

## Appendix A

### RF Test Data for BT V4.0 (BDR/EDR) (Conducted Measurement)

Product Name: Tablet PC

Trade Mark: T60

Test Model: FUSION5

#### Environmental Conditions

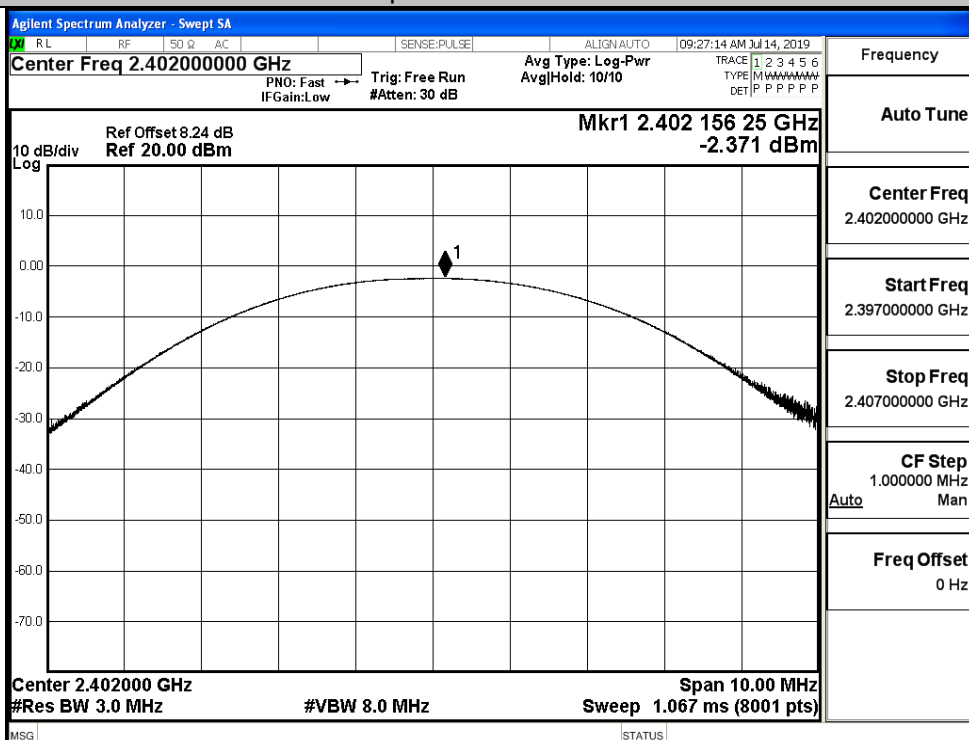
Temperature:	24.1 ° C
Relative Humidity:	53.2%
ATM Pressure:	100.0 kPa
Test Engineer:	David Luo
Supervised by:	Wang.Chuang

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

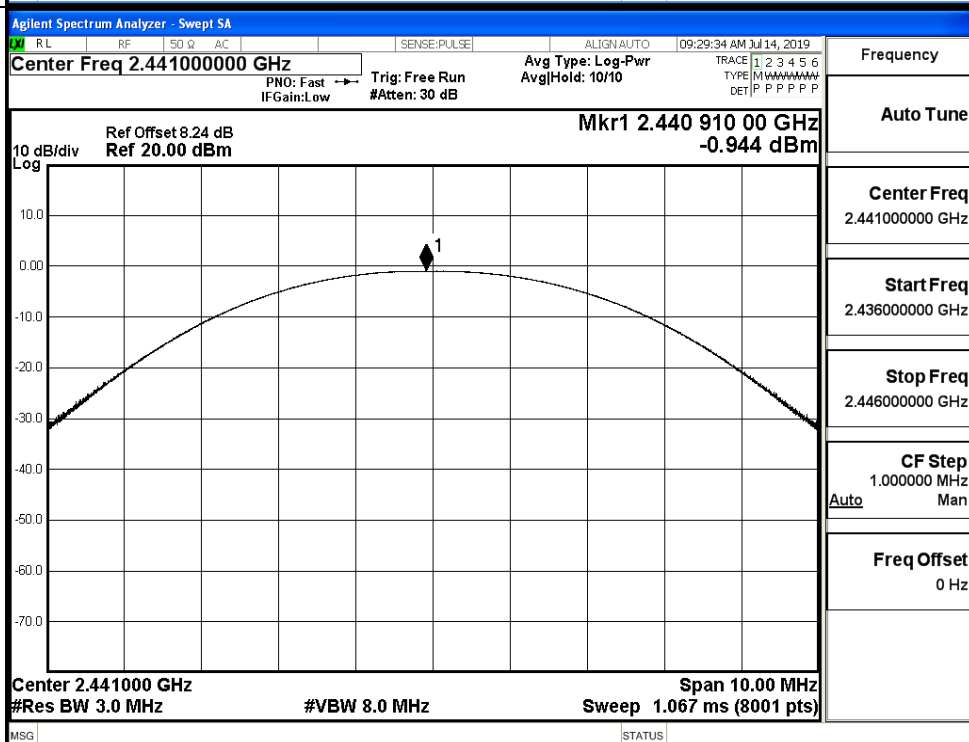
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-2.371	30	PASS
	MCH	-0.944	30	PASS
	HCH	-1.663	30	PASS
$\pi/4$ DQPSK	LCH	-3.022	21	PASS
	MCH	-1.662	21	PASS
	HCH	-2.430	21	PASS
8DPSK	LCH	-2.930	21	PASS
	MCH	-1.619	21	PASS
	HCH	-1.988	21	PASS

## Test Graphs

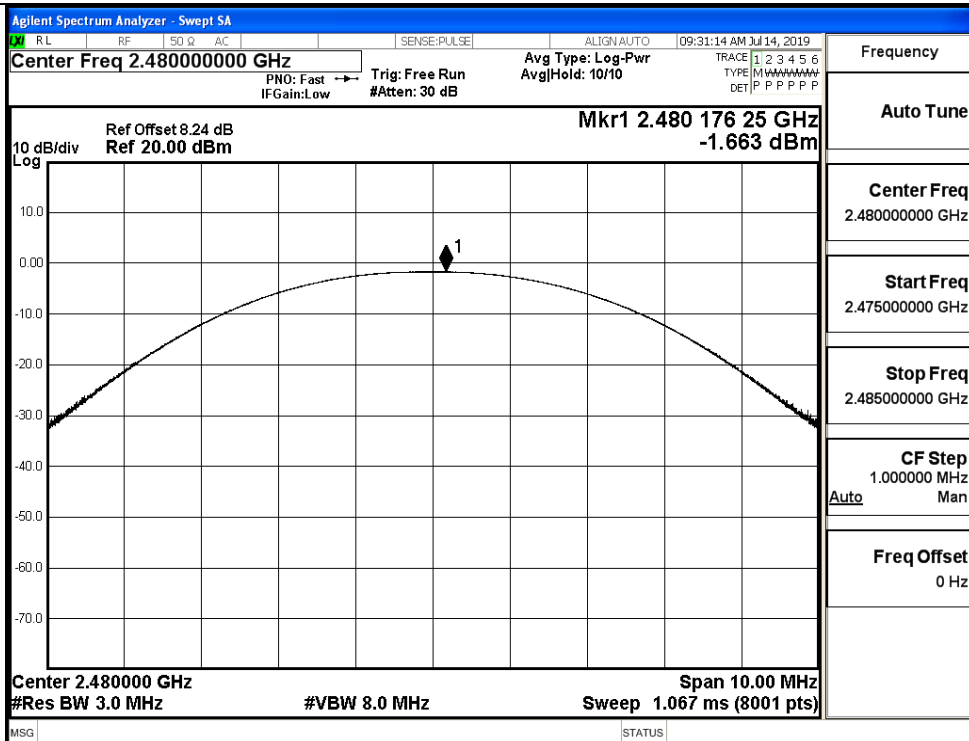
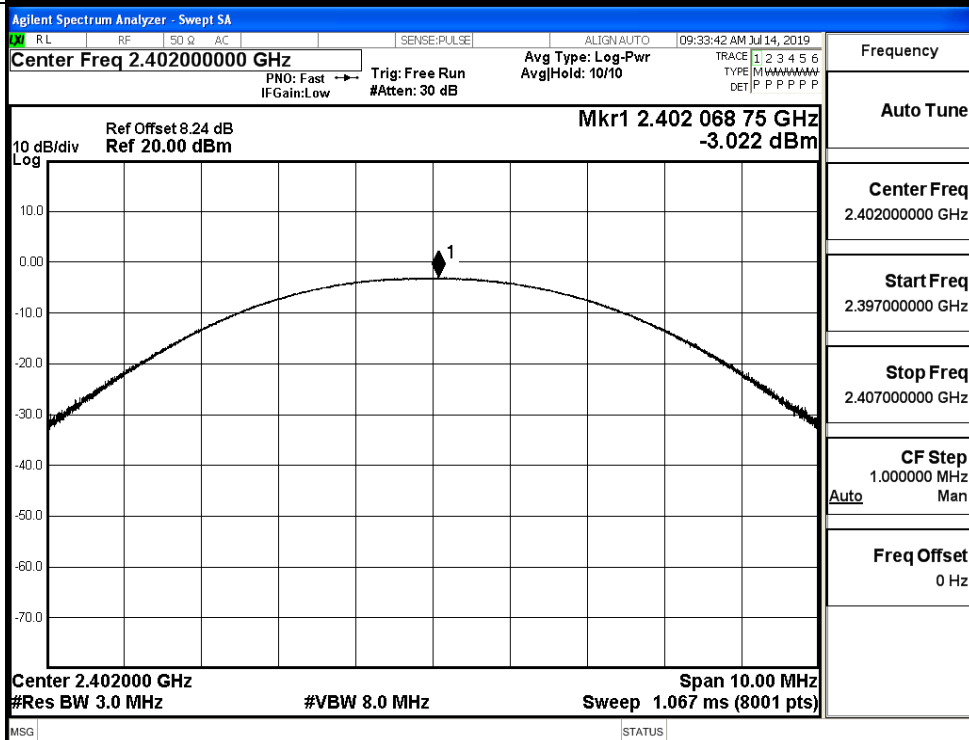
GFSK/LCH

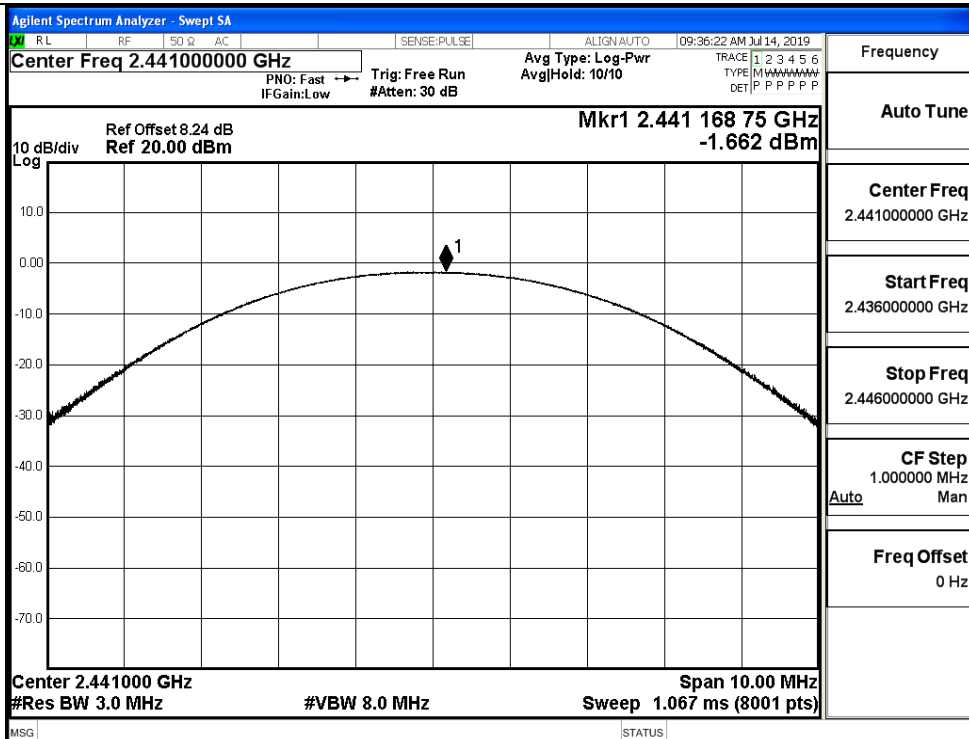
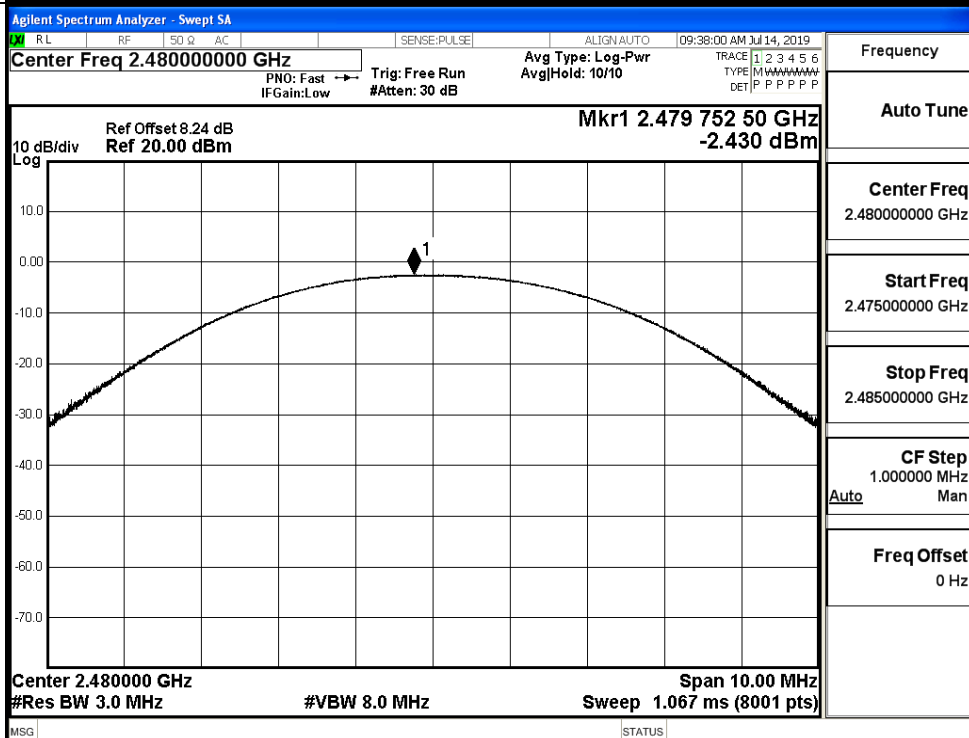


GFSK/MCH

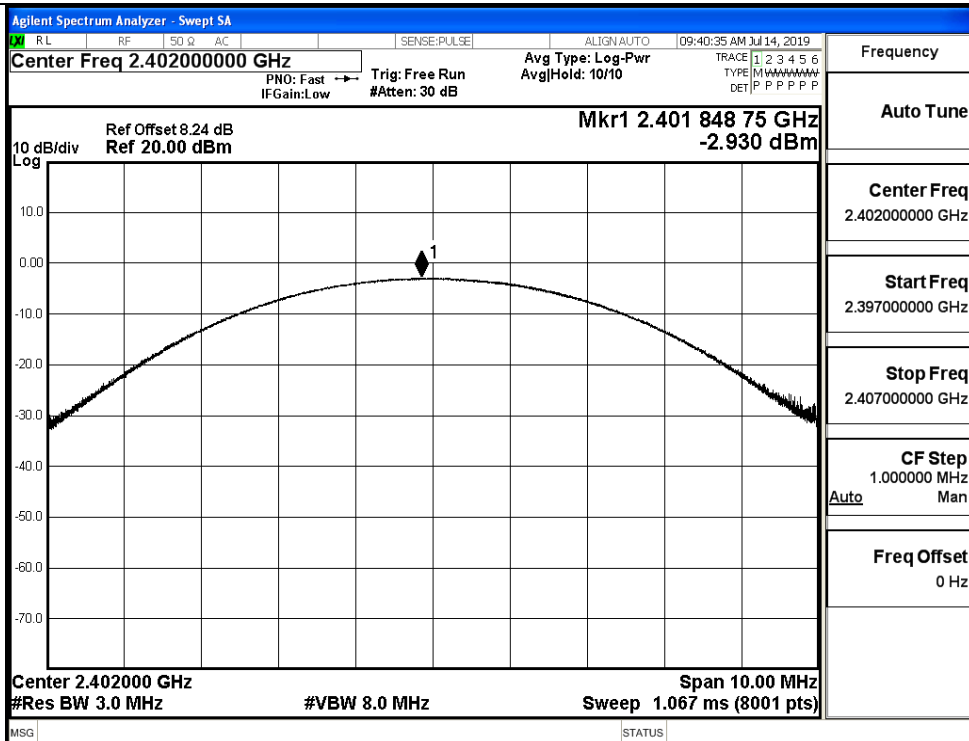


GFSK/HCH

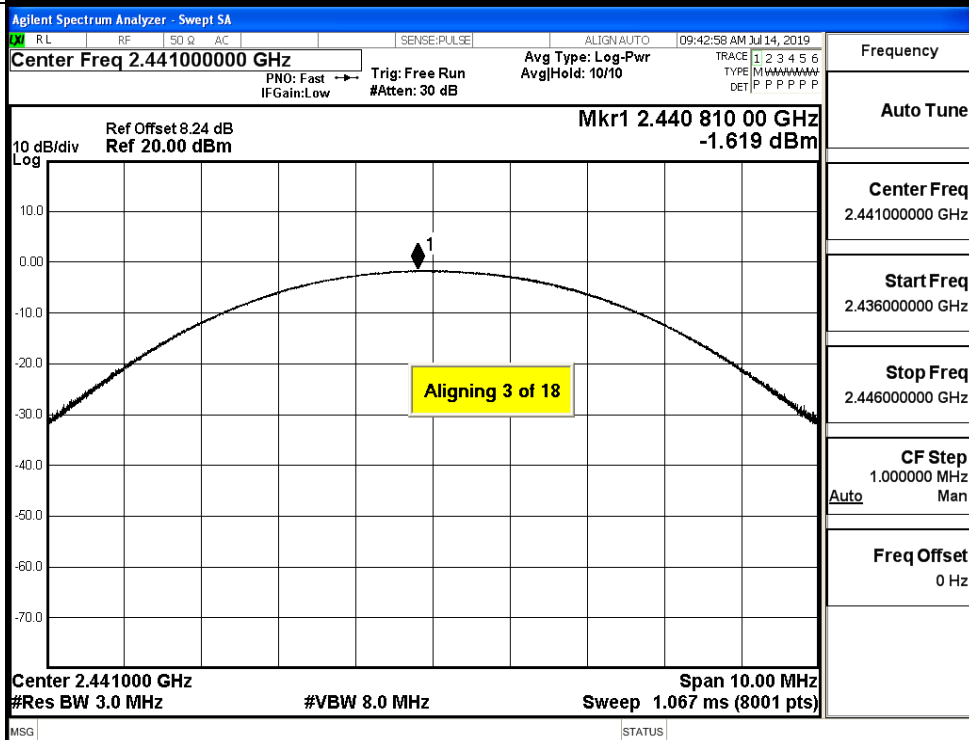
 $\pi/4$ DQPSK/LCH

$\pi/4$ DQPSK/MCH $\pi/4$ DQPSK/HCH

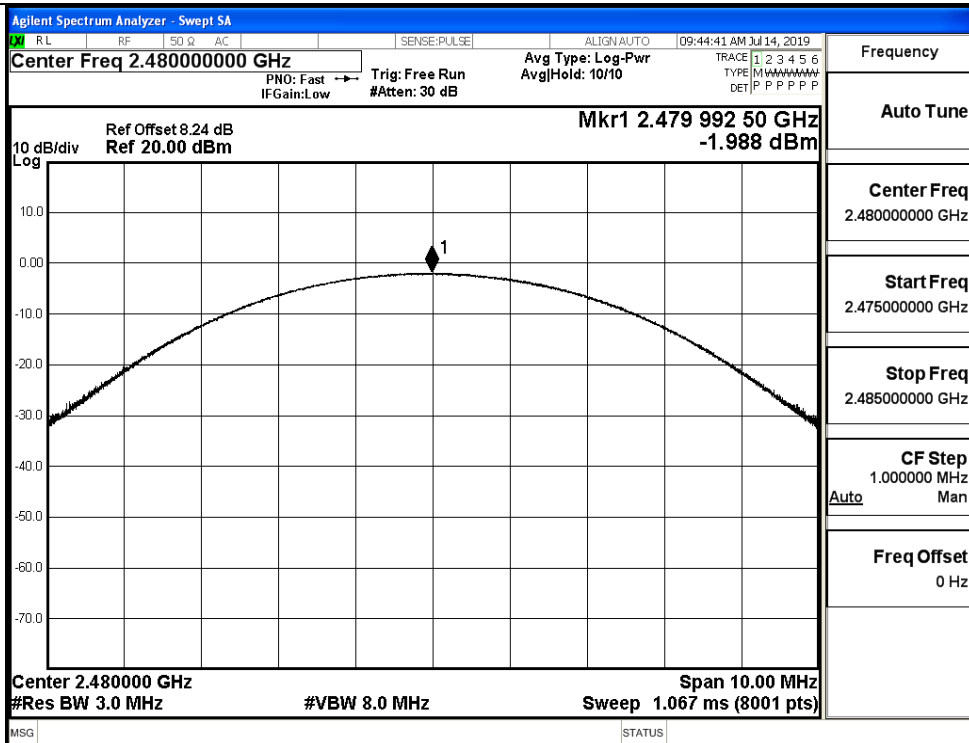
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

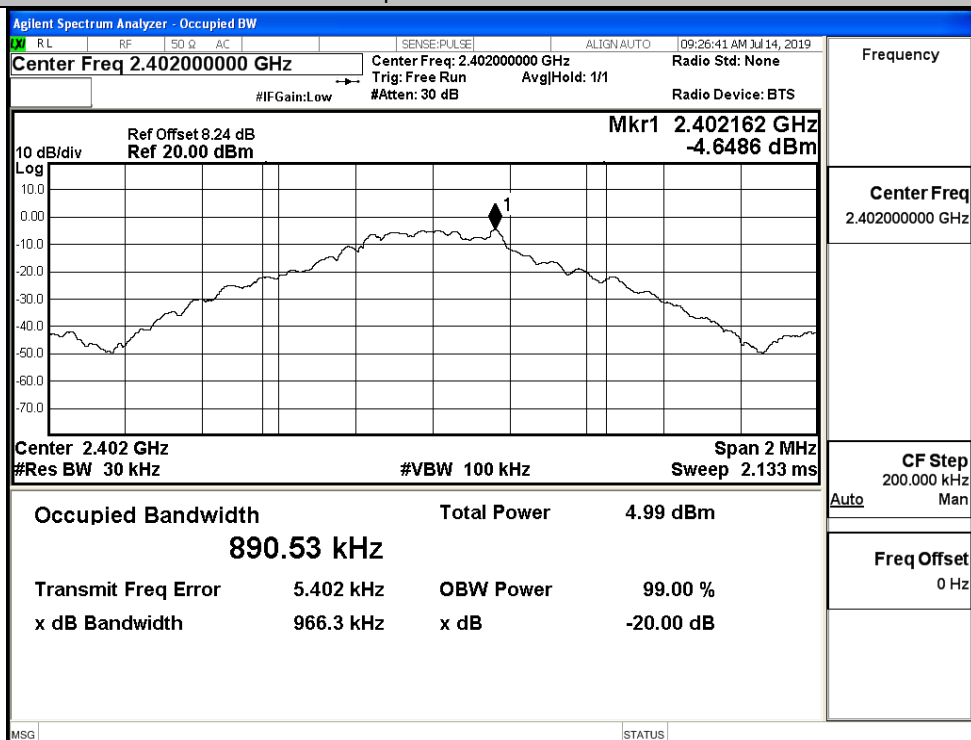


## A.2 20dB Bandwidth

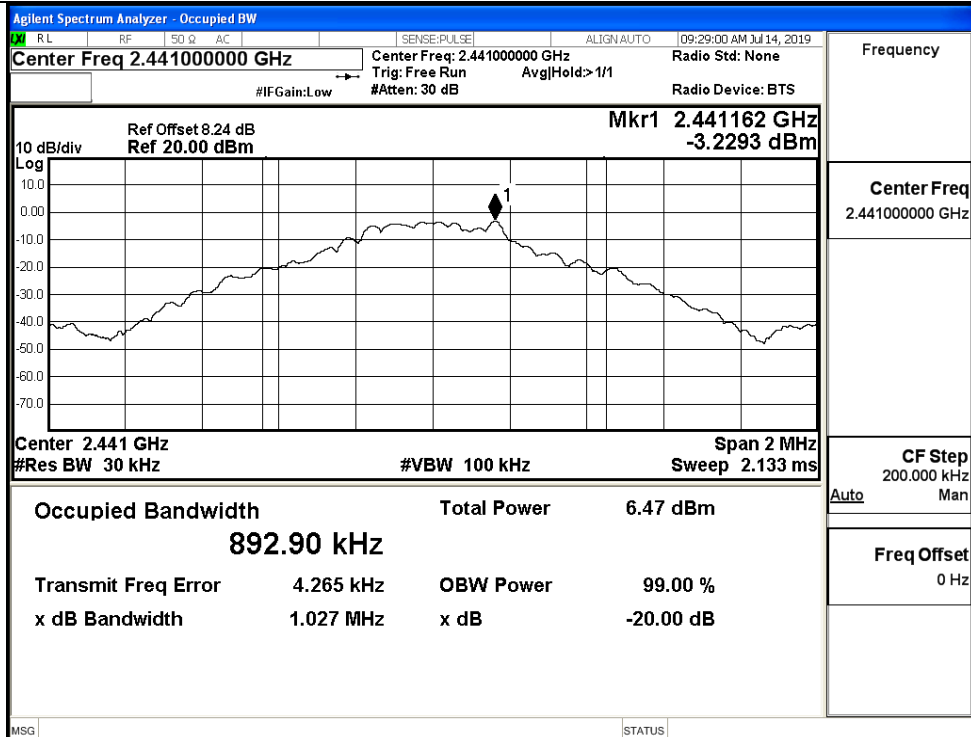
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.9663	Not Specified	PASS
	MCH	1.027	Not Specified	PASS
	HCH	0.9702	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.291	Not Specified	PASS
	MCH	1.306	Not Specified	PASS
	HCH	1.308	Not Specified	PASS
8DPSK	LCH	1.295	Not Specified	PASS
	MCH	1.301	Not Specified	PASS
	HCH	1.295	Not Specified	PASS

## Test Graphs

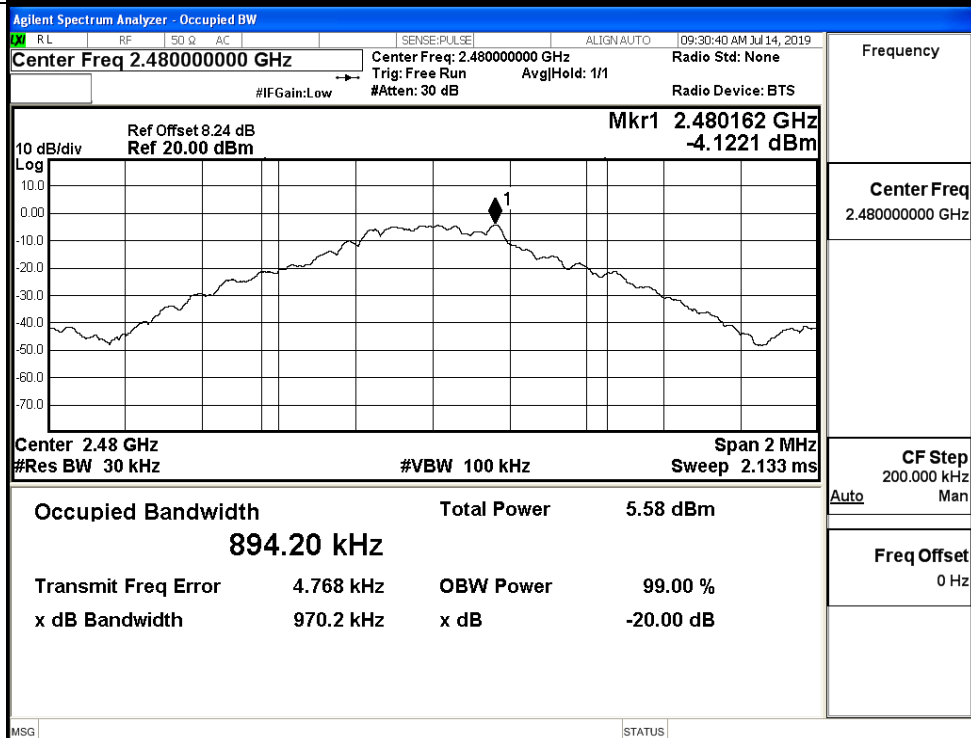
GFSK/LCH



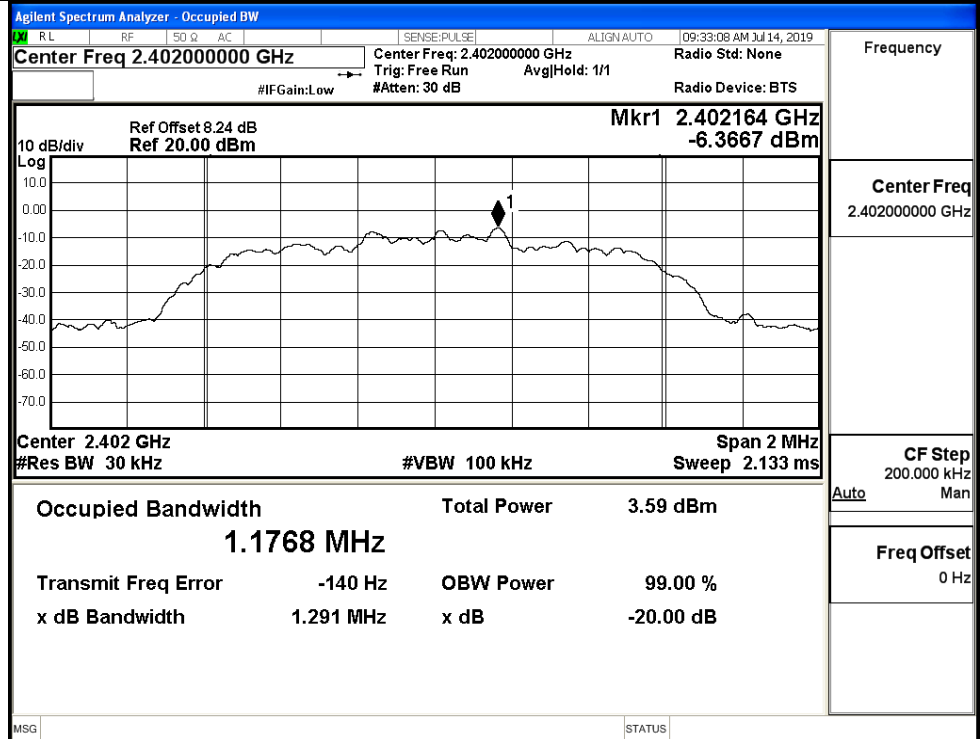
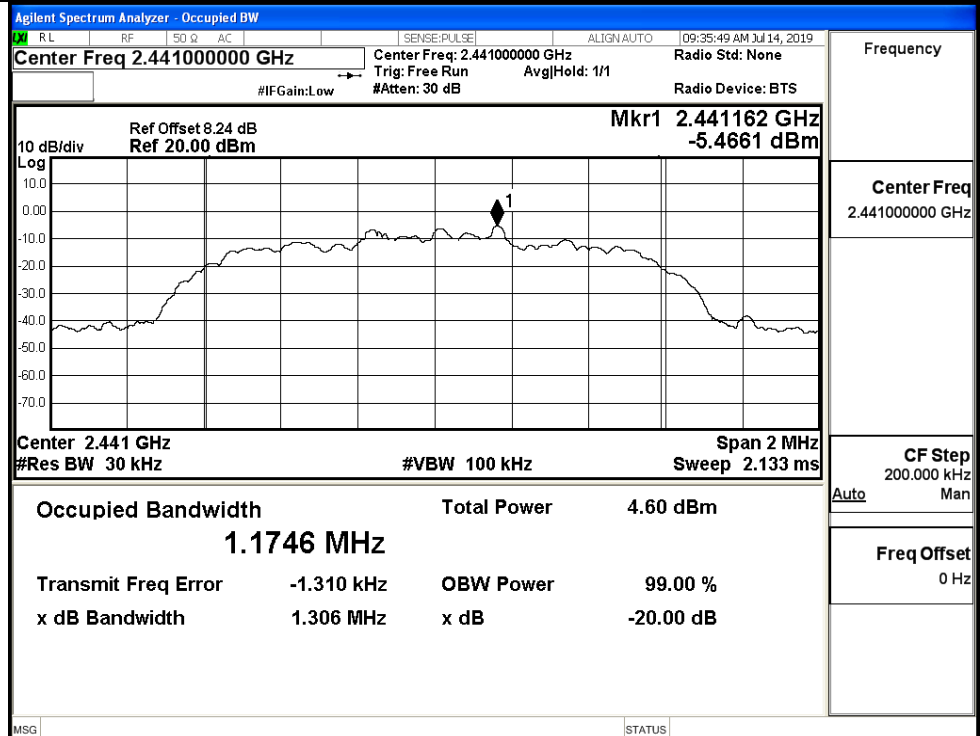
GFSK/MCH

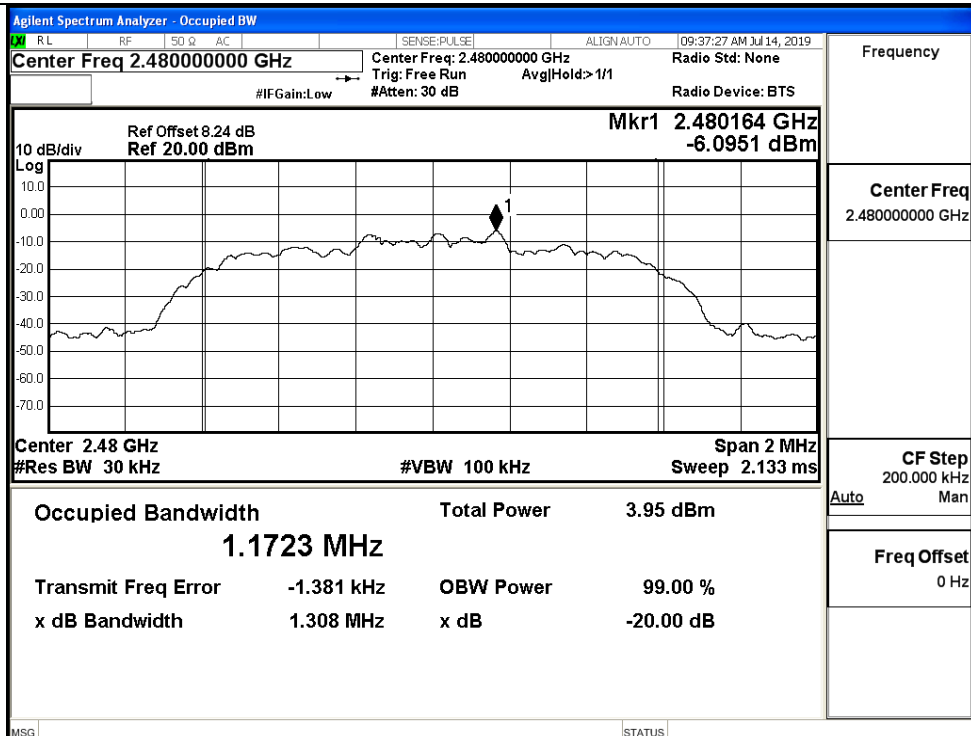


GFSK/HCH





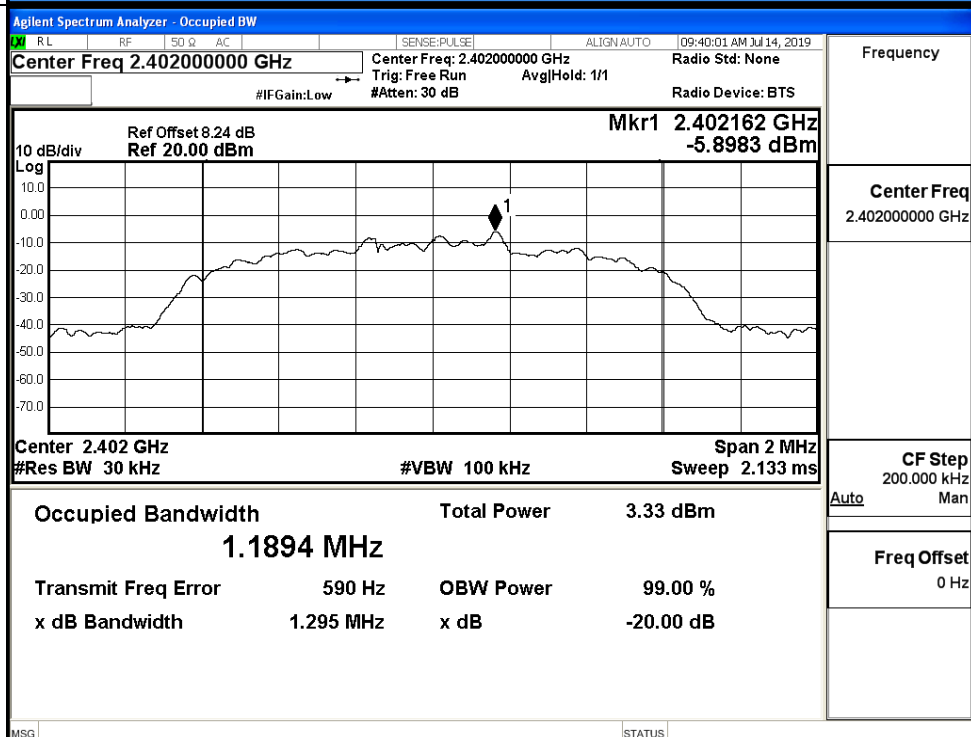
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

Frequency

Center Freq  
2.480000000 GHzCF Step  
200.000 kHz  
ManFreq Offset  
0 Hz

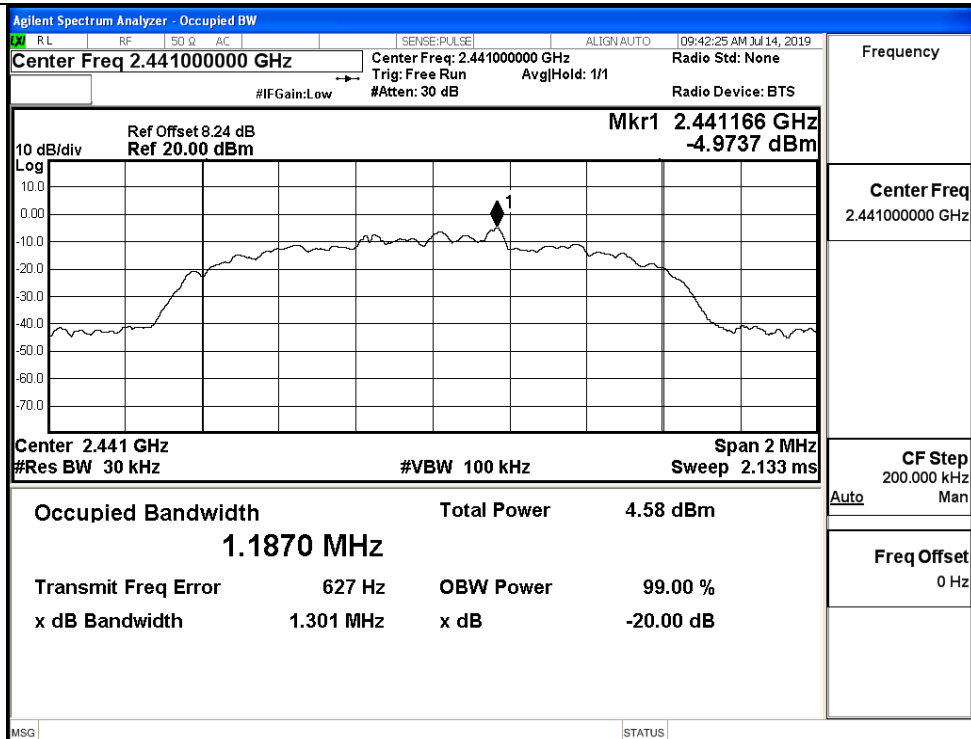
8DPSK/LCH



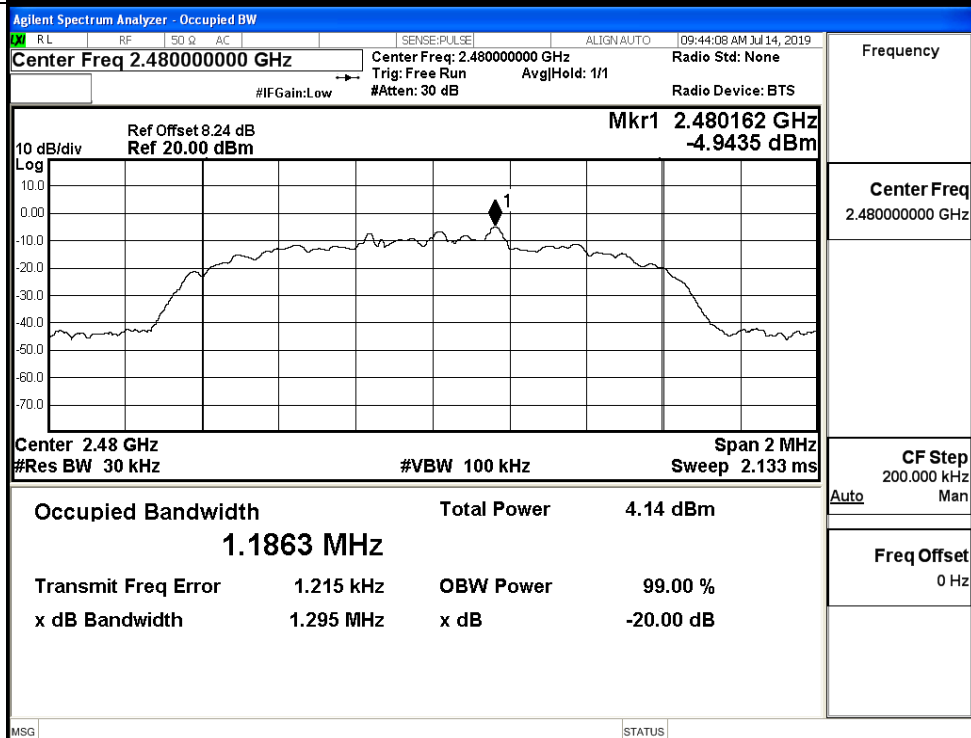
Frequency

Center Freq  
2.402000000 GHzCF Step  
200.000 kHz  
ManFreq Offset  
0 Hz

8DPSK/MCH



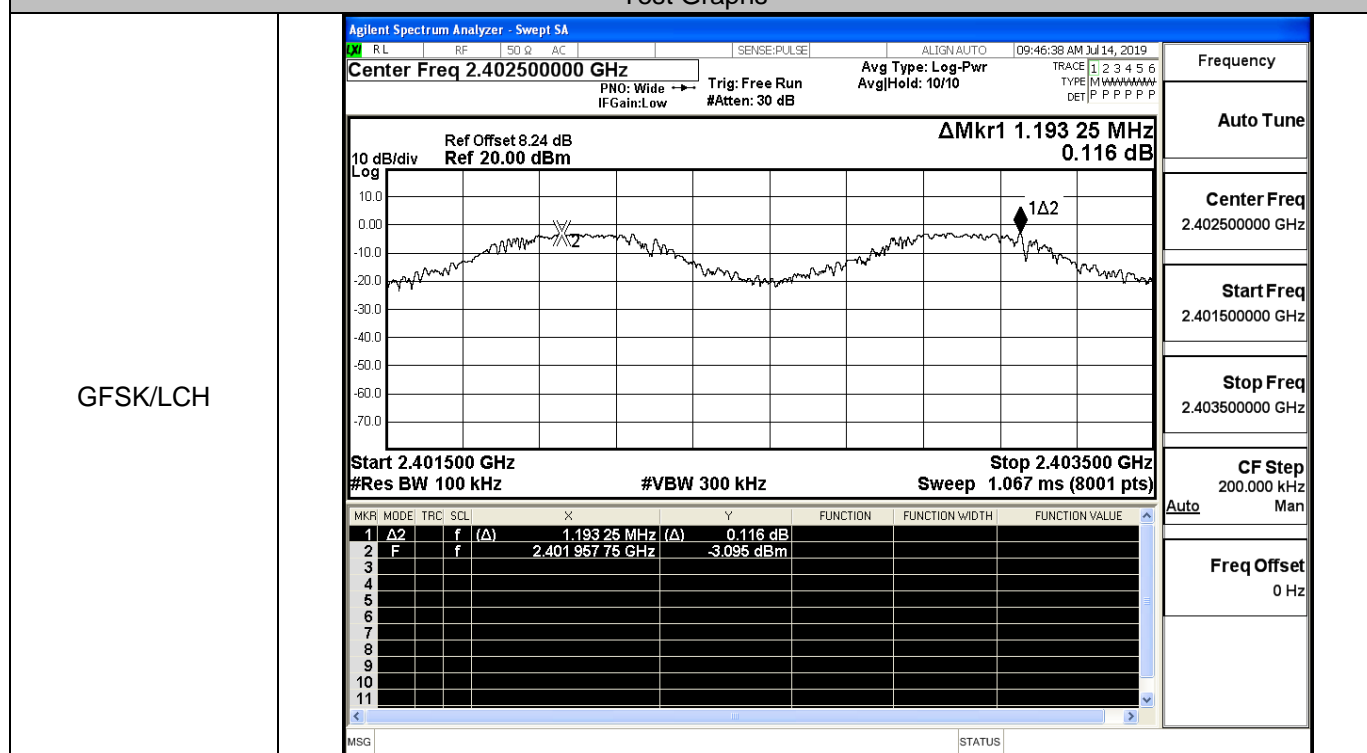
8DPSK/HCH



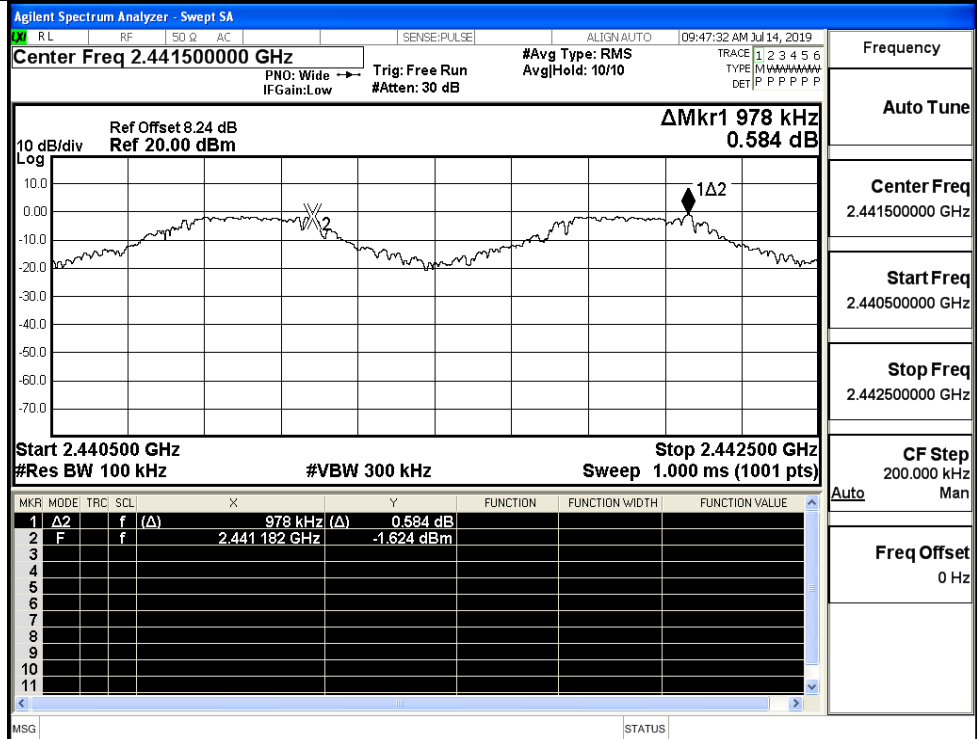
### A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.193	0.685	PASS
	MCH	0.978	0.685	PASS
	HCH	0.882	0.685	PASS
$\pi/4$ DQPSK	LCH	1.302	0.872	PASS
	MCH	1.054	0.872	PASS
	HCH	1.004	0.872	PASS
8DPSK	LCH	1.098	0.867	PASS
	MCH	1.300	0.867	PASS
	HCH	1.122	0.867	PASS

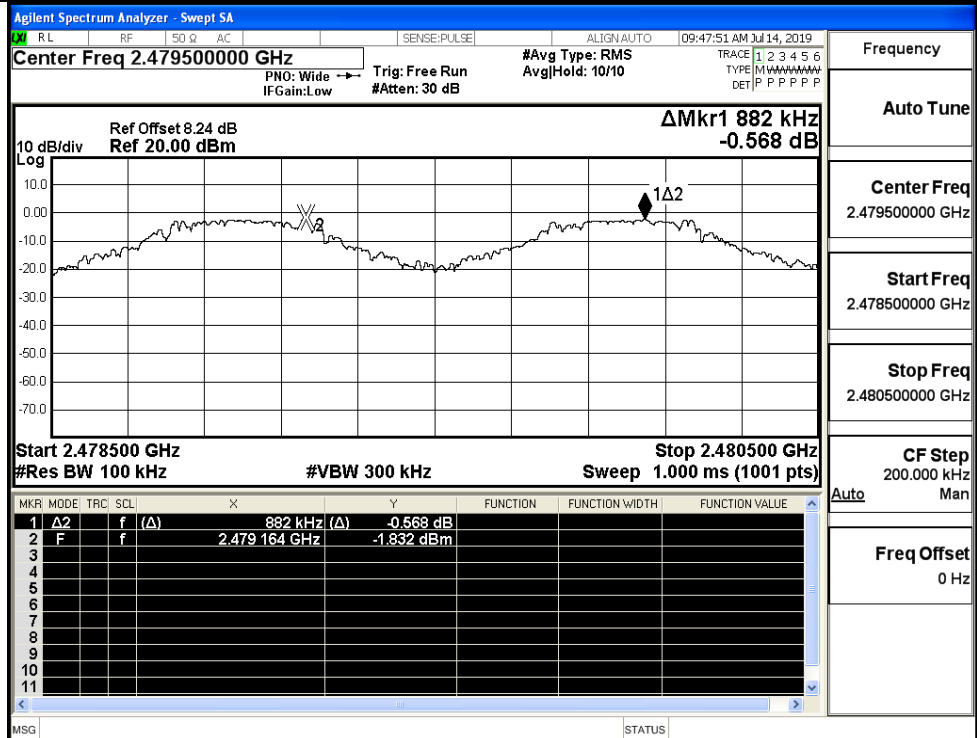
#### Test Graphs

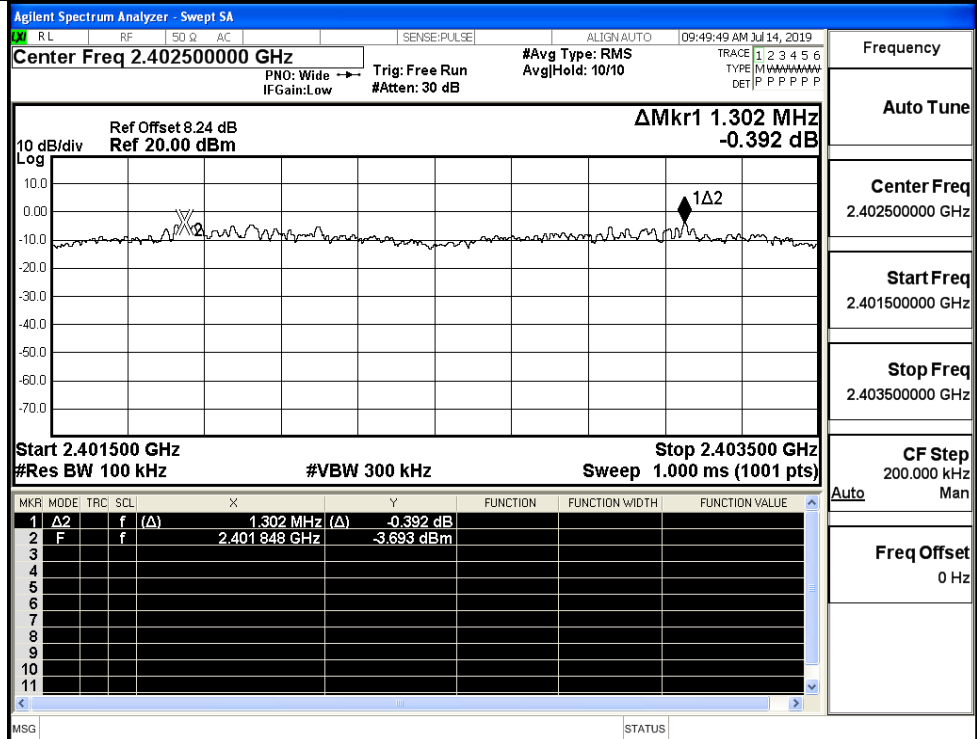


GFSK/MCH



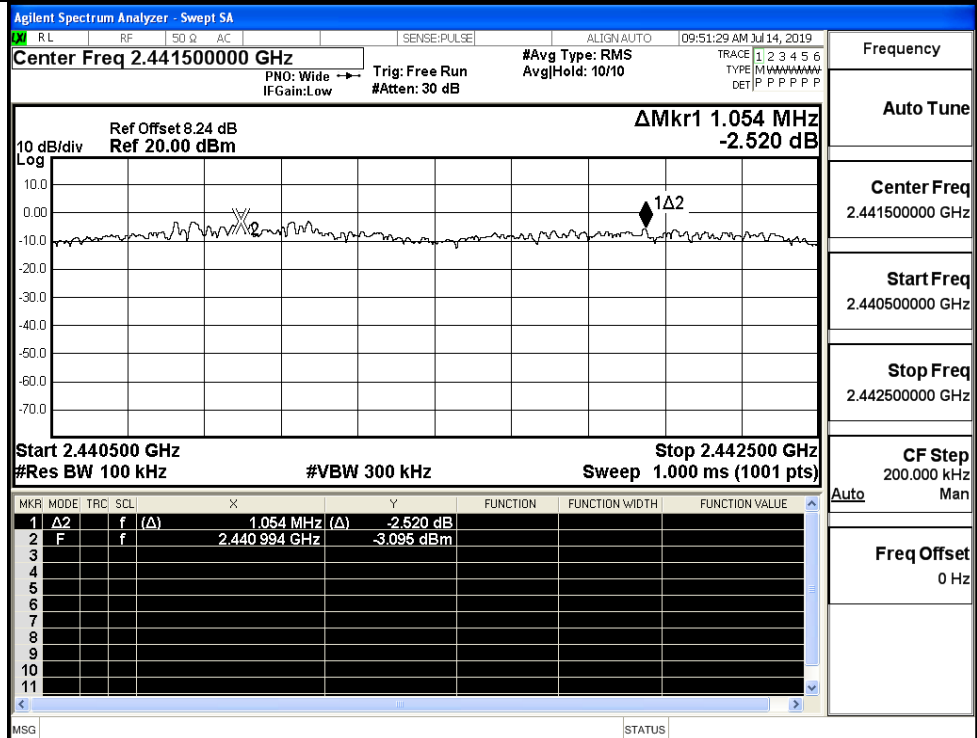
GFSK/HCH



$\pi/4$ DQPSK/LCH

Frequency

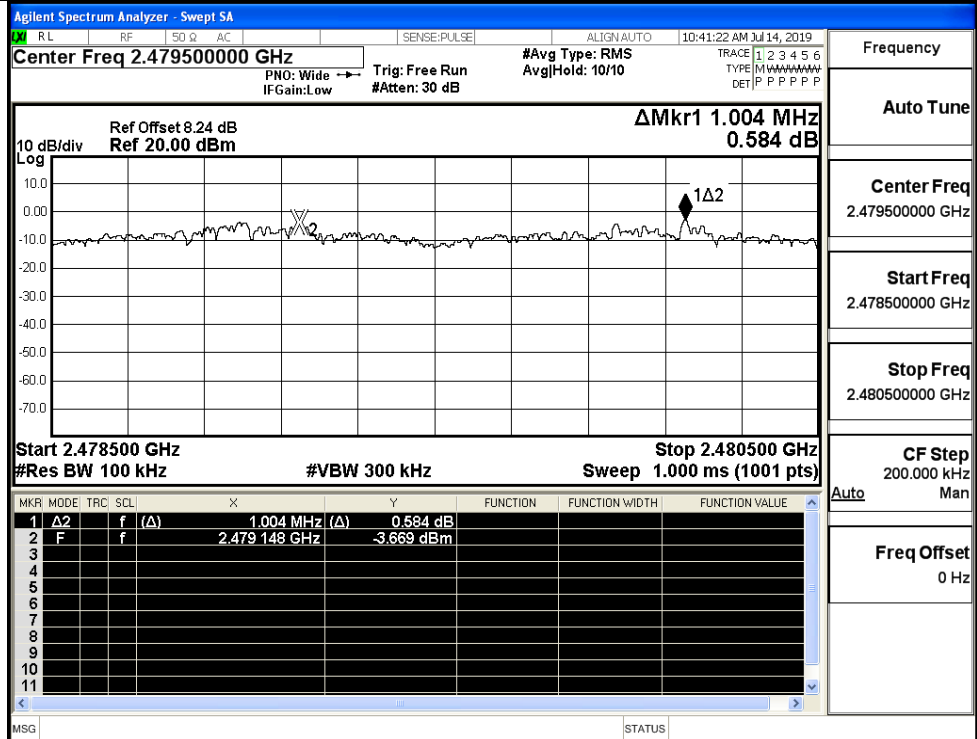
Auto Tune

Center Freq  
2.402500000 GHzStart Freq  
2.401500000 GHzStop Freq  
2.403500000 GHzCF Step  
200.000 kHz  
ManFreq Offset  
0 Hz $\pi/4$ DQPSK/MCH

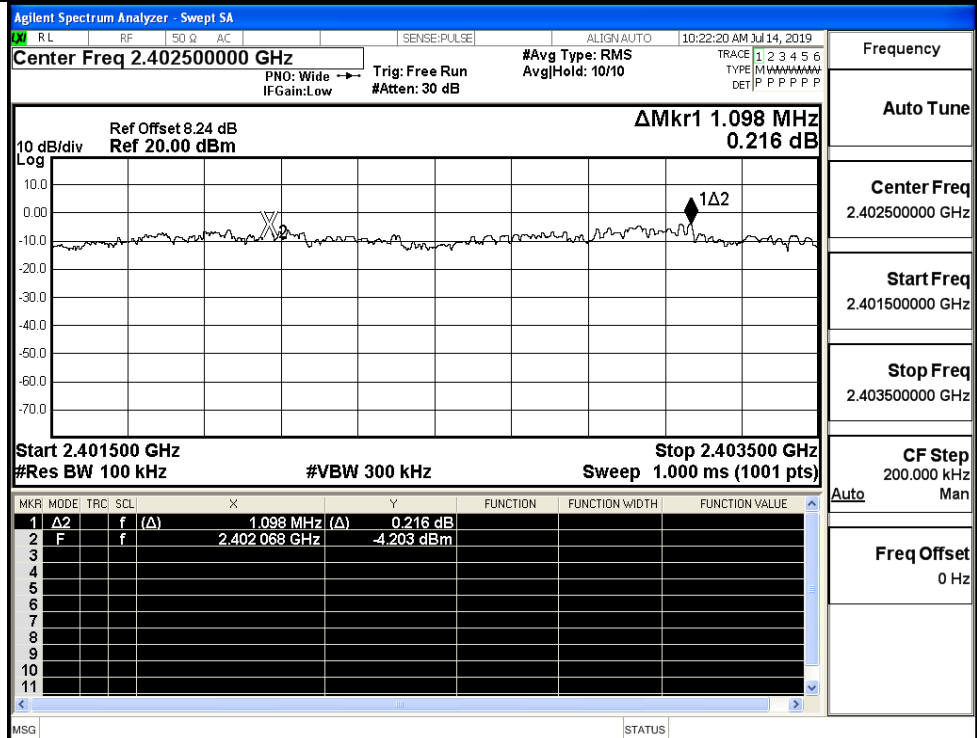
Frequency

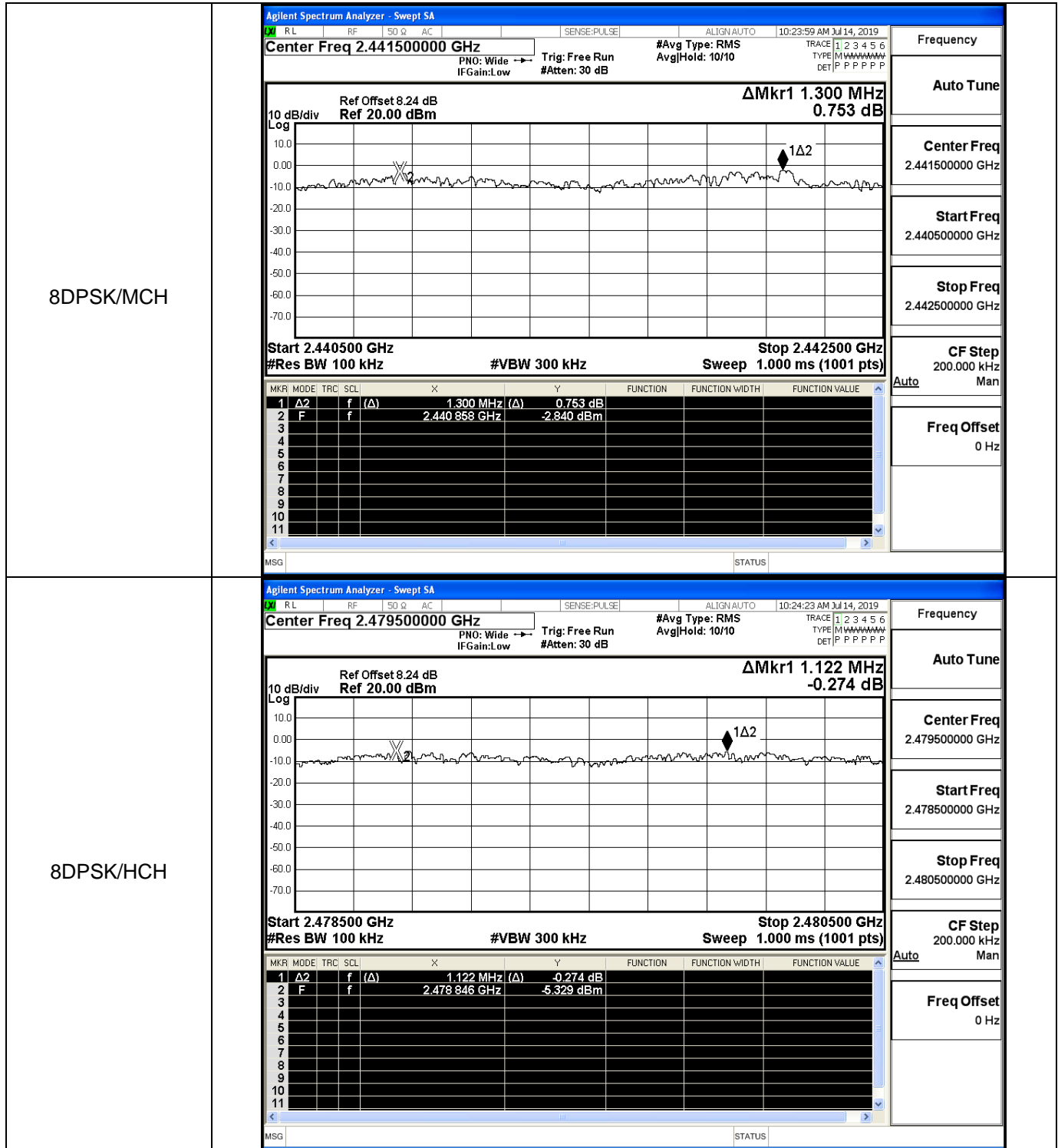
Auto Tune

Center Freq  
2.441500000 GHzStart Freq  
2.440500000 GHzStop Freq  
2.442500000 GHzCF Step  
200.000 kHz  
ManFreq Offset  
0 Hz

$\pi/4$ DQPSK/HCH

8DPSK/LCH





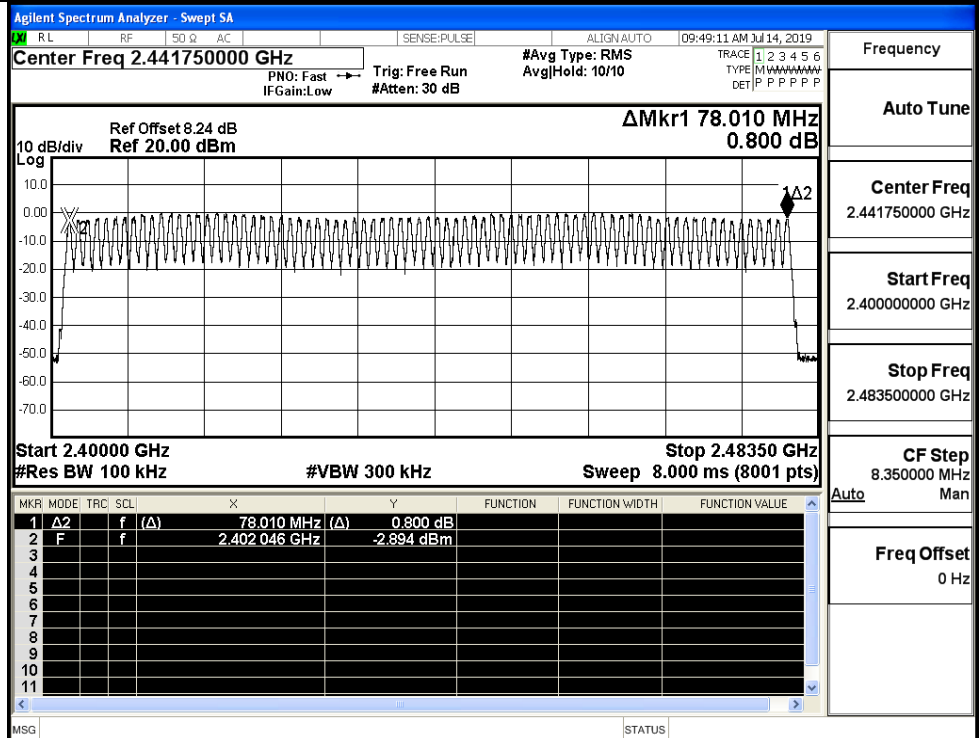
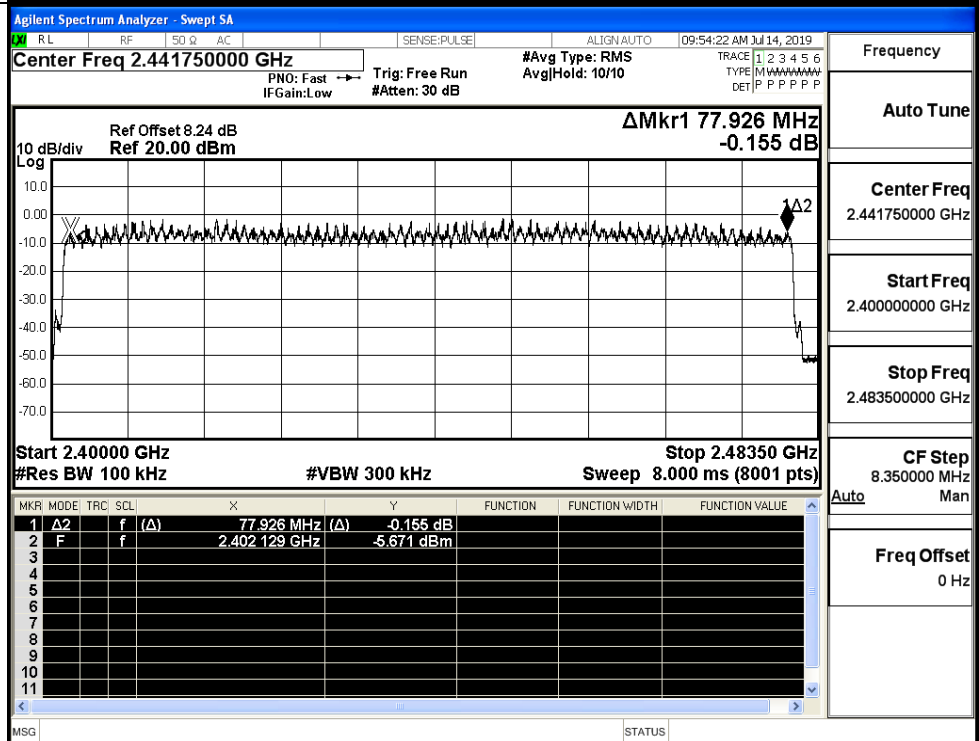
#### A.4 Hopping Channel Number

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

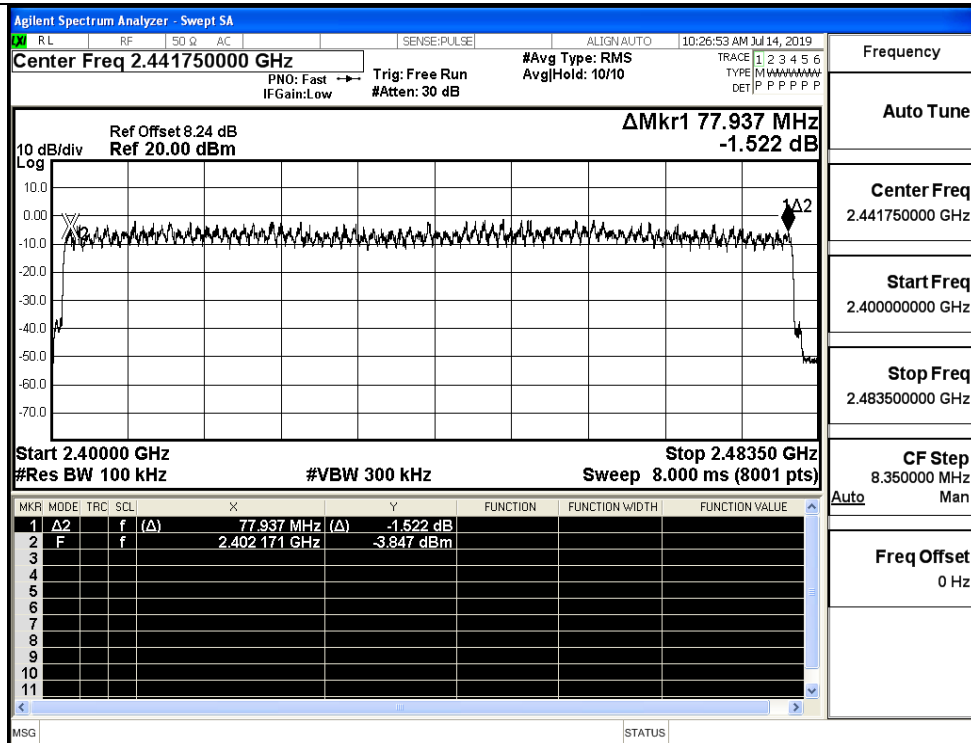


## Test Graphs

GFSK/Hop

 $\pi/4$ DQPSK/Hop

8DPSK/Hop

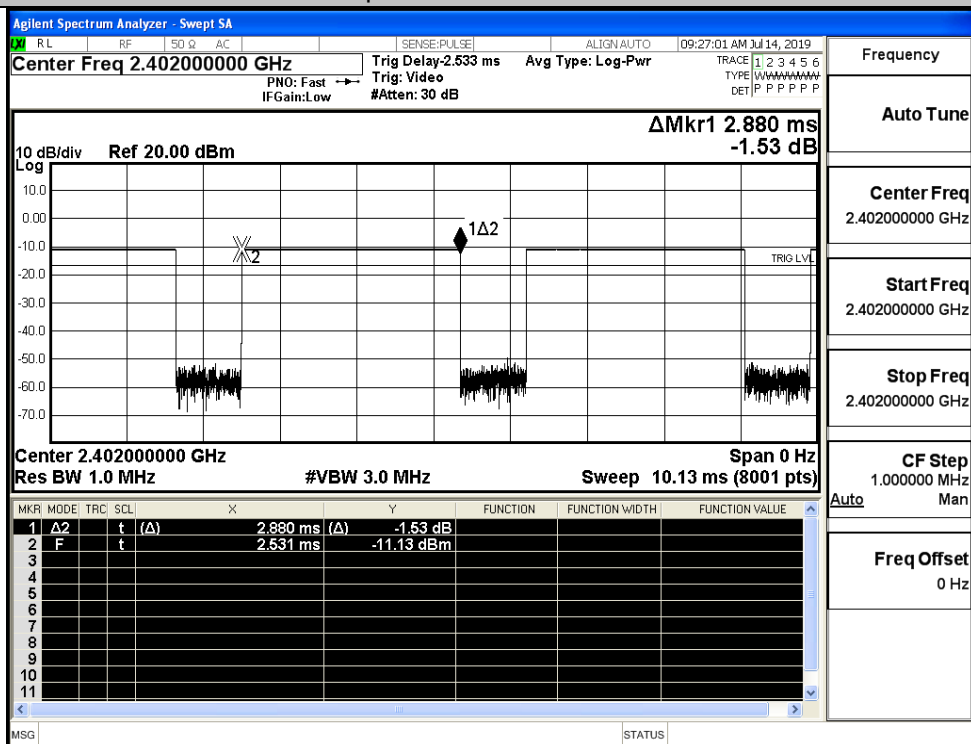


## A.5 Dwell Time

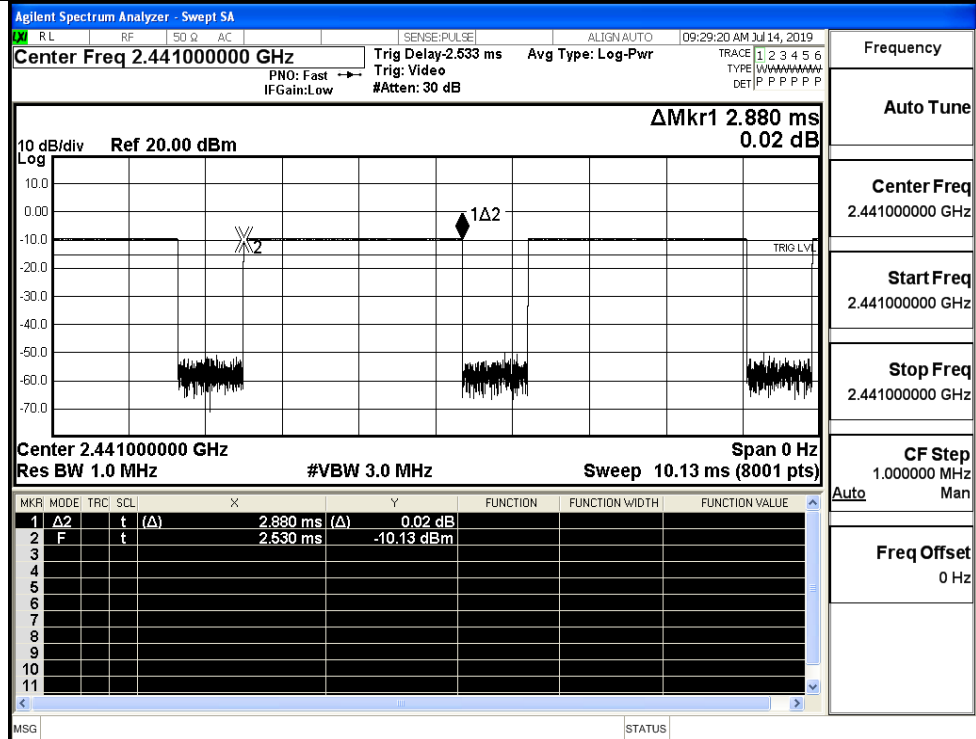
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.88	106.7	0.307	0.4	PASS
8DPSK	3DH5	LCH	2.88	106.7	0.308	0.4	PASS
	3DH5	MCH	2.88	106.7	0.308	0.4	PASS
	3DH5	HCH	2.88	106.7	0.308	0.4	PASS

Test Graphs

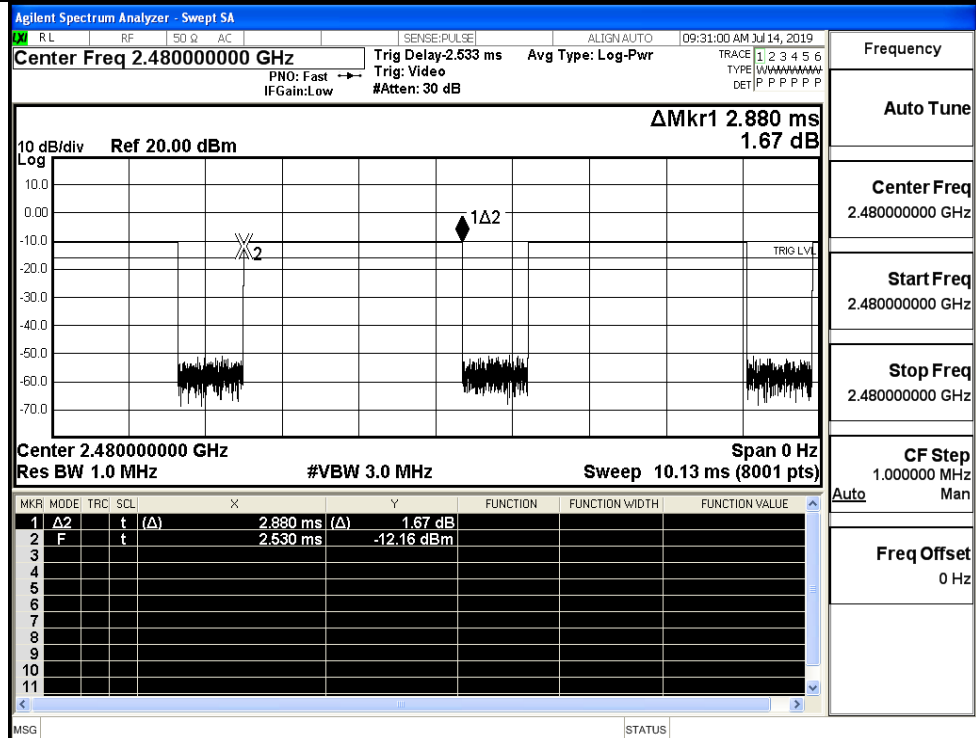
GFSK\_DH5/LCH



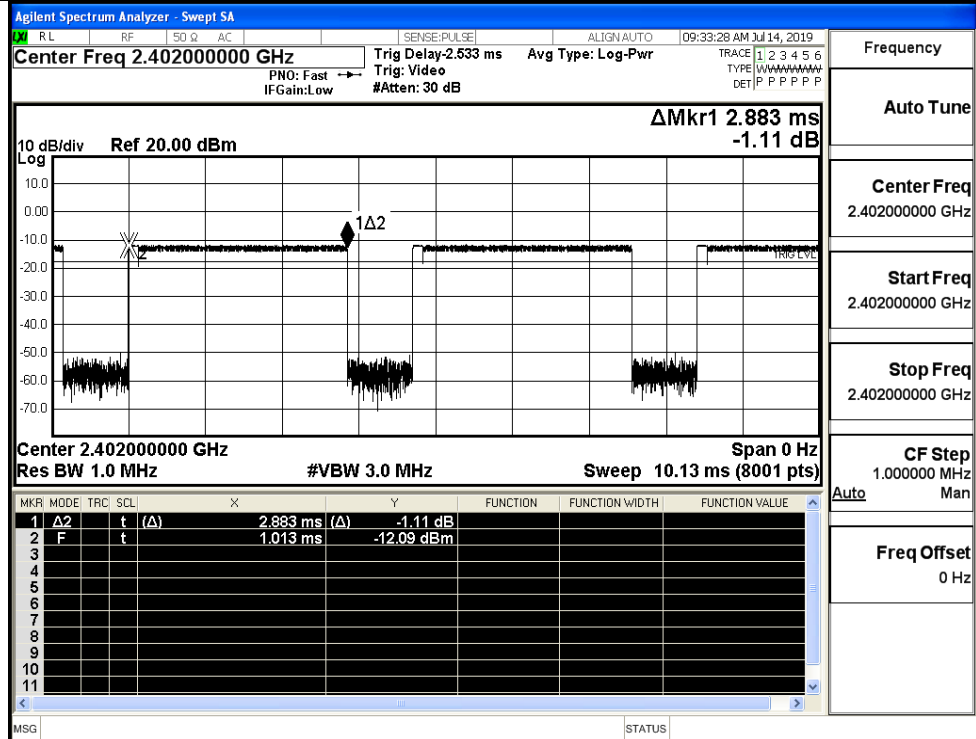
GFSK\_DH5/MCH



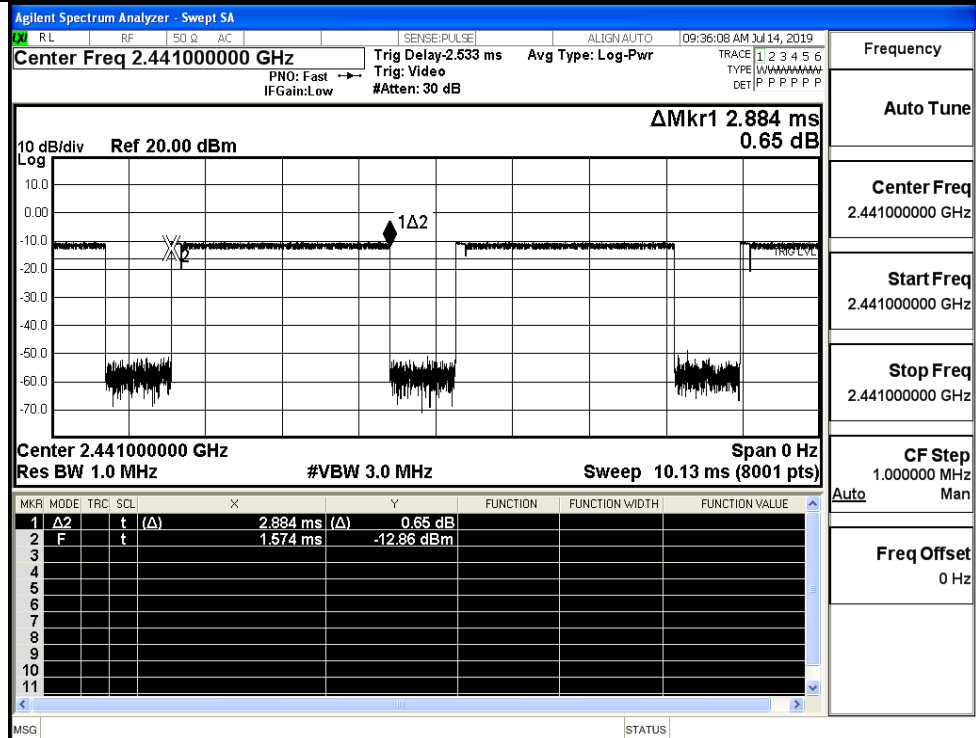
GFSK\_DH5/HCH



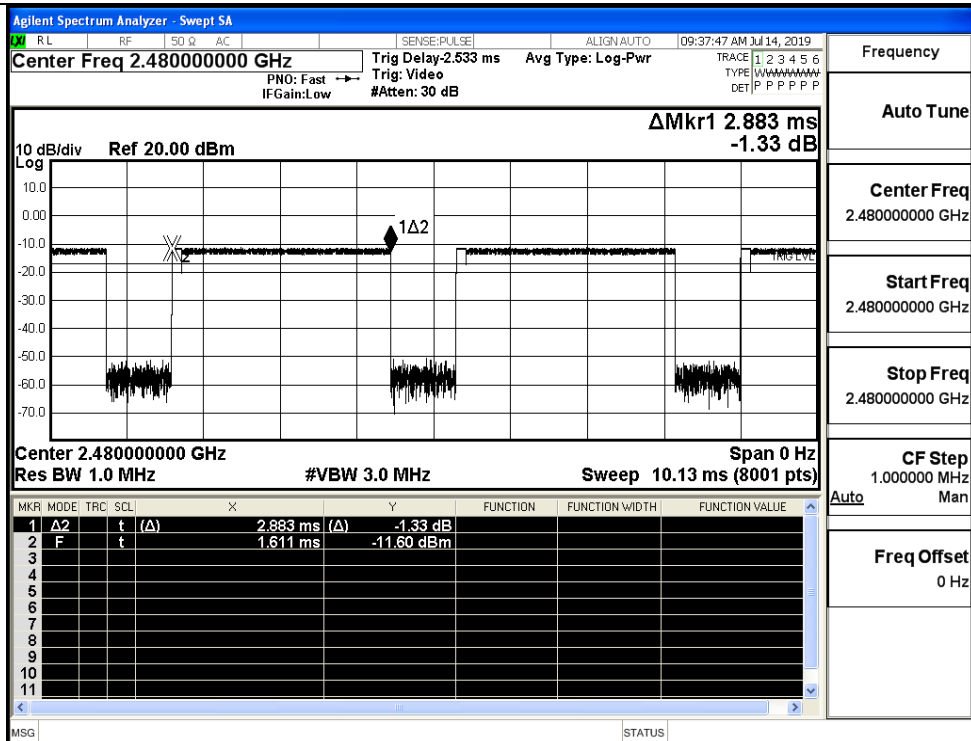
$\pi/4$ DQPSK  
\_2DH5/LCH



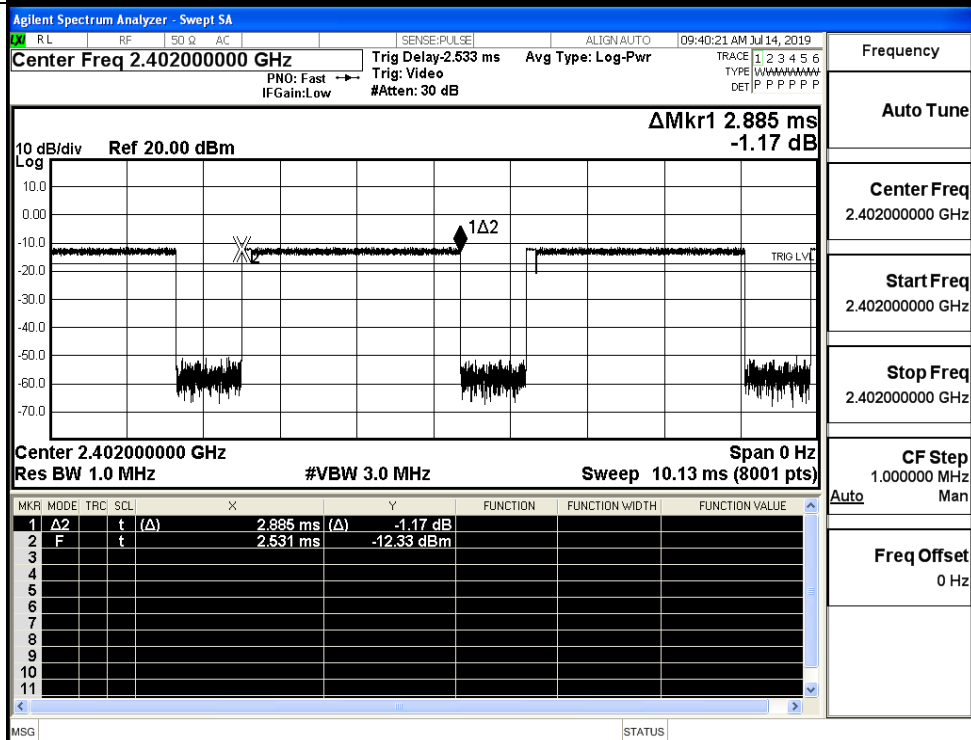
$\pi/4$ DQPSK  
\_2DH5/MCH



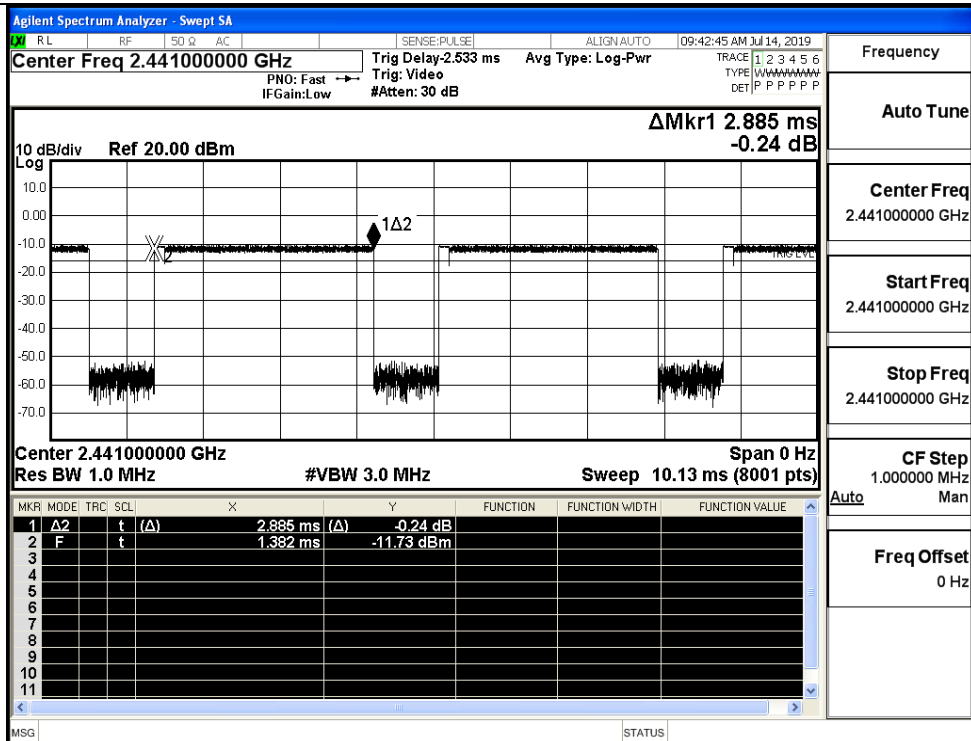
$\pi/4$ DQPSK  
\_2DH5/HCH



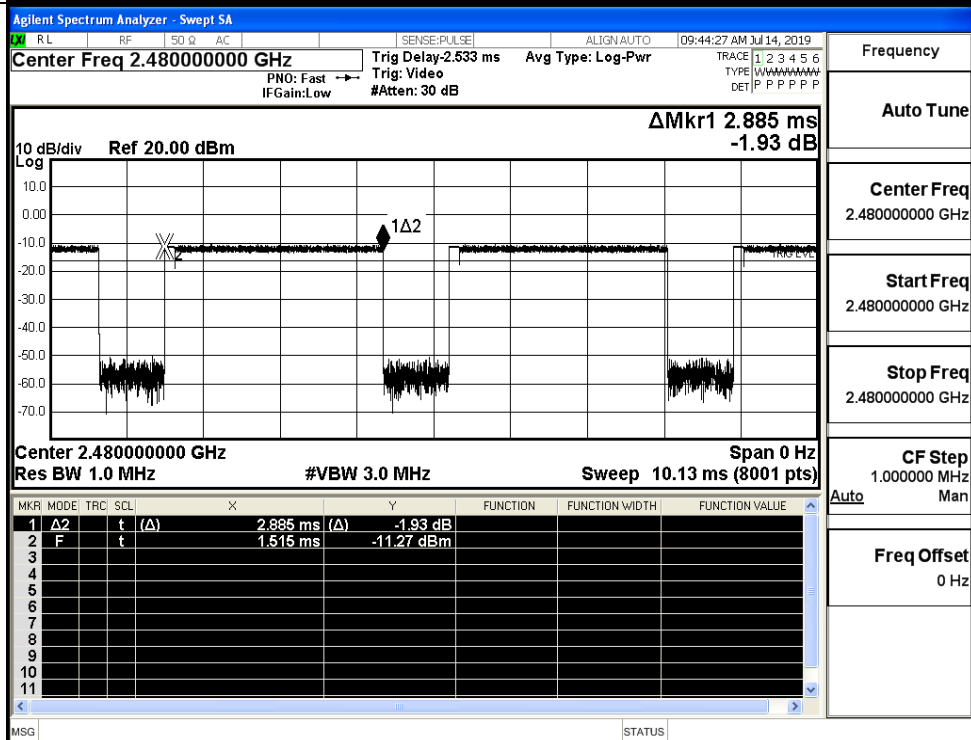
8DPSK \_3DH5/LCH



8DPSK\_3DH5/MCH



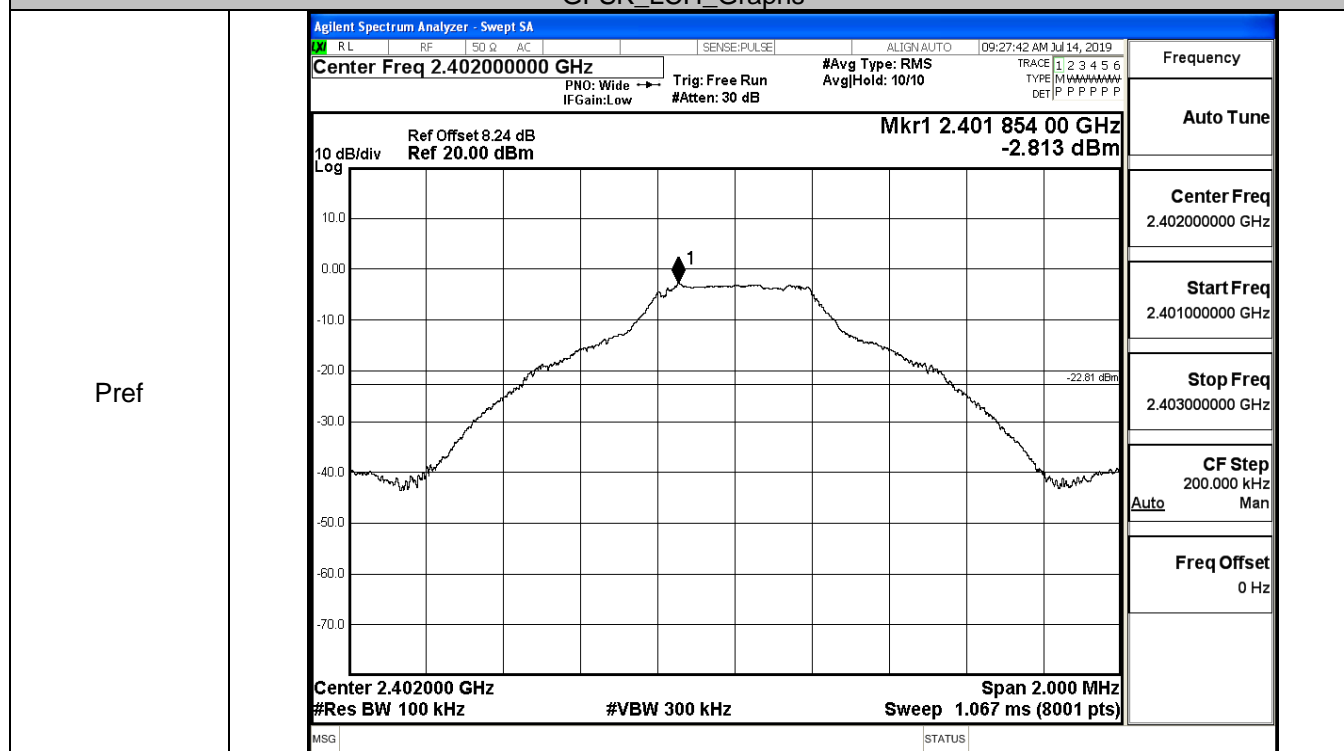
8DPSK\_3DH5/HCH



## A.6 RF Conducted Spurious Emissions

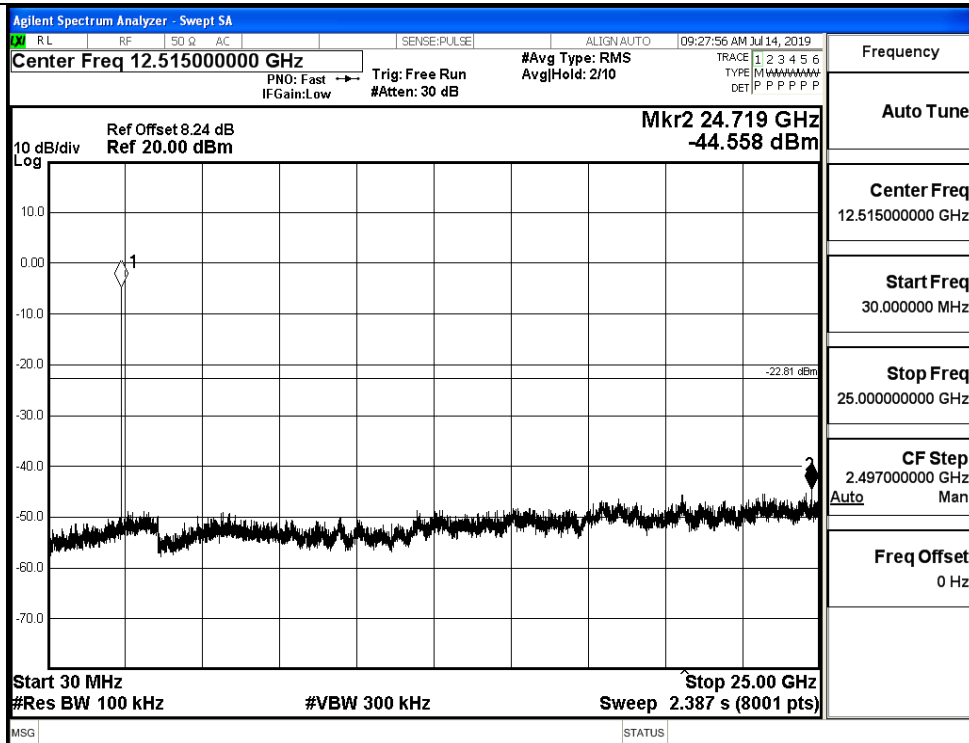
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-2.813	-44.558	-22.813	PASS
	MCH	-0.136	-45.510	-20.136	PASS
	HCH	-1.956	-44.805	-21.956	PASS
$\pi/4$ DQPSK	LCH	-4.396	-45.397	-24.396	PASS
	MCH	-2.503	-45.406	-22.503	PASS
	HCH	-3.293	-45.013	-23.293	PASS
8DPSK	LCH	-3.803	-44.326	-23.803	PASS
	MCH	-9.9	-44.463	-29.900	PASS
	HCH	-3.445	-44.234	-23.445	PASS

GFSK\_LCH\_Graphs



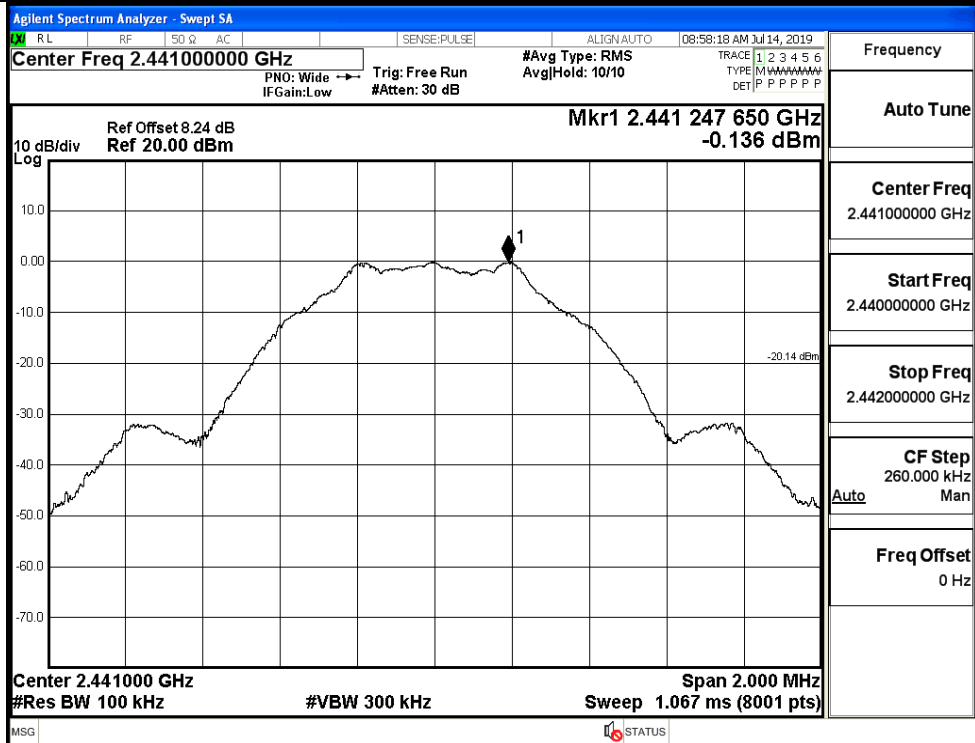


Puw

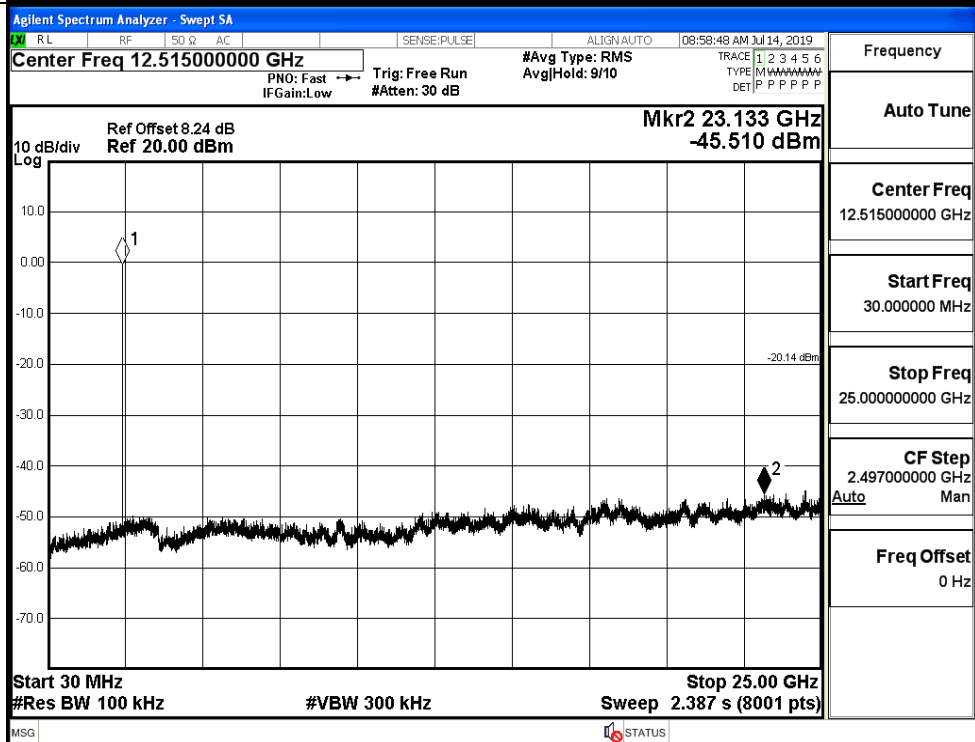


## GFSK\_MCH\_Graphs

Pref

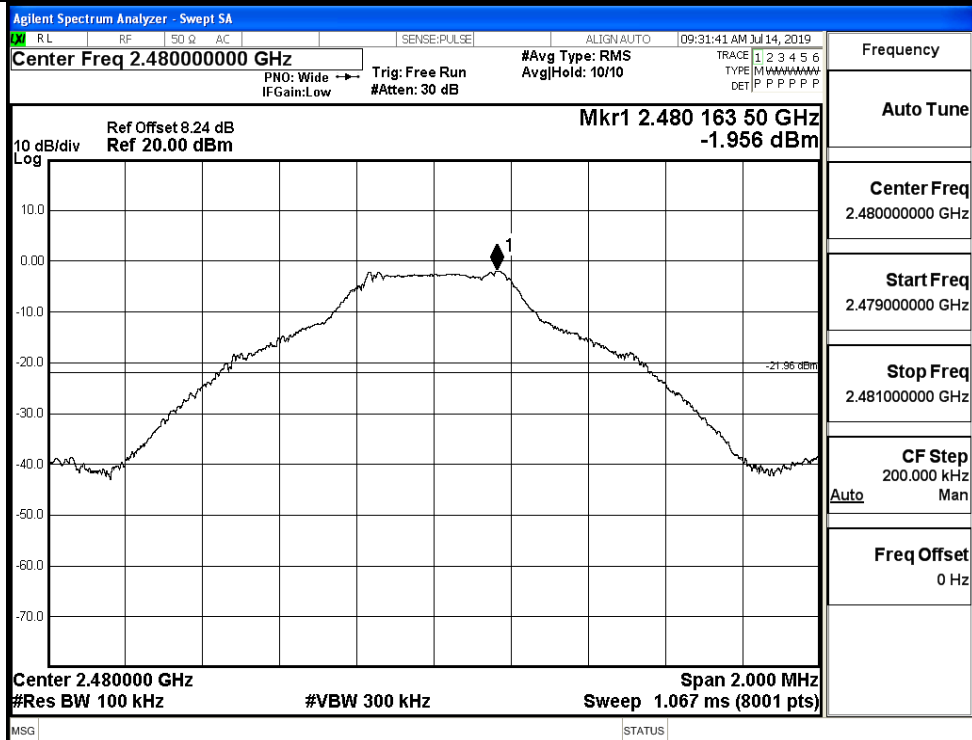


Puw

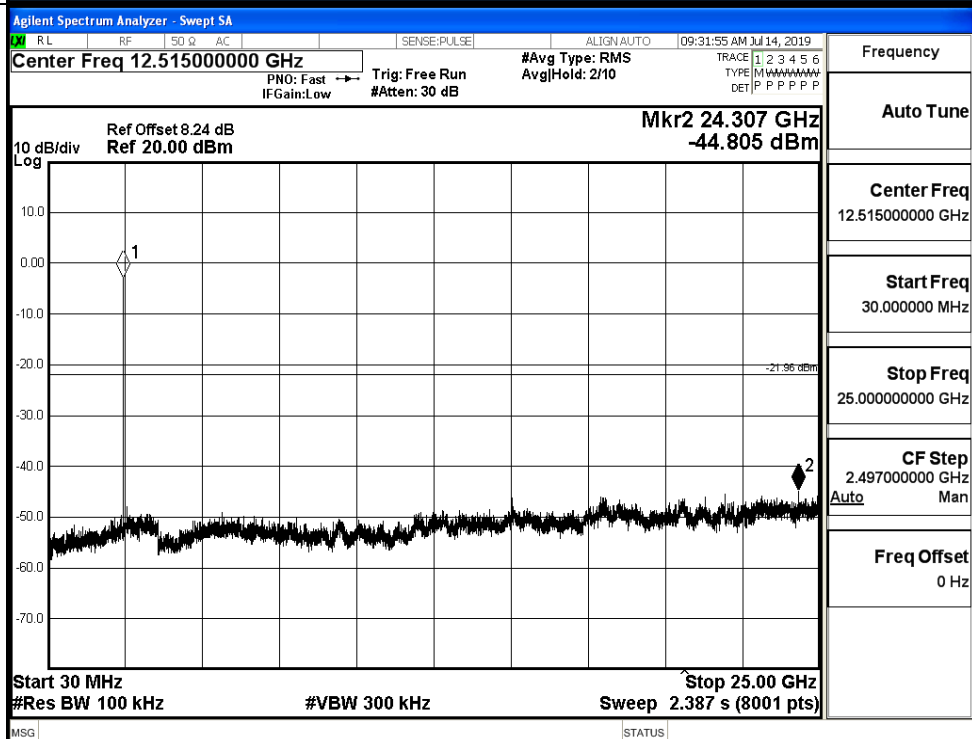


## GFSK\_HCH\_Graphs

Pref

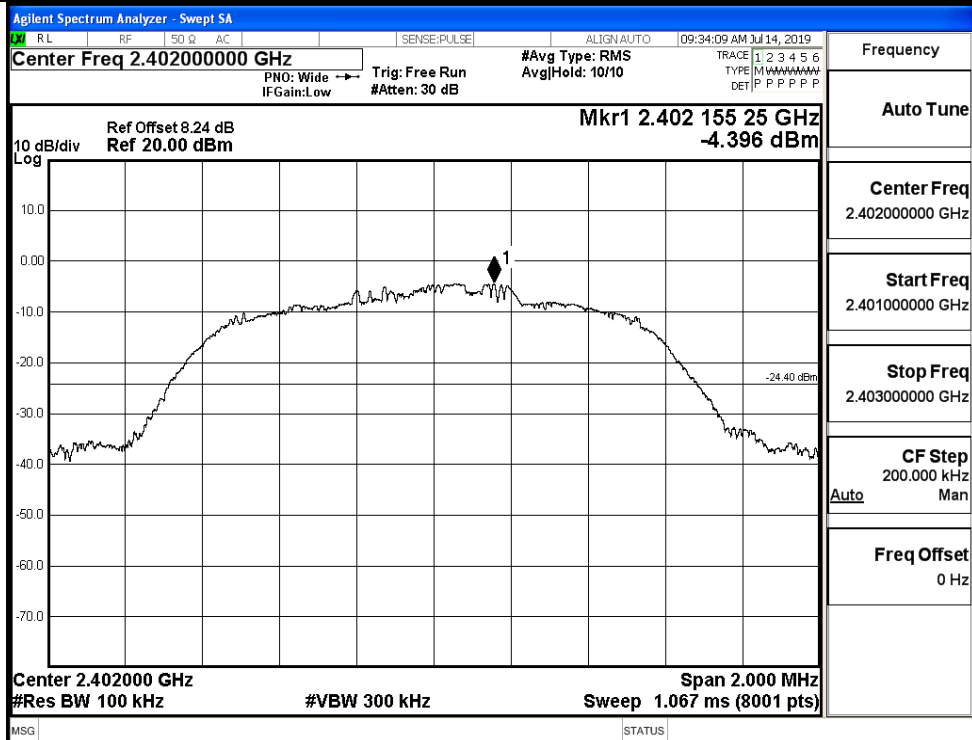


Puw

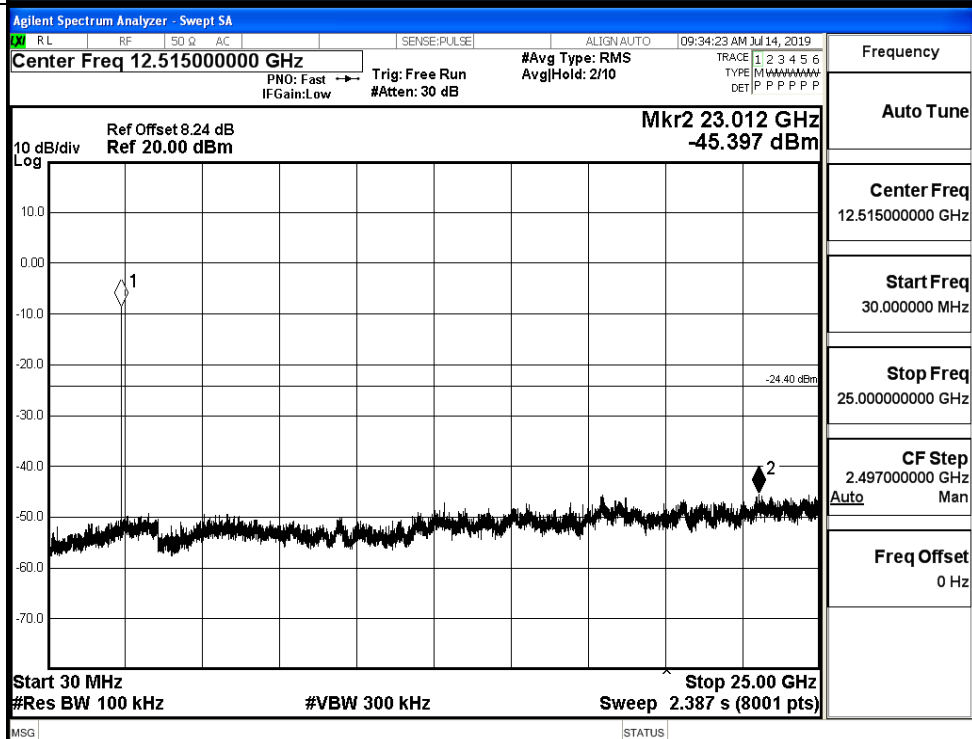


$\pi$ /4DQPSK LCH\_Graphs

Pref

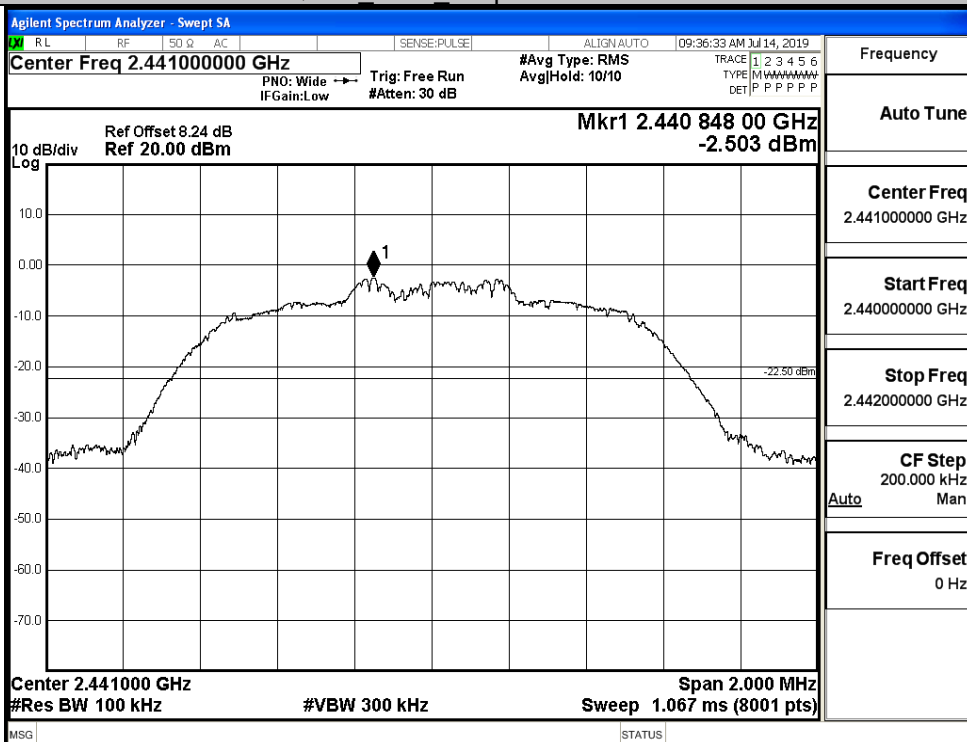


Puw

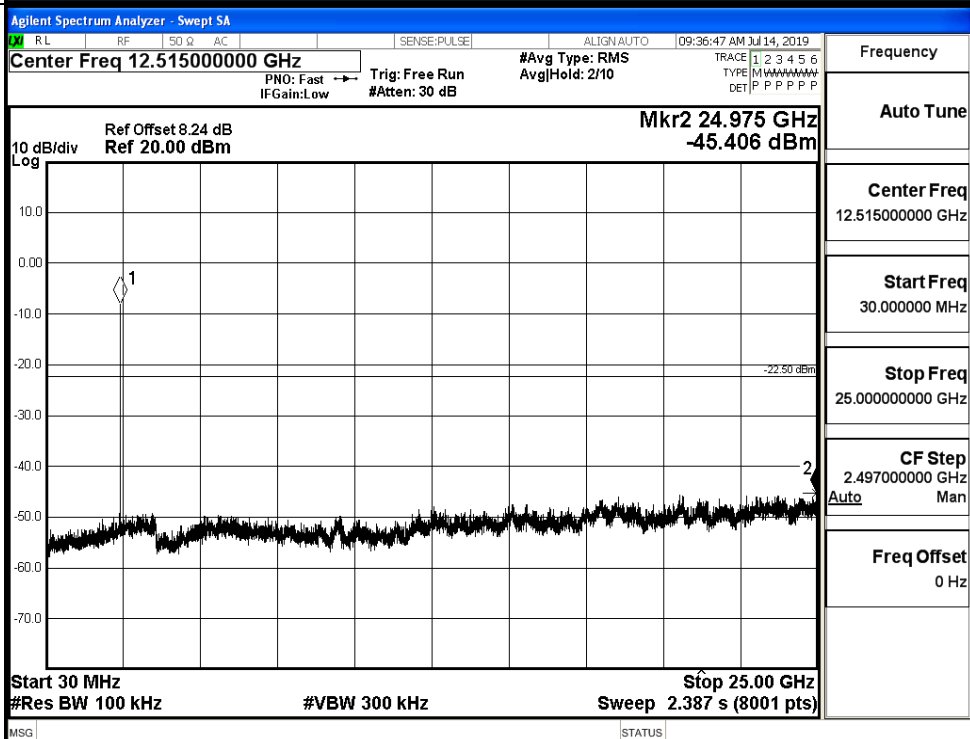


$\pi$ /4DQPSK MCH\_Graphs

Pref

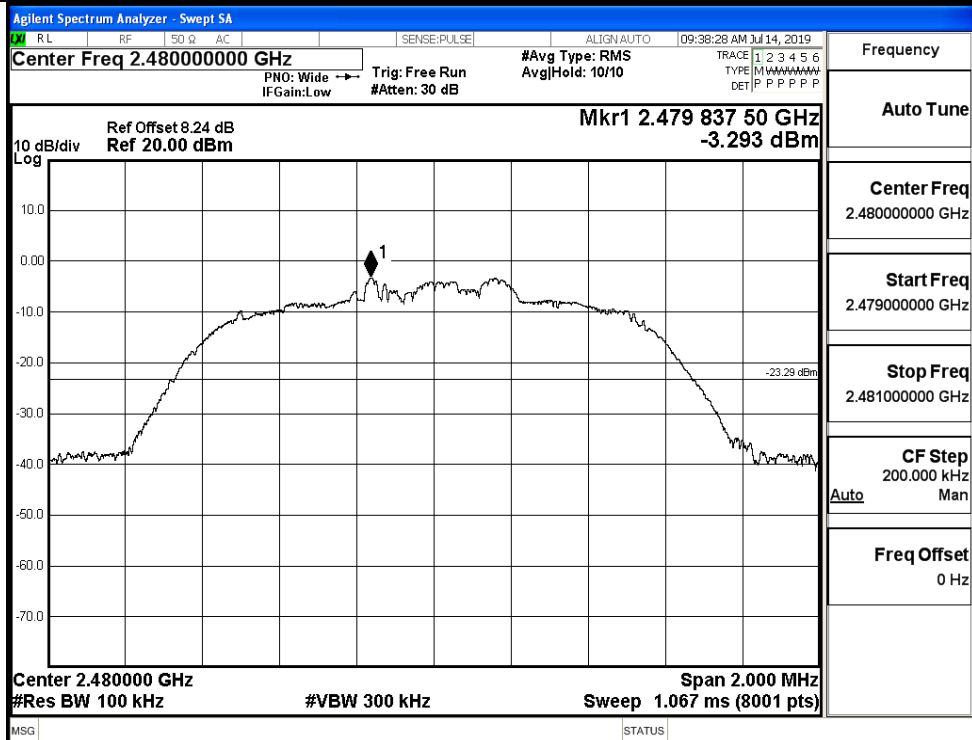


Puw

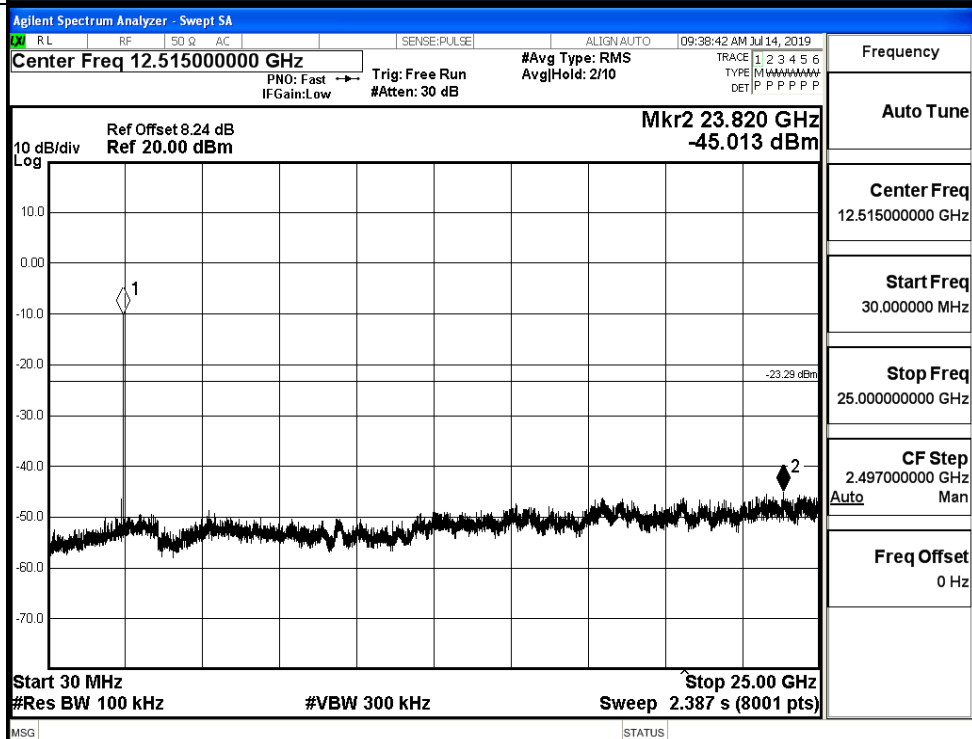


$\pi/4$ DQPSK HCH\_Graphs

Pref

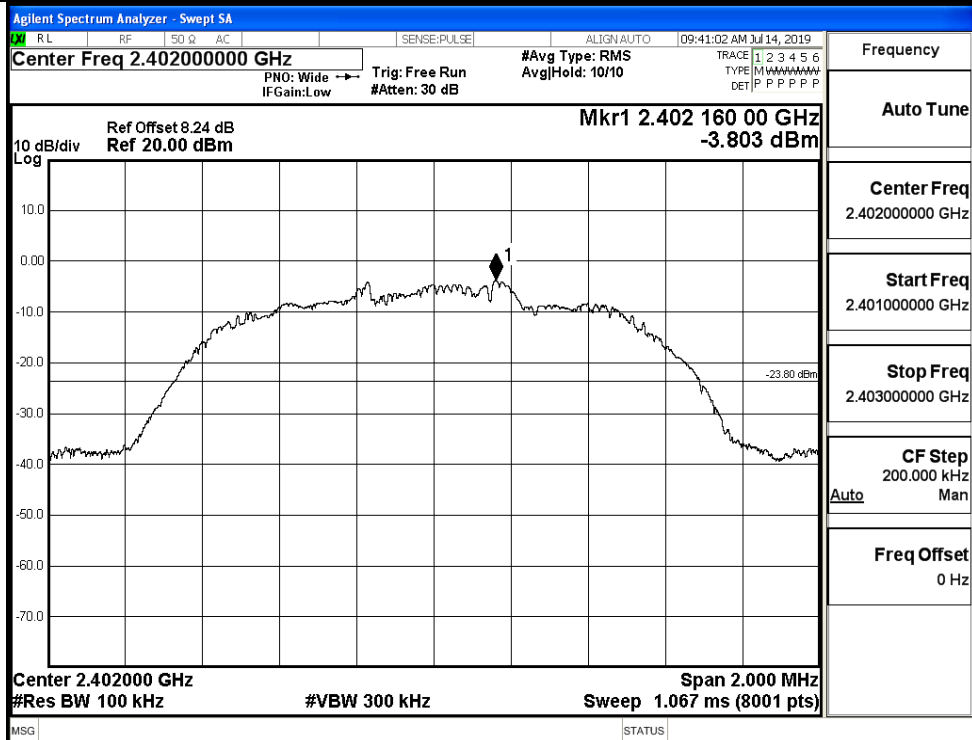


Puw

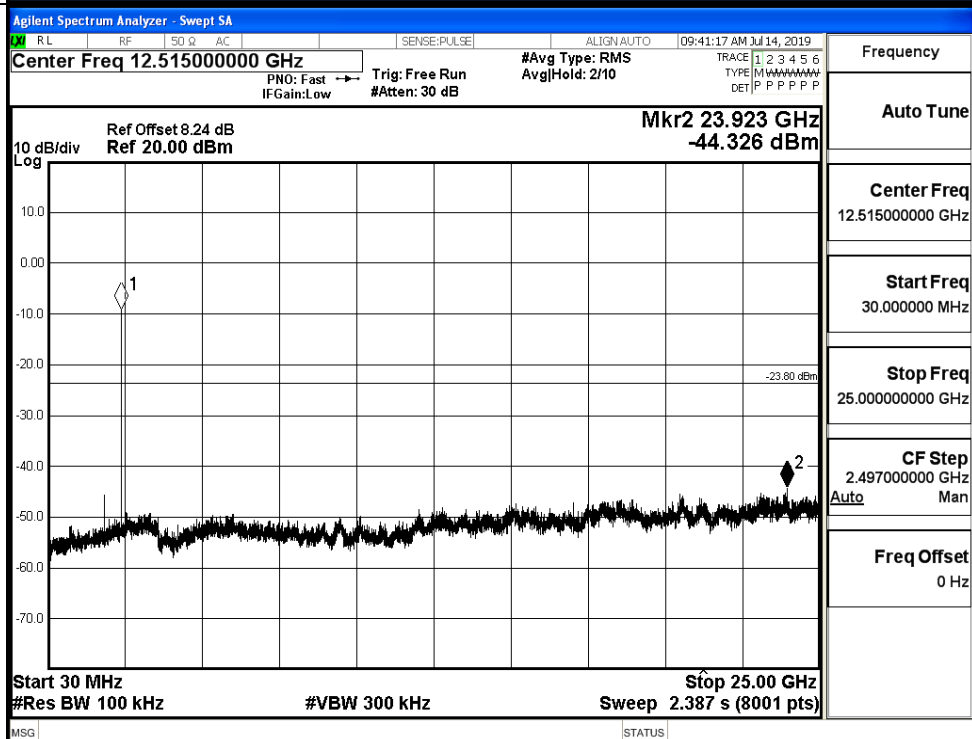


## 8DPSK\_LCH\_Graphs

Pref

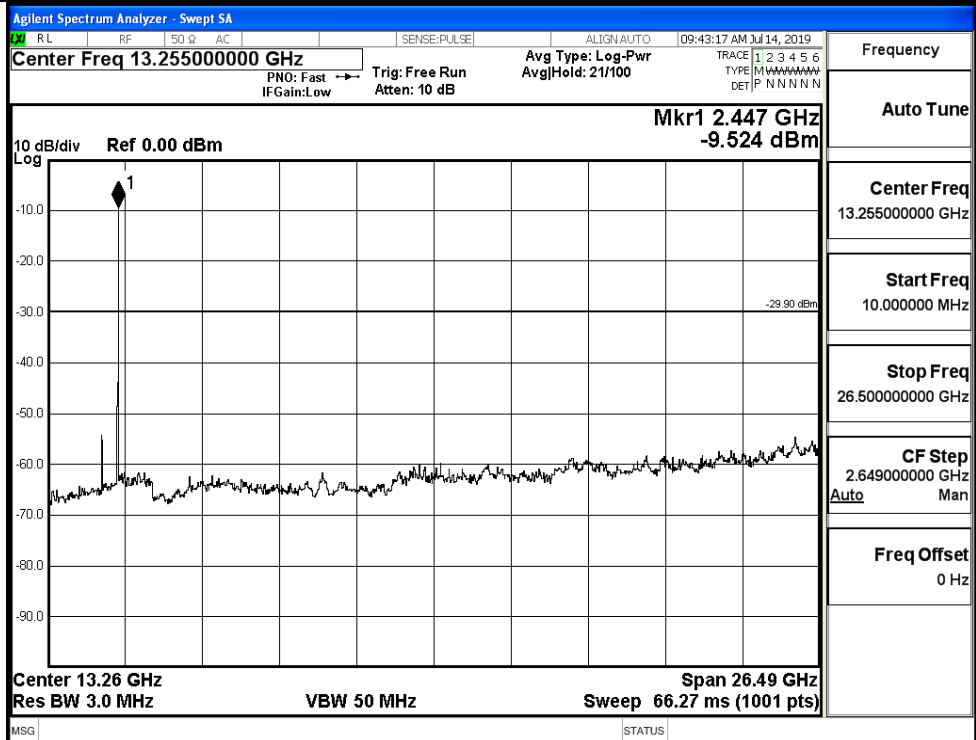


Puw

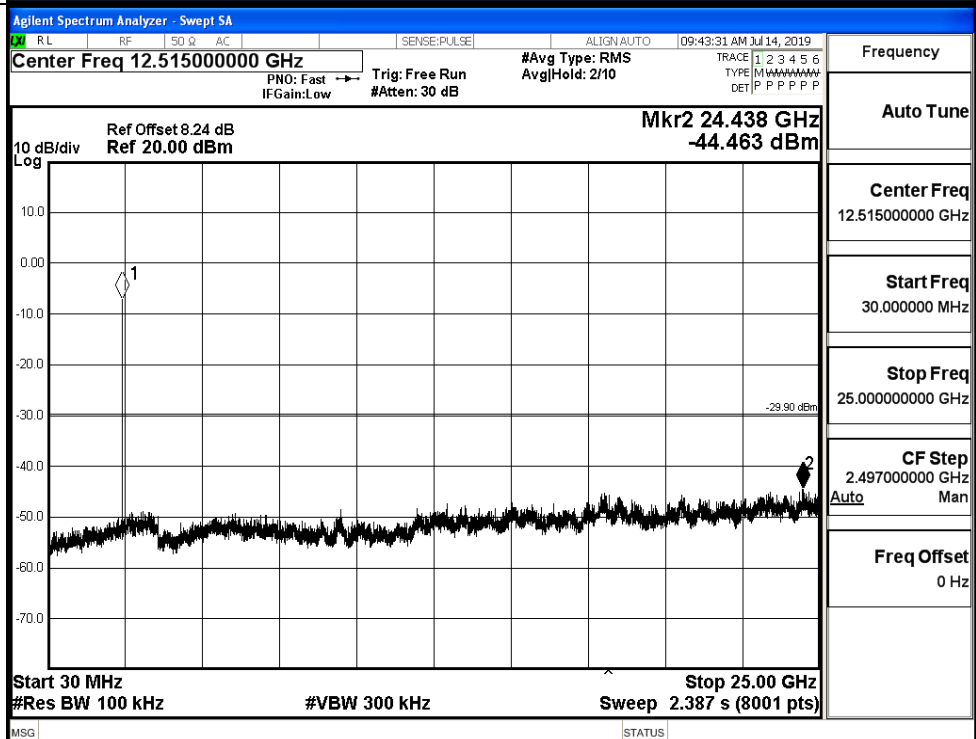


## 8DPSK\_MCH\_Graphs

Pref



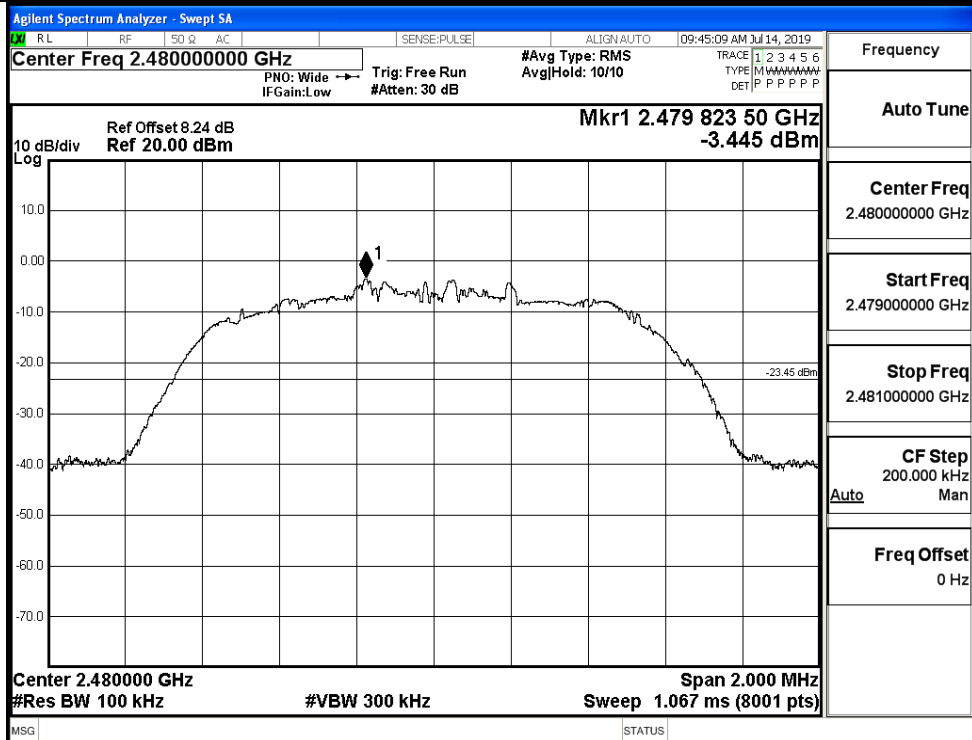
Puw



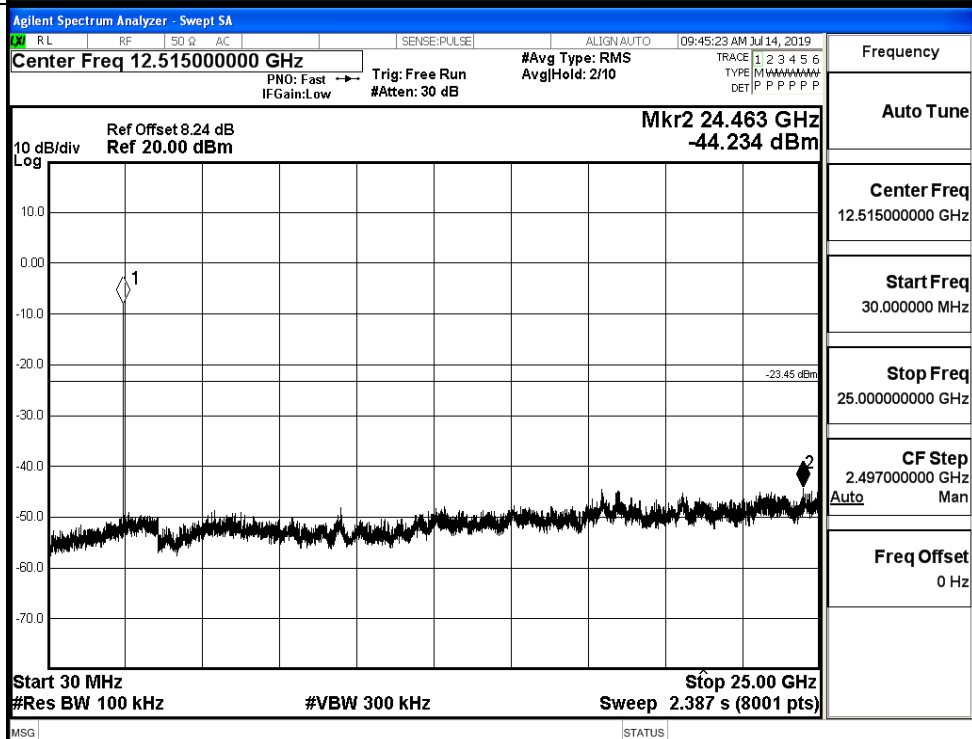


## 8DPSK\_HCH\_Graphs

Pref



Puw

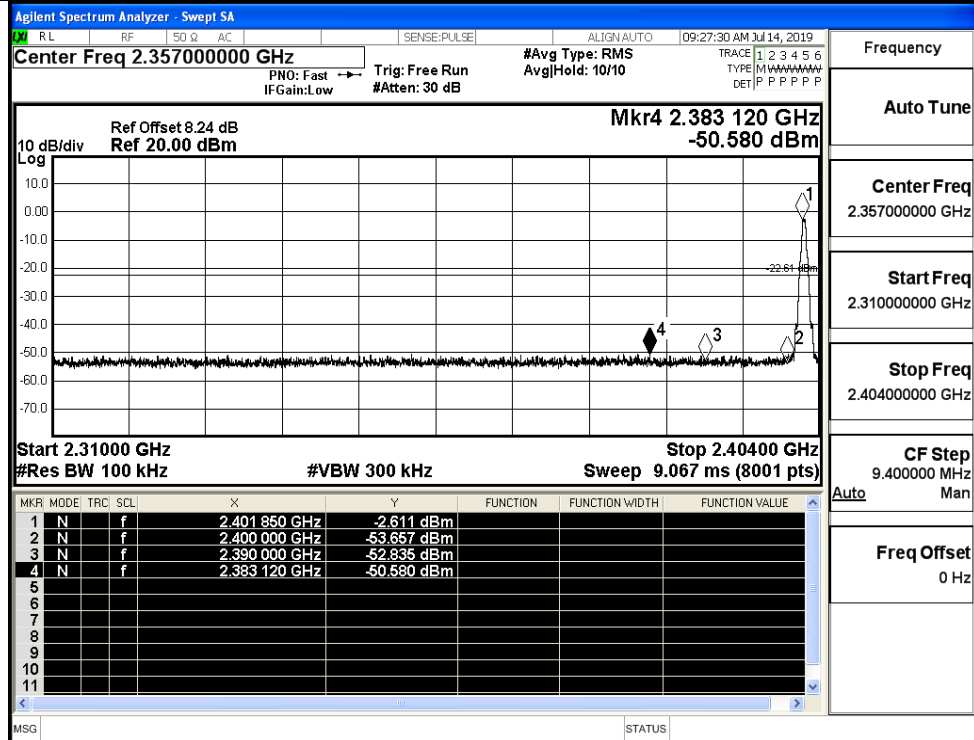


## A.7 Band-edge for RF Conducted Emissions

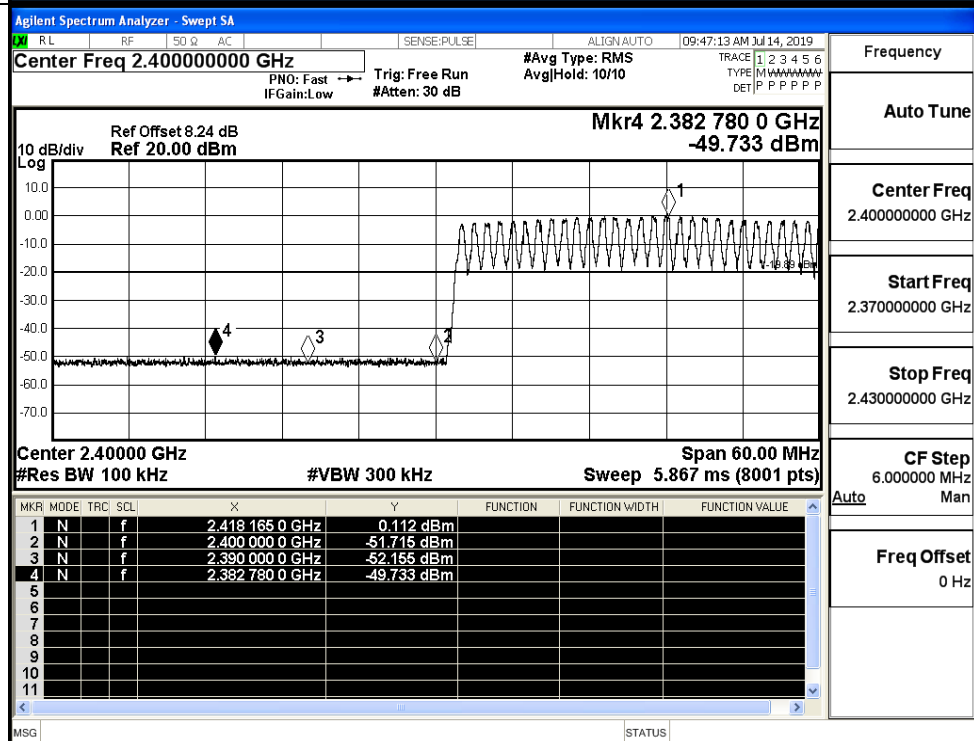
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-2.611	Off	-50.580	-22.61	PASS
			0.112	On	-49.733	-19.89	PASS
	HCH	2480	-1.965	Off	-50.173	-21.97	PASS
			0.157	On	-48.807	-19.84	PASS
$\pi/4$ DQPSK	LCH	2402	-5.050	Off	-50.107	-25.05	PASS
			-1.344	On	-48.462	-21.34	PASS
	HCH	2480	-3.260	Off	-50.216	-23.26	PASS
			-1.446	On	-48.552	-21.45	PASS
8DPSK	LCH	2402	-3.710	Off	-49.855	-23.71	PASS
			-1.503	On	-49.444	-21.5	PASS
	HCH	2480	-2.909	Off	-49.907	-22.91	PASS
			-1.104	On	-49.481	-21.1	PASS

## Test Graphs

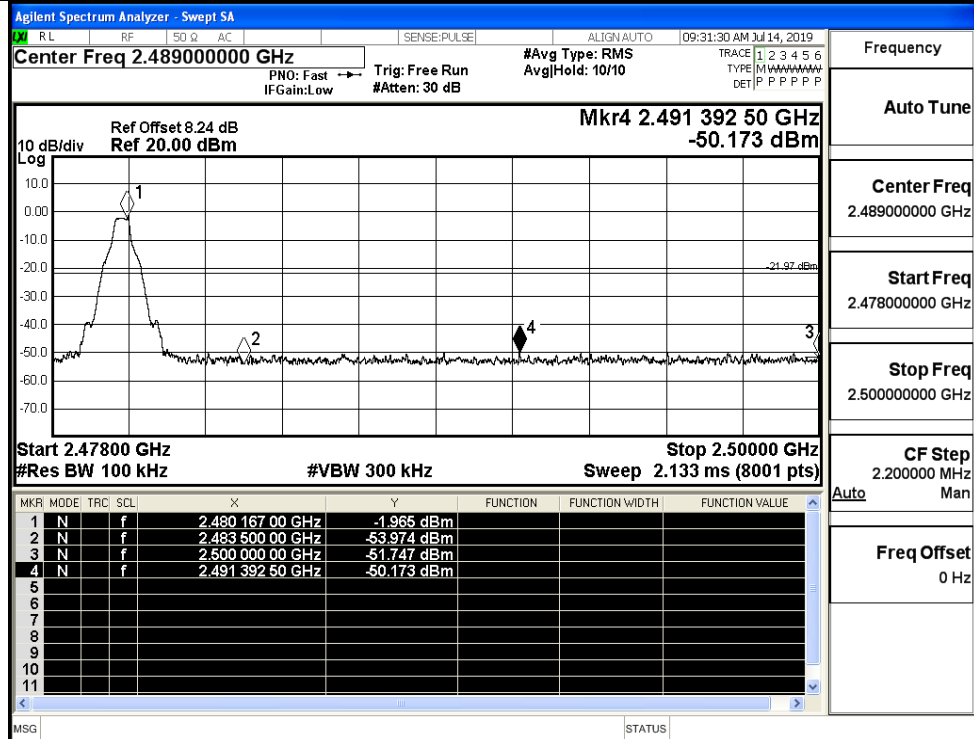
GFSK/LCH/No Hop



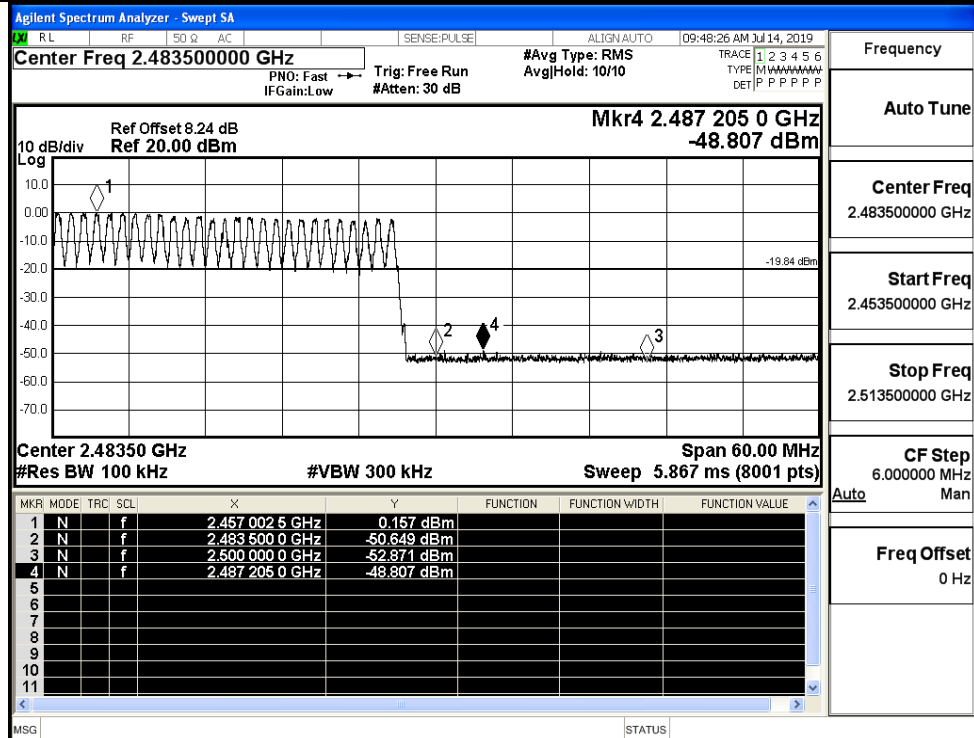
GFSK/LCH/Hop



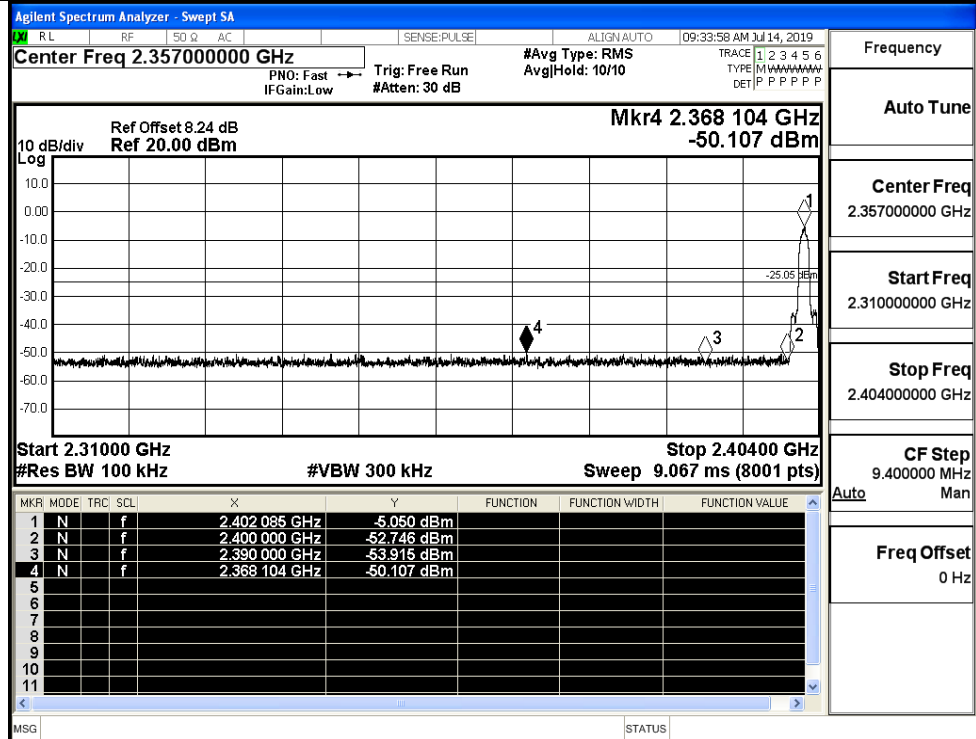
GFSK/HCH/No Hop



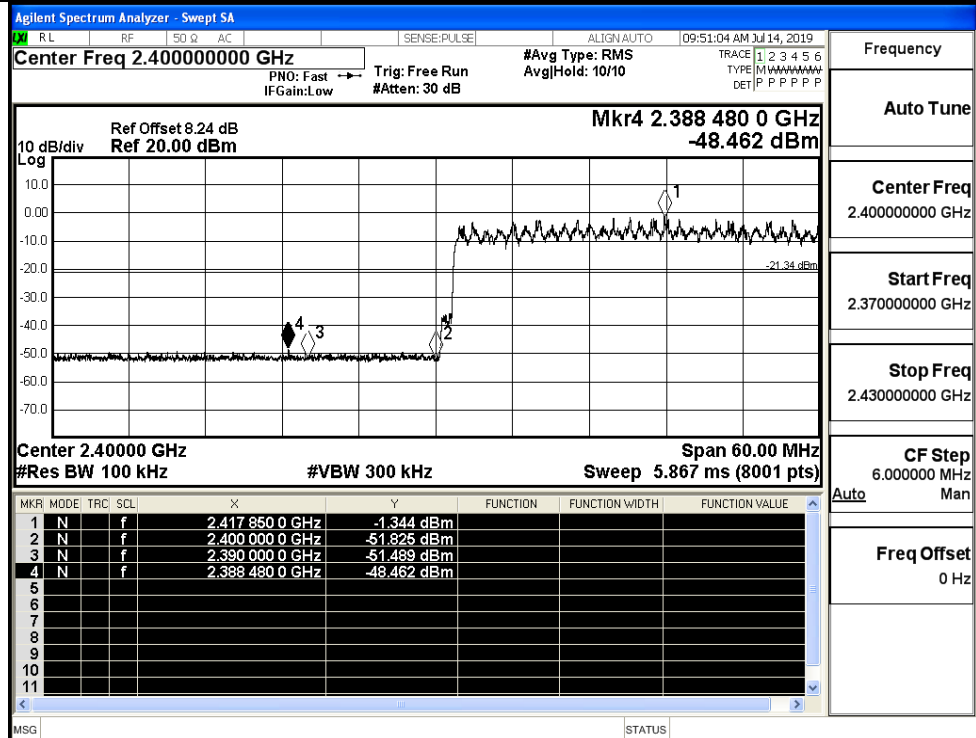
GFSK/HCH/Hop



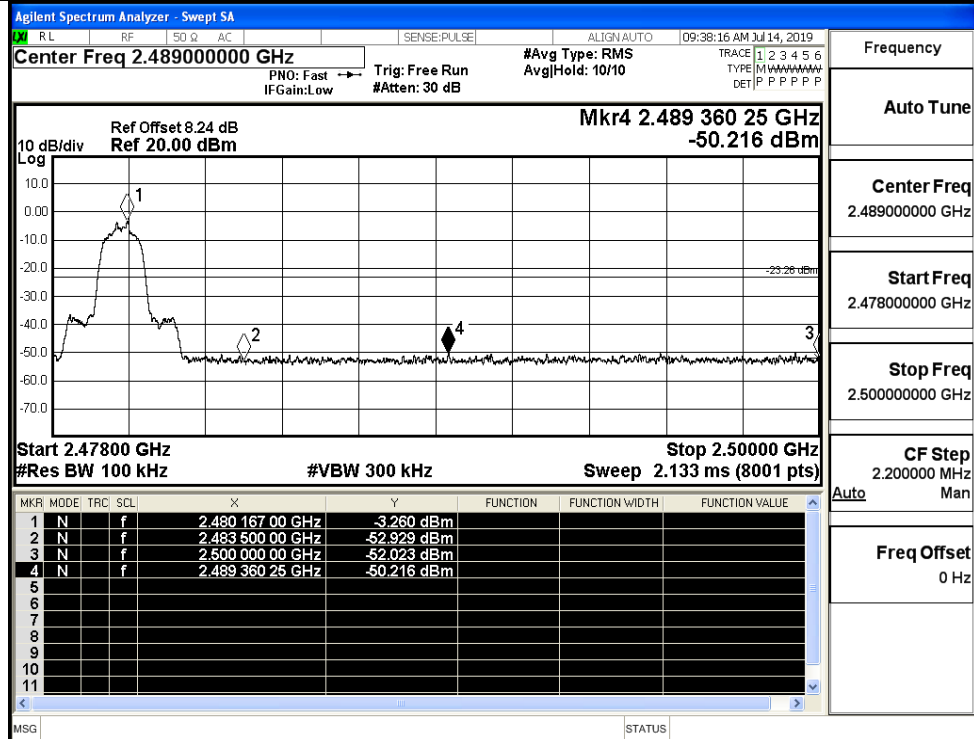
$\pi/4$ DQPSK/LCH/No  
Hop



$\pi/4$ DQPSK/LCH/Hop



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



Frequency

Auto Tune

Center Freq  
2.489000000 GHz

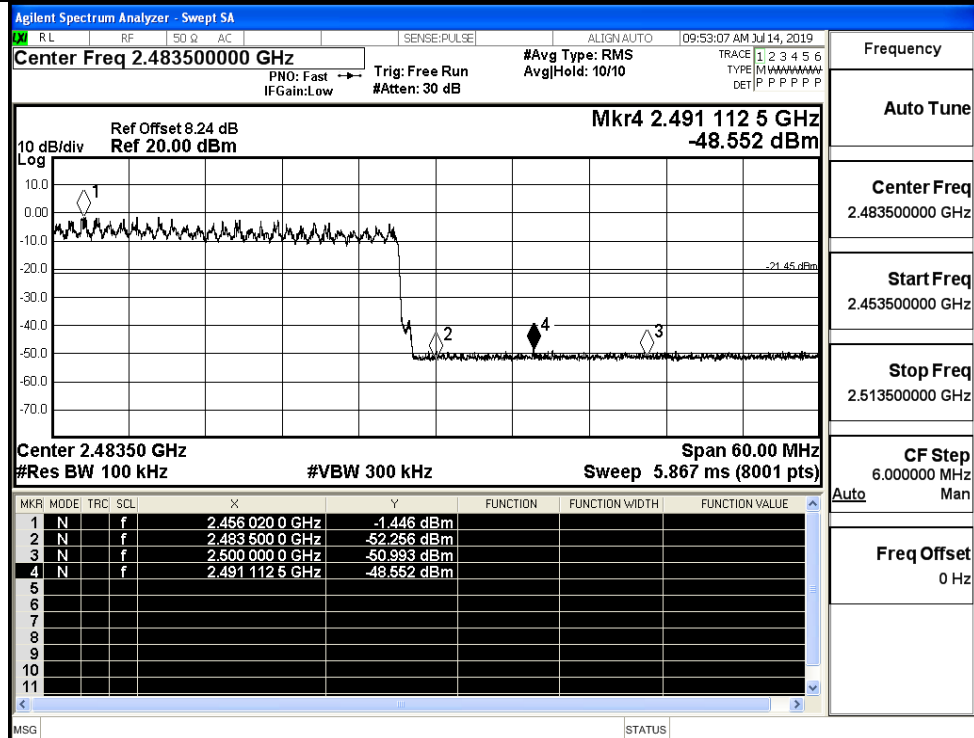
Start Freq  
2.478000000 GHz

Stop Freq  
2.500000000 GHz

CF Step  
2.200000 MHz  
Auto Man

Freq Offset  
0 Hz

$\pi/4$ DQPSK/HCH/Hop



Frequency

Auto Tune

Center Freq  
2.483500000 GHz

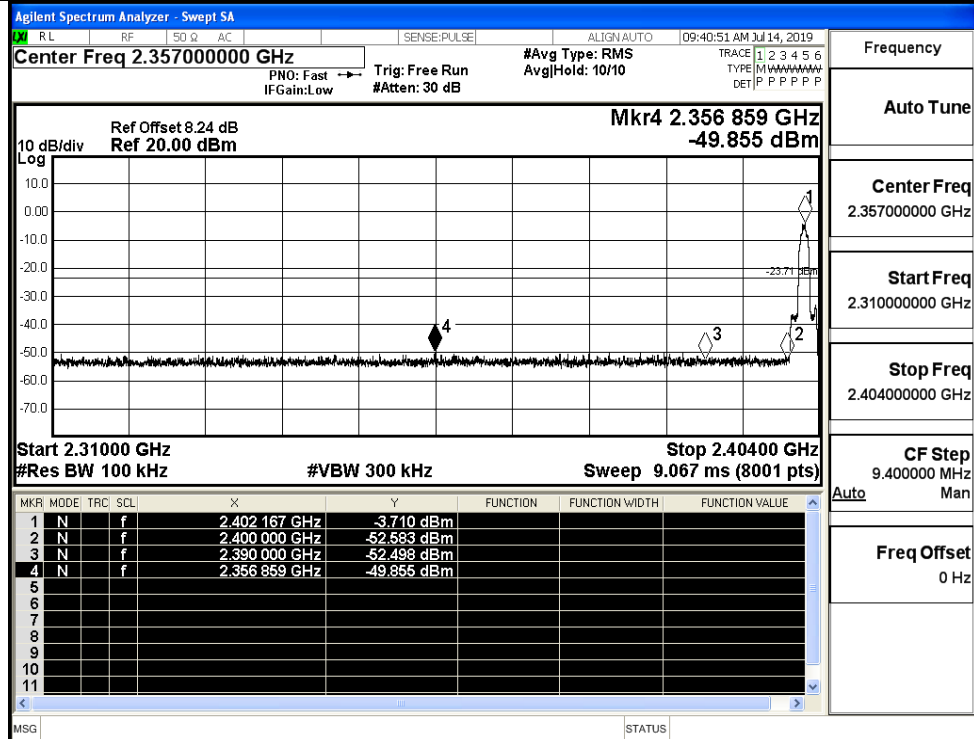
Start Freq  
2.453500000 GHz

Stop Freq  
2.513500000 GHz

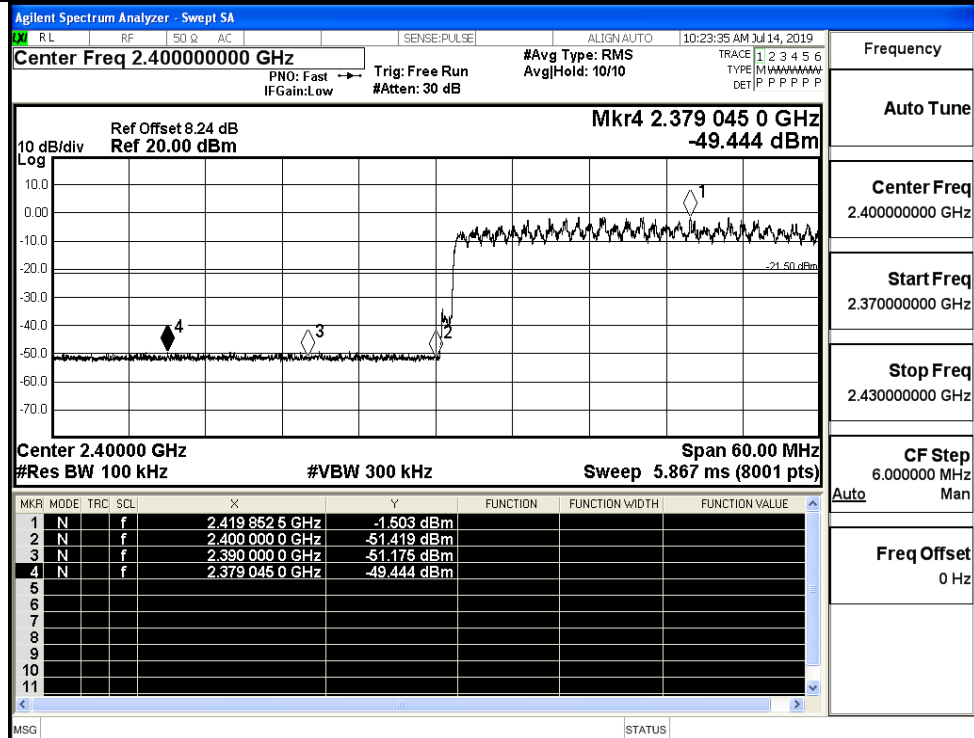
CF Step  
6.000000 MHz  
Auto Man

Freq Offset  
0 Hz

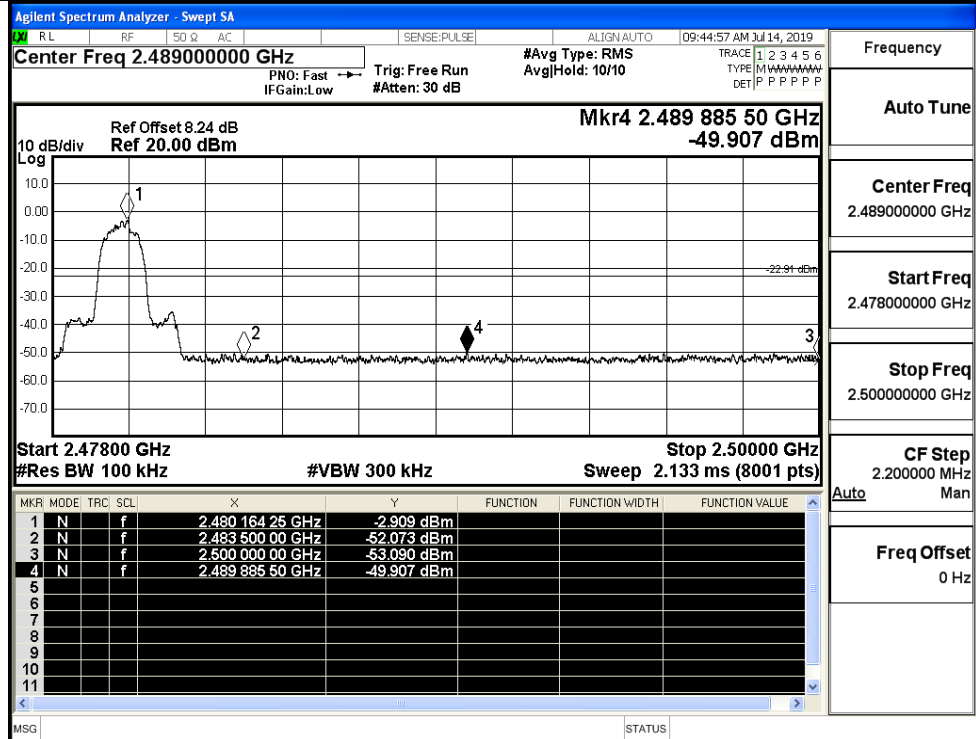
8DPSK/LCH/No Hop



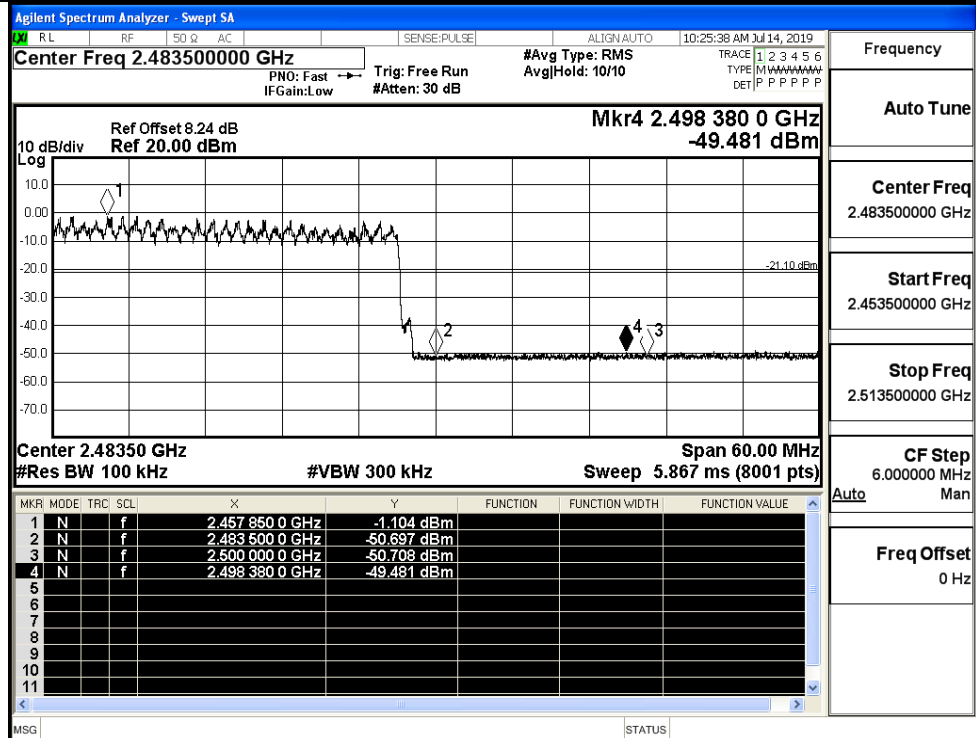
8DPSK/LCH/Hop



8DPSK/HCH/No Hop



8DPSK/HCH/Hop

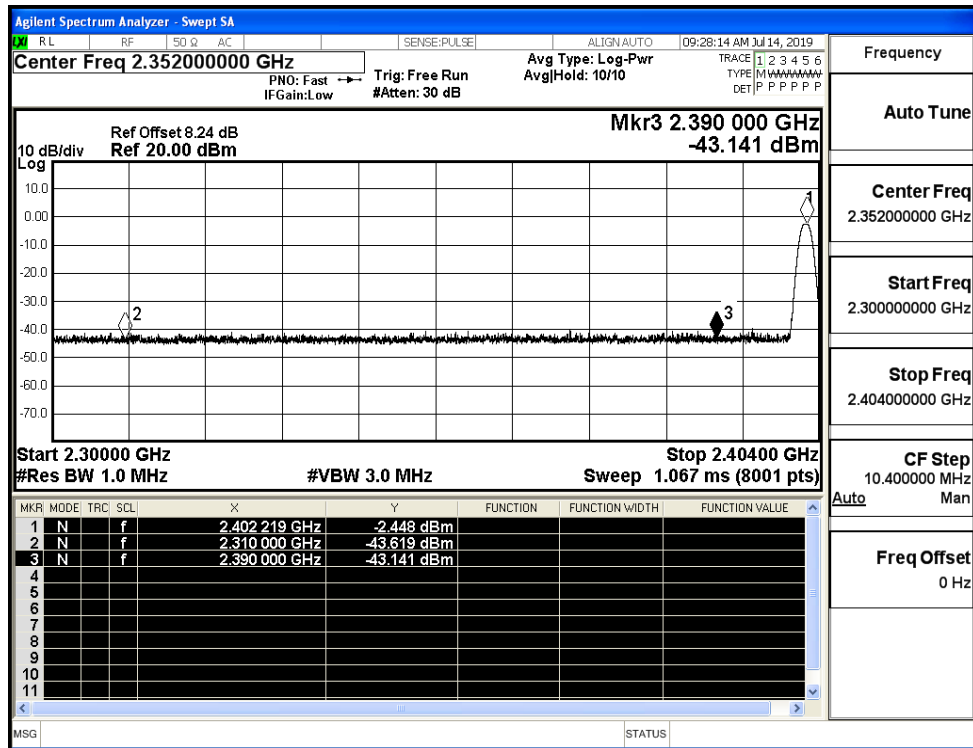




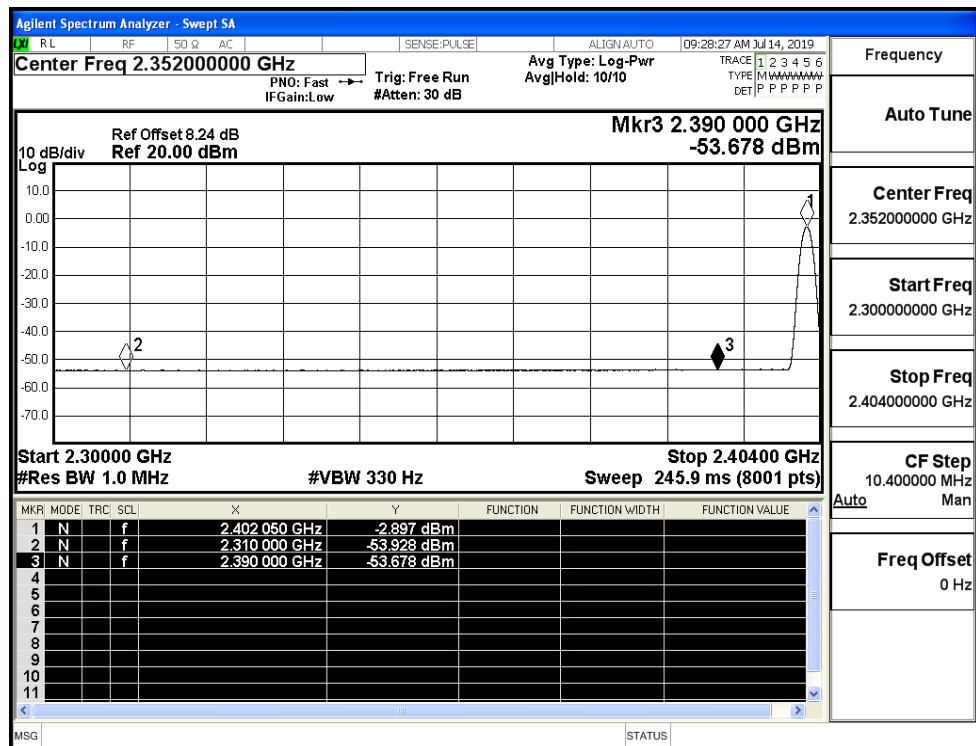
## A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-43.62	2.5	0	54.14	PEAK	74	PASS
	Off	2310.0	-53.93	2.5	0	43.83	AV	54	PASS
	Off	2390.0	-43.14	2.5	0	54.62	PEAK	74	PASS
	Off	2390.0	-53.68	2.5	0	44.08	AV	54	PASS
	Off	2483.5	-43.07	2.5	0	54.69	PEAK	74	PASS
	Off	2483.5	-53.40	2.5	0	44.36	AV	54	PASS
	Off	2500.0	-43.04	2.5	0	54.72	PEAK	74	PASS
	Off	2500.0	-53.19	2.5	0	44.57	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-43.26	2.5	0	54.5	PEAK	74	PASS
	Off	2310.0	-53.91	2.5	0	43.85	AV	54	PASS
	Off	2390.0	-42.84	2.5	0	54.92	PEAK	74	PASS
	Off	2390.0	-53.49	2.5	0	44.27	AV	54	PASS
	Off	2483.5	-43.03	2.5	0	54.73	PEAK	74	PASS
	Off	2483.5	-53.24	2.5	0	44.52	AV	54	PASS
	Off	2500.0	-43.30	2.5	0	54.46	PEAK	74	PASS
	Off	2500.0	-53.21	2.5	0	44.55	AV	54	PASS
8DPSK	Off	2310.0	-43.77	2.5	0	53.99	PEAK	74	PASS
	Off	2310.0	-53.71	2.5	0	44.05	AV	54	PASS
	Off	2390.0	-42.66	2.5	0	55.1	PEAK	74	PASS
	Off	2390.0	-53.47	2.5	0	44.29	AV	54	PASS
	Off	2483.5	-42.70	2.5	0	55.06	PEAK	74	PASS
	Off	2483.5	-53.03	2.5	0	44.73	AV	54	PASS
	Off	2500.0	-43.52	2.5	0	54.24	PEAK	74	PASS
	Off	2500.0	-52.80	2.5	0	44.96	AV	54	PASS

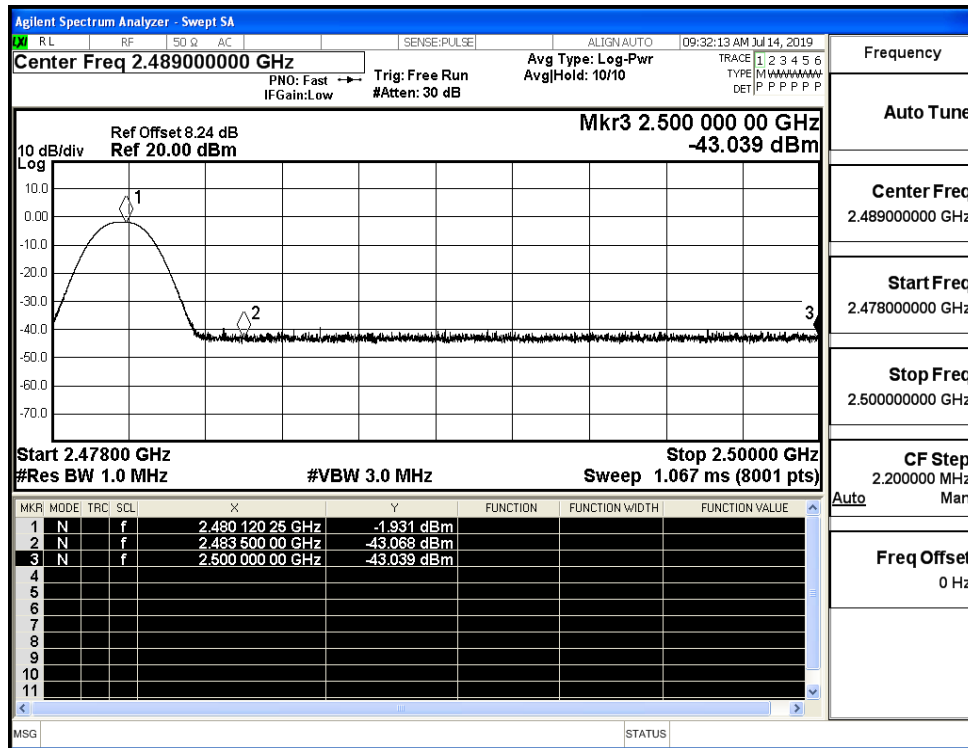
## Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_PEAK (Low Channel)



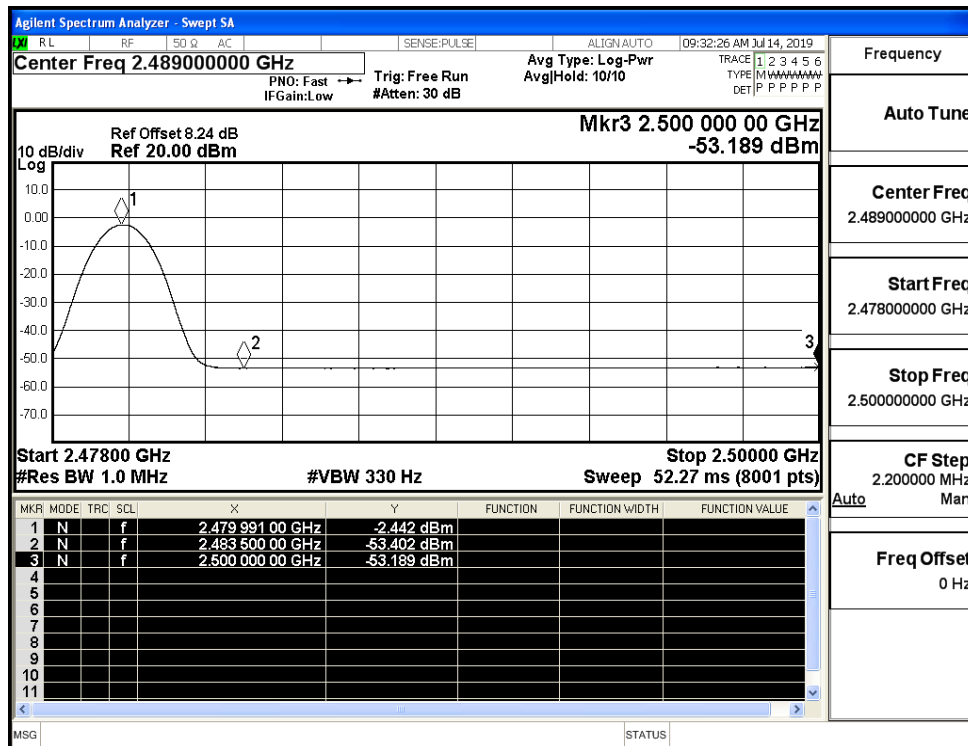
## Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_Average (Low Channel)

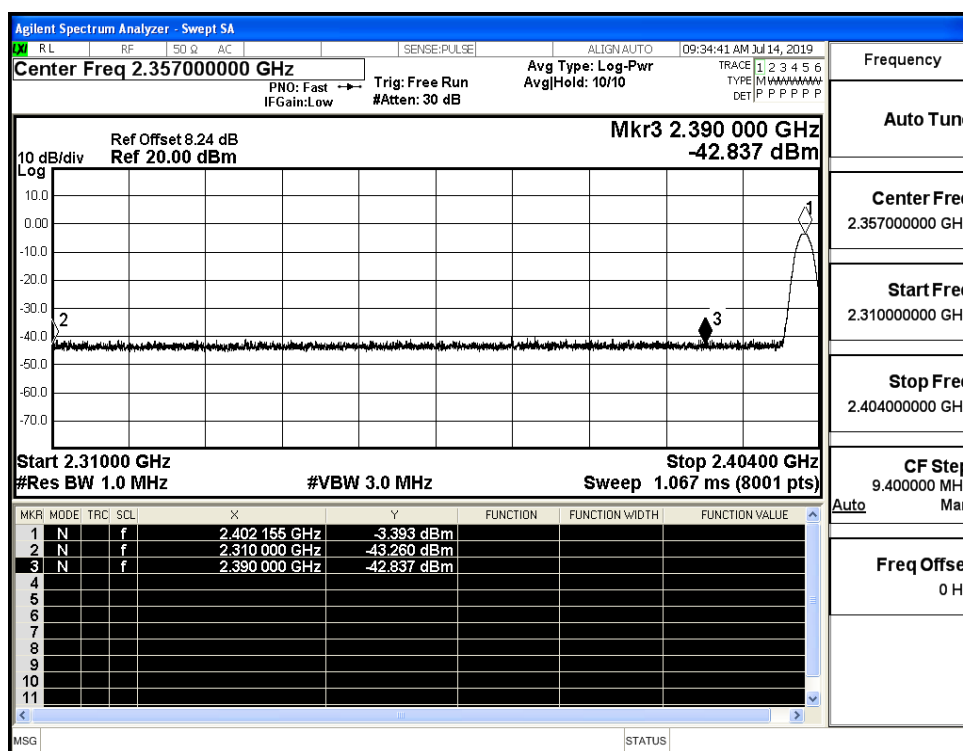
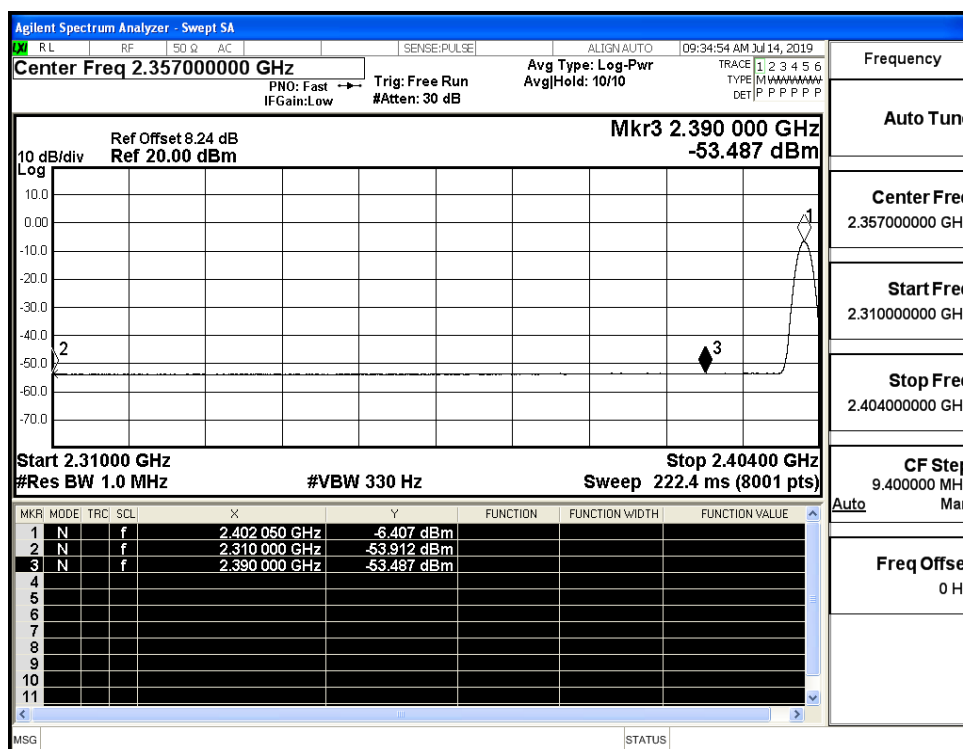


## Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_PEAK (High Channel)

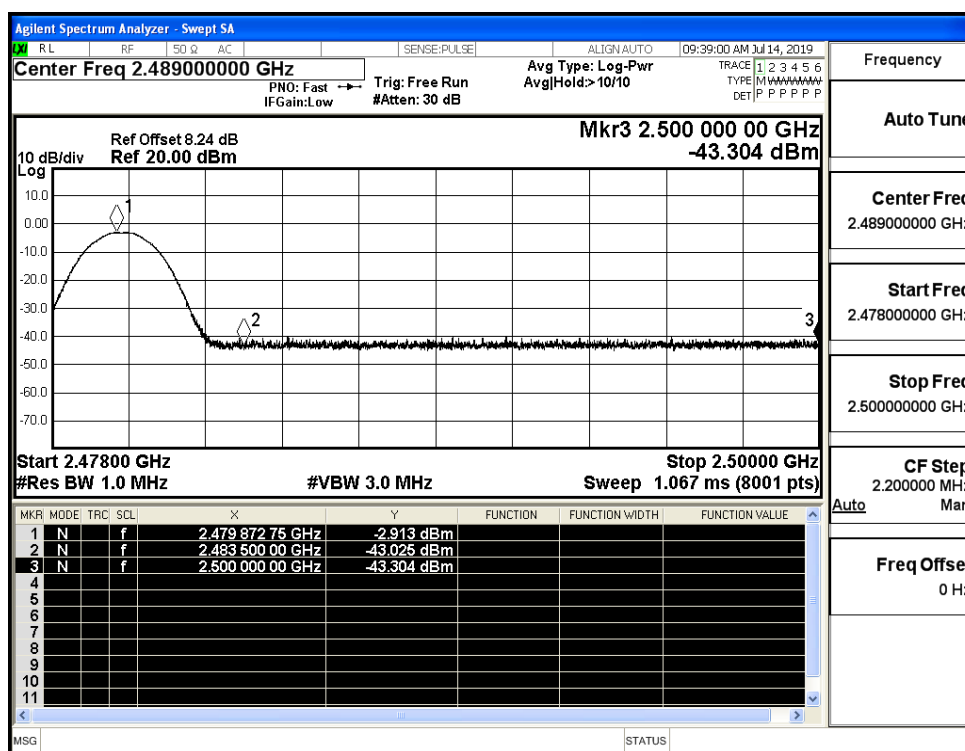


## Restrict-band band-edge measurements\_Hopping Off\_ GFSK\_Average (High Channel)

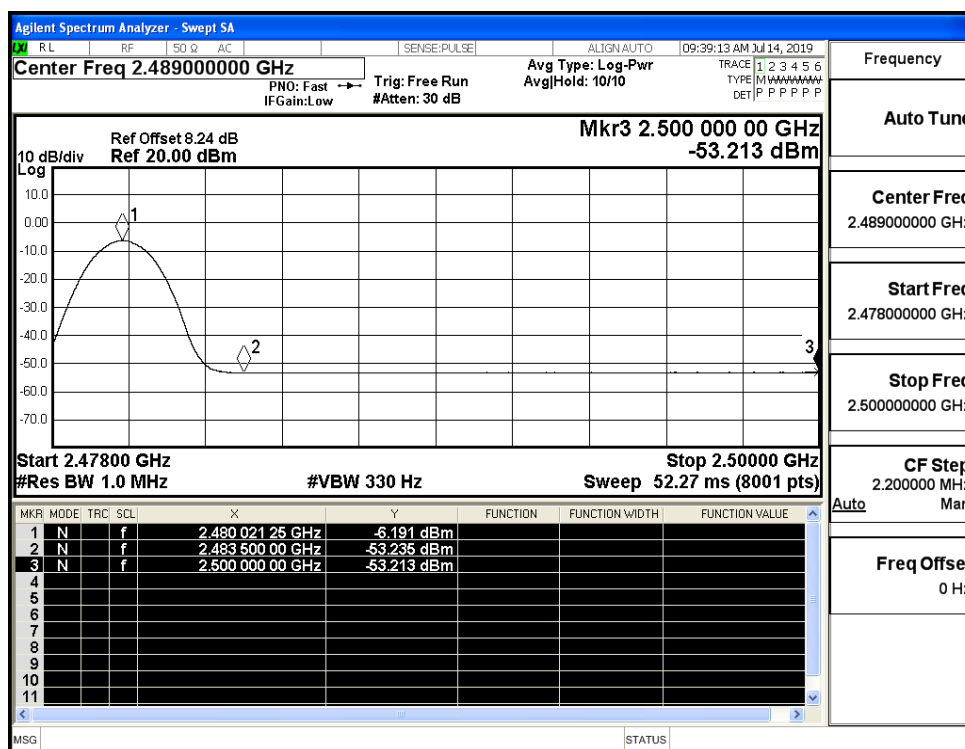


Restrict-band band-edge measurements\_Hopping Off  $\pi/4$ -DQPSK\_PEAK (Low Channel)Restrict-band band-edge measurements\_Hopping Off  $\pi/4$ -DQPSK\_Average (Low Channel)

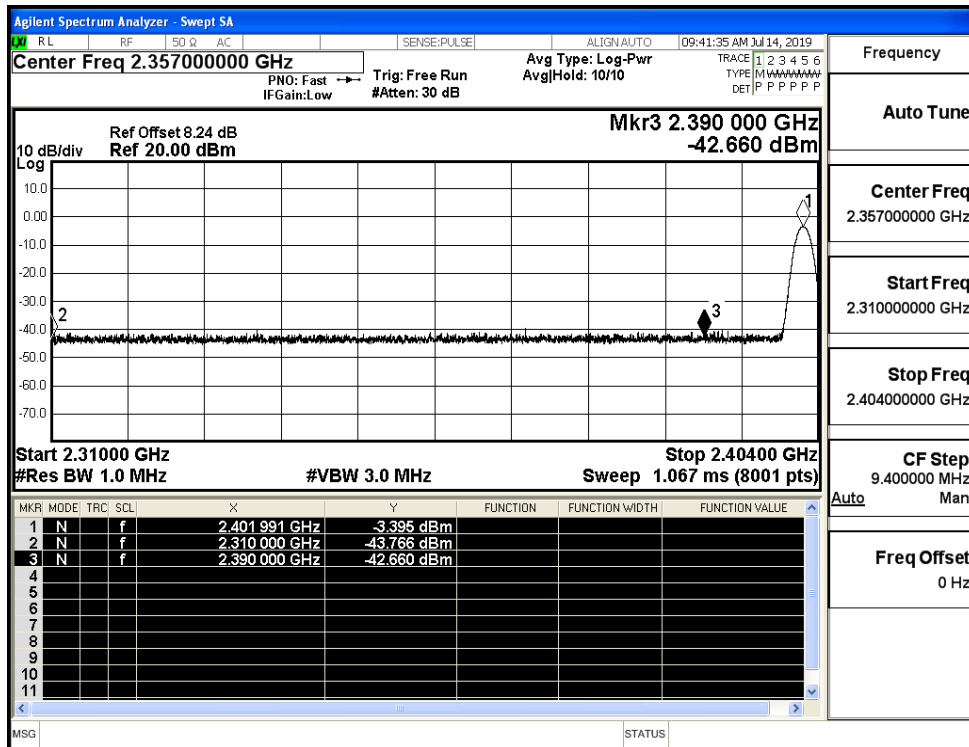
## Restrict-band band-edge measurements\_Hopping Off\_π/4-DQPSK\_PEAK (High Channel)



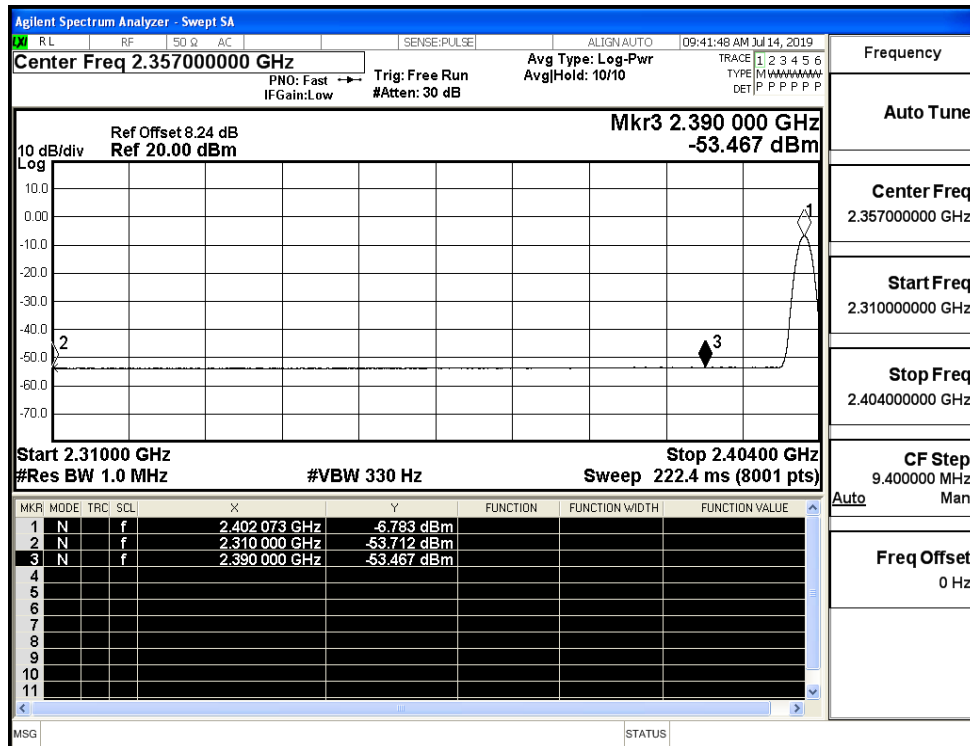
## Restrict-band band-edge measurements\_Hopping Off\_π/4-DQPSK\_Average (High Channel)



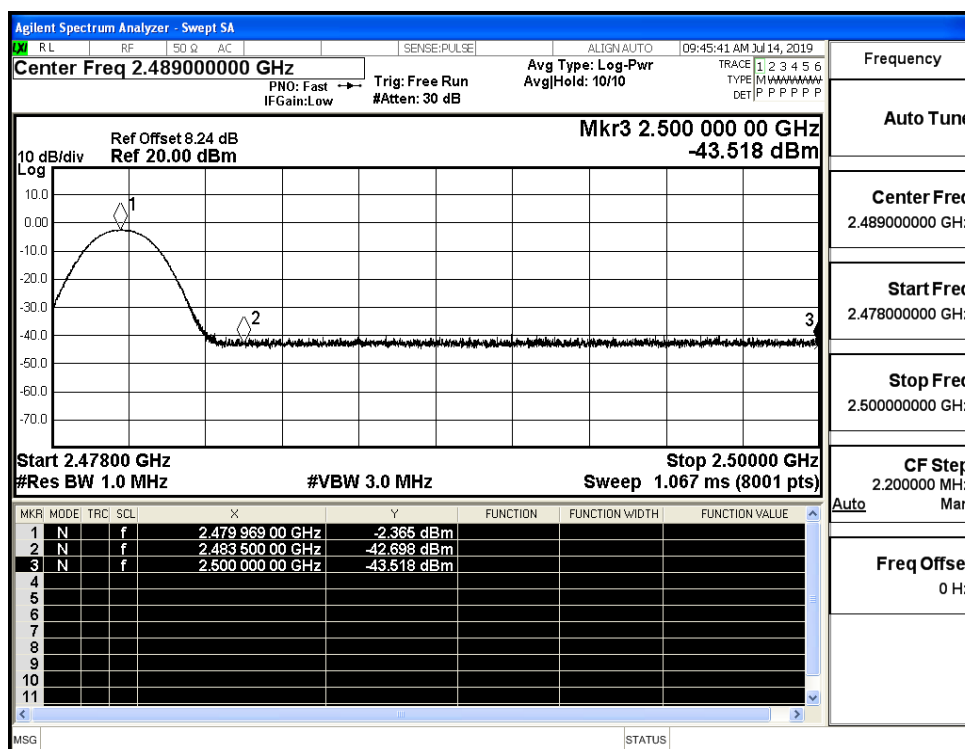
## Restrict-band band-edge measurements\_Hopping Off\_8DPSK\_PEAK (Low Channel)



## 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)

