

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

Product Name: X-boy

Trade Mark: /

Test Model: XS03

FCC ID: 2AIZN-XS03

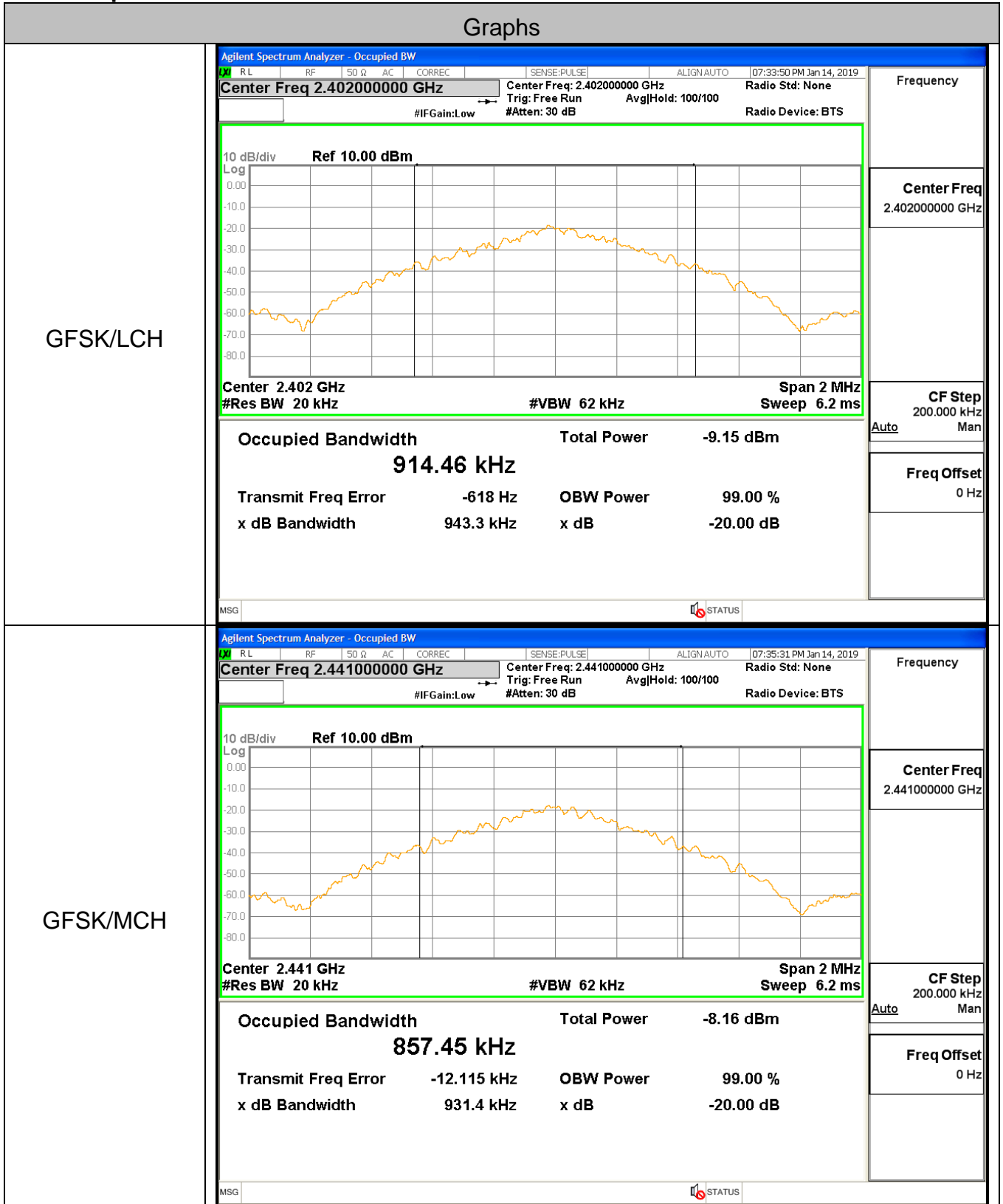
Environmental Conditions

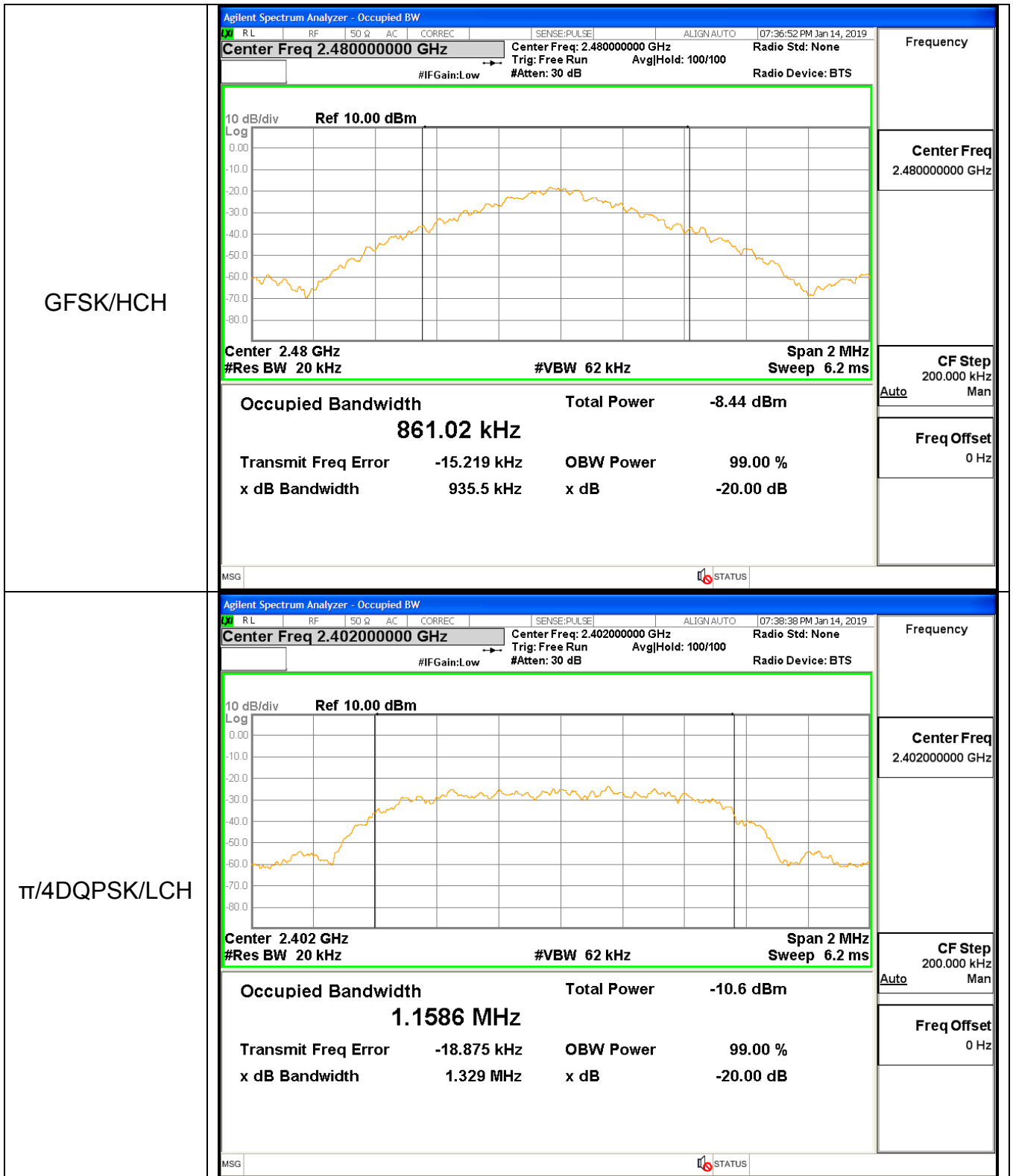
Temperature:	22.5 ° C
Relative Humidity:	55.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Gary Qian
Supervised by:	Eden Hu

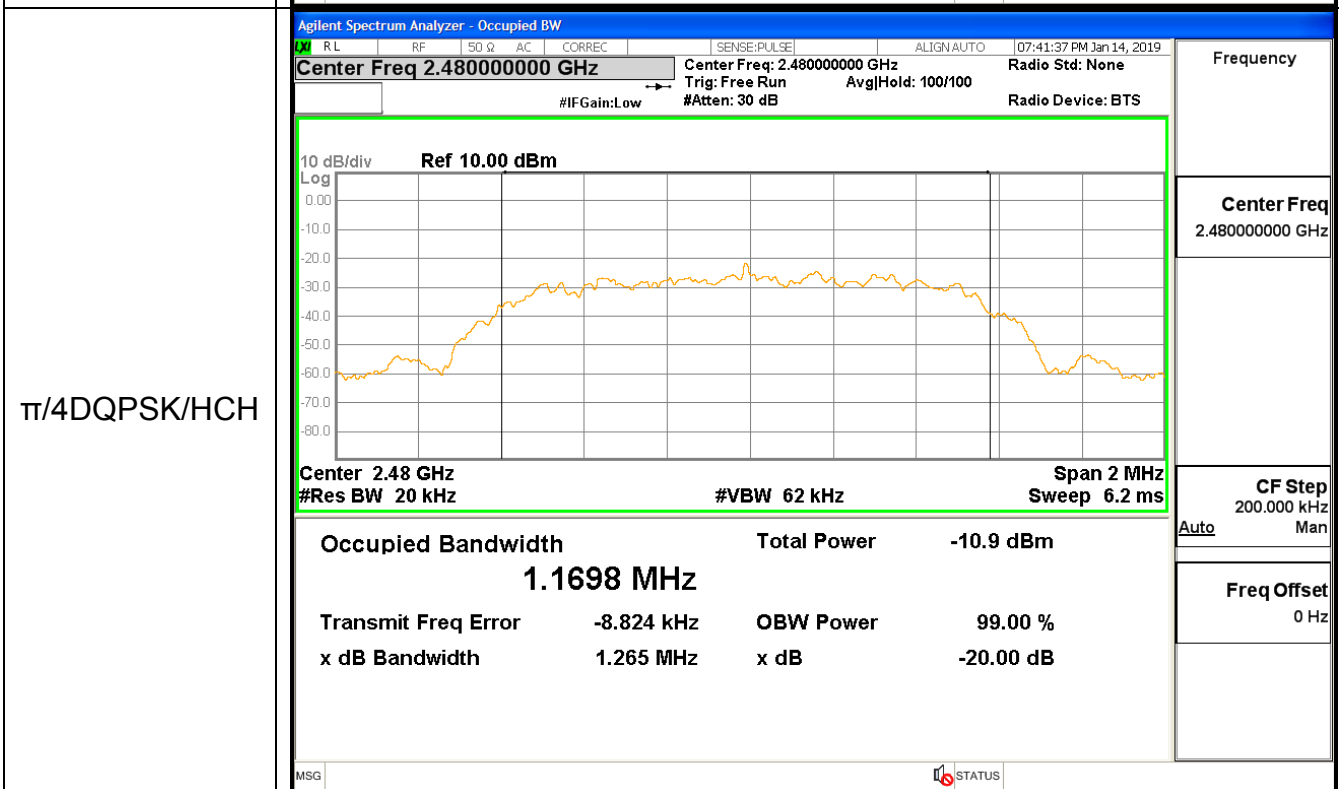
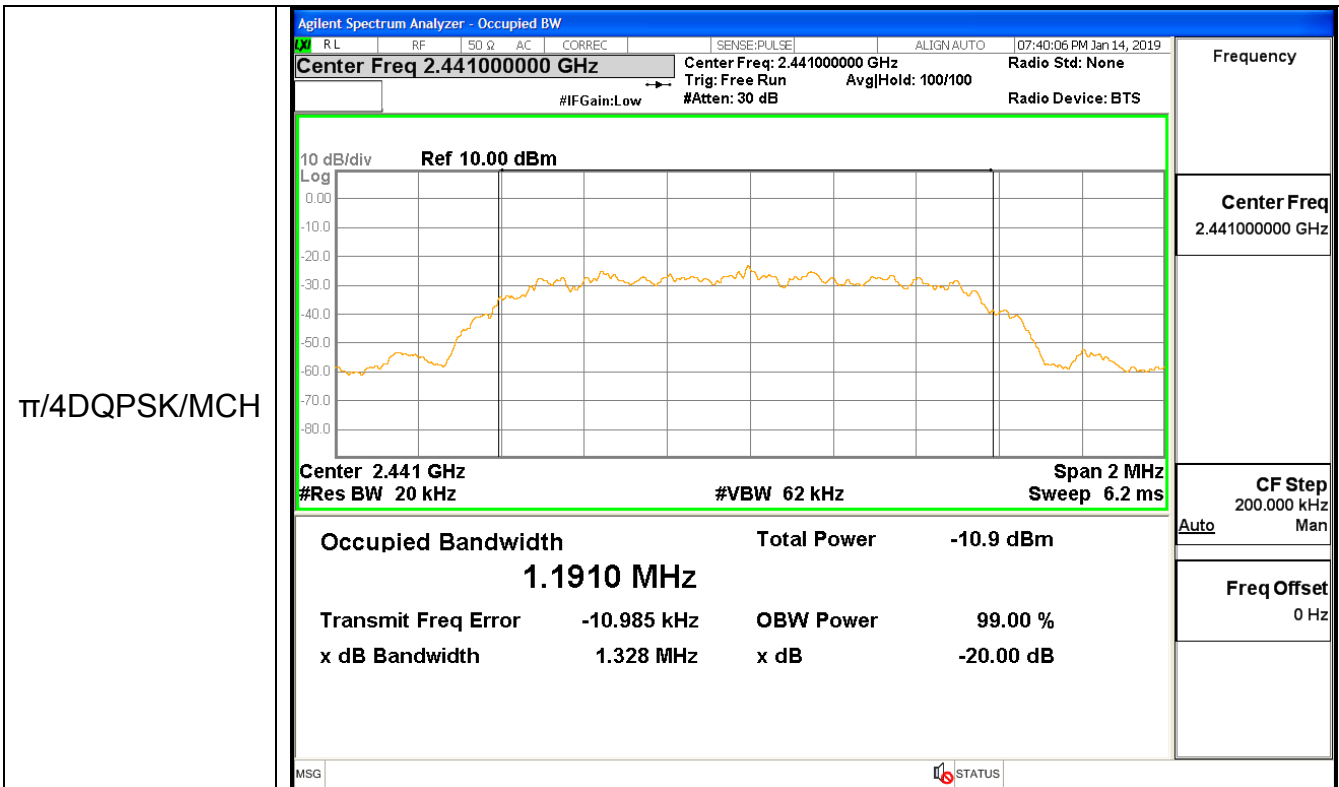
A.1 20 dB Bandwidth

Mode	Channel.	20dB Bandwidth [MHz]	Limit(MHz)	Verdict
GFSK	LCH	0.943	Not Specified	PASS
GFSK	MCH	0.931	Not Specified	PASS
GFSK	HCH	0.936	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.329	Not Specified	PASS
$\pi/4$ DQPSK	MCH	1.328	Not Specified	PASS
$\pi/4$ DQPSK	HCH	1.265	Not Specified	PASS

Test Graph



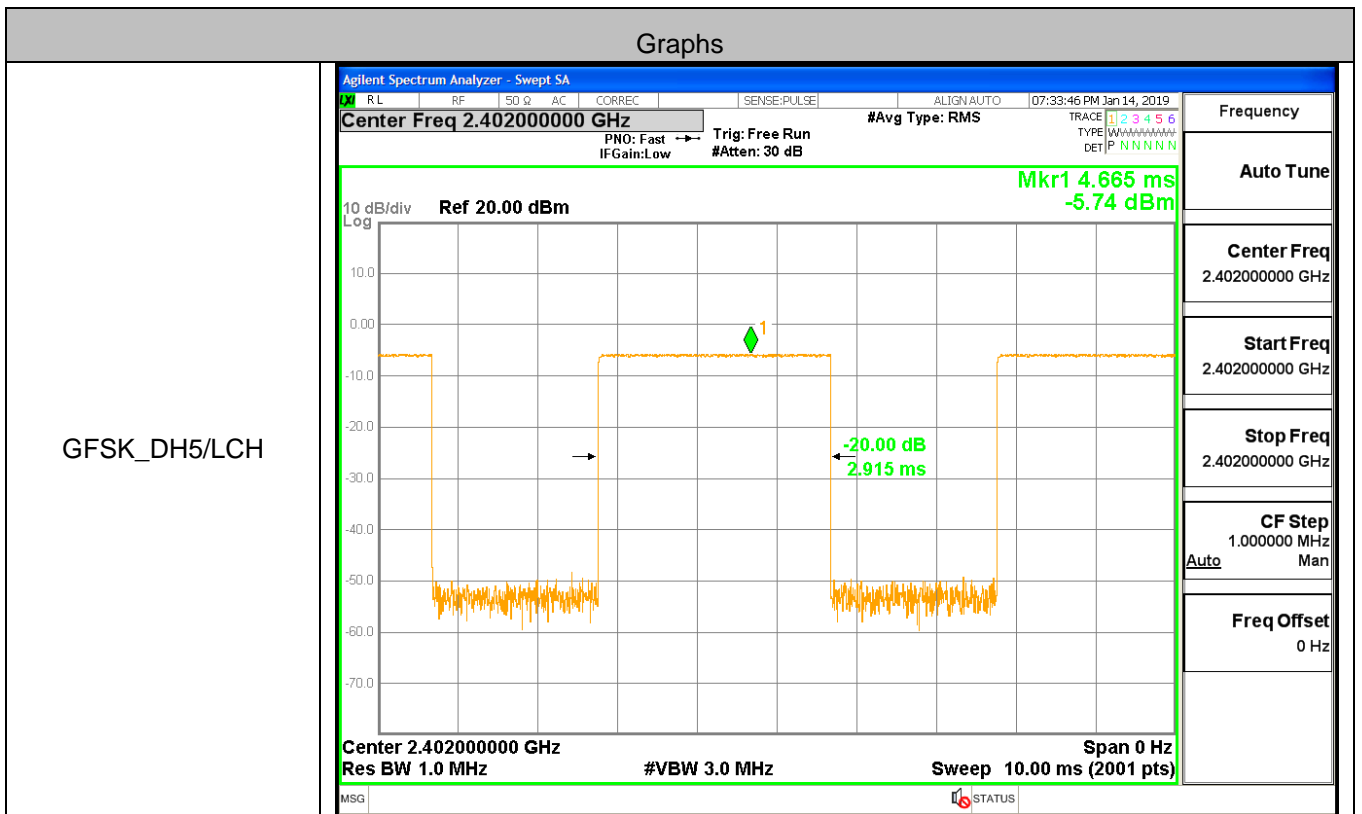


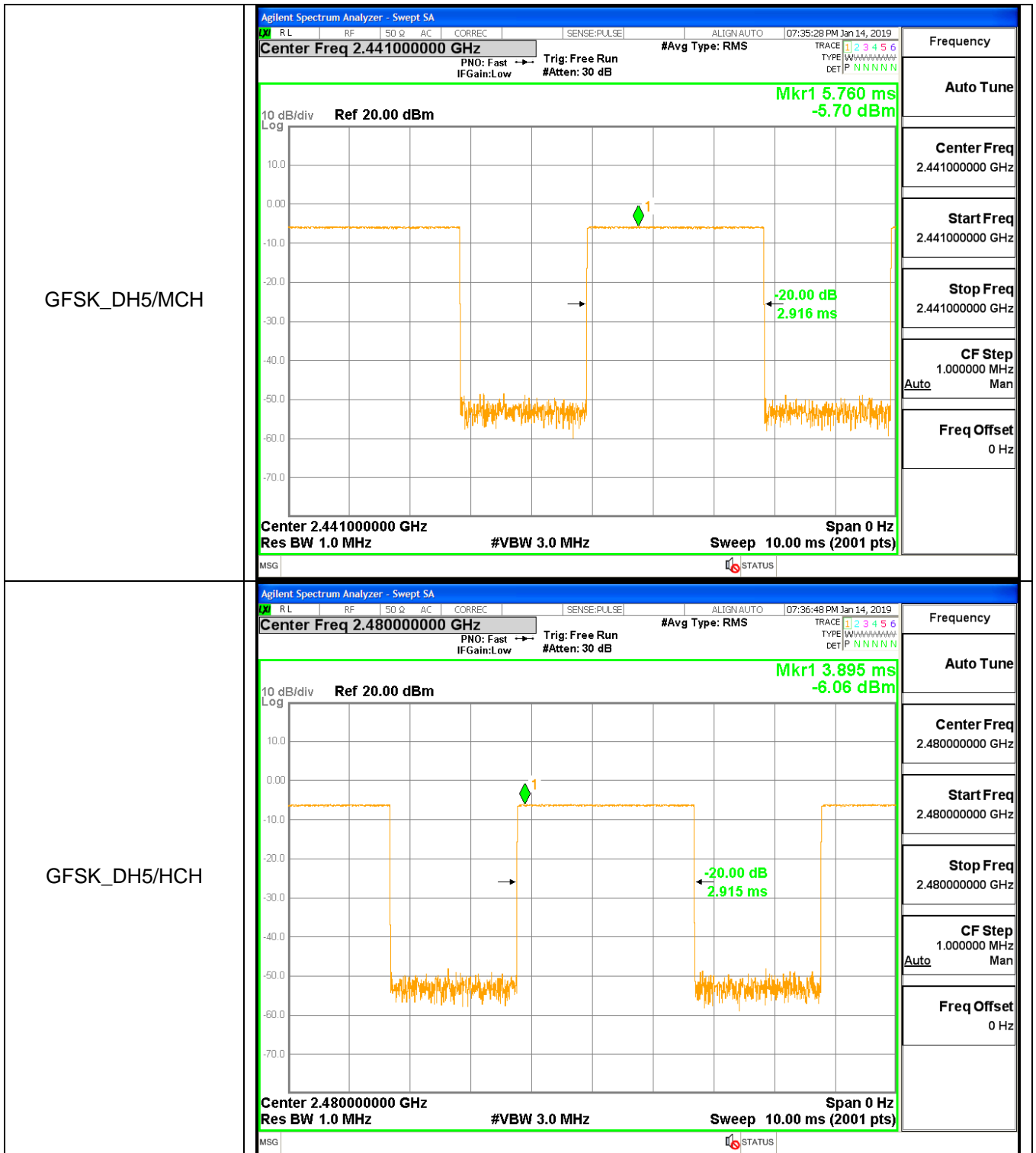


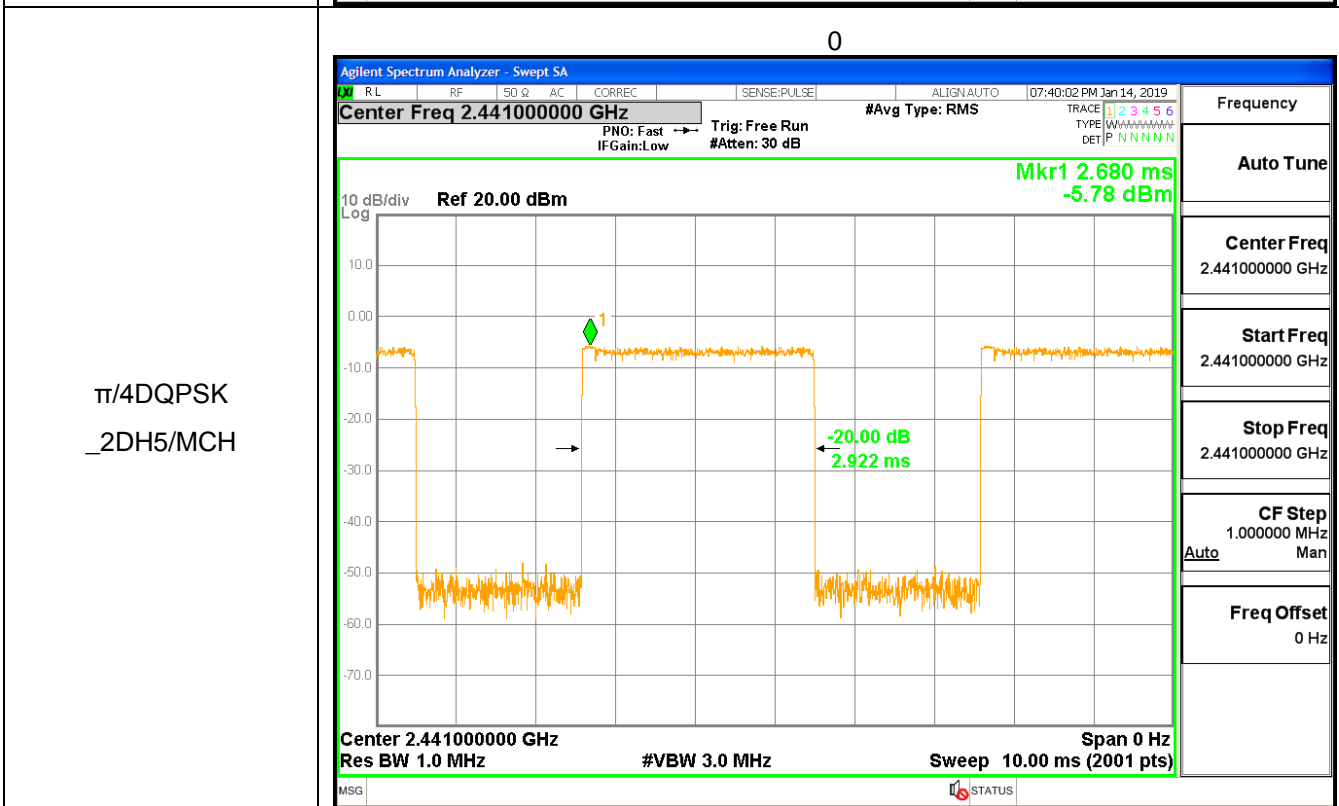
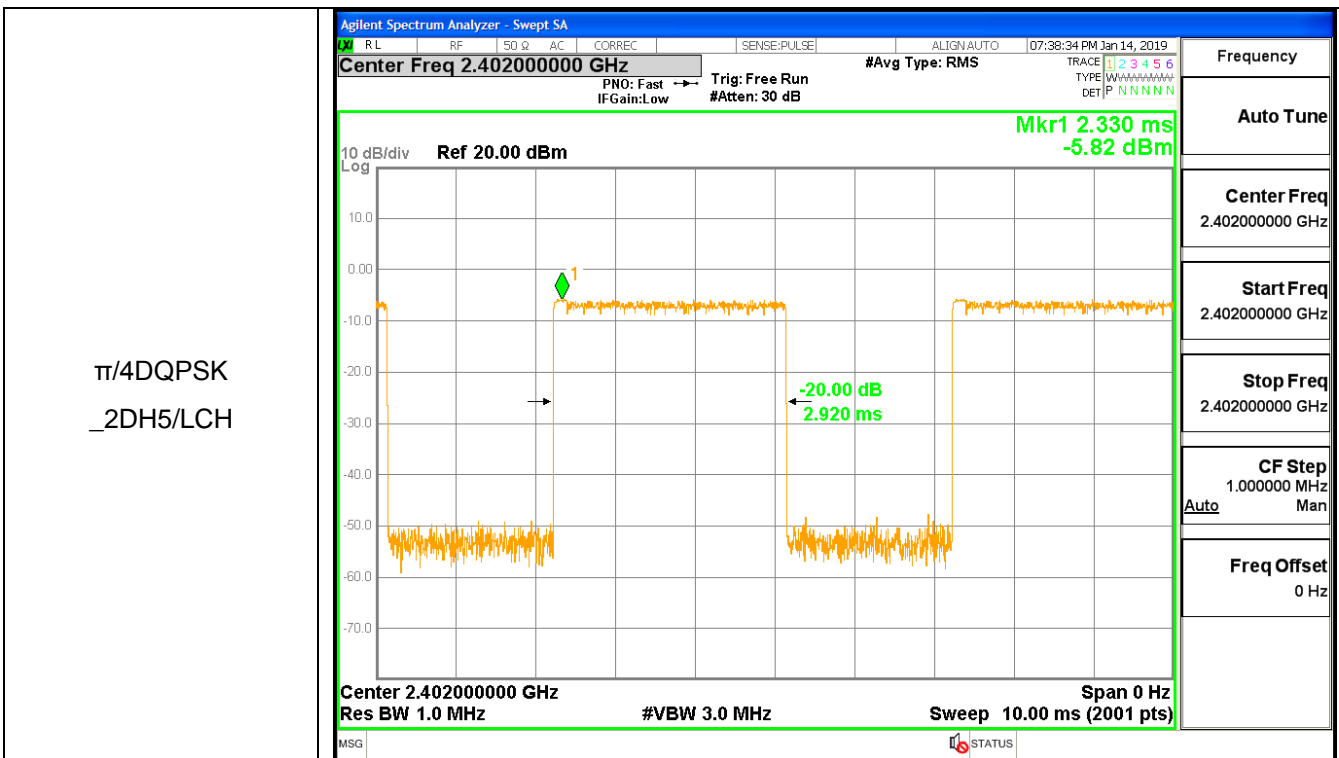
A.2 Dwell Time

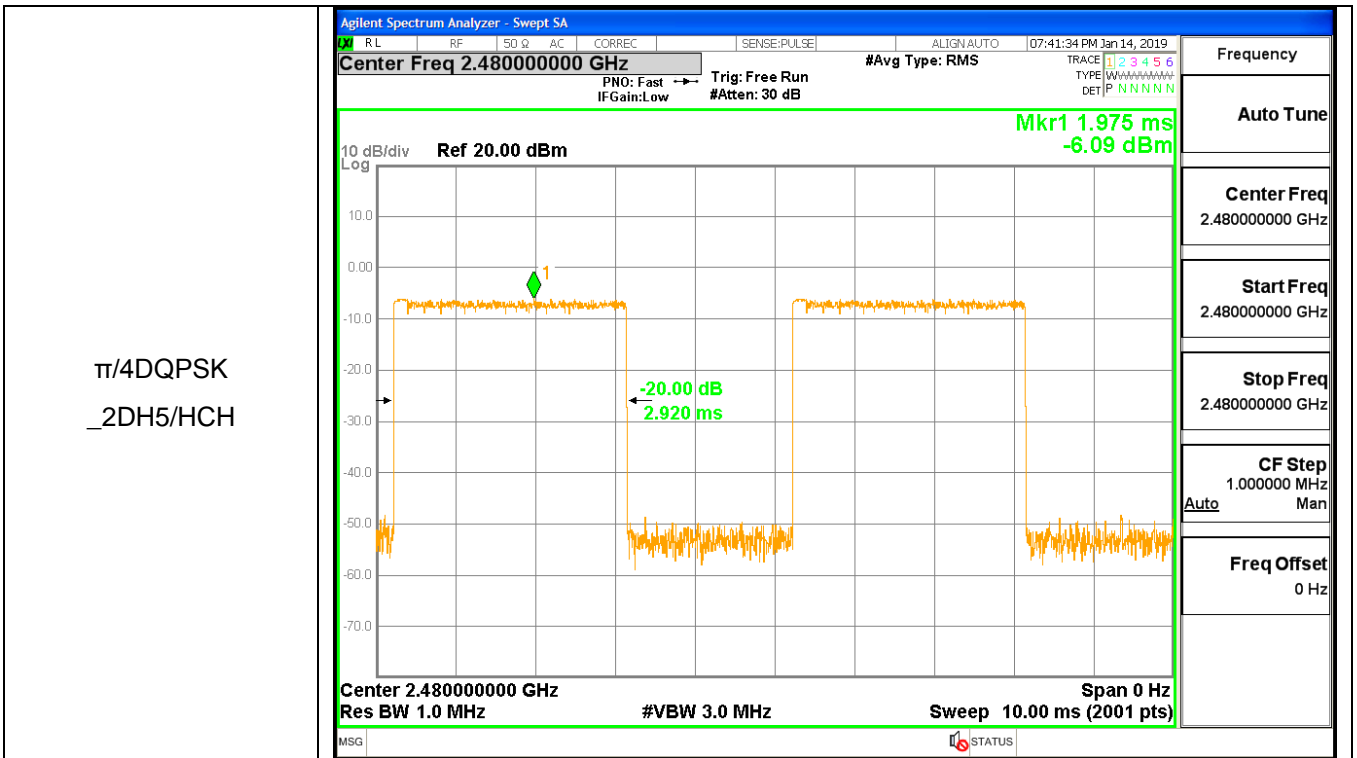
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	0.002915316	106.7	0.311064187	0.4	PASS
GFSK	DH5	MCH	0.002916229	106.7	0.311161587	0.4	PASS
GFSK	DH5	HCH	0.002915232	106.7	0.311055206	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	0.002920208	106.7	0.311586176	0.4	PASS
$\pi/4$ DQPSK	2DH5	MCH	0.002922225	106.7	0.311801373	0.4	PASS
$\pi/4$ DQPSK	2DH5	HCH	0.002919949	106.7	0.311558594	0.4	PASS

Test Graph





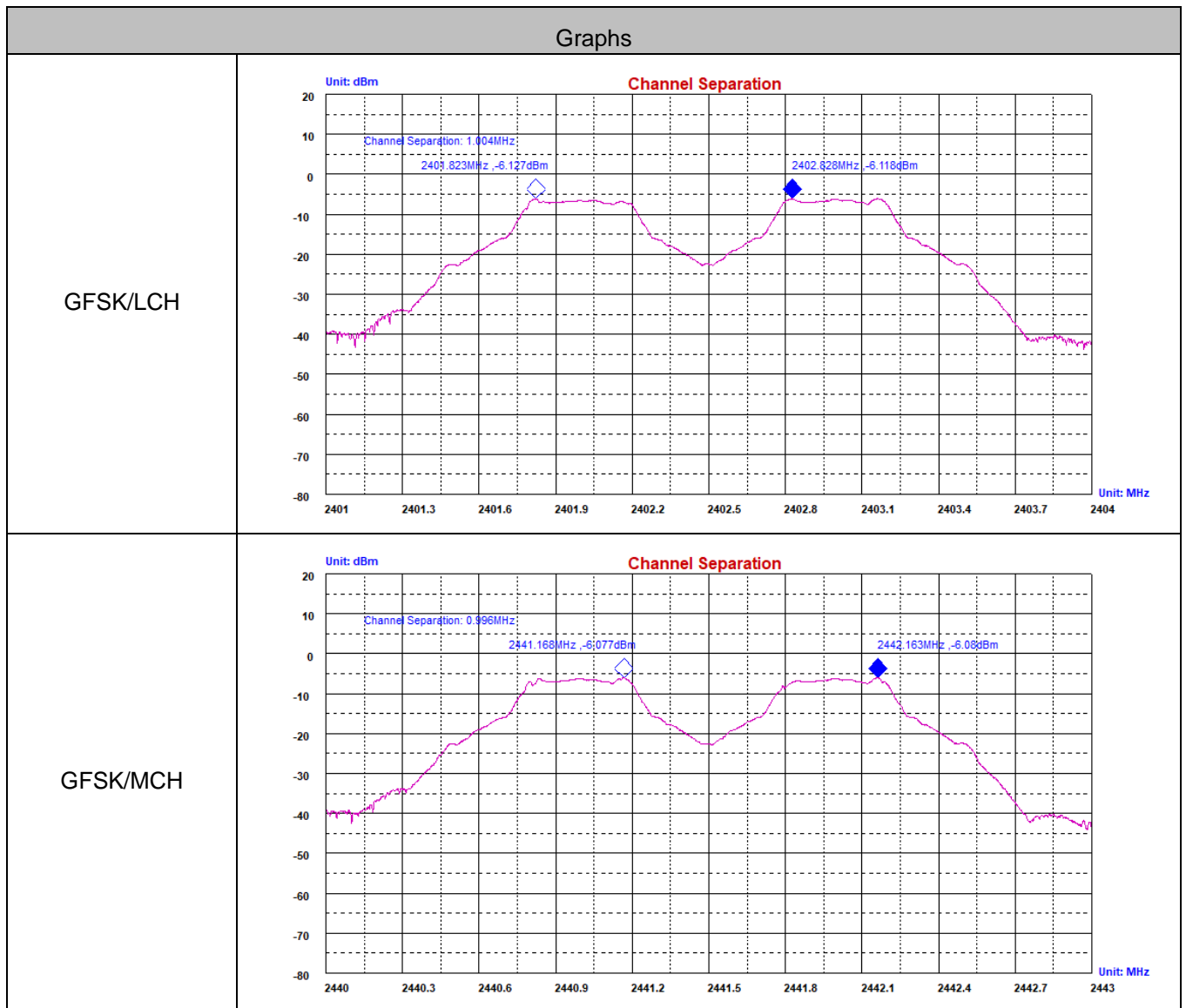


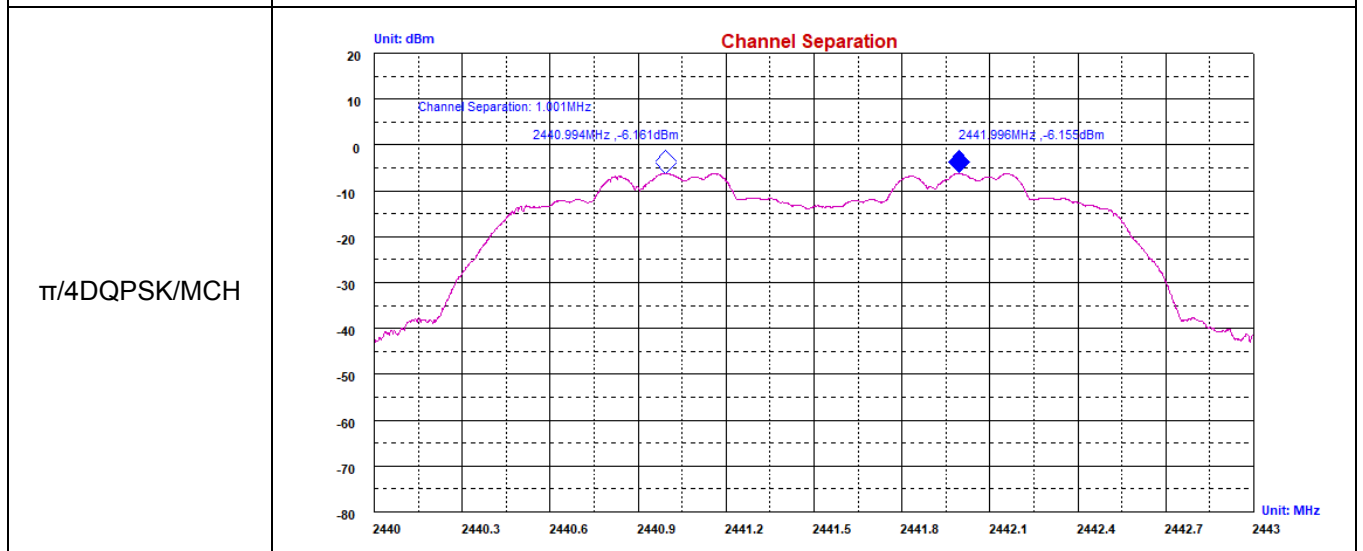
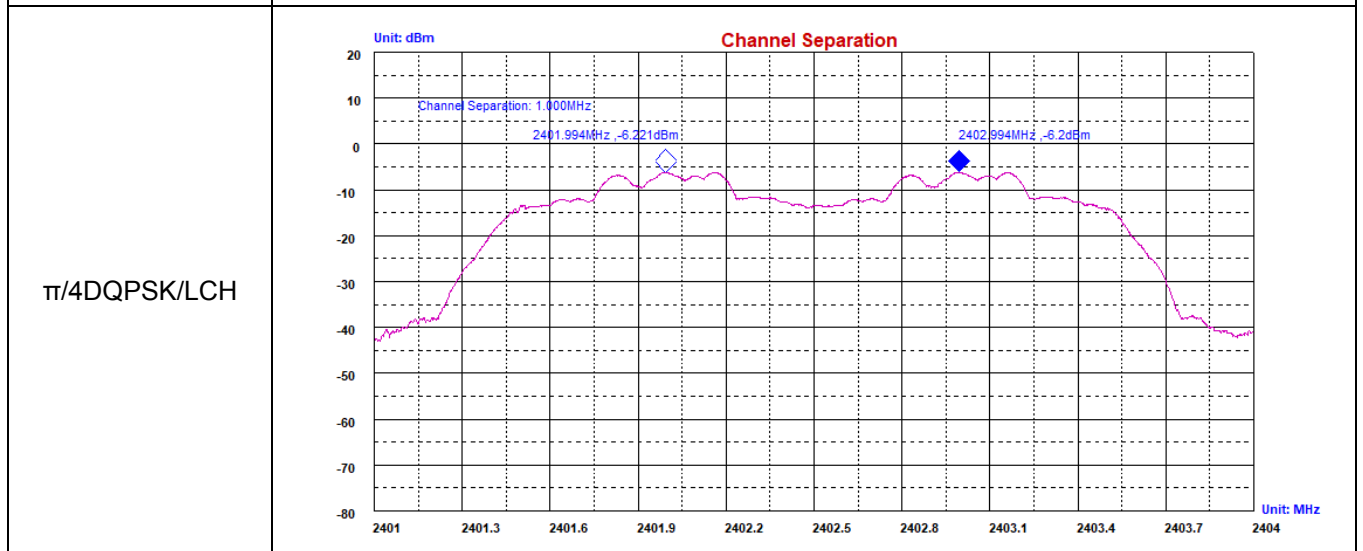
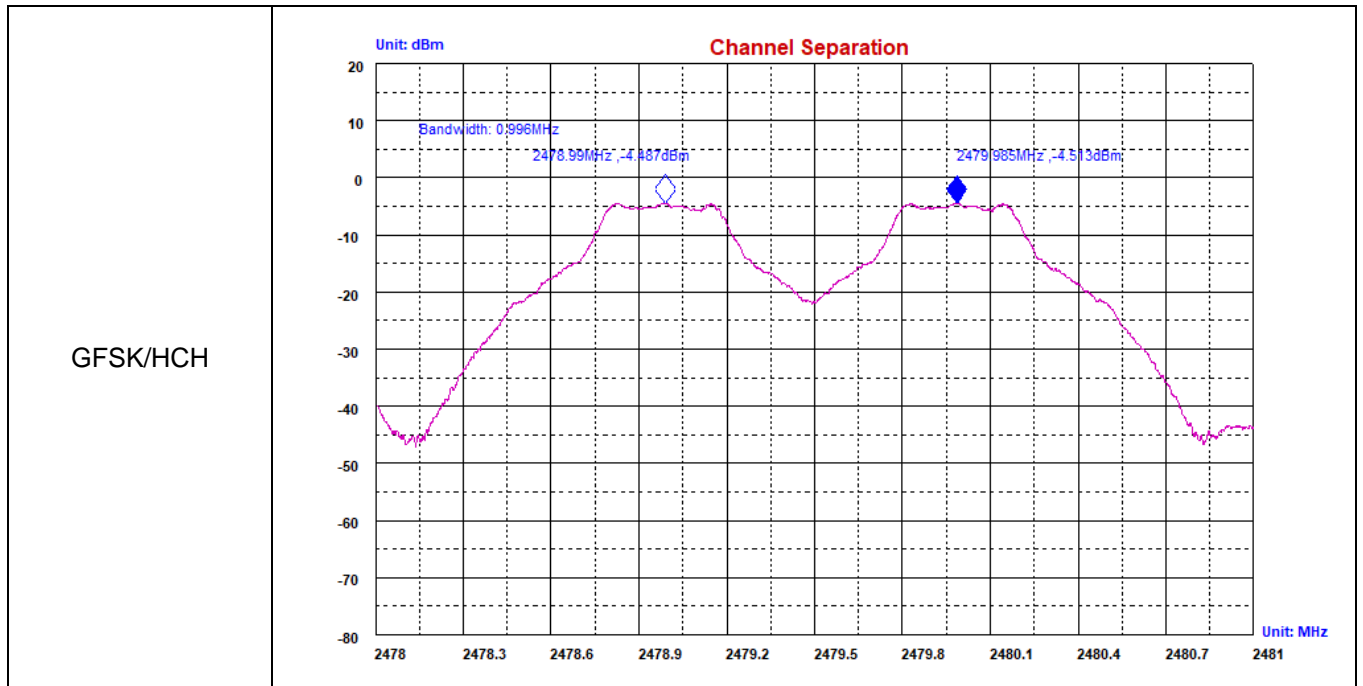


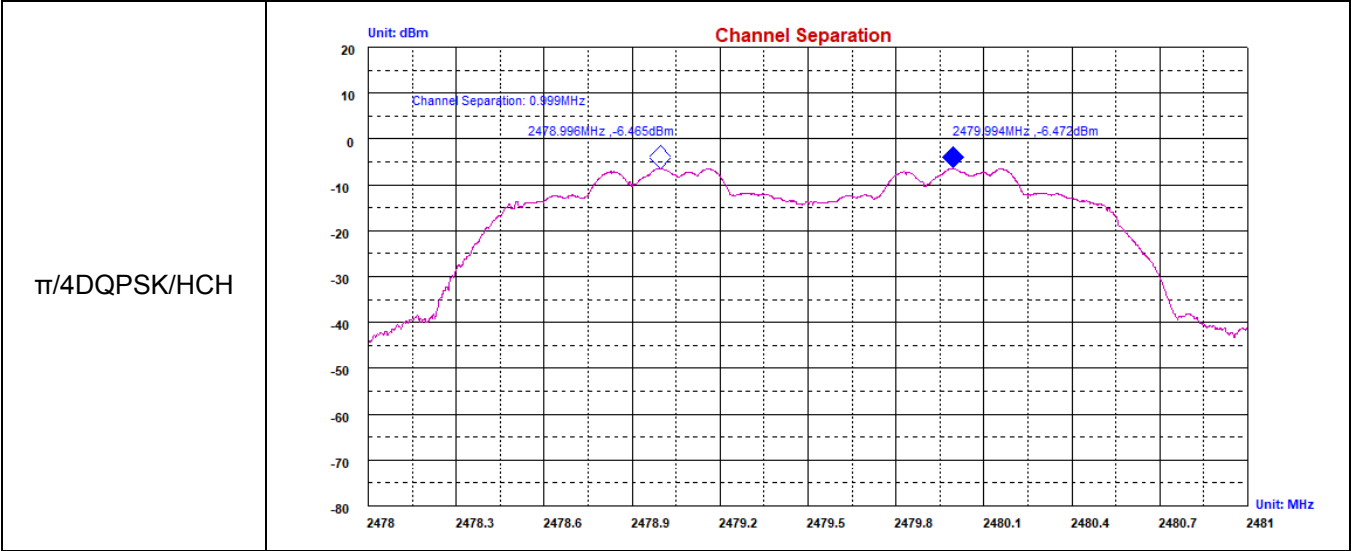
A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.004	0.619	PASS
GFSK	MCH	0.996	0.613	PASS
GFSK	HCH	0.996	0.623	PASS
$\pi/4$ DQPSK	LCH	1.000	0.888	PASS
$\pi/4$ DQPSK	MCH	1.001	0.888	PASS
$\pi/4$ DQPSK	HCH	0.999	0.892	PASS

Test Graph



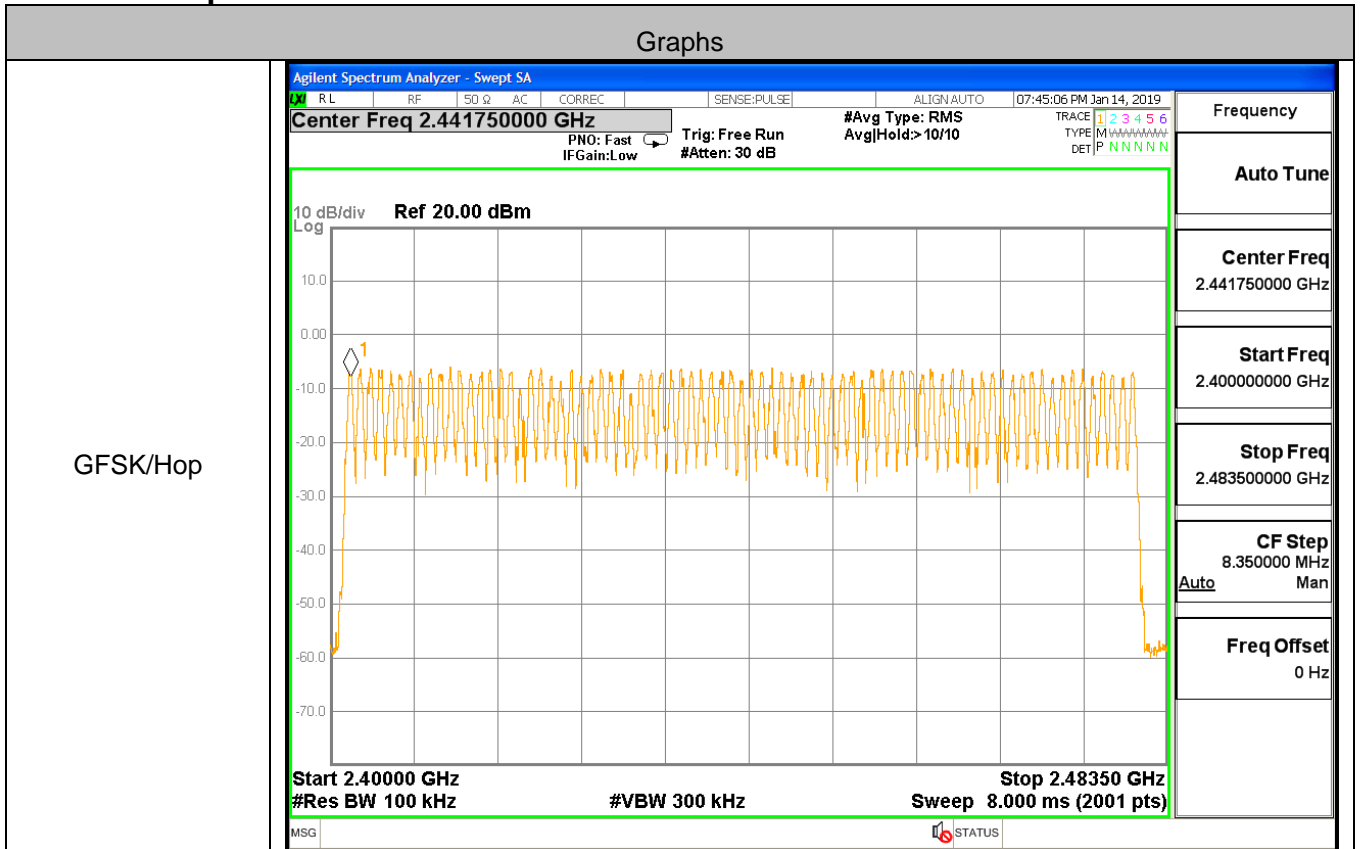


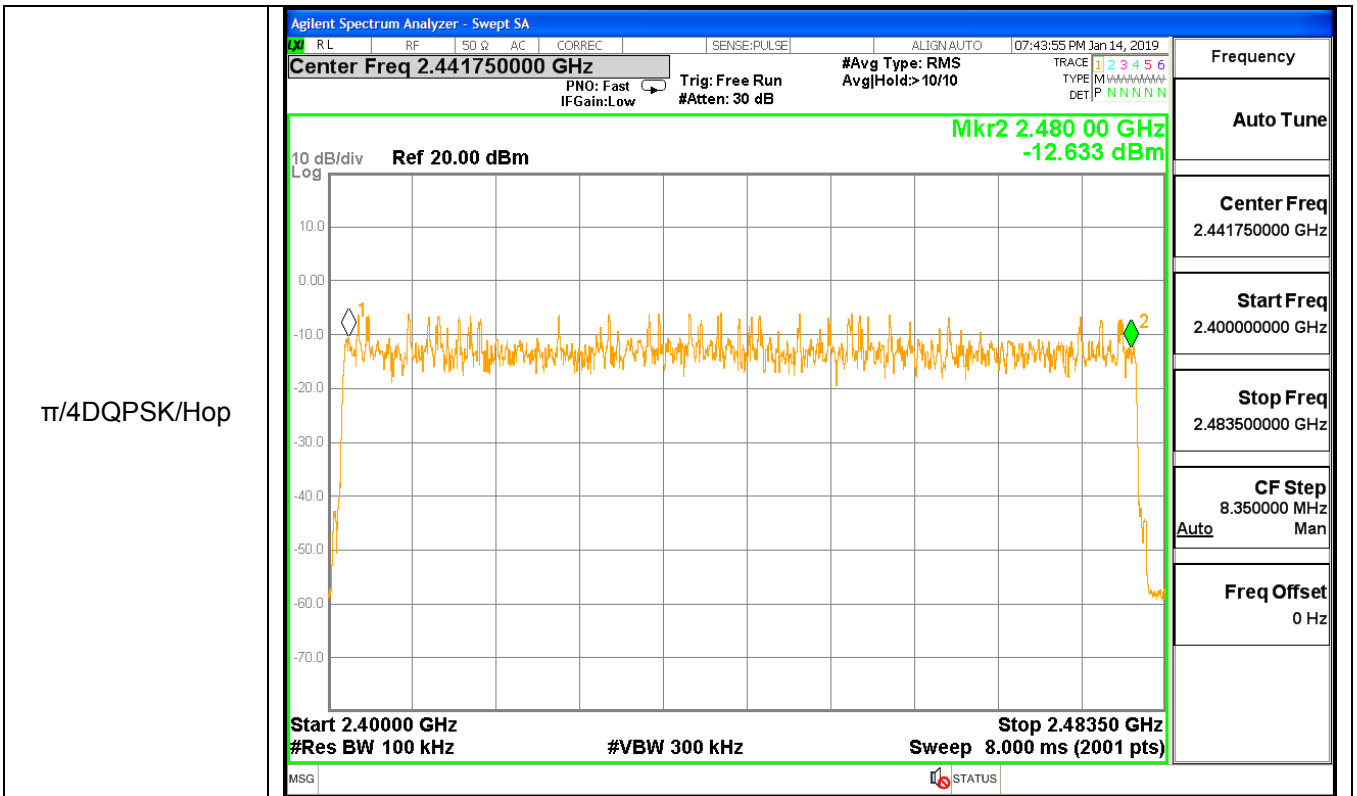


A.4 Hopping Channel Number

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

Test Graph

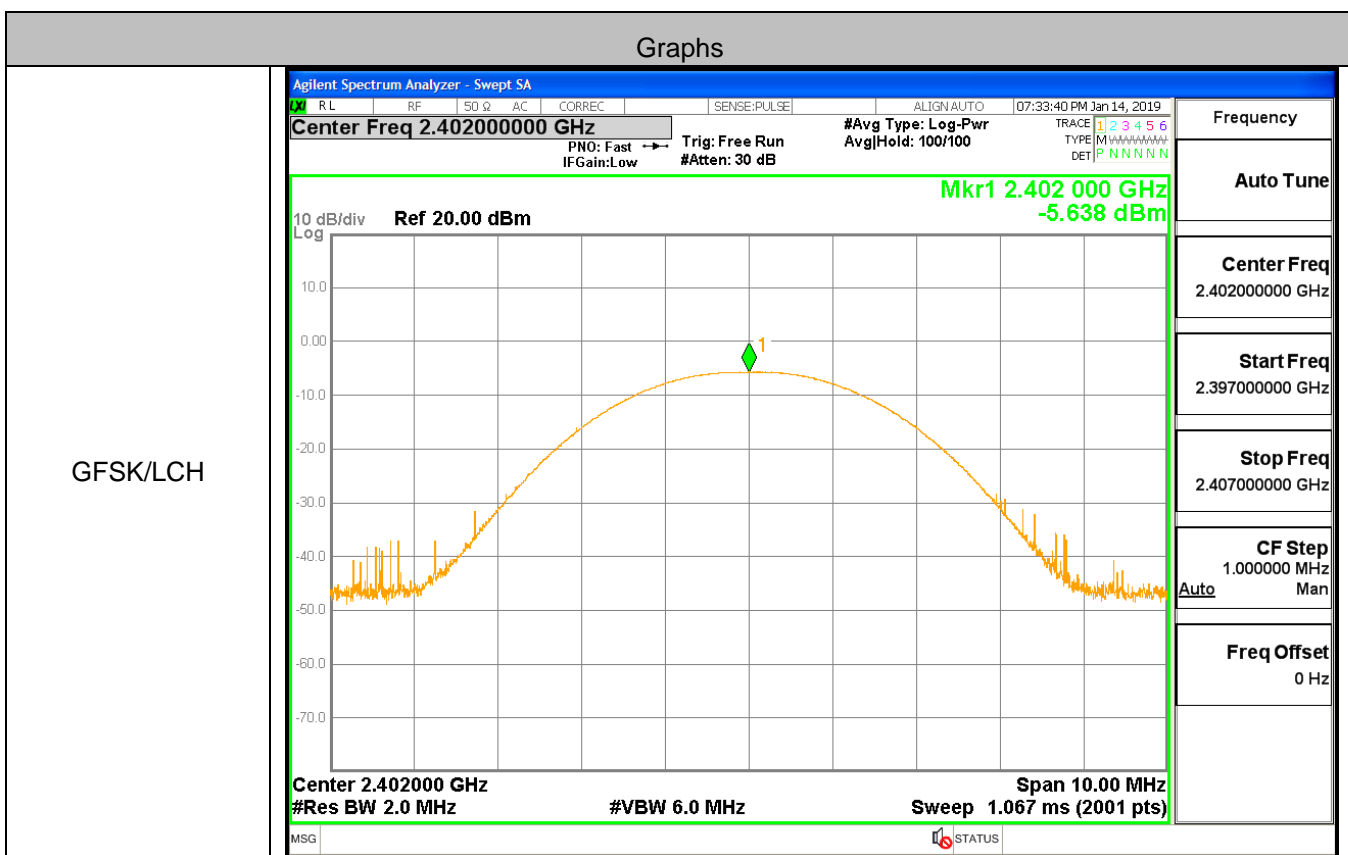


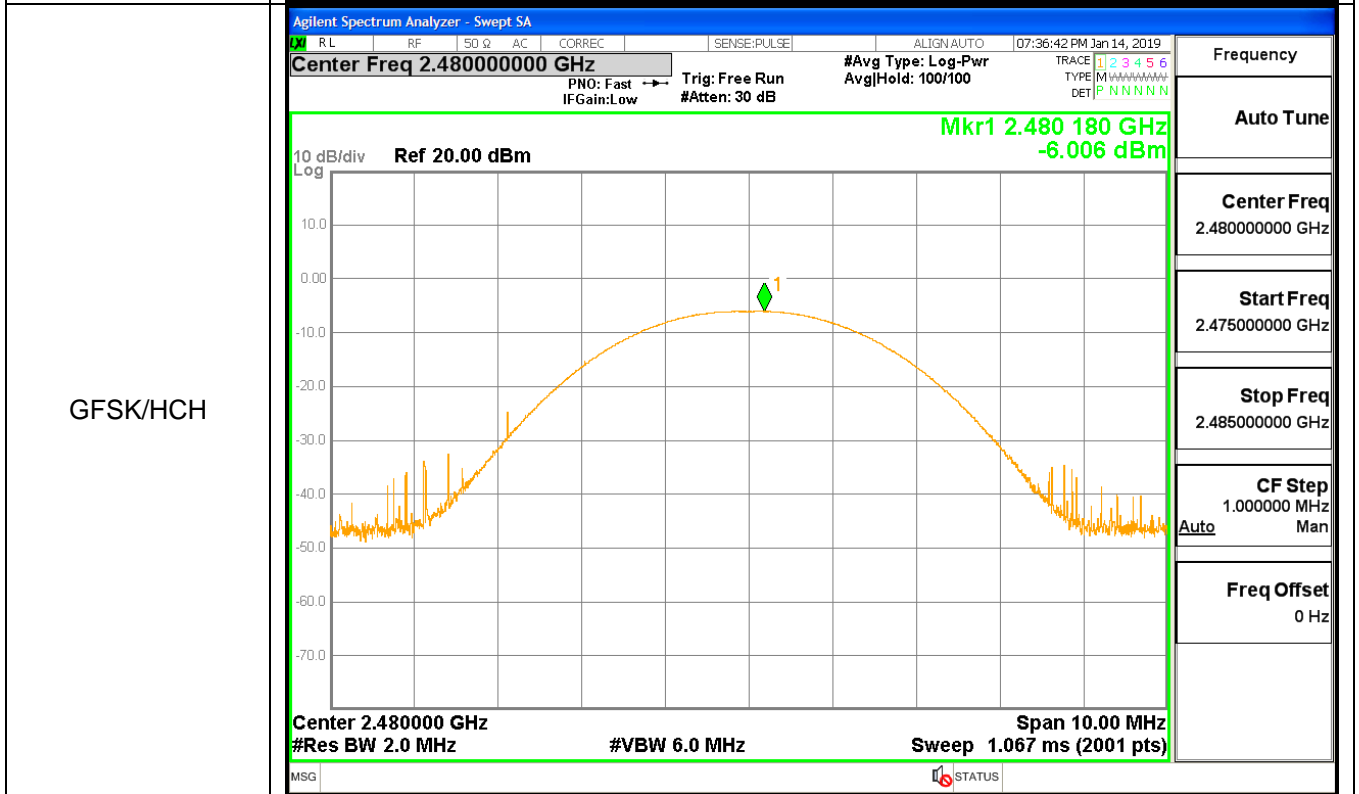
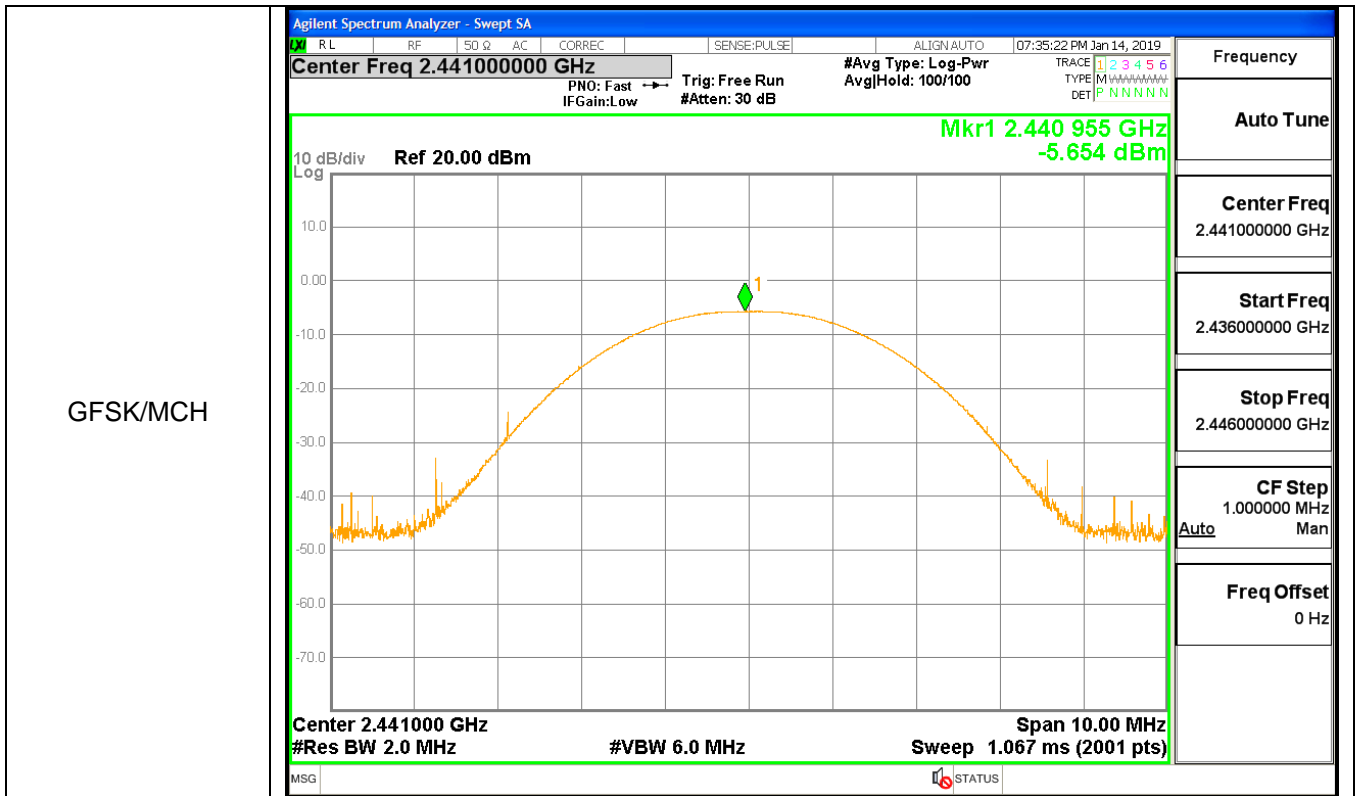


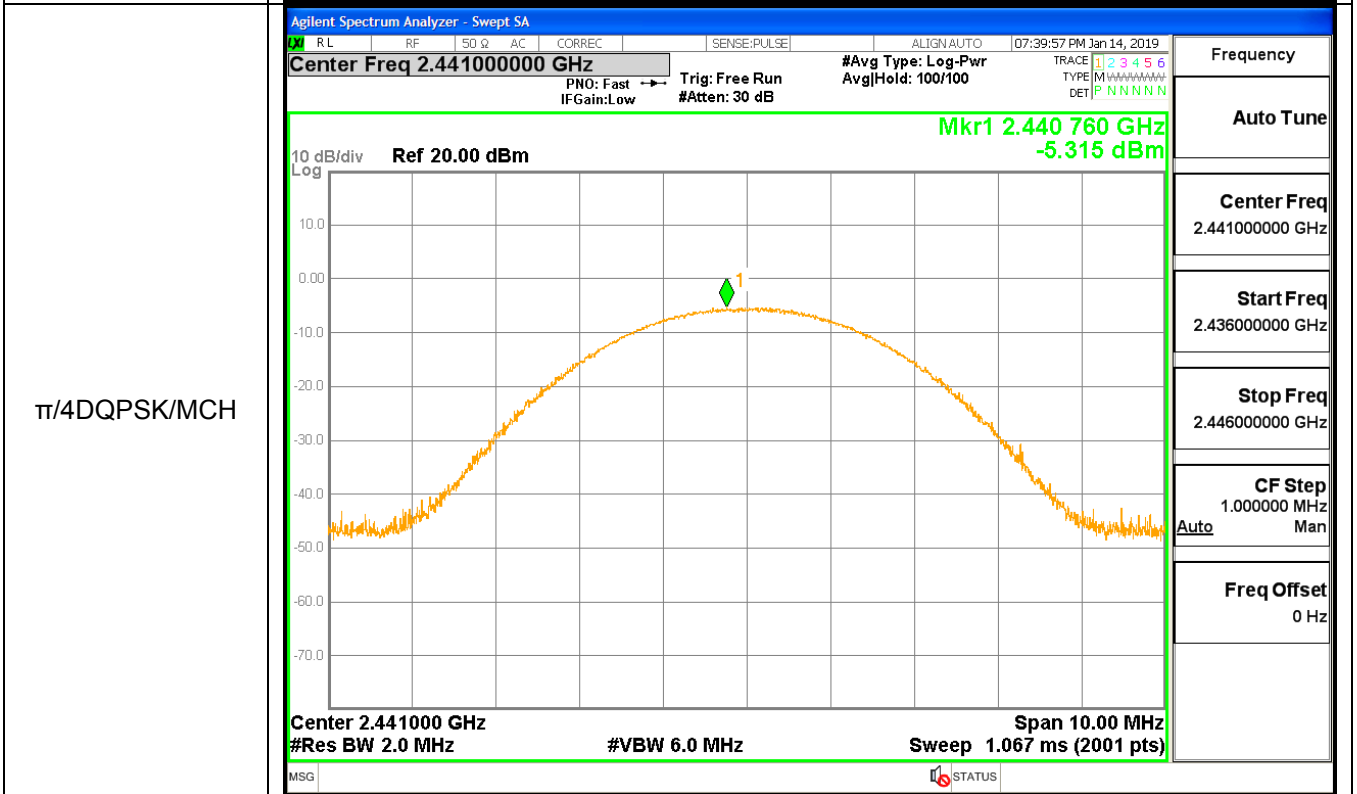
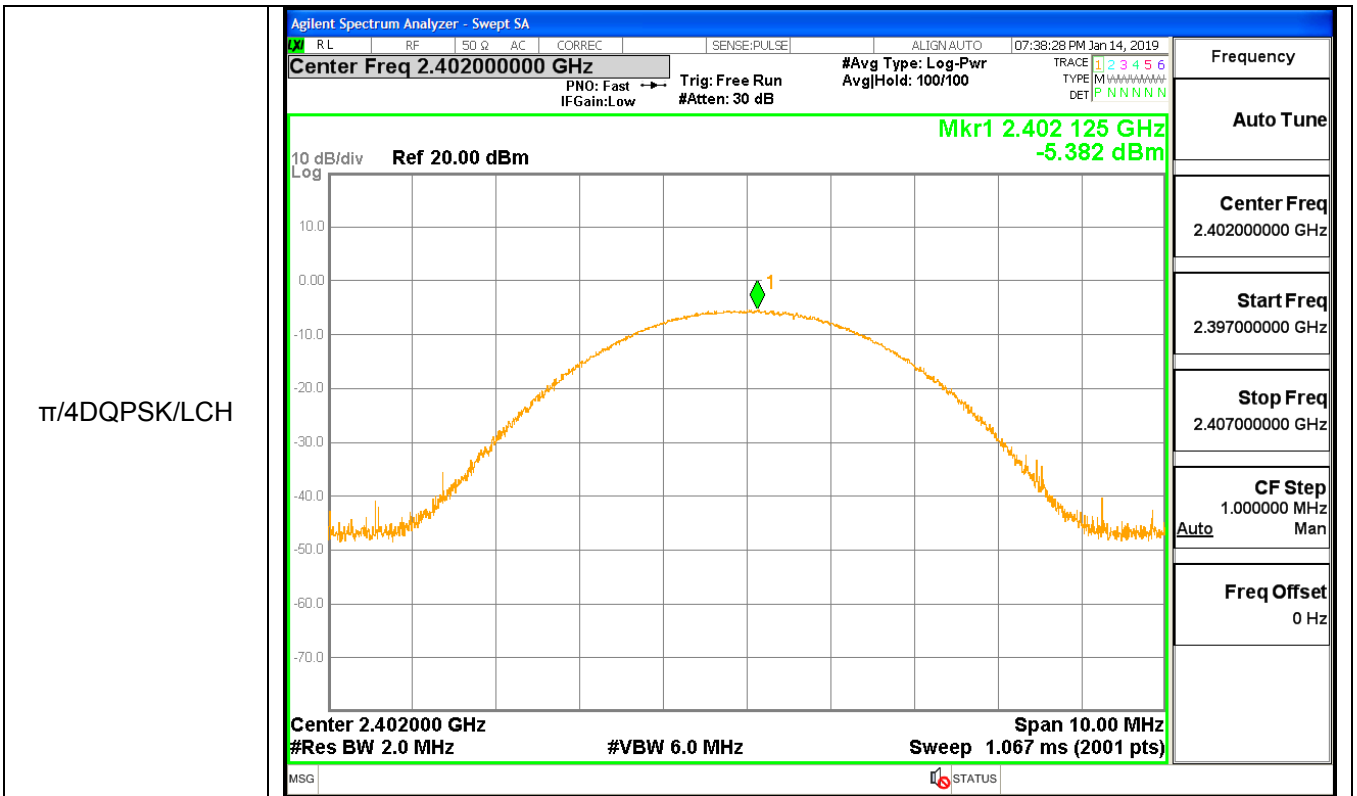
A.5 Conducted Peak Output Power

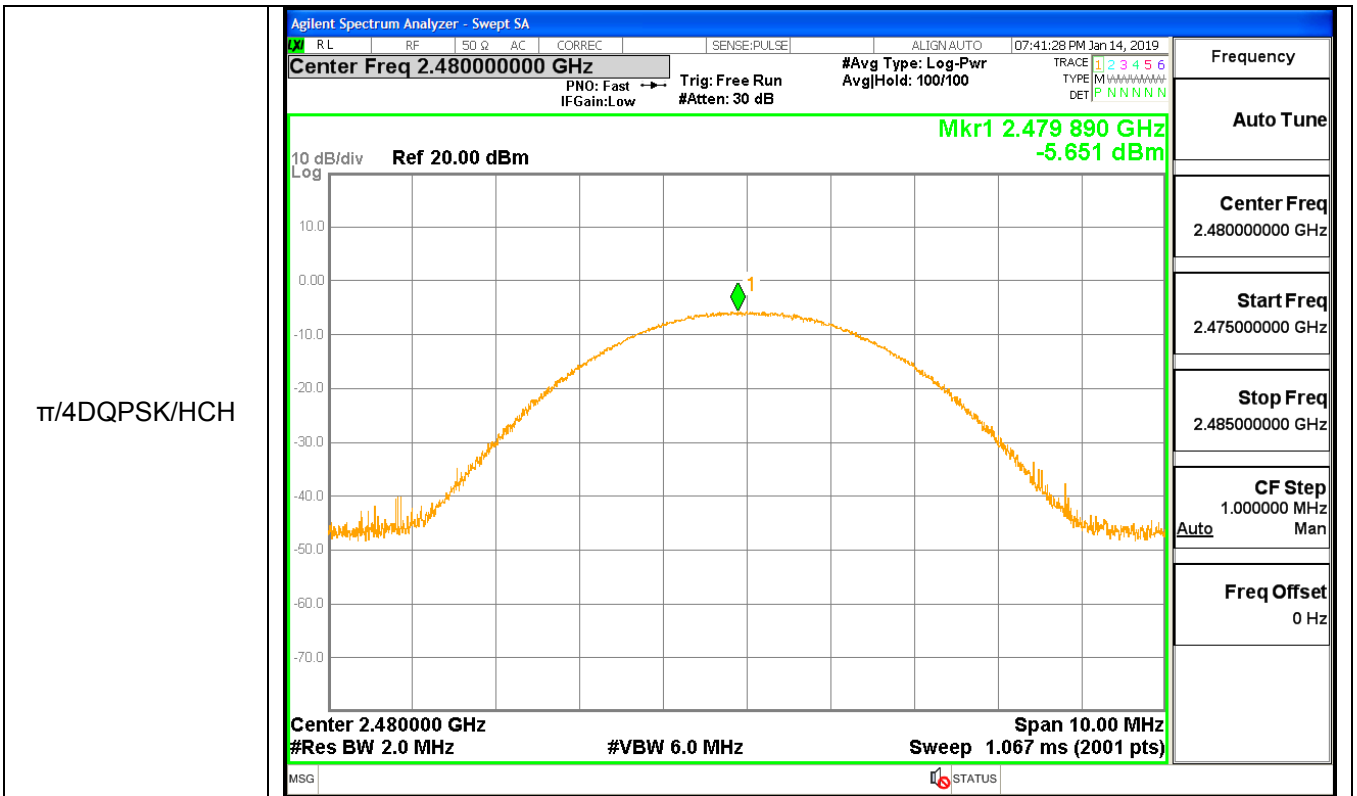
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-5.638	21	PASS
GFSK	MCH	-5.654	21	PASS
GFSK	HCH	-6.006	21	PASS
$\pi/4$ DQPSK	LCH	-5.382	21	PASS
$\pi/4$ DQPSK	MCH	-5.315	21	PASS
$\pi/4$ DQPSK	HCH	-5.651	21	PASS

Test Graph









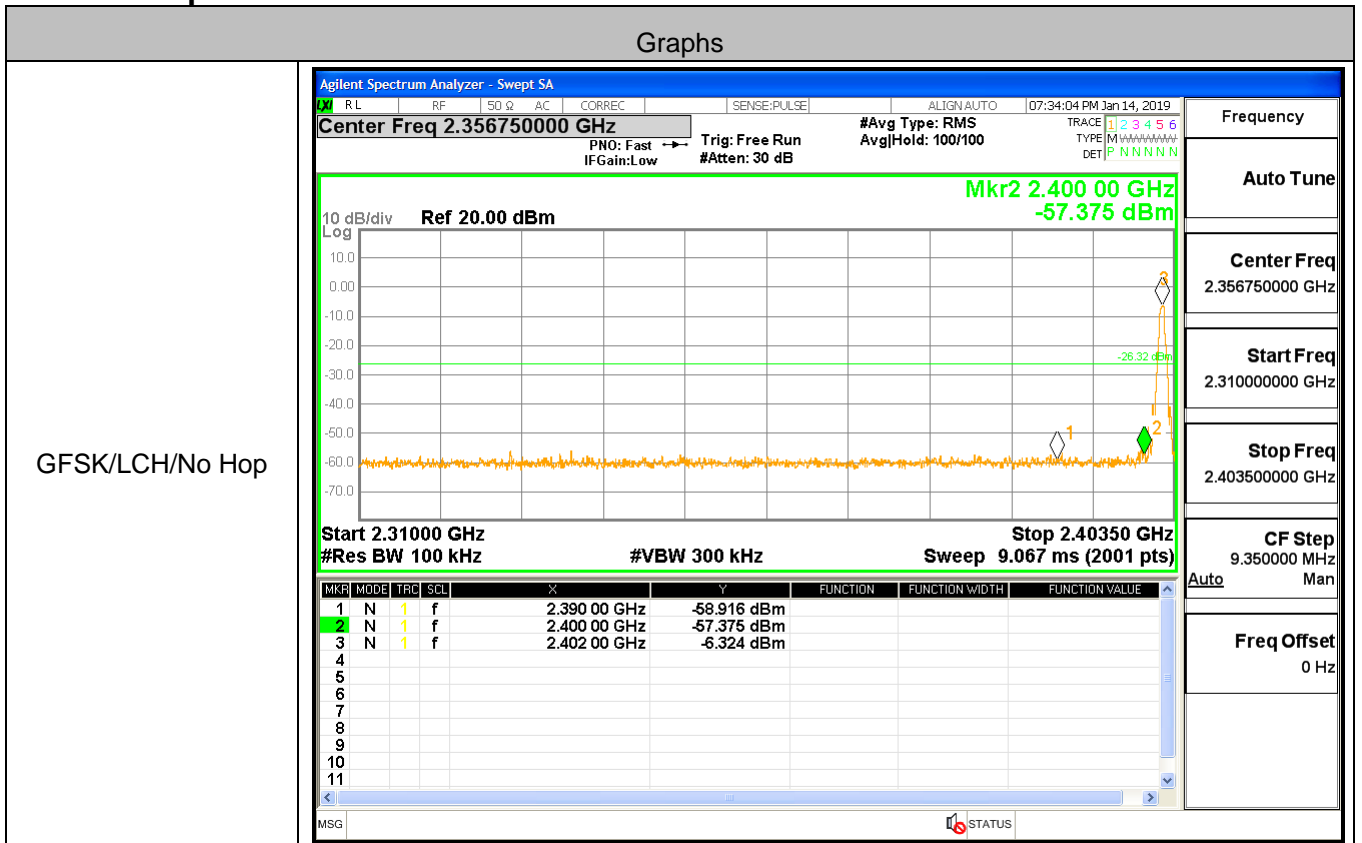
MSG

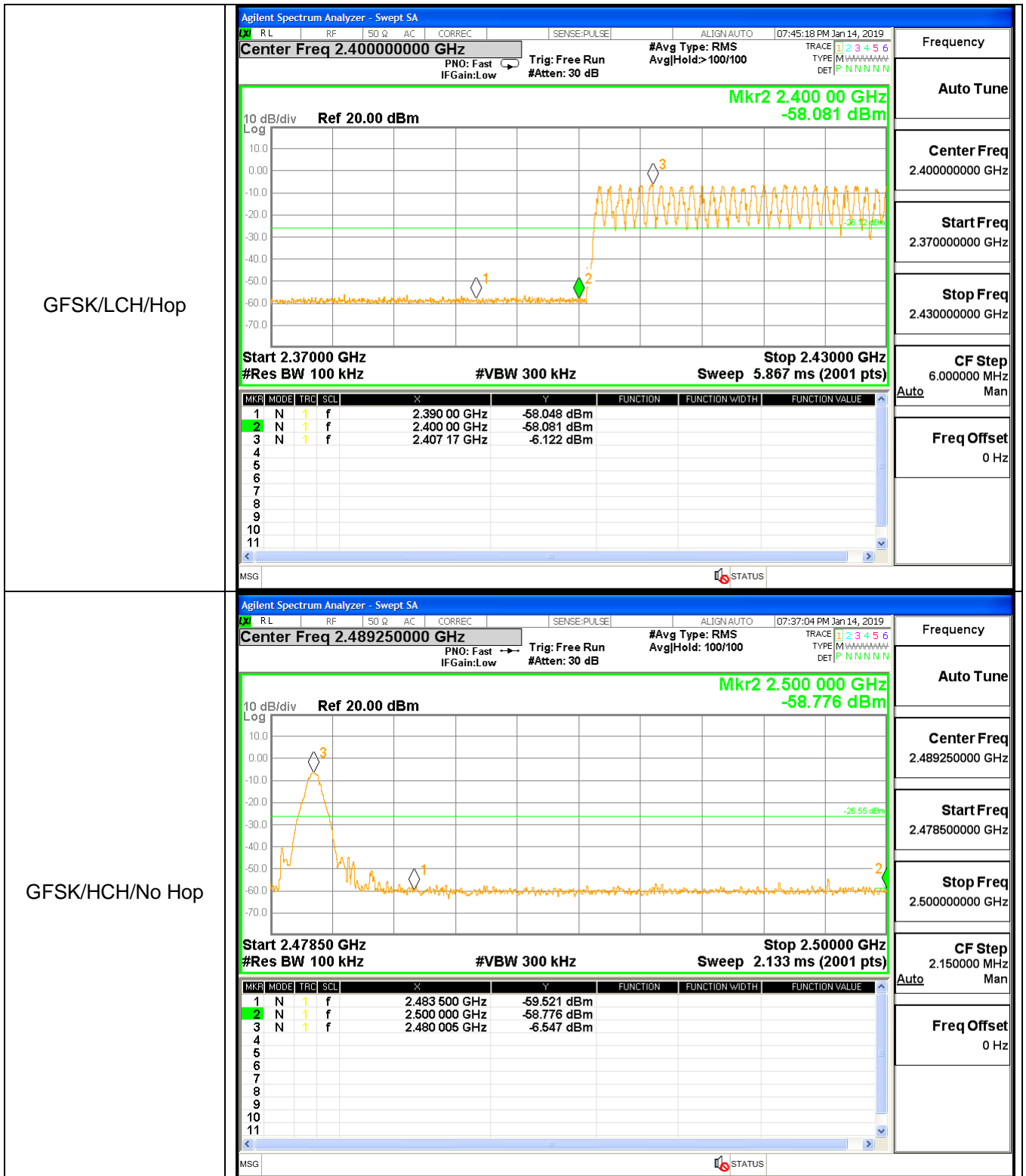
STATUS

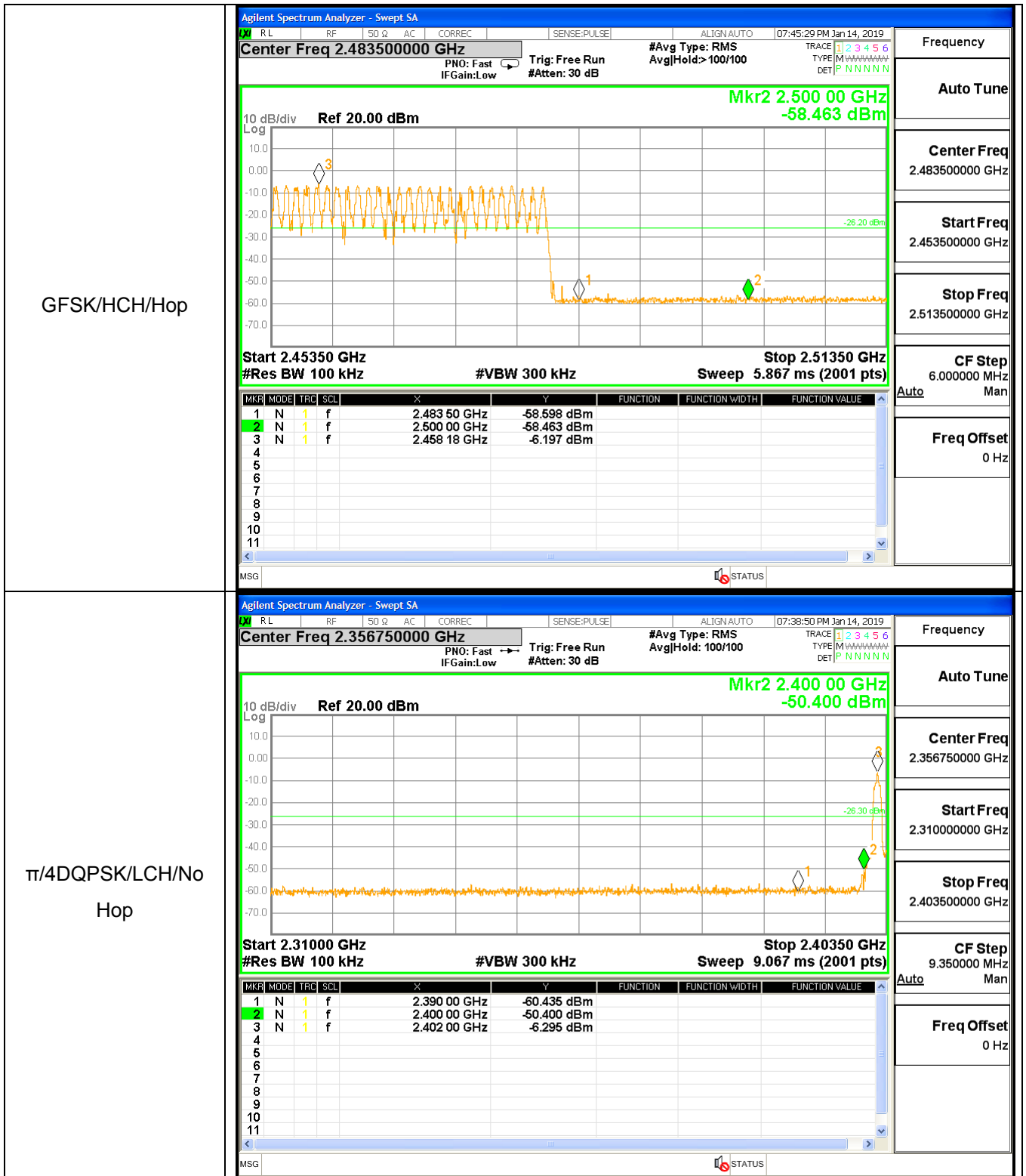
A.6 Band-edge for RF Conducted Emissions

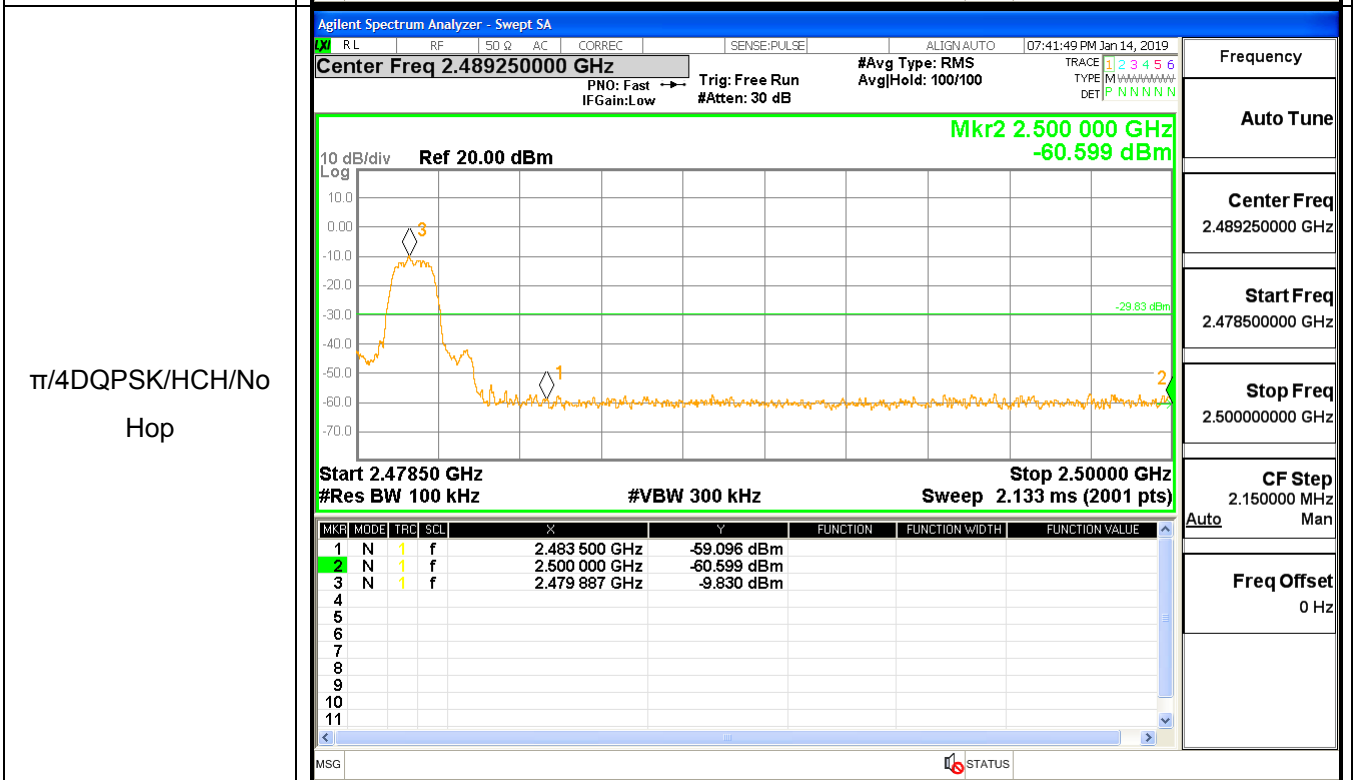
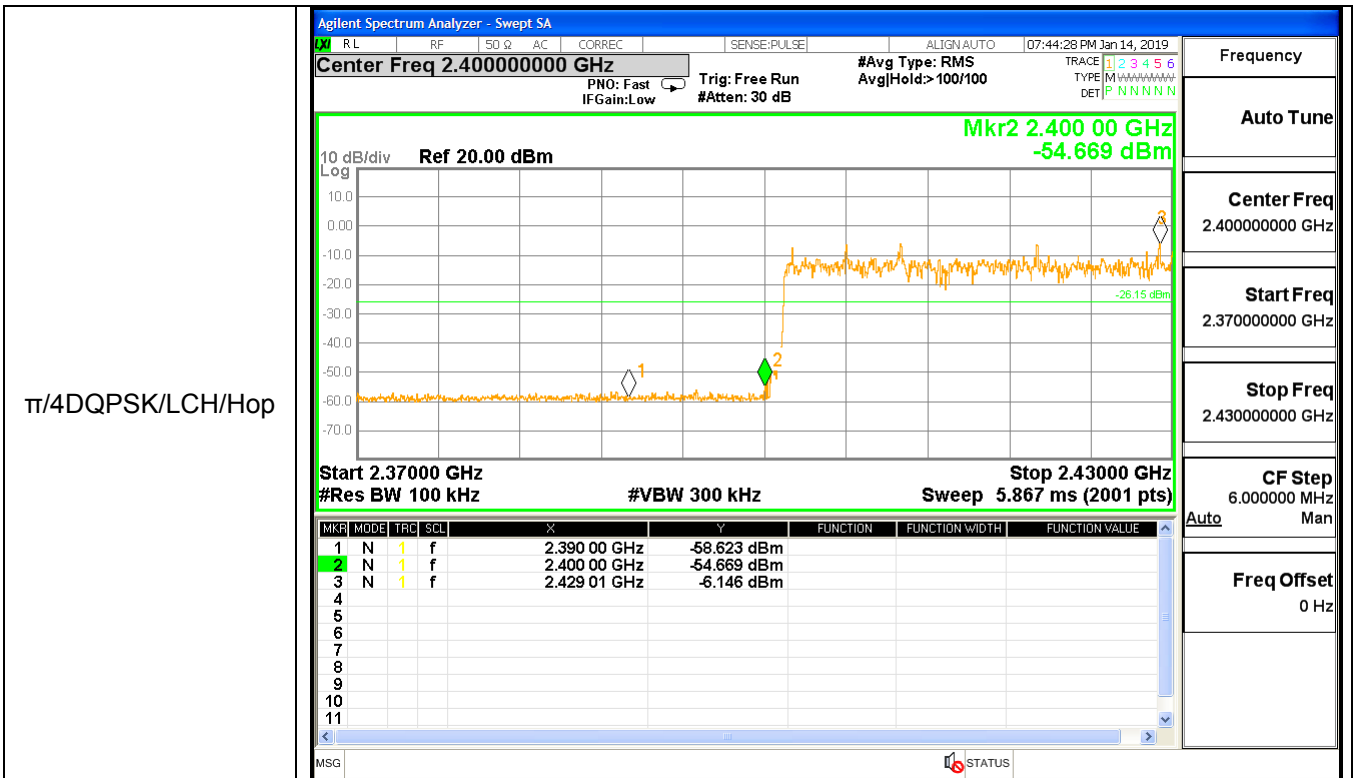
Type	Carrier Frequency(MHz)	Frequency(MHz)	Carrier Frequency Power [dBm]	Bandedge Peak(dBm)	Upper limit(dBm)	Conclusion
1DH5	2402	2390	-6.324	-58.92	-26.324	Pass
1DH5	2402	2400	-6.324	-57.38	-26.324	Pass
1DH5-Hopping	2402	2390	-6.122	-58.05	-26.122	Pass
1DH5-Hopping	2402	2400	-6.122	-58.08	-26.122	Pass
1DH5	2480	2483.5	-6.547	-59.52	-26.547	Pass
1DH5	2480	2500	-6.547	-58.78	-26.547	Pass
1DH5-Hopping	2480	2483.5	-6.197	-58.6	-26.197	Pass
1DH5-Hopping	2480	2500	-6.197	-58.46	-26.197	Pass
2DH5	2402	2390	-6.295	-60.44	-26.295	Pass
2DH5	2402	2400	-6.295	-50.4	-26.295	Pass
2DH5-Hopping	2480	2483.5	-6.528	-57.91	-26.528	Pass
2DH5-Hopping	2480	2500	-6.528	-57.33	-26.528	Pass
2DH5	2480	2483.5	-9.83	-59.1	-29.83	Pass
2DH5	2480	2500	-9.83	-60.6	-29.83	Pass
2DH5-Hopping	2402	2390	-6.146	-58.62	-26.146	Pass
2DH5-Hopping	2402	2400	-6.146	-54.67	-26.146	Pass

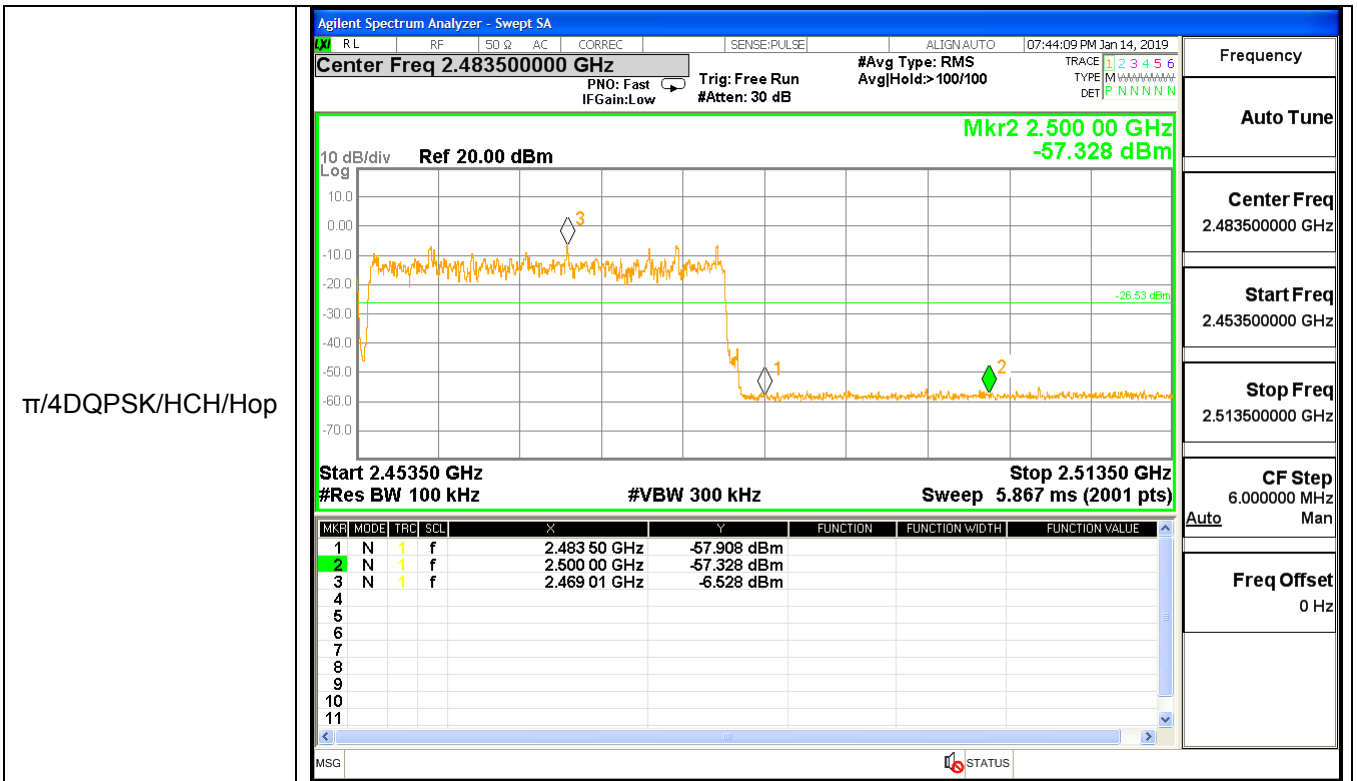
Test Graph



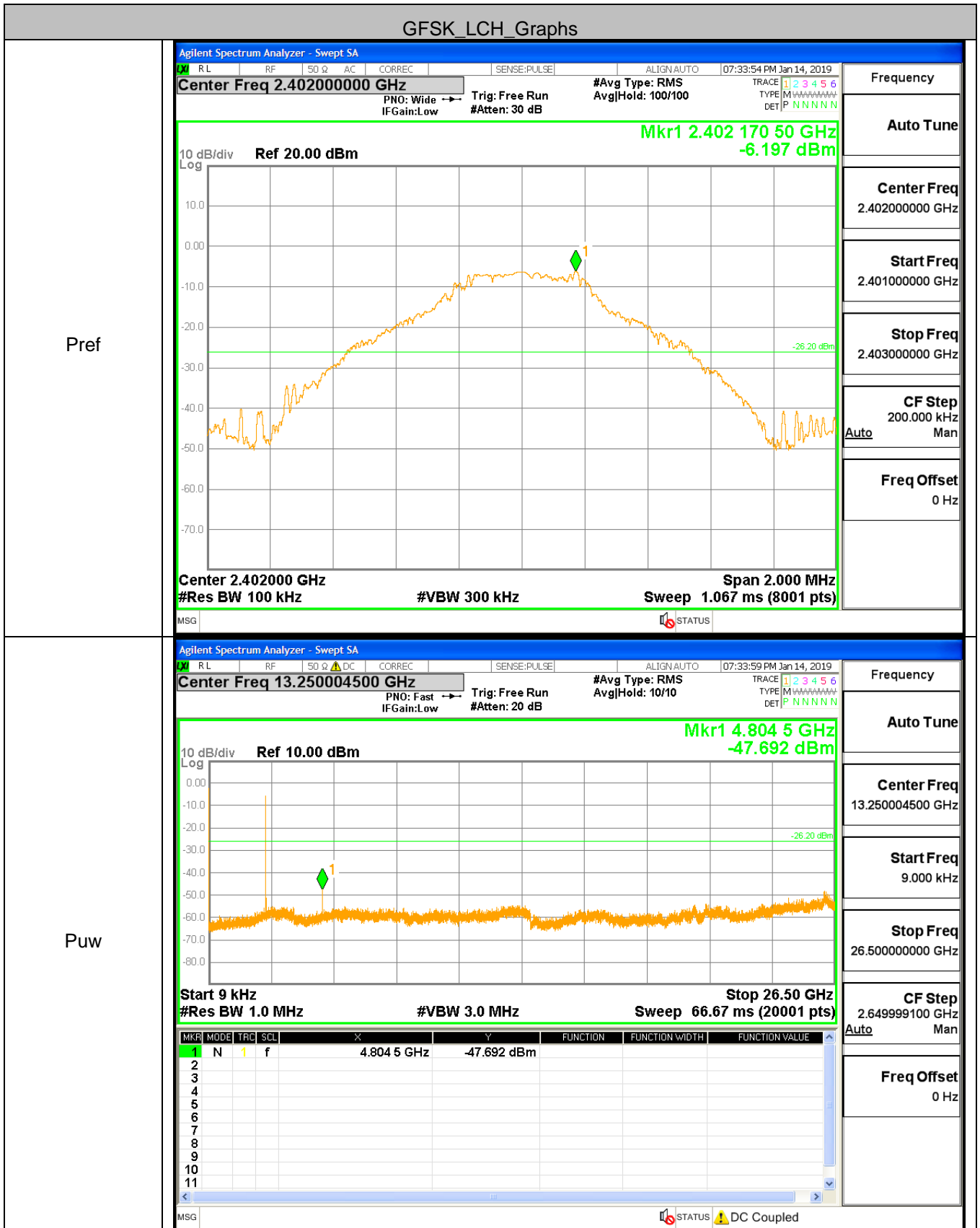




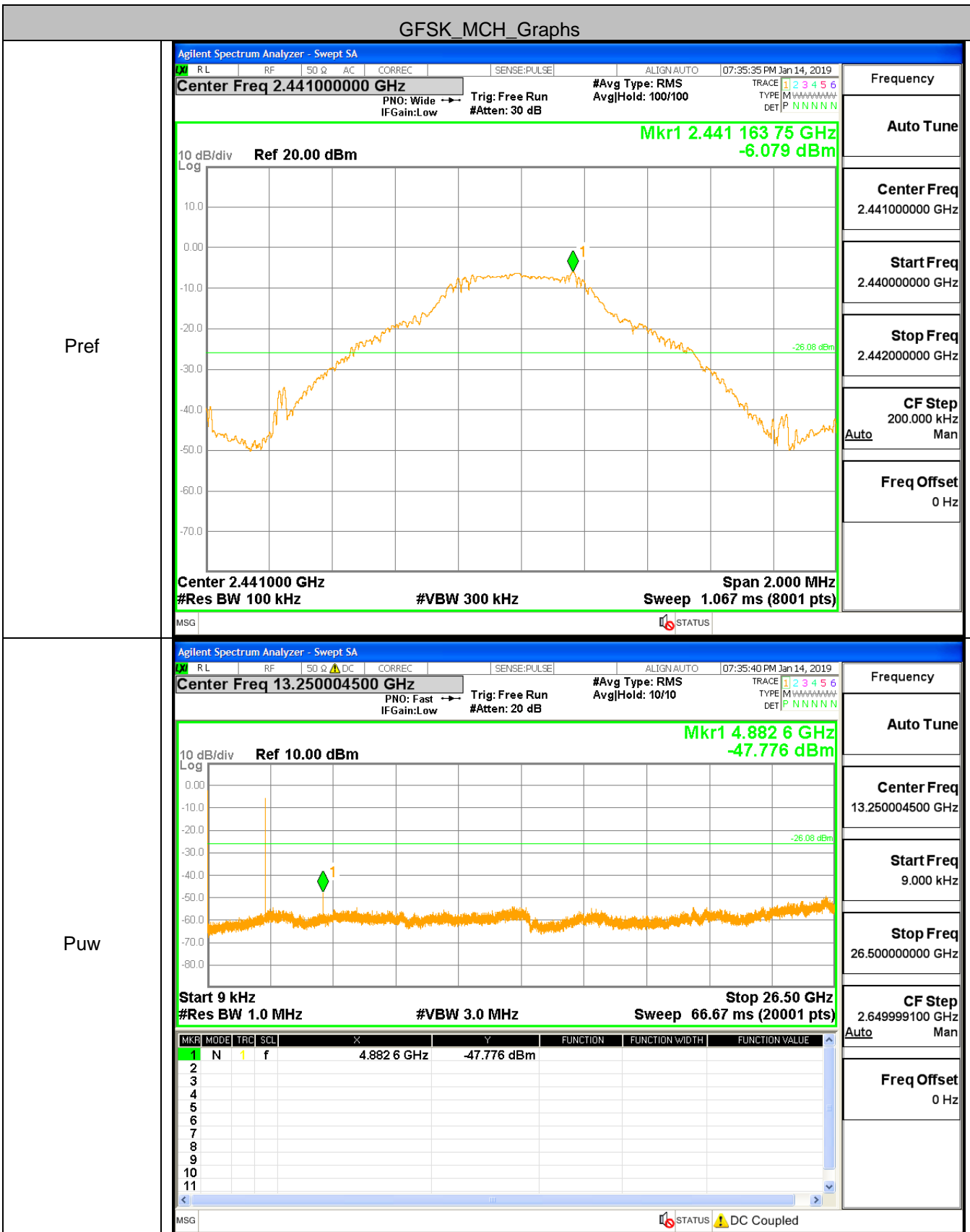




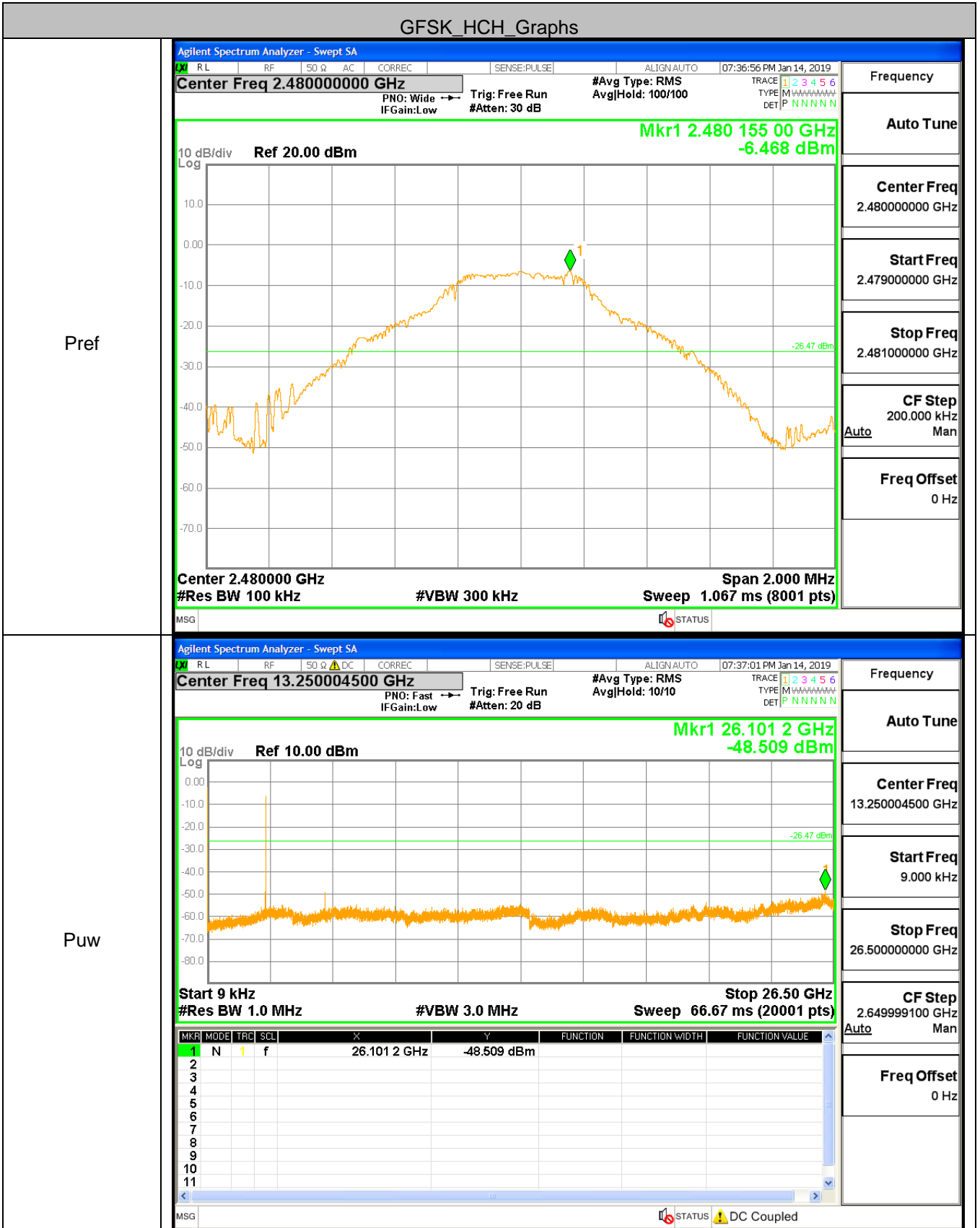
A.7 RF Conducted Spurious Emissions Test Graph



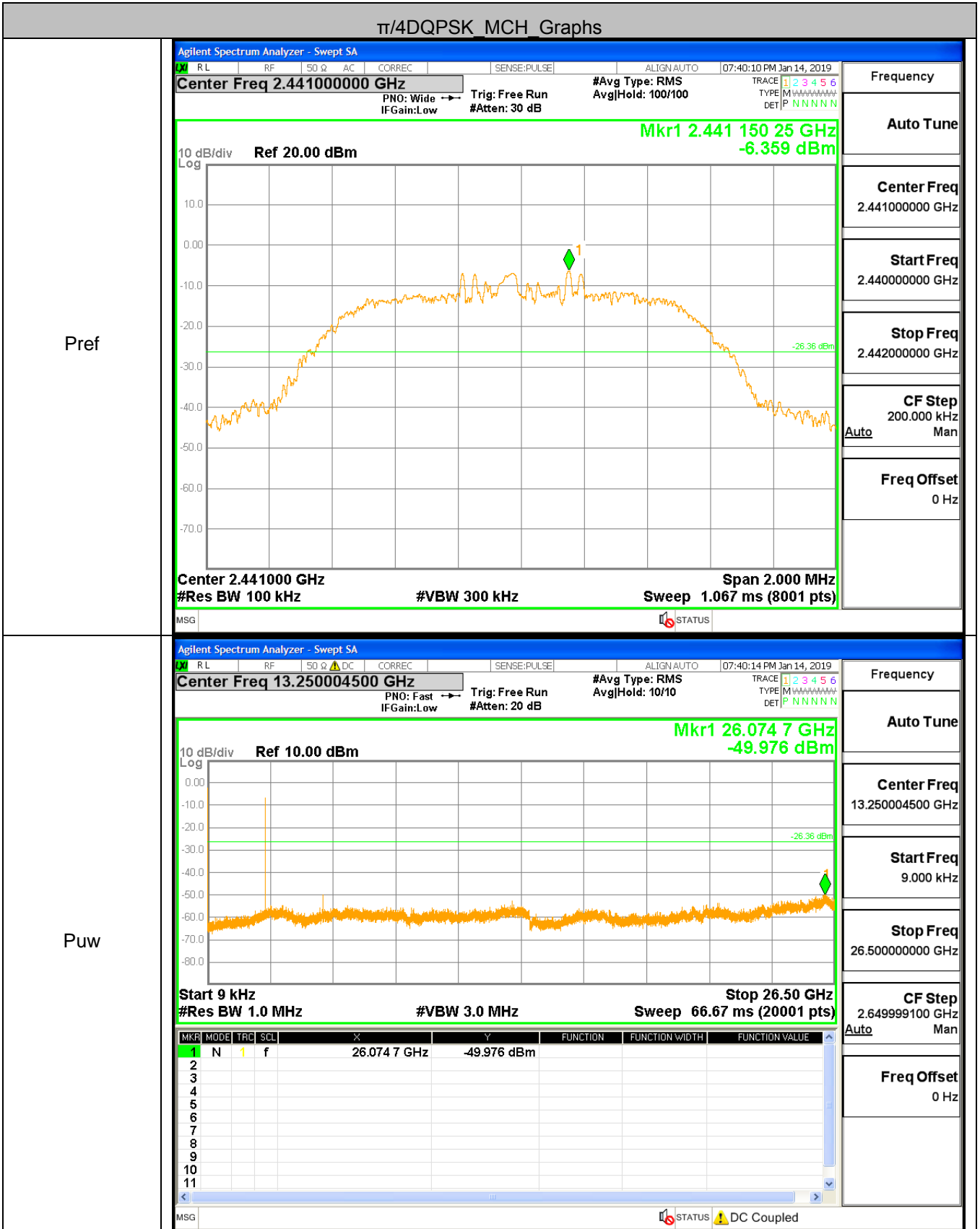
GFSK_MCH_Graphs



GFSK_HCH_Graphs



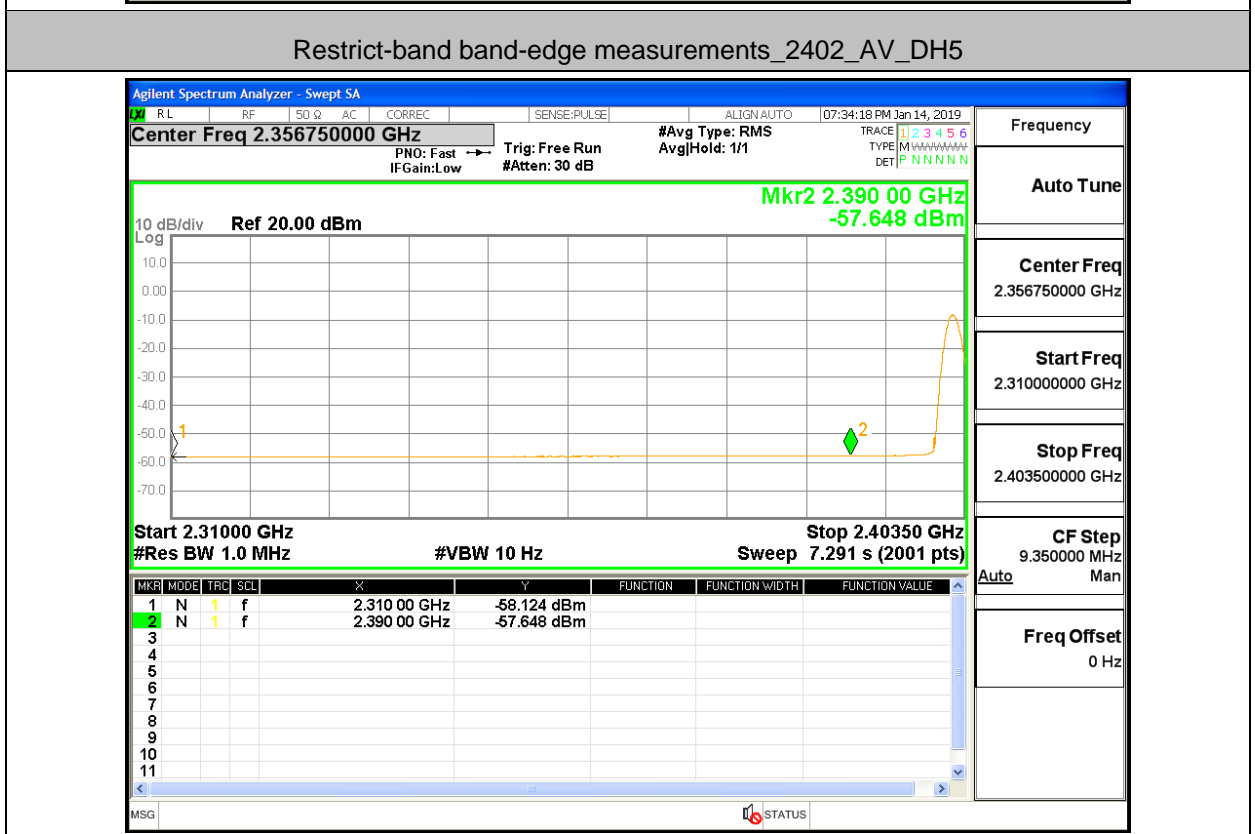
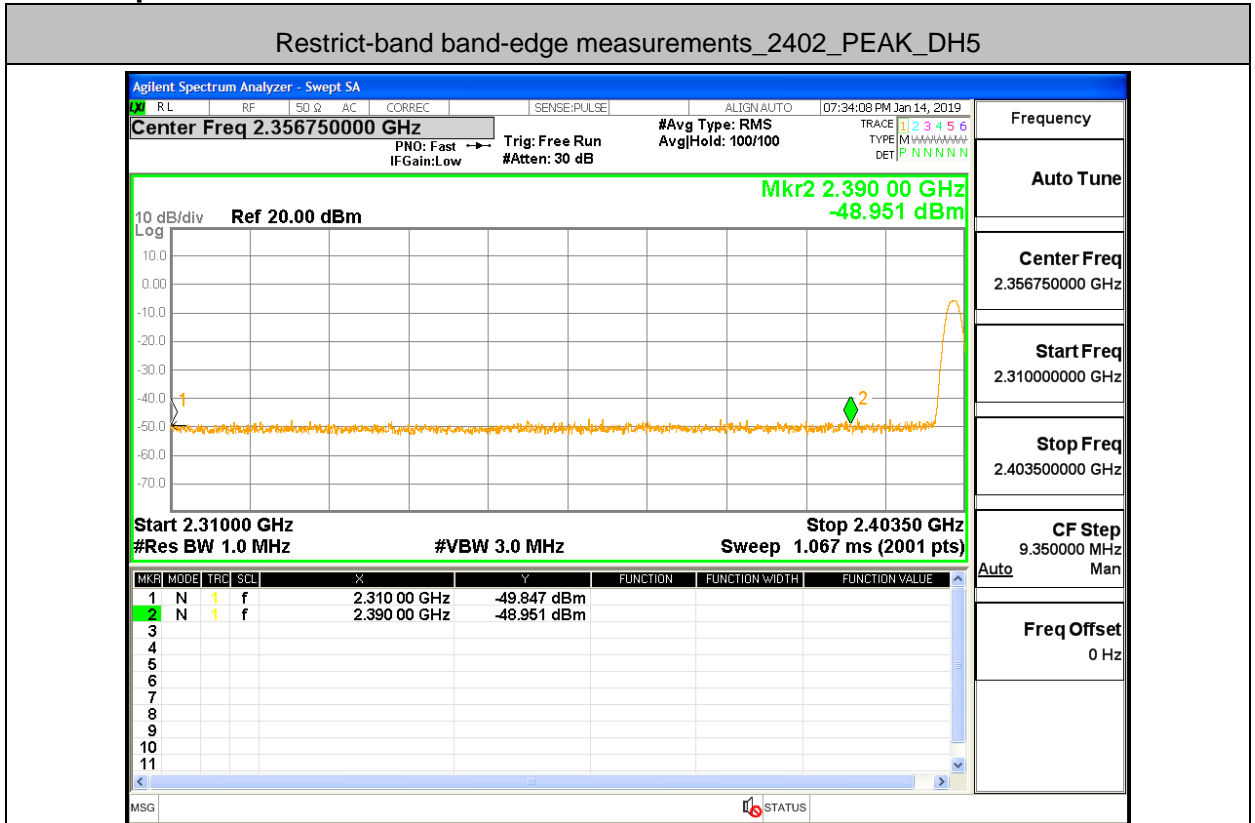
$\pi/4$ DQPSK MCH Graphs



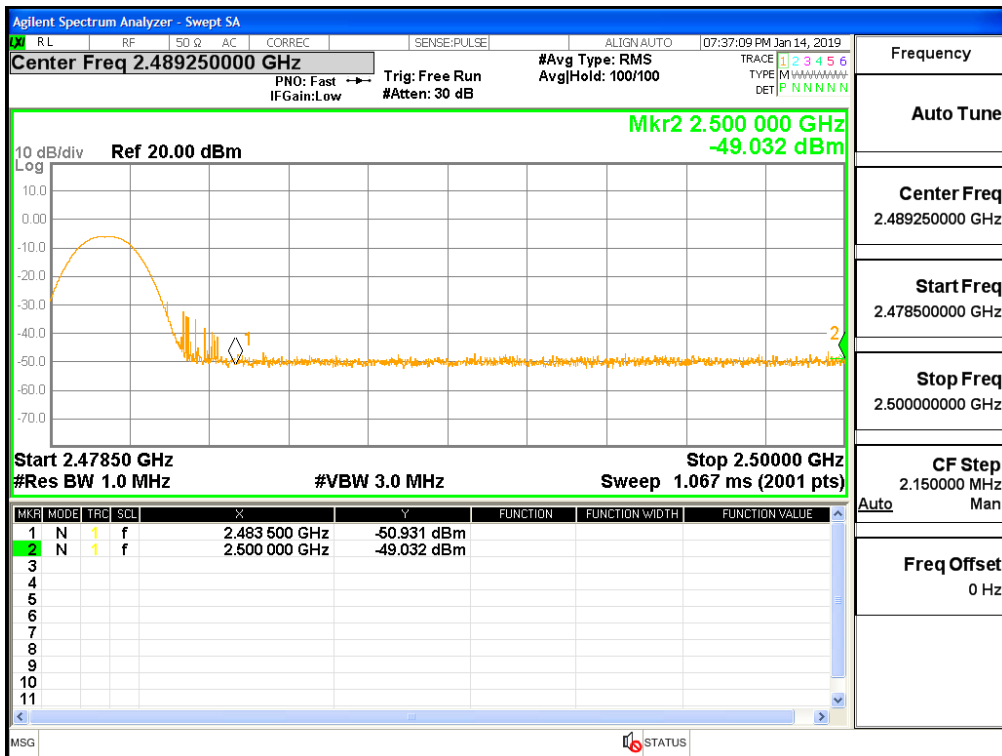
A.8 Restrict-band measurements

Type	Carrier Frequency (MHz)	Frequency(MHz)	Gain	Ground Factor	Peak Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Average Value(dBm)	E [dBuV/m]	Limit [dBuV/m]	Conclusion
1DH5	2402	2310	2.00	0.00	-49.85	47.35	74	-58.12	39.08	54	Pass
1DH5	2402	2390	2.00	0.00	-48.95	48.25	74	-57.65	39.55	54	Pass
1DH5	2480	2483.5	2.00	0.00	-50.93	46.27	74	-56.88	40.32	54	Pass
1DH5	2480	2500	2.00	0.00	-49.03	48.17	74	-57.05	40.15	54	Pass
2DH5	2402	2310	2.00	0.00	-50.56	46.64	74	-58.08	39.12	54	Pass
2DH5	2402	2390	2.00	0.00	-52.12	45.08	74	-57.6	39.6	54	Pass
2DH5	2480	2483.5	2.00	0.00	-51.01	46.19	74	-56.84	40.36	54	Pass
2DH5	2480	2500	2.00	0.00	-48.92	48.28	74	-57.06	40.14	54	Pass

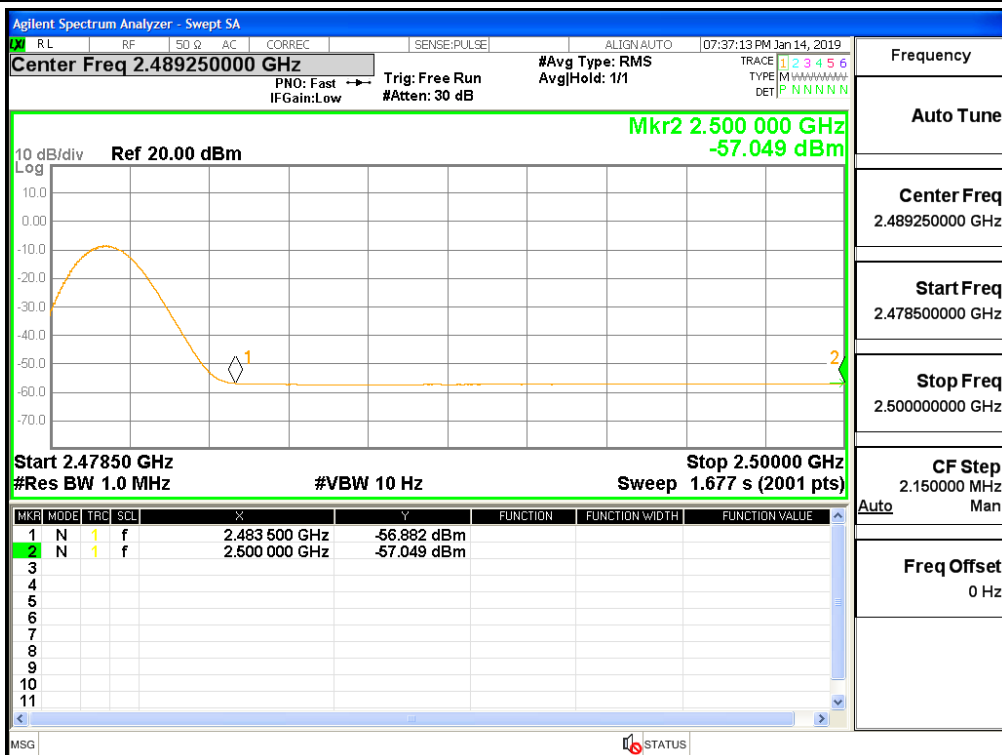
Test Graph



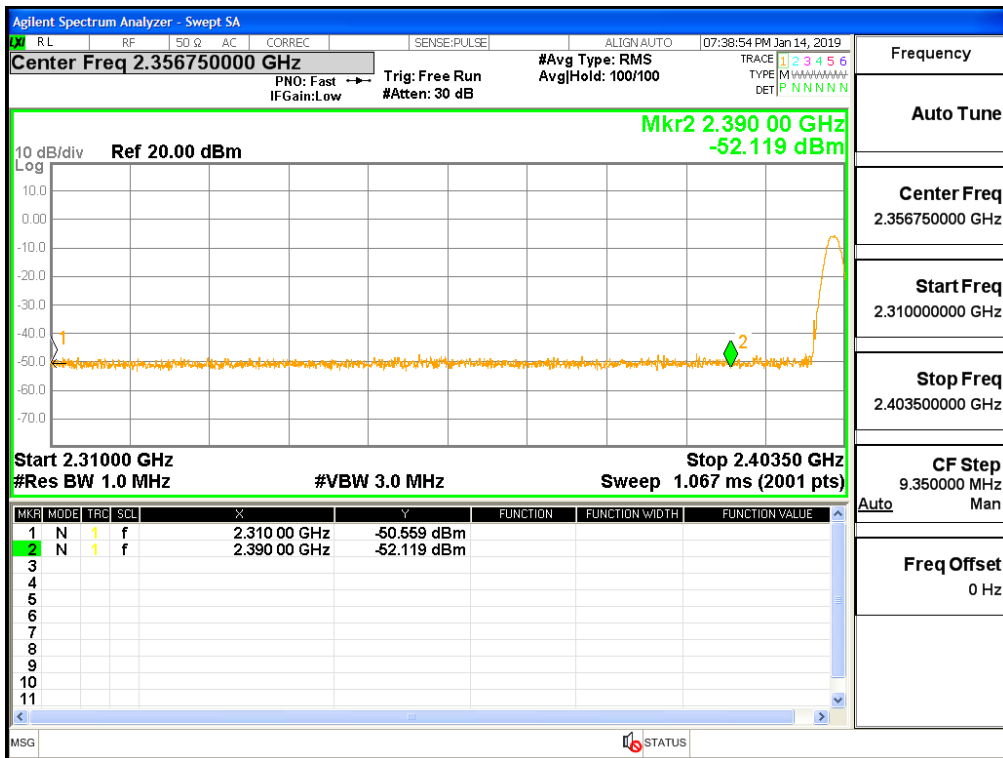
Restrict-band band-edge measurements_2480_PEAK_DH5



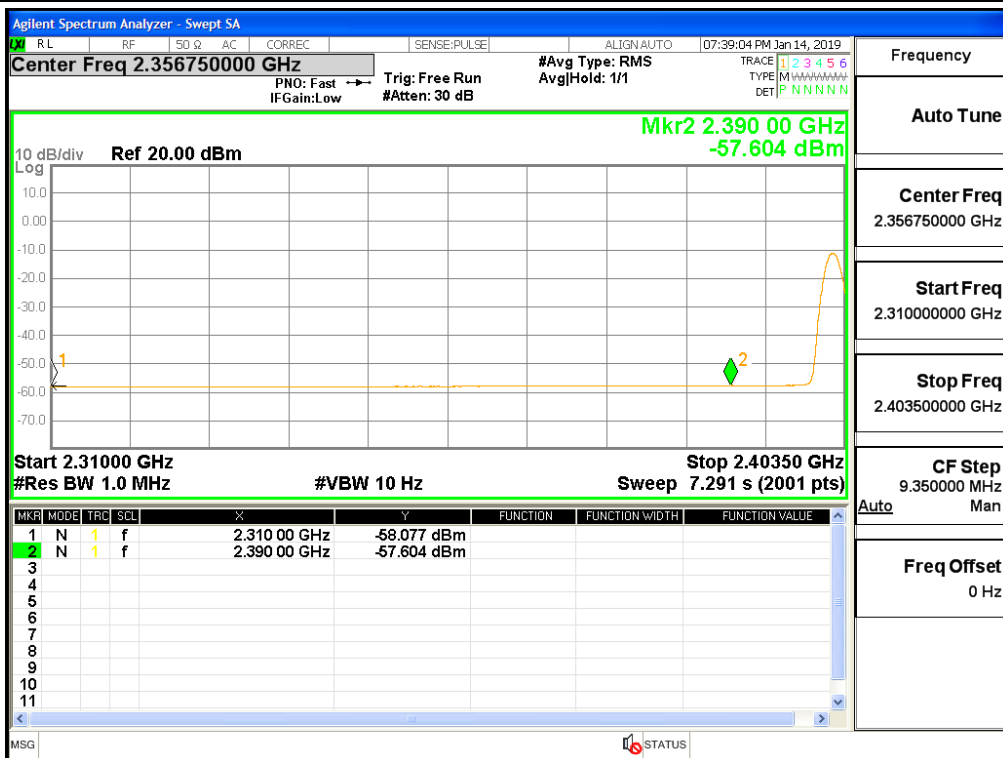
Restrict-band band-edge measurements_2480_AV_DH5



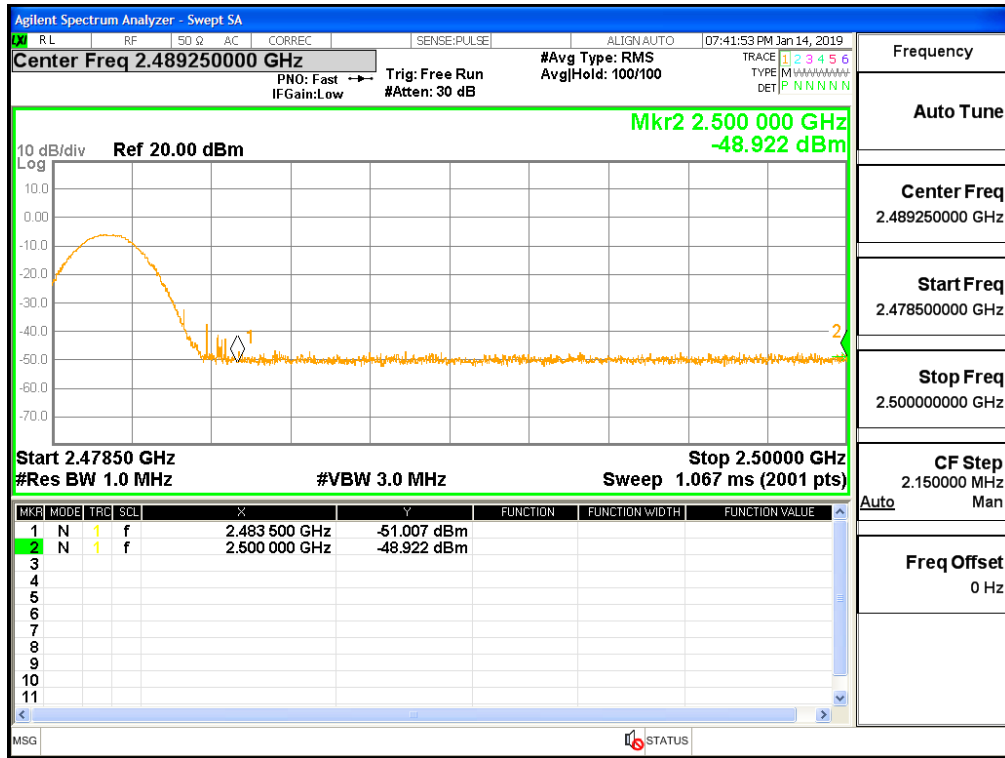
Restrict-band band-edge measurements_2402_PEAK_2DH5



Restrict-band band-edge measurements_2402_AV_2DH5



Restrict-band band-edge measurements_2480_PEAK_2DH5



Restrict-band band-edge measurements_2480_AV_2DH5

