

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

Product Name: 4K ATV Stick

Trade Mark: N/A

Test Model: SN8B6BB

FCC ID: 2AOVU-SN8B6BB

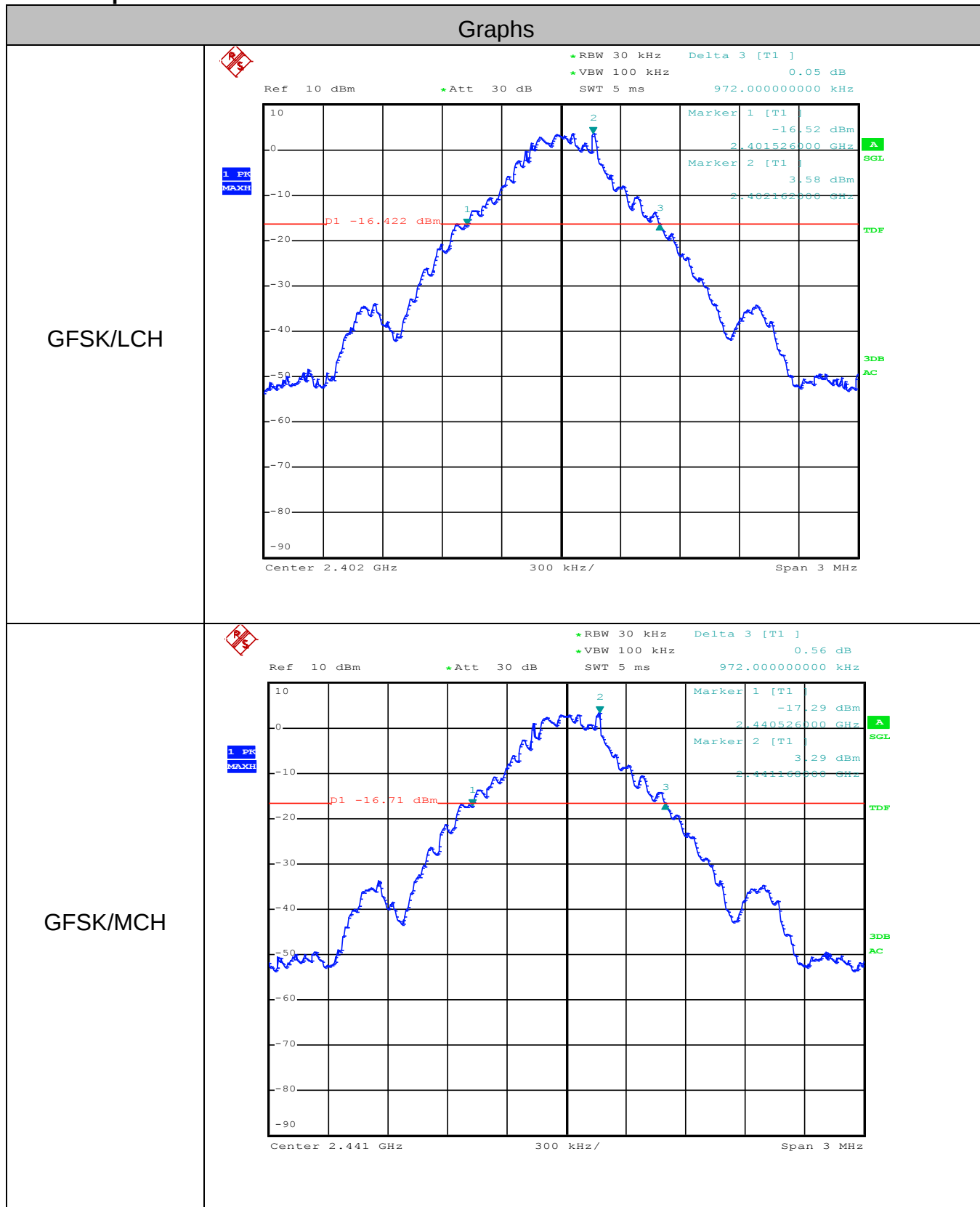
Environmental Conditions

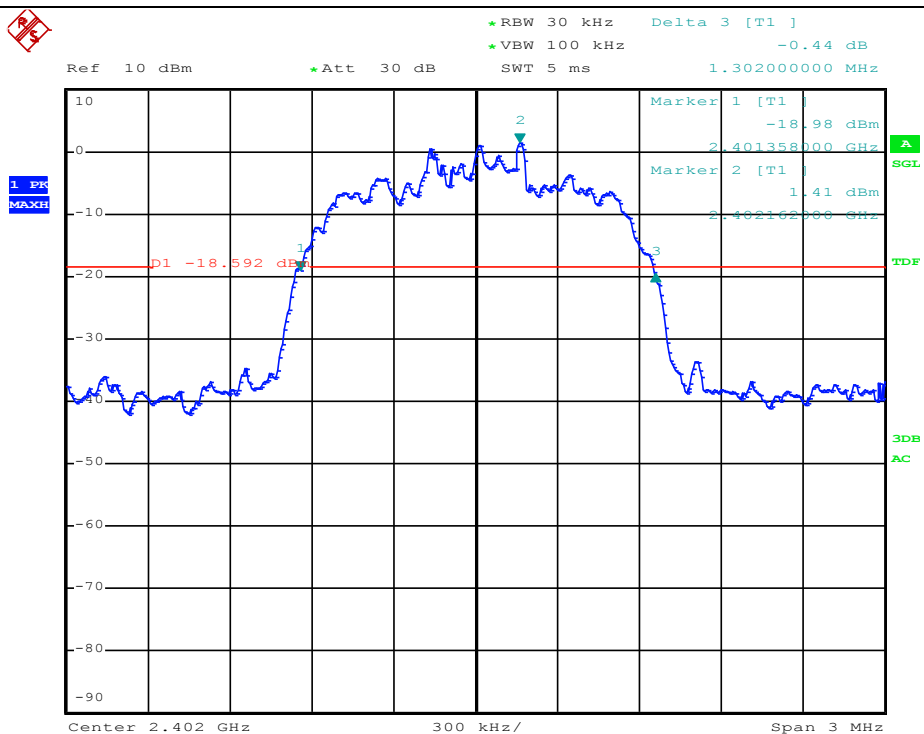
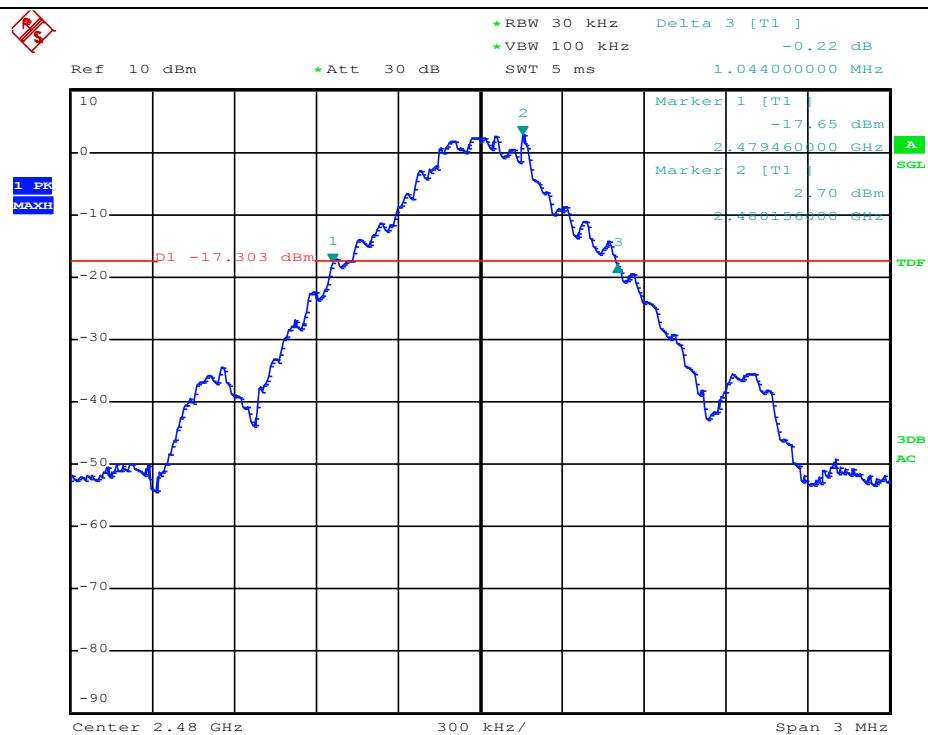
Temperature:	22.9 ° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Gary Qian
Supervised by:	Eden Hu

A.1 20 dB Bandwidth

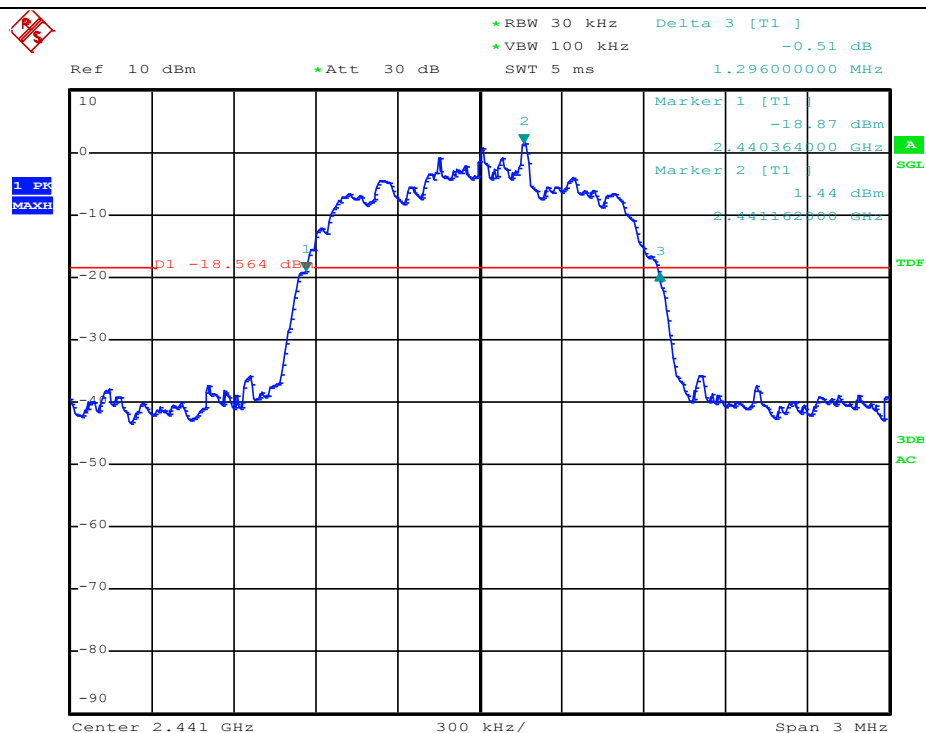
Mode	Channel.	20dB Bandwidth [MHz]	Limit(MHz)	Verdict
GFSK	LCH	0.972MHz	Not Specified	PASS
GFSK	MCH	0.972MHz	Not Specified	PASS
GFSK	HCH	1.044MHz	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.302MHz	Not Specified	PASS
$\pi/4$ DQPSK	MCH	1.296MHz	Not Specified	PASS
$\pi/4$ DQPSK	HCH	1.332MHz	Not Specified	PASS
8DPSK	LCH	1.320MHz	Not Specified	PASS
8DPSK	MCH	1.296MHz	Not Specified	PASS
8DPSK	HCH	1.302MHz	Not Specified	PASS

Test Graph

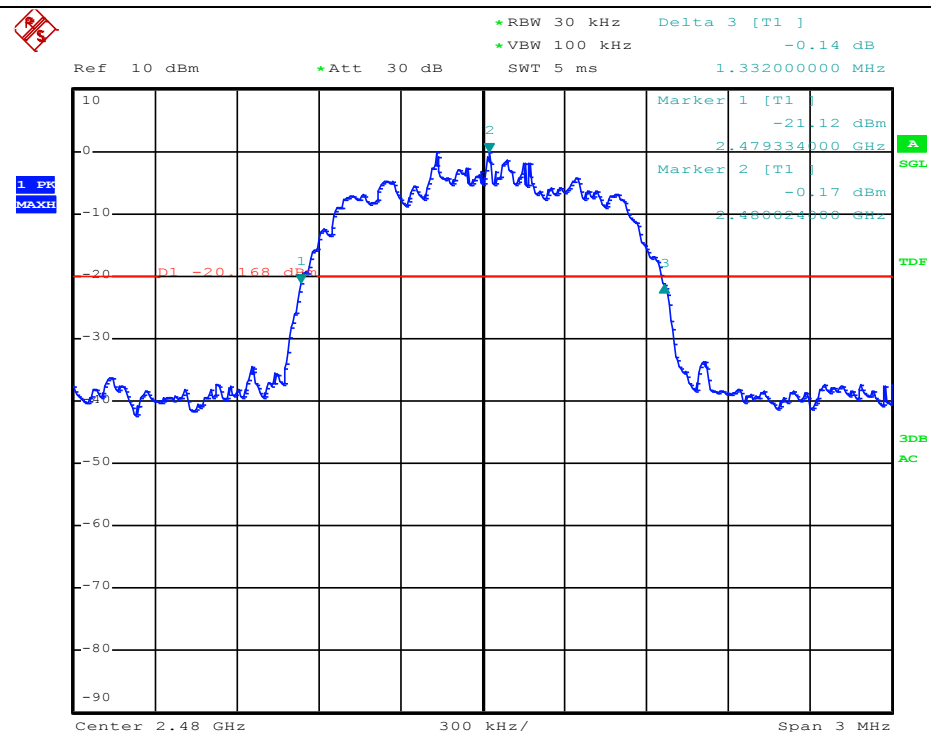


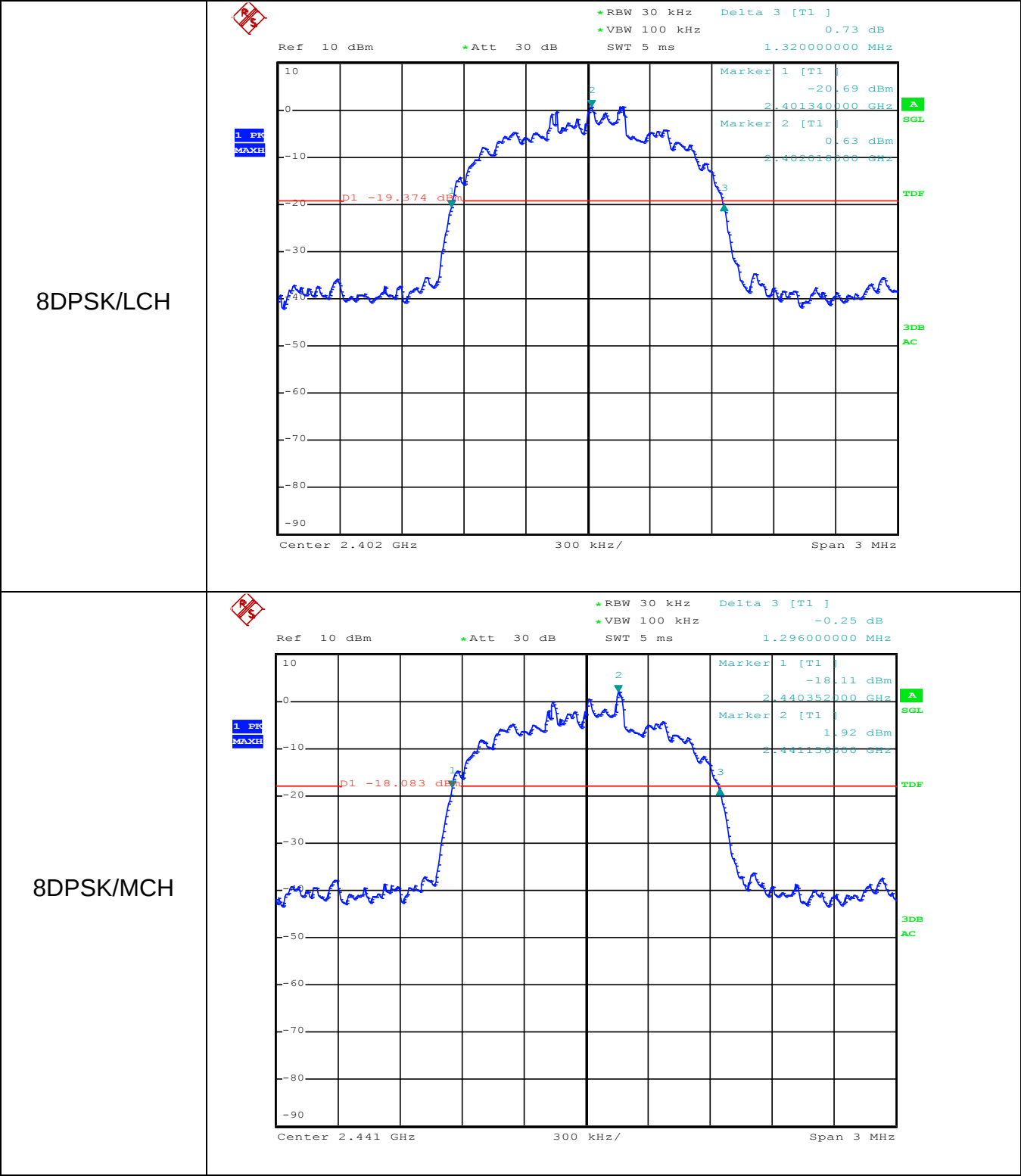


$\pi/4$ DQPSK/MCH

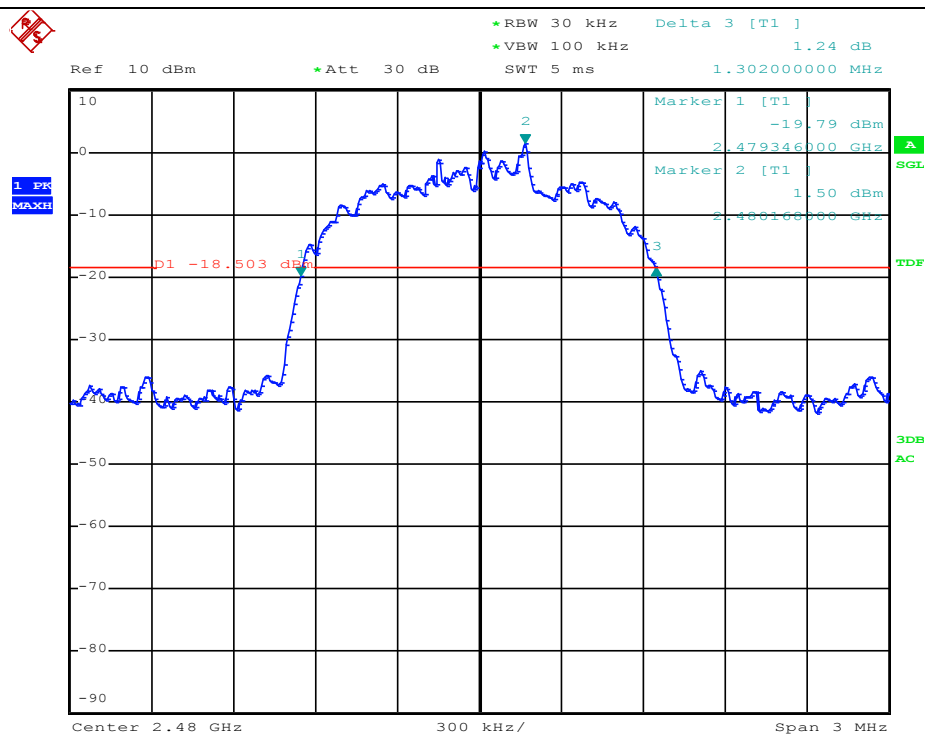


$\pi/4$ DQPSK/HCH





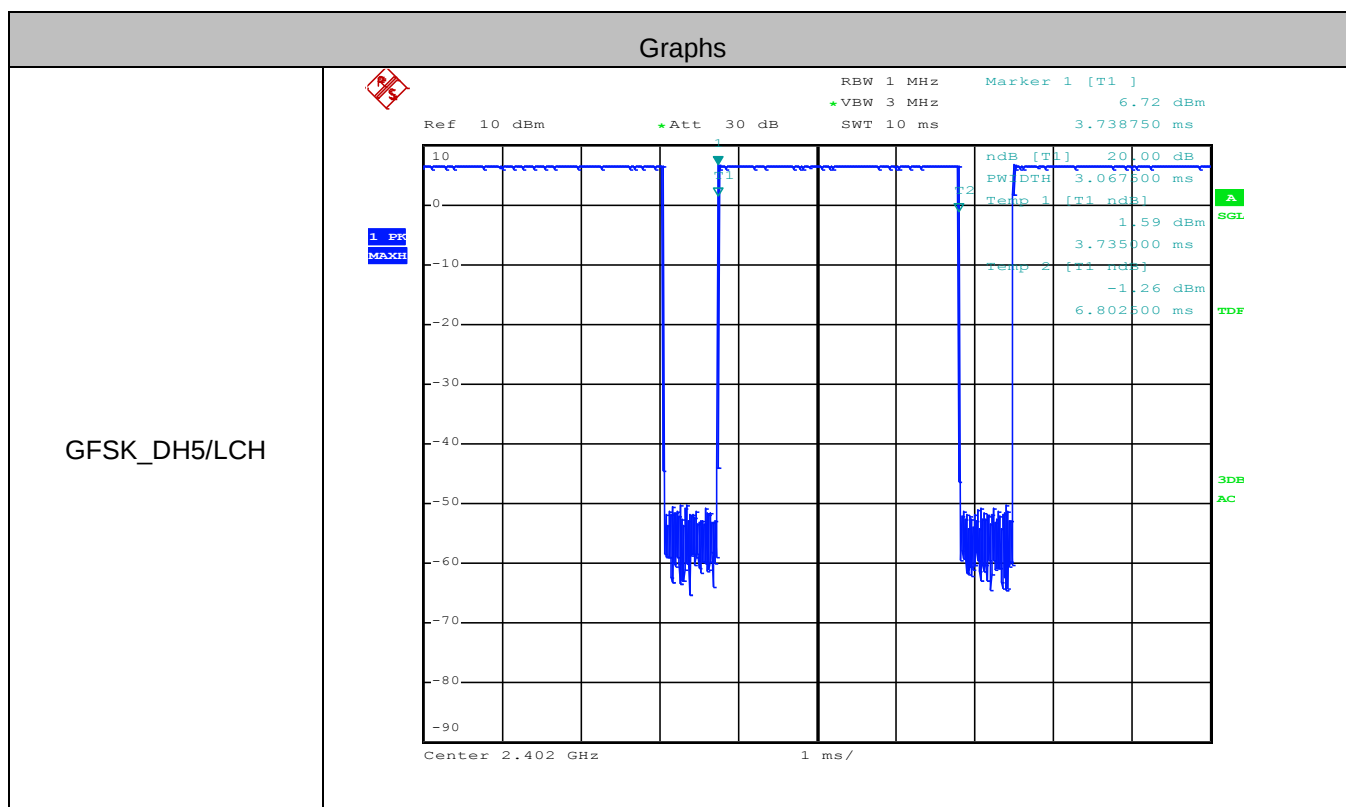
8DPSK/HCH

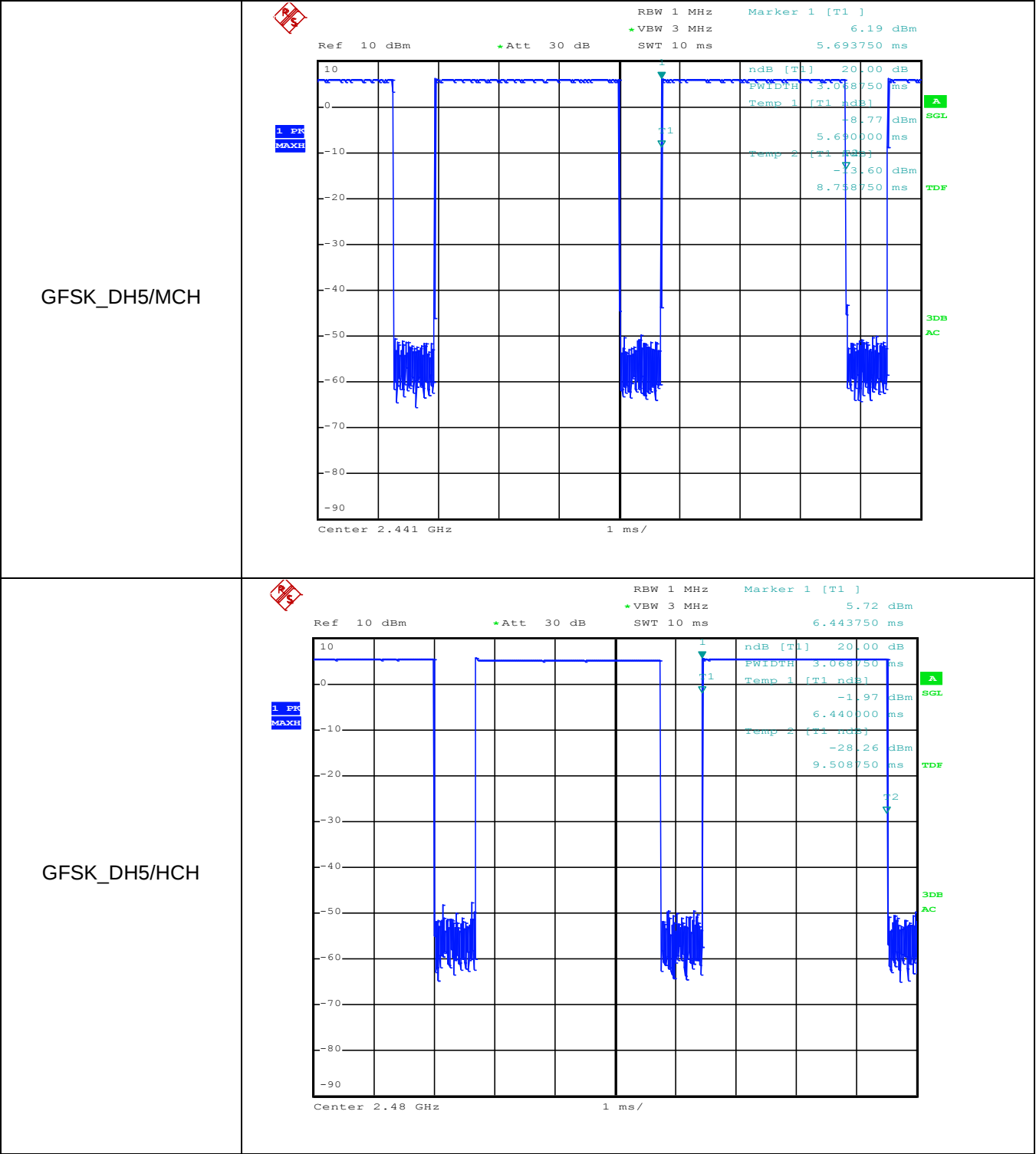


A.2 Dwell Time

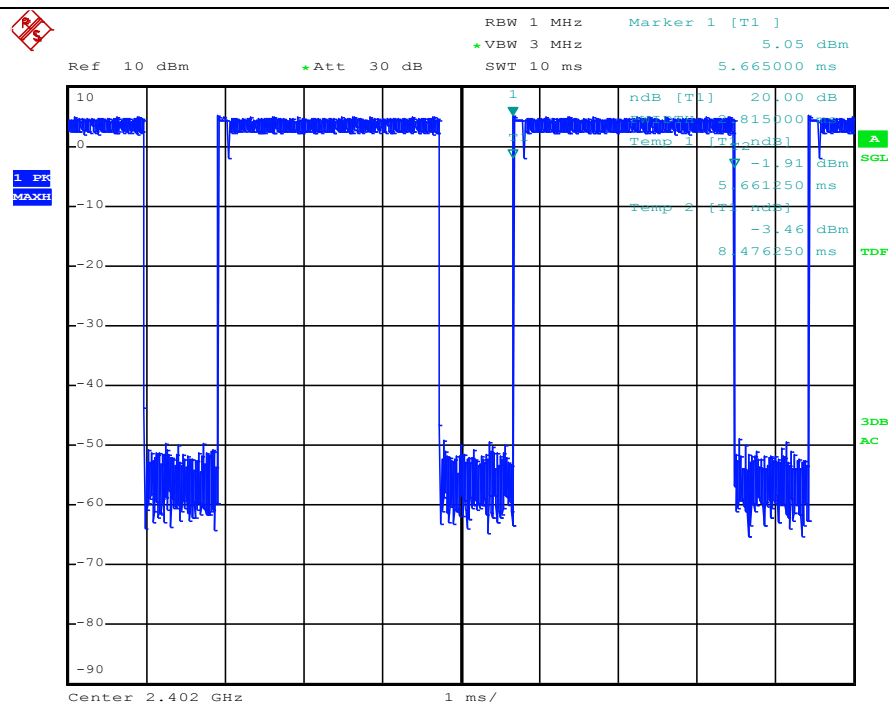
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	3.068	106.7	0.327	0.4	PASS
GFSK	DH5	MCH	3.069	106.7	0.327	0.4	PASS
GFSK	DH5	HCH	3.069	106.7	0.327	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.815	106.7	0.300	0.4	PASS
$\pi/4$ DQPSK	2DH5	MCH	2.816	106.7	0.300	0.4	PASS
$\pi/4$ DQPSK	2DH5	HCH	2.815	106.7	0.300	0.4	PASS
8DPSK	3DH5	LCH	2.887	106.7	0.308	0.4	PASS
8DPSK	3DH5	MCH	2.886	106.7	0.308	0.4	PASS
8DPSK	3DH5	HCH	2.887	106.7	0.308	0.4	PASS

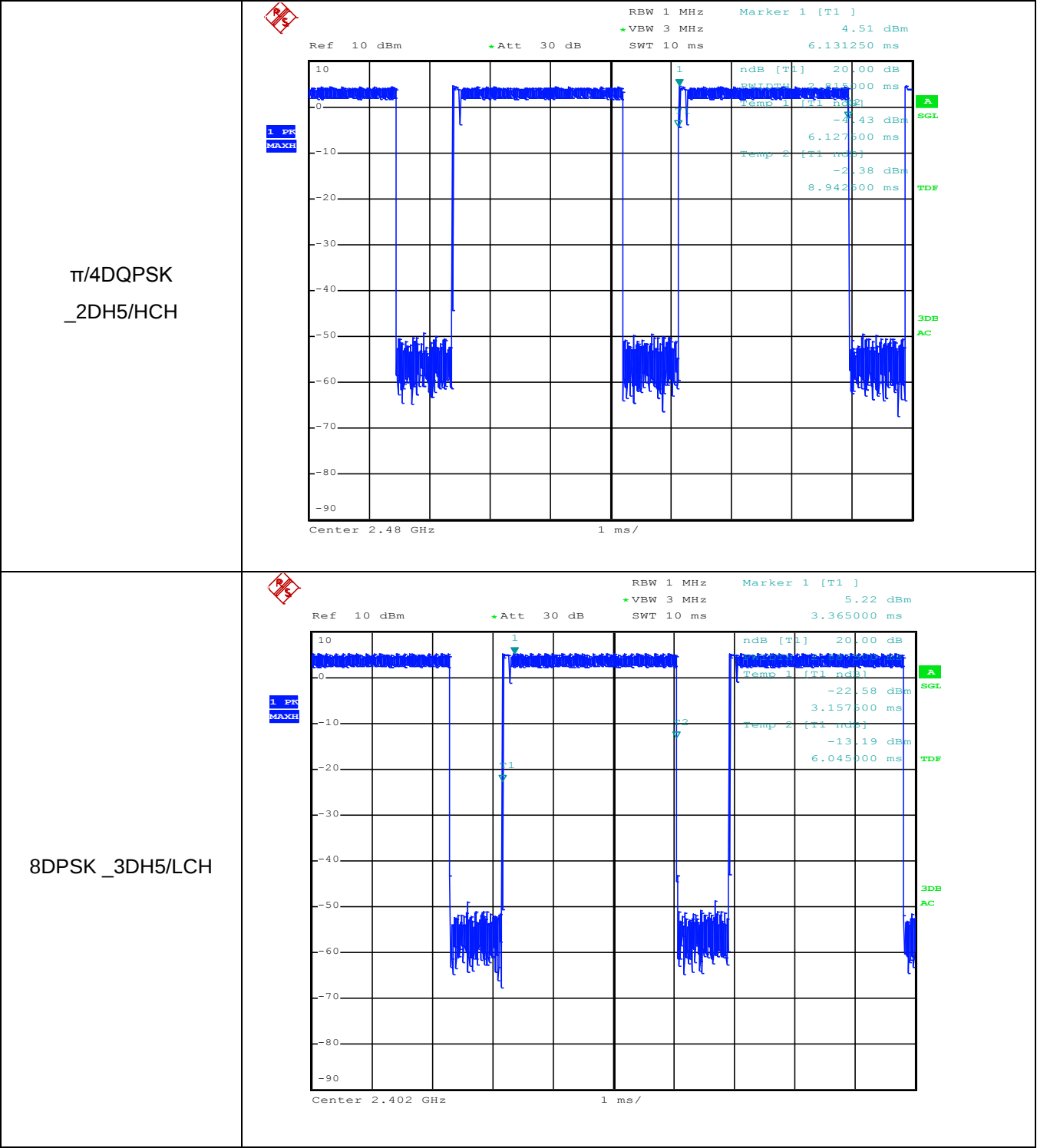
Test Graph

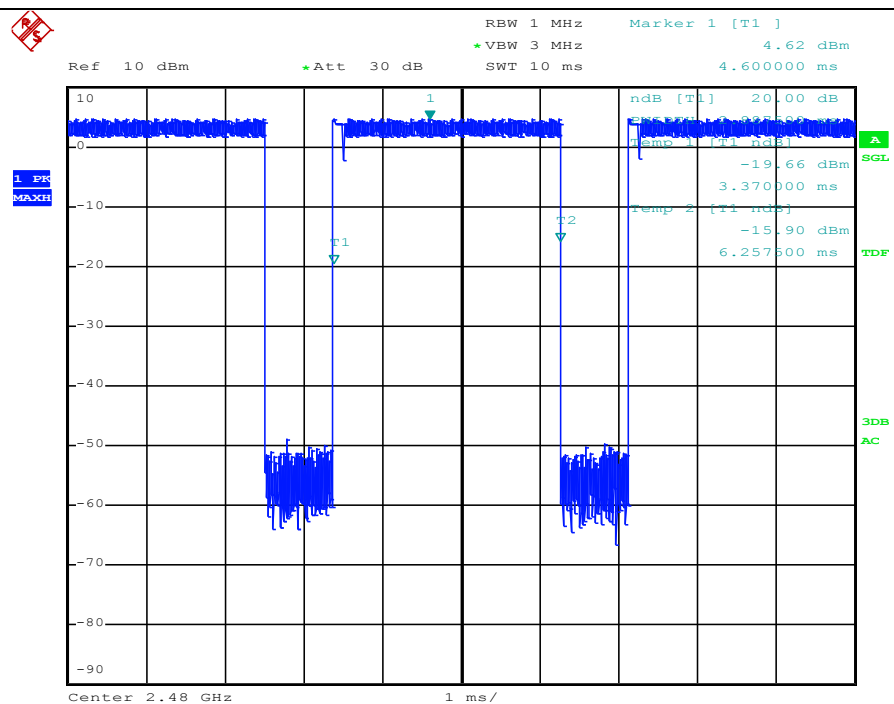
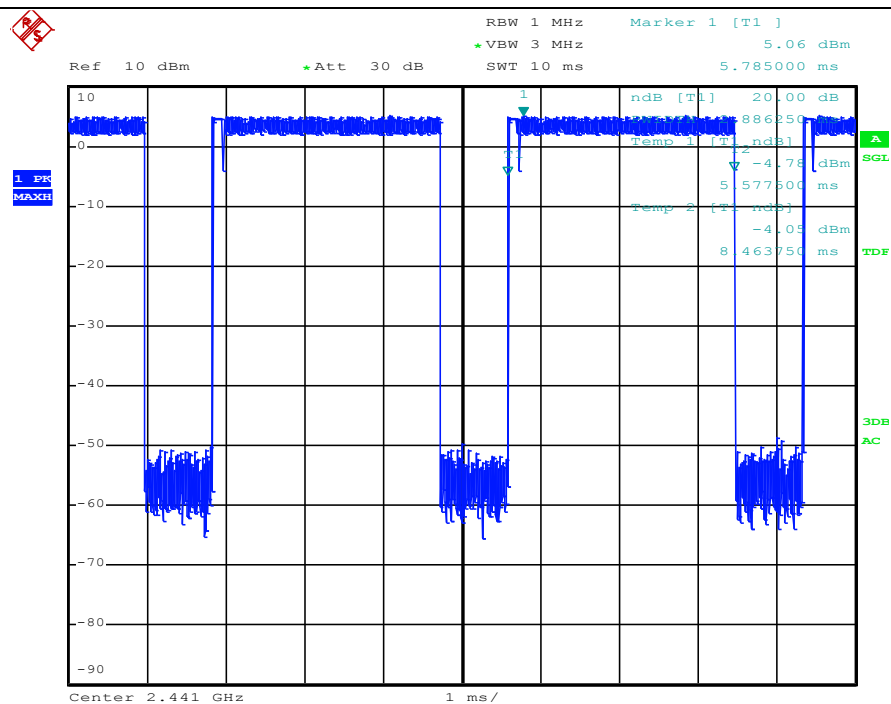




π/4DQPSK
_2DH5/LCH



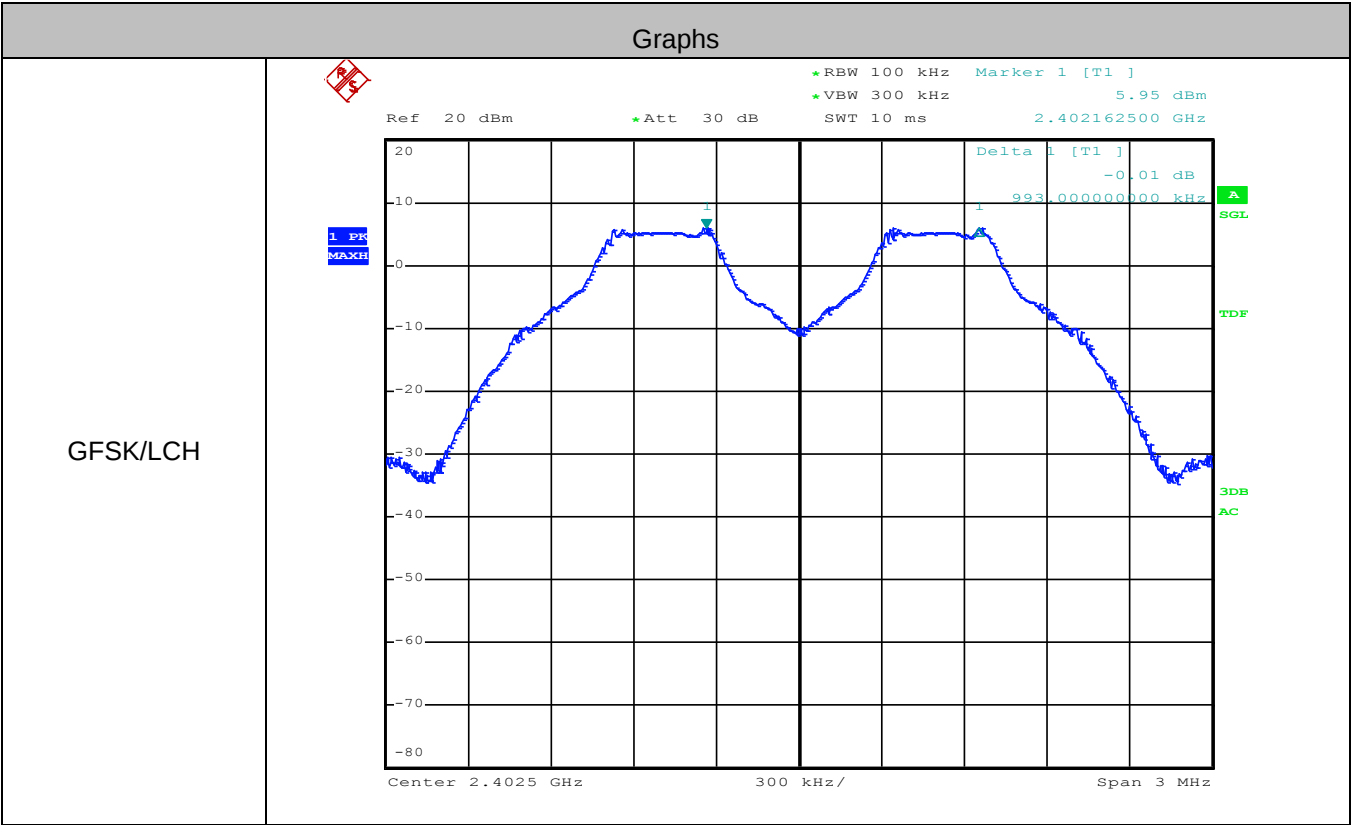


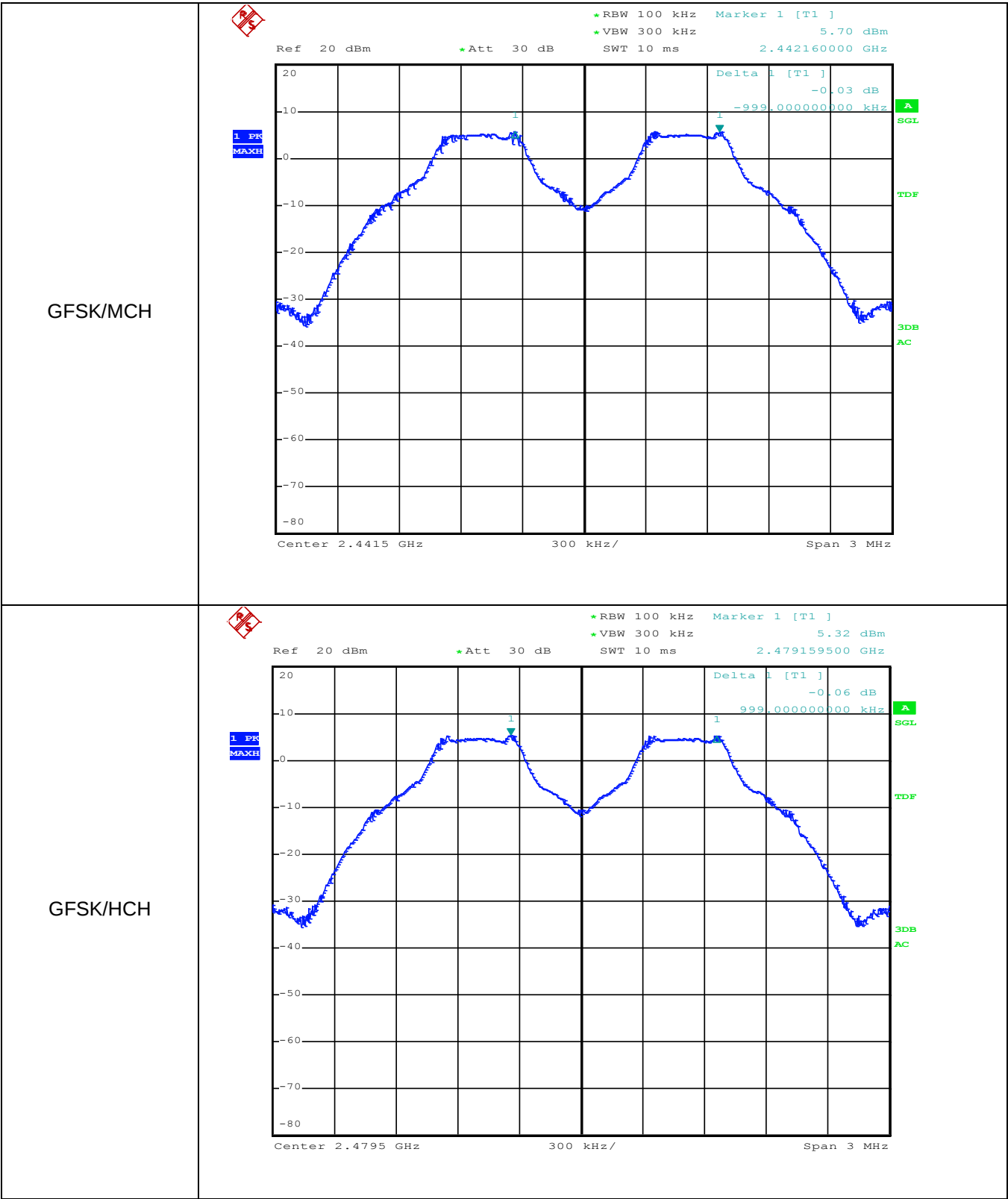


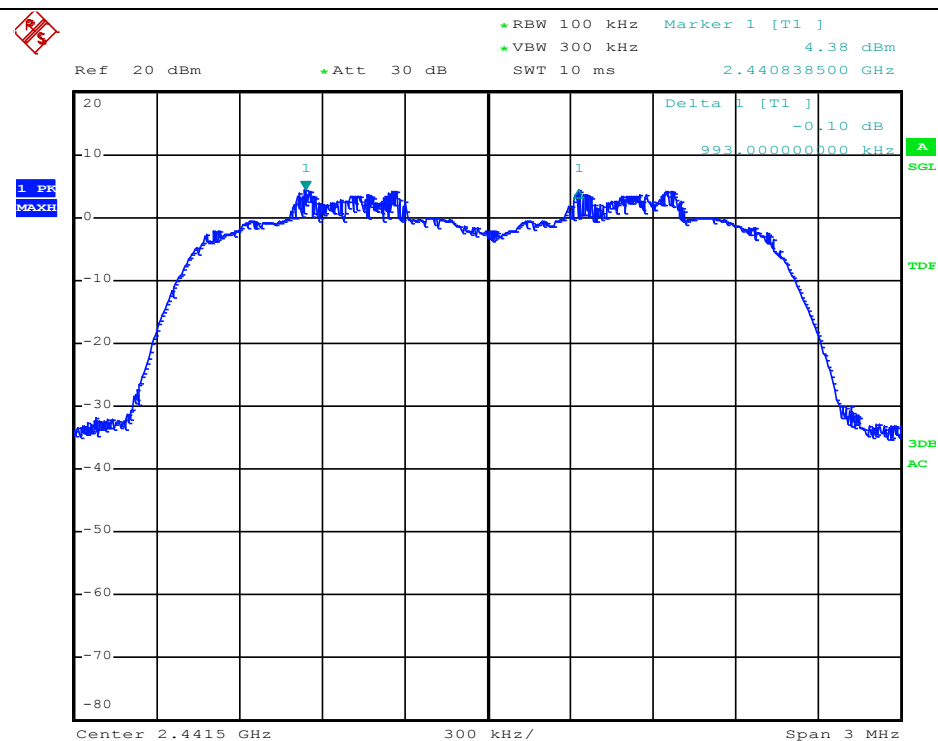
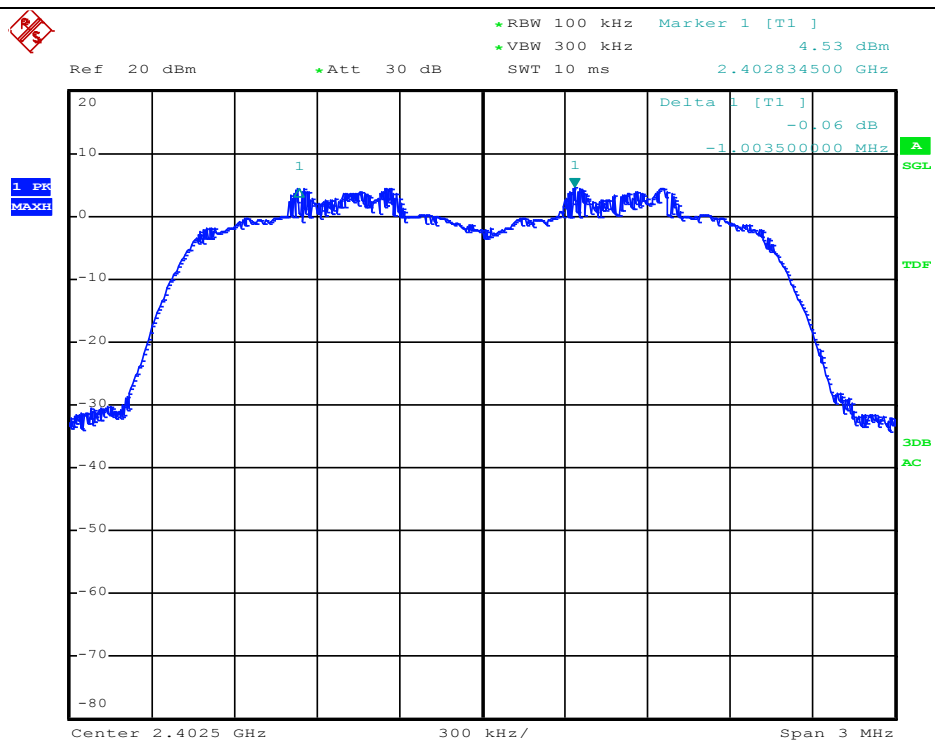
A.3 Carrier Frequency Separation

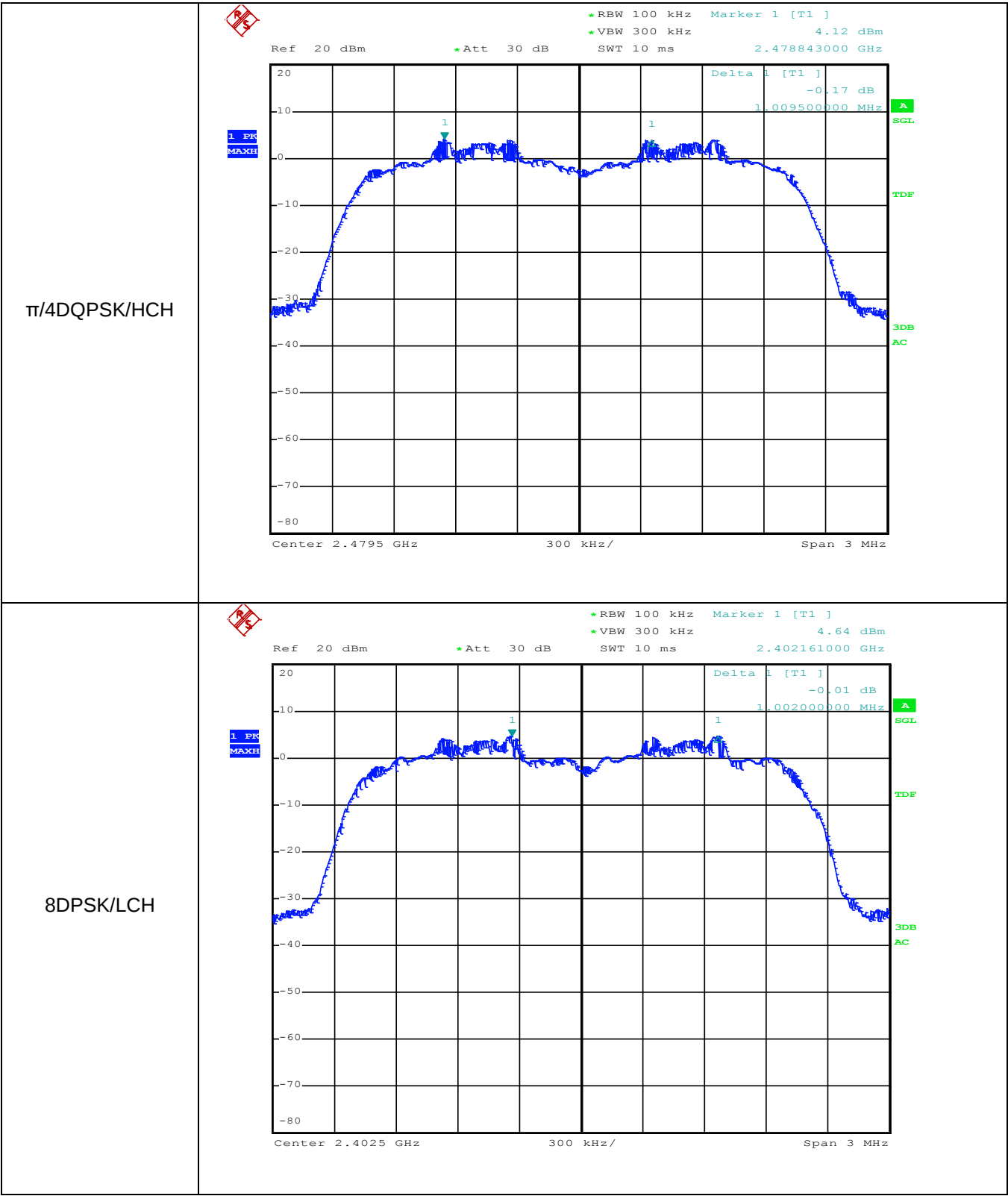
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.993	0.648	PASS
GFSK	MCH	0.999	0.648	PASS
GFSK	HCH	0.999	0.696	PASS
π /4DQPSK	LCH	1.004	0.868	PASS
π /4DQPSK	MCH	0.993	0.864	PASS
π /4DQPSK	HCH	1.010	0.888	PASS
8DPSK	LCH	1.002	0.880	PASS
8DPSK	MCH	0.999	0.864	PASS
8DPSK	HCH	1.000	0.868	PASS

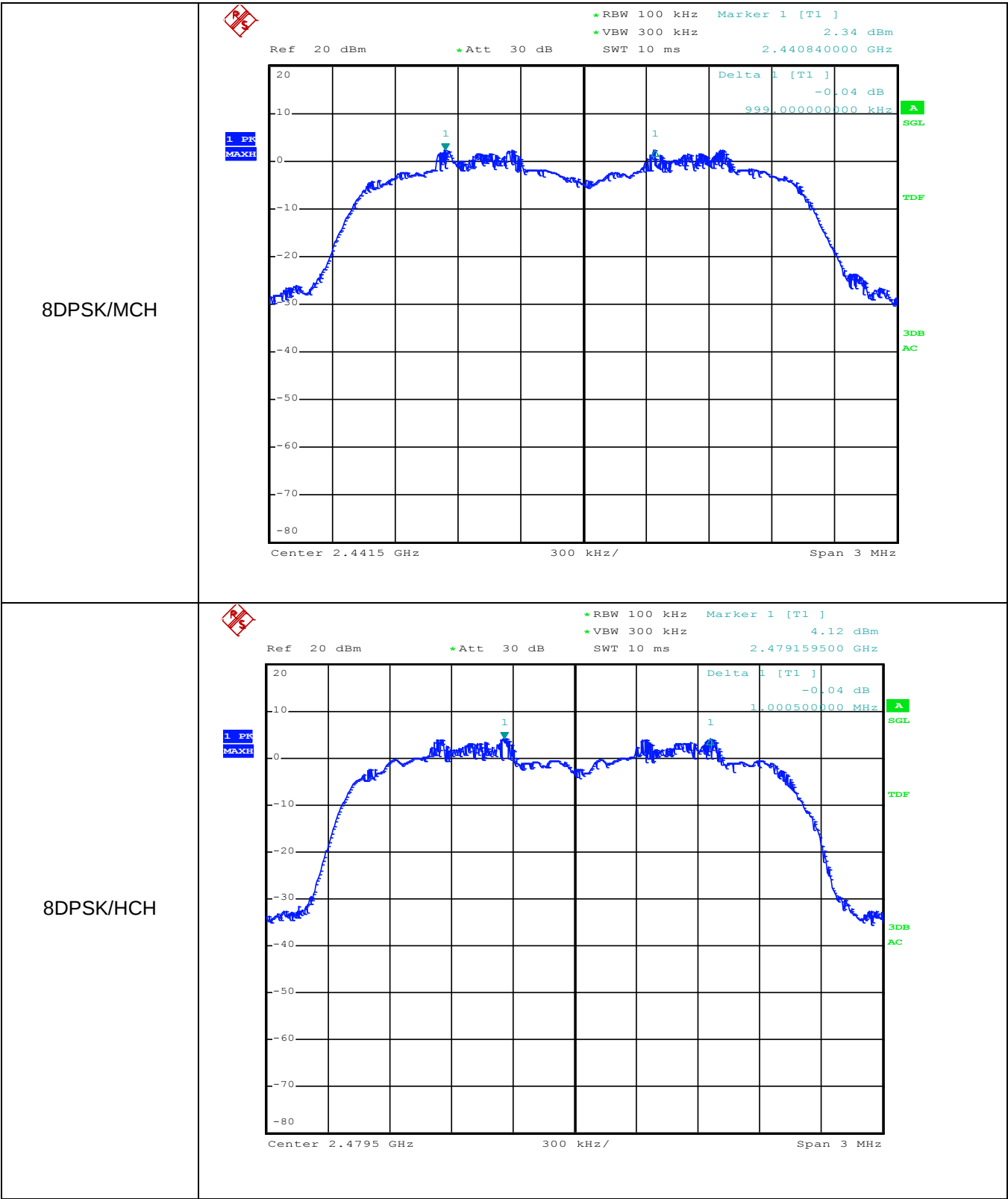
Test Graph







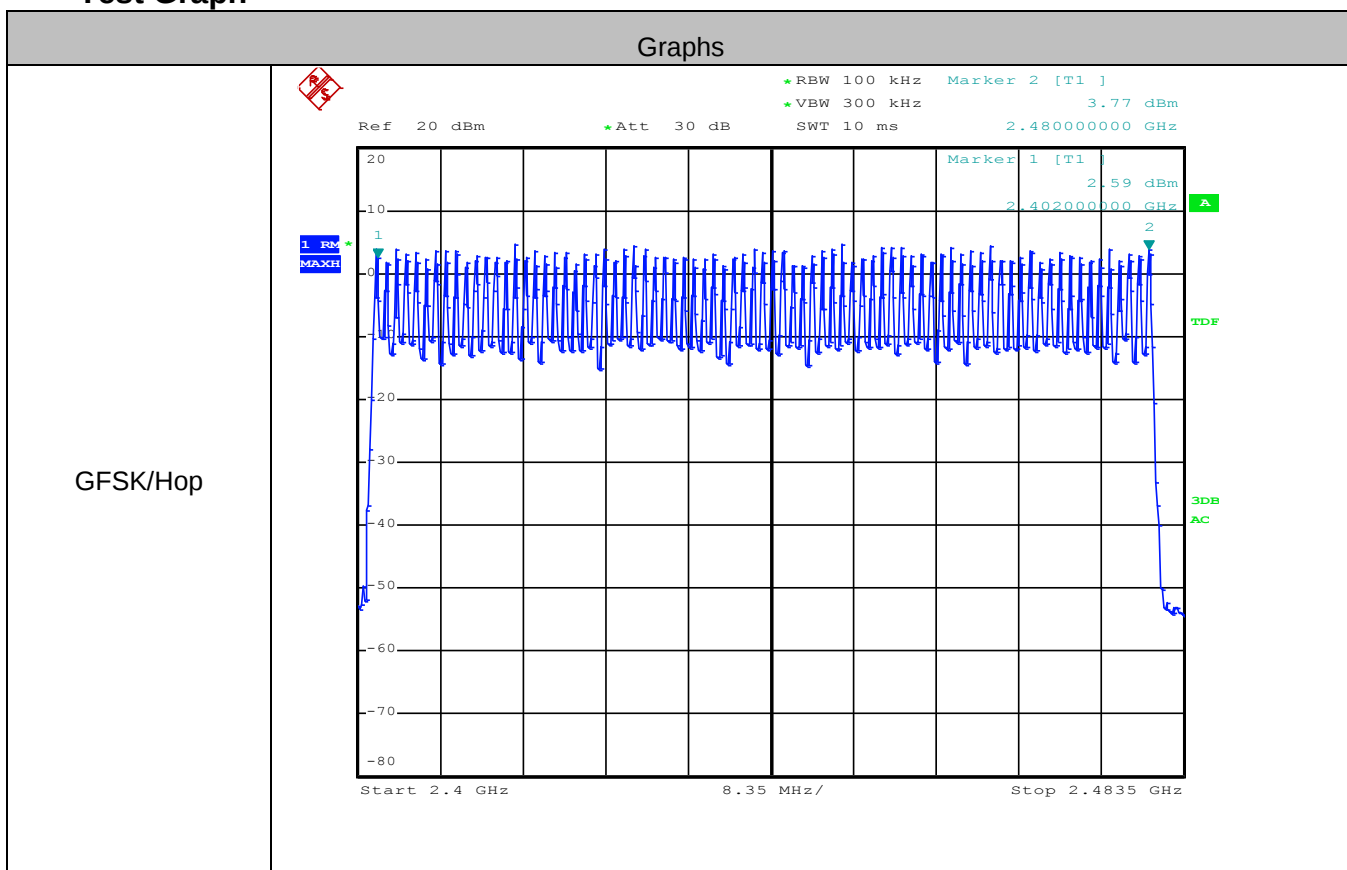


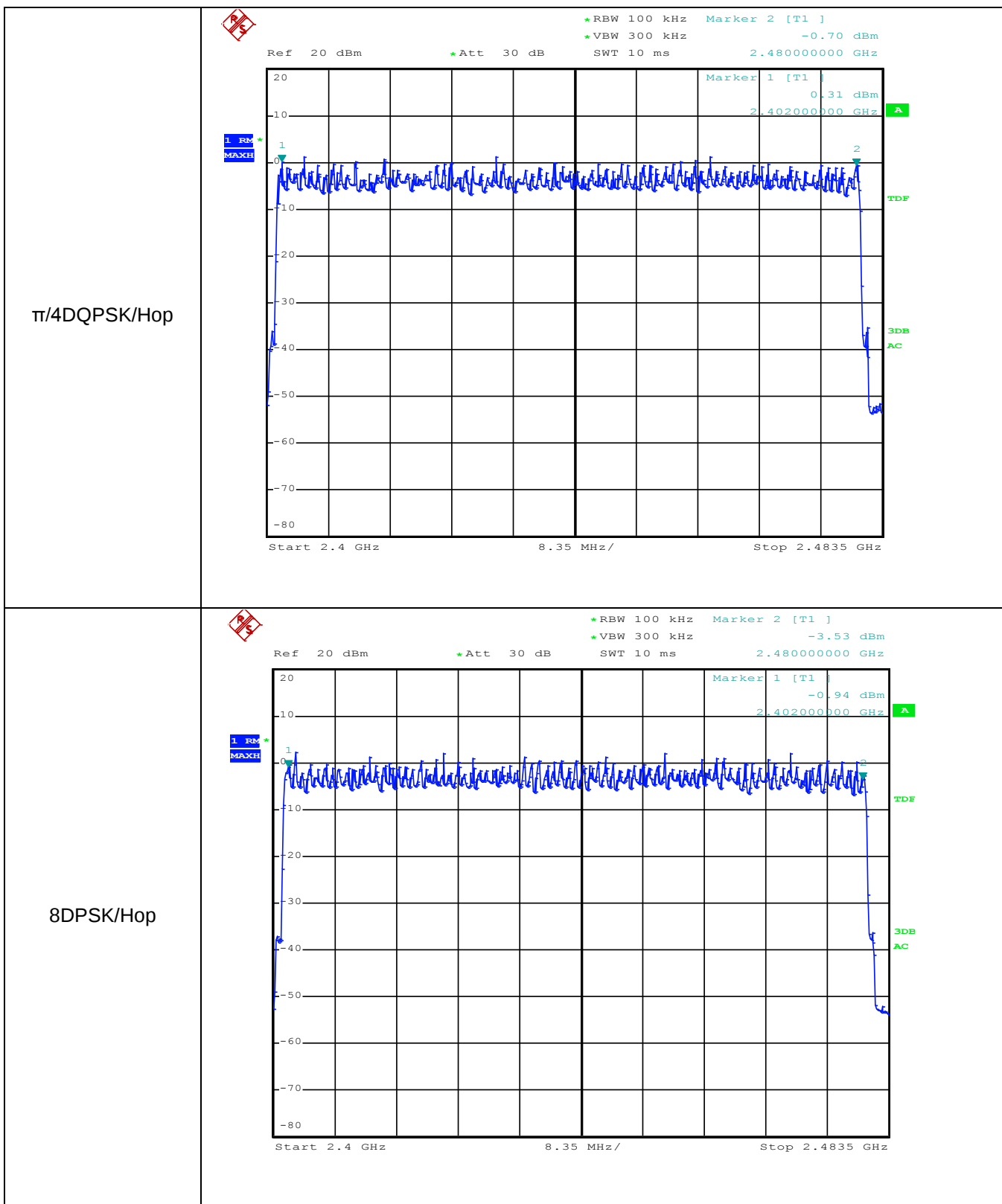


A.4 Hopping Channel Number

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

Test Graph

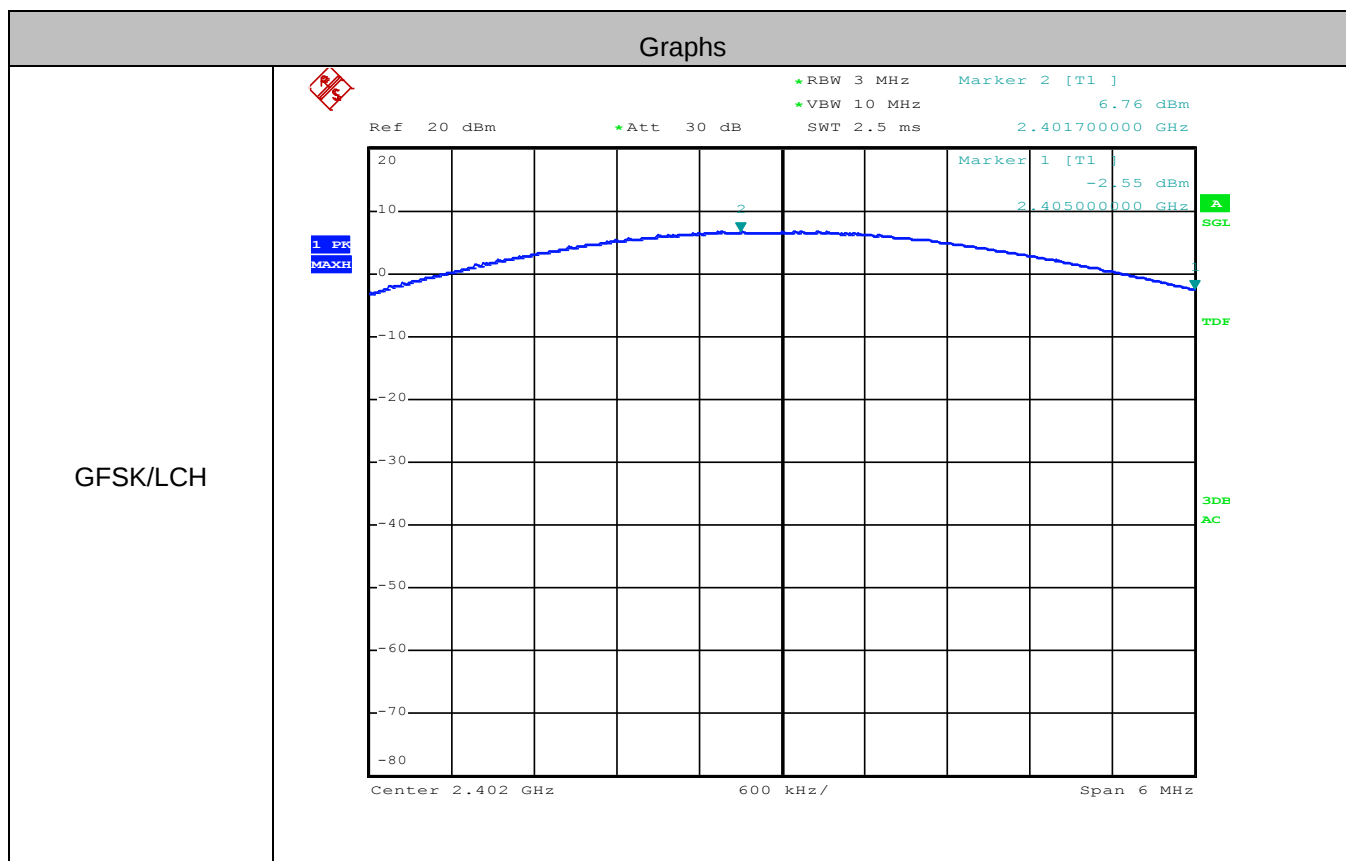


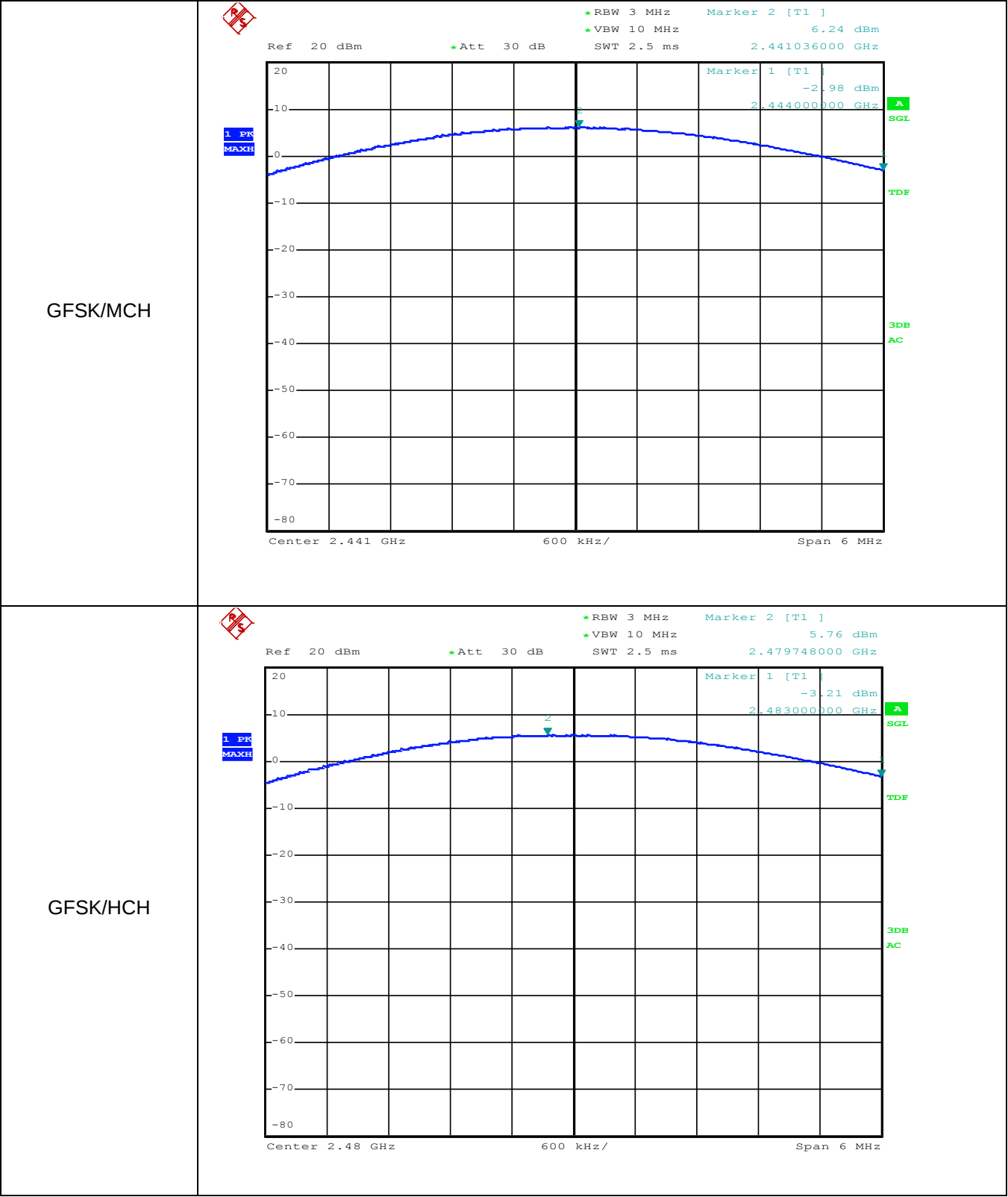


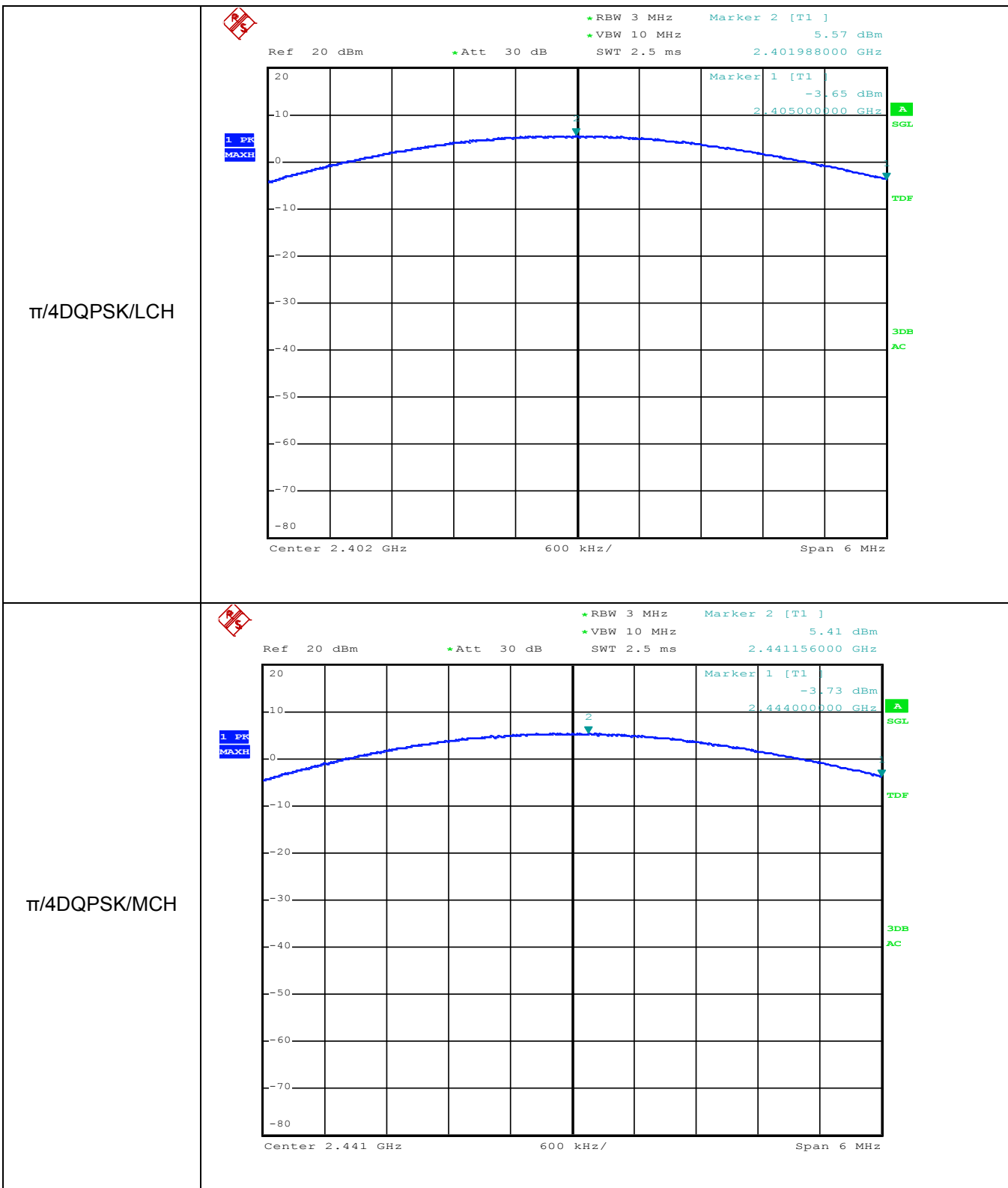
A.5 Conducted Peak Output Power

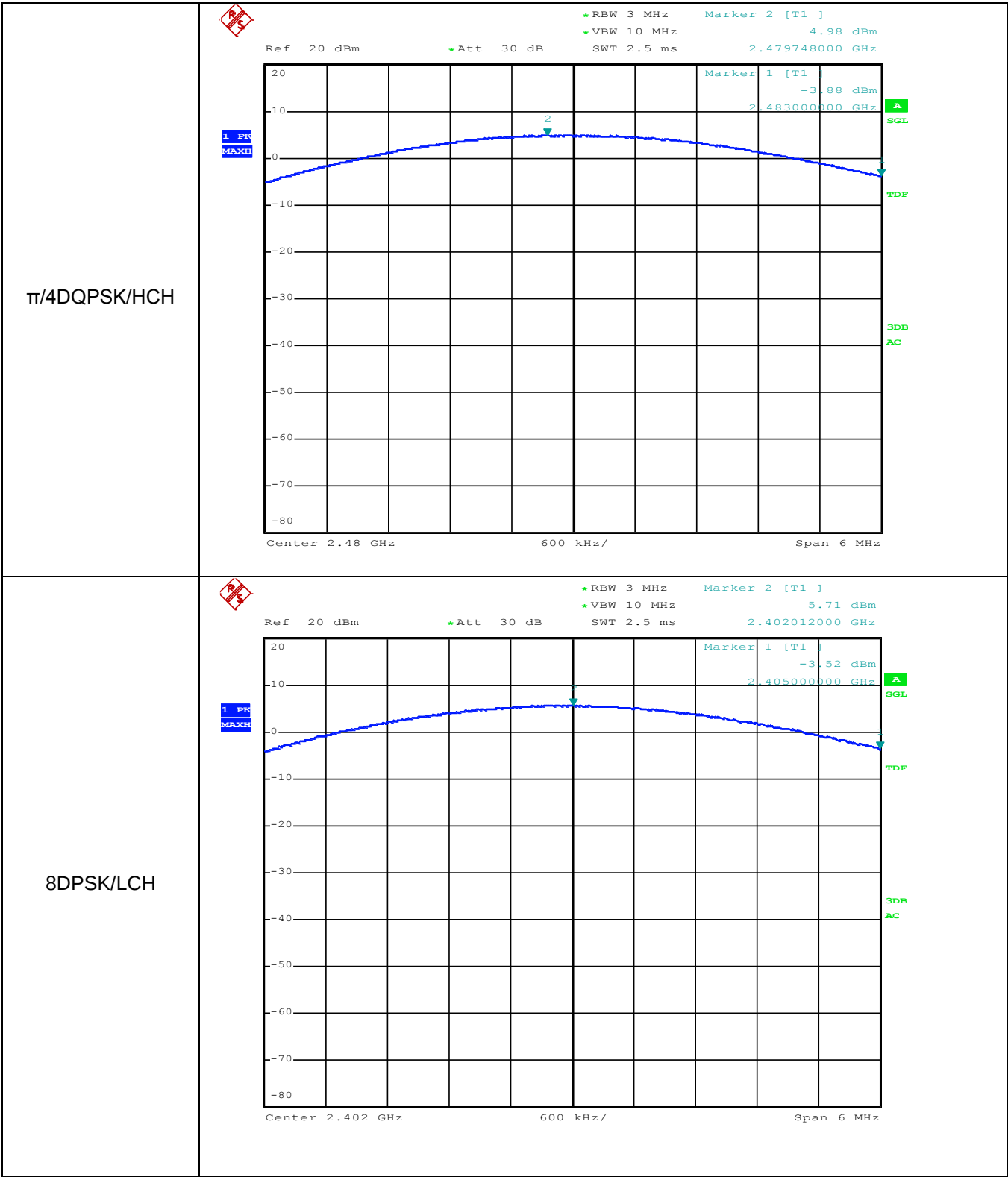
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2.88	21	PASS
GFSK	MCH	3.17	21	PASS
GFSK	HCH	3.06	21	PASS
$\pi/4$ DQPSK	LCH	2.28	21	PASS
$\pi/4$ DQPSK	MCH	2.57	21	PASS
$\pi/4$ DQPSK	HCH	2.76	21	PASS
8DPSK	LCH	2.47	21	PASS
8DPSK	MCH	2.89	21	PASS
8DPSK	HCH	2.76	21	PASS

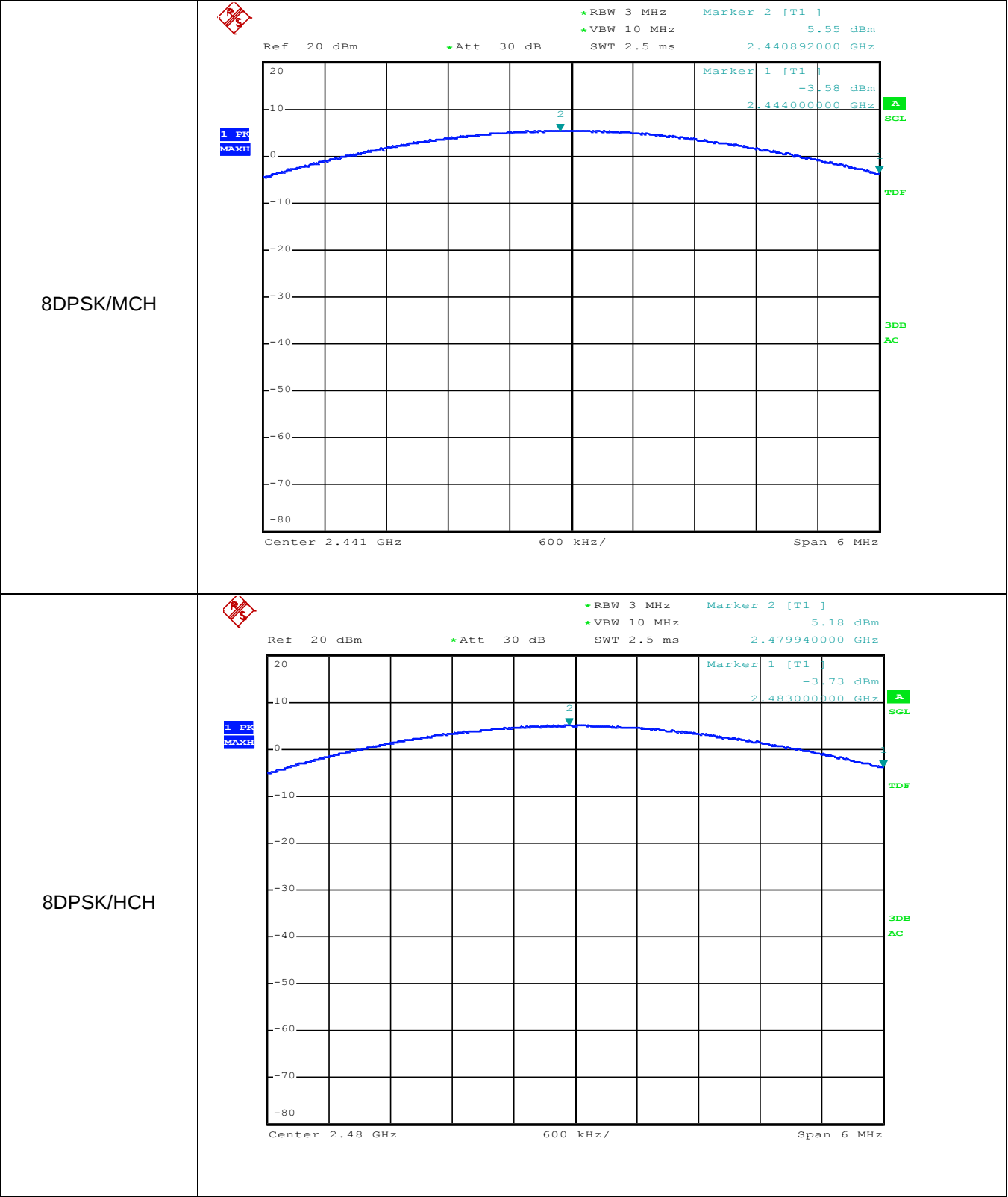
Test Graph







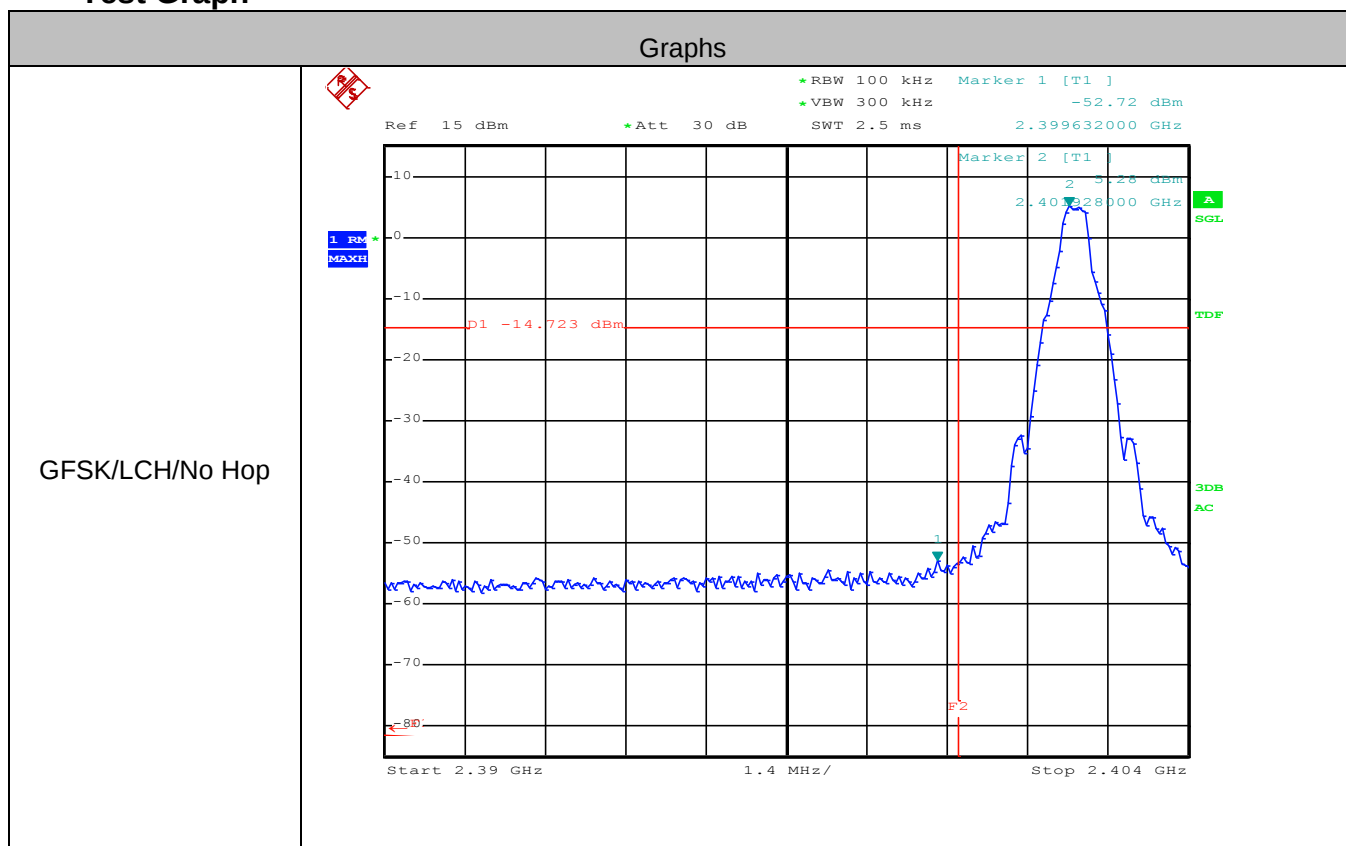


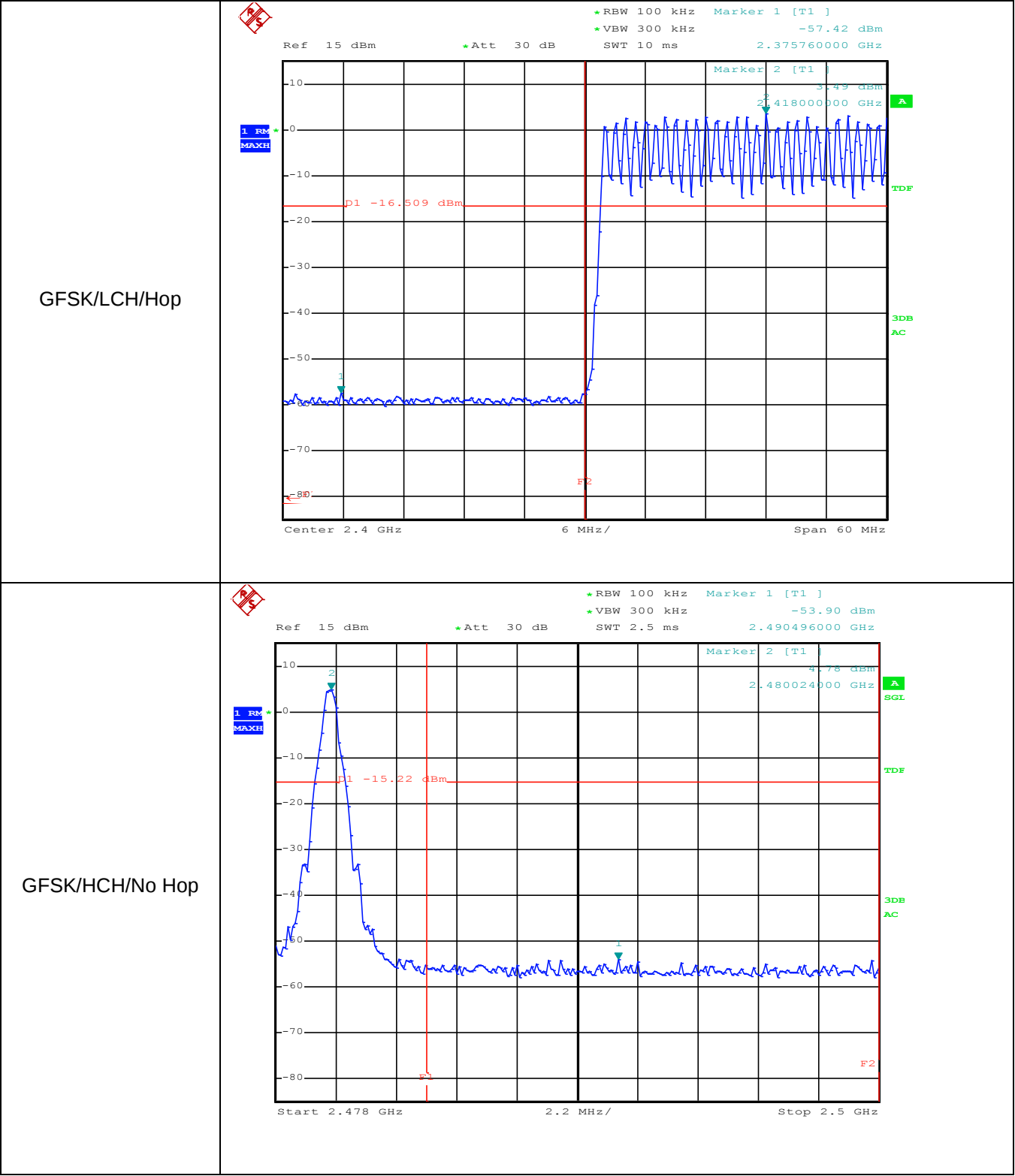


A.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Frequency [MHz]	Frequency Hopping	Carrier Frequency Power [dBm]	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	Off	5.28	-52.72	-14.72	PASS
			On	3.49	-57.42	-16.51	PASS
GFSK	HCH	2480	Off	4.78	-53.90	-15.22	PASS
			On	3.51	-57.74	-16.50	PASS
$\pi/4$ DQPSK	LCH	2402	Off	2.89	-51.71	-17.11	PASS
			On	0.07	-56.41	-19.93	PASS
$\pi/4$ DQPSK	HCH	2480	Off	2.27	-53.47	-17.73	PASS
			On	-0.02	-57.18	-20.02	PASS
8DPSK	LCH	2402	Off	3.71	-51.96	-16.30	PASS
			On	1.78	-55.82	-18.22	PASS
8DPSK	HCH	2480	Off	1.28	-53.57	-18.72	PASS
			On	1.36	-57.12	-18.64	PASS

Test Graph





Ref 15 dBm *Att 30 dB SWT 10 ms 2.498380000 GHz

Marker 1 [T1] 3.51 dBm 2.460940000 GHz

Marker 2 [T1] 3.51 dBm 2.460940000 GHz

1 RBW 30 dB 16.495 dBm

Center 2.4835 GHz 6 MHz/ Span 60 MHz

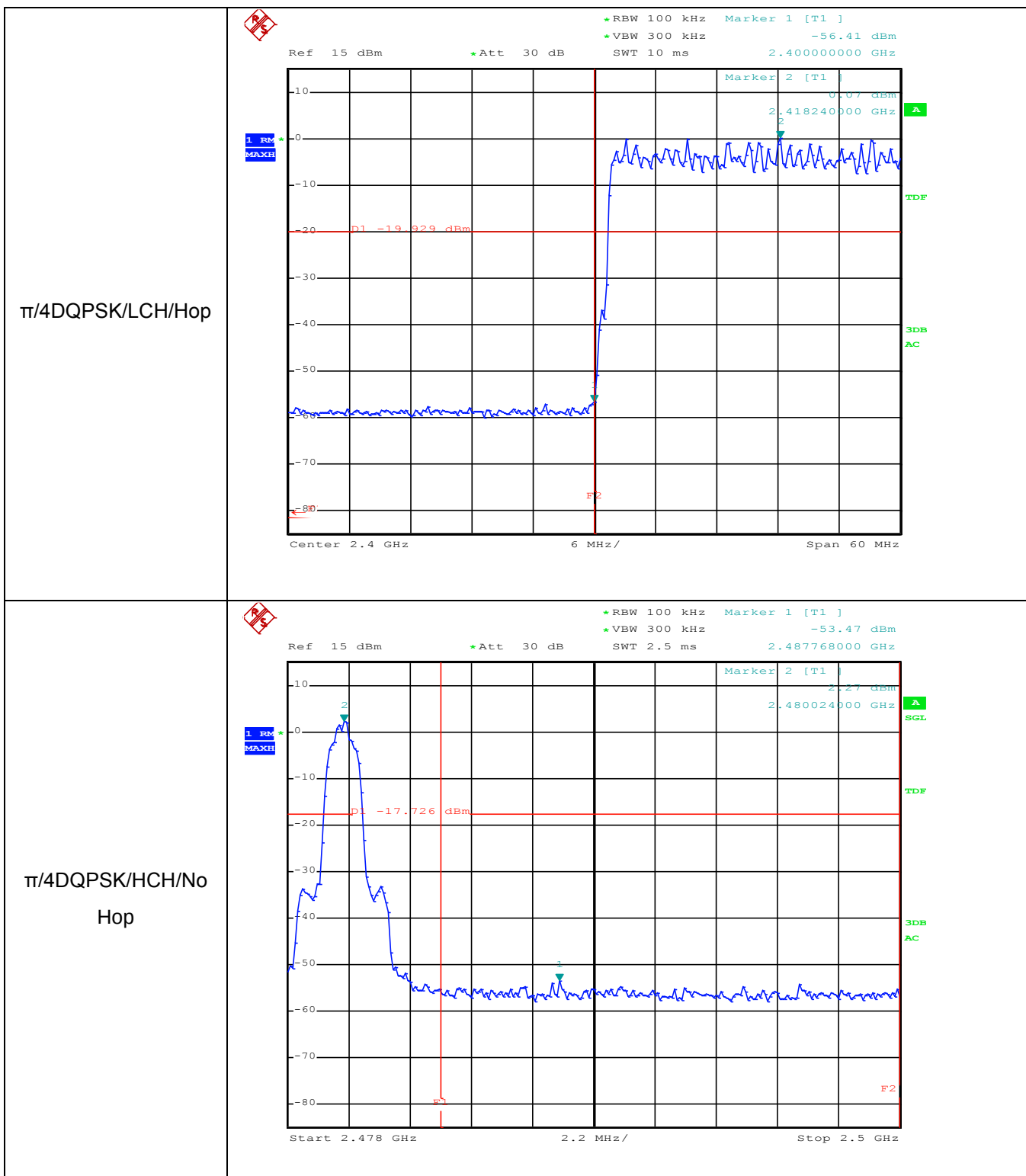
Ref 15 dBm * Att 30 dB RBW 100 kHz VBW 300 kHz SWT 2.5 ms 2.399688000 GHz

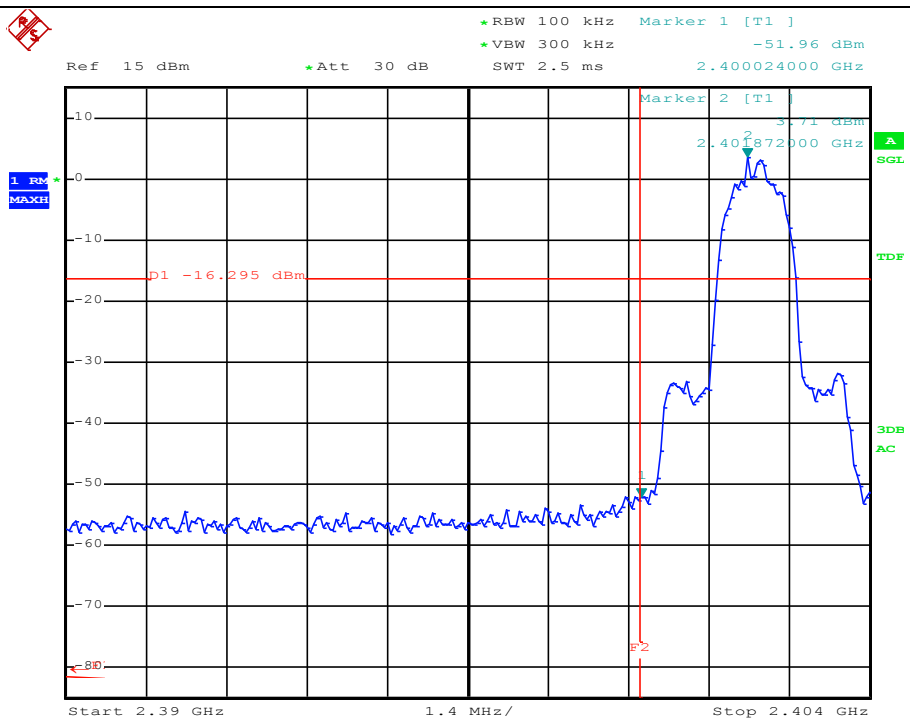
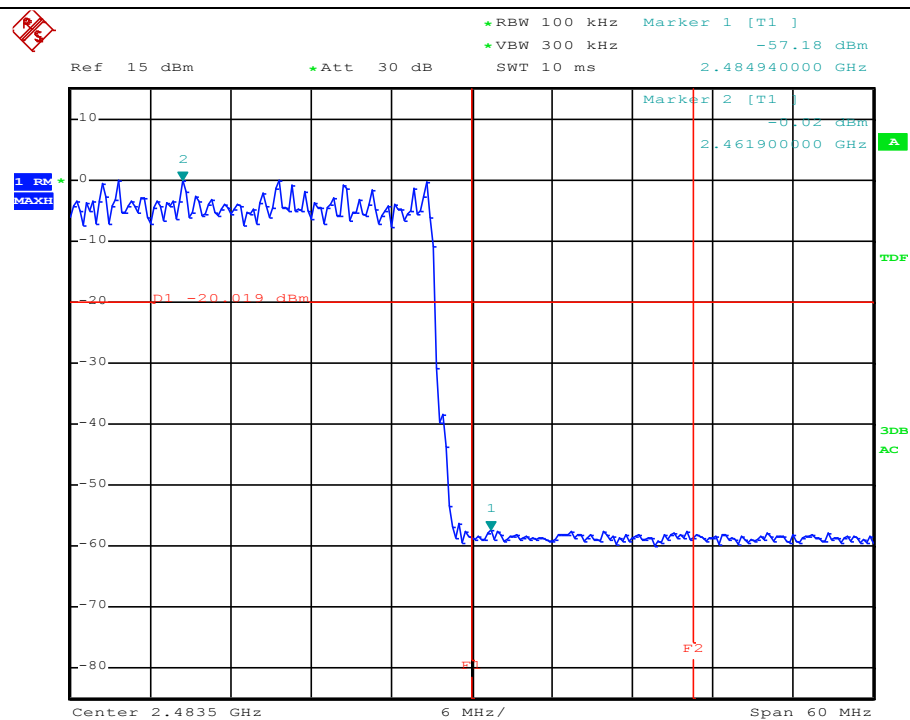
Marker 2 [T1] 2.402 GHz -17.11 dBm

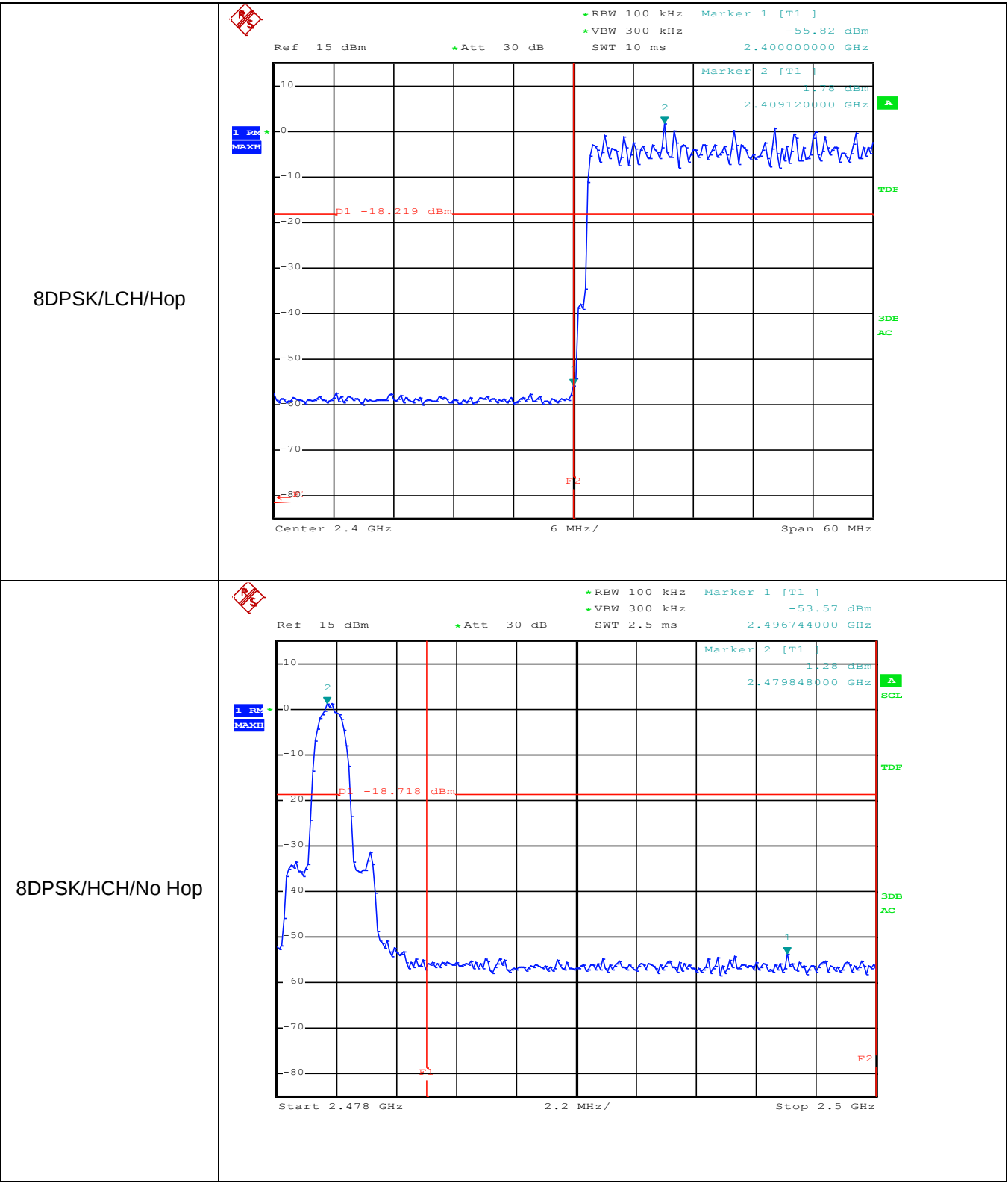
1 PdB MAX

1 PdB MAX

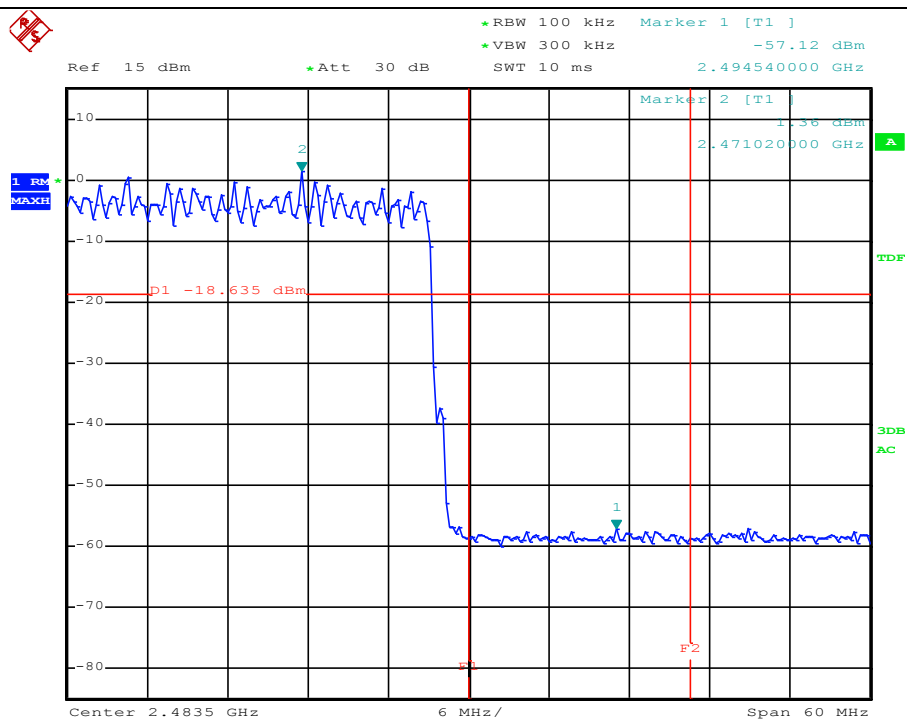
Start 2.39 GHz 1.4 MHz/ Stop 2.404 GHz



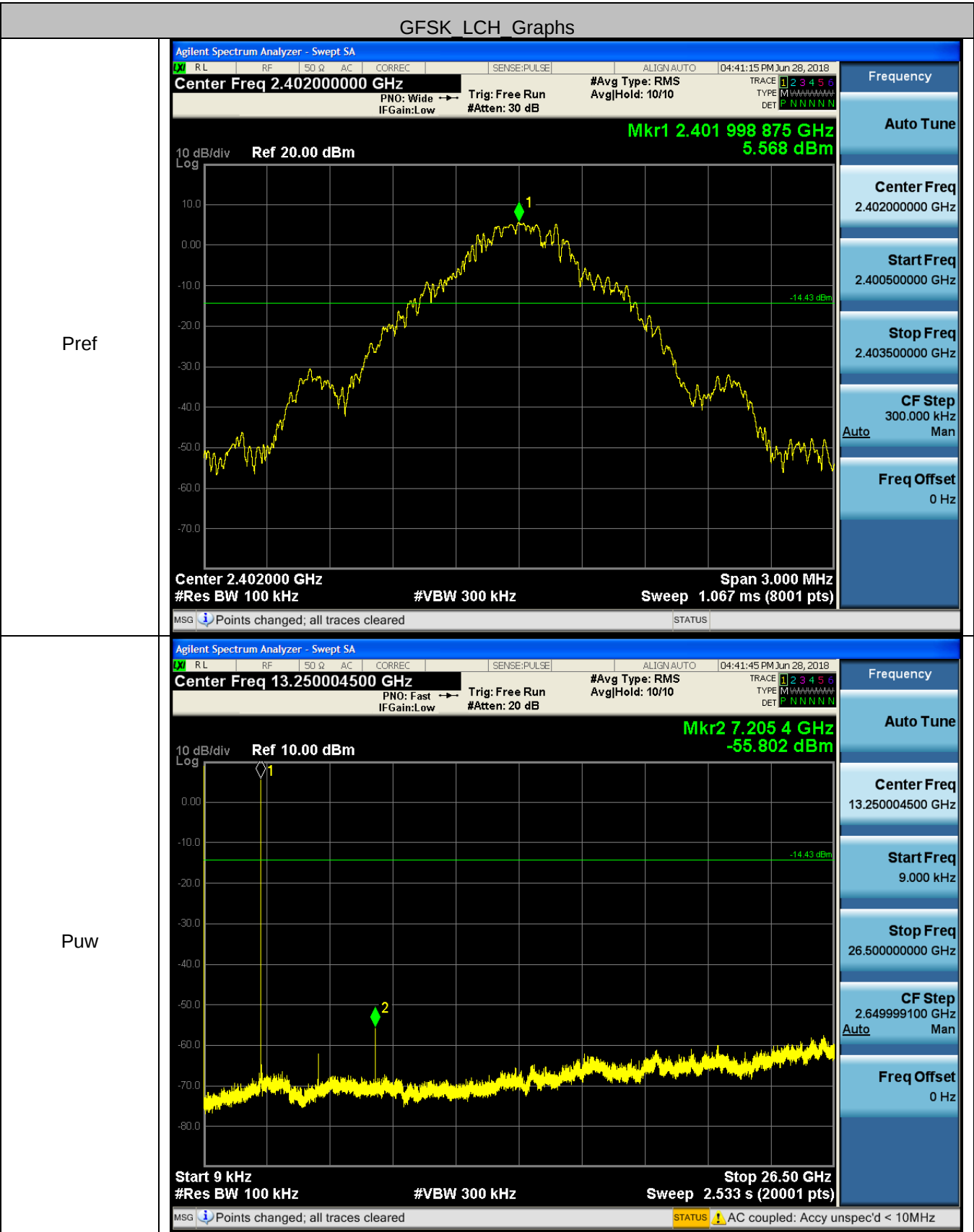


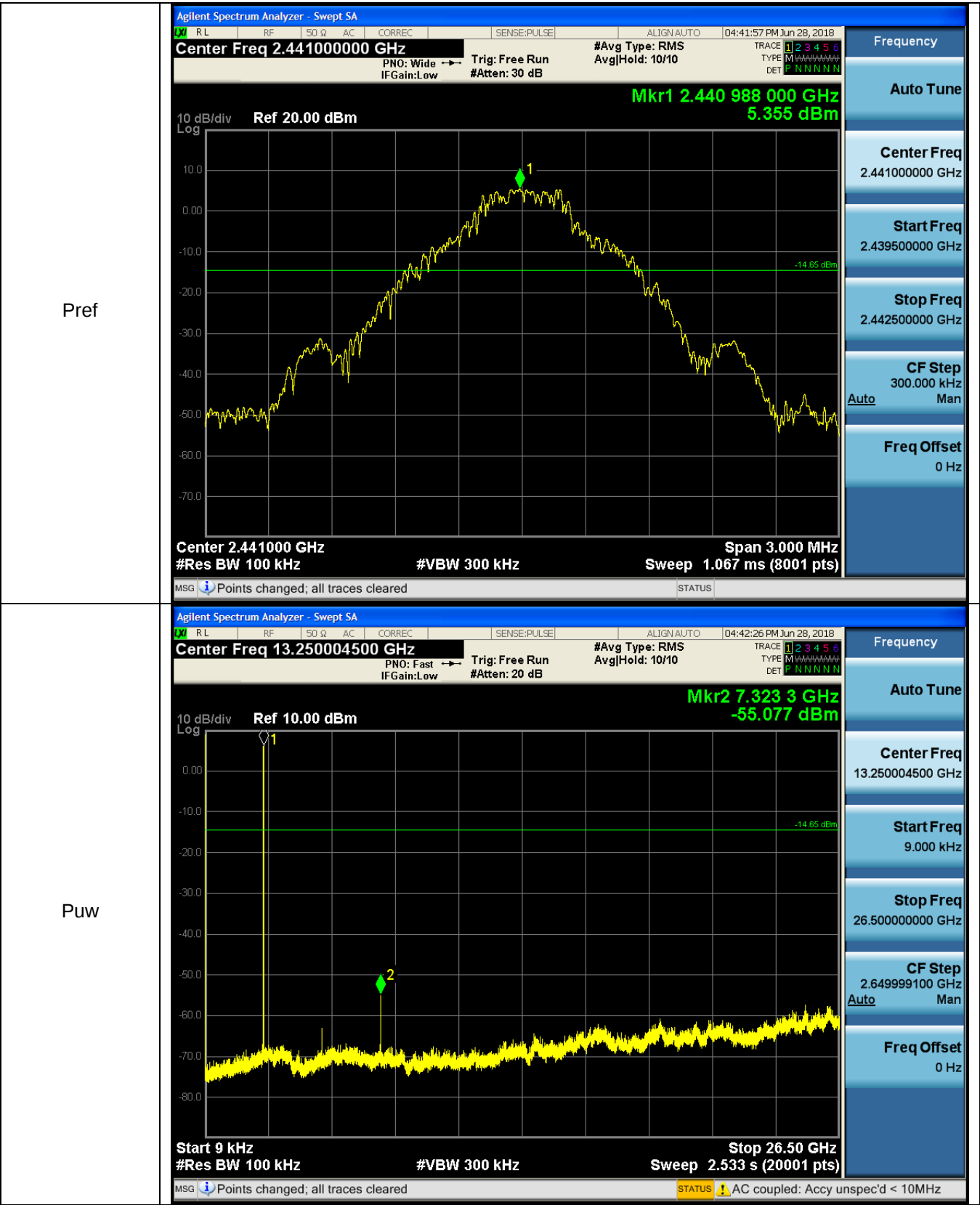


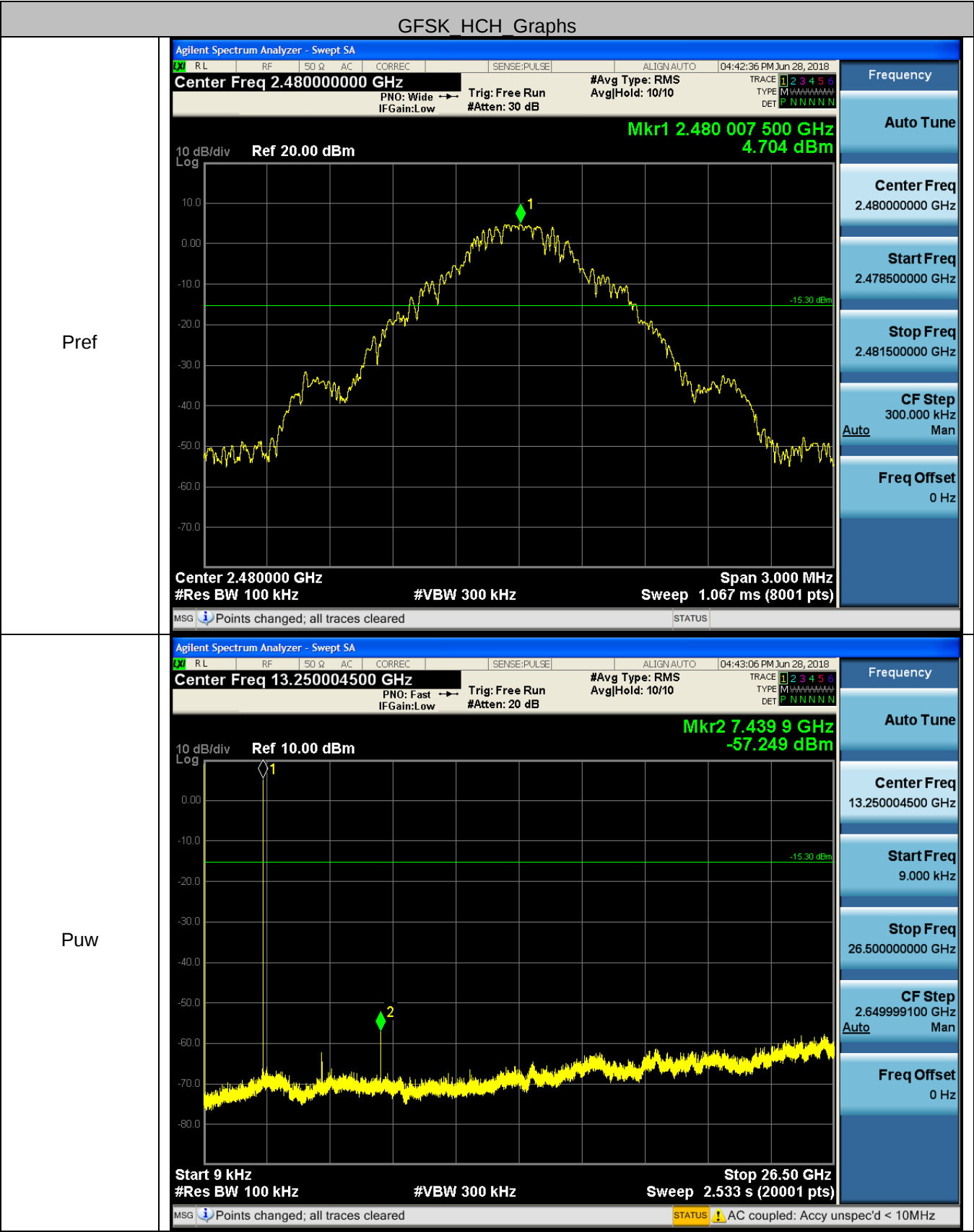
8DPSK/HCH/Hop

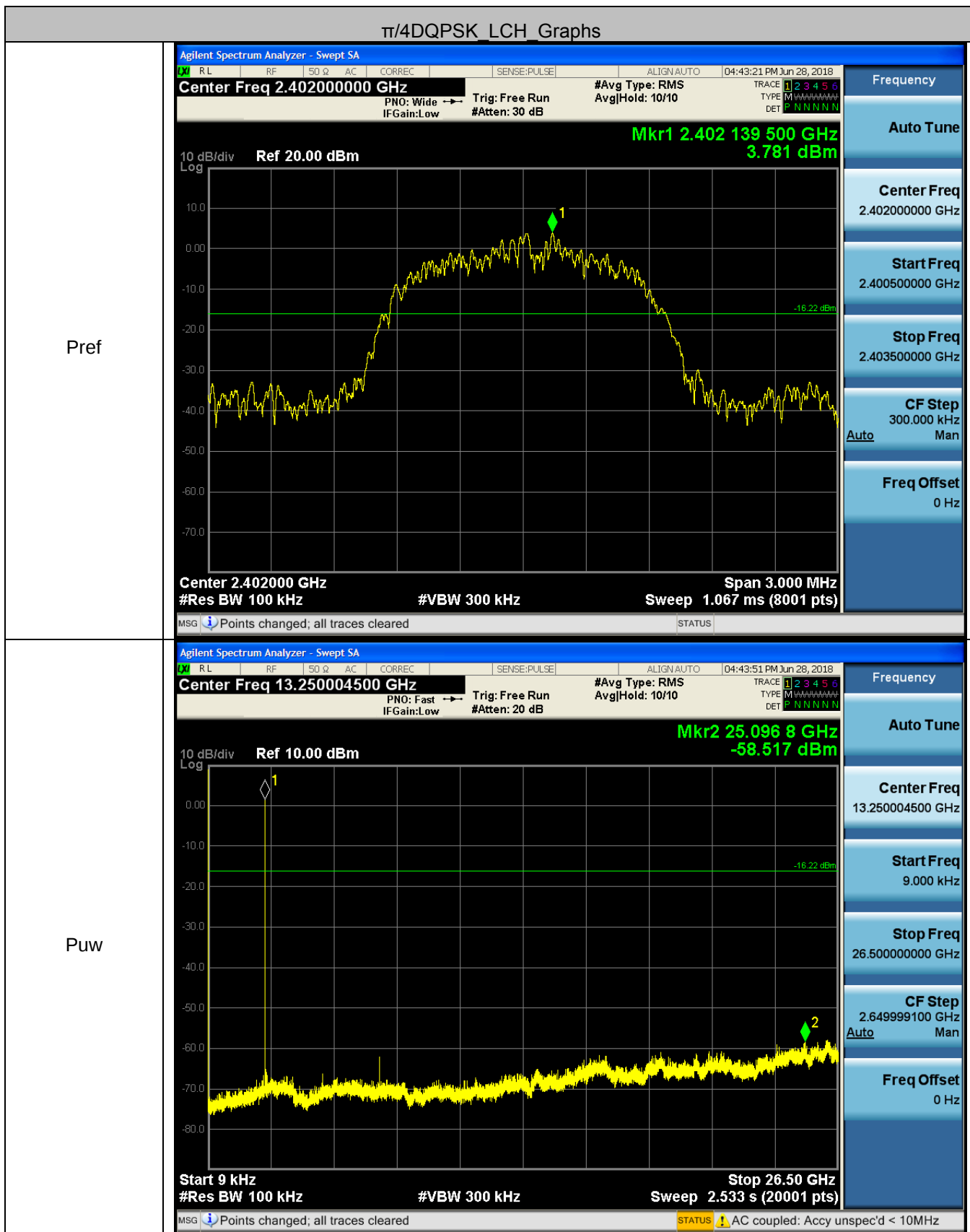


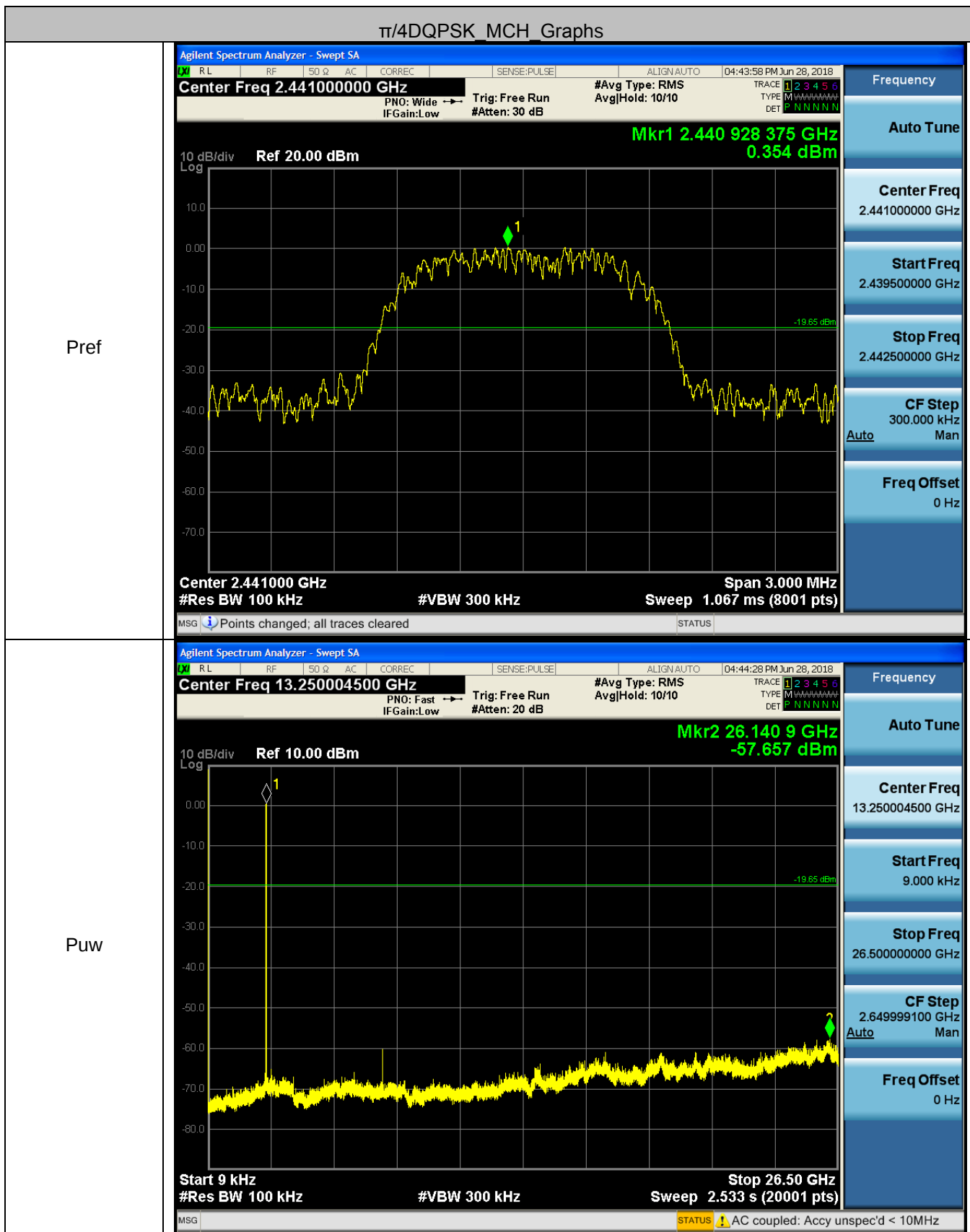
A.7 RF Conducted Spurious Emissions
Test Graph

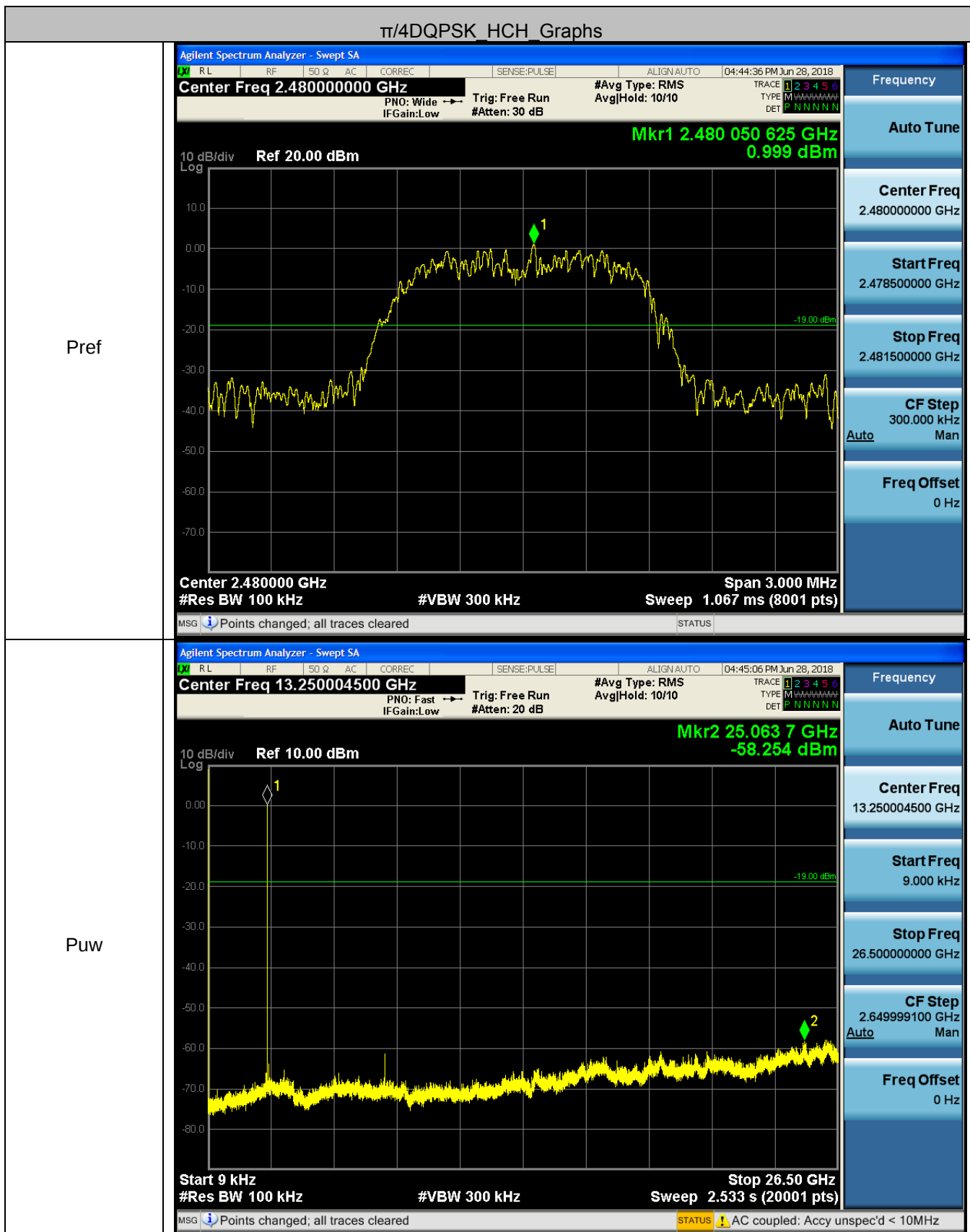


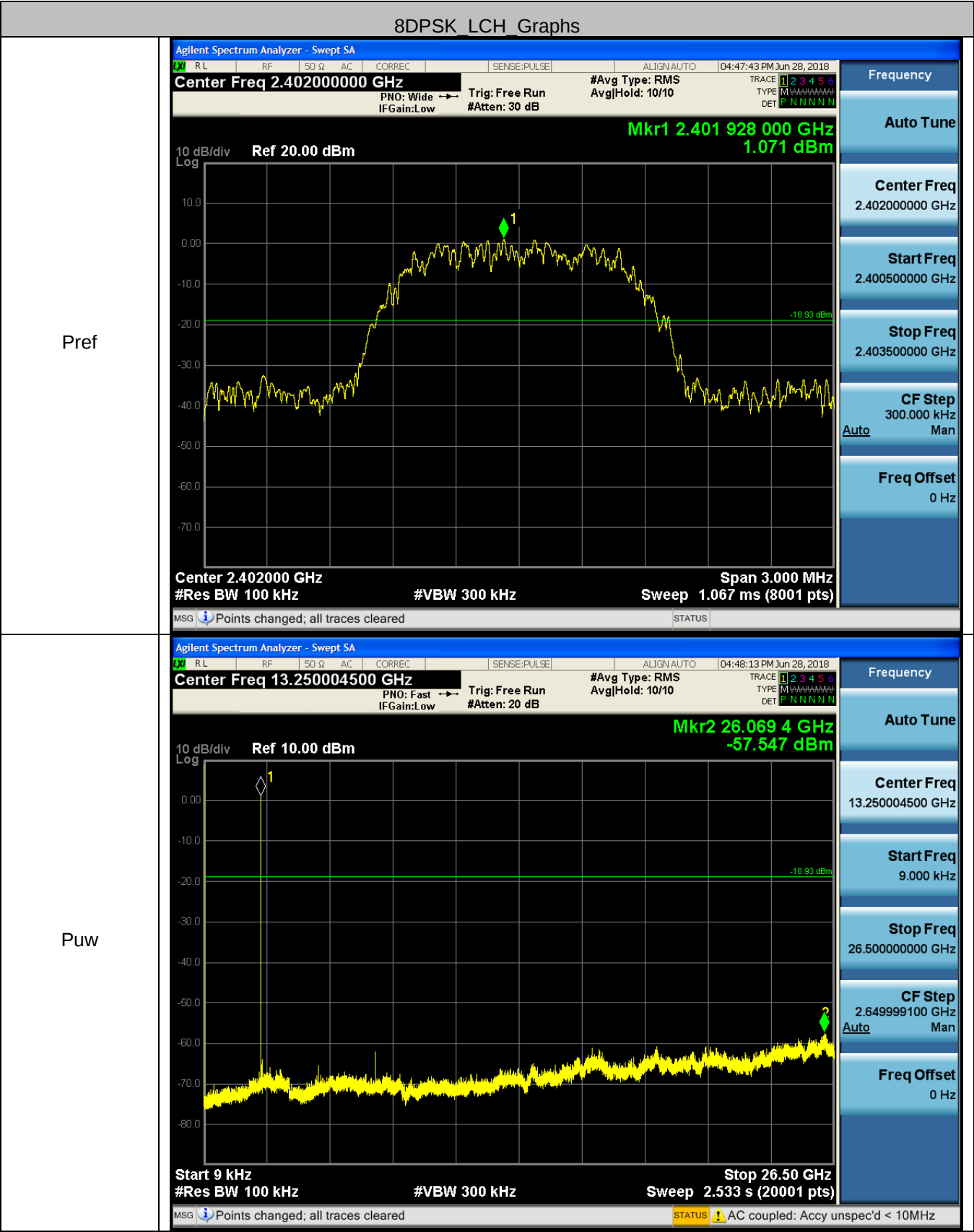


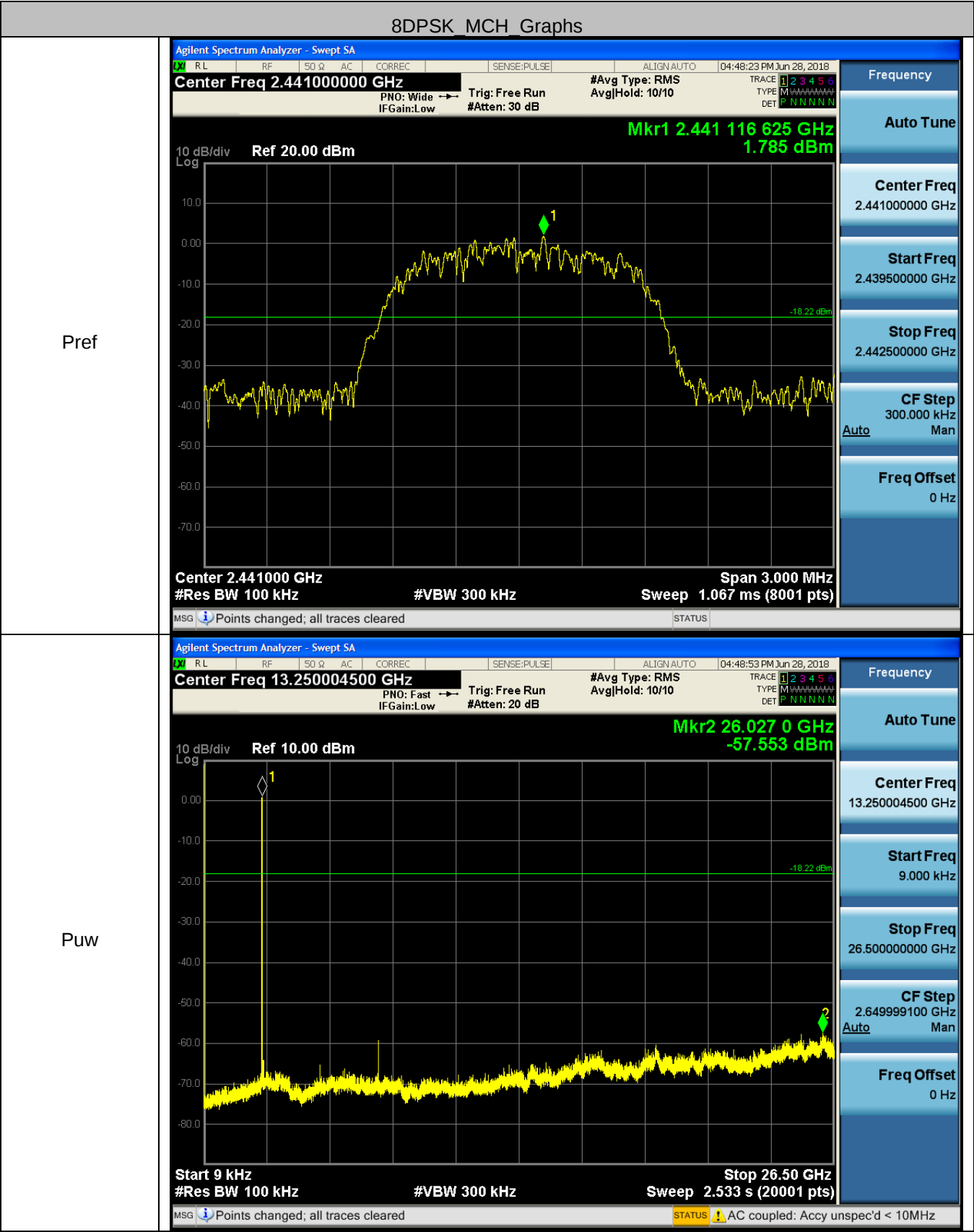


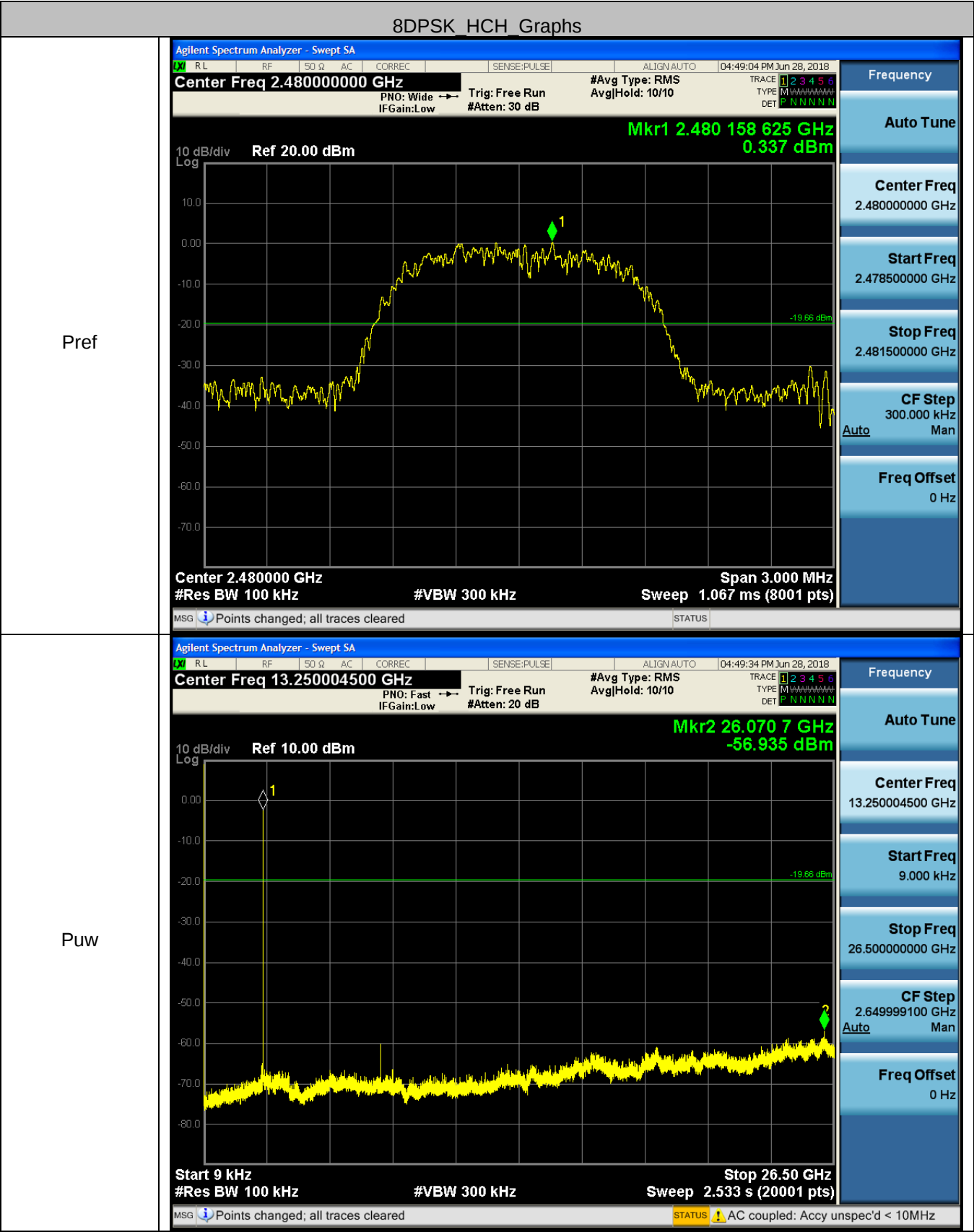








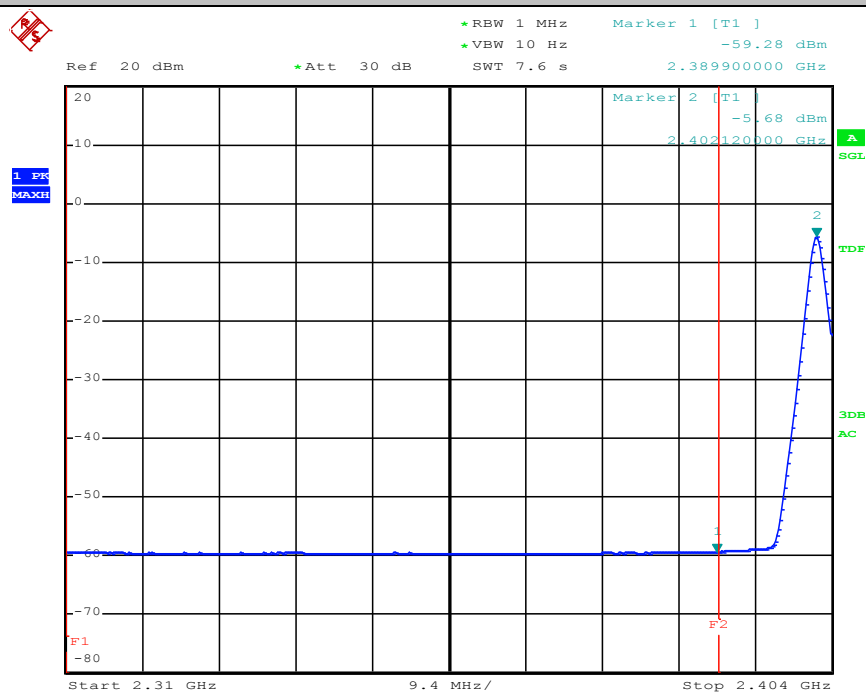
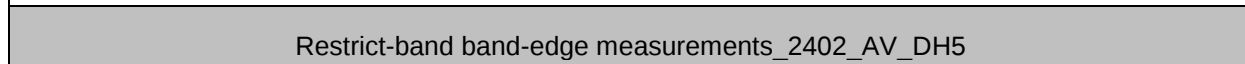




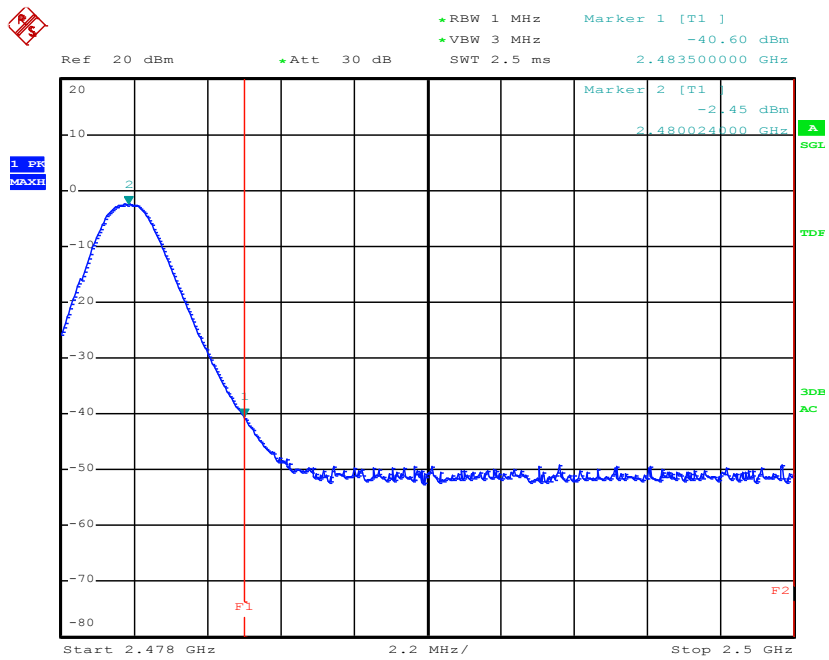
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detect or	Limit [dBuV/m]	Verdi
GFSK	Off	2310.0-2390.0	-46.32	1.76	0	50.64	PEAK	74	PASS
	Off	2310.0-2390.0	-59.28	1.76	0	37.68	AV	54	PASS
	Off	2483.5-2500.0	-40.60	1.76	0	56.36	PEAK	74	PASS
	Off	2483.5-2500.0	-47.02	1.76	0	49.94	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0-2390.0	-46.32	1.76	0	50.64	PEAK	74	PASS
	Off	2310.0-2390.0	-59.27	1.76	0	37.69	AV	54	PASS
	Off	2483.5-2500.0	-40.02	1.76	0	56.94	PEAK	74	PASS
	Off	2483.5-2500.0	-49.34	1.76	0	47.62	AV	54	PASS
8DPSK	Off	2310.0-2390.0	-46.54	1.76	0	50.42	PEAK	74	PASS
	Off	2310.0-2390.0	-59.26	1.76	0	37.70	AV	54	PASS
	Off	2483.5-2500.0	-40.18	1.76	0	56.78	PEAK	74	PASS
	Off	2483.5-2500.0	-48.87	1.76	0	48.09	AV	54	PASS

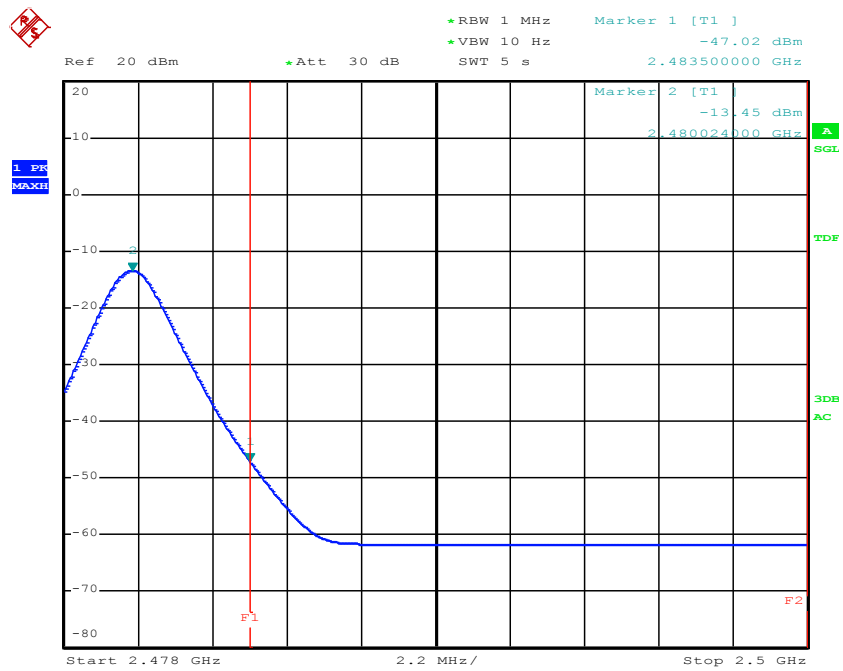
Restrict-band band-edge measurements_2402_PEAK_DH5
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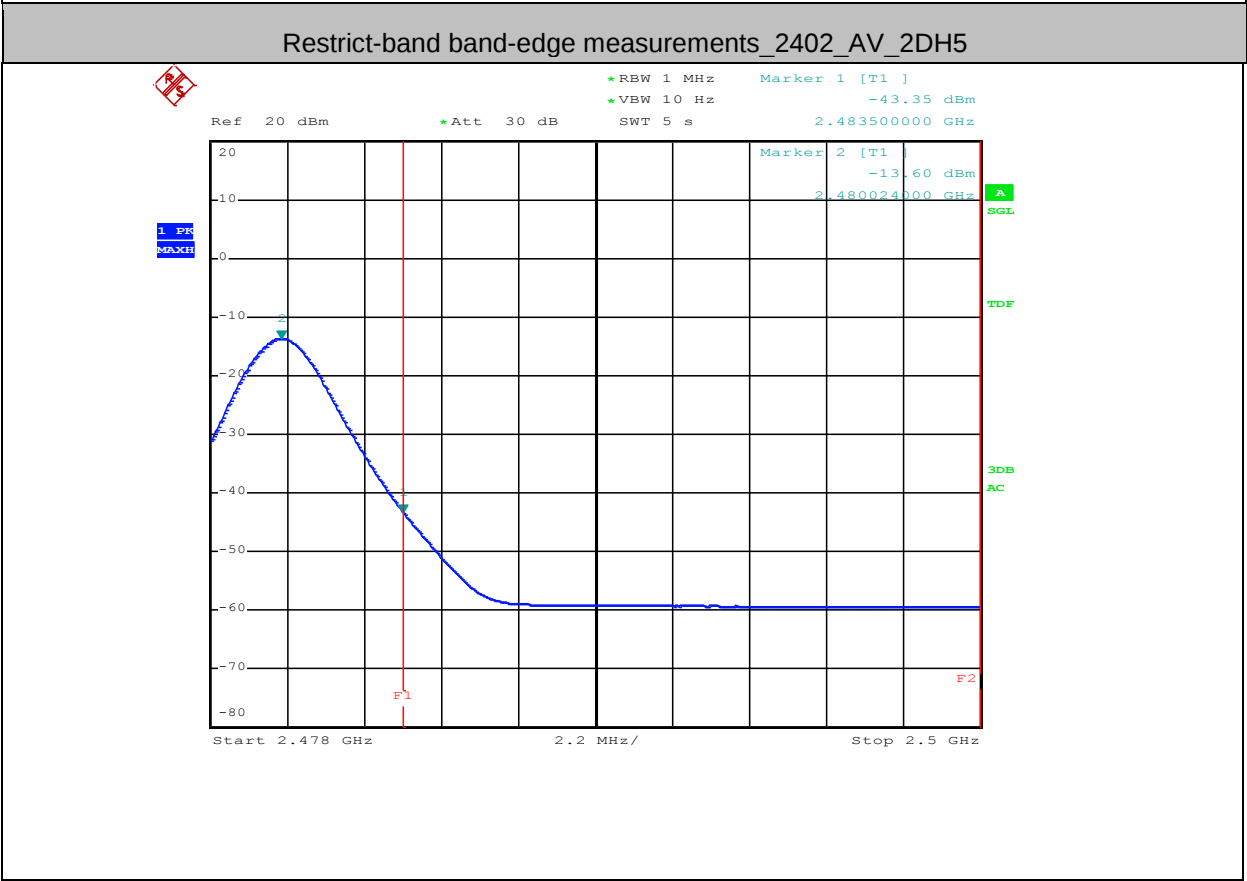
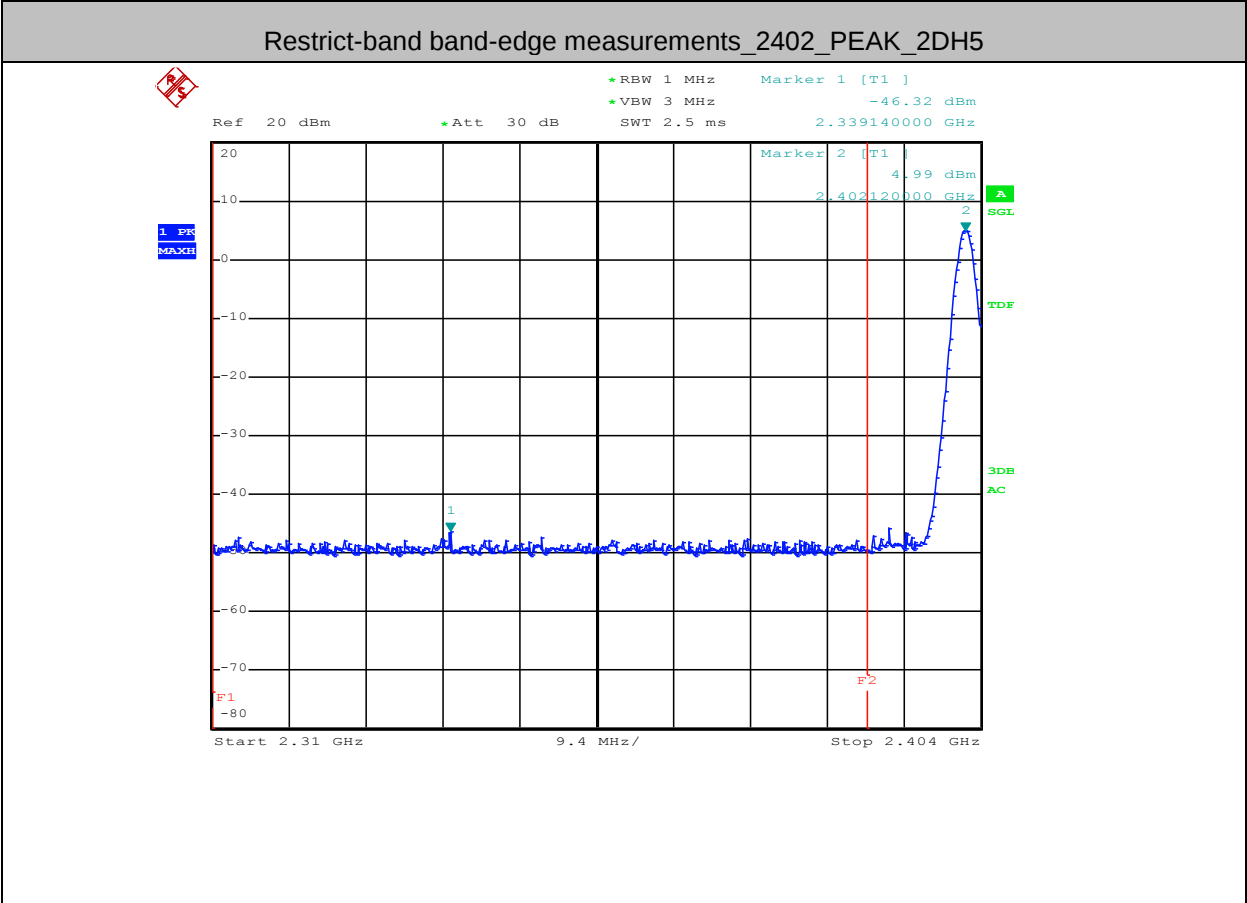


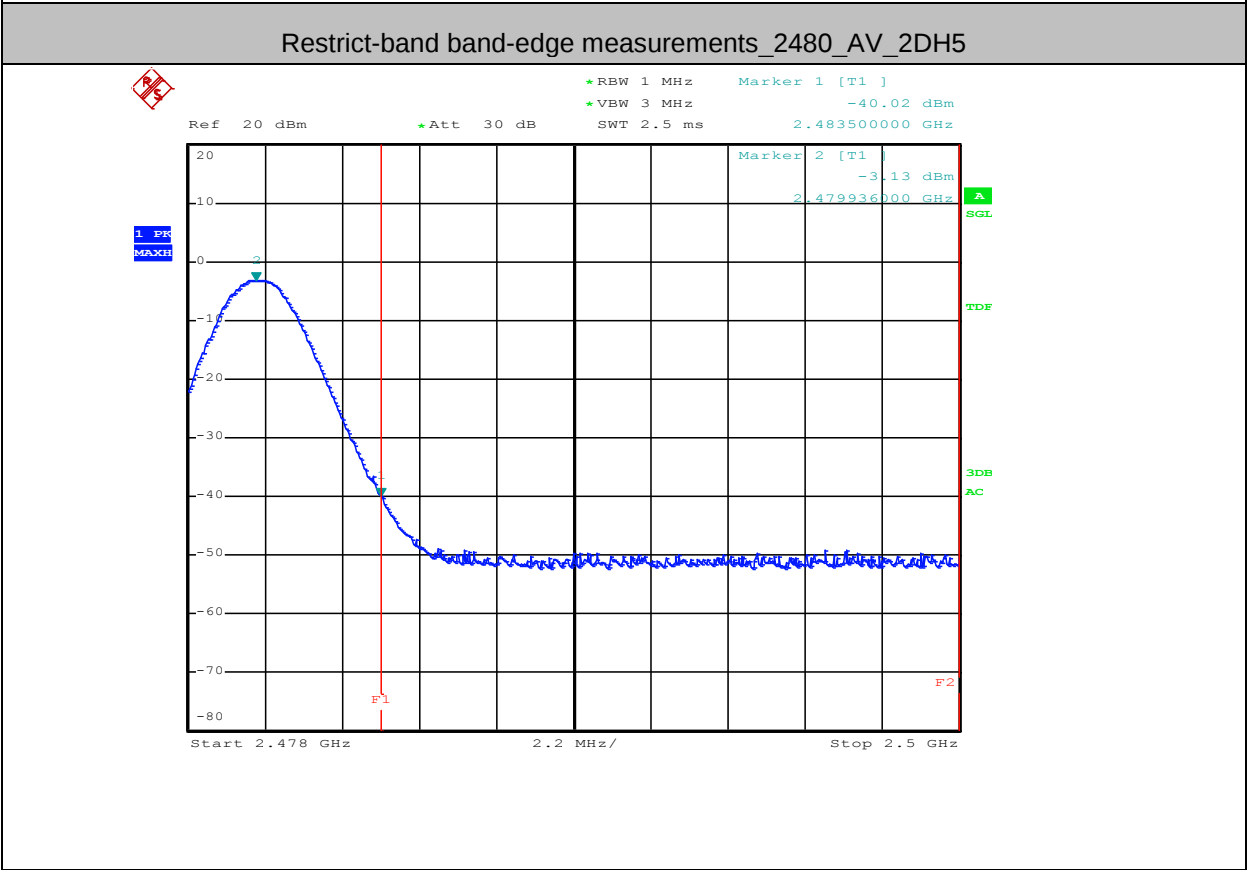
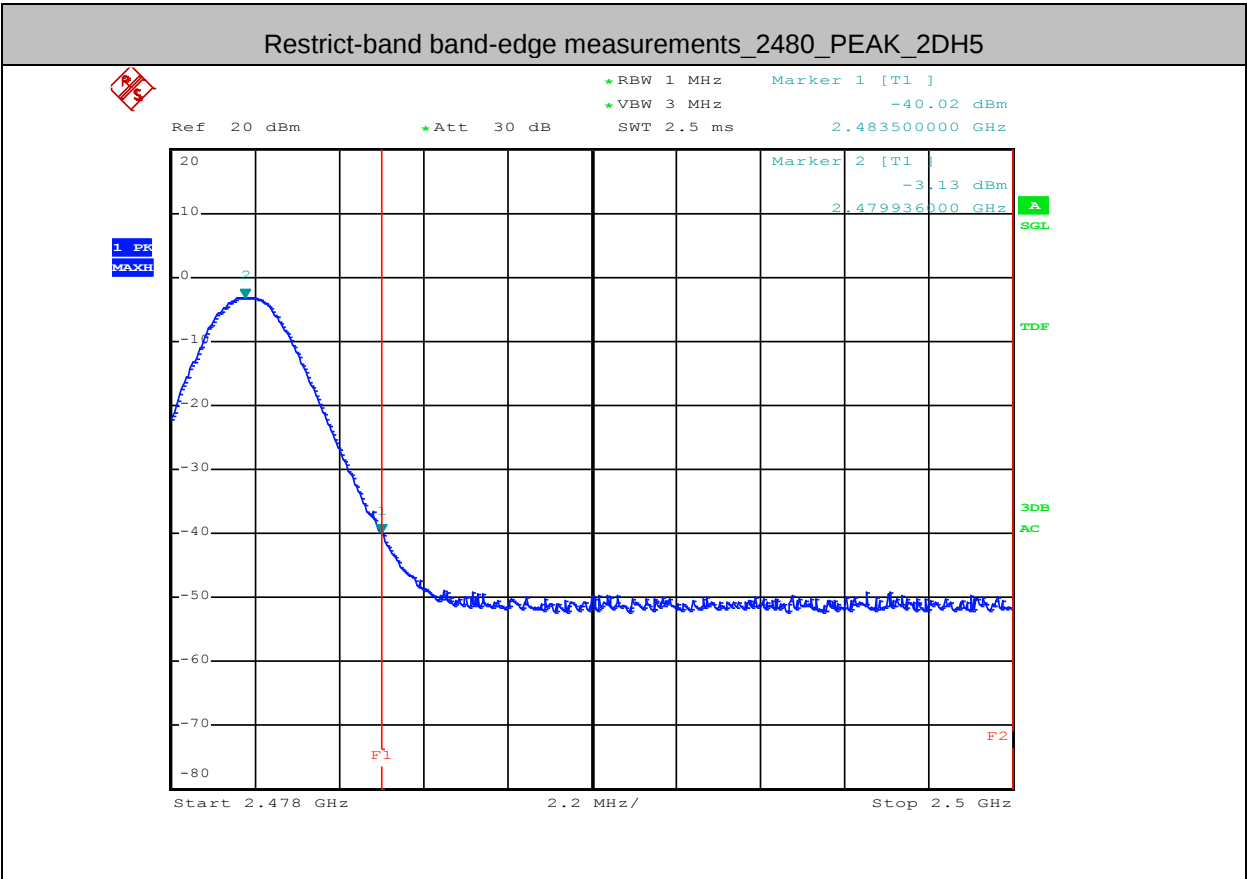
Restrict-band band-edge measurements 2480 PEAK DH5



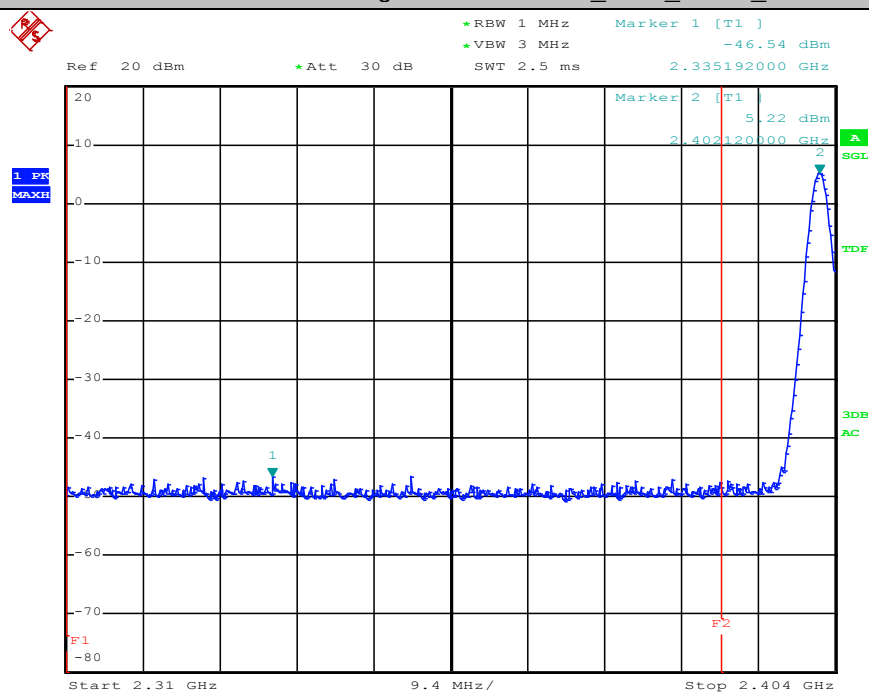
Restrict-band band-edge measurements 2480 AV DH5







Restrict-band band-edge measurements 2402 PEAK 3DH5



Restrict-band band-edge measurements 2402 AV 3DH5

