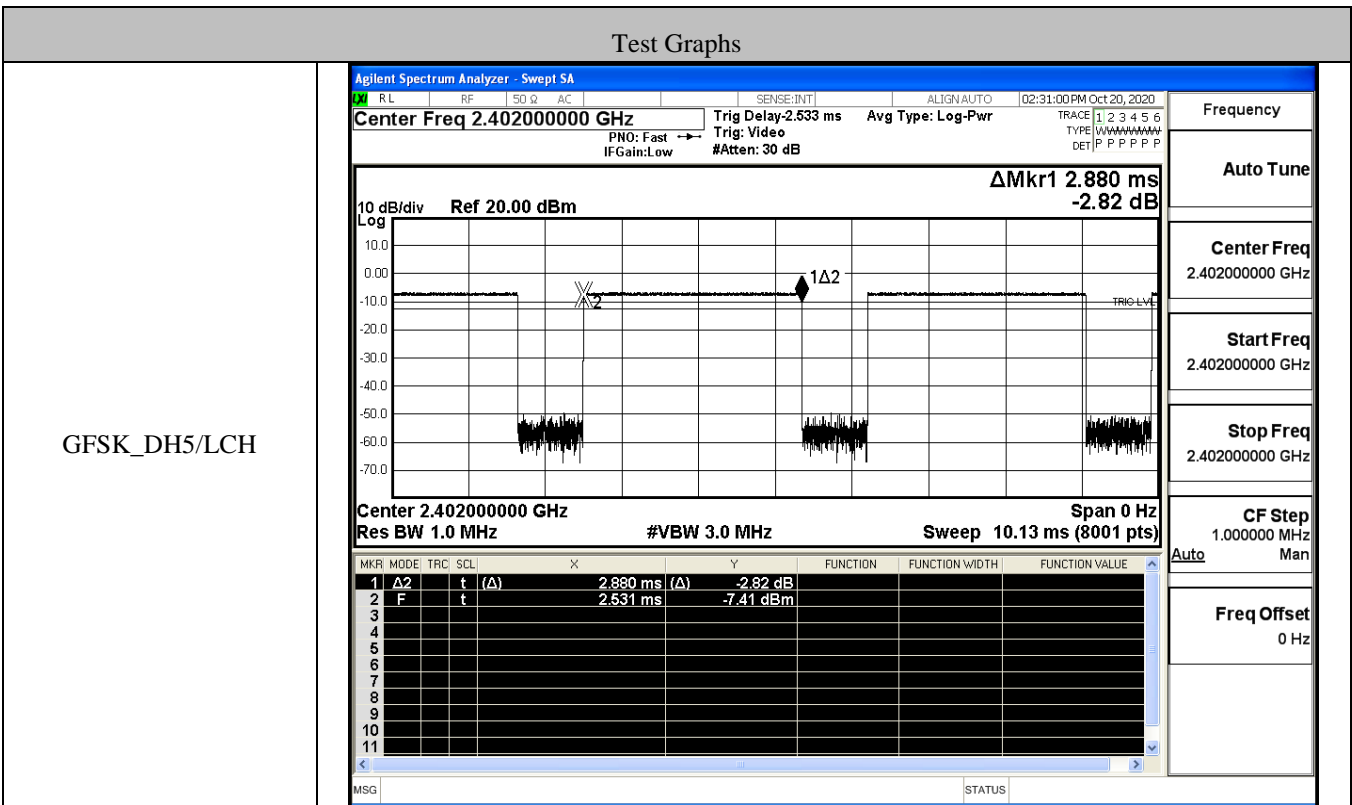
GFSK/Hop	<p>Agilent Spectrum Analyzer - Swept SA                  Center Freq 2.441750000 GHz                  Ref Offset 8.05 dB                  Ref 20.00 dBm  <math>\Delta</math>Mkr1 78.146 MHz                  -1.764 dBm                  Start 2.40000 GHz                  #Res BW 100 kHz                  #VBW 300 kHz                  Stop 2.48350 GHz                  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><math>\Delta</math>2</td> <td>f</td> <td>(<math>\Delta</math>)</td> <td>78.146 MHz</td> <td>(<math>\Delta</math>)</td> <td>-1.764 dB</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>F</td> <td>f</td> <td></td> <td>2.401 889 GHz</td> <td></td> <td>0.225 dBm</td> <td></td> <td></td> </tr> </tbody> </table>	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	$\Delta$ 2	f	( $\Delta$ )	78.146 MHz	( $\Delta$ )	-1.764 dB			2	F	f		2.401 889 GHz		0.225 dBm			Frequency Auto Tune Center Freq 2.441750000 GHz Start Freq 2.400000000 GHz Stop Freq 2.483500000 GHz CF Step 8.350000 MHz Man Freq Offset 0 Hz
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																					
1	$\Delta$ 2	f	( $\Delta$ )	78.146 MHz	( $\Delta$ )	-1.764 dB																							
2	F	f		2.401 889 GHz		0.225 dBm																							
$\pi/4$ DQPSK/Hop	<p>Agilent Spectrum Analyzer - Swept SA                  Center Freq 2.441750000 GHz                  Ref Offset 8.05 dB                  Ref 20.00 dBm  <math>\Delta</math>Mkr1 77.749 MHz                  -3.221 dBm                  Start 2.40000 GHz                  #Res BW 100 kHz                  #VBW 300 kHz                  Stop 2.48350 GHz                  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><math>\Delta</math>2</td> <td>f</td> <td>(<math>\Delta</math>)</td> <td>77.749 MHz</td> <td>(<math>\Delta</math>)</td> <td>-3.221 dB</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>F</td> <td>f</td> <td></td> <td>2.402 098 GHz</td> <td></td> <td>-2.424 dBm</td> <td></td> <td></td> </tr> </tbody> </table>	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	$\Delta$ 2	f	( $\Delta$ )	77.749 MHz	( $\Delta$ )	-3.221 dB			2	F	f		2.402 098 GHz		-2.424 dBm			Frequency Auto Tune Center Freq 2.441750000 GHz Start Freq 2.400000000 GHz Stop Freq 2.483500000 GHz CF Step 8.350000 MHz Man Freq Offset 0 Hz
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																					
1	$\Delta$ 2	f	( $\Delta$ )	77.749 MHz	( $\Delta$ )	-3.221 dB																							
2	F	f		2.402 098 GHz		-2.424 dBm																							

8DPSK/Hop

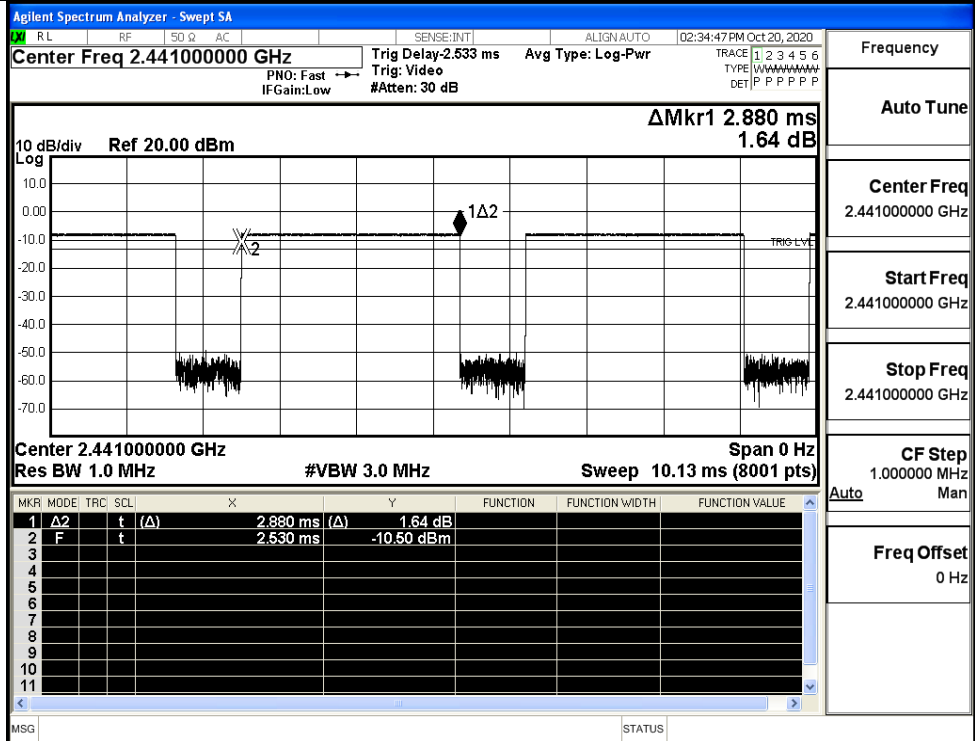


**A.5 Dwell Time**

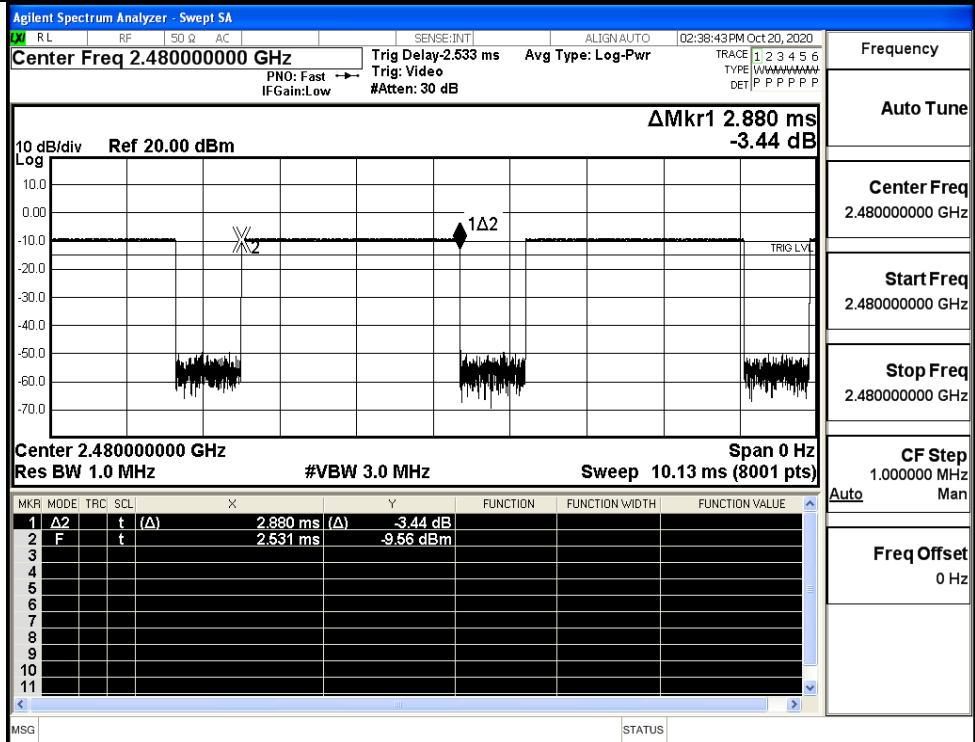
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.88	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



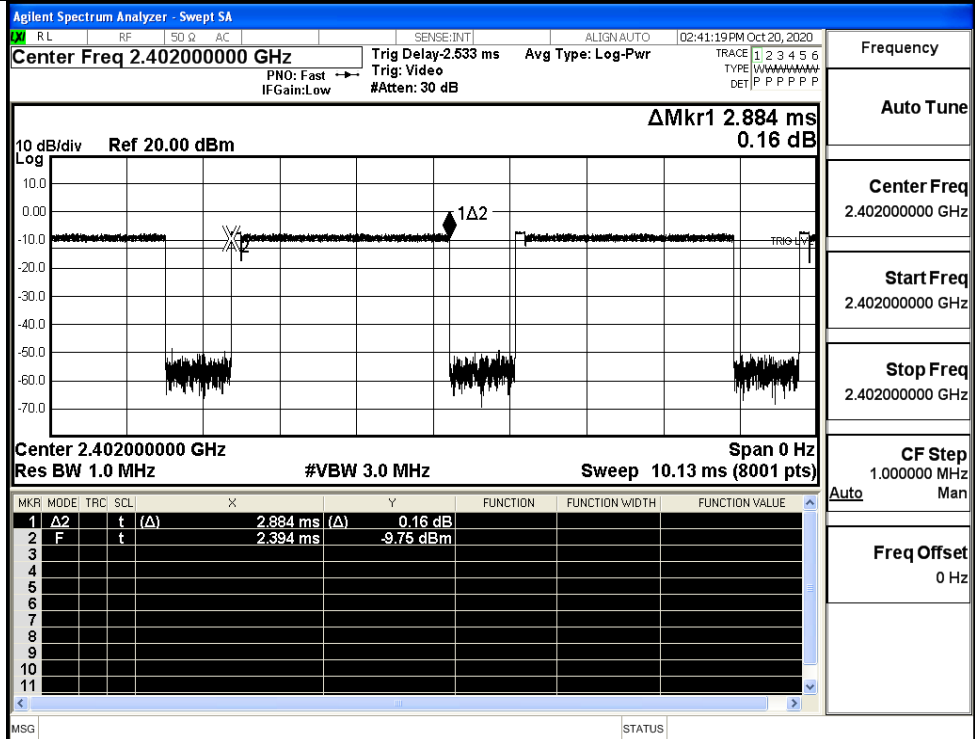
GFSK\_DH5/MCH



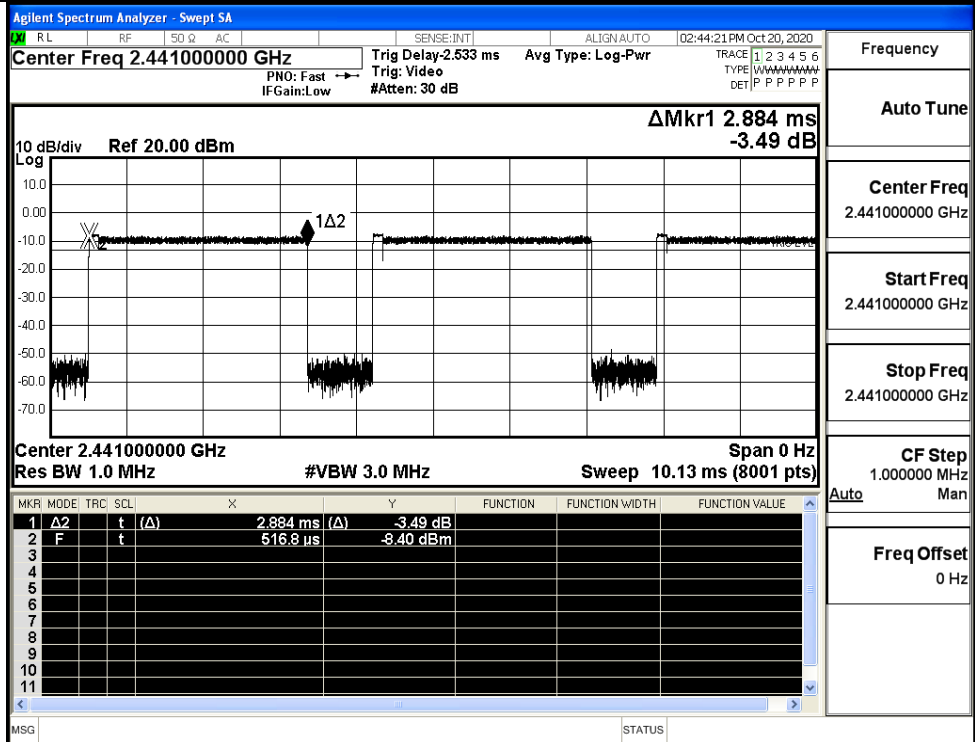
GFSK\_DH5/HCH



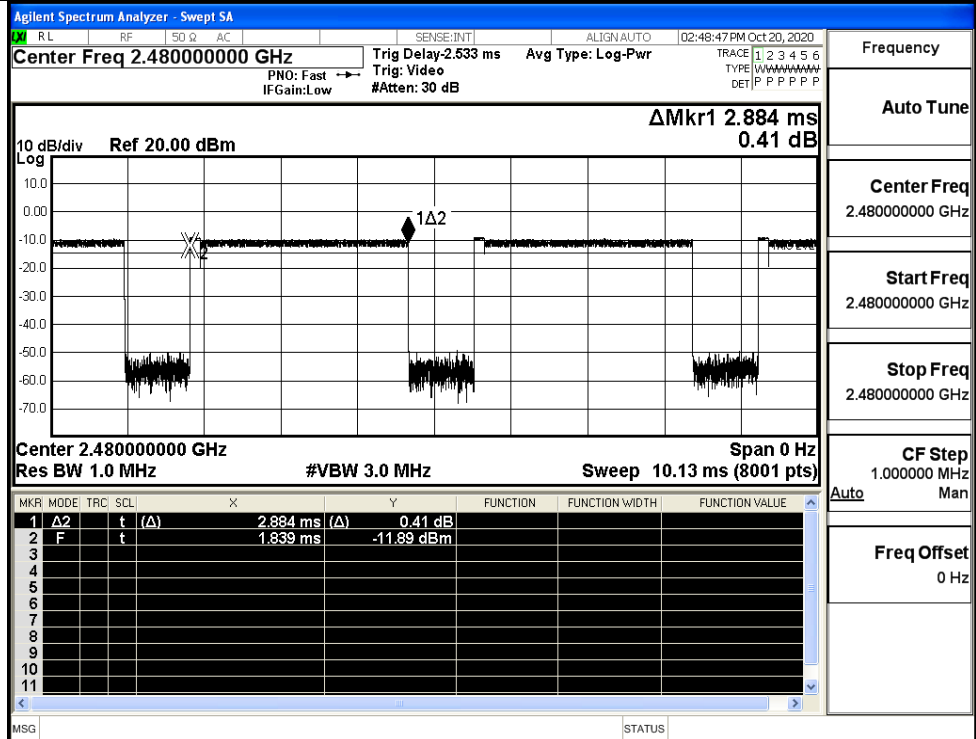
$\pi/4$ DQPSK\_2DH5/LCH



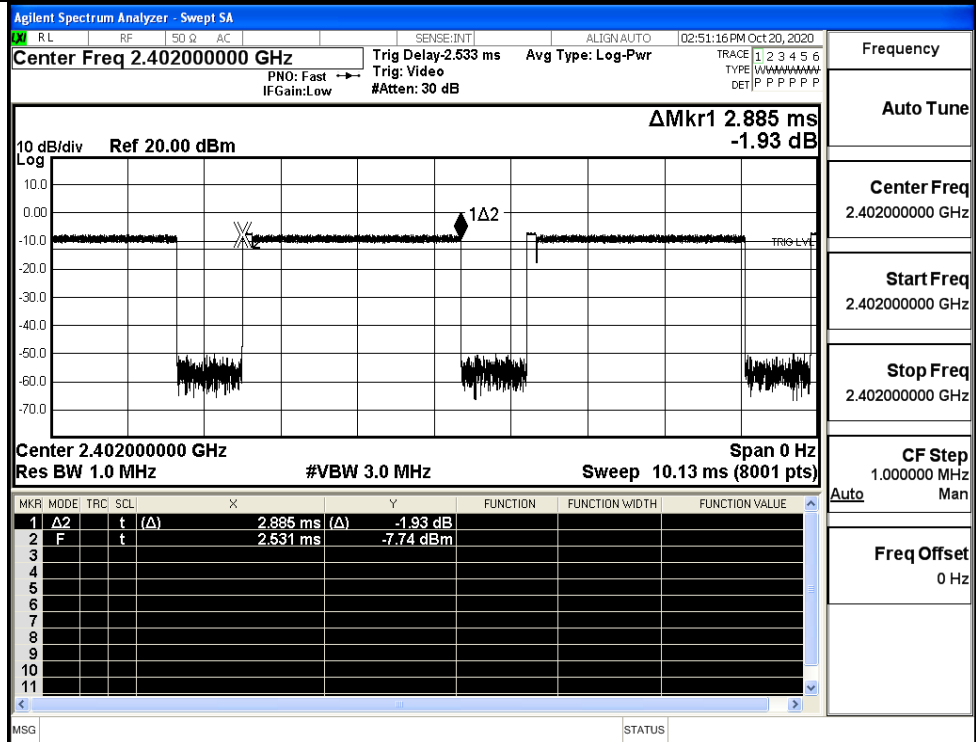
$\pi/4$ DQPSK\_2DH5/MCH



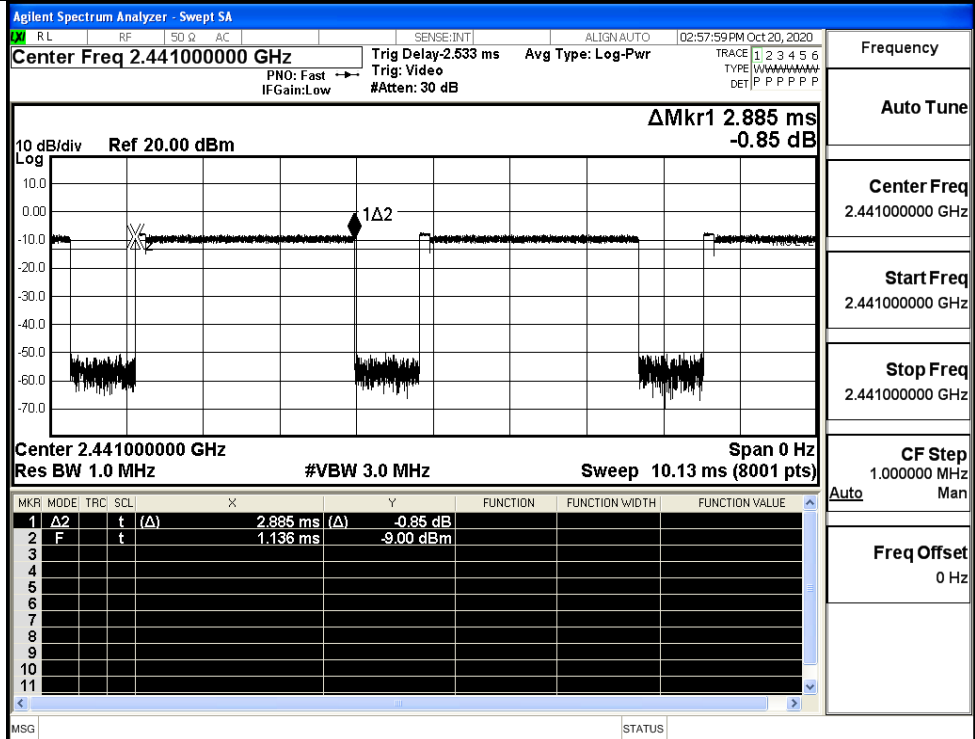
$\pi/4$ DQPSK\_2DH5/HCH



8DPSK\_3DH5/LCH

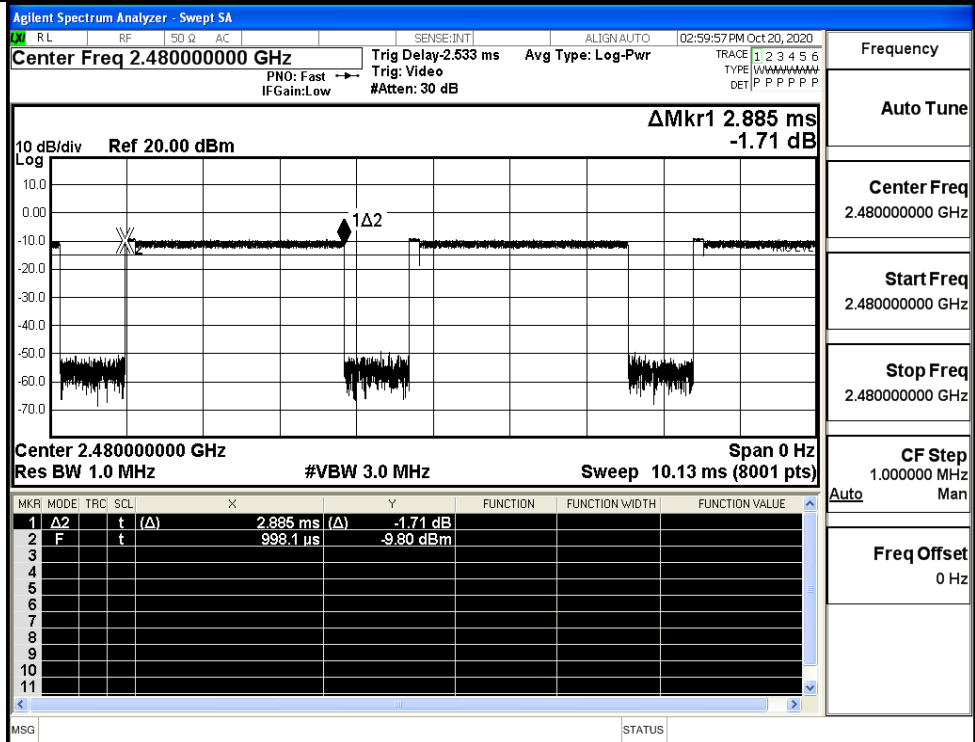


8DPSK\_3DH5/MCH



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

8DPSK\_3DH5/HCH

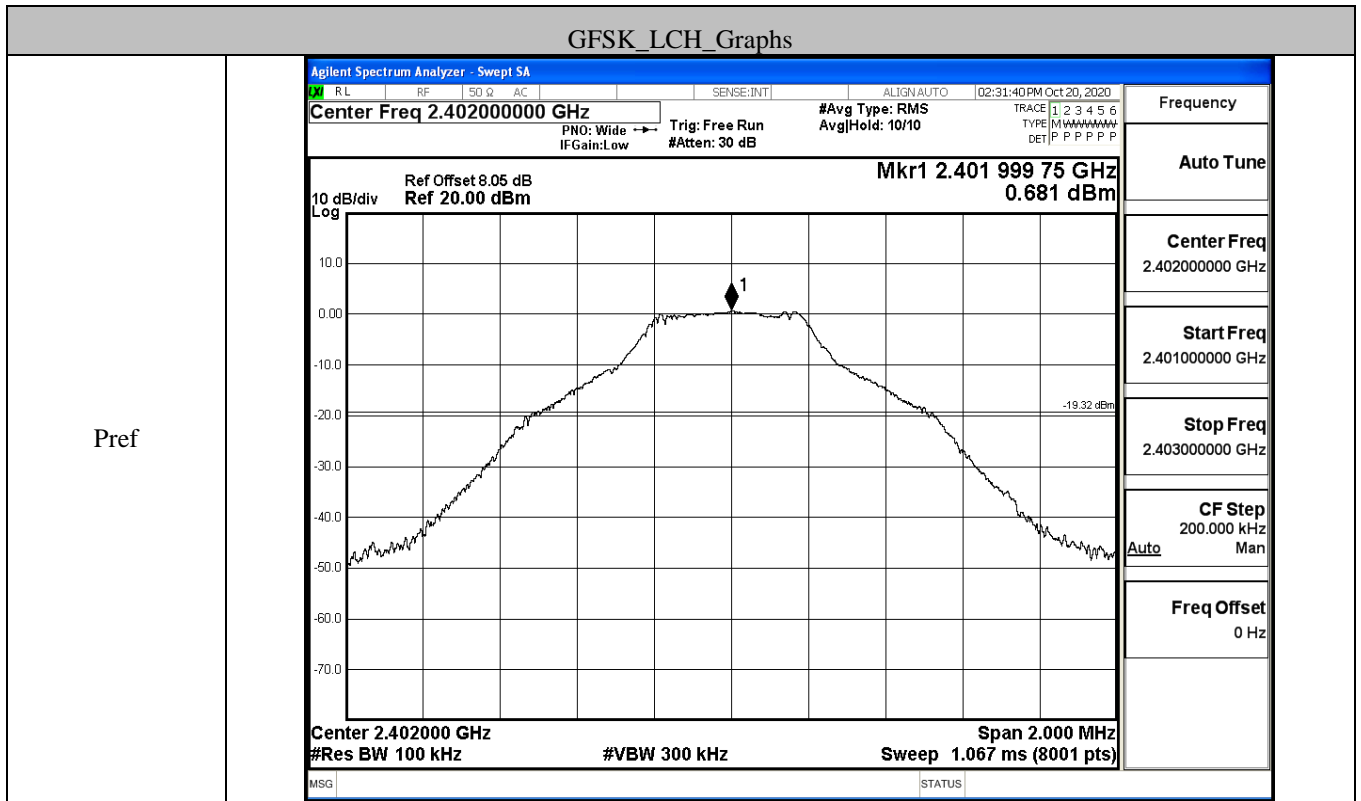


Frequency	2.480000000 GHz
Auto Tune	
Center Freq	2.480000000 GHz
Start Freq	2.480000000 GHz
Stop Freq	2.480000000 GHz
CF Step	1.000000 MHz
Auto	Man
Freq Offset	0 Hz

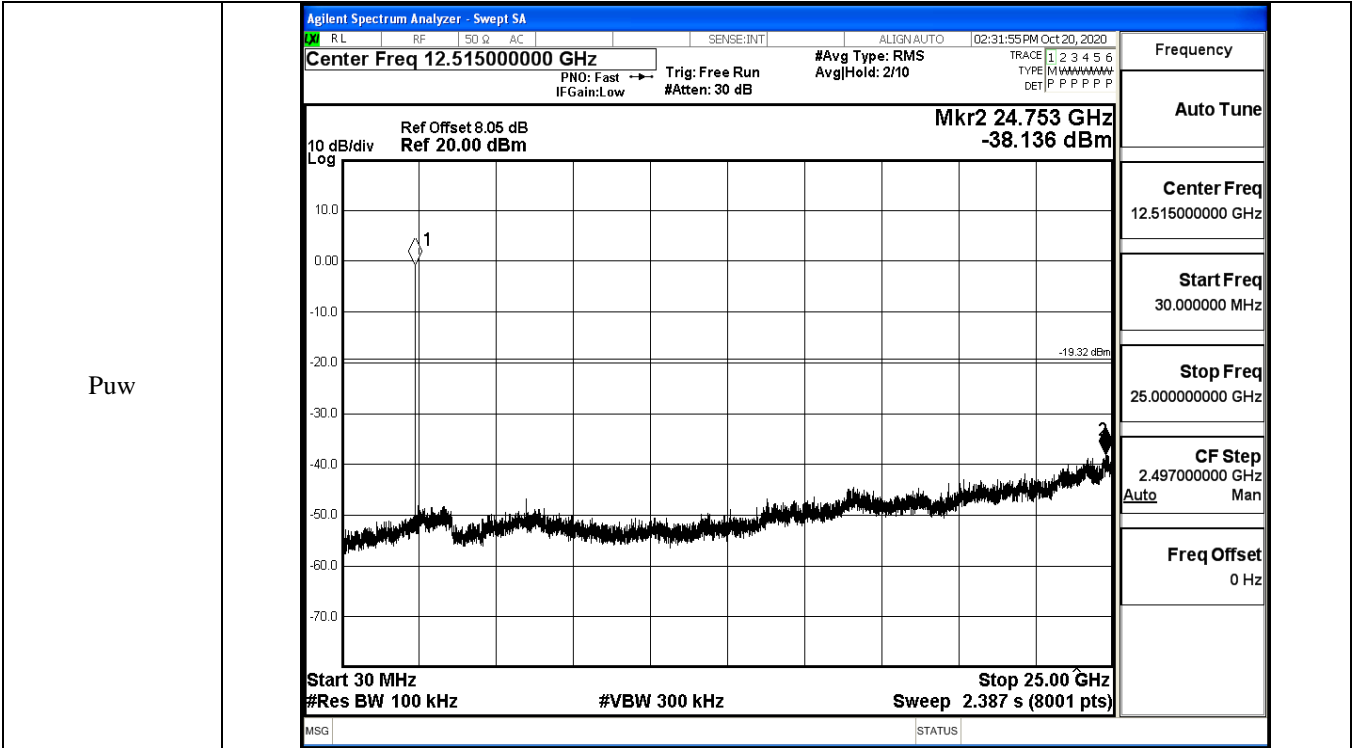
**A.6 RF Conducted Spurious Emissions**

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	0.681	-38.136	-19.319	PASS
	MCH	-0.044	-38.285	-20.044	PASS
	HCH	-1.534	-38.372	-21.534	PASS
$\pi/4$ DQPSK	LCH	0.517	-37.649	-19.483	PASS
	MCH	-0.028	-37.653	-20.028	PASS
	HCH	-1.542	-37.561	-21.542	PASS
8DPSK	LCH	0.628	-37.947	-19.372	PASS
	MCH	0.121	-37.807	-19.879	PASS
	HCH	-1.485	-36.127	-21.485	PASS

GFSK\_LCH\_Graphs

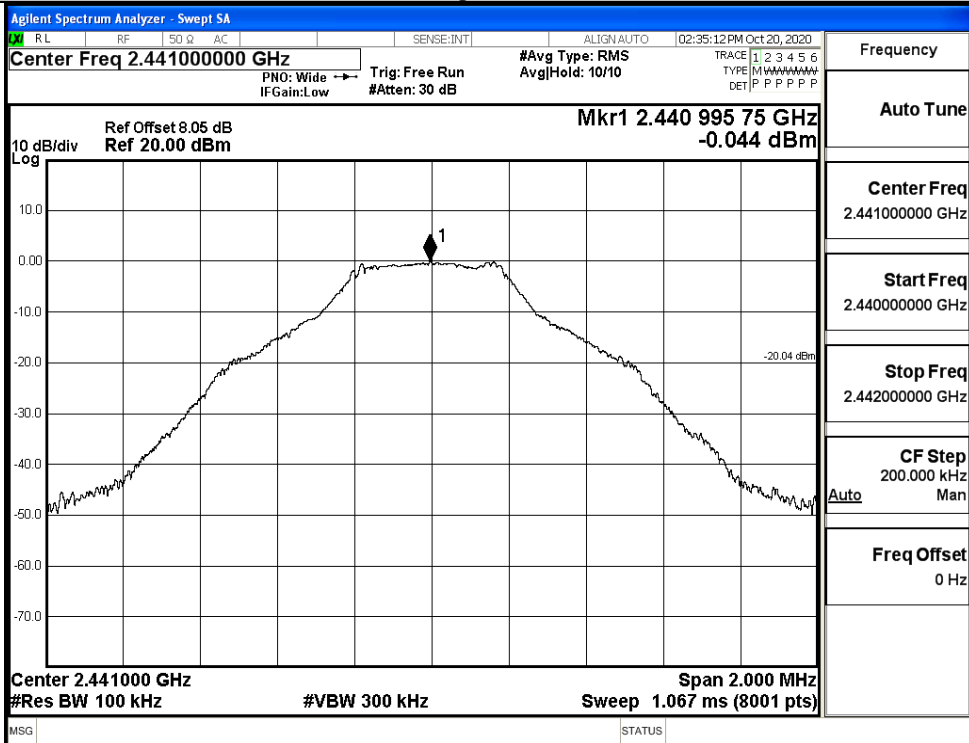




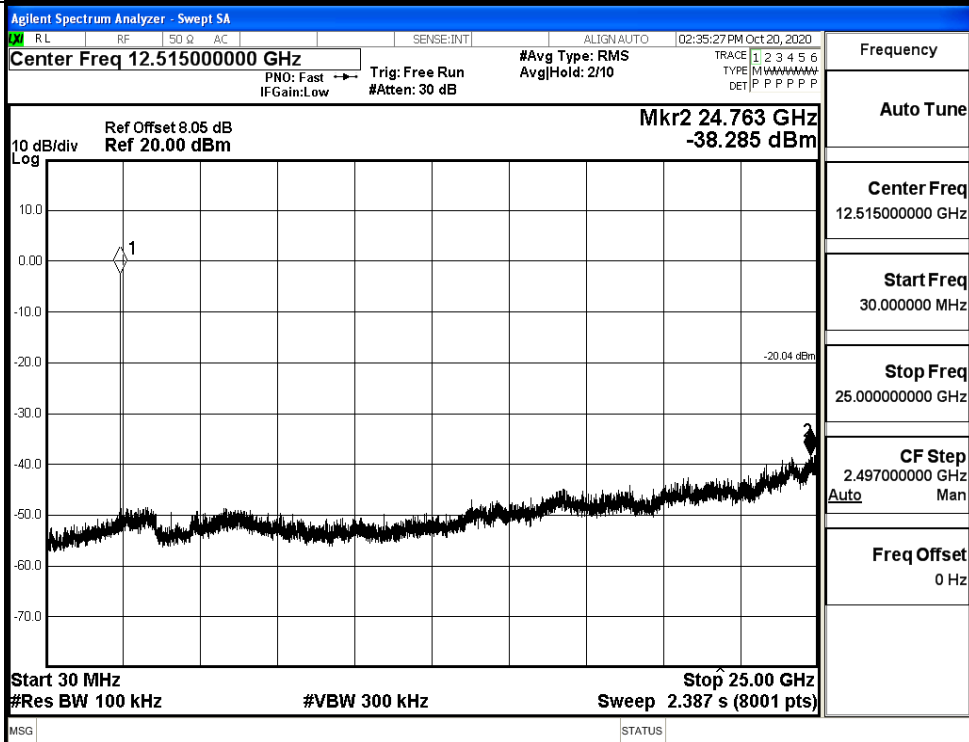


GFSK\_MCH\_Graphs

Pref

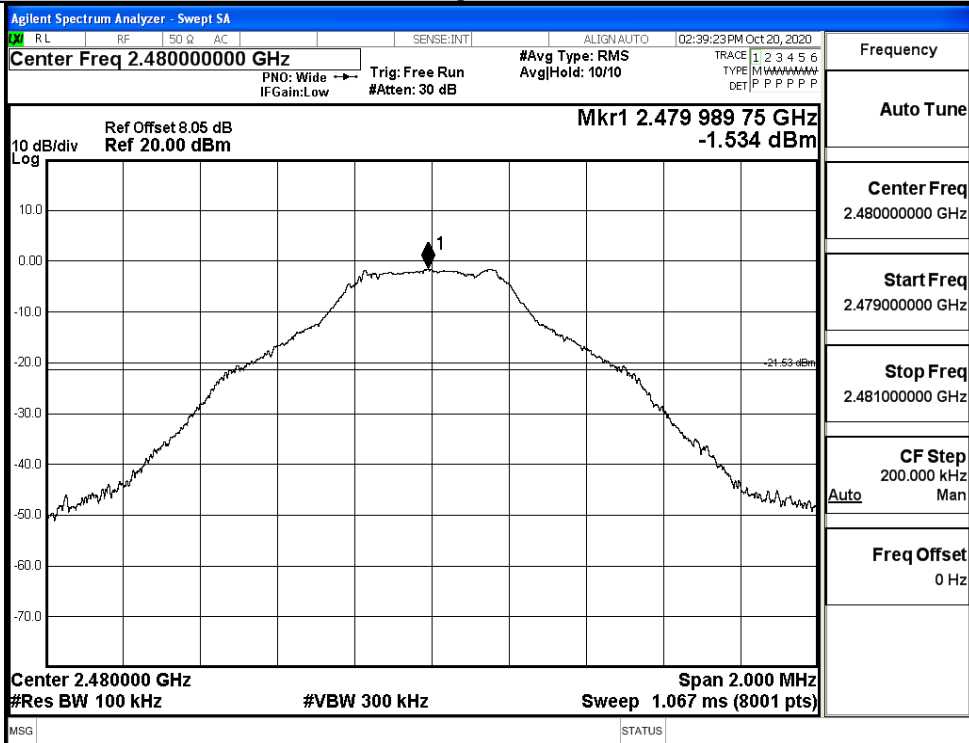


Puw

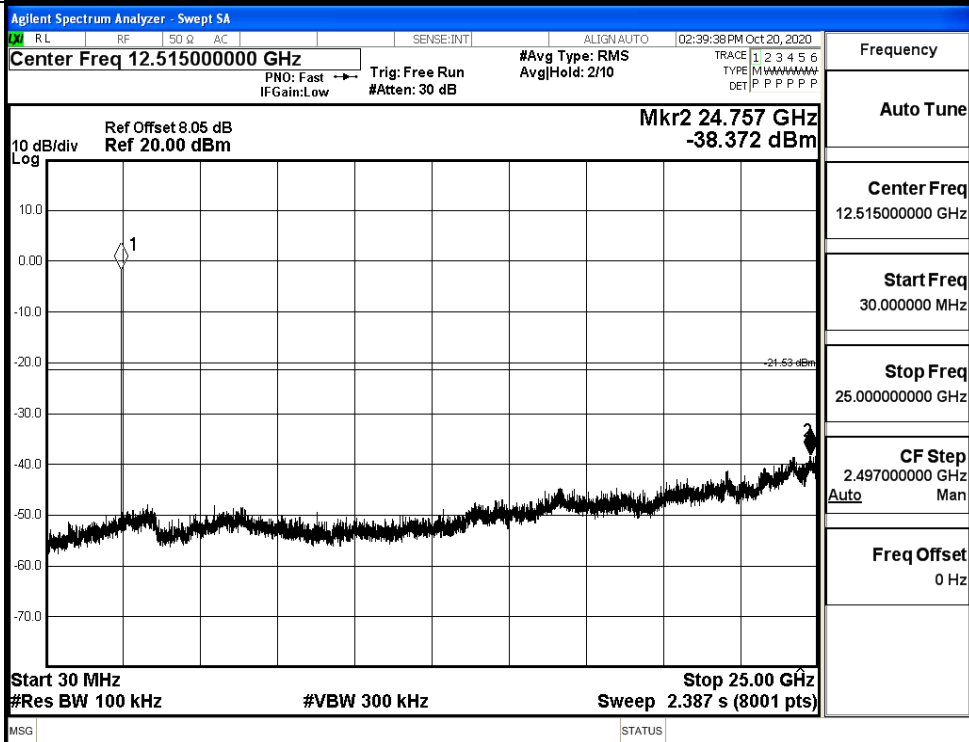


GFSK\_HCH\_Graphs

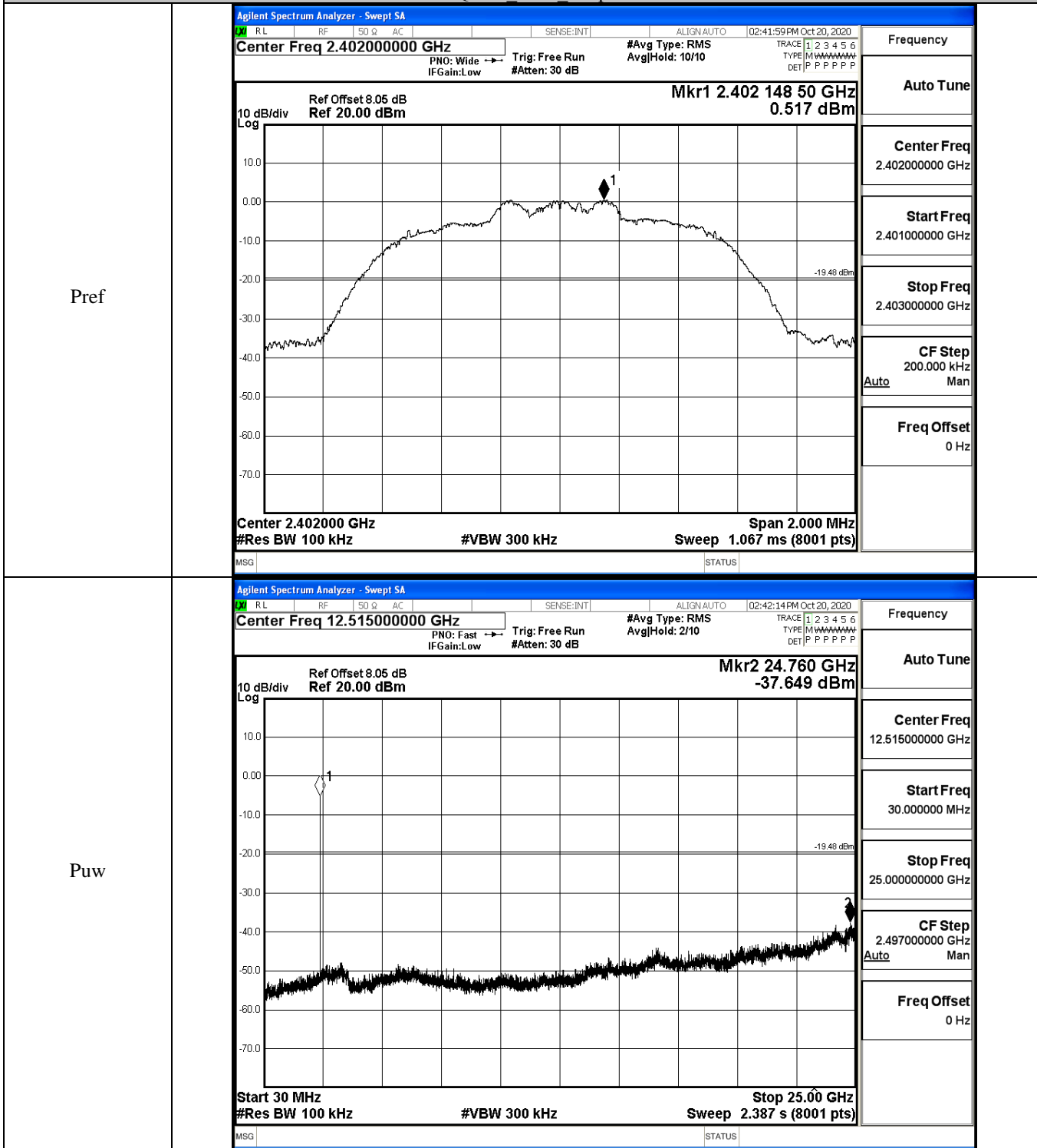
Pref



Puw

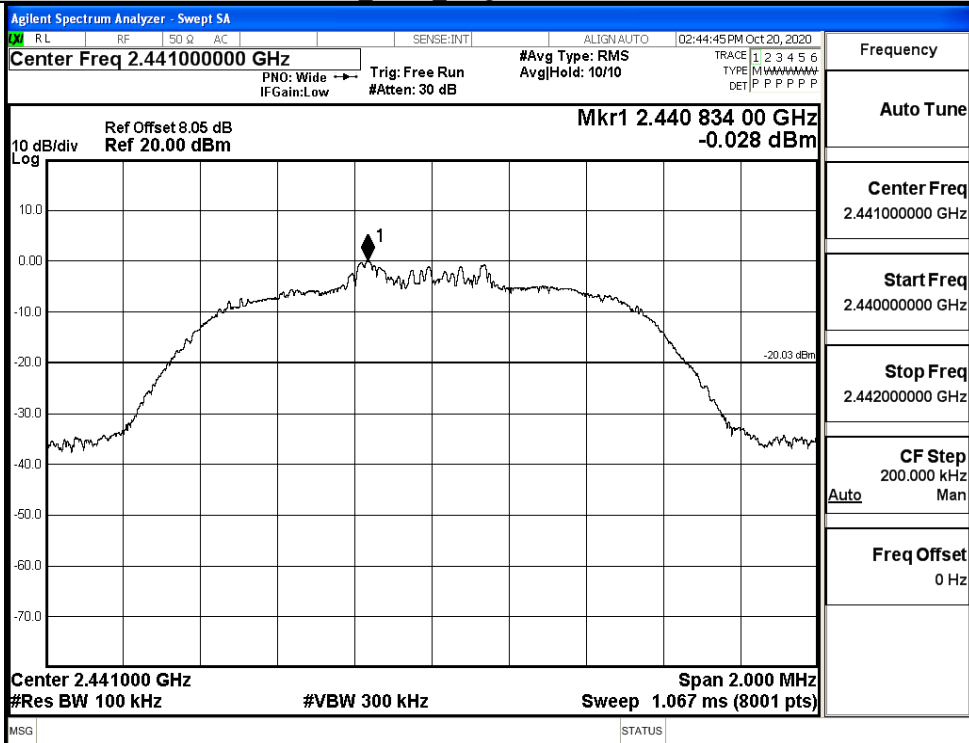


$\pi/4$ DQPSK LCH Graphs

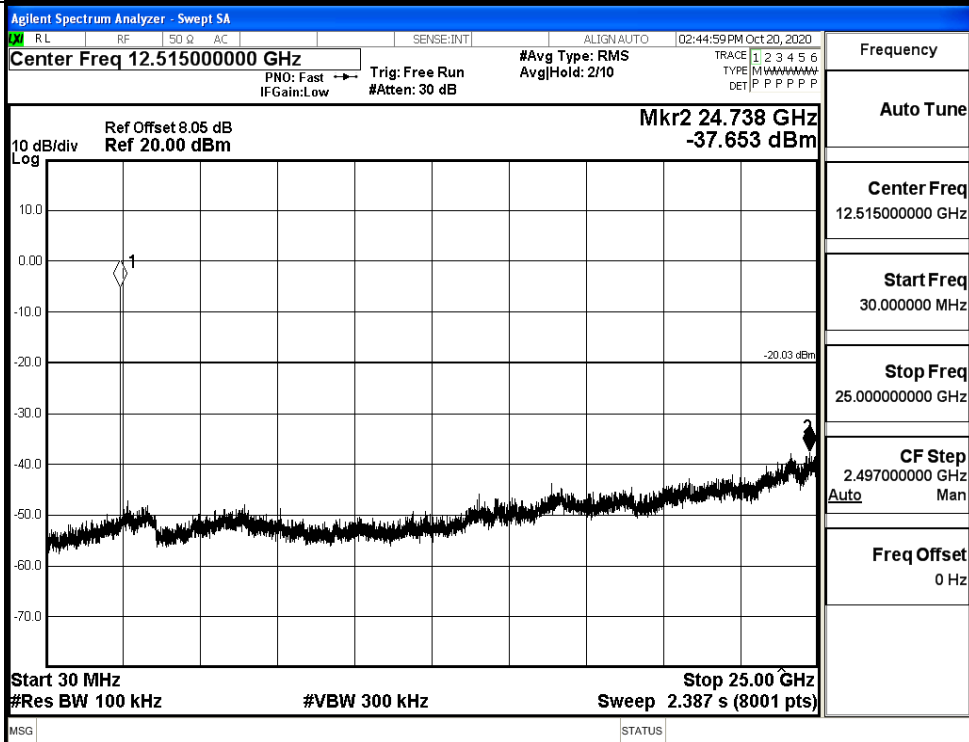


$\pi/4$ DQPSK MCH Graphs

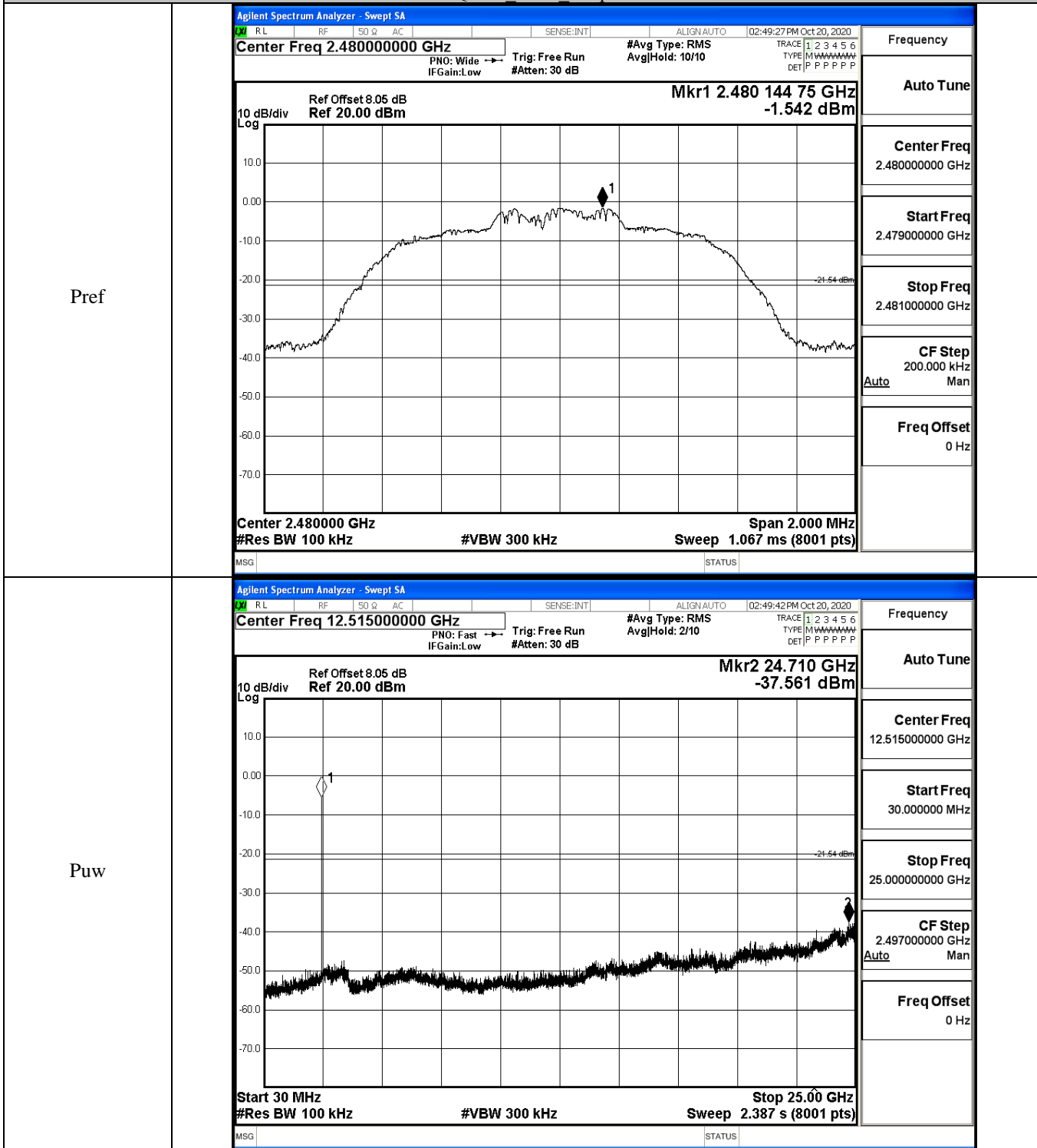
Pref



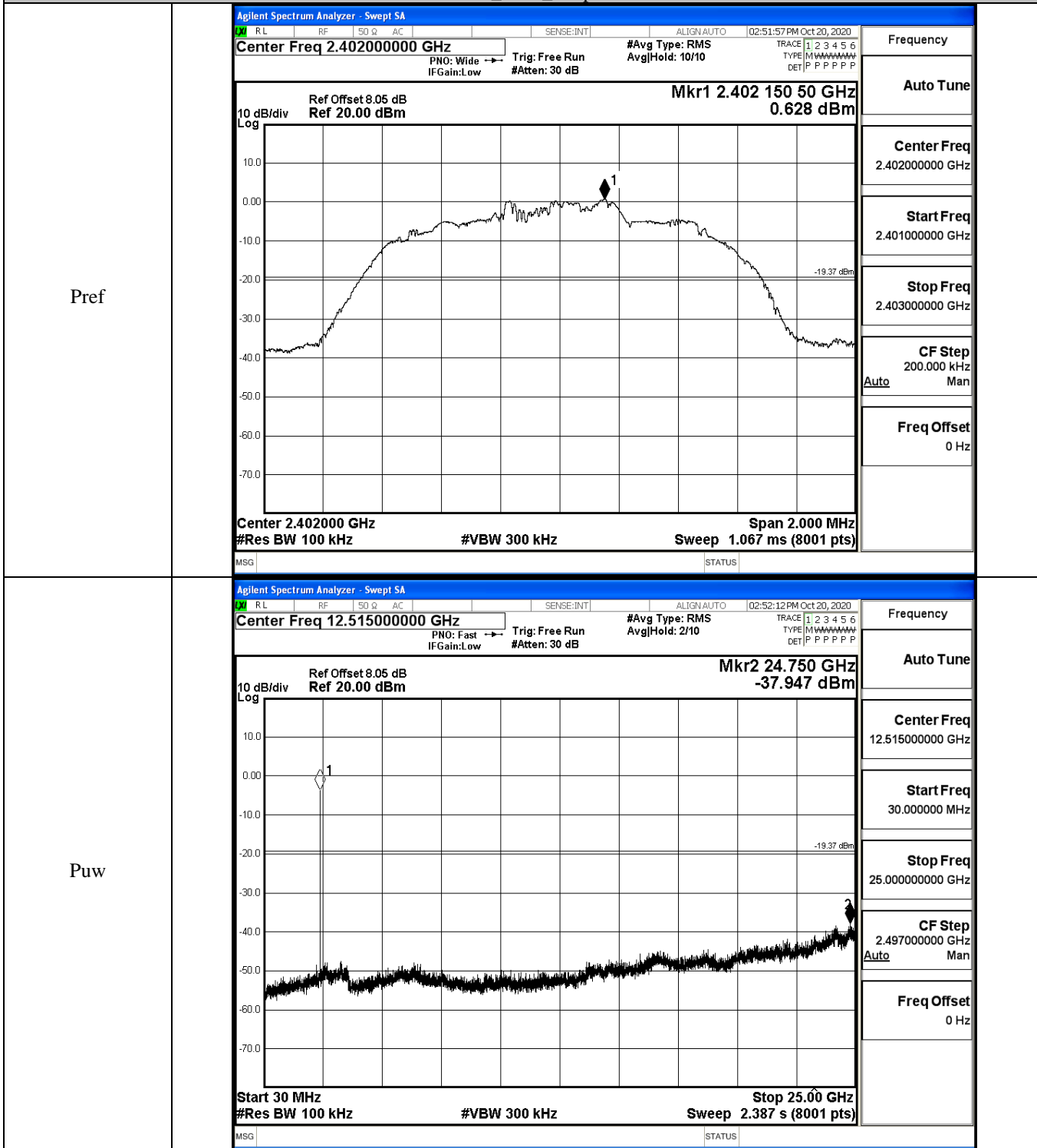
Puw



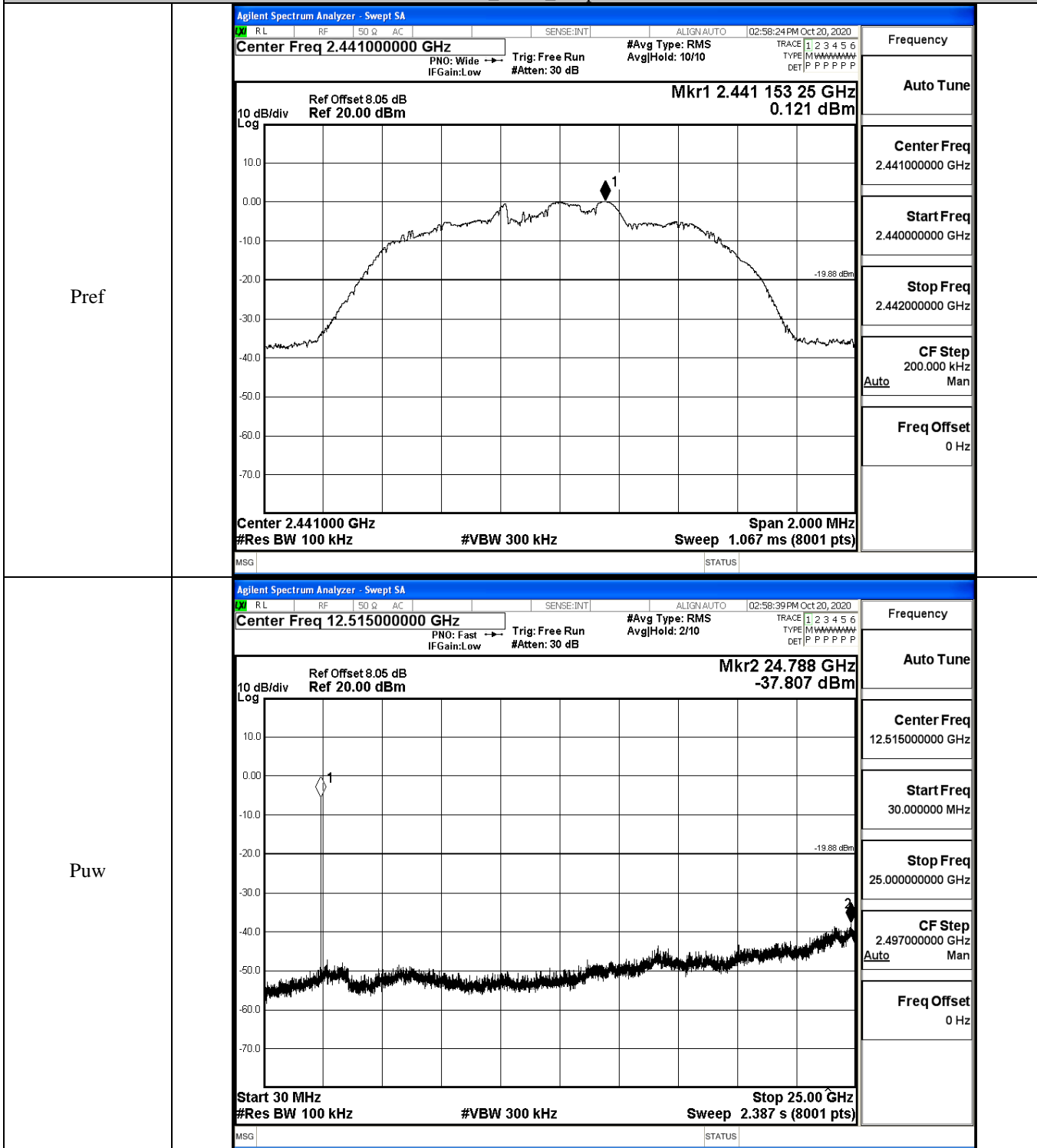
$\pi/4$ DQPSK HCH Graphs



8DPSK\_LCH\_Graphs



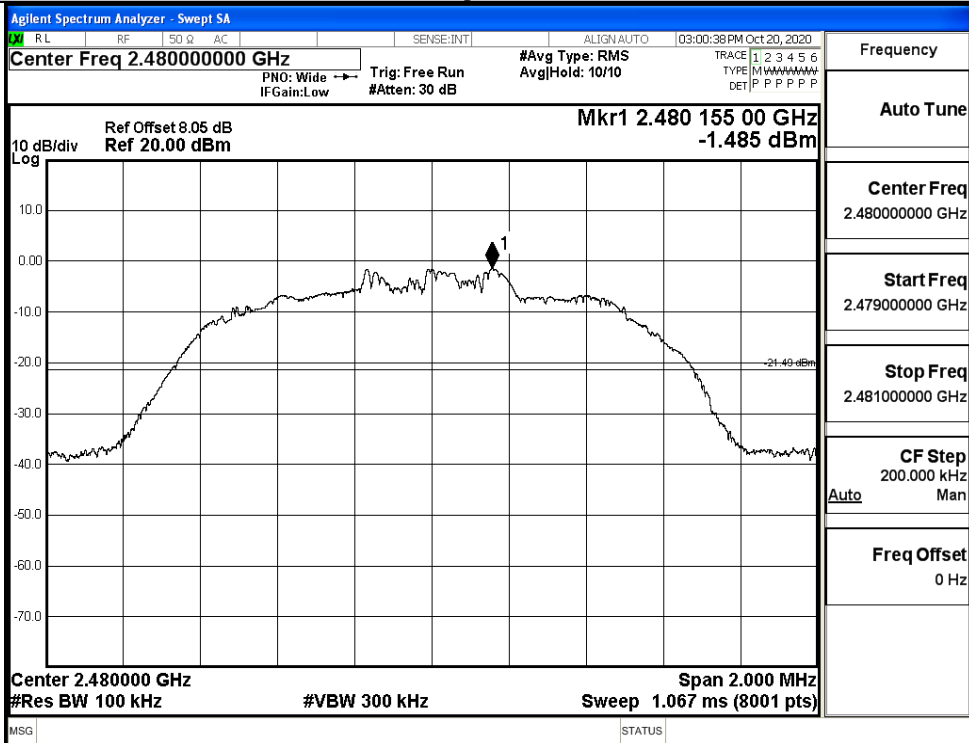
8DPSK\_MCH\_Graphs



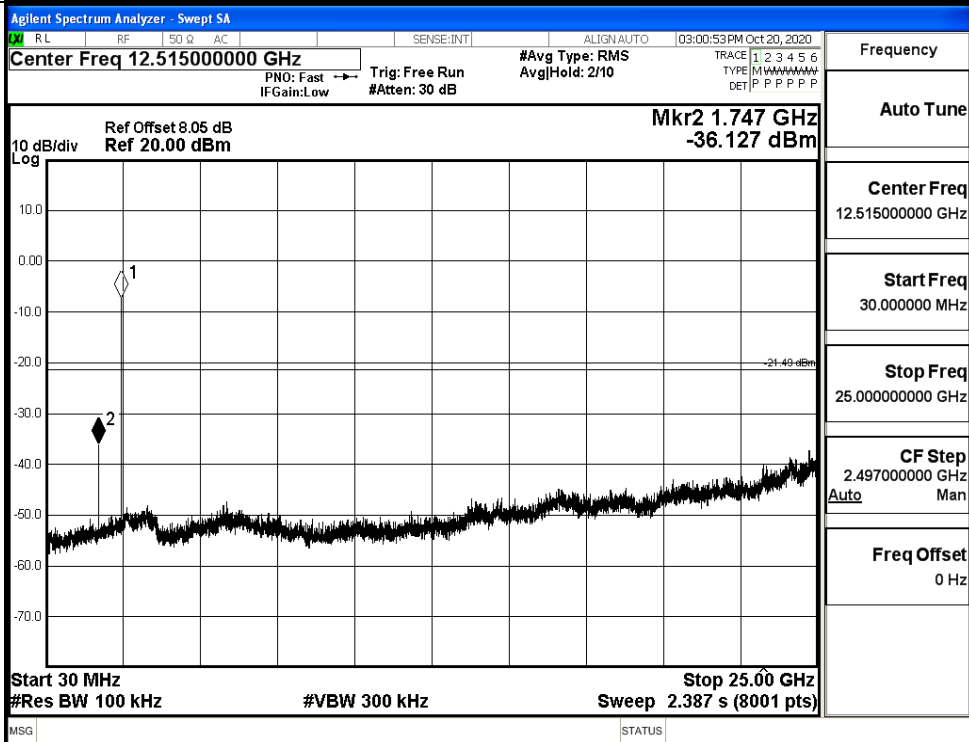


8DPSK\_HCH\_Graphs

Pref



Puw

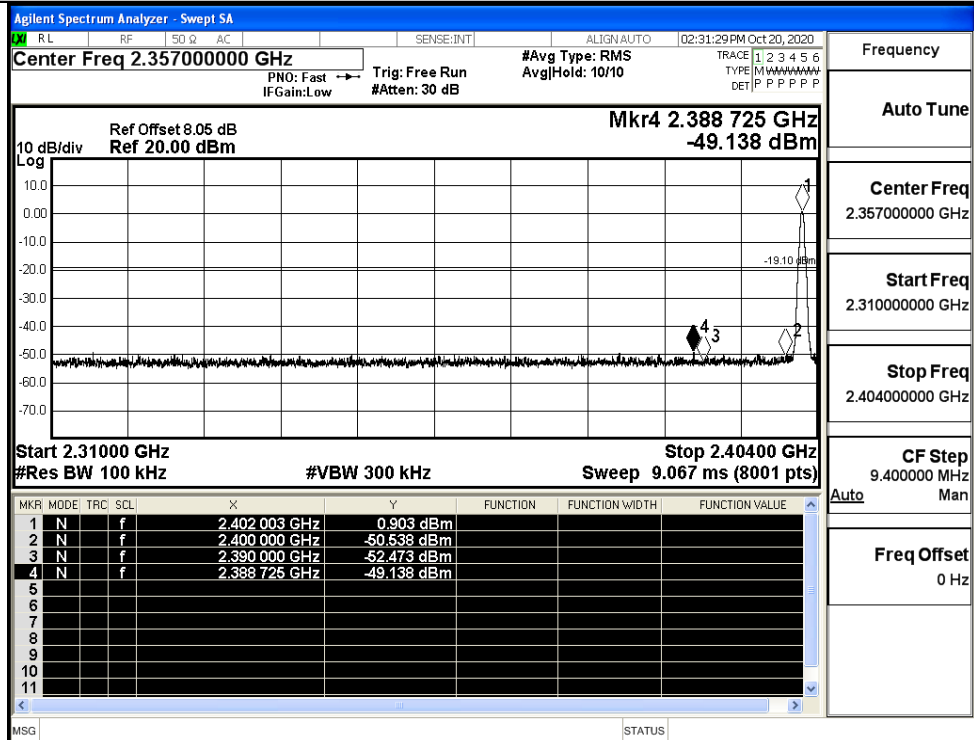


**A.7 Band-edge for RF Conducted Emissions**

Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	0.903	Off	-49.138	-19.1	PASS
			3.400	On	-49.039	-16.6	PASS
	HCH	2480	-1.287	Off	-48.969	-21.29	PASS
			5.914	On	-48.313	-14.09	PASS
$\pi/4$ DQPSK	LCH	2402	0.383	Off	-49.308	-19.62	PASS
			2.146	On	-48.862	-17.85	PASS
	HCH	2480	-1.159	Off	-48.585	-21.16	PASS
			4.679	On	-48.405	-15.32	PASS
8DPSK	LCH	2402	-0.195	Off	-49.406	-20.2	PASS
			2.676	On	-48.815	-17.32	PASS
	HCH	2480	-1.204	Off	-49.007	-21.2	PASS
			3.432	On	-48.120	-16.57	PASS

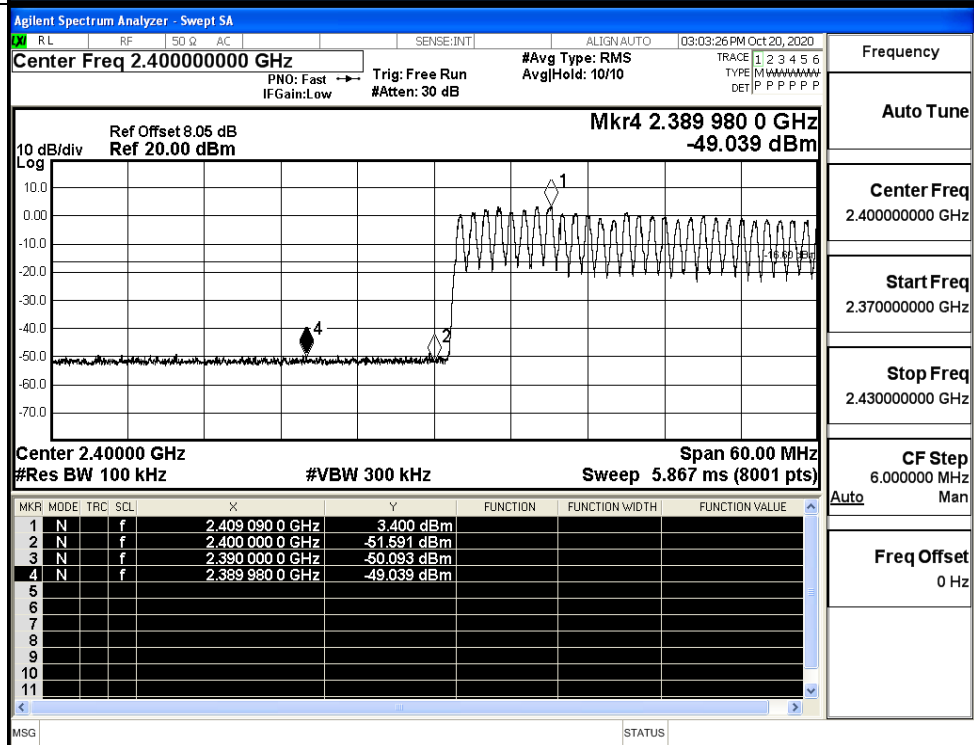
Test Graphs

GFSK/LCH/No Hop



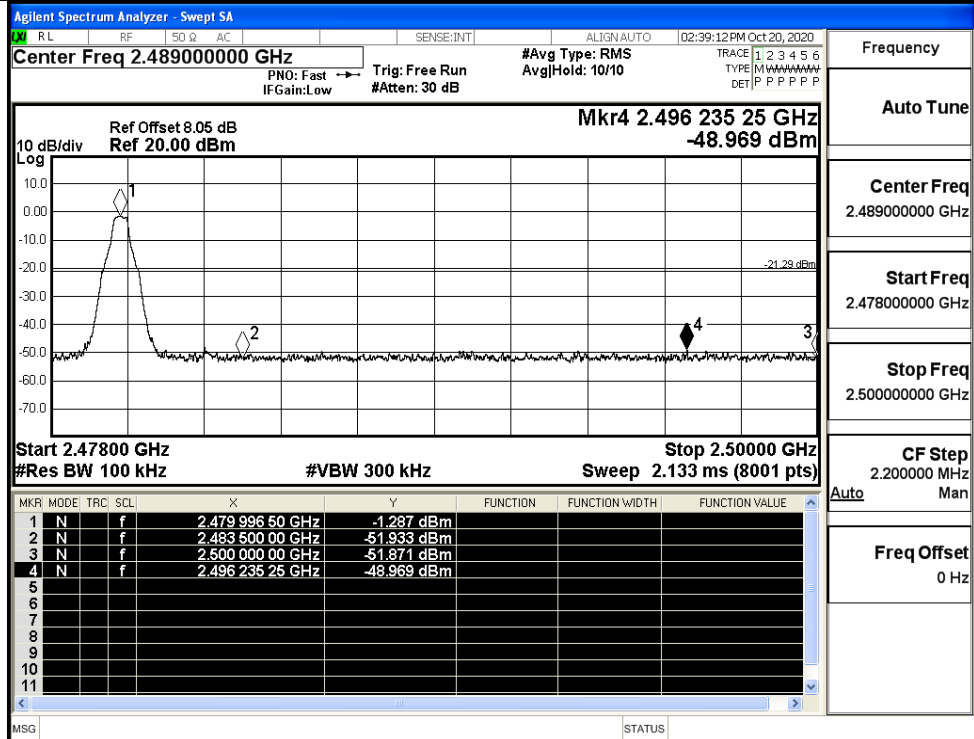
Frequency	2.35700000 GHz
Auto Tune	
Center Freq	2.35700000 GHz
Start Freq	2.31000000 GHz
Stop Freq	2.40400000 GHz
CF Step	9.400000 MHz
Auto	Man
Freq Offset	0 Hz

GFSK/LCH/Hop

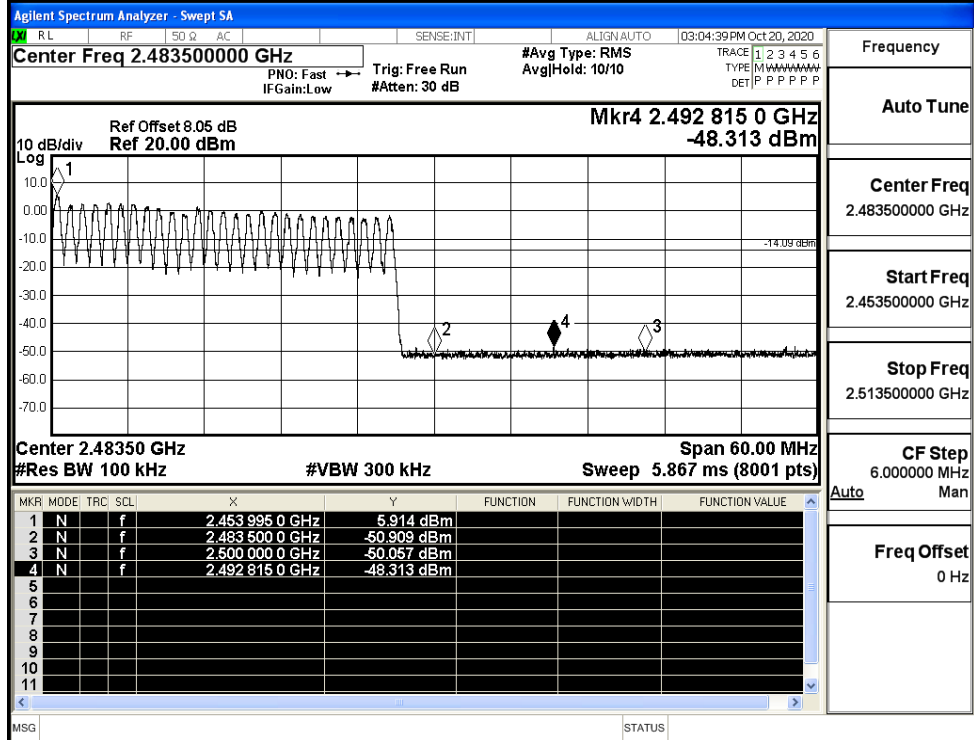


Frequency	2.40000000 GHz
Auto Tune	
Center Freq	2.40000000 GHz
Start Freq	2.37000000 GHz
Stop Freq	2.43000000 GHz
CF Step	6.000000 MHz
Auto	Man
Freq Offset	0 Hz

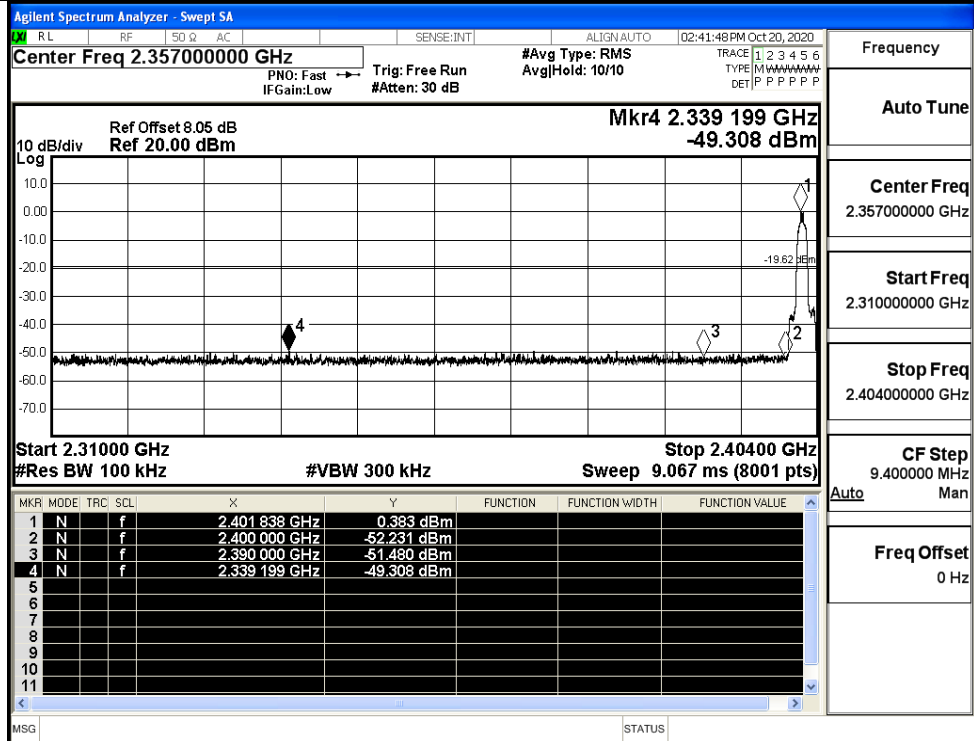
GFSK/HCH/No Hop



GFSK/HCH/Hop

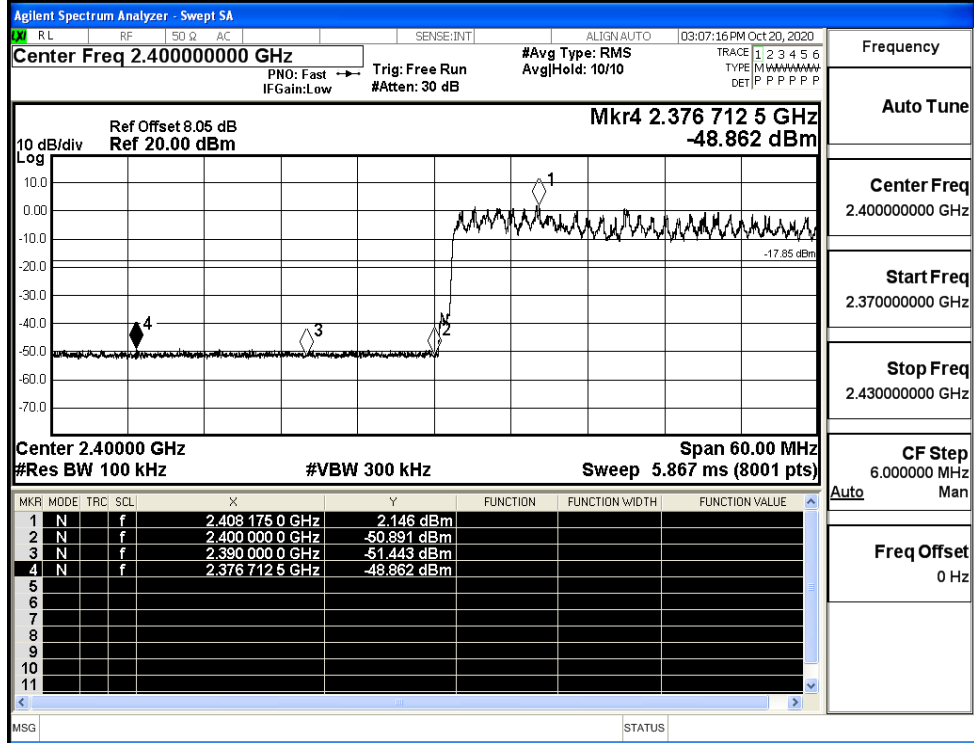


$\pi/4$ DQPSK/LCH/No  
Hop



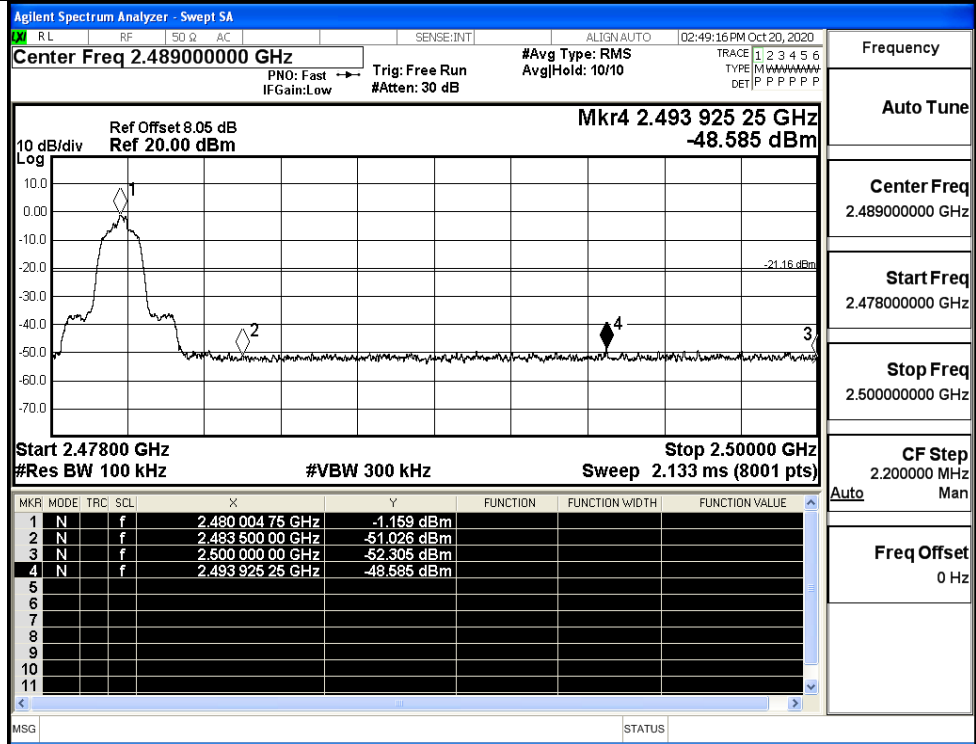
Frequency  
Auto Tune  
Center Freq  
2.357000000 GHz  
Start Freq  
2.310000000 GHz  
Stop Freq  
2.404000000 GHz  
CF Step  
9.400000 MHz  
Auto Man  
Freq Offset  
0 Hz

$\pi/4$ DQPSK/LCH/Hop

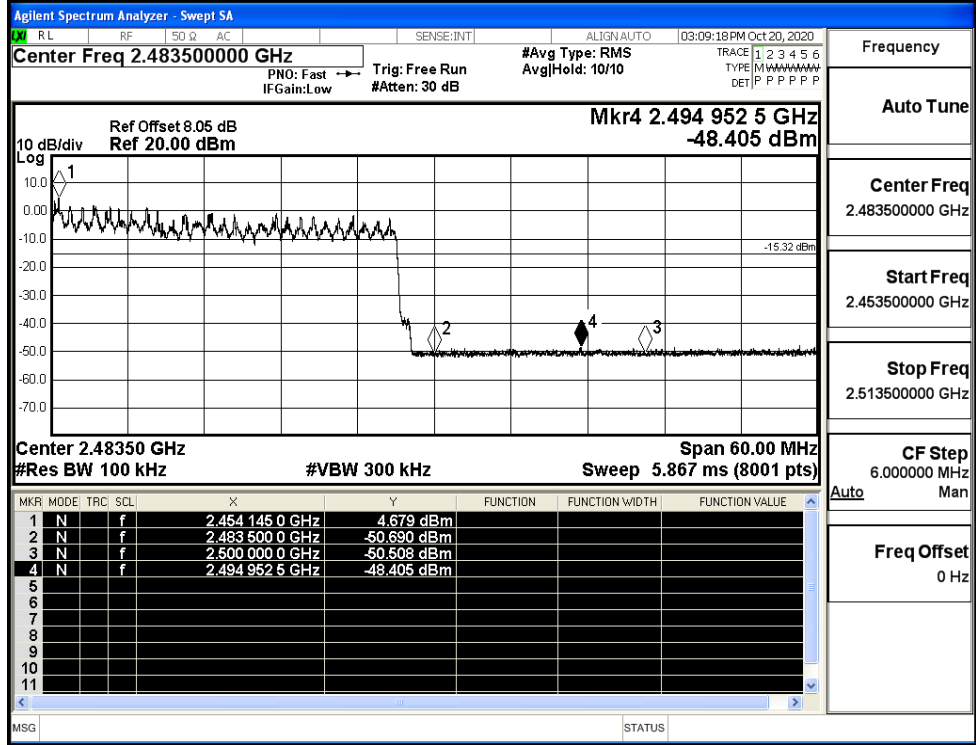


Frequency  
Auto Tune  
Center Freq  
2.400000000 GHz  
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Stop Freq  
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CF Step  
6.000000 MHz  
Auto Man  
Freq Offset  
0 Hz

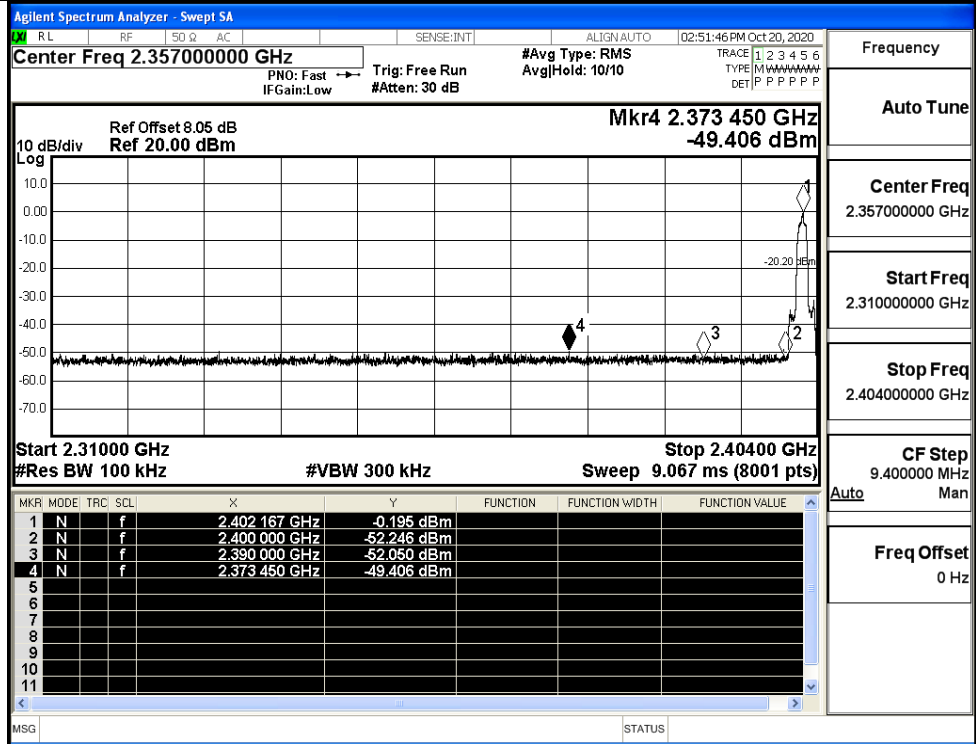
$\pi/4$ DQPSK/HCH/No  
Hop



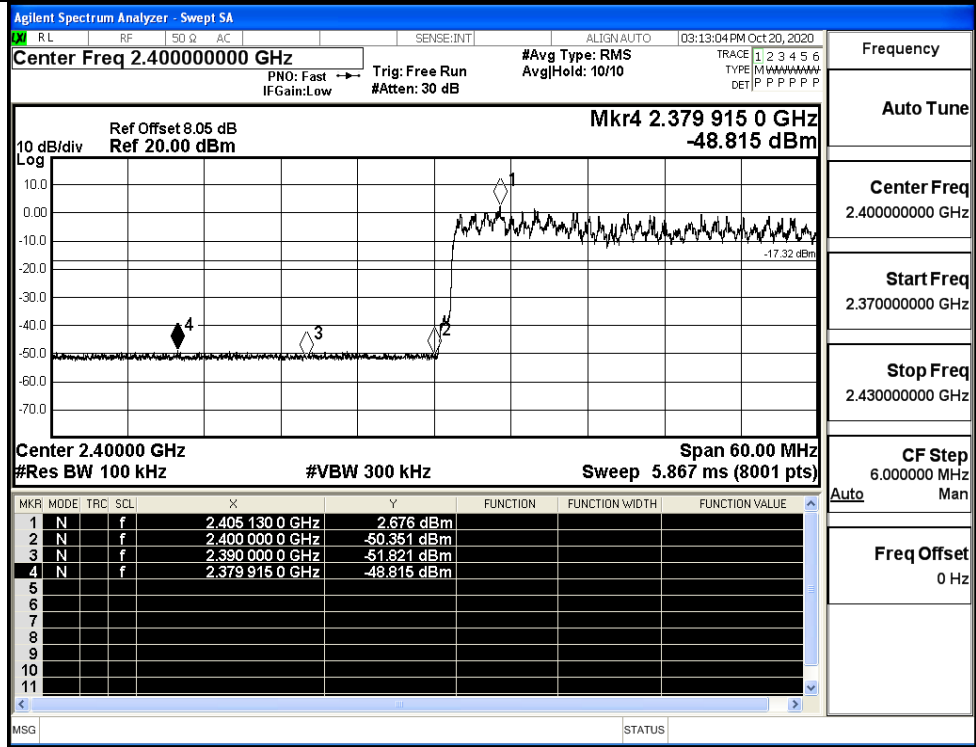
$\pi/4$ DQPSK/HCH/Hop



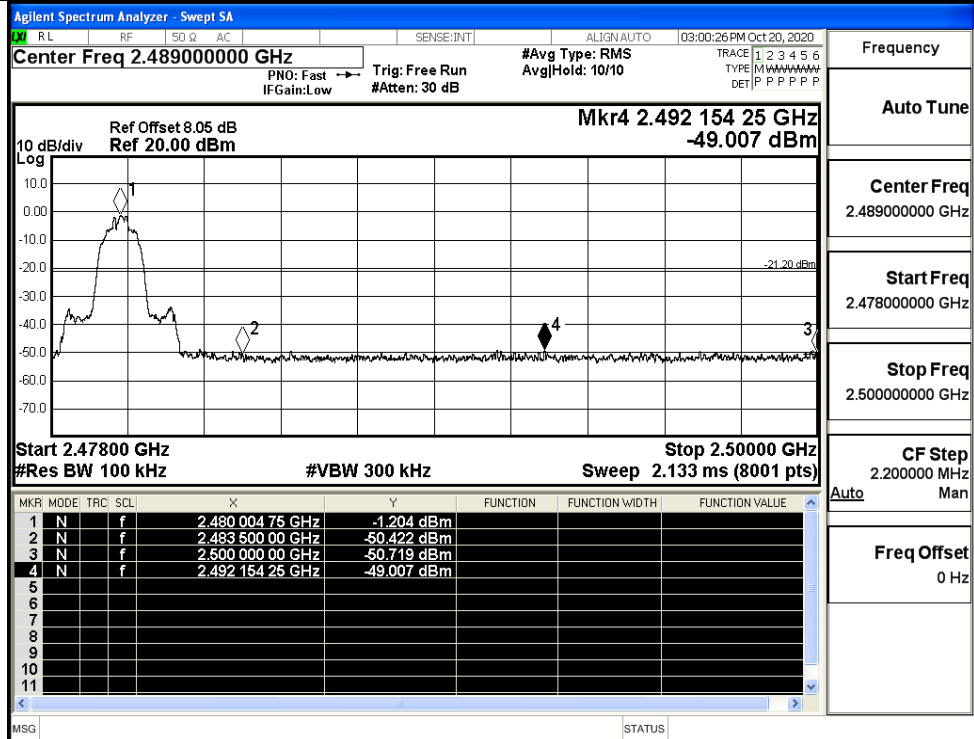
8DPSK/LCH/No Hop



8DPSK/LCH/Hop

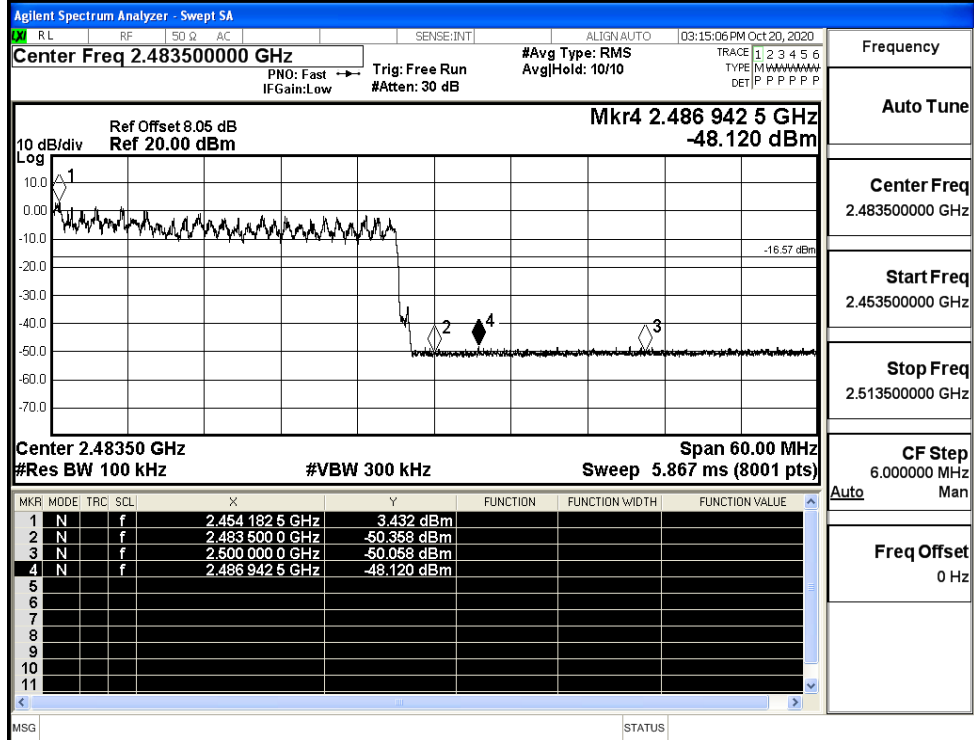


8DPSK/HCH/No Hop



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

8DPSK/HCH/Hop



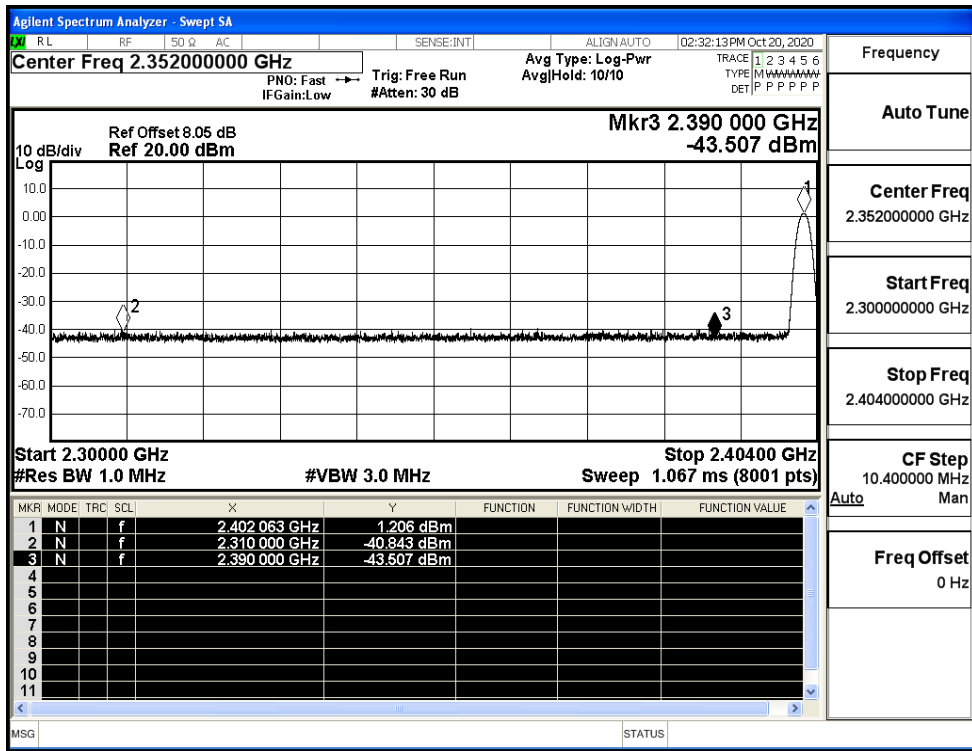
Frequency	2.483500000 GHz
Auto Tune	
Center Freq	2.483500000 GHz
Start Freq	2.453500000 GHz
Stop Freq	2.513500000 GHz
CF Step	6.000000 MHz
Freq Offset	0 Hz



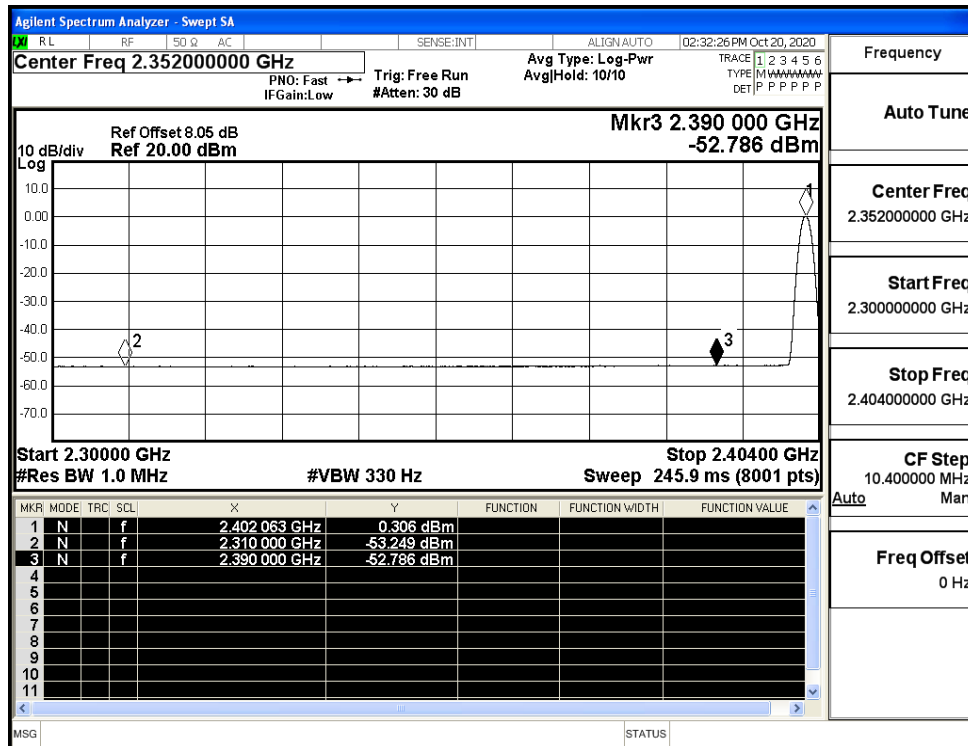
## A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-40.84	2.0	0	56.39	PEAK	74	PASS
	Off	2310.0	-53.25	2.0	0	43.98	AV	54	PASS
	Off	2390.0	-43.51	2.0	0	53.72	PEAK	74	PASS
	Off	2390.0	-52.79	2.0	0	44.44	AV	54	PASS
	Off	2483.5	-41.80	2.0	0	55.43	PEAK	74	PASS
	Off	2483.5	-52.30	2.0	0	44.93	AV	54	PASS
	Off	2500.0	-41.96	2.0	0	55.27	PEAK	74	PASS
	Off	2500.0	-52.31	2.0	0	44.92	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-43.74	2.0	0	53.49	PEAK	74	PASS
	Off	2310.0	-53.33	2.0	0	43.90	AV	54	PASS
	Off	2390.0	-42.93	2.0	0	54.30	PEAK	74	PASS
	Off	2390.0	-52.92	2.0	0	44.31	AV	54	PASS
	Off	2483.5	-42.87	2.0	0	54.36	PEAK	74	PASS
	Off	2483.5	-52.33	2.0	0	44.90	AV	54	PASS
	Off	2500.0	-41.70	2.0	0	55.53	PEAK	74	PASS
	Off	2500.0	-52.28	2.0	0	44.95	AV	54	PASS
8DPSK	Off	2310.0	-43.38	2.0	0	53.85	PEAK	74	PASS
	Off	2310.0	-53.39	2.0	0	43.84	AV	54	PASS
	Off	2390.0	-42.84	2.0	0	54.39	PEAK	74	PASS
	Off	2390.0	-52.97	2.0	0	44.26	AV	54	PASS
	Off	2483.5	-42.68	2.0	0	54.55	PEAK	74	PASS
	Off	2483.5	-52.38	2.0	0	44.85	AV	54	PASS
	Off	2500.0	-41.15	2.0	0	56.08	PEAK	74	PASS
	Off	2500.0	-52.30	2.0	0	44.93	AV	54	PASS

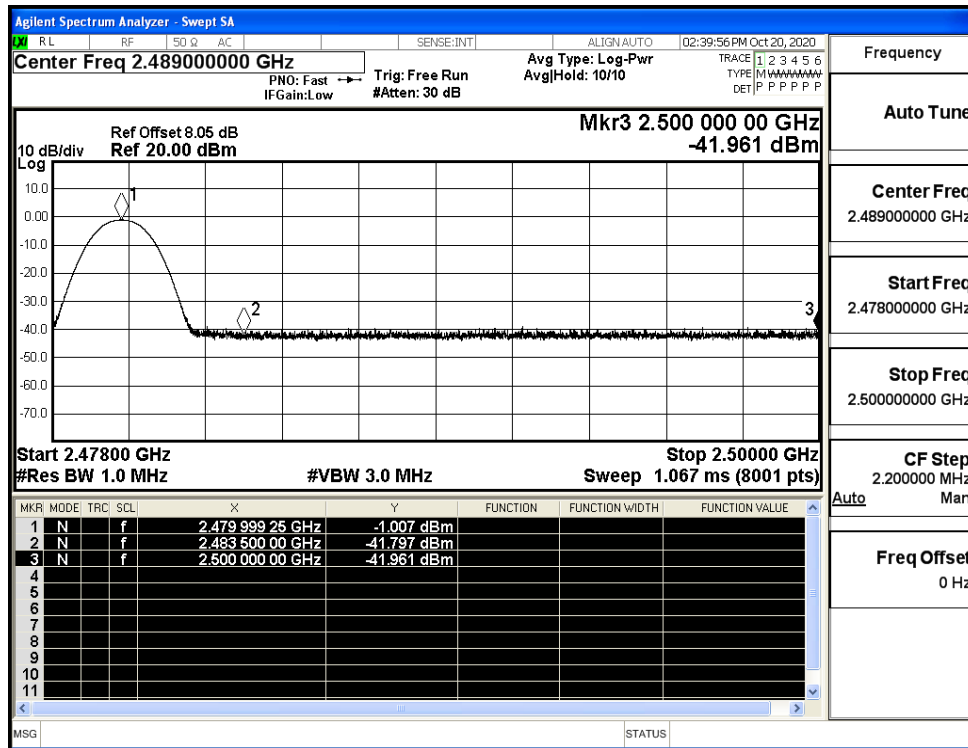
Restrict-band band-edge measurements\_Hopping Off\_GFSK\_PEAK (Low Channel)



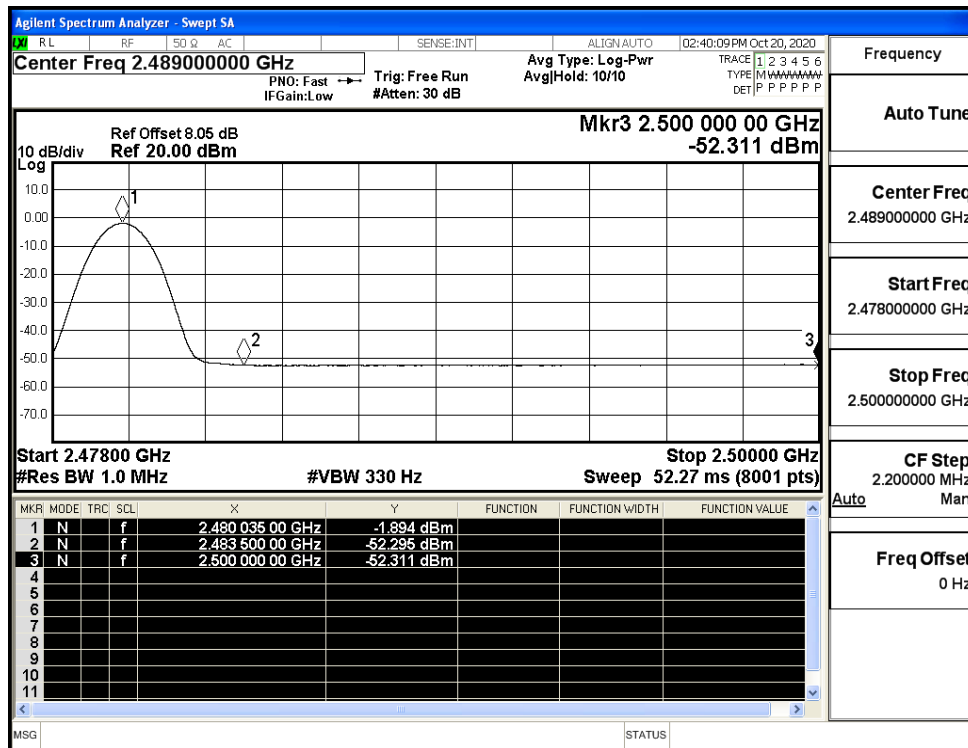
Restrict-band band-edge measurements\_Hopping Off\_GFSK\_Average (Low Channel)



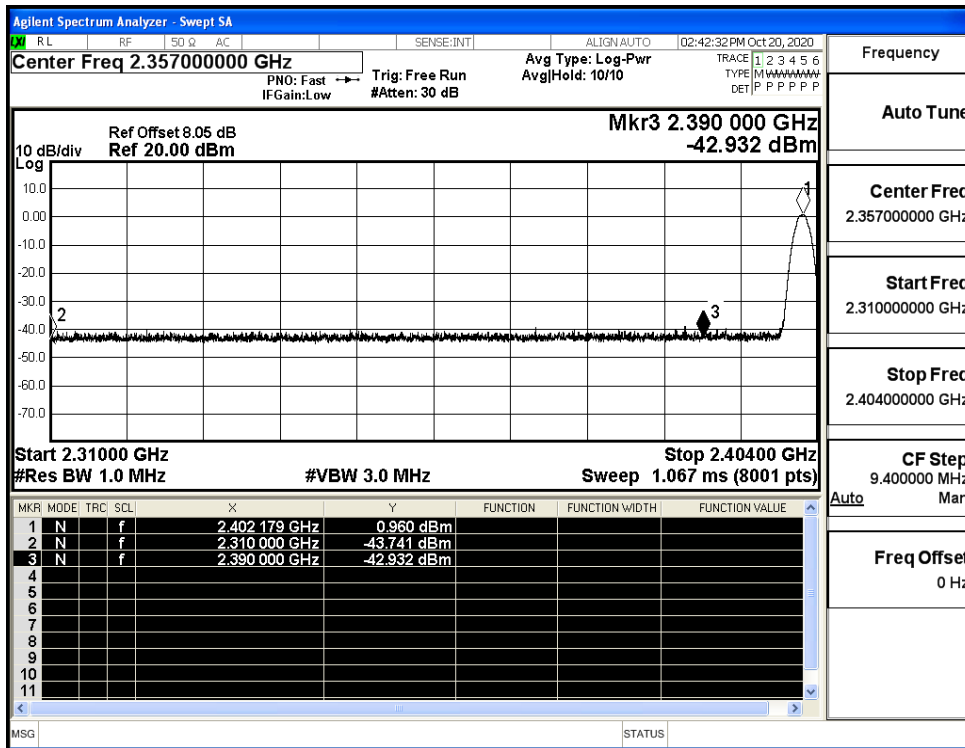
Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_PEAK (High Channel)



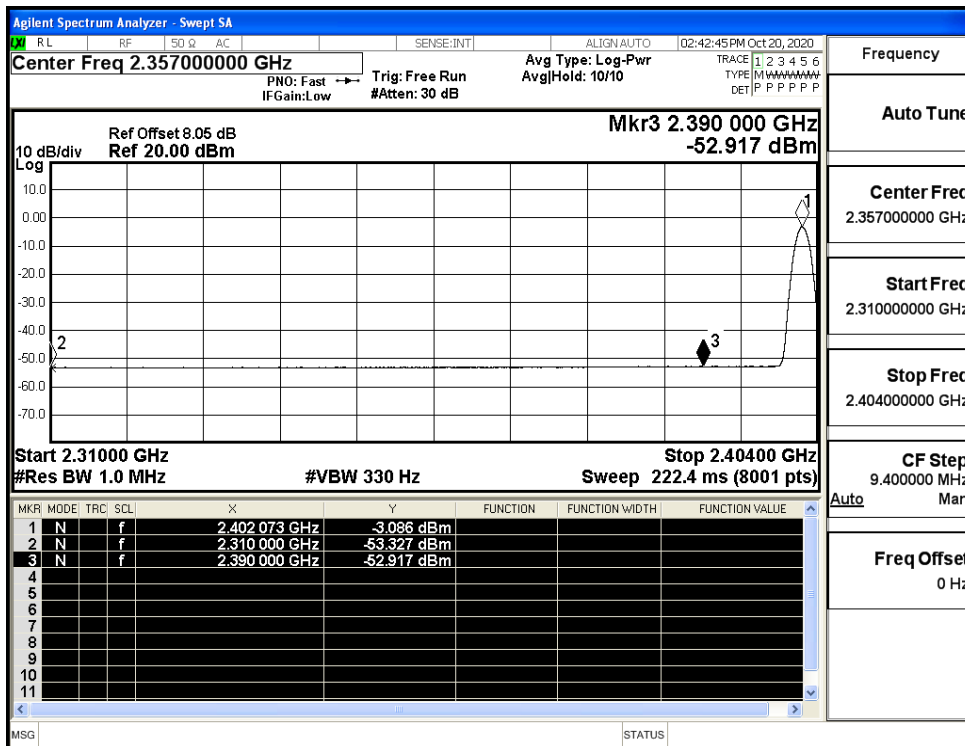
Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_Average (High Channel)



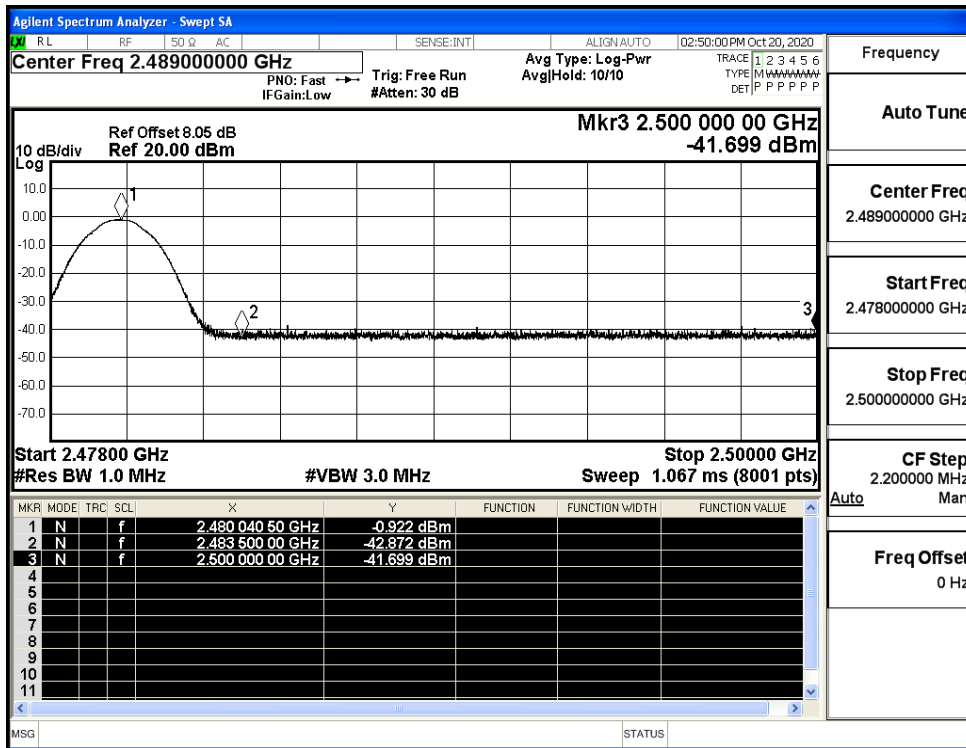
Restrict-band band-edge measurements\_Hopping Off  $\pi/4$ -DQPSK\_PEAK (Low Channel)



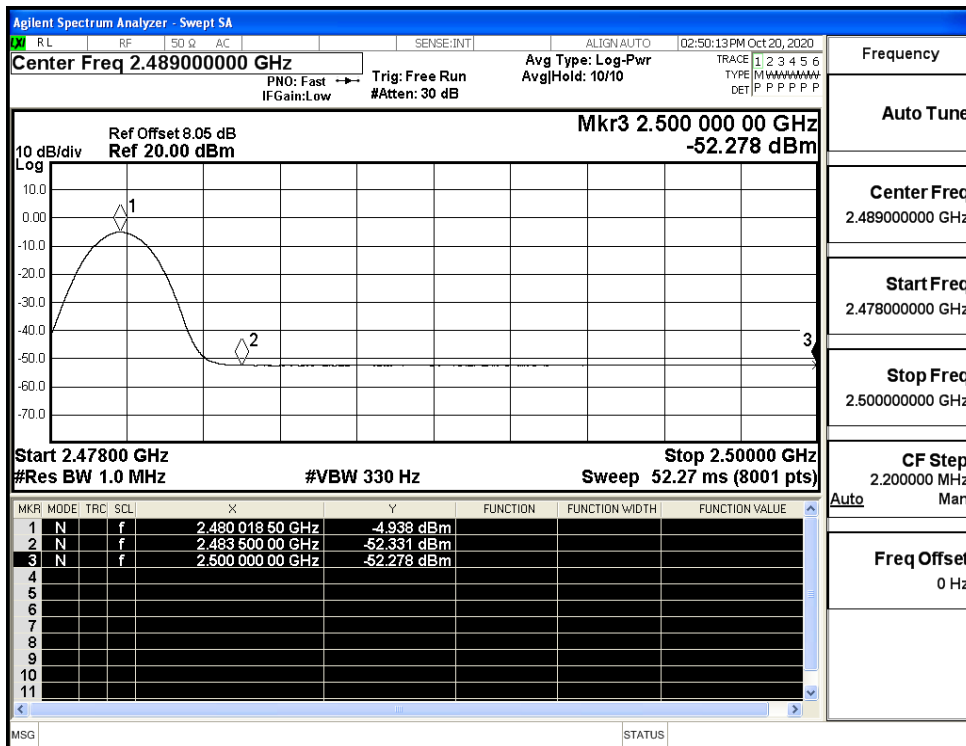
Restrict-band band-edge measurements\_Hopping Off  $\pi/4$ -DQPSK\_Average (Low Channel)



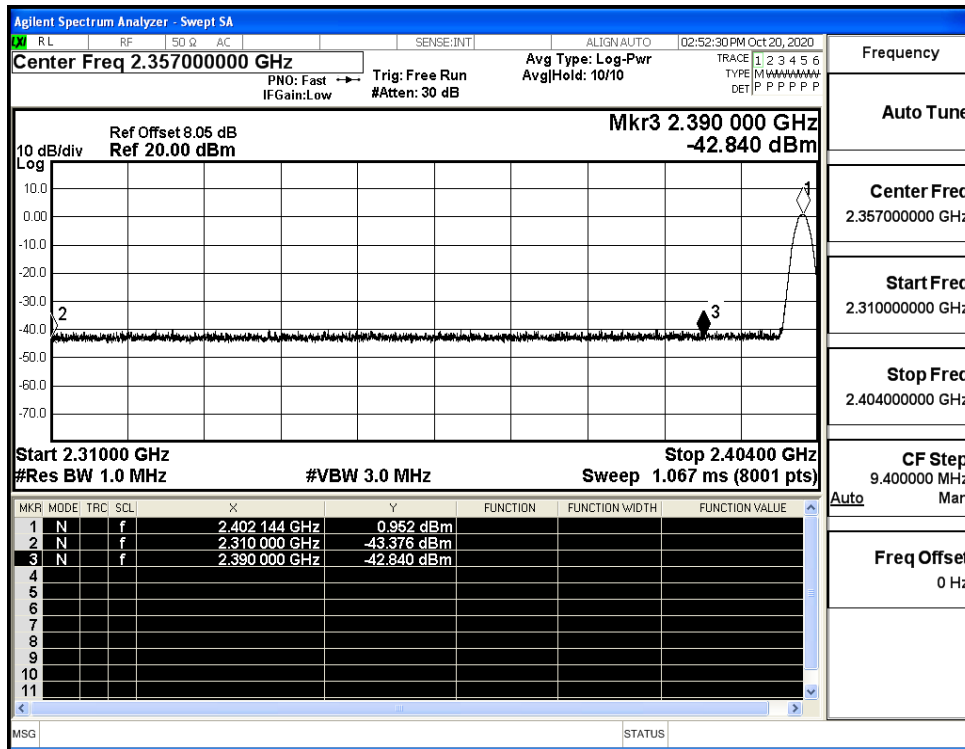
Restrict-band band-edge measurements\_Hopping Off  $\pi/4$ -DQPSK\_PEAK (High Channel)



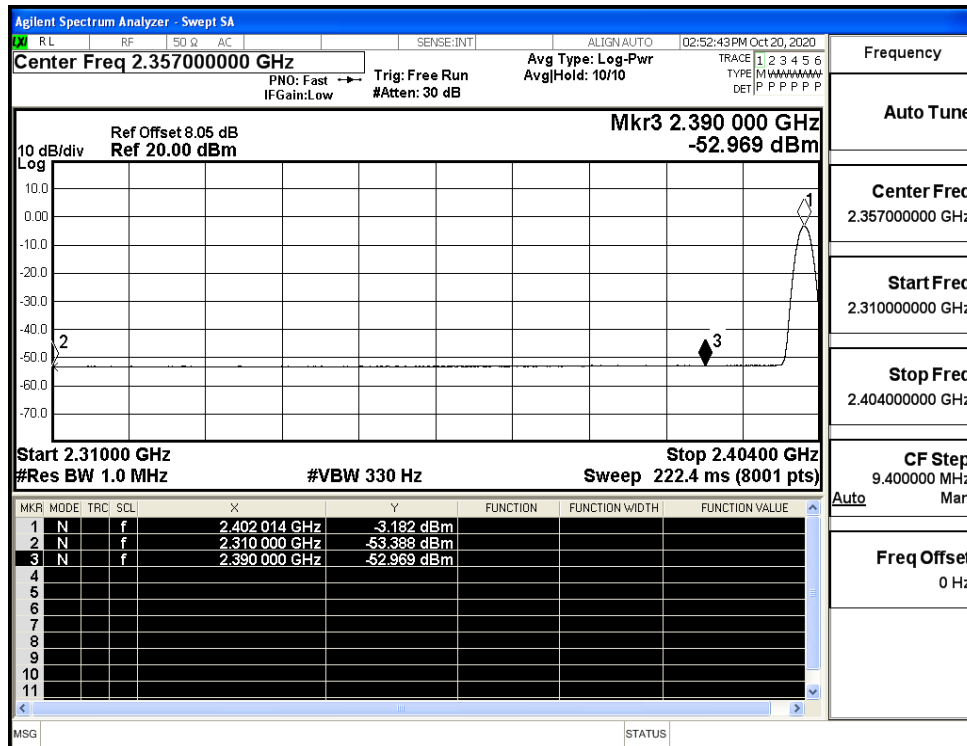
Restrict-band band-edge measurements\_Hopping Off  $\pi/4$ -DQPSK\_Average (High Channel)



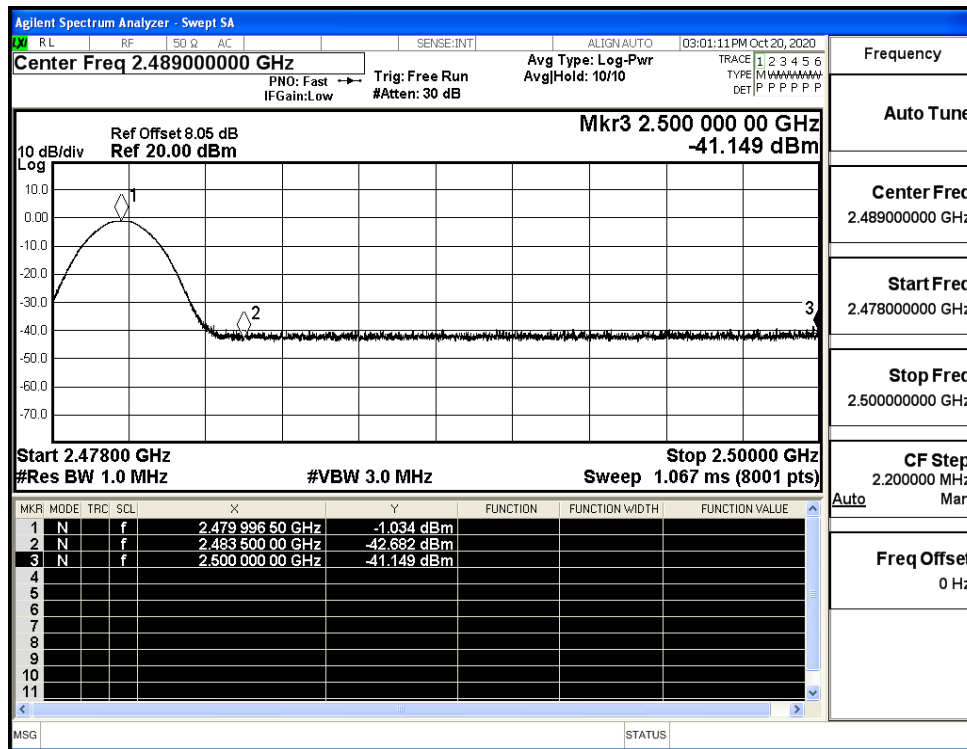
Restrict-band band-edge measurements\_Hopping Off\_8DPSK\_PEAK (Low Channel)



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)

