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

Product Name: ANC Bluetooth headphone

Trade Mark: N/A

Test Model: NC-1031

FCC ID: 2AAHX-NC-1031

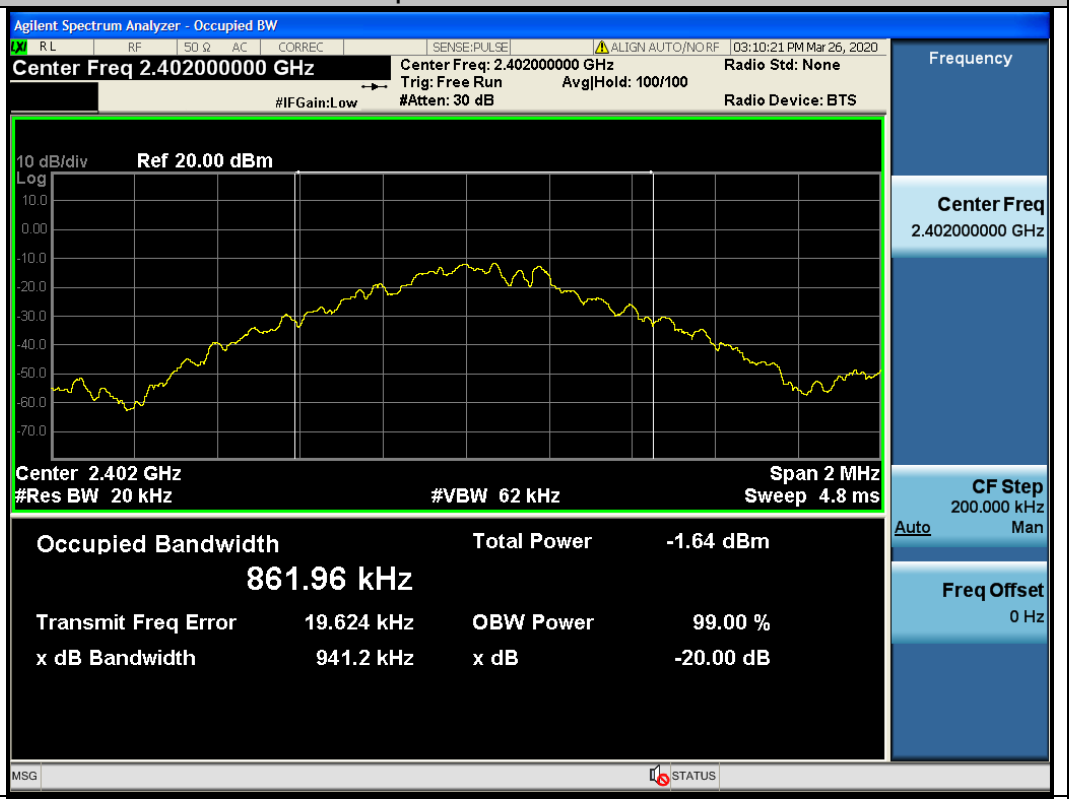
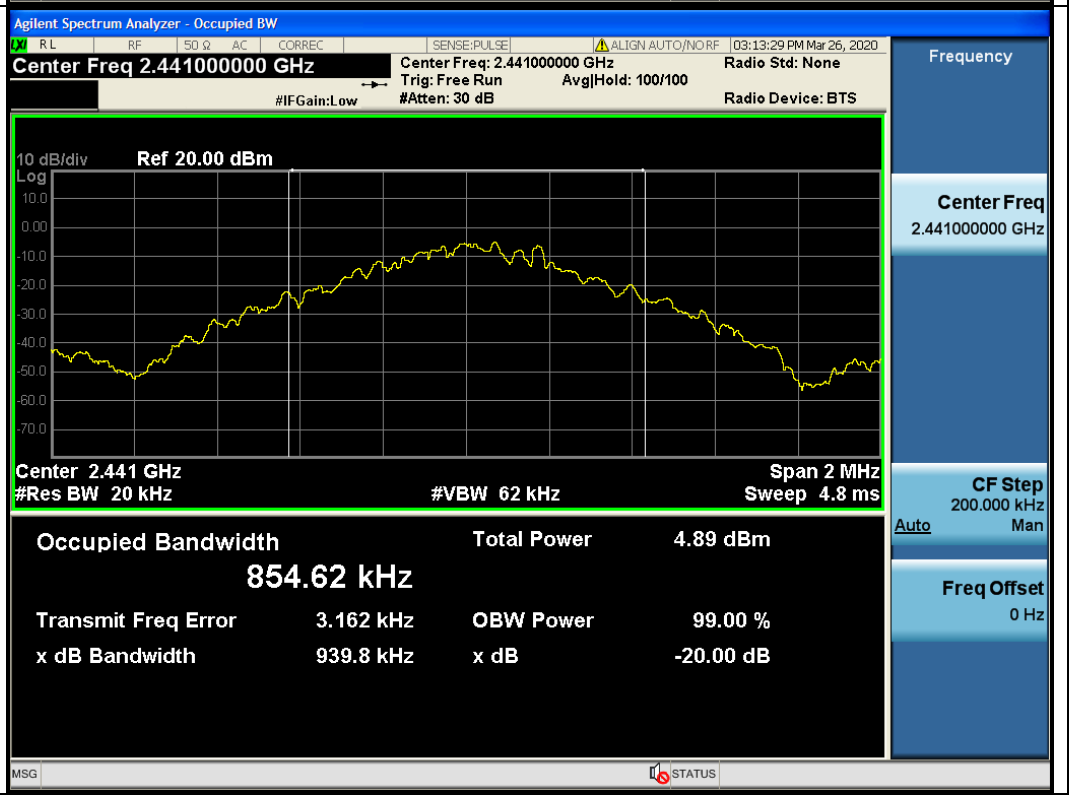
Environmental Conditions

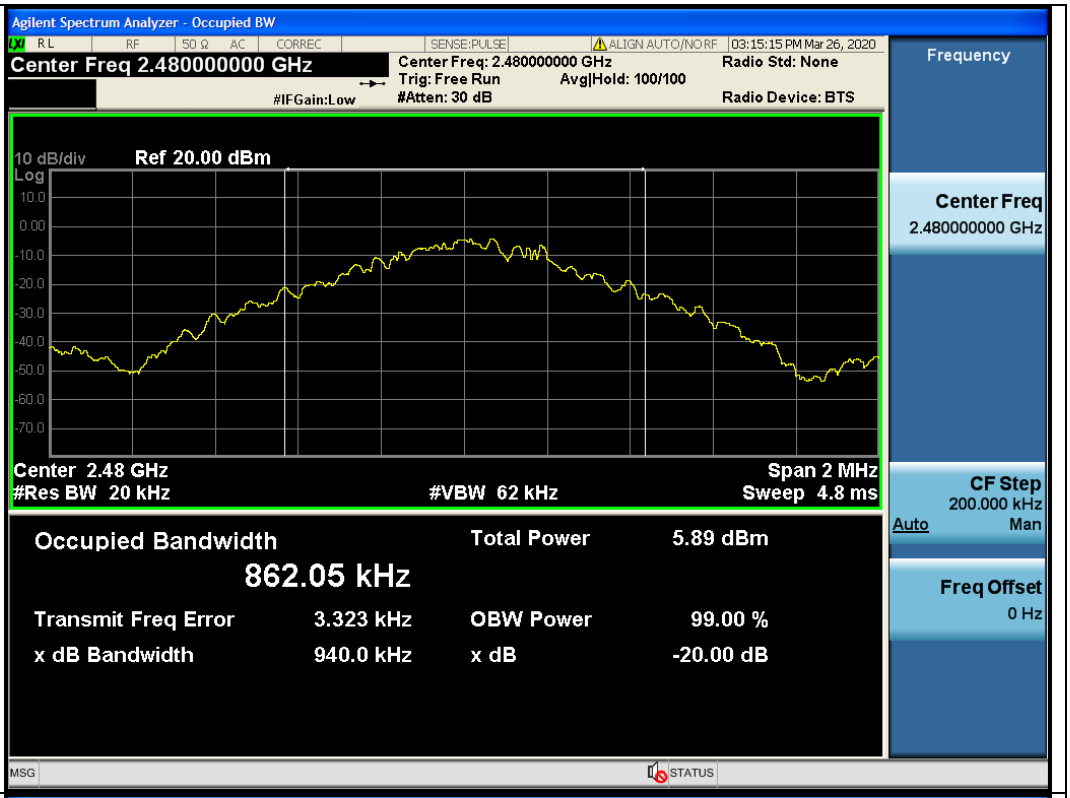
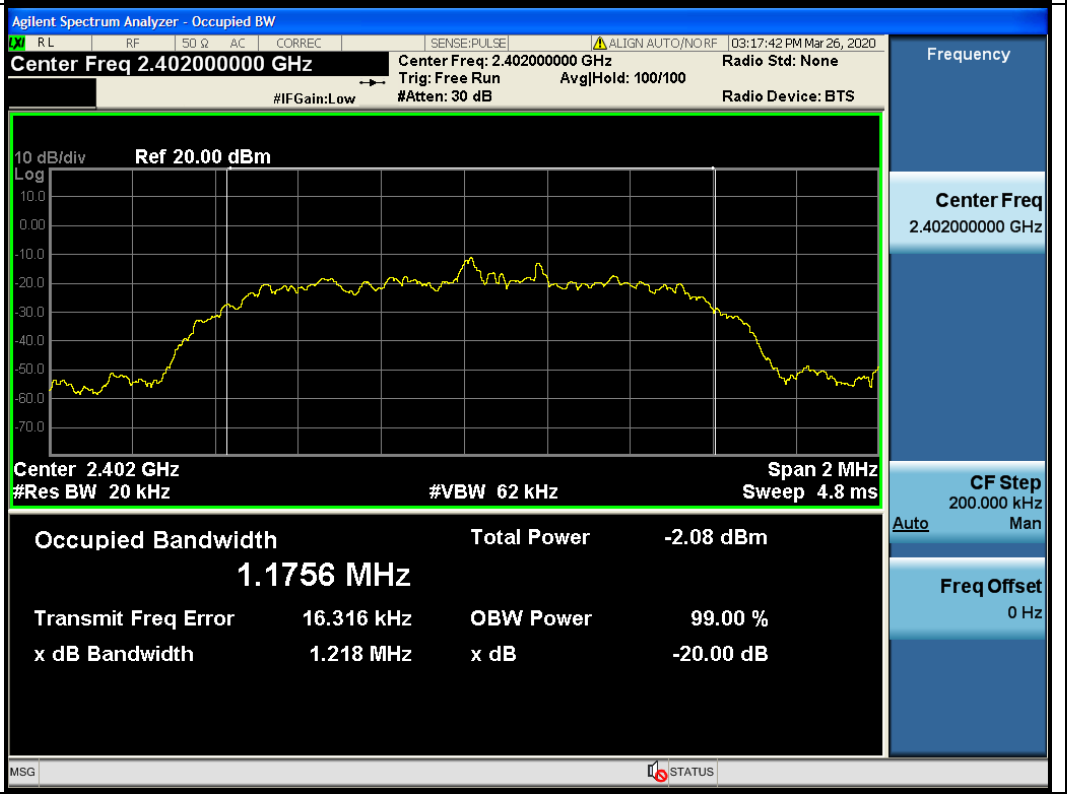
Temperature:	22.8° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Nancy Li
Supervised by:	Hugo Chen

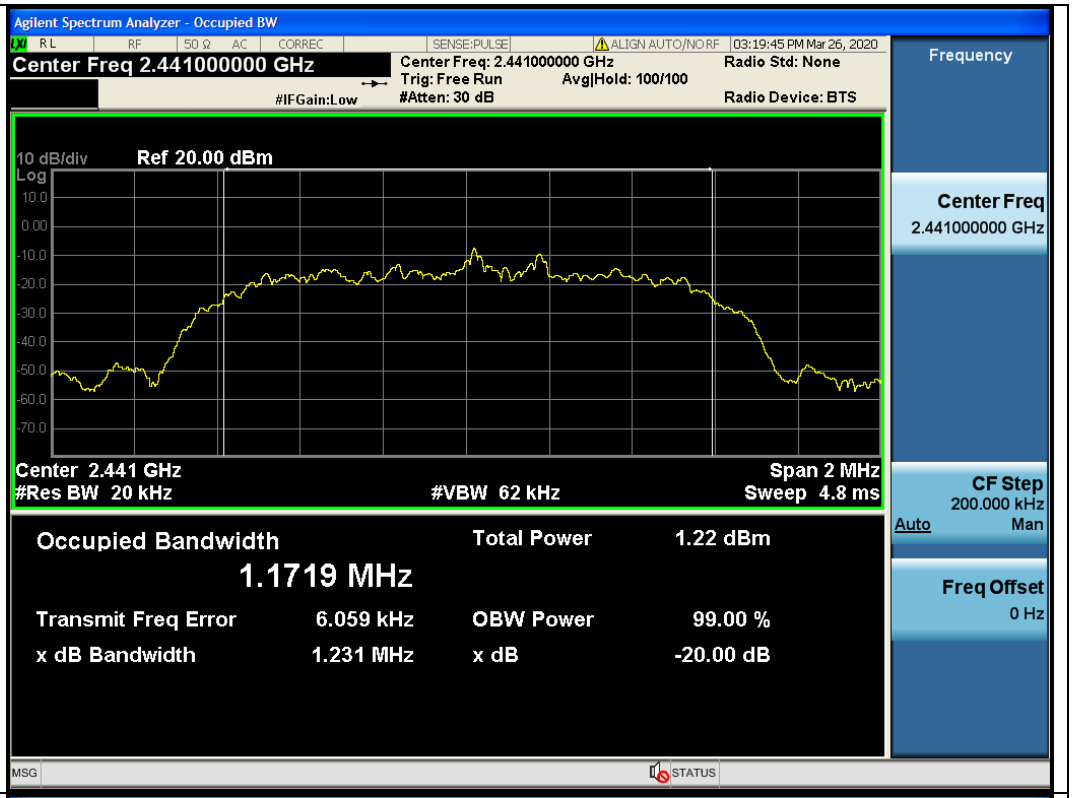
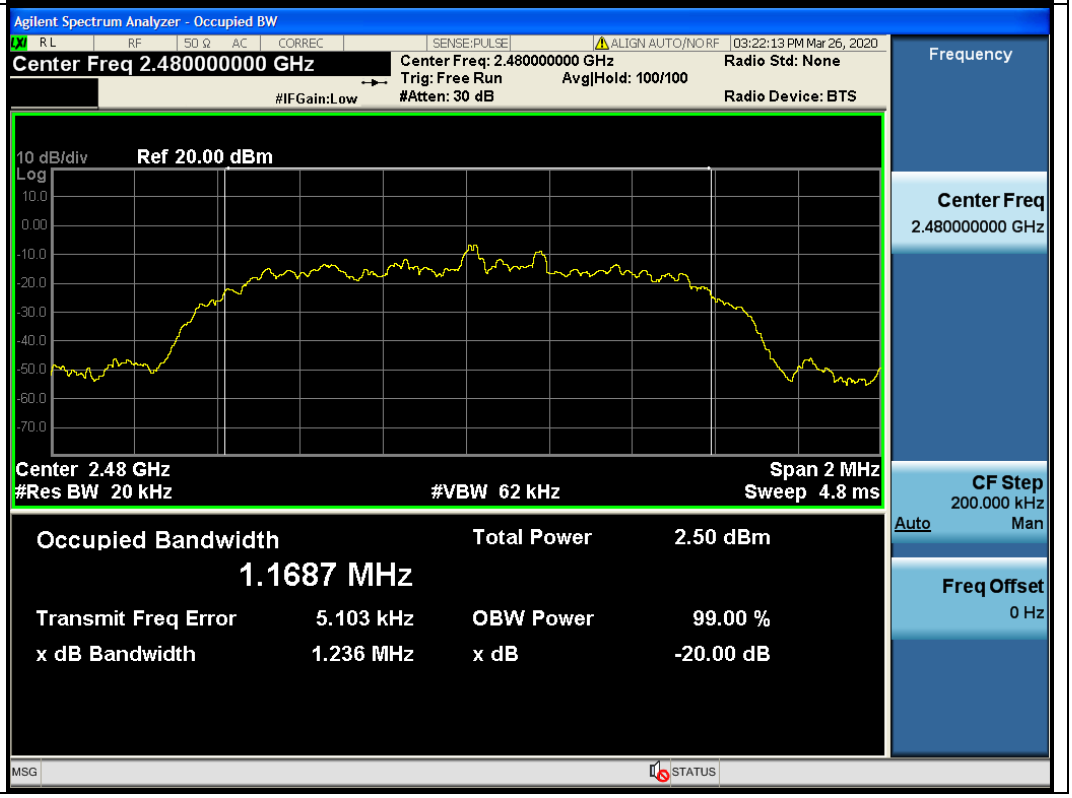
A.1 20 dB Bandwidth

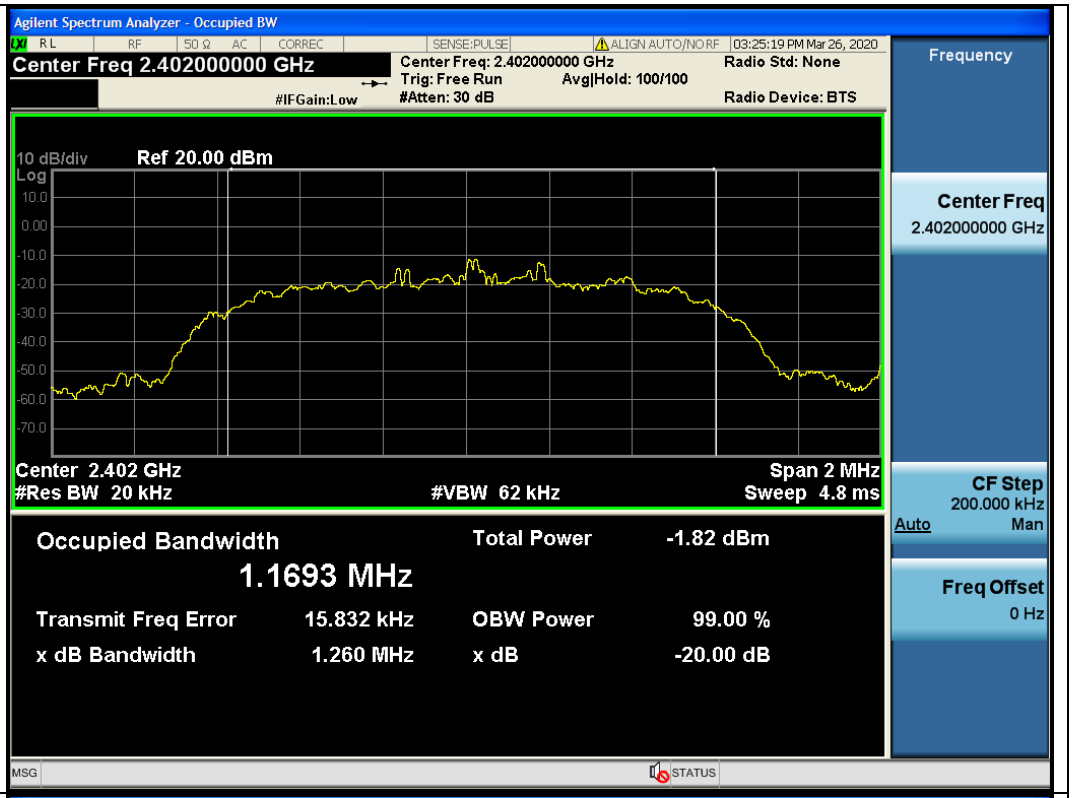
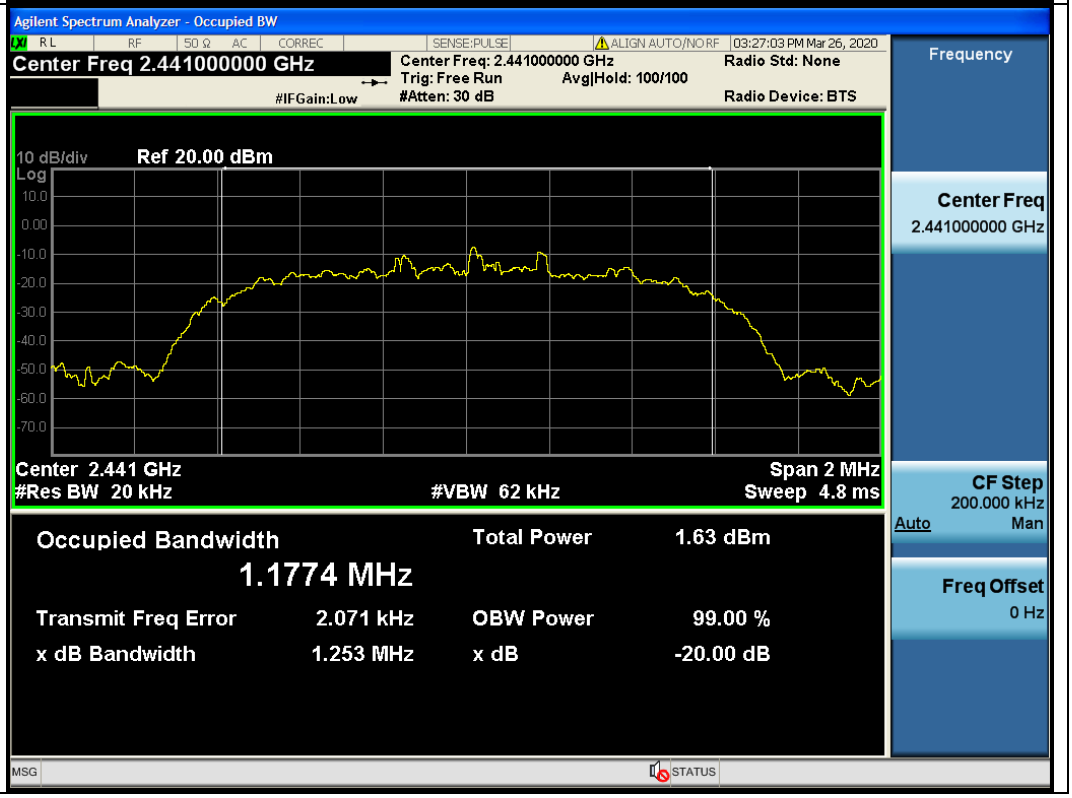
Mode	Channel.	20dB Bandwidth [MHz]	Limit(MHz)	Verdict
GFSK	LCH	0.941	Not Specified	PASS
GFSK	MCH	0.940	Not Specified	PASS
GFSK	HCH	0.940	Not Specified	PASS
π/4DQPSK	LCH	1.218	Not Specified	PASS
π/4DQPSK	MCH	1.231	Not Specified	PASS
π/4DQPSK	HCH	1.236	Not Specified	PASS
8DPSK	LCH	1.260	Not Specified	PASS
8DPSK	MCH	1.253	Not Specified	PASS
8DPSK	HCH	1.253	Not Specified	PASS

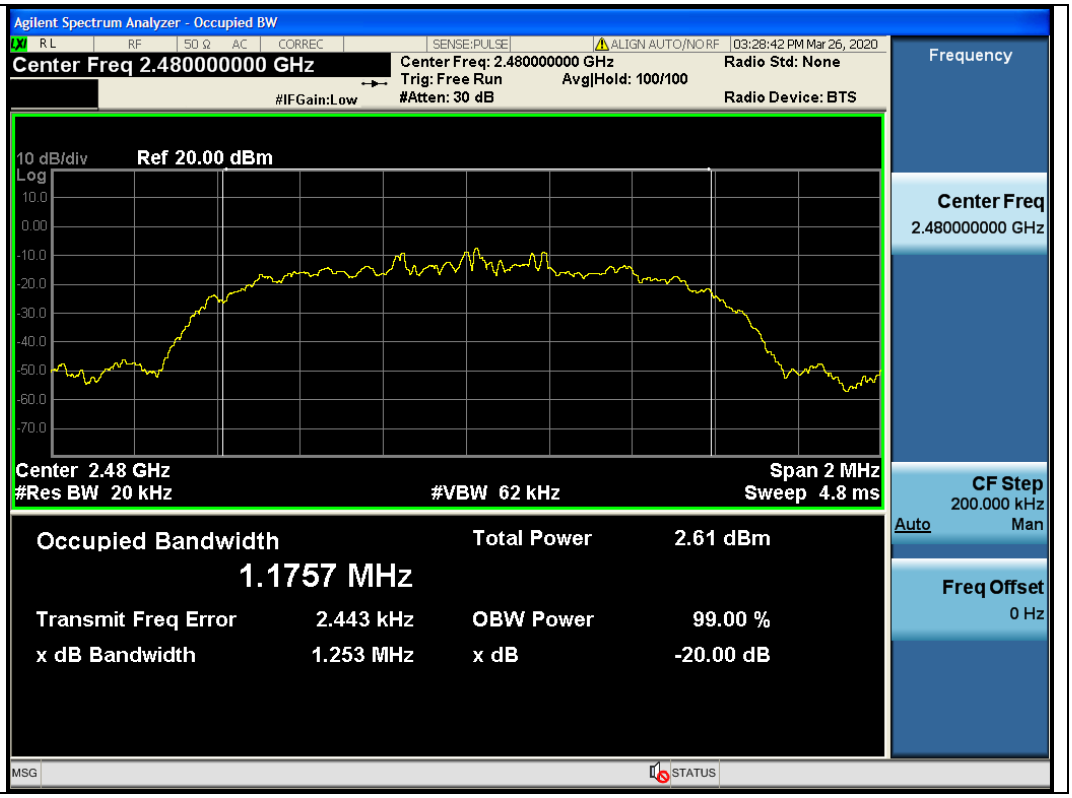
Test Graph

Graphs	
GFSK/LCH	
GFSK/MCH	

GFSK/HCH	
π/4DQPSK/LCH	

π/4DQPSK/MCH	
π/4DQPSK/HCH	

8DPSK/LCH	
8DPSK/MCH	

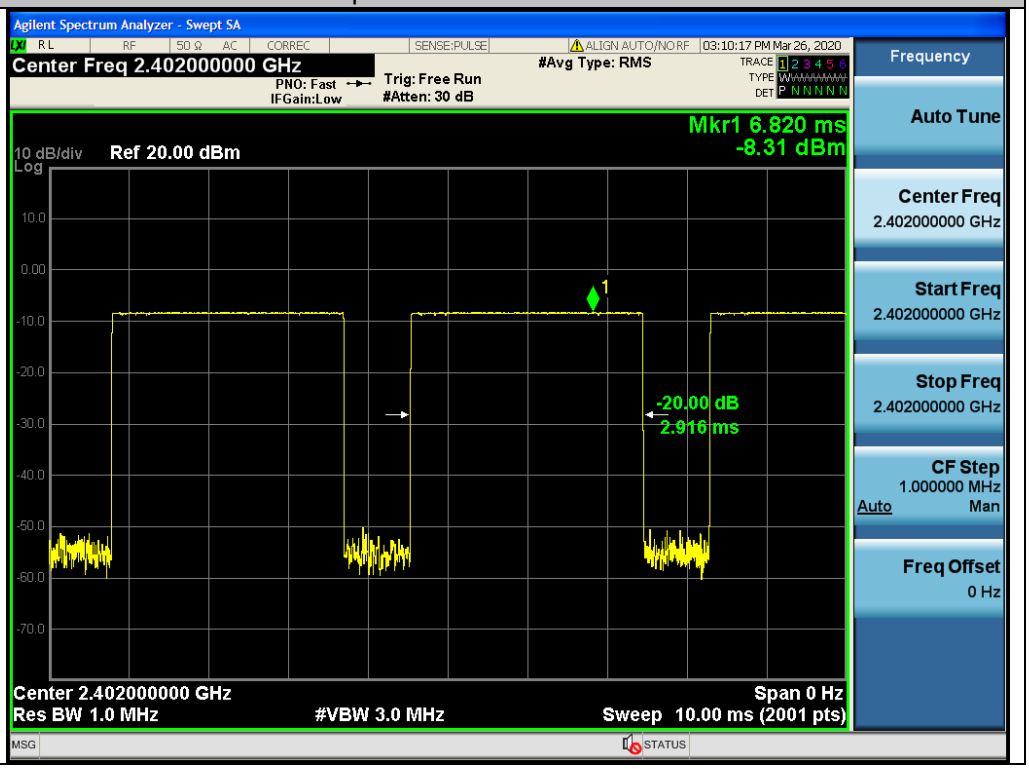
8DPSK/HCH	

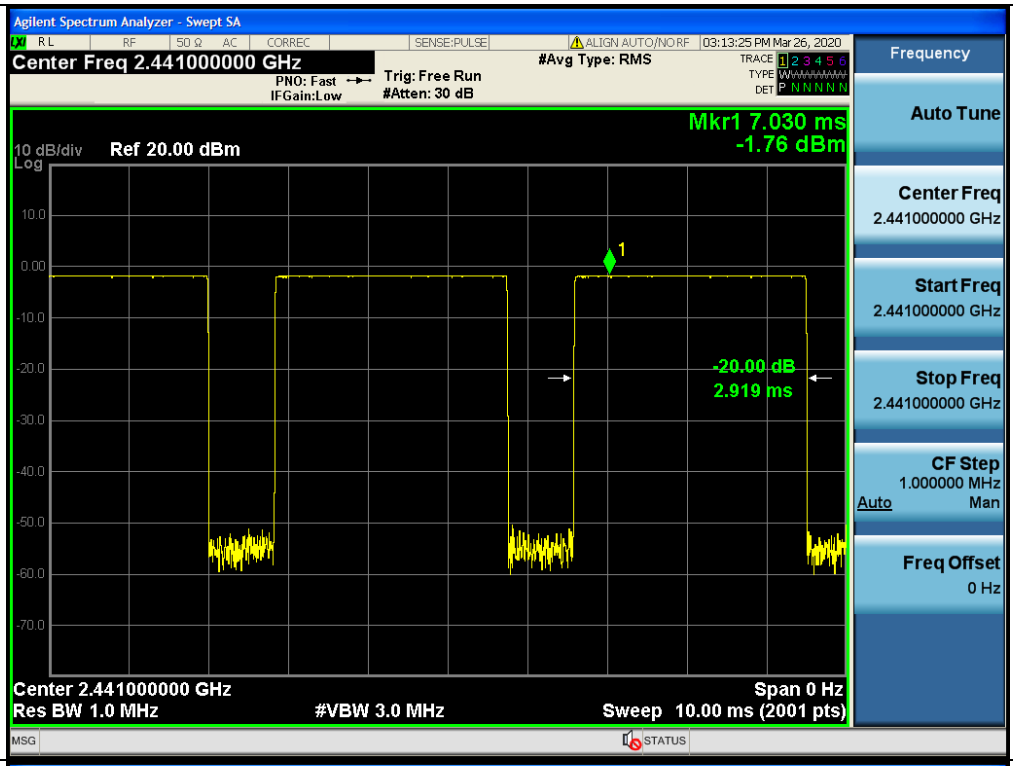
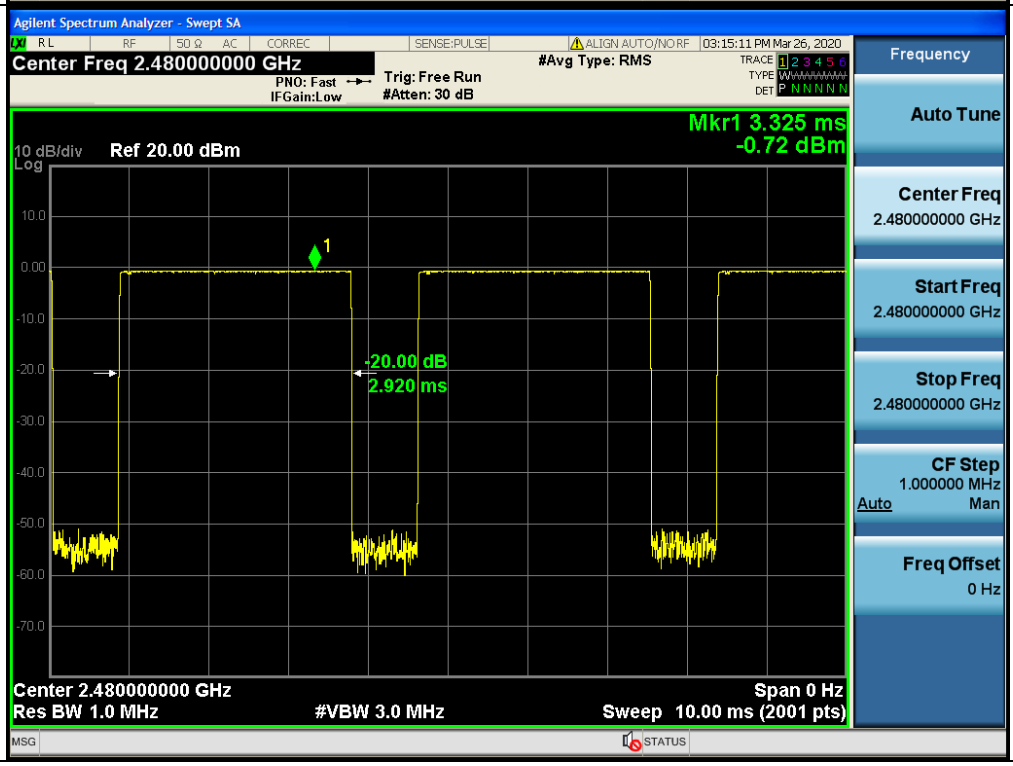
Agilent Spectrum Analyzer - Occupied BW
RL
RF
50 Ω AC
CORREC
SENSE:PULSE
ALIGN AUTO/NO RF
03:28:42 PM Mar 26, 2020
Center Freq 2.480000000 GHz
Center Freq: 2.480000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#IFGain:Low
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Frequency
10 dB/div
Log
Ref 20.00 dBm
10.0
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
Center Freq
2.480000000 GHz
Center 2.48 GHz
#Res BW 20 kHz
#VBW 62 kHz
Span 2 MHz
Sweep 4.8 ms
CF Step
200.000 kHz
Auto
Man
Occupied Bandwidth
1.1757 MHz
Total Power
2.61 dBm
Transmit Freq Error
2.443 kHz
OBW Power
99.00 %
x dB Bandwidth
1.253 MHz
x dB
-20.00 dB
Freq Offset
0 Hz
MSG
STATUS

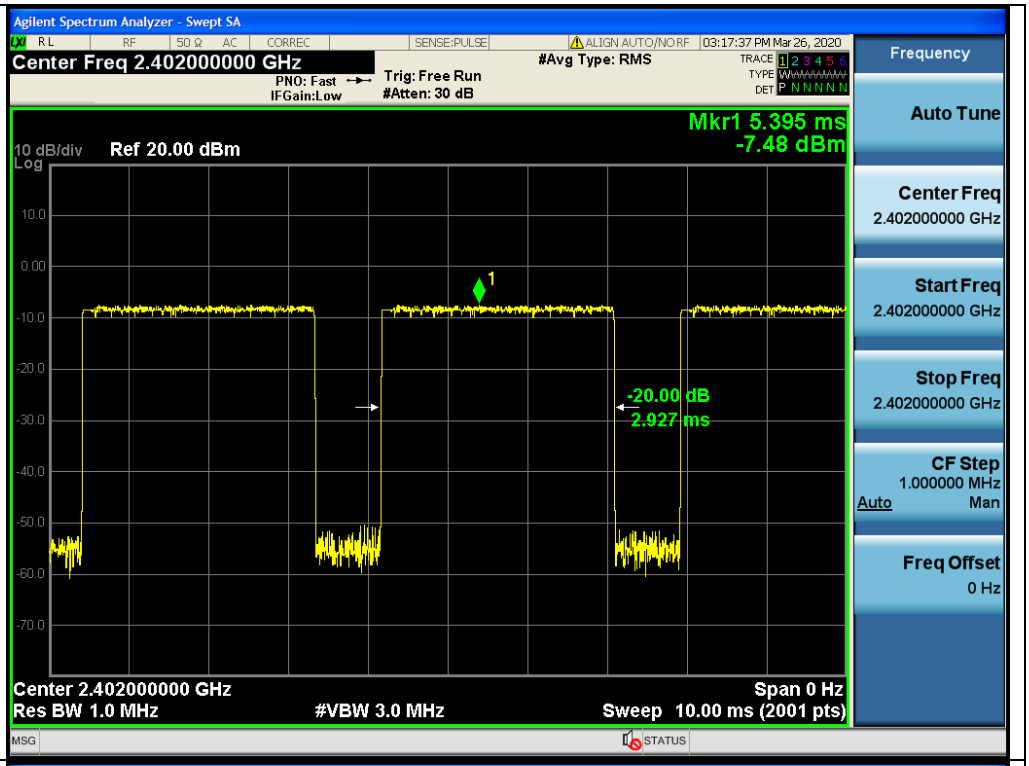
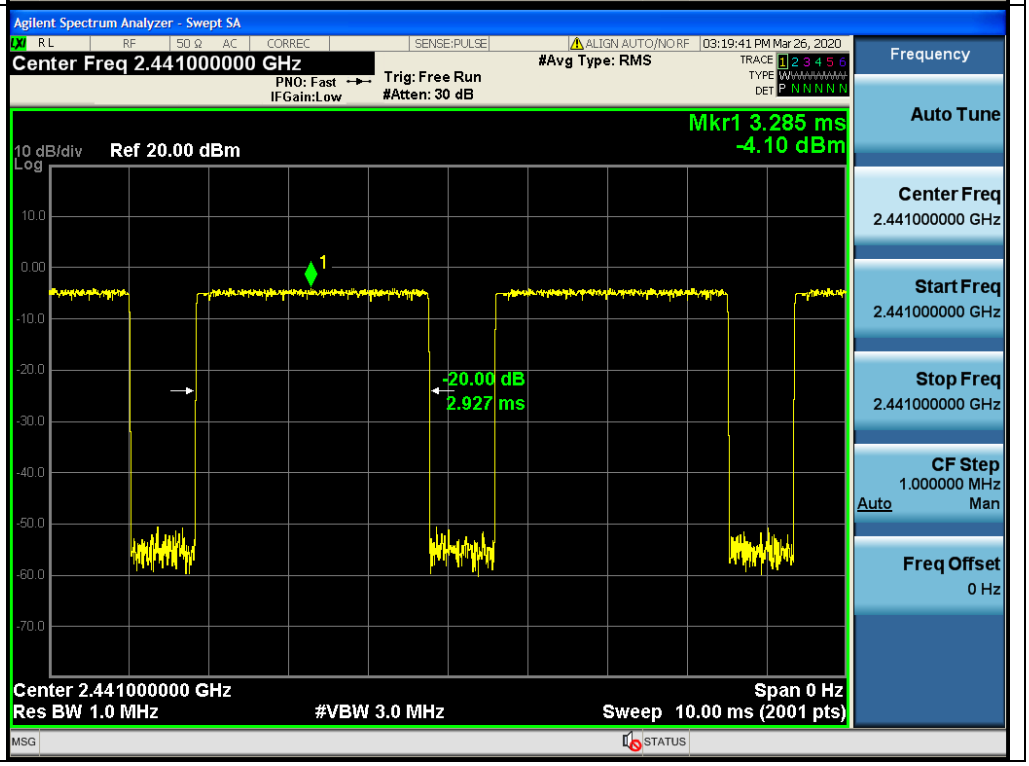
A.2 Dwell Time

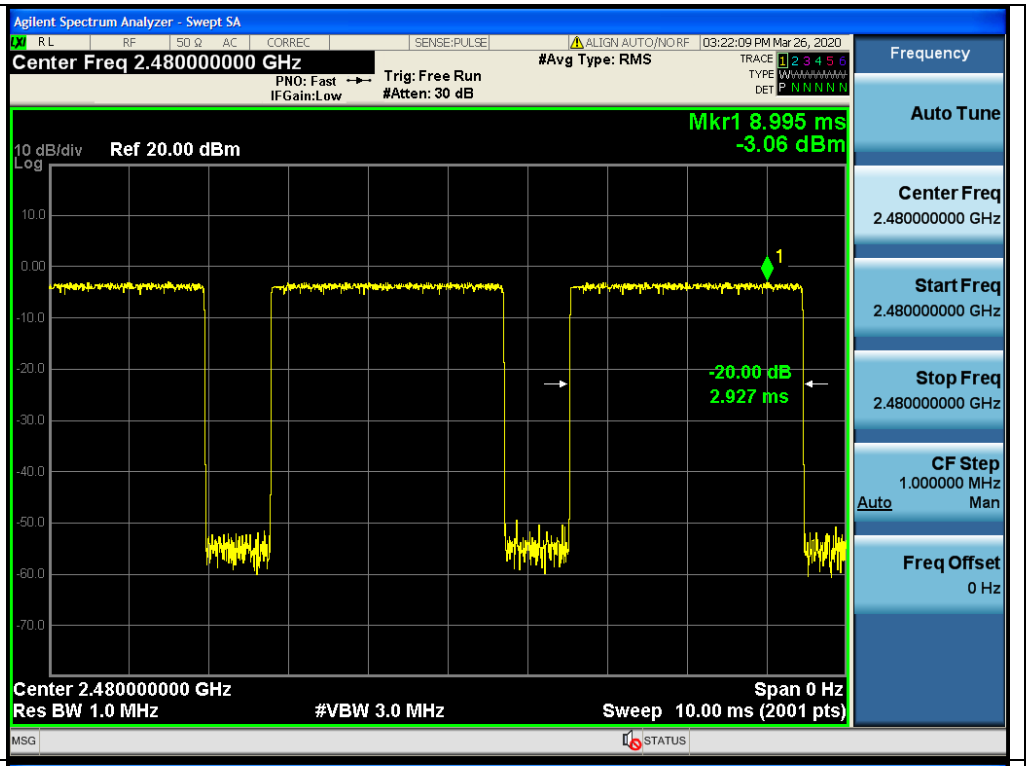
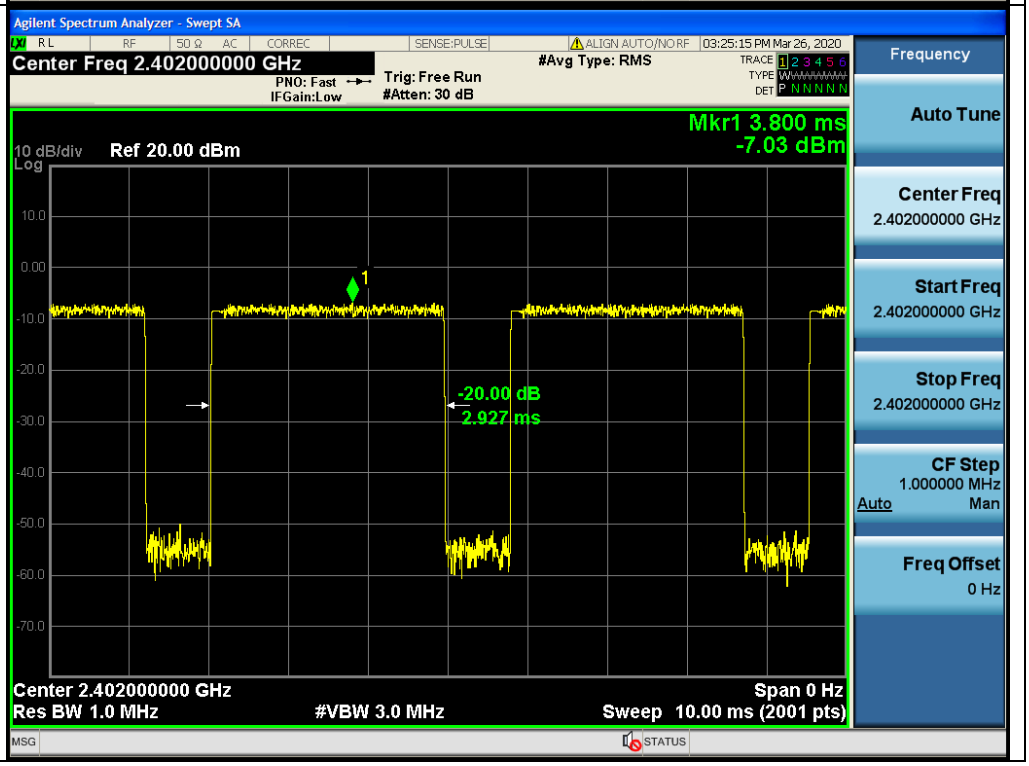
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.916	106.7	0.311	0.4	PASS
GFSK	DH5	MCH	2.919	106.7	0.311	0.4	PASS
GFSK	DH5	HCH	2.920	106.7	0.312	0.4	PASS
π/4DQPSK	2DH5	LCH	2.927	106.7	0.312	0.4	PASS
π/4DQPSK	2DH5	MCH	2.927	106.7	0.312	0.4	PASS
π/4DQPSK	2DH5	HCH	2.927	106.7	0.312	0.4	PASS
8DPSK	3DH5	LCH	2.927	106.7	0.312	0.4	PASS
8DPSK	3DH5	MCH	2.927	106.7	0.312	0.4	PASS
8DPSK	3DH5	HCH	2.928	106.7	0.312	0.4	PASS

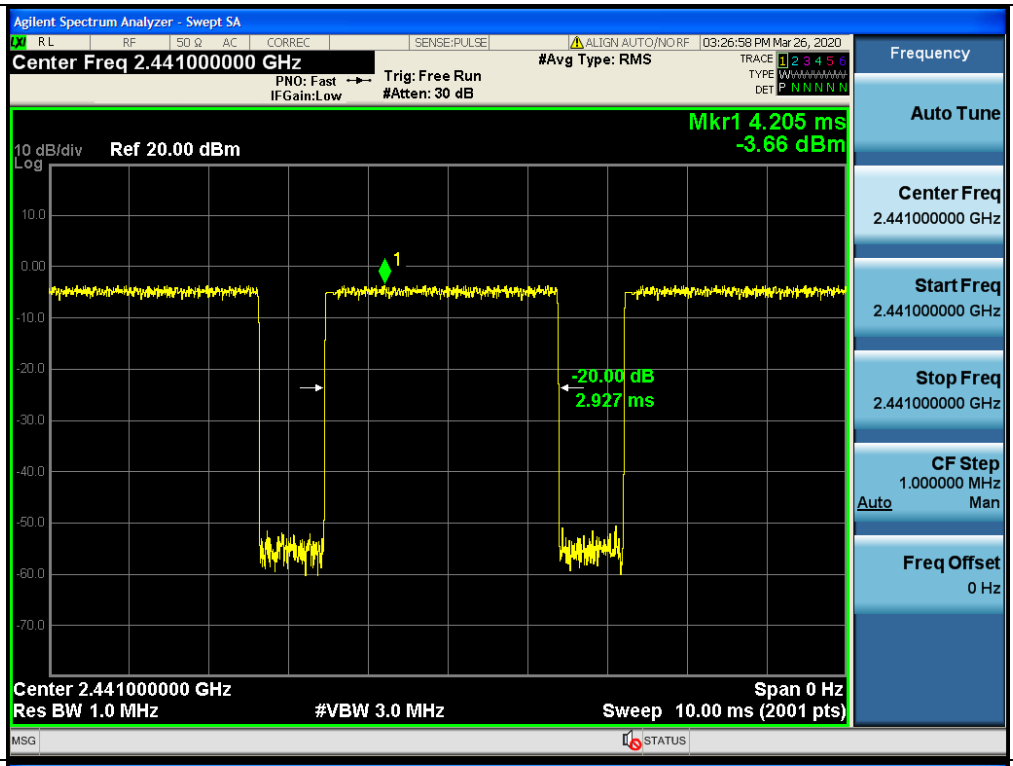
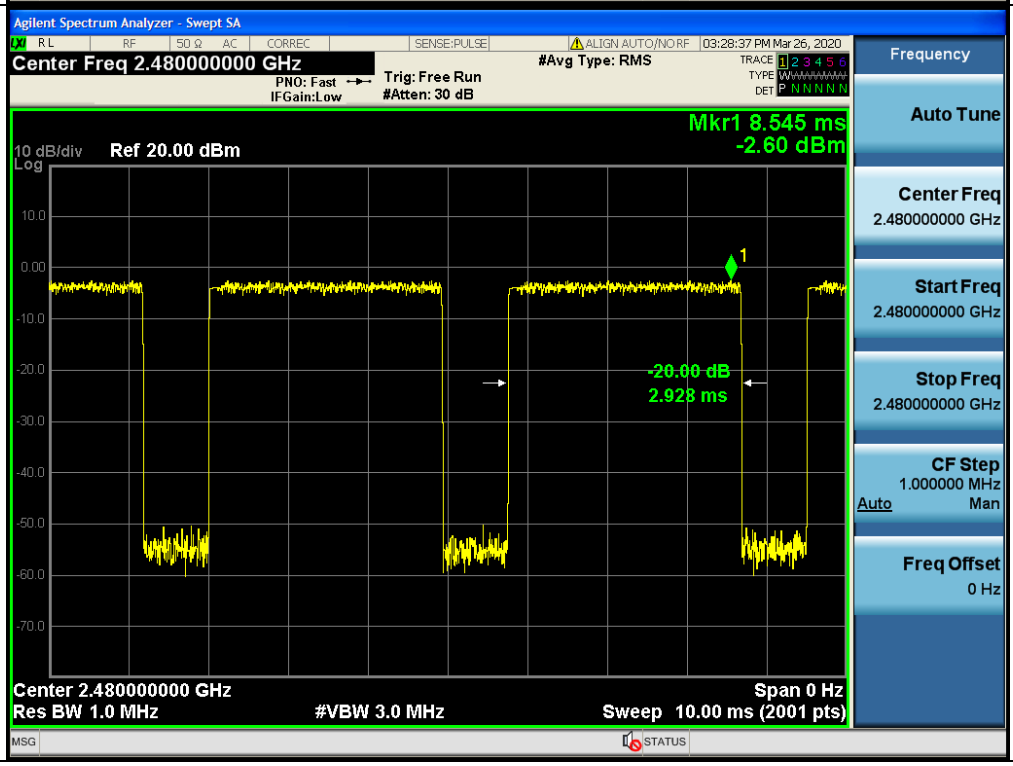
Test Graph

Graphs	
GFSK_DH5/LCH	

GFSK_DH5/MCH	
GFSK_DH5/HCH	

π/4DQPSK _2DH5/LCH	
π/4DQPSK _2DH5/MCH	

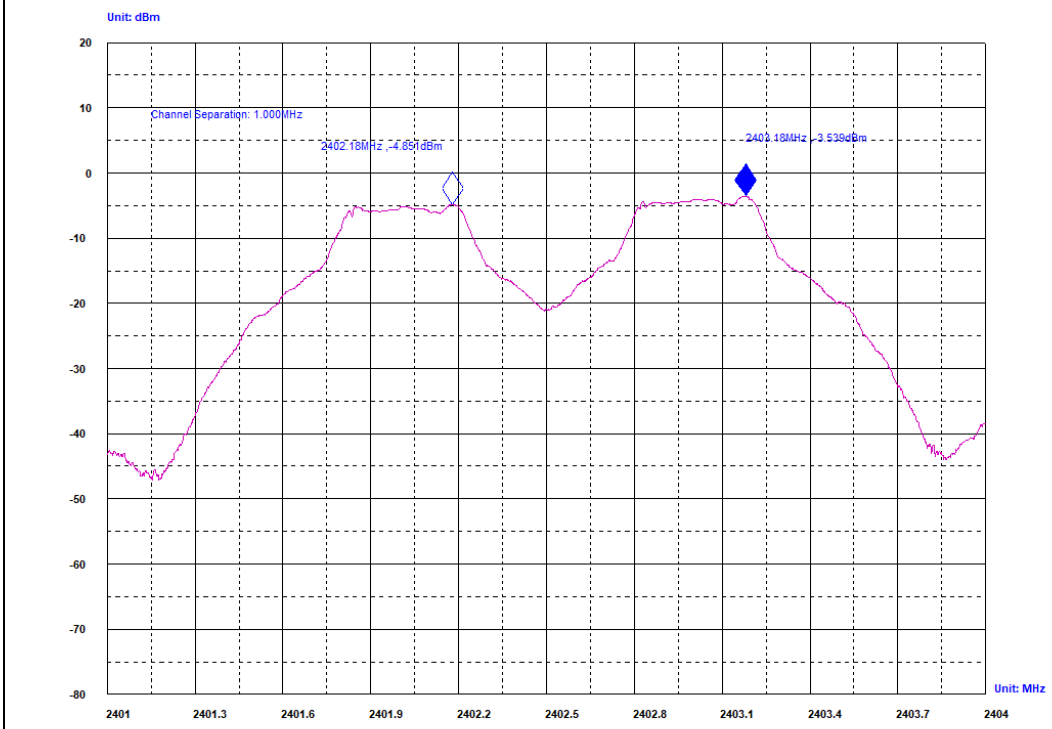
π/4DQPSK _2DH5/HCH	
8DPSK _3DH5/LCH	

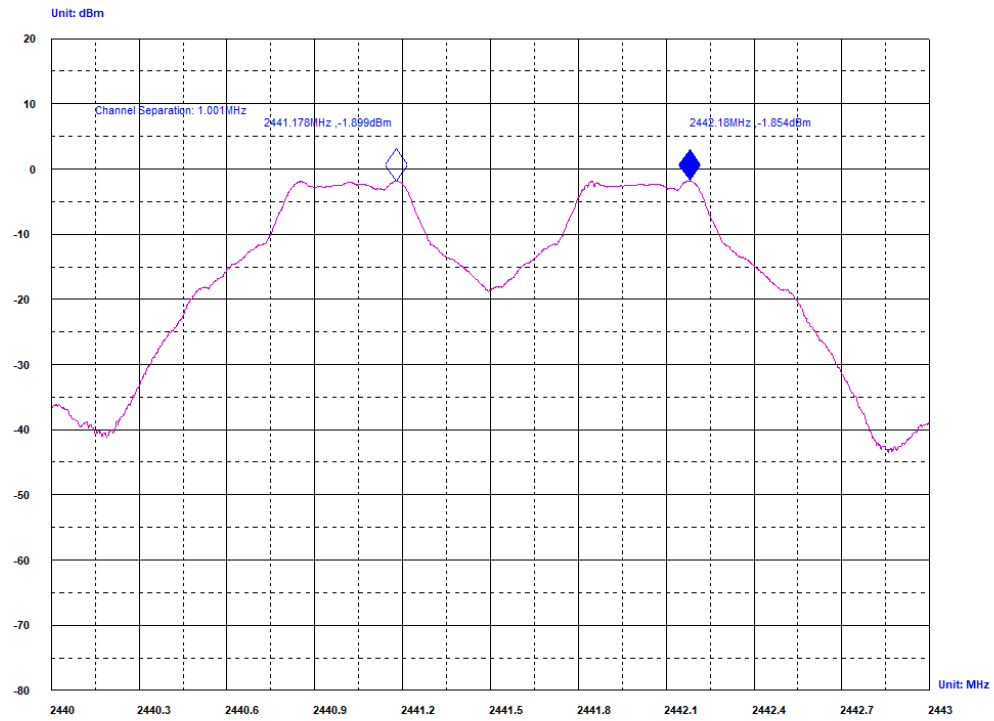
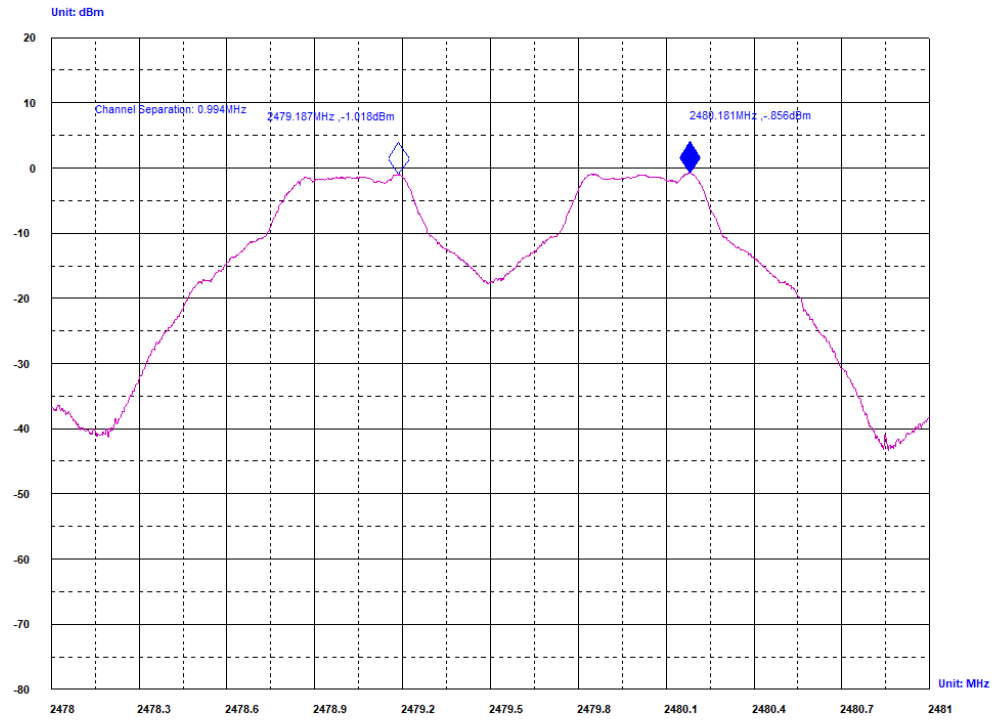
8DPSK _3DH5/MCH	
8DPSK _3DH5/HCH	

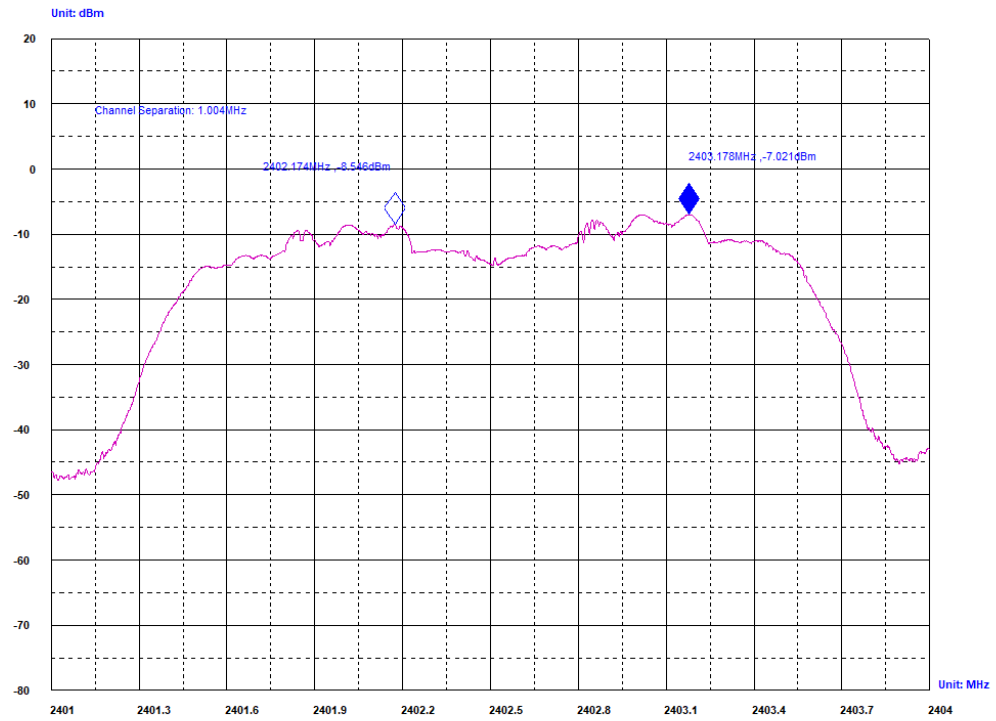
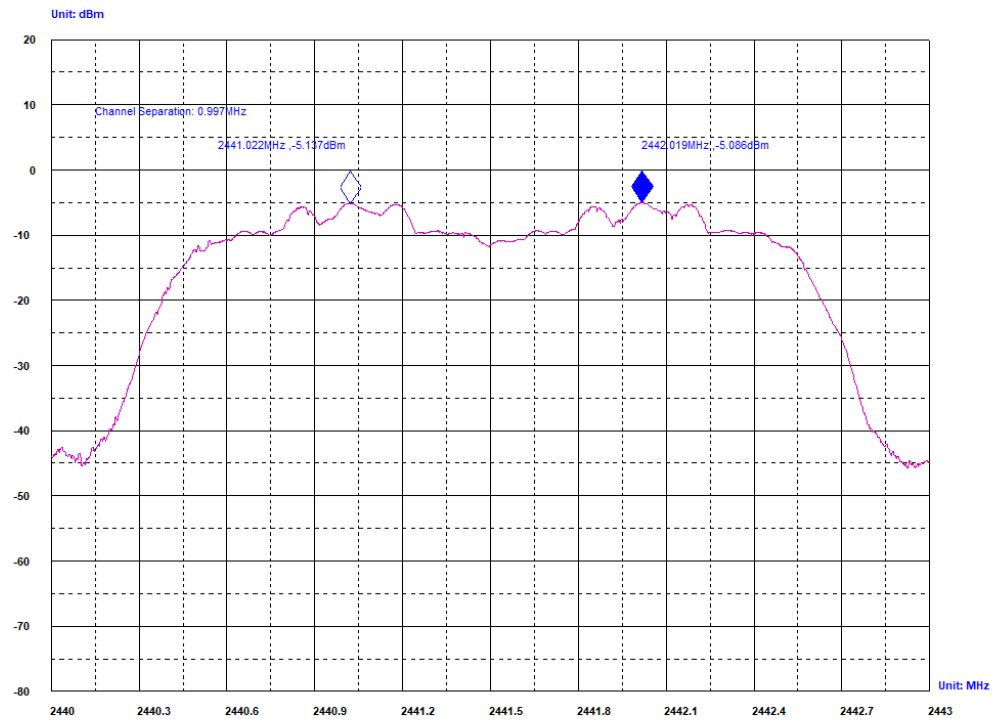
A.3 Carrier Frequency Separation

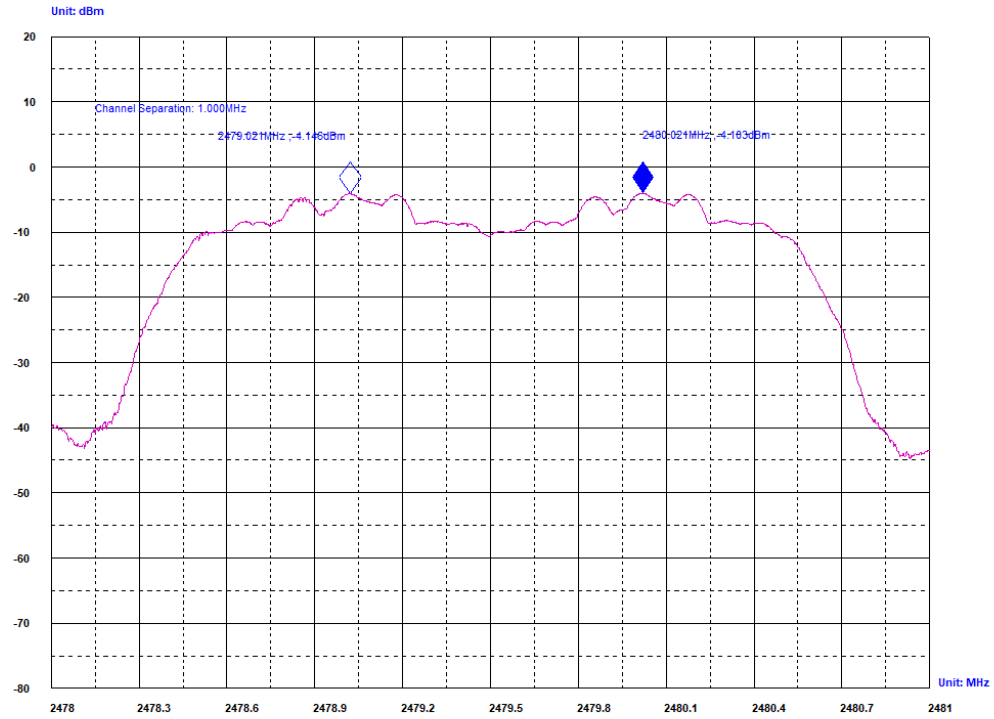
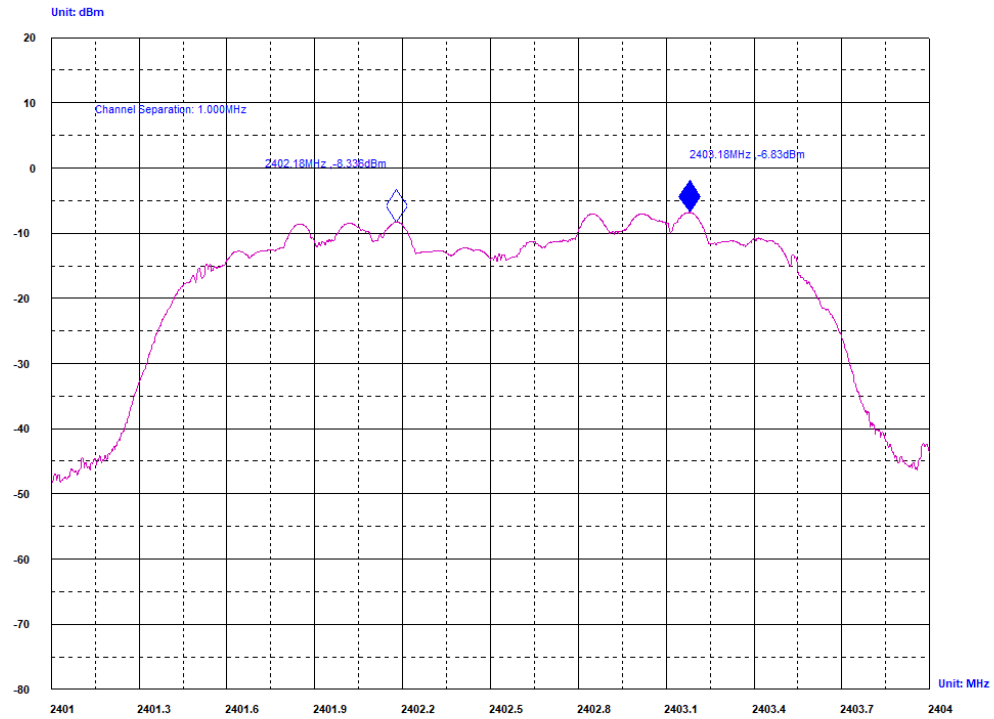
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.000	0.627	PASS
GFSK	MCH	1.001	0.627	PASS
GFSK	HCH	0.994	0.627	PASS
π/4DQPSK	LCH	1.004	0.812	PASS
π/4DQPSK	MCH	0.997	0.821	PASS
π/4DQPSK	HCH	1.000	0.824	PASS
8DPSK	LCH	1.000	0.840	PASS
8DPSK	MCH	0.994	0.835	PASS
8DPSK	HCH	0.997	0.835	PASS

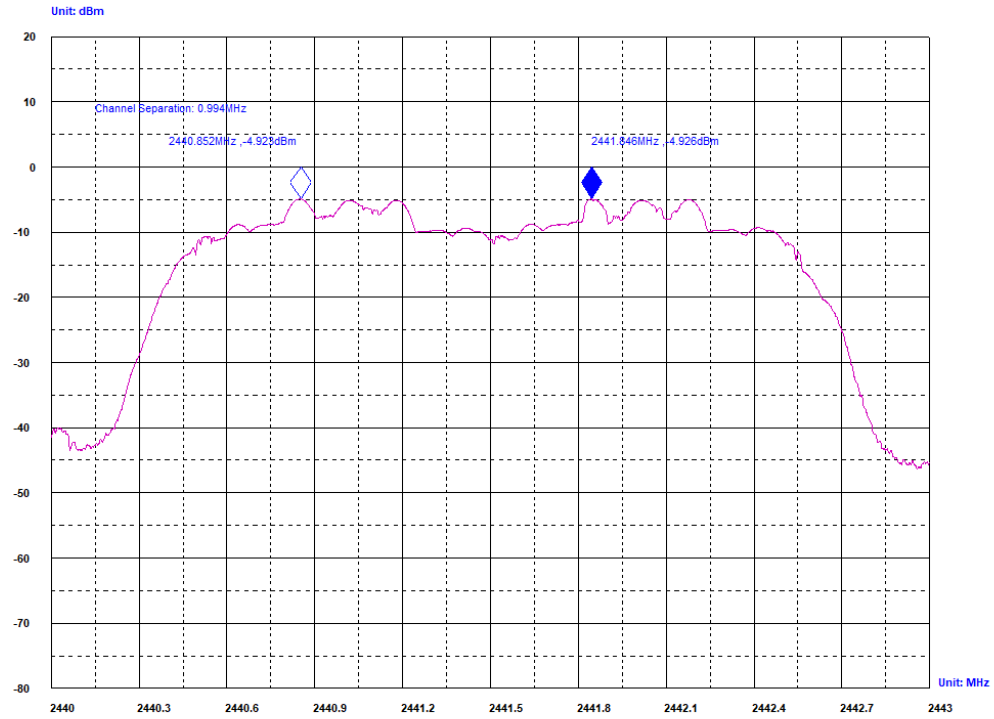
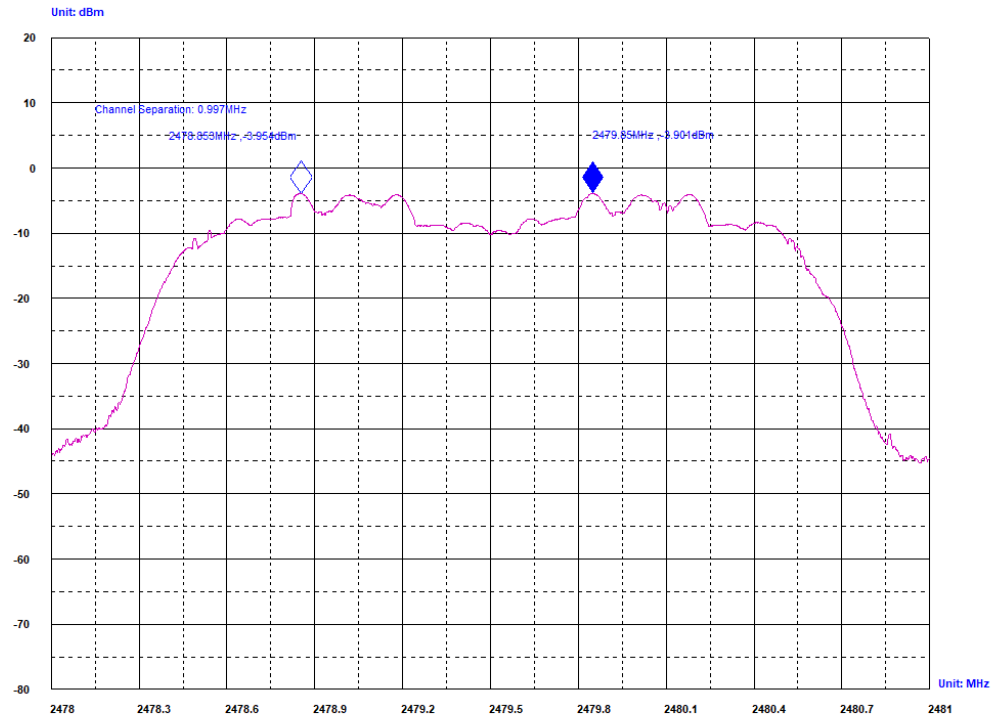
Test Graph

Graphs	
GFSK/LCH	

GFSK/MCH	
GFSK/HCH	

π/4DQPSK/LCH	
π/4DQPSK/MCH	

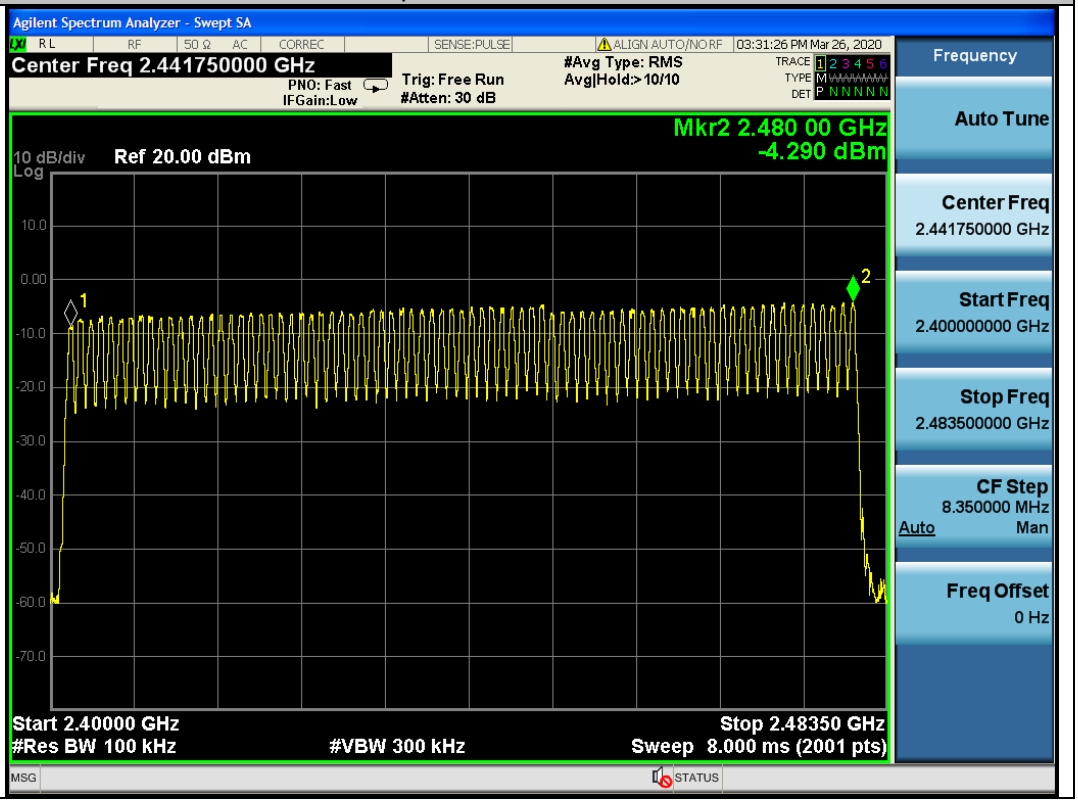
π/4DQPSK/HCH	
8DPSK/LCH	

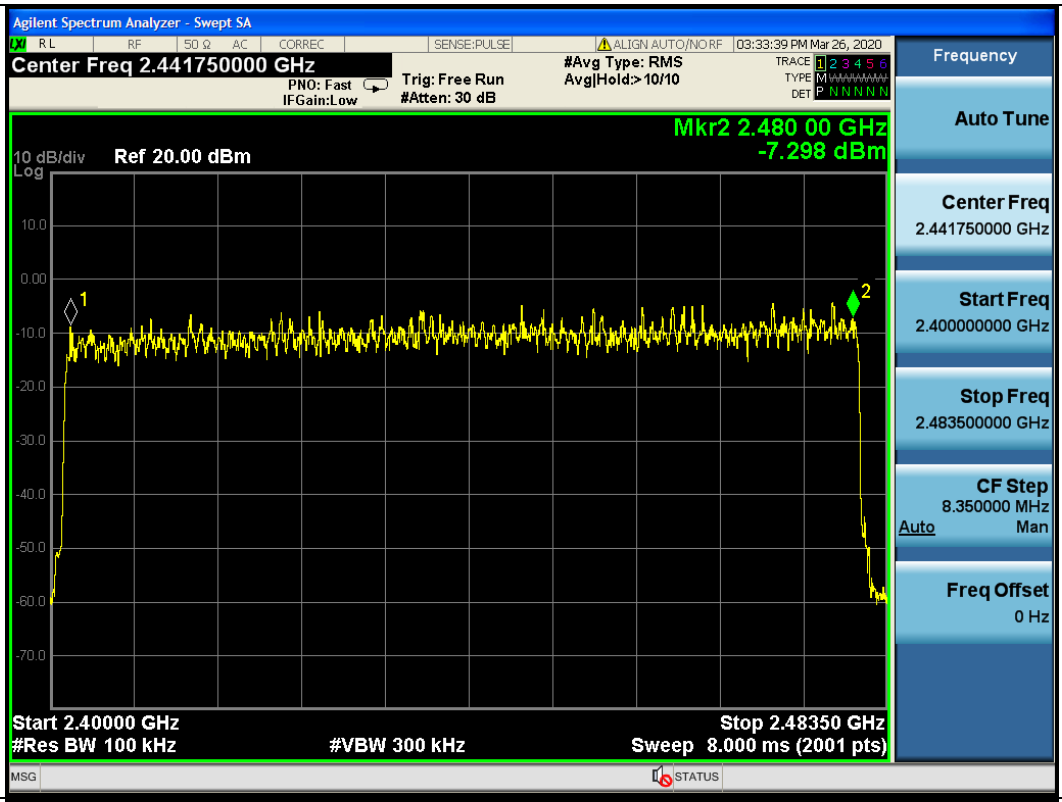
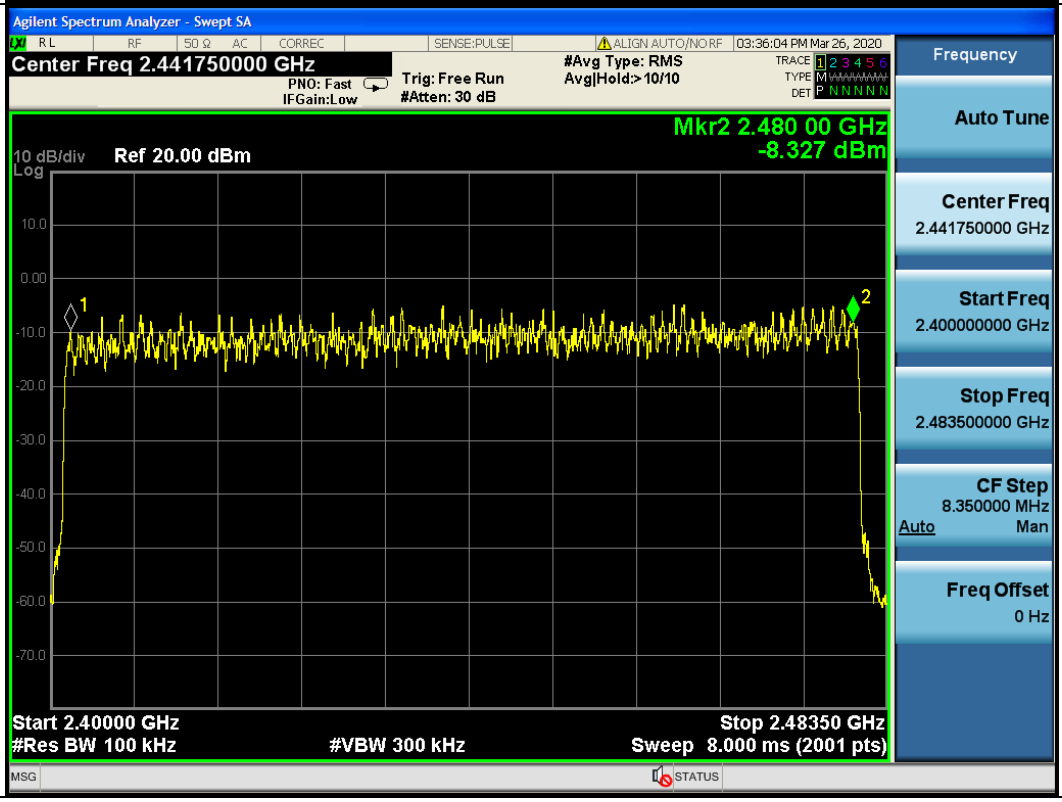
8DPSK/MCH	
8DPSK/HCH	

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 Graph

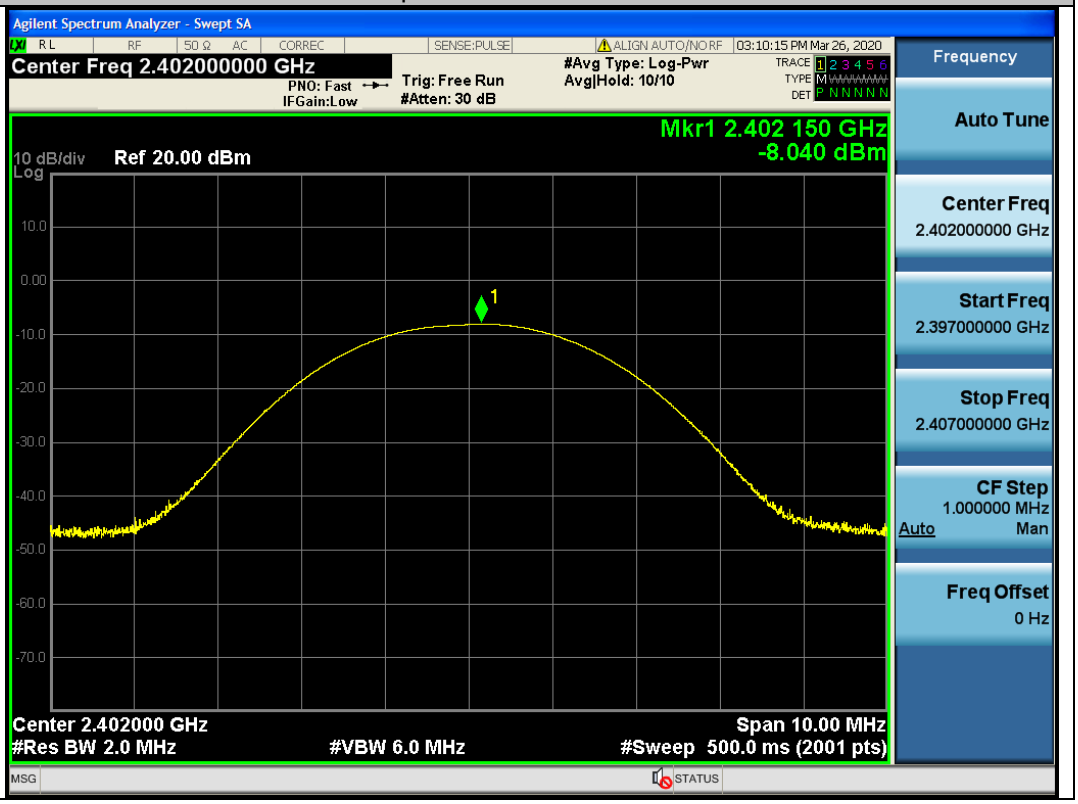
Graphs	
GFSK/Hop	

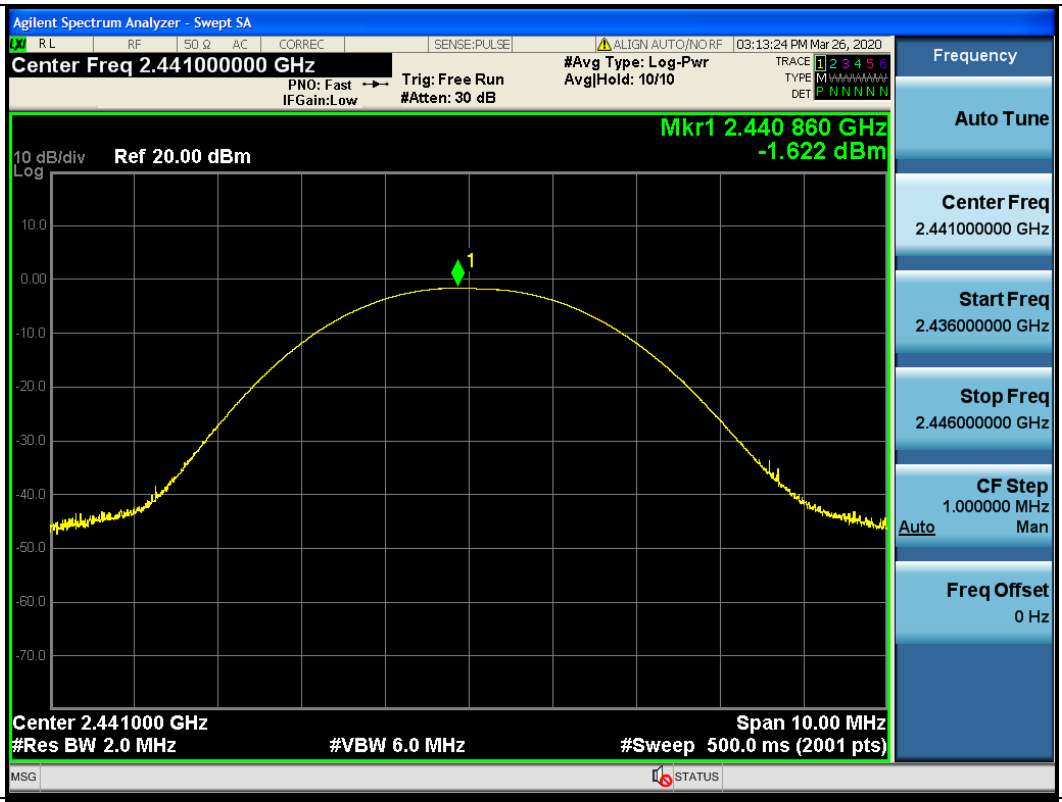
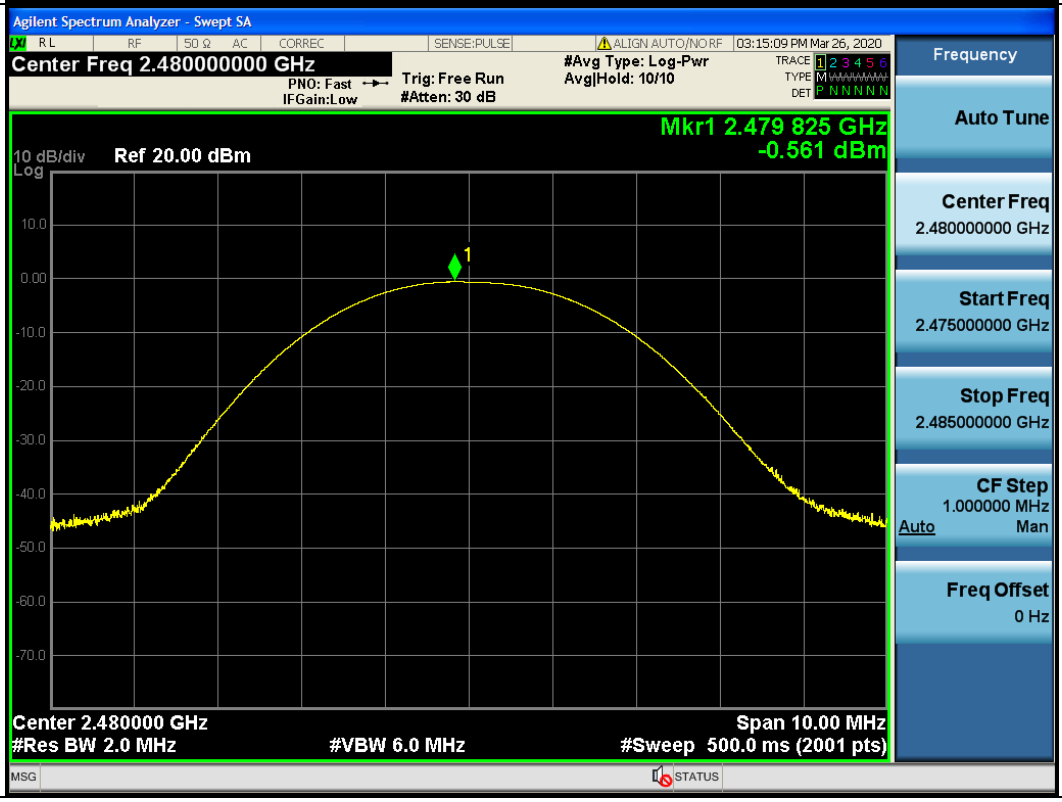
π/4DQPSK/Hop	
8DPSK/Hop	

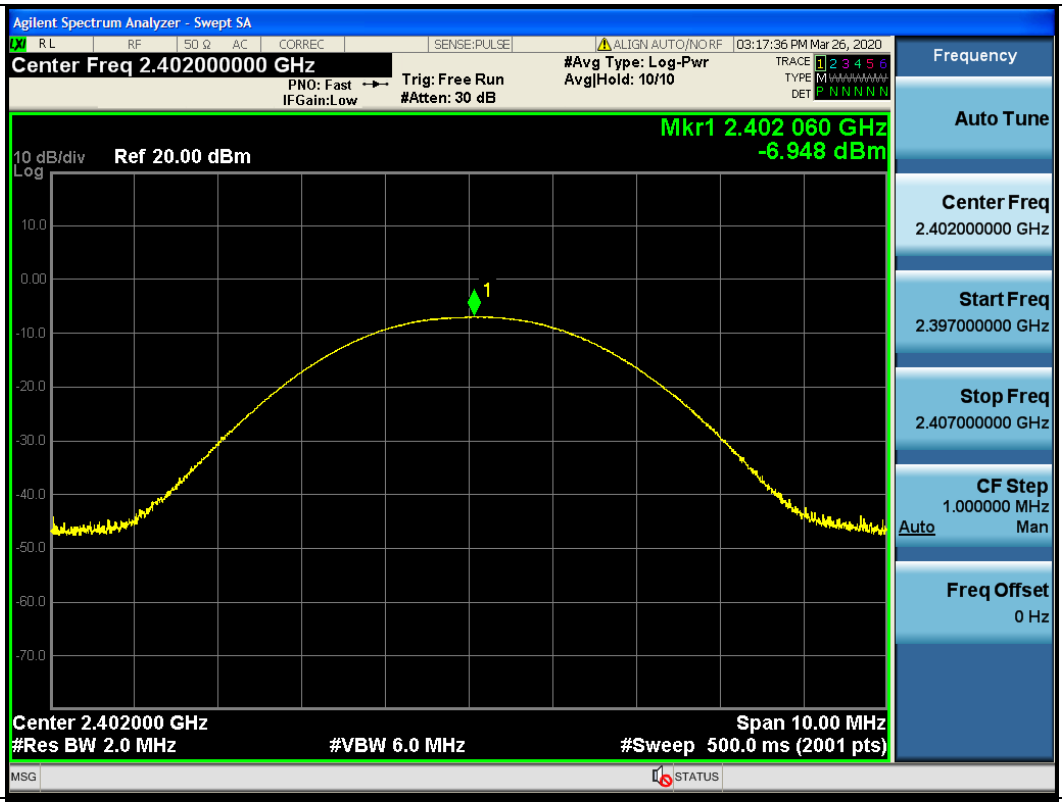
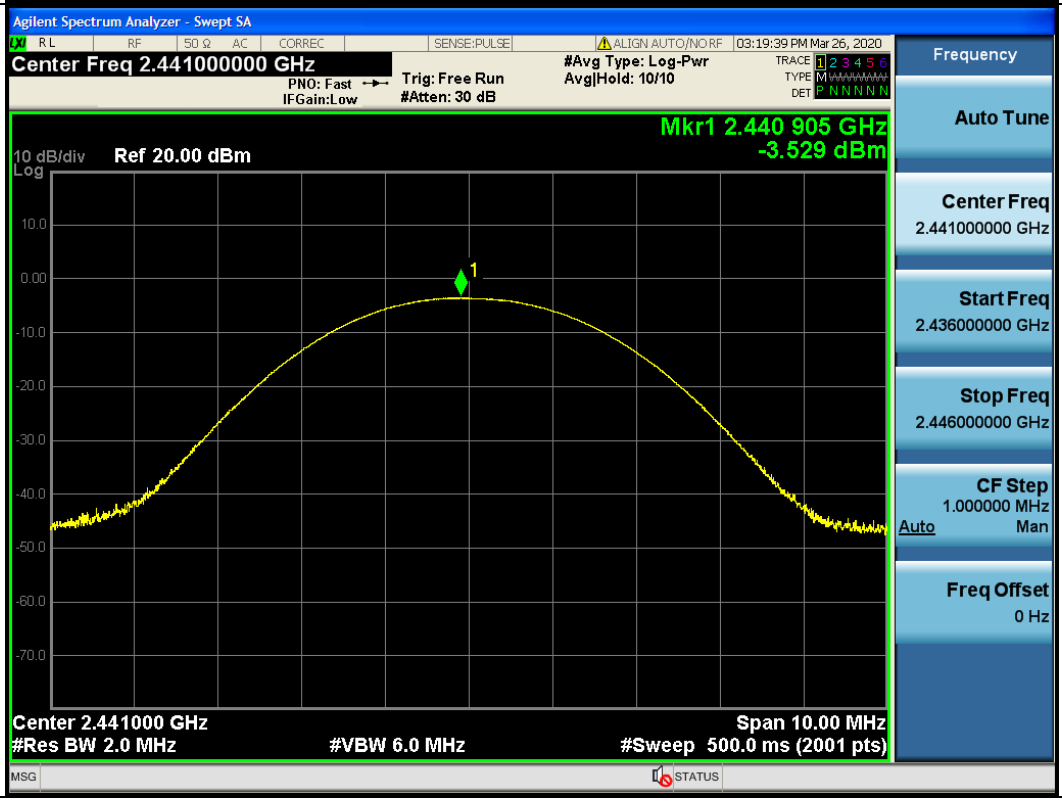
A.5 Conducted Peak Output Power

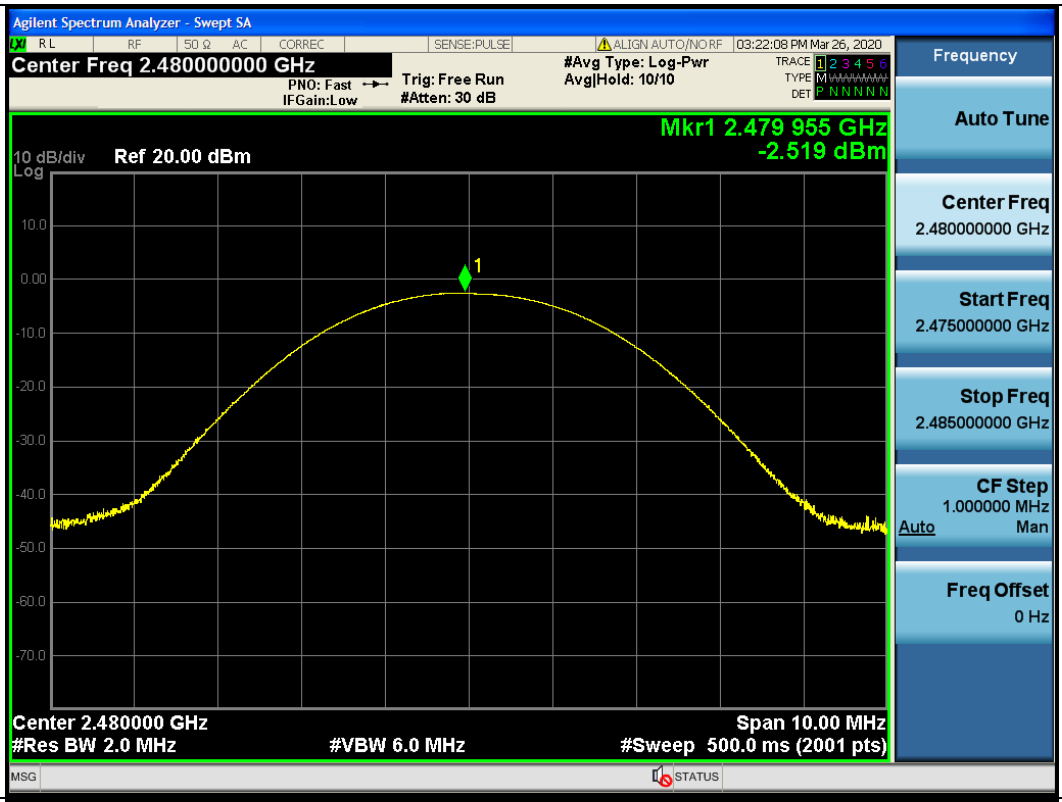
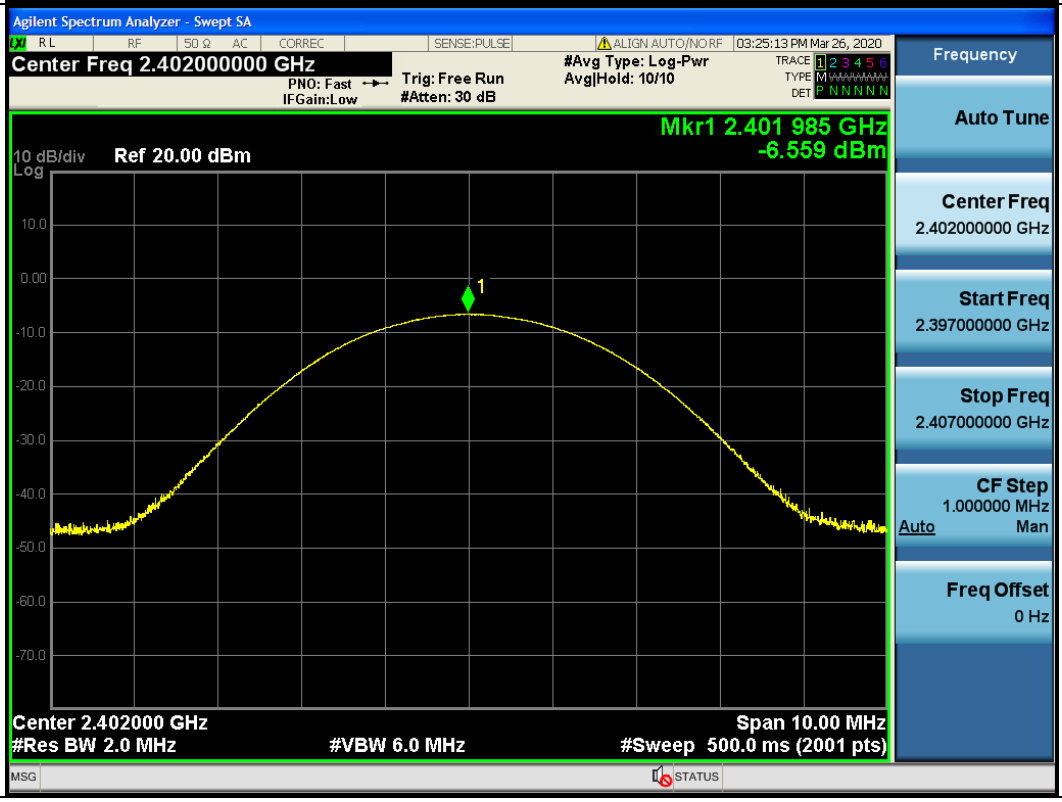
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-8.040	21	PASS
GFSK	MCH	-1.622	21	PASS
GFSK	HCH	-0.561	21	PASS
π/4DQPSK	LCH	-6.948	21	PASS
π/4DQPSK	MCH	-3.529	21	PASS
π/4DQPSK	HCH	-2.519	21	PASS
8DPSK	LCH	-6.559	21	PASS
8DPSK	MCH	-3.150	21	PASS
8DPSK	HCH	-2.106	21	PASS

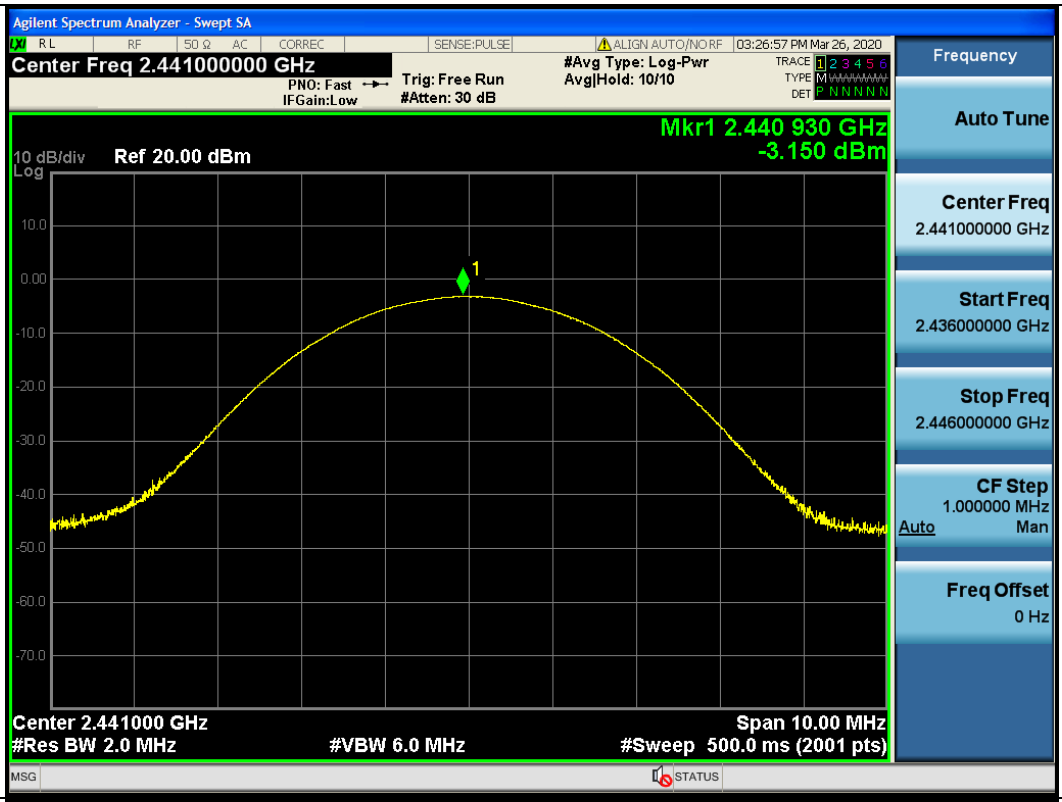
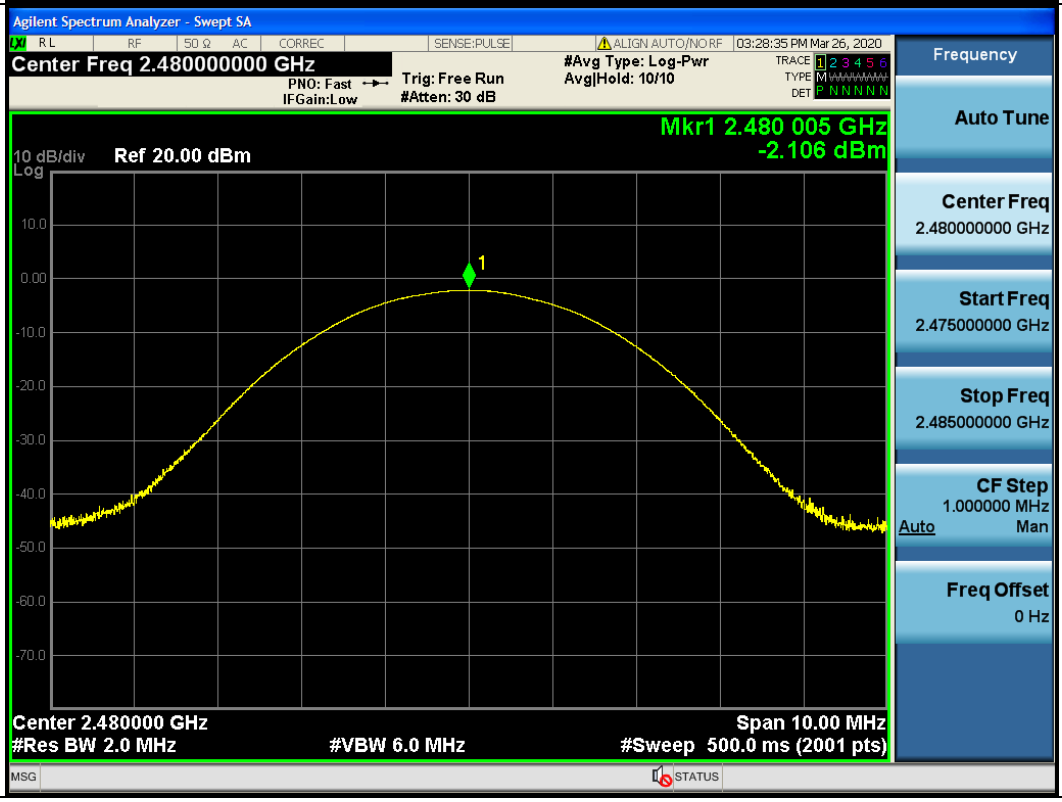
Test Graph

Graphs	
GFSK/LCH	

GFSK/MCH	
GFSK/HCH	

π/4DQPSK/LCH	
π/4DQPSK/MCH	

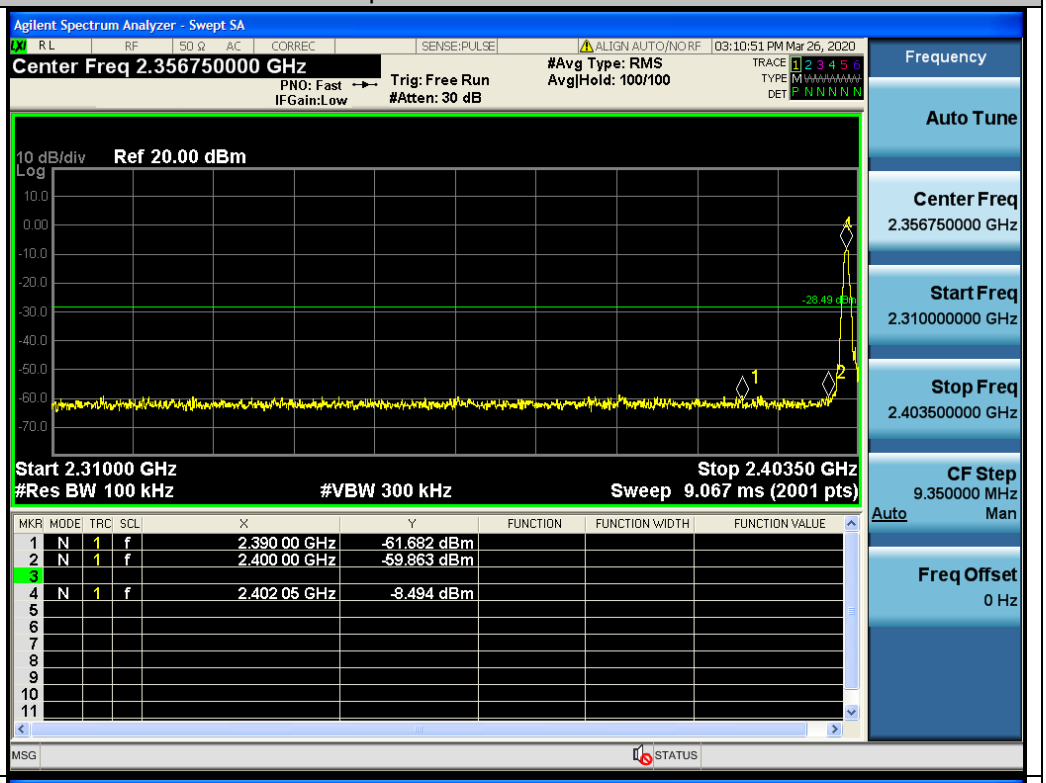
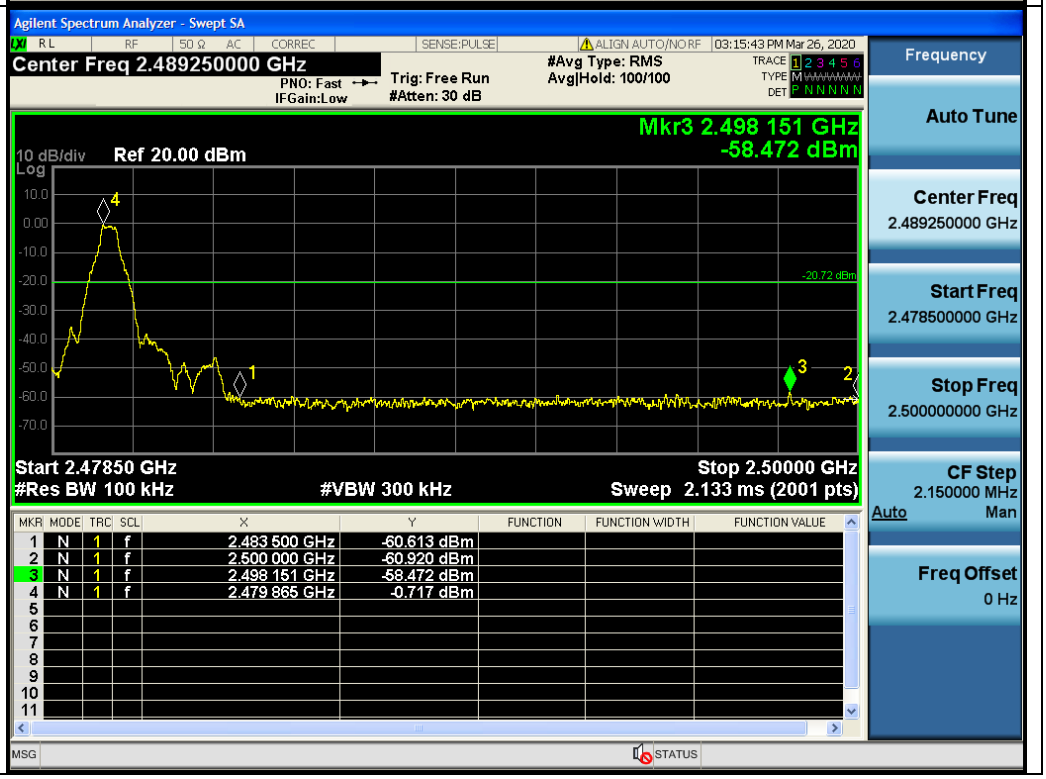
π/4DQPSK/HCH	
8DPSK/LCH	

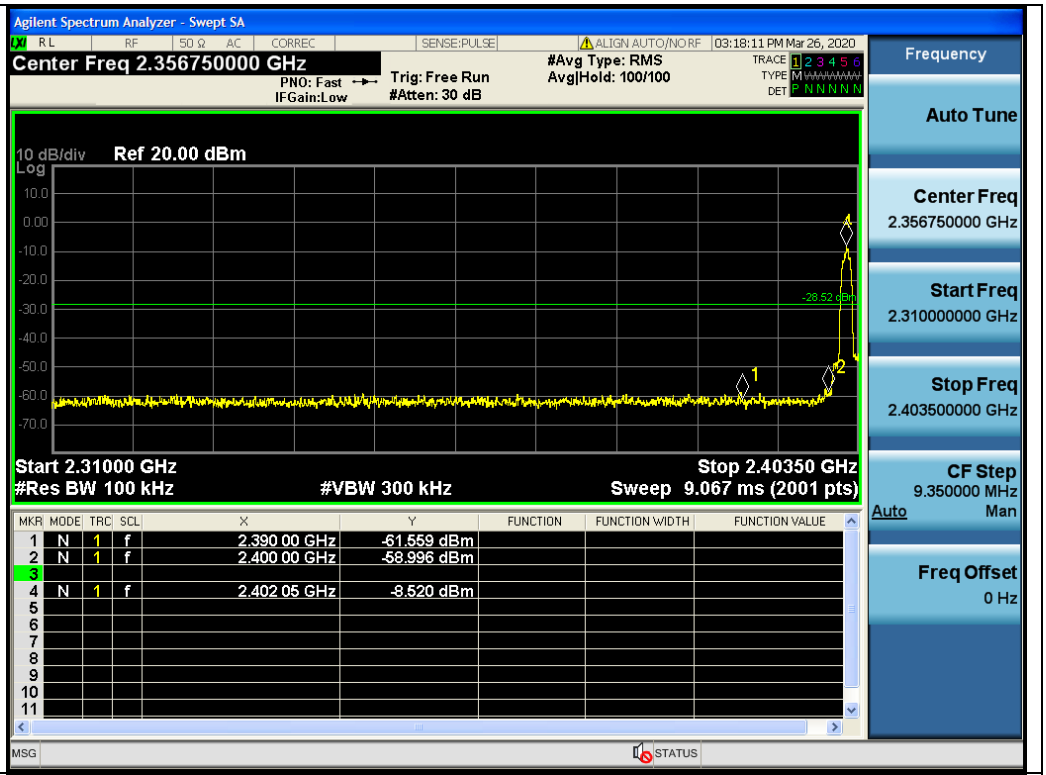
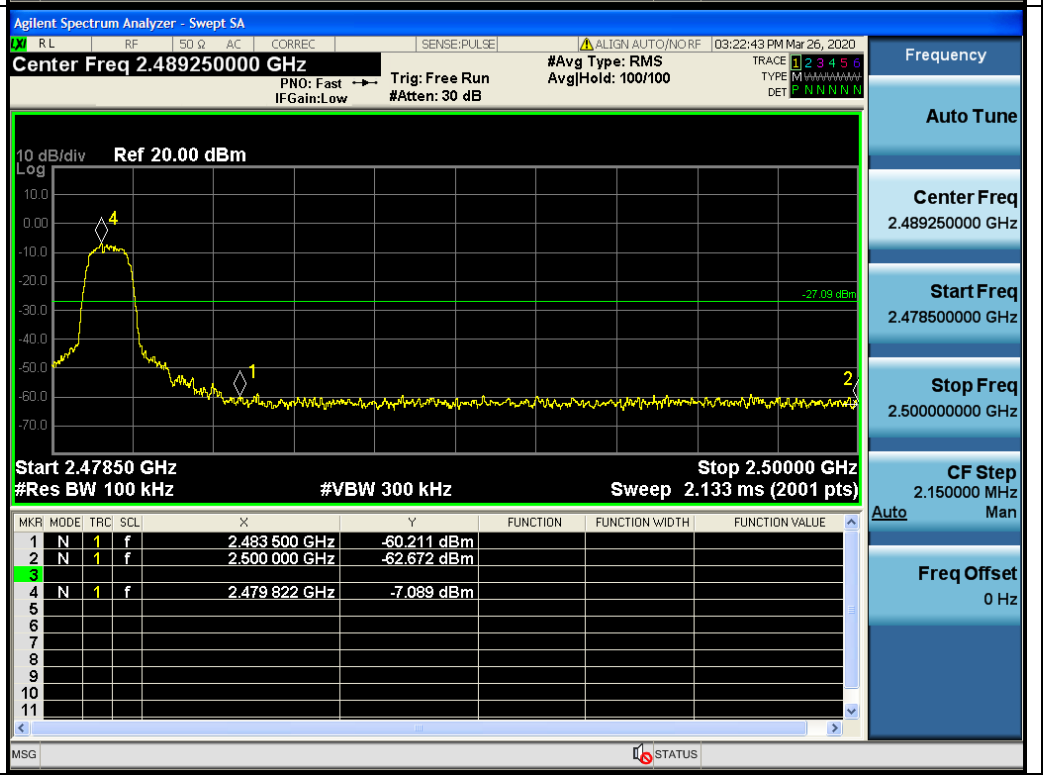
8DPSK/MCH	
8DPSK/HCH	

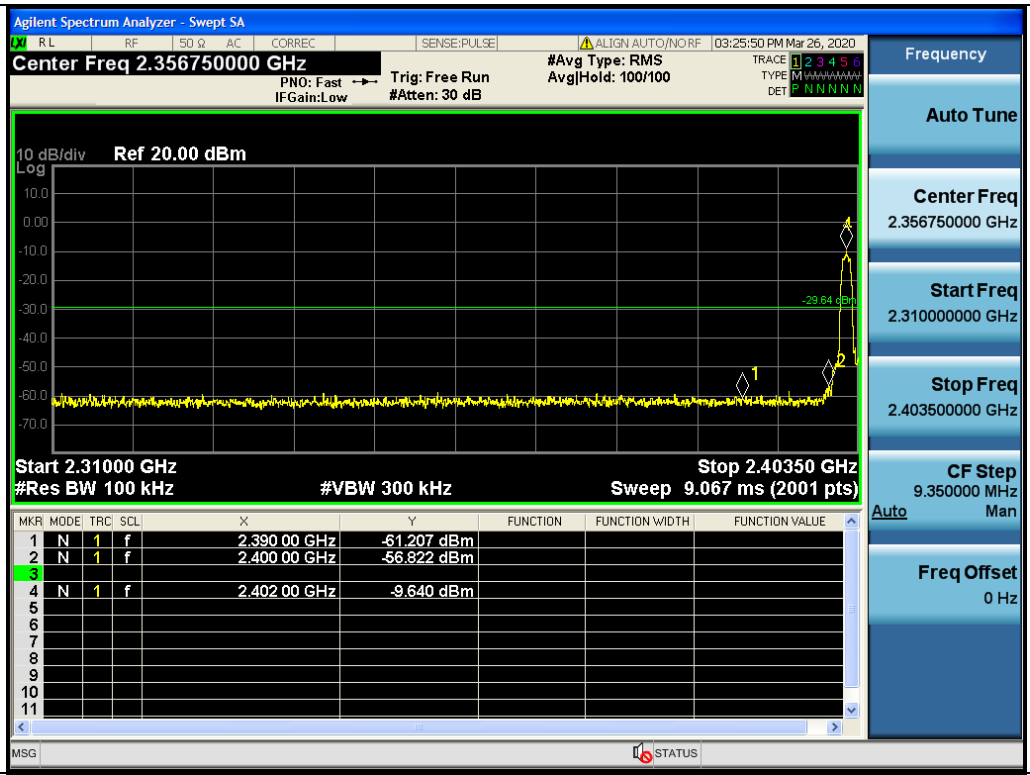
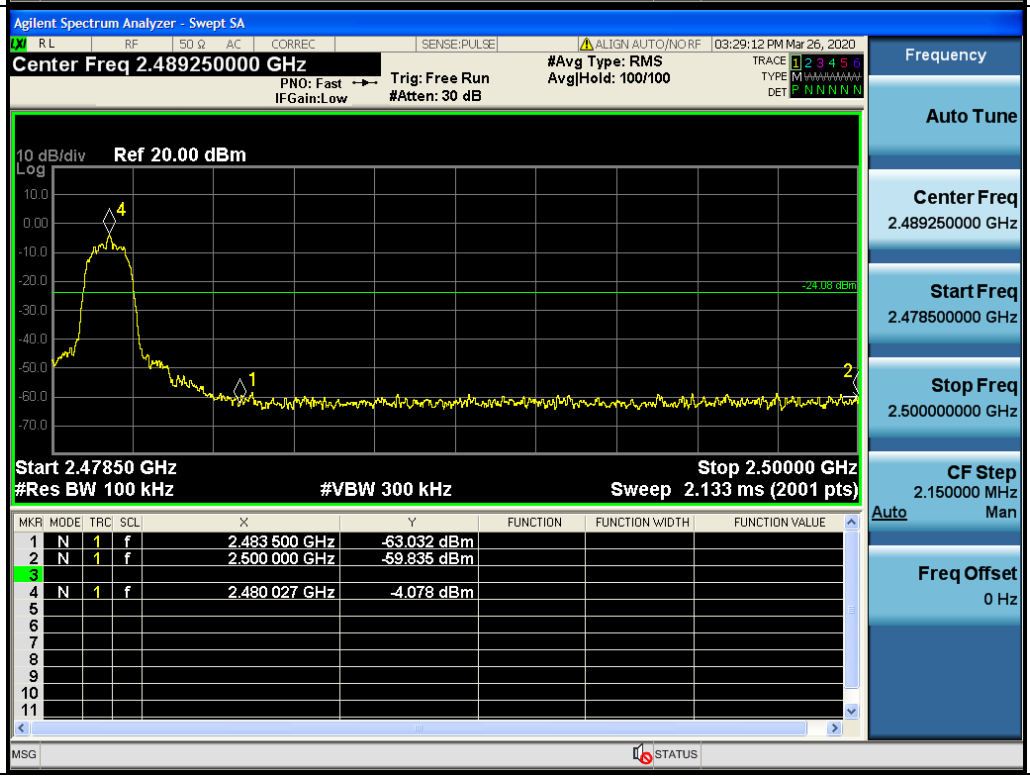
A.6 Band-edge for RF Conducted Emissions

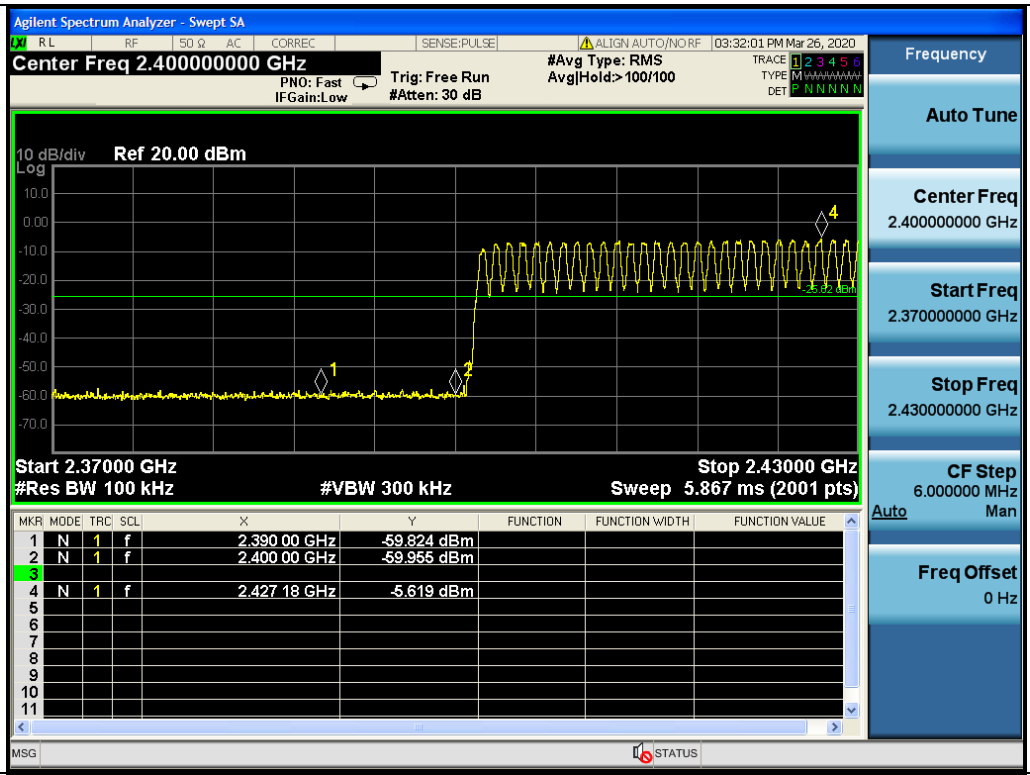
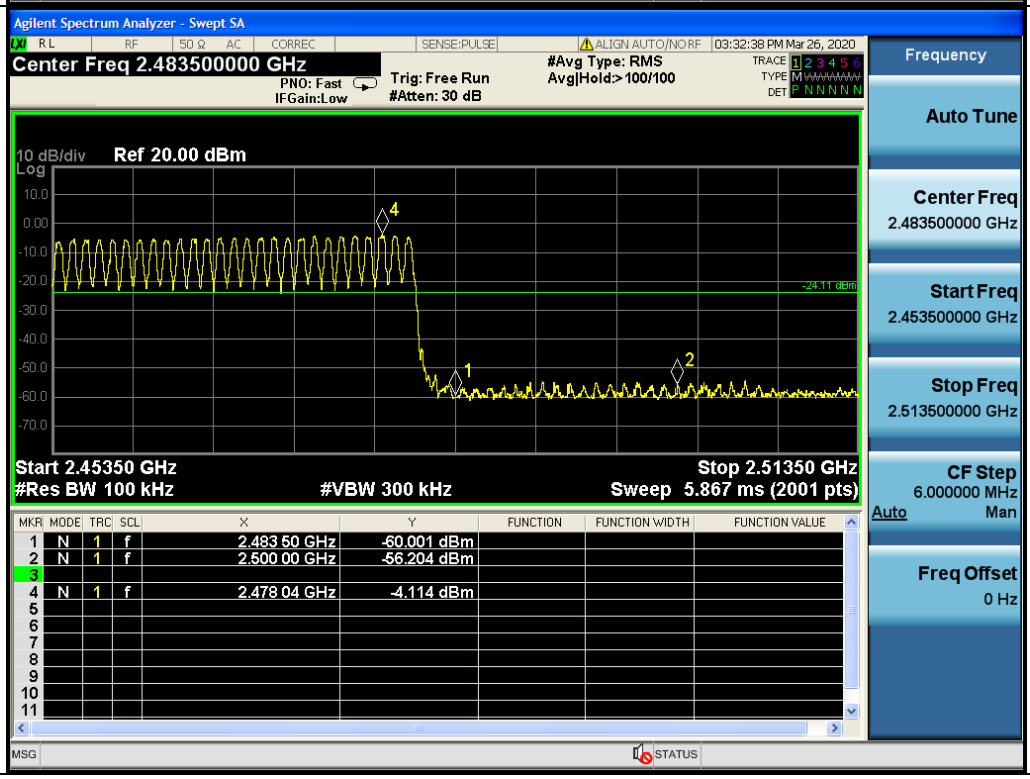
Type	Carrier Frequency(MHz)	Frequency(MHz)	Carrier Frequency Power [dBm]	Bandedge Peak(dBm)	Upper limit(dBm)	Conclusion
1DH5	2402	2400	-8.494	-59.86	-28.494	Pass
1DH5	2480	2498.151	-0.717	-58.472	-20.717	Pass
2DH5	2402	2400	-8.52	-59	-28.52	Pass
2DH5	2480	2483.5	-7.089	-60.21	-27.089	Pass
3DH5	2402	2400	-9.64	-56.82	-29.64	Pass
3DH5	2480	2500	-4.078	-59.84	-24.078	Pass
1DH5-Hopping	2402	2390	-5.619	-59.82	-25.619	Pass
1DH5-Hopping	2480	2500	-4.114	-56.2	-24.114	Pass
2DH5-Hopping	2402	2400	-5.827	-60.03	-25.827	Pass
2DH5-Hopping	2480	2500	-4.255	-57.06	-24.255	Pass
3DH5-Hopping	2402	2400	-6.04	-58.42	-26.04	Pass
3DH5-Hopping	2480	2483.5	-4.344	-59.76	-24.344	Pass

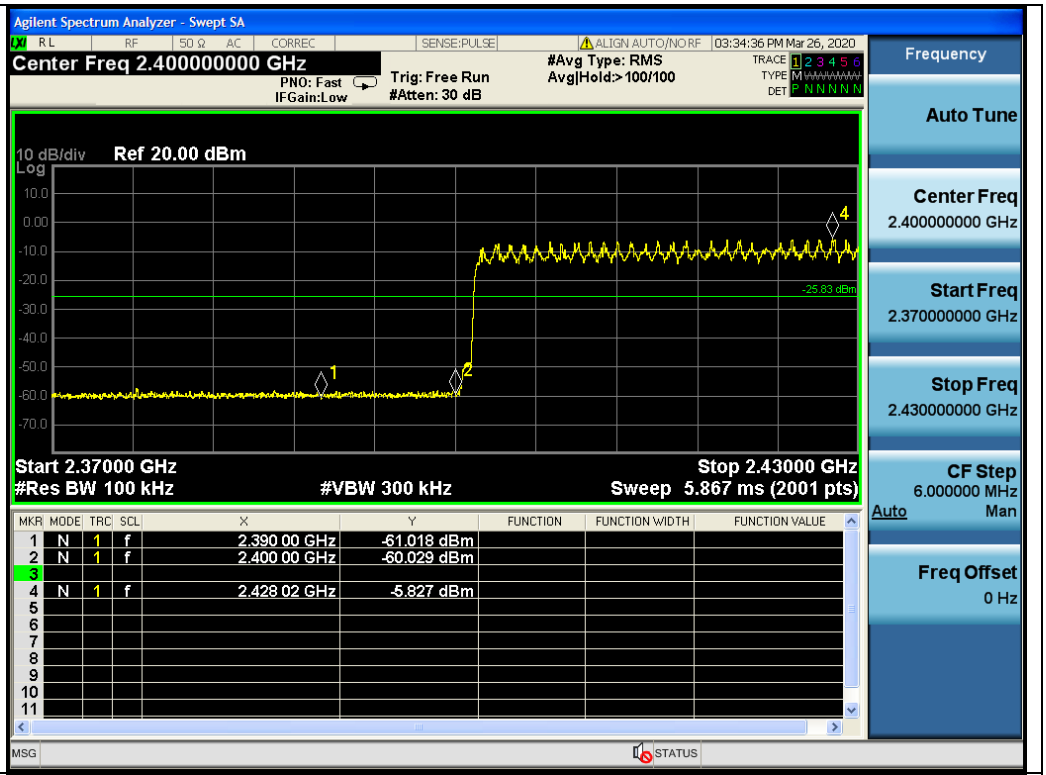
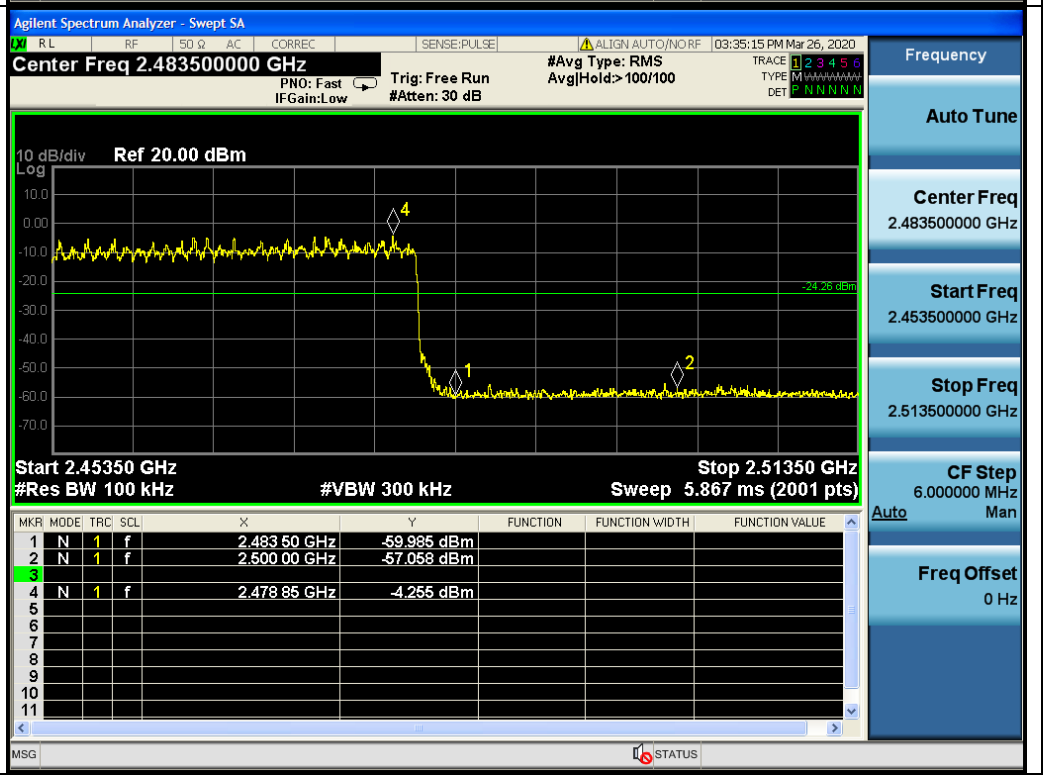
Test Graph

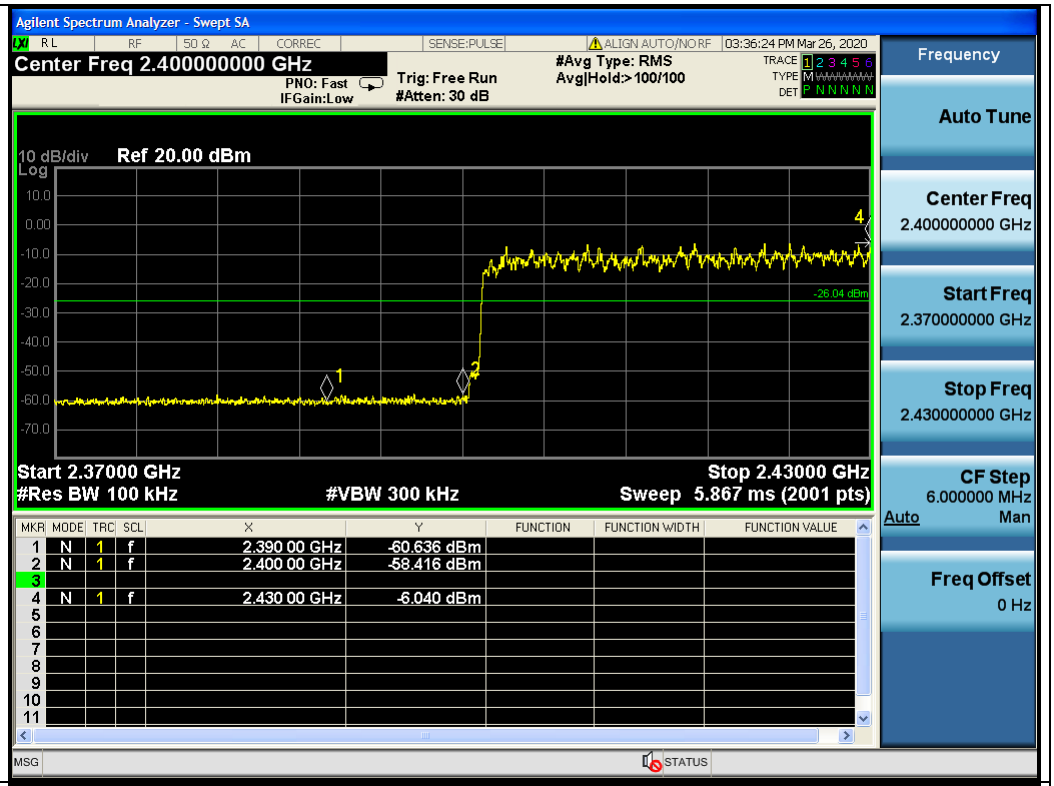
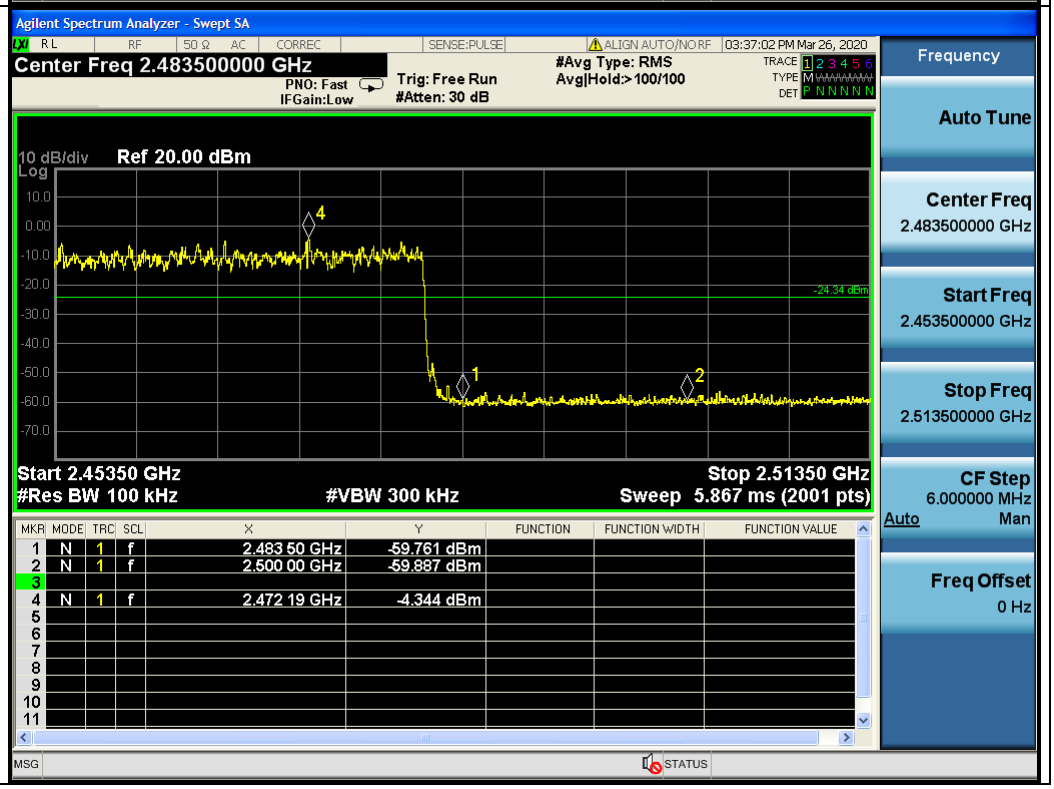
Graphs	
GFSK/LCH/No Hop	
GFSK/HCH/No Hop	

π/4DQPSK/LCH/No Hop	
π/4DQPSK/HCH/No Hop	

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

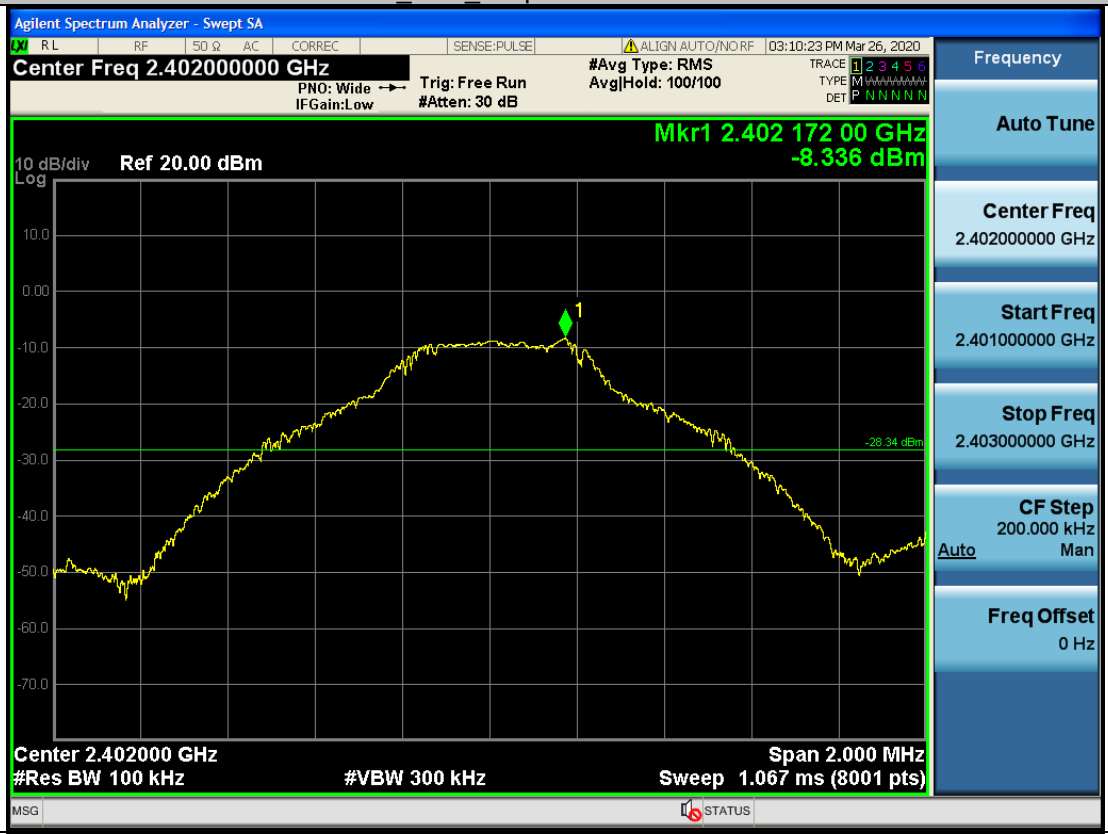
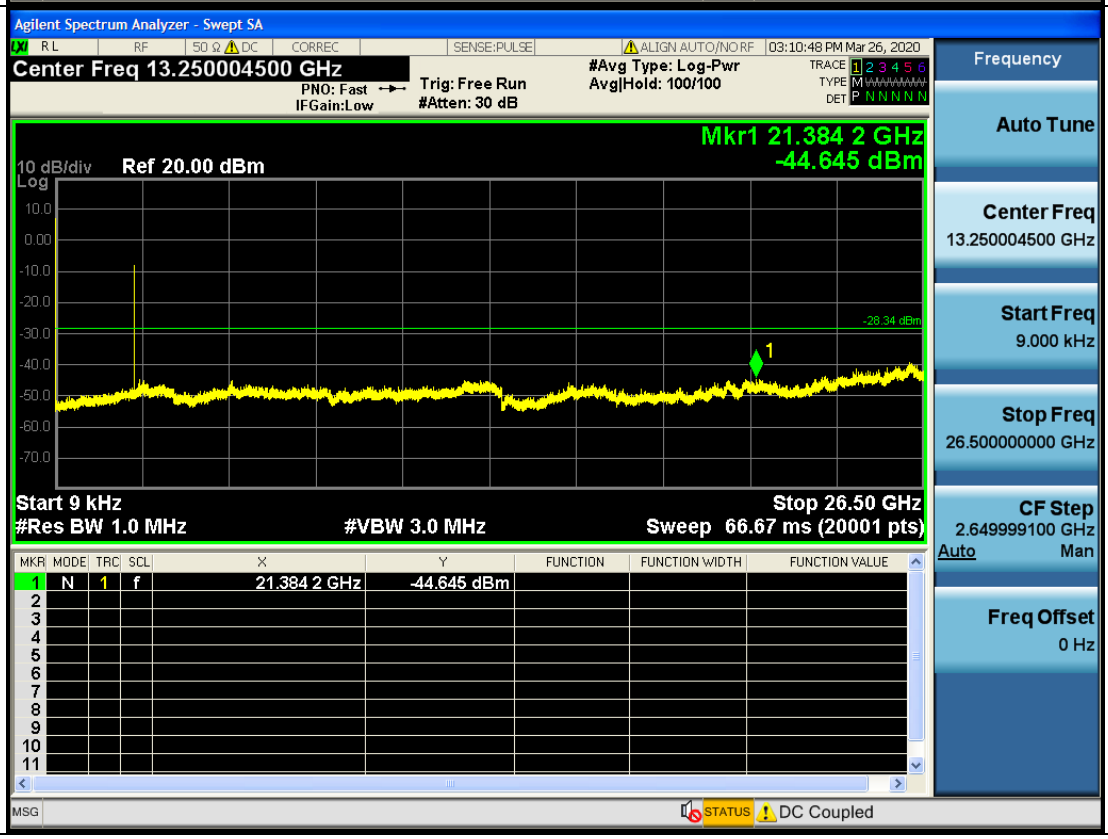
GFSK/LCH/Hop	
GFSK/HCH/Hop	

π/4DQPSK/LCH/Hop	
π /4DQPSK/HCH/Hop	

8DPSK/LCH/Hop	
8DPSK/HCH/Hop	

A.7 RF Conducted Spurious Emissions

Test Graph

GFSK_LCH_Graphs	
Pref	
Puw	

GFSK_MCH_Graphs	
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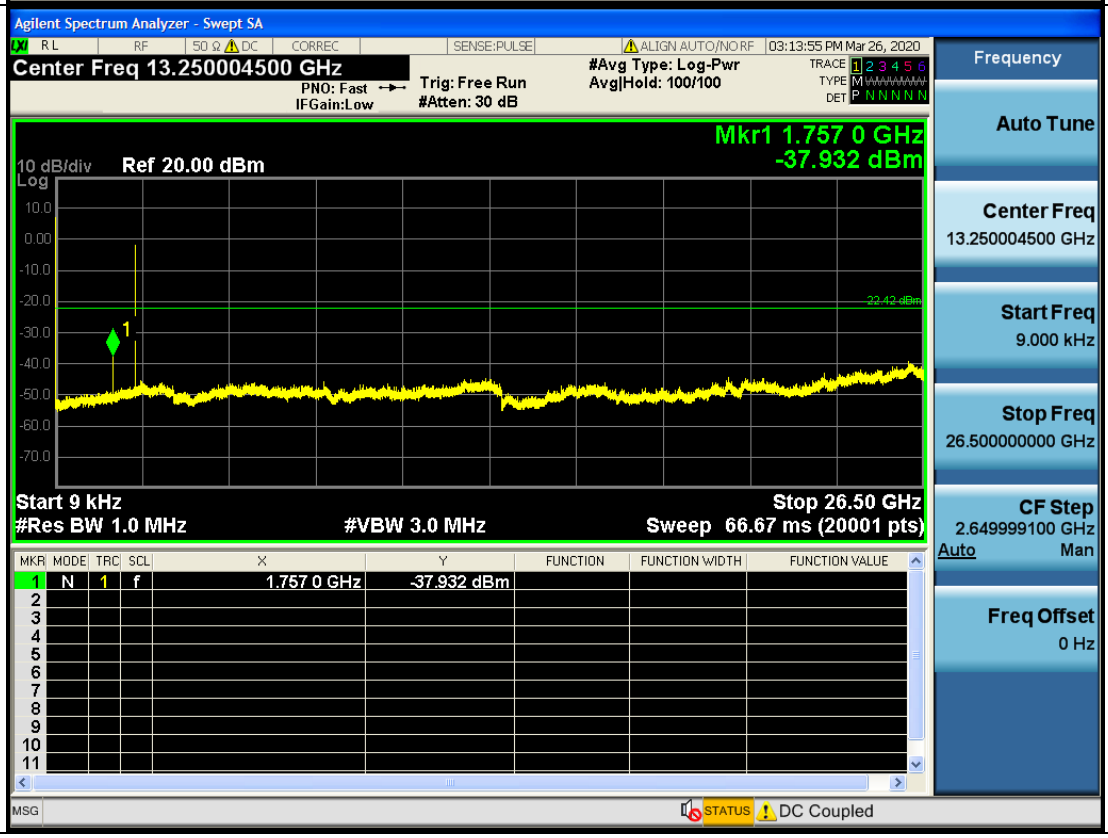
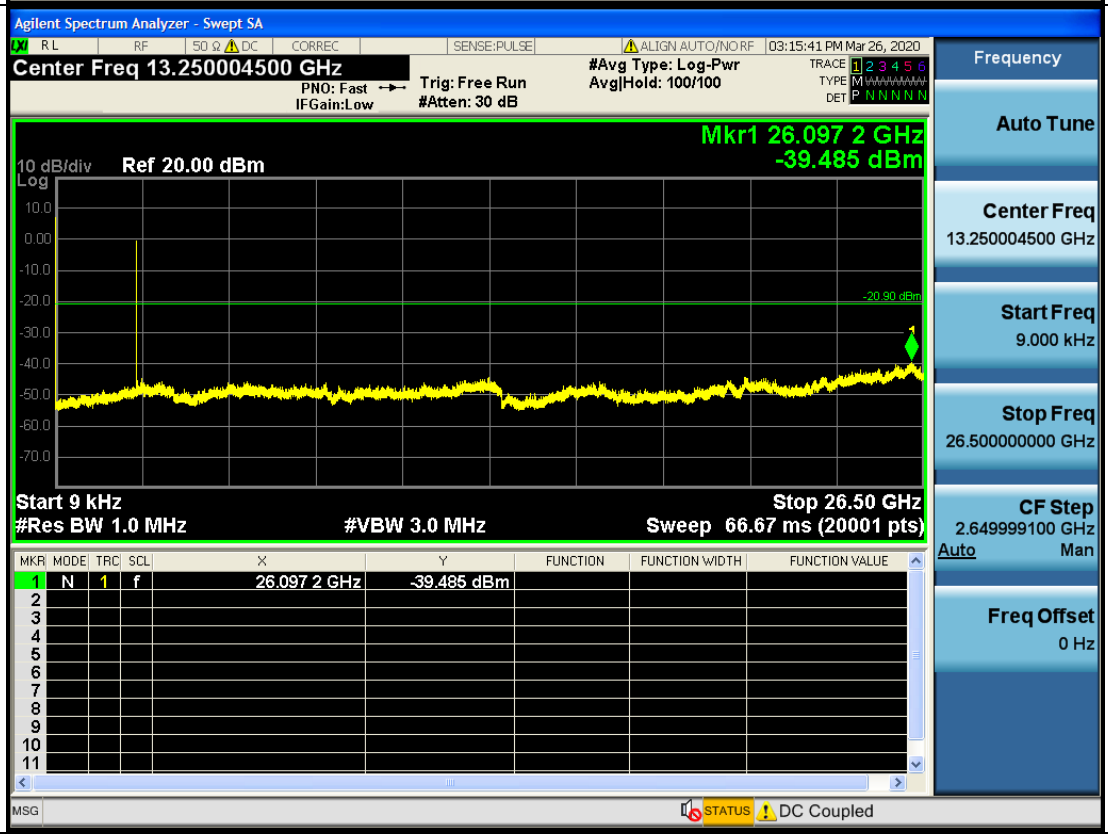
Puw	

GFSK_HCH_Graphs	
Pref	
Puw	

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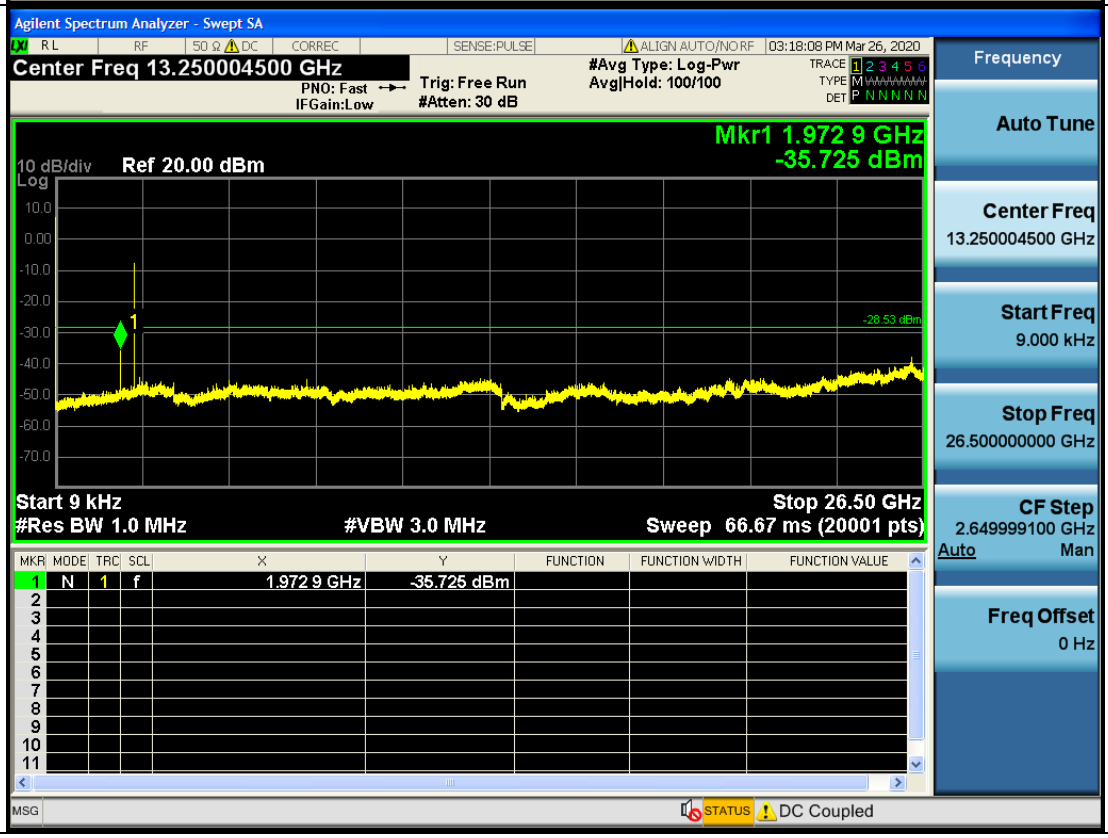
Puw	

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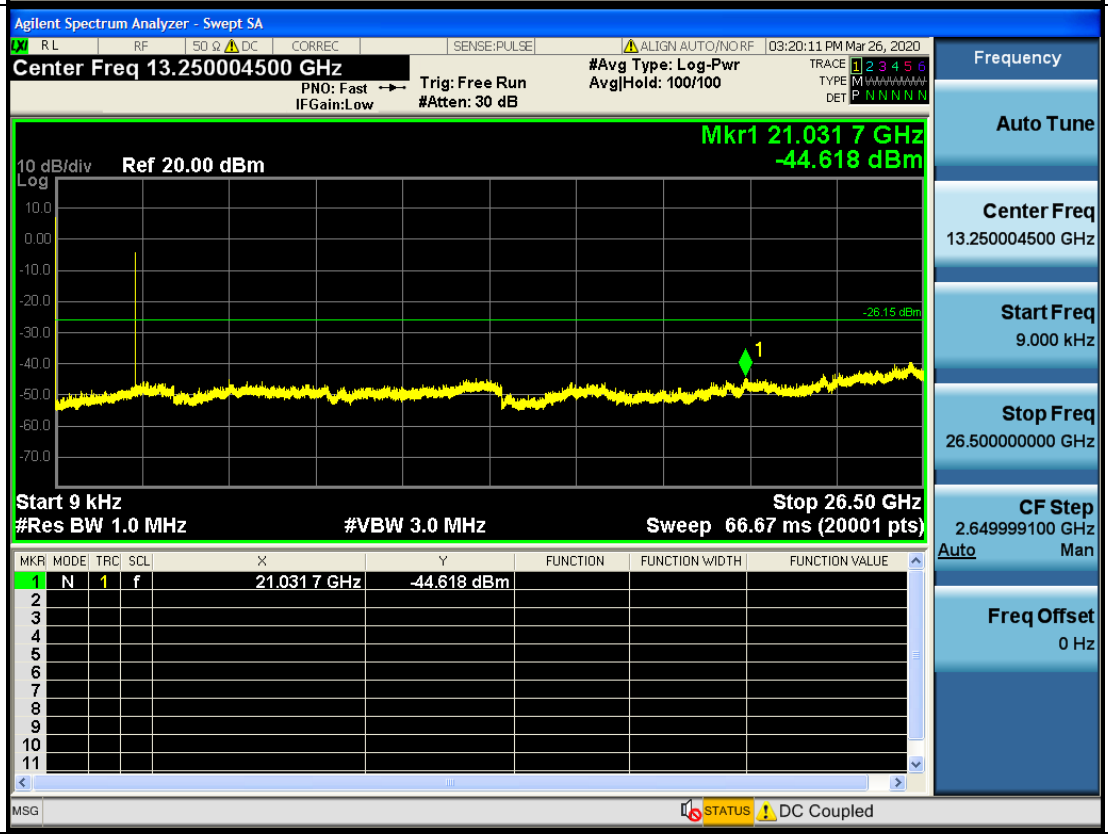
Puw	

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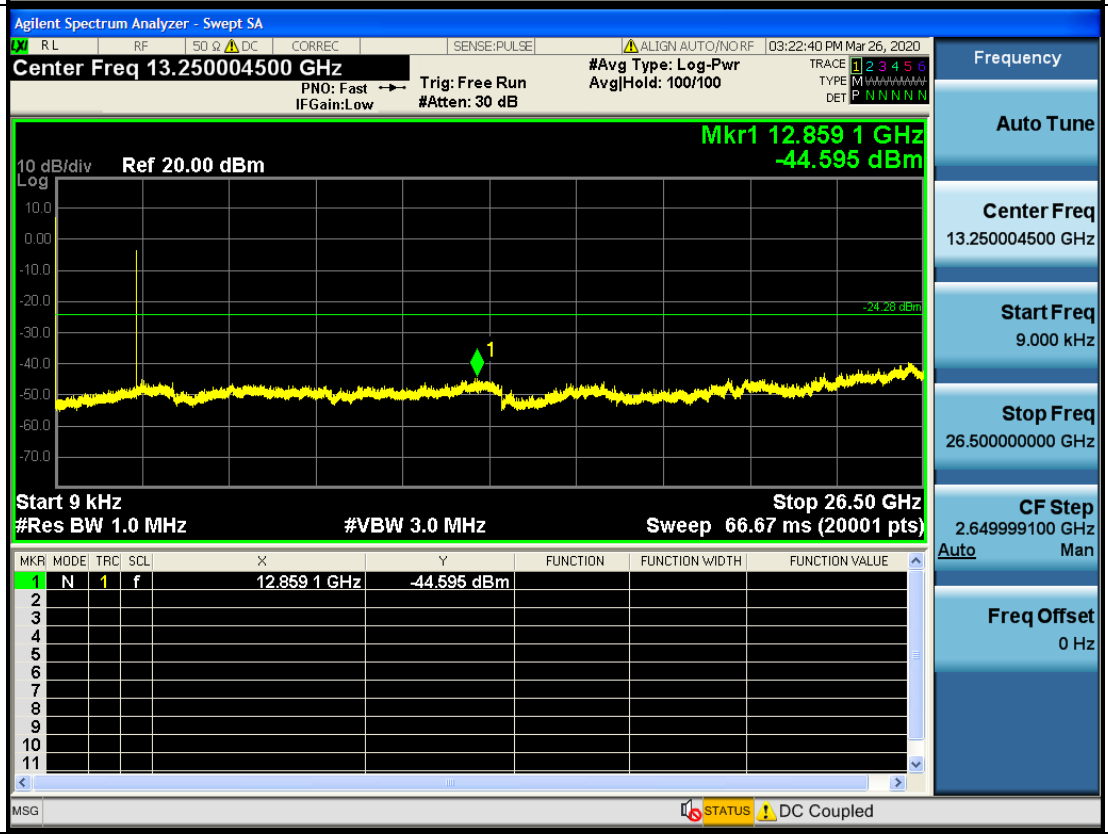
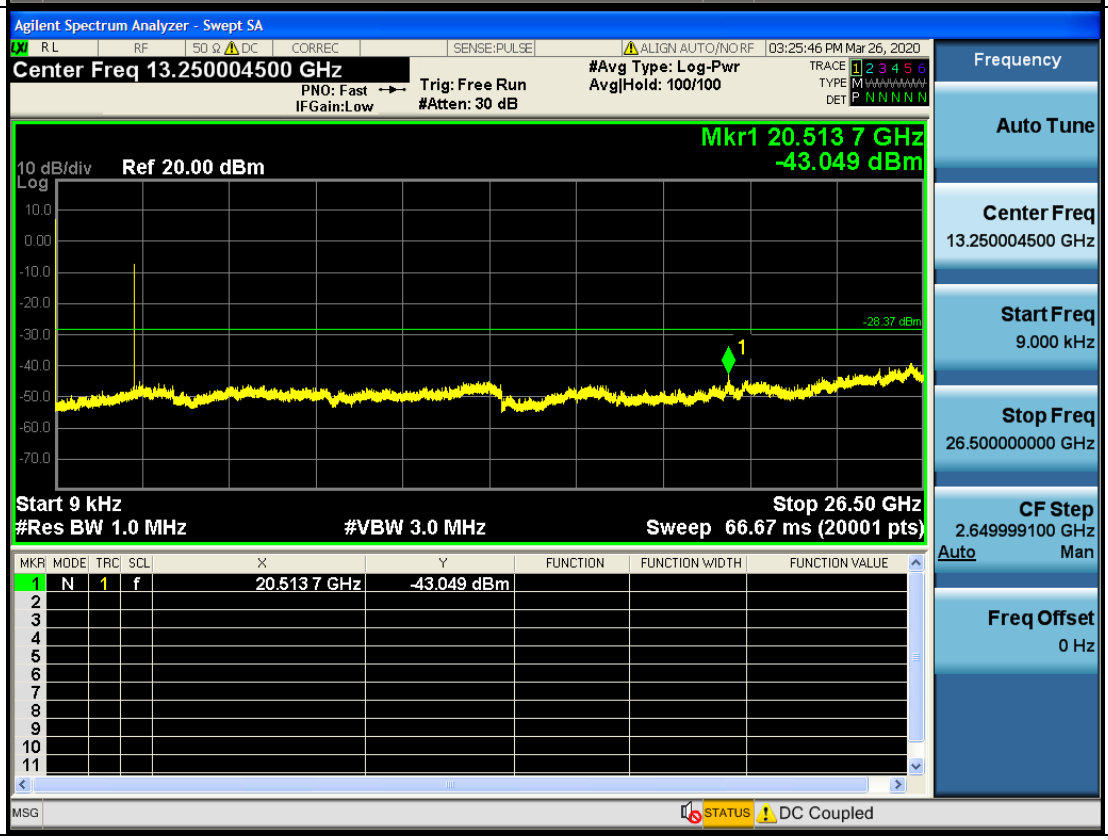
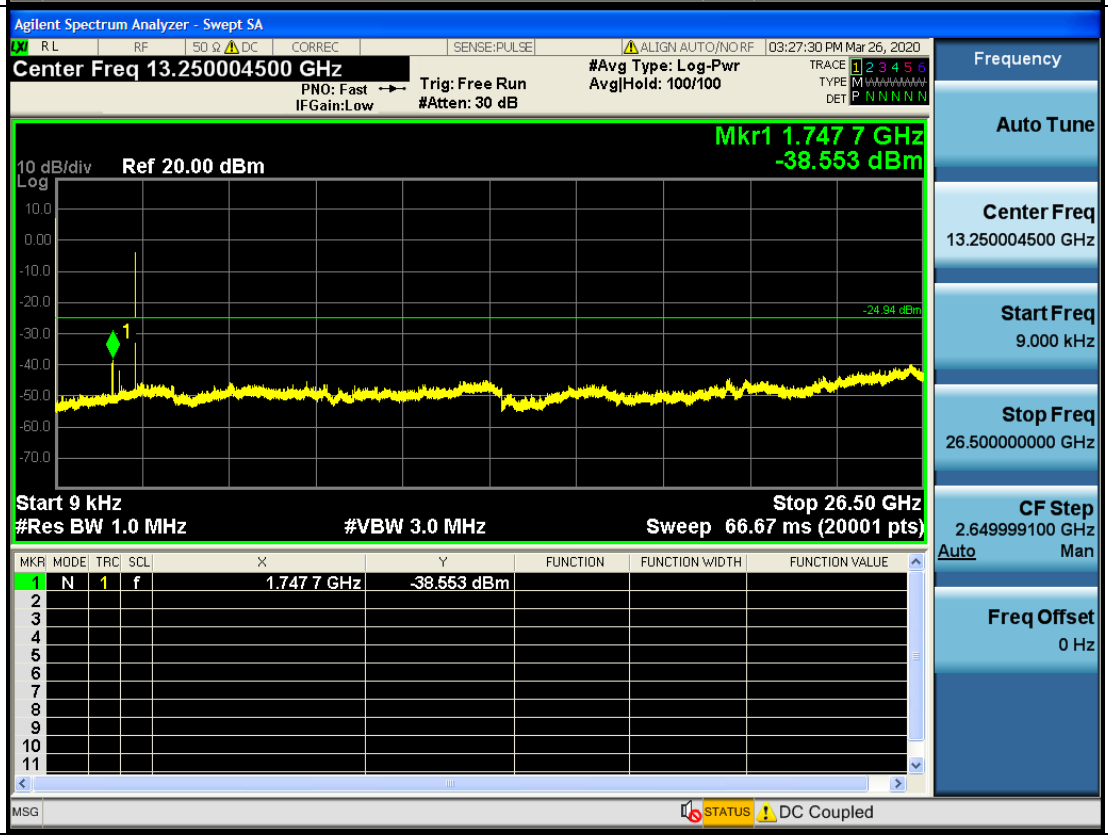
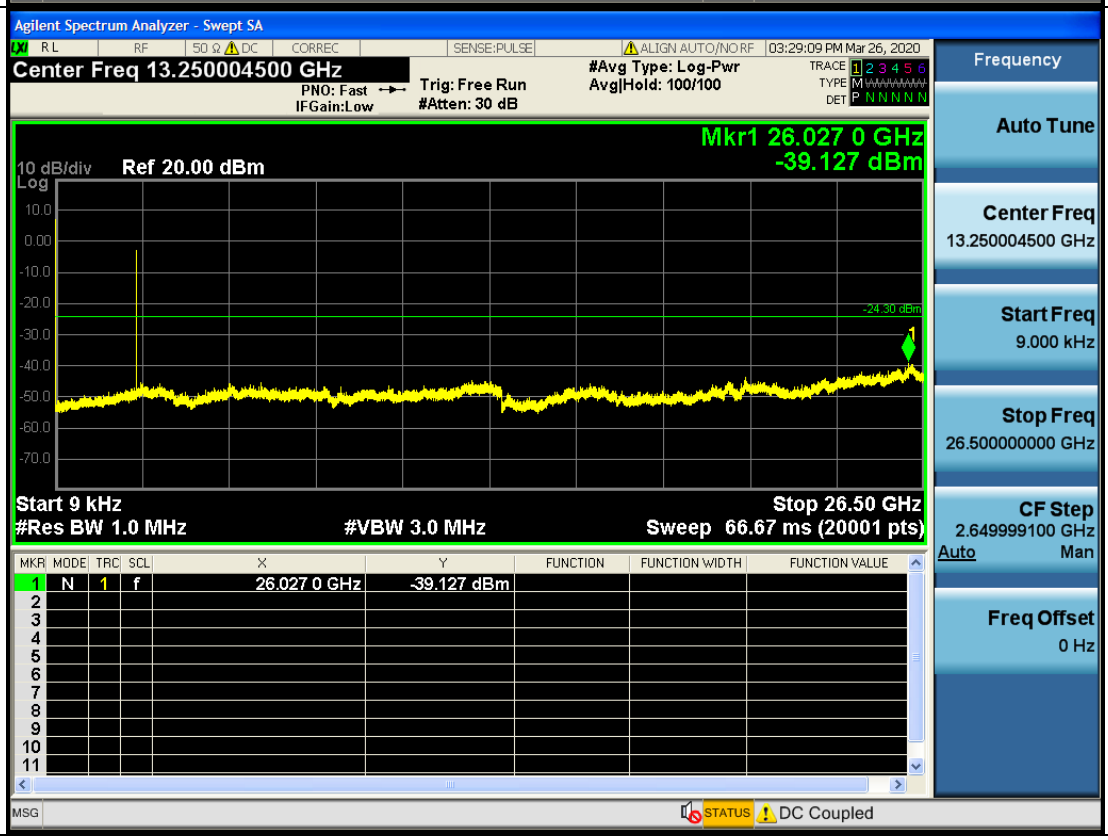
Puw	

8DPSK_LCH_Graphs	
Pref	
Puw	

8DPSK_MCH_Graphs	
Pref	
Puw	

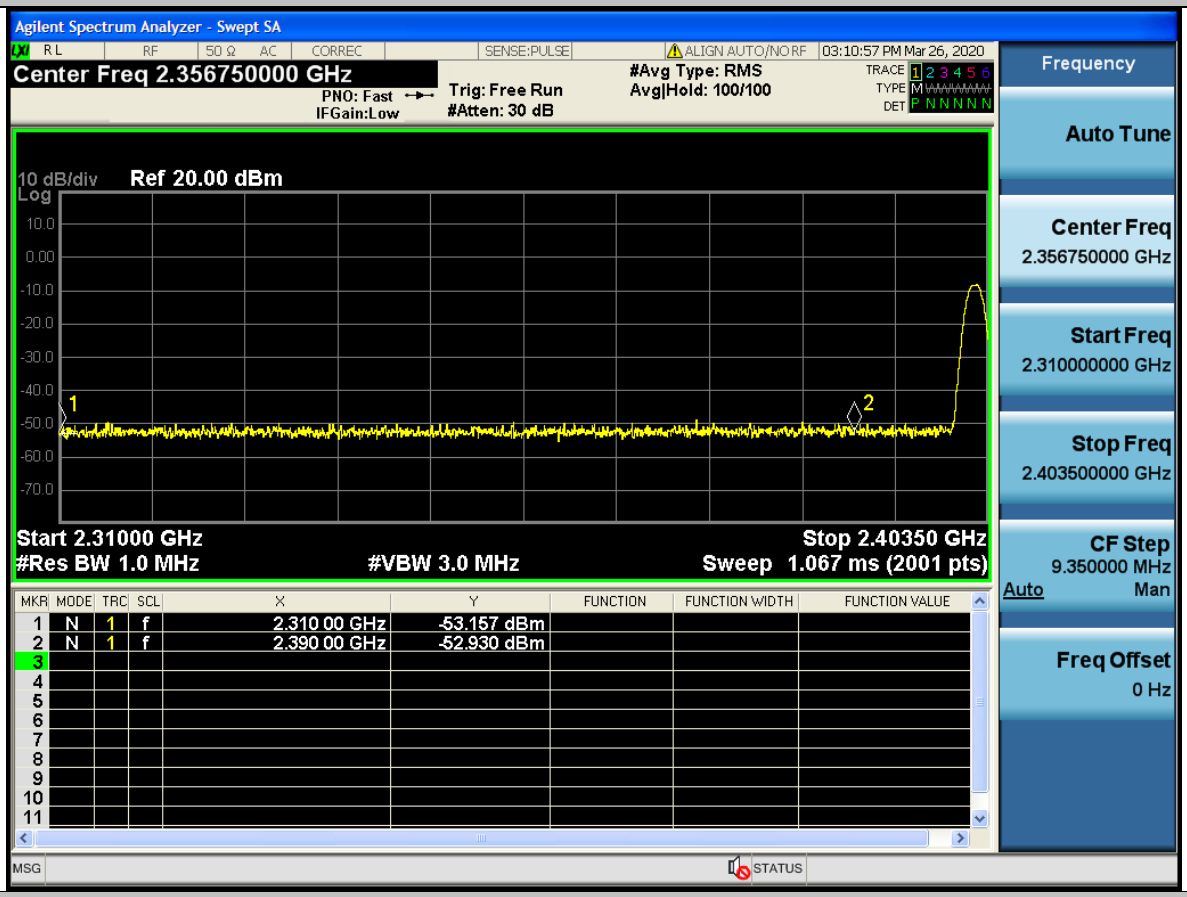
8DPSK_HCH_Graphs	
Pref	
Puw	

A.8 Restrict-band band-edge measurements

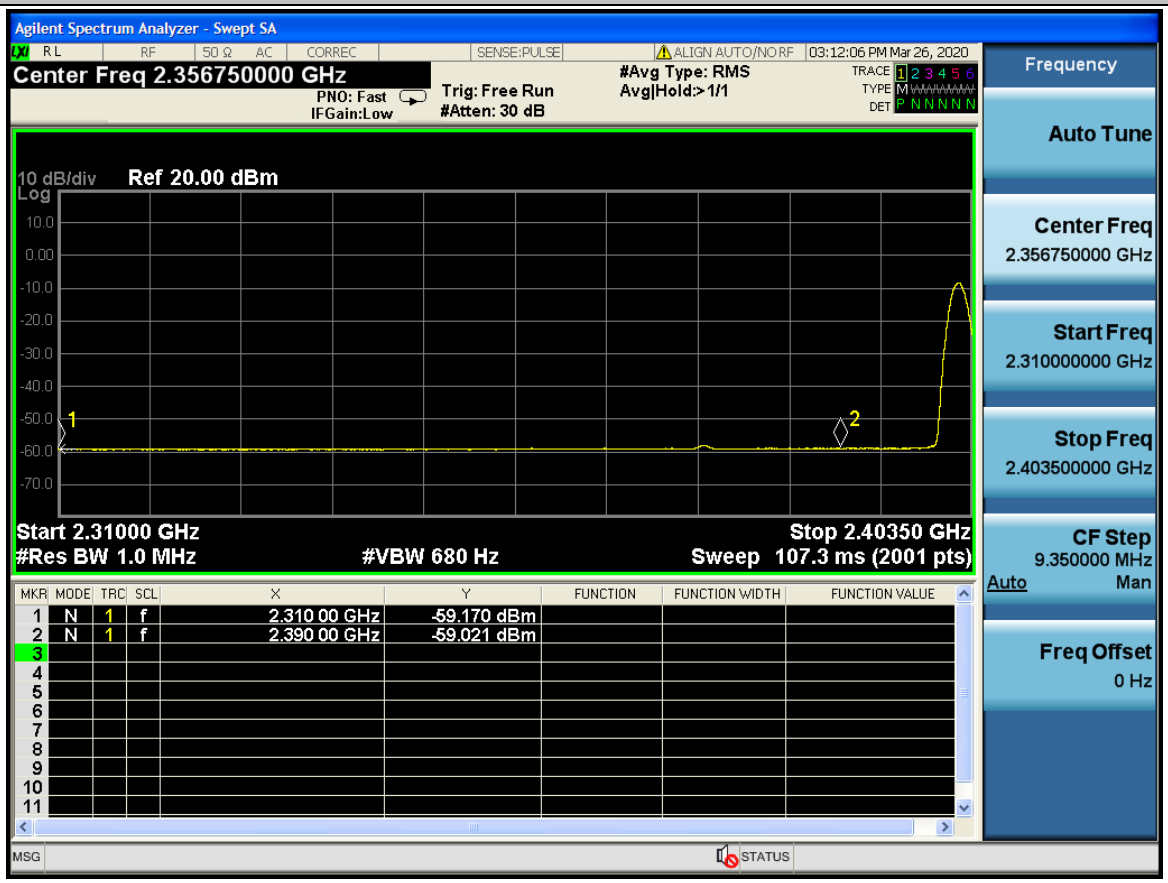
Type	Carrier Frequency (MHz)	Frequency(MHz)	Gain	Ground Factor	Peak Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
1DH5	2402	2390	2.00	0.00	-52.93	44.27	74	Pass
1DH5	2480	2483.5	2.00	0.00	-46.399	50.801	74	Pass
2DH5	2402	2310	2.00	0.00	-50.958	46.242	74	Pass
2DH5	2480	2483.5	2.00	0.00	-49.711	47.489	74	Pass
3DH5	2402	2310	2.00	0.00	-52.382	44.818	74	Pass
3DH5	2480	2483.5	2.00	0.00	-49.591	47.609	74	Pass

Type	Carrier Frequency (MHz)	Frequency(MHz)	Gain	Ground Factor	Average Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
1DH5	2402	2390	2.00	0.00	-59.021	38.179	54	Pass
1DH5	2480	2483.5	2.00	0.00	-51.492	45.708	54	Pass
2DH5	2402	2310	2.00	0.00	-59.13	38.07	54	Pass
2DH5	2480	2483.5	2.00	0.00	-55.634	41.566	54	Pass
3DH5	2402	2310	2.00	0.00	-59.128	38.072	54	Pass
3DH5	2480	2483.5	2.00	0.00	-55.616	41.584	54	Pass

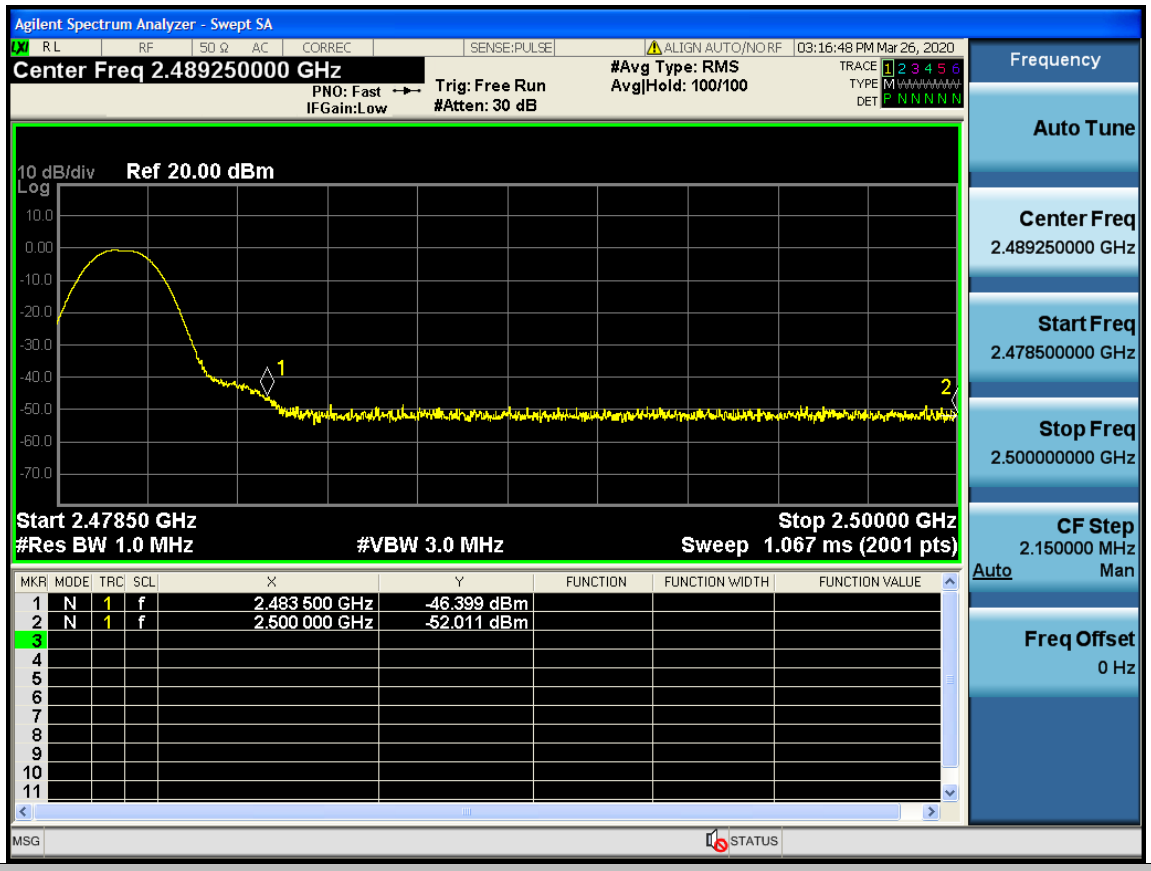
Restrict-band band-edge measurements_2402_PEAK_DH5



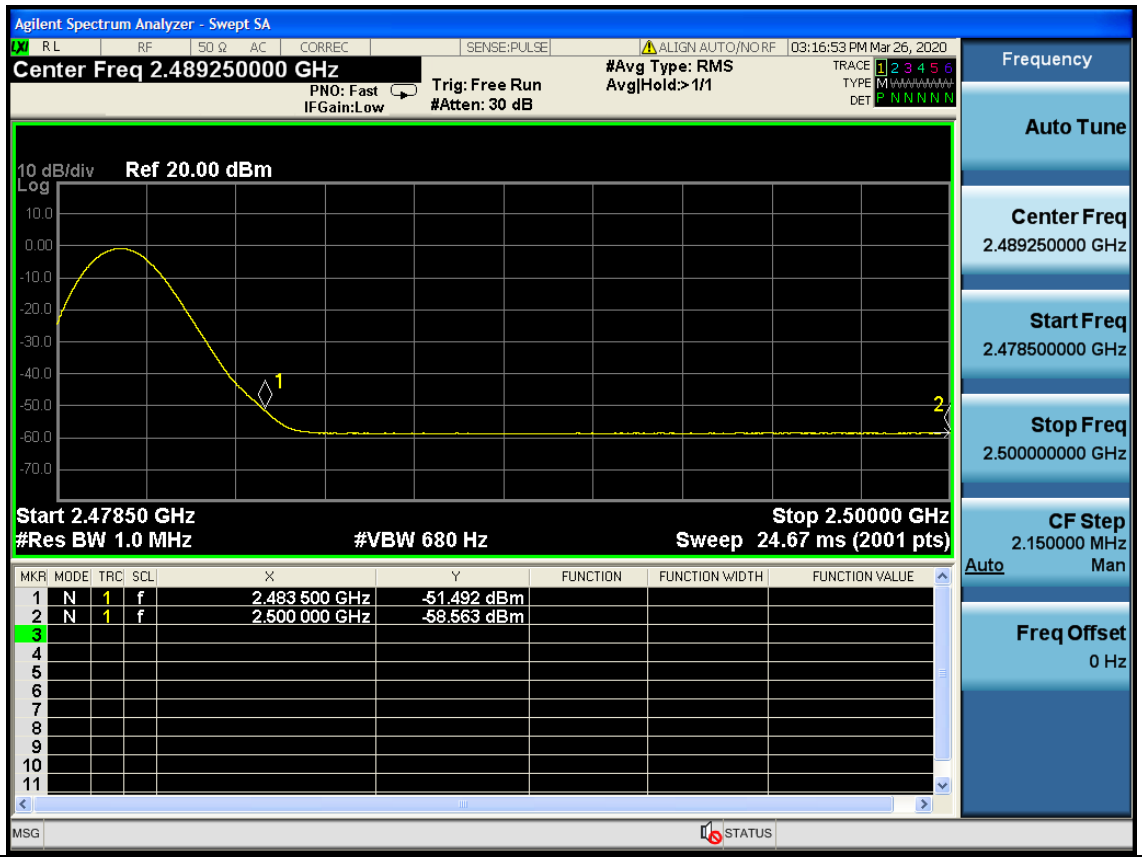
Restrict-band band-edge measurements_2402_AV_DH5



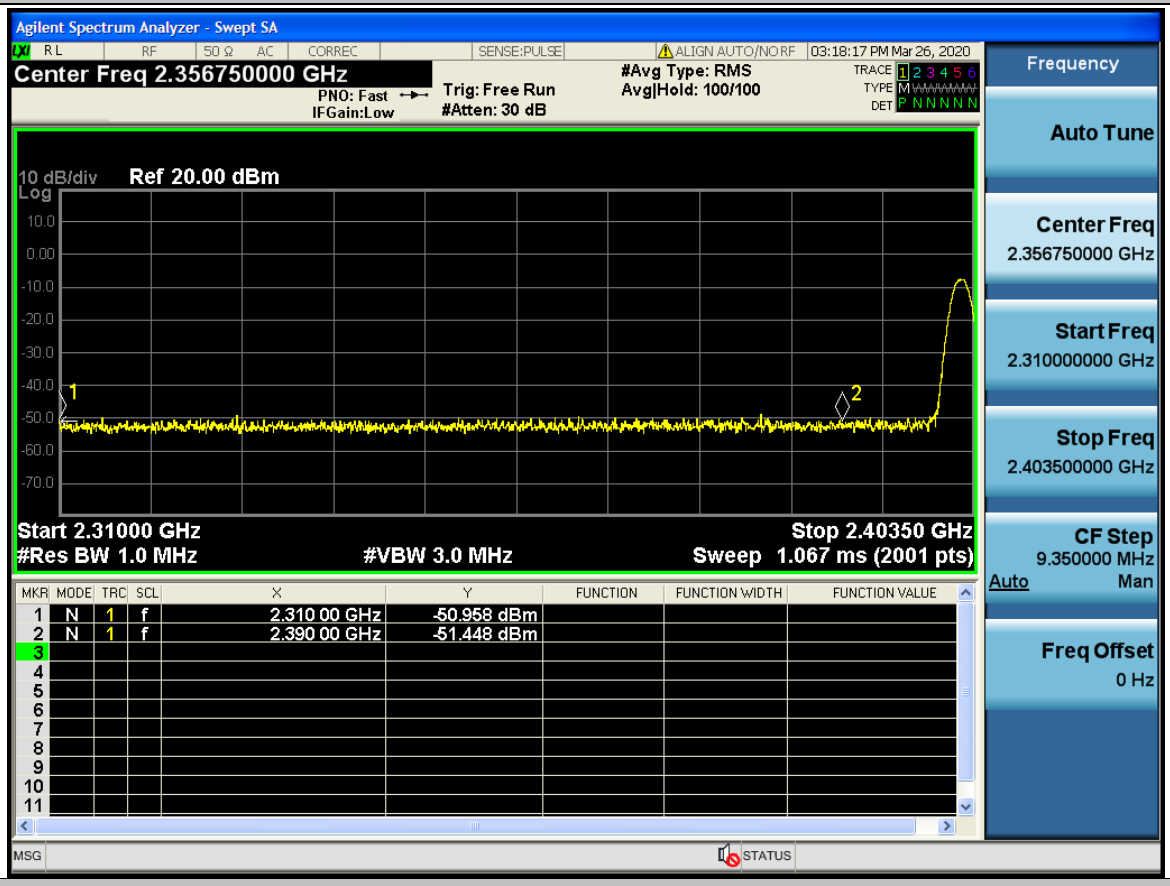
Restrict-band band-edge measurements_2480_PEAK_DH5



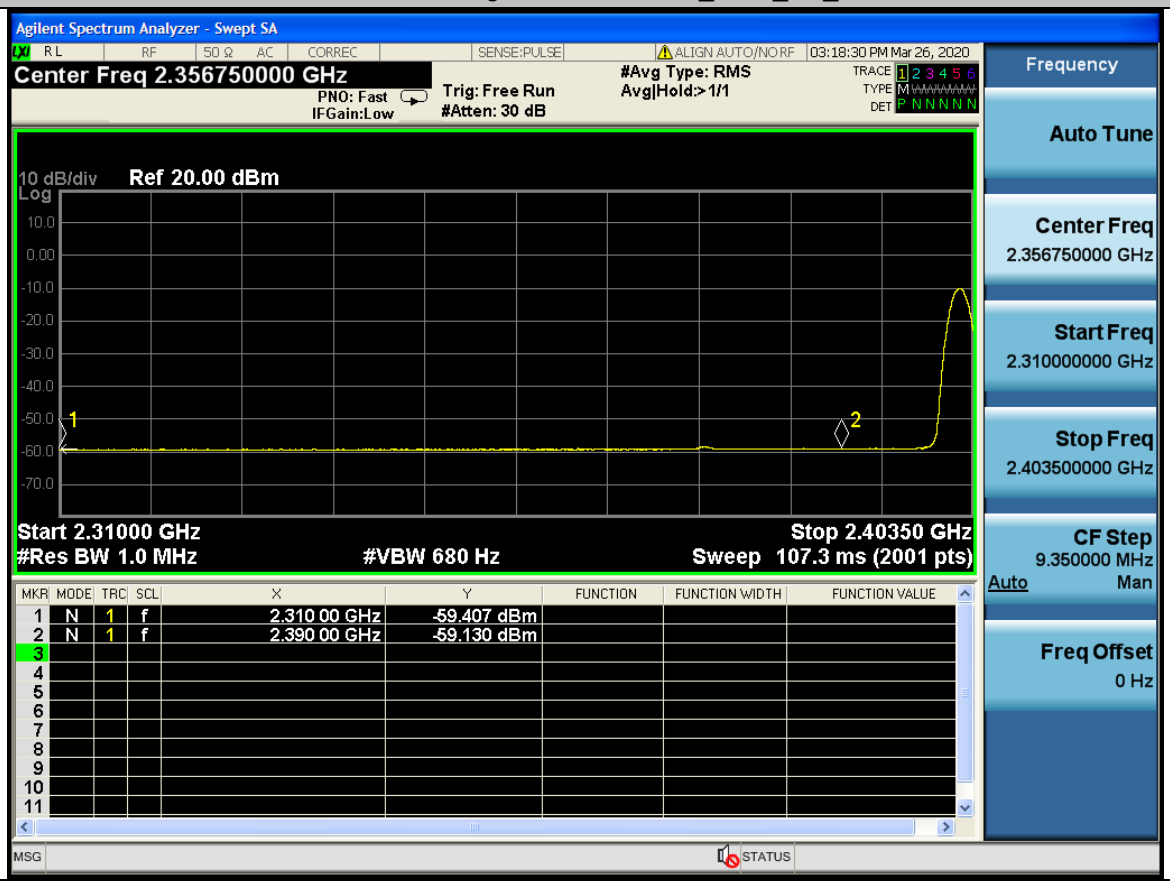
Restrict-band band-edge measurements_2480_AV_DH5



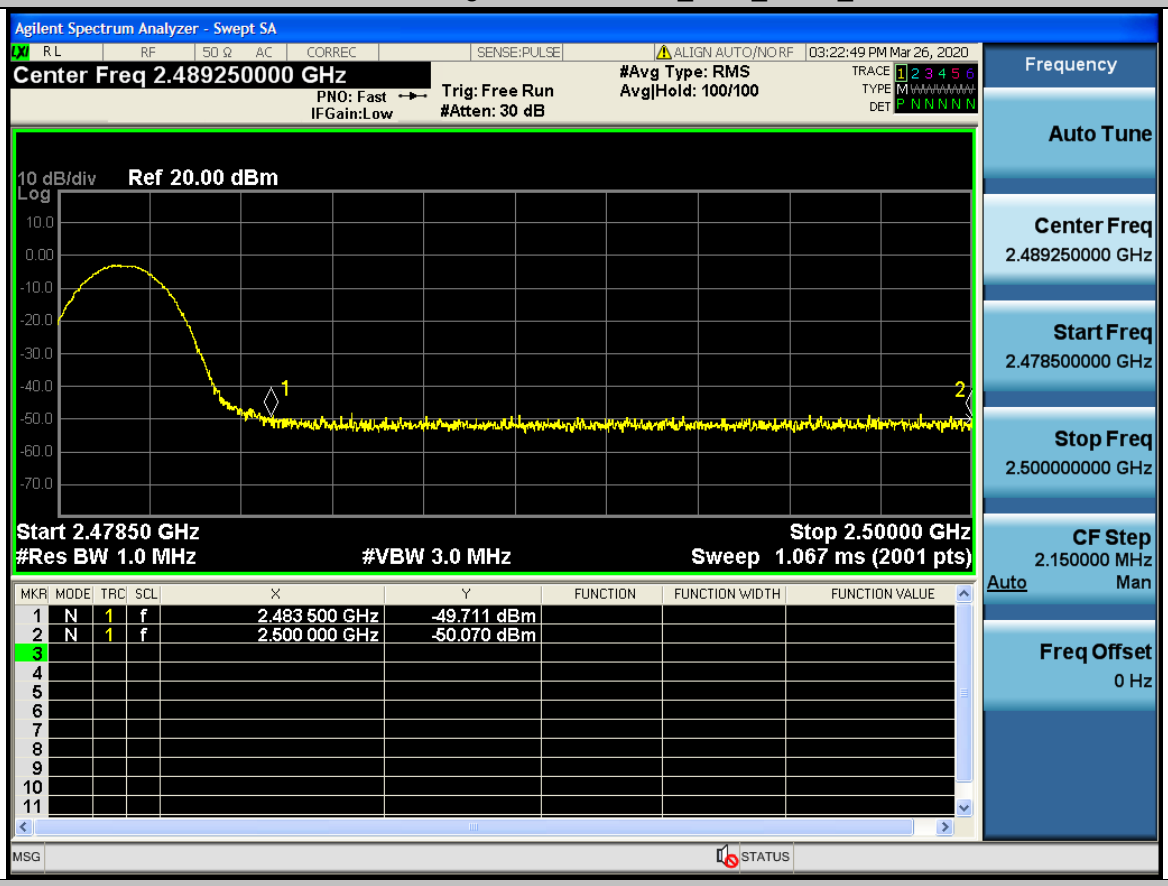
Restrict-band band-edge measurements_2402_PEAK_2DH5



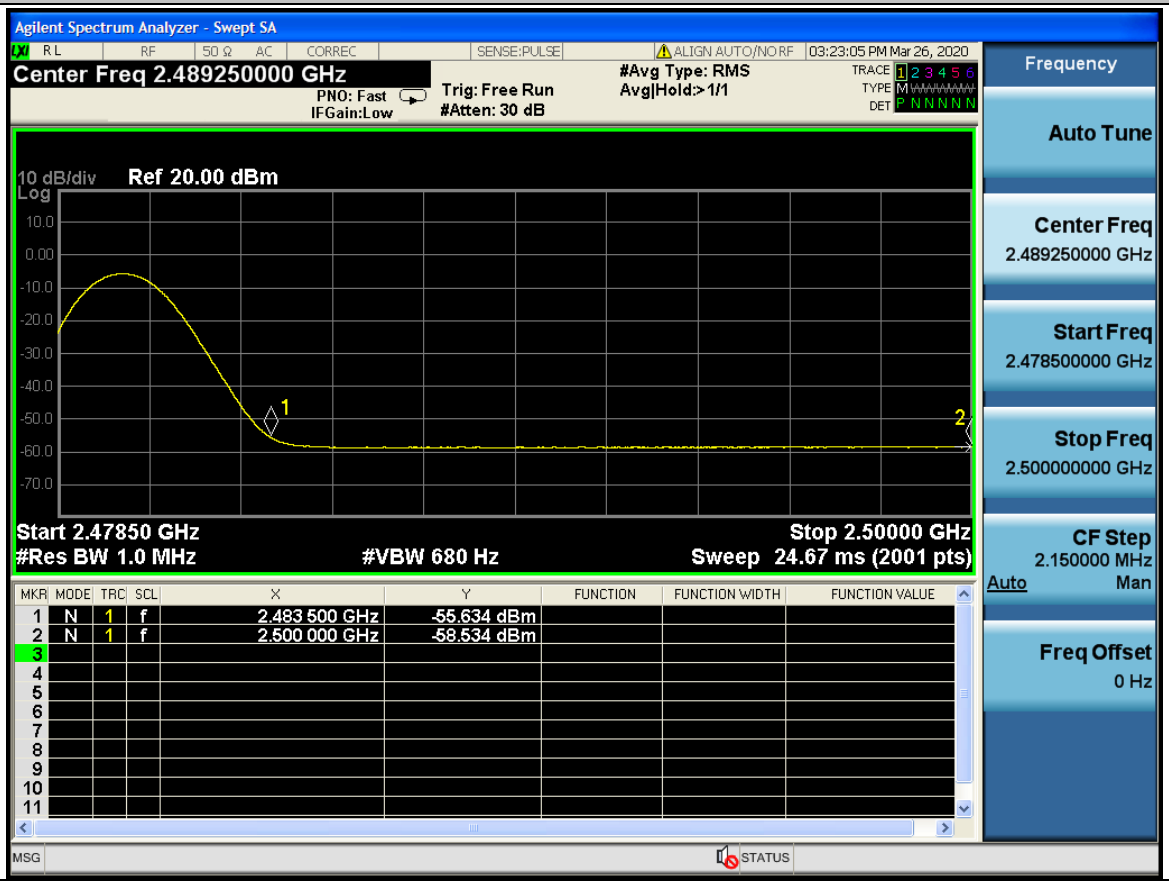
Restrict-band band-edge measurements_2402_AV_2DH5



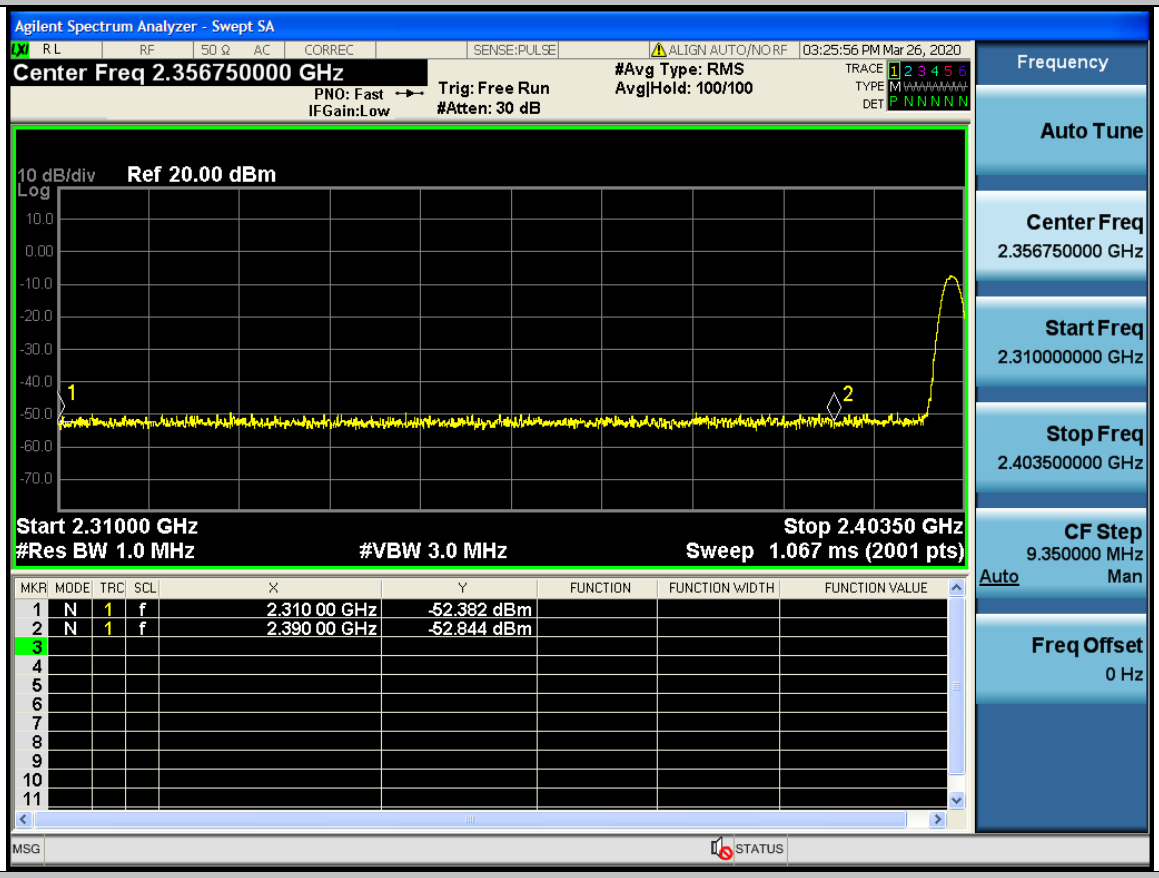
Restrict-band band-edge measurements_2480_PEAK_2DH5



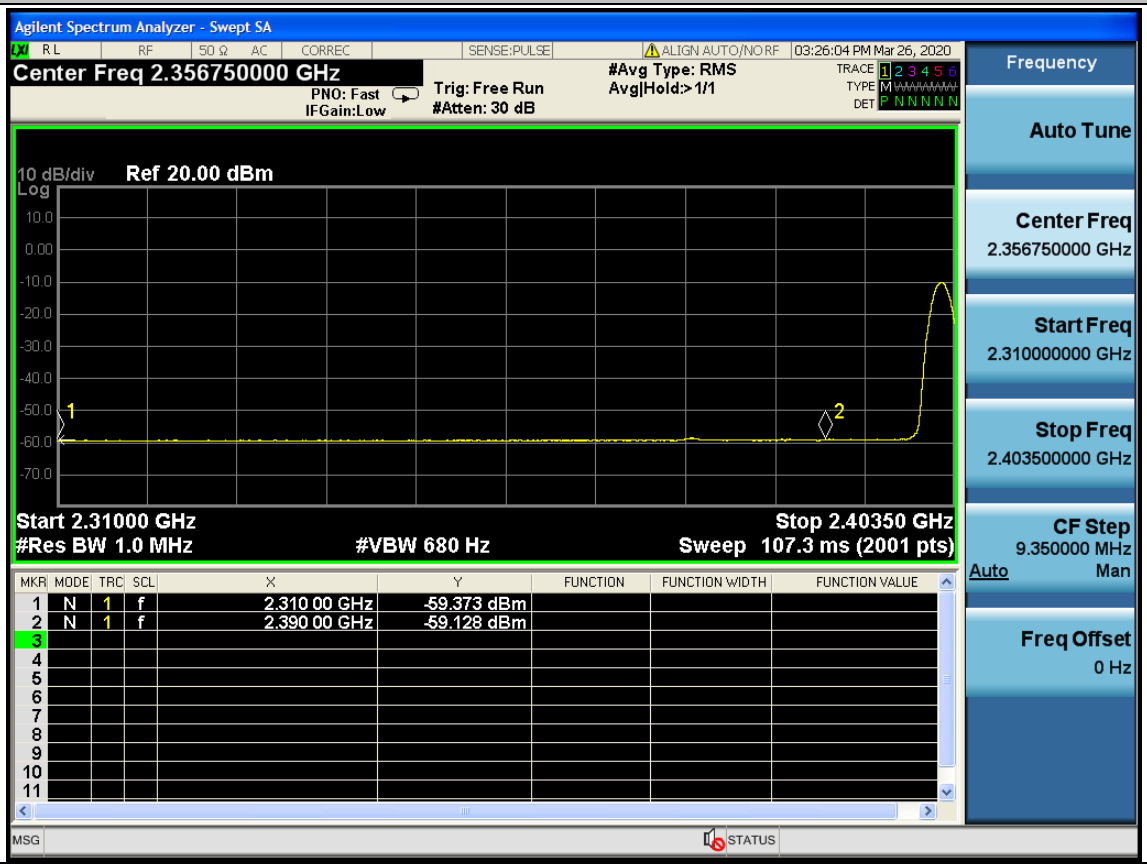
Restrict-band band-edge measurements_2480_AV_2DH5



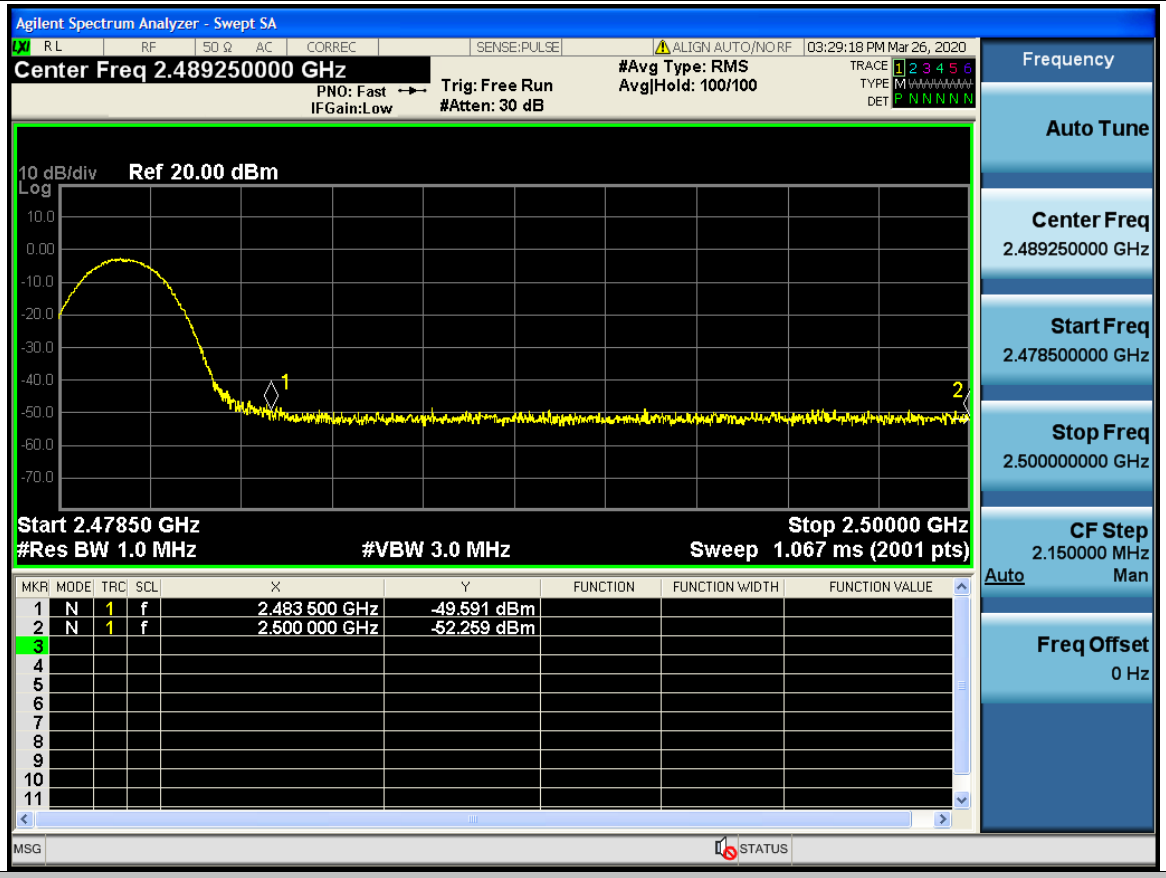
Restrict-band band-edge measurements_2402_PEAK_3DH5



Restrict-band band-edge measurements_2402_AV_3DH5



Restrict-band band-edge measurements_2480_PEAK_3DH5



Restrict-band band-edge measurements_2480_AV_3DH5