Appendix A

RF Test Data for BT V5.0(DSS) (Conducted Measurement)

Product Name: Smart TV Box

Trade Mark: N/A

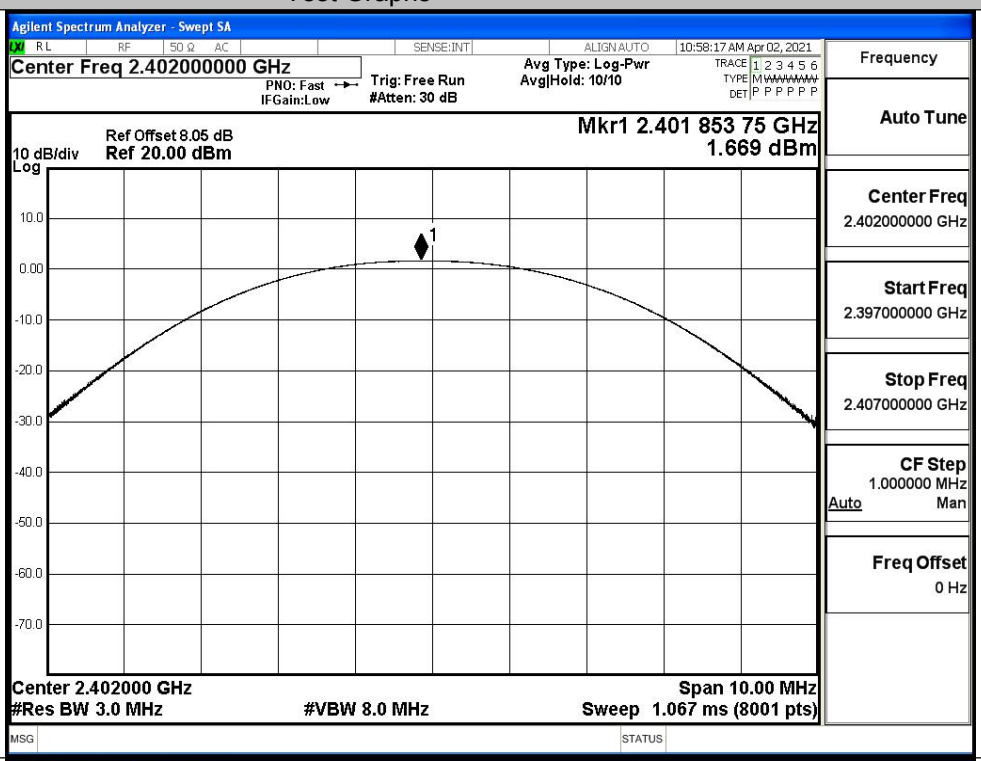
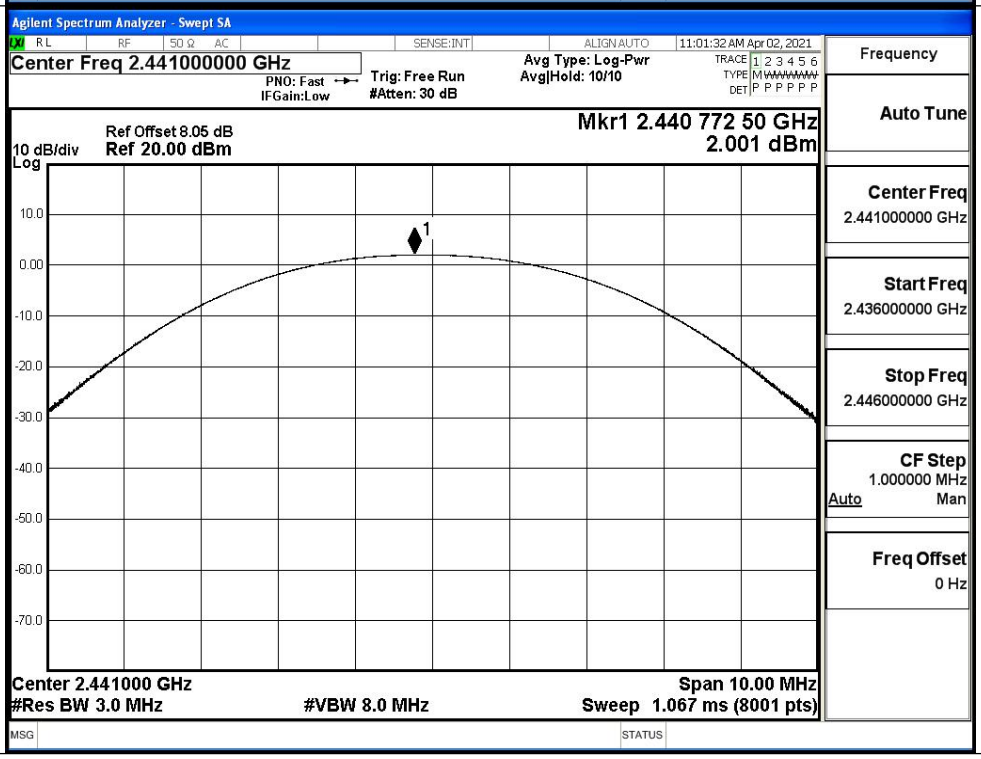
Test Model: T95

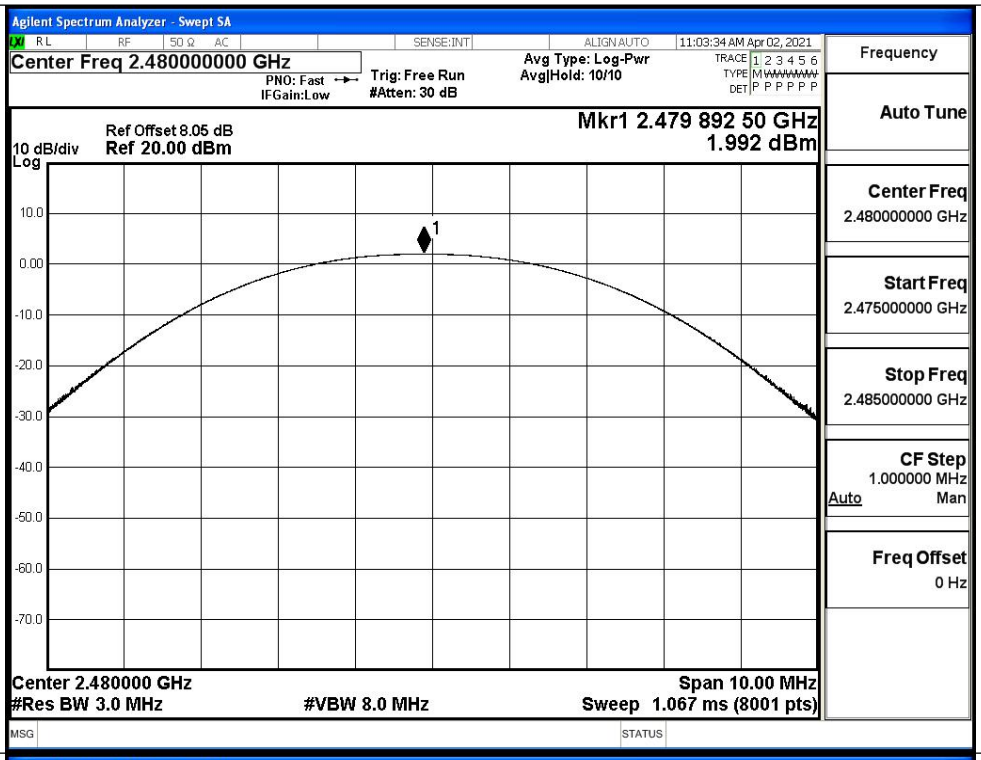
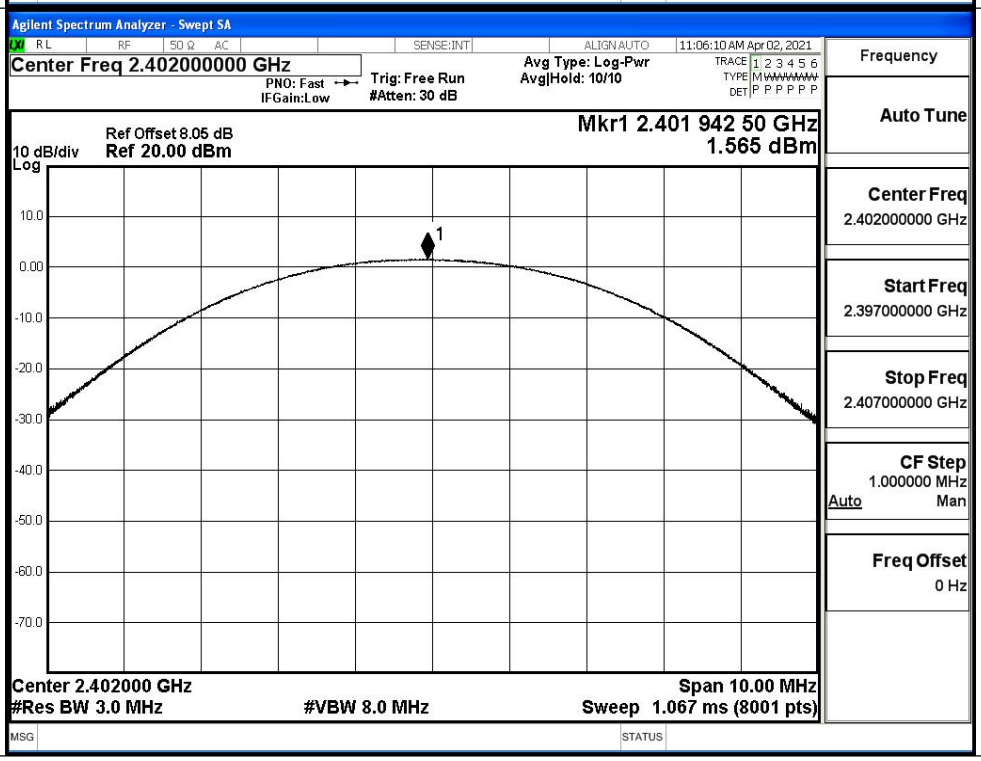
Environmental Conditions

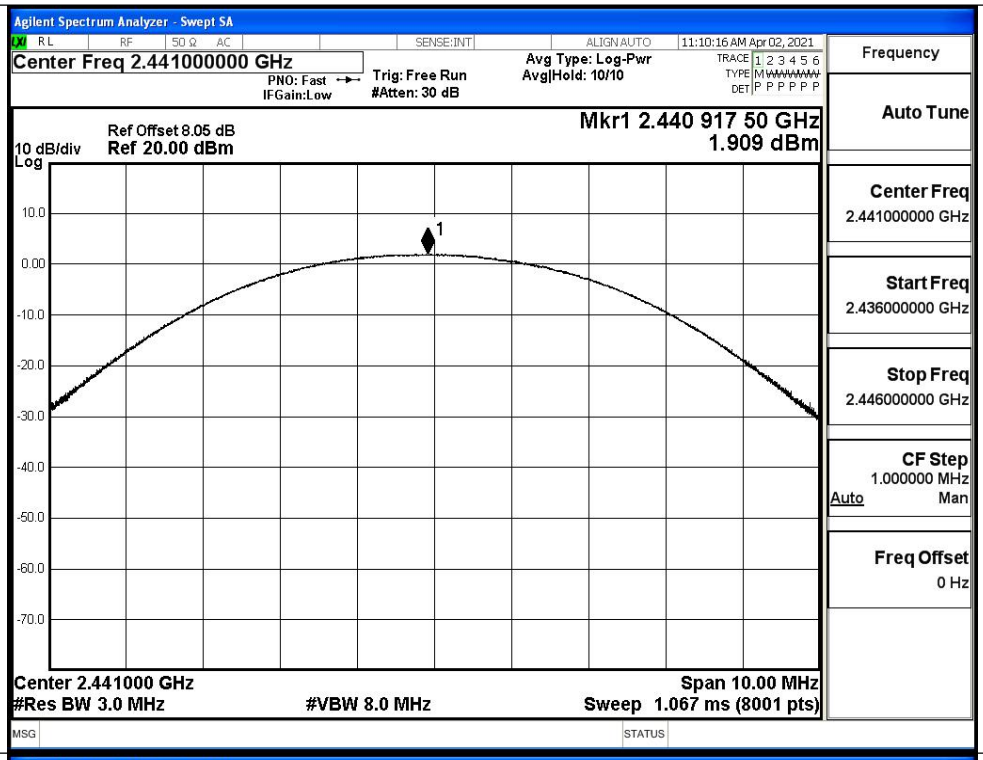
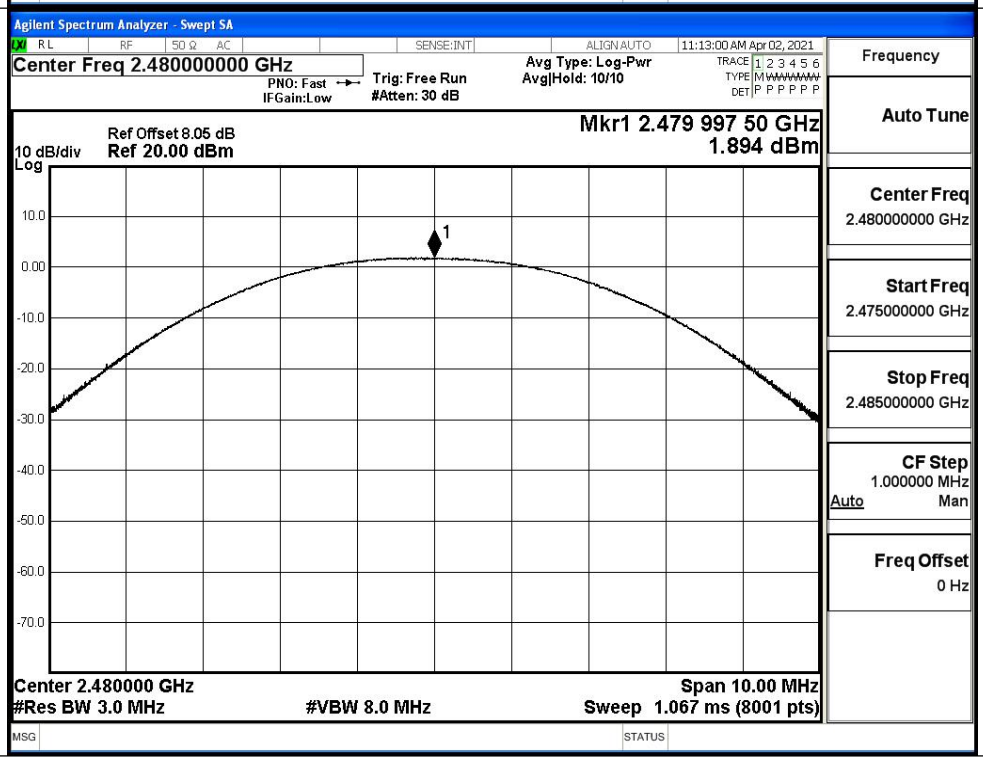
Temperature:	24.6 ° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

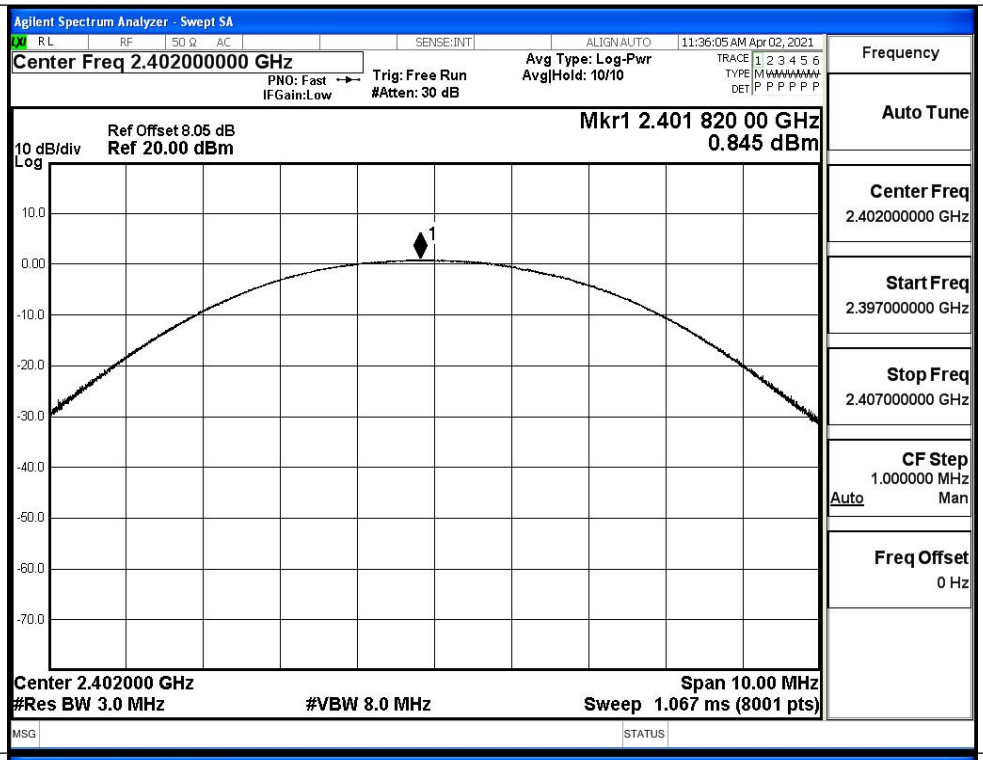
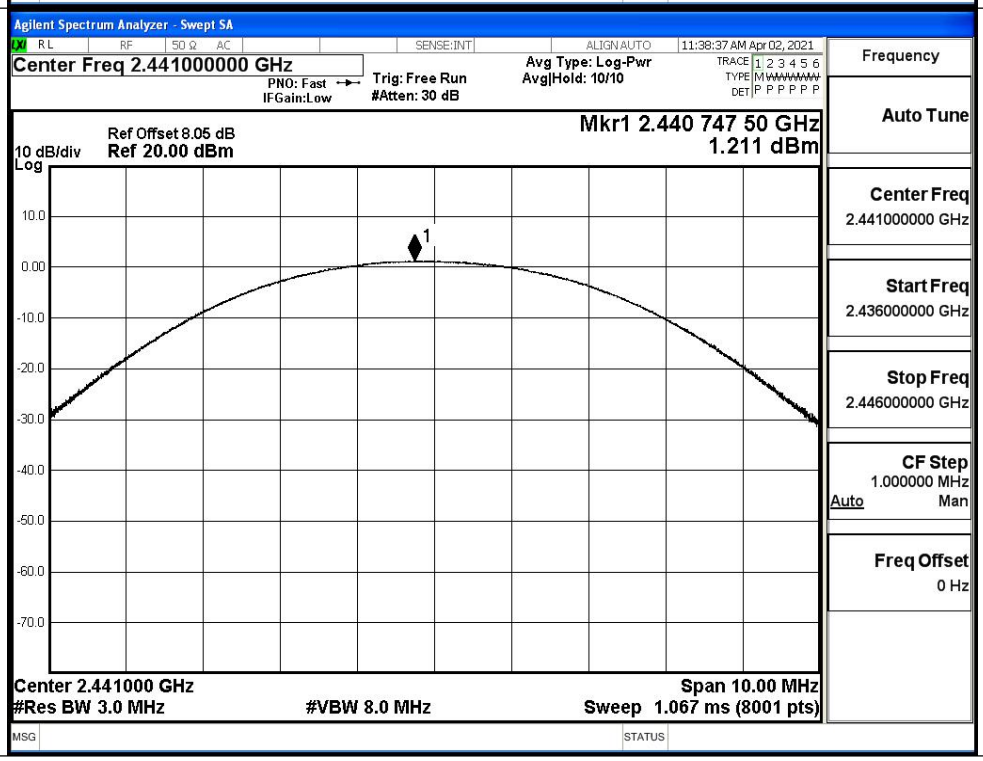
A.1 Maxmum Conducted Peak Output Power

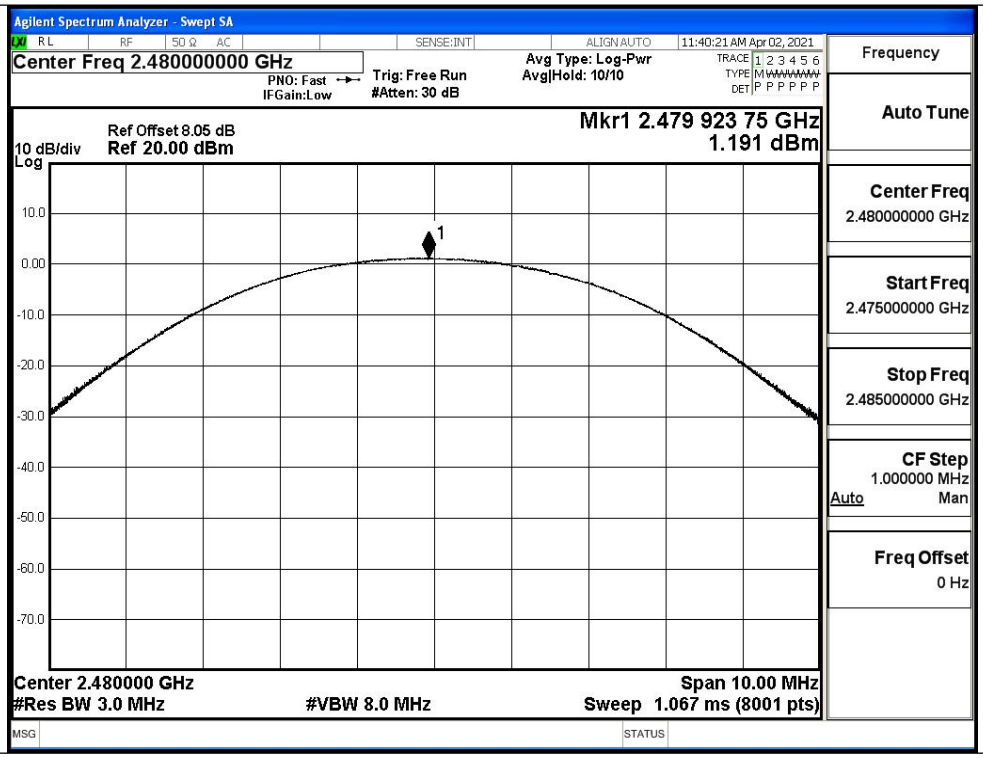
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	1.669	21	PASS
	MCH	2.001	21	PASS
	HCH	1.992	21	PASS
π/4DQPSK	LCH	1.565	21	PASS
	MCH	1.909	21	PASS
	HCH	1.894	21	PASS
8DPSK	LCH	0.845	21	PASS
	MCH	1.211	21	PASS
	HCH	1.191	21	PASS

Test Graphs		
GFSK/LCH		
GFSK/MCH		

GFSK/HCH		
π/4DQPSK/LCH		

π/4DQPSK/MCH	
π/4DQPSK/HCH	

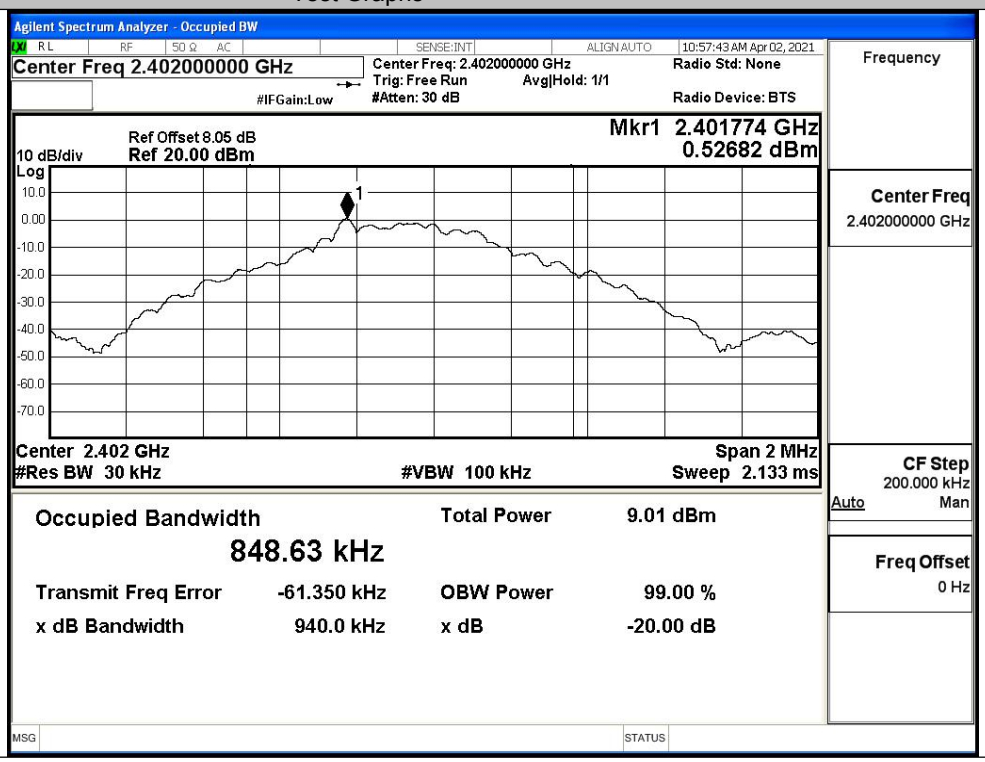
8DPSK/LCH		
8DPSK/MCH		

8DPSK/HCH		

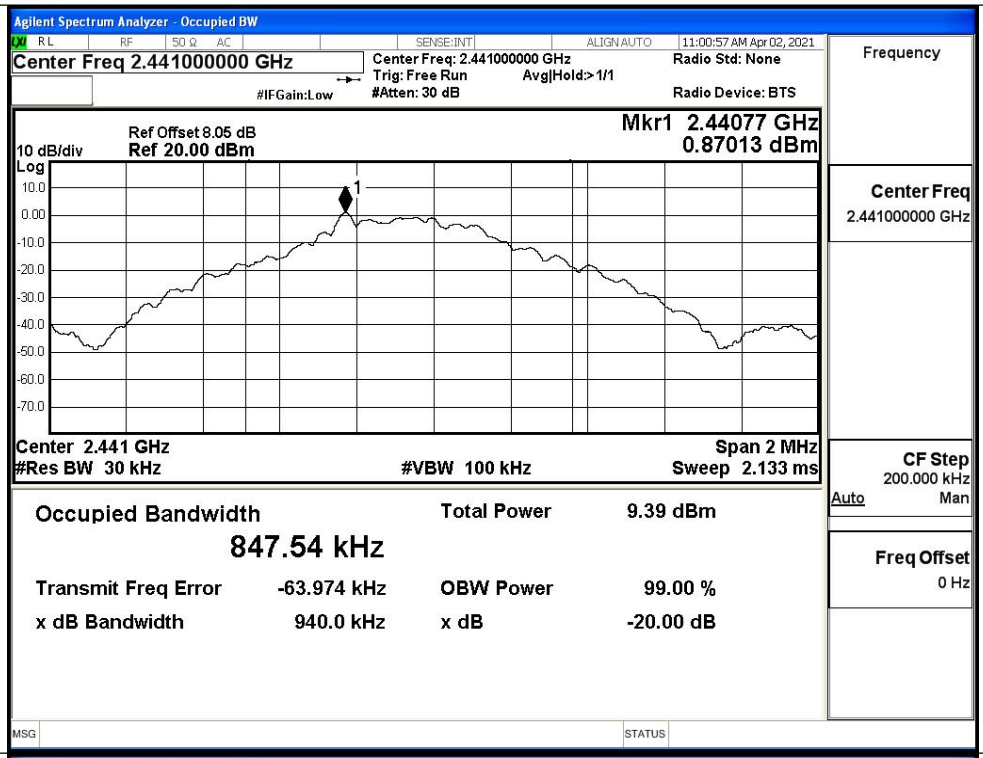
Agilent Spectrum Analyzer - Swept SA
Center Freq 2.480000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 10/10
11:40:21 AM Apr 02, 2021
Ref Offset 8.05 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 2.479 923 75 GHz
1.191 dBm
Center 2.480000 GHz
#Res BW 3.0 MHz
#VBW 8.0 MHz
Span 10.00 MHz
Sweep 1.067 ms (8001 pts)
Frequency
Auto Tune
Center Freq
2.480000000 GHz
Start Freq
2.475000000 GHz
Stop Freq
2.485000000 GHz
CF Step
1.000000 MHz
Auto
Man
Freq Offset
0 Hz

A.2 20dB Bandwidth

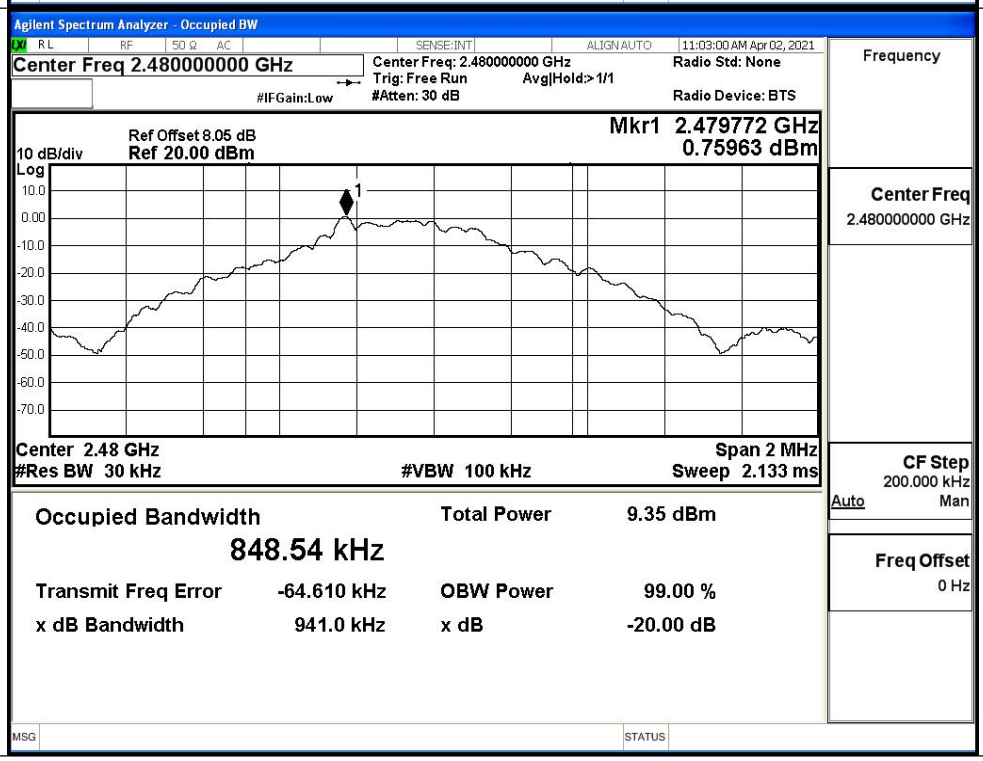
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.9400	Not Specified	PASS
	MCH	0.9400	Not Specified	PASS
	HCH	0.9410	Not Specified	PASS
π/4DQPSK	LCH	1.275	Not Specified	PASS
	MCH	1.272	Not Specified	PASS
	HCH	1.273	Not Specified	PASS
8DPSK	LCH	1.247	Not Specified	PASS
	MCH	1.248	Not Specified	PASS
	HCH	1.247	Not Specified	PASS

Test Graphs	
GFSK/LCH	

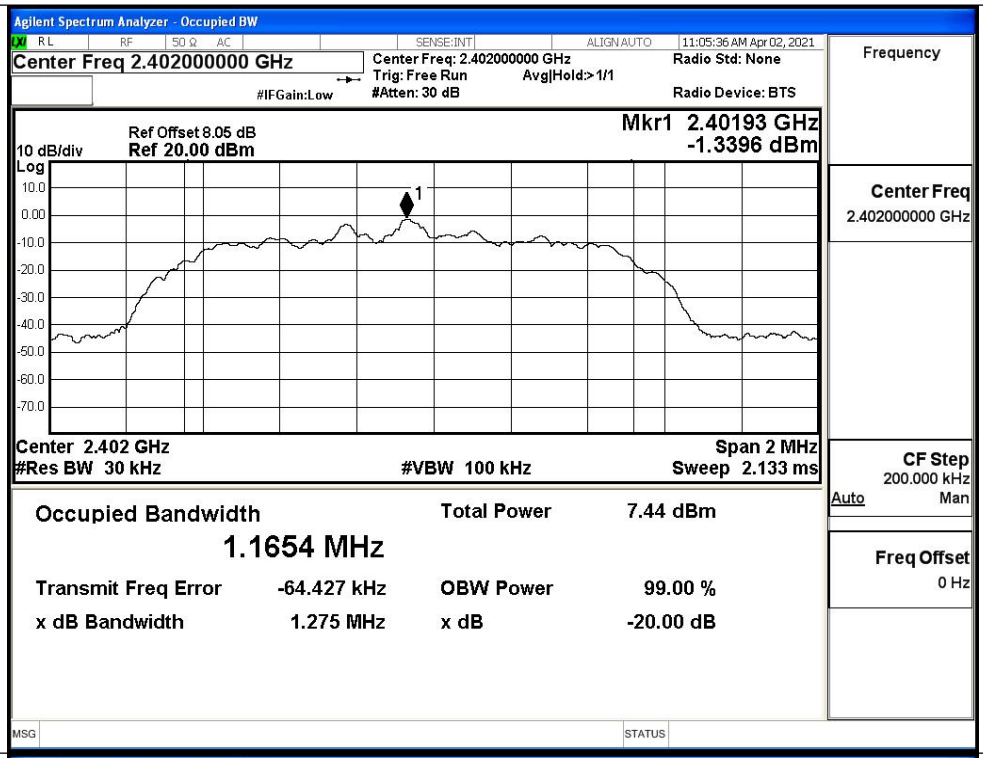
GFSK/MCH



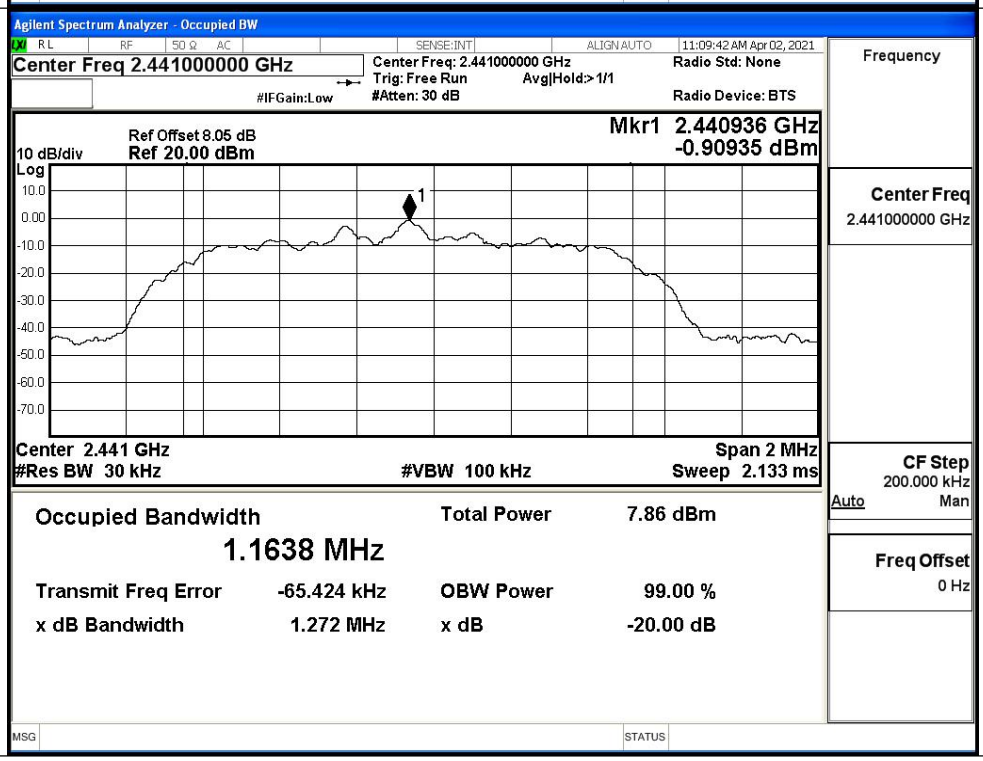
GFSK/HCH



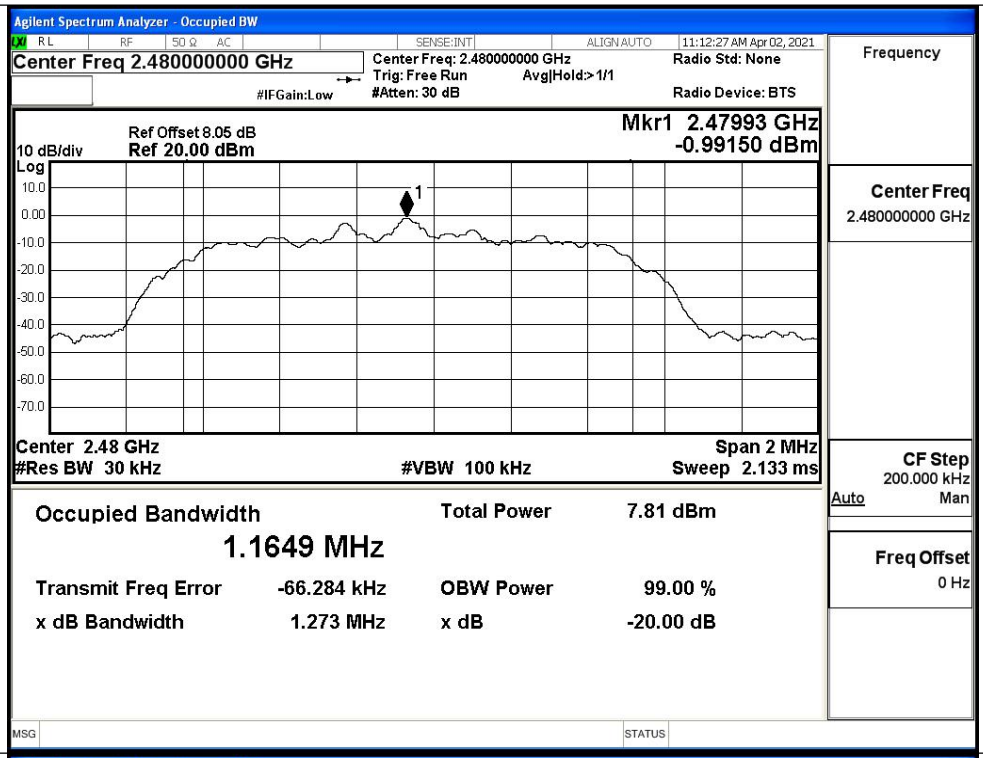
π/4DQPSK/LCH



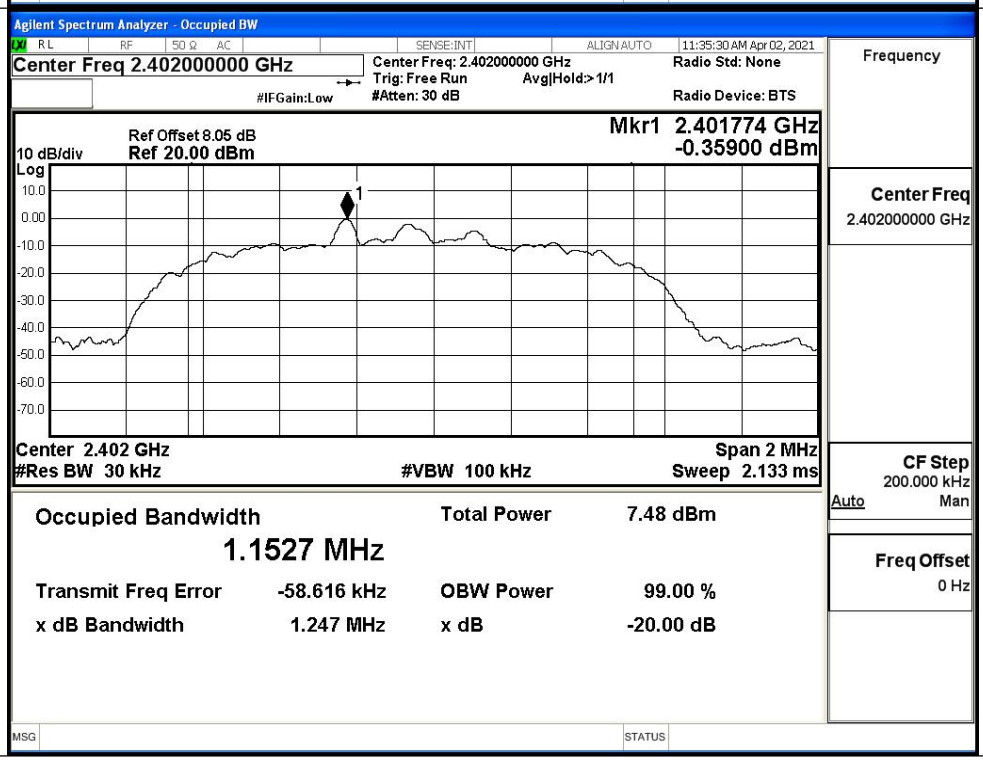
π/4DQPSK/MCH



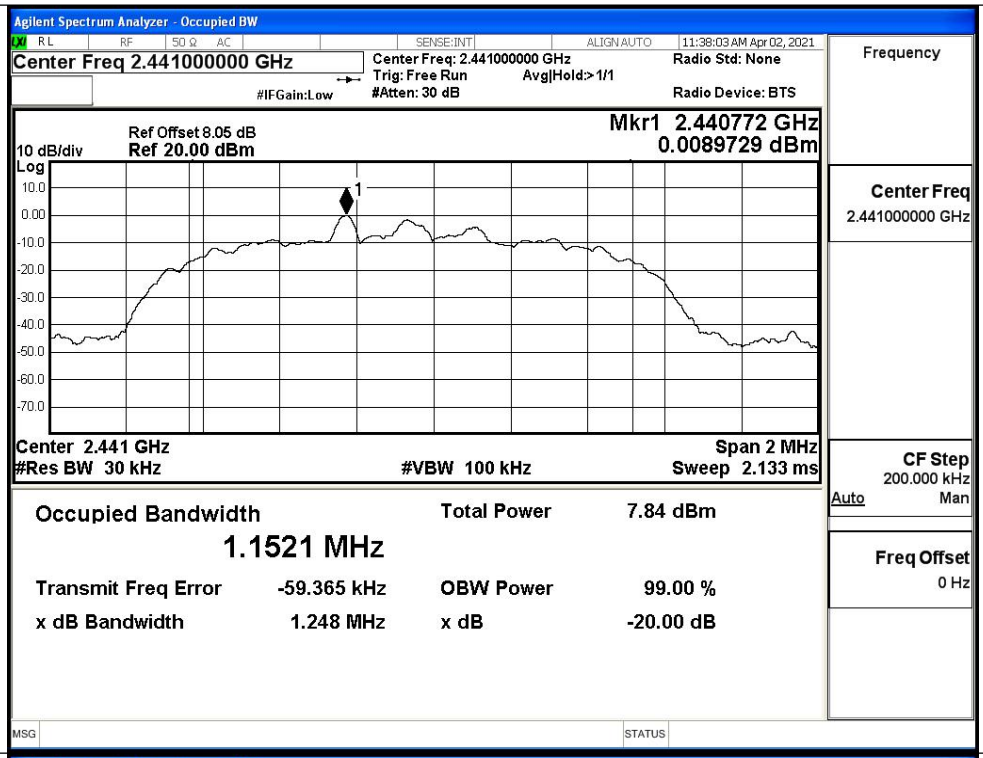
π/4DQPSK/HCH



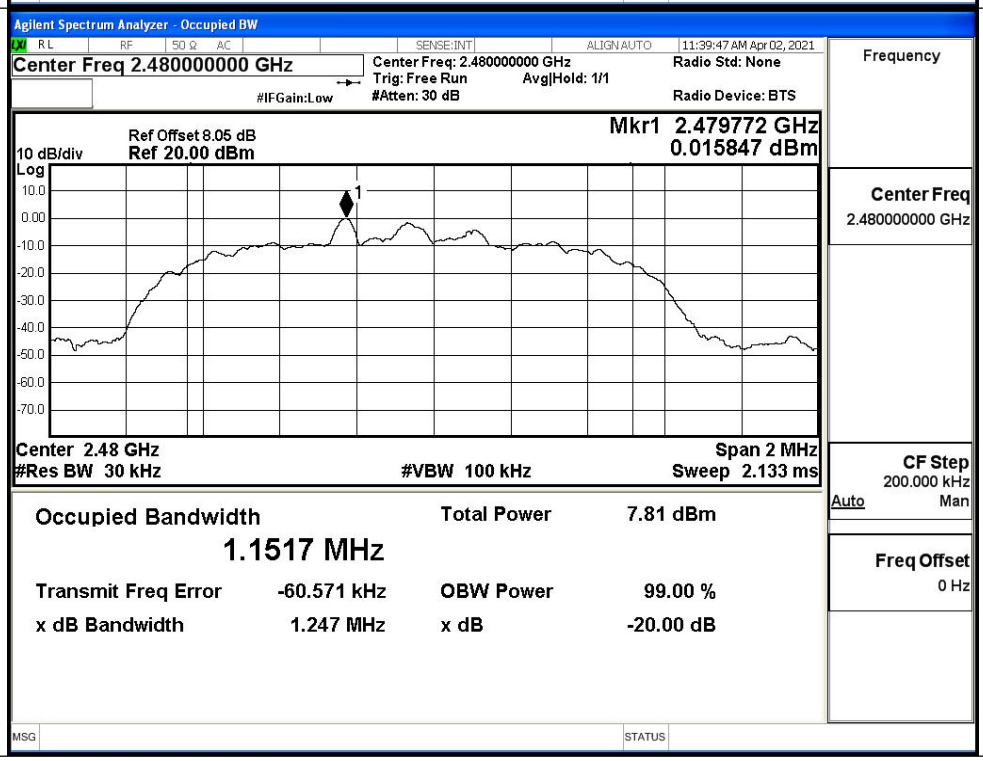
8DPSK/LCH



8DPSK/MCH

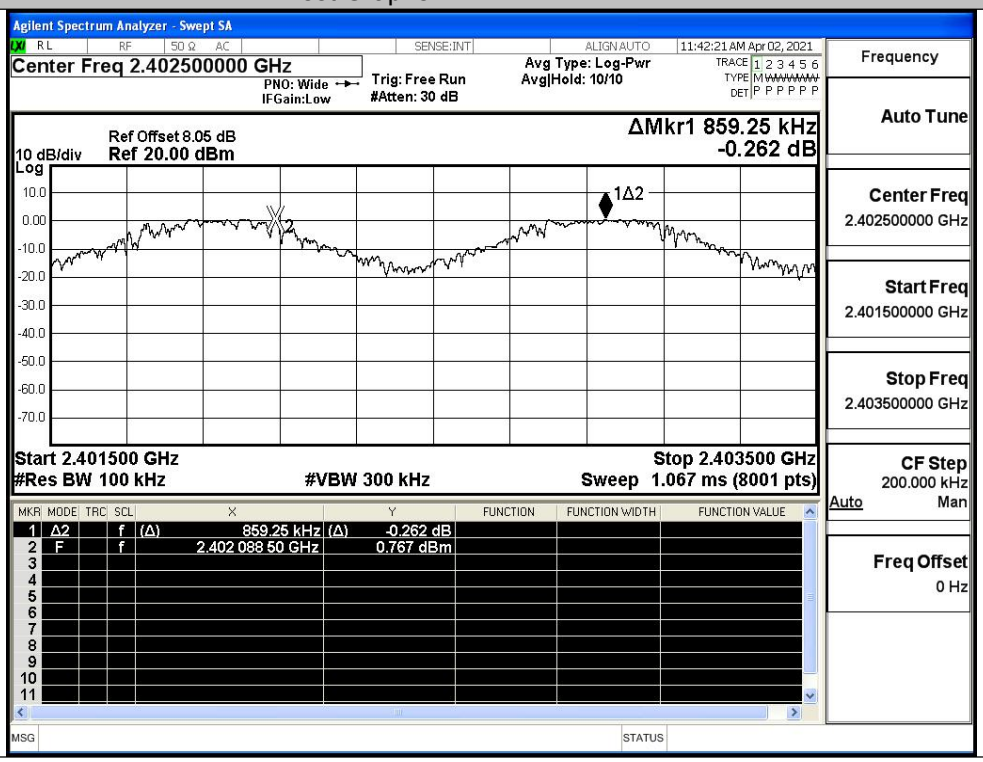


8DPSK/HCH

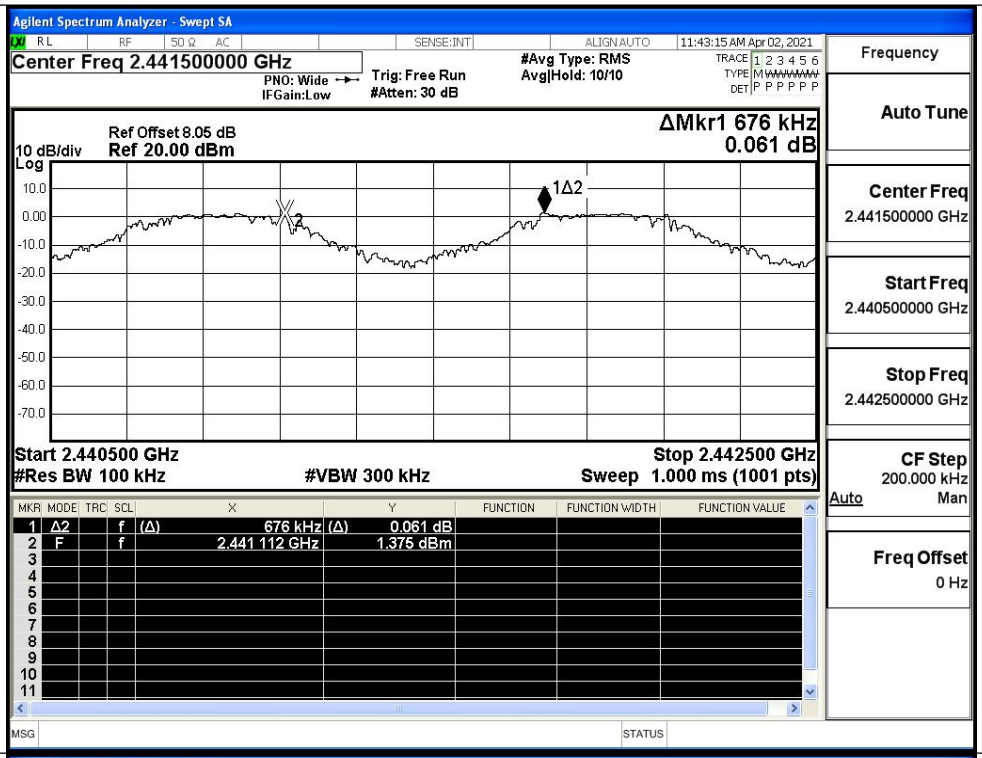


A.3 Carrier Frequency Separation

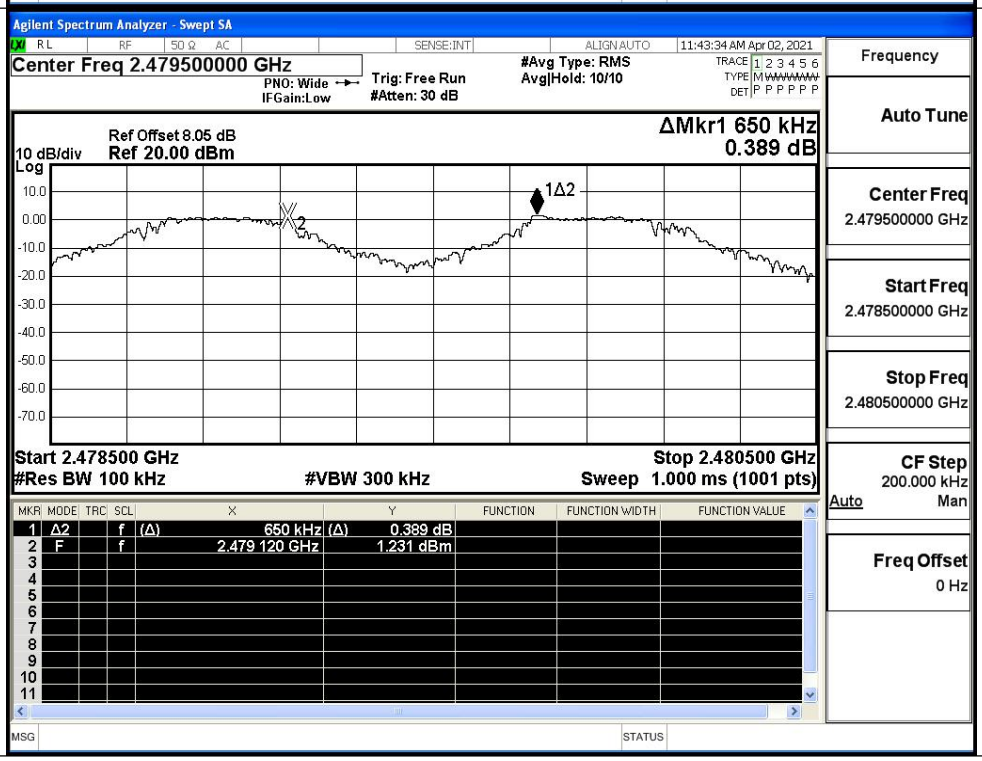
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.859	0.627	PASS
	MCH	0.676	0.627	PASS
	HCH	0.650	0.627	PASS
π/4DQPSK	LCH	0.862	0.850	PASS
	MCH	1.014	0.848	PASS
	HCH	1.000	0.849	PASS
8DPSK	LCH	1.206	0.831	PASS
	MCH	1.084	0.832	PASS
	HCH	0.854	0.831	PASS

Test Graphs		
GFSK/LCH		

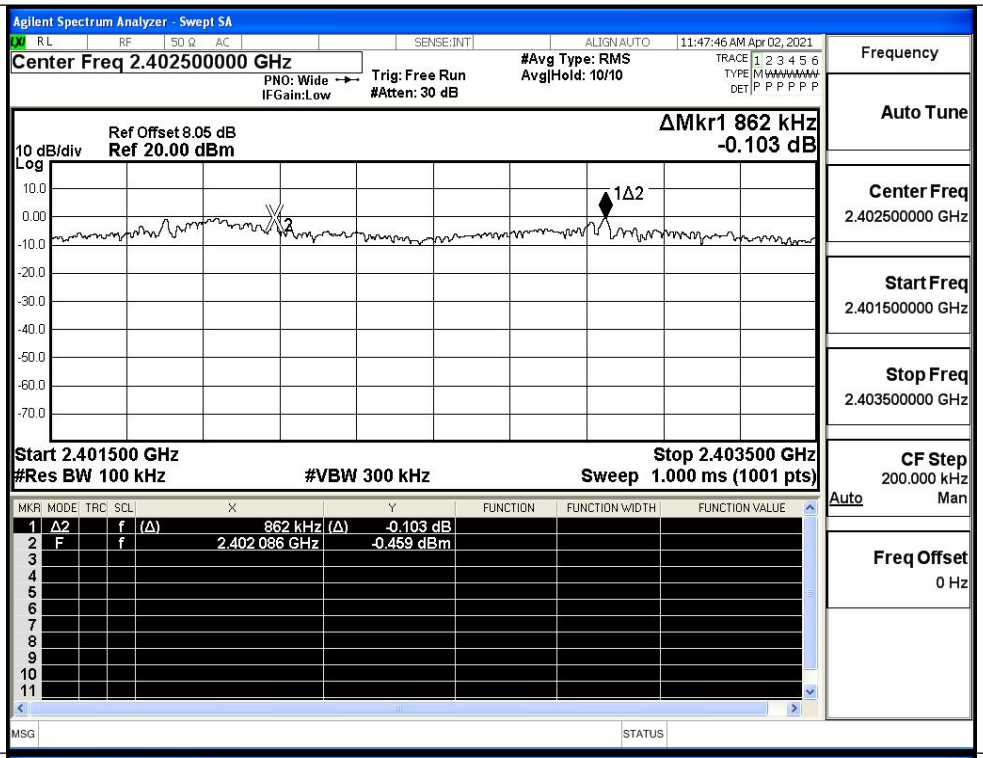
GFSK/MCH



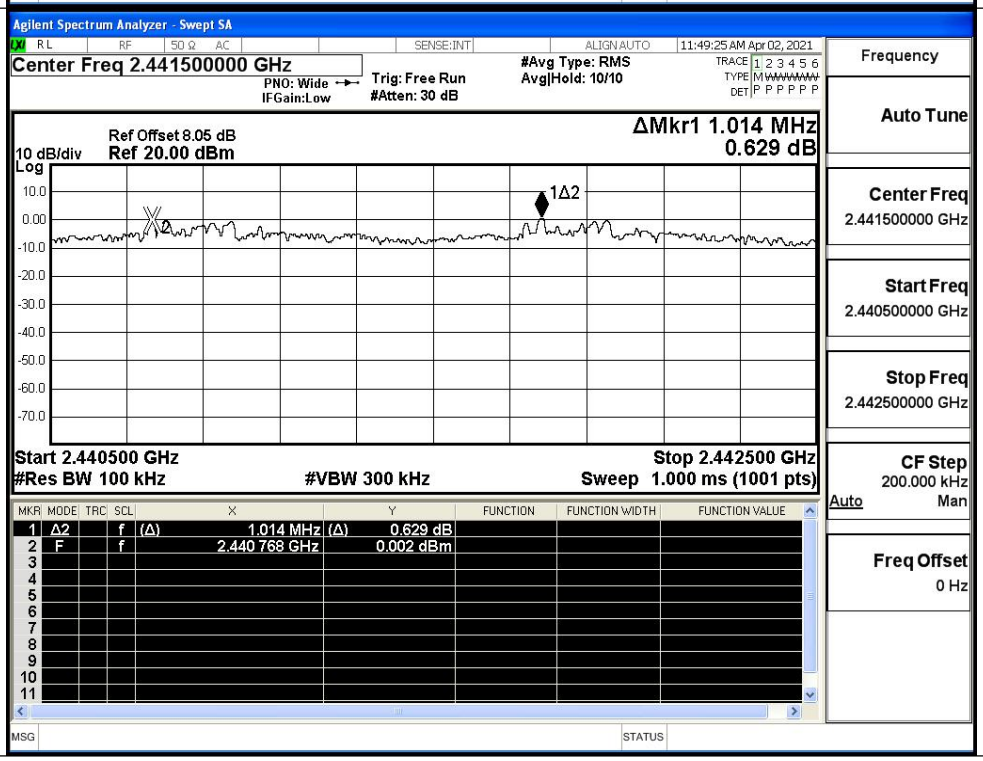
GFSK/HCH



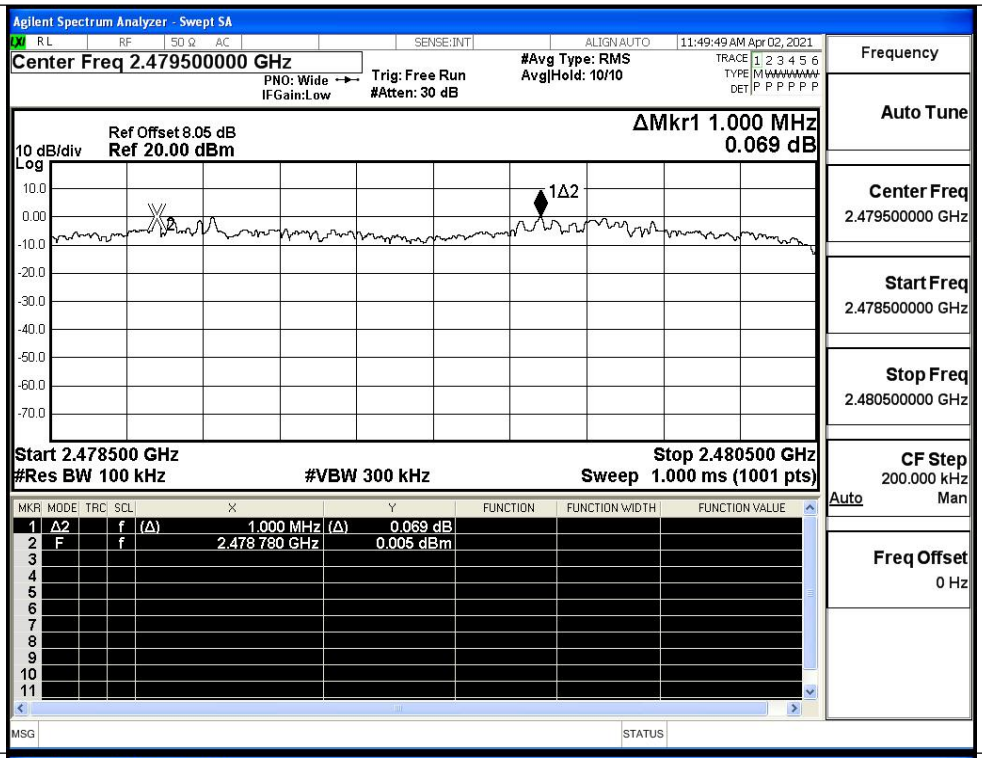
π/4DQPSK/LCH



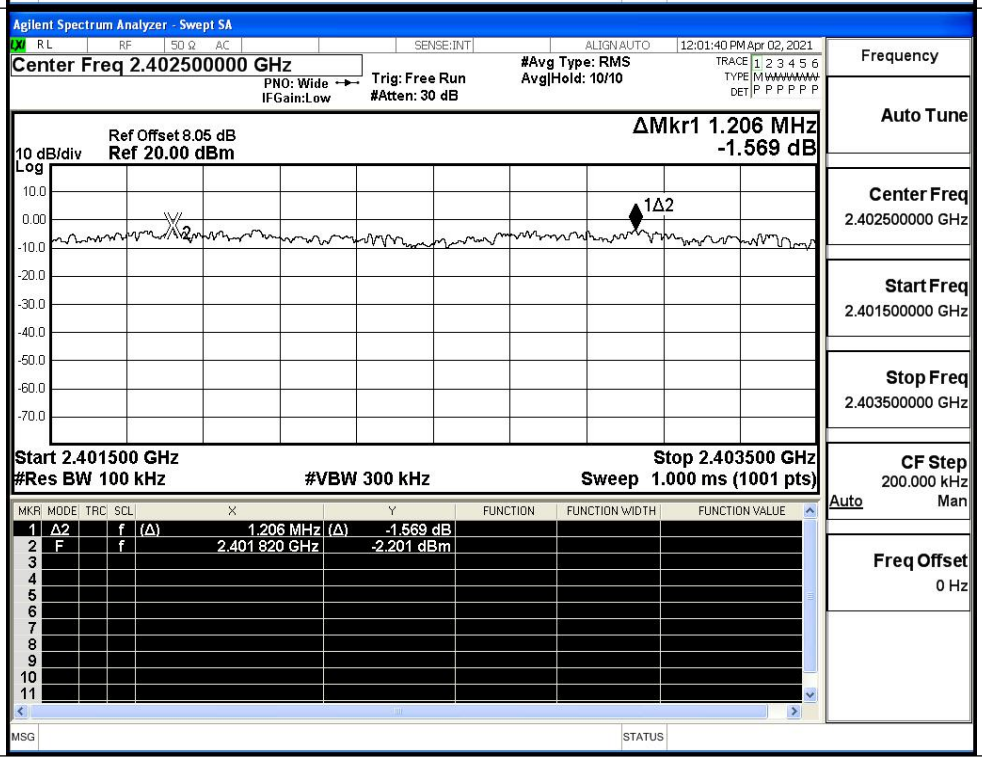
π/4DQPSK/MCH



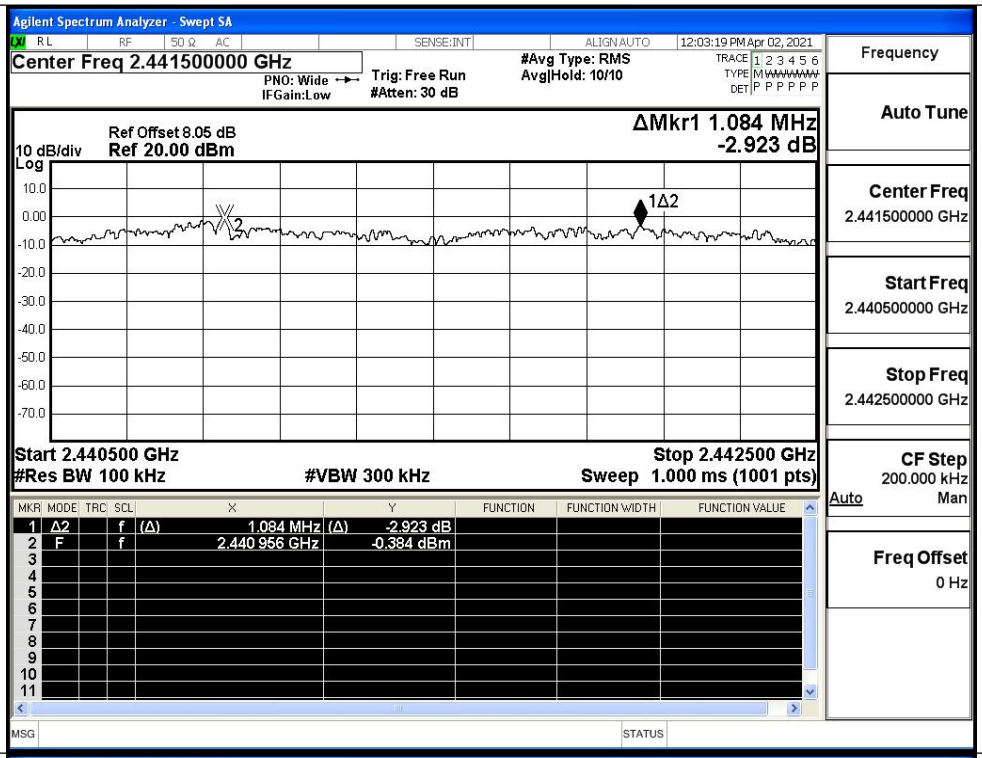
π/4DQPSK/HCH



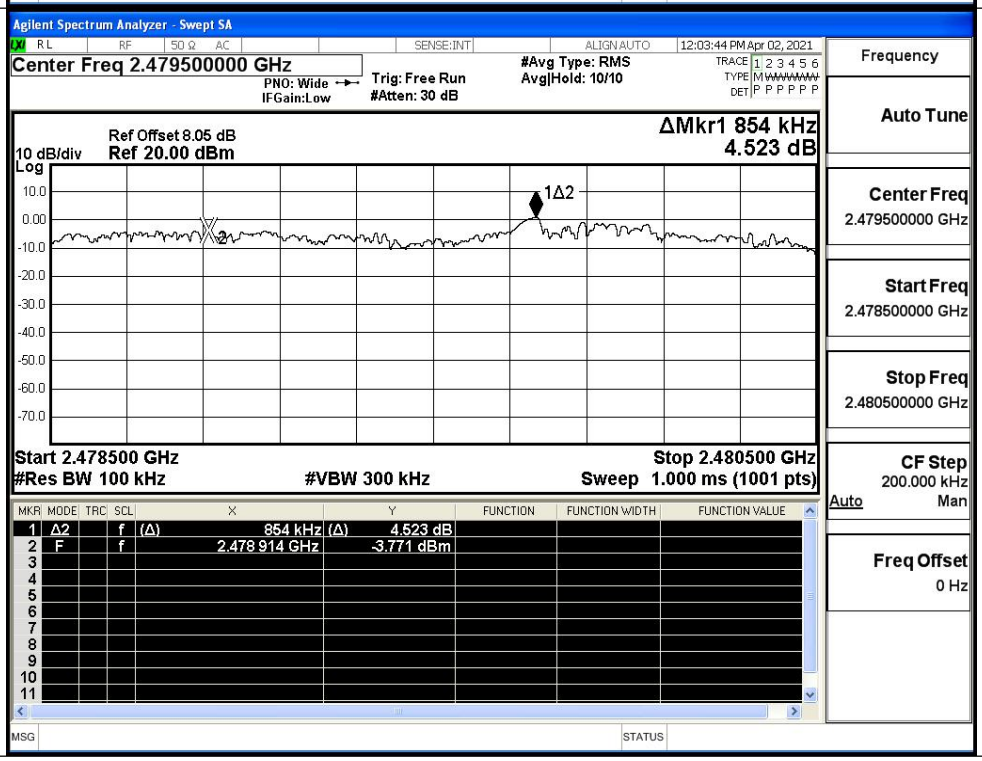
8DPSK/LCH



8DPSK/MCH

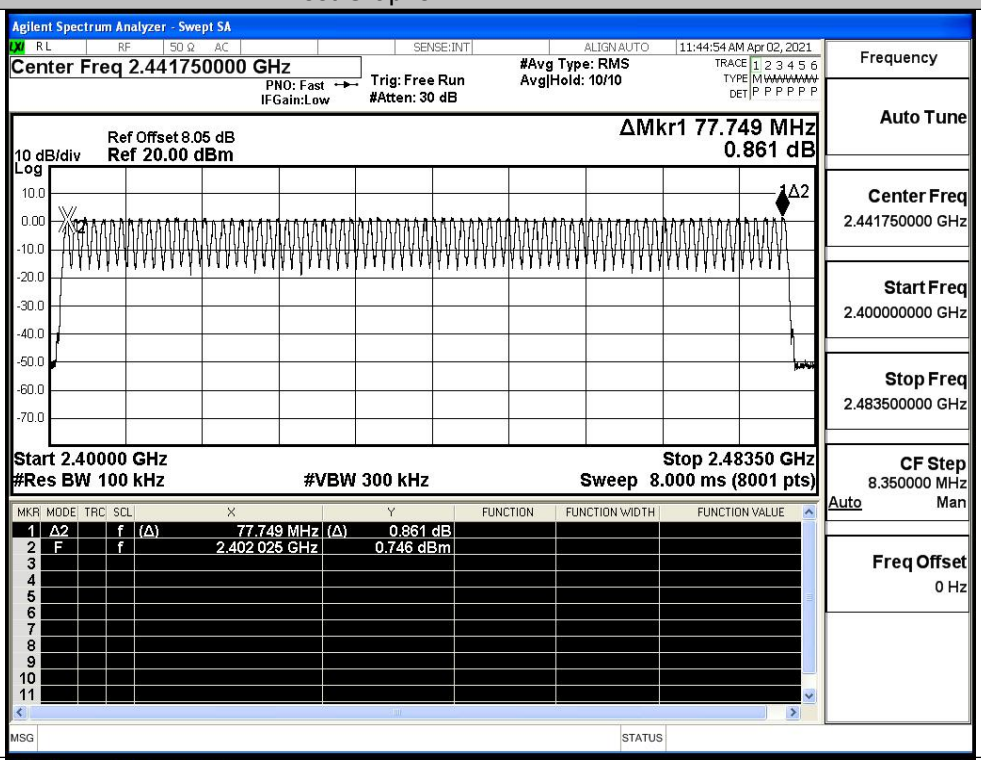
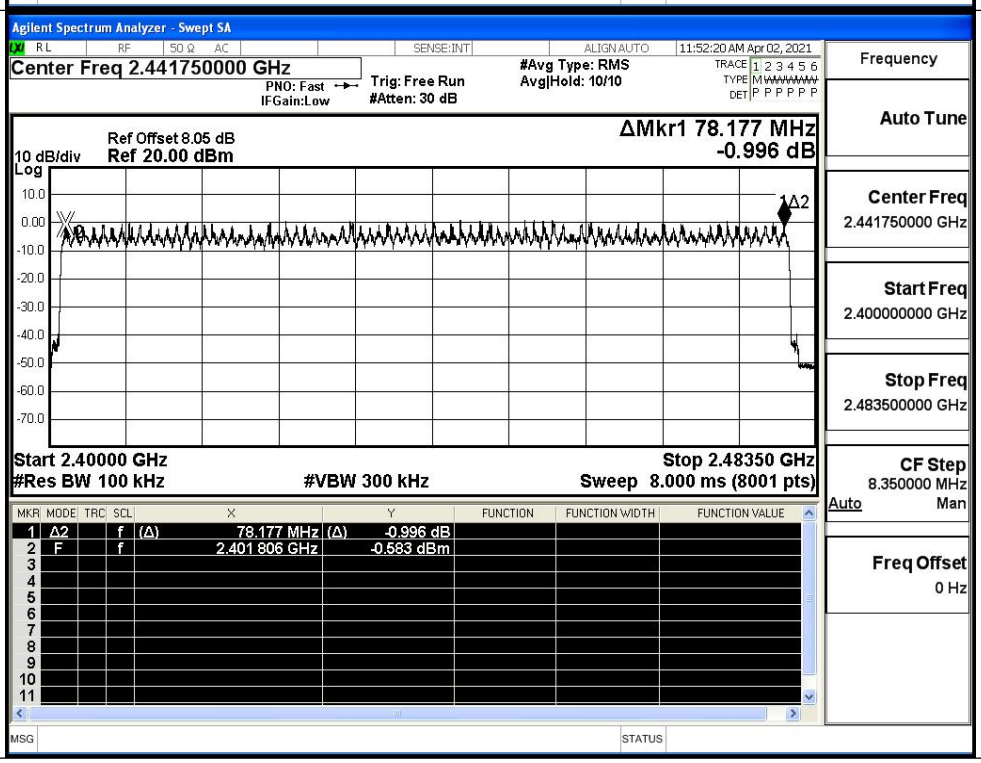


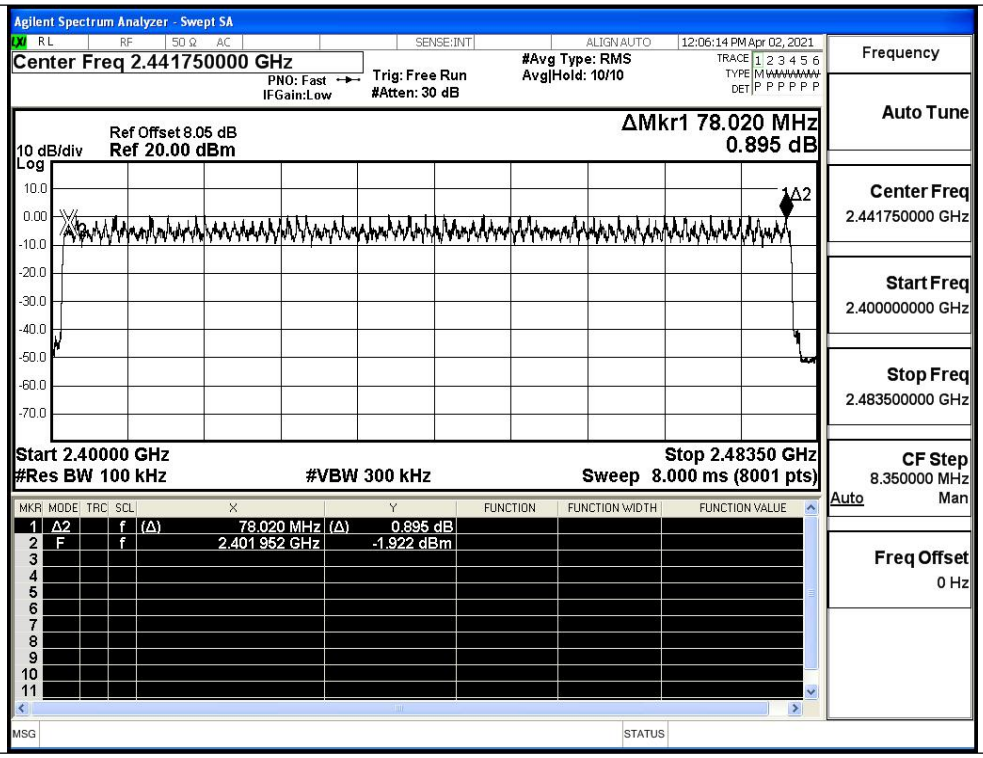
8DPSK/HCH



A.4 Hopping Channel Number

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

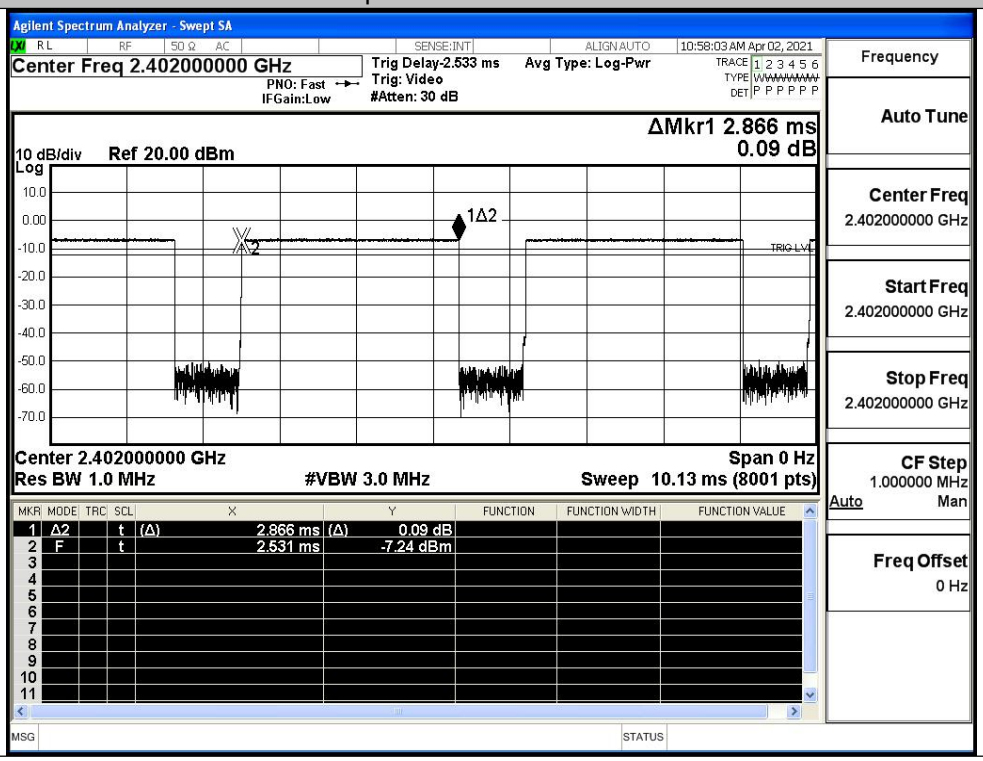
Test Graphs		
GFSK/Hop		
π/4DQPSK/Hop		

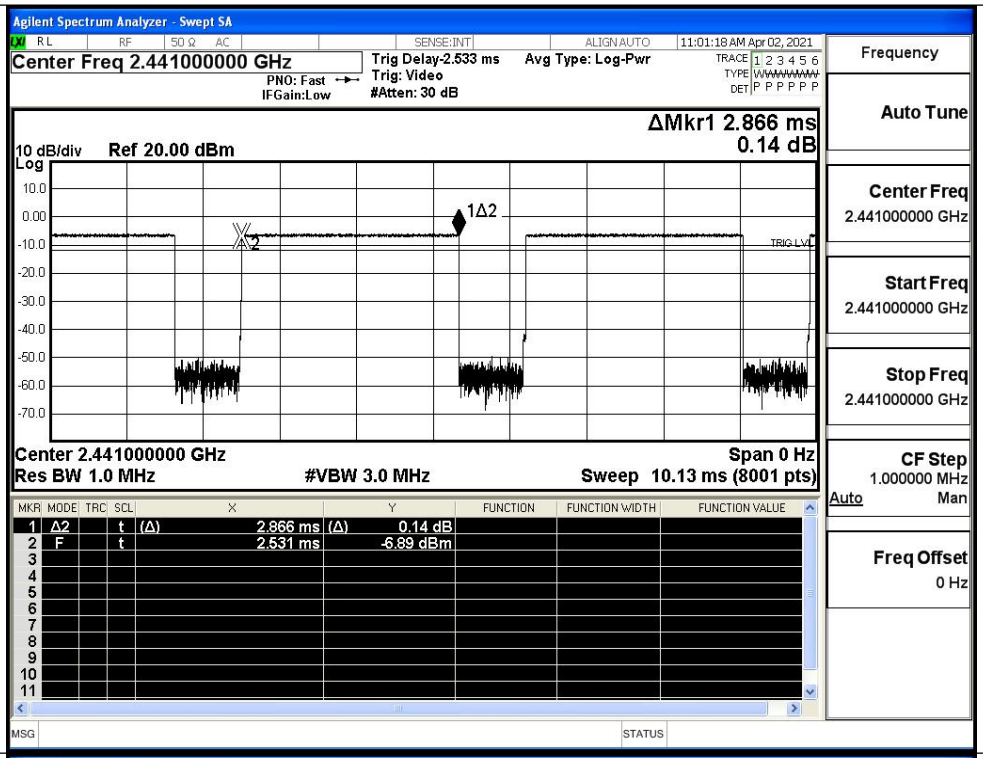
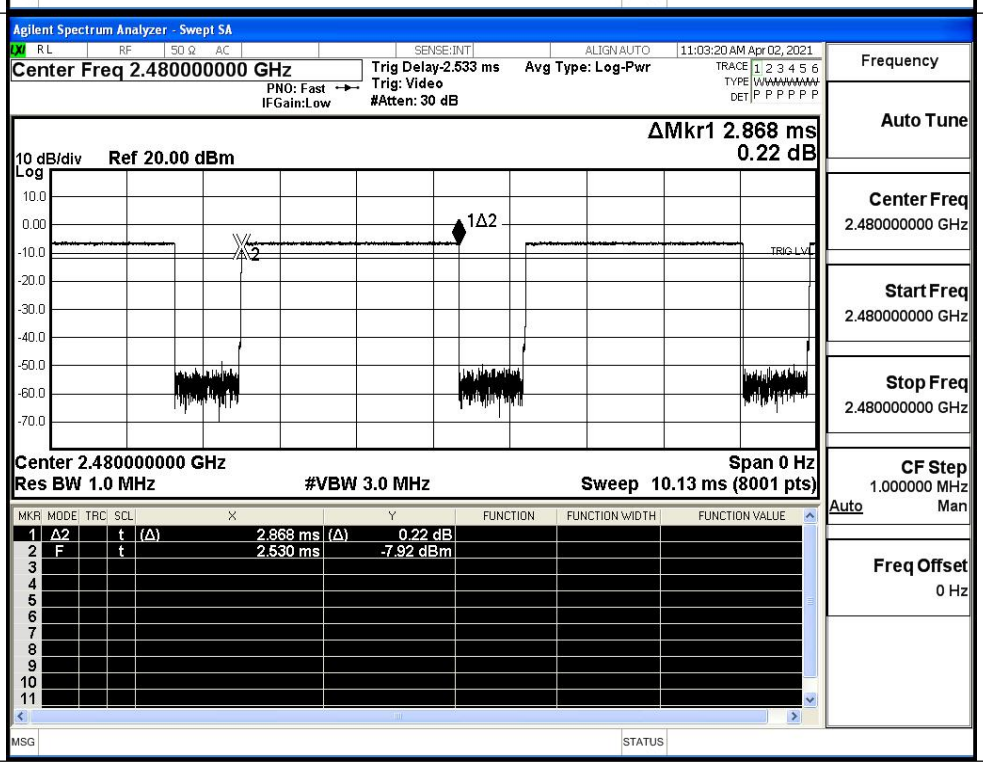
8DPSK/Hop		

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441750000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 10/10
12:06:14 PM Apr 02, 2021
Ref Offset 8.05 dB
10 dB/div
Ref 20.00 dBm
ΔMkr1 78.020 MHz
0.895 dB
Start 2.40000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.48350 GHz
Sweep 8.000 ms (8001 pts)
1 Δ2 f (Δ) 78.020 MHz (Δ) 0.895 dB
2 F f 2.401 952 GHz -1.922 dBm
Frequency
Auto Tune
Center Freq
2.441750000 GHz
Start Freq
2.400000000 GHz
Stop Freq
2.483500000 GHz
CF Step
8.350000 MHz
Auto Man
Freq Offset
0 Hz

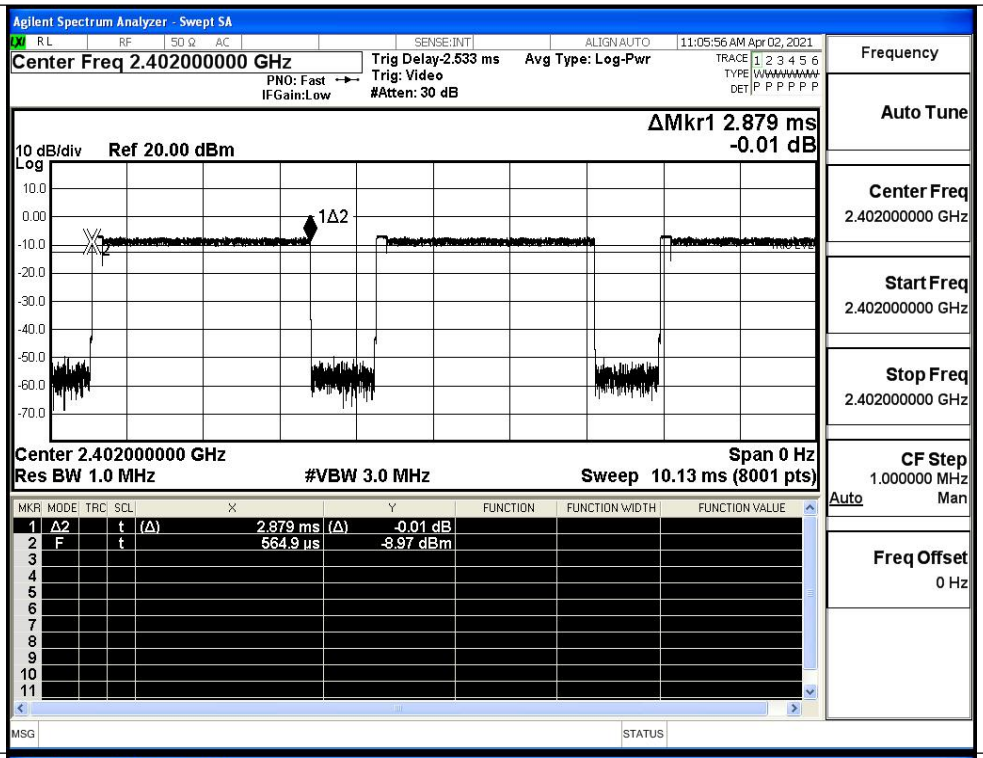
A.5 Dwell Time

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.87	106.7	0.306	0.4	PASS
	DH5	MCH	2.87	106.7	0.306	0.4	PASS
	DH5	HCH	2.87	106.7	0.306	0.4	PASS
π/4DQPSK	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.88	106.7	0.307	0.4	PASS
8DPSK	3DH5	LCH	2.88	106.7	0.307	0.4	PASS
	3DH5	MCH	2.88	106.7	0.307	0.4	PASS
	3DH5	HCH	2.88	106.7	0.307	0.4	PASS

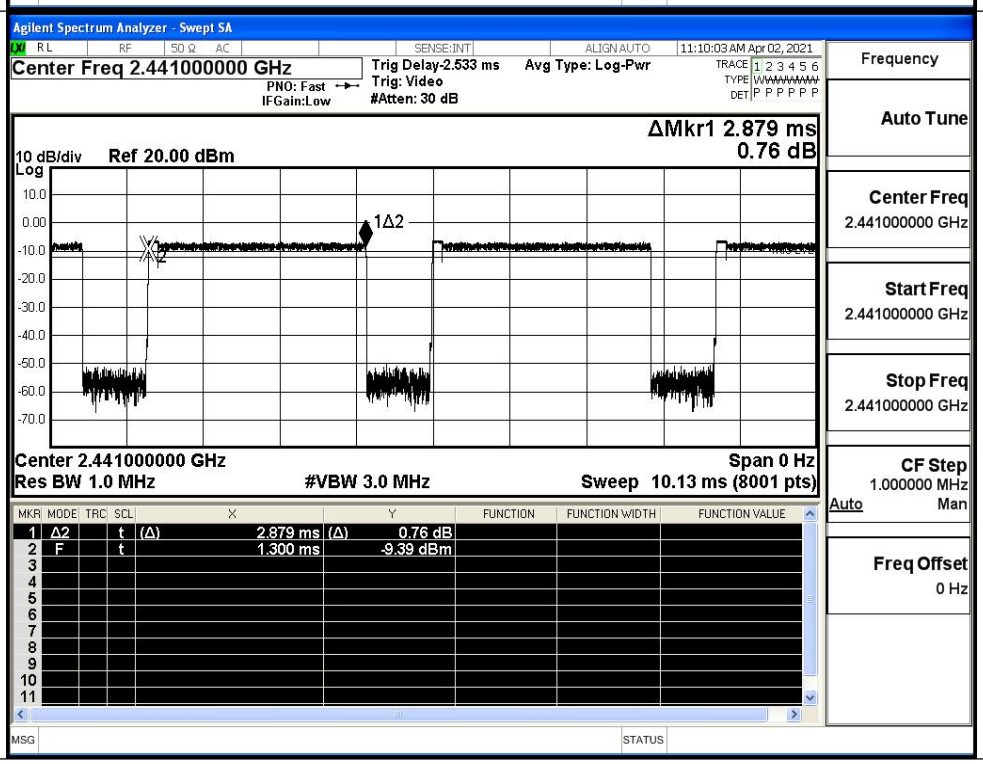
Test Graphs	
GFSK_DH5/LCH	

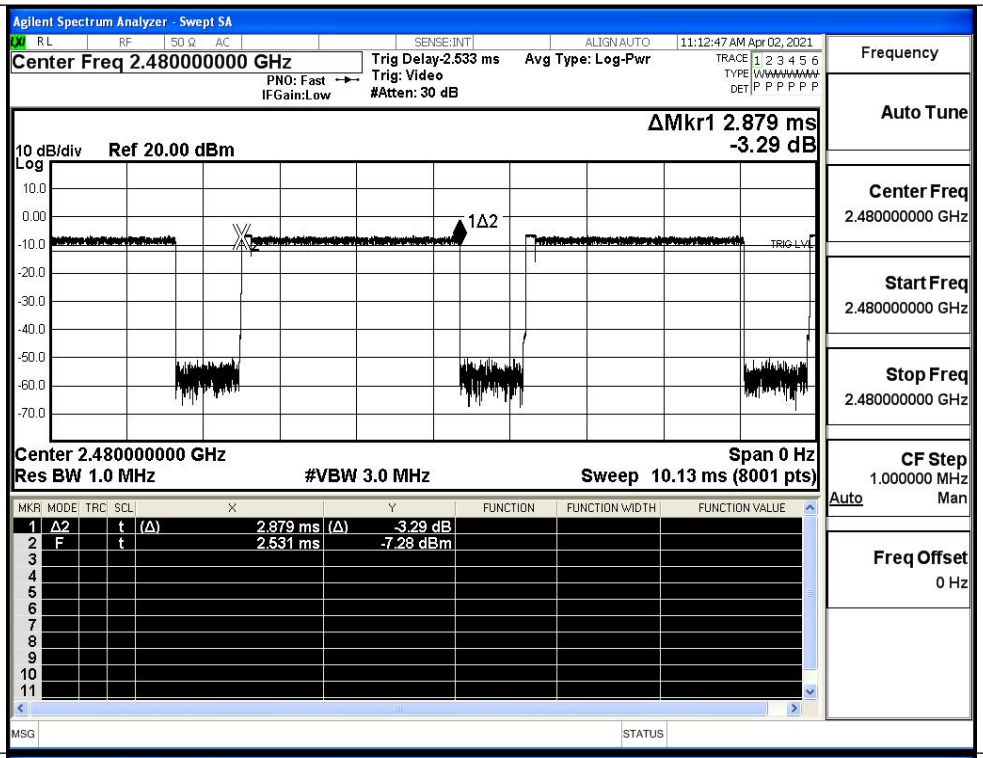
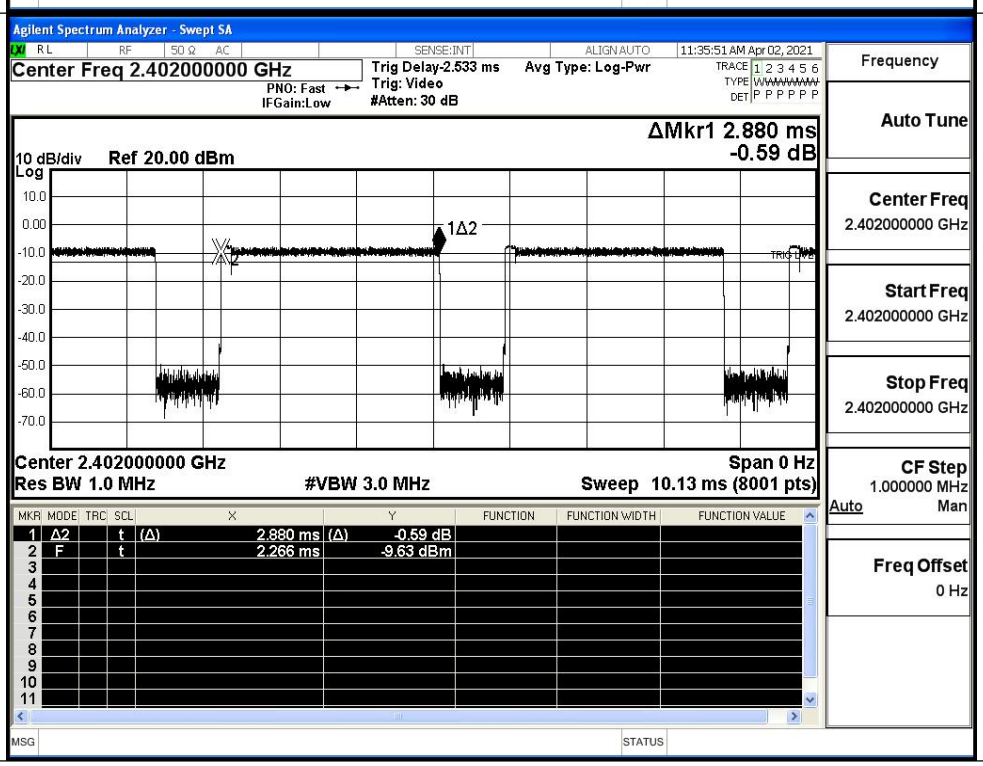
GFSK_DH5/MCH	
GFSK_DH5/HCH	

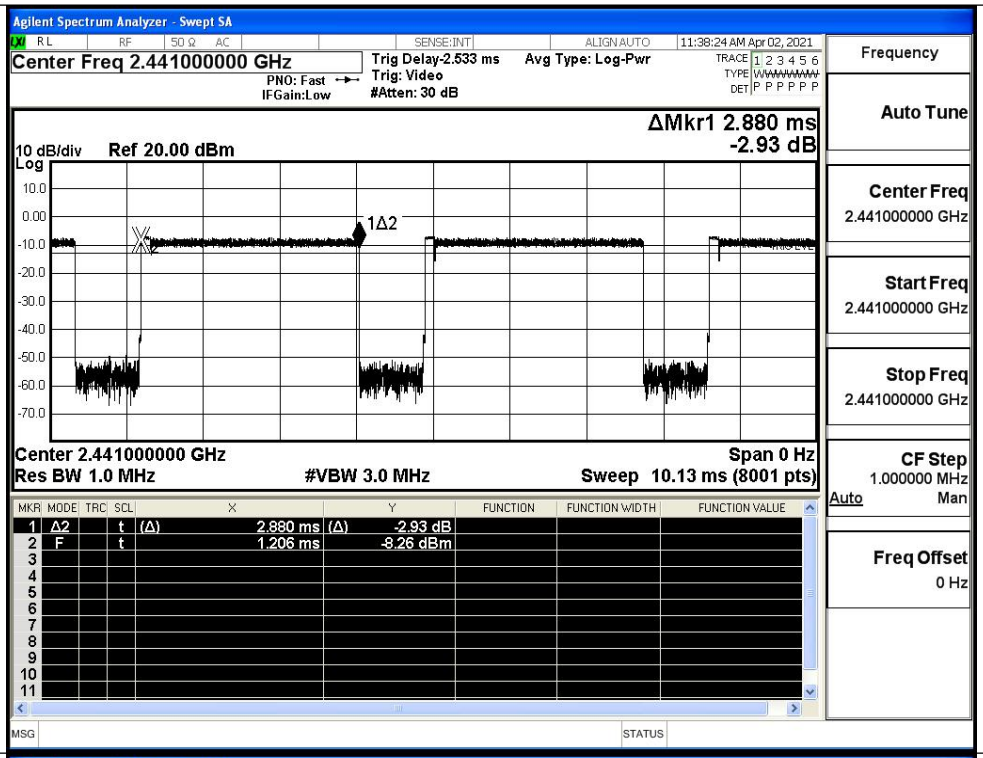
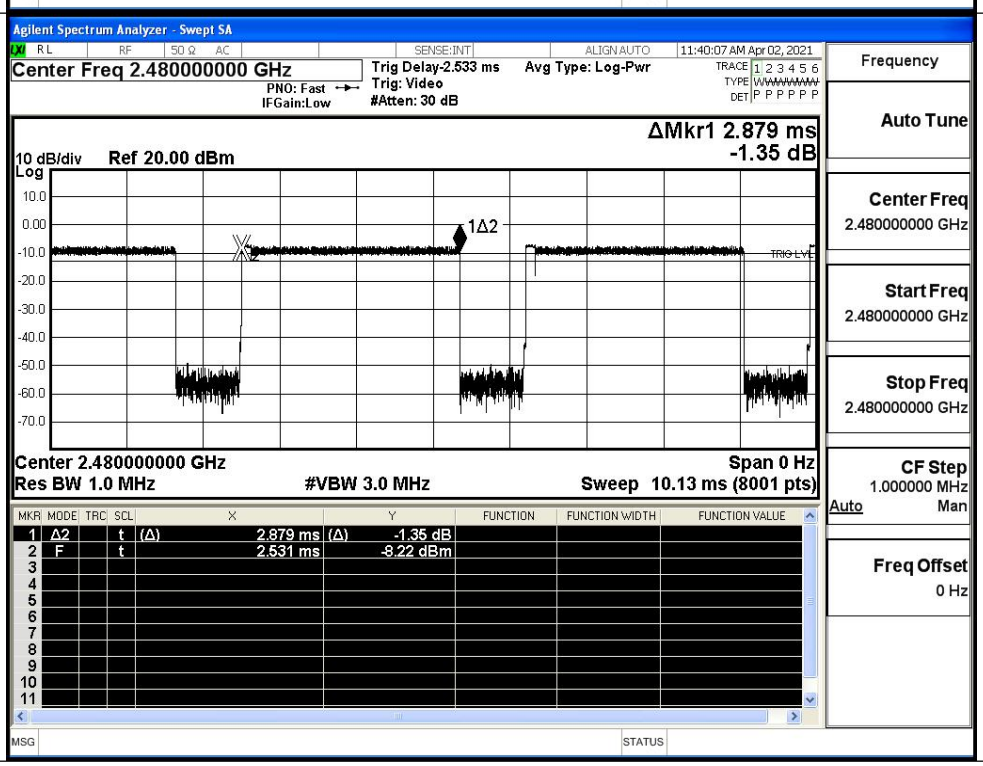
π/4DQPSK
_2DH5/LCH



π/4DQPSK
_2DH5/MCH

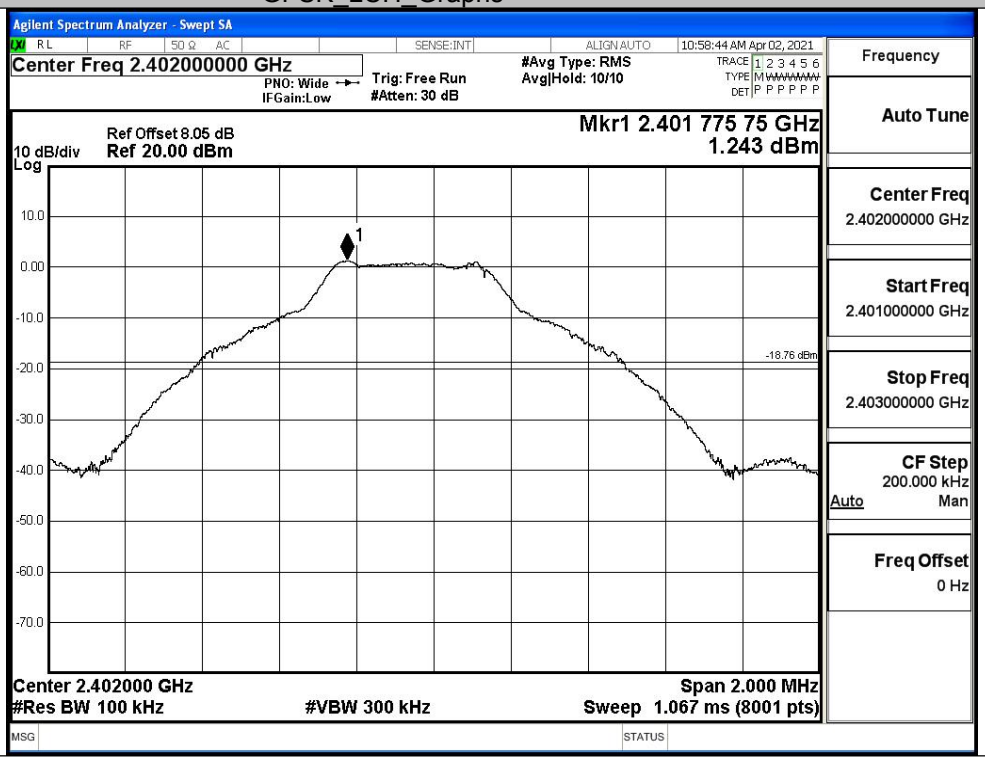


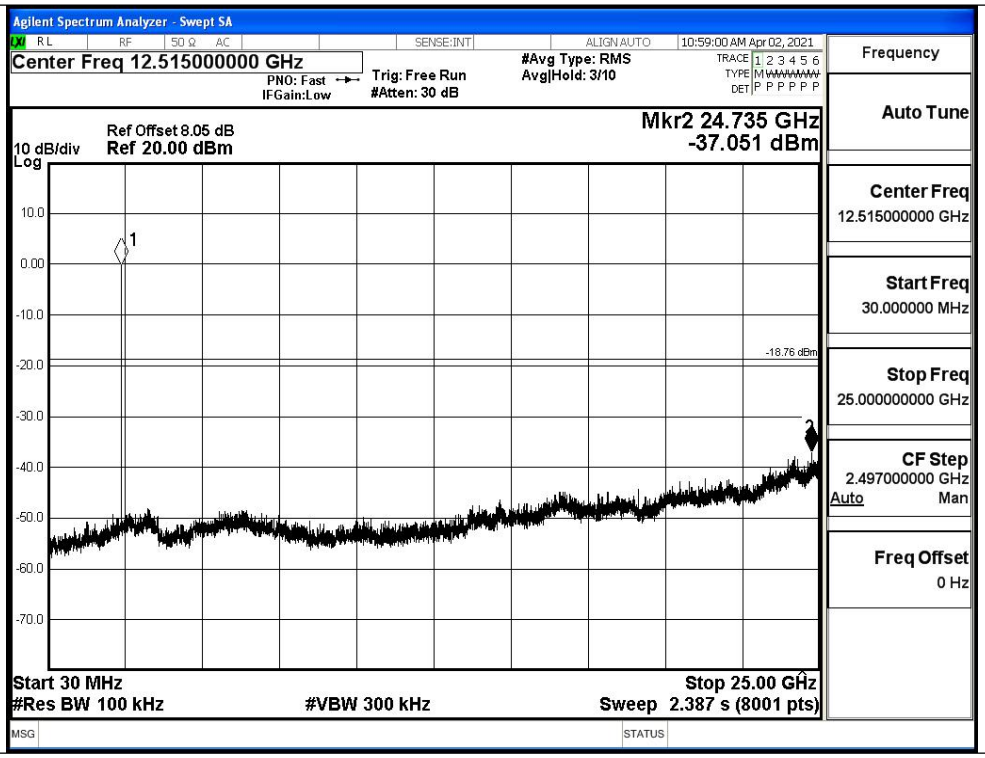
π/4DQPSK _2DH5/HCH	
8DPSK _3DH5/LCH	

8DPSK _3DH5/MCH	
8DPSK _3DH5/HCH	

A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	1.243	-37.051	-18.757	PASS
	MCH	1.583	-37.400	-18.417	PASS
	HCH	1.59	-37.960	-18.410	PASS
π/4DQPSK	LCH	1.032	-37.468	-18.968	PASS
	MCH	1.405	-37.602	-18.595	PASS
	HCH	1.299	-37.768	-18.701	PASS
8DPSK	LCH	0.424	-37.168	-19.576	PASS
	MCH	0.821	-37.416	-19.179	PASS
	HCH	0.781	-37.879	-19.219	PASS

GFSK_LCH_Graphs		
Pref		

Puw		

Agilent Spectrum Analyzer - Swept SA
Center Freq 12.515000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
#Avg Type: RMS
Avg|Hold: 3/10
10:59:00 AM Apr 02, 2021
Ref Offset 8.05 dB
10 dB/div Ref 20.00 dBm
Log
Mkr2 24.735 GHz
-37.051 dBm
-18.76 dBm
Start 30 MHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 25.00 GHz
Sweep 2.387 s (8001 pts)
Frequency
Auto Tune
Center Freq
12.515000000 GHz
Start Freq
30.000000 MHz
Stop Freq
25.000000000 GHz
CF Step
2.497000000 GHz
Auto Man
Freq Offset
0 Hz