

Appendix A

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

Product Name: Bluetooth headset

Trade Mark: CDX

Test Model: D42

FCC ID: 2AQK8-D42

Environmental Conditions

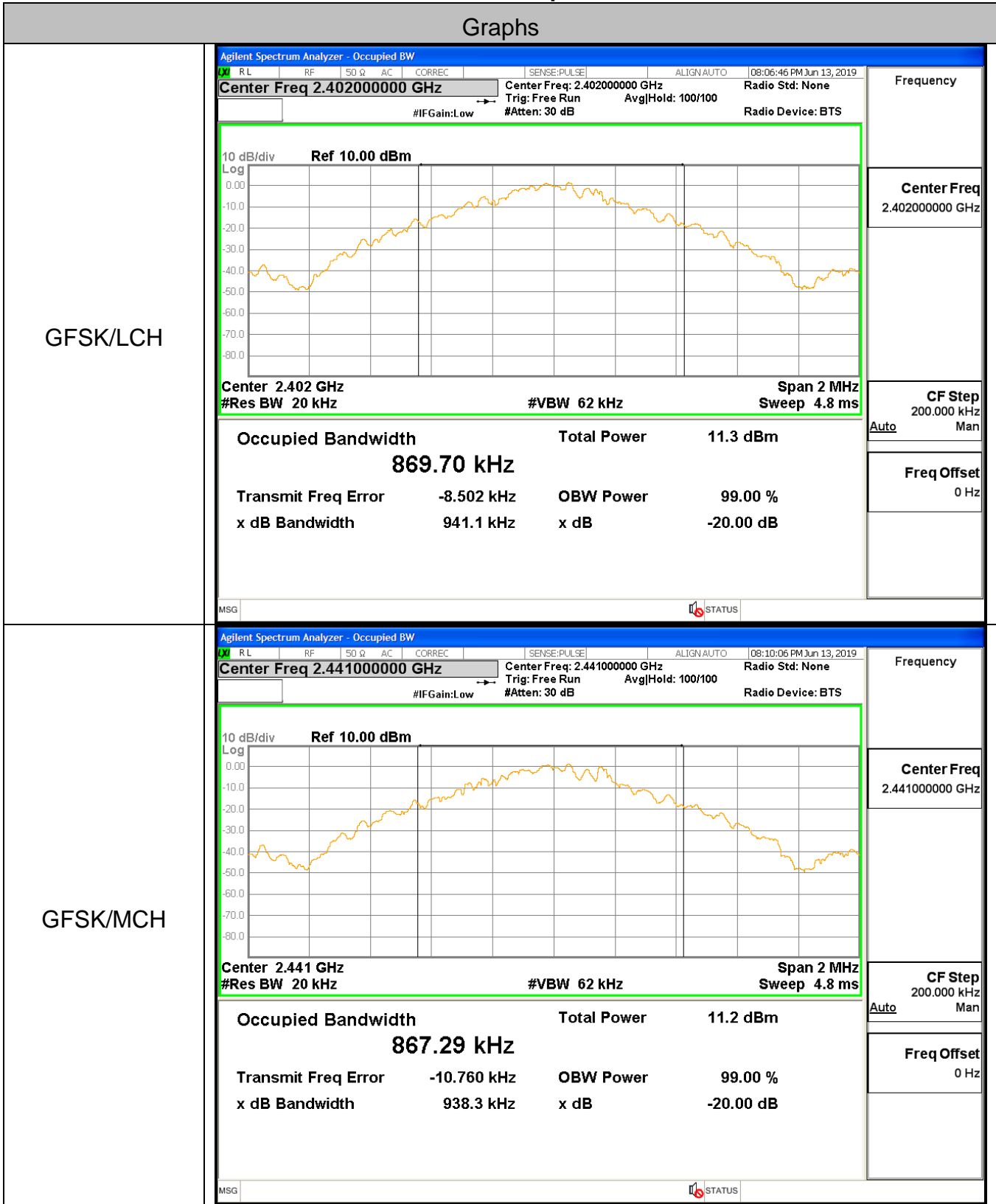
Temperature:	23.5 ° C
Relative Humidity:	50%
ATM Pressure:	100.0 kPa
Test Engineer:	Gary Qian
Supervised by:	Eden Hu

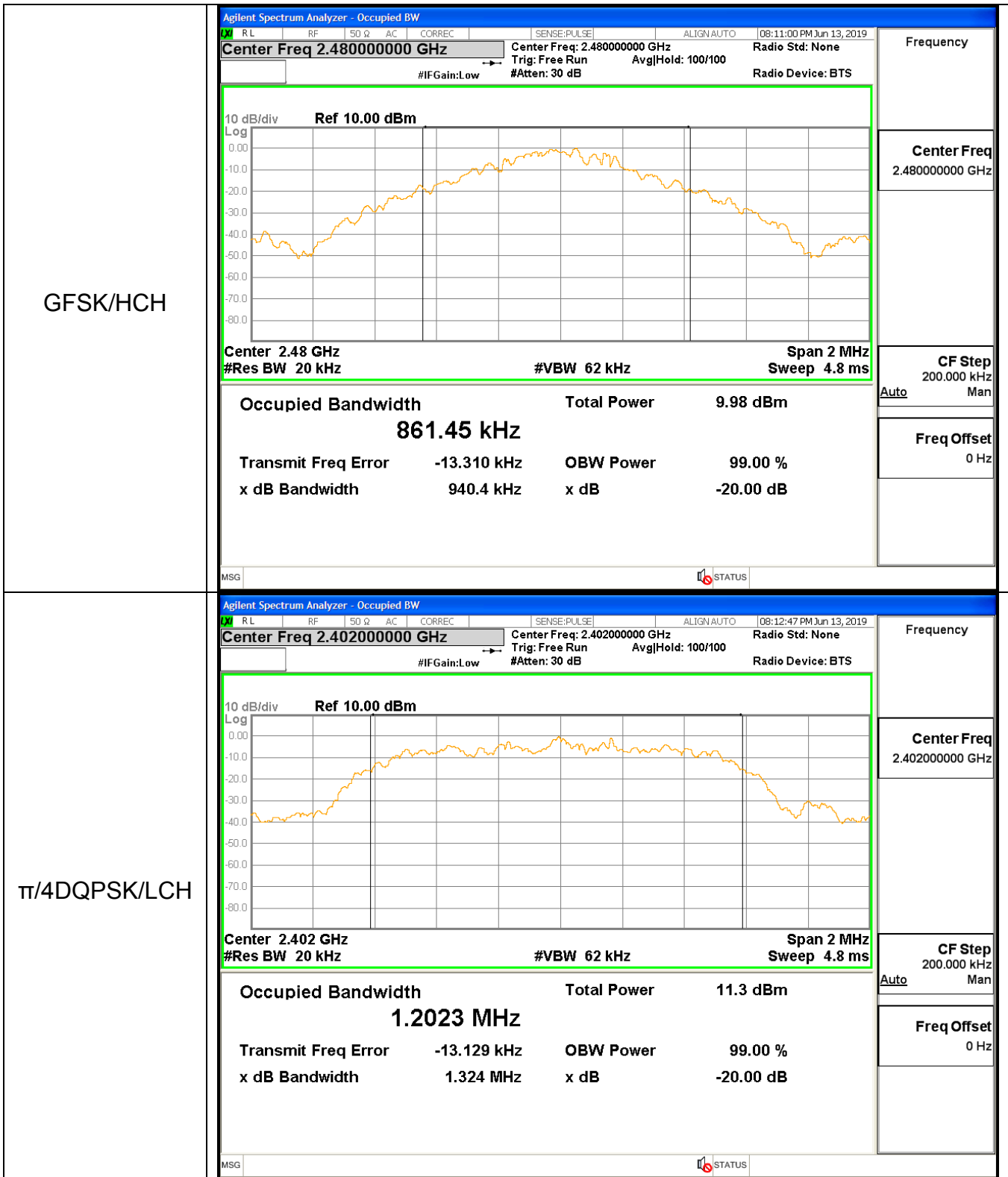
A.1 20 dB Bandwidth

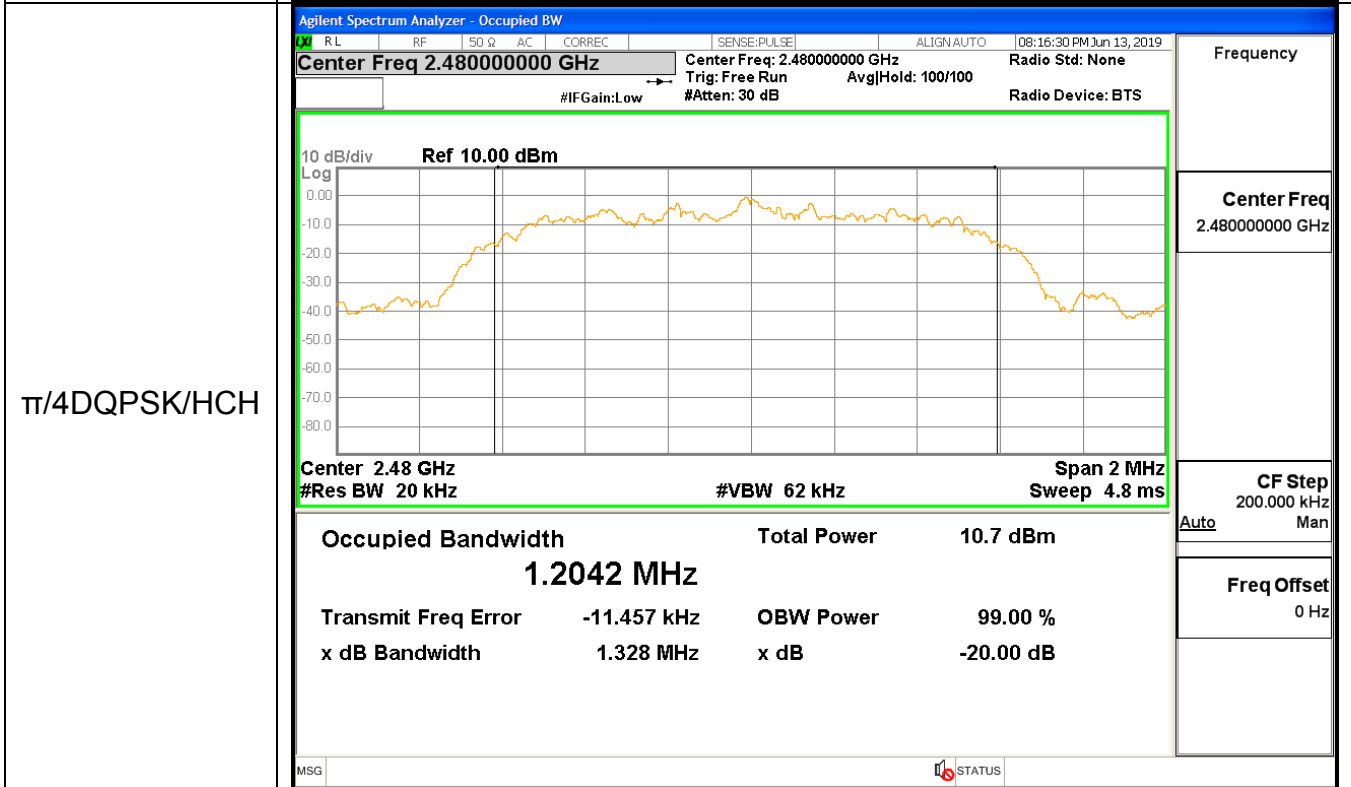
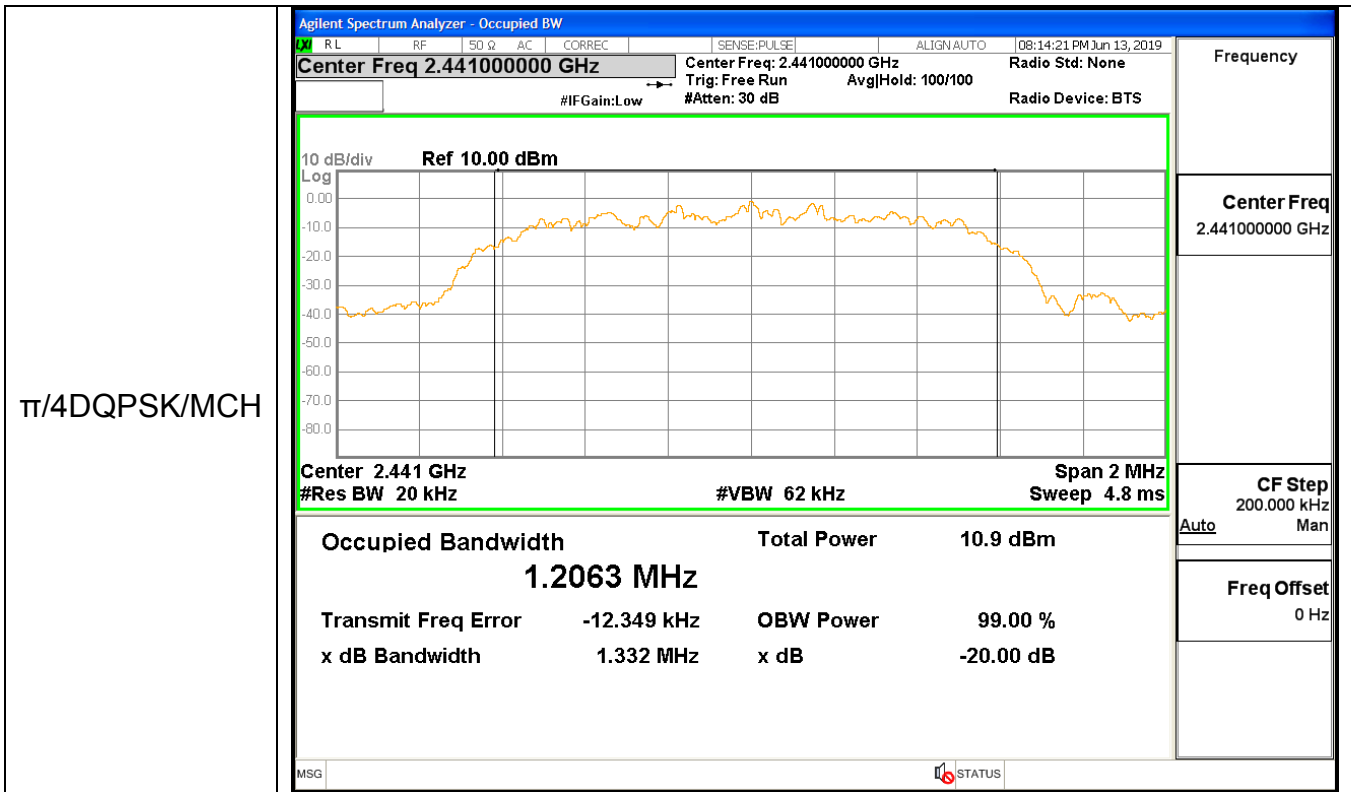
Mode	Channel.	20dB Bandwidth [MHz]	Limit(MHz)	Verdict
GFSK	LCH	0.941	Not Specified	PASS
GFSK	MCH	0.938	Not Specified	PASS
GFSK	HCH	0.940	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.324	Not Specified	PASS
$\pi/4$ DQPSK	MCH	1.332	Not Specified	PASS
$\pi/4$ DQPSK	HCH	1.328	Not Specified	PASS
8DPSK	LCH	1.328	Not Specified	PASS
8DPSK	MCH	1.331	Not Specified	PASS
8DPSK	HCH	1.332	Not Specified	PASS

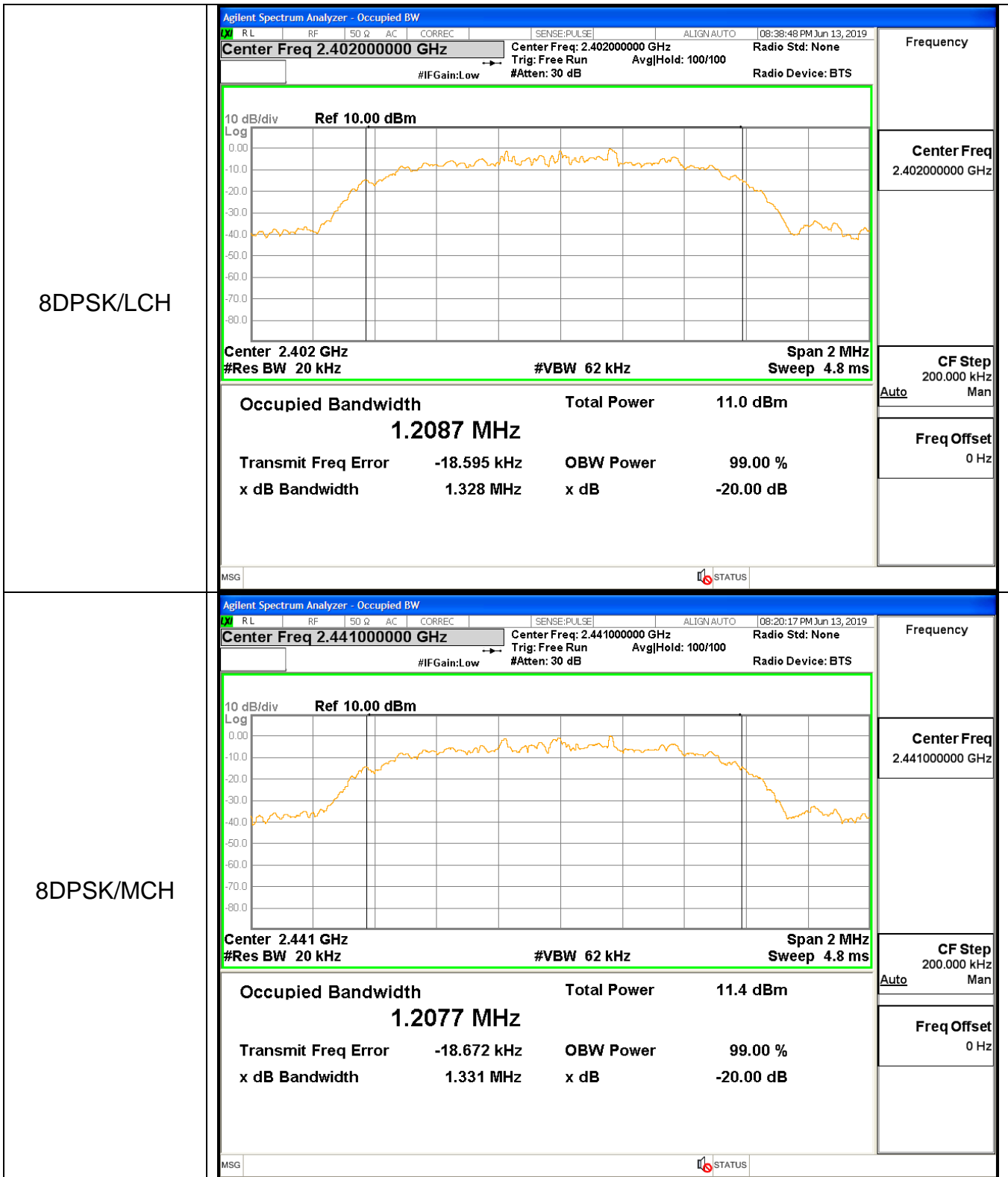
Test Graph

Graphs

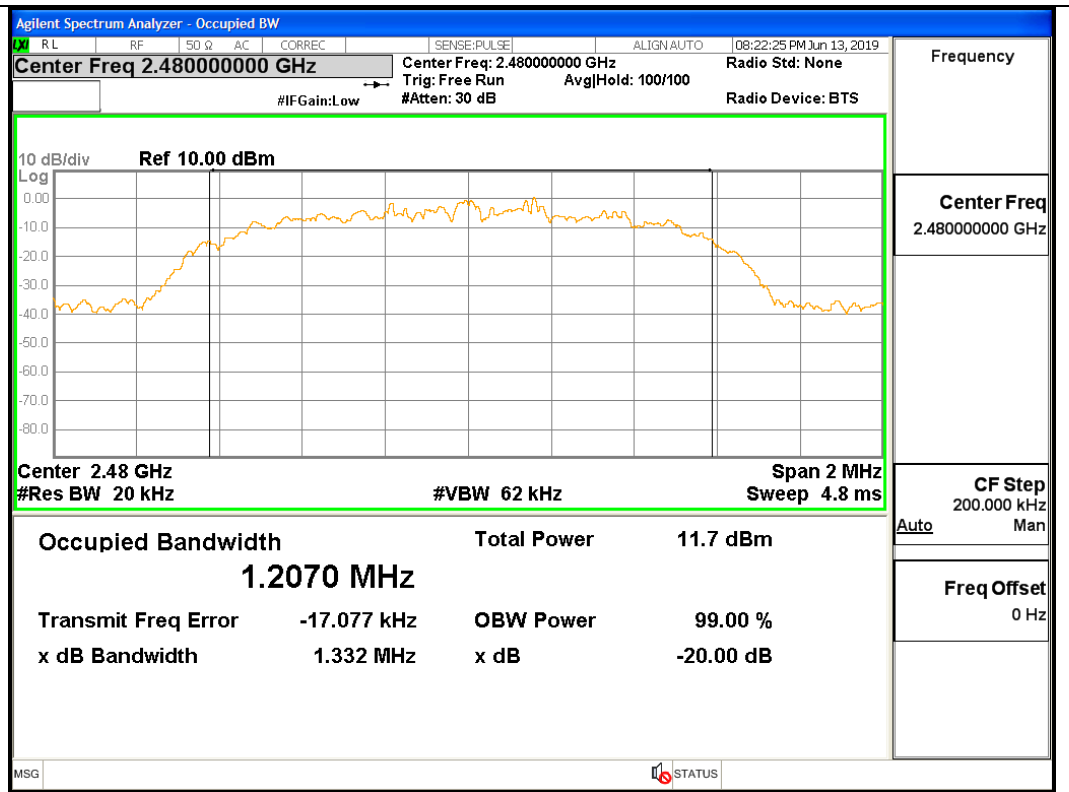








8DPSK/HCH

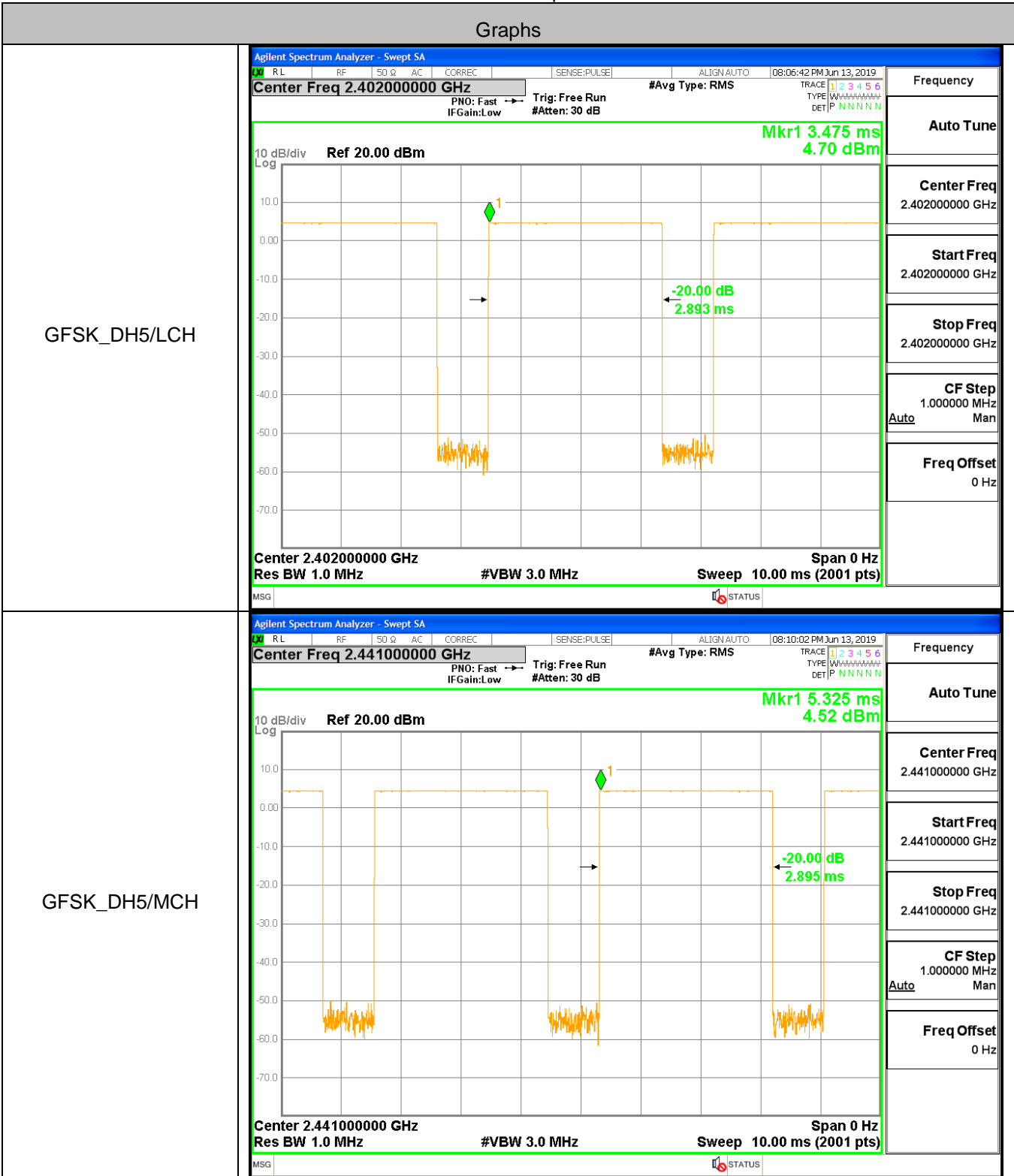


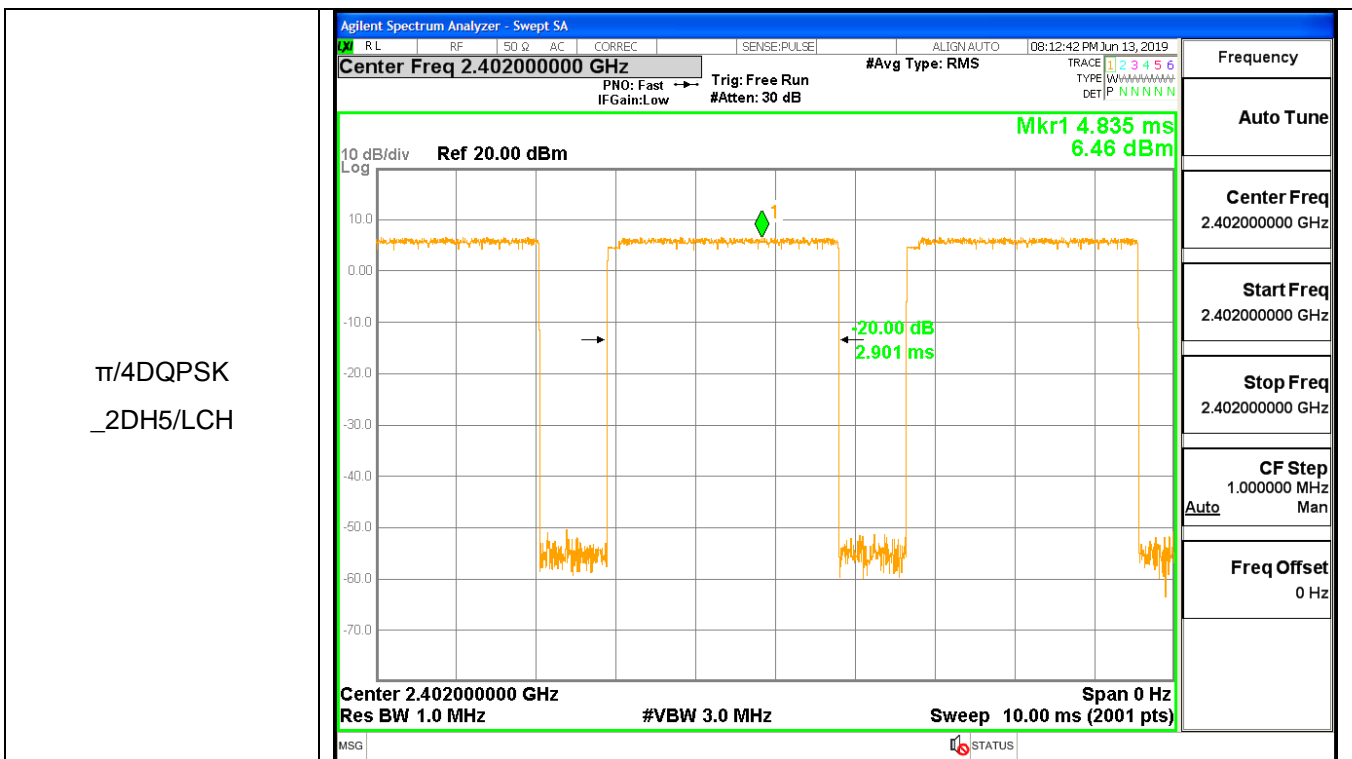
A.2 Dwell Time

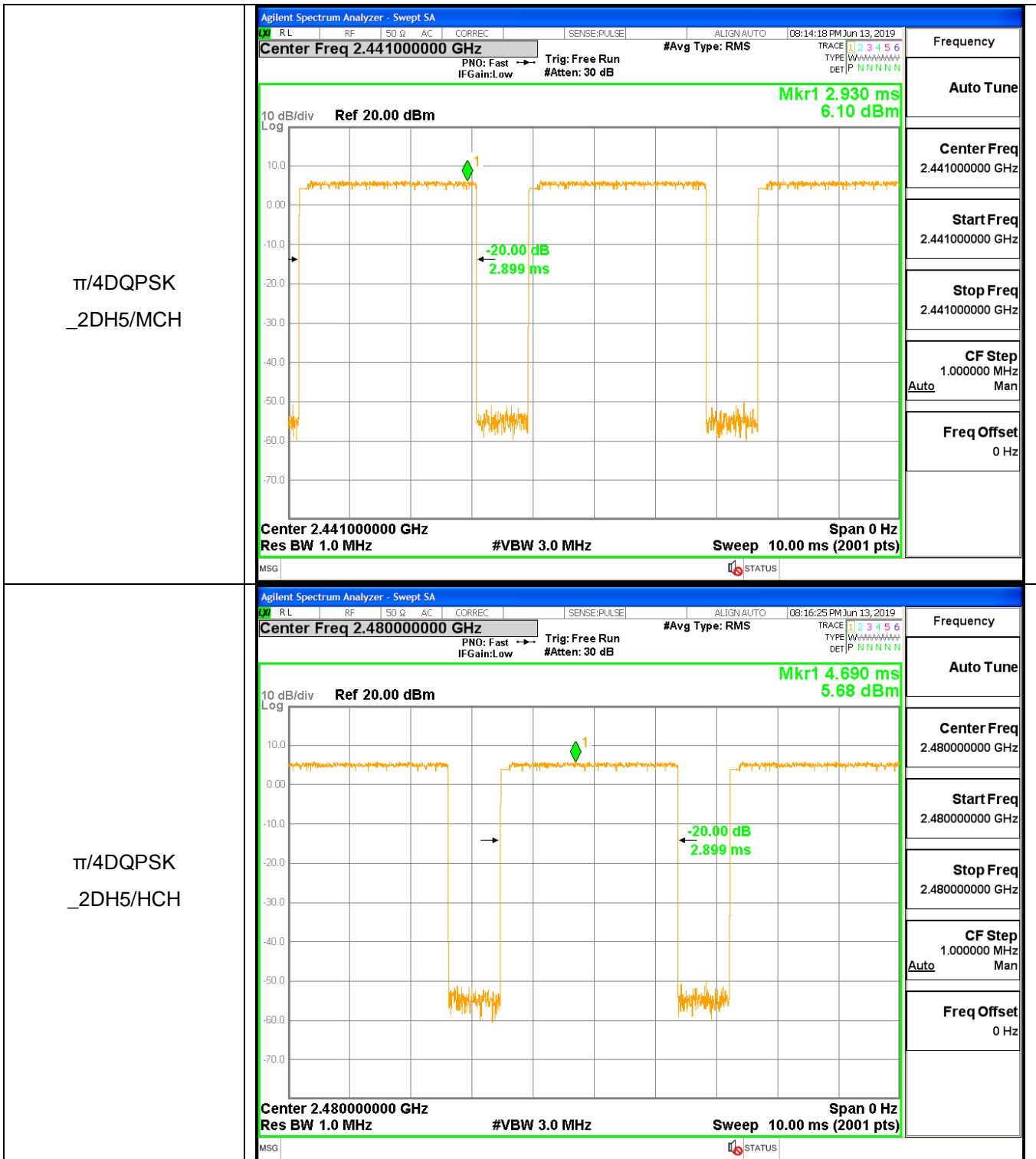
Mode	Packet	Channel	Burst Width [s/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	0.002893	106.7	0.308717	0.4	PASS
GFSK	DH5	MCH	0.002895	106.7	0.308929	0.4	PASS
GFSK	DH5	HCH	0.002893	106.7	0.308730	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	0.002901	106.7	0.309542	0.4	PASS
$\pi/4$ DQPSK	2DH5	MCH	0.002899	106.7	0.309274	0.4	PASS
$\pi/4$ DQPSK	2DH5	HCH	0.002899	106.7	0.309291	0.4	PASS
8DPSK	3DH5	LCH	0.002892	106.7	0.308606	0.4	PASS
8DPSK	3DH5	MCH	0.002900	106.7	0.309444	0.4	PASS
8DPSK	3DH5	HCH	0.002902	106.7	0.309614	0.4	PASS

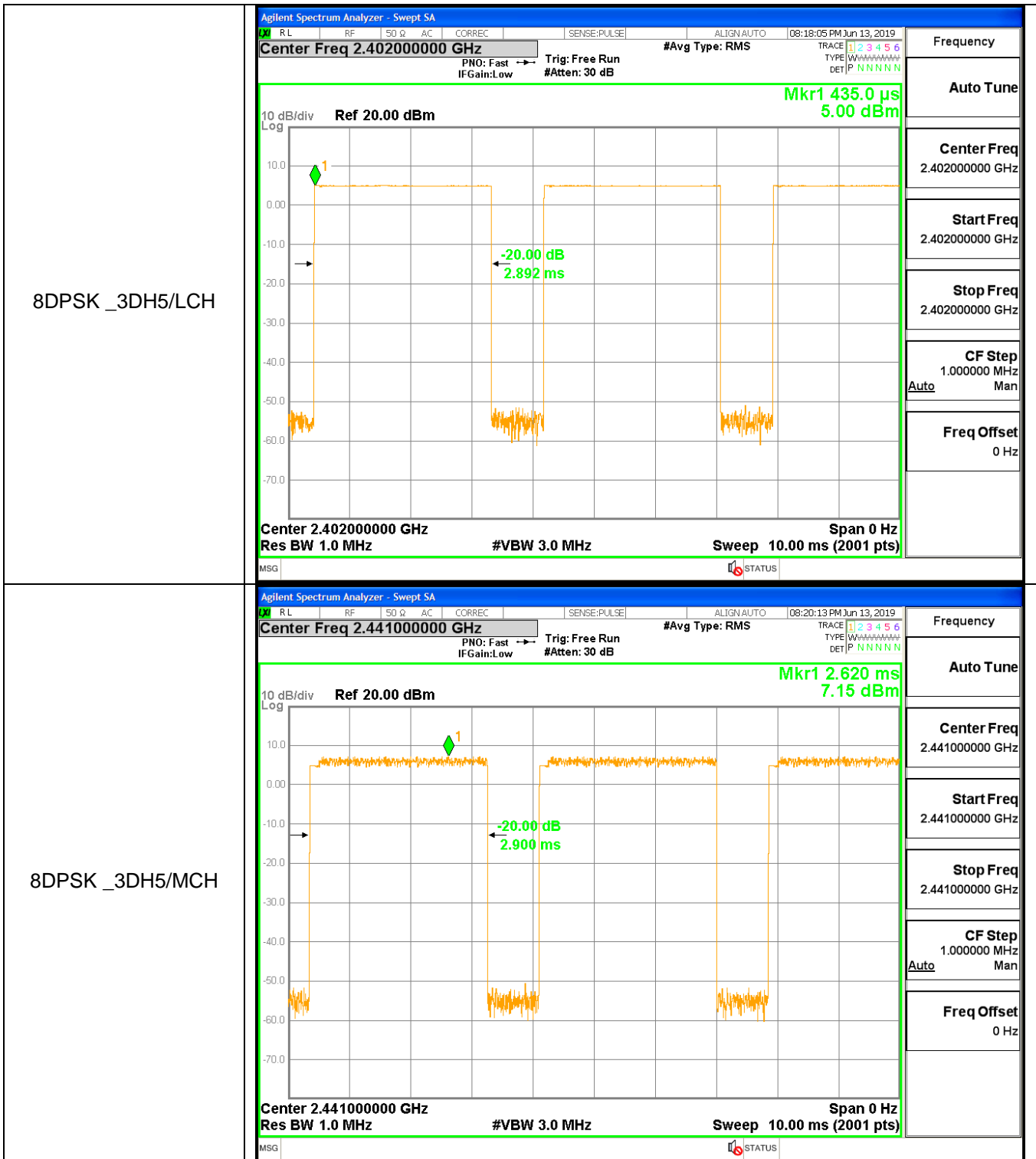
Test Graph

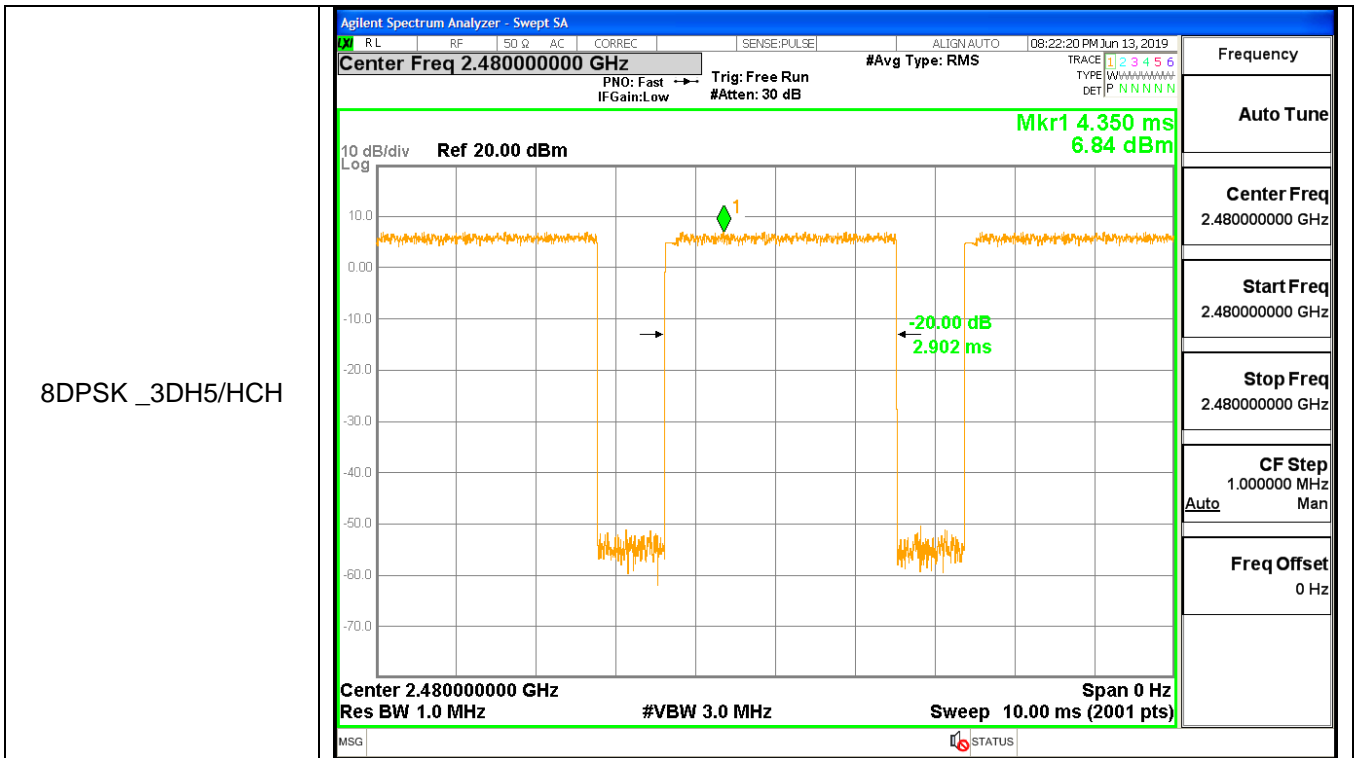
Graphs







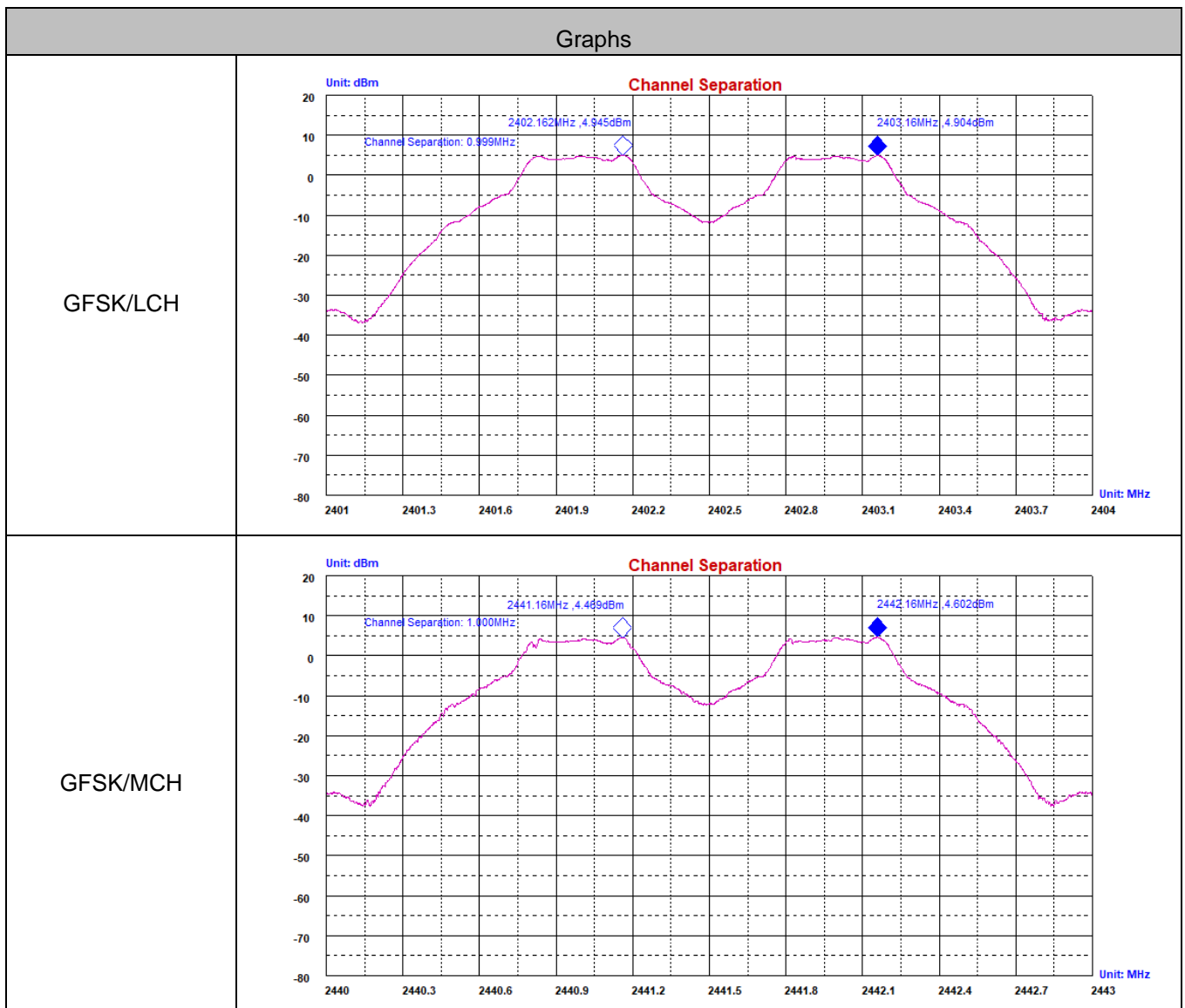


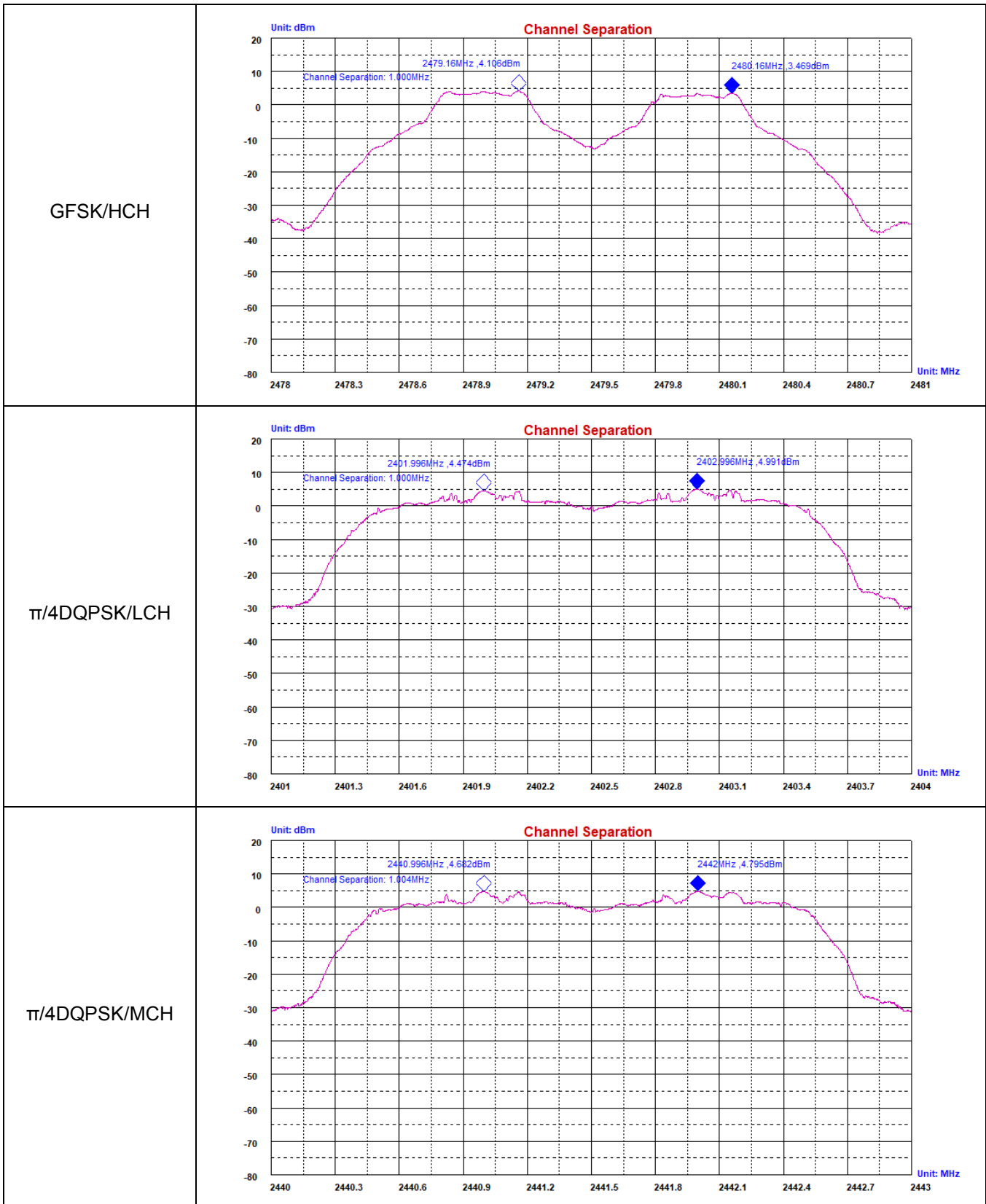


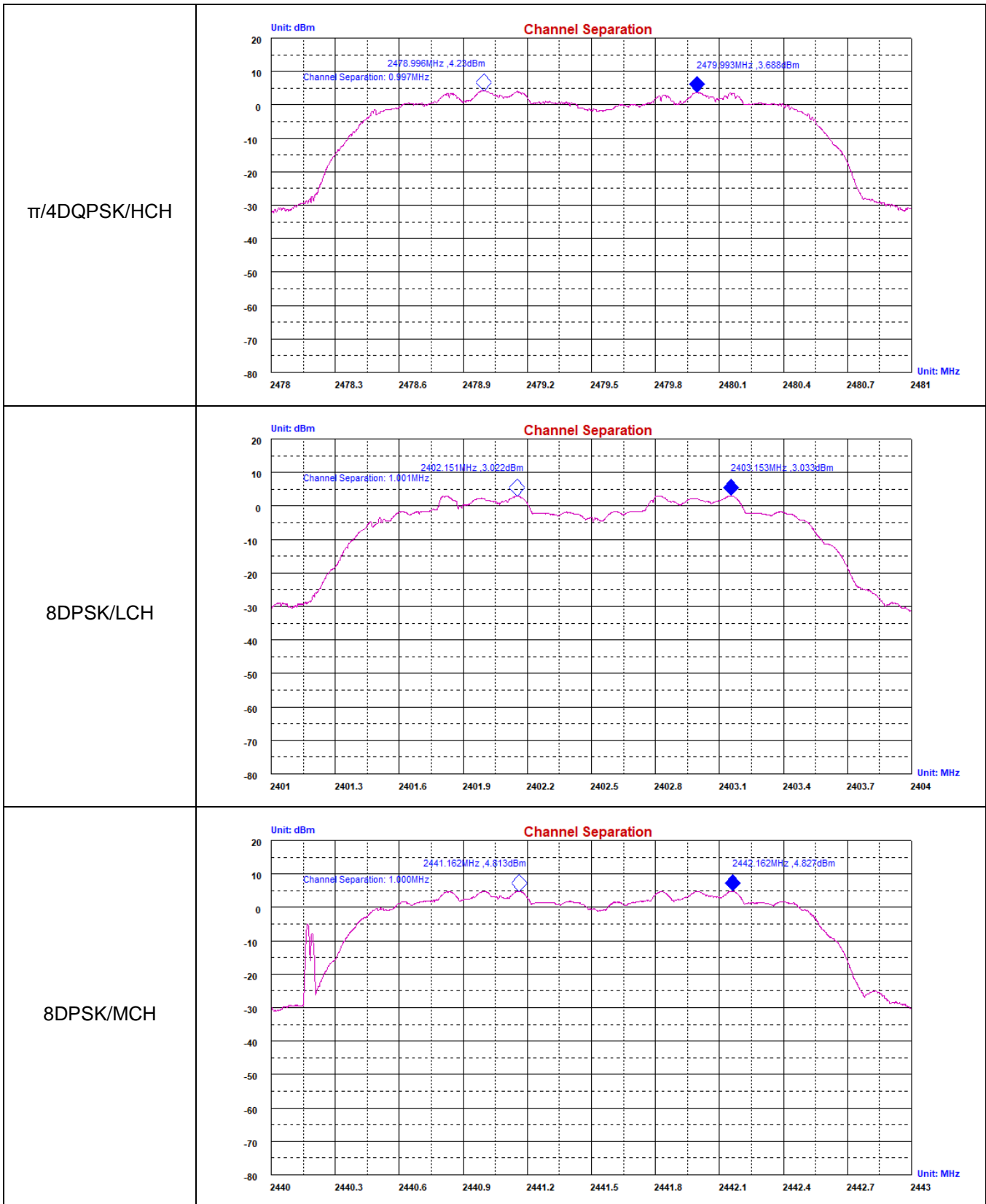
A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.999	0.627	PASS
GFSK	MCH	1.000	0.625	PASS
GFSK	HCH	1.000	0.627	PASS
$\pi/4$ DQPSK	LCH	1.000	0.883	PASS
$\pi/4$ DQPSK	MCH	1.004	0.888	PASS
$\pi/4$ DQPSK	HCH	0.997	0.885	PASS
8DPSK	LCH	1.001	0.853	PASS
8DPSK	MCH	1.000	0.887	PASS
8DPSK	HCH	0.997	0.888	PASS

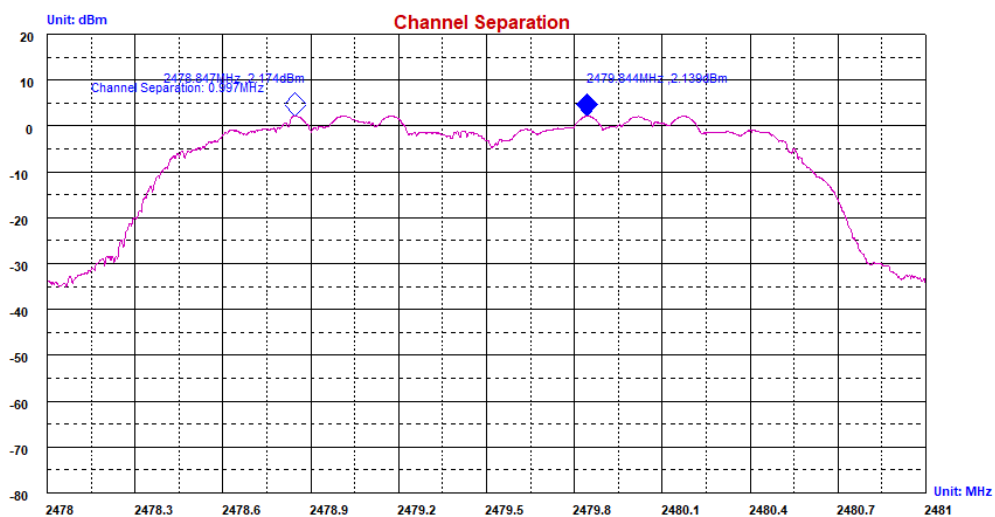
Test Graph







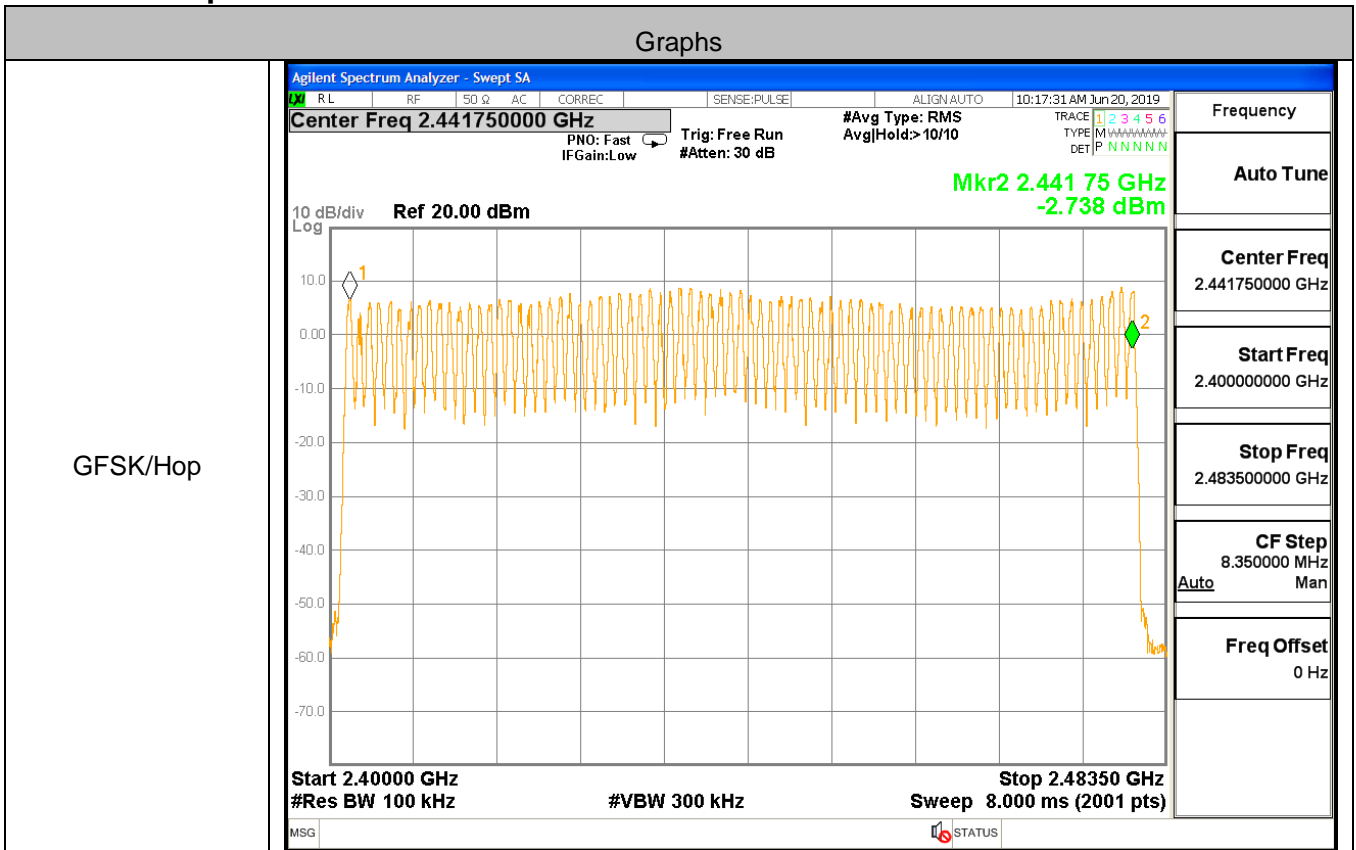
8DPSK/HCH



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 Graph

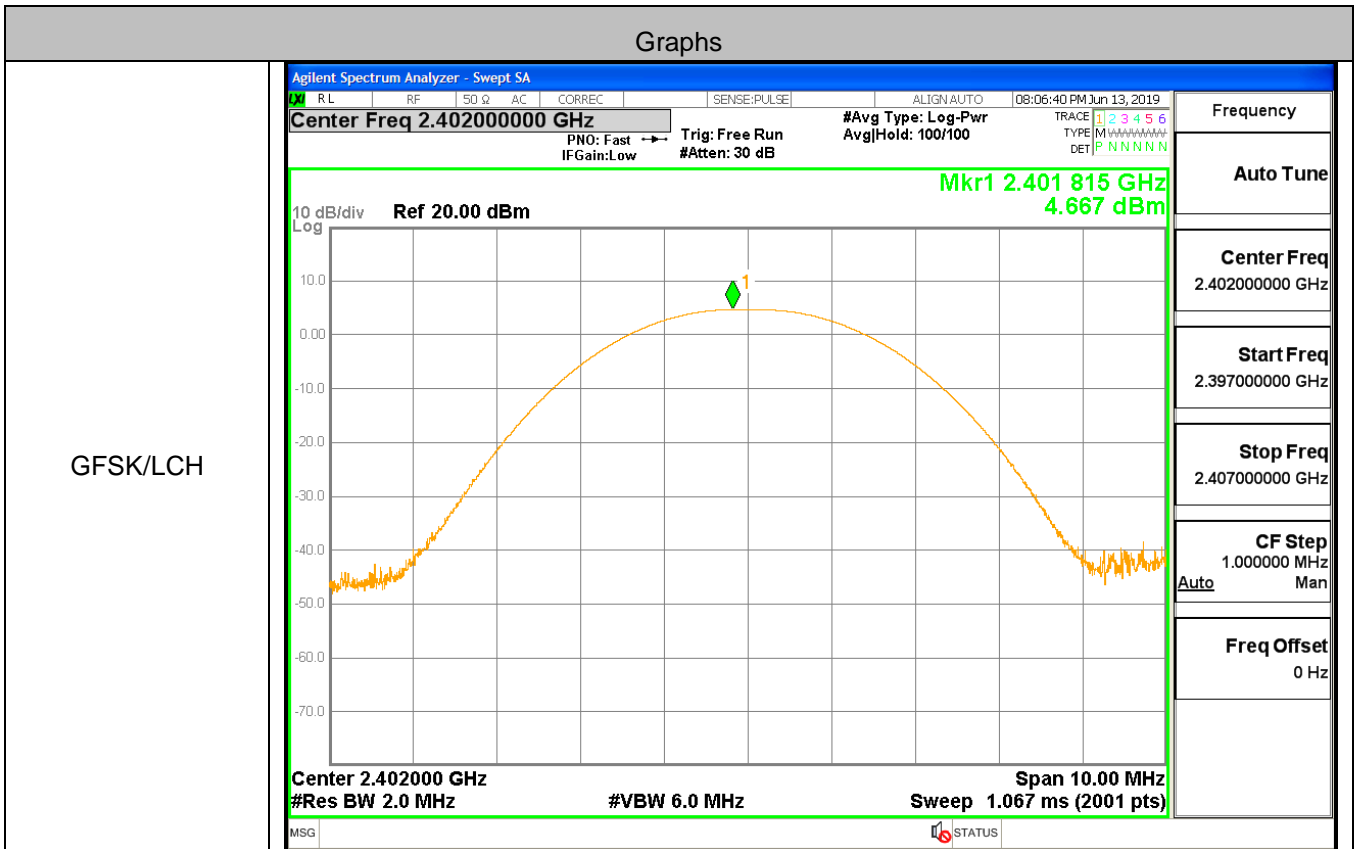


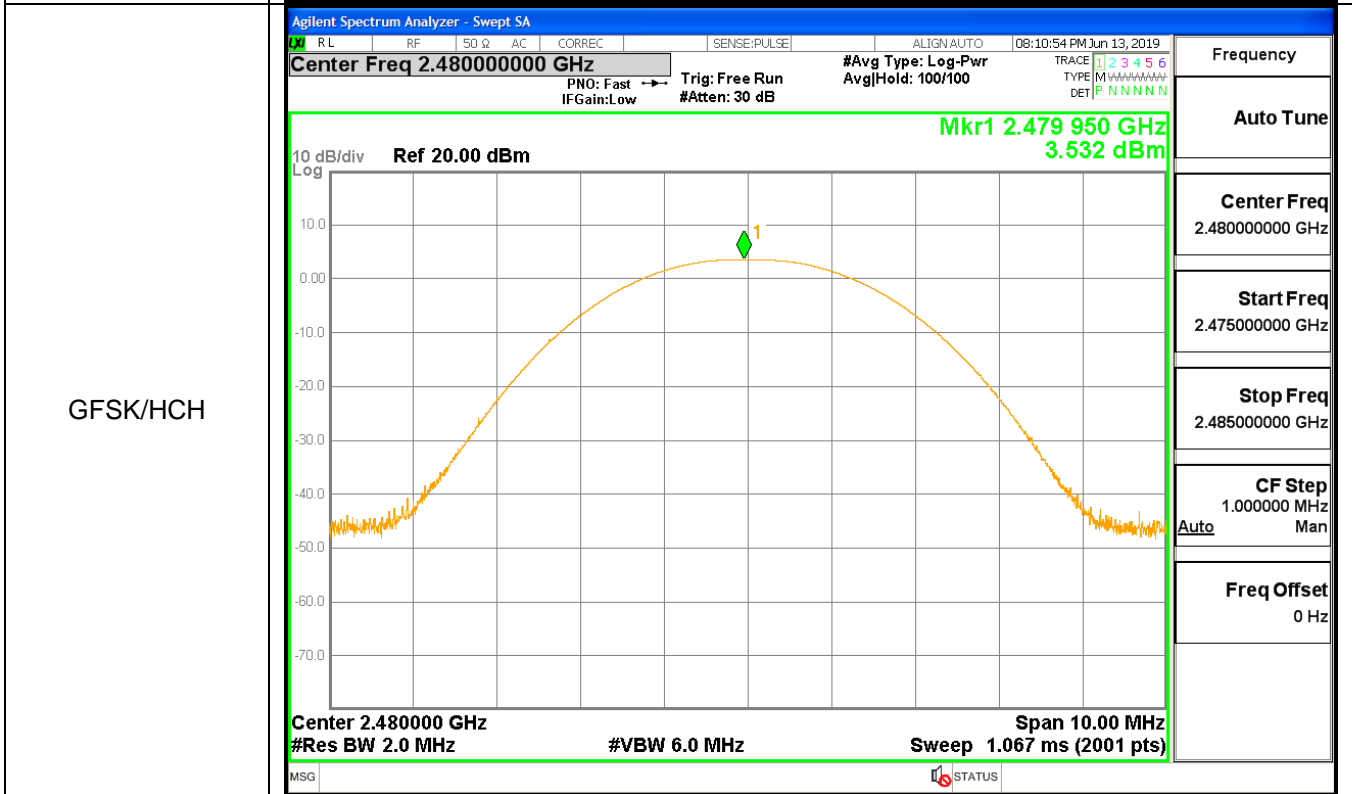
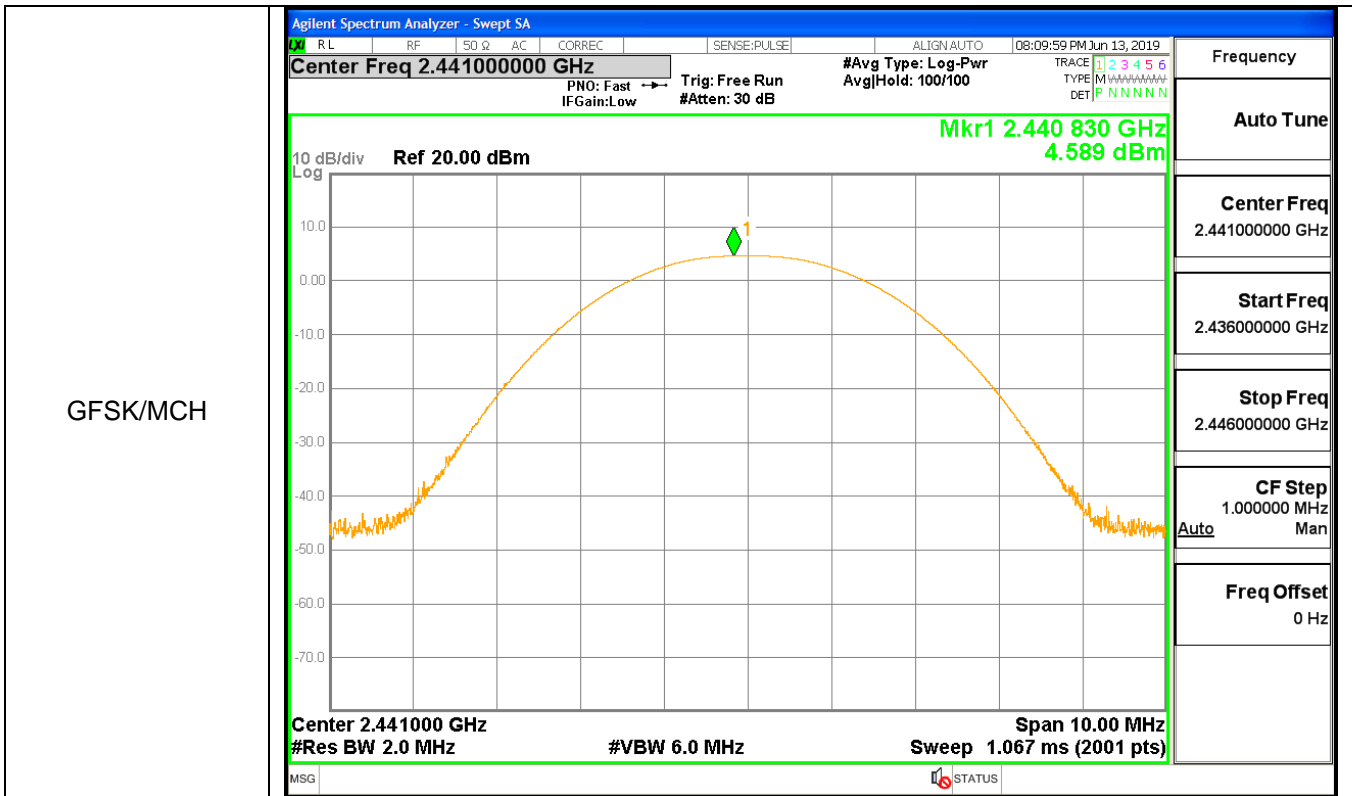


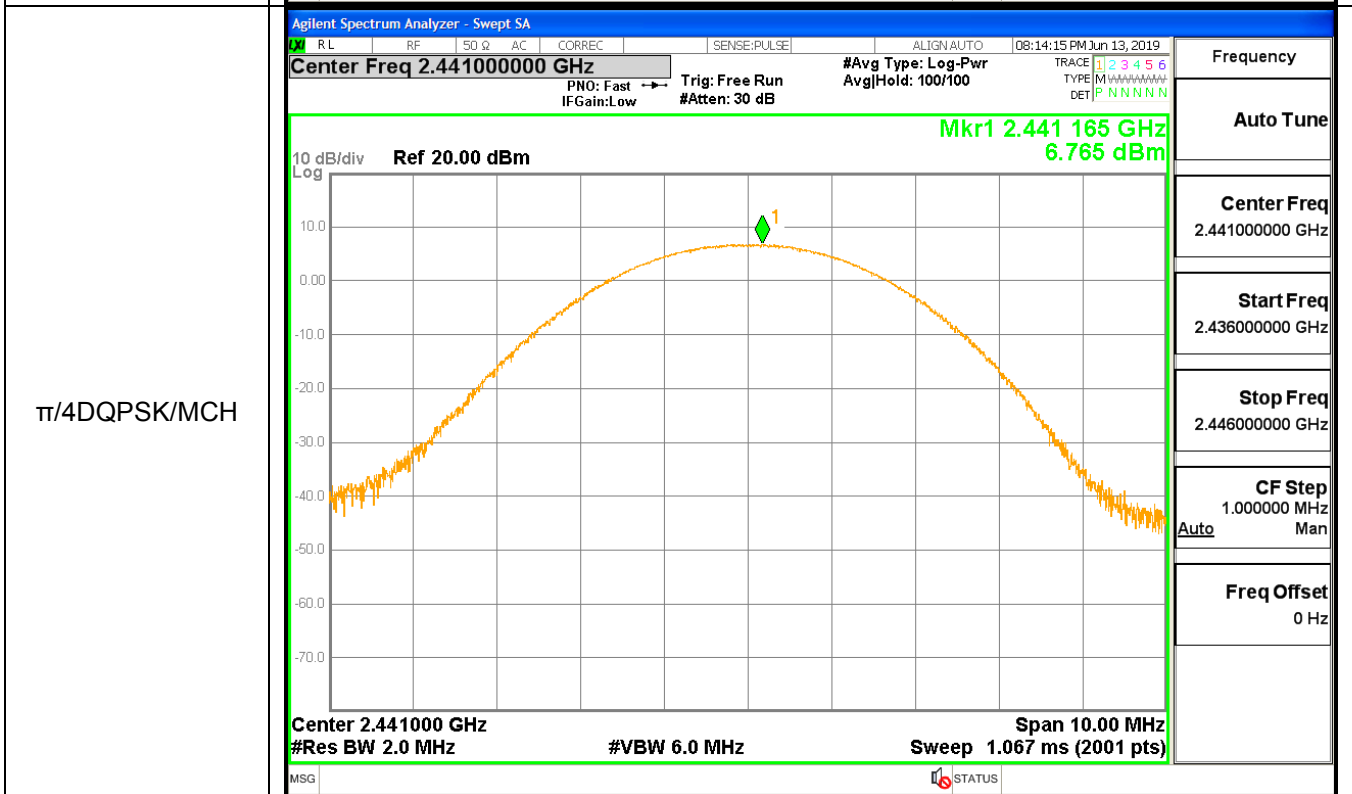
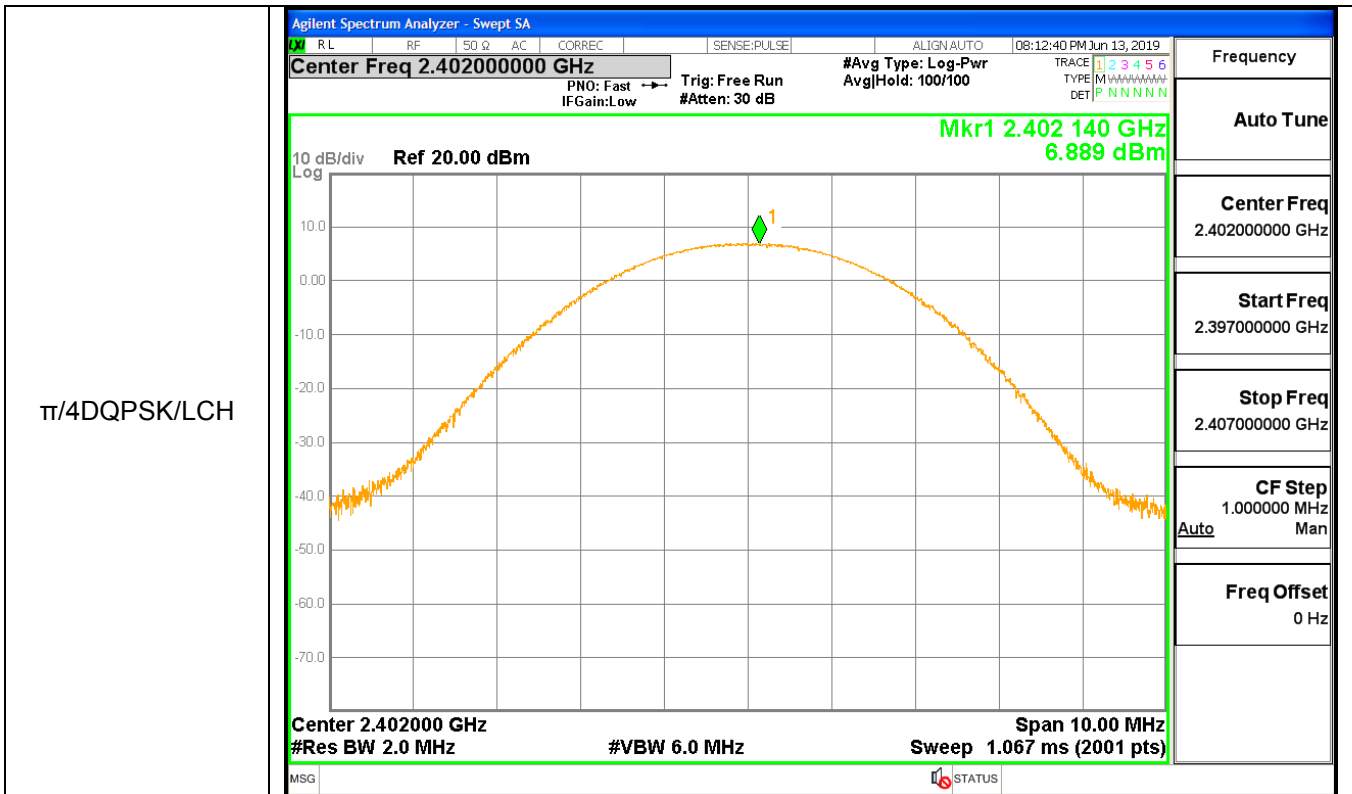
A.5 Conducted Peak Output Power

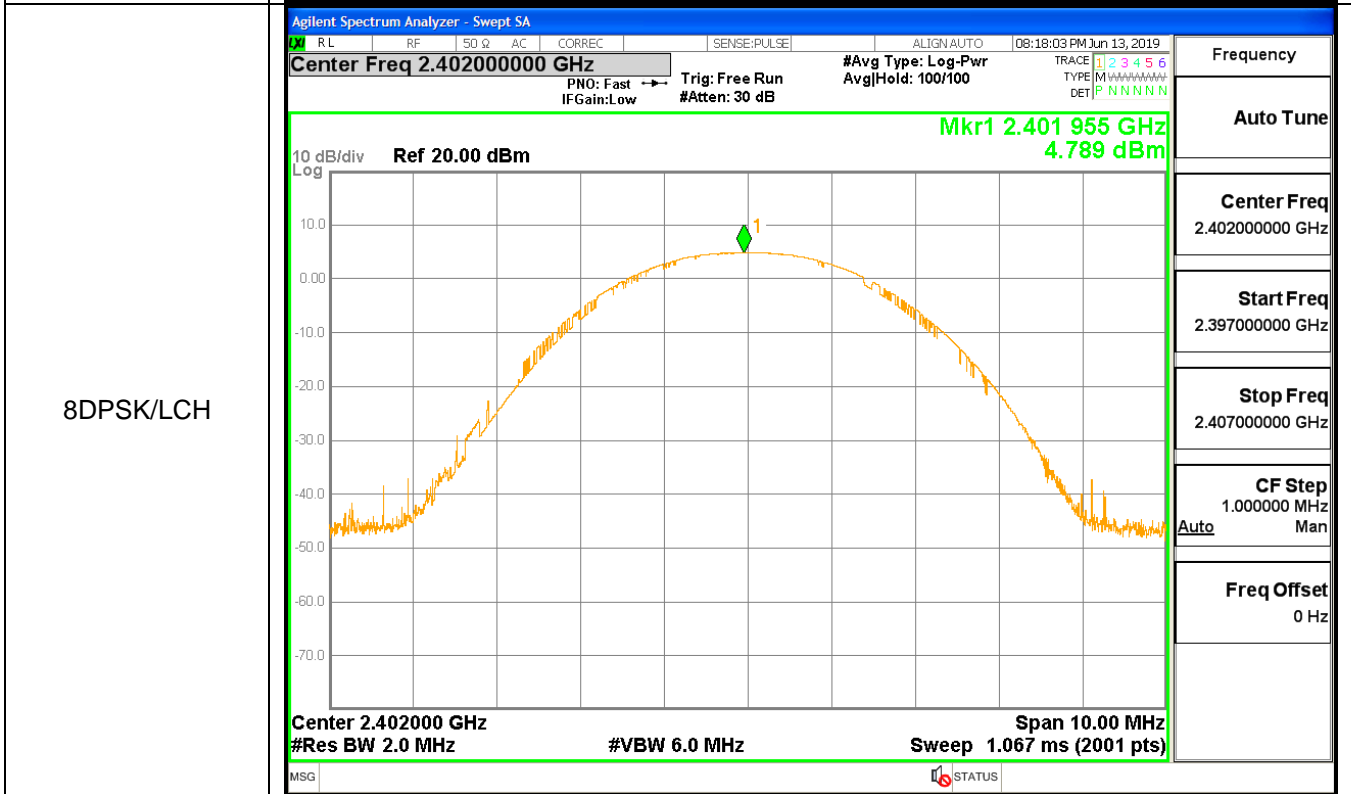
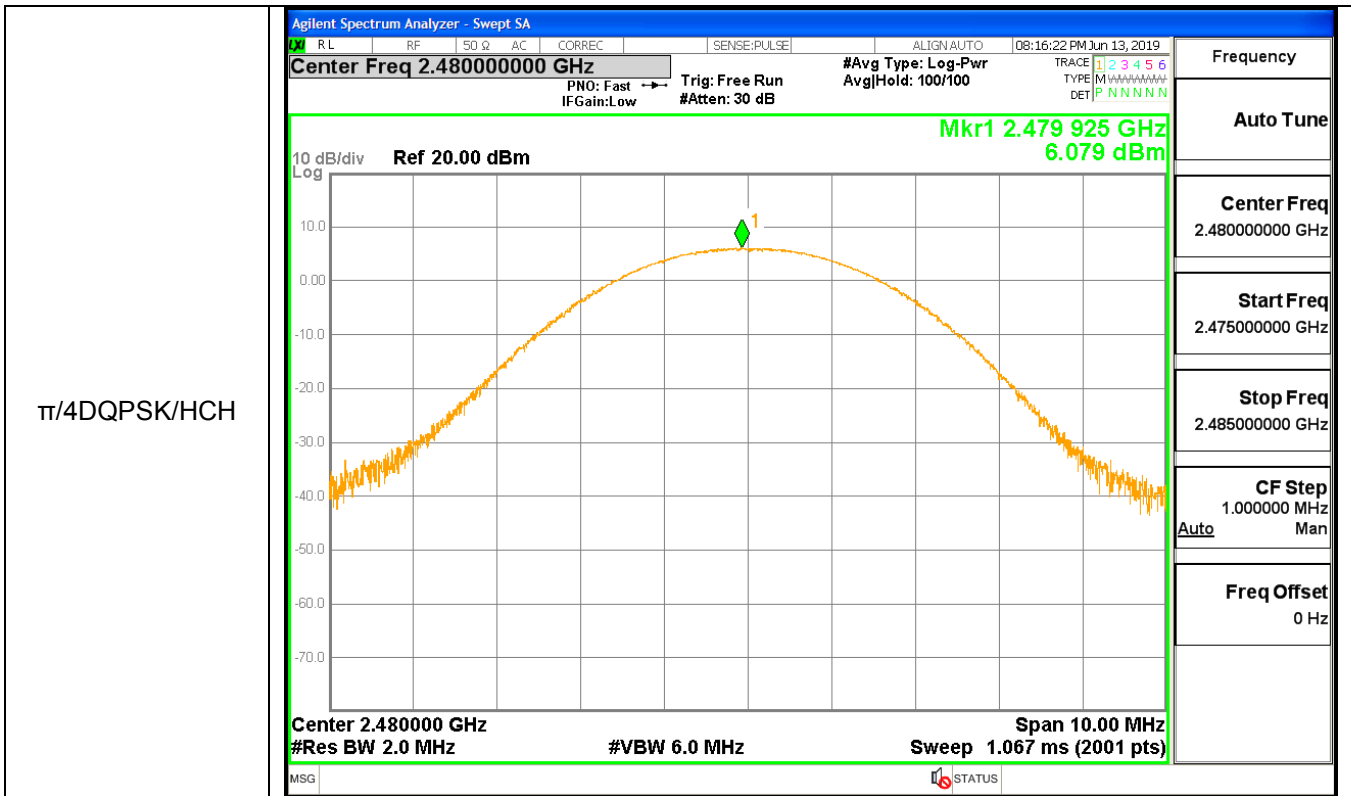
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	4.667	21	PASS
GFSK	MCH	4.589	21	PASS
GFSK	HCH	3.532	21	PASS
$\pi/4$ DQPSK	LCH	6.889	21	PASS
$\pi/4$ DQPSK	MCH	6.765	21	PASS
$\pi/4$ DQPSK	HCH	6.079	21	PASS
8DPSK	LCH	4.789	21	PASS
8DPSK	MCH	7.334	21	PASS
8DPSK	HCH	7.273	21	PASS

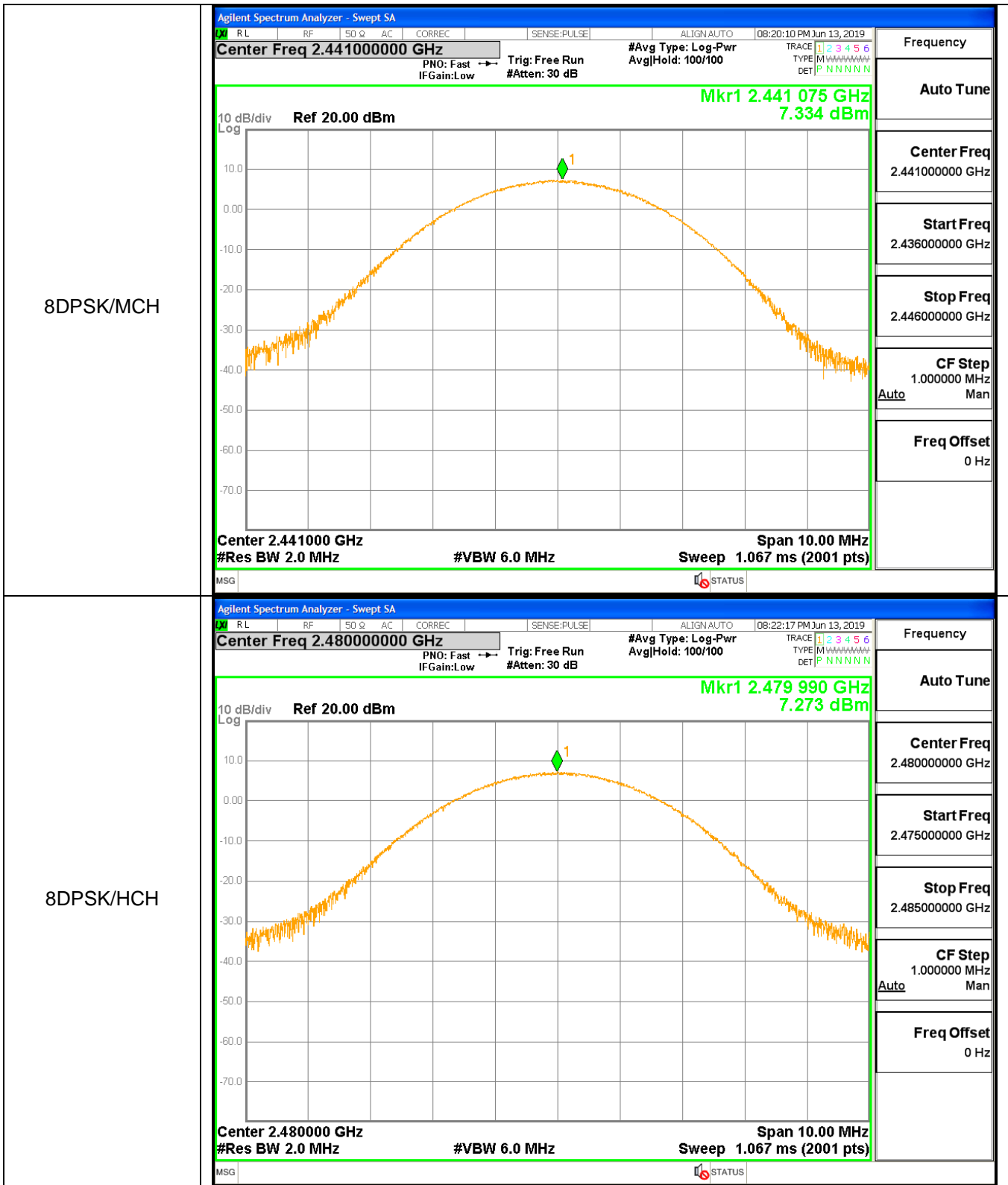
Test Graph









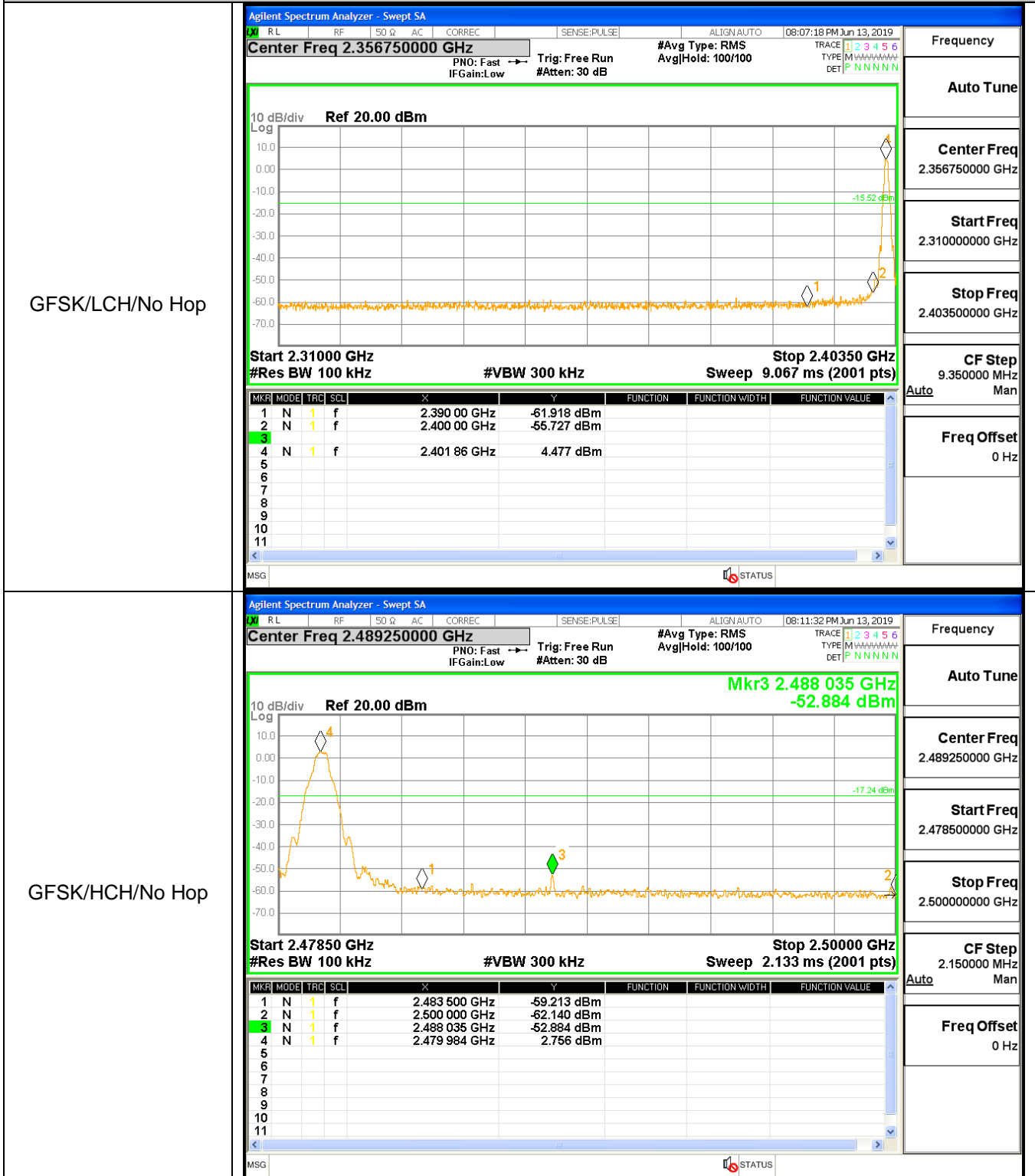


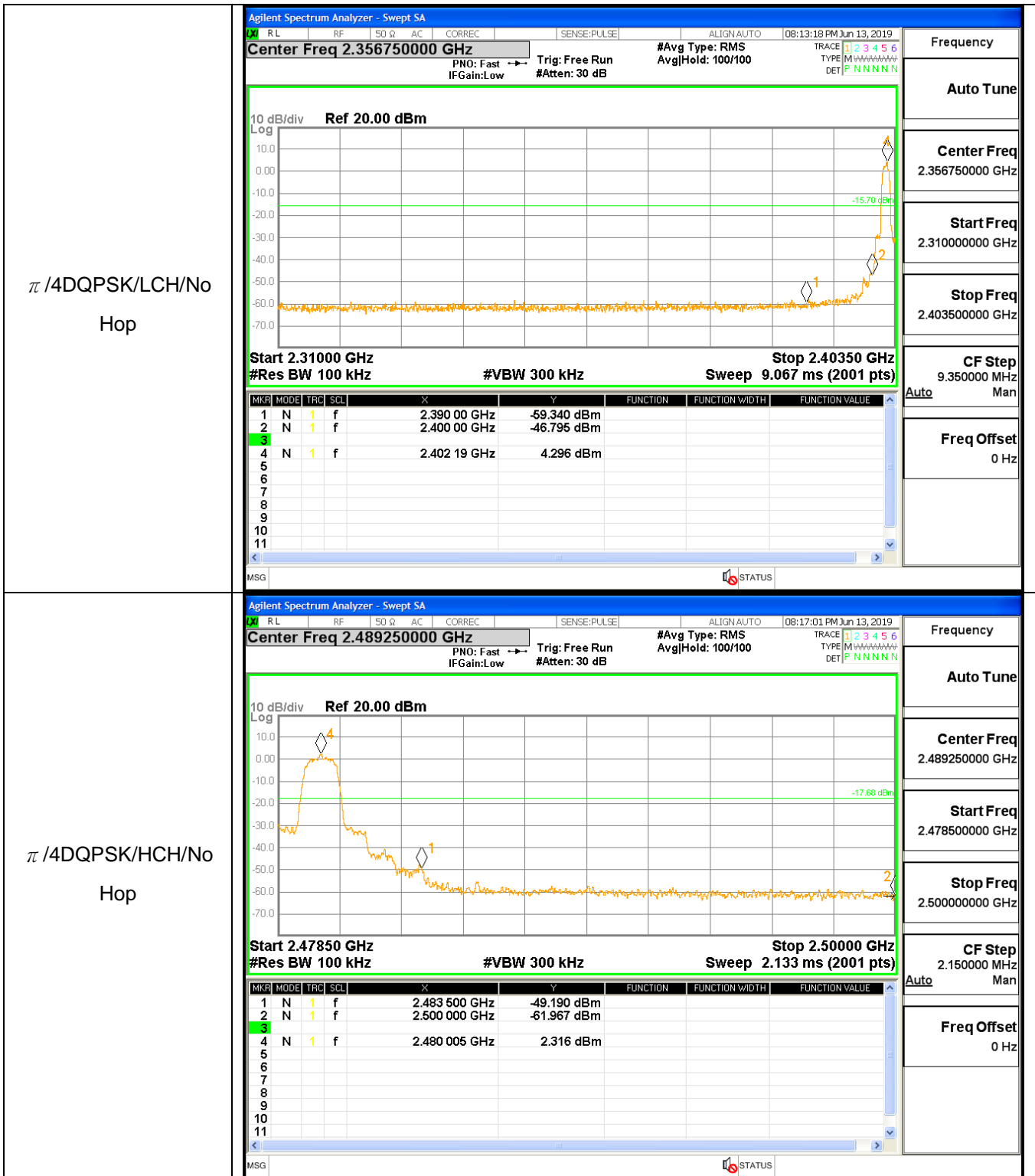
A.6 Band-edge for RF Conducted Emissions

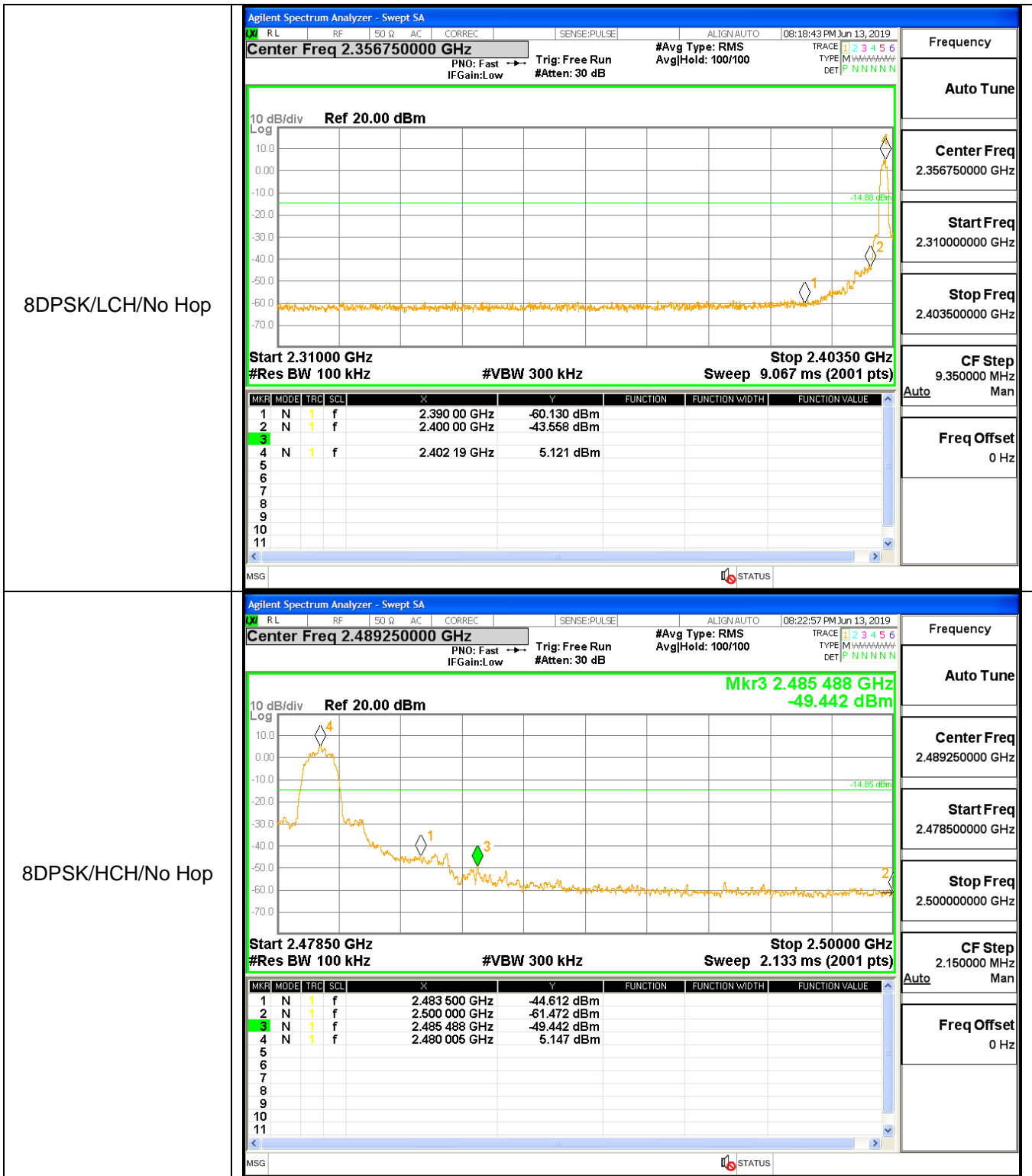
Type	Carrier Frequency(MHz)	Frequency(MHz)	Carrier Frequency Power [dBm]	Bandedge Peak(dBm)	Upper limit(dBm)	Conclusion
1DH5	2402	2400	4.477	-55.73	-15.523	Pass
1DH5	2480	2488.035	2.756	-52.884	-17.244	Pass
2DH5	2402	2400	4.296	-46.8	-15.704	Pass
2DH5	2480	2483.5	2.316	-49.19	-17.684	Pass
3DH5	2402	2400	5.121	-43.56	-14.879	Pass
3DH5	2480	2483.5	5.147	-44.61	-14.853	Pass
1DH5-Hopping	2402	2400	7.94	-58.83	-12.06	Pass
1DH5-Hopping	2480	2483.5	8.718	-59.1	-11.282	Pass
2DH5-Hopping	2402	2400	4.943	-58.23	-15.057	Pass
2DH5-Hopping	2480	2483.5	5.819	-58.11	-14.181	Pass
3DH5-Hopping	2402	2400	4.118	-57.82	-15.882	Pass
3DH5-Hopping	2480	2483.5	5.731	-58.1	-14.269	Pass

Test Graph

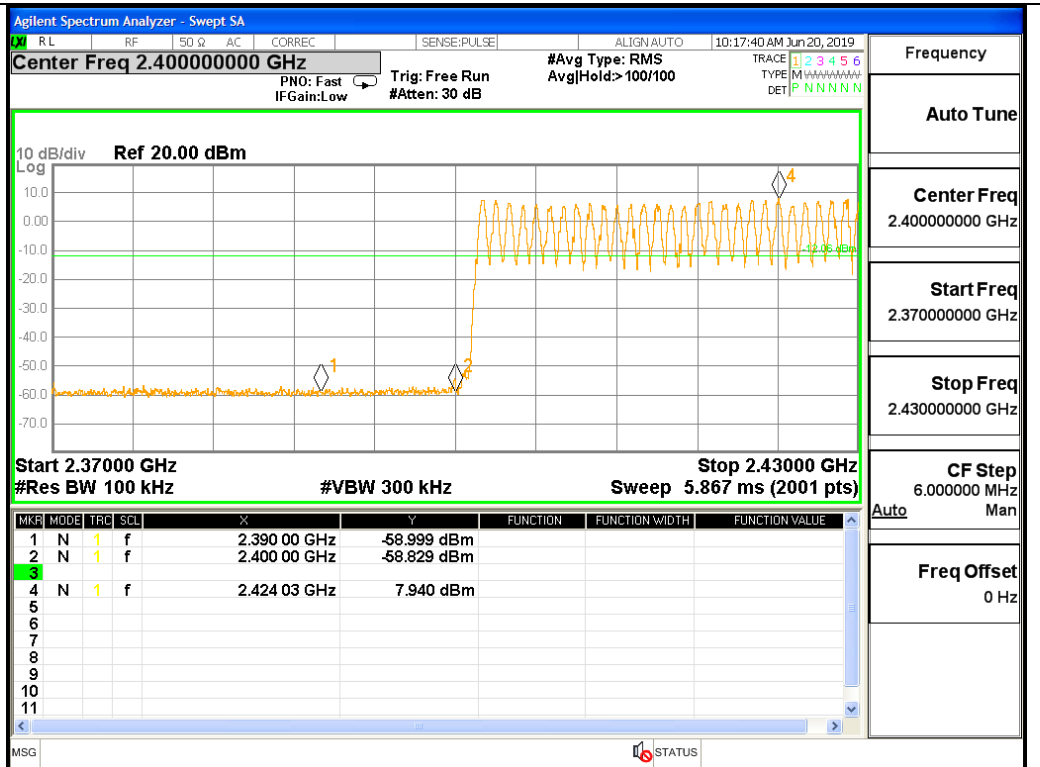
Graphs



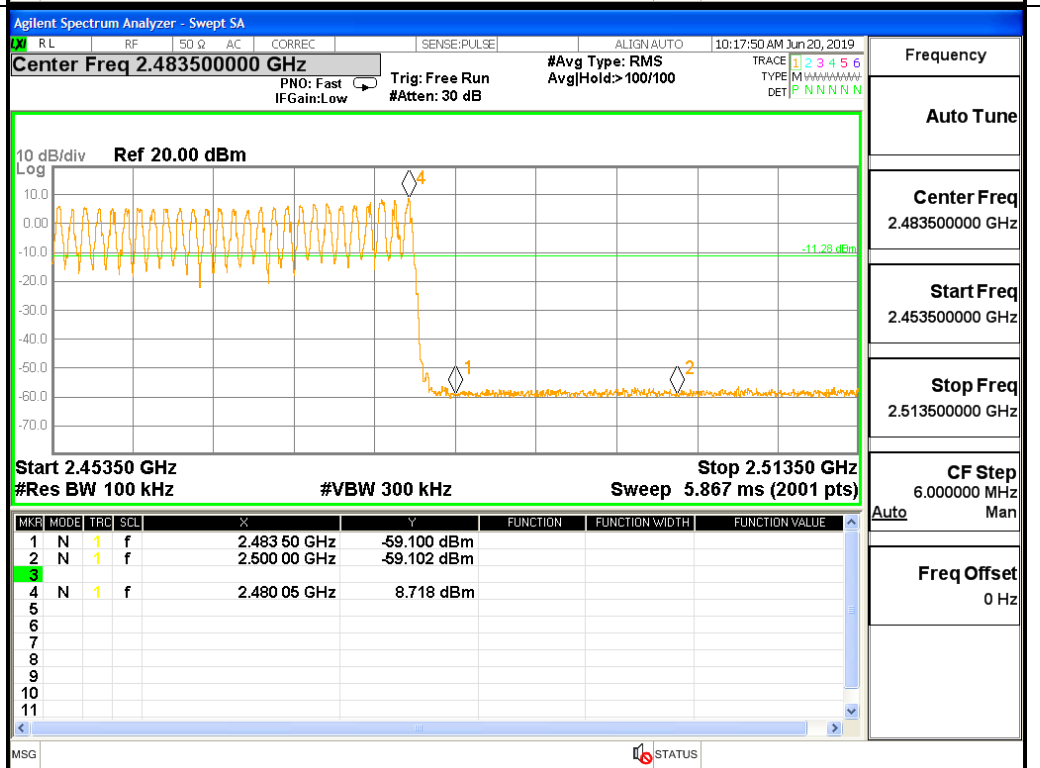


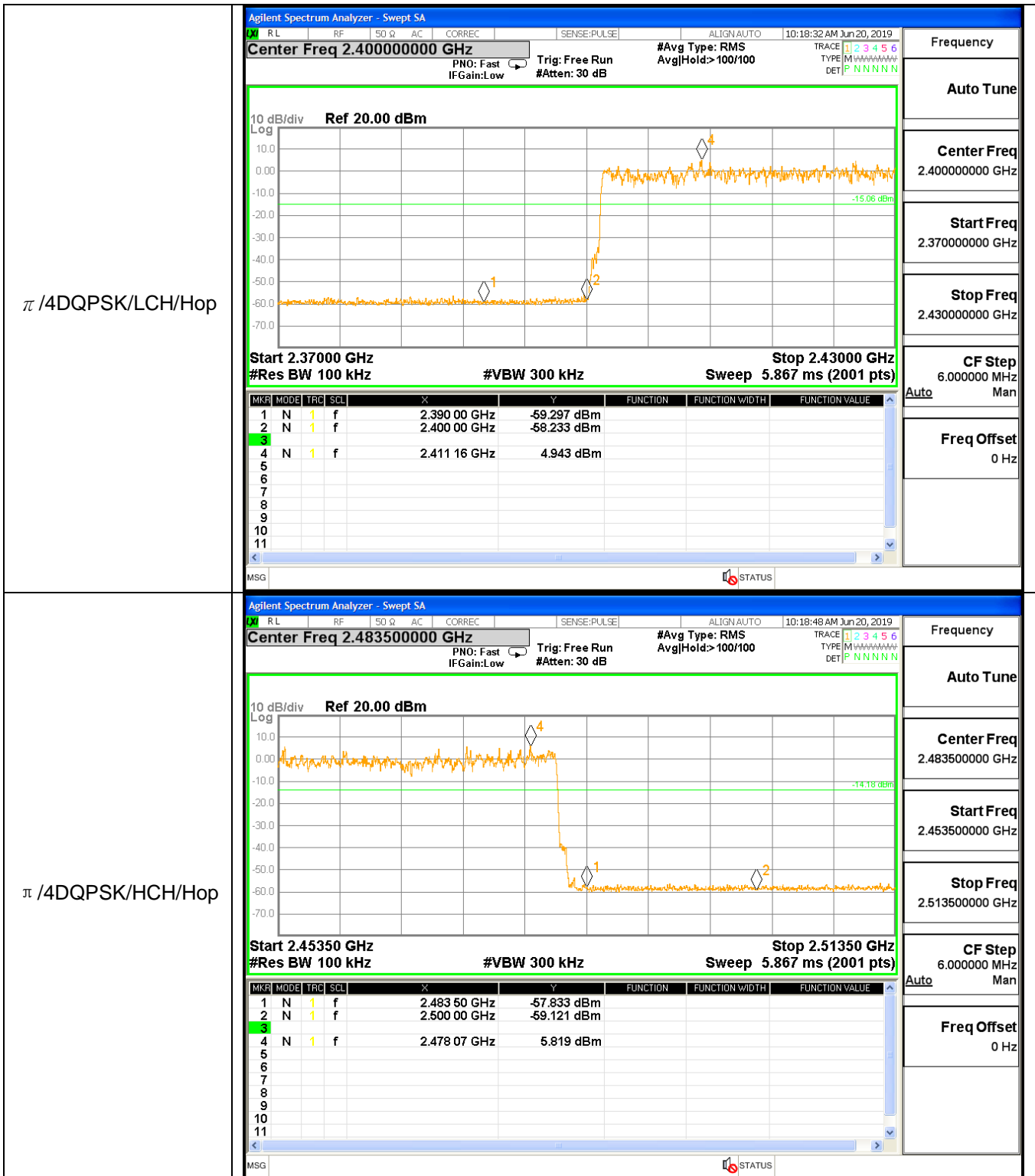


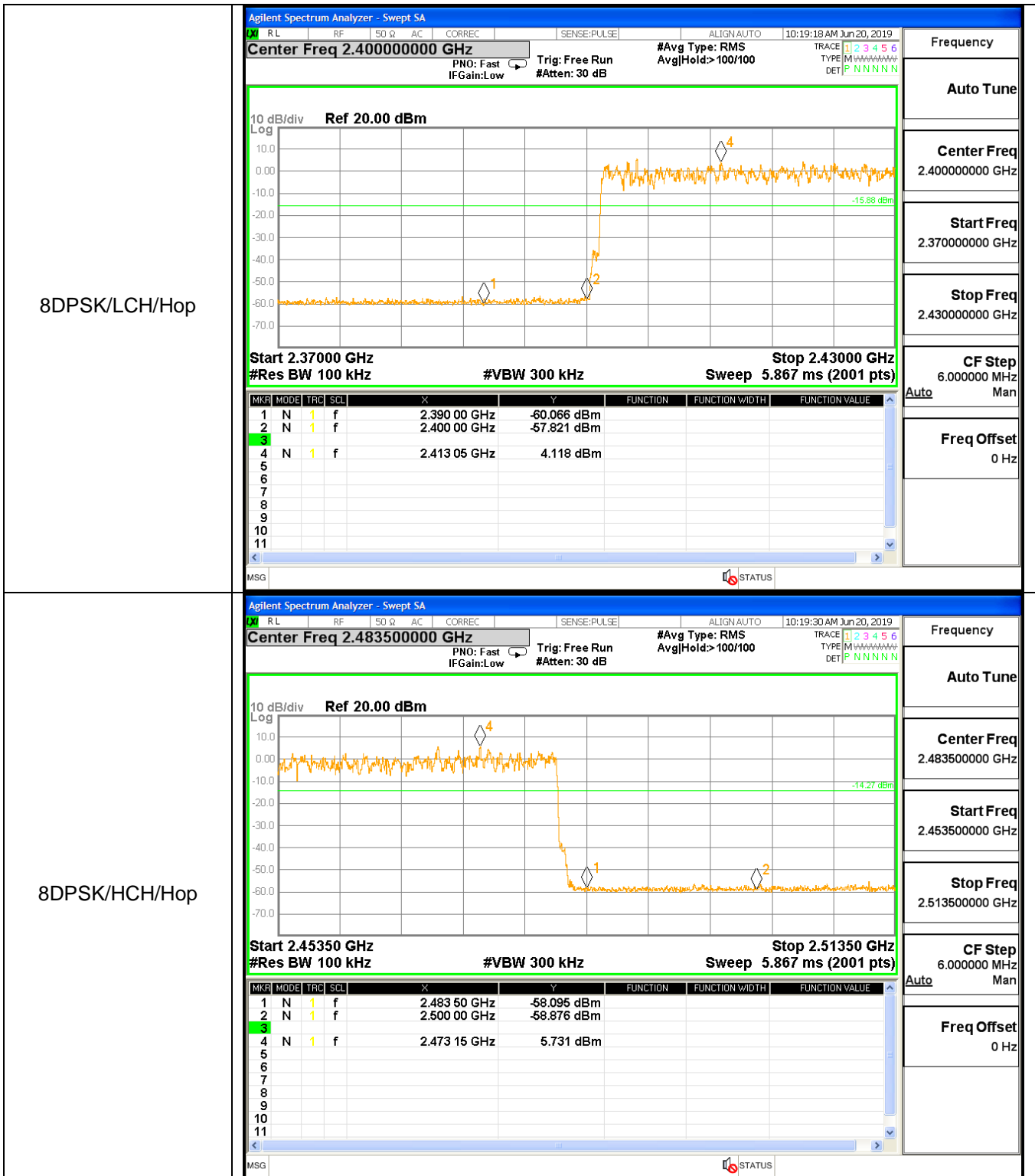
GFSK/LCH/Hop



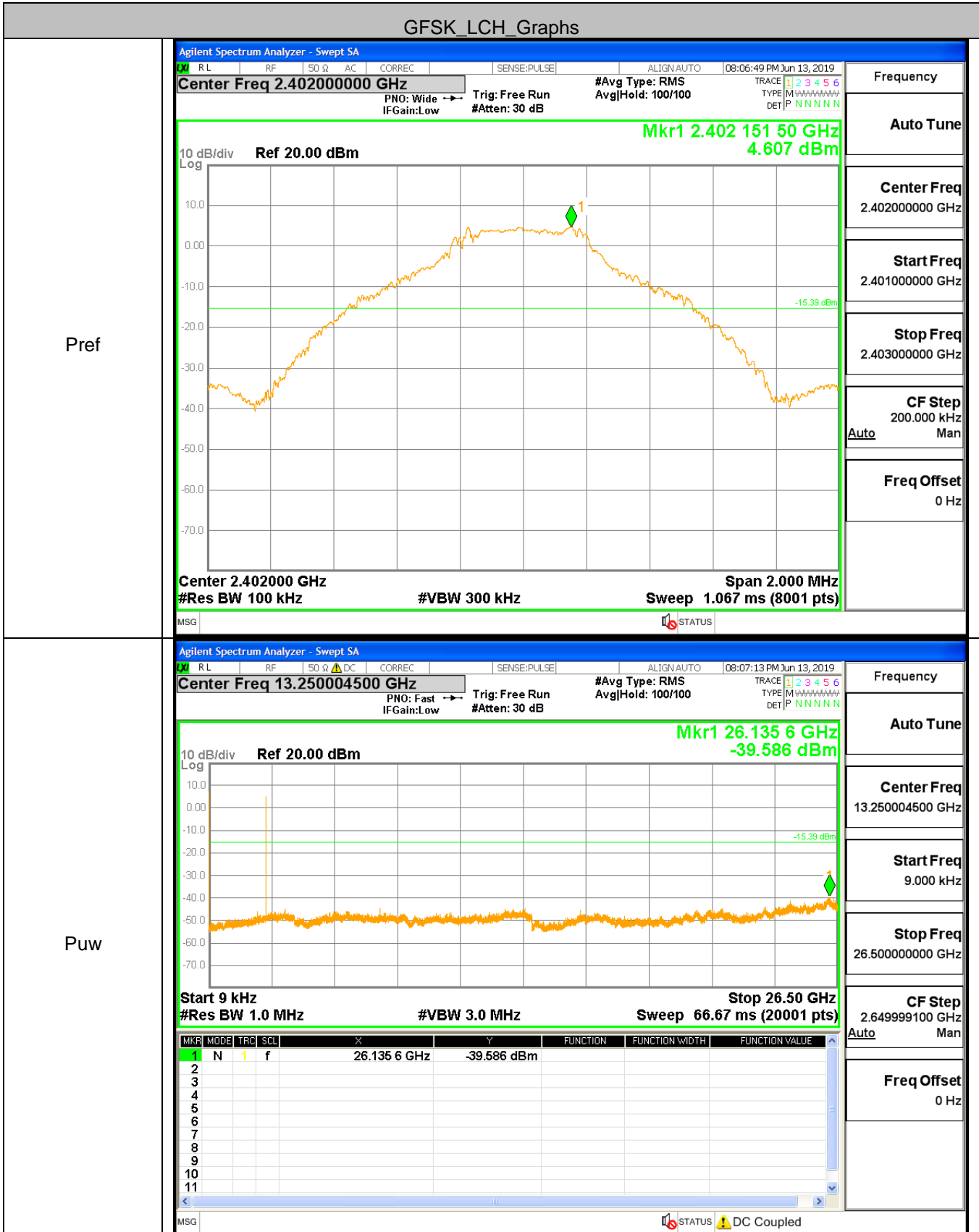
GFSK/HCH/Hop





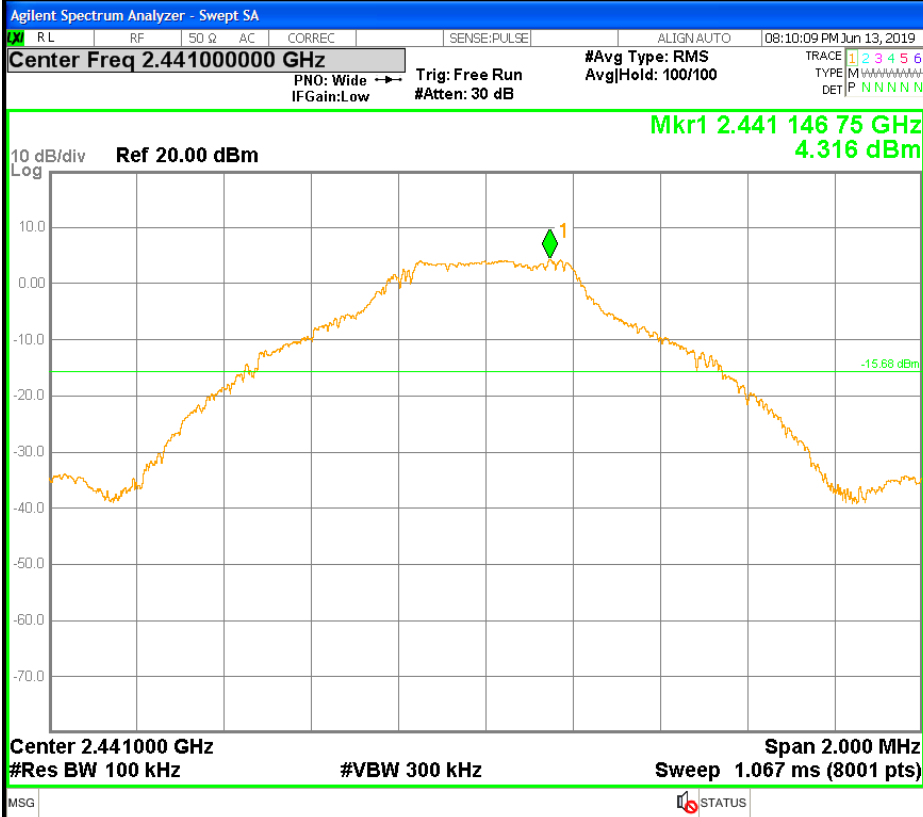


A.7 RF Conducted Spurious Emissions Test Graph



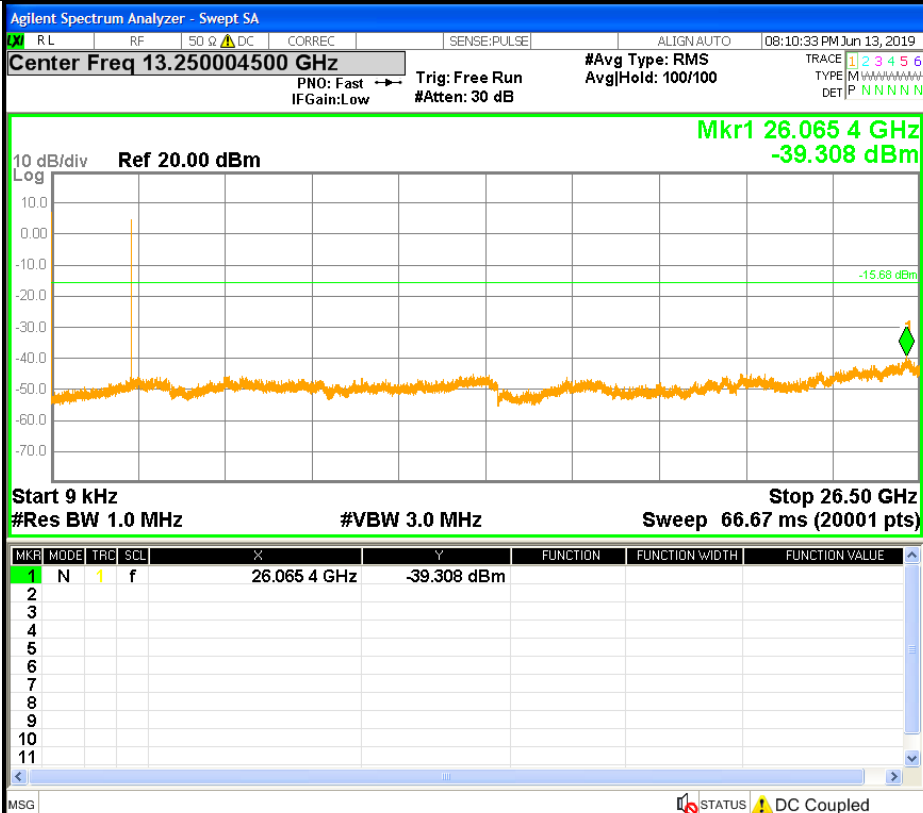
GFSK_MCH_Graphs

Pref



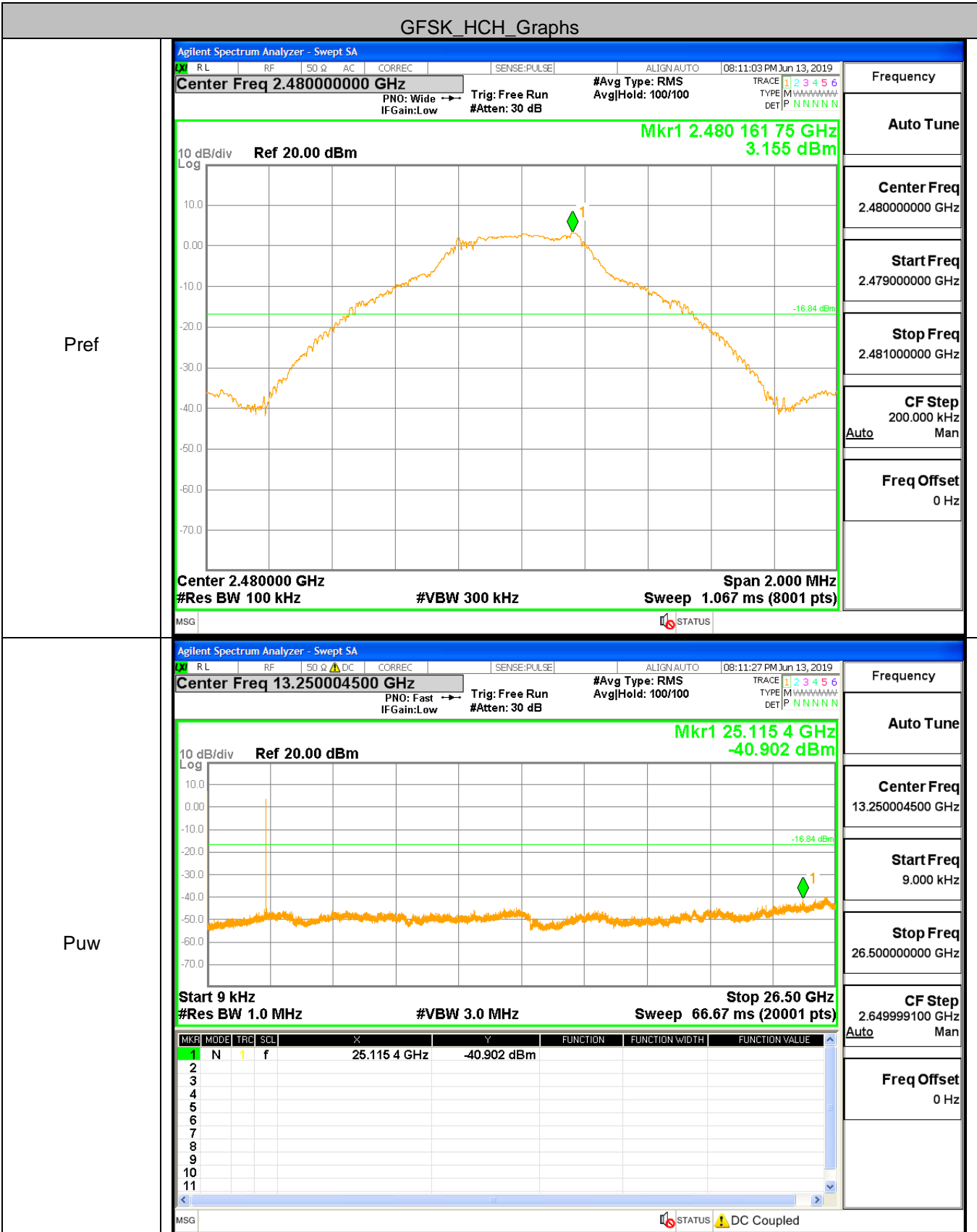
Frequency
Auto Tune
Center Freq 2.441000000 GHz
Start Freq 2.440000000 GHz
Stop Freq 2.442000000 GHz
CF Step 200.000 kHz Auto Man
Freq Offset 0 Hz

Puw

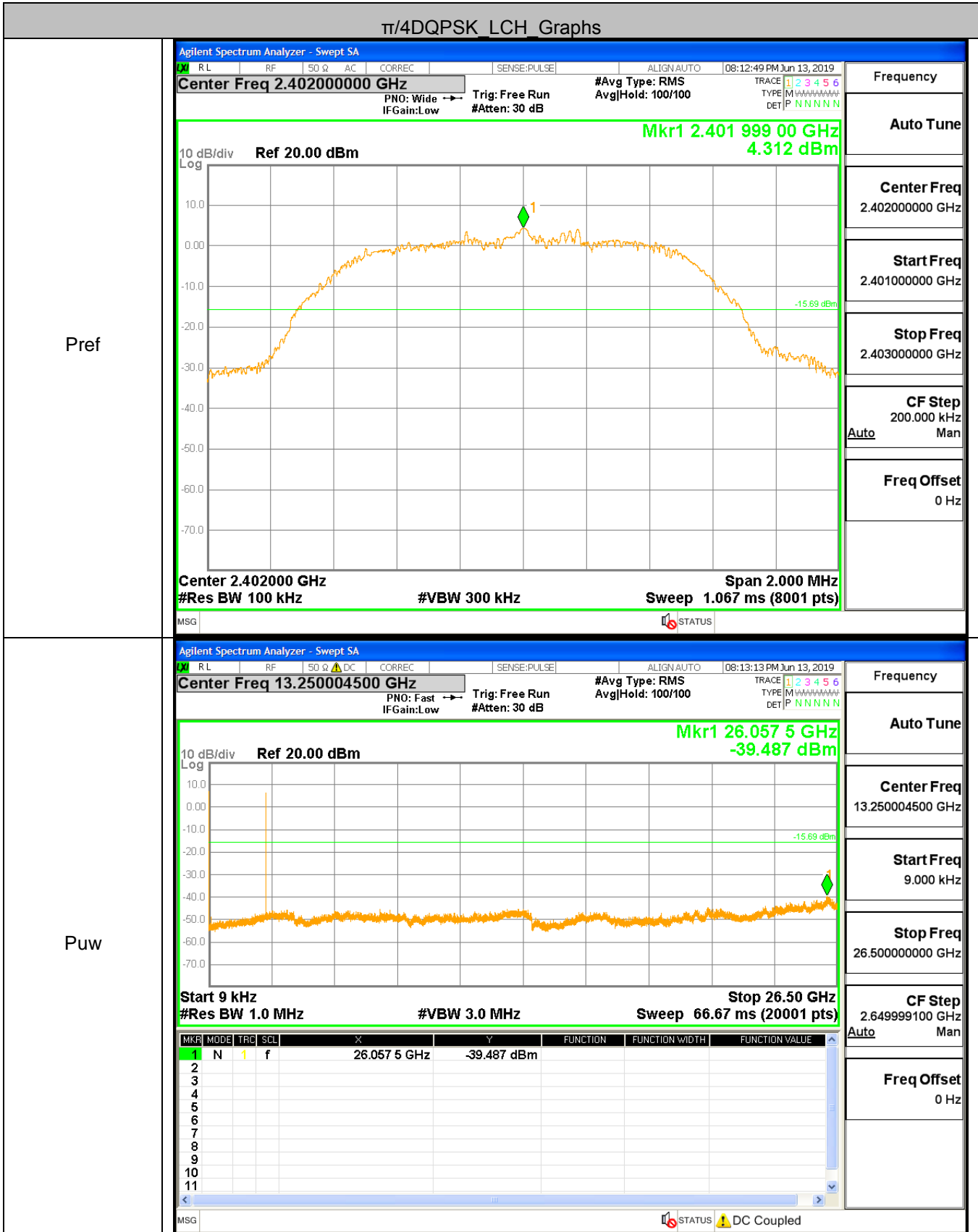


Frequency
Auto Tune
Center Freq 13.250004500 GHz
Start Freq 9.000 kHz
Stop Freq 26.500000000 GHz
CF Step 2.649999100 GHz Auto Man
Freq Offset 0 Hz

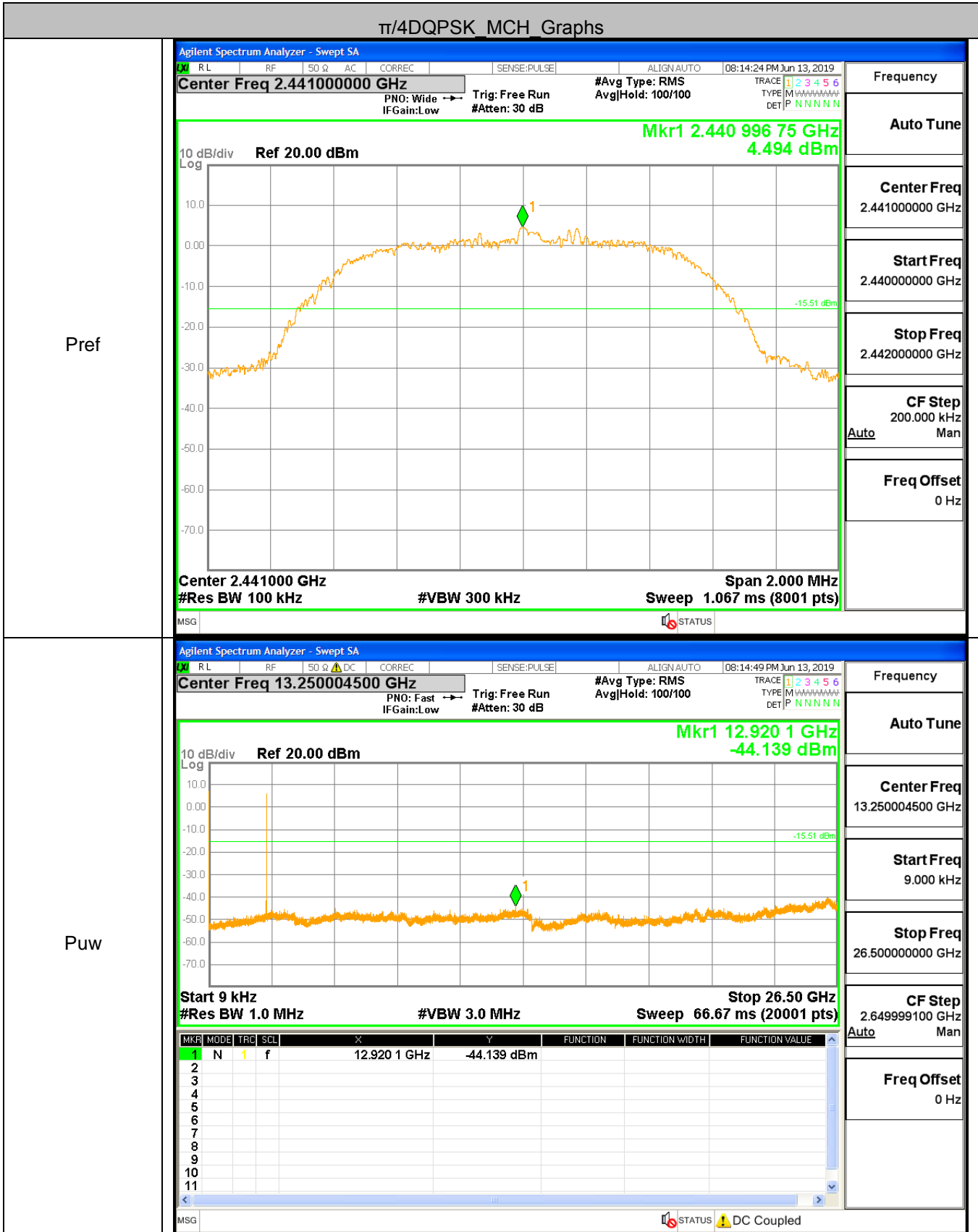
GFSK_HCH_Graphs



$\pi/4$ DQPSK LCH Graphs

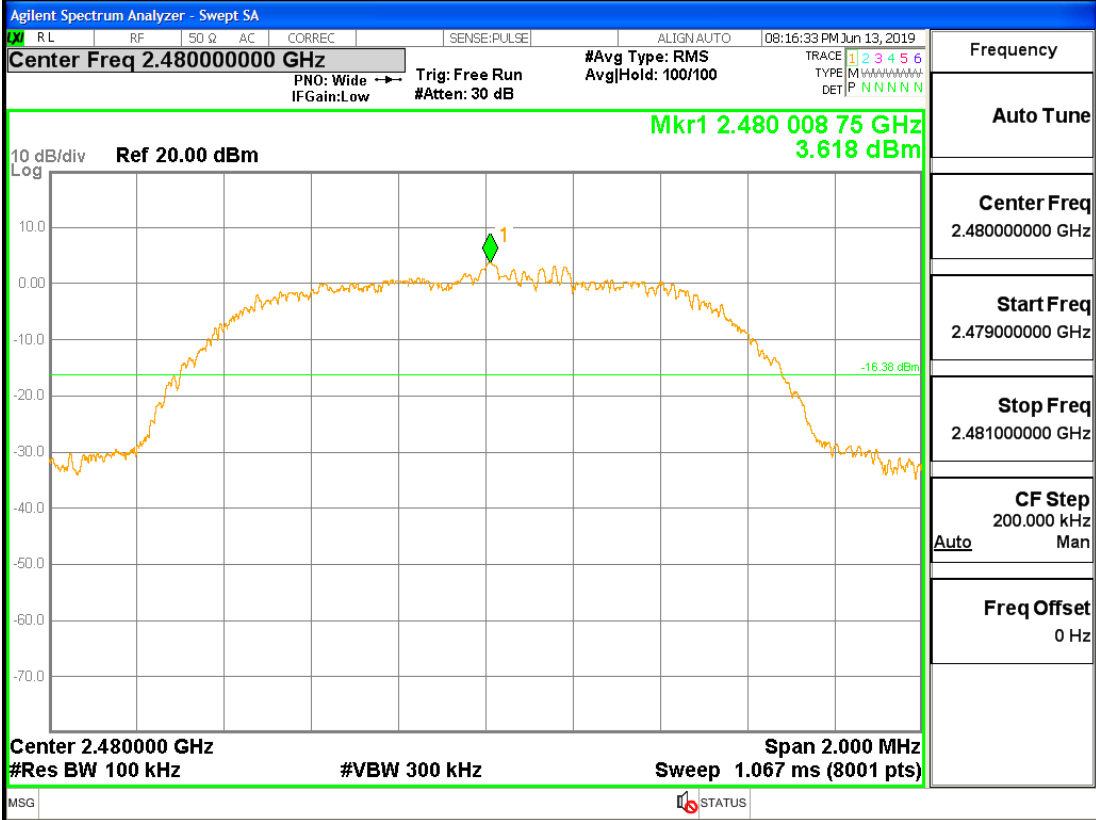


π/4DQPSK MCH Graphs

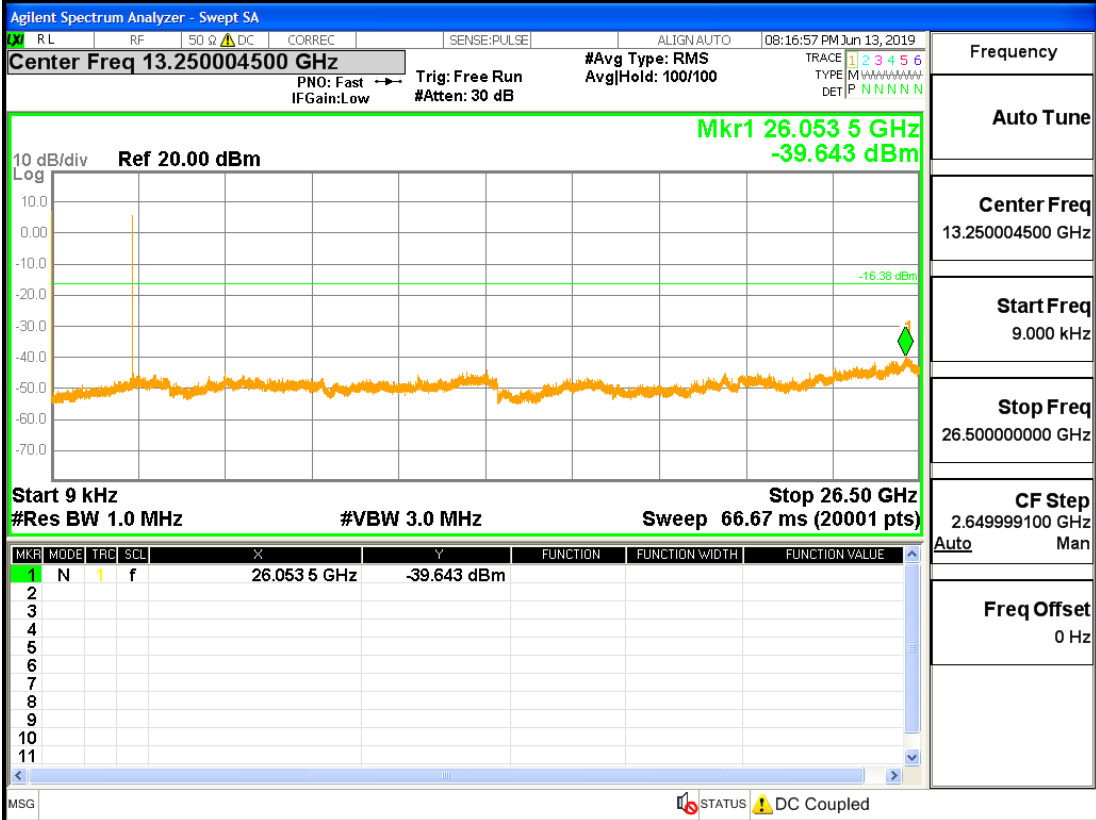


$\pi/4$ DQPSK HCH Graphs

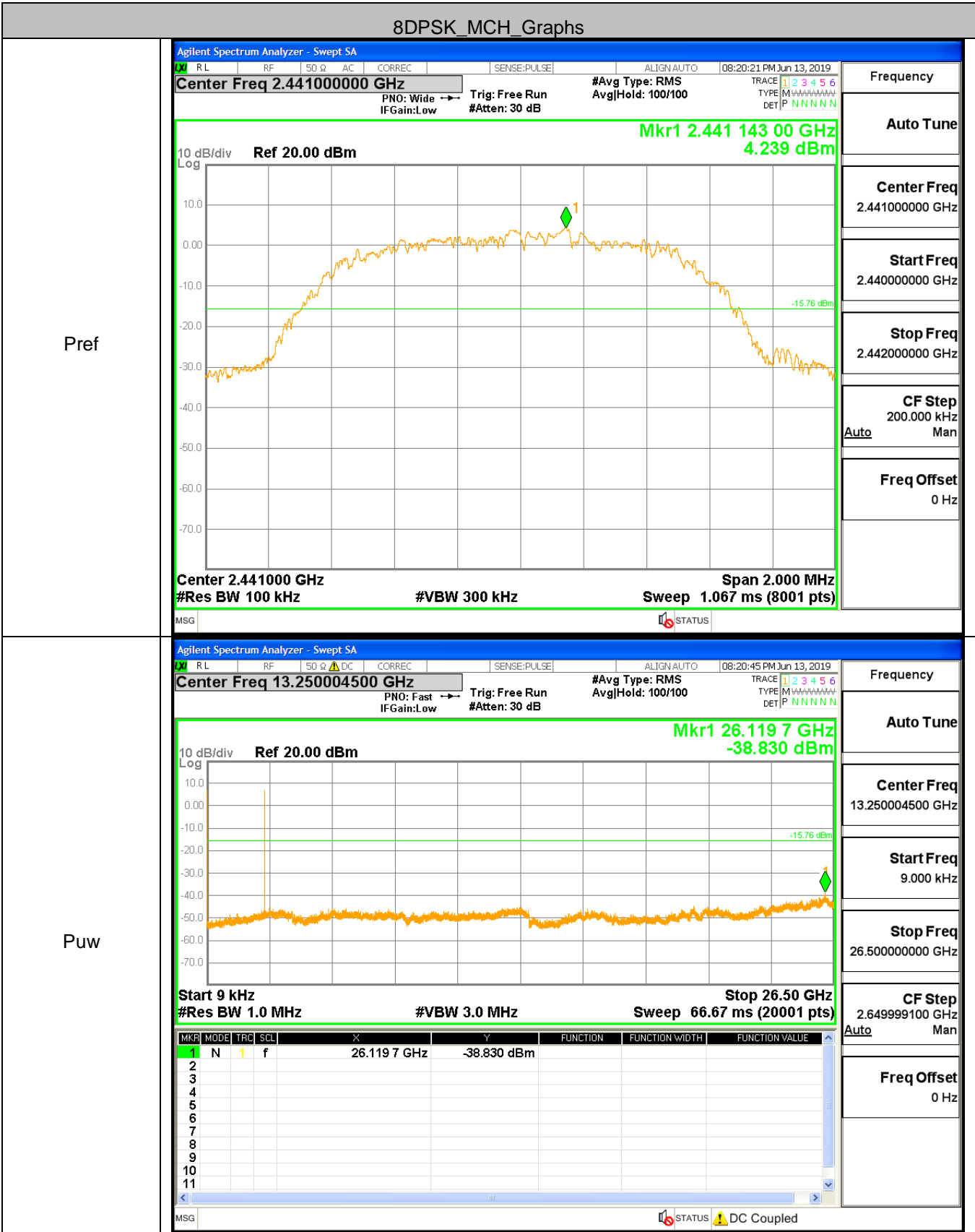
Pref



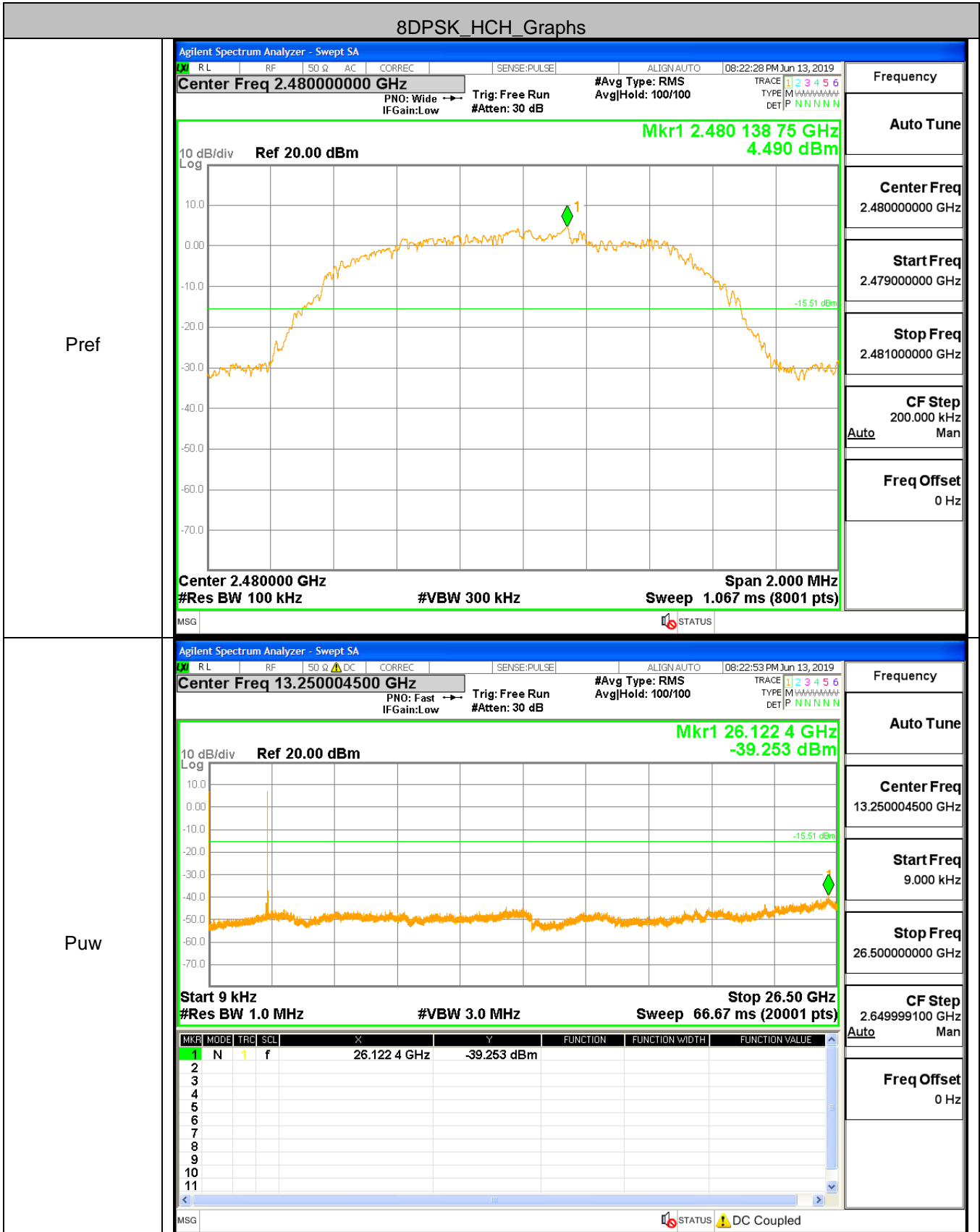
Puw



8DPSK_MCH_Graphs



8DPSK_HCH_Graphs

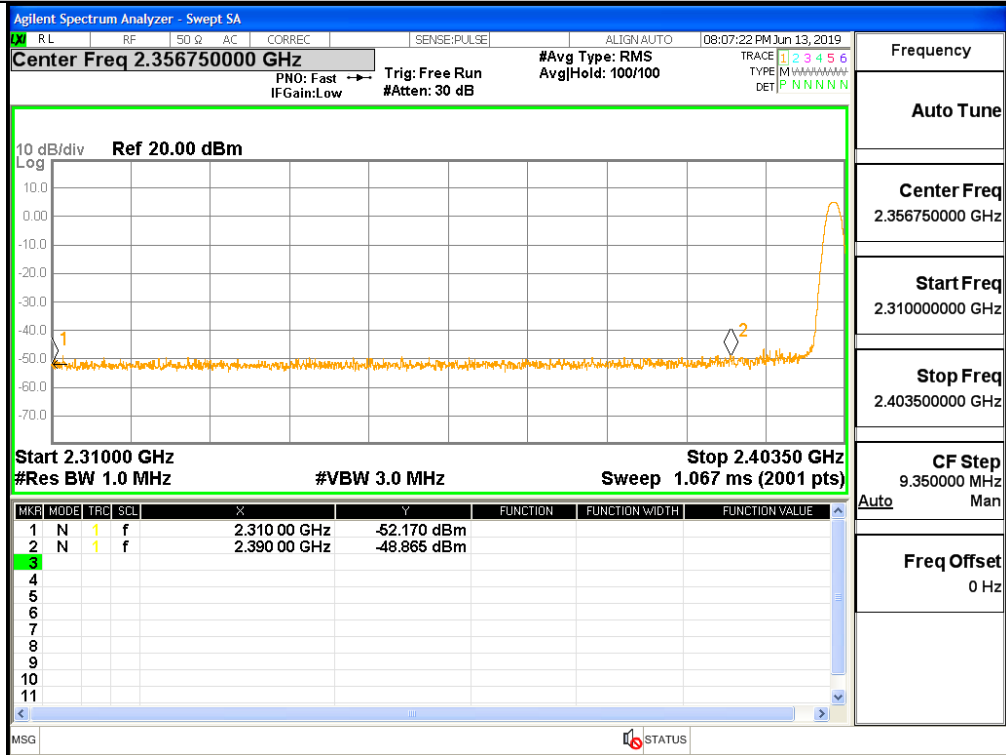


A.8 Restrict-band band-edge measurements

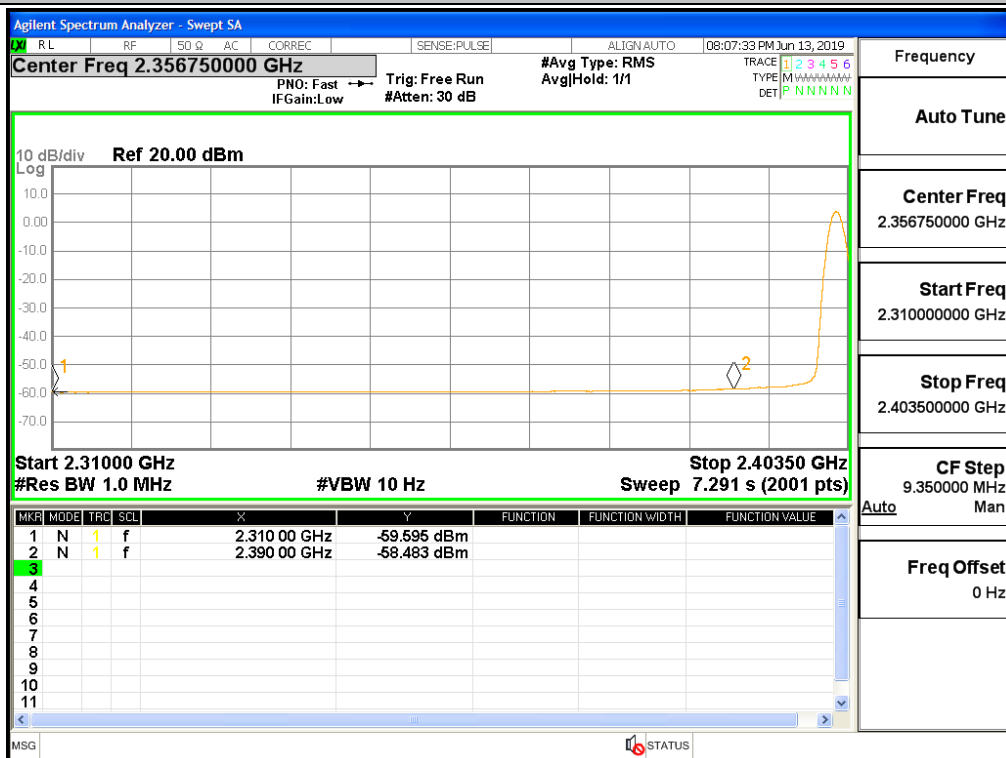
Type	Carrier Frequency (MHz)	Frequency(M Hz)	Gain	Ground Factor	Peak Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
1DH5	2402	2390.00	2.00	0.00	-48.86	48.34	74	Pass
1DH5	2480	2492.48	2.00	0.00	-46.91	50.29	74	Pass
2DH5	2402	2390.00	2.00	0.00	-50.69	46.51	74	Pass
2DH5	2480	2483.50	2.00	0.00	-36.79	60.41	74	Pass
3DH5	2402	2390.00	2.00	0.00	-50.81	46.39	74	Pass
3DH5	2480	2487.79	2.00	0.00	-45.60	51.61	74	Pass

Type	Carrier Frequency (MHz)	Frequency(M Hz)	Gain	Ground Factor	Average Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
1DH5	2402	2390.00	2.00	0.00	-58.48	38.72	54	Pass
1DH5	2480	2483.50	2.00	0.00	-54.77	42.43	54	Pass
2DH5	2402	2390.00	2.00	0.00	-58.00	39.20	54	Pass
2DH5	2480	2483.50	2.00	0.00	-49.40	47.80	54	Pass
3DH5	2402	2390.00	2.00	0.00	-57.87	39.33	54	Pass
3DH5	2480	2483.50	2.00	0.00	-54.85	42.35	54	Pass

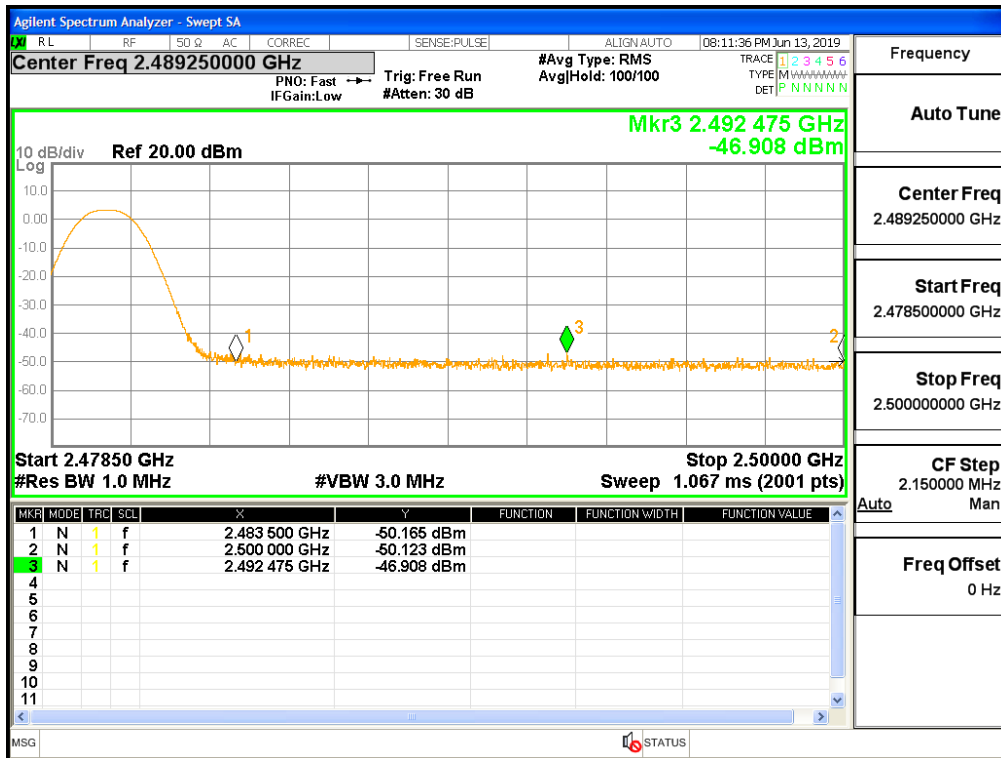
Restrict-band band-edge measurements_2402_PEAK_DH5



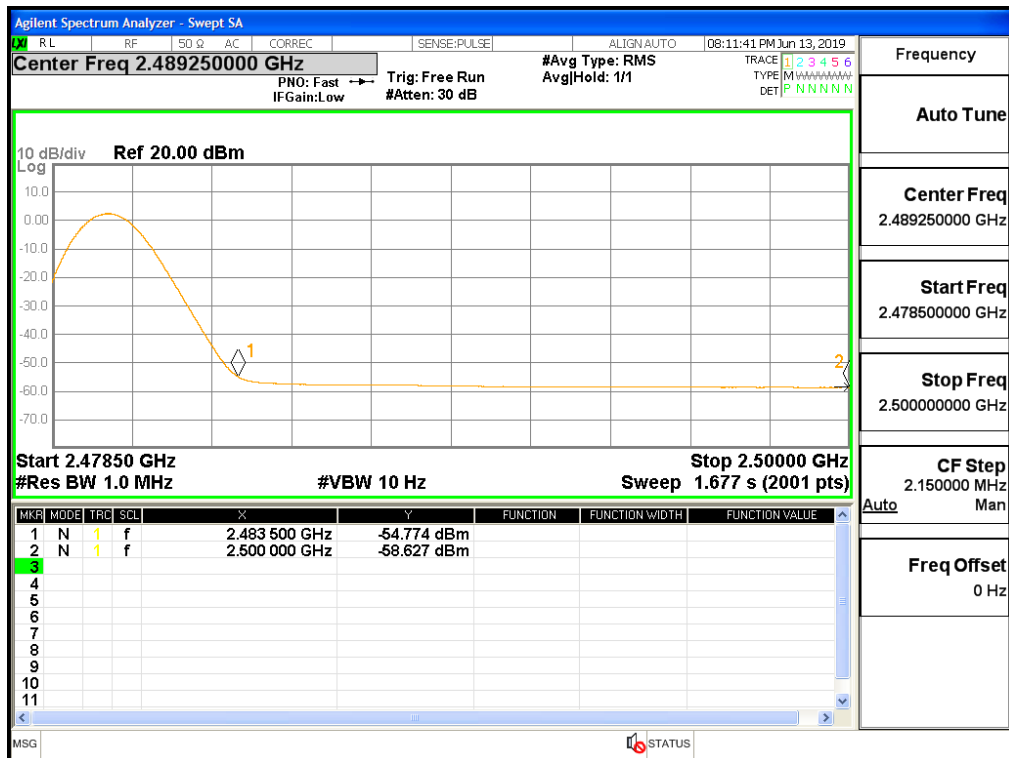
Restrict-band band-edge measurements_2402_AV_DH5



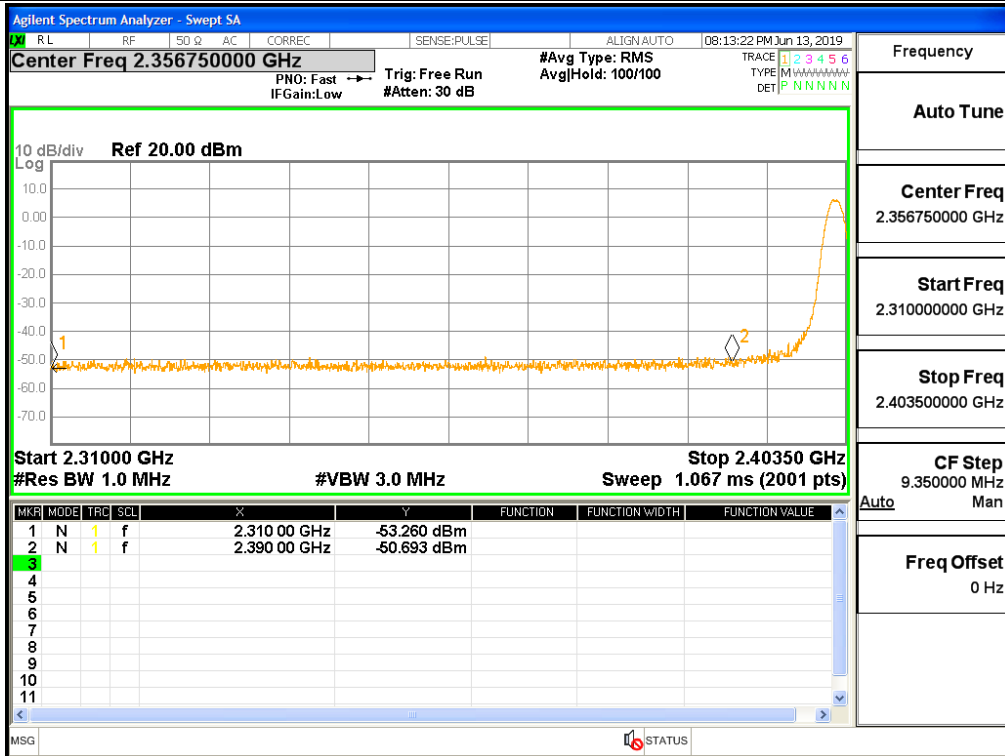
Restrict-band band-edge measurements_2480_PEAK_DH5



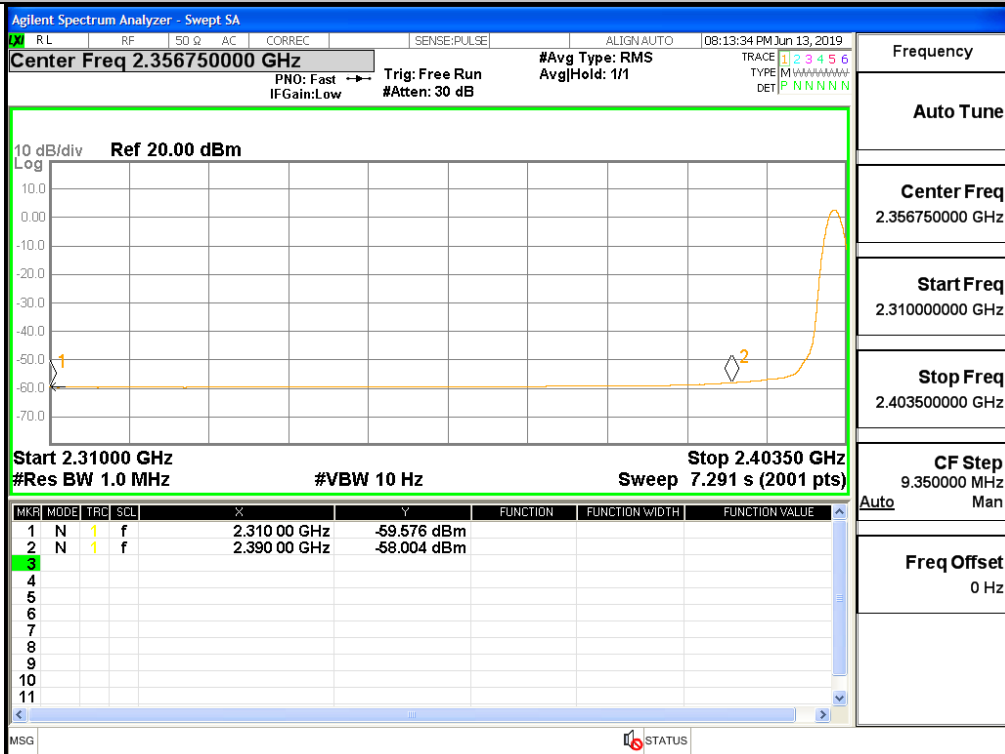
Restrict-band band-edge measurements_2480_AV_DH5



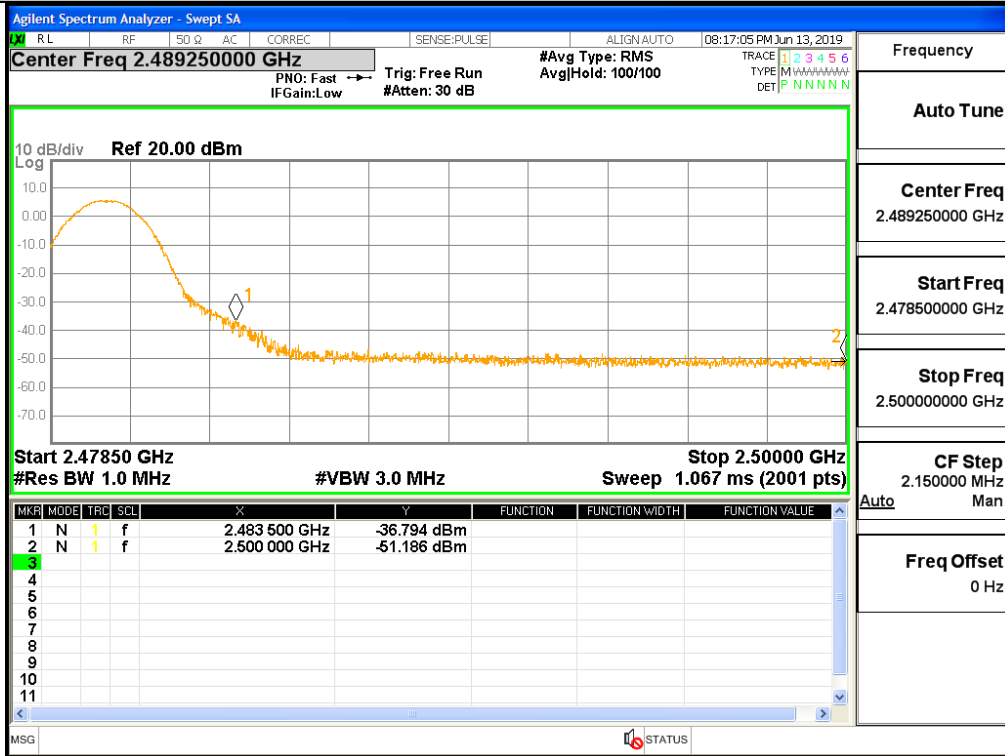
Restrict-band band-edge measurements_2402_PEAK_2DH5



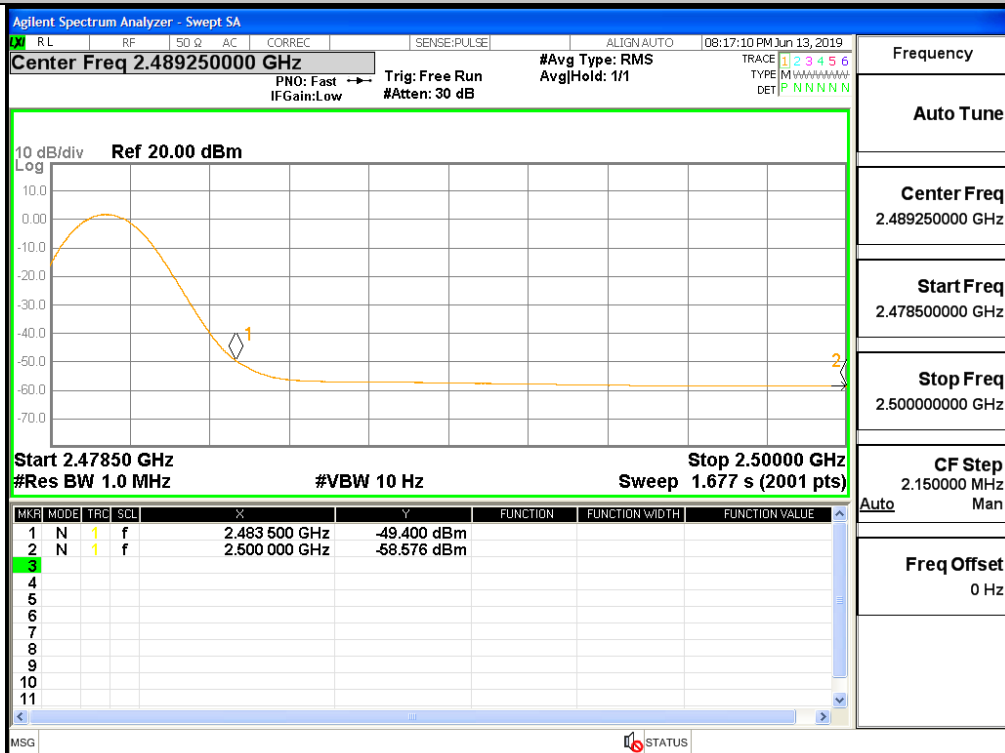
Restrict-band band-edge measurements_2402_AV_2DH5



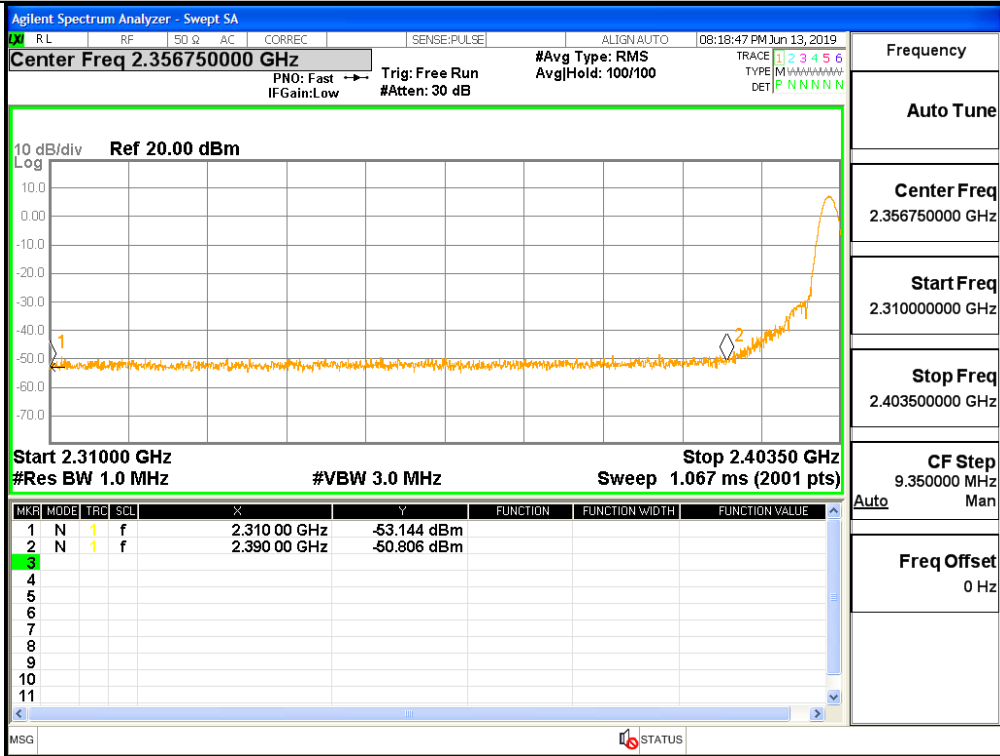
Restrict-band band-edge measurements_2480_PEAK_2DH5



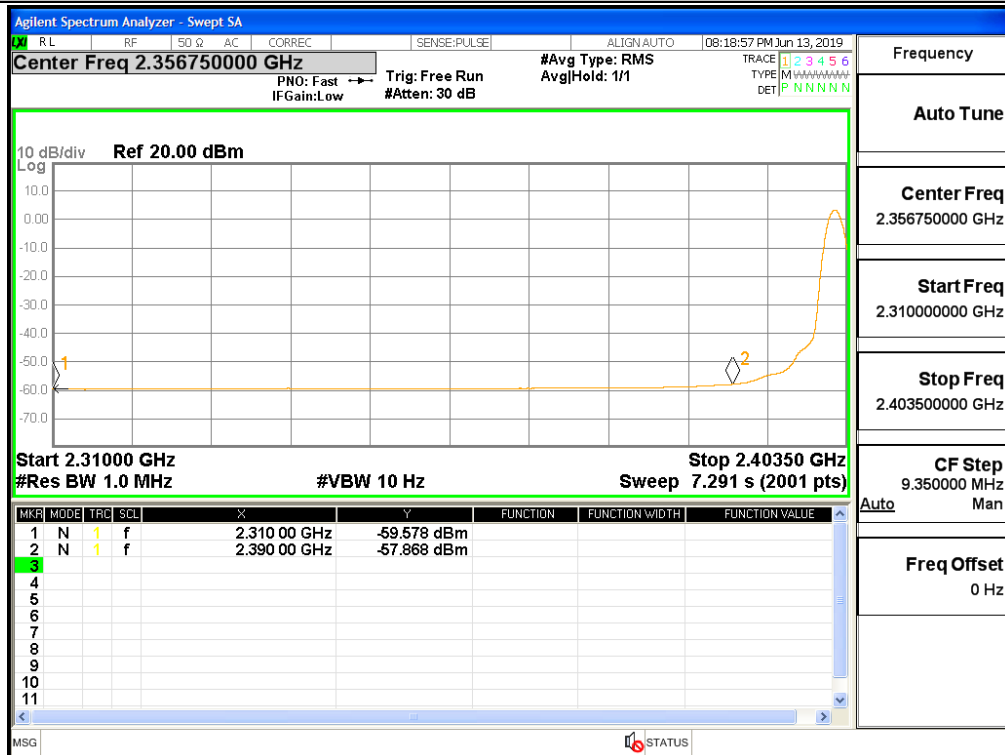
Restrict-band band-edge measurements_2480_AV_2DH5



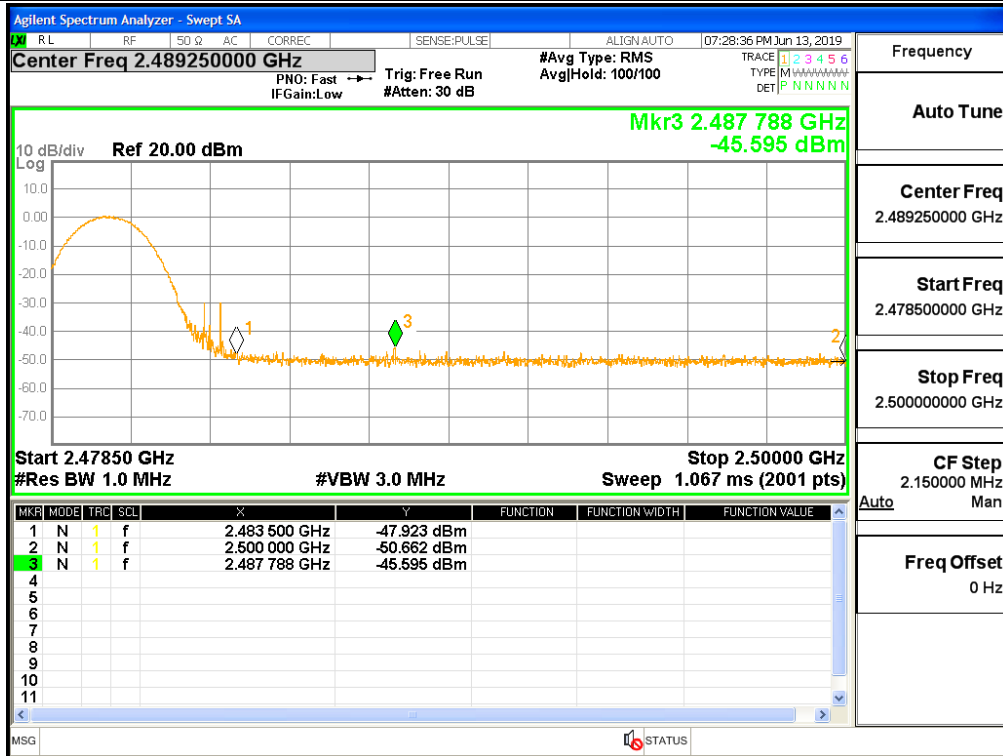
Restrict-band band-edge measurements_2402_PEAK_3DH5



Restrict-band band-edge measurements_2402_AV_3DH5



Restrict-band band-edge measurements_2480_PEAK_3DH5



Restrict-band band-edge measurements_2480_AV_3DH5

