

Appendix A
RF Test Data for BT V5.0(BDR/EDR) (Conducted Measurement)
Product Name: Communicator
Trade Mark: N/A
Test Model: Communicator 3

Environmental Conditions

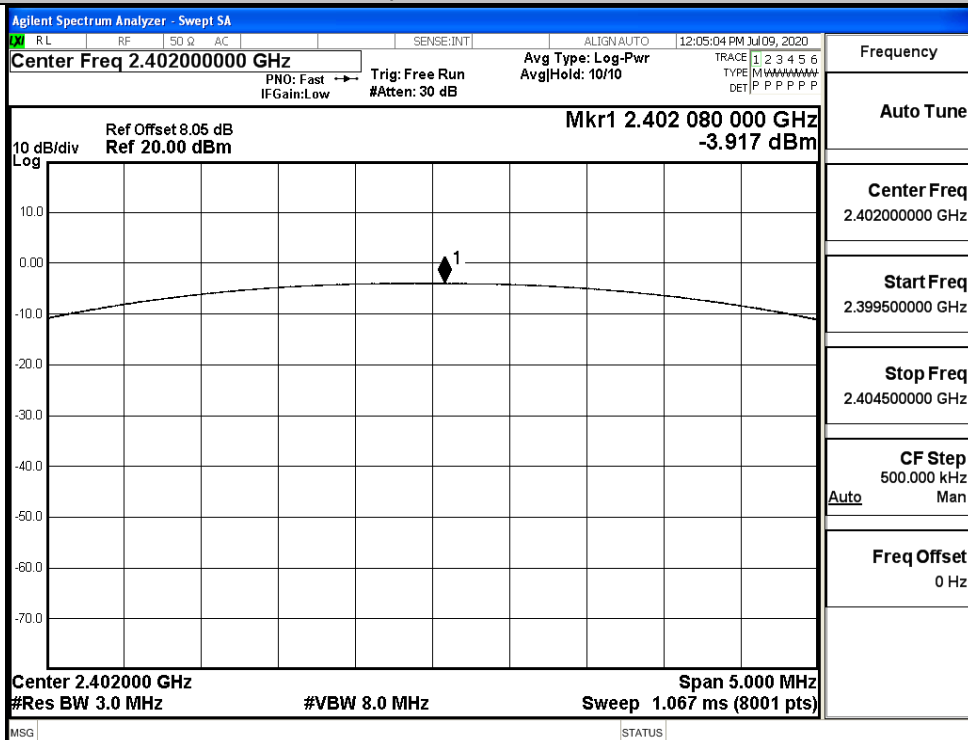
Temperature:	24.6° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Carl Fu
Supervised by:	Li Huan

A.1 Maximum Conducted Peak Output Power

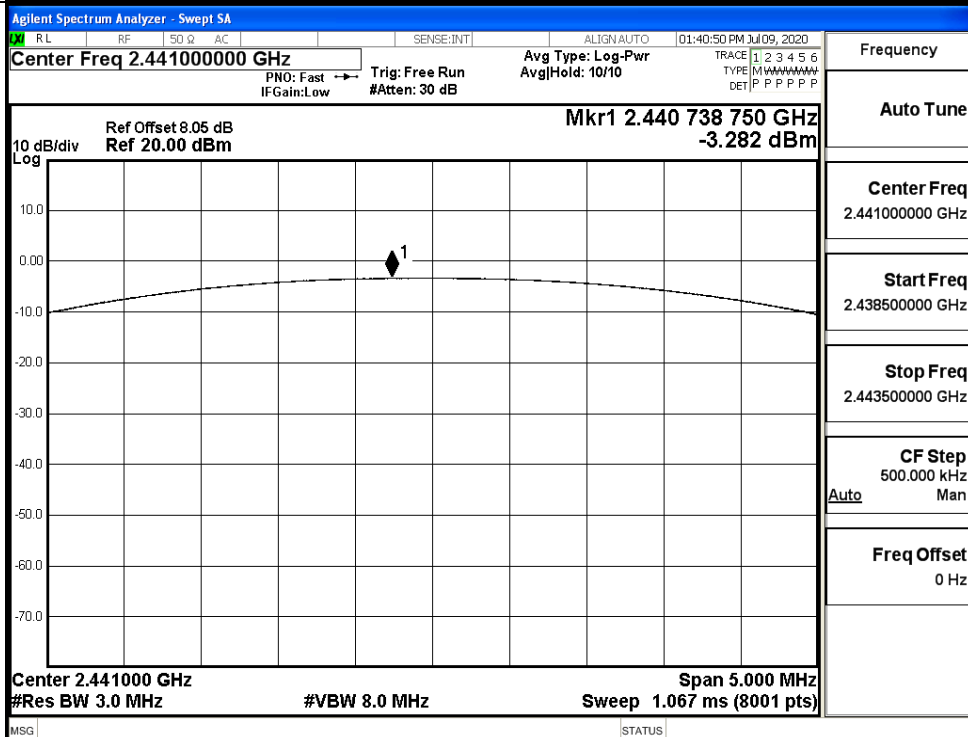
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-3.917	30	PASS
	MCH	-3.282	30	PASS
	HCH	-3.618	30	PASS
$\pi/4$ DQPSK	LCH	-1.051	21	PASS
	MCH	-0.495	21	PASS
	HCH	-0.973	21	PASS
8DPSK	LCH	-0.209	21	PASS
	MCH	0.296	21	PASS
	HCH	-0.247	21	PASS

Test Graphs

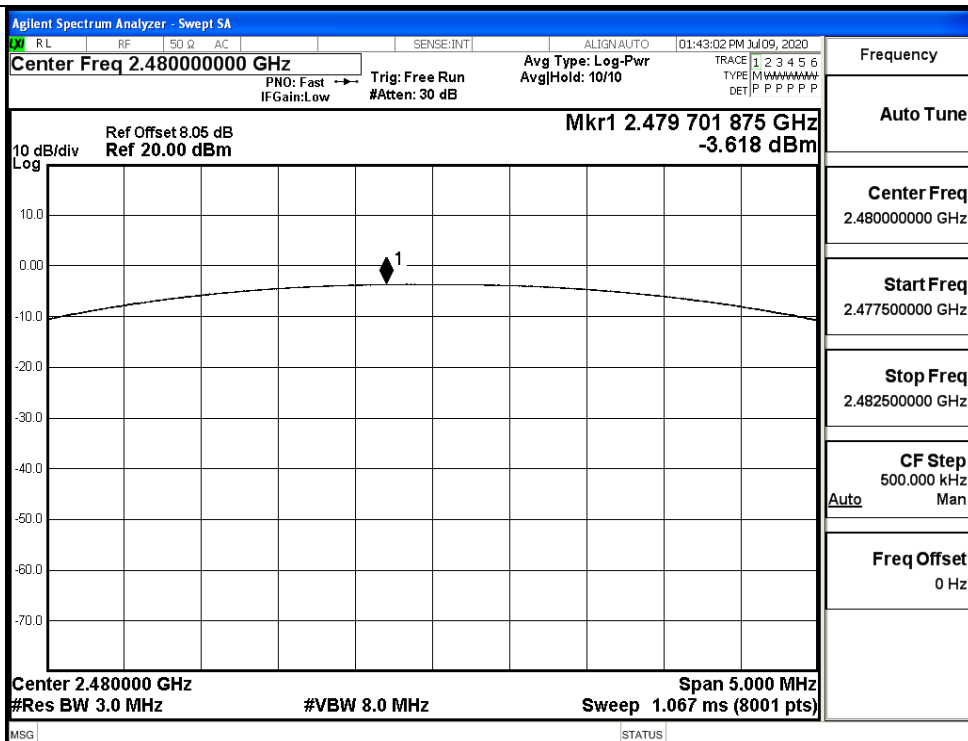
GFSK/LCH



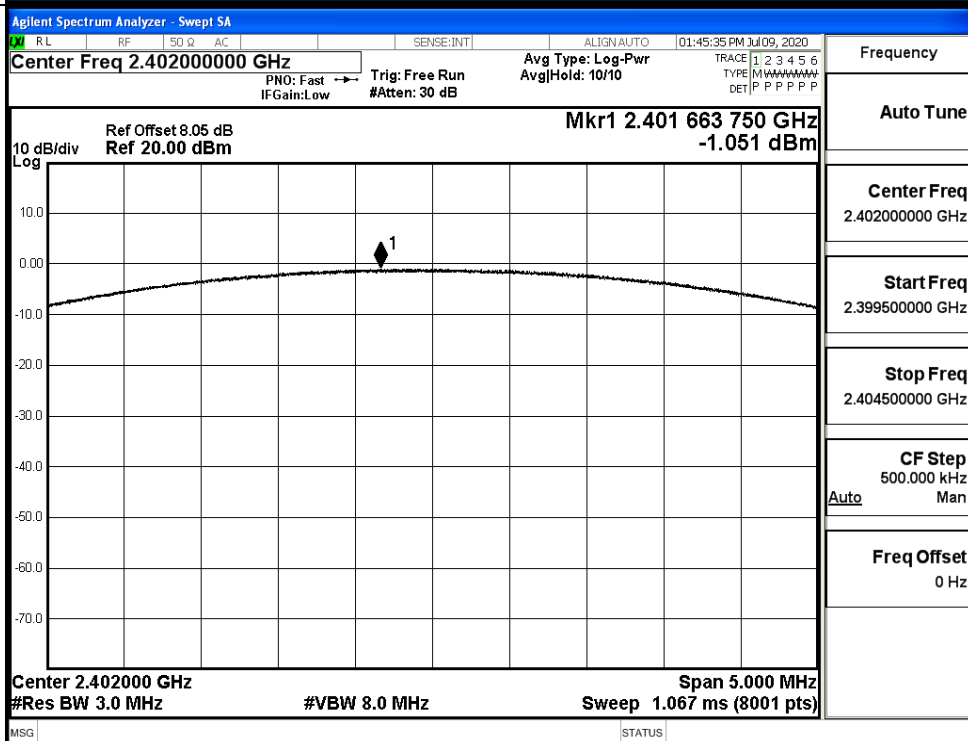
GFSK/MCH

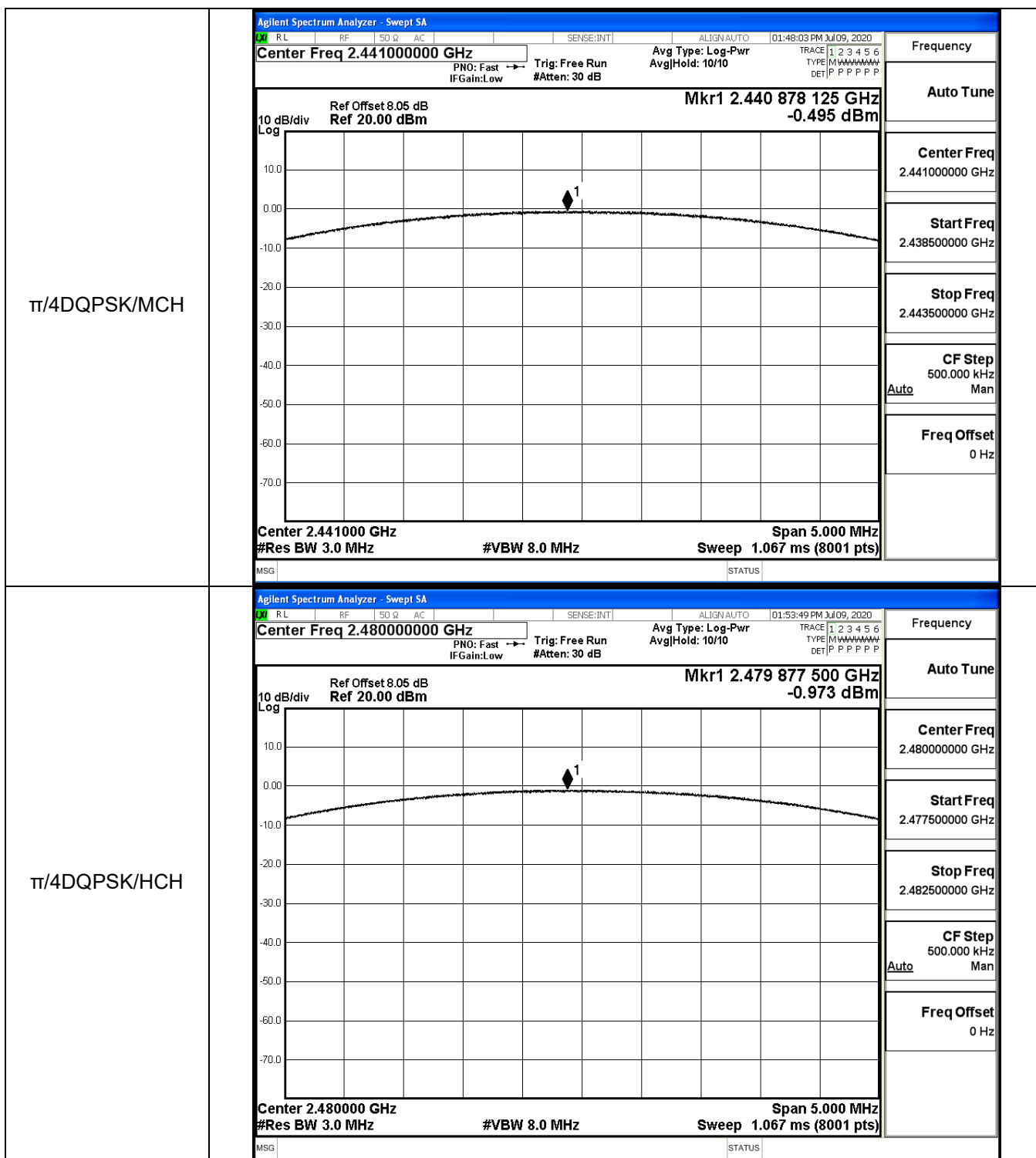


GFSK/HCH

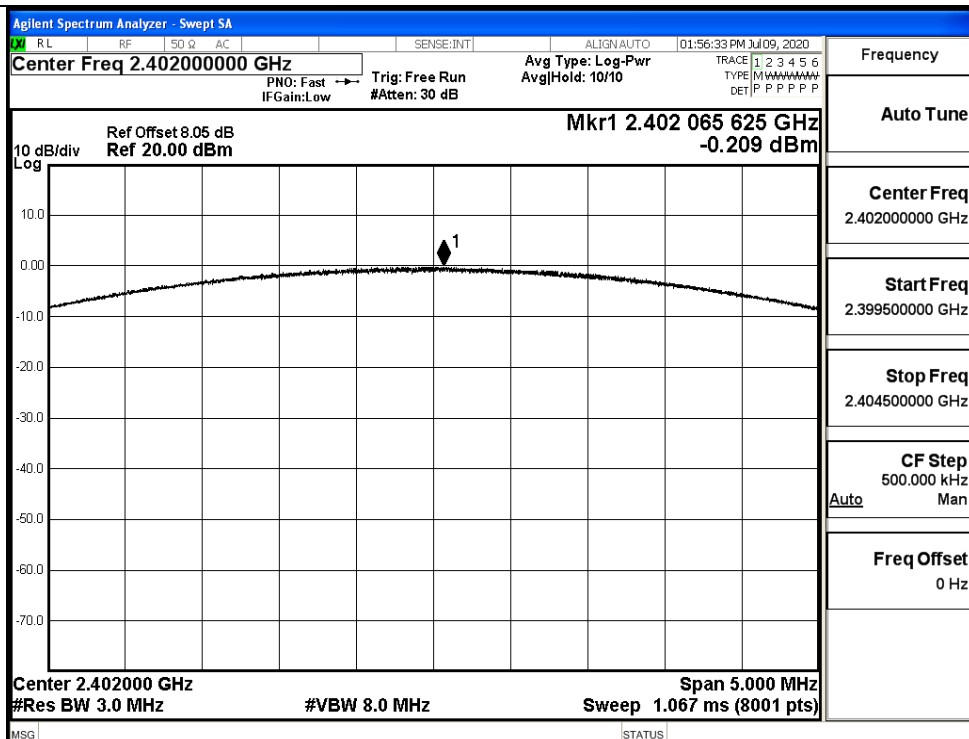


$\pi/4$ DQPSK/LCH

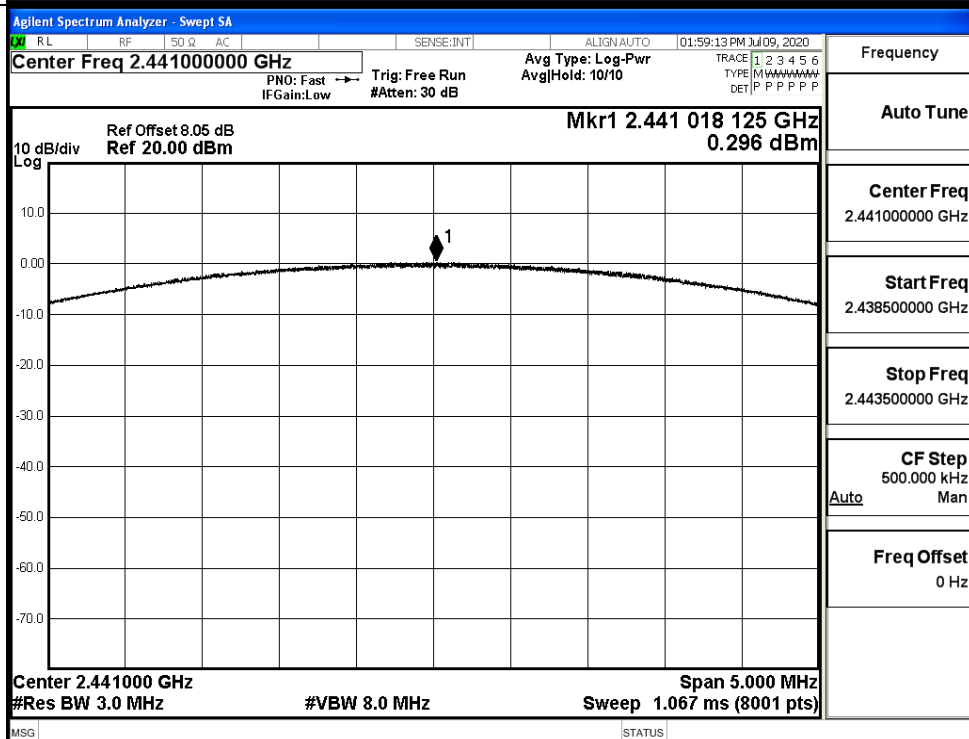




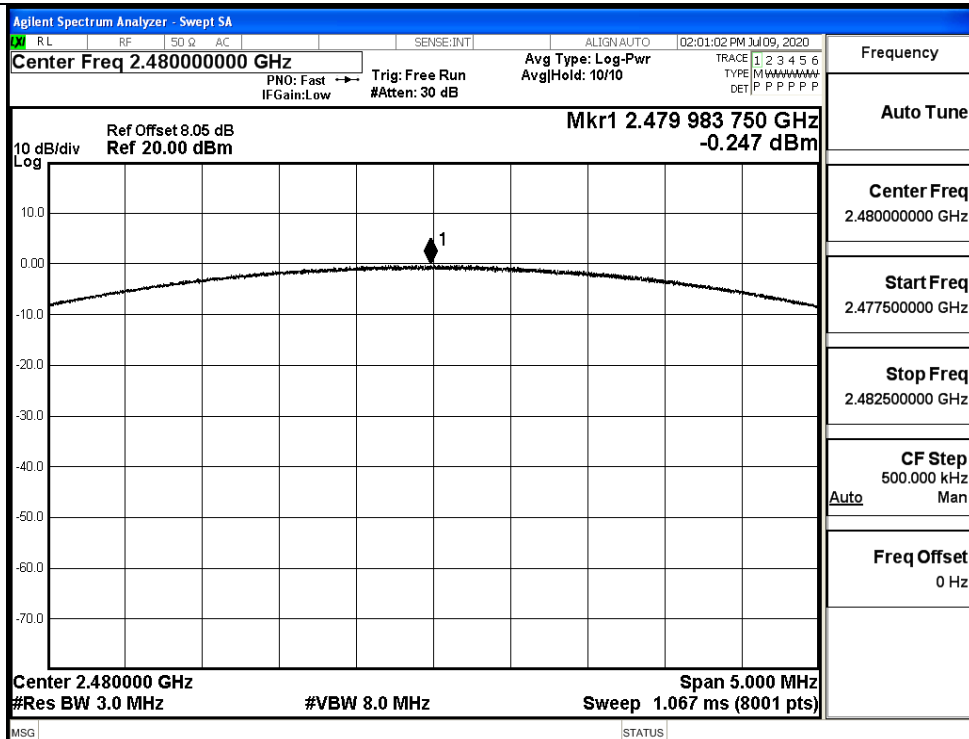
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

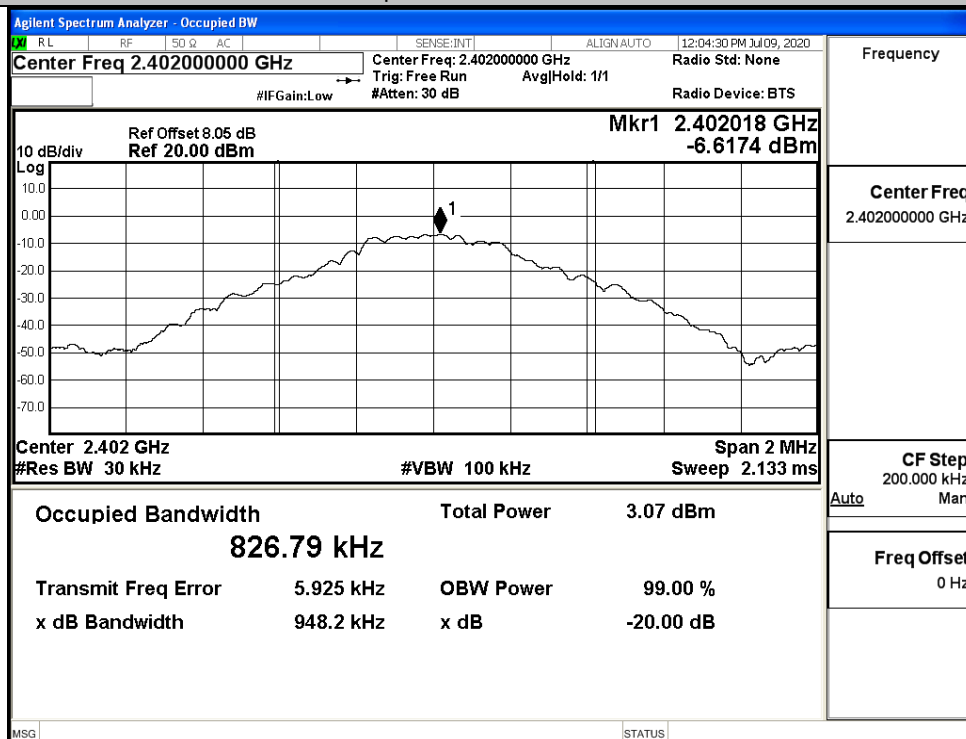


A.2 20dB Bandwidth

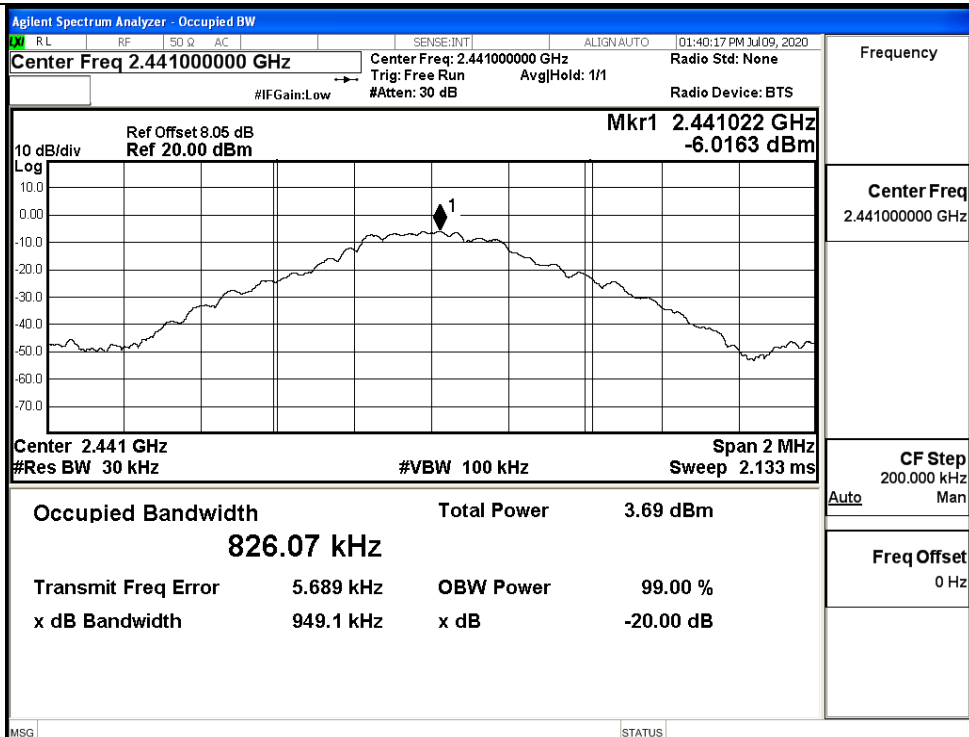
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.9482	Not Specified	PASS
	MCH	0.9491	Not Specified	PASS
	HCH	0.9464	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.321	Not Specified	PASS
	MCH	1.323	Not Specified	PASS
	HCH	1.323	Not Specified	PASS
8DPSK	LCH	1.290	Not Specified	PASS
	MCH	1.289	Not Specified	PASS
	HCH	1.292	Not Specified	PASS

Test Graphs

GFSK/LCH



GFSK/MCH



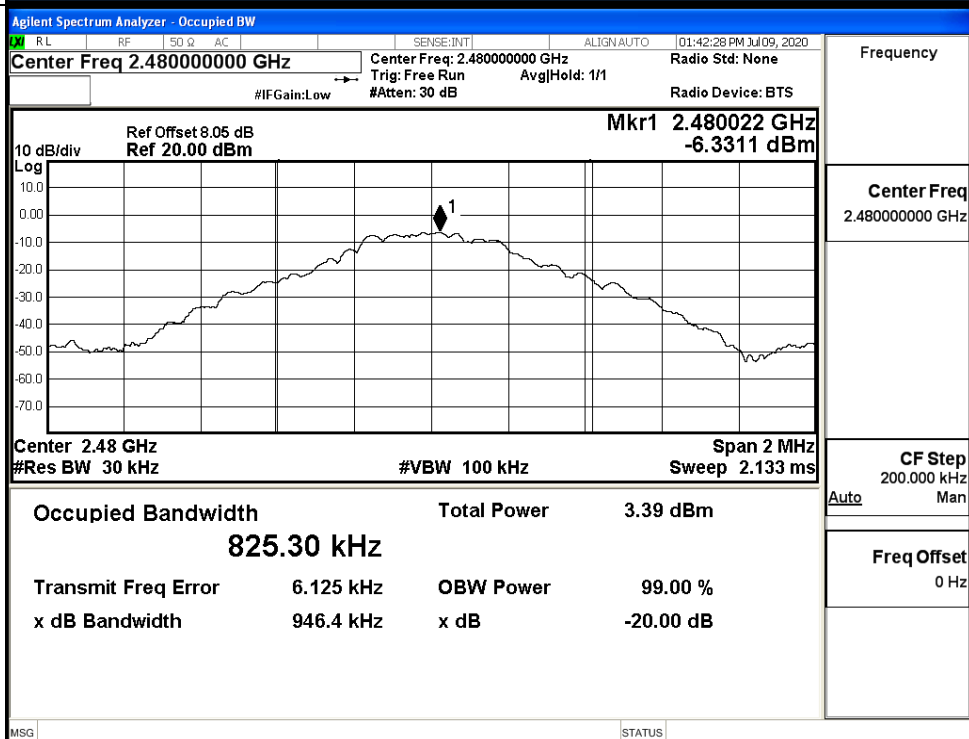
Frequency

Center Freq
2.441000000 GHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz

GFSK/HCH

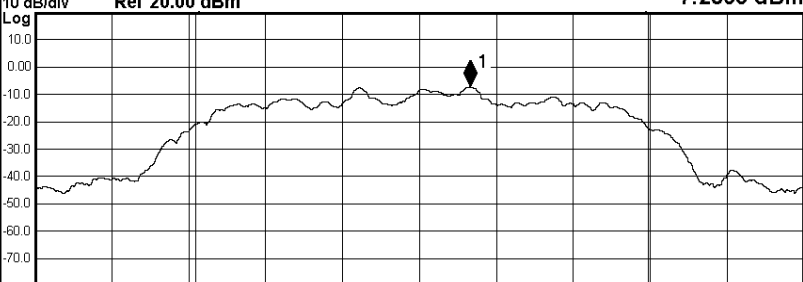
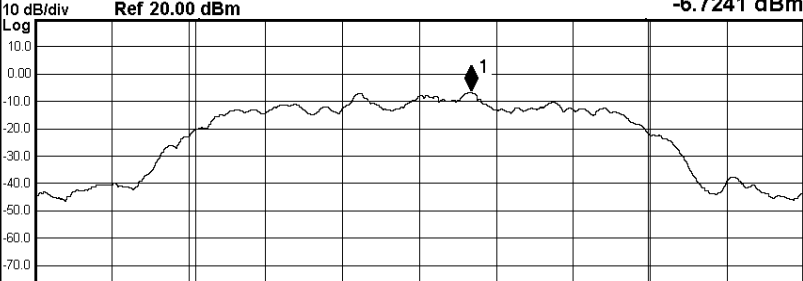


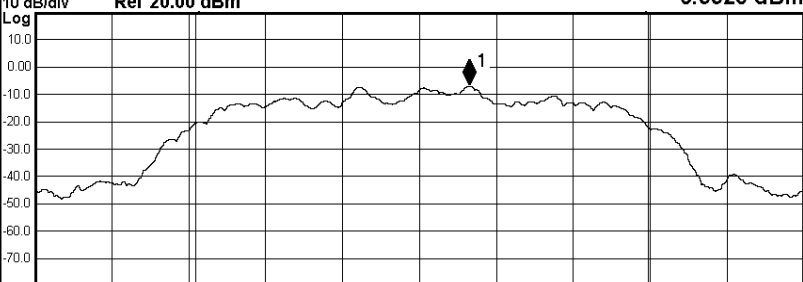
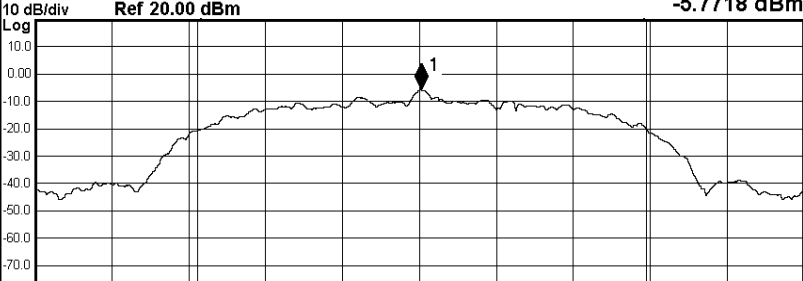
Frequency

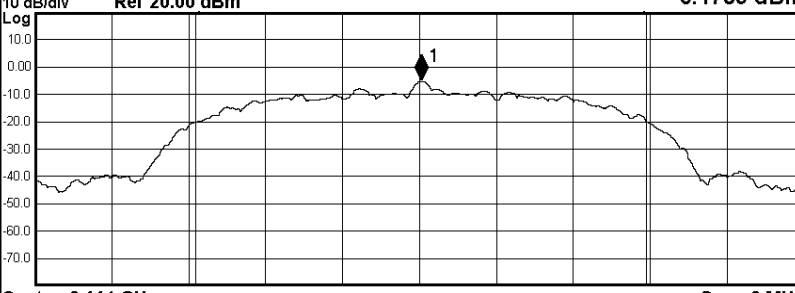
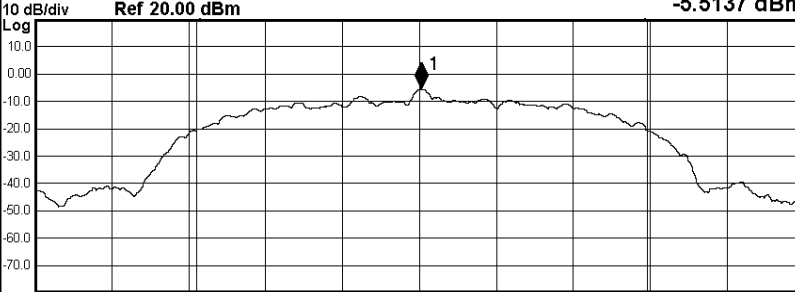
Center Freq
2.480000000 GHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz

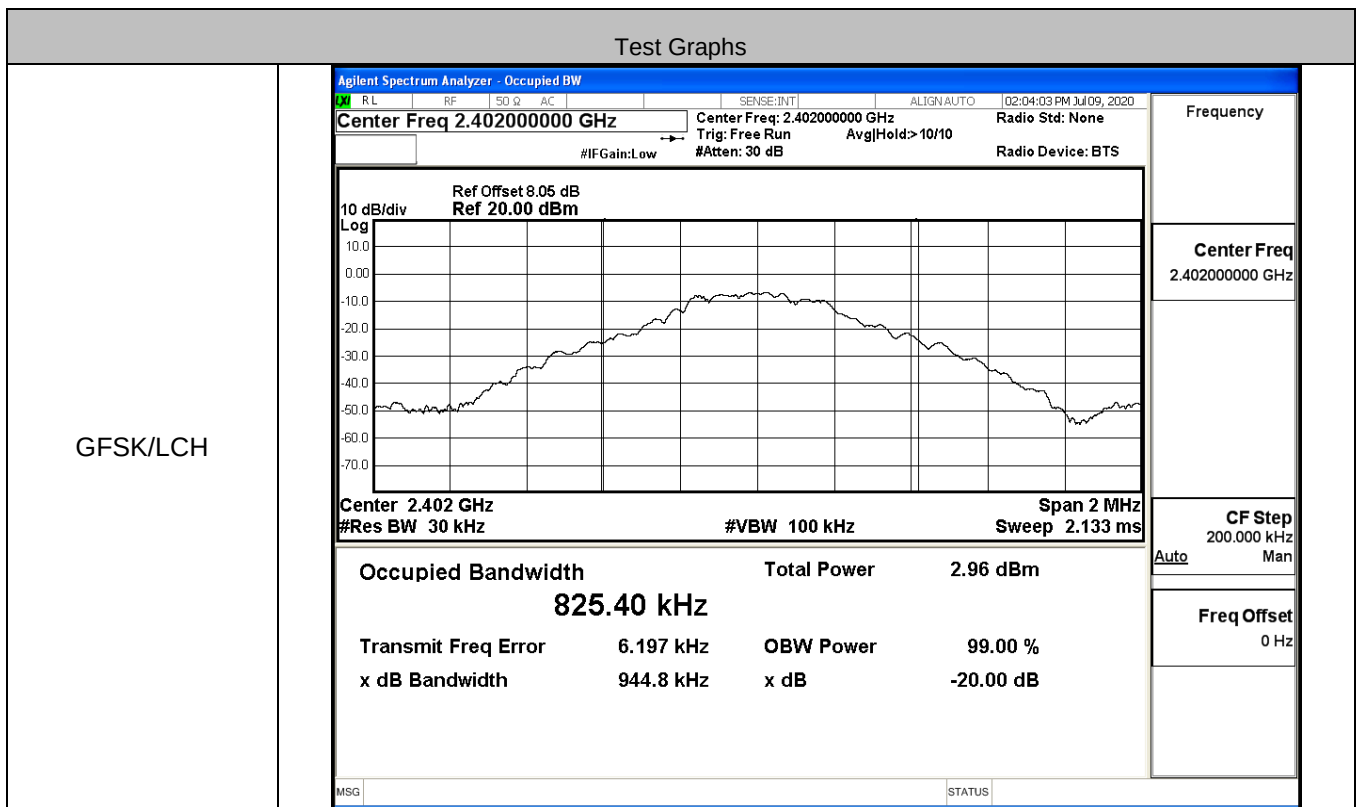
$\pi/4$DQPSK/LCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 01:45:00 PM Jul 09, 2020 Center Freq 2.402000000 GHz Center Freq: 2.402000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None #IFGain: Low #Atten: 30 dB Radio Device: BTS Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.402132 GHz -7.2863 dBm 10 dB/div Log  Center 2.402 GHz #Res BW 30 kHz #VBW 100 kHz Span 2 MHz Sweep 2.133 ms Occupied Bandwidth 1.1732 MHz Total Power 3.50 dBm Transmit Freq Error 7.740 kHz OBW Power 99.00 % x dB Bandwidth 1.321 MHz x dB -20.00 dB MSG STATUS
$\pi/4$DQPSK/MCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 01:47:28 PM Jul 09, 2020 Center Freq 2.441000000 GHz Center Freq: 2.441000000 GHz Trig: Free Run Avg/Hold: 1/1 Radio Std: None #IFGain: Low #Atten: 30 dB Radio Device: BTS Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.441134 GHz -6.7241 dBm 10 dB/div Log  Center 2.441 GHz #Res BW 30 kHz #VBW 100 kHz Span 2 MHz Sweep 2.133 ms Occupied Bandwidth 1.1735 MHz Total Power 4.02 dBm Transmit Freq Error 7.428 kHz OBW Power 99.00 % x dB Bandwidth 1.323 MHz x dB -20.00 dB MSG STATUS

$\pi/4$DQPSK/HCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 01:53:14 PM Jul 09, 2020 Center Freq 2.480000000 GHz Center Freq: 2.480000000 GHz Radio Std: None #IFGain: Low Trig: Free Run Avg/Hold: 1/1 Radio Device: BTS Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.48013 GHz -6.9925 dBm 10 dB/div Log  Center 2.48 GHz #Res BW 30 kHz #VBW 100 kHz Span 2 MHz Sweep 2.133 ms Occupied Bandwidth 1.1722 MHz Total Power 3.77 dBm Transmit Freq Error 7.198 kHz OBW Power 99.00 % x dB Bandwidth 1.323 MHz x dB -20.00 dB MSG STATUS
8DPSK/LCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 01:56:00 PM Jul 09, 2020 Center Freq 2.402000000 GHz Center Freq: 2.402000000 GHz Radio Std: None #IFGain: Low Trig: Free Run Avg/Hold: > 1/1 Radio Device: BTS Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.402004 GHz -5.7718 dBm 10 dB/div Log  Center 2.402 GHz #Res BW 30 kHz #VBW 100 kHz Span 2 MHz Sweep 2.133 ms Occupied Bandwidth 1.1679 MHz Total Power 4.10 dBm Transmit Freq Error 6.400 kHz OBW Power 99.00 % x dB Bandwidth 1.290 MHz x dB -20.00 dB MSG STATUS

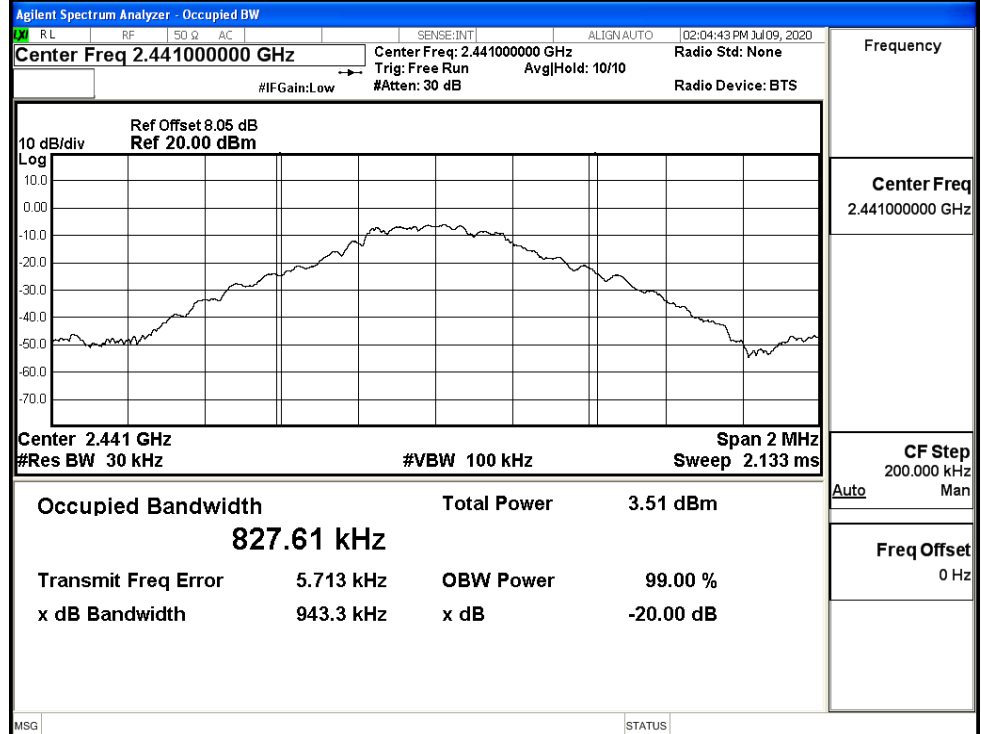
8DPSK/MCH	Agilent Spectrum Analyzer - Occupied BW Center Freq 2.441000000 GHz Center Freq: 2.441000000 GHz Trig: Free Run #Atten: 30 dB Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.441006 GHz -5.1789 dBm  Center 2.441 GHz #Res BW 30 kHz Span 2 MHz Sweep 2.133 ms Occupied Bandwidth 1.1678 MHz Total Power 4.69 dBm Transmit Freq Error 5.933 kHz OBW Power 99.00 % x dB Bandwidth 1.289 MHz x dB -20.00 dB Frequency Center Freq 2.441000000 GHz CF Step 200.000 kHz Man Freq Offset 0 Hz
8DPSK/HCH	Agilent Spectrum Analyzer - Occupied BW Center Freq 2.480000000 GHz Center Freq: 2.480000000 GHz Trig: Free Run #Atten: 30 dB Ref Offset 8.05 dB Ref 20.00 dBm Mkr1 2.480004 GHz -5.5137 dBm  Center 2.48 GHz #Res BW 30 kHz Span 2 MHz Sweep 2.133 ms Occupied Bandwidth 1.1704 MHz Total Power 4.36 dBm Transmit Freq Error 6.420 kHz OBW Power 99.00 % x dB Bandwidth 1.292 MHz x dB -20.00 dB Frequency Center Freq 2.480000000 GHz CF Step 200.000 kHz Man Freq Offset 0 Hz

A.3 Occupied Bandwidth

Mode	Channel.	Occupied Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.82540	Not Specified	PASS
	MCH	0.82761	Not Specified	PASS
	HCH	0.82916	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.1732	Not Specified	PASS
	MCH	1.1755	Not Specified	PASS
	HCH	1.1767	Not Specified	PASS
8DPSK	LCH	1.1699	Not Specified	PASS
	MCH	1.1654	Not Specified	PASS
	HCH	1.1735	Not Specified	PASS



GFSK/MCH



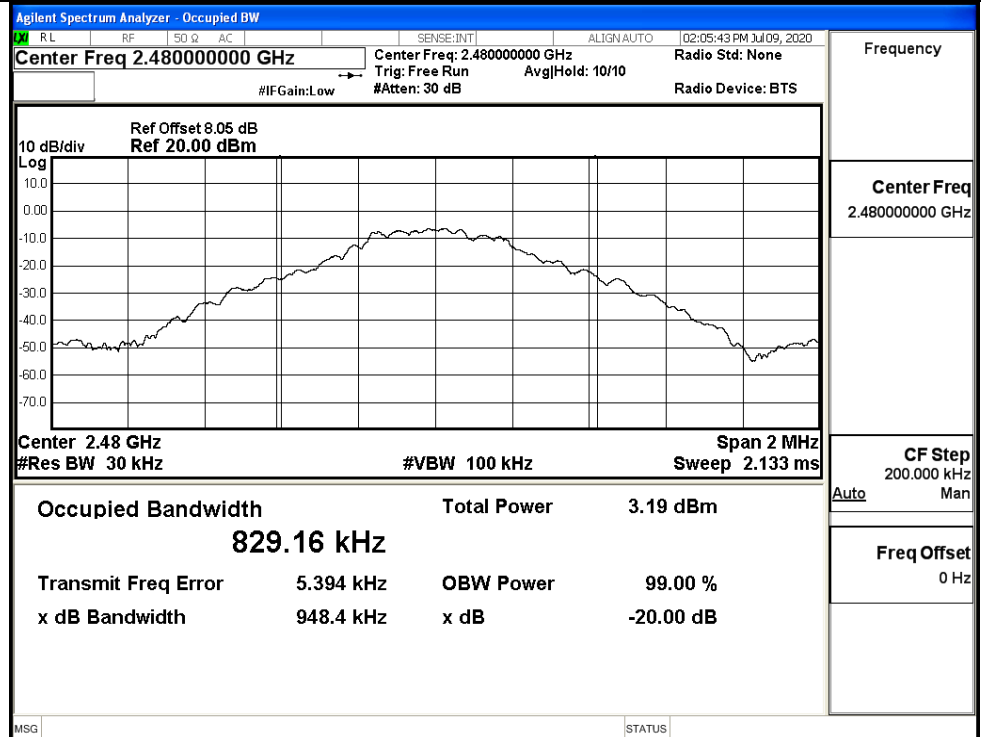
Frequency

Center Freq
2.441000000 GHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz

GFSK/HCH



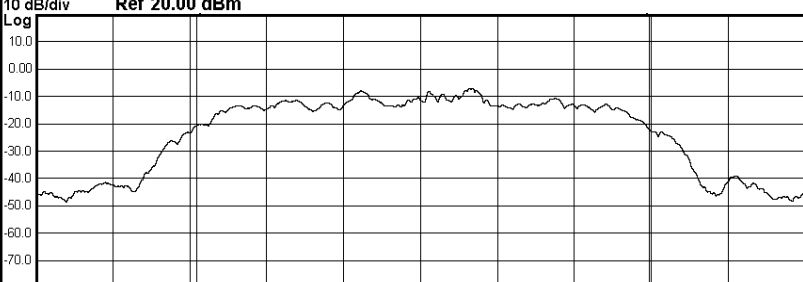
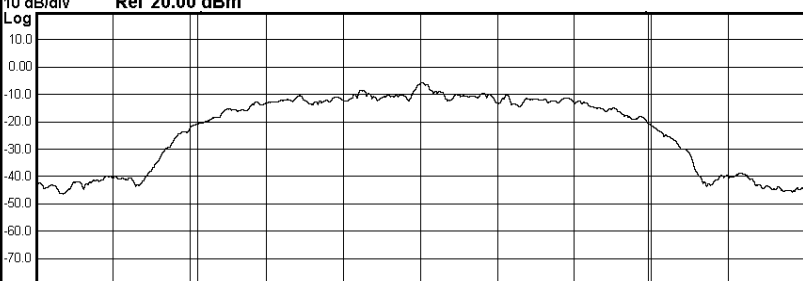
Frequency

Center Freq
2.480000000 GHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz

Page 14 of 52

$\pi/4$ DQPSK/HCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:07:48 PM Jul 09, 2020 Center Freq 2.480000000 GHz Center Freq: 2.480000000 GHz Trig: Free Run Avg/Hold: > 10/10 Radio Std: None #IFGain: Low #Atten: 30 dB Radio Device: BTS Ref Offset 8.05 dB Ref 20.00 dBm 10 dB/div Log  Center 2.48 GHz #Res BW 30 kHz #VBW 100 kHz Span 2 MHz Sweep 2.133 ms Occupied Bandwidth 1.1767 MHz Total Power 3.33 dBm Transmit Freq Error 6.374 kHz OBW Power 99.00 % x dB Bandwidth 1.320 MHz x dB -20.00 dB MSG STATUS	Frequency Center Freq 2.480000000 GHz CF Step 200.000 kHz Man Freq Offset 0 Hz	
	8DPSK/LCH	Agilent Spectrum Analyzer - Occupied BW RL RF 50 Ω AC SENSE:INT ALIGN AUTO 02:08:40 PM Jul 09, 2020 Center Freq 2.402000000 GHz Center Freq: 2.402000000 GHz Trig: Free Run Avg/Hold: > 10/10 Radio Std: None #IFGain: Low #Atten: 30 dB Radio Device: BTS Ref Offset 8.05 dB Ref 20.00 dBm 10 dB/div Log  Center 2.402 GHz #Res BW 30 kHz #VBW 100 kHz Span 2 MHz Sweep 2.133 ms Occupied Bandwidth 1.1699 MHz Total Power 3.82 dBm Transmit Freq Error 6.348 kHz OBW Power 99.00 % x dB Bandwidth 1.283 MHz x dB -20.00 dB MSG STATUS	Frequency Center Freq 2.402000000 GHz CF Step 200.000 kHz Man Freq Offset 0 Hz

Center Freq 2.402000000 GHz

Center Freq: 2.402000000 GHz

Trig: Free Run

Avg/Hold: > 10/10

Radio Std: None

#IFGain: Low

#Atten: 30 dB

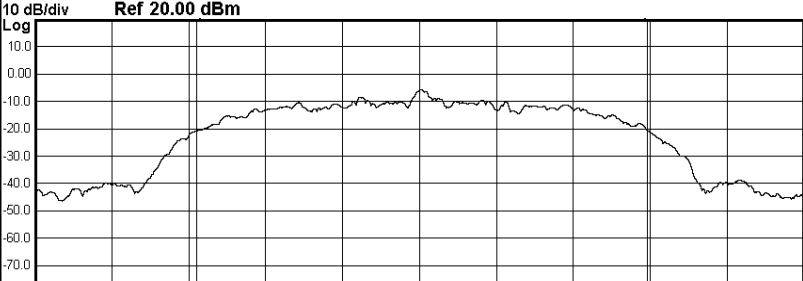
Radio Device: BTS

Ref Offset 8.05 dB

Ref 20.00 dBm

10 dB/div

Log



Center 2.402 GHz

#Res BW 30 kHz

#VBW 100 kHz

Span 2 MHz

Sweep 2.133 ms

Occupied Bandwidth

1.1699 MHz

Total Power

3.82 dBm

Transmit Freq Error

6.348 kHz

OBW Power

99.00 %

x dB Bandwidth

1.283 MHz

x dB

-20.00 dB

MSG

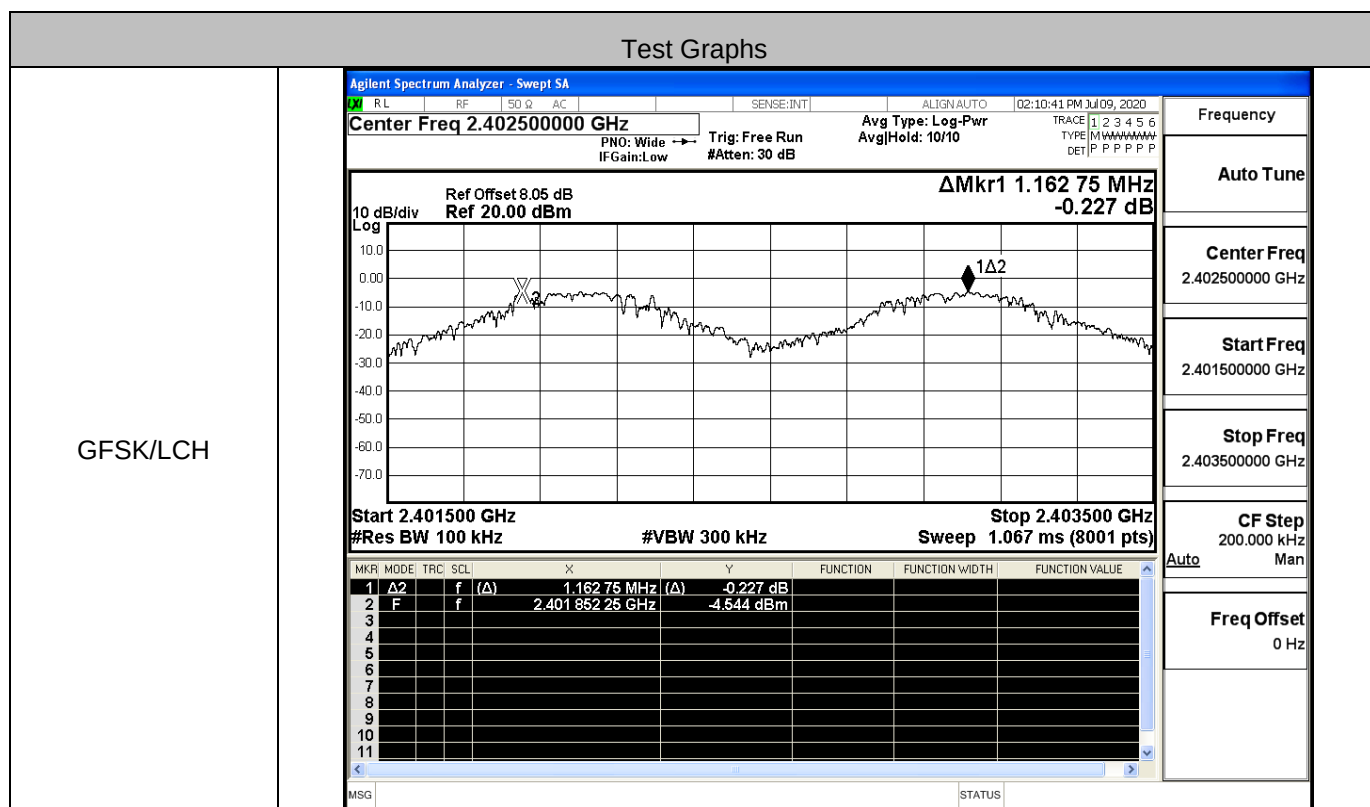
STATUS

Page 16 of 52

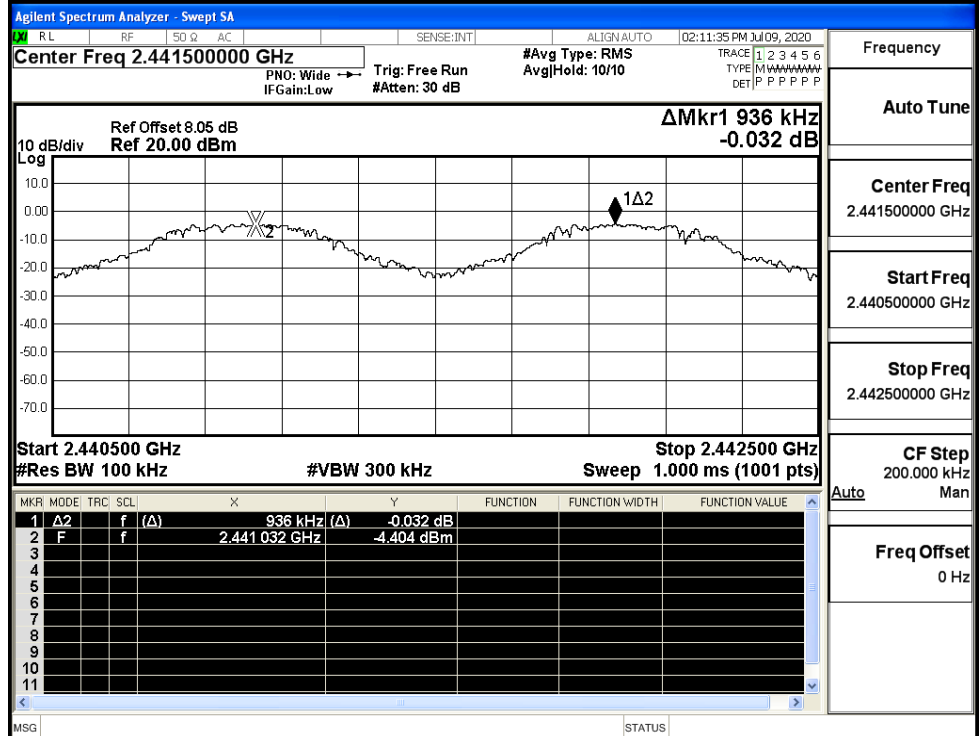
A.4 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.163	0.633	PASS
	MCH	0.936	0.633	PASS
	HCH	0.822	0.633	PASS
π /4DQPSK	LCH	1.090	0.882	PASS
	MCH	1.290	0.882	PASS
	HCH	0.986	0.882	PASS
8DPSK	LCH	1.140	0.861	PASS
	MCH	1.040	0.861	PASS
	HCH	0.952	0.861	PASS

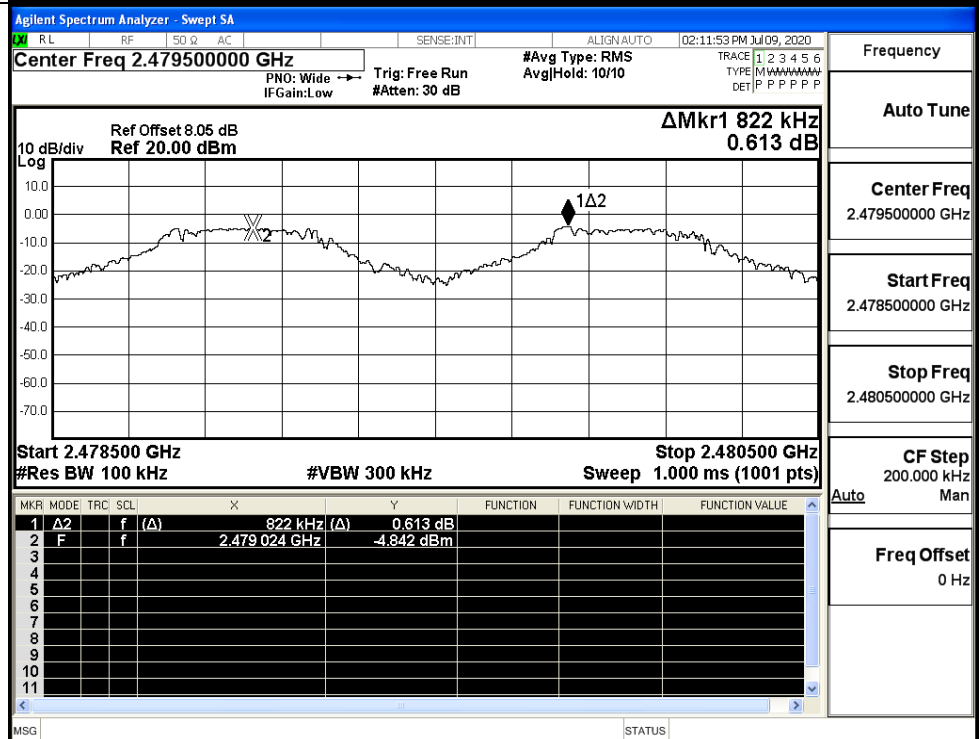
Test Graphs

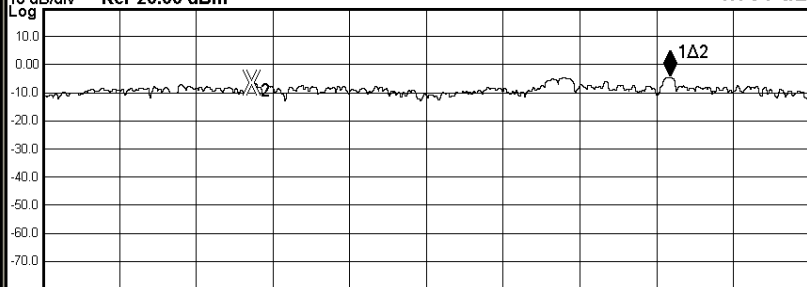
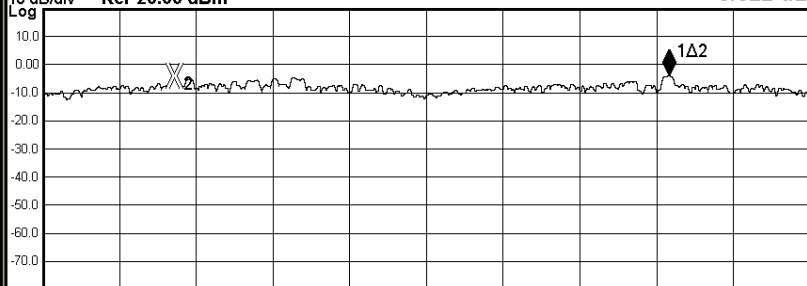


GFSK/MCH



GFSK/HCH



$\pi/4$ DQPSK/LCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 02:15:44 PM Jul 09, 2020 Center Freq 2.402500000 GHz PN0: Wide IF Gain: Low Trig: Free Run #Atten: 30 dB #Avg Type: RMS Avg/Hold: 10/10 TRACE 1 2 3 4 5 6 TYPE M W W W W W W W DET P P P P P P Ref Offset 8.05 dB Ref 20.00 dBm ΔMkr1 1.090 MHz 1.791 dB 10 dB/div Log  Start 2.401500 GHz #Res BW 100 kHz #VBW 300 kHz Stop 2.403500 GHz Sweep 1.000 ms (1001 pts) <table><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><tr><td>1</td><td>Δ2</td><td>f</td><td>(Δ)</td><td>1.090 MHz</td><td>(Δ)</td><td>1.791 dB</td><td></td><td></td></tr><tr><td>2</td><td>F</td><td>f</td><td></td><td>2.402 044 GHz</td><td></td><td>-6.444 dBm</td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> MSG STATUS 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	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	Δ 2	f	(Δ)	1.090 MHz	(Δ)	1.791 dB			2	F	f		2.402 044 GHz		-6.444 dBm			3									4									5									6									7									8									9									10									11								
	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																																																																																																				
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$\pi/4$ DQPSK/MCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 02:17:24 PM Jul 09, 2020 Center Freq 2.441500000 GHz PN0: Wide IF Gain: Low Trig: Free Run #Atten: 30 dB #Avg Type: RMS Avg/Hold: 10/10 TRACE 1 2 3 4 5 6 TYPE M W W W W W W W DET P P P P P P Ref Offset 8.05 dB Ref 20.00 dBm ΔMkr1 1.290 MHz 0.022 dB 10 dB/div Log  Start 2.440500 GHz #Res BW 100 kHz #VBW 300 kHz Stop 2.442500 GHz Sweep 1.000 ms (1001 pts) <table><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><tr><td>1</td><td>Δ2</td><td>f</td><td>(Δ)</td><td>1.290 MHz</td><td>(Δ)</td><td>0.022 dB</td><td></td><td></td></tr><tr><td>2</td><td>F</td><td>f</td><td></td><td>2.440 842 GHz</td><td></td><td>-4.157 dBm</td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> MSG STATUS Frequency Auto Tune Center Freq 2.441500000 GHz Start Freq 2.440500000 GHz Stop Freq 2.442500000 GHz CF Step 200.000 kHz Auto Freq Offset 0 Hz	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	Δ 2	f	(Δ)	1.290 MHz	(Δ)	0.022 dB			2	F	f		2.440 842 GHz		-4.157 dBm			3									4									5									6									7									8									9									10									11								
	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE																																																																																																				
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Frequency

Auto Tune

Center Freq
2.441500000 GHz

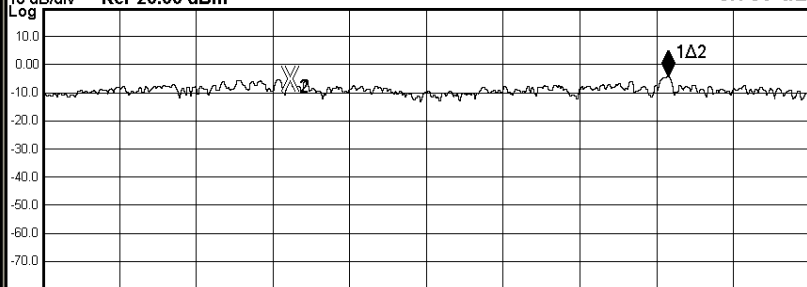
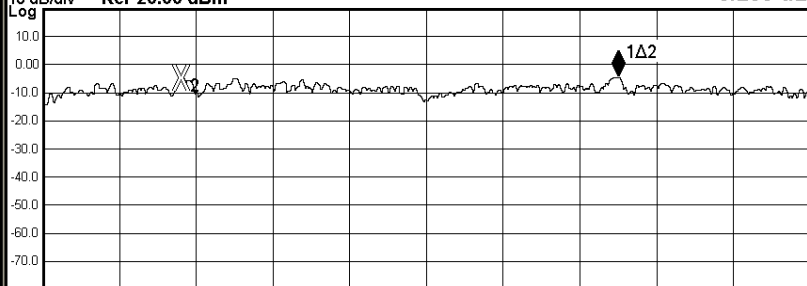
Start Freq
2.440500000 GHz

Stop Freq
2.442500000 GHz

CF Step
200.000 kHz

Auto

Freq Offset
0 Hz

$\pi/4$ DQPSK/HCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 02:17:47 PM Jul09, 2020 Center Freq 2.479500000 GHz PN0: Wide IFGain: Low Trig: Free Run #Atten: 30 dB #Avg Type: RMS Avg Hold: 10/10 TRACE 1 2 3 4 5 6 TYPE M W W W W W W W DET P P P P P P Ref Offset 8.05 dB Ref 20.00 dBm ΔMkr1 986 kHz 0.739 dB 10 dB/div Log  Start 2.478500 GHz #Res BW 100 kHz #VBW 300 kHz Stop 2.480500 GHz Sweep 1.000 ms (1001 pts) <table><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><tr><td>1</td><td>Δ2</td><td>f</td><td>(Δ)</td><td>986 kHz</td><td>(Δ)</td><td>0.739 dB</td><td></td><td></td></tr><tr><td>2</td><td>F</td><td>f</td><td></td><td>2.479 144 GHz</td><td></td><td>-5.178 dBm</td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> MSG STATUS Frequency 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	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	Δ 2	f	(Δ)	986 kHz	(Δ)	0.739 dB			2	F	f		2.479 144 GHz		-5.178 dBm			3									4									5									6									7									8									9									10									11								
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8DPSK/LCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 02:20:55 PM Jul09, 2020 Center Freq 2.402500000 GHz PN0: Wide IFGain: Low Trig: Free Run #Atten: 30 dB #Avg Type: RMS Avg Hold: 10/10 TRACE 1 2 3 4 5 6 TYPE M W W W W W W W DET P P P P P P Ref Offset 8.05 dB Ref 20.00 dBm ΔMkr1 1.140 MHz 0.233 dB 10 dB/div Log  Start 2.401500 GHz #Res BW 100 kHz #VBW 300 kHz Stop 2.403500 GHz Sweep 1.000 ms (1001 pts) <table><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><tr><td>1</td><td>Δ2</td><td>f</td><td>(Δ)</td><td>1.140 MHz</td><td>(Δ)</td><td>0.233 dB</td><td></td><td></td></tr><tr><td>2</td><td>F</td><td>f</td><td></td><td>2.401 860 GHz</td><td></td><td>-4.727 dBm</td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> MSG STATUS 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	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	Δ 2	f	(Δ)	1.140 MHz	(Δ)	0.233 dB			2	F	f		2.401 860 GHz		-4.727 dBm			3									4									5									6									7									8									9									10									11								
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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

8DPSK/MCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 02:26:30 PM Jul 09, 2020 Center Freq 2.441500000 GHz PNO: Wide IF Gain: Low Trig: Free Run #Atten: 30 dB #Avg Type: RMS Avg Hold: 10/10 TRACE 1 2 3 4 5 6 TYPE M W W W W W W W DET P P P P P P Ref Offset 8.05 dB Ref 20.00 dBm ΔMkr1 1.040 MHz 2.219 dB 10 dB/div Log Start 2.440500 GHz #Res BW 100 kHz #VBW 300 kHz Stop 2.442500 GHz Sweep 1.000 ms (1001 pts) <table><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><tr><td>1</td><td>Δ2</td><td>f</td><td>(Δ)</td><td>1.040 MHz (Δ)</td><td>2.219 dB</td><td></td><td></td><td></td></tr><tr><td>2</td><td>F</td><td>f</td><td></td><td>2.440 966 GHz</td><td>-6.051 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> MSG STATUS Frequency 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	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	Δ2	f	(Δ)	1.040 MHz (Δ)	2.219 dB				2	F	f		2.440 966 GHz	-6.051 dBm				3									4									5									6									7									8									9									10									11								
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8DPSK/HCH	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 02:28:11 PM Jul 09, 2020 Center Freq 2.479500000 GHz PNO: Wide IF Gain: Low Trig: Free Run #Atten: 30 dB #Avg Type: RMS Avg Hold: 10/10 TRACE 1 2 3 4 5 6 TYPE M W W W W W W W DET P P P P P P Ref Offset 8.05 dB Ref 20.00 dBm ΔMkr1 952 kHz -1.770 dB 10 dB/div Log Start 2.478500 GHz #Res BW 100 kHz #VBW 300 kHz Stop 2.480500 GHz Sweep 1.000 ms (1001 pts) <table><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><tr><td>1</td><td>Δ2</td><td>f</td><td>(Δ)</td><td>952 kHz (Δ)</td><td>-1.770 dB</td><td></td><td></td><td></td></tr><tr><td>2</td><td>F</td><td>f</td><td></td><td>2.479 016 GHz</td><td>-4.732 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> MSG STATUS Frequency 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	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	Δ2	f	(Δ)	952 kHz (Δ)	-1.770 dB				2	F	f		2.479 016 GHz	-4.732 dBm				3									4									5									6									7									8									9									10									11								
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Frequency

Auto Tune

Center Freq 2.479500000 GHz

Start Freq 2.478500000 GHz

Stop Freq 2.480500000 GHz

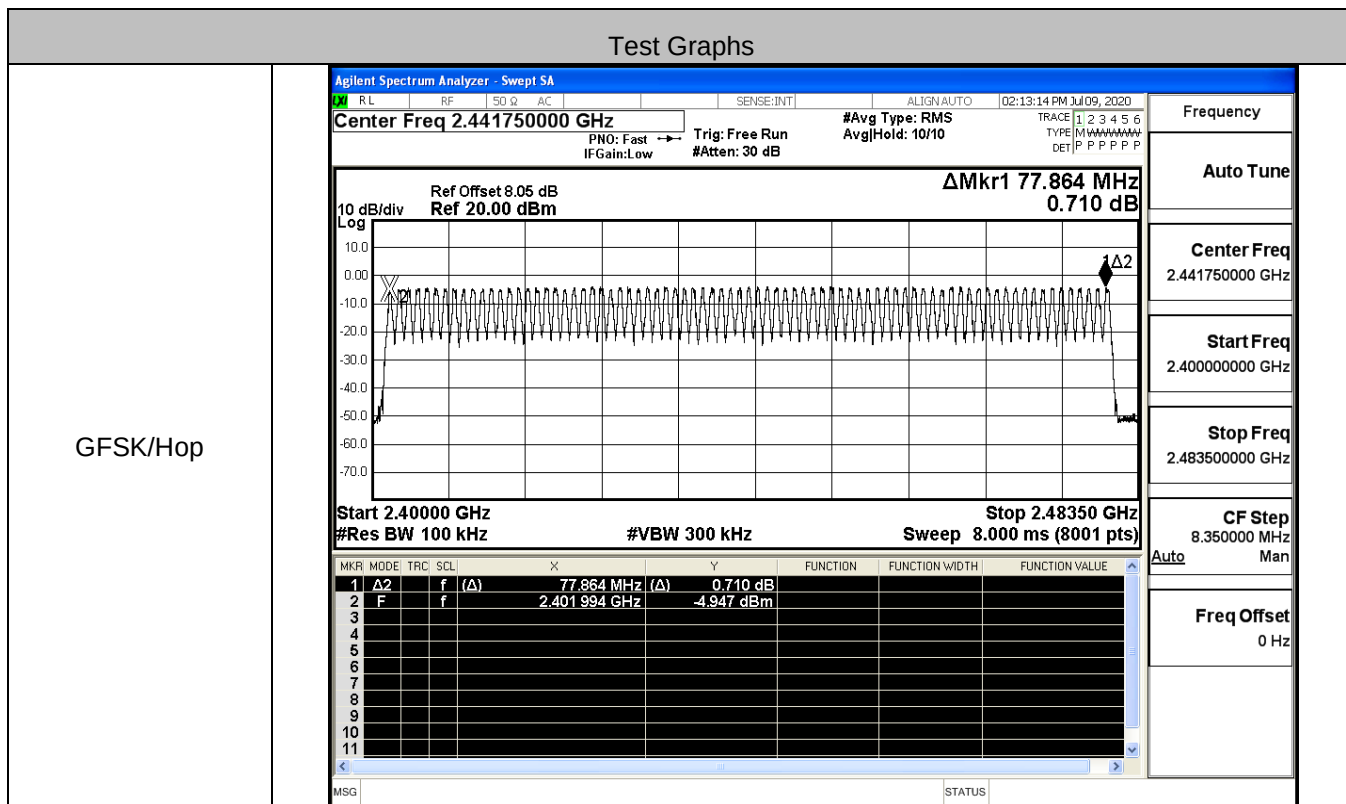
CF Step 200.000 kHz

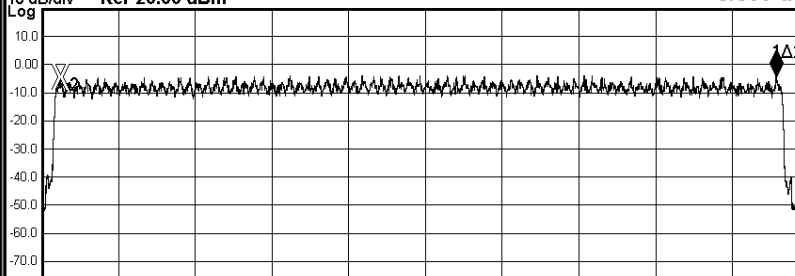
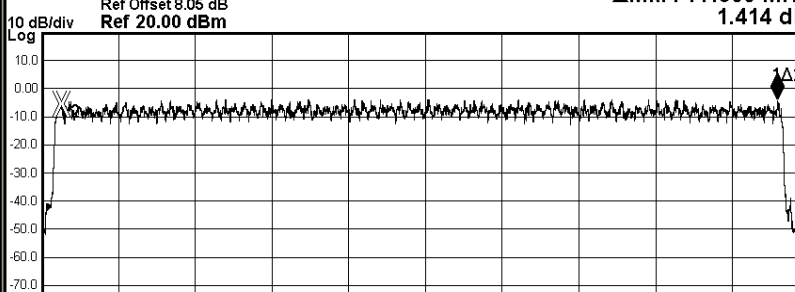
Auto Man

Freq Offset 0 Hz

A.5 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



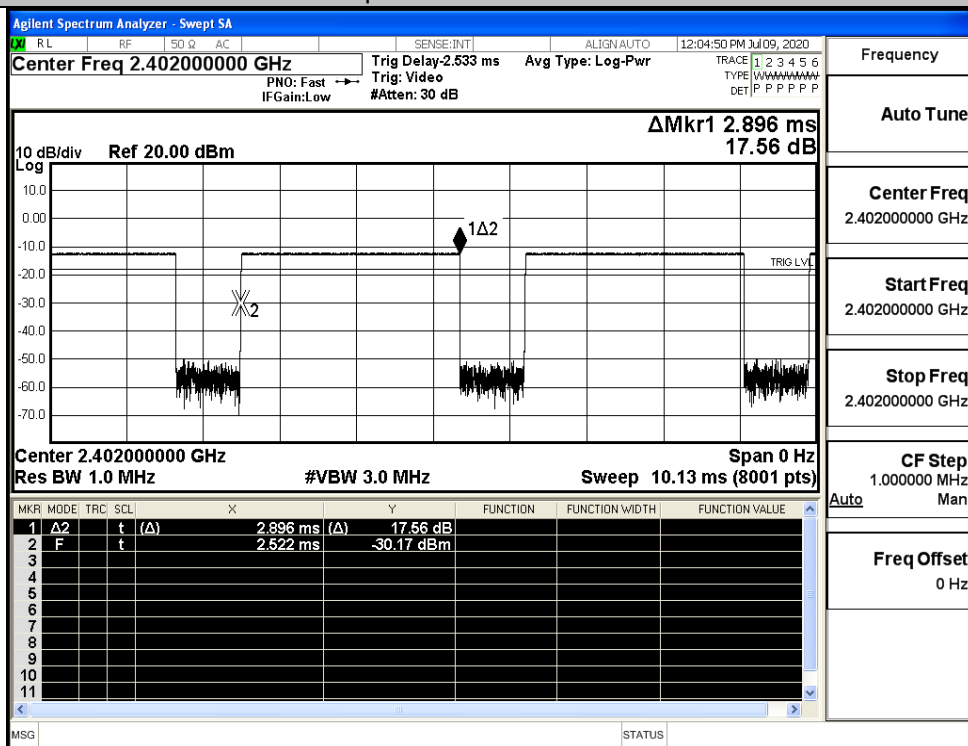
π/4DQPSK/Hop	Agilent Spectrum Analyzer - Swept SA RL RF 50 Ω AC SENSE:INT ALIGN: AUTO 02:20:17 PM Jul 09, 2020 Center Freq 2.441750000 GHz PNO: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB #Avg Type: RMS Avg/Hold: 10/10 TRACE 1 2 3 4 5 6 TYPE: M W W W W W W W DET: P P P P P P Ref Offset 8.05 dB Ref 20.00 dBm ΔMkr1 77.864 MHz -0.069 dB  Start 2.40000 GHz #Res BW 100 kHz #VBW 300 kHz Stop 2.48350 GHz Sweep 8.000 ms (8001 pts) <table><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><tr><td>1</td><td>Δ2</td><td>f</td><td>(Δ)</td><td>77.864 MHz</td><td>(Δ)</td><td>-0.069 dB</td><td></td><td></td></tr><tr><td>2</td><td>F</td><td>f</td><td></td><td>2.402 004 GHz</td><td></td><td>-4.350 dBm</td><td></td><td></td></tr><tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> MSG STATUS Frequency Auto Tune Center Freq 2.441750000 GHz Start Freq 2.400000000 GHz Stop Freq 2.483500000 GHz CF Step 8.350000 MHz Auto Freq Offset 0 Hz	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	Δ2	f	(Δ)	77.864 MHz	(Δ)	-0.069 dB			2	F	f		2.402 004 GHz		-4.350 dBm			3									4									5									6									7									8									9									10									11								
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A.6 Dwell Time

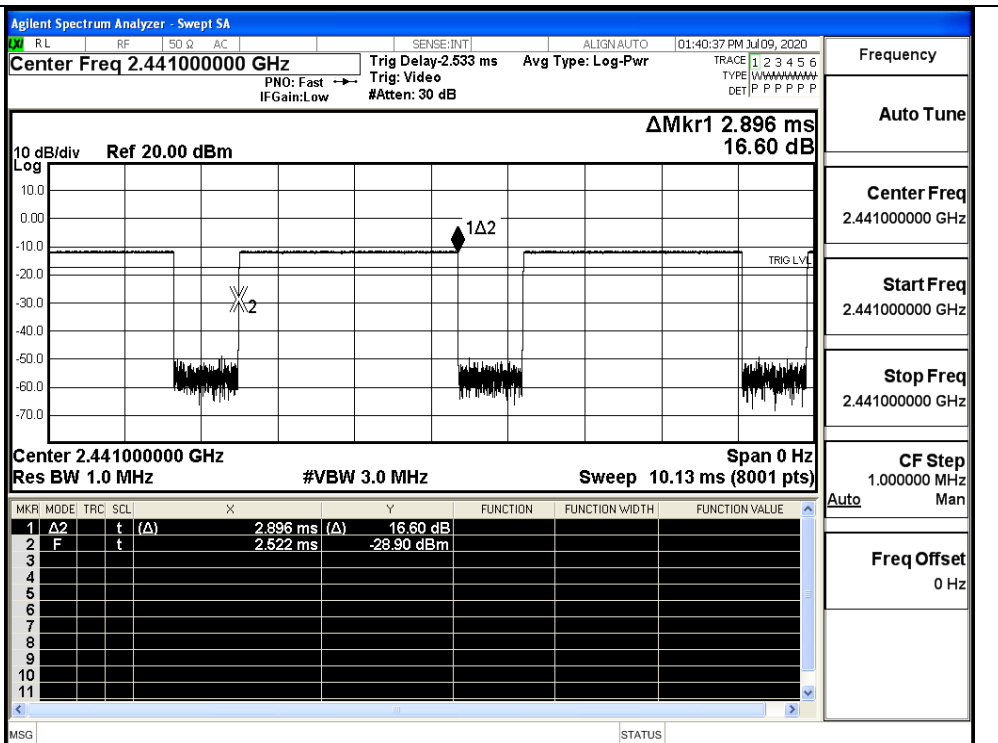
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.9	106.7	0.309	0.4	PASS
	DH5	MCH	2.9	106.7	0.309	0.4	PASS
	DH5	HCH	2.9	106.7	0.309	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.9	106.7	0.309	0.4	PASS
	2DH5	MCH	2.9	106.7	0.309	0.4	PASS
	2DH5	HCH	2.9	106.7	0.309	0.4	PASS
8DPSK	3DH5	LCH	2.9	106.7	0.309	0.4	PASS
	3DH5	MCH	2.9	106.7	0.309	0.4	PASS
	3DH5	HCH	2.9	106.7	0.309	0.4	PASS

Test Graphs

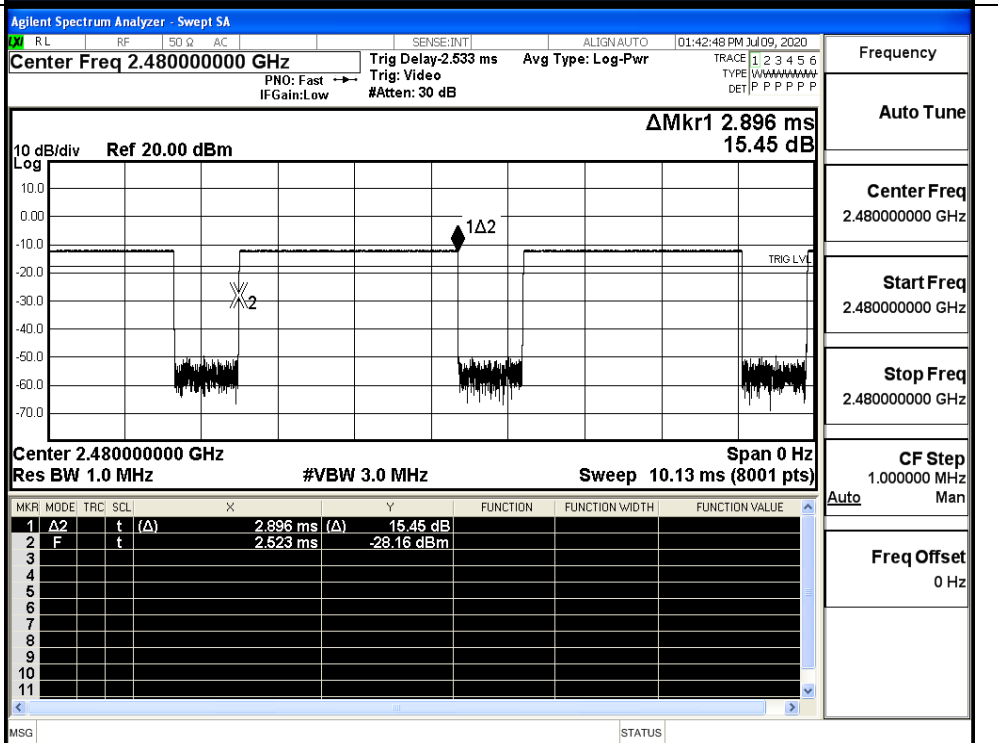
GFSK_DH5/LCH



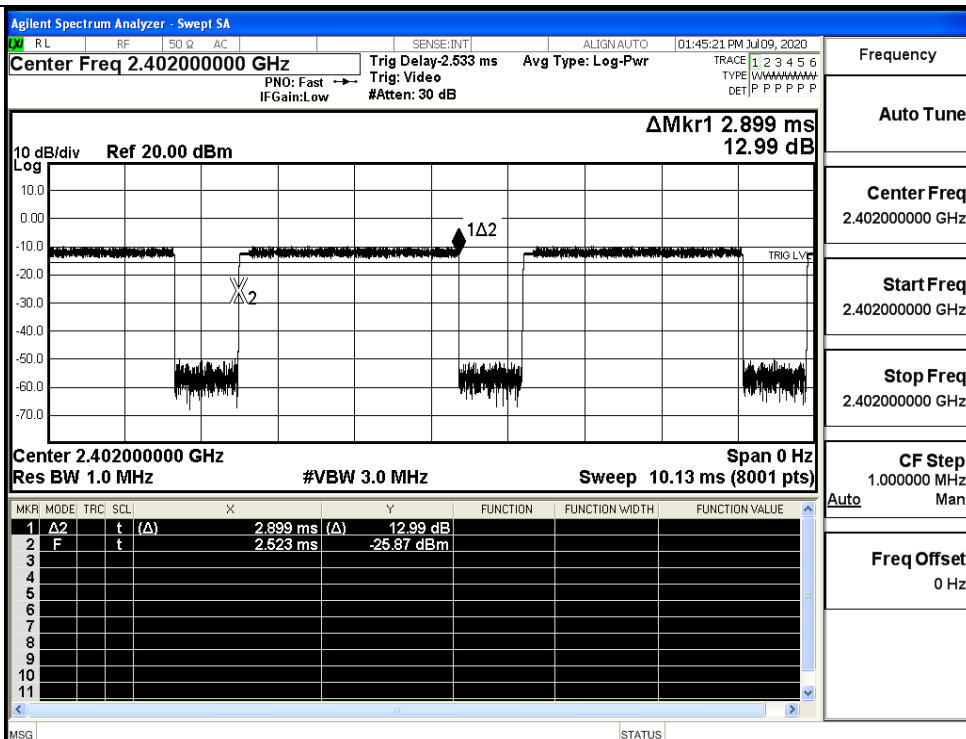
GFSK_DH5/MCH



GFSK_DH5/HCH

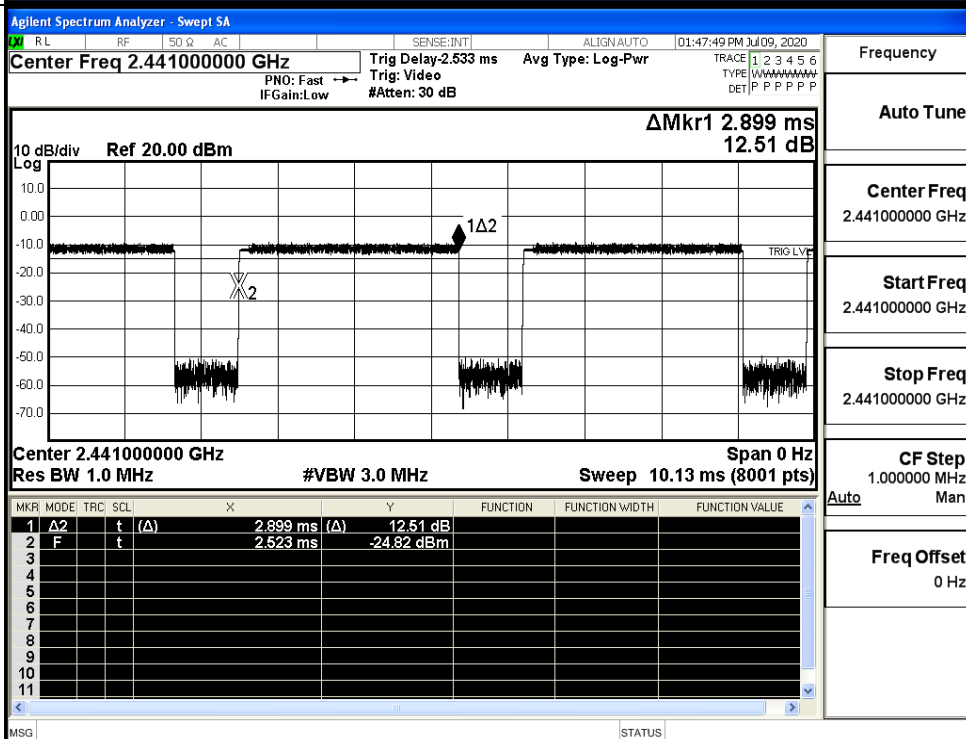


$\pi/4$ DQPSK
_2DH5/LCH



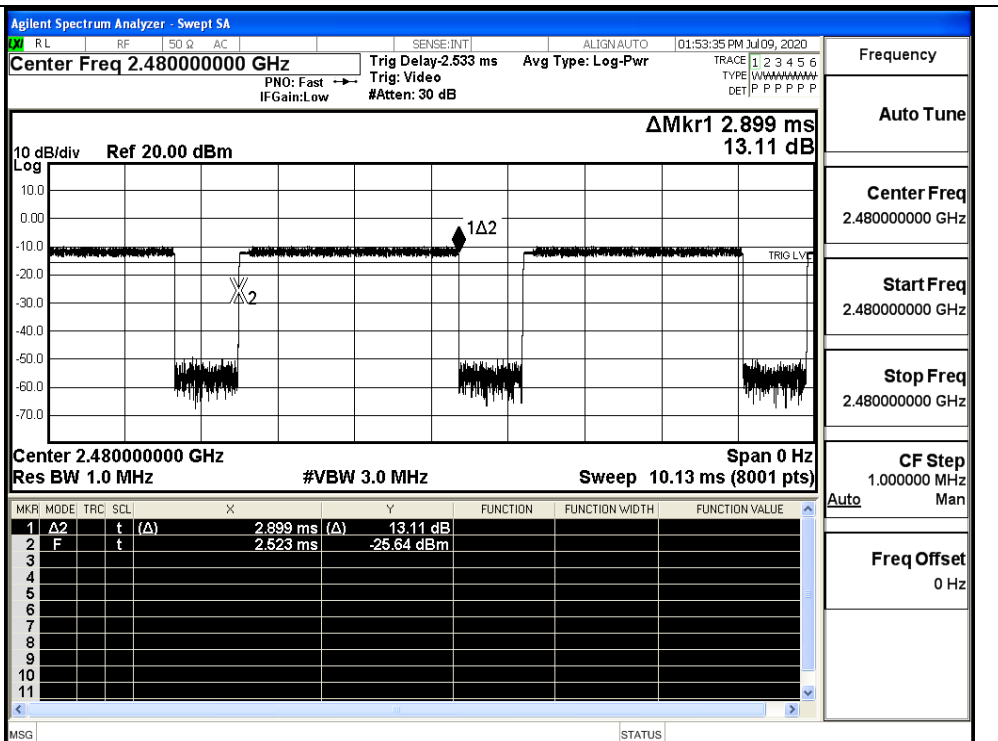
Frequency
Auto Tune
Center Freq 2.402000000 GHz
Start Freq 2.402000000 GHz
Stop Freq 2.402000000 GHz
CF Step 1.000000 MHz Man
Freq Offset 0 Hz

$\pi/4$ DQPSK
_2DH5/MCH

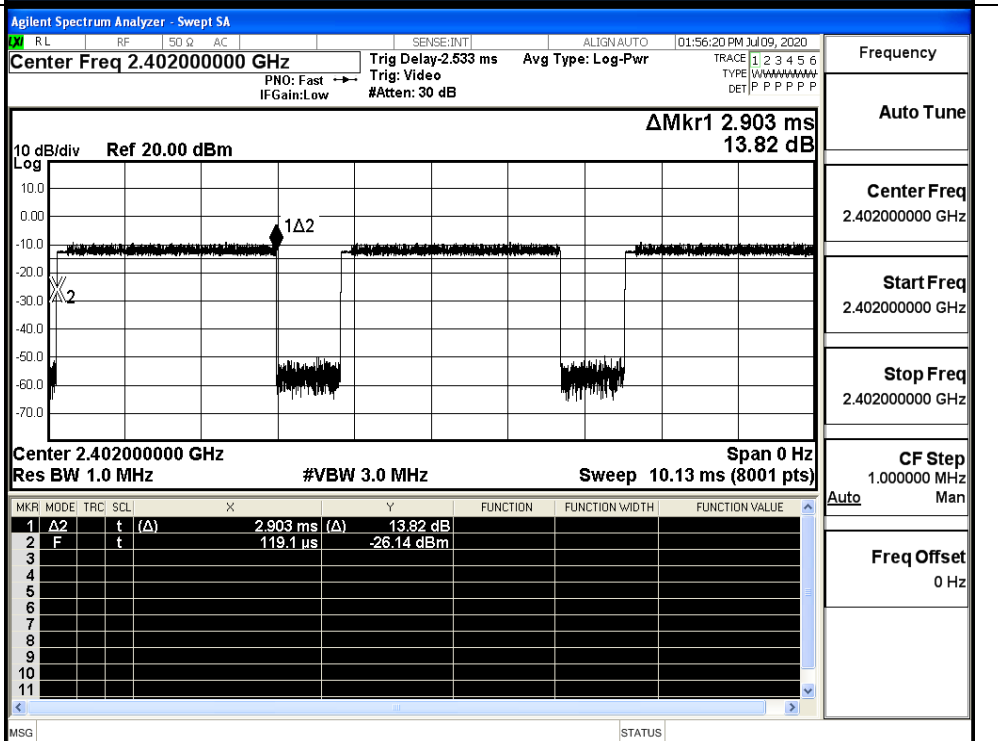


Frequency
Auto Tune
Center Freq 2.441000000 GHz
Start Freq 2.441000000 GHz
Stop Freq 2.441000000 GHz
CF Step 1.000000 MHz Man
Freq Offset 0 Hz

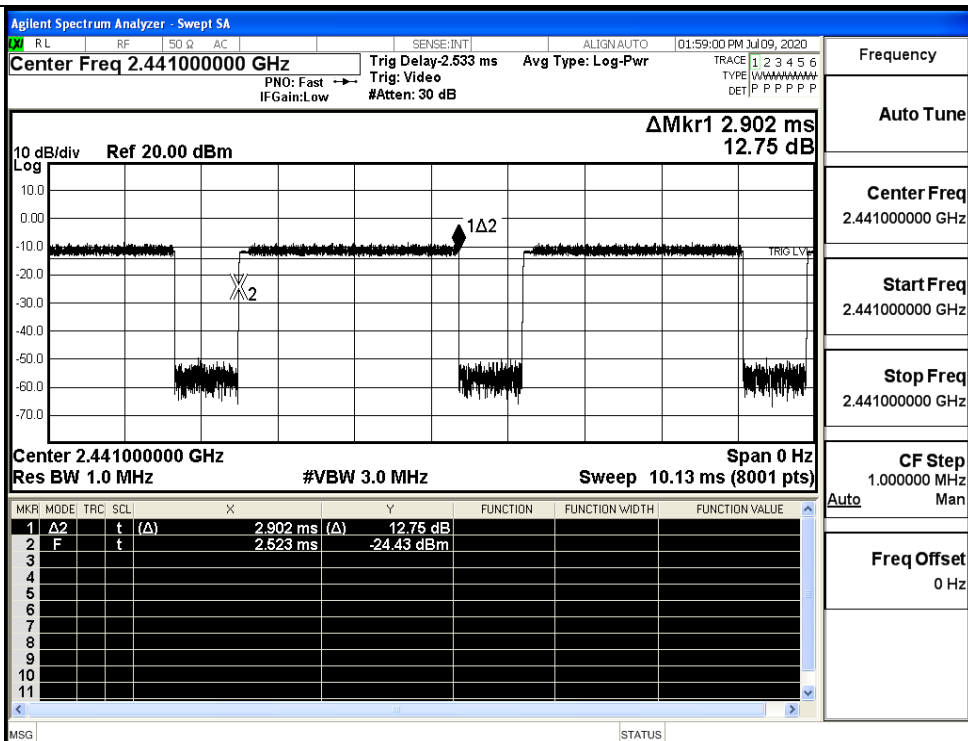
$\pi/4$ DQPSK
_2DH5/HCH



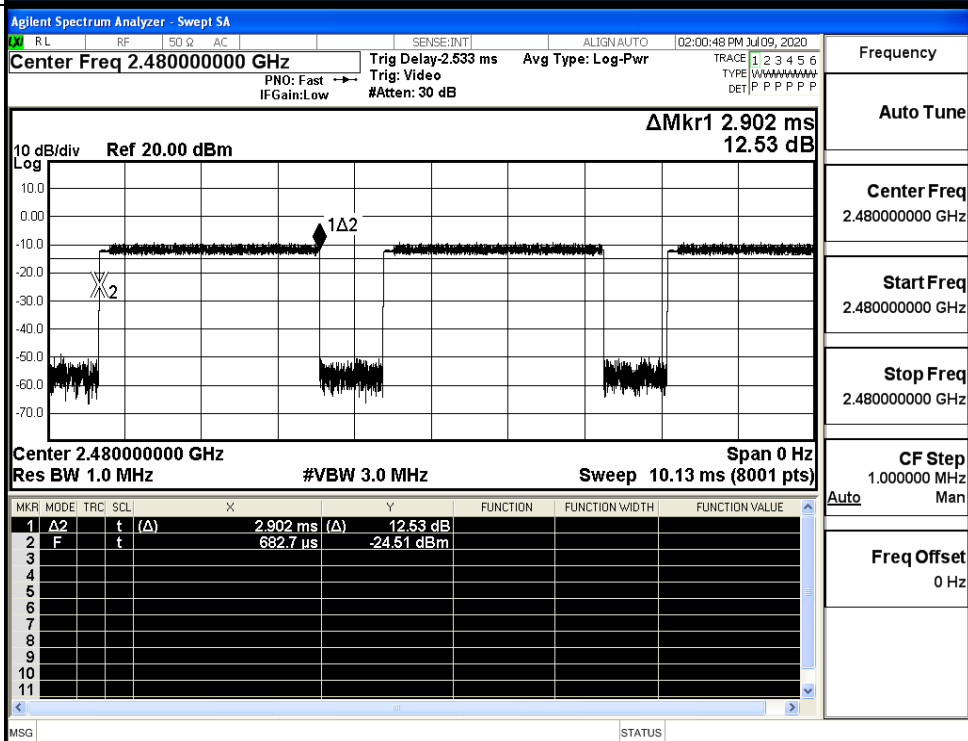
8DPSK_3DH5/LCH



8DPSK_3DH5/MCH

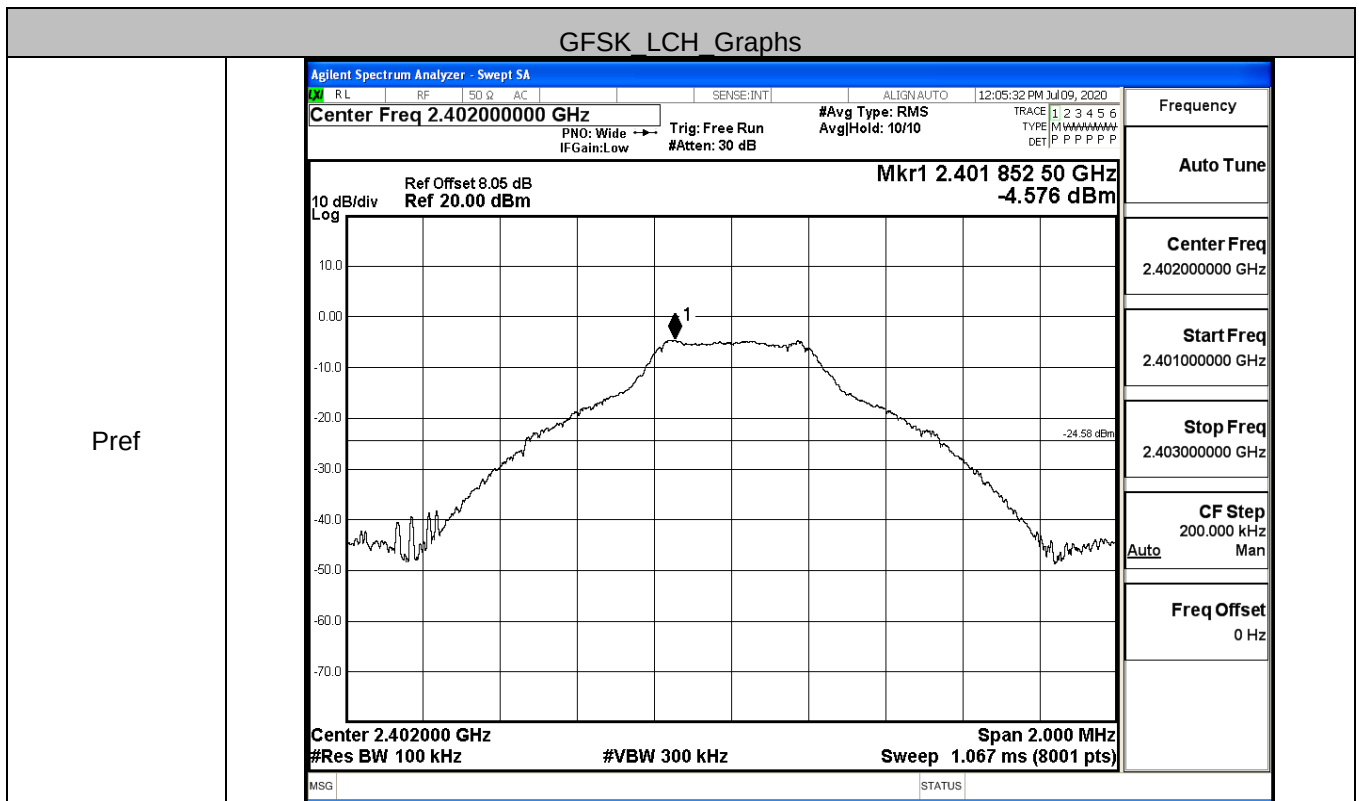


8DPSK_3DH5/HCH

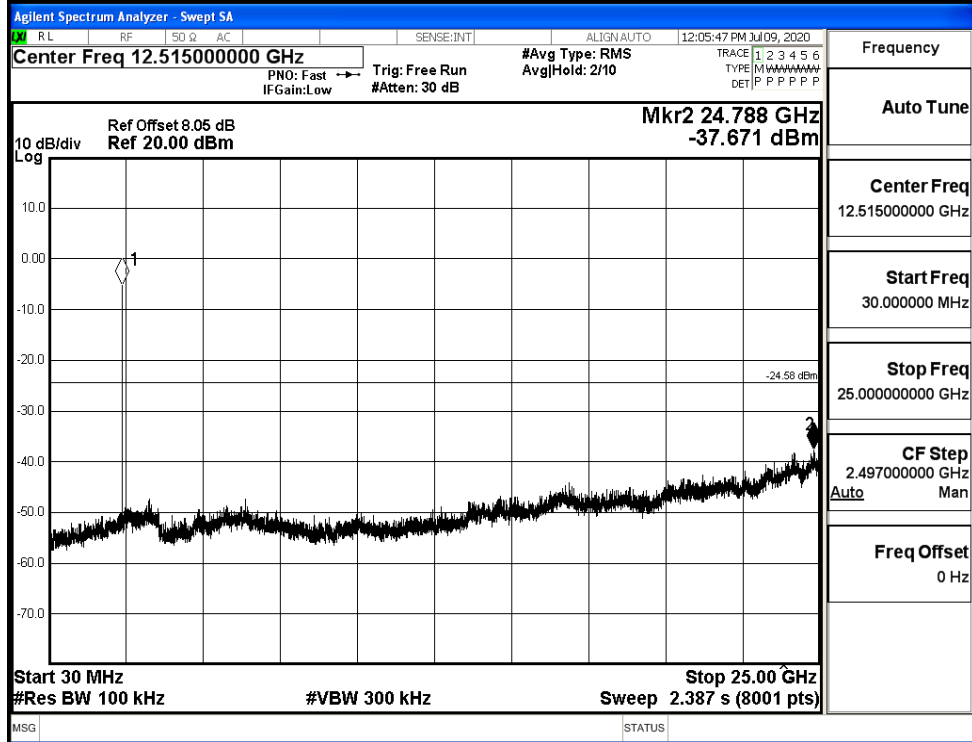


A.7 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-4.576	-37.671	-24.576	PASS
	MCH	-3.902	-37.890	-23.902	PASS
	HCH	-4.459	-37.889	-24.459	PASS
$\pi/4$ DQPSK	LCH	-4.646	-37.906	-24.646	PASS
	MCH	-4.054	-37.865	-24.054	PASS
	HCH	-4.401	-36.639	-24.401	PASS
8DPSK	LCH	-4.264	-38.509	-24.264	PASS
	MCH	-3.783	-37.238	-23.783	PASS
	HCH	-4.226	-38.168	-24.226	PASS

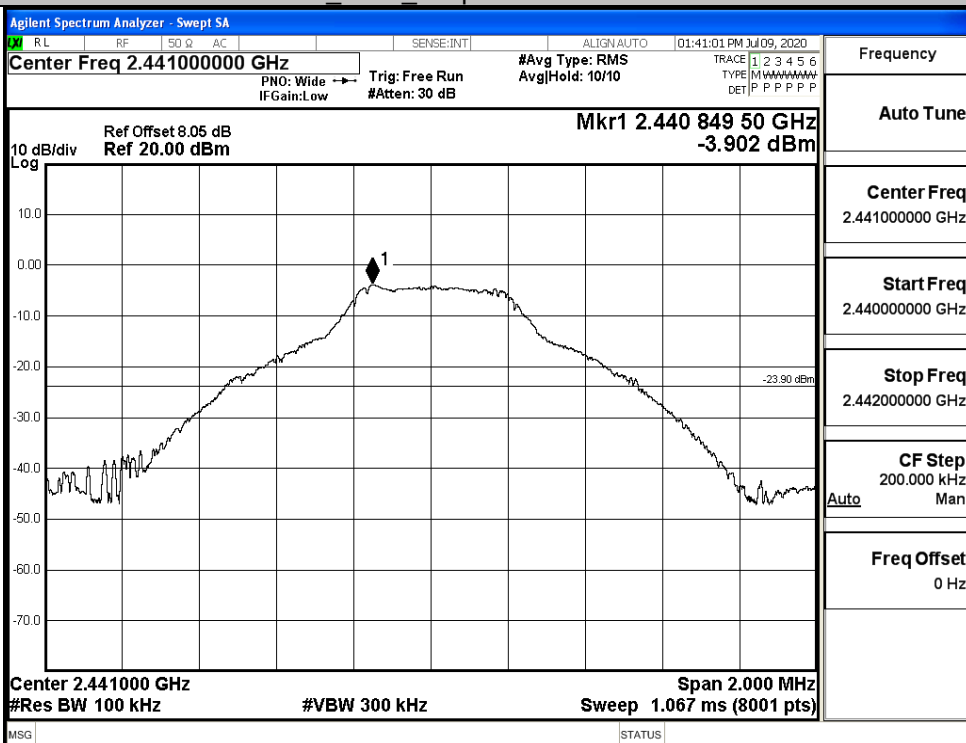


Puw

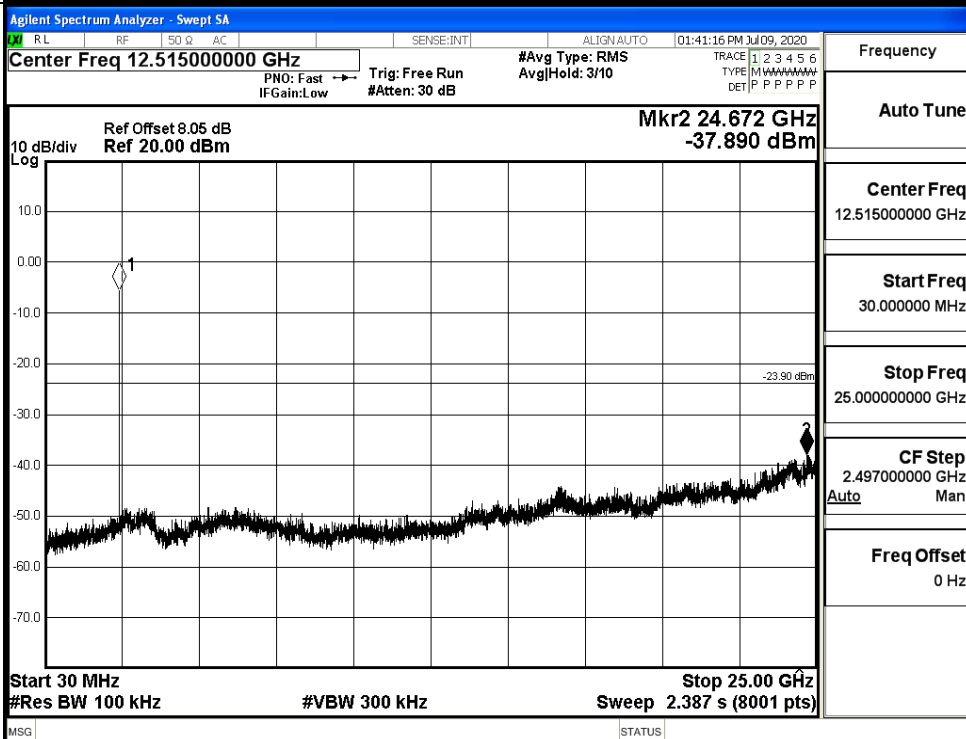


GFSK MCH_Graphs

Pref

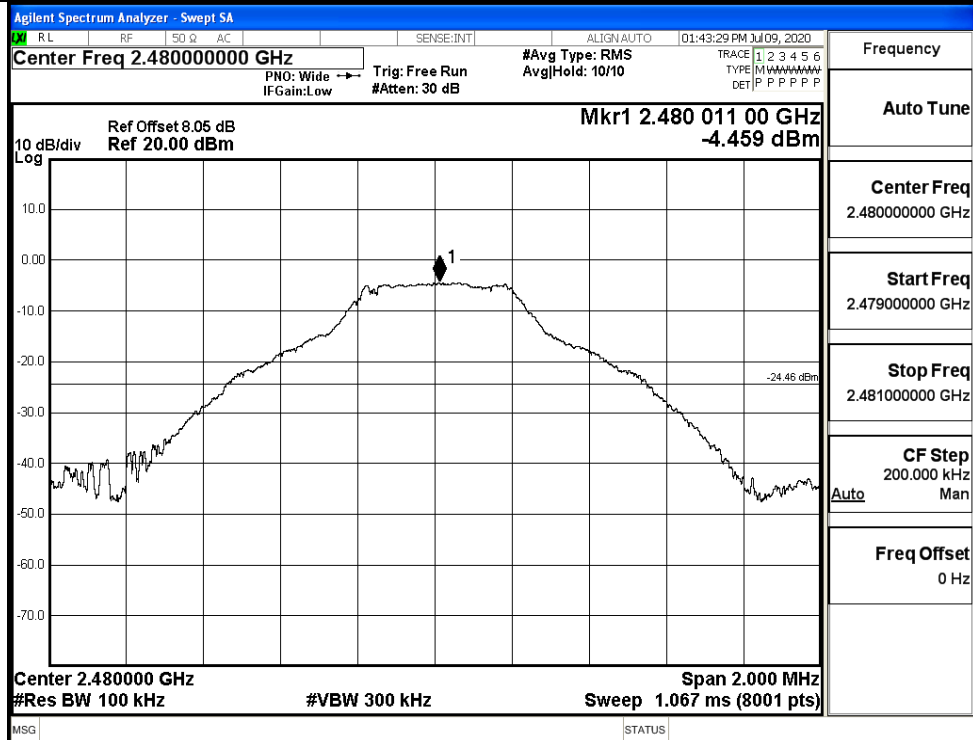


Puw

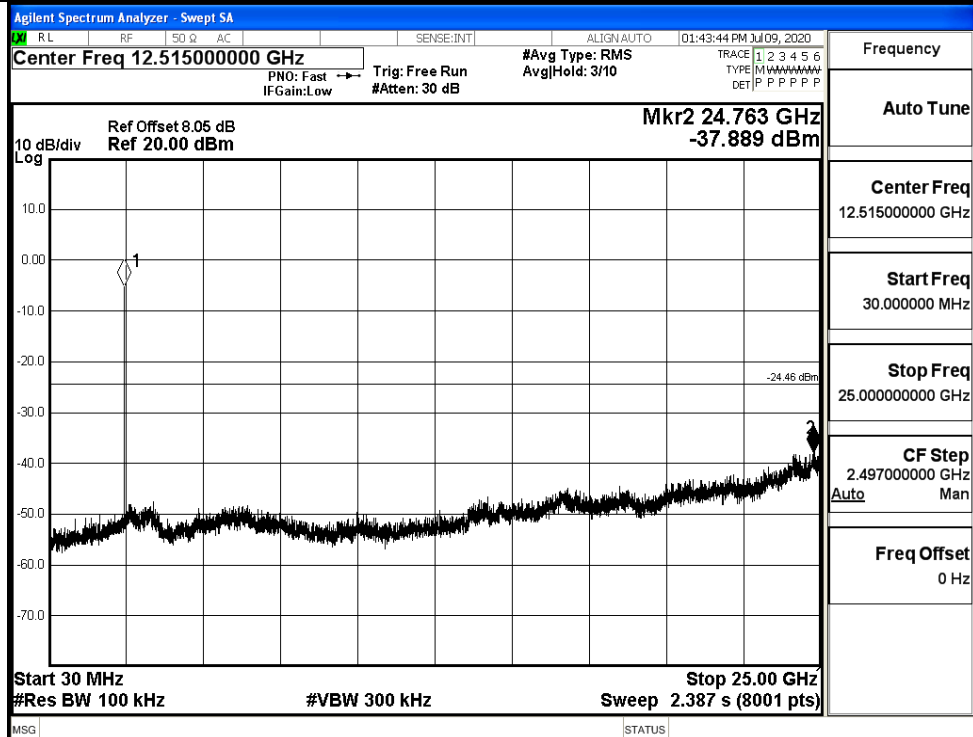


GFSK HCH Graphs

Pref

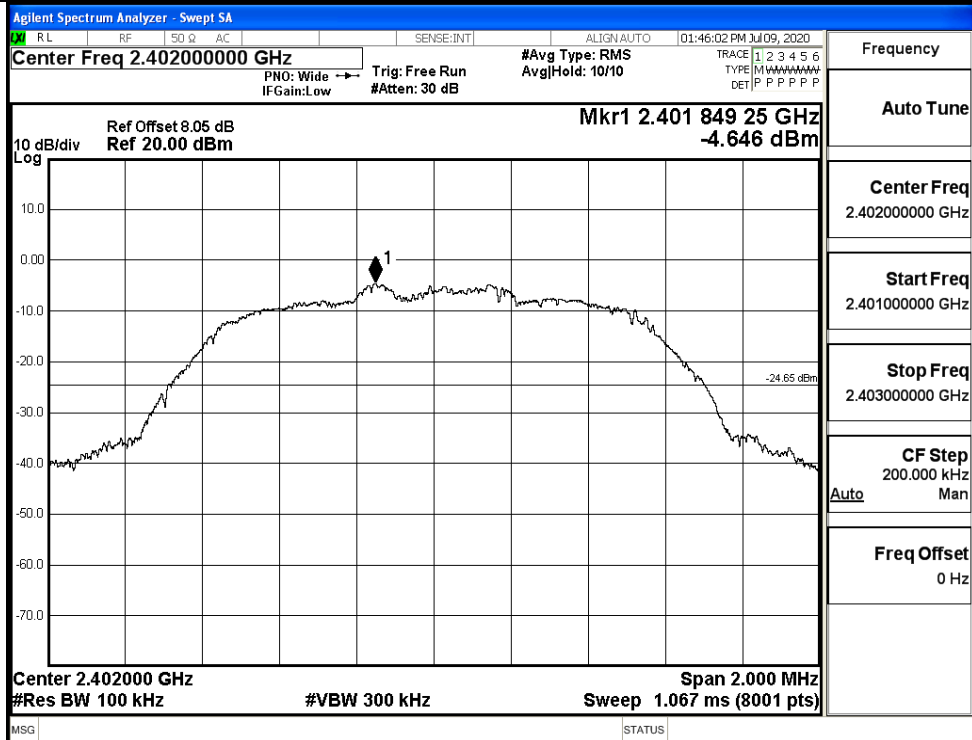


Puw



$\pi/4$ DQPSK LCH_Graphs

Pref

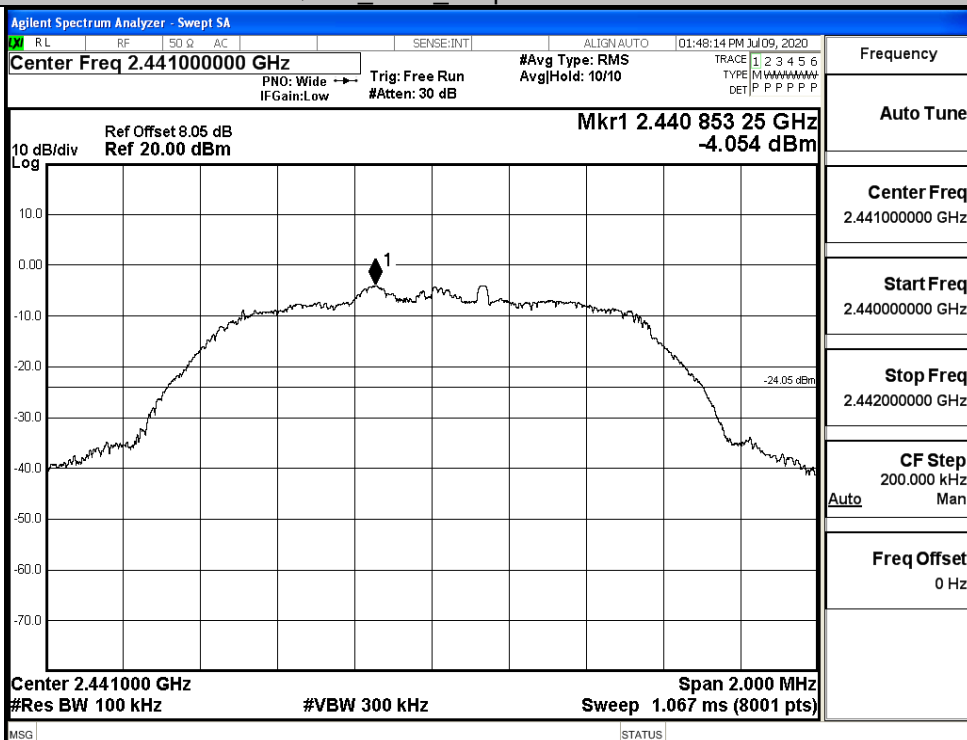


Puw



π/4DQPSK MCH Graphs

Pref

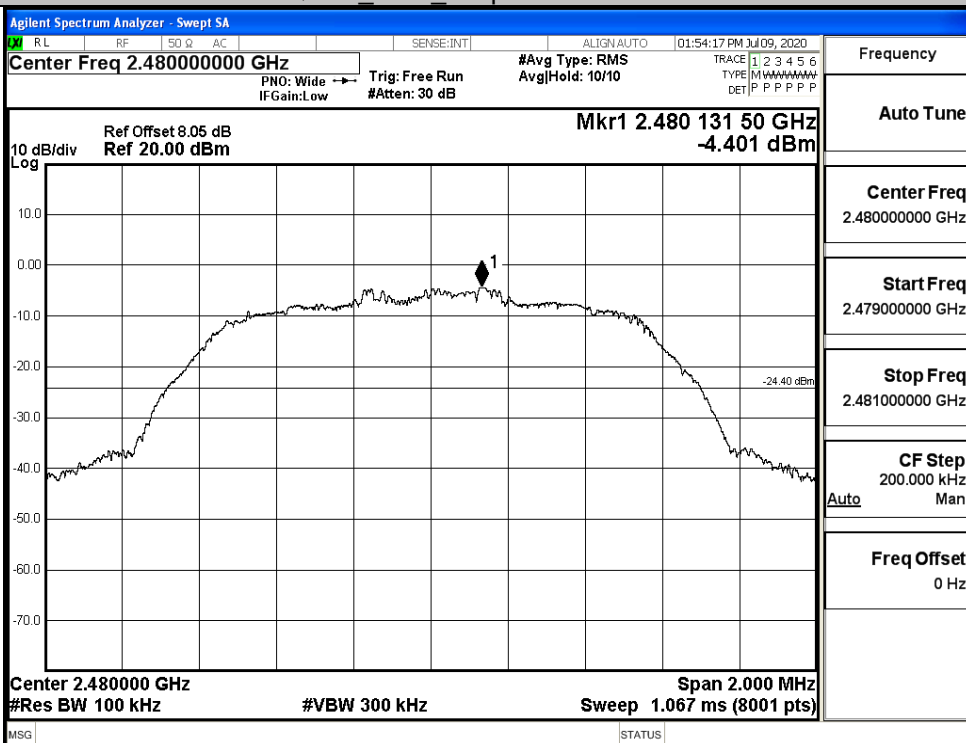


Puw

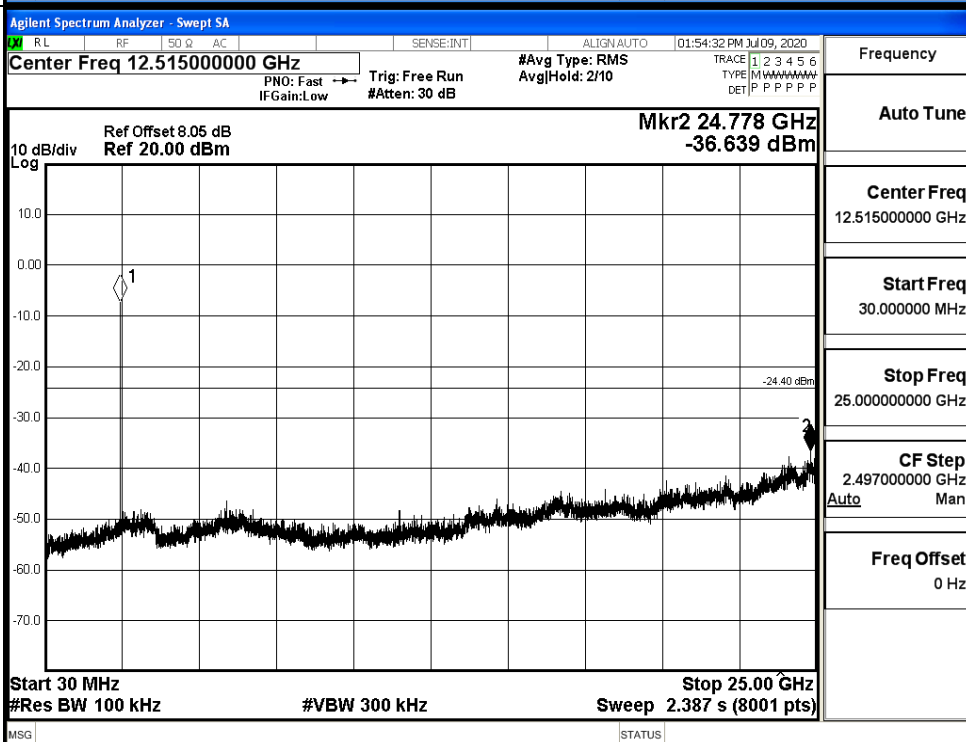


$\pi/4$ DQPSK HCH Graphs

Pref

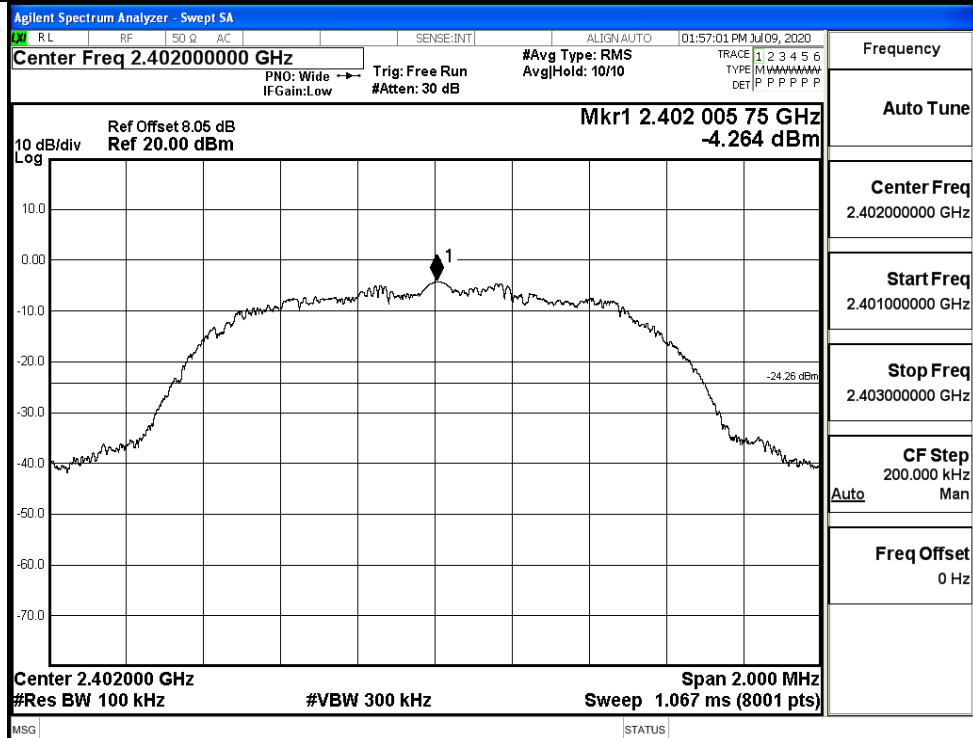


Puw

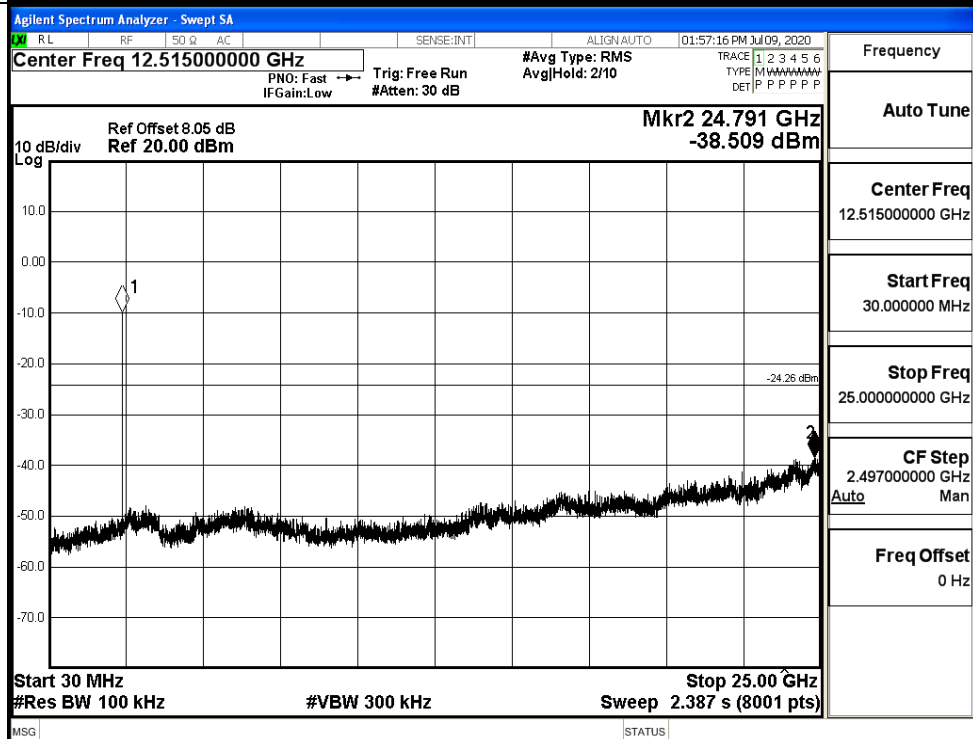


8DPSK LCH Graphs

Pref

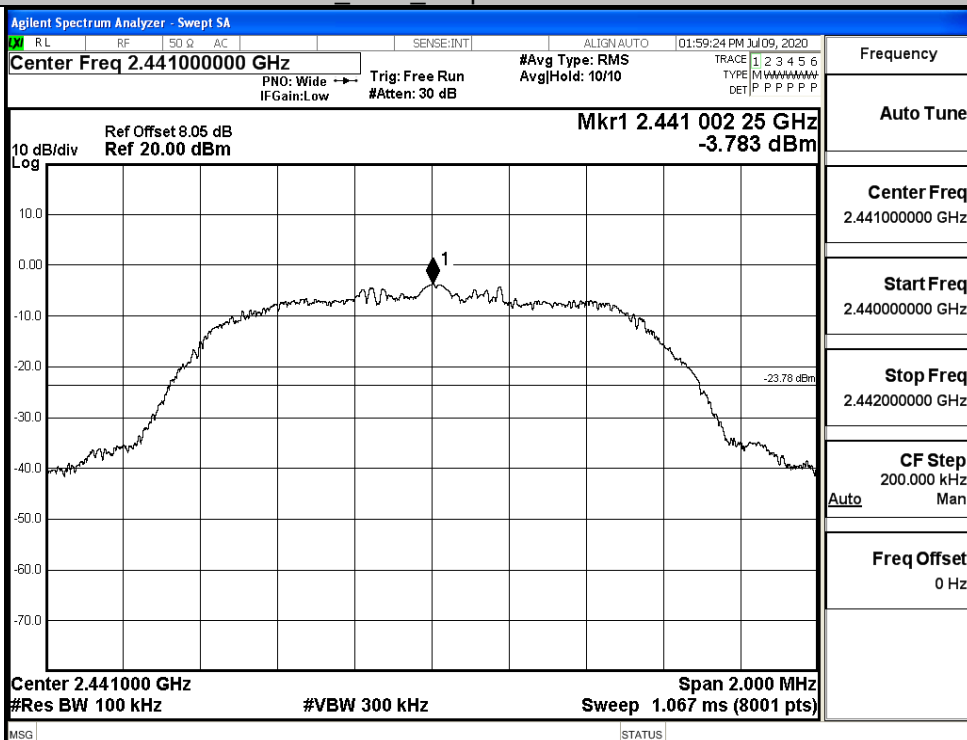


Puw

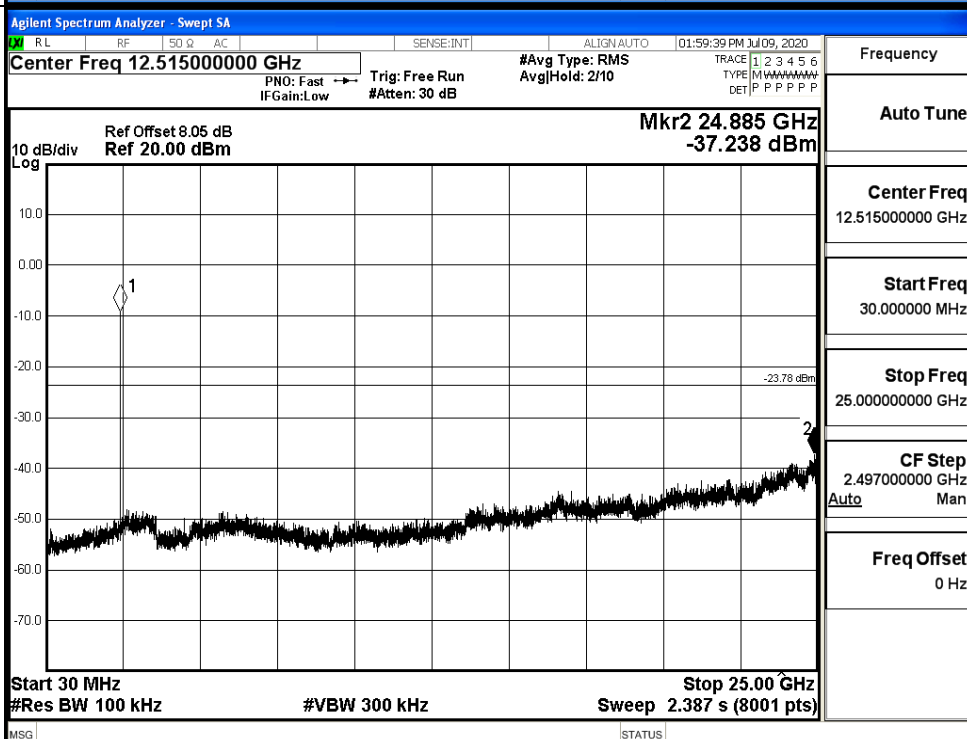


8DPSK MCH_Graphs

Pref

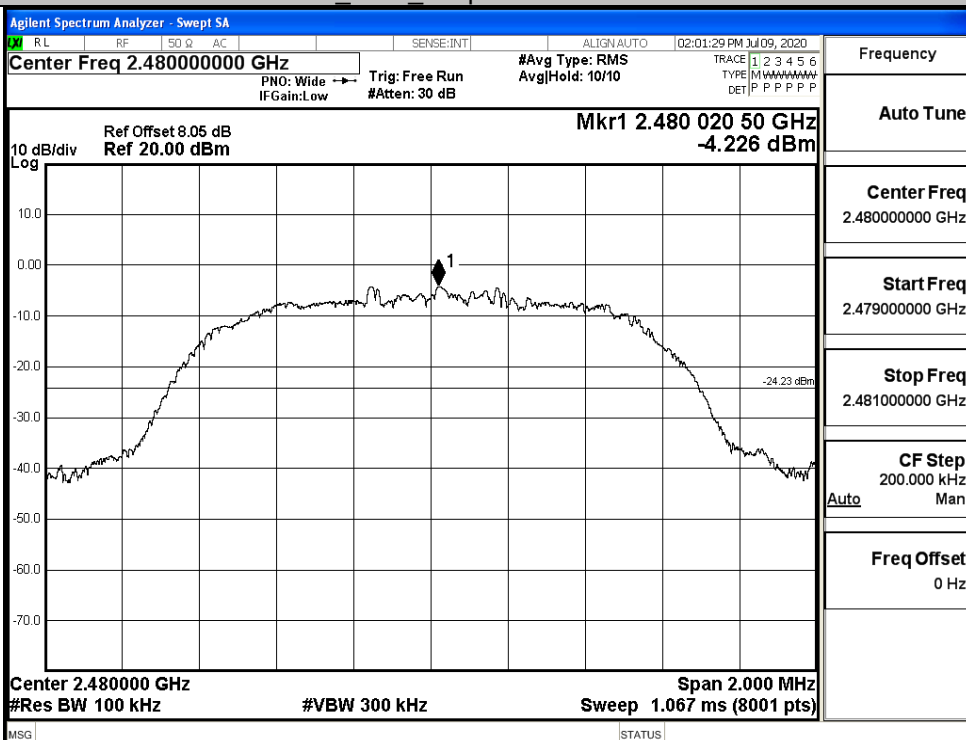


Puw

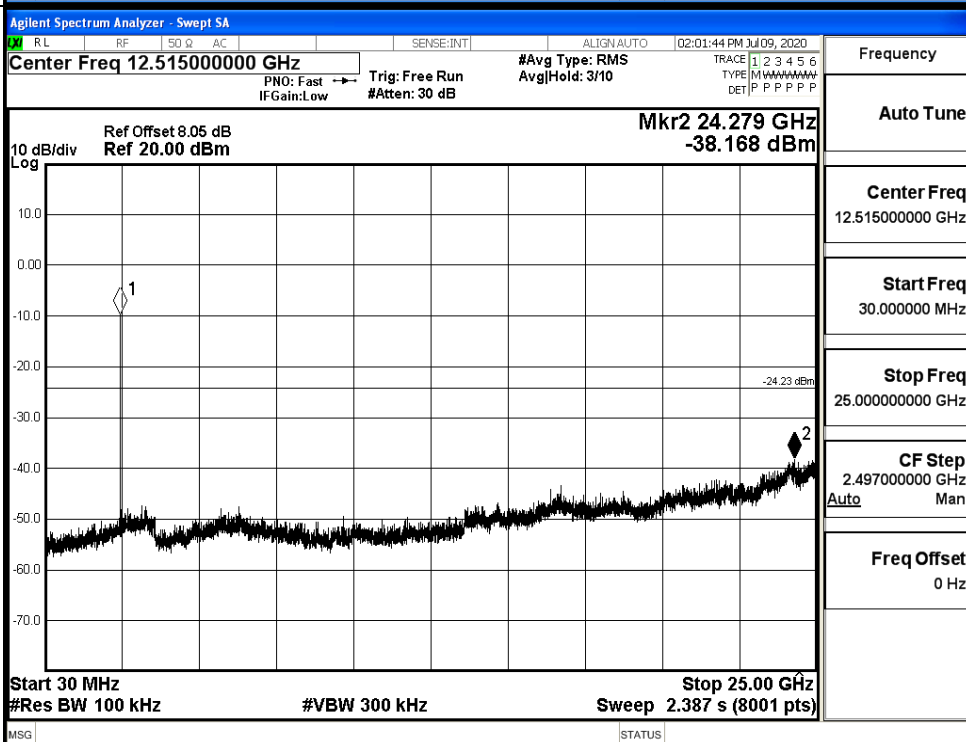


8DPSK_HCH_Graphs

Pref



Puw

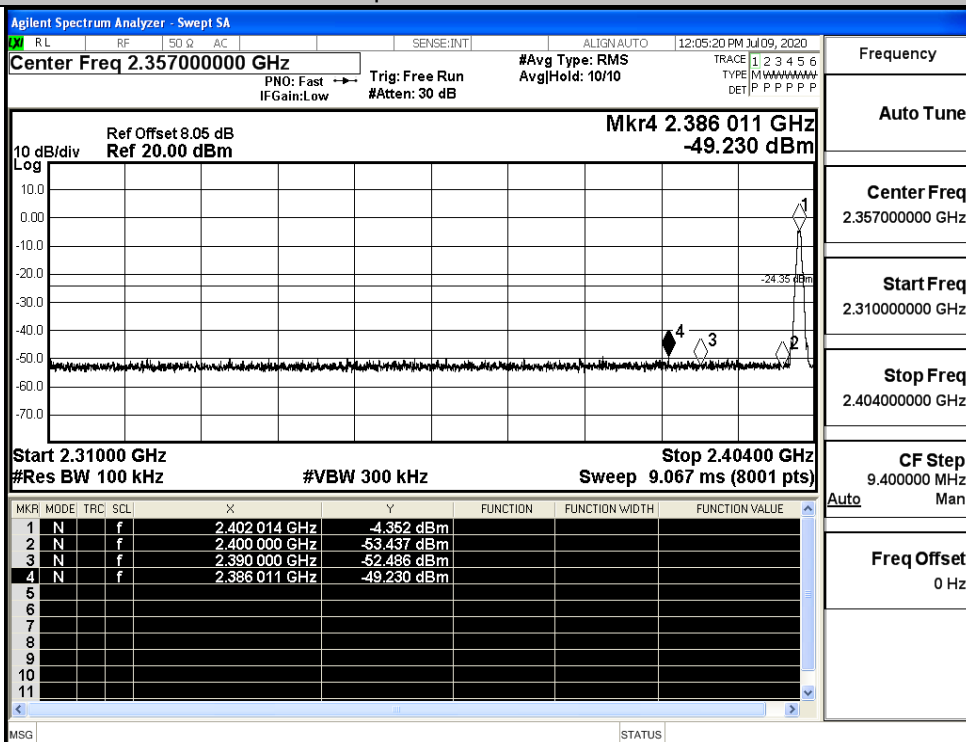


A.8 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-4.352	Off	-49.230	-24.35	PASS
			-4.014	On	-49.606	-24.01	PASS
	HCH	2480	-4.038	Off	-49.271	-24.04	PASS
			-3.952	On	-48.796	-23.95	PASS
$\pi/4$ DQPSK	LCH	2402	-4.630	Off	-49.663	-24.63	PASS
			-4.107	On	-48.316	-24.11	PASS
	HCH	2480	-4.393	Off	-48.501	-24.39	PASS
			-4.051	On	-48.706	-24.05	PASS
8DPSK	LCH	2402	-6.061	Off	-49.399	-26.06	PASS
			-3.955	On	-48.655	-23.96	PASS
	HCH	2480	-4.043	Off	-48.520	-24.04	PASS
			-3.910	On	-48.642	-23.91	PASS

Test Graphs

GFSK/LCH/No Hop



Frequency

Auto Tune

Center Freq
2.357000000 GHz

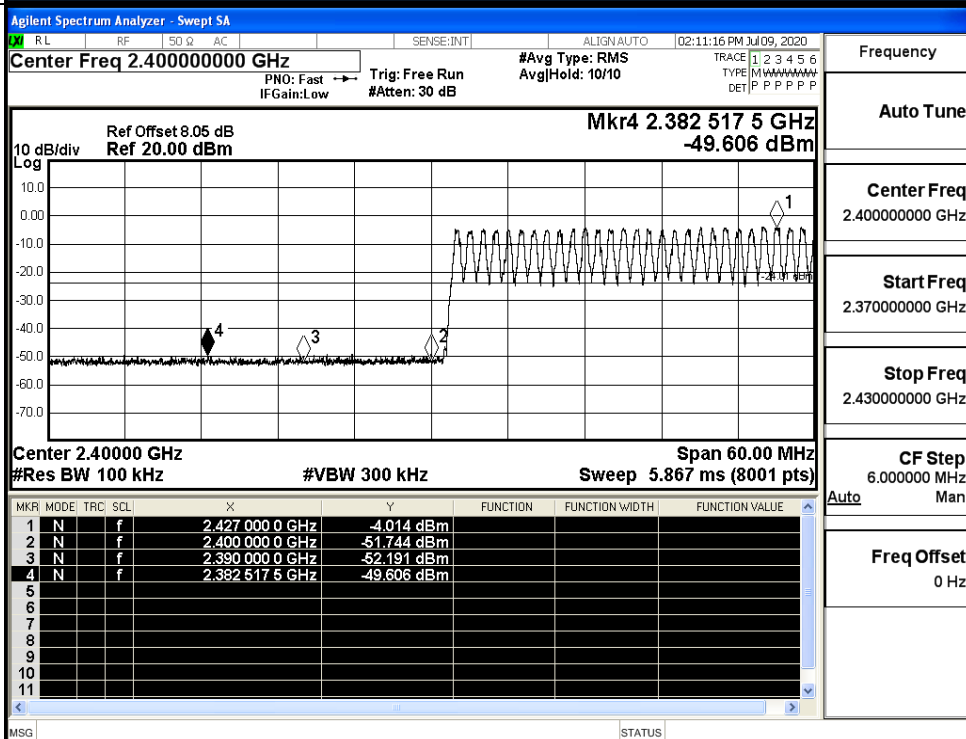
Start Freq
2.310000000 GHz

Stop Freq
2.404000000 GHz

CF Step
9.400000 MHz
Man

Freq Offset
0 Hz

GFSK/LCH/Hop



Frequency

Auto Tune

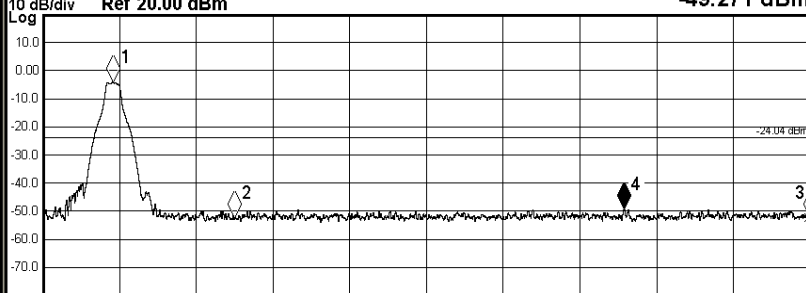
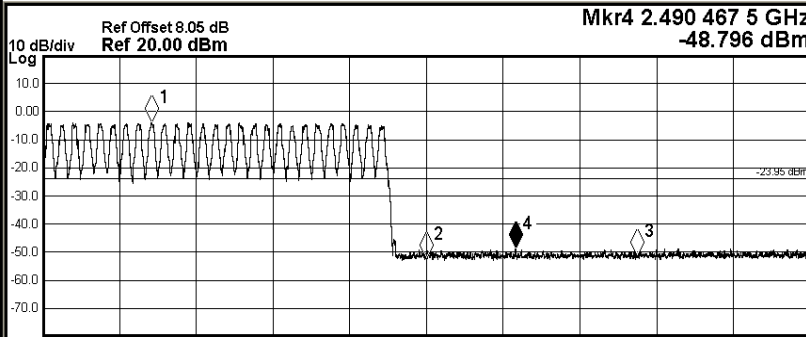
Center Freq
2.400000000 GHz

Start Freq
2.370000000 GHz

Stop Freq
2.430000000 GHz

CF Step
6.000000 MHz
Man

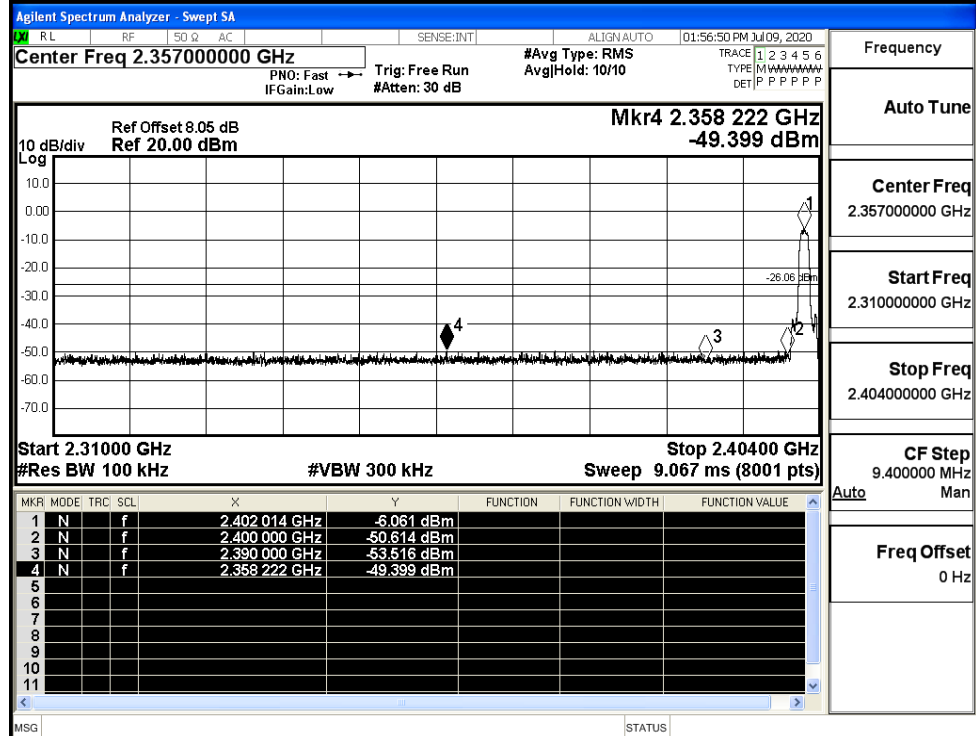
Freq Offset
0 Hz

GFSK/HCH/No Hop	Agilent Spectrum Analyzer - Swept SA RL RF 50 Q AC SENSE:INT ALIGN:AUTO 01:43:18 PM Jul 09, 2020 Center Freq 2.489000000 GHz PN0: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB #Avg Type: RMS Avg/Hold: 10/10 TRACE 1 2 3 4 5 6 TYPE: M W X Y Z DET: P P P P P P Ref Offset 8.05 dB Ref 20.00 dBm Mkr4 2.494 665 00 GHz -49.271 dBm 10 dB/div Log  Start 2.47800 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.133 ms (8001 pts) <table><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><tr><td>1</td><td>N</td><td>f</td><td></td><td>2.480 018 50 GHz</td><td>-4.038 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>f</td><td></td><td>2.483 500 00 GHz</td><td>-52.503 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>N</td><td>f</td><td></td><td>2.500 000 00 GHz</td><td>-52.359 dBm</td><td></td><td></td><td></td></tr><tr><td>4</td><td>N</td><td>f</td><td></td><td>2.494 665 00 GHz</td><td>-49.271 dBm</td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> MSG STATUS Frequency Auto Tune Center Freq 2.489000000 GHz Start Freq 2.478000000 GHz Stop Freq 2.500000000 GHz CF Step 2.200000 MHz Auto Freq Offset 0 Hz	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	f		2.480 018 50 GHz	-4.038 dBm				2	N	f		2.483 500 00 GHz	-52.503 dBm				3	N	f		2.500 000 00 GHz	-52.359 dBm				4	N	f		2.494 665 00 GHz	-49.271 dBm				5									6									7									8									9									10									11								
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GFSK/HCH/Hop	Agilent Spectrum Analyzer - Swept SA RL RF 50 Q AC SENSE:INT ALIGN:AUTO 02:12:29 PM Jul 09, 2020 Center Freq 2.483500000 GHz PN0: Fast IF Gain: Low Trig: Free Run #Atten: 30 dB #Avg Type: RMS Avg/Hold: 10/10 TRACE 1 2 3 4 5 6 TYPE: M W X Y Z DET: P P P P P P Ref Offset 8.05 dB Ref 20.00 dBm Mkr4 2.490 467 5 GHz -48.796 dBm 10 dB/div Log  Center 2.48350 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 5.867 ms (8001 pts) <table><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><tr><td>1</td><td>N</td><td>f</td><td></td><td>2.462 005 0 GHz</td><td>-3.952 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>f</td><td></td><td>2.483 500 0 GHz</td><td>-52.315 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>N</td><td>f</td><td></td><td>2.500 000 0 GHz</td><td>-51.340 dBm</td><td></td><td></td><td></td></tr><tr><td>4</td><td>N</td><td>f</td><td></td><td>2.490 467 5 GHz</td><td>-48.796 dBm</td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> MSG STATUS Frequency Auto Tune Center Freq 2.483500000 GHz Start Freq 2.453500000 GHz Stop Freq 2.513500000 GHz CF Step 6.000000 MHz Auto Freq Offset 0 Hz	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	f		2.462 005 0 GHz	-3.952 dBm				2	N	f		2.483 500 0 GHz	-52.315 dBm				3	N	f		2.500 000 0 GHz	-51.340 dBm				4	N	f		2.490 467 5 GHz	-48.796 dBm				5									6									7									8									9									10									11								
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$\pi/4$ DQPSK/LCH/No Hop	Agilent Spectrum Analyzer - Swept SA RLRF50 QACSENSE:INTALIGN AUTO01:45:51 PM Jul 09, 2020 Center Freq 2.357000000 GHz Ref Offset 8.05 dB Ref 20.00 dBm 10 dB/div Log Mkr4 2.349 809 GHz -49.663 dBm Start 2.31000 GHz #Res BW 100 kHz #VBW 300 kHz Stop 2.40400 GHz Sweep 9.067 ms (8001 pts) <table><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><tr><td>1</td><td>N</td><td>f</td><td></td><td>2.402 132 GHz</td><td>-4.630 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>f</td><td></td><td>2.400 000 GHz</td><td>-52.839 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>N</td><td>f</td><td></td><td>2.390 000 GHz</td><td>-52.199 dBm</td><td></td><td></td><td></td></tr><tr><td>4</td><td>N</td><td>f</td><td></td><td>2.349 809 GHz</td><td>-49.663 dBm</td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> MSGSTATUS	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	f		2.402 132 GHz	-4.630 dBm				2	N	f		2.400 000 GHz	-52.839 dBm				3	N	f		2.390 000 GHz	-52.199 dBm				4	N	f		2.349 809 GHz	-49.663 dBm				5									6									7									8									9									10									11									Frequency Auto Tune Center Freq 2.357000000 GHz Start Freq 2.310000000 GHz Stop Freq 2.404000000 GHz CF Step 9.400000 MHz AutoMan Freq Offset 0 Hz
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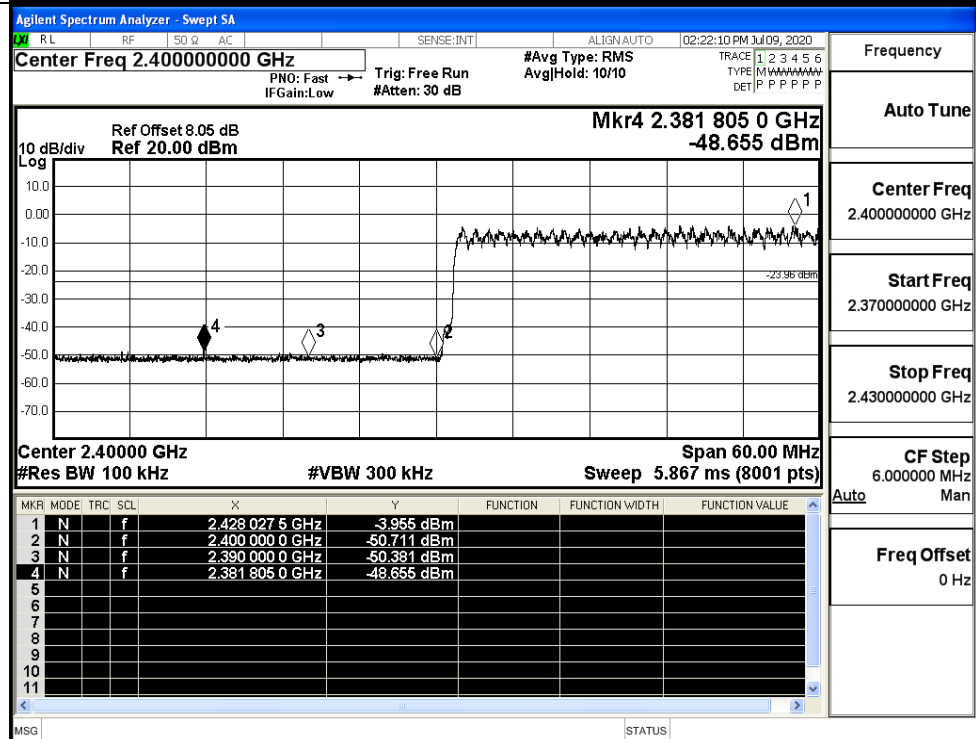
$\pi/4$ DQPSK/HCH/No Hop	Agilent Spectrum Analyzer - Swept SA RLRF50 QACSENSE:INTALIGN AUTO01:54:05 PM Jul 09, 2020 Center Freq 2.489000000 GHz PNO: Fast IFGain:LowTrig: Free Run #Atten: 30 dB#Avg Type: RMS AvgHold: 10/10 TRACE 1 2 3 4 5 6TYPE M W W W W W W W WDET P P P P P P Ref Offset 8.05 dBRef 20.00 dBm Mkr4 2.488 282 25 GHz-48.501 dBm 10 dB/divLog Start 2.47800 GHz#Res BW 100 kHz#VBW 300 kHzStop 2.50000 GHzSweep 2.133 ms (8001 pts) <table><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><tr><td>1</td><td>N</td><td>f</td><td></td><td>2.480 136 75 GHz</td><td>-4.393 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>f</td><td></td><td>2.483 500 00 GHz</td><td>-51.986 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>N</td><td>f</td><td></td><td>2.500 000 00 GHz</td><td>-52.554 dBm</td><td></td><td></td><td></td></tr><tr><td>4</td><td>N</td><td>f</td><td></td><td>2.488 282 25 GHz</td><td>-48.501 dBm</td><td></td><td></td><td></td></tr><tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table> MSGSTATUS	MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	f		2.480 136 75 GHz	-4.393 dBm				2	N	f		2.483 500 00 GHz	-51.986 dBm				3	N	f		2.500 000 00 GHz	-52.554 dBm				4	N	f		2.488 282 25 GHz	-48.501 dBm				5									6									7									8									9									10									11									Frequency Auto Tune Center Freq2.489000000 GHz Start Freq2.478000000 GHz Stop Freq2.500000000 GHz CF Step2.200000 MHzMan Freq Offset0 Hz
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8DPSK/LCH/No Hop



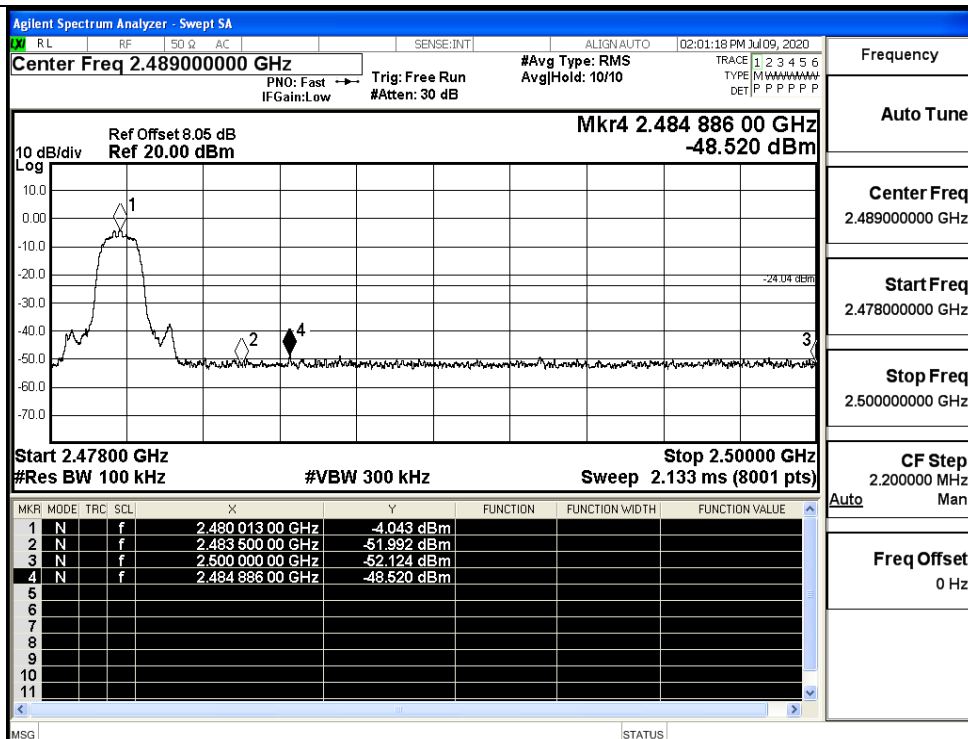
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Start Freq 2.310000000 GHz
Stop Freq 2.404000000 GHz
CF Step 9.400000 MHz
Auto Man
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8DPSK/LCH/Hop

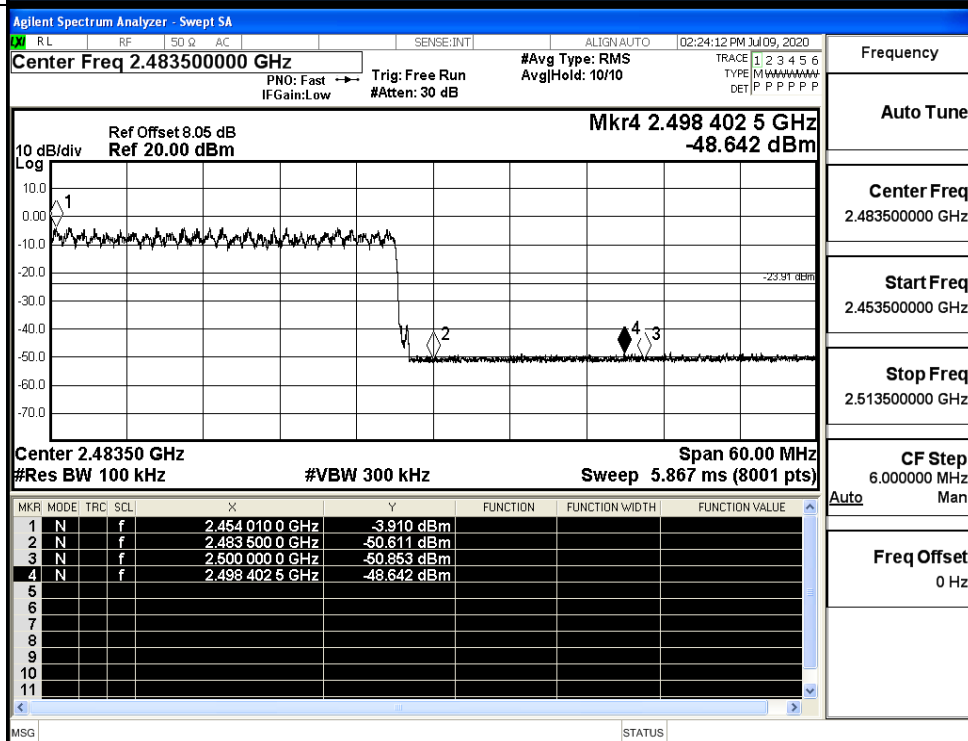


Frequency
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Start Freq 2.370000000 GHz
Stop Freq 2.430000000 GHz
CF Step 6.000000 MHz
Auto Man
Freq Offset 0 Hz

8DPSK/HCH/No Hop



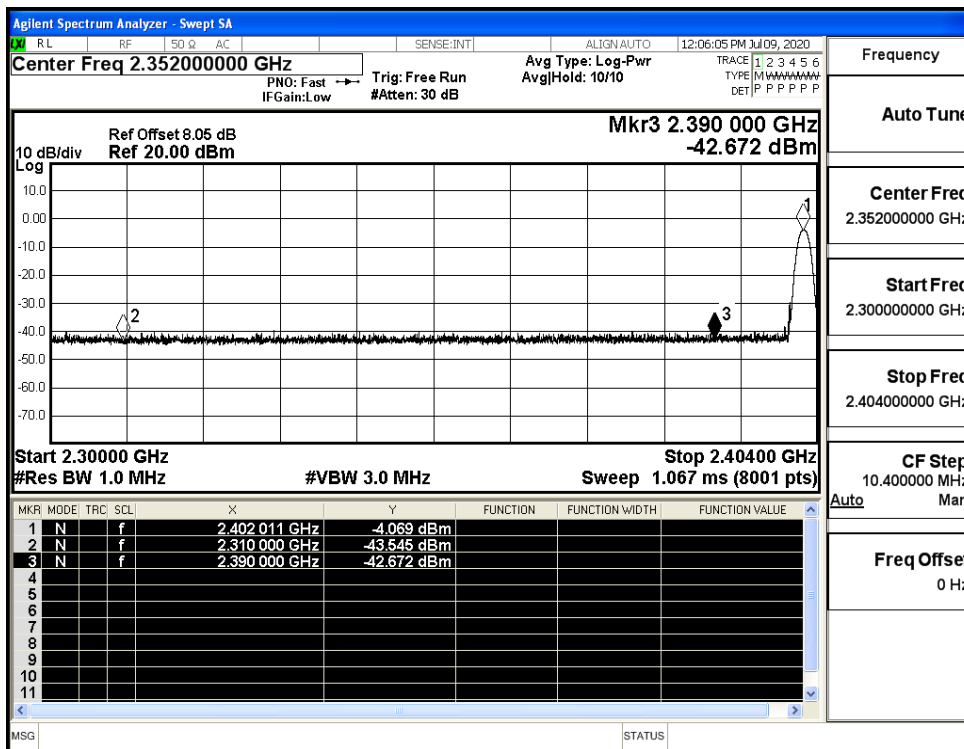
8DPSK/HCH/Hop



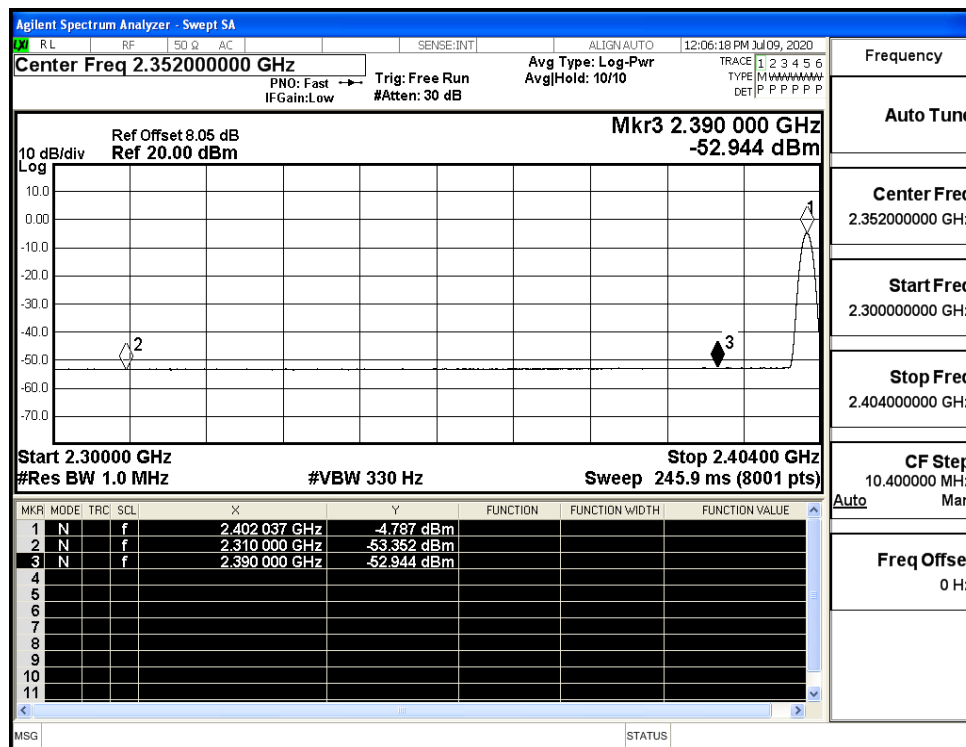
A.9 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-43.55	3.2	0	54.88	PEAK	74	PASS
	Off	2310.0	-53.35	3.2	0	45.08	AV	54	PASS
	Off	2390.0	-42.67	3.2	0	55.76	PEAK	74	PASS
	Off	2390.0	-52.94	3.2	0	45.49	AV	54	PASS
	Off	2483.5	-43.52	3.2	0	54.91	PEAK	74	PASS
	Off	2483.5	-52.38	3.2	0	46.05	AV	54	PASS
	Off	2500.0	-41.54	3.2	0	56.89	PEAK	74	PASS
	Off	2500.0	-52.27	3.2	0	46.16	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-42.98	3.2	0	55.45	PEAK	74	PASS
	Off	2310.0	-53.30	3.2	0	45.13	AV	54	PASS
	Off	2390.0	-43.39	3.2	0	55.04	PEAK	74	PASS
	Off	2390.0	-52.97	3.2	0	45.46	AV	54	PASS
	Off	2483.5	-42.86	3.2	0	55.57	PEAK	74	PASS
	Off	2483.5	-52.45	3.2	0	45.98	AV	54	PASS
	Off	2500.0	-42.49	3.2	0	55.94	PEAK	74	PASS
	Off	2500.0	-52.27	3.2	0	46.16	AV	54	PASS
8DPSK	Off	2310.0	-43.62	3.2	0	54.81	PEAK	74	PASS
	Off	2310.0	-53.43	3.2	0	45.00	AV	54	PASS
	Off	2390.0	-43.68	3.2	0	54.75	PEAK	74	PASS
	Off	2390.0	-52.92	3.2	0	45.51	AV	54	PASS
	Off	2483.5	-42.76	3.2	0	55.67	PEAK	74	PASS
	Off	2483.5	-52.36	3.2	0	46.07	AV	54	PASS
	Off	2500.0	-41.00	3.2	0	57.43	PEAK	74	PASS
	Off	2500.0	-52.20	3.2	0	46.23	AV	54	PASS

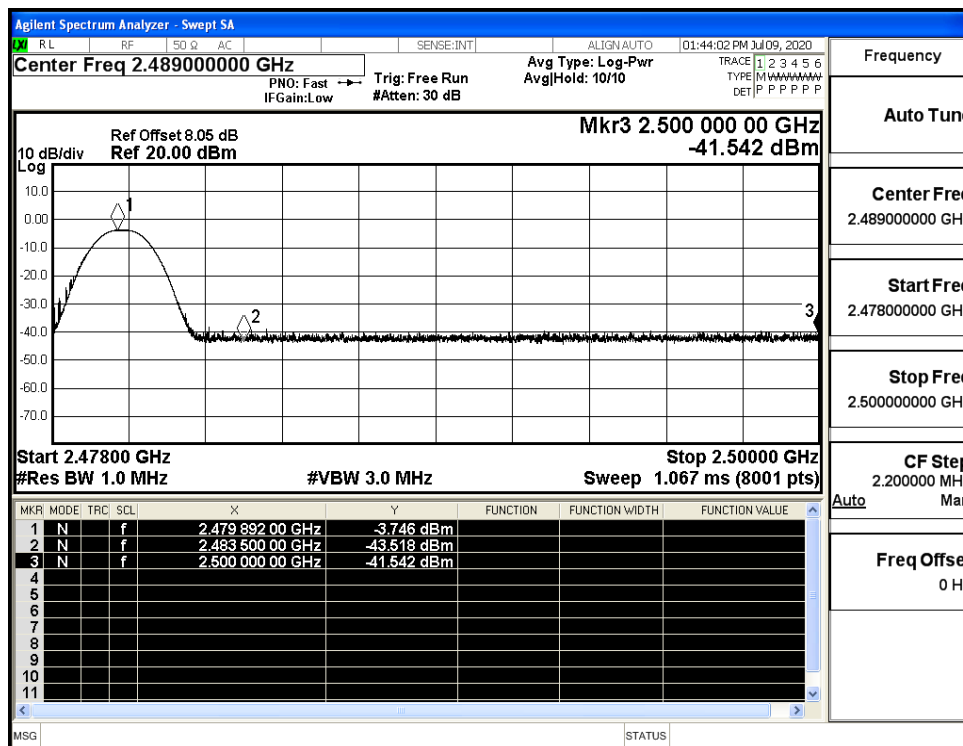
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (Low Channel)



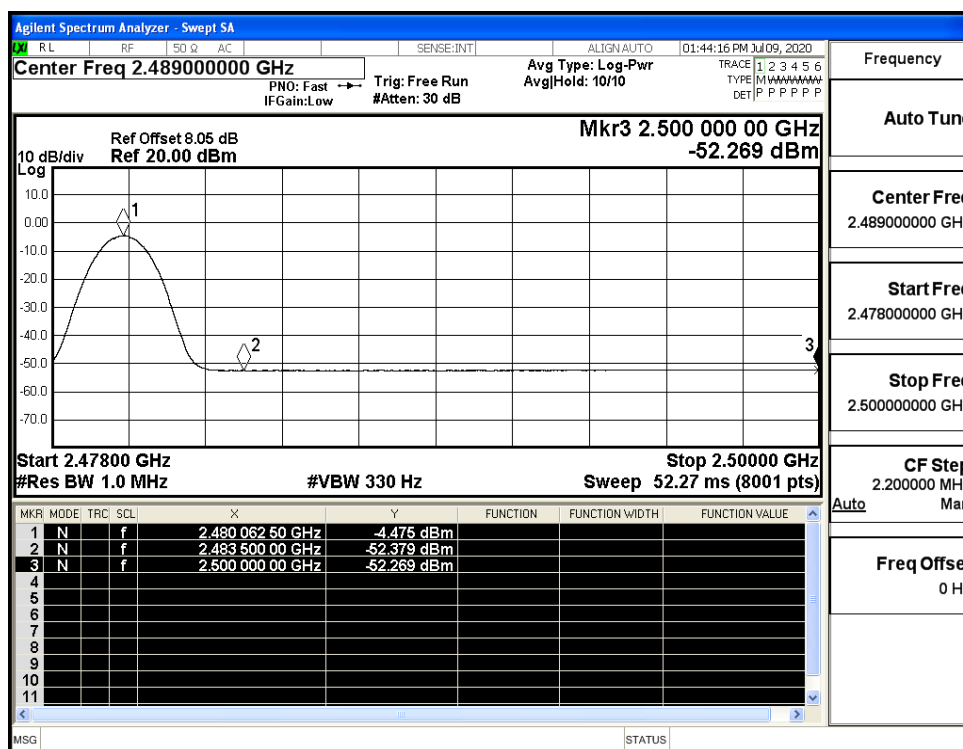
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (Low Channel)



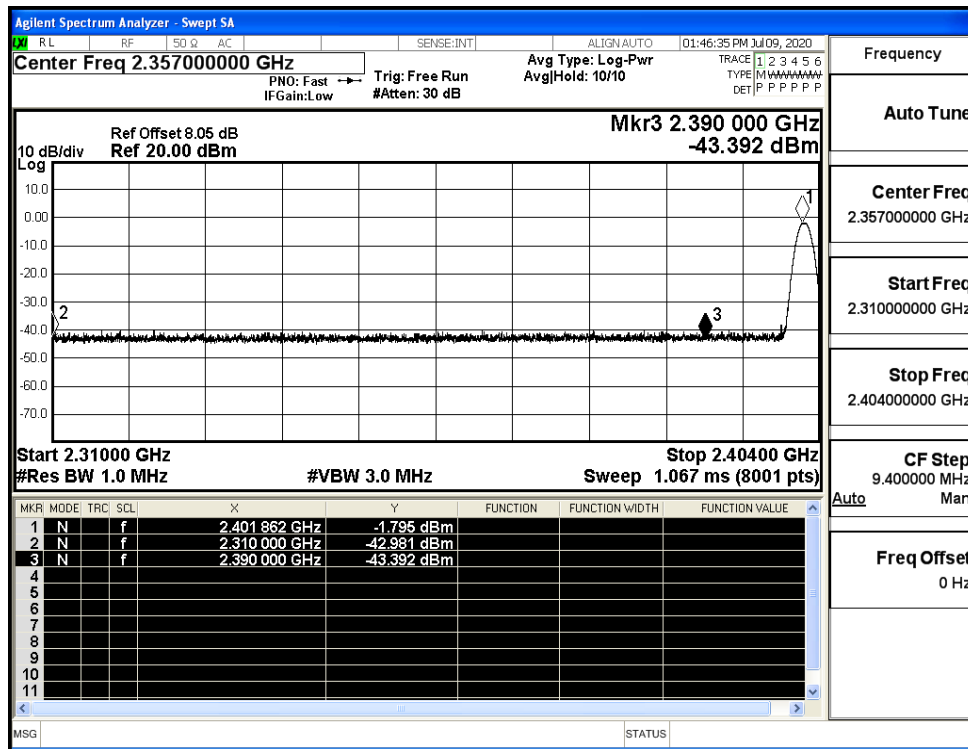
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)



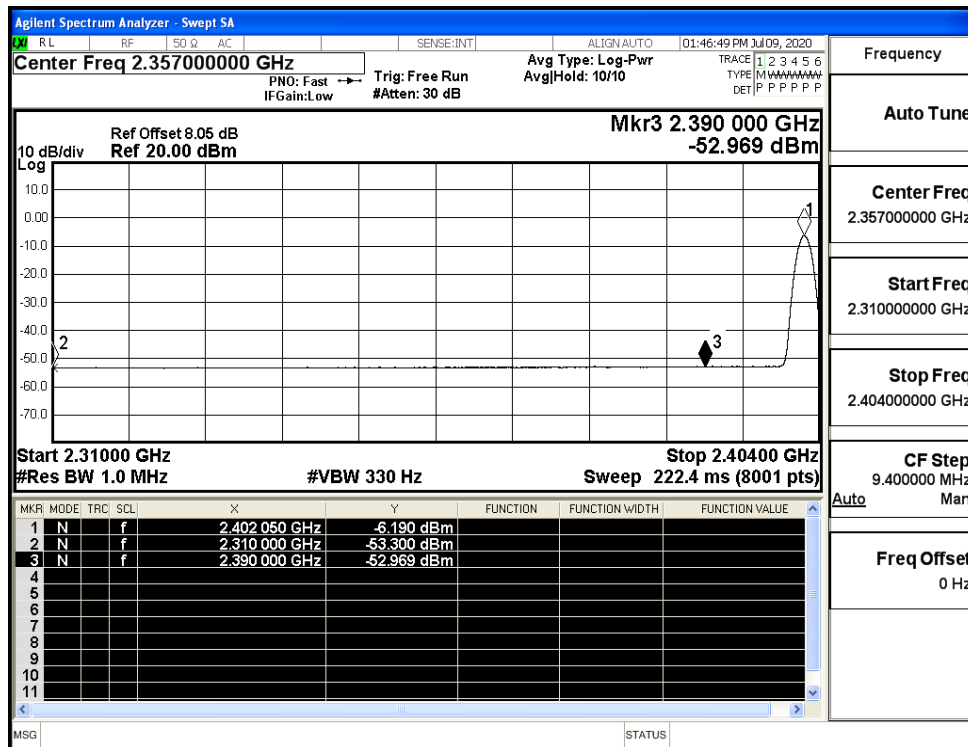
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (High Channel)



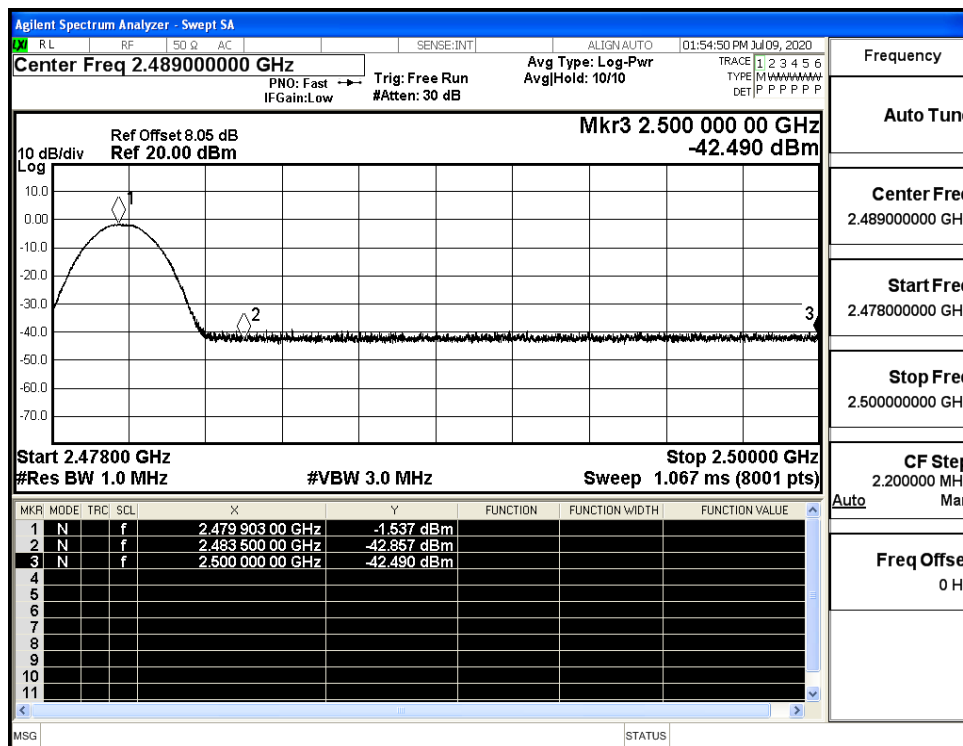
Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)



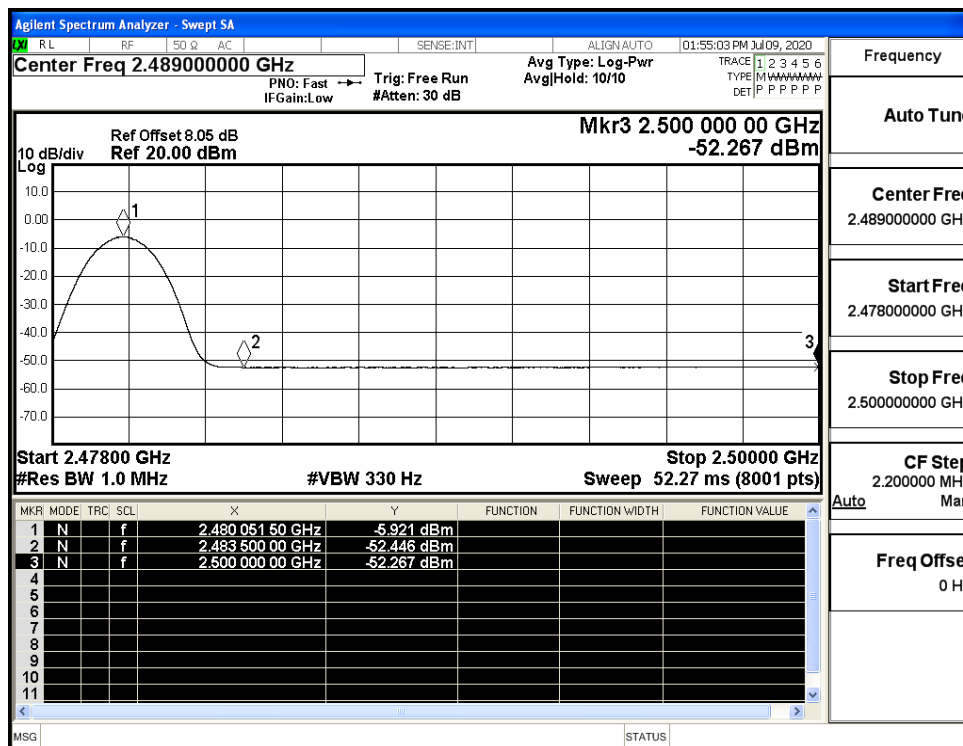
Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (Low Channel)



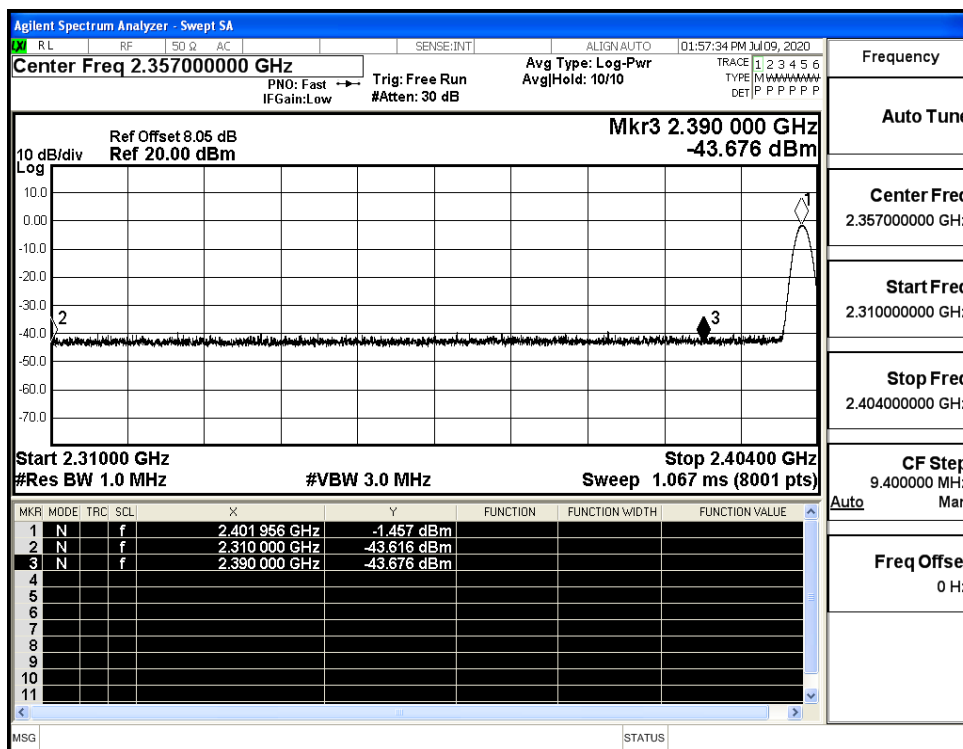
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (High Channel)



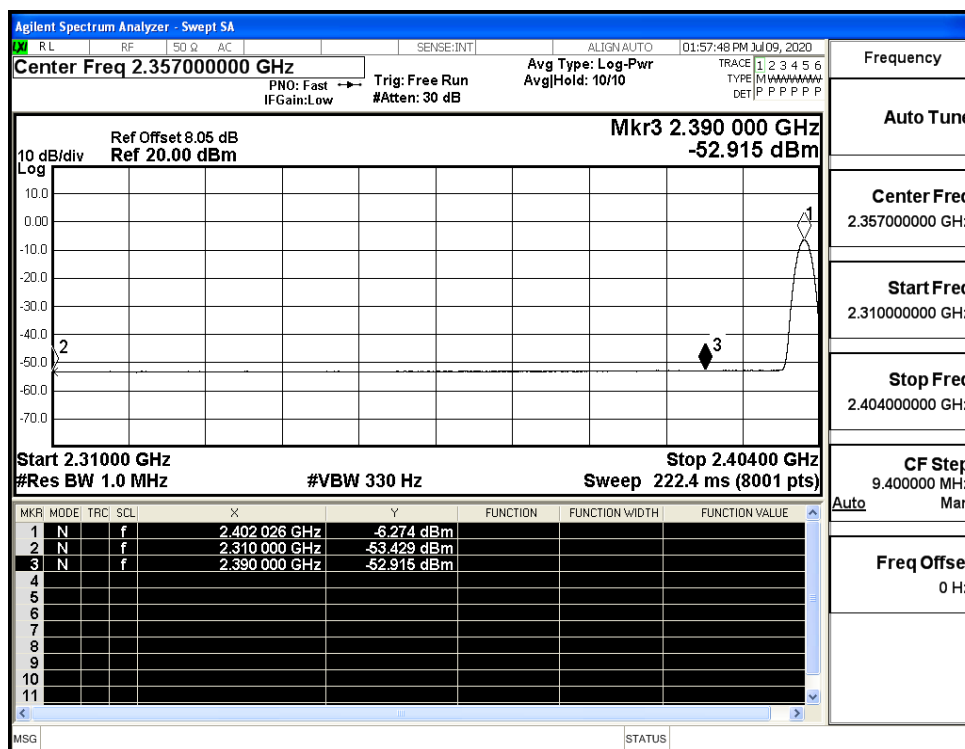
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (High Channel)



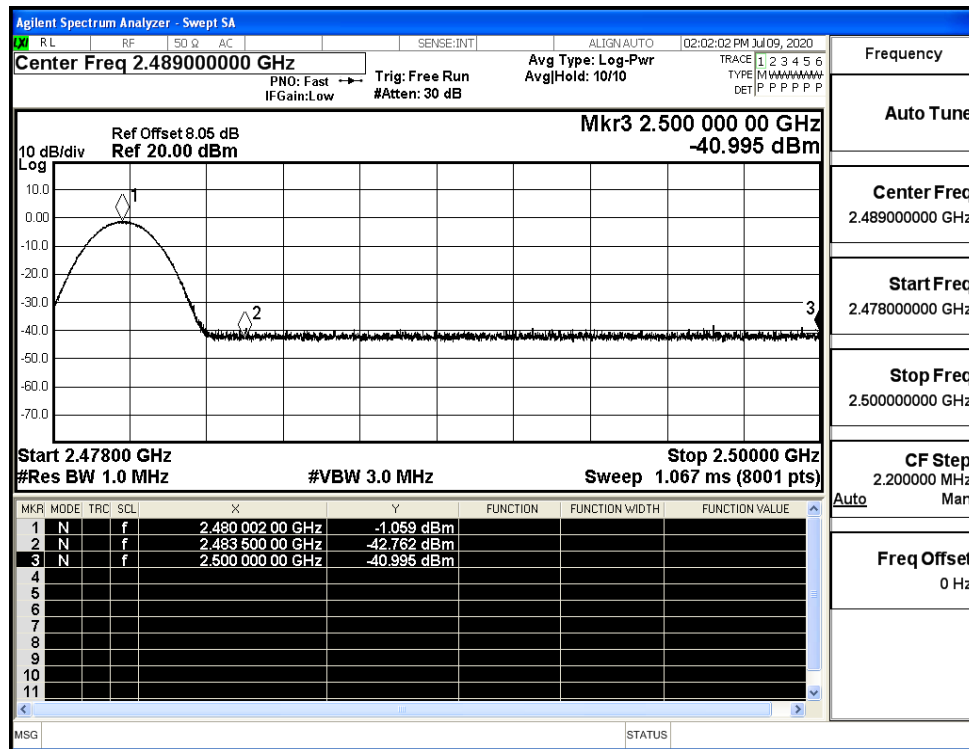
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)

