

Appendix A

RF Test Data for BT V4.1 (BDR/EDR) (Conducted Measurement)

Product Name: Tablet PC

Trade Mark: ALLDOCUBE

Test Model: U1005

Environmental Conditions

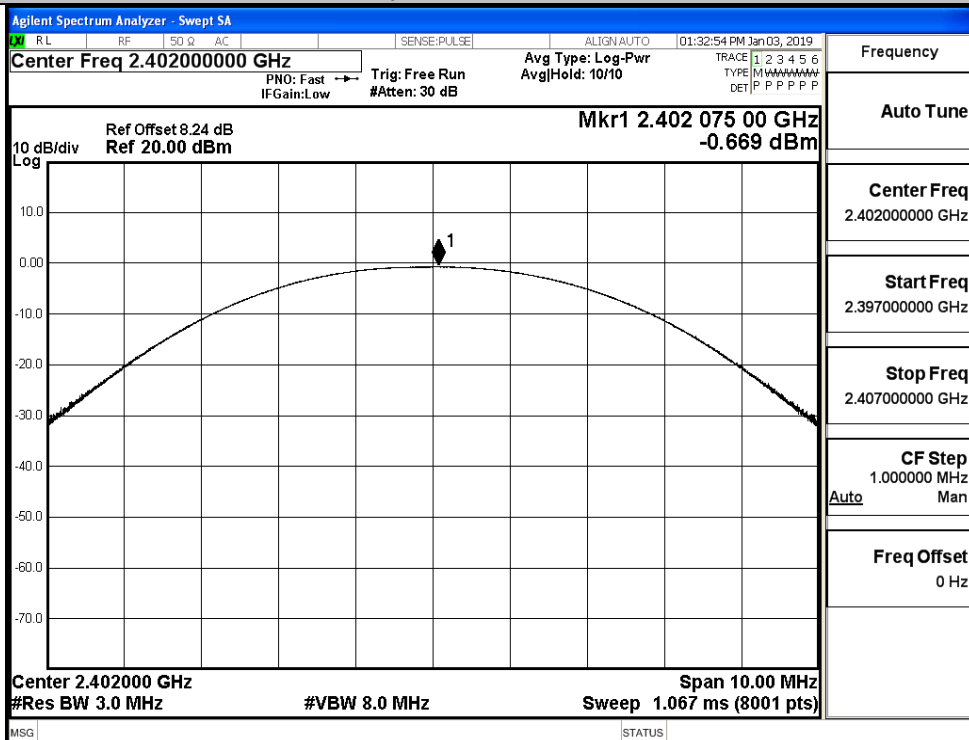
Temperature:	22.5° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond.Lu
Supervised by:	Jayden.Zhuo

A.1 Maximum Conducted Peak Output Power

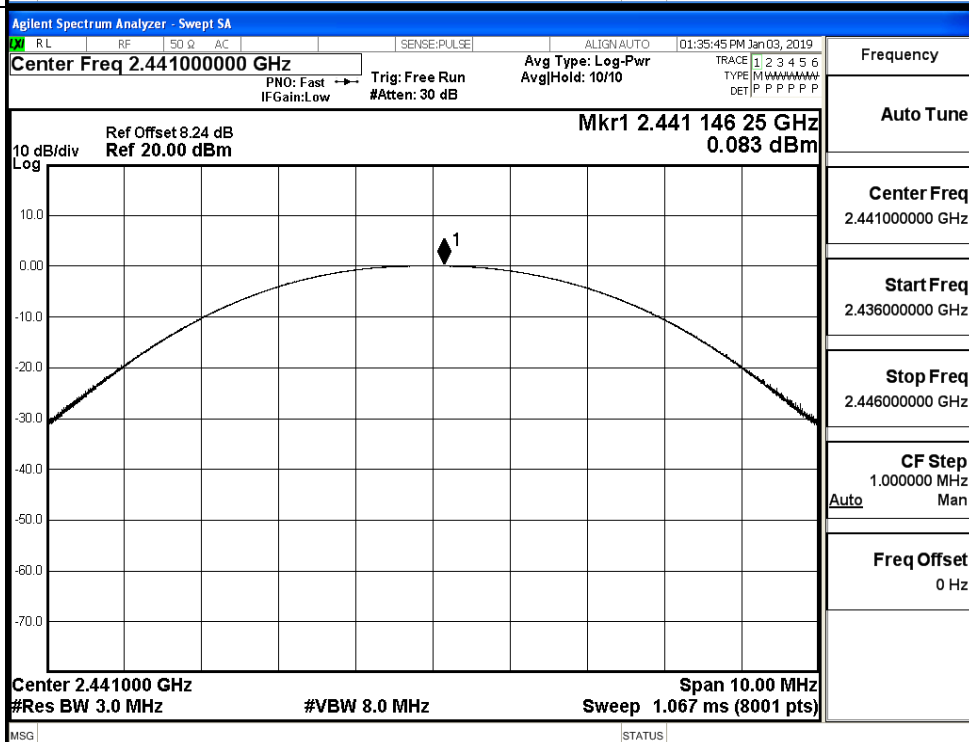
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-0.669	21	PASS
	MCH	0.083	21	PASS
	HCH	-0.386	21	PASS
$\pi/4$ DQPSK	LCH	-1.432	21	PASS
	MCH	-0.555	21	PASS
	HCH	-1.194	21	PASS
8DPSK	LCH	-1.412	21	PASS
	MCH	-0.521	21	PASS
	HCH	-1.120	21	PASS

Test Graphs

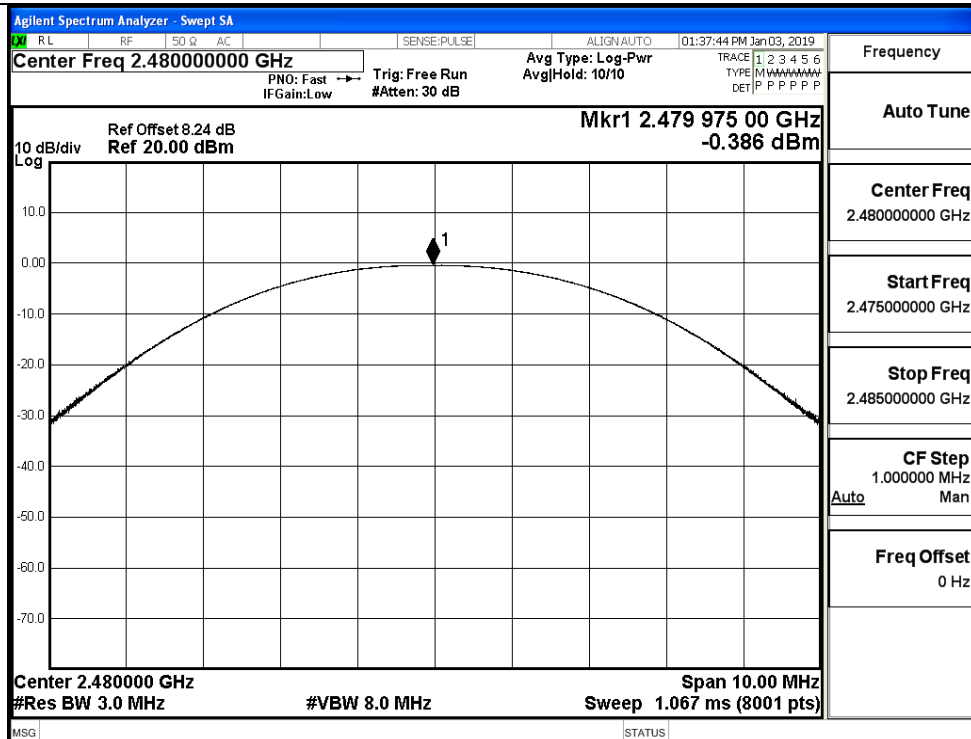
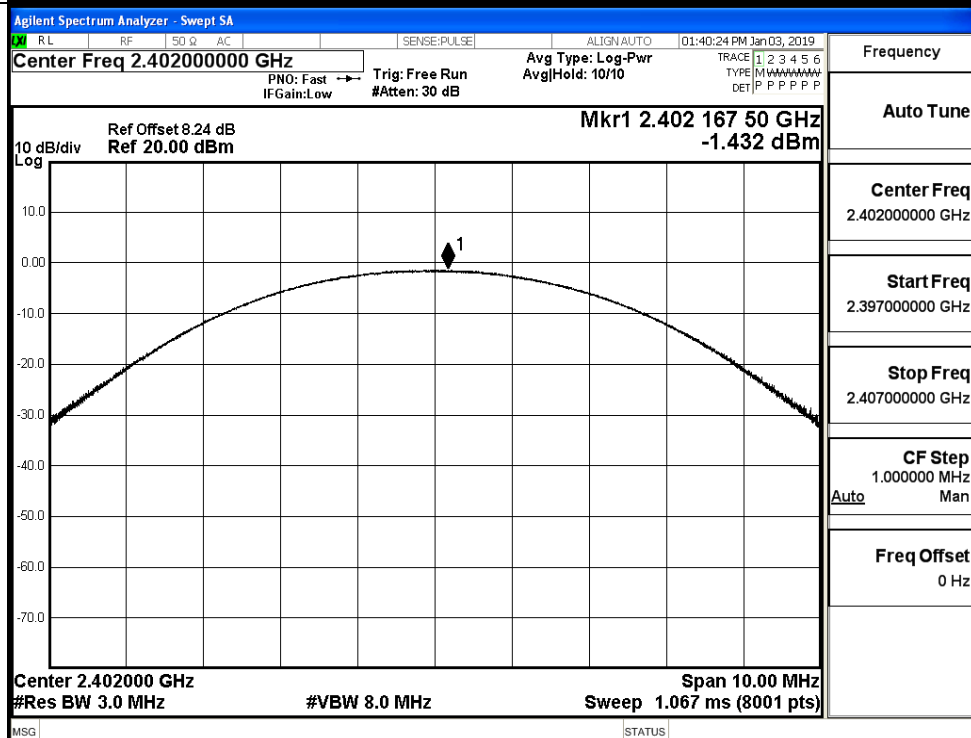
GFSK/LCH

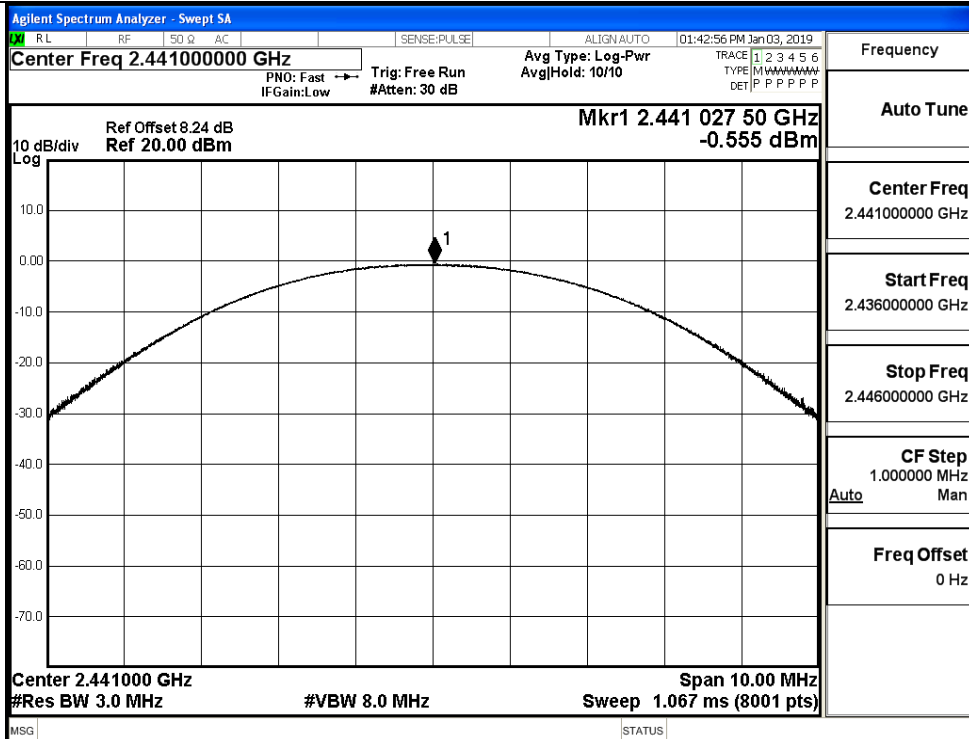
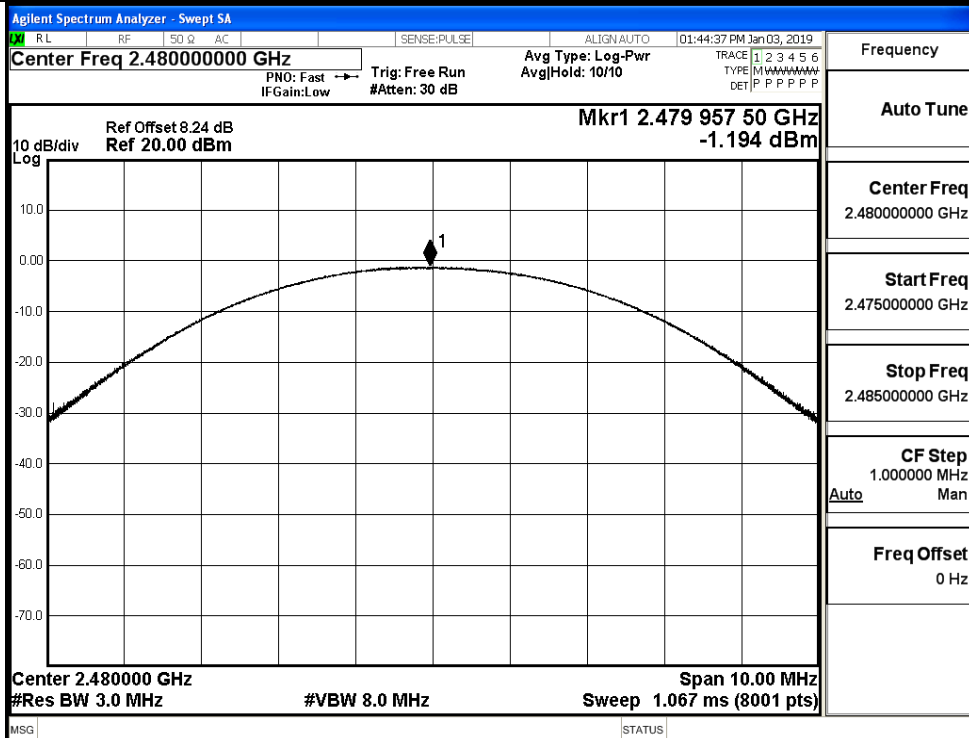


GFSK/MCH

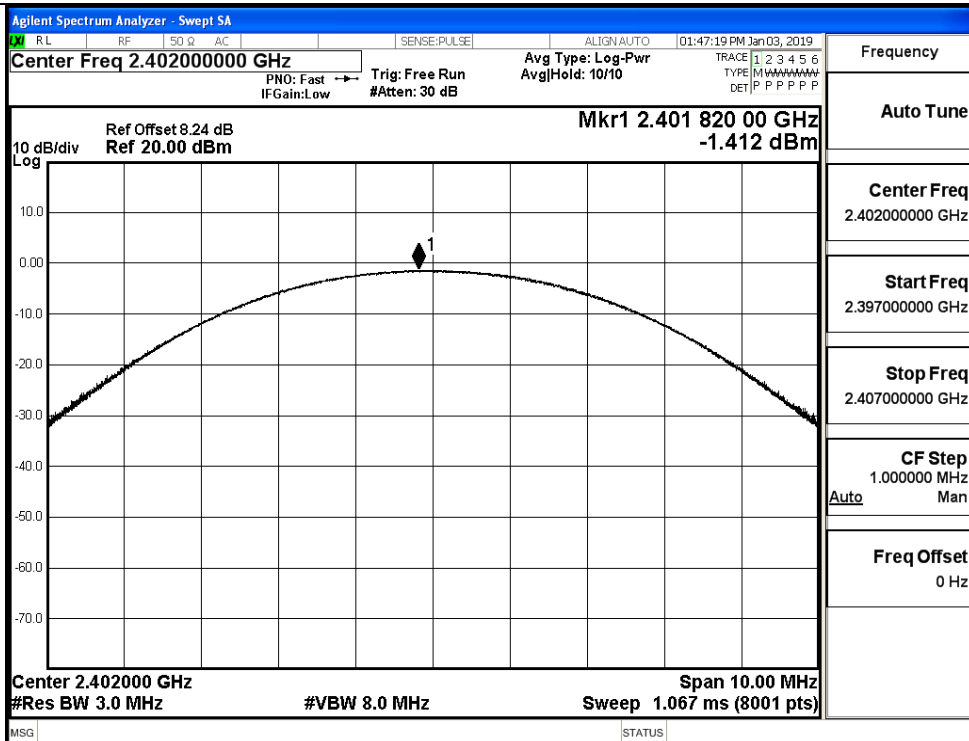


GFSK/HCH

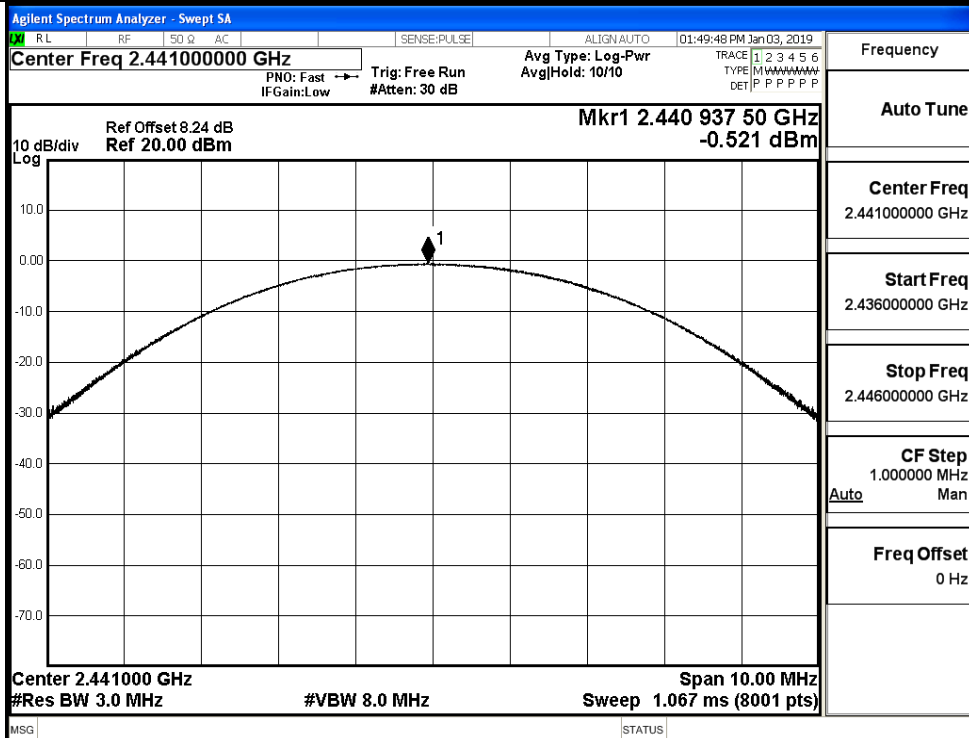
 π /4DQPSK/LCH

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

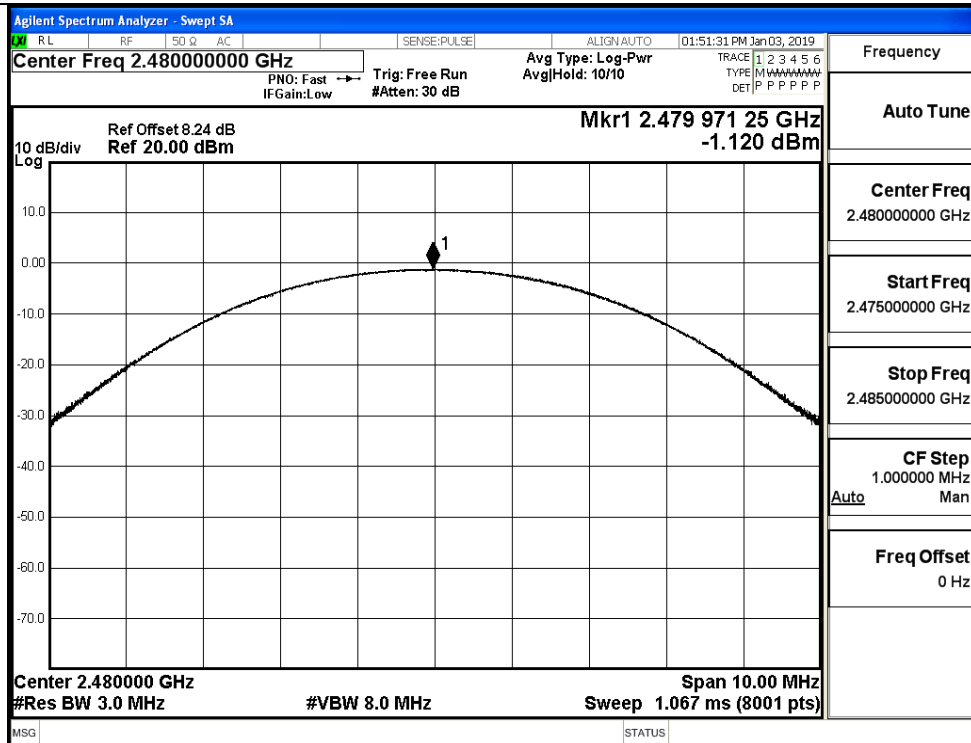
8DPSK/LCH



8DPSK/MCH



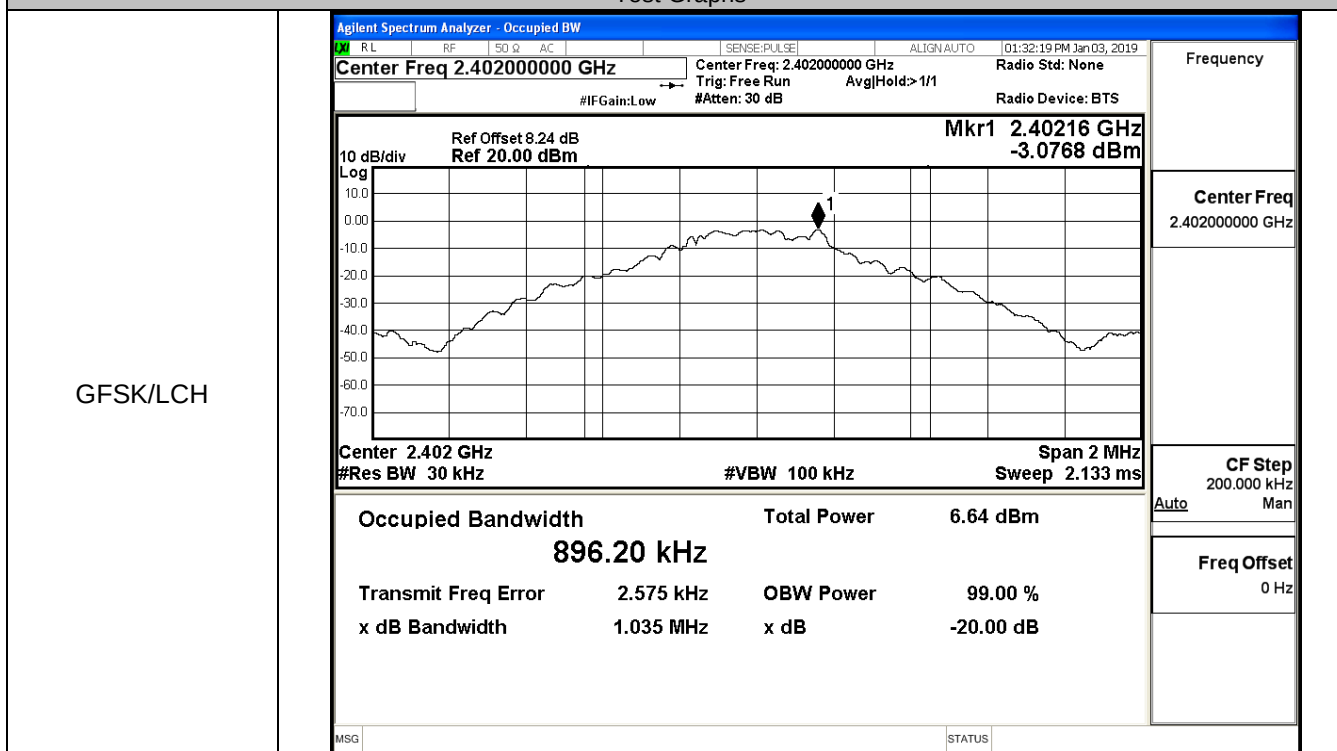
8DPSK/HCH



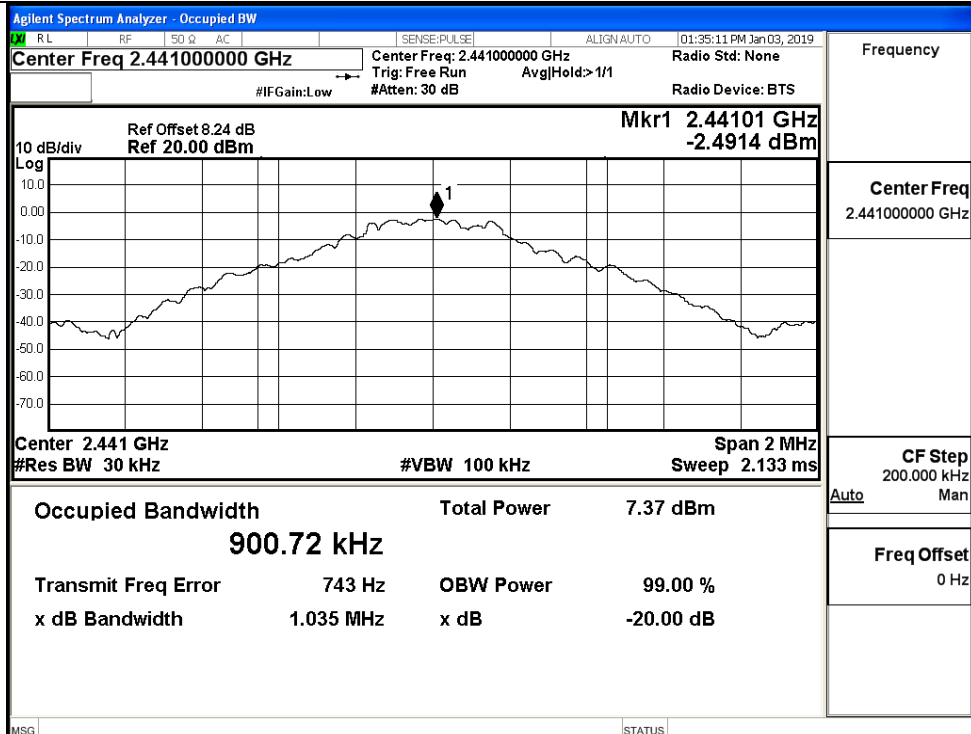
A.2 99% and 20dB Bandwidth

Mode	Channel.	99% Bandwidth [MHz]	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.89620	1.035	Not Specified	PASS
	MCH	0.90072	1.035	Not Specified	PASS
	HCH	0.89805	1.027	Not Specified	PASS
π /4DQPSK	LCH	1.1744	1.291	Not Specified	PASS
	MCH	1.1762	1.312	Not Specified	PASS
	HCH	1.1712	1.308	Not Specified	PASS
8DPSK	LCH	1.1813	1.301	Not Specified	PASS
	MCH	1.1833	1.295	Not Specified	PASS
	HCH	1.1814	1.303	Not Specified	PASS

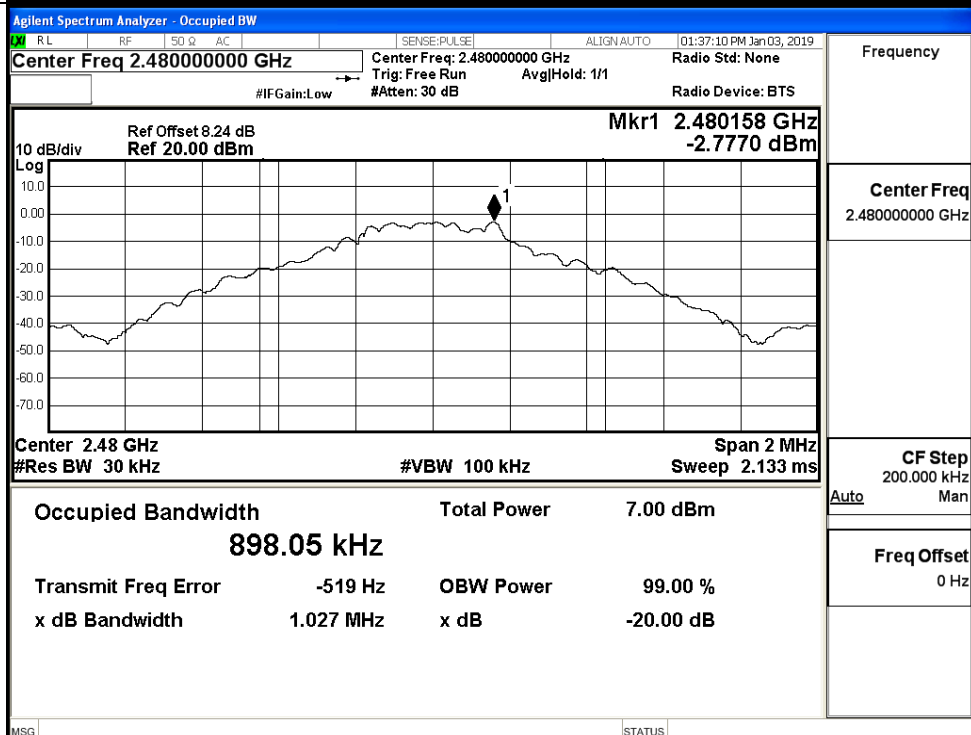
Test Graphs

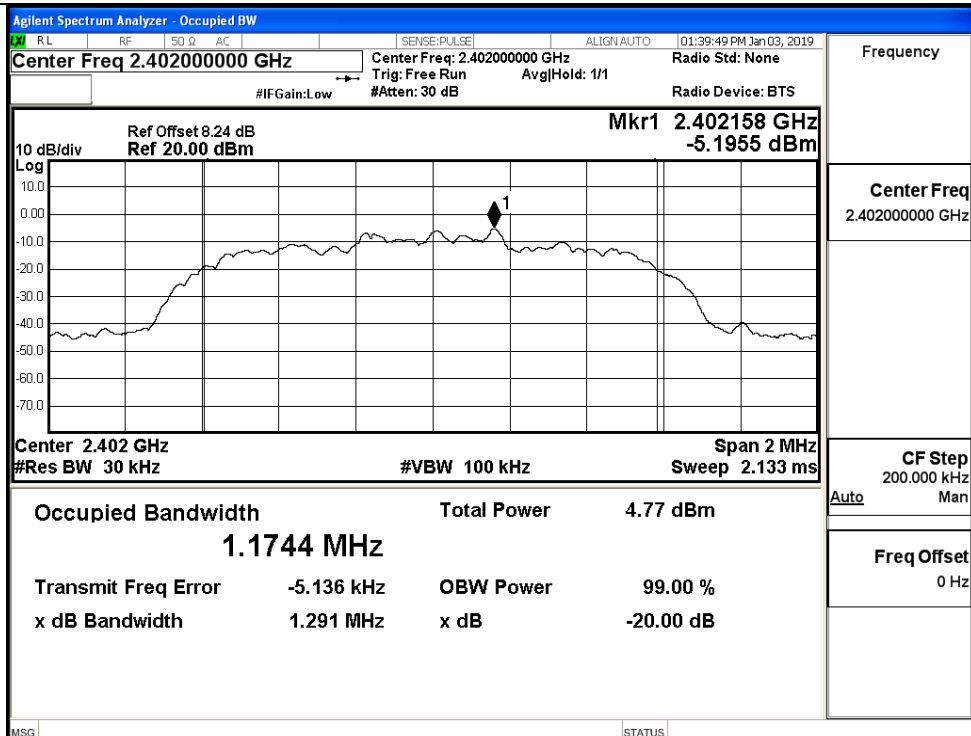
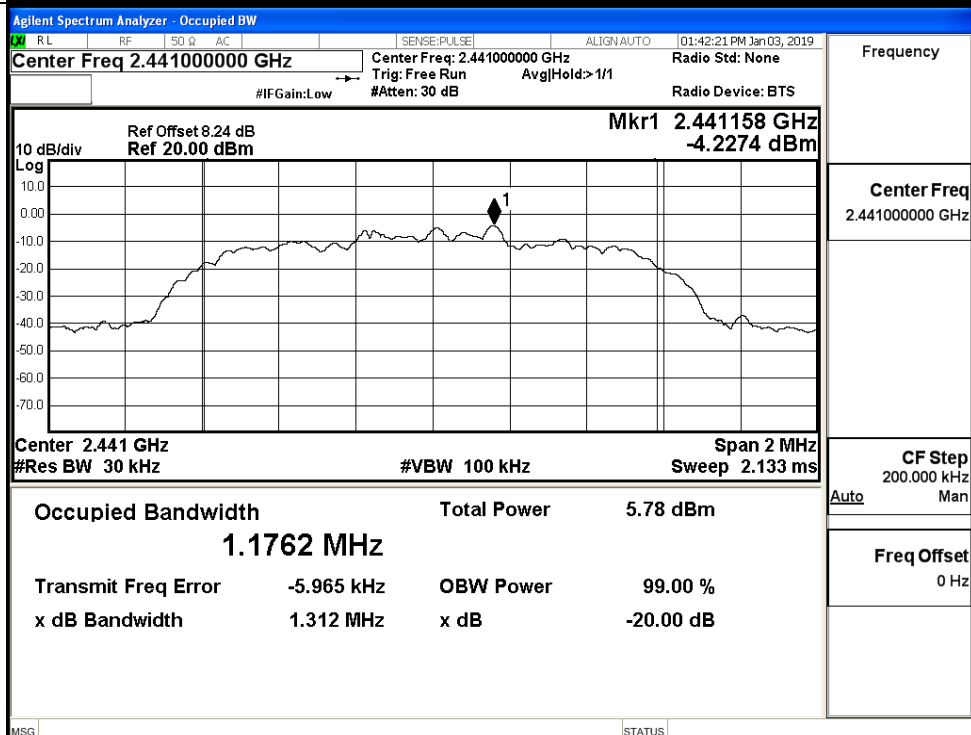


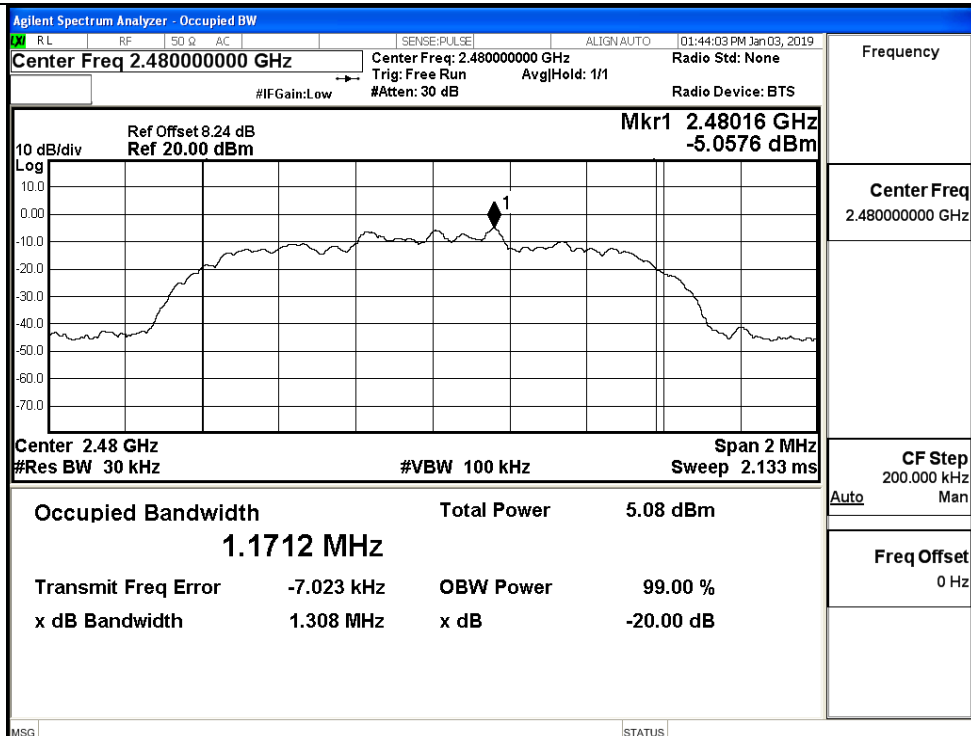
GFSK/MCH



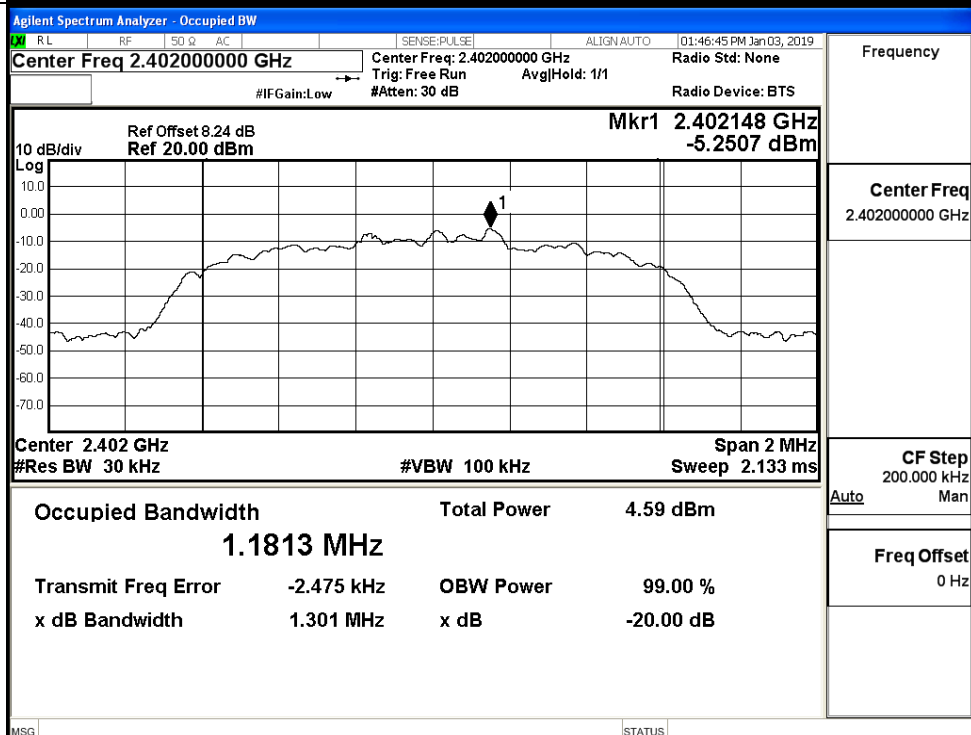
GFSK/HCH



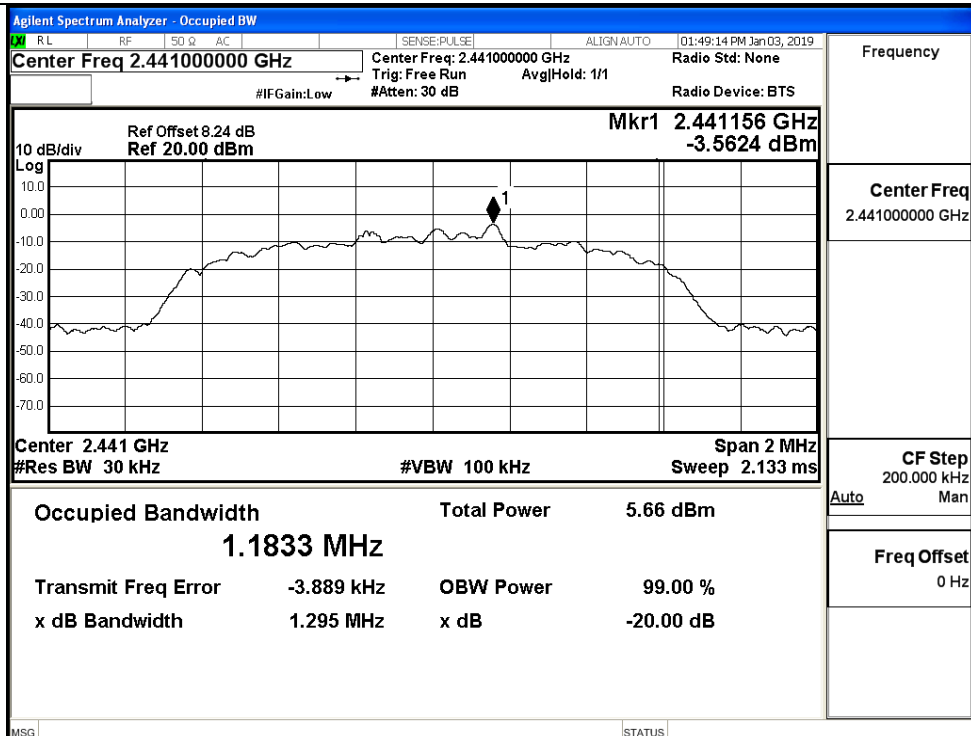
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

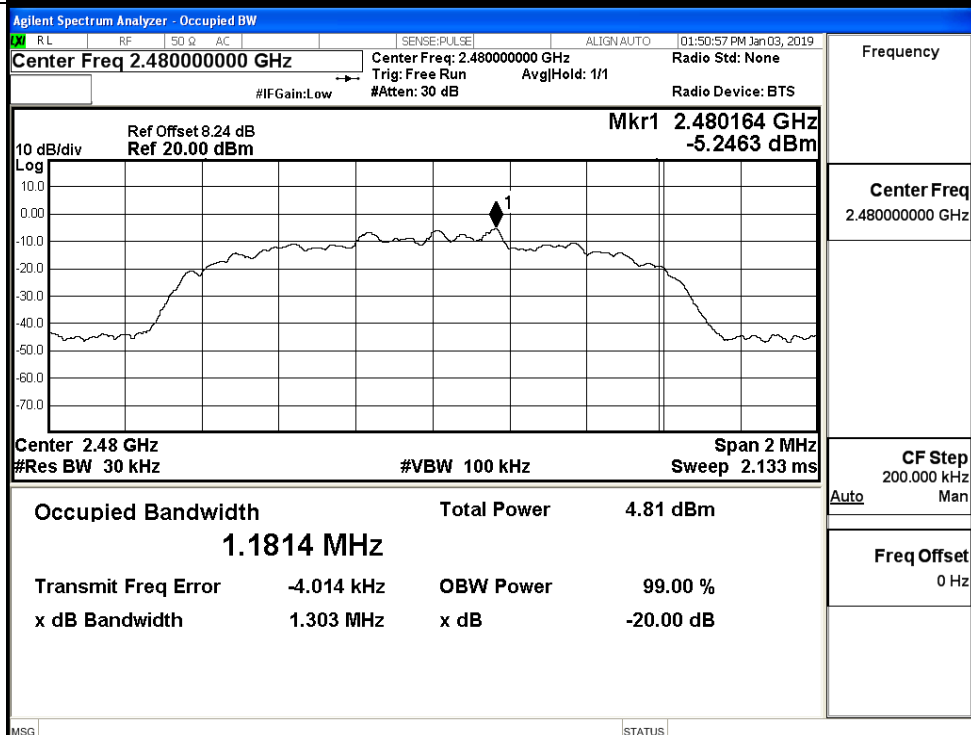
8DPSK/LCH



8DPSK/MCH



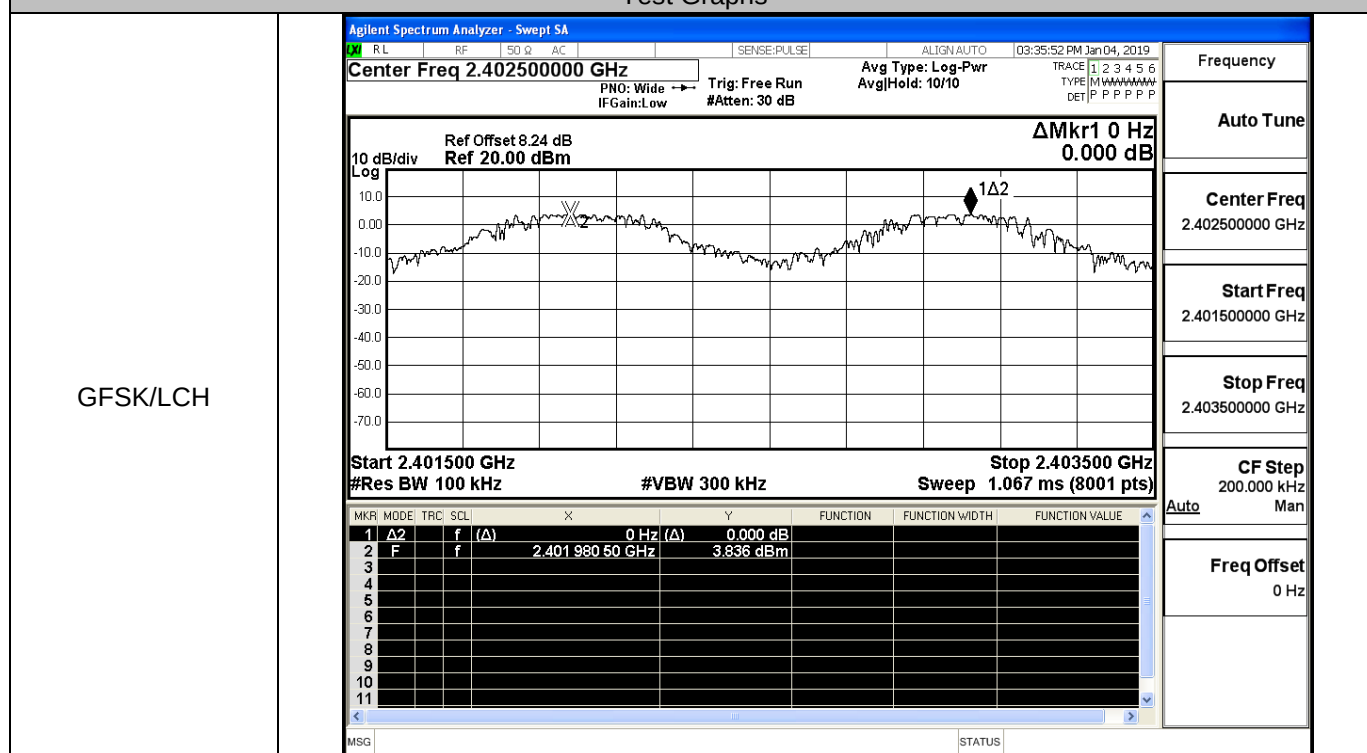
8DPSK/HCH



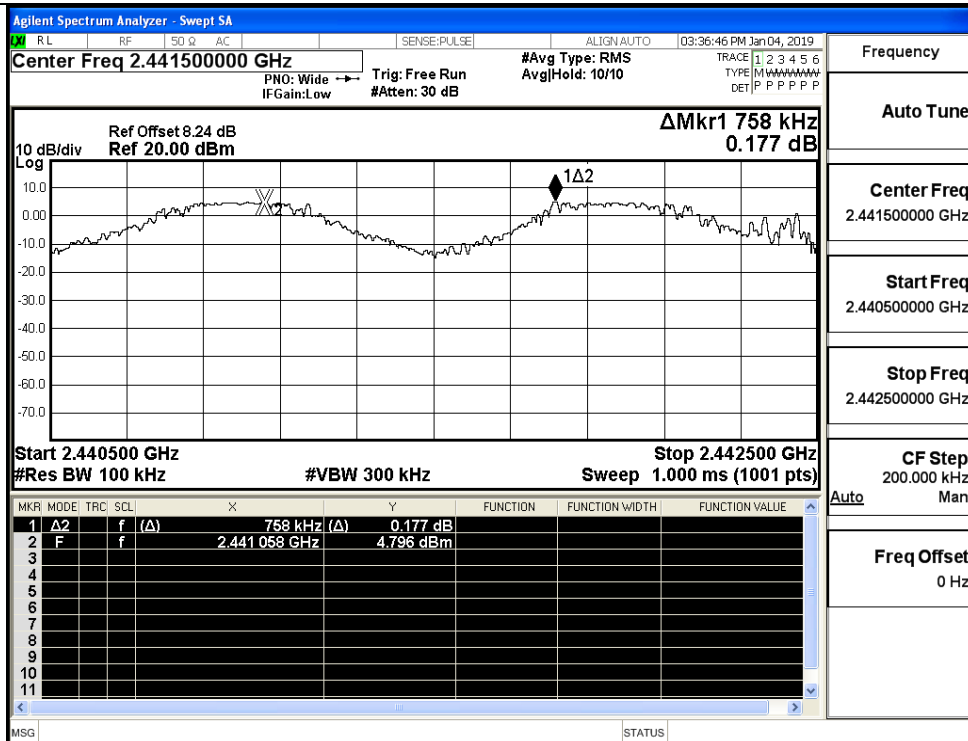
A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.043	0.690	PASS
	MCH	0.758	0.690	PASS
	HCH	1.034	0.690	PASS
π /4DQPSK	LCH	0.972	0.875	PASS
	MCH	1.182	0.875	PASS
	HCH	1.066	0.875	PASS
8DPSK	LCH	1.276	0.869	PASS
	MCH	0.944	0.869	PASS
	HCH	1.048	0.869	PASS

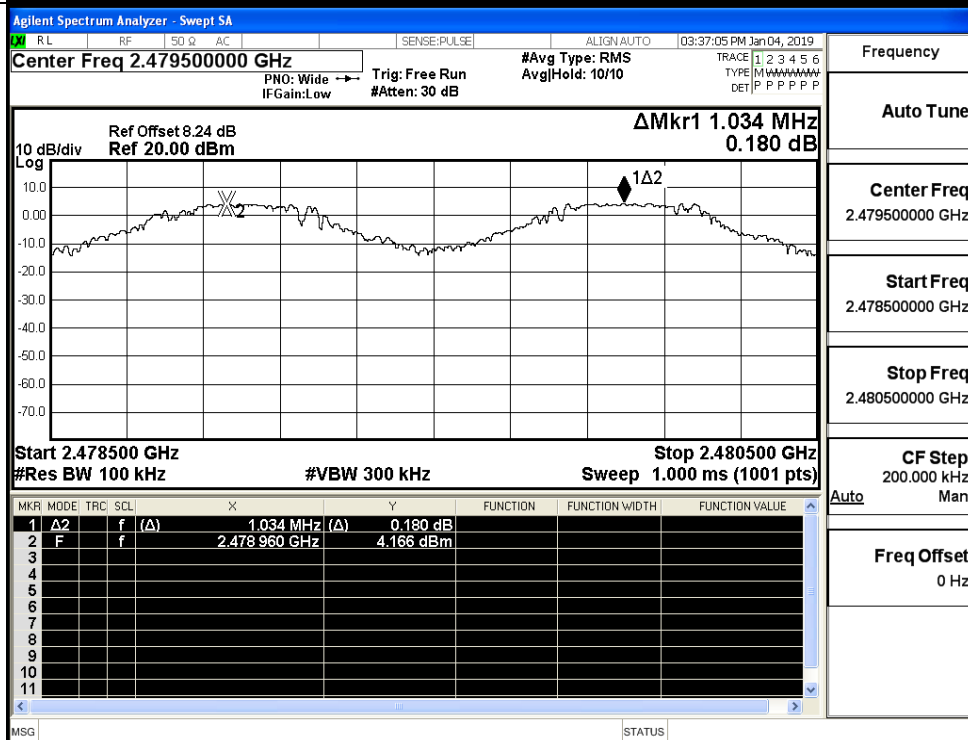
Test Graphs

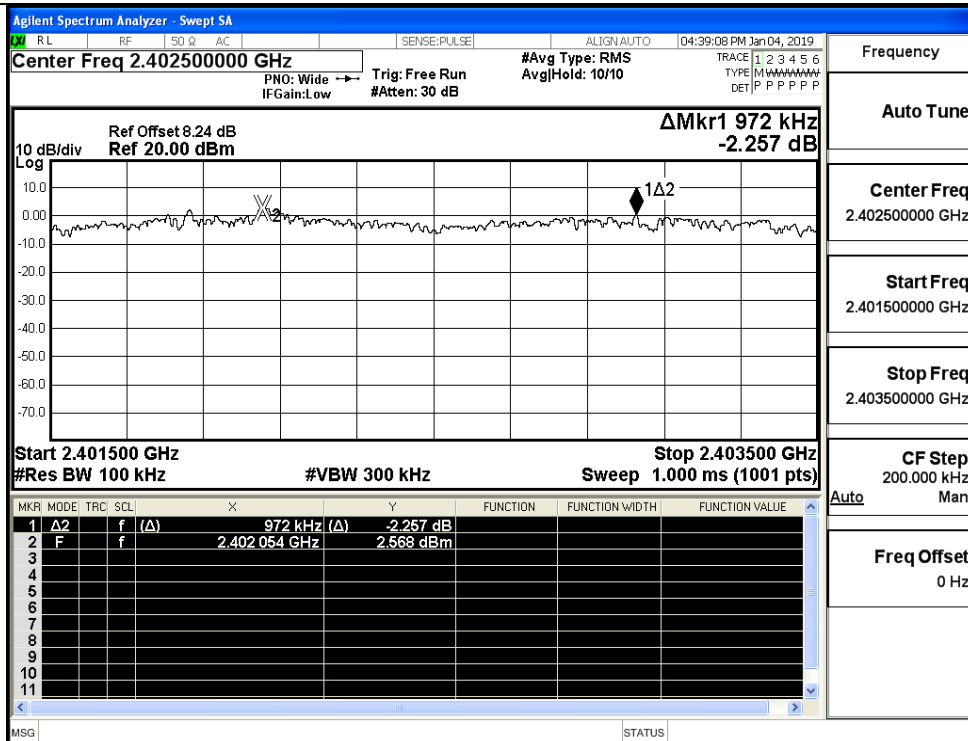
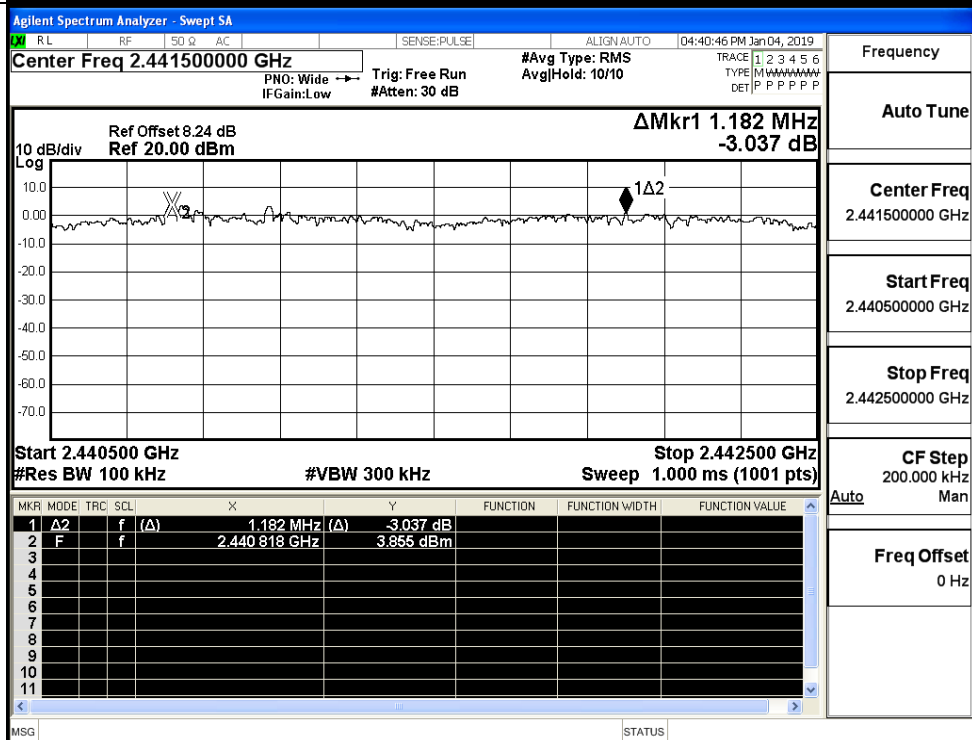


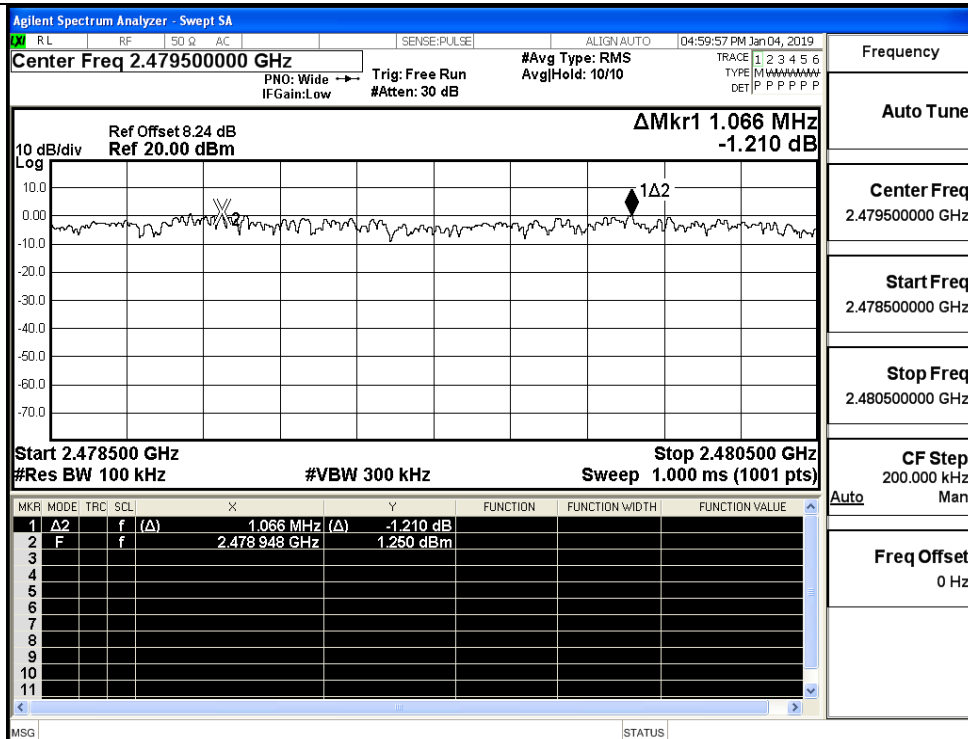
GFSK/MCH



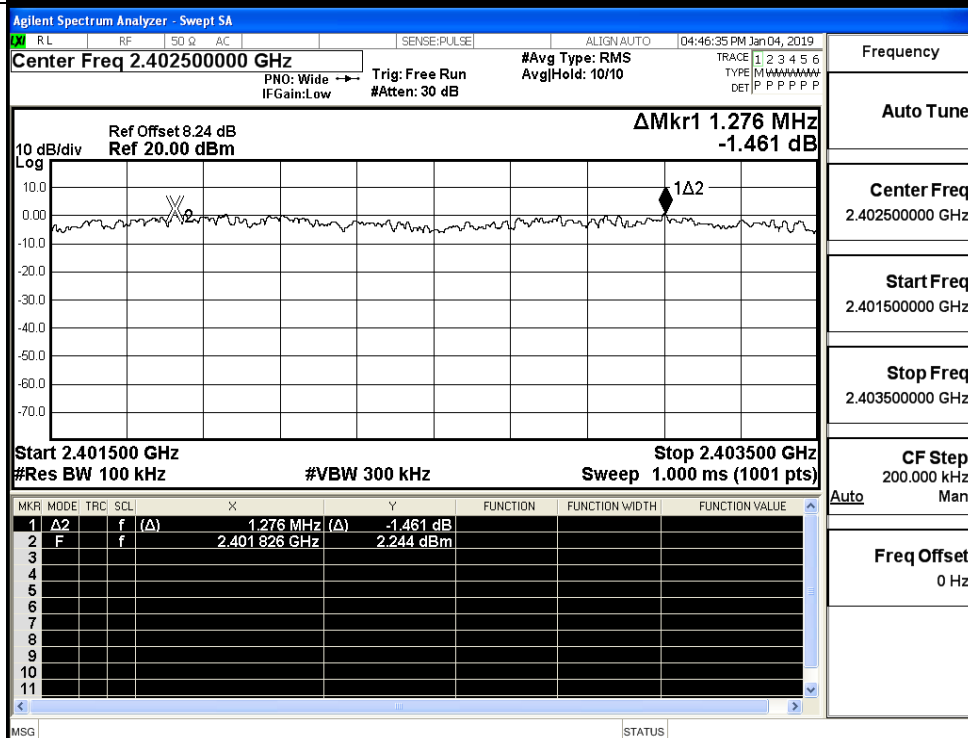
GFSK/HCH



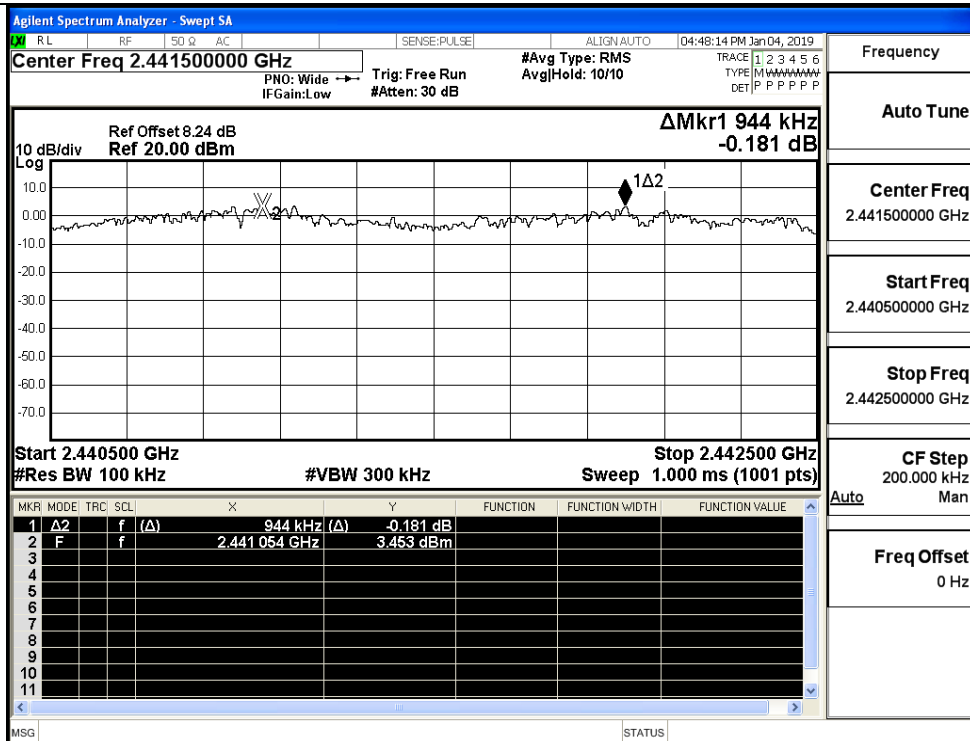
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

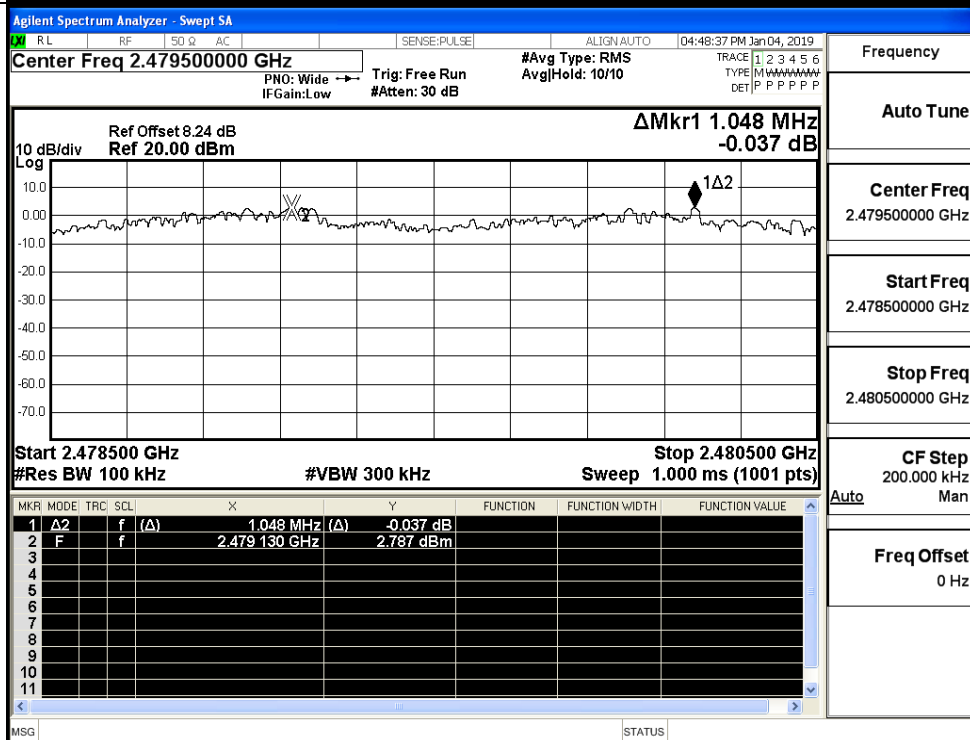
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

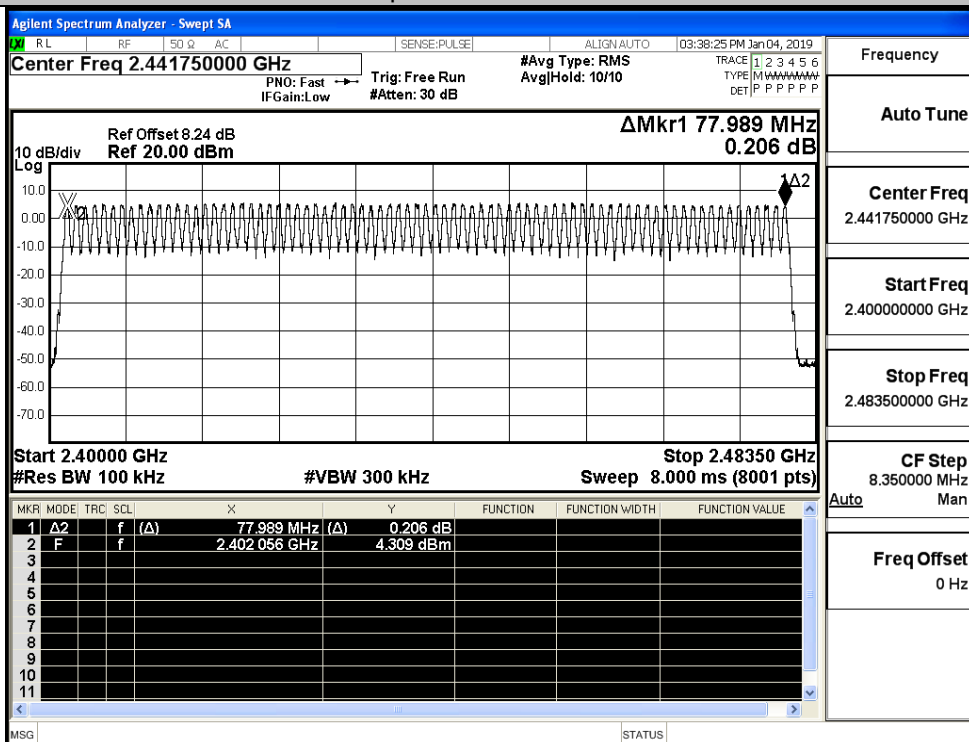
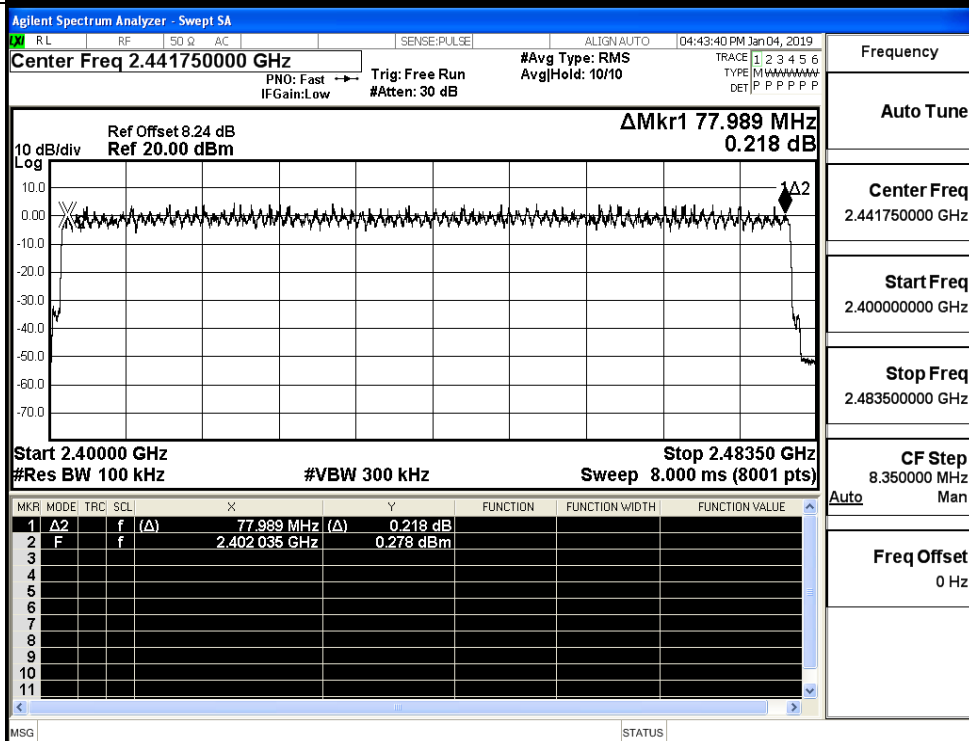


A.4 Hopping Channel Number

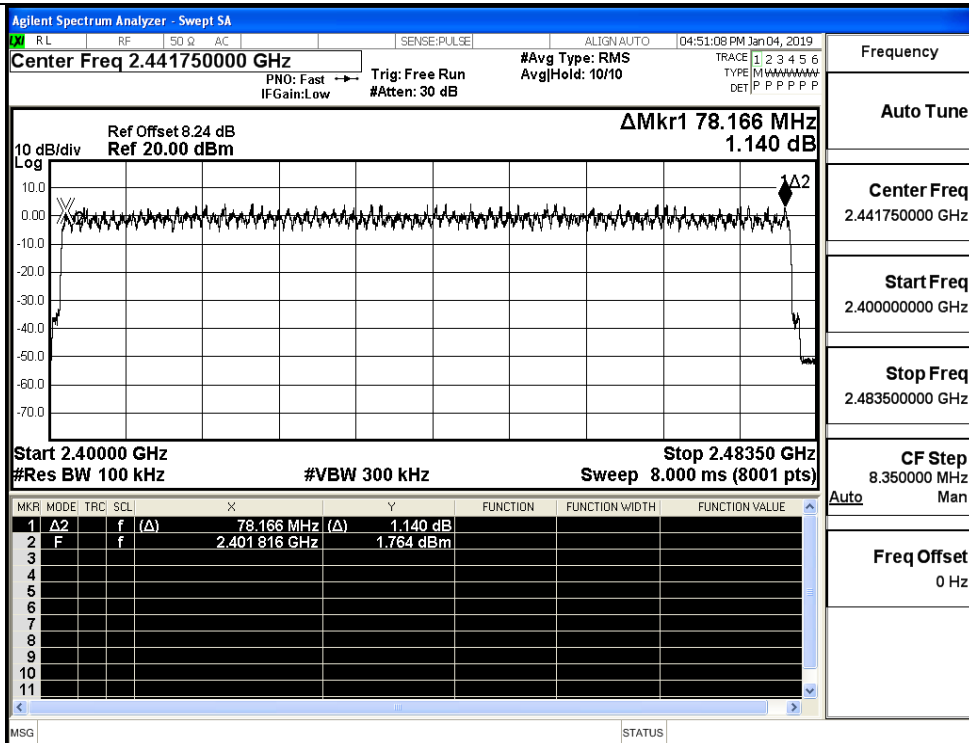
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	≥ 15	PASS
$\pi/4$ DQPSK	Hop	79	≥ 15	PASS
8DPSK	Hop	79	≥ 15	PASS

Test Graphs

GFSK/Hop

 $\pi/4$ DQPSK/Hop

8DPSK/Hop

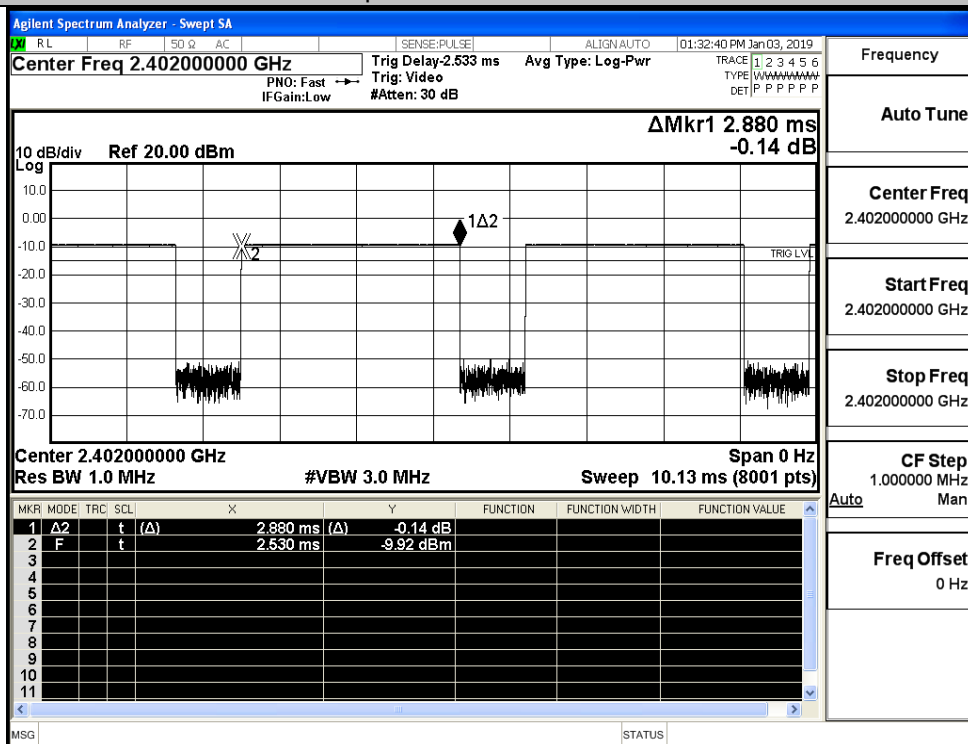


A.5 Dwell Time

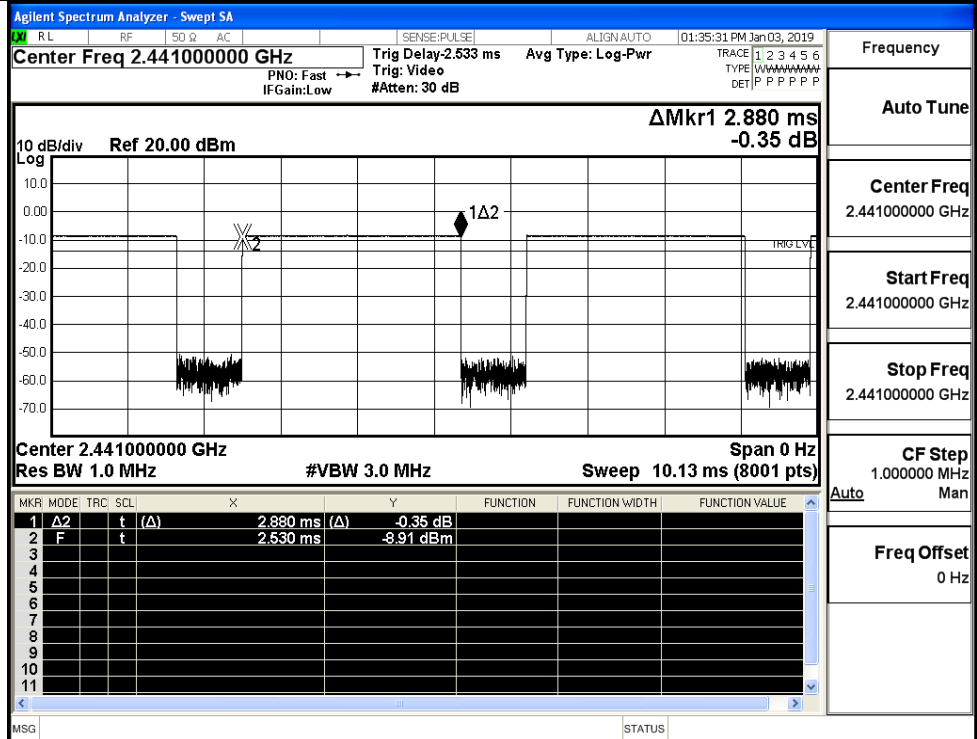
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.88	106.7	0.307	0.4	PASS
8DPSK	3DH5	LCH	2.89	106.7	0.308	0.4	PASS
	3DH5	MCH	2.89	106.7	0.308	0.4	PASS
	3DH5	HCH	2.89	106.7	0.308	0.4	PASS

Test Graphs

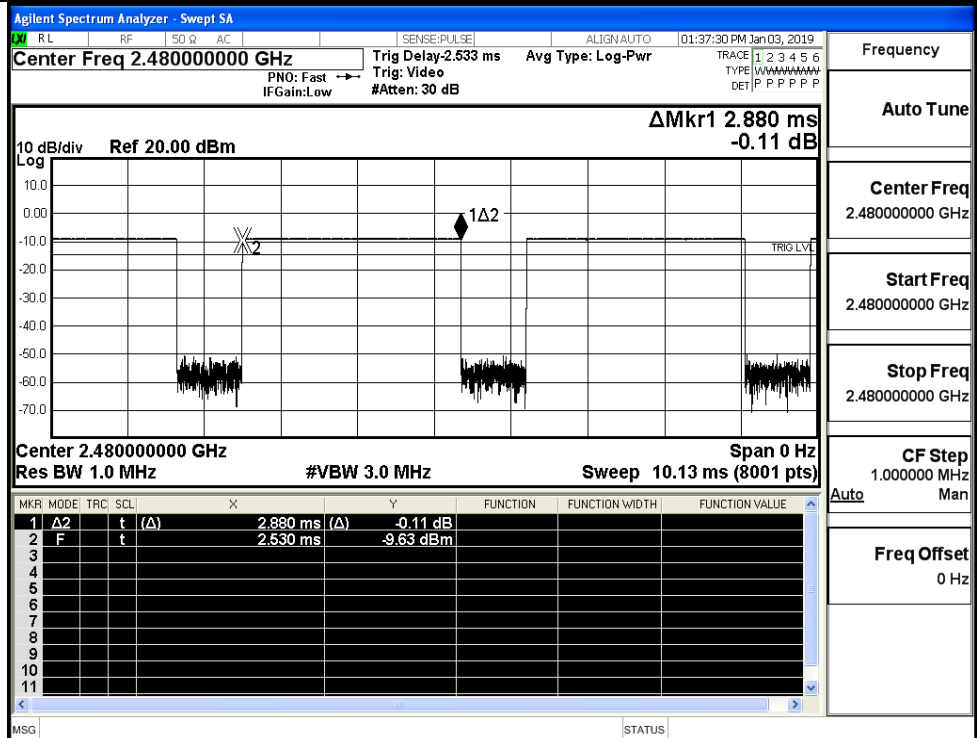
GFSK_DH5/LCH



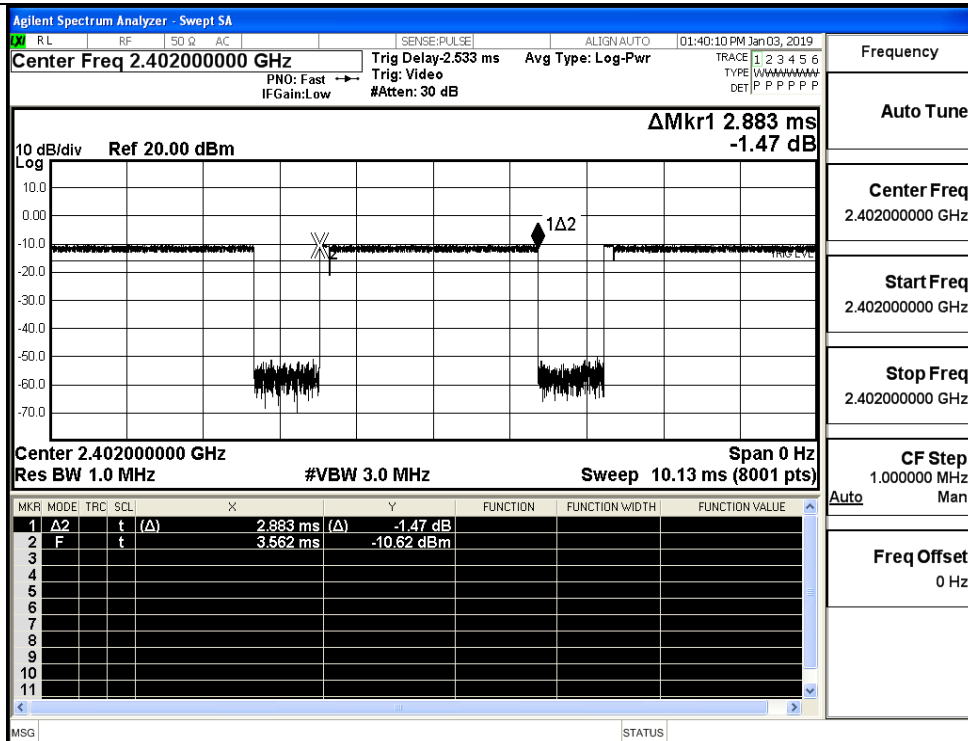
GFSK_DH5/MCH



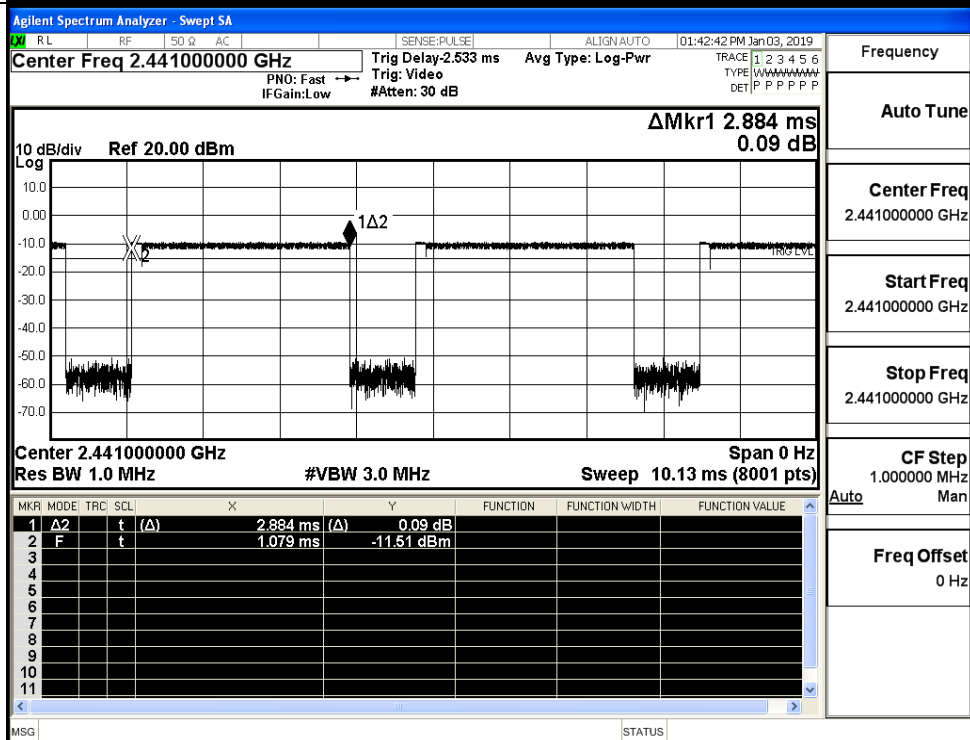
GFSK_DH5/HCH



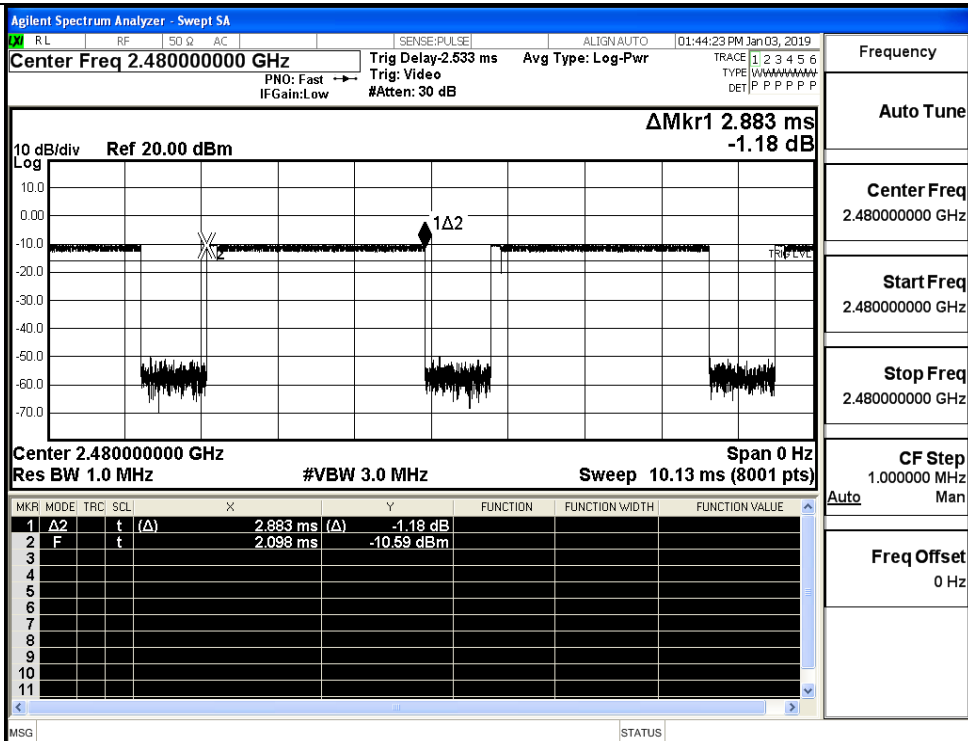
$\pi/4$ DQPSK
_2DH5/LCH



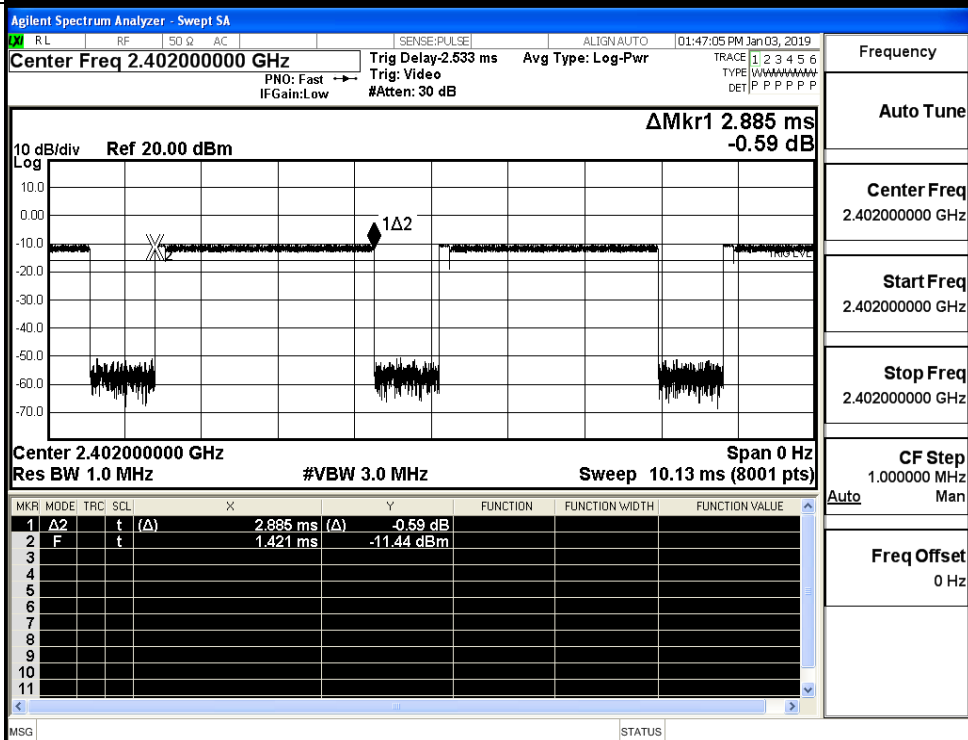
$\pi/4$ DQPSK
_2DH5/MCH



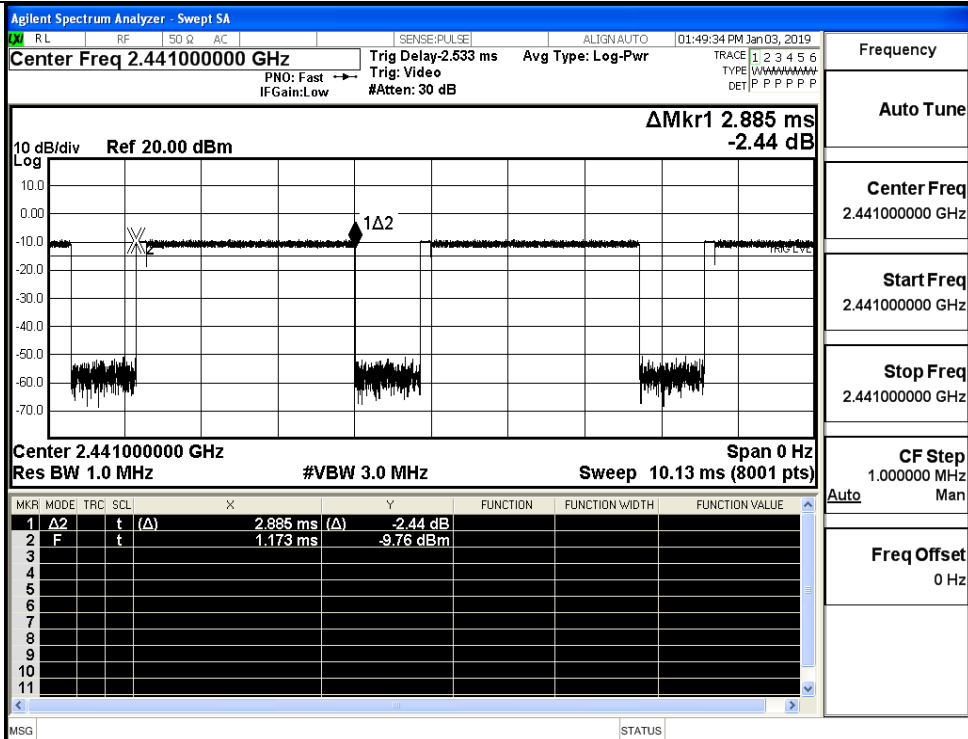
$\pi/4$ DQPSK
_2DH5/HCH



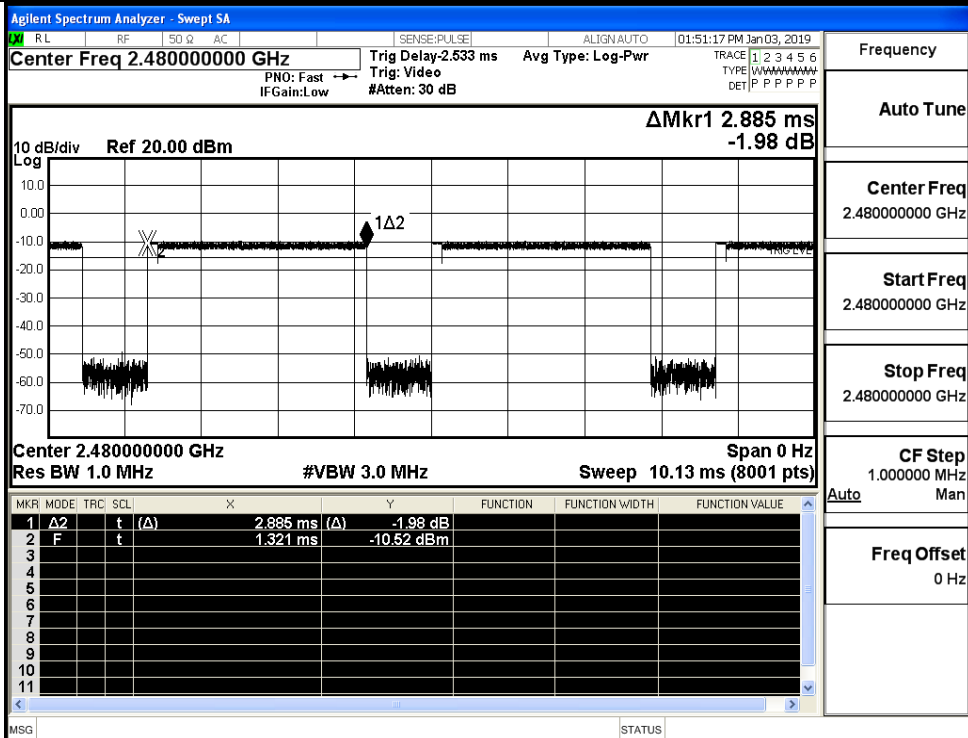
8DPSK _3DH5/LCH



8DPSK_3DH5/MCH



8DPSK_3DH5/HCH

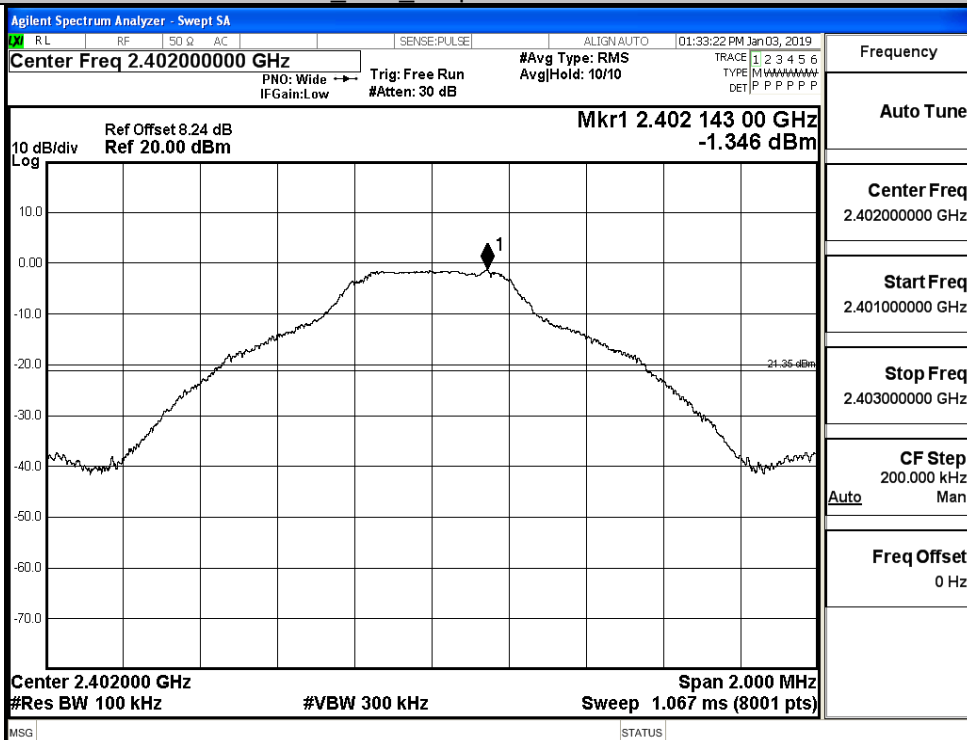


A.6 RF Conducted Spurious Emissions

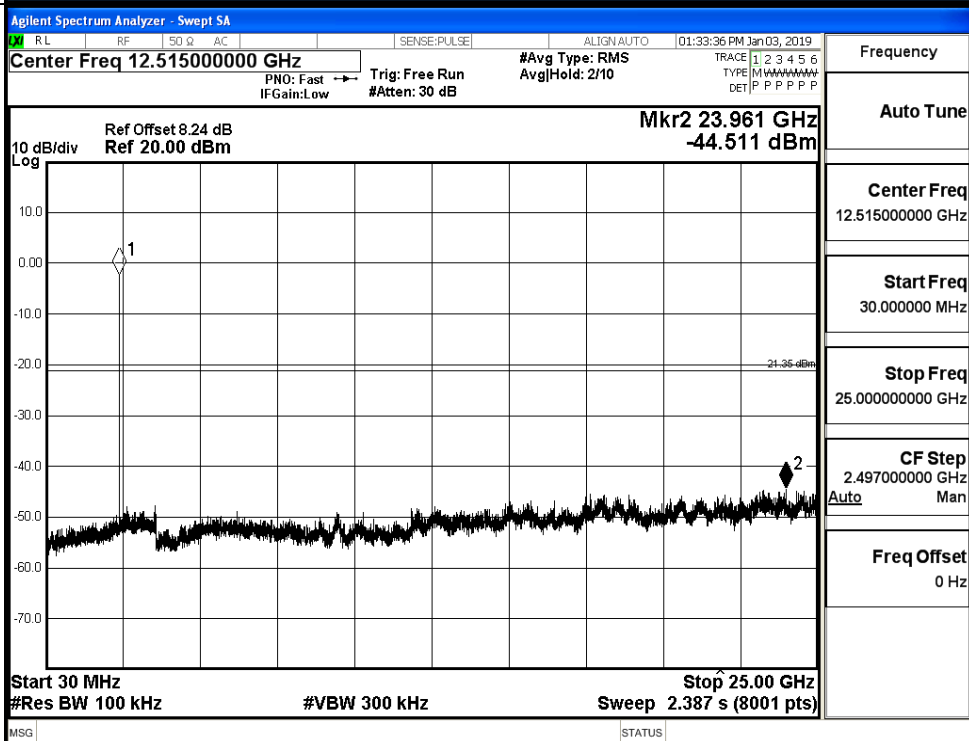
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-1.346	-44.511	-21.346	PASS
	MCH	-0.194	-44.989	-20.194	PASS
	HCH	-0.932	-43.979	-20.932	PASS
$\pi/4$ DQPSK	LCH	-2.656	-44.074	-22.656	PASS
	MCH	-2.155	-44.480	-22.155	PASS
	HCH	-2.253	-44.135	-22.253	PASS
8DPSK	LCH	-2.434	-43.740	-22.434	PASS
	MCH	-1.484	-44.646	-21.484	PASS
	HCH	-2.525	-44.408	-22.525	PASS

GFSK LCH Graphs

Pref

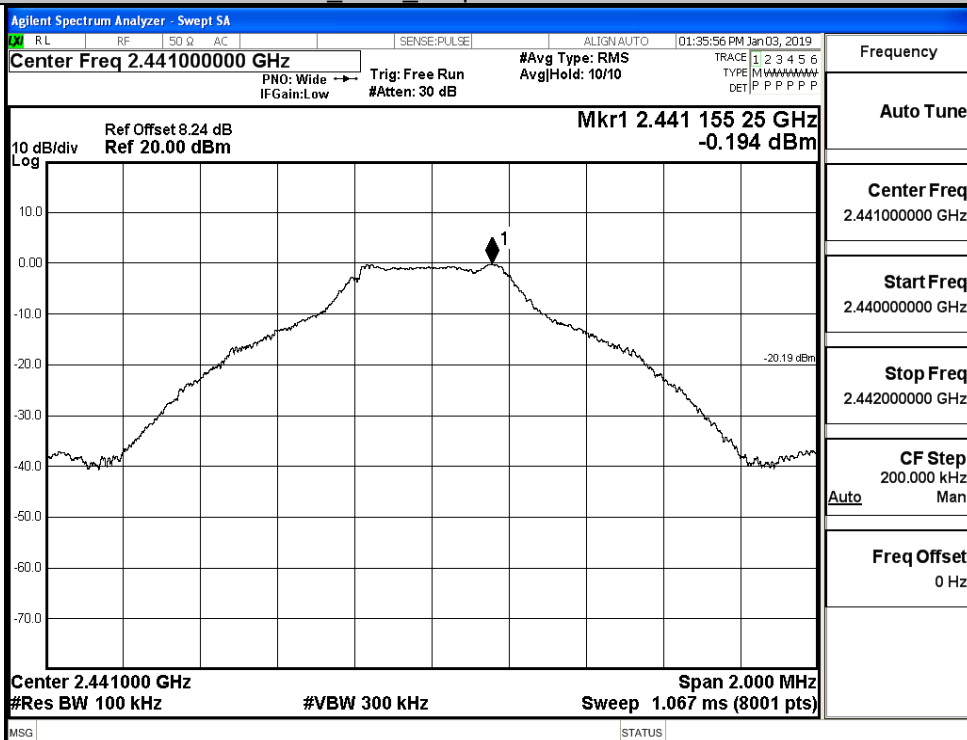


Puw

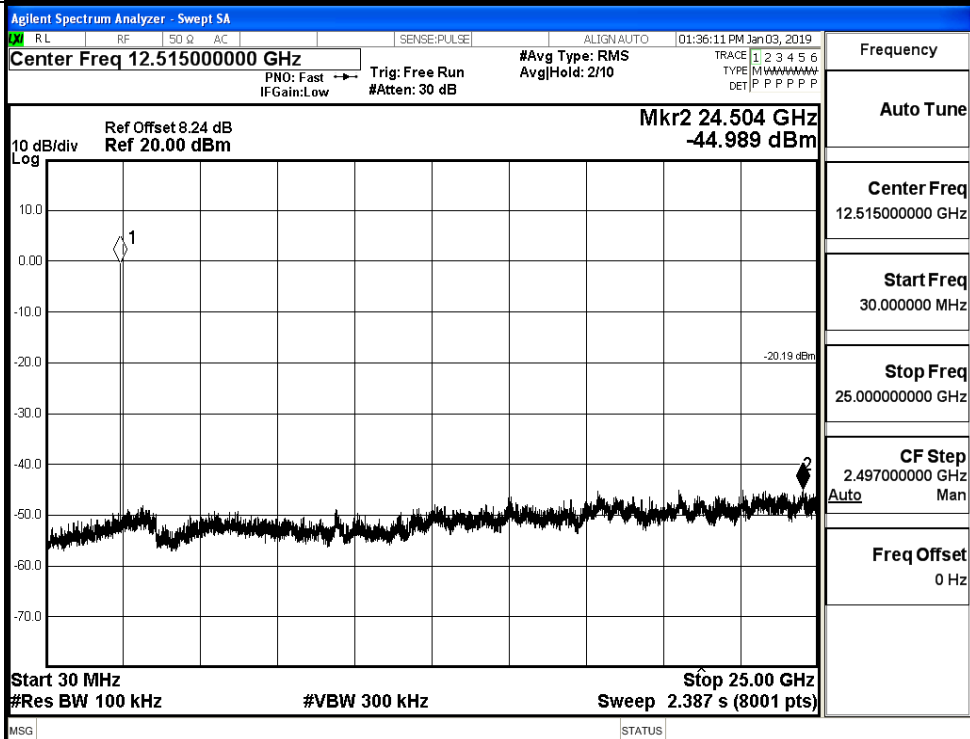


GFSK_MCH_Graphs

Pref

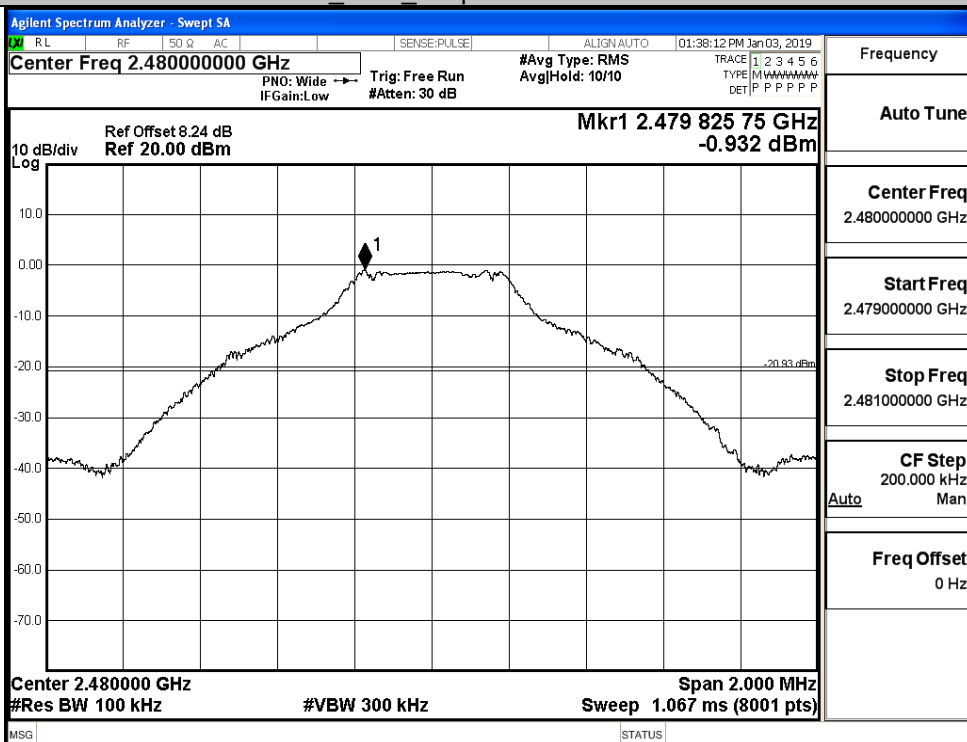


Puw

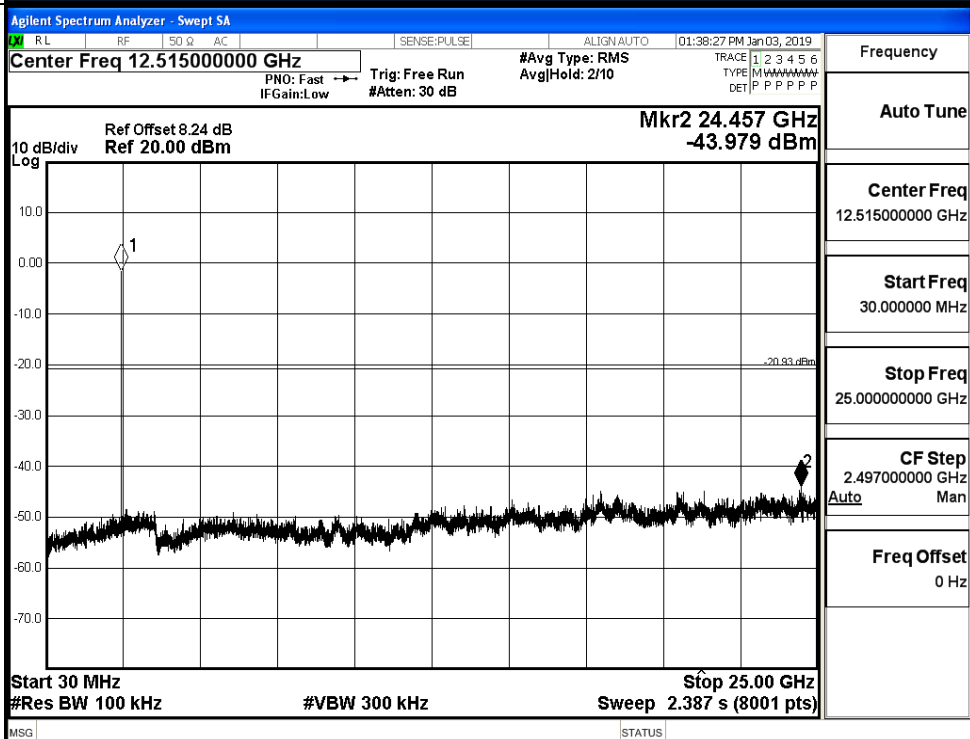


GFSK_HCH_Graphs

Pref

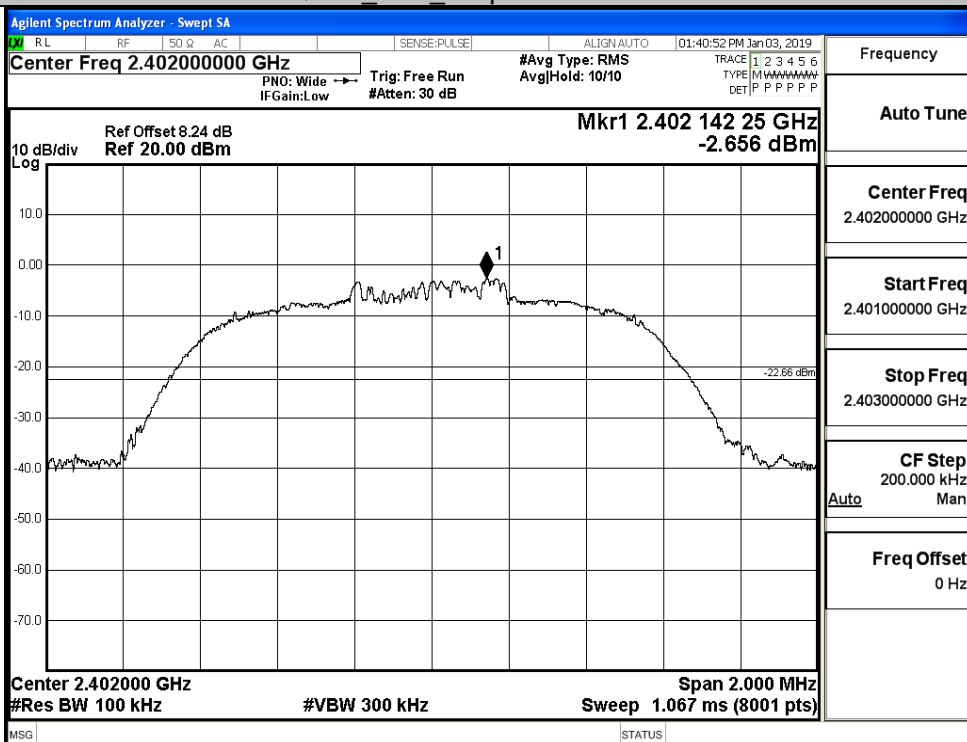


Puw

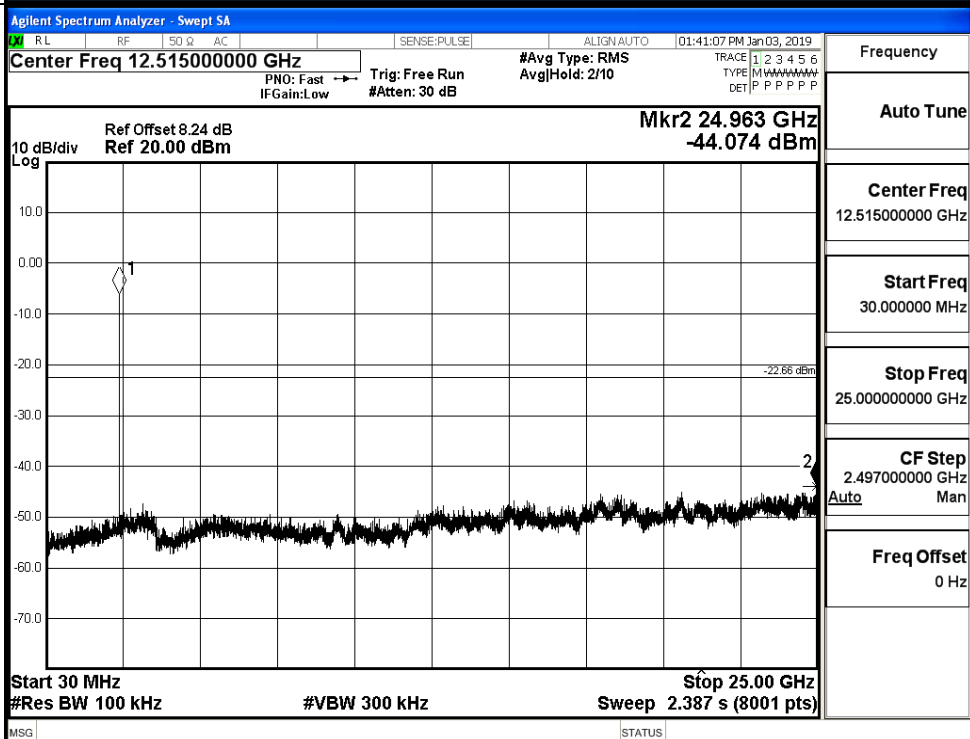


π /4DQPSK_LCH_Graphs

Pref

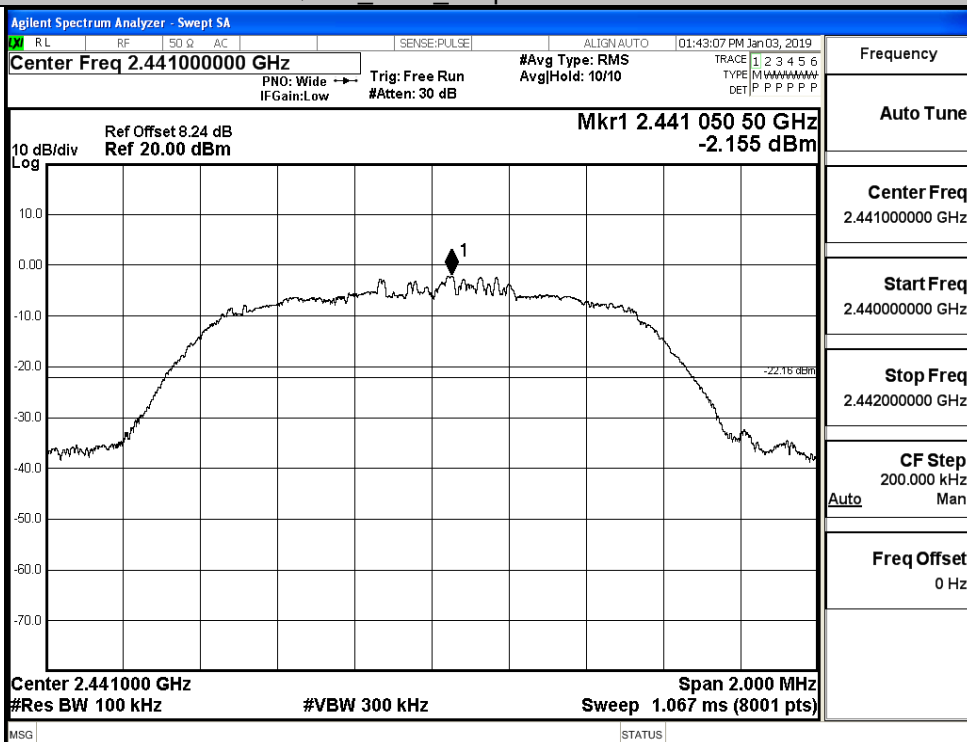


Puw

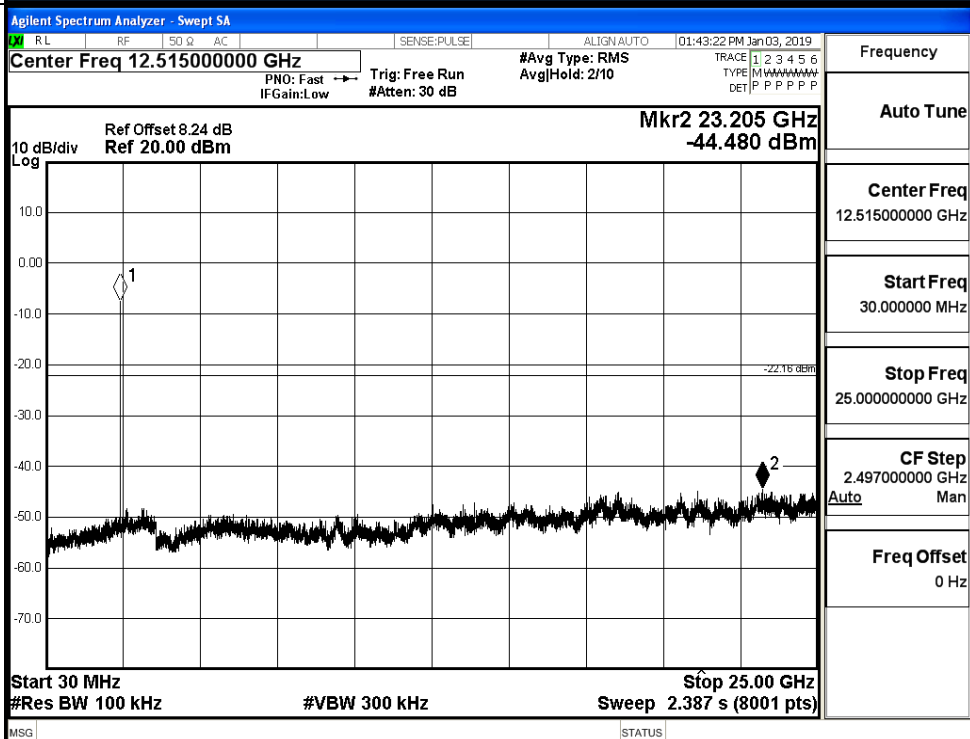


π /4DQPSK_MCH_Graphs

Pref

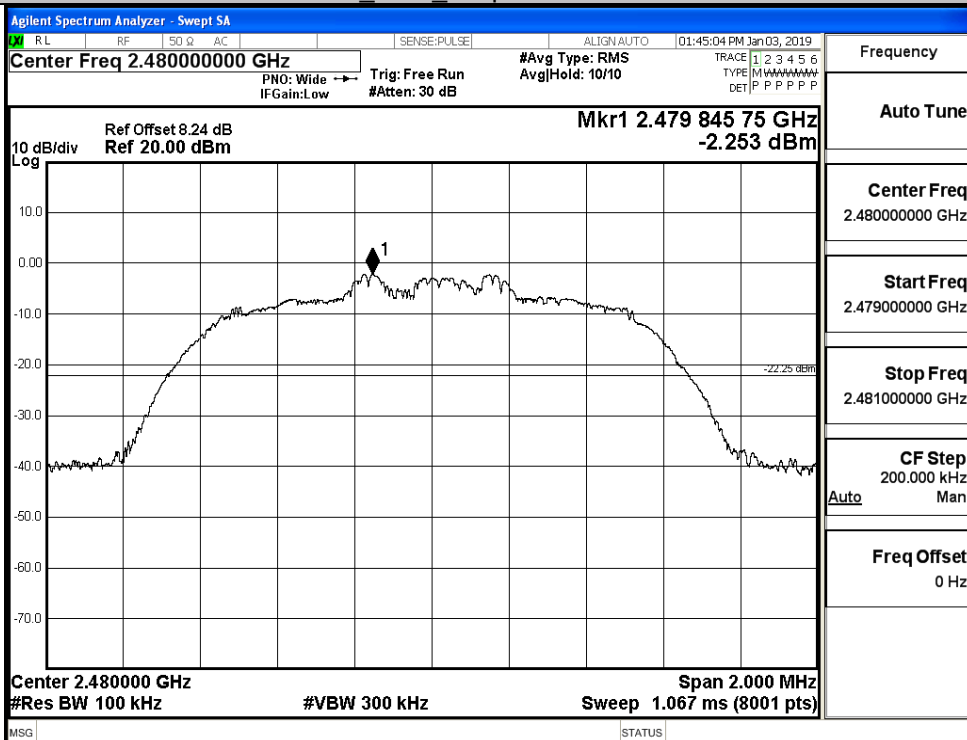


Puw

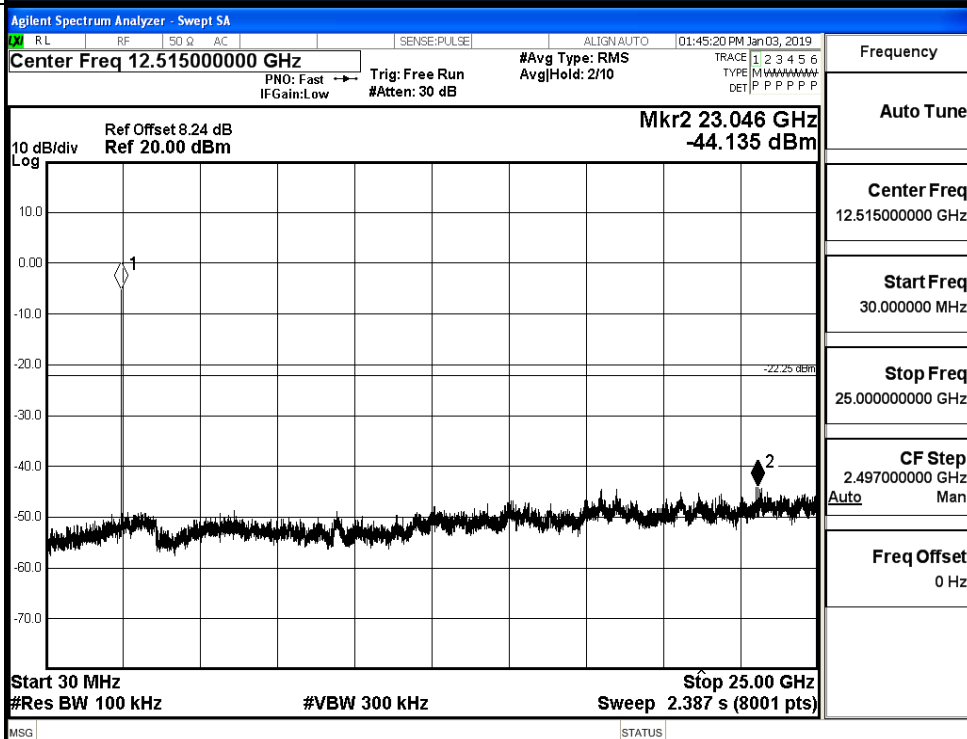


π /4DQPSK_HCH_Graphs

Pref

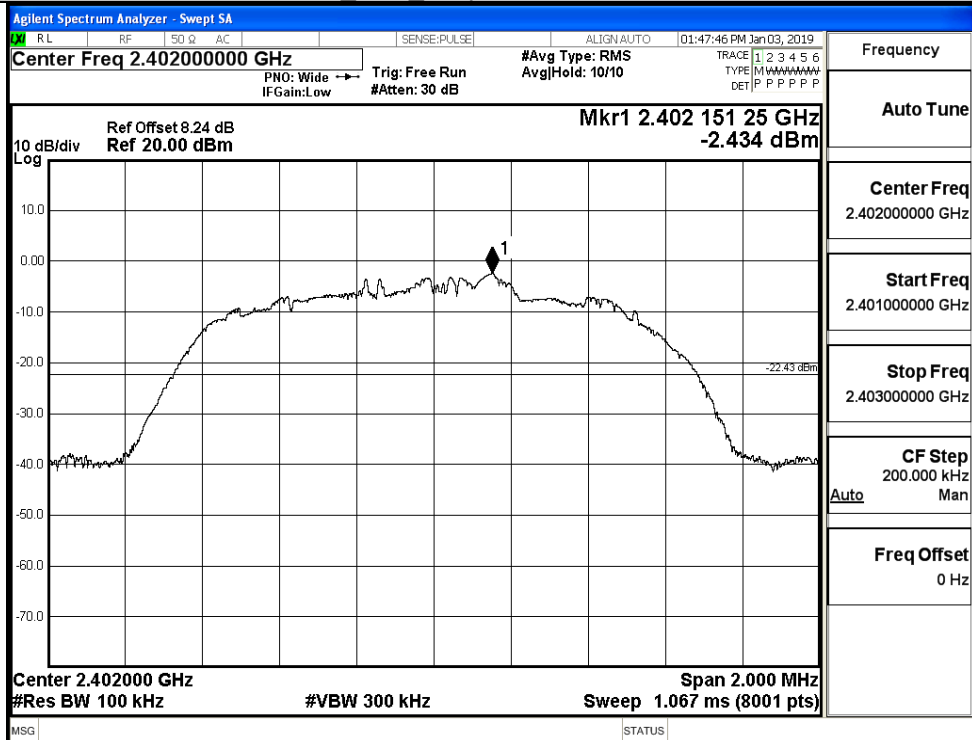


Puw

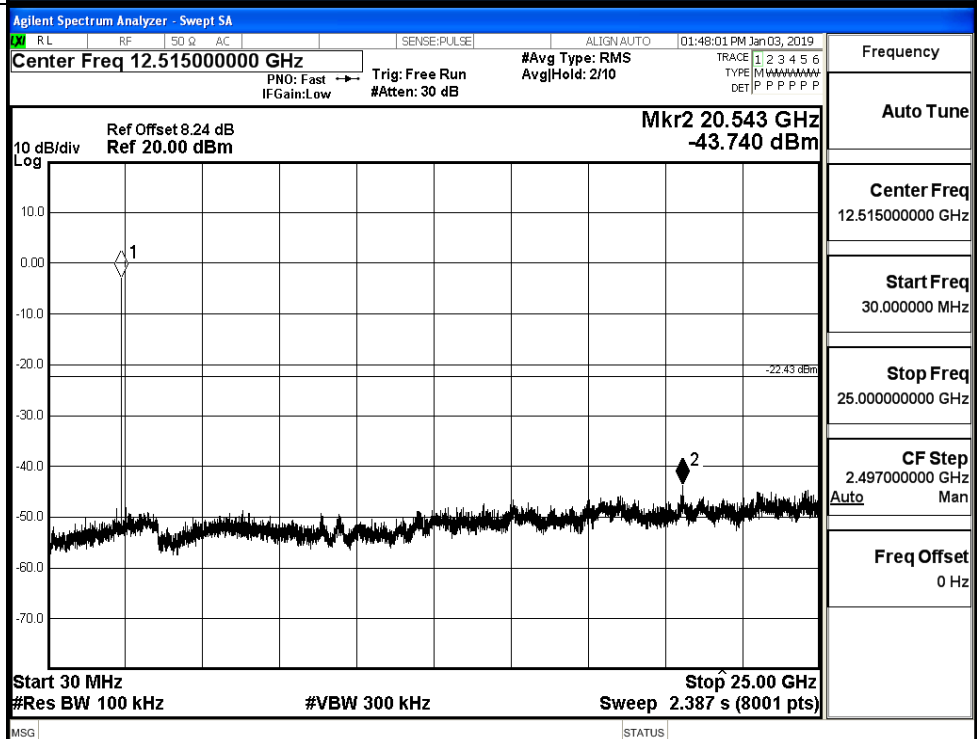


8DPSK_LCH_Graphs

Pref

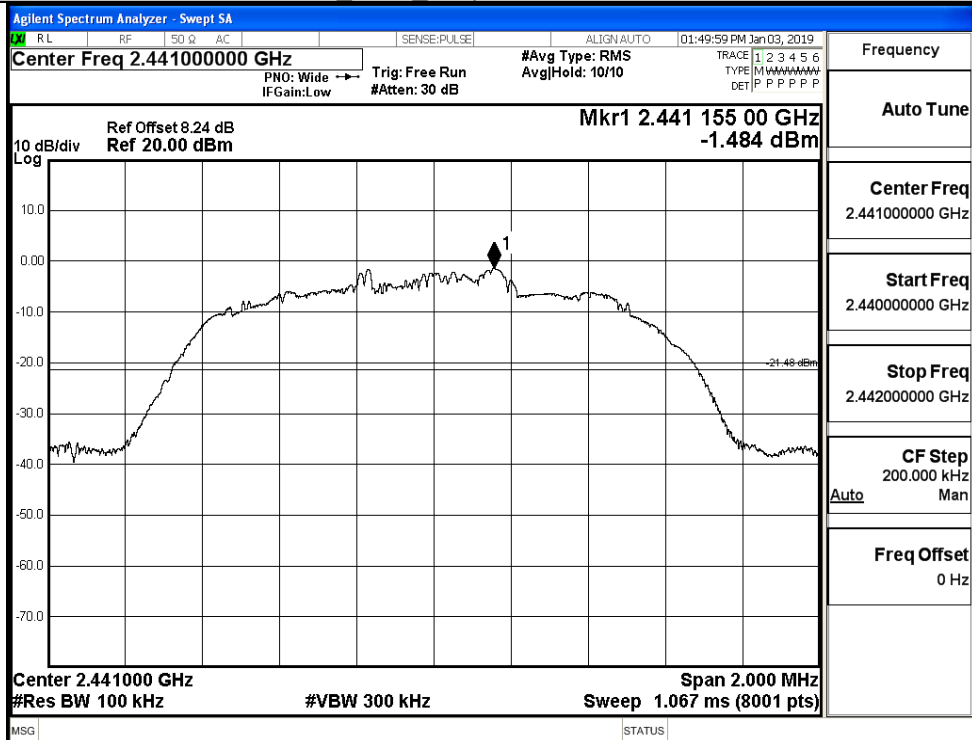


Puw

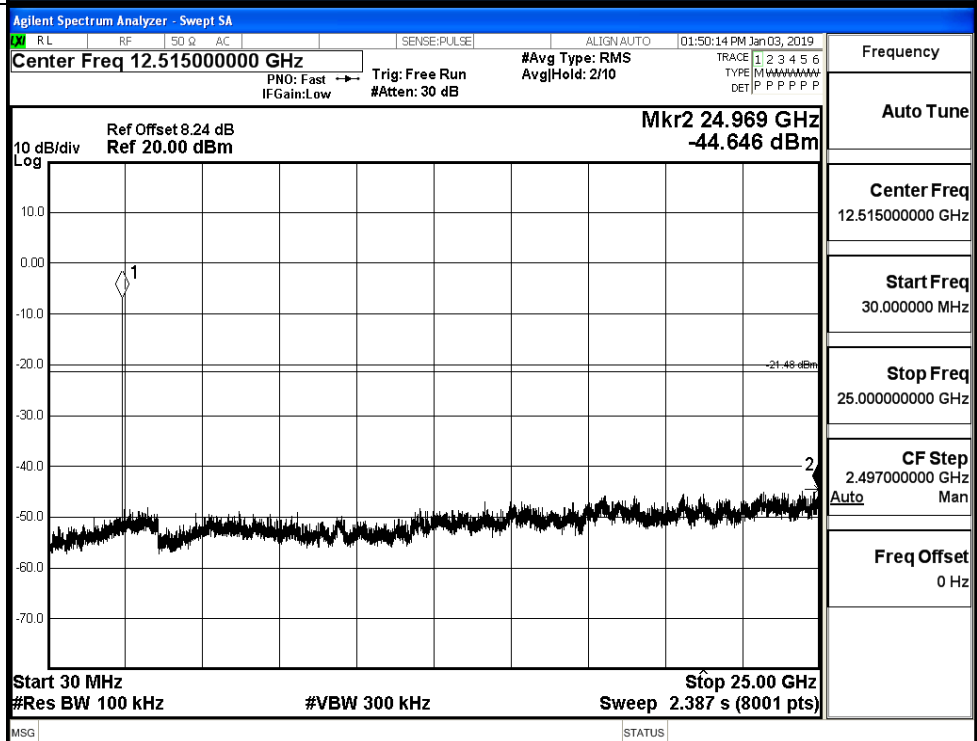


8DPSK_MCH_Graphs

Pref

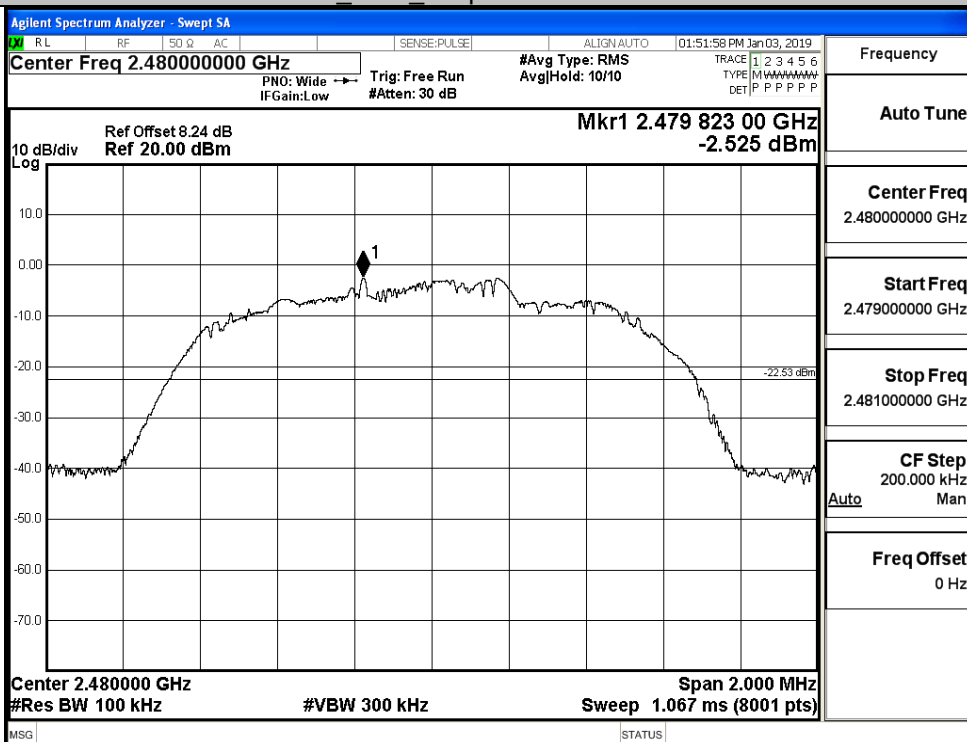


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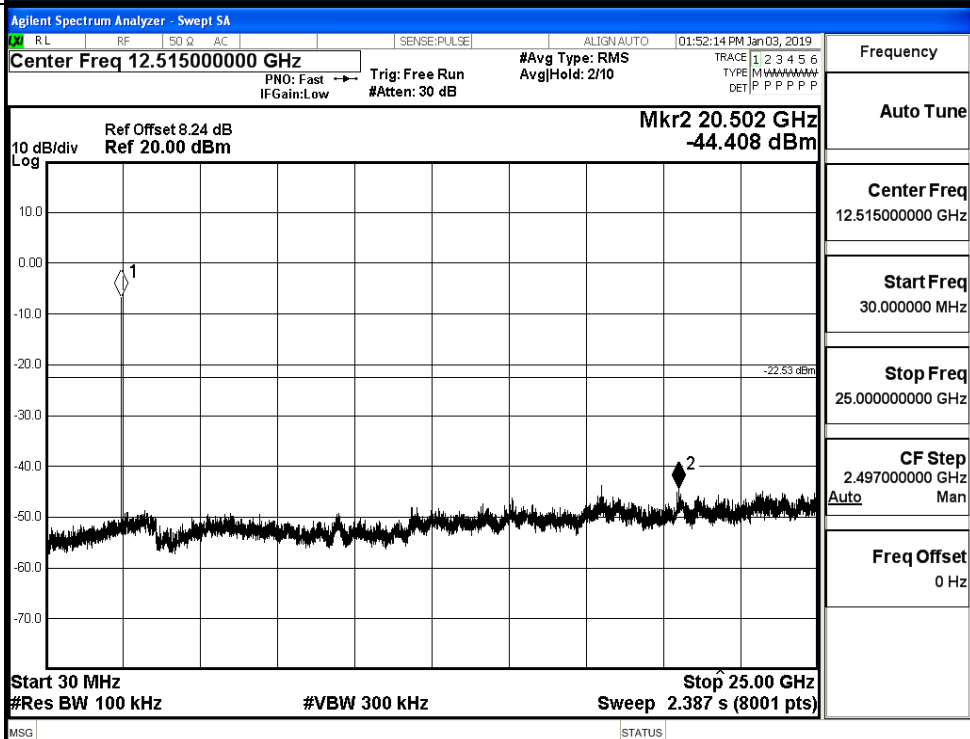


8DPSK_HCH_Graphs

Pref



Puw

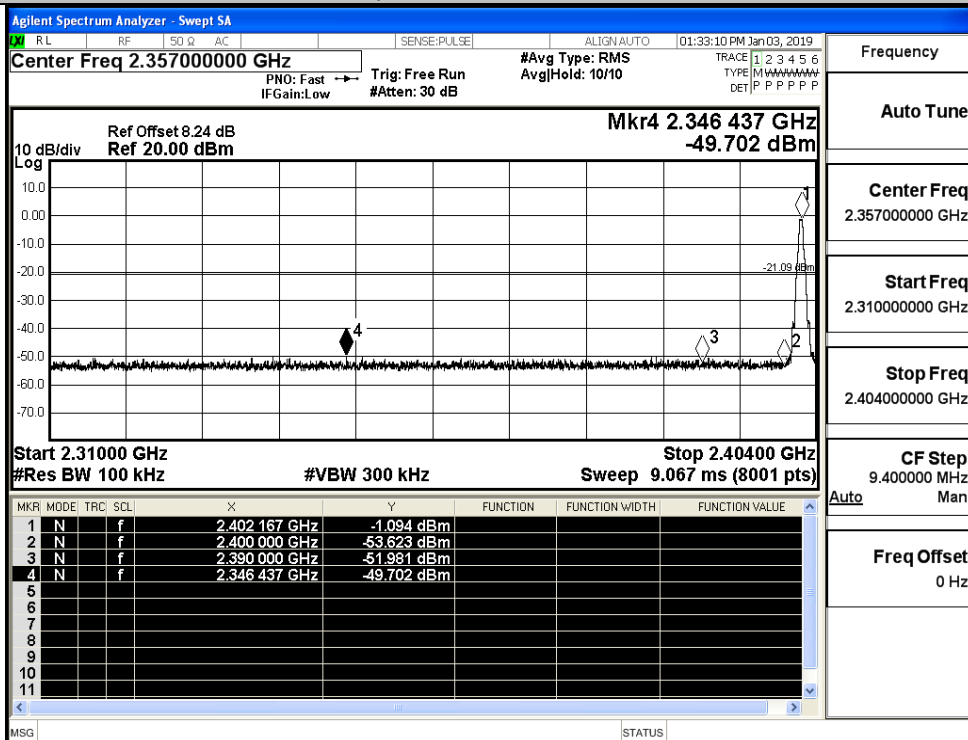


A.7 Band-edge for RF Conducted Emissions

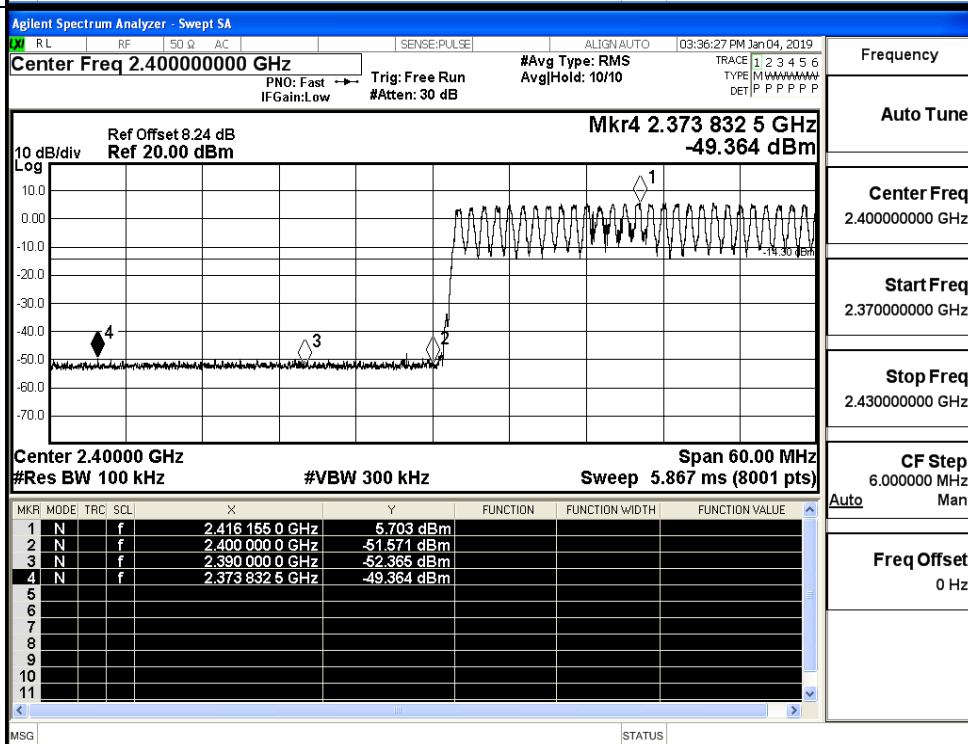
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-1.094	Off	-49.702	-21.09	PASS
			5.703	On	-49.364	-14.3	PASS
	HCH	2480	-0.777	Off	-49.426	-20.78	PASS
			5.335	On	-49.650	-14.67	PASS
$\pi/4$ DQPSK	LCH	2402	-2.331	Off	-50.033	-22.33	PASS
			4.055	On	-49.625	-15.95	PASS
	HCH	2480	-3.178	Off	-49.436	-23.18	PASS
			4.422	On	-49.243	-15.58	PASS
8DPSK	LCH	2402	-2.373	Off	-50.005	-22.37	PASS
			4.341	On	-49.362	-15.66	PASS
	HCH	2480	-2.266	Off	-49.069	-22.27	PASS
			4.254	On	-46.337	-15.75	PASS

Test Graphs

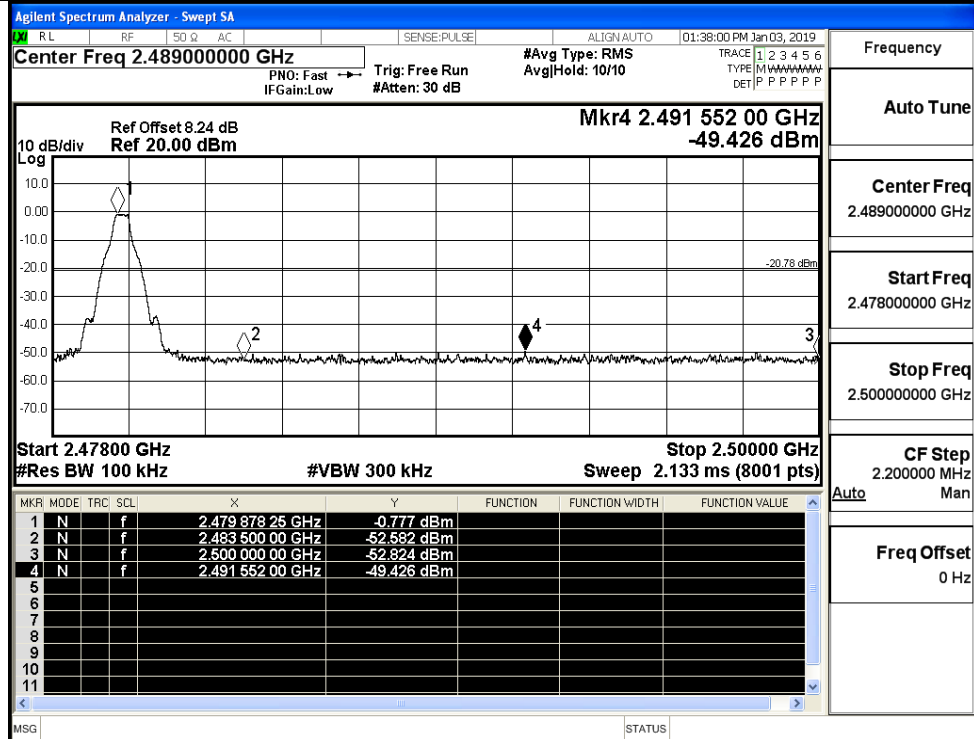
GFSK/LCH/No Hop



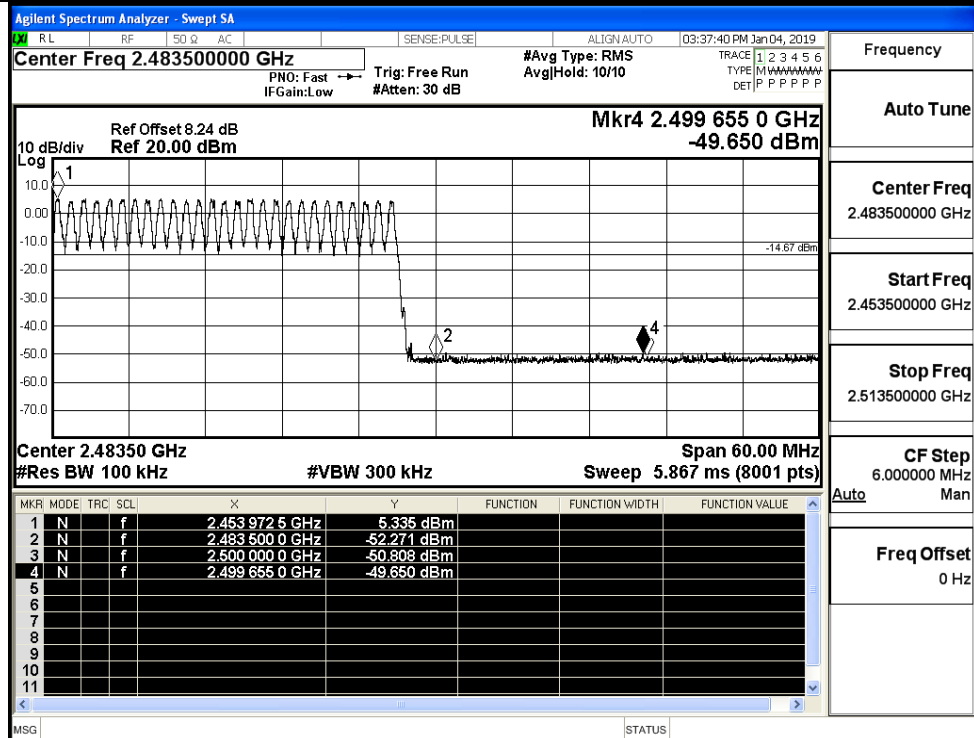
GFSK/LCH/Hop



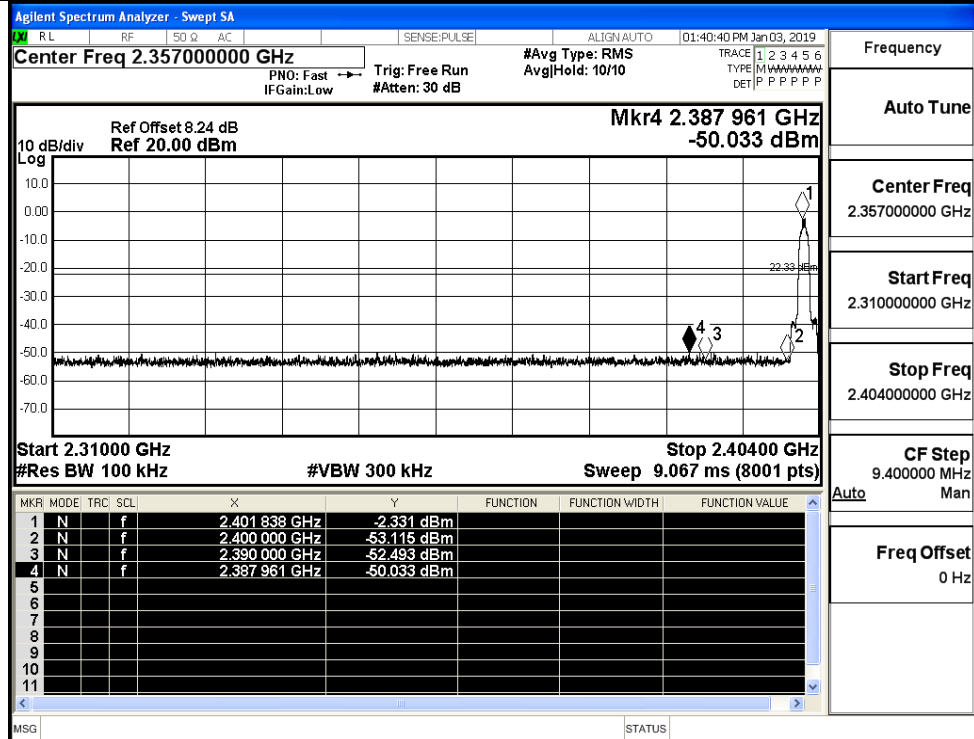
GFSK/HCH/No Hop



GFSK/HCH/Hop



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



Frequency

Auto Tune

Center Freq
2.357000000 GHz

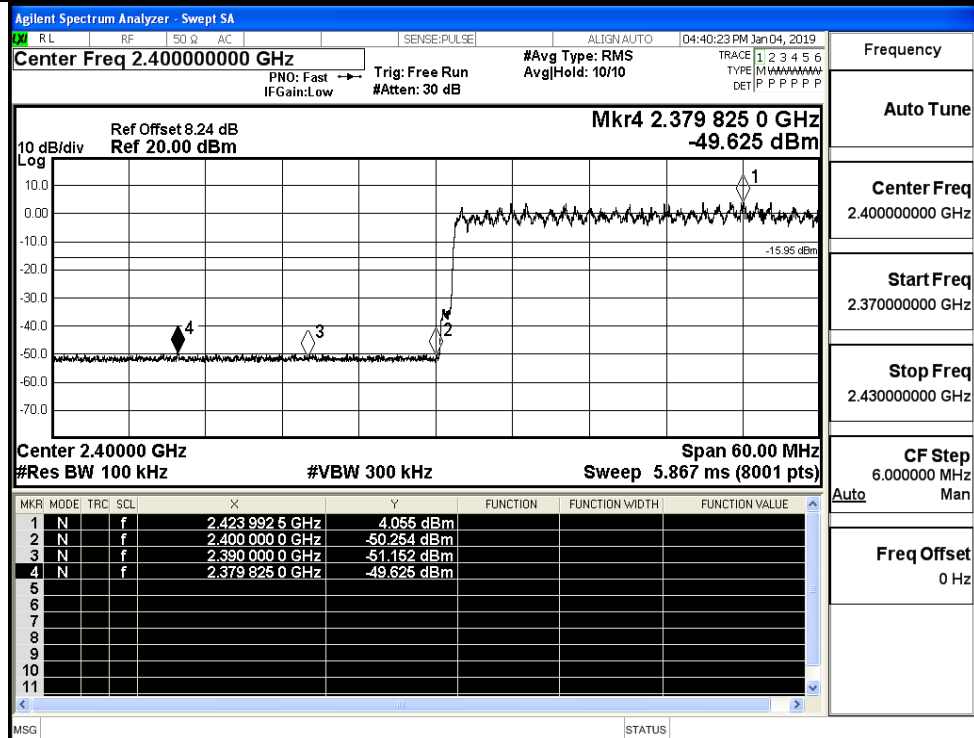
Start Freq
2.310000000 GHz

Stop Freq
2.404000000 GHz

CF Step
9.400000 MHz
Auto Man

Freq Offset
0 Hz

$\pi/4$ DQPSK/LCH/Hop



Frequency

Auto Tune

Center Freq
2.400000000 GHz

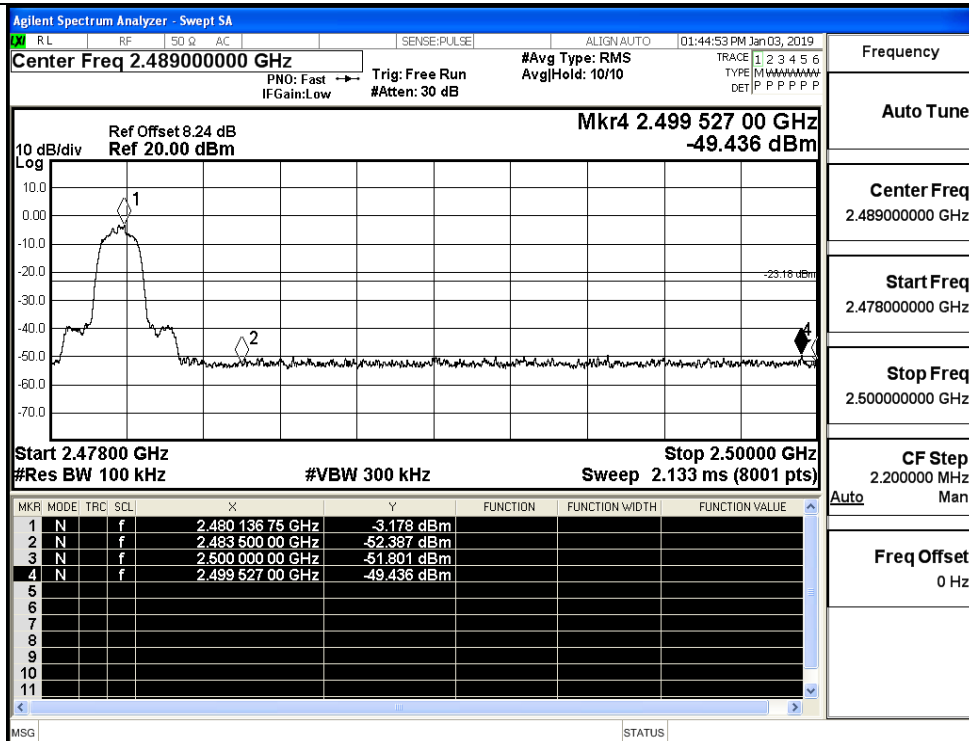
Start Freq
2.370000000 GHz

Stop Freq
2.430000000 GHz

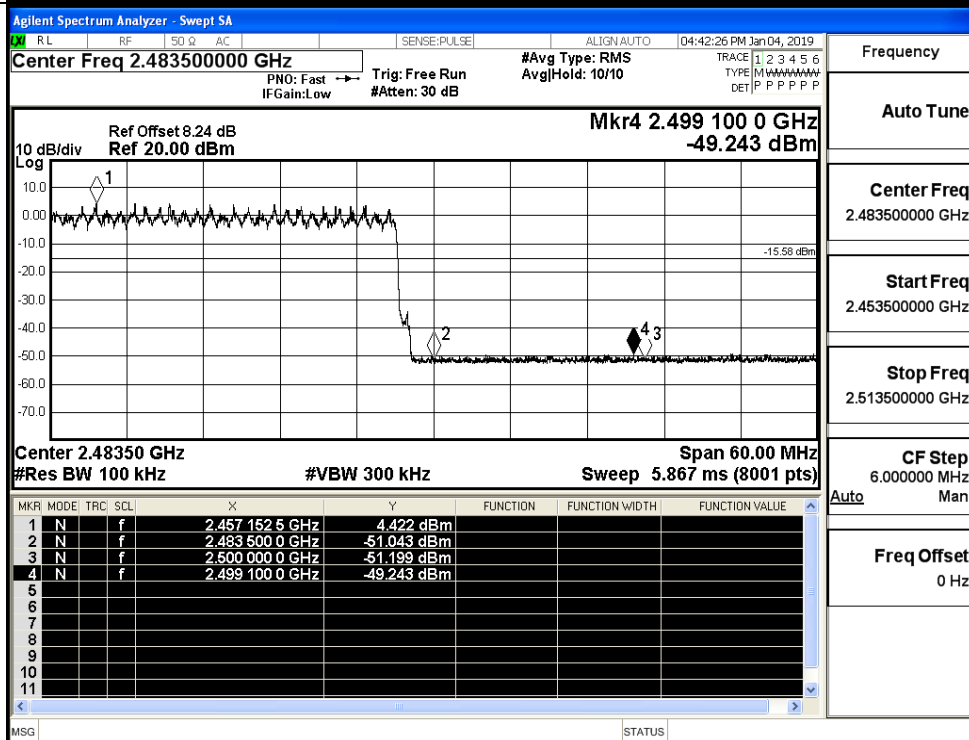
CF Step
6.000000 MHz
Auto Man

Freq Offset
0 Hz

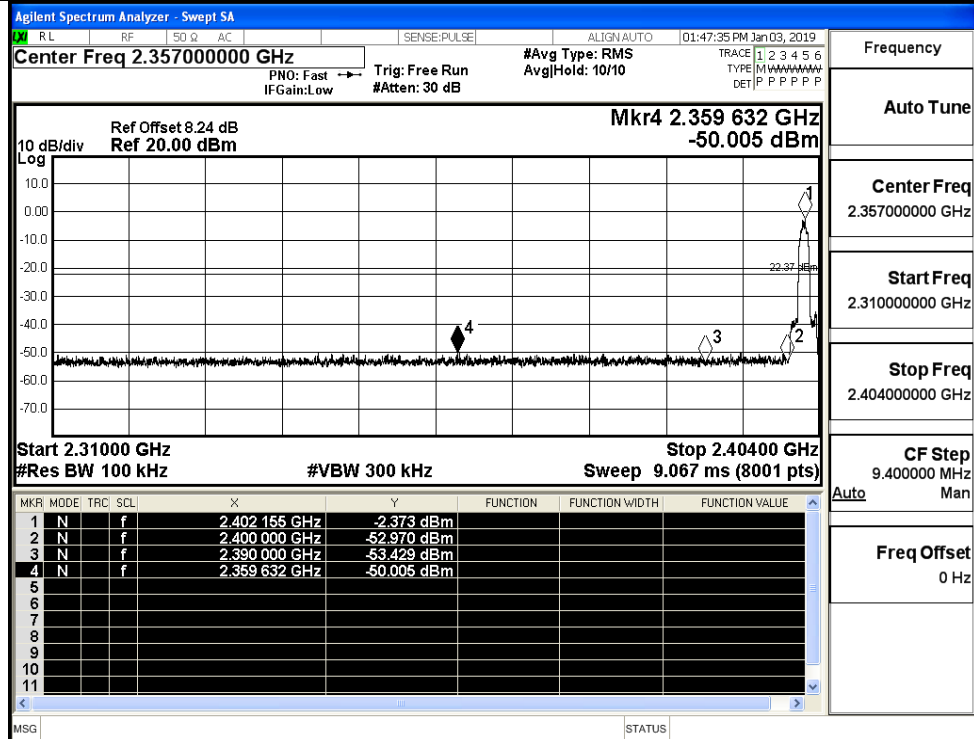
$\pi/4$ DQPSK/HCH/No
Hop



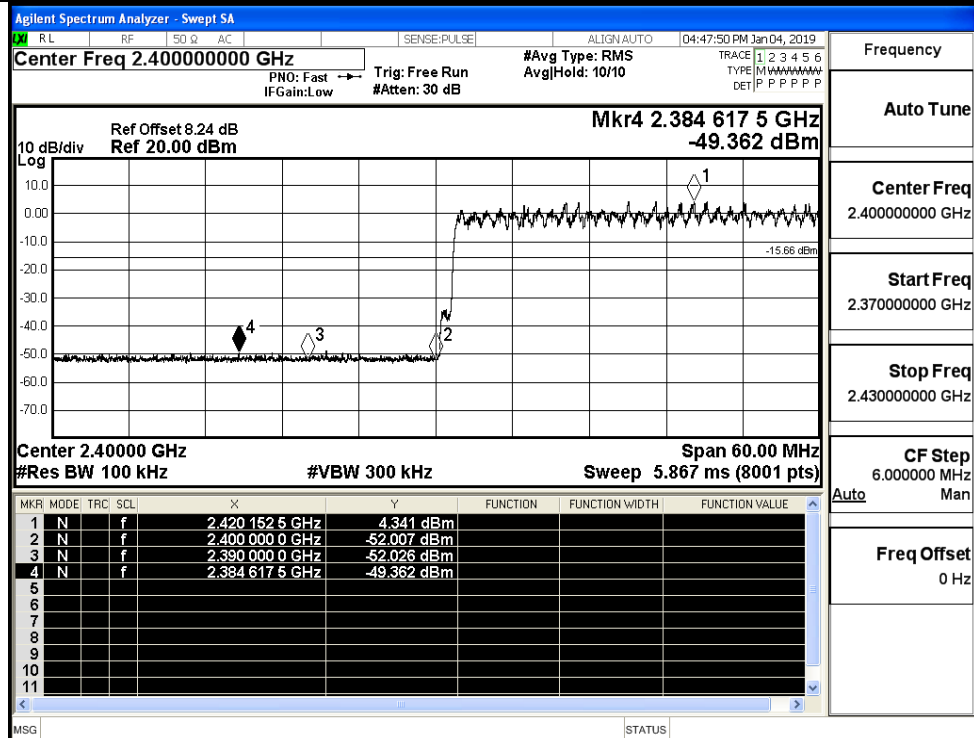
$\pi/4$ DQPSK/HCH/Hop



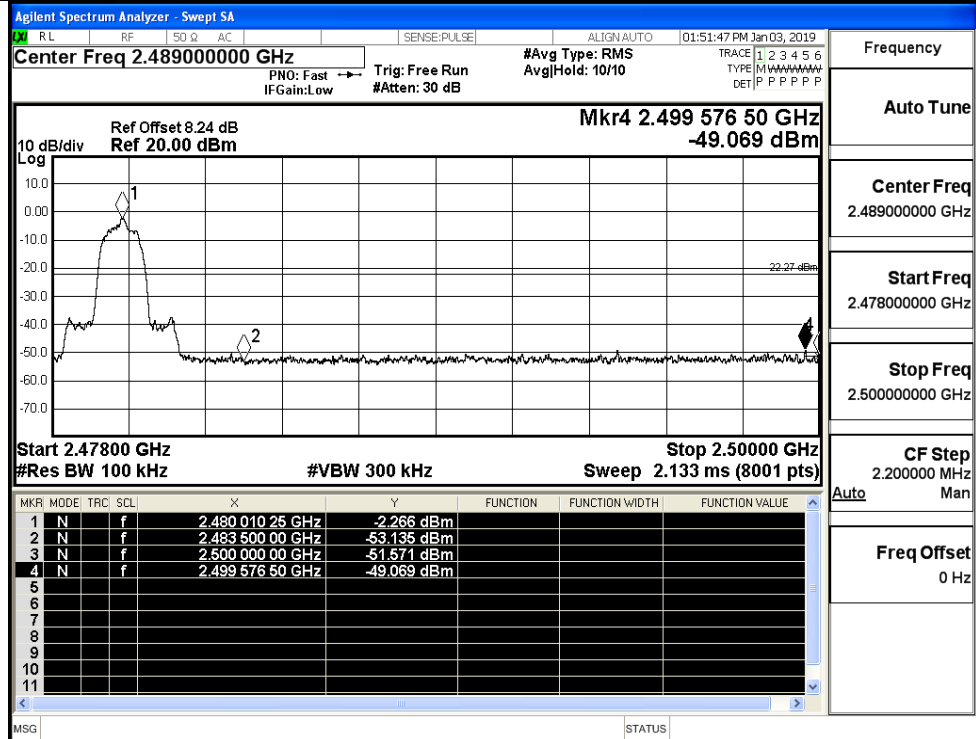
8DPSK/LCH/No Hop



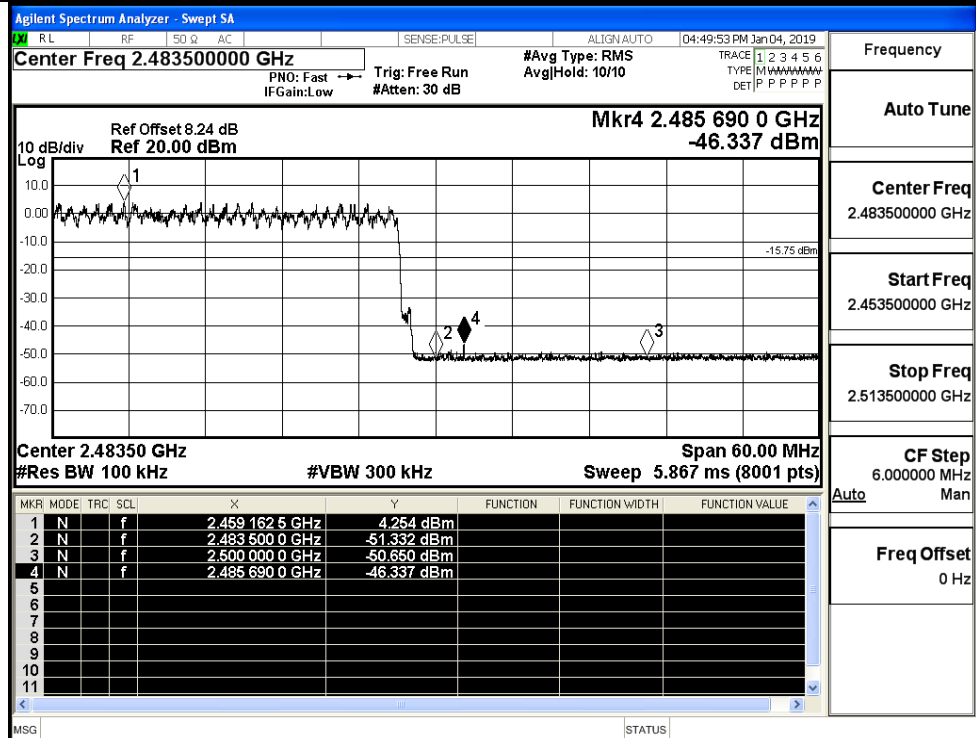
8DPSK/LCH/Hop



8DPSK/HCH/No Hop



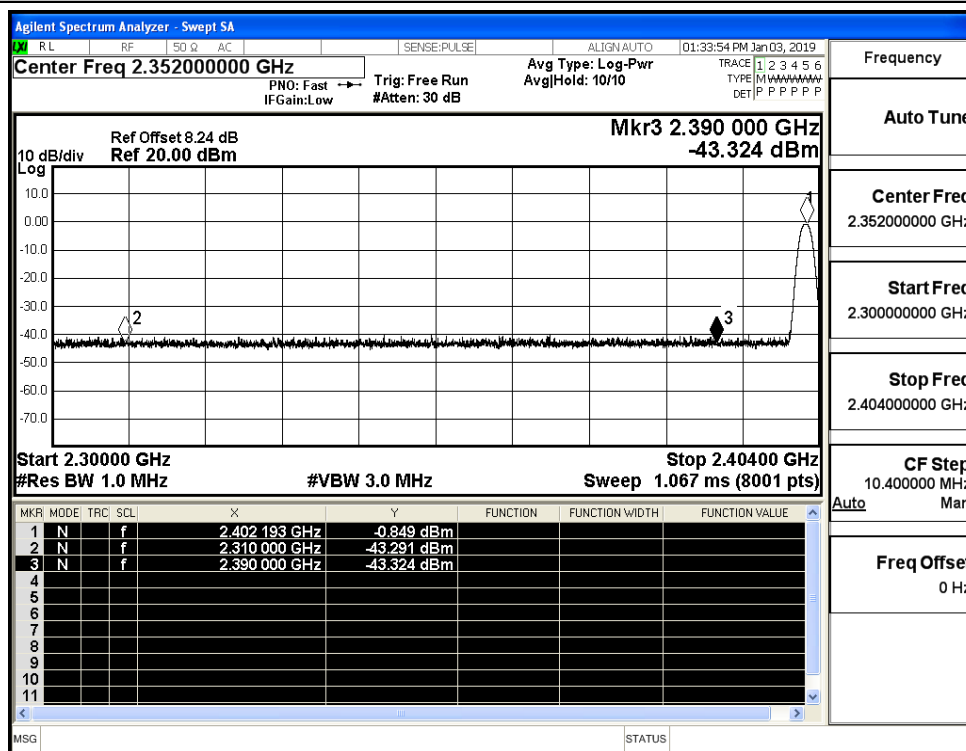
8DPSK/HCH/Hop



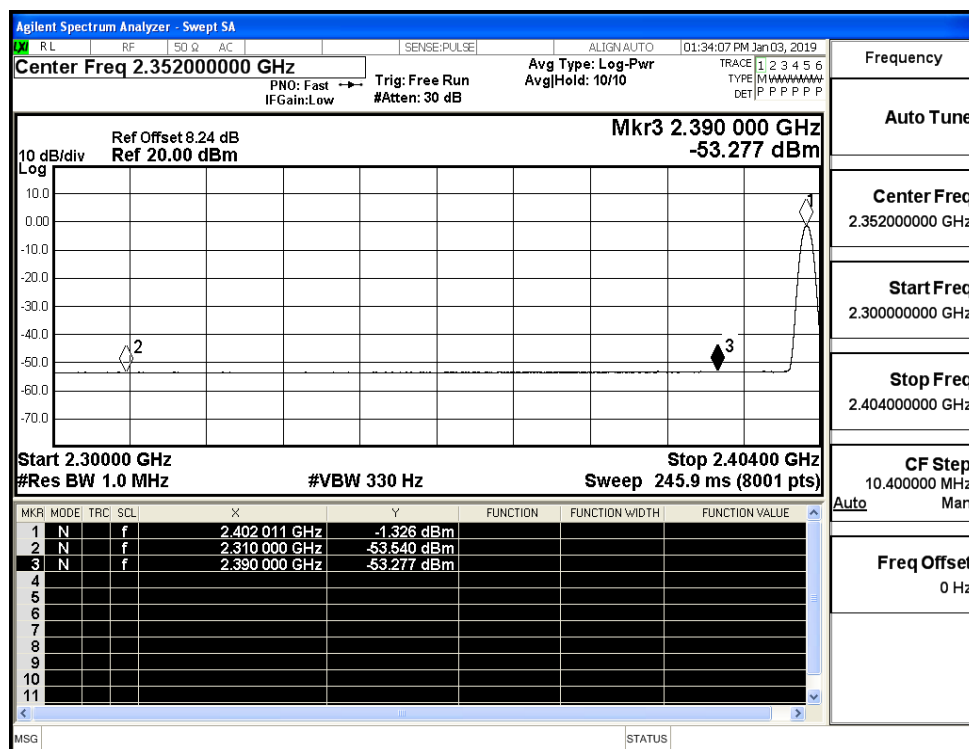
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-43.29	2.0	0	51.97	PEAK	74	PASS
	Off	2310.0	-53.54	2.0	0	41.72	AV	54	PASS
	Off	2390.0	-43.32	2.0	0	51.93	PEAK	74	PASS
	Off	2390.0	-53.28	2.0	0	41.98	AV	54	PASS
	Off	2483.5	-43.52	2.0	0	51.74	PEAK	74	PASS
	Off	2483.5	-52.96	2.0	0	42.30	AV	54	PASS
	Off	2500.0	-41.43	2.0	0	53.82	PEAK	74	PASS
	Off	2500.0	-52.86	2.0	0	42.40	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-42.88	2.0	0	52.38	PEAK	74	PASS
	Off	2310.0	-53.62	2.0	0	41.64	AV	54	PASS
	Off	2390.0	-42.28	2.0	0	52.98	PEAK	74	PASS
	Off	2390.0	-53.26	2.0	0	41.99	AV	54	PASS
	Off	2483.5	-41.46	2.0	0	53.80	PEAK	74	PASS
	Off	2483.5	-53.05	2.0	0	42.21	AV	54	PASS
	Off	2500.0	-42.57	2.0	0	52.69	PEAK	74	PASS
	Off	2500.0	-52.99	2.0	0	42.27	AV	54	PASS
8DPSK	Off	2310.0	-42.10	2.0	0	53.16	PEAK	74	PASS
	Off	2310.0	-53.61	2.0	0	41.64	AV	54	PASS
	Off	2390.0	-42.87	2.0	0	52.38	PEAK	74	PASS
	Off	2390.0	-53.41	2.0	0	41.85	AV	54	PASS
	Off	2483.5	-42.86	2.0	0	52.40	PEAK	74	PASS
	Off	2483.5	-53.08	2.0	0	42.17	AV	54	PASS
	Off	2500.0	-41.30	2.0	0	53.96	PEAK	74	PASS
	Off	2500.0	-52.97	2.0	0	42.29	AV	54	PASS

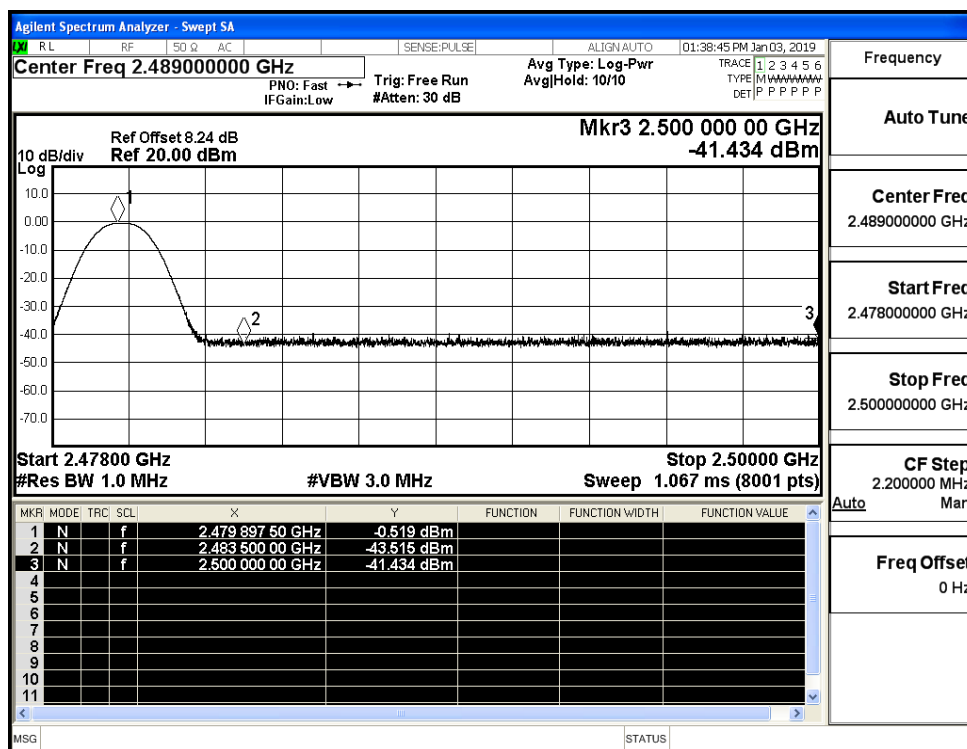
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



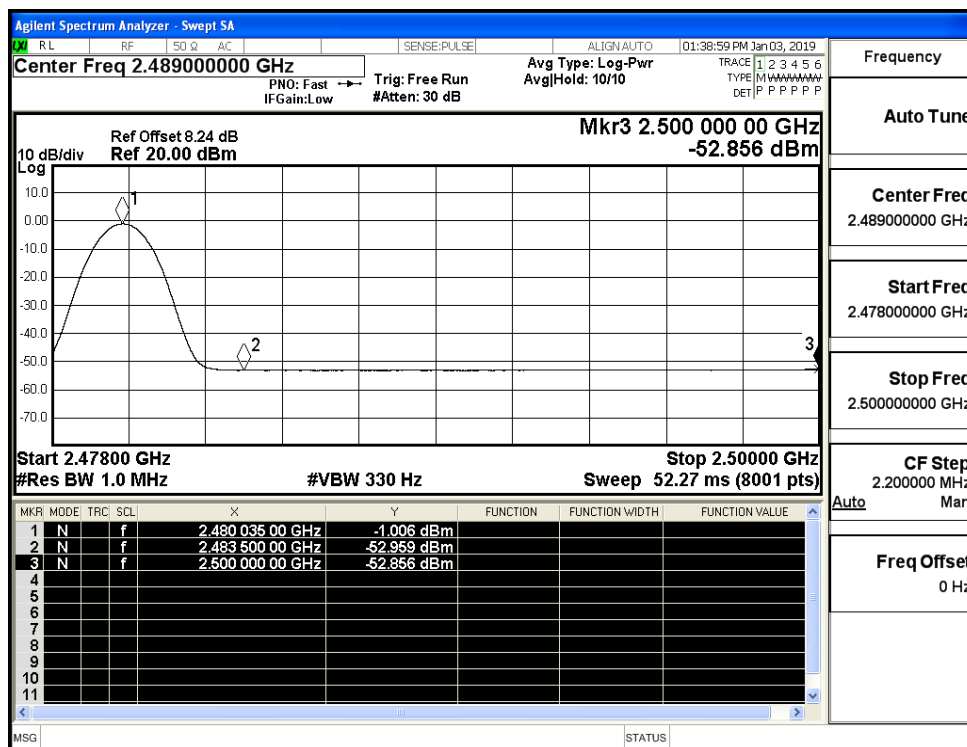
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)

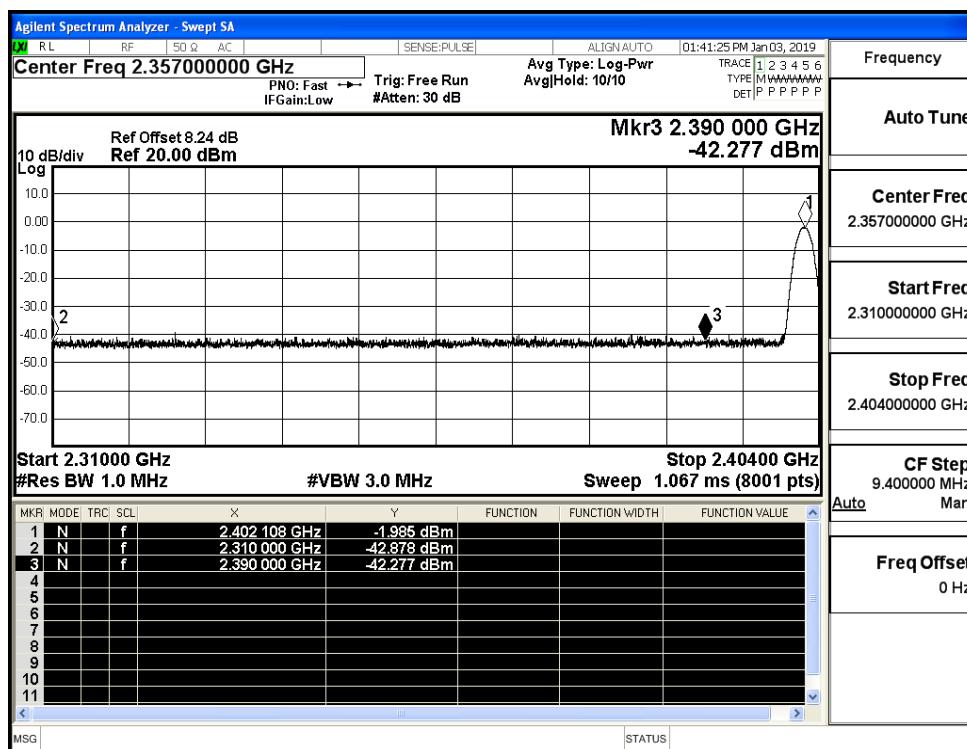
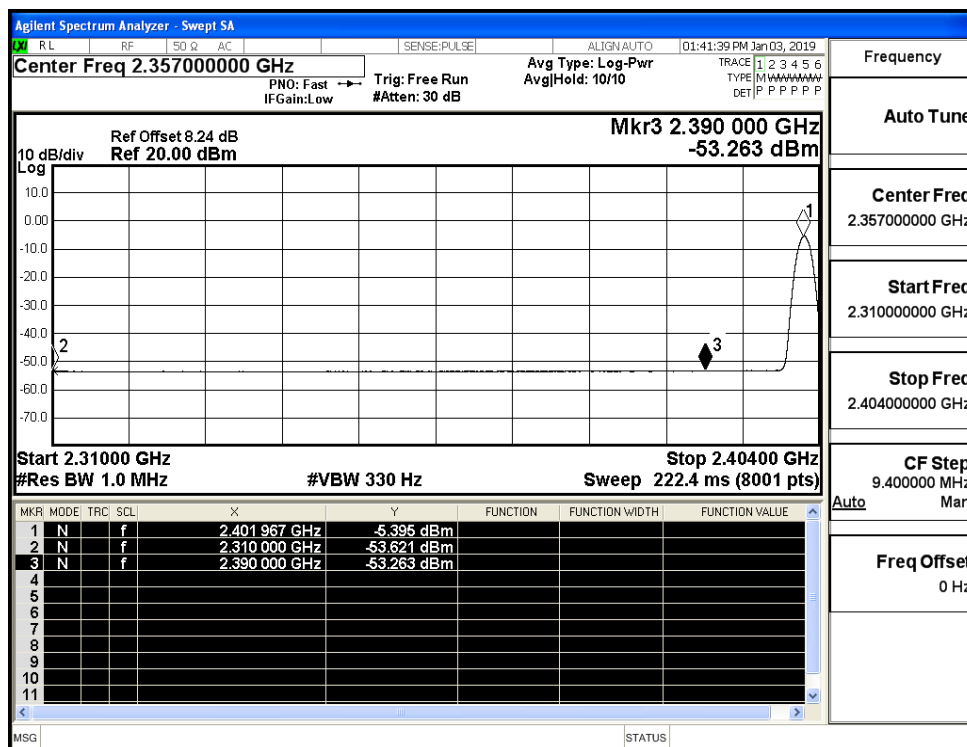


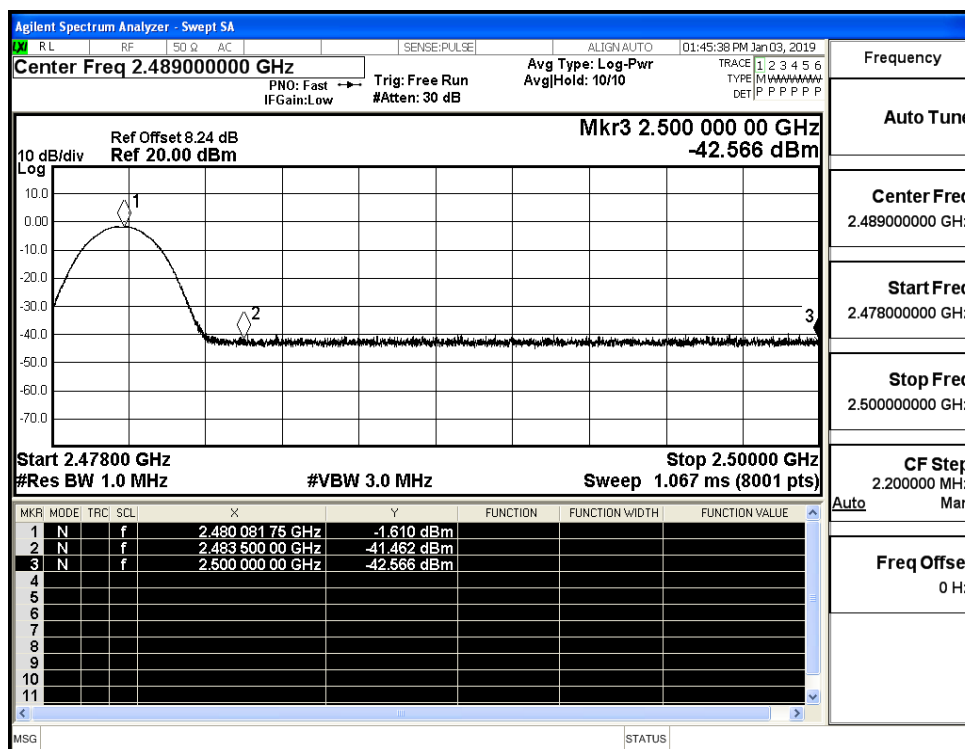
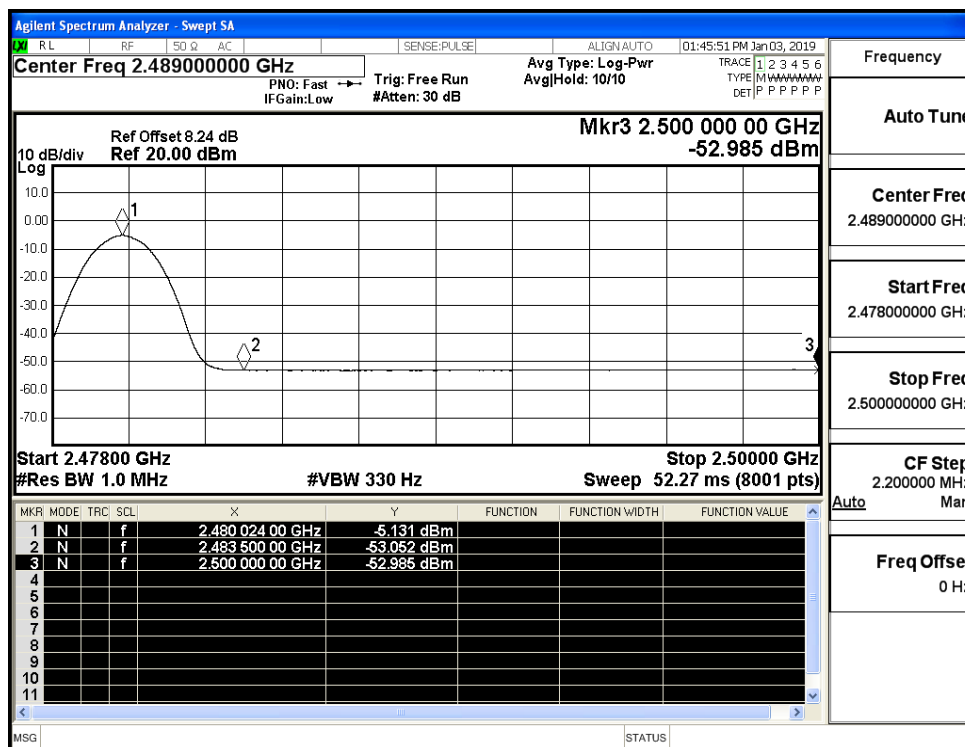
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)



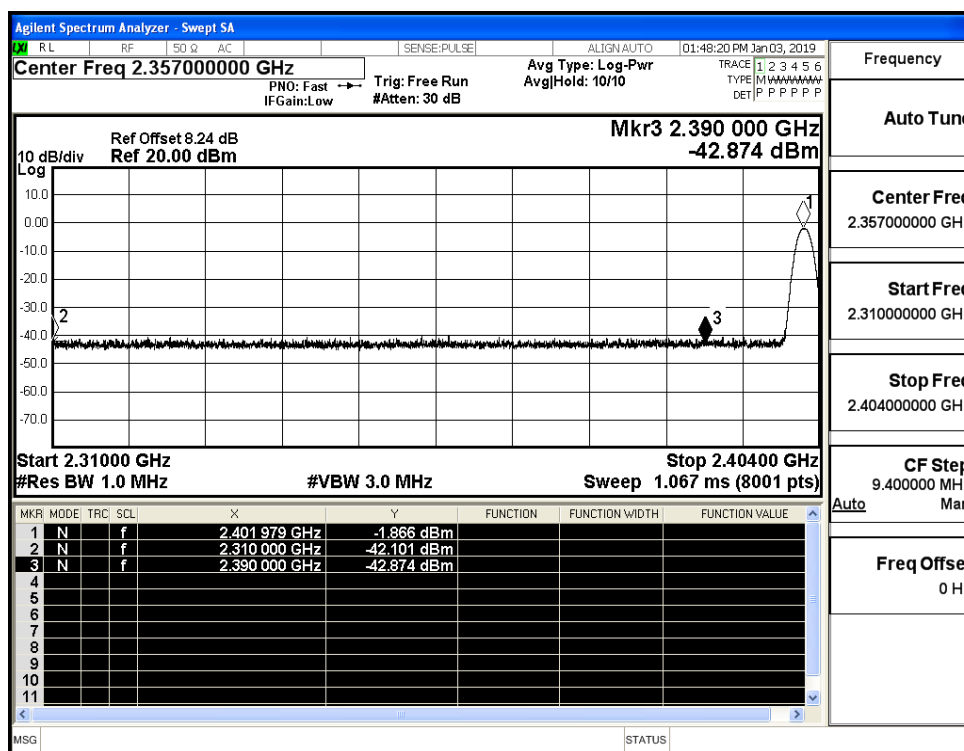
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (High Channel)



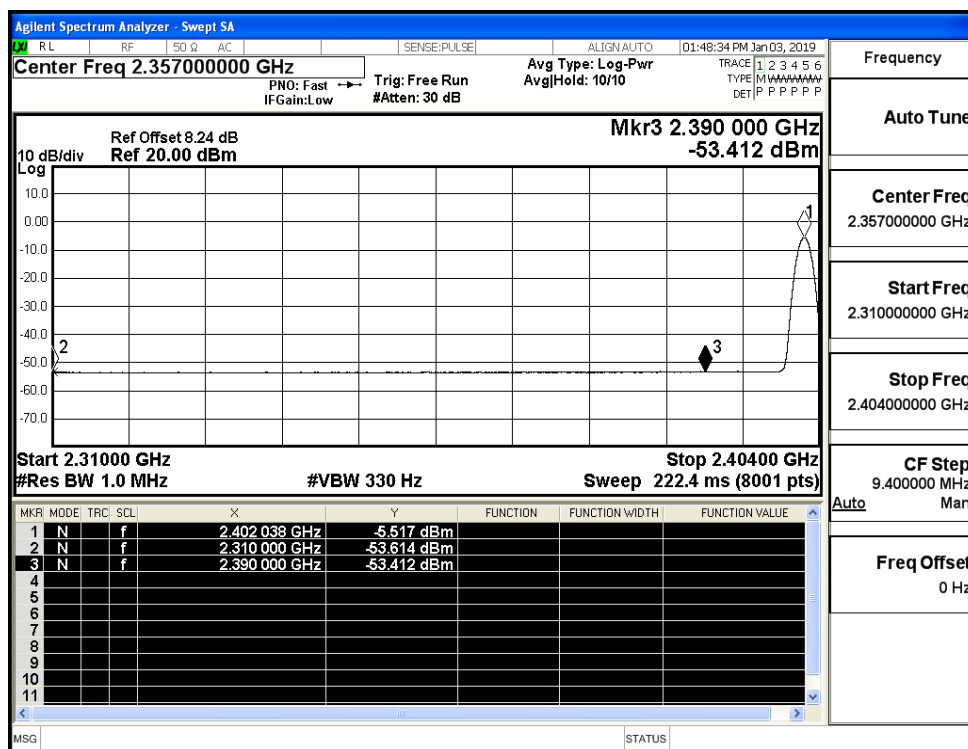
Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (Low Channel)

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

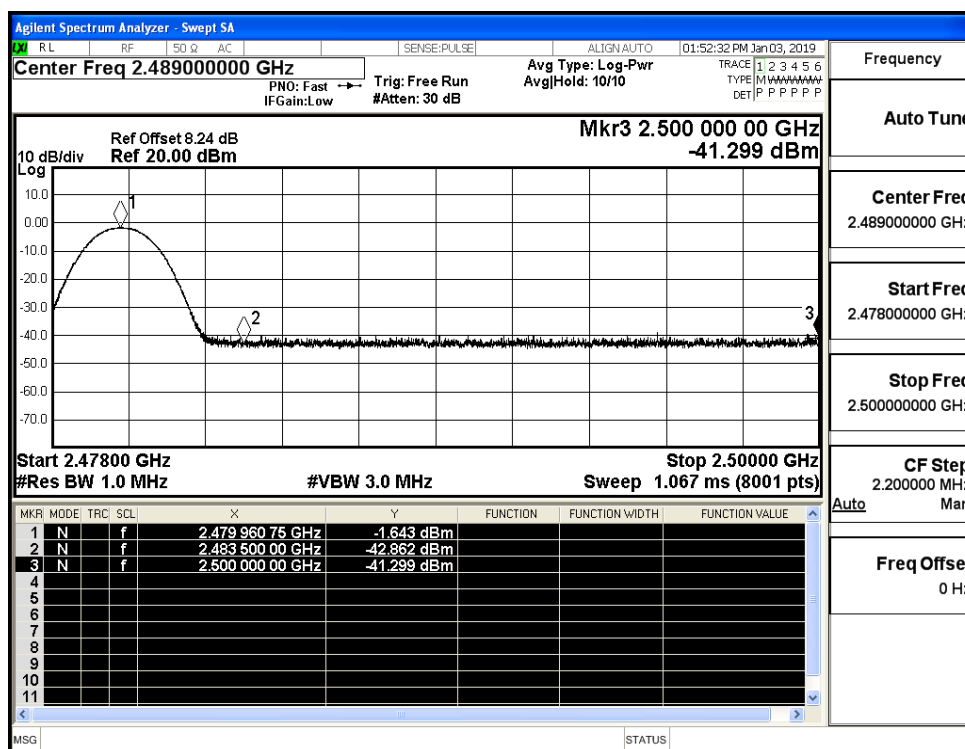
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



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)

