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

Product Name: Mobile Phone

Trade Mark: Krip

Test Model: K5b

FCC ID: 2APX7K5B

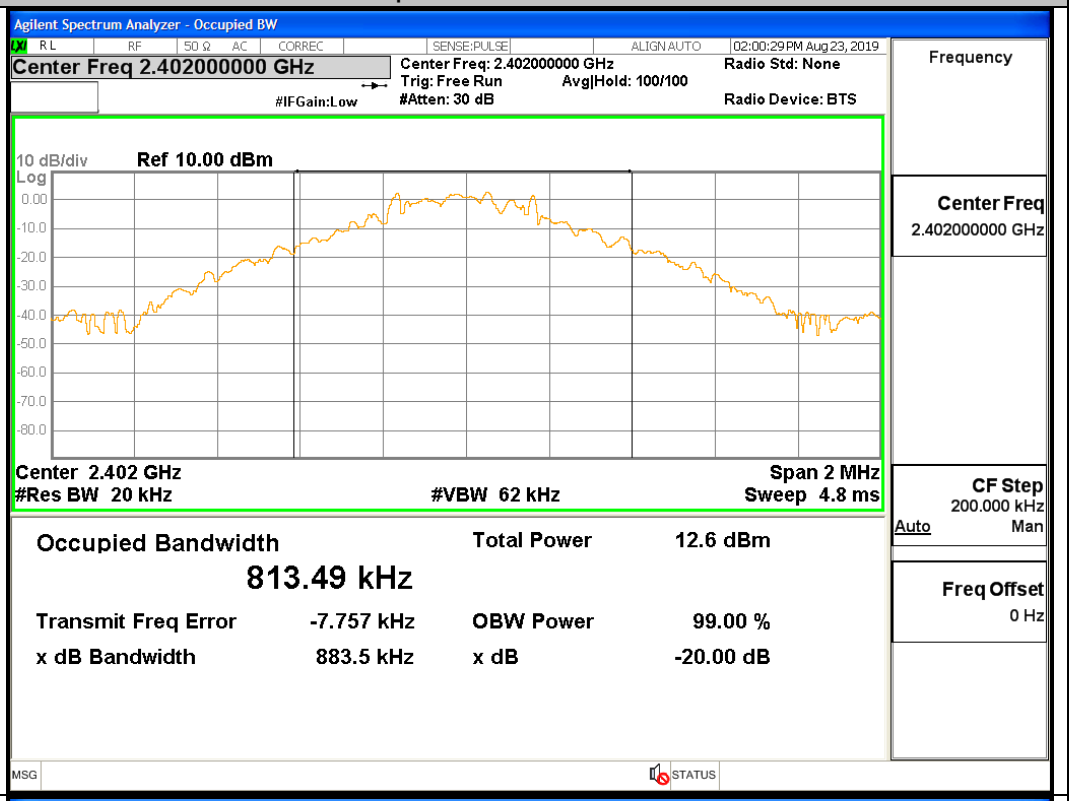
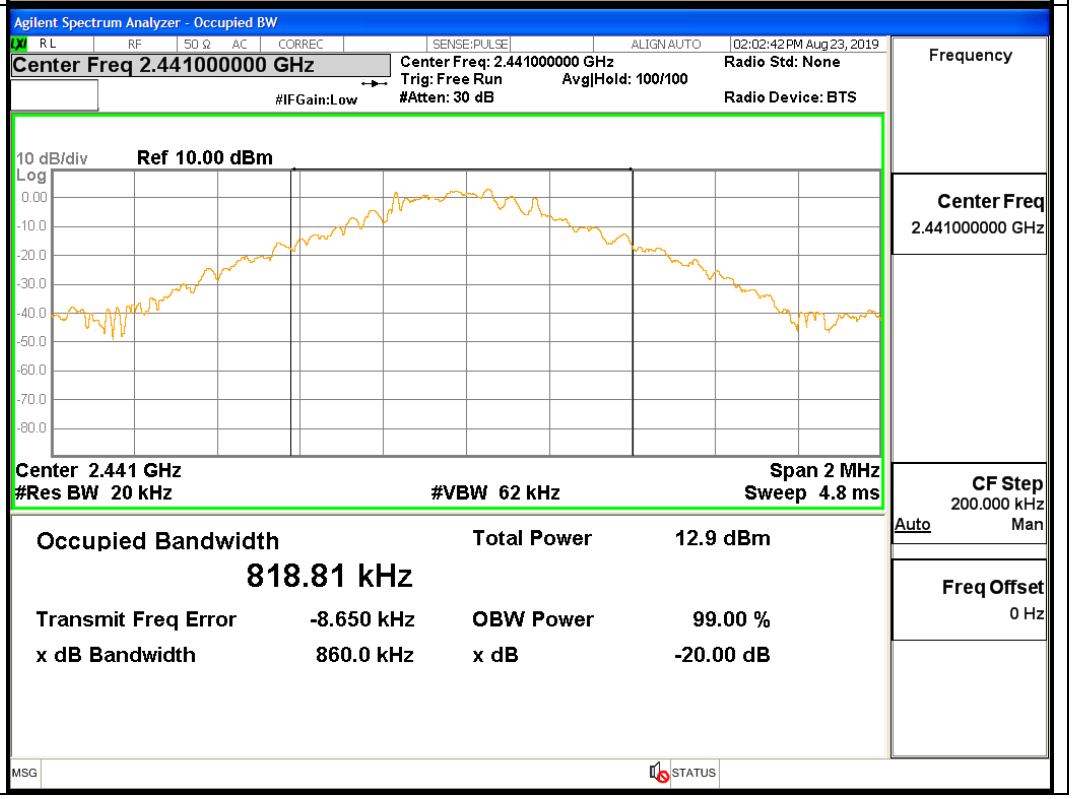
Environmental Conditions

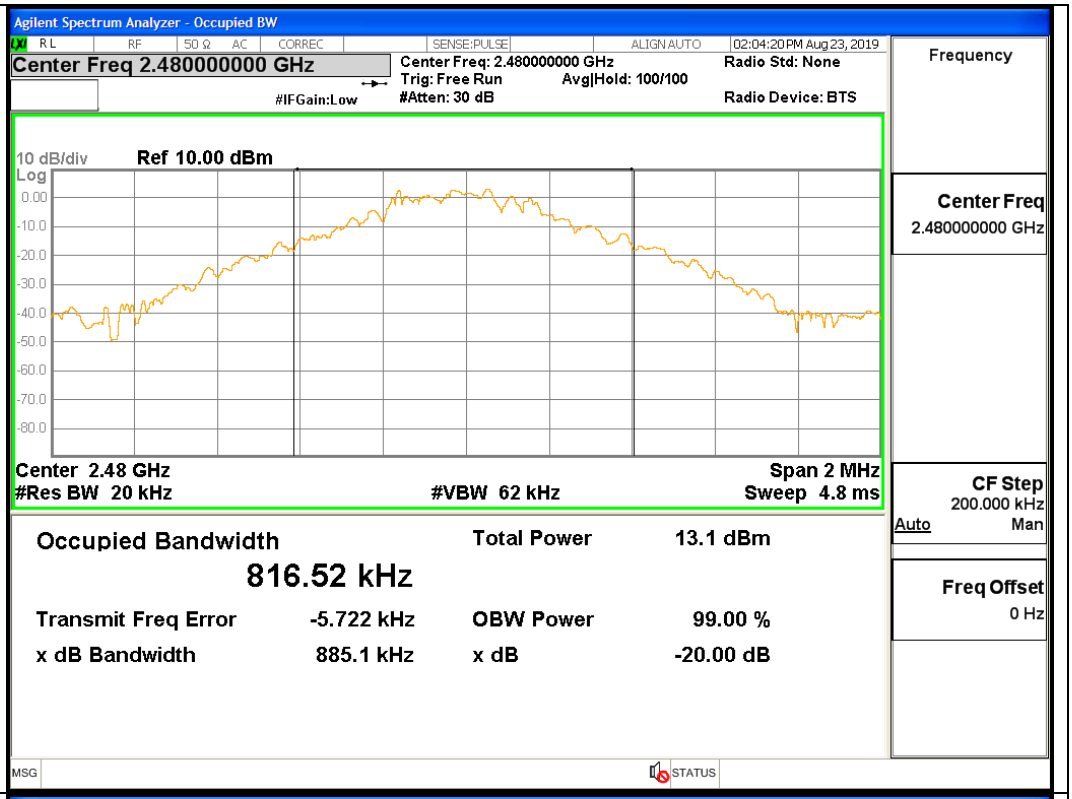
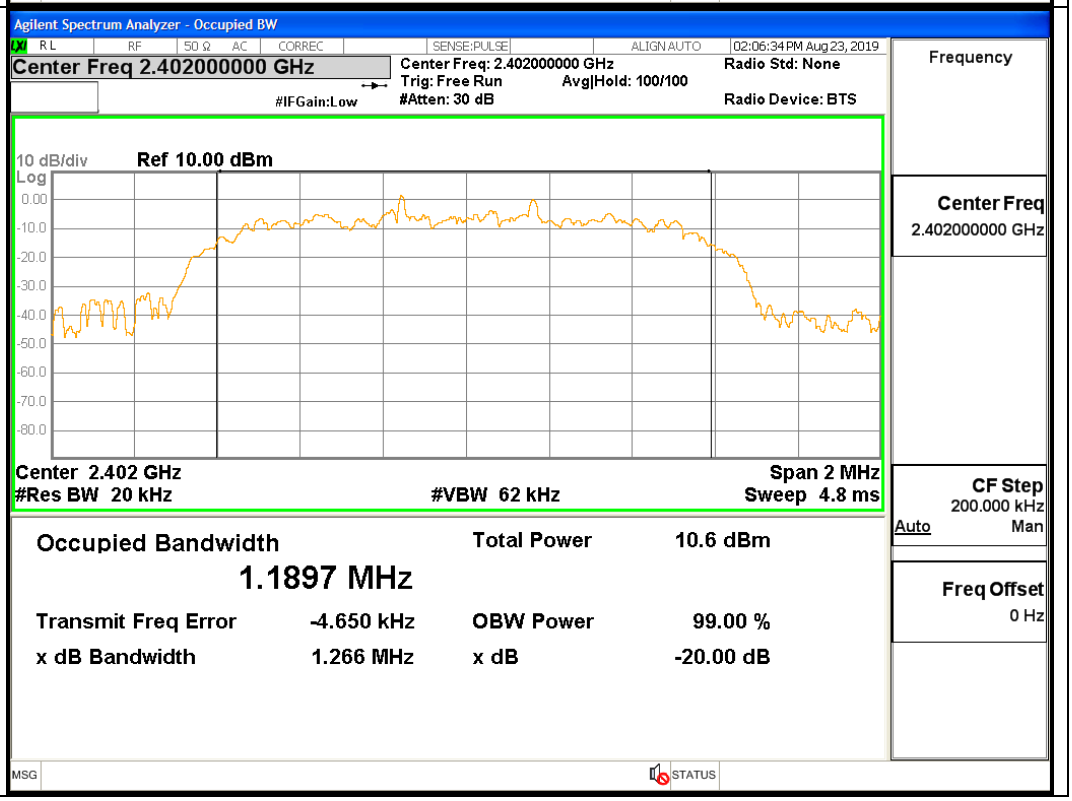
Temperature:	23.5° C
Relative Humidity:	50%
ATM Pressure:	100.0 kPa
Test Engineer:	Gary Qian
Supervised by:	Eden Hu

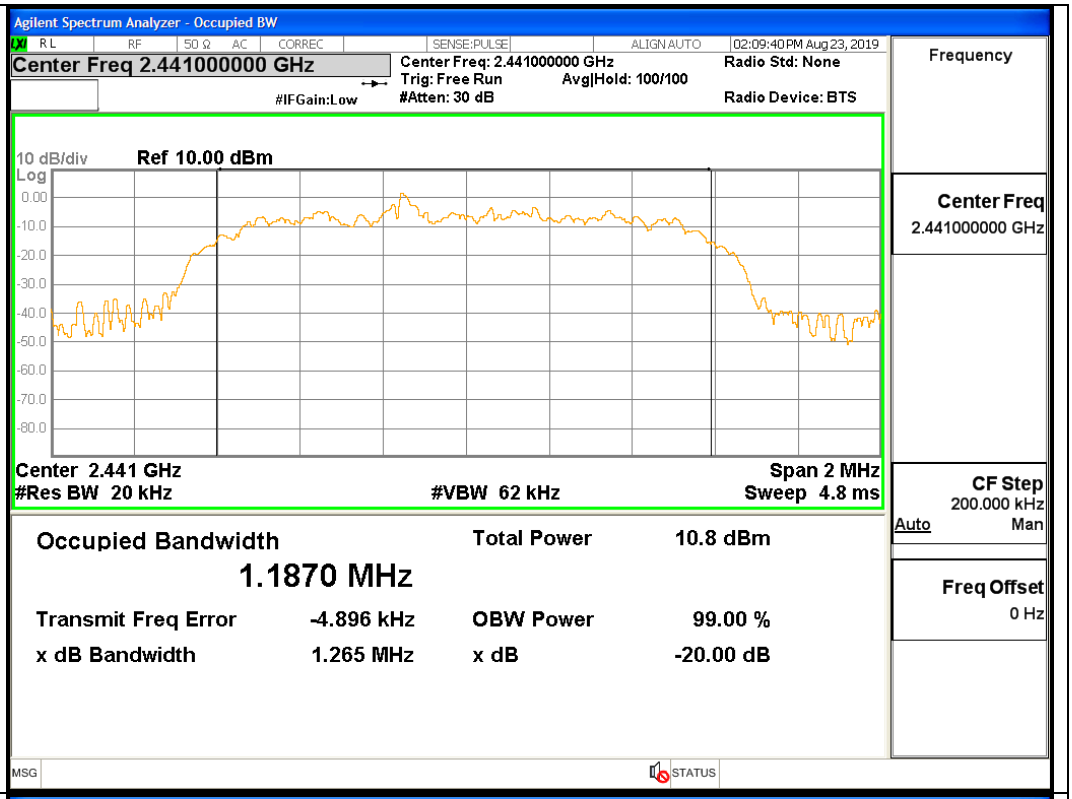
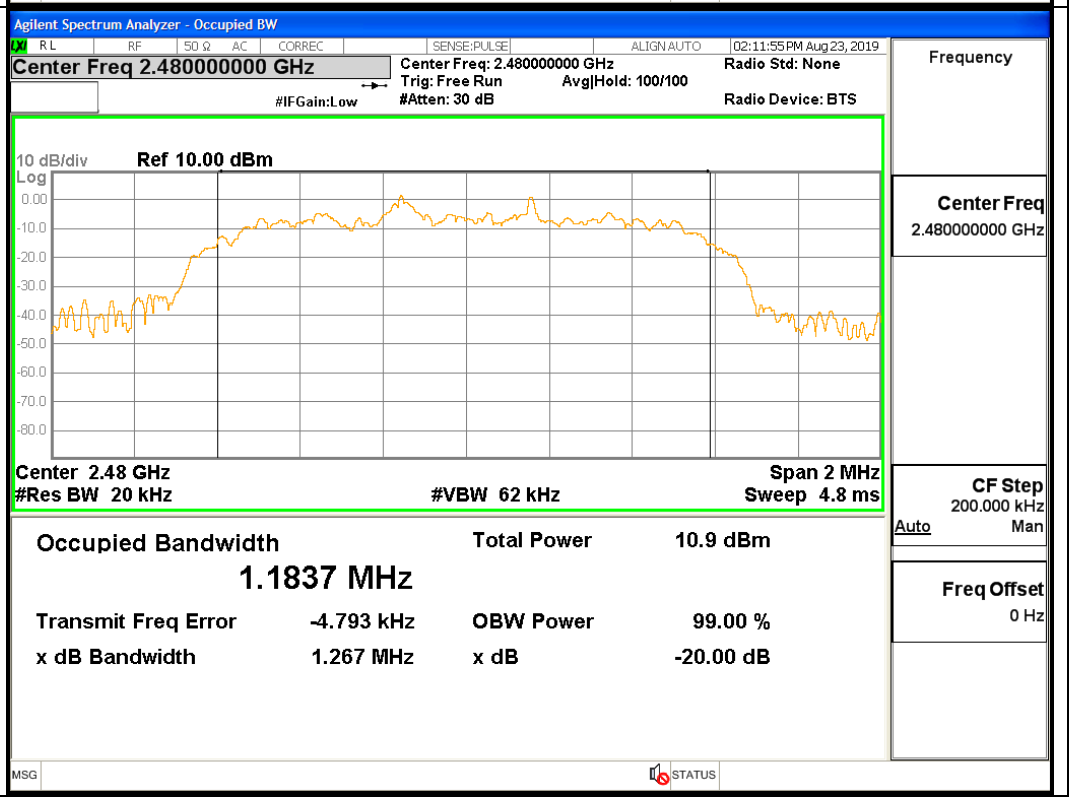
A.1 20 dB Bandwidth

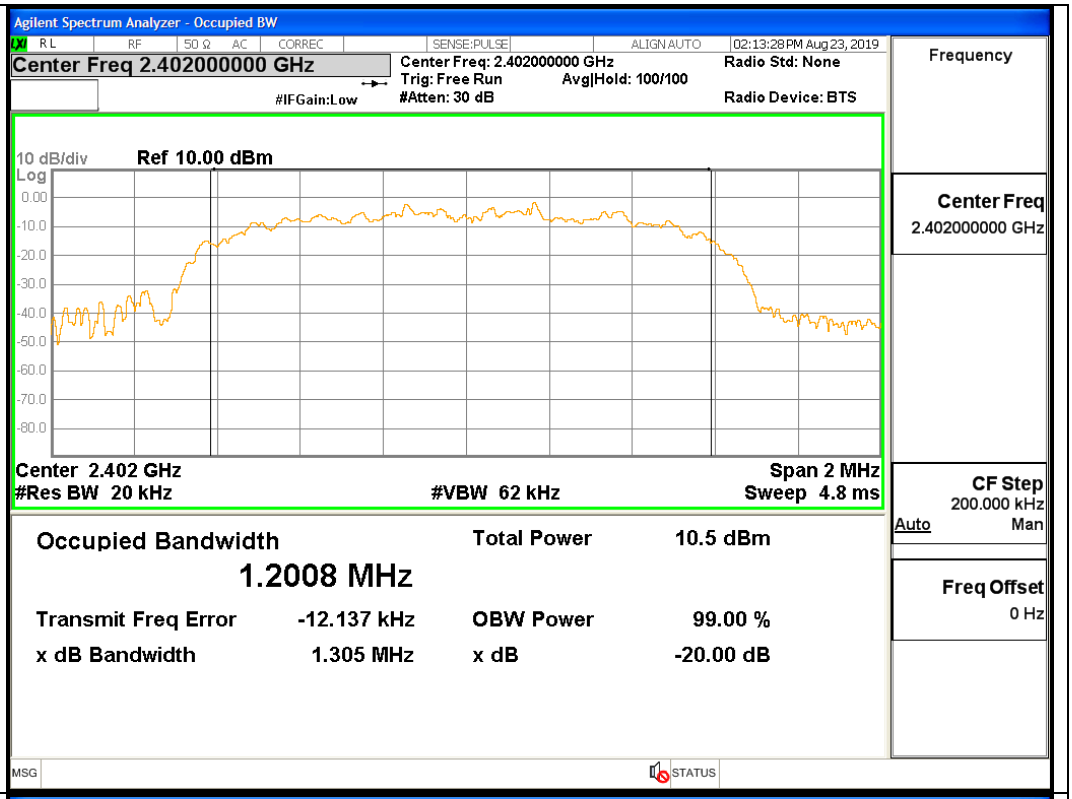
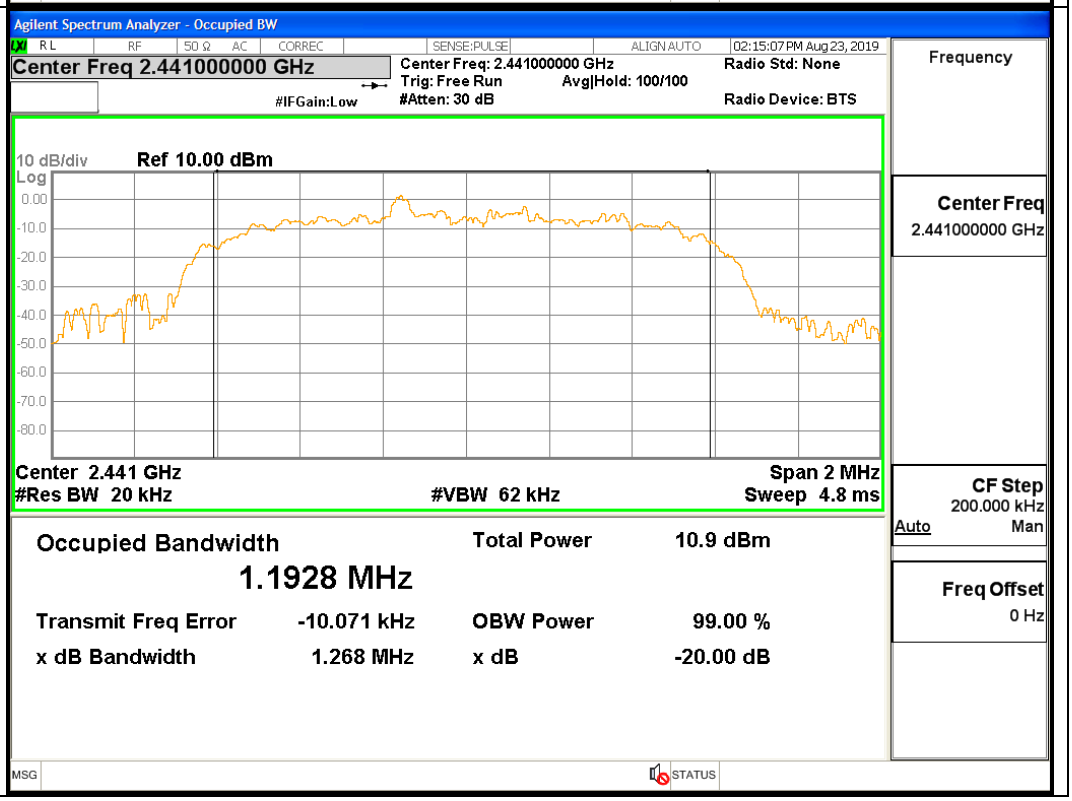
Mode	Channel.	20dB Bandwidth [MHz]	Limit(MHz)	Verdict
GFSK	LCH	0.884	Not Specified	PASS
GFSK	MCH	0.860	Not Specified	PASS
GFSK	HCH	0.885	Not Specified	PASS
π/4DQPSK	LCH	1.266	Not Specified	PASS
π/4DQPSK	MCH	1.265	Not Specified	PASS
π/4DQPSK	HCH	1.267	Not Specified	PASS
8DPSK	LCH	1.305	Not Specified	PASS
8DPSK	MCH	1.268	Not Specified	PASS
8DPSK	HCH	1.263	Not Specified	PASS

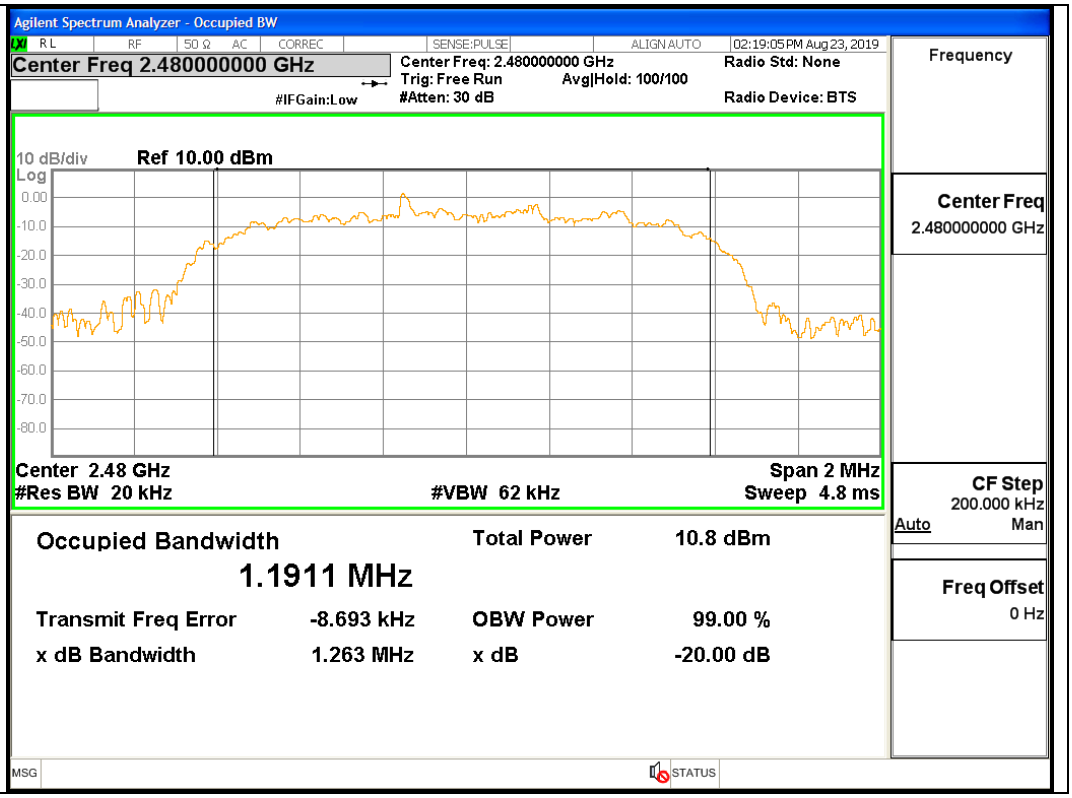
Test Graph

Graphs	
GFSK/LCH	
GFSK/MCH	

GFSK/HCH	
π/4DQPSK/LCH	

π/4DQPSK/MCH	
π/4DQPSK/HCH	

8DPSK/LCH	
8DPSK/MCH	

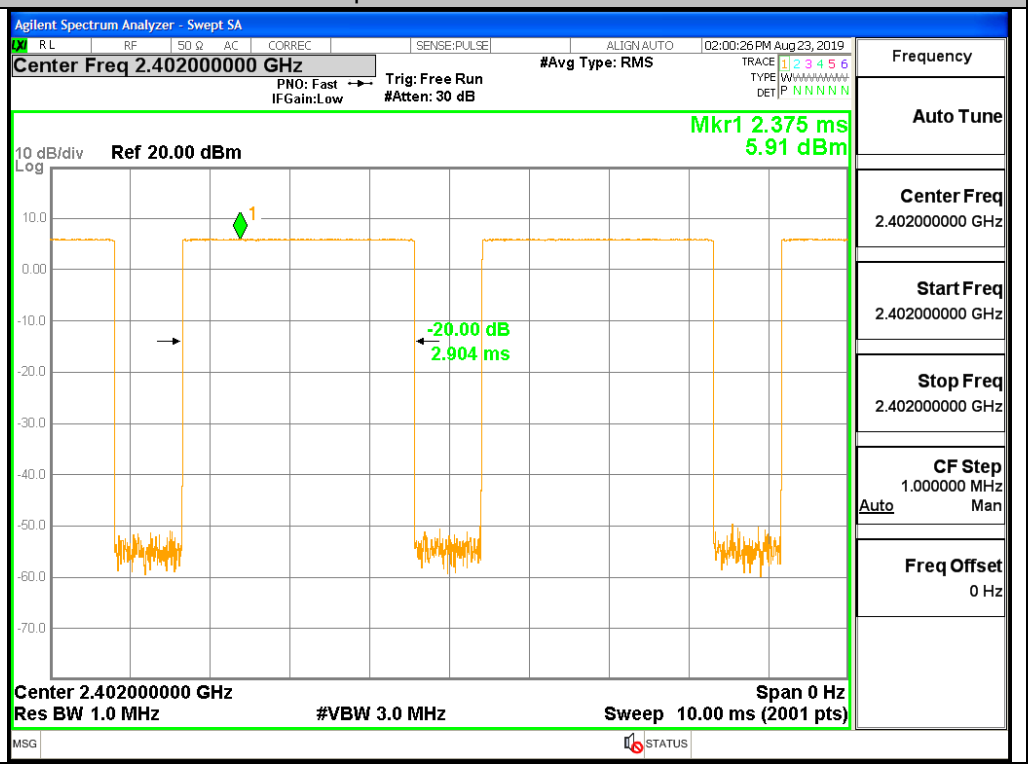
8DPSK/HCH	

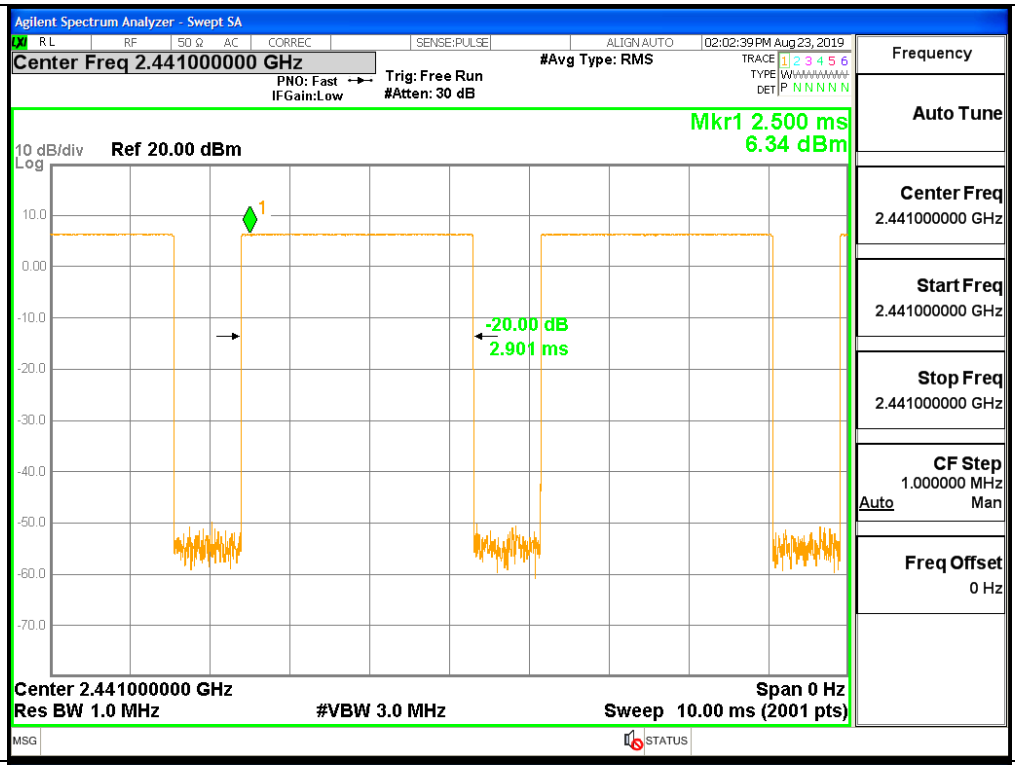
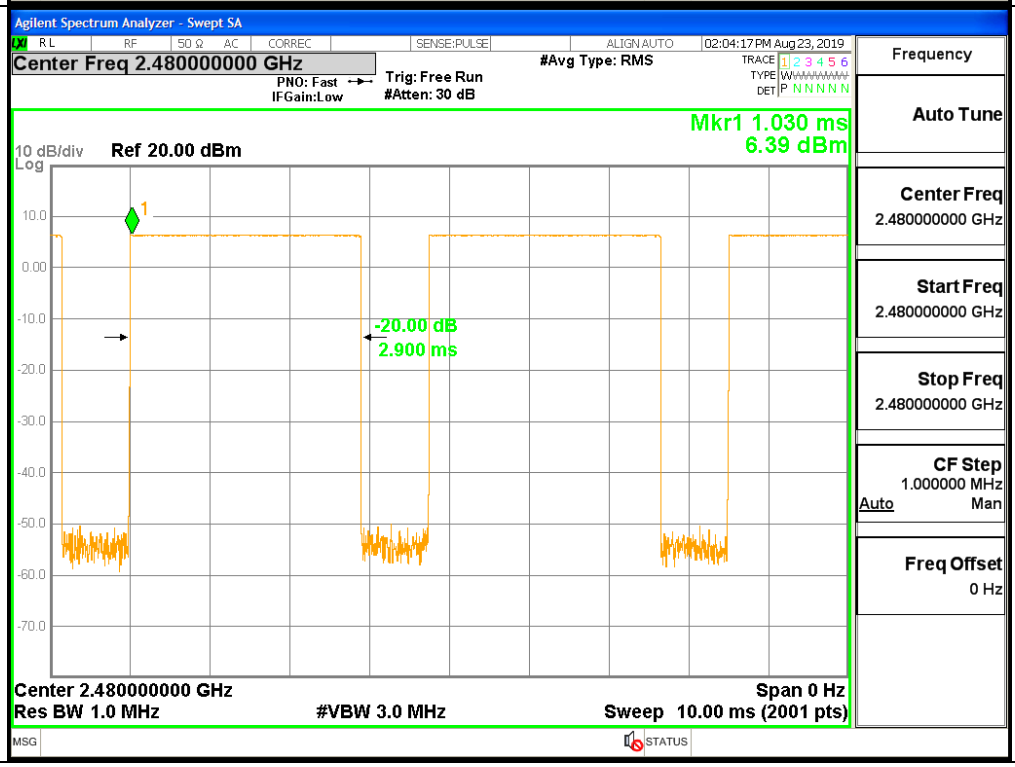
Agilent Spectrum Analyzer - Occupied BW
RL
RF
50 Ω AC
CORREC
SENSE:PULSE
ALIGN AUTO
02:19:05 PM Aug 23, 2019
Center Freq 2.480000000 GHz
Center Freq: 2.480000000 GHz
Trig: Free Run
Avg|Hold: 100/100
#IFGain:Low
#Atten: 30 dB
Radio Std: None
Radio Device: BTS
Frequency
10 dB/div
Log
Ref 10.00 dBm
0.00
-10.0
-20.0
-30.0
-40.0
-50.0
-60.0
-70.0
-80.0
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
1.1911 MHz
Total Power
10.8 dBm
Transmit Freq Error
-8.693 kHz
OBW Power
99.00 %
x dB Bandwidth
1.263 MHz
x dB
-20.00 dB
Freq Offset
0 Hz
MSG
STATUS

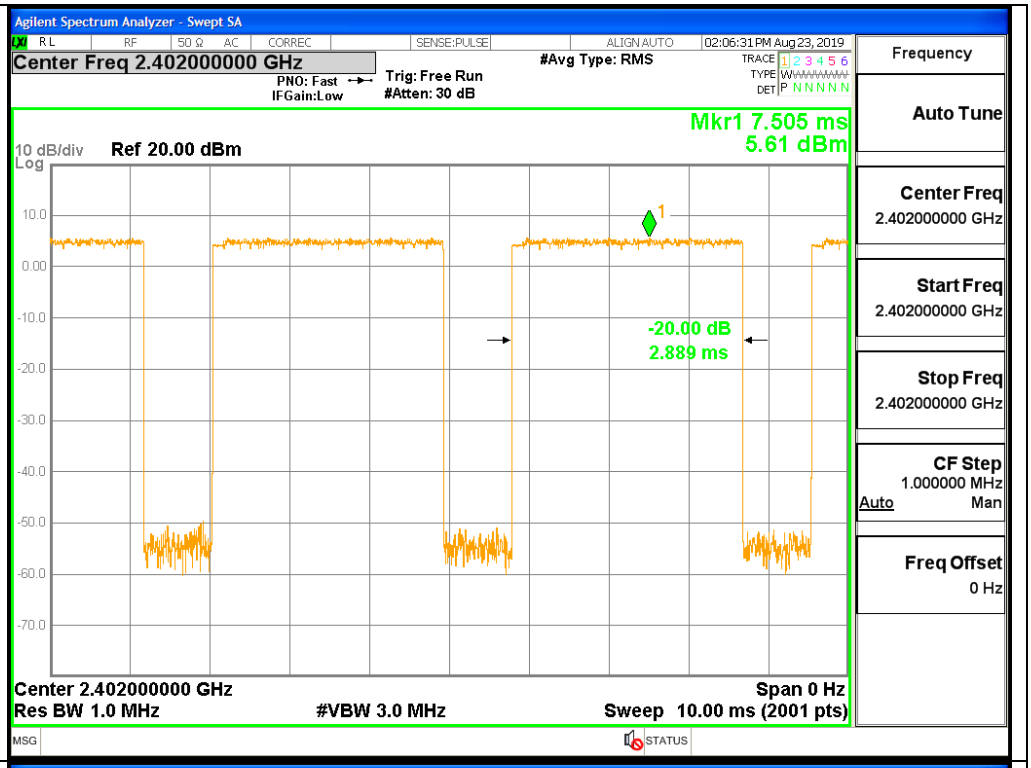
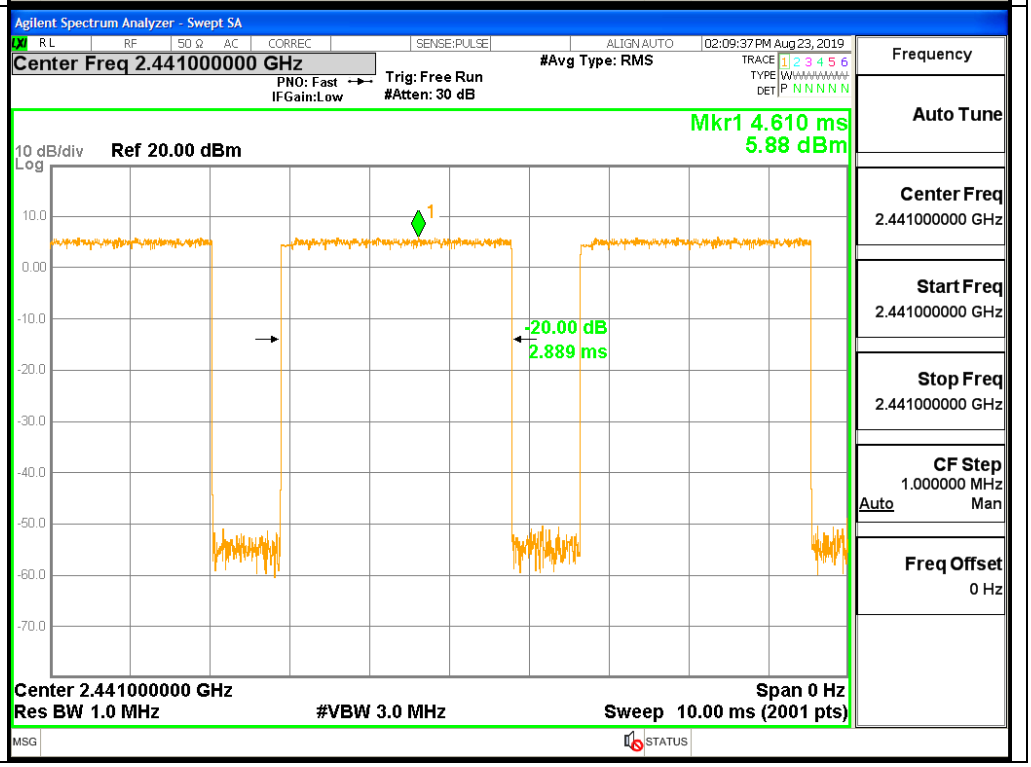
A.2 Dwell Time

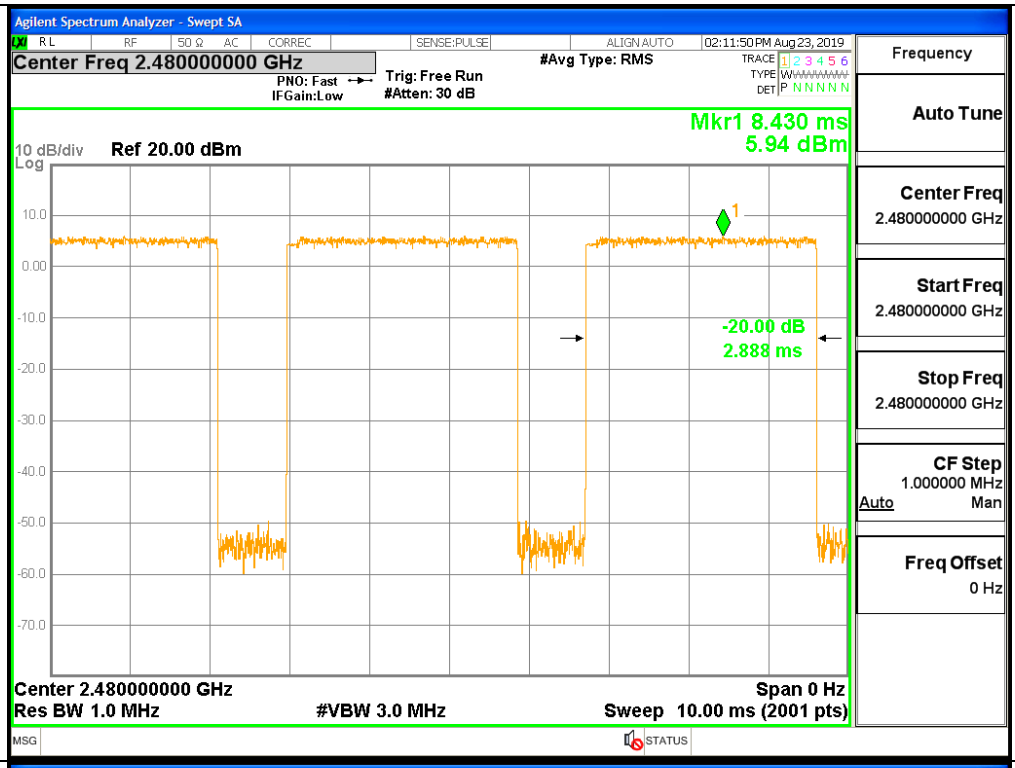
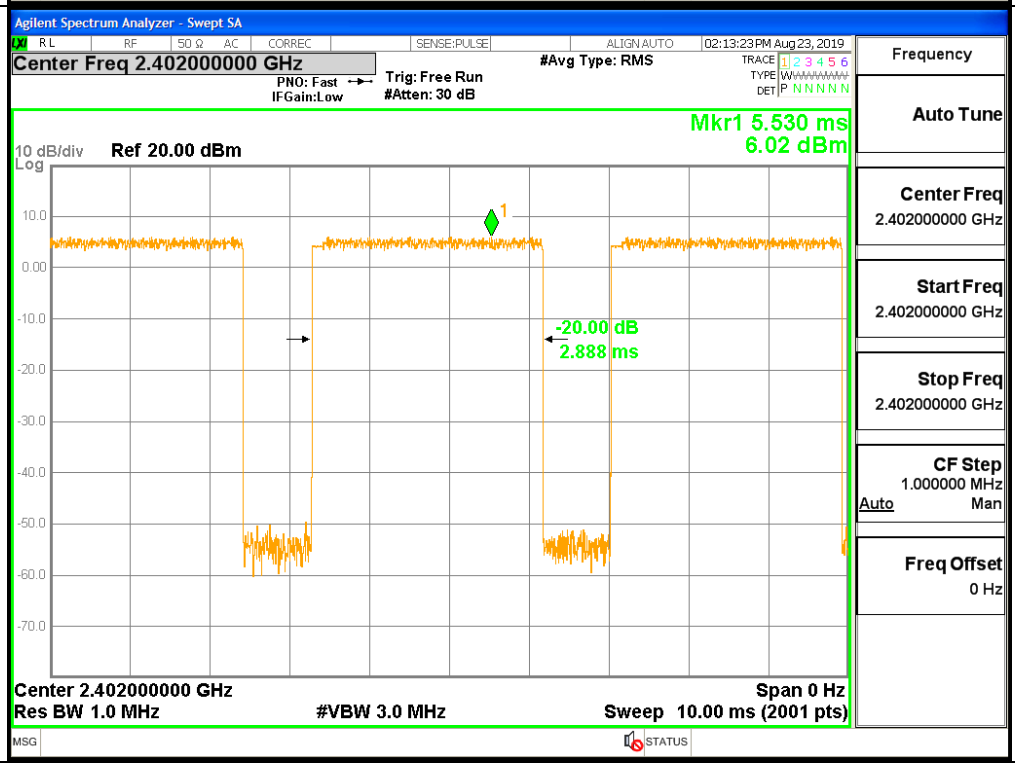
Mode	Packet	Channel	Burst Width [s/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	0.002904	106.7	0.309808	0.4	PASS
GFSK	DH5	MCH	0.002901	106.7	0.309516	0.4	PASS
GFSK	DH5	HCH	0.0029	106.7	0.309436	0.4	PASS
π/4DQPSK	2DH5	LCH	0.002889	106.7	0.308213	0.4	PASS
π/4DQPSK	2DH5	MCH	0.002889	106.7	0.30822	0.4	PASS
π/4DQPSK	2DH5	HCH	0.002888	106.7	0.3082	0.4	PASS
8DPSK	3DH5	LCH	0.002888	106.7	0.308201	0.4	PASS
8DPSK	3DH5	MCH	0.002888	106.7	0.308191	0.4	PASS
8DPSK	3DH5	HCH	0.002884	106.7	0.307739	0.4	PASS

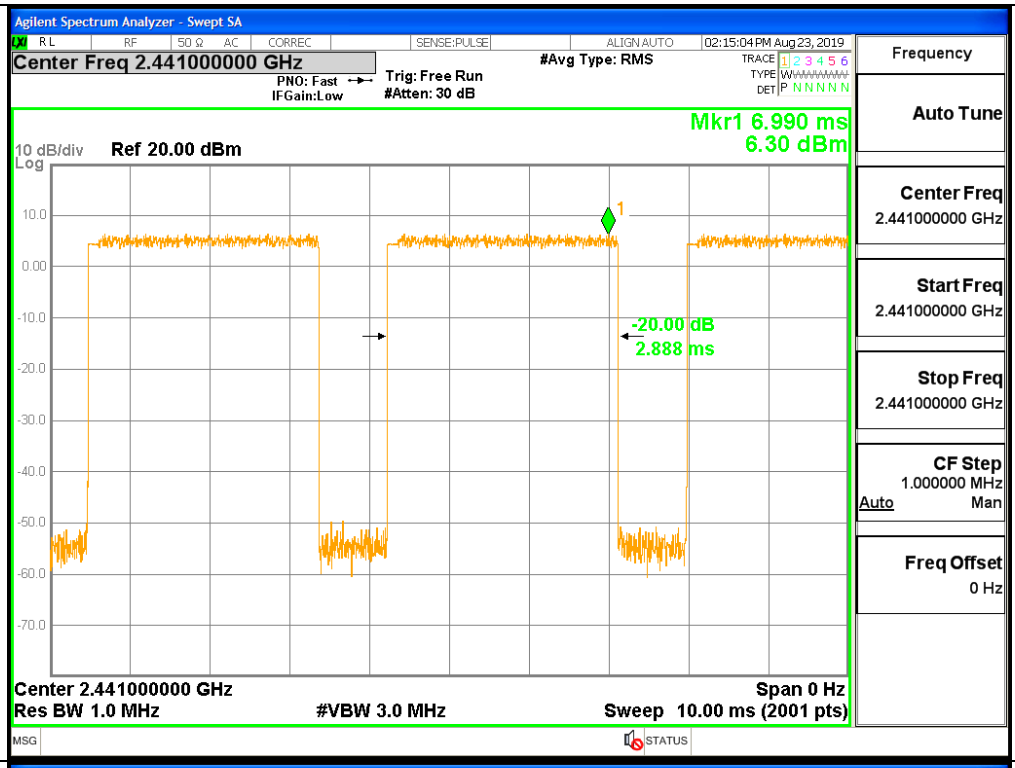
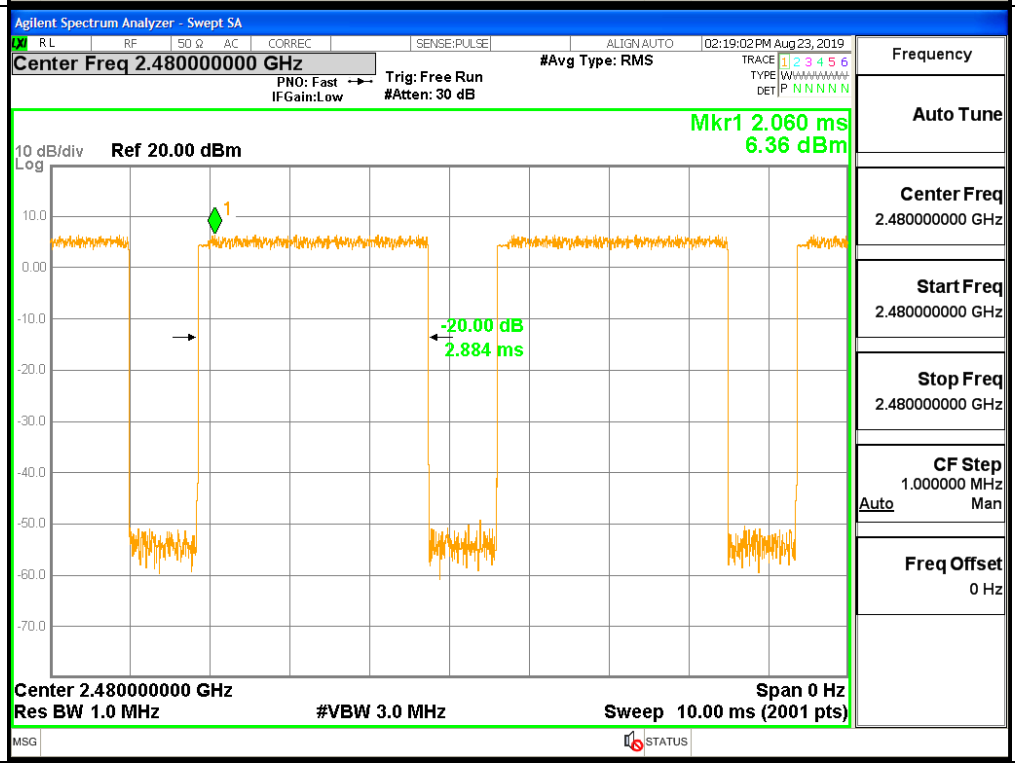
Test Graph

Graphs	
GFSK_DH5/LCH	

GFSK_DH5/MCH	
GFSK_DH5/HCH	

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

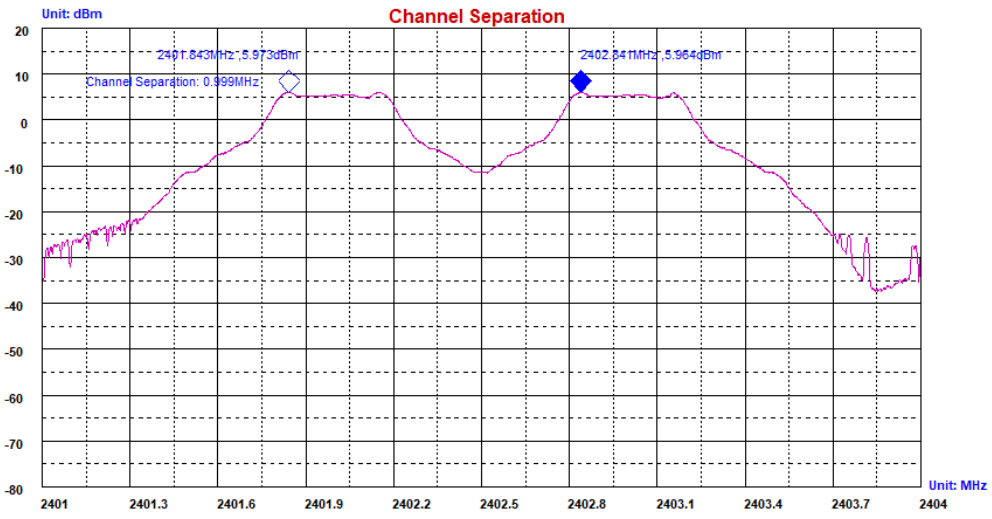
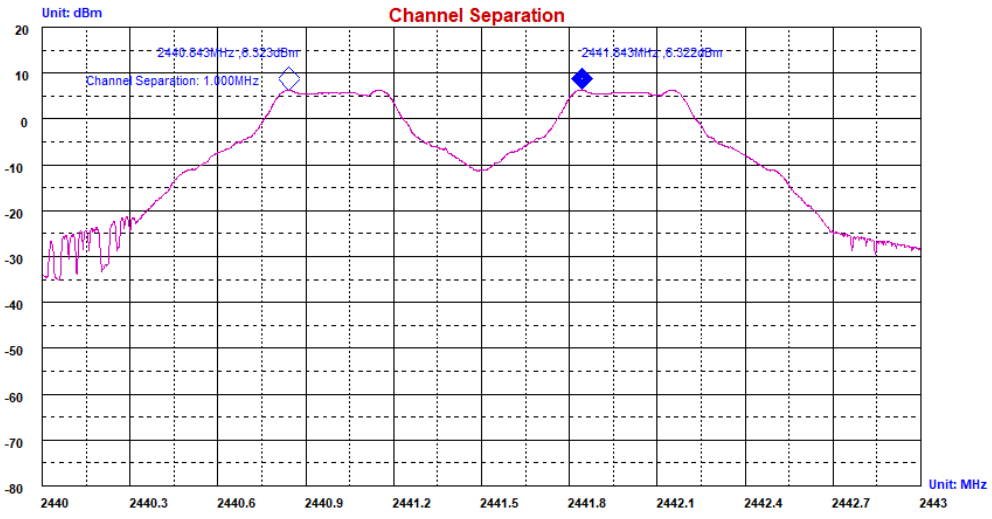
π/4DQPSK _2DH5/HCH	
8DPSK _3DH5/LCH	

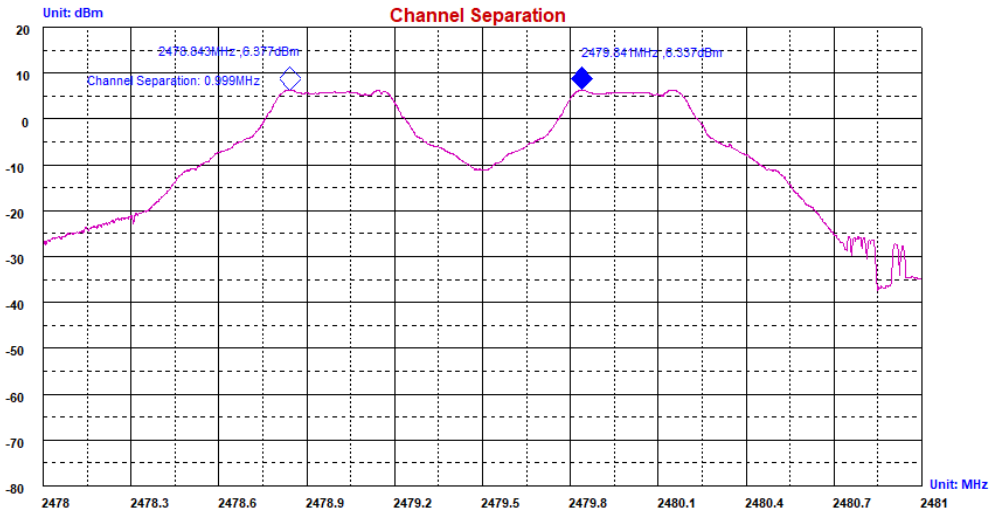
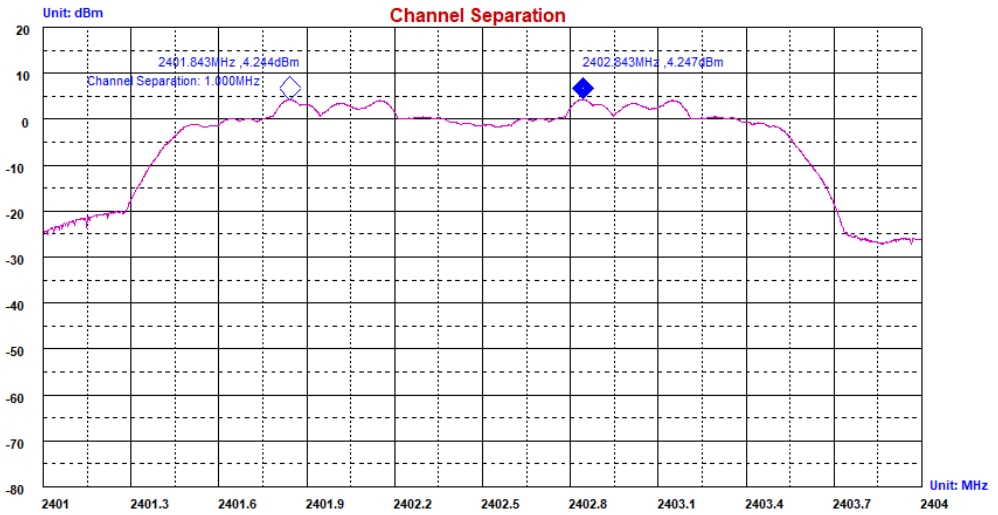
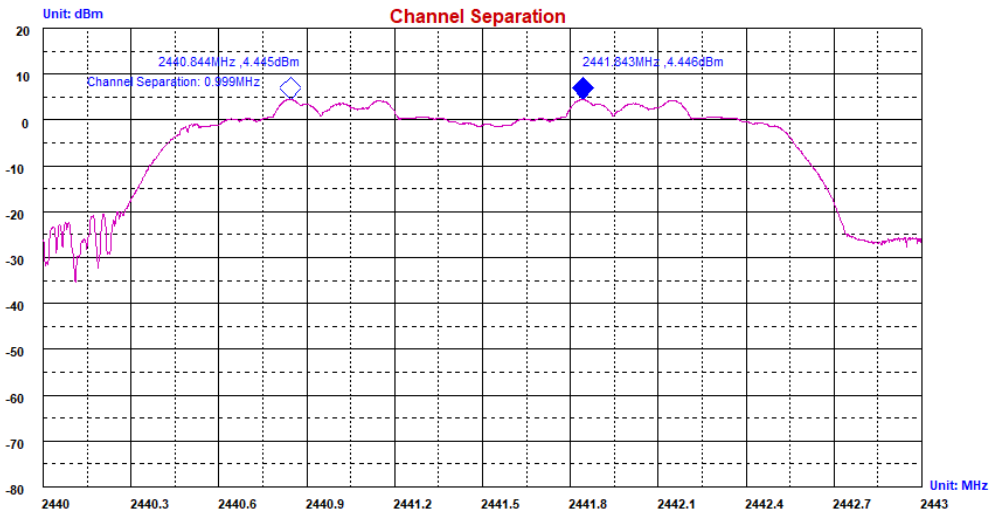
8DPSK _3DH5/MCH	
8DPSK _3DH5/HCH	

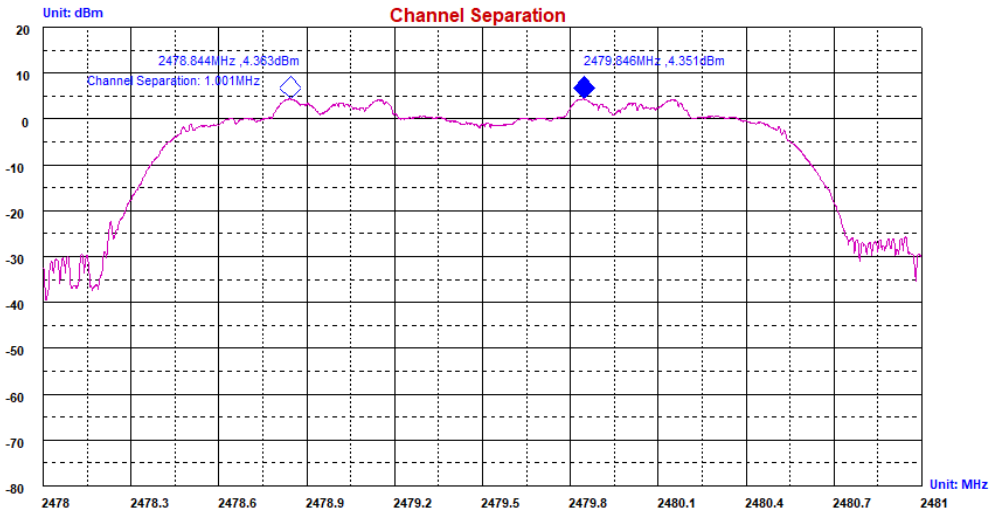
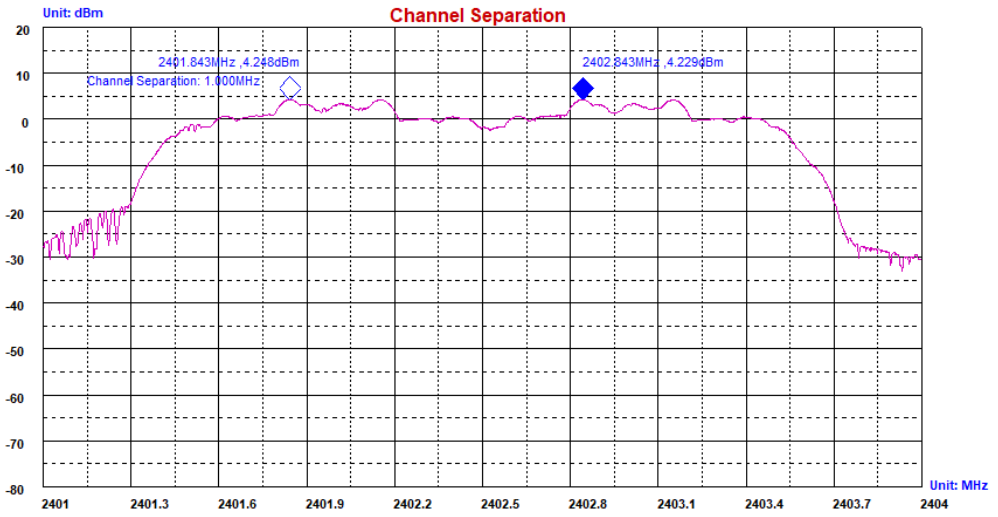
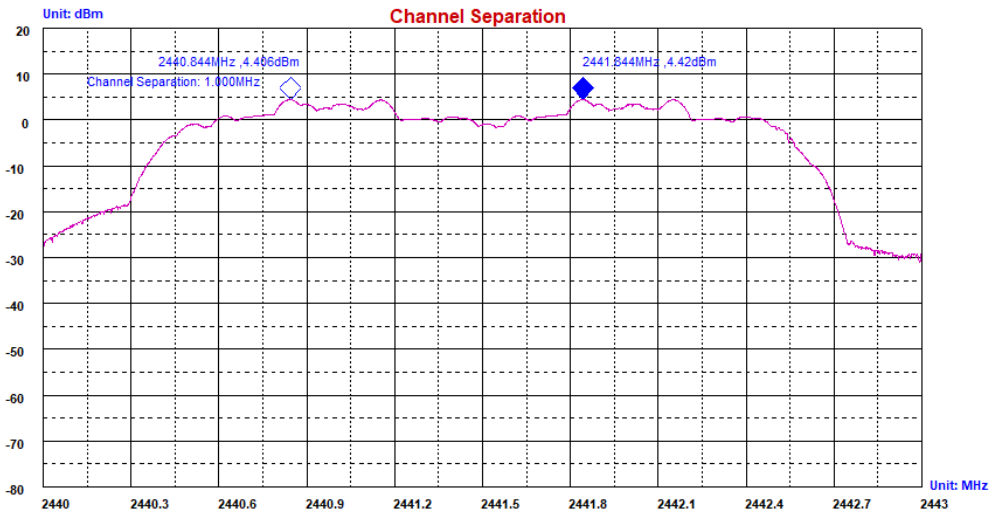
A.3 Carrier Frequency Separation

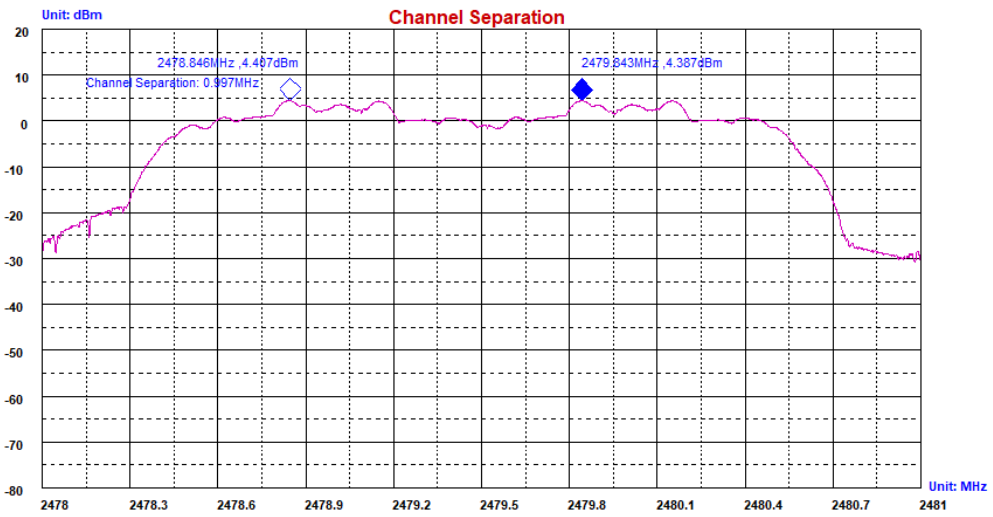
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.999	0.589	PASS
GFSK	MCH	1.000	0.573	PASS
GFSK	HCH	0.999	0.590	PASS
π/4DQPSK	LCH	1.000	0.844	PASS
π/4DQPSK	MCH	0.999	0.843	PASS
π/4DQPSK	HCH	1.001	0.845	PASS
8DPSK	LCH	1.000	0.870	PASS
8DPSK	MCH	1.000	0.845	PASS
8DPSK	HCH	0.997	0.842	PASS

Test Graph

Graphs	
GFSK/LCH	
GFSK/MCH	

GFSK/HCH	
π/4DQPSK/LCH	
π/4DQPSK/MCH	

π/4DQPSK/HCH	
8DPSK/LCH	
8DPSK/MCH	

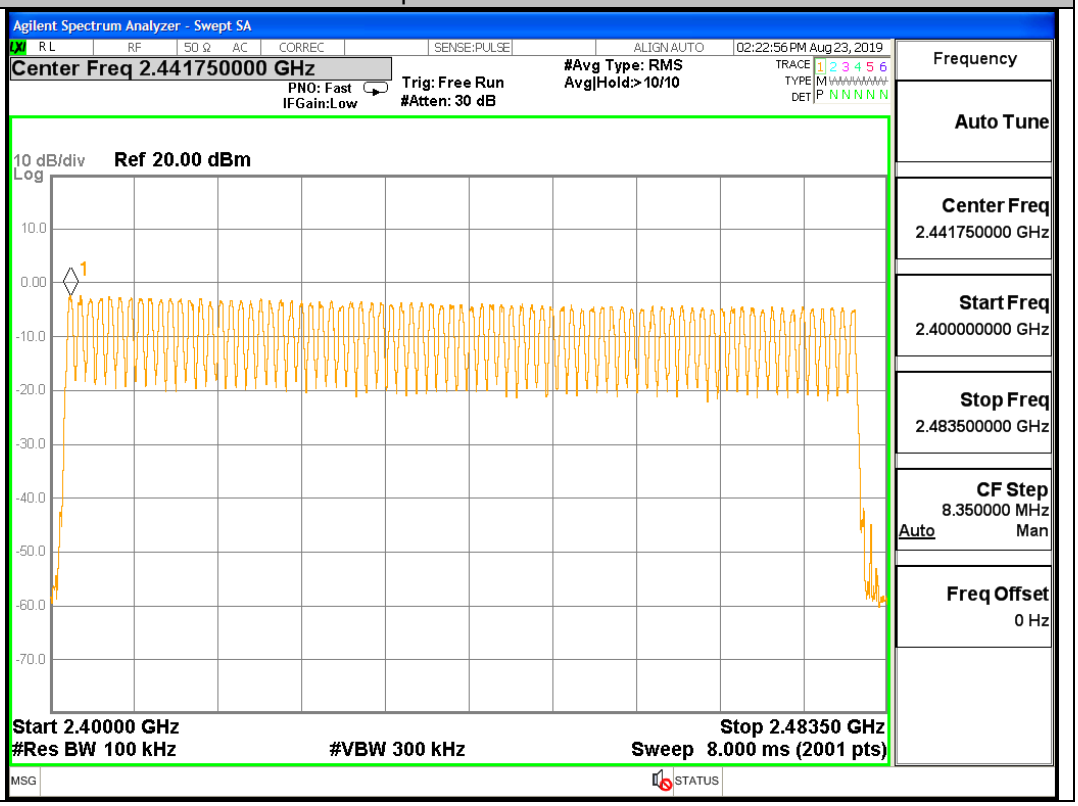
8DPSK/HCH	

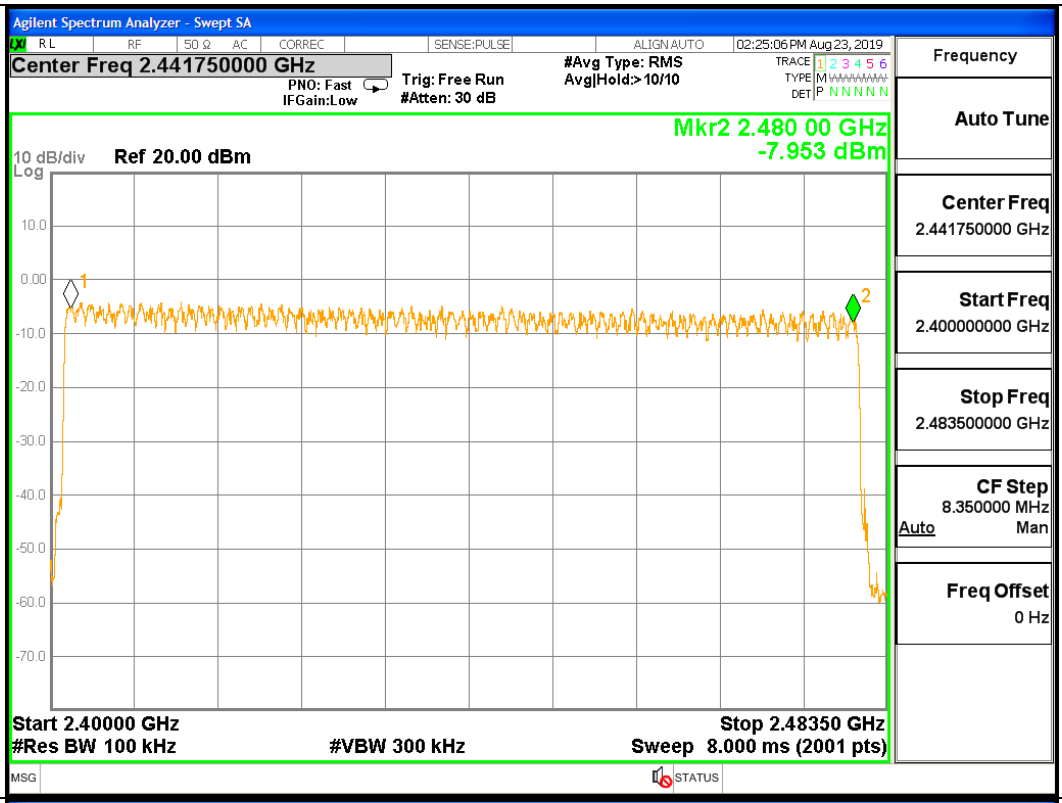
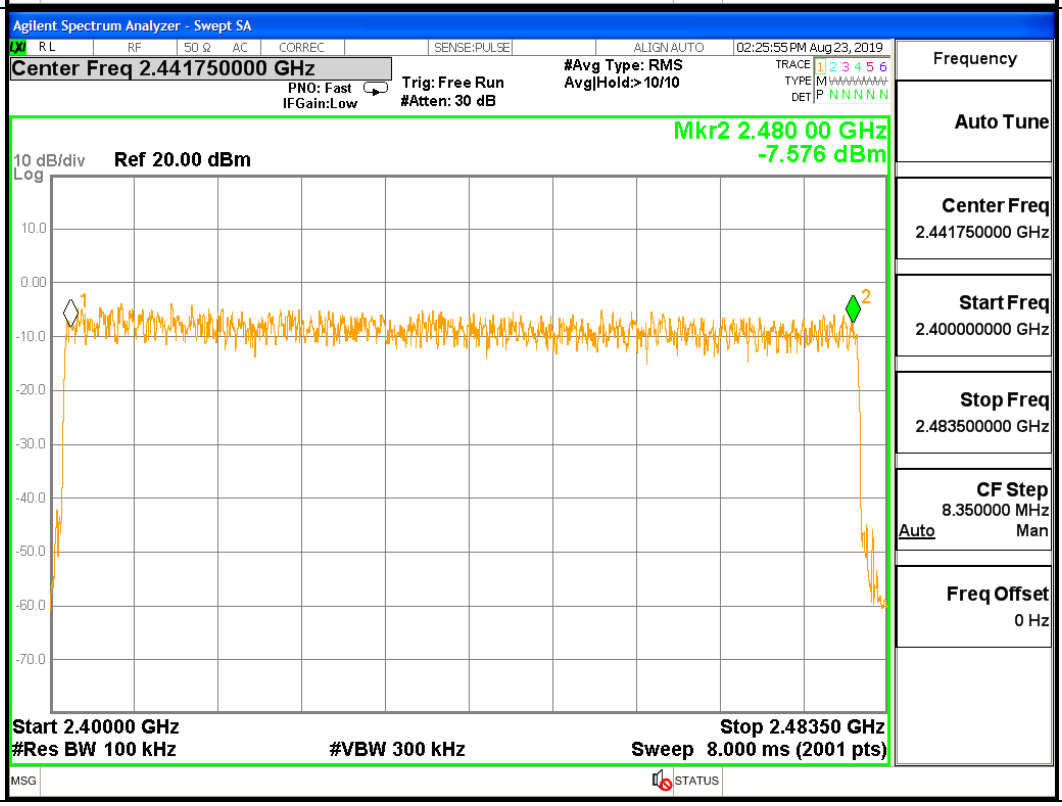
Unit: dBm
Channel Separation
2478.846MHz ,4.407dBm
Channel Separation: 0.997MHz
2479.843MHz ,4.387dBm
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
2478
2478.3
2478.6
2478.9
2479.2
2479.5
2479.8
2480.1
2480.4
2480.7
2481
Unit: MHz

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

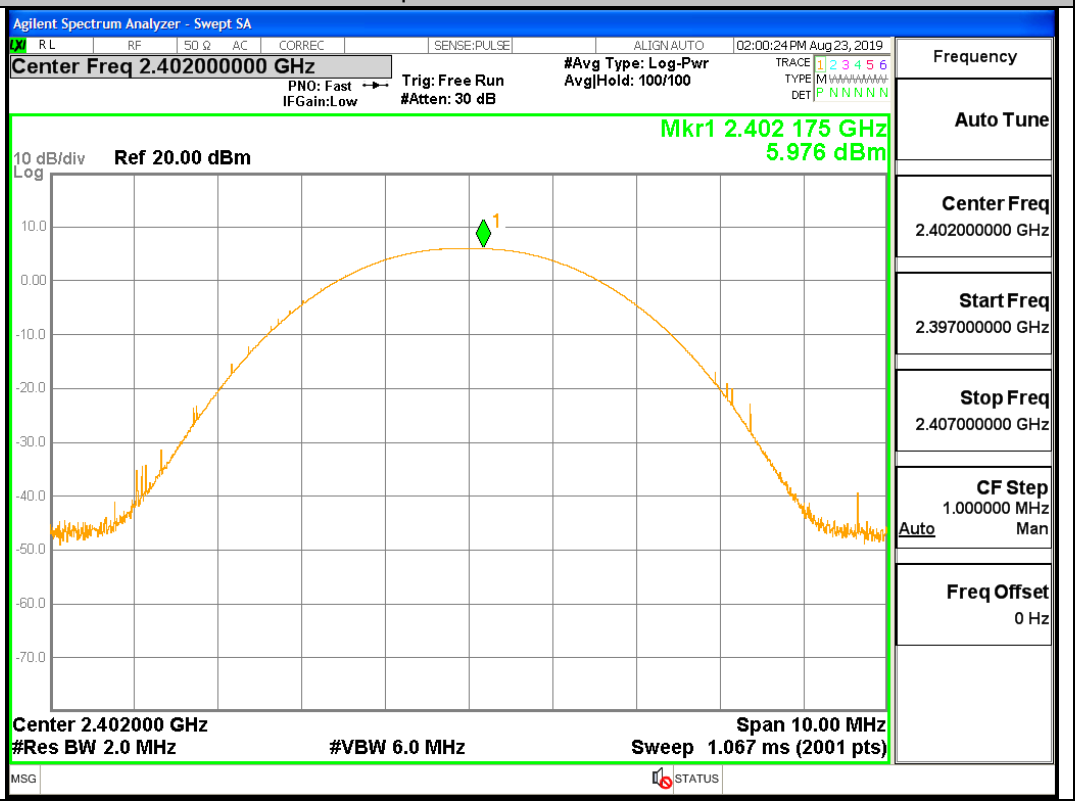
Graphs	
GFSK/Hop	

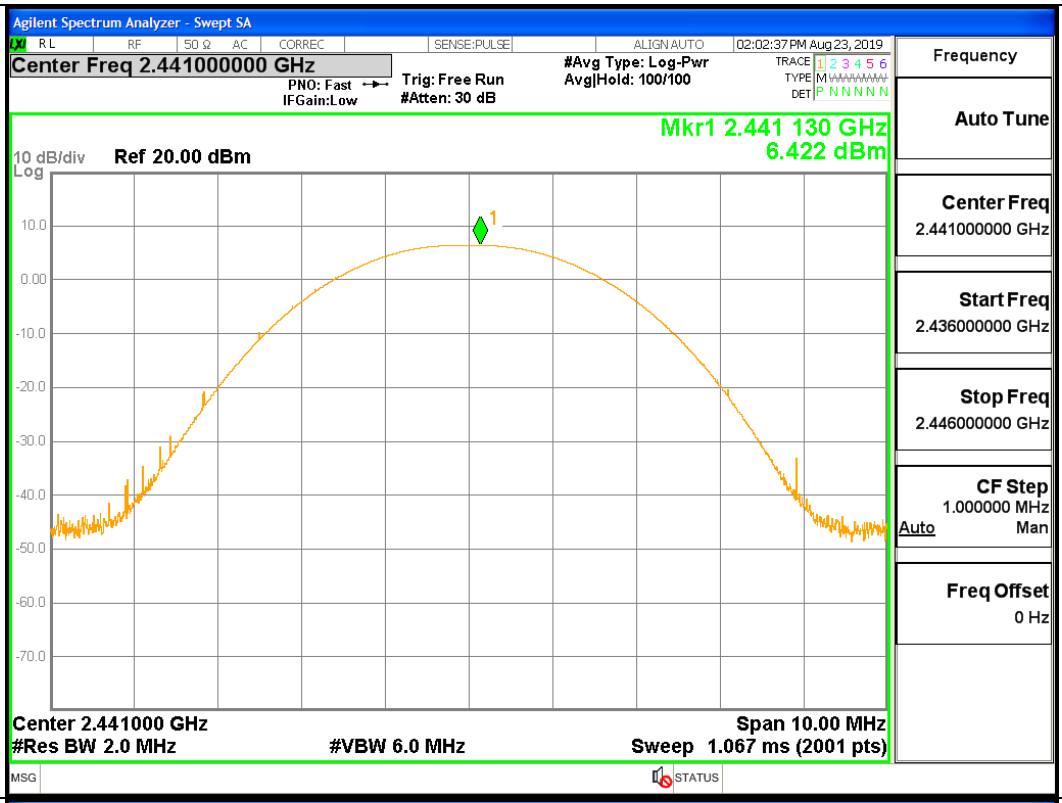
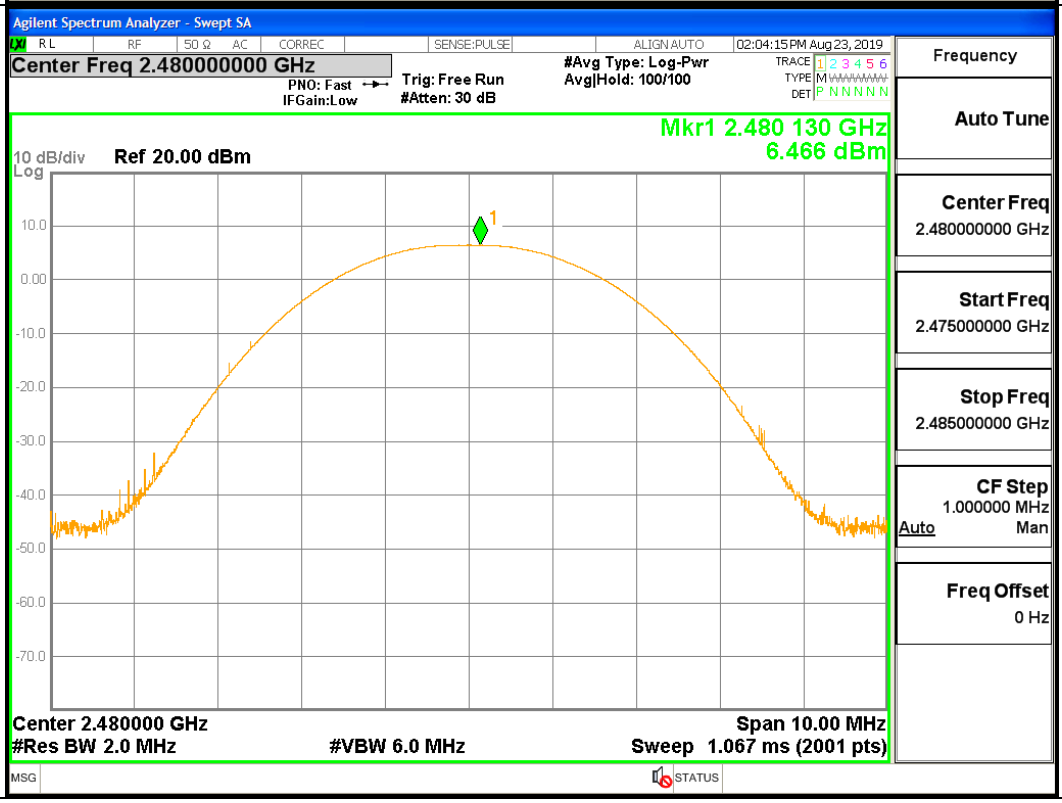
π/4DQPSK/Hop	
8DPSK/Hop	

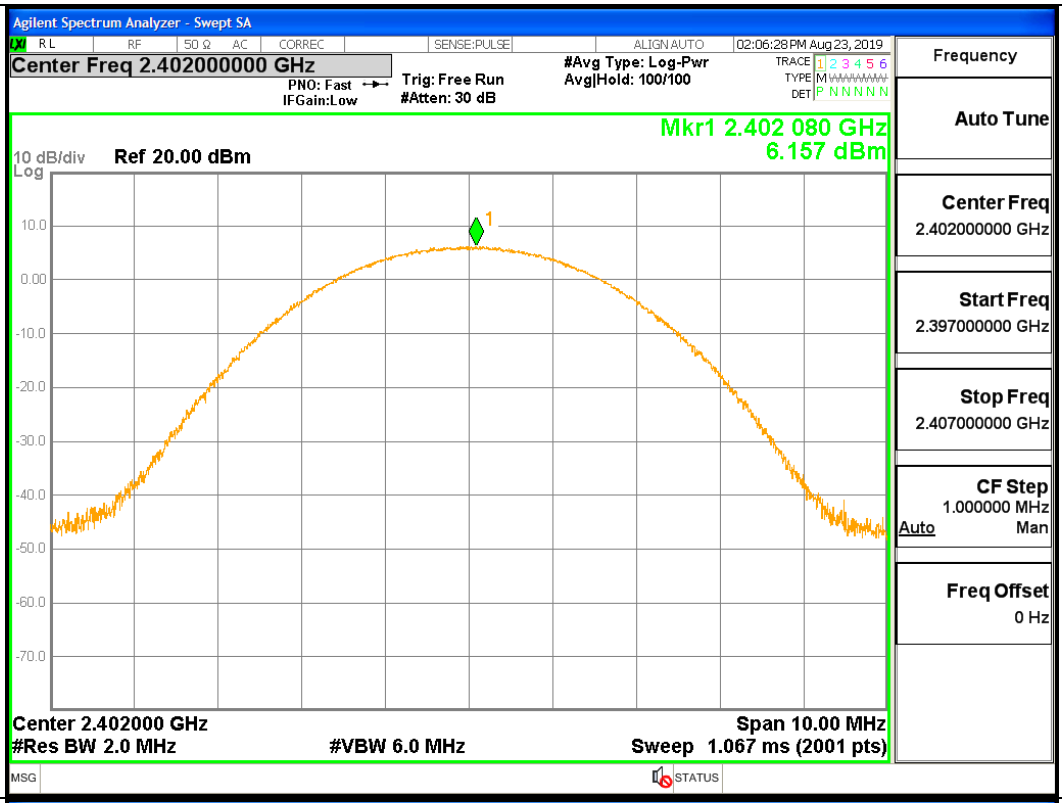
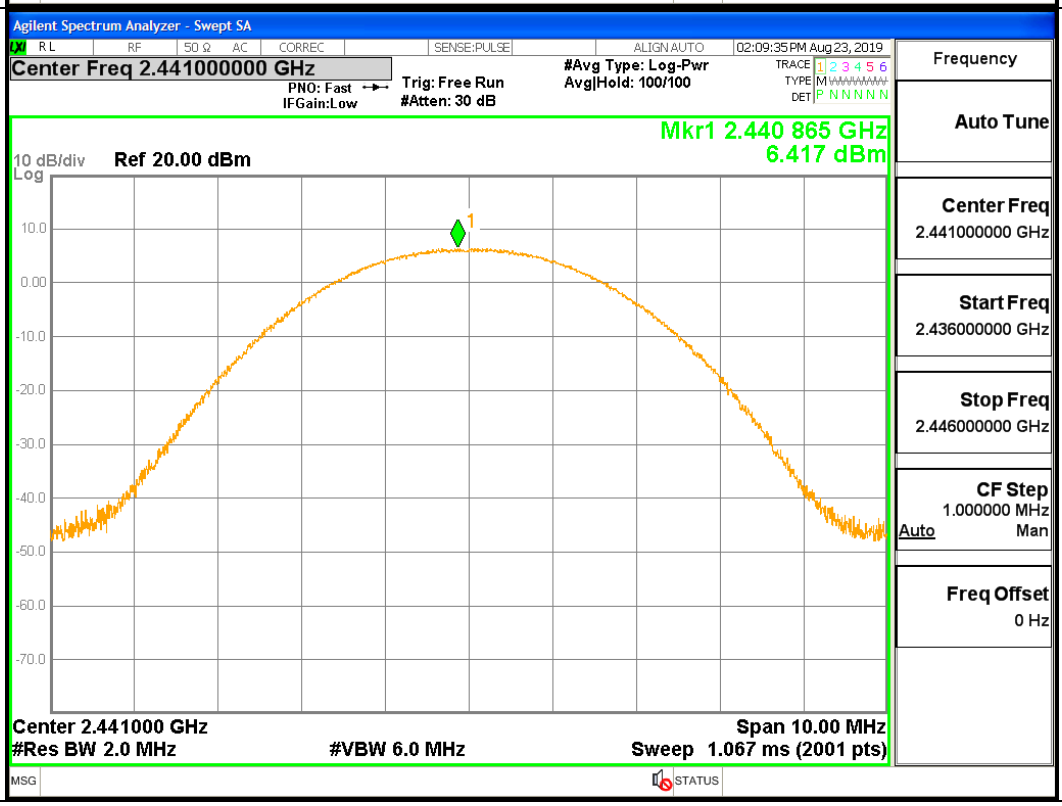
A.5 Conducted Peak Output Power

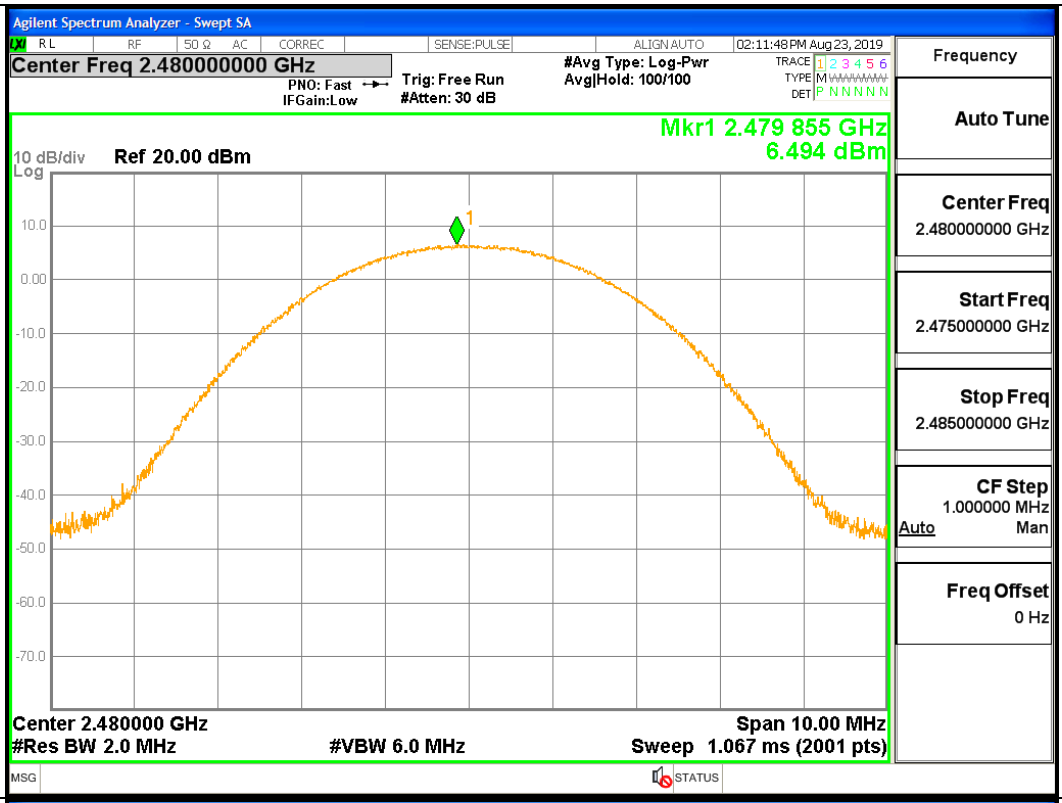
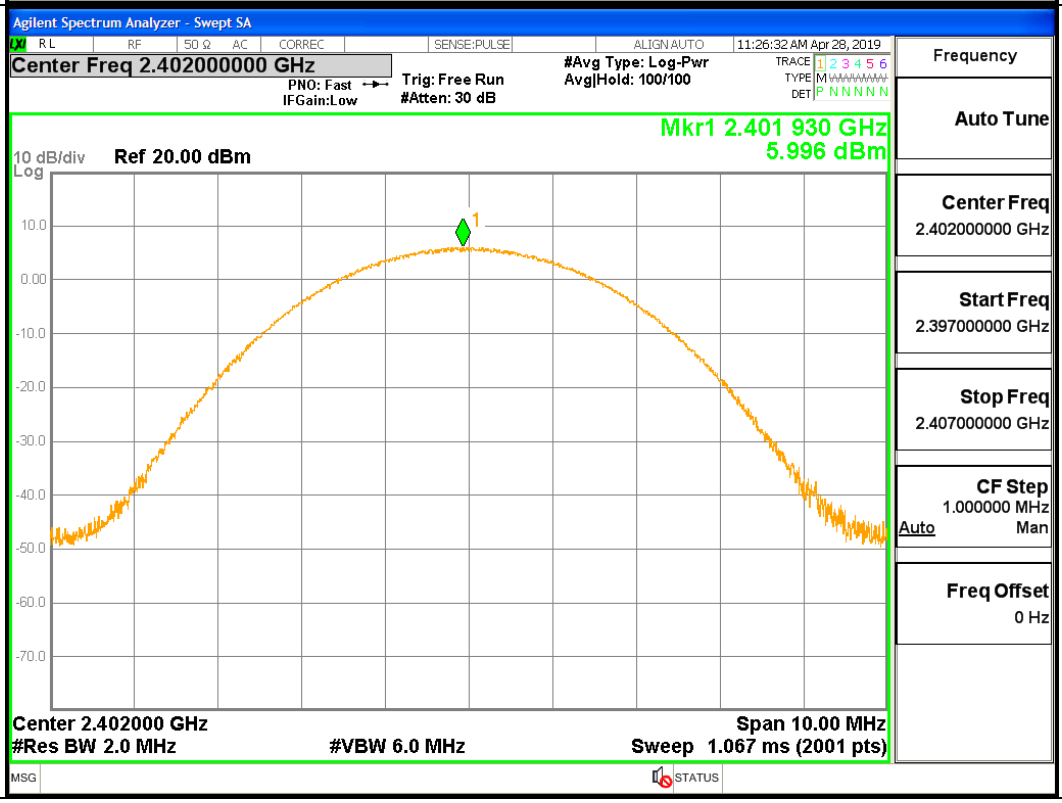
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	5.976	21	PASS
GFSK	MCH	6.422	21	PASS
GFSK	HCH	6.466	21	PASS
π/4DQPSK	LCH	6.157	21	PASS
π/4DQPSK	MCH	6.417	21	PASS
π/4DQPSK	HCH	6.494	21	PASS
8DPSK	LCH	6.469	21	PASS
8DPSK	MCH	6.774	21	PASS
8DPSK	HCH	6.865	21	PASS

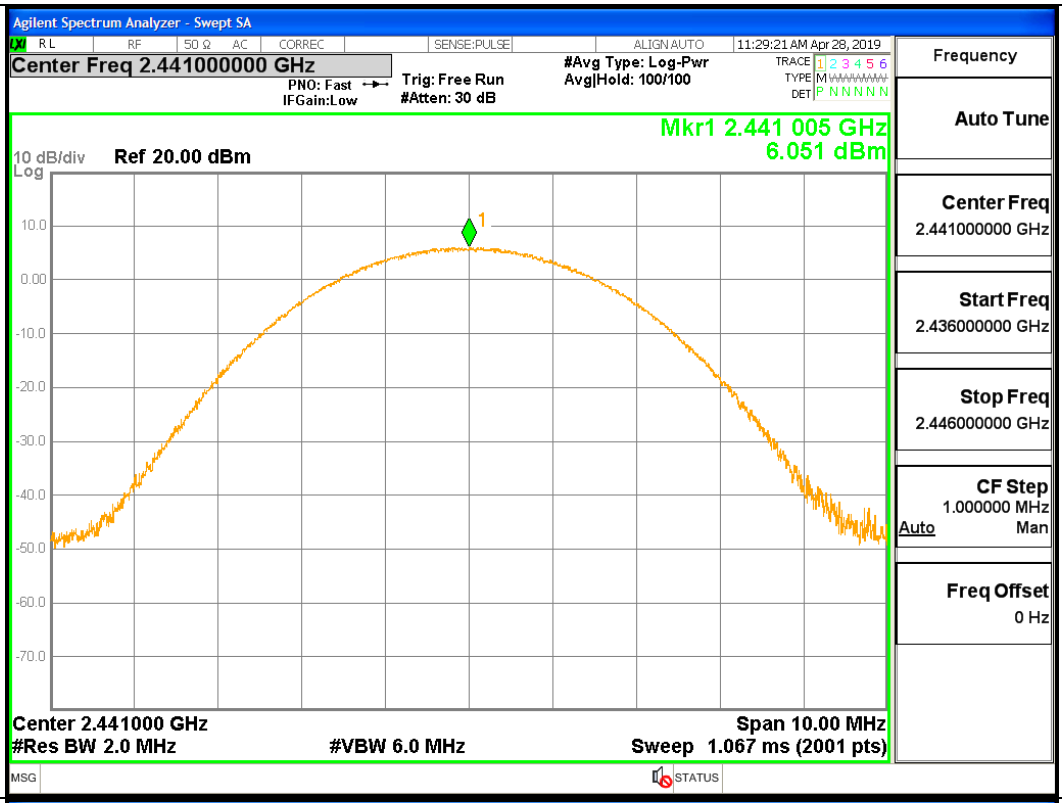
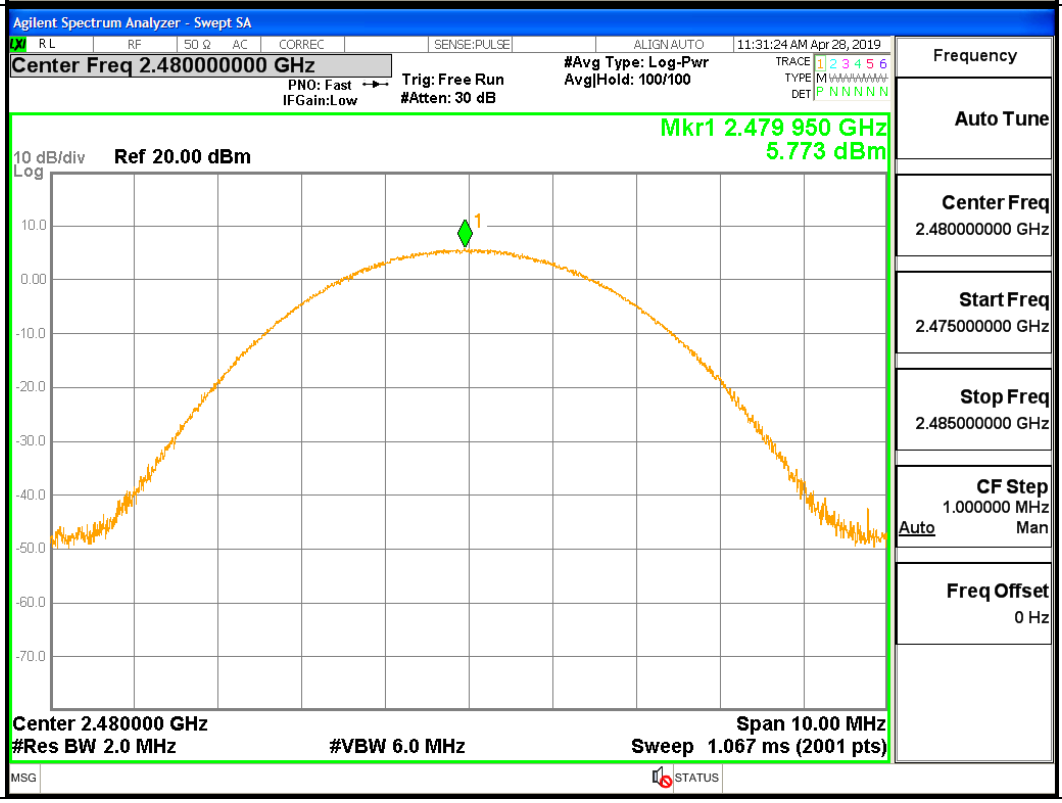
Test Graph

Graphs	
GFSK/LCH	

GFSK/MCH	
GFSK/HCH	

π/4DQPSK/LCH	
π/4DQPSK/MCH	

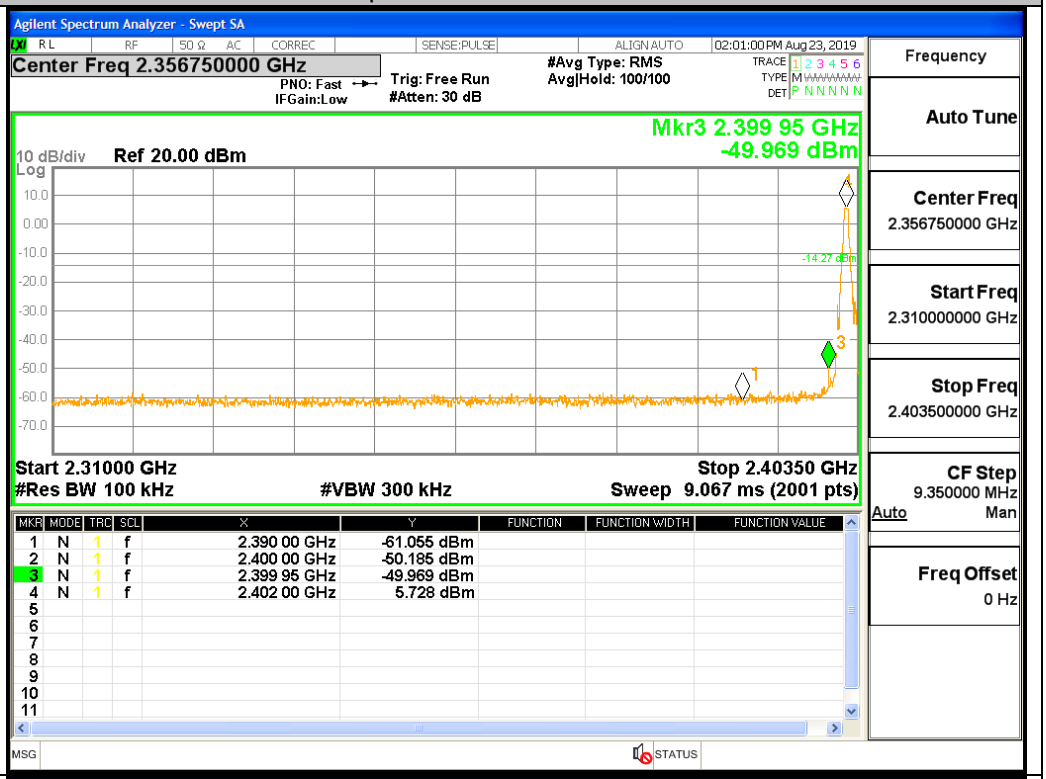
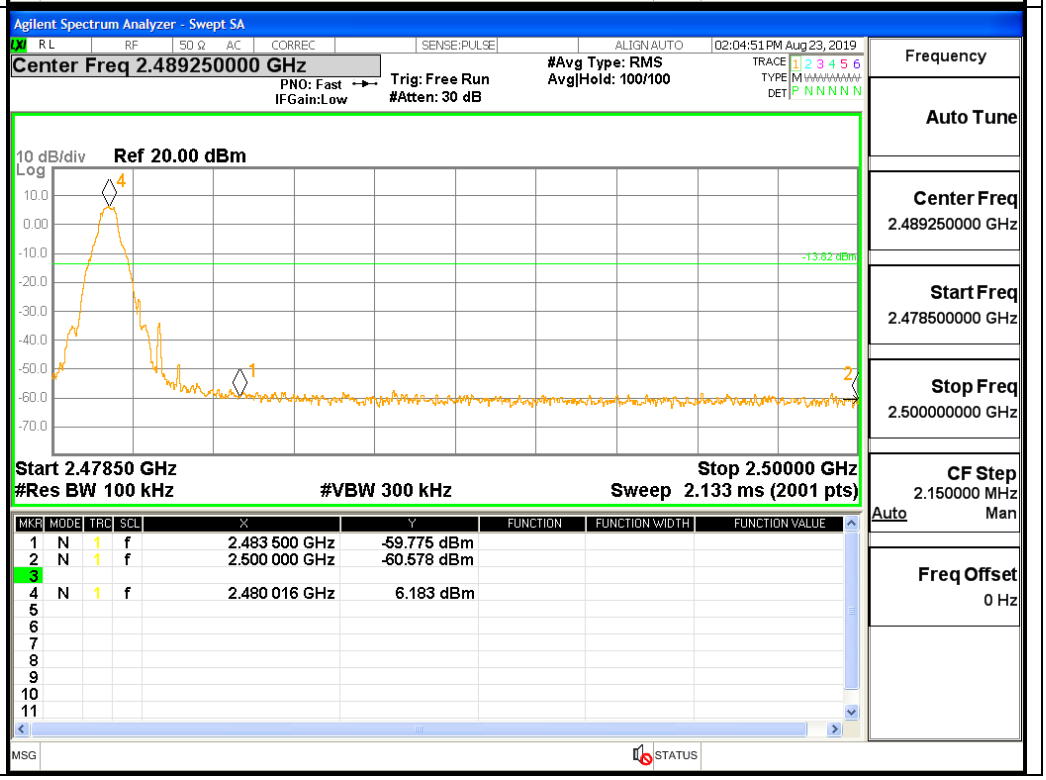
π/4DQPSK/HCH	
8DPSK/LCH	

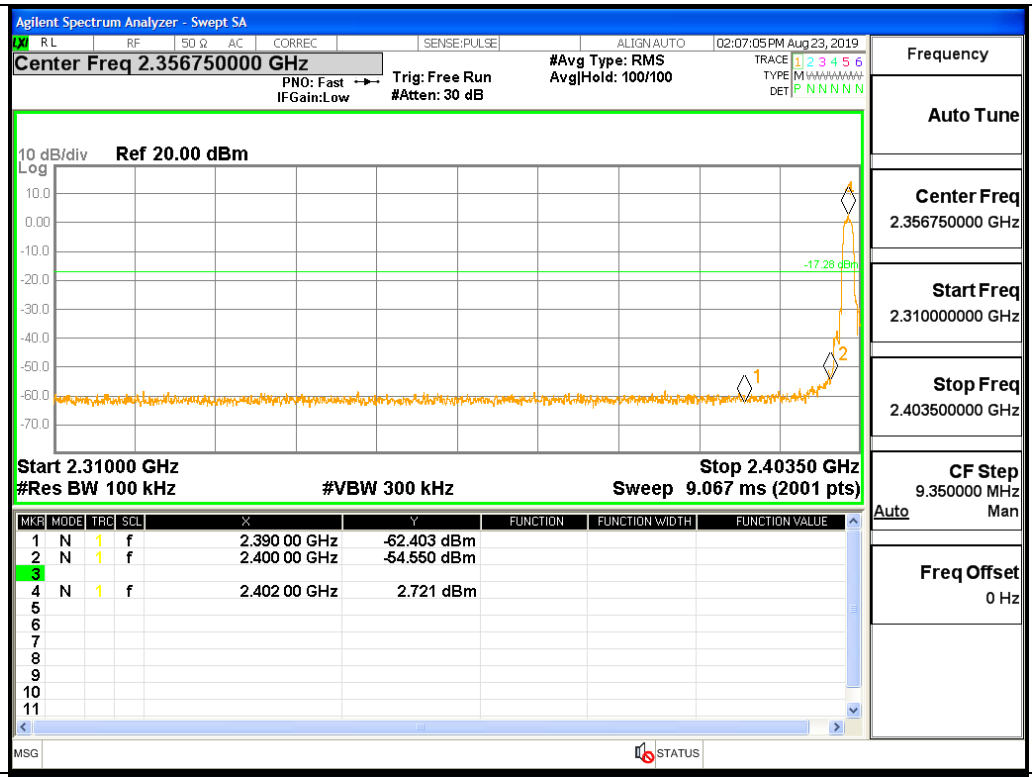
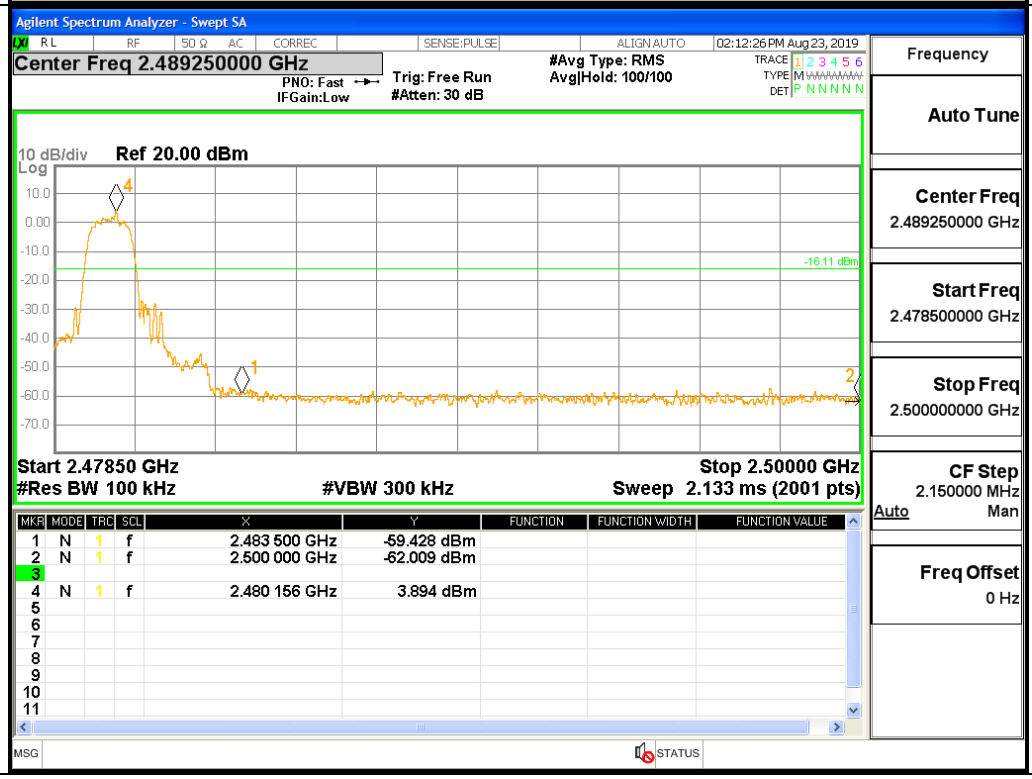
8DPSK/MCH	
8DPSK/HCH	

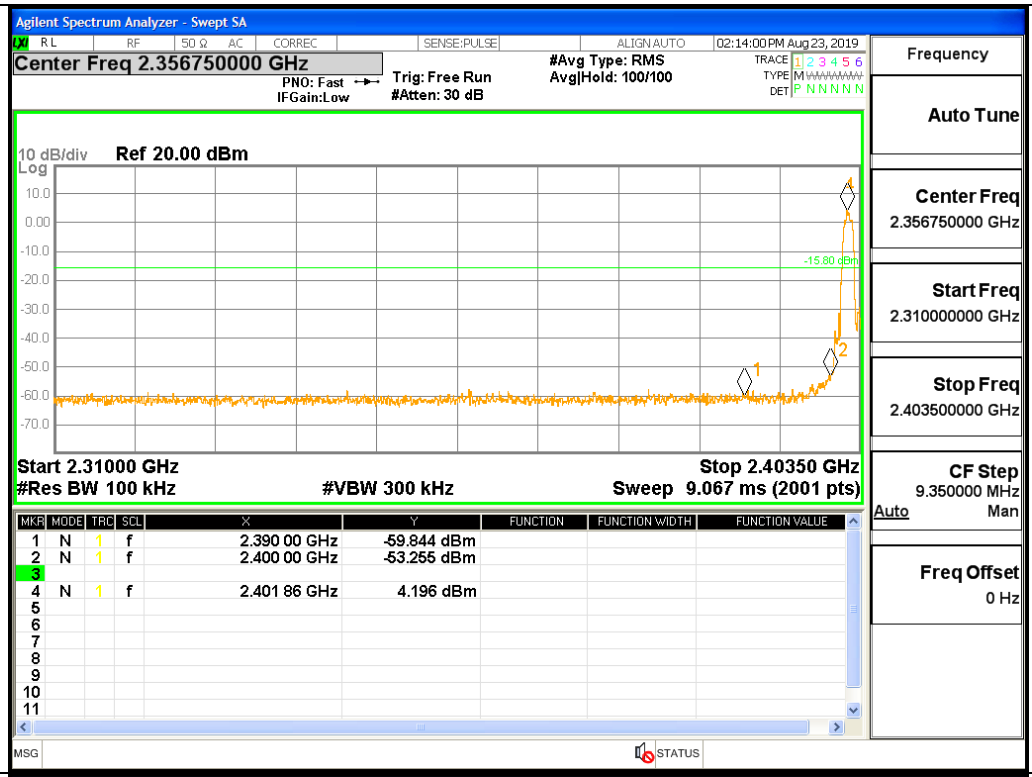
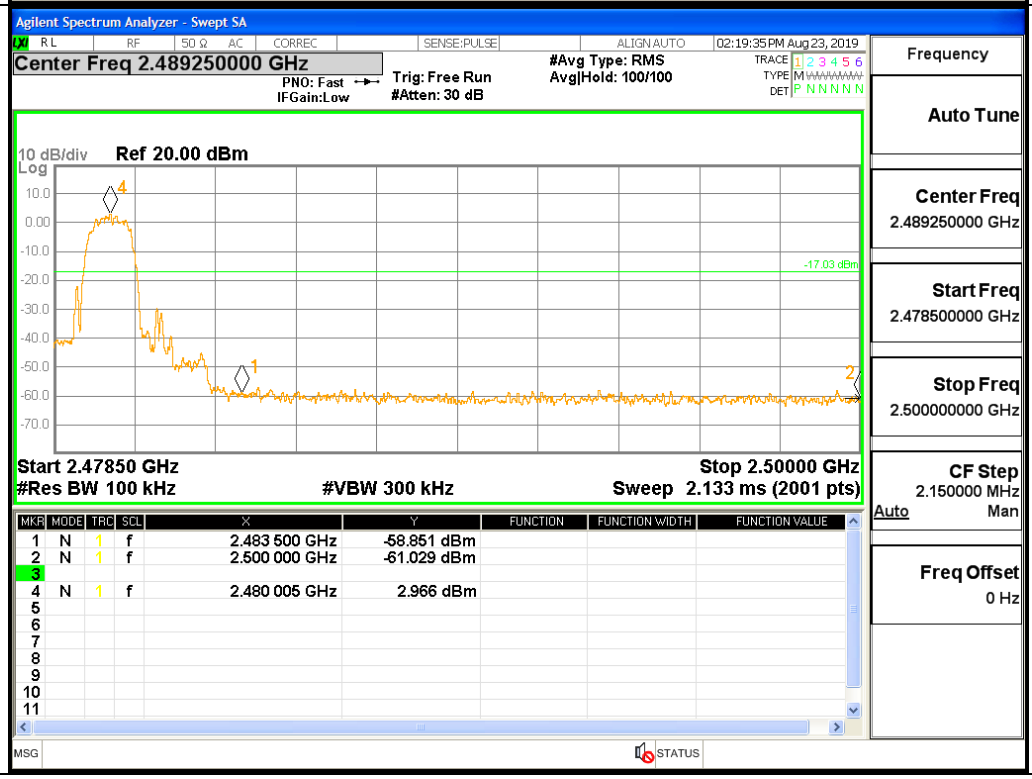
A.6 Band-edge for RF Conducted Emissions

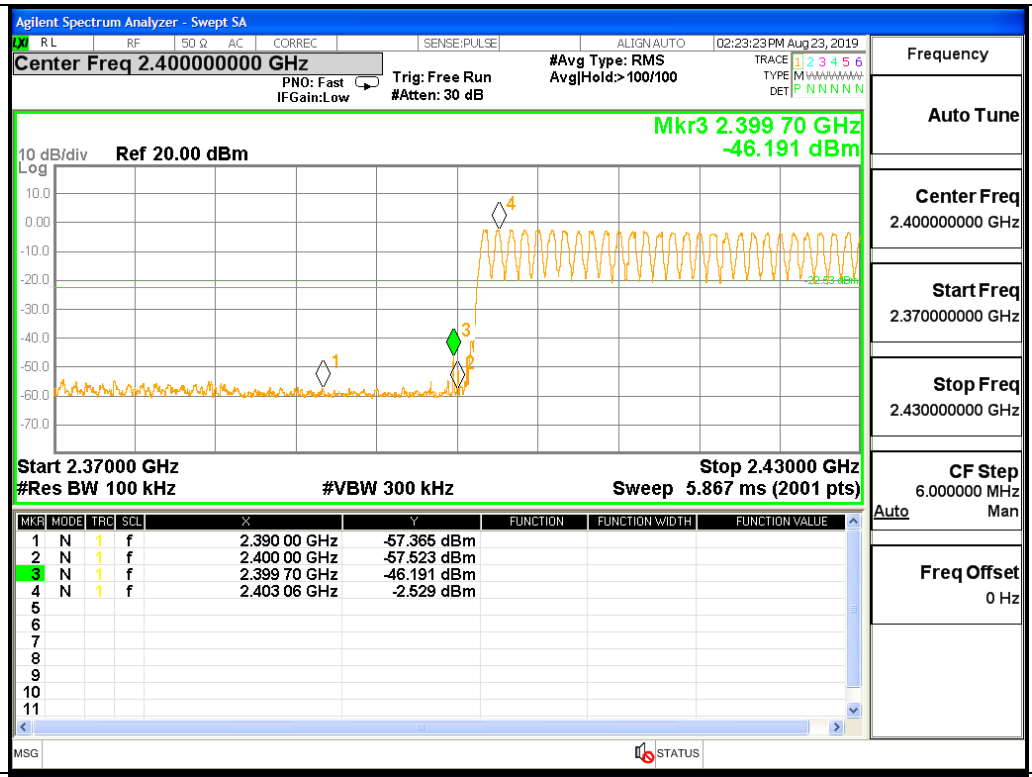
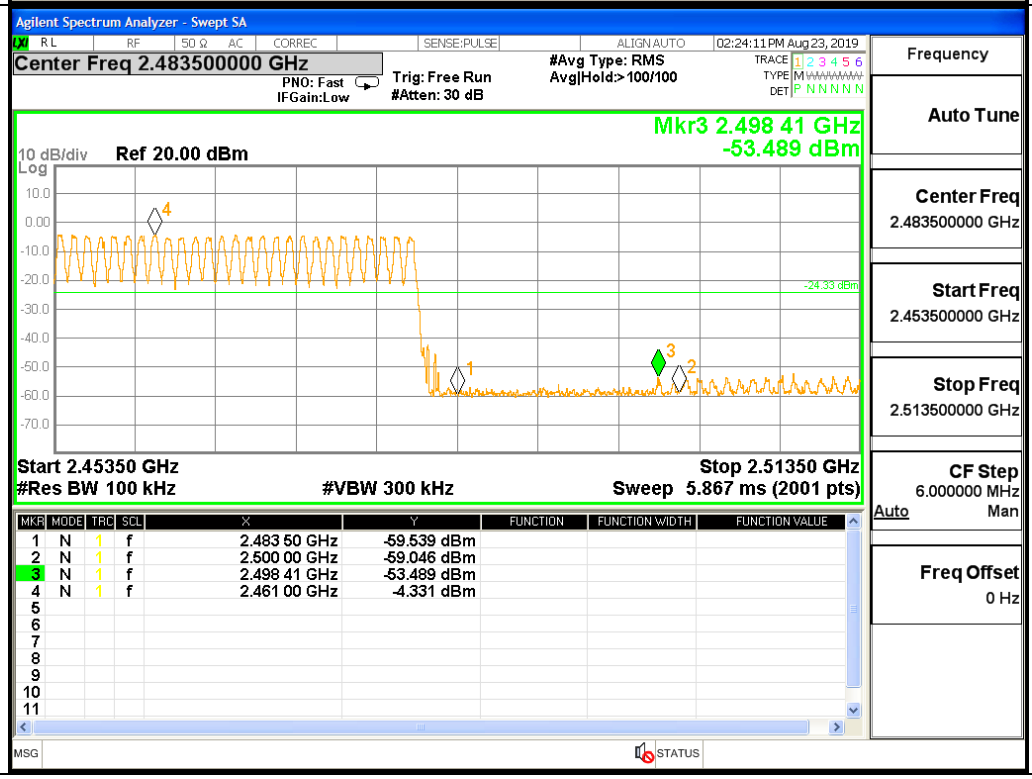
Type	Carrier Frequency(MHz)	Frequency(MHz)	Carrier Frequency Power [dBm]	Bandedge Peak(dBm)	Upper limit(dBm)	Conclusion
1DH5	2402	2399.947	5.728	-49.969	-14.272	Pass
1DH5	2480	2483.5	6.183	-59.78	-13.817	Pass
2DH5	2402	2400	2.721	-54.55	-17.279	Pass
2DH5	2480	2483.5	3.894	-59.43	-16.106	Pass
3DH5	2402	2400	4.196	-53.26	-15.804	Pass
3DH5	2480	2483.5	2.966	-58.85	-17.034	Pass
1DH5-Hopping	2402	2399.7	-2.529	-46.191	-22.529	Pass
1DH5-Hopping	2480	2498.41	-4.331	-53.489	-24.331	Pass
2DH5-Hopping	2402	2399.58	-4.717	-53.551	-24.717	Pass
2DH5-Hopping	2480	2500	-5.753	-59.54	-25.753	Pass
3DH5-Hopping	2402	2399.22	-3.686	-52.103	-23.686	Pass
3DH5-Hopping	2480	2483.5	-5.515	-58.58	-25.515	Pass

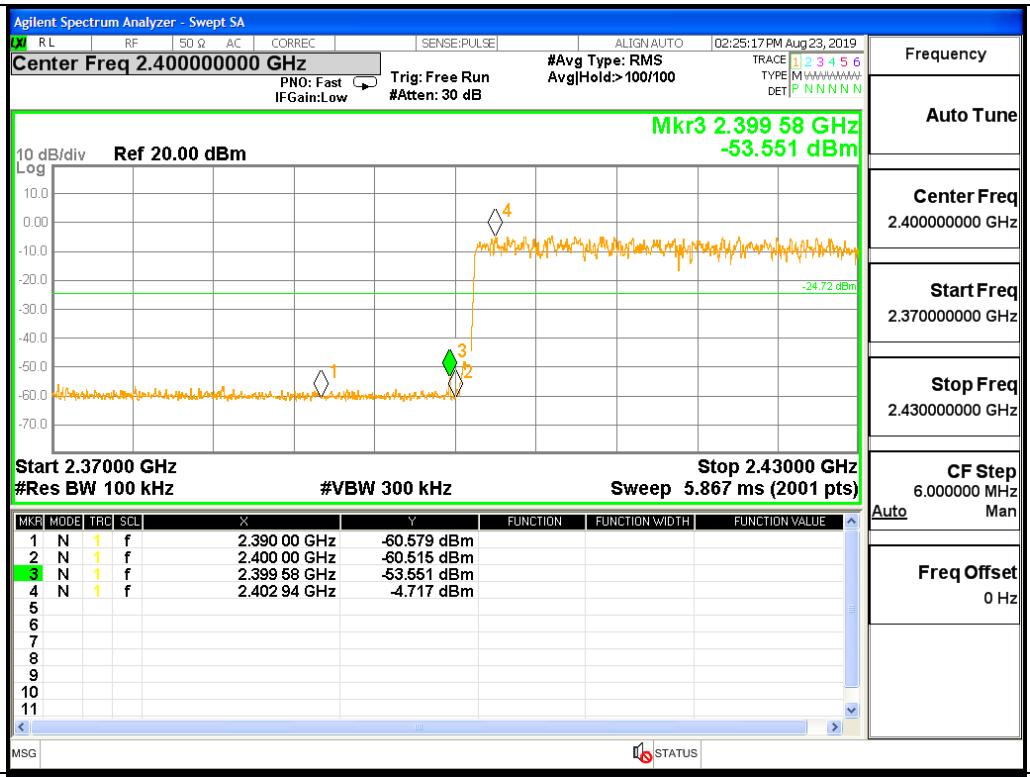
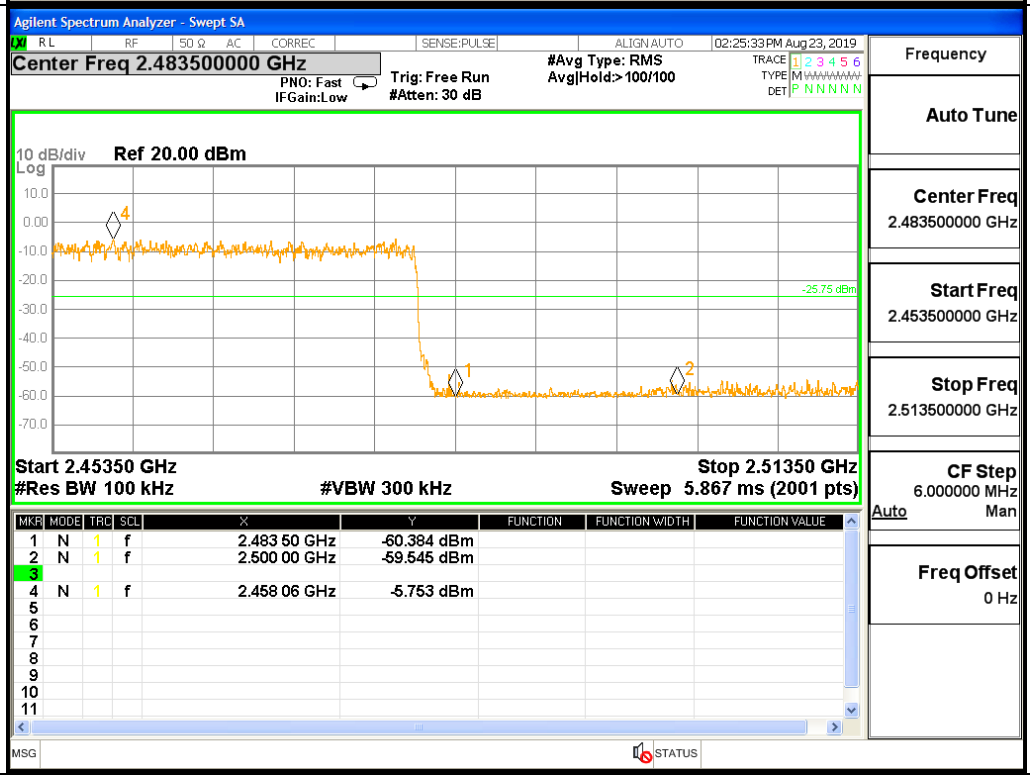
Test Graph

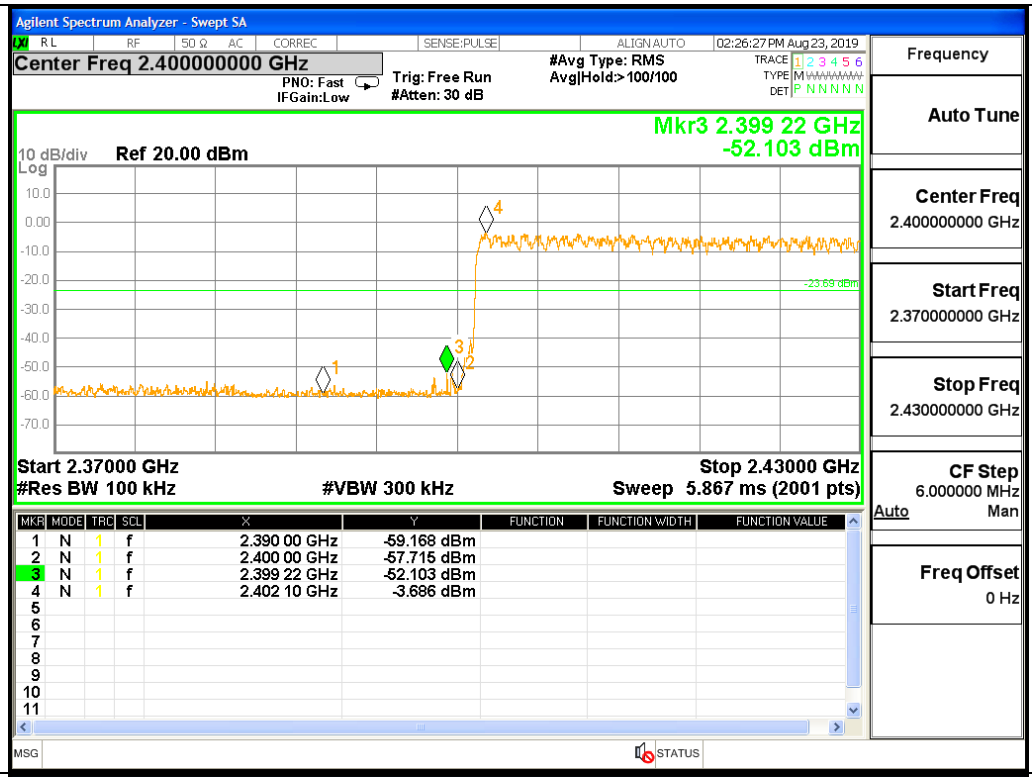
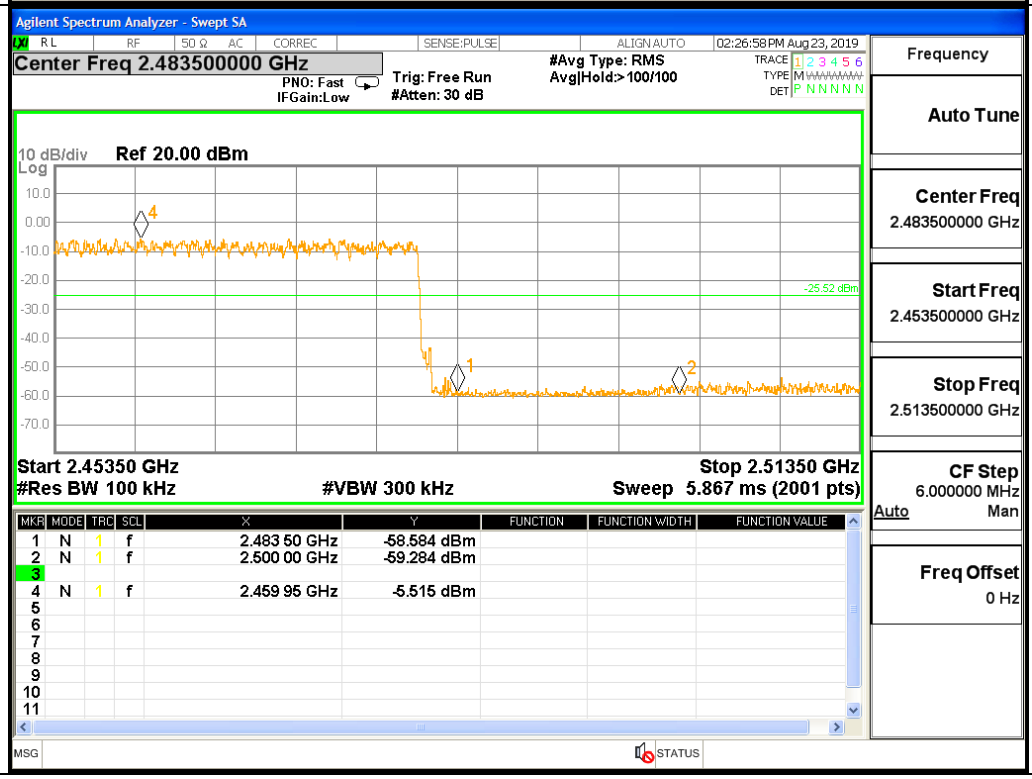
Graphs	
GFSK/LCH/No Hop	
GFSK/HCH/No Hop	

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

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

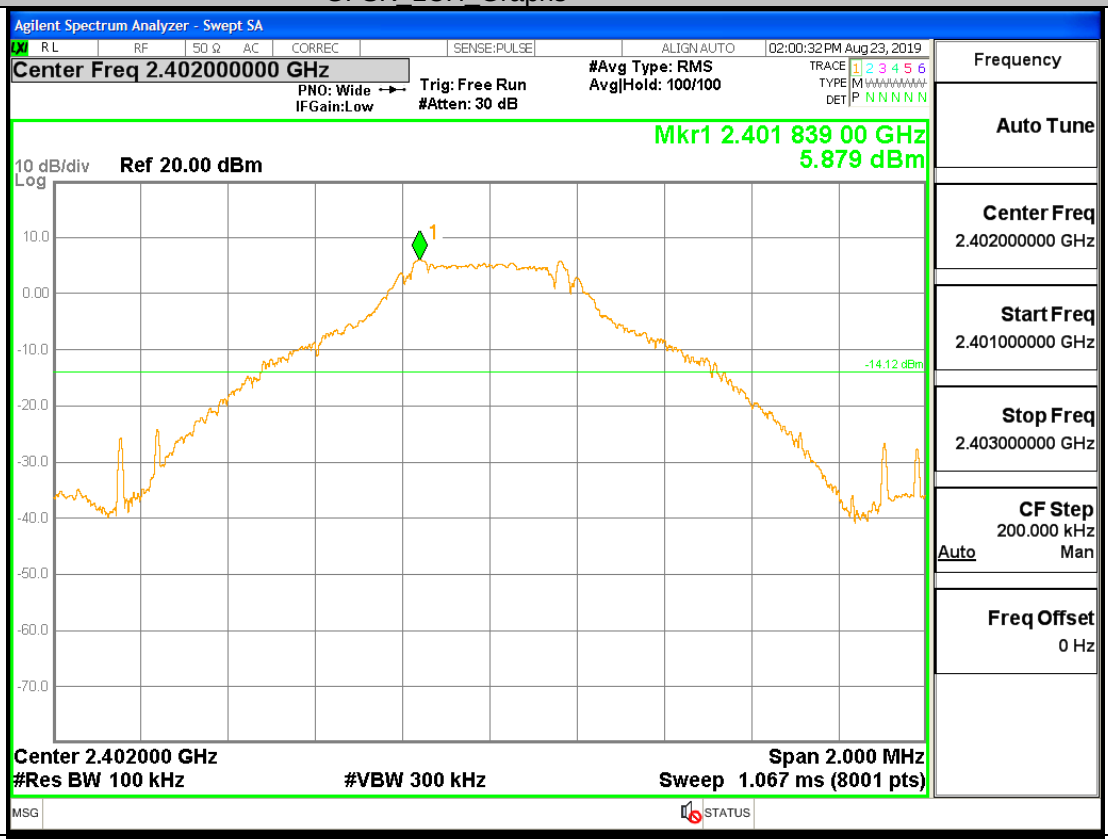
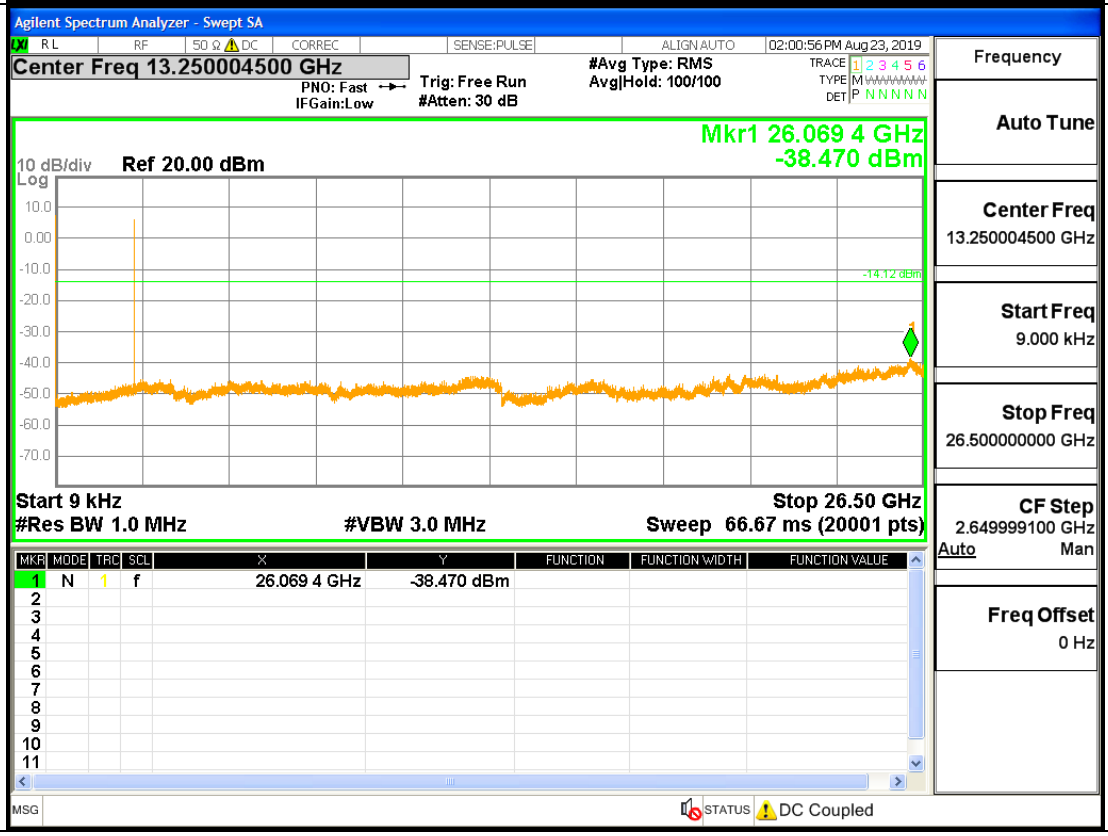
GFSK/LCH/Hop	
GFSK/HCH/Hop	

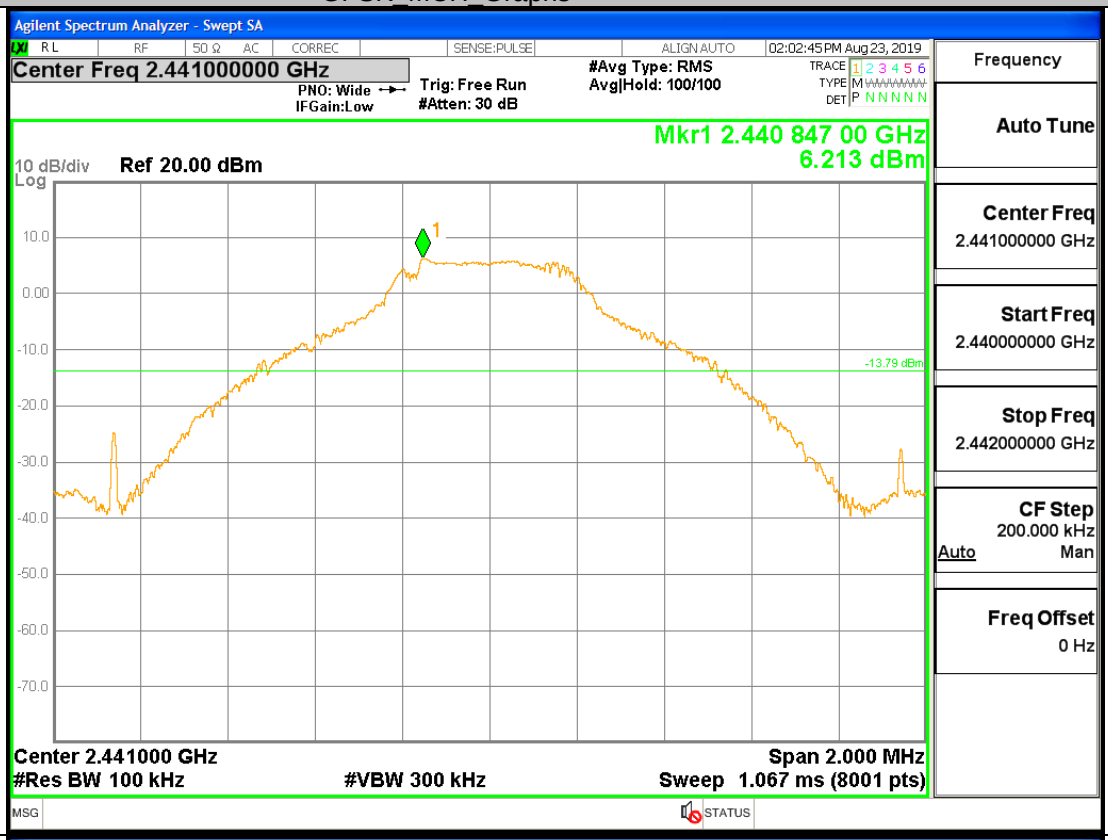
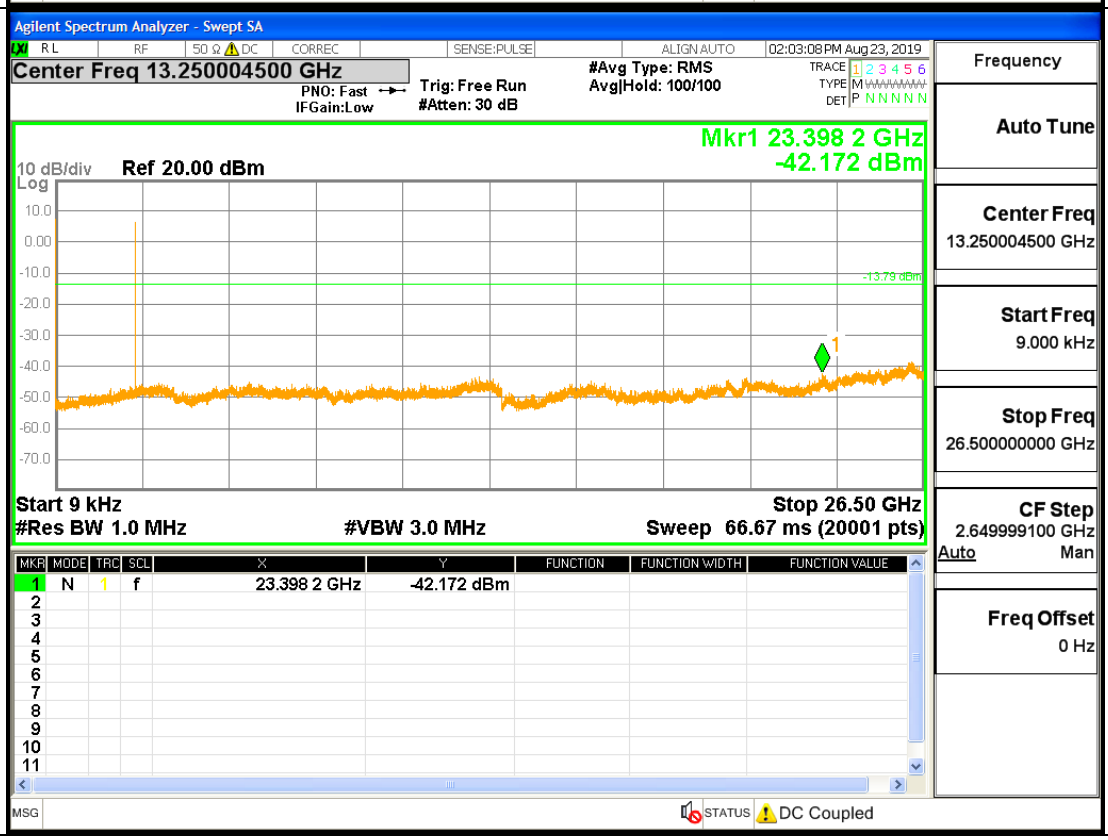
π /4DQPSK/LCH/Hop	
π /4DQPSK/HCH/Hop	

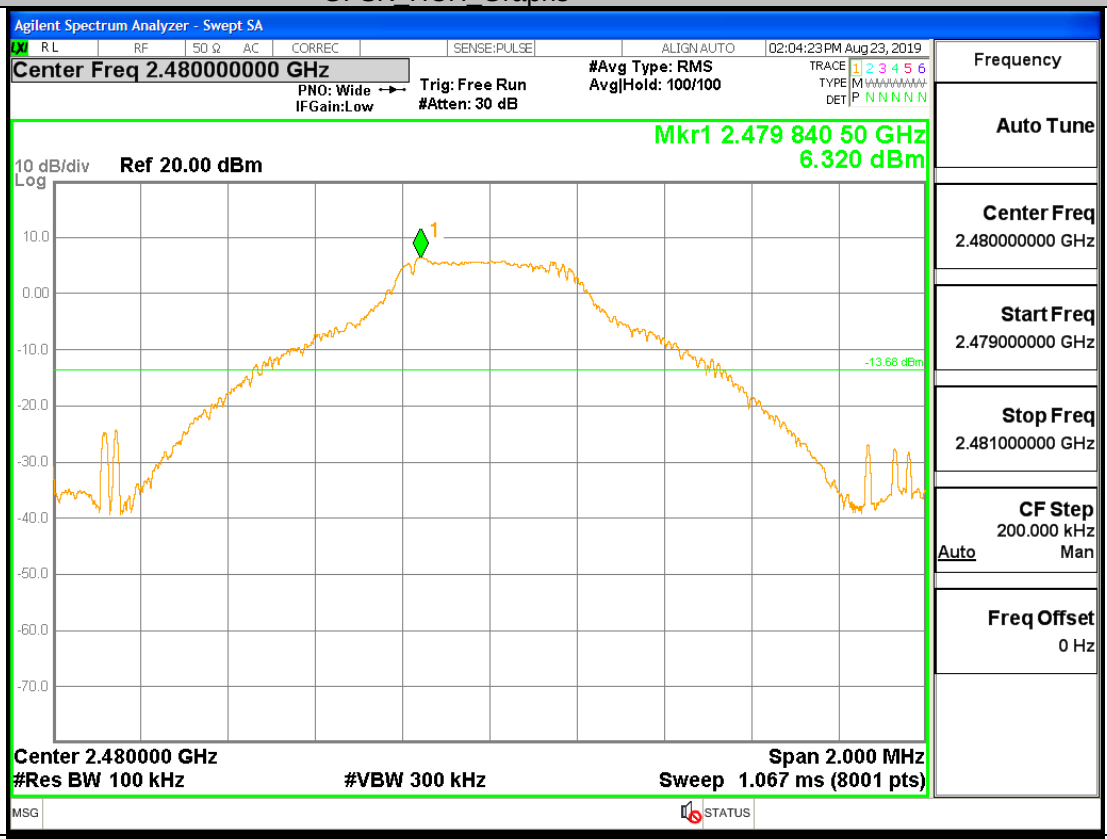
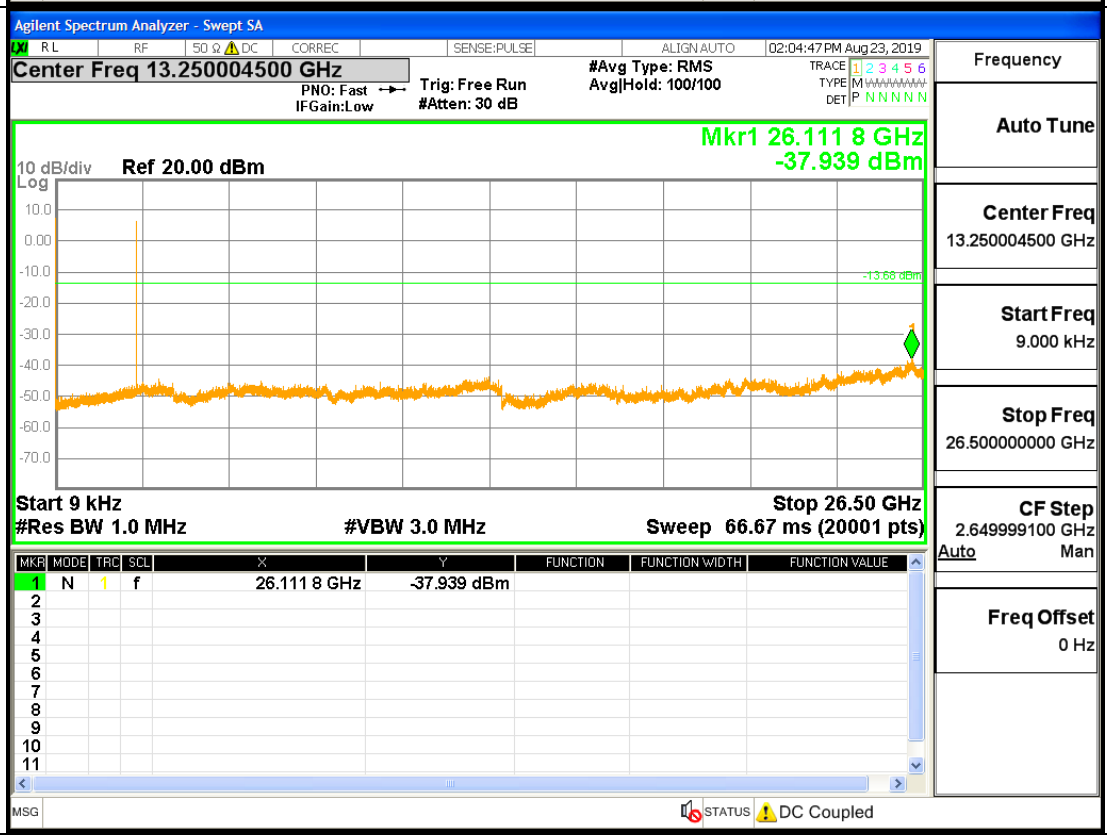
8DPSK/LCH/Hop	
8DPSK/HCH/Hop	

A.7 RF Conducted Spurious Emissions

Test Graph

GFSK_LCH_Graphs	
Pref	
Puw	

GFSK_MCH_Graphs	
Pref	
Puw	

GFSK_HCH_Graphs	
Pref	
Puw	

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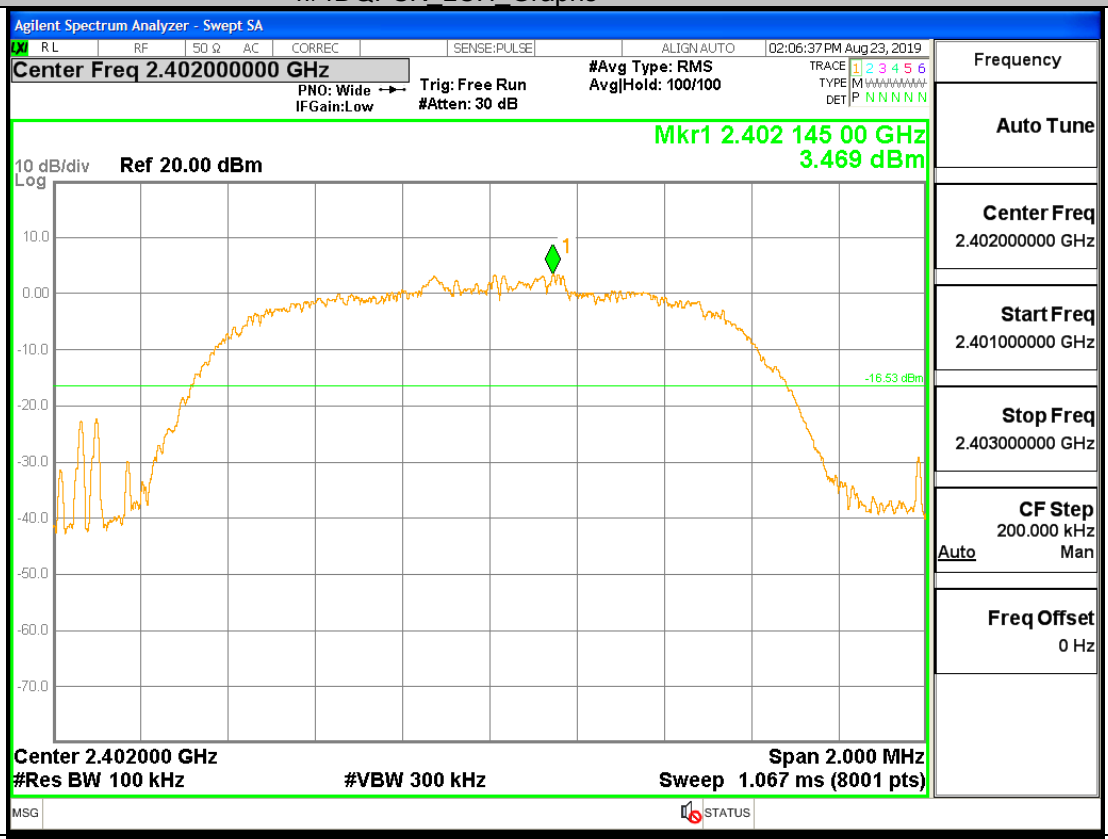
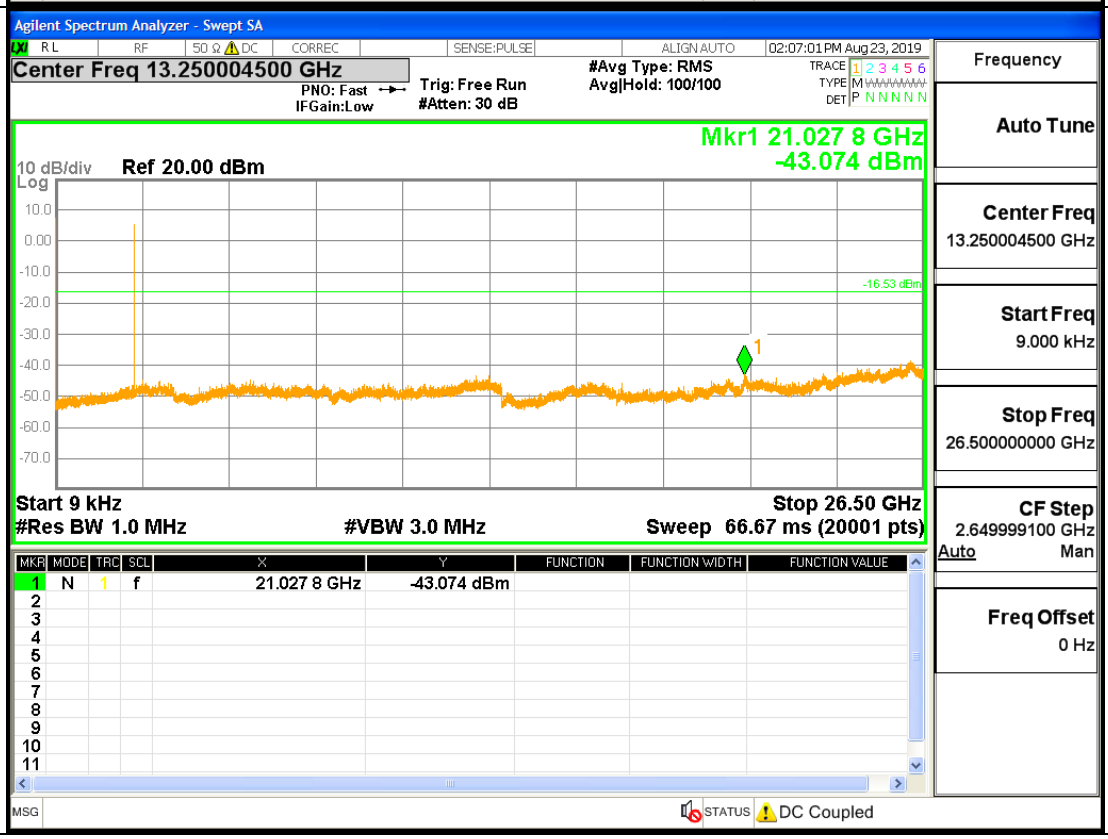
Pref	
Puw	

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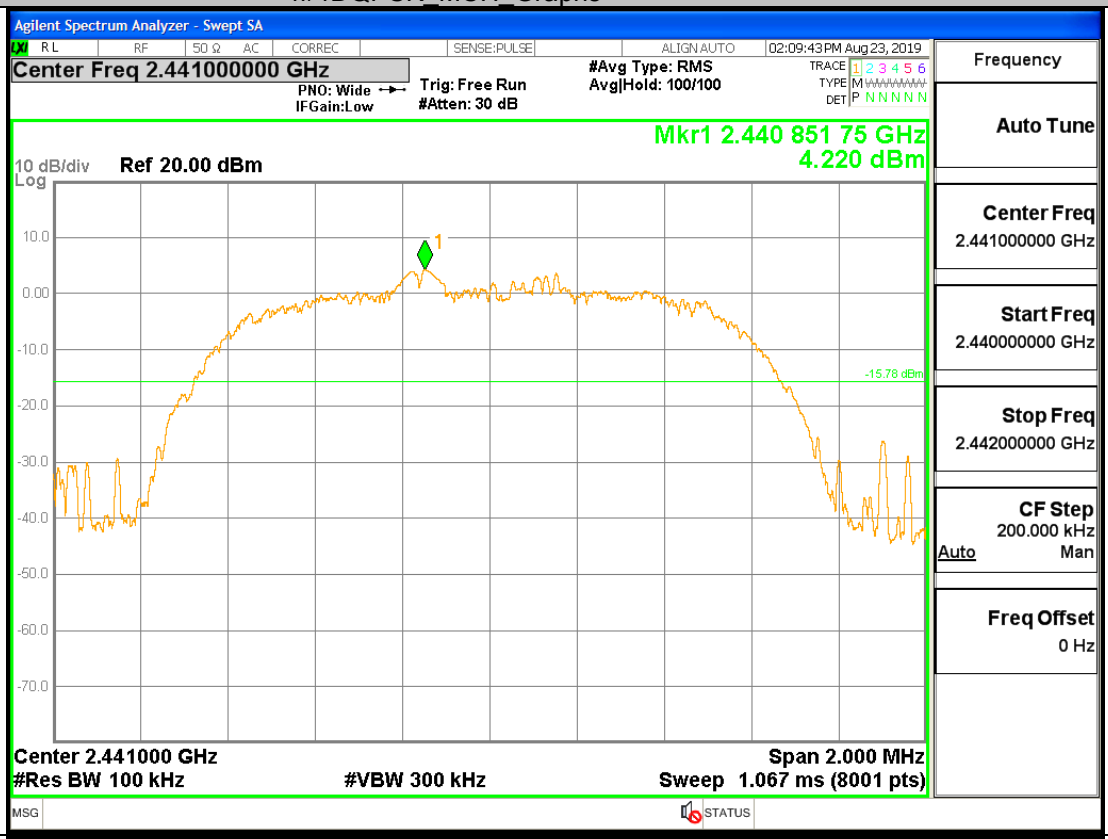
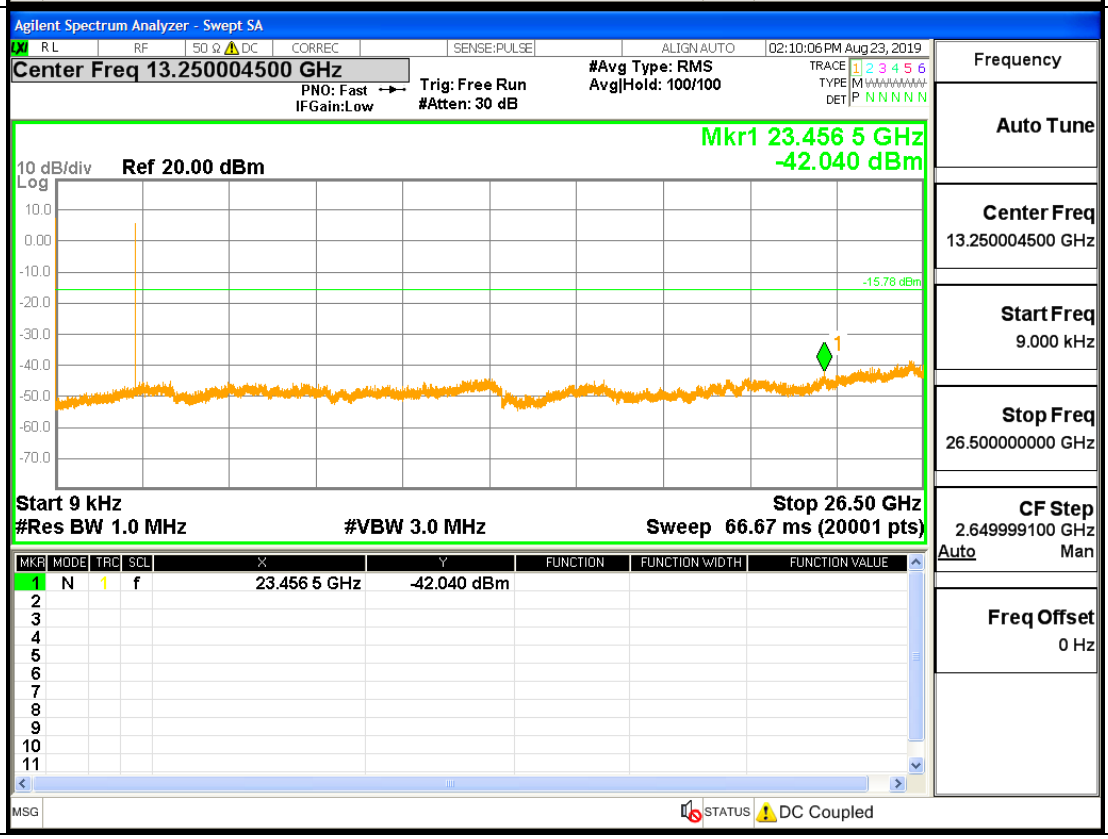
Pref	
Puw	

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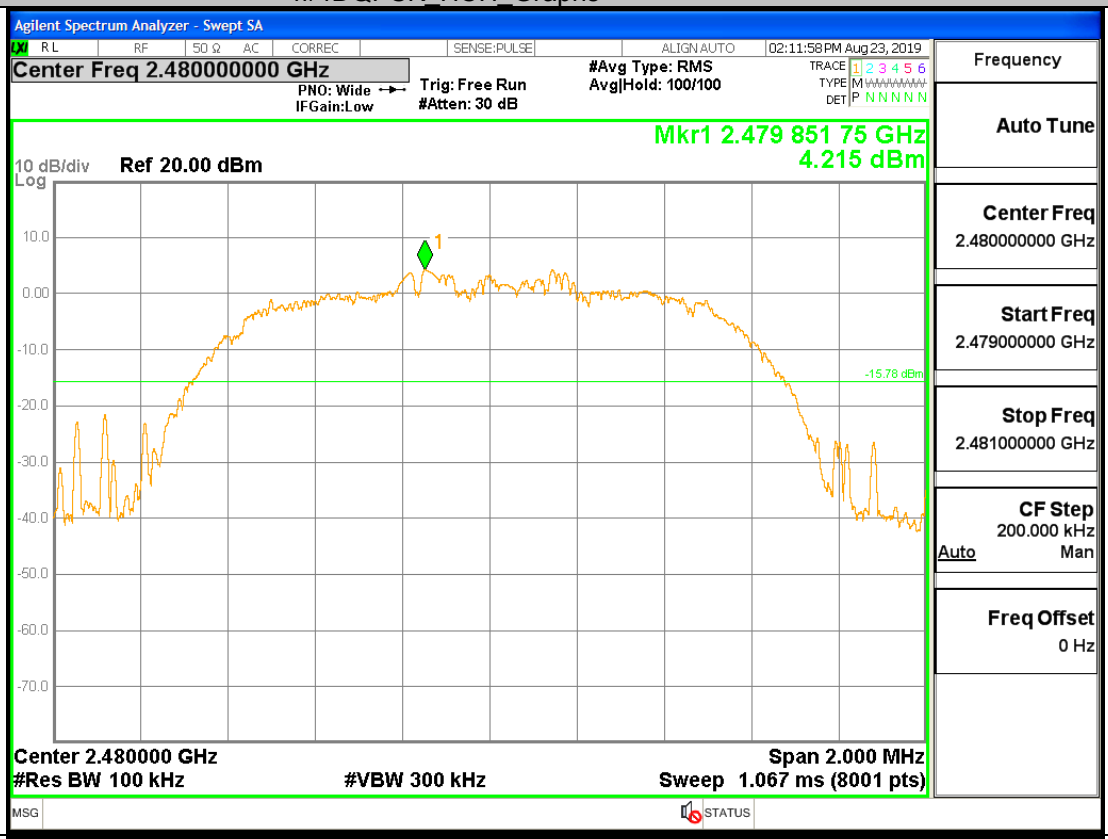
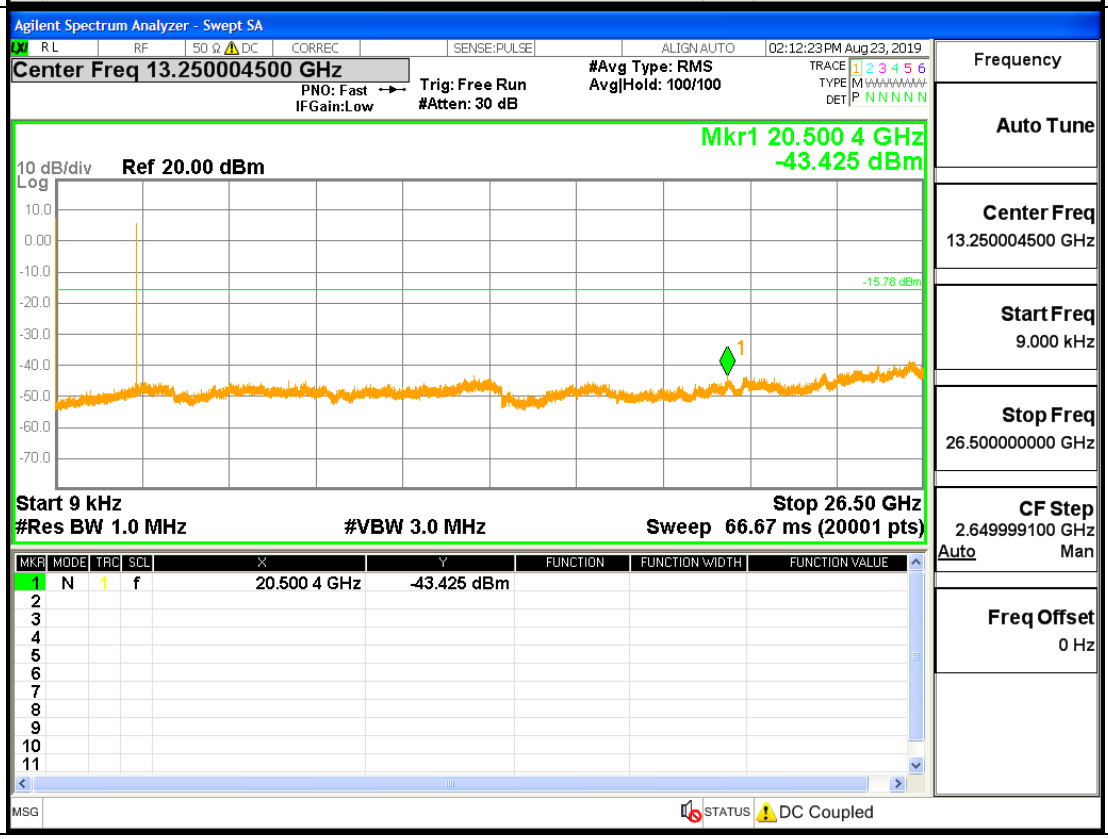
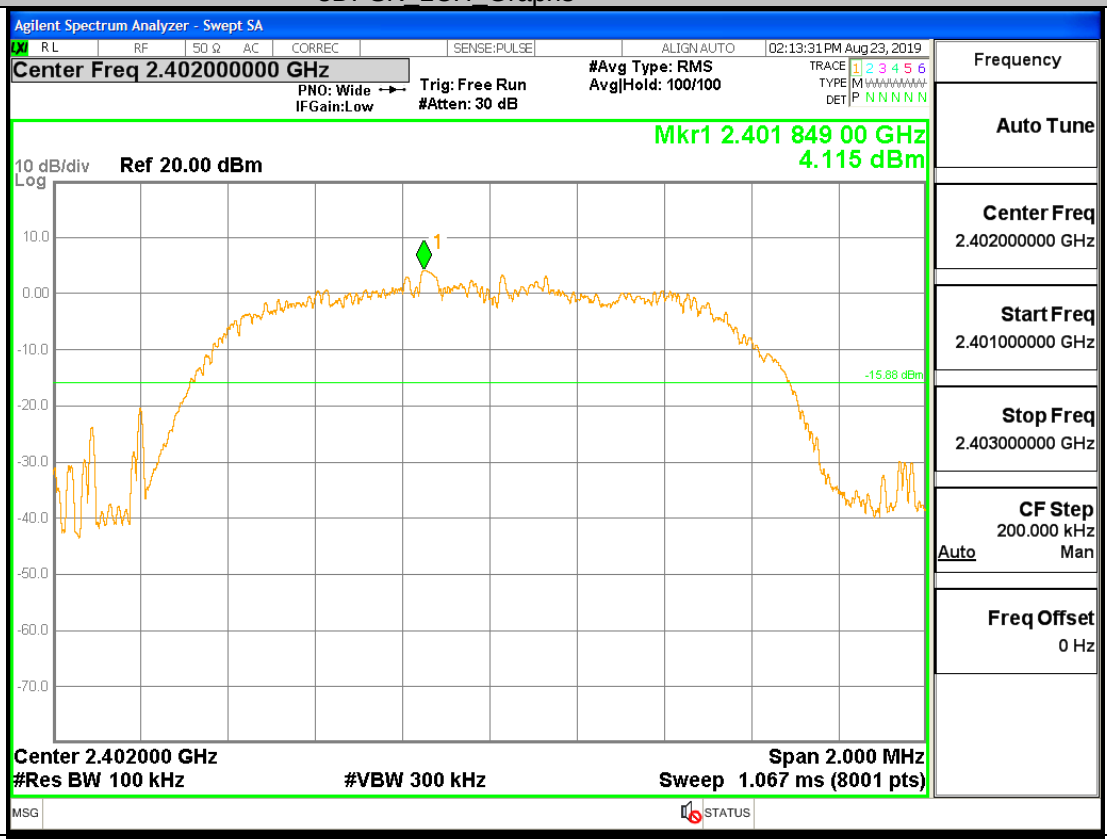
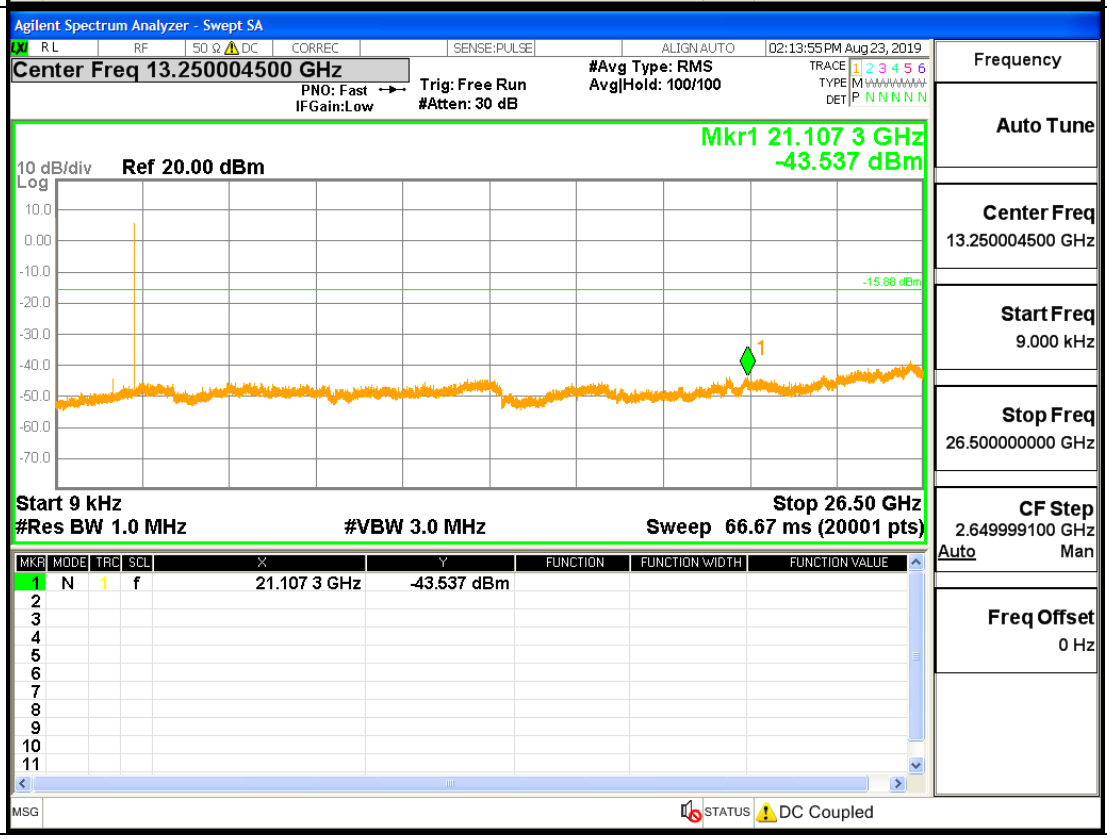
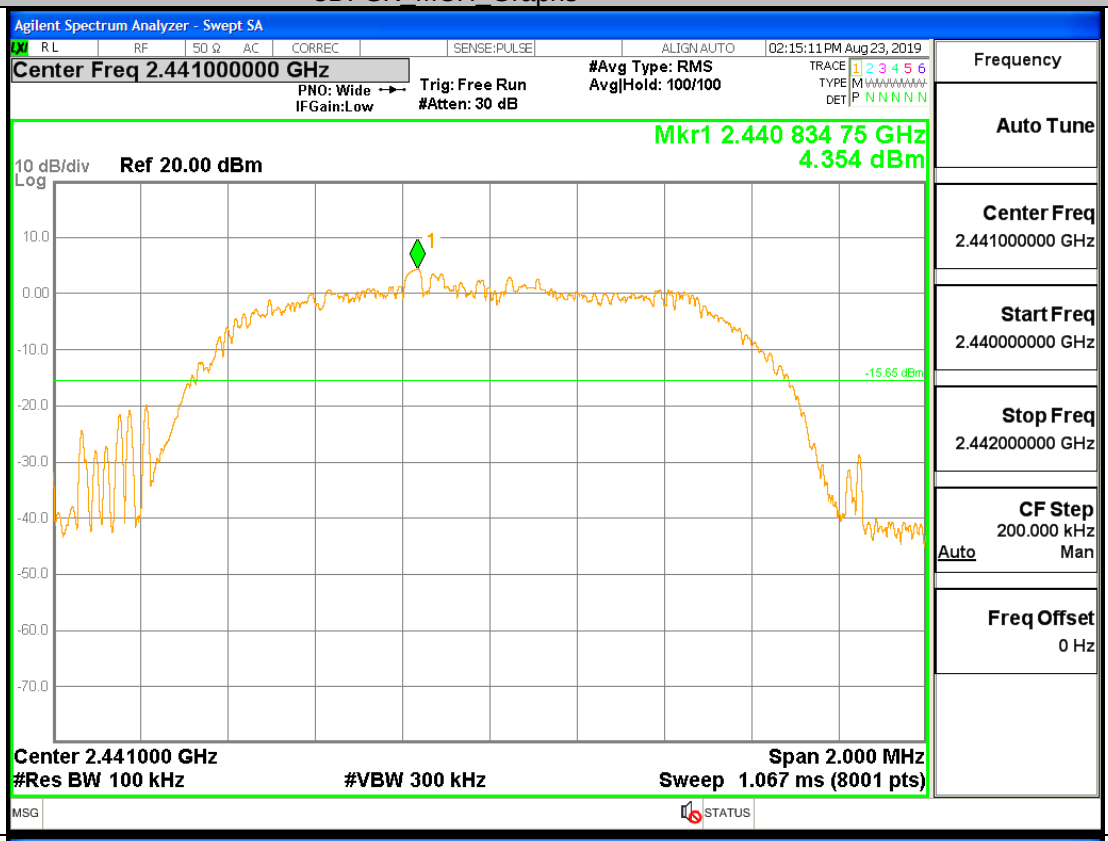
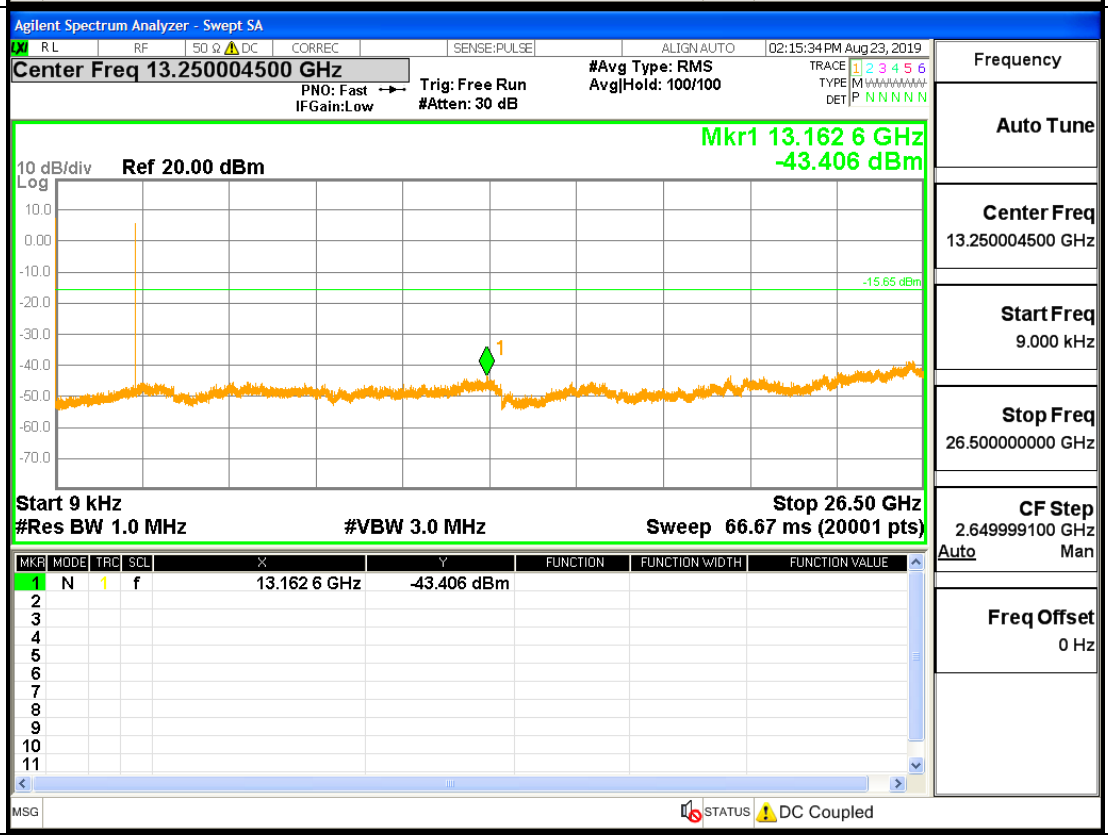
Pref	
Puw	

8DPSK_LCH_Graphs	
Pref	
Puw	

8DPSK_MCH_Graphs	
Pref	
Puw	

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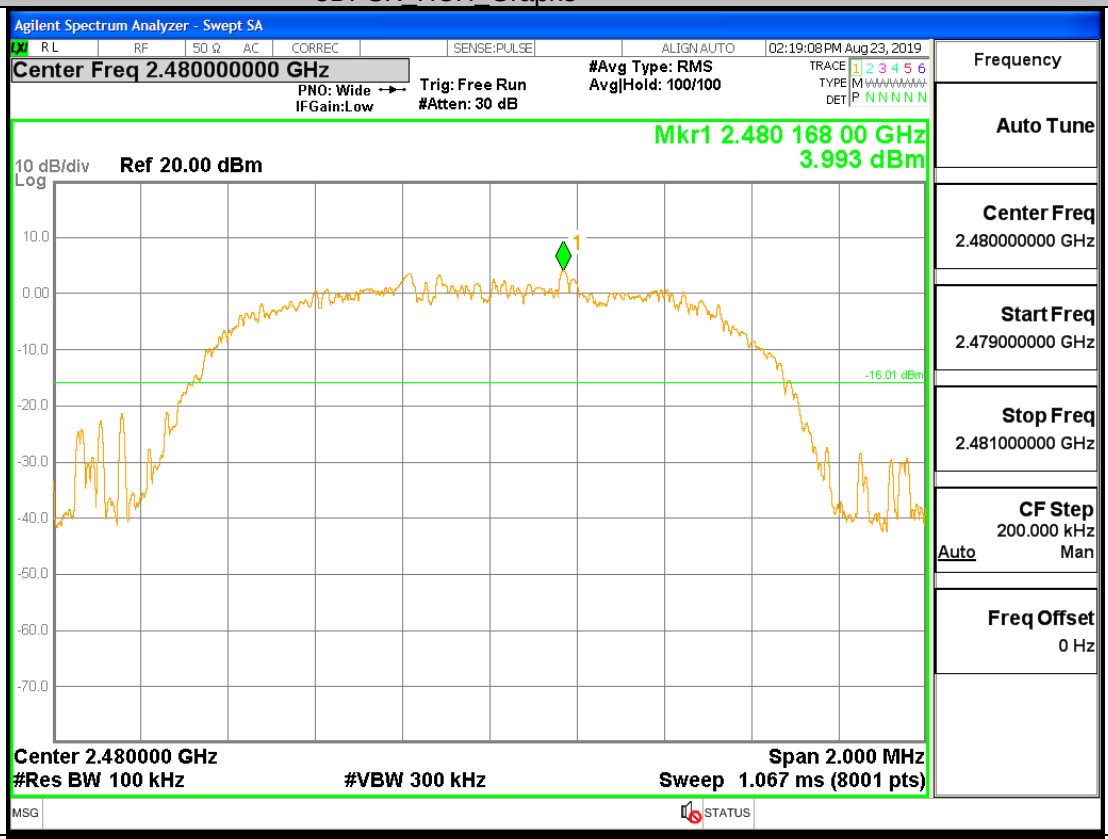
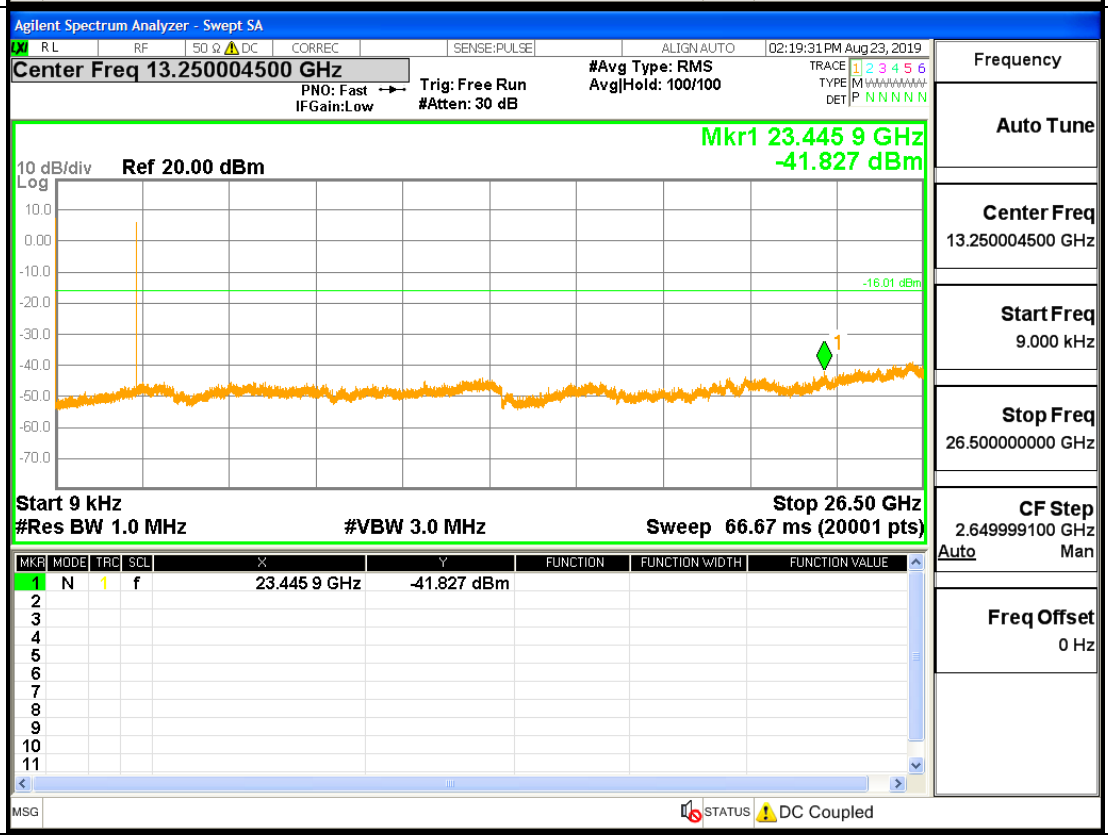
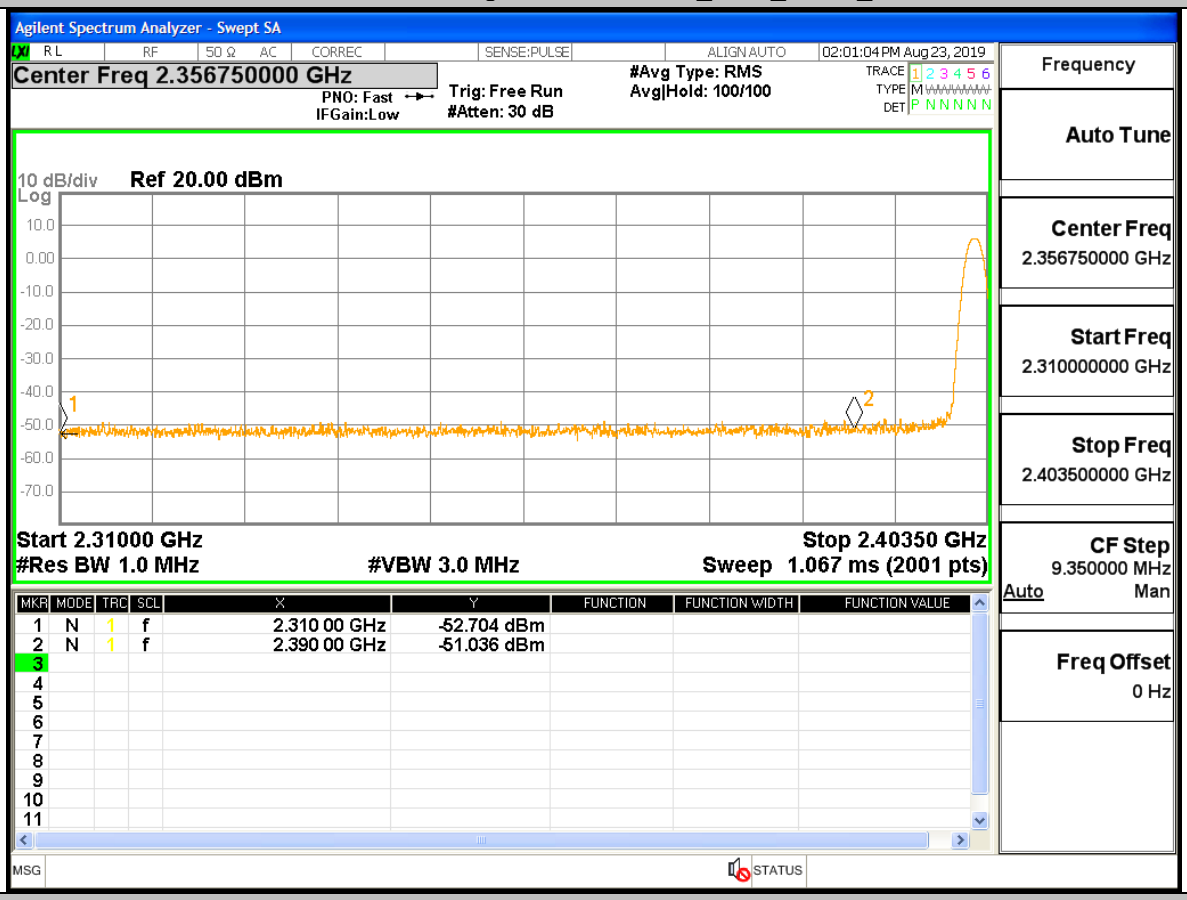
Pref	
Puw	

A.8 Restrict-band band-edge measurements

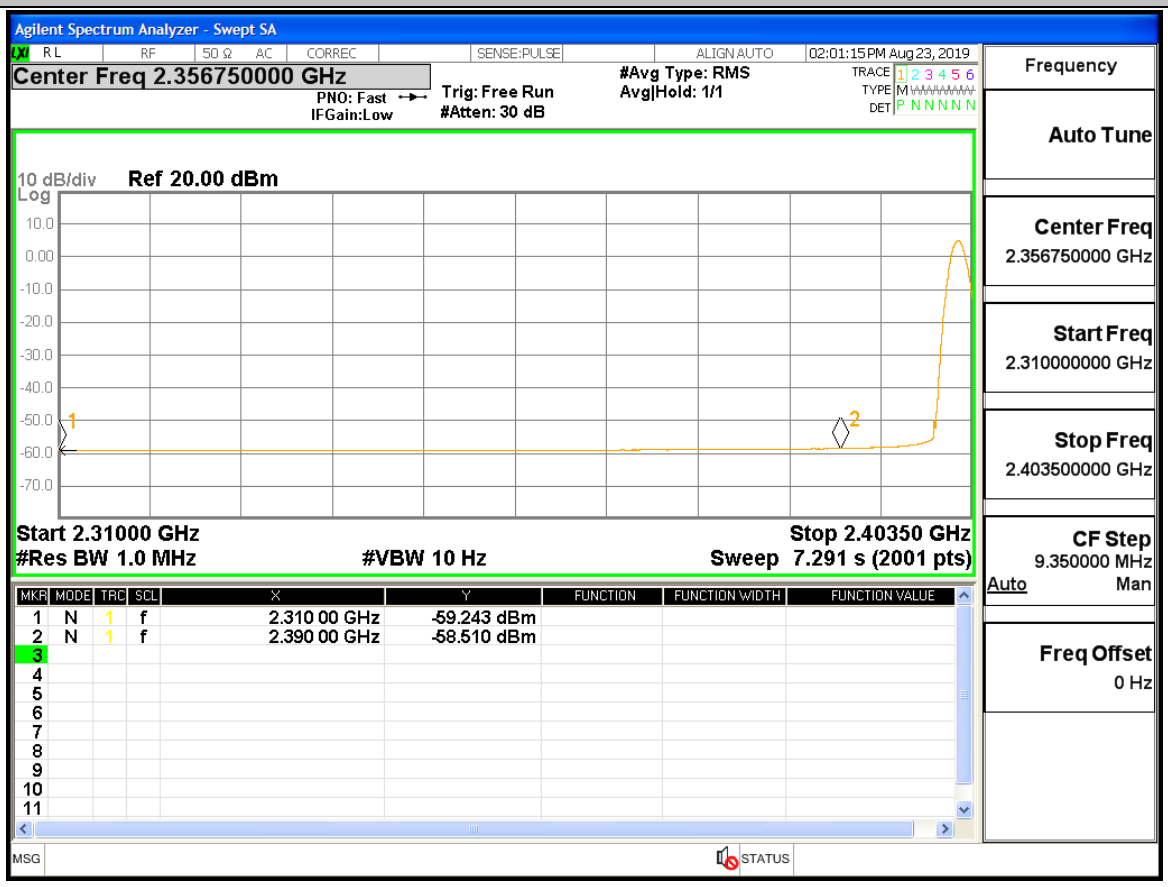
Type	Carrier Frequency (MHz)	Frequency(MHz)	Gain	Ground Factor	Peak Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
1DH5	2402	2390.00	2.00	0.00	-51.04	46.16	74	Pass
1DH5	2480	2494.18	2.00	0.00	-47.09	50.11	74	Pass
2DH5	2402	2310.00	2.00	0.00	-52.10	45.10	74	Pass
2DH5	2480	2486.08	2.00	0.00	-46.96	50.24	74	Pass
3DH5	2402	2390.00	2.00	0.00	-52.01	45.19	74	Pass
3DH5	2480	2484.22	2.00	0.00	-47.65	49.55	74	Pass

Type	Carrier Frequency (MHz)	Frequency(MHz)	Gain	Ground Factor	Average Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
1DH5	2402	2390.00	2.00	0.00	-58.51	38.69	54	Pass
1DH5	2480	2494.18	2.00	0.00	-53.47	43.73	54	Pass
2DH5	2402	2310.00	2.00	0.00	-58.67	38.53	54	Pass
2DH5	2480	2486.08	2.00	0.00	-52.96	44.24	54	Pass
3DH5	2402	2390.00	2.00	0.00	-58.68	38.52	54	Pass
3DH5	2480	2484.22	2.00	0.00	-58.42	38.78	54	Pass

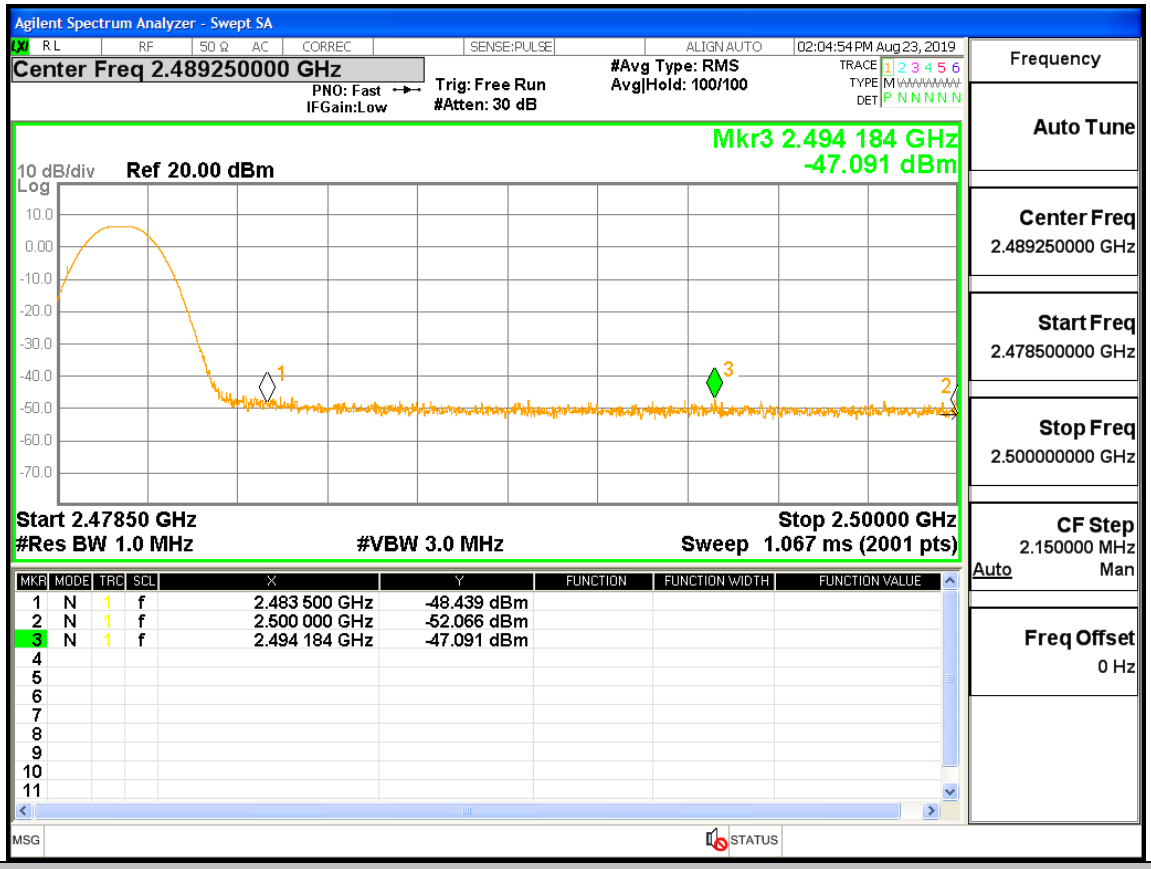
Restrict-band band-edge measurements_2402_PEAK_DH5



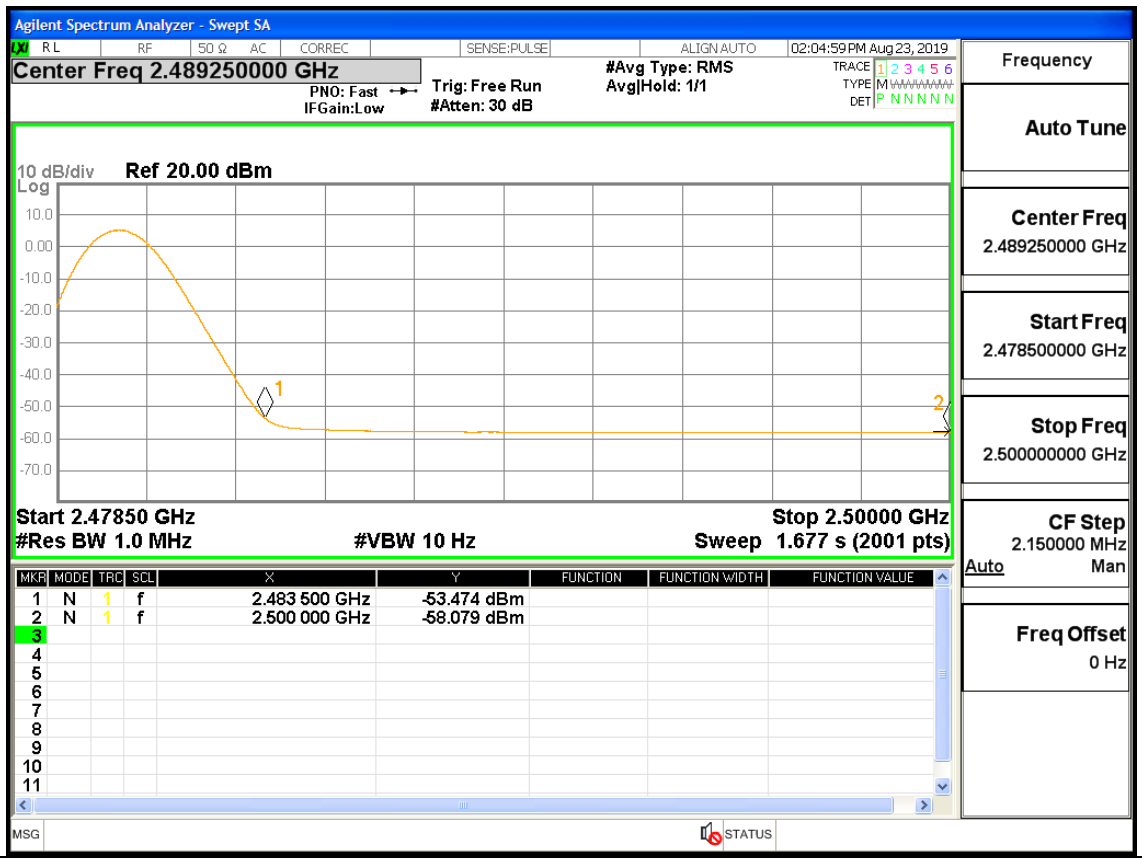
Restrict-band band-edge measurements_2402_AV_DH5



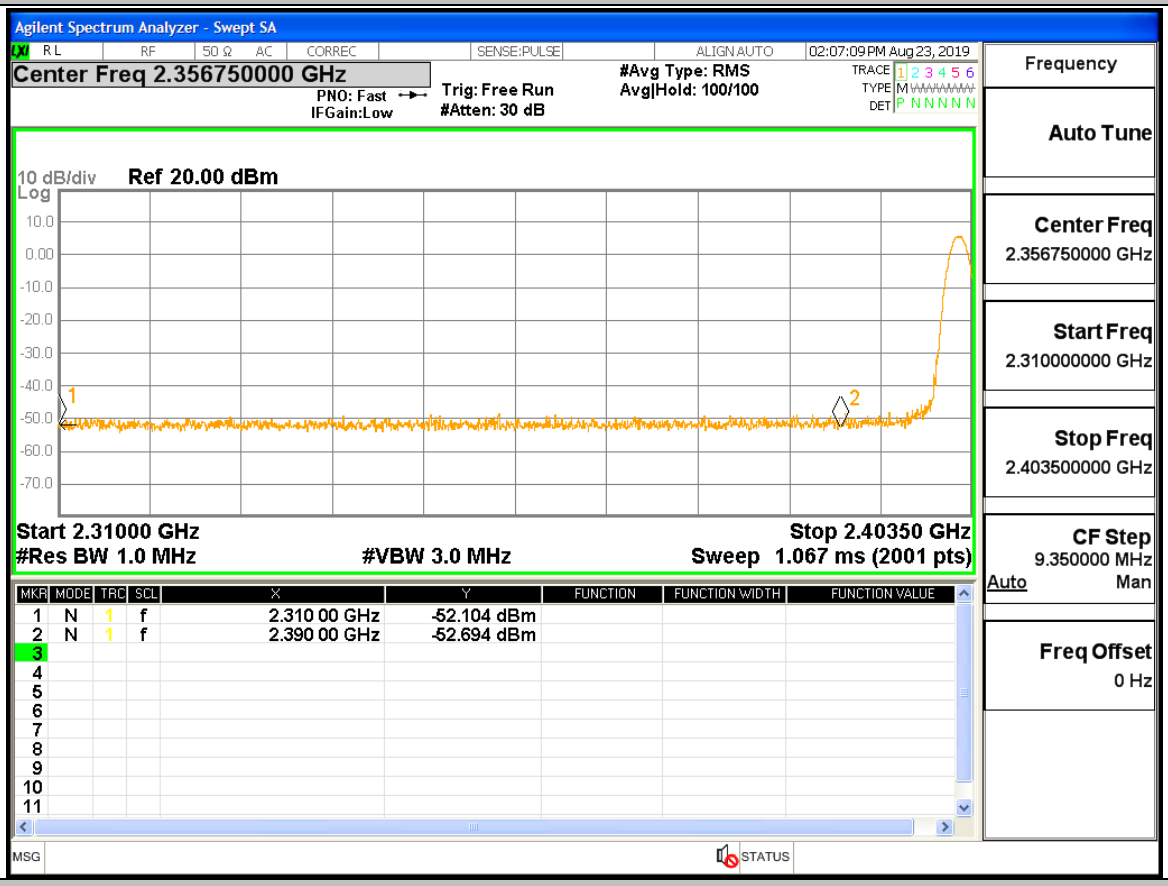
Restrict-band band-edge measurements_2480_PEAK_DH5



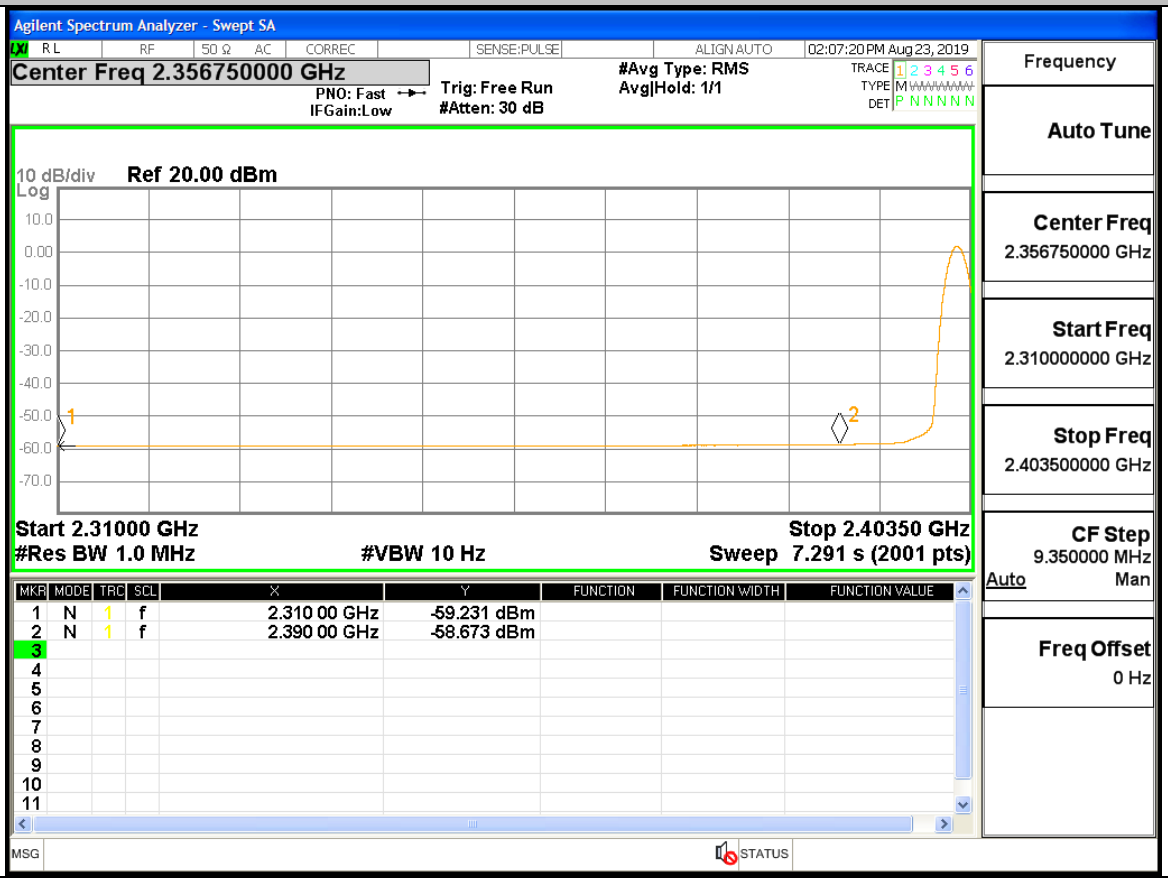
Restrict-band band-edge measurements_2480_AV_DH5



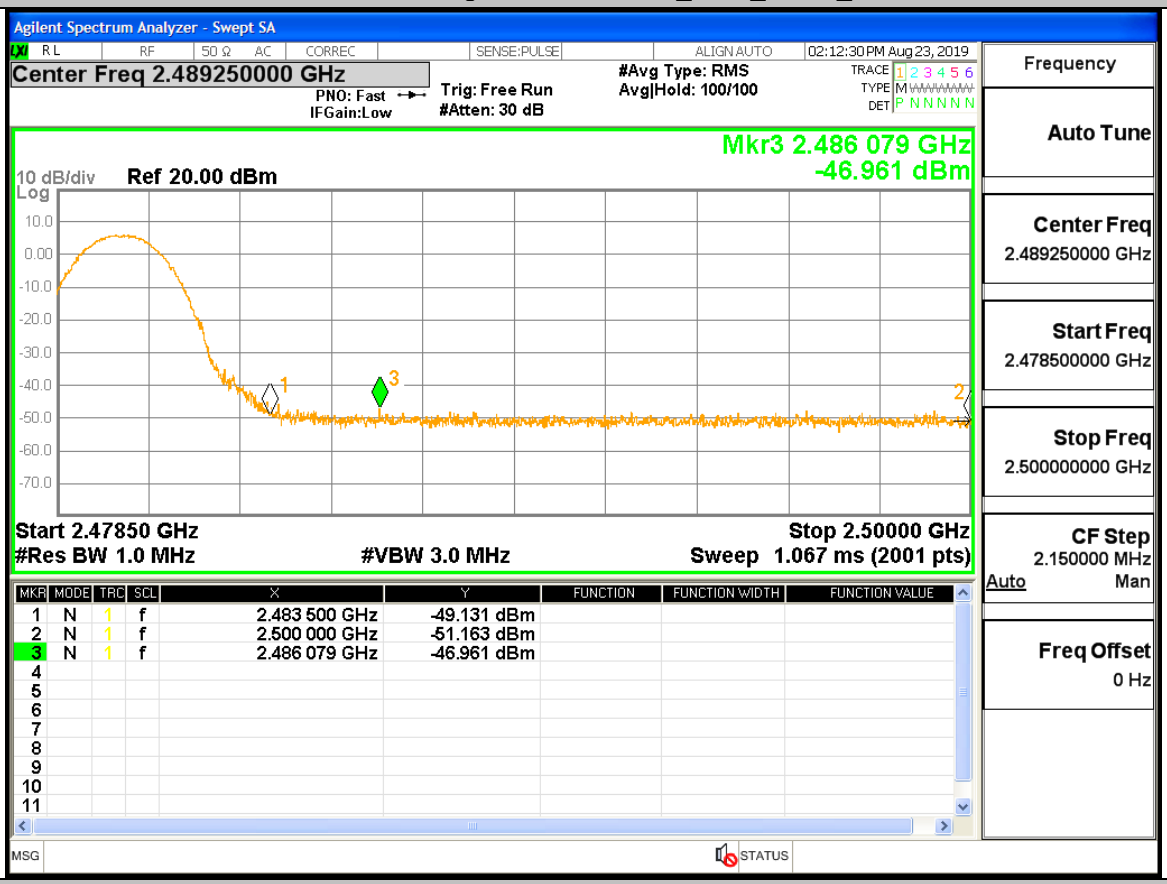
Restrict-band band-edge measurements_2402_PEAK_2DH5



Restrict-band band-edge measurements_2402_AV_2DH5



Restrict-band band-edge measurements_2480_PEAK_2DH5



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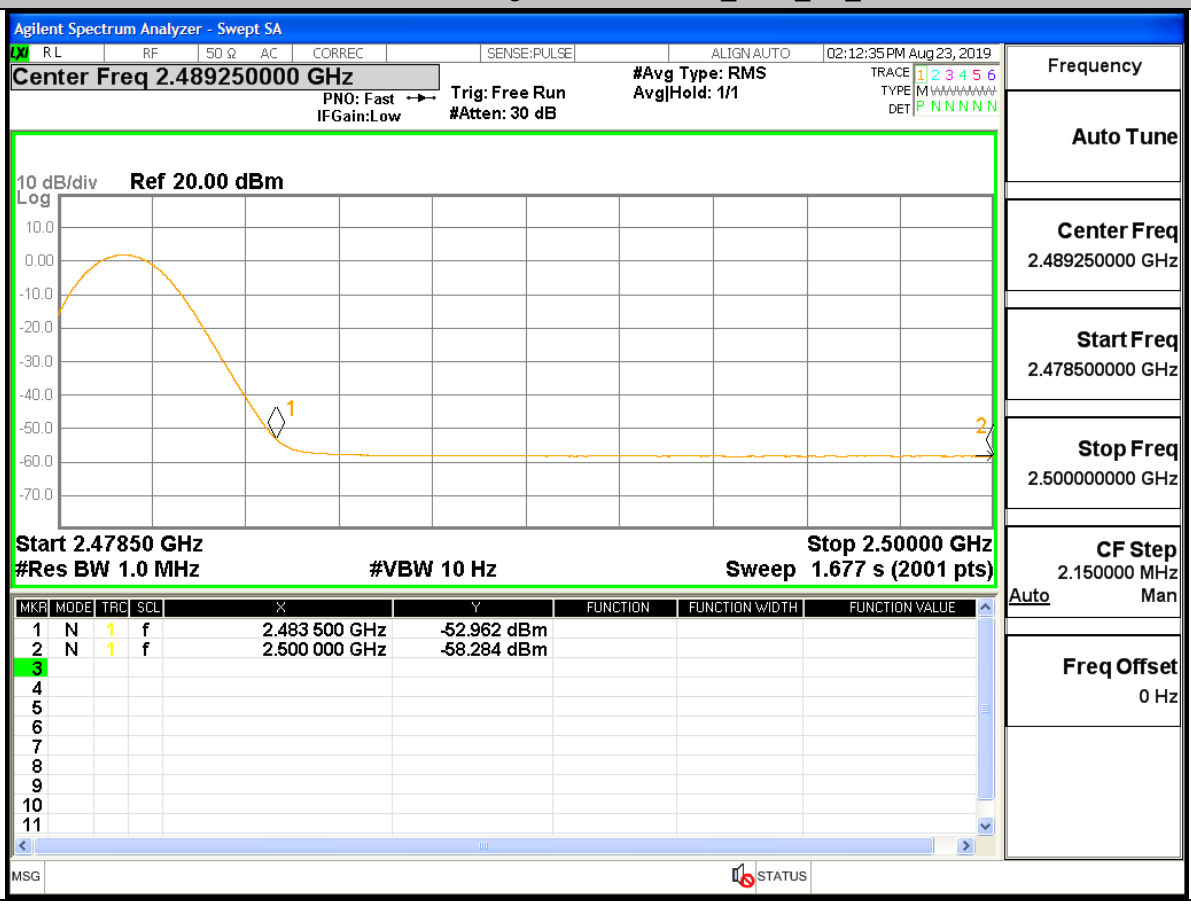
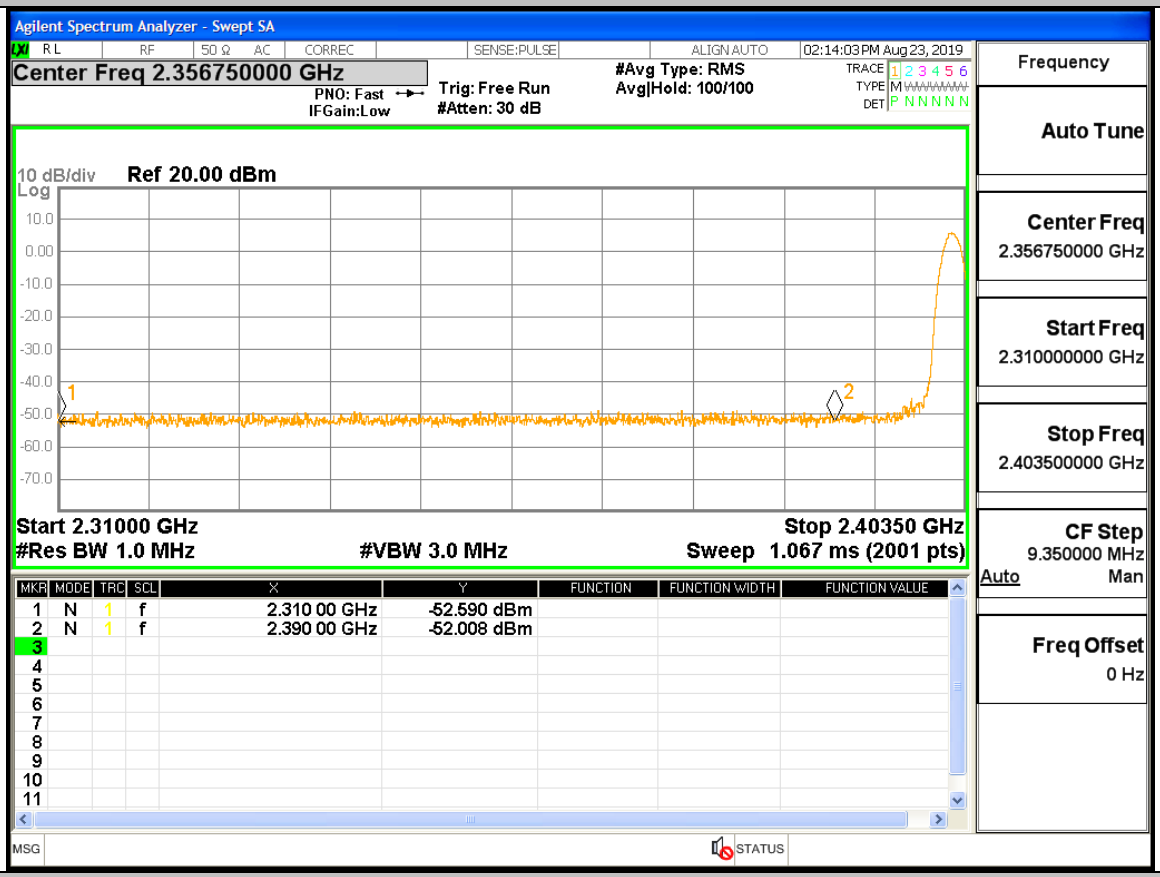
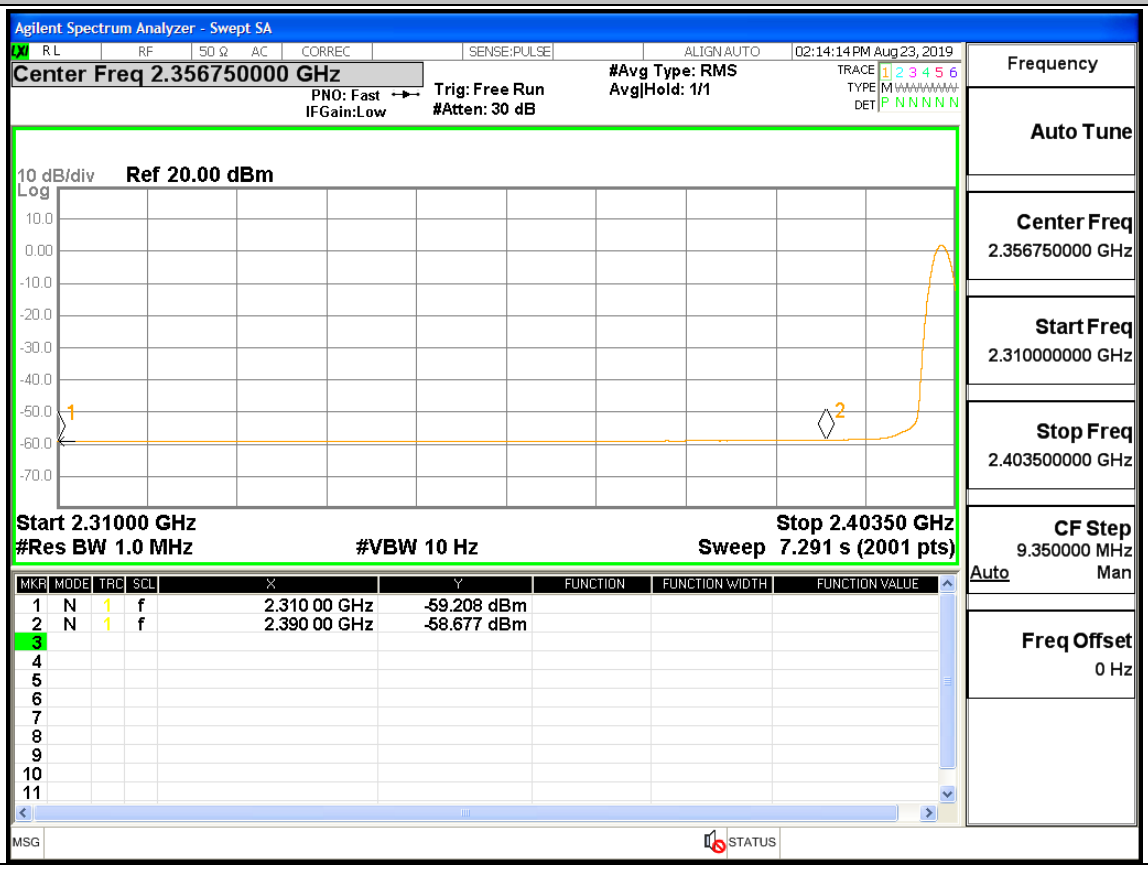


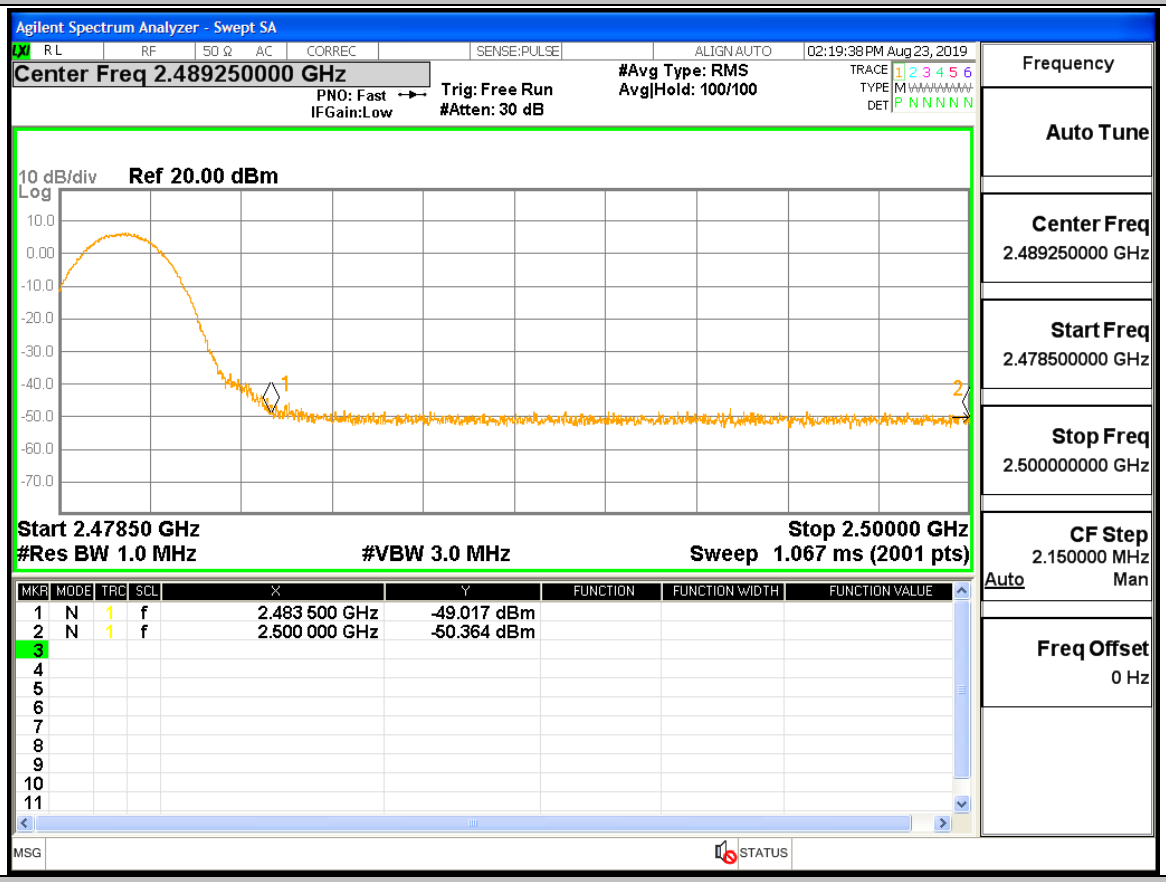
Restrict-band band-edge measurements_2402_PEAK_3DH5



Restrict-band band-edge measurements_2402_AV_3DH5



Restrict-band band-edge measurements_2480_PEAK_3DH5



Restrict-band band-edge measurements_2480_AV_3DH5