

Appendix A

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

Product Name: Wireless speaker with RGB Lights

Trade Mark: FLYLEAD

Test Model: JR-MW01

Environmental Conditions

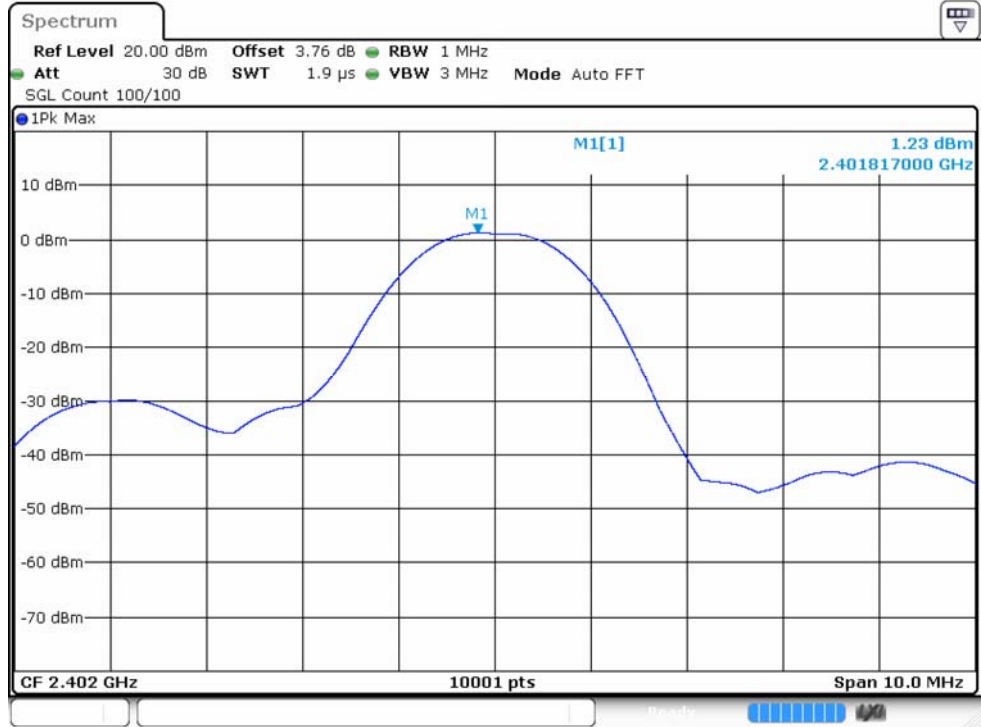
Temperature:	26°C
Relative Humidity:	58%
ATM Pressure:	101Kpa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen

A.1 Maximum Conducted Peak Output Power

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	1.23	21	Pass
	MCH	1.28	21	Pass
	HCH	0.98	21	Pass
$\pi/4$ DQPSK	LCH	1.5	21	Pass
	MCH	1.54	21	Pass
	HCH	1.26	21	Pass

Test Graphs

GFSK/LCH



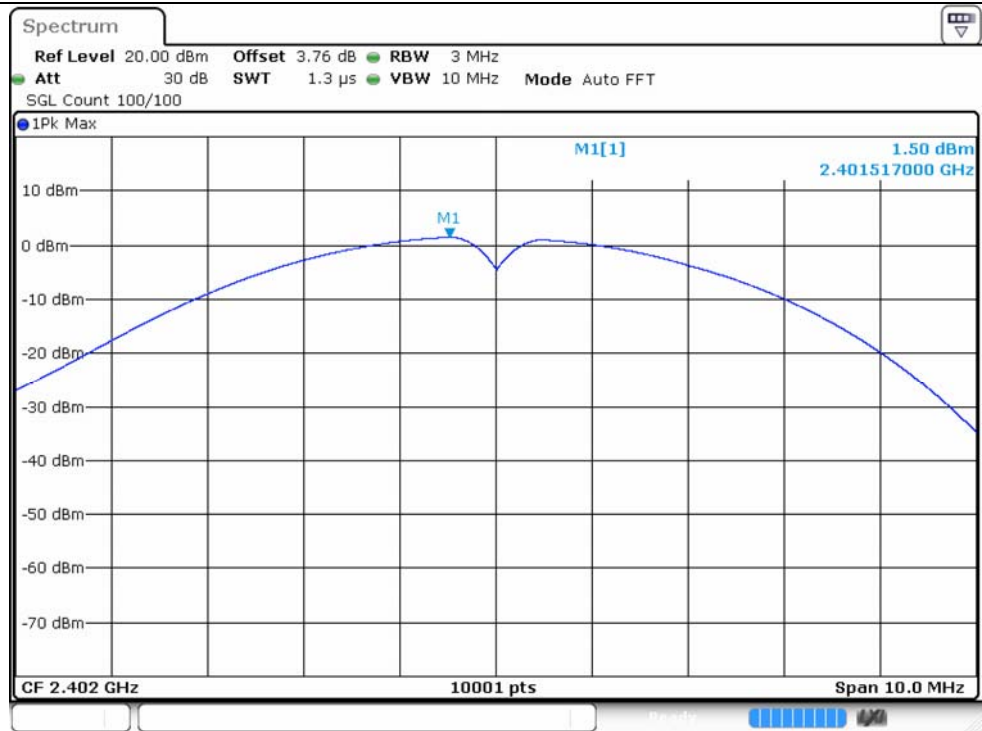
GFSK/MCH

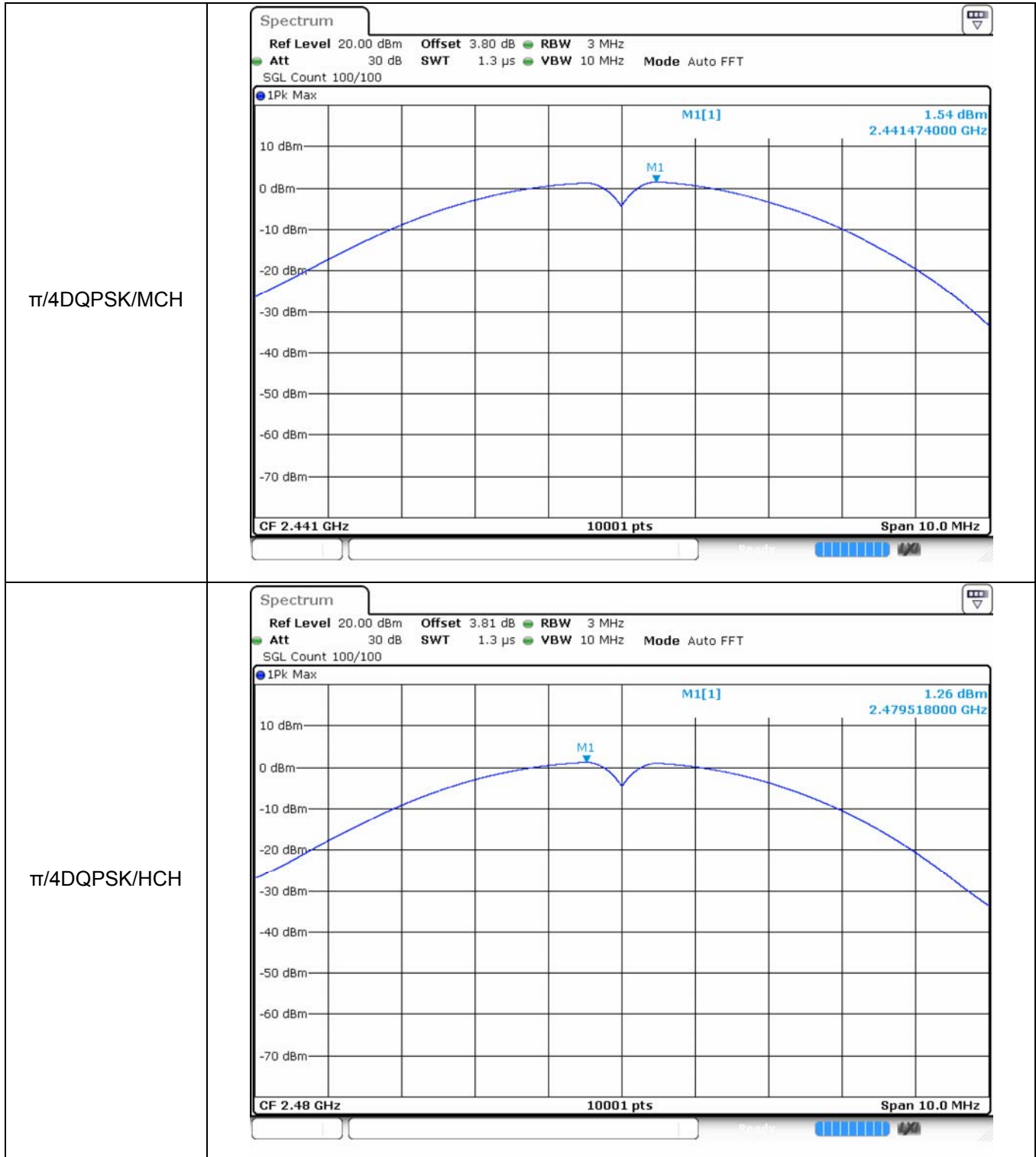


GFSK/HCH

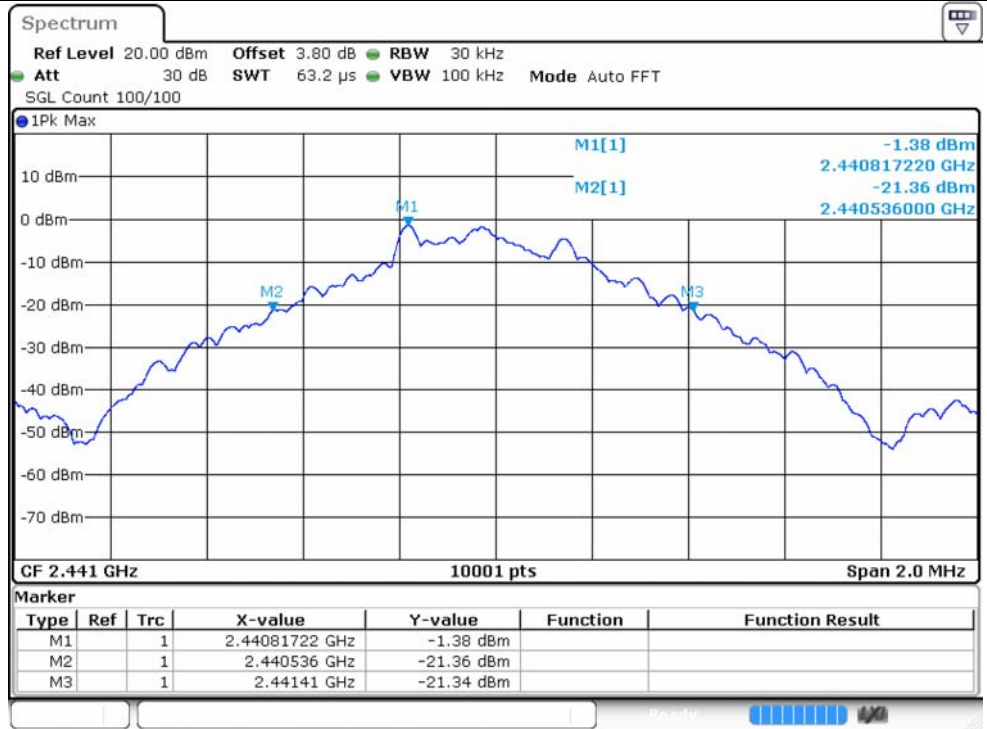


$\pi/4$ DQPSK/LCH

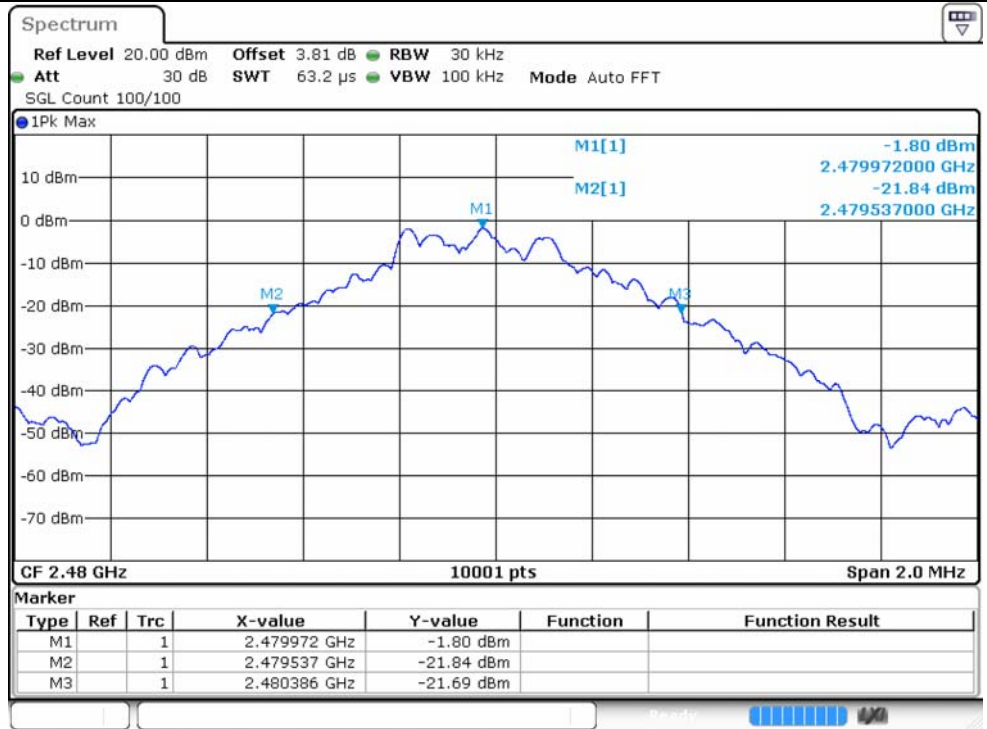




GFSK/MCH



GFSK/HCH



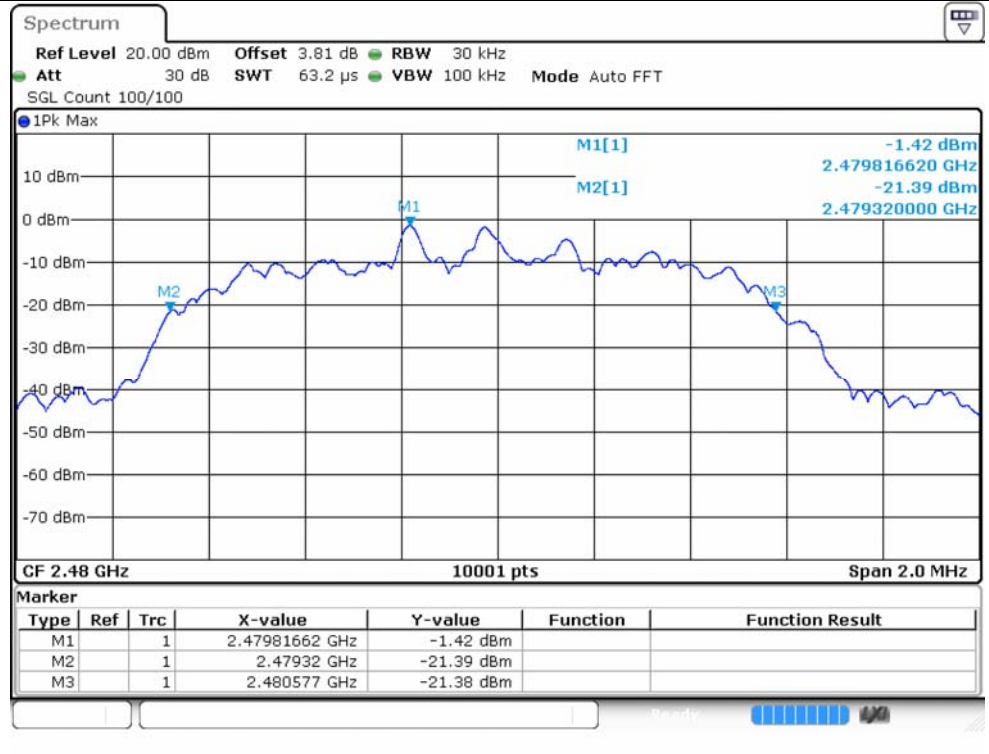
$\pi/4$ DQPSK/LCH



$\pi/4$ DQPSK/MCH

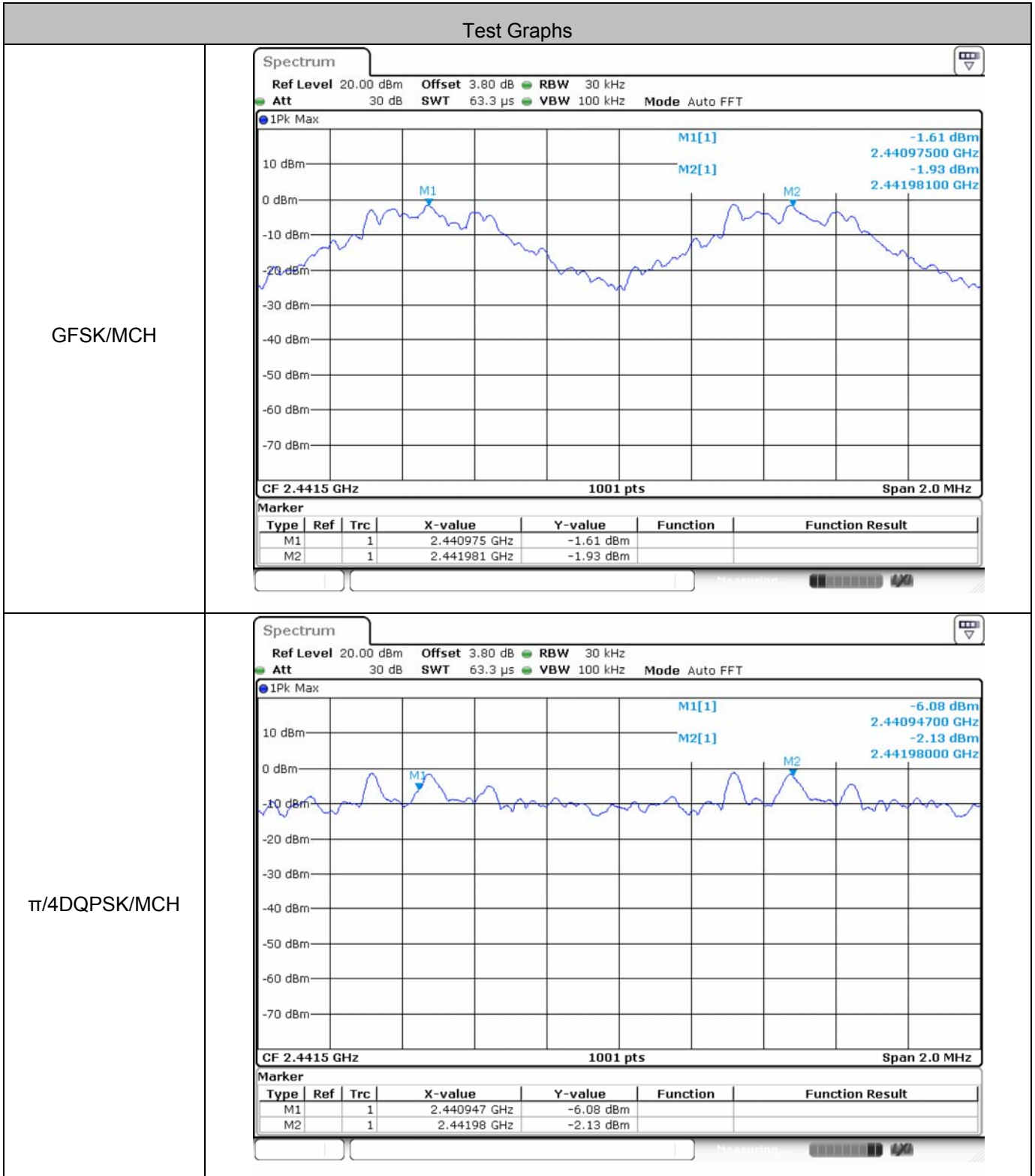


$\pi/4$ DQPSK/HCH



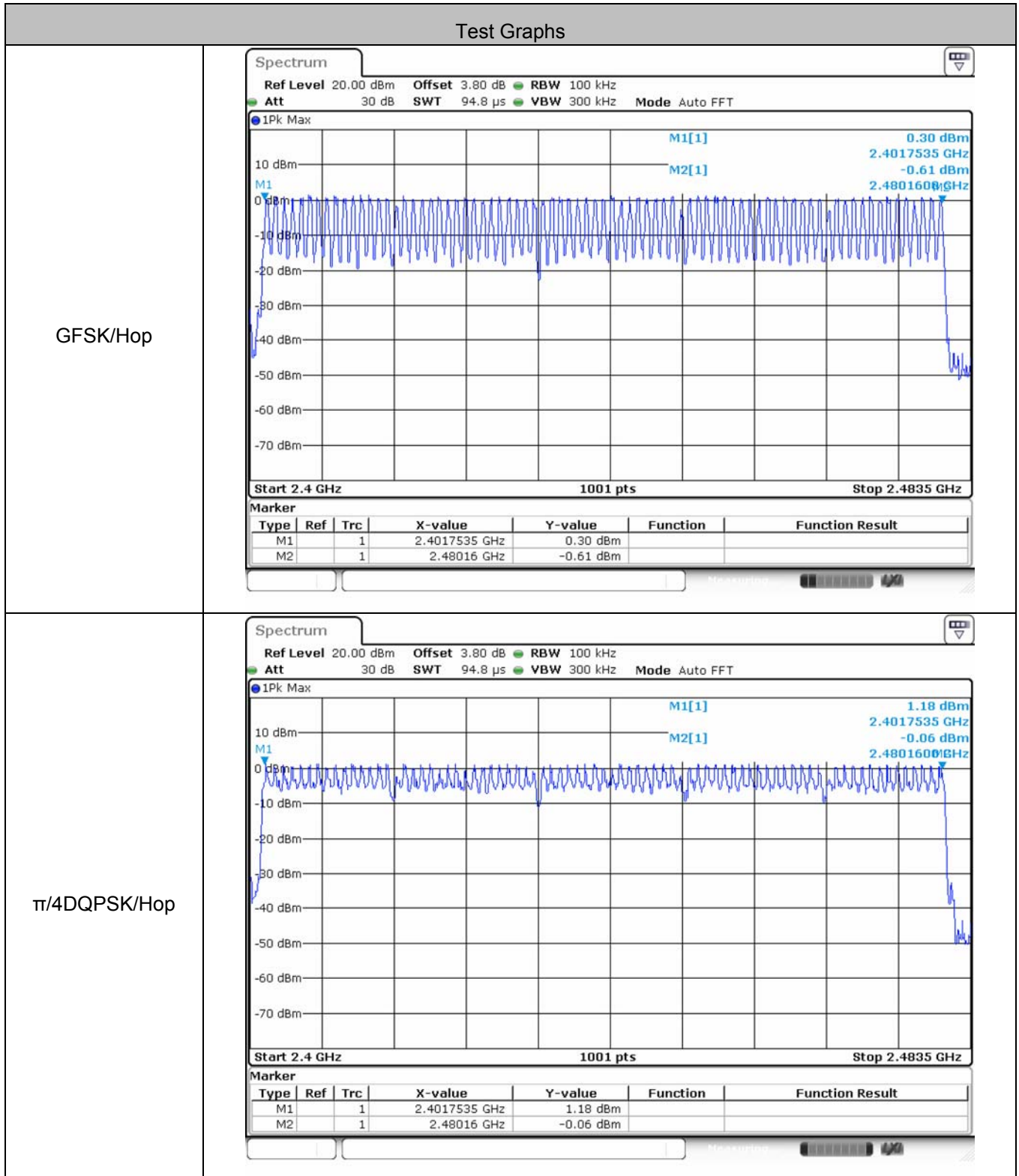
A.3 Carrier Frequency Separation

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	MCH	1.006	0.583	Pass
$\pi/4$ DQPSK	MCH	1.033	0.838	Pass



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

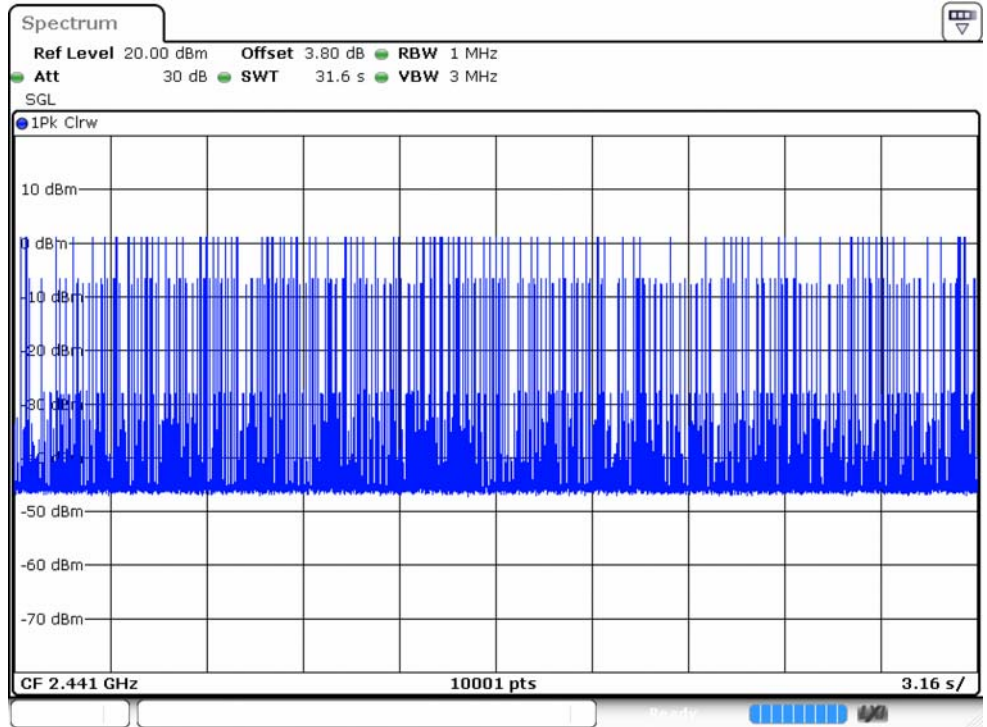
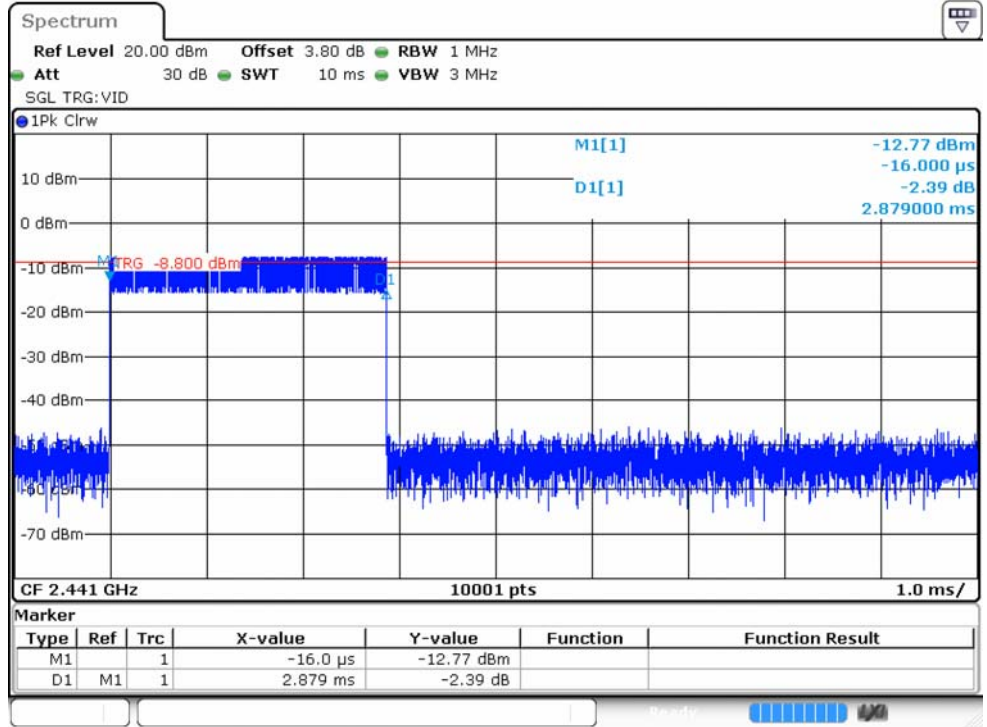


A.5 Dwell Time

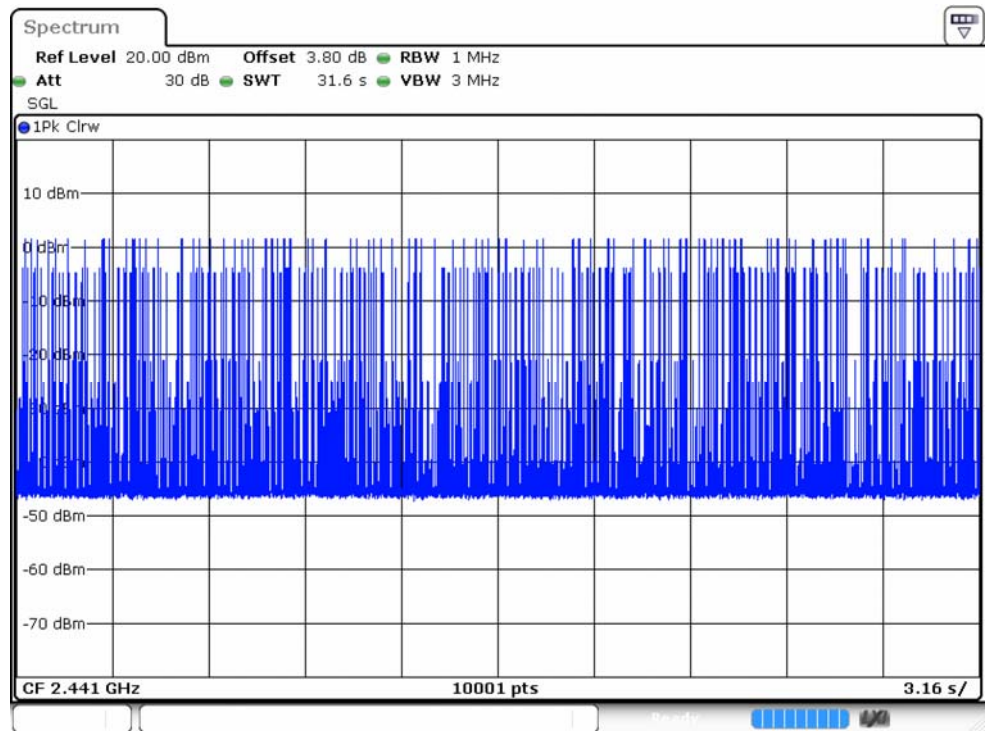
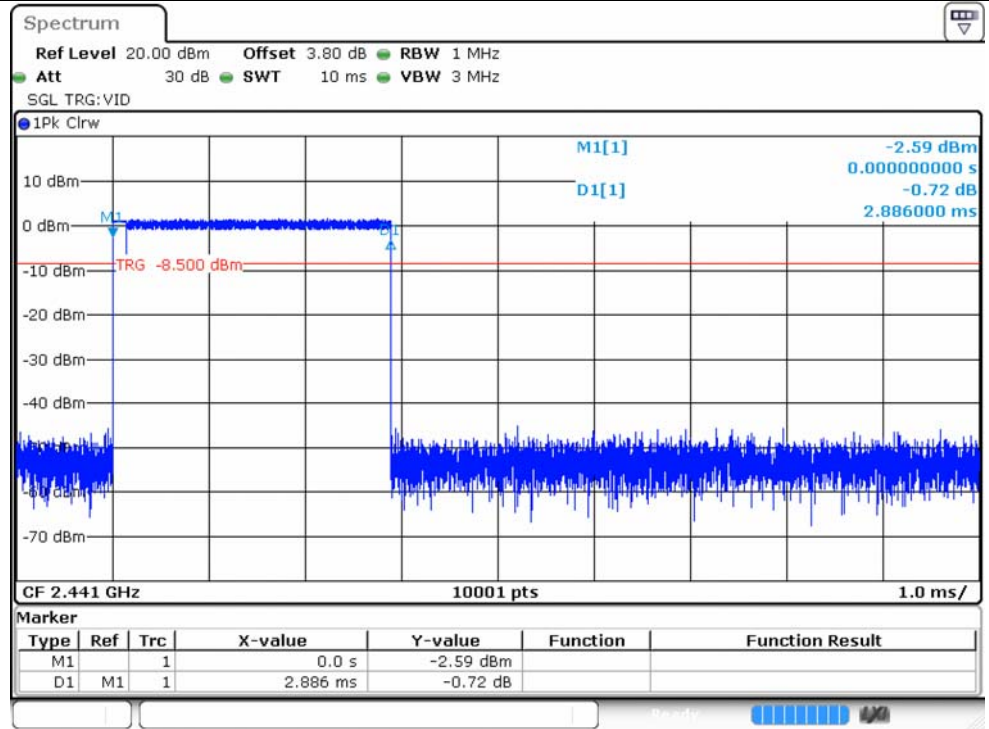
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	MCH	2.879	111	319.569	0.4	Pass
$\pi/4$ DQPSK	2DH5	MCH	2.886	115	331.89	0.4	Pass

Test Graphs

GFSK_DH5/MCH



$\pi/4$ DQPSK
_2DH5/MCH

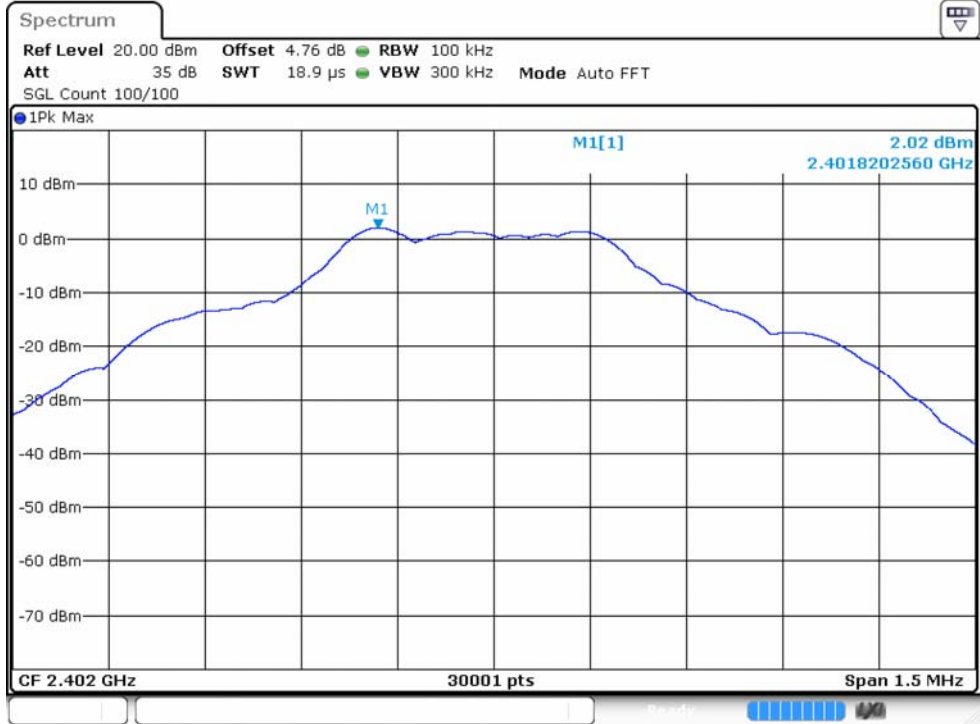


A.6 RF Conducted Spurious Emissions

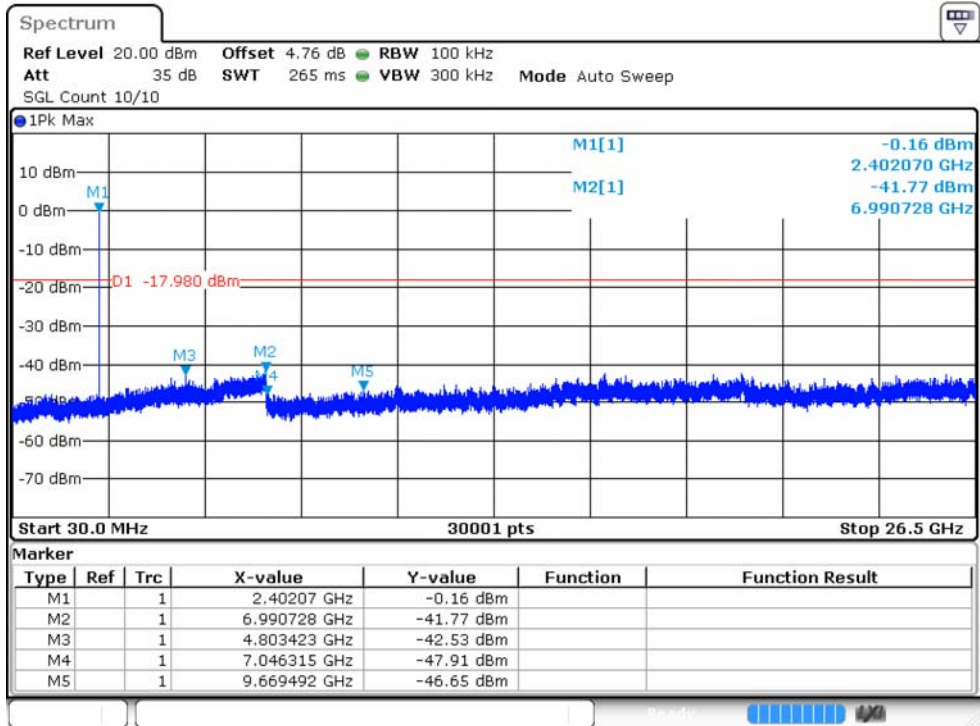
Mode	Channel	Max. Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	-43.79	-20	Pass
	MCH	-39.1	-20	Pass
	HCH	-37.74	-20	Pass
$\pi/4$ DQPSK	LCH	-43.02	-20	Pass
	MCH	-40.69	-20	Pass
	HCH	-43.66	-20	Pass

GFSK_LCH_Graphs

Pref

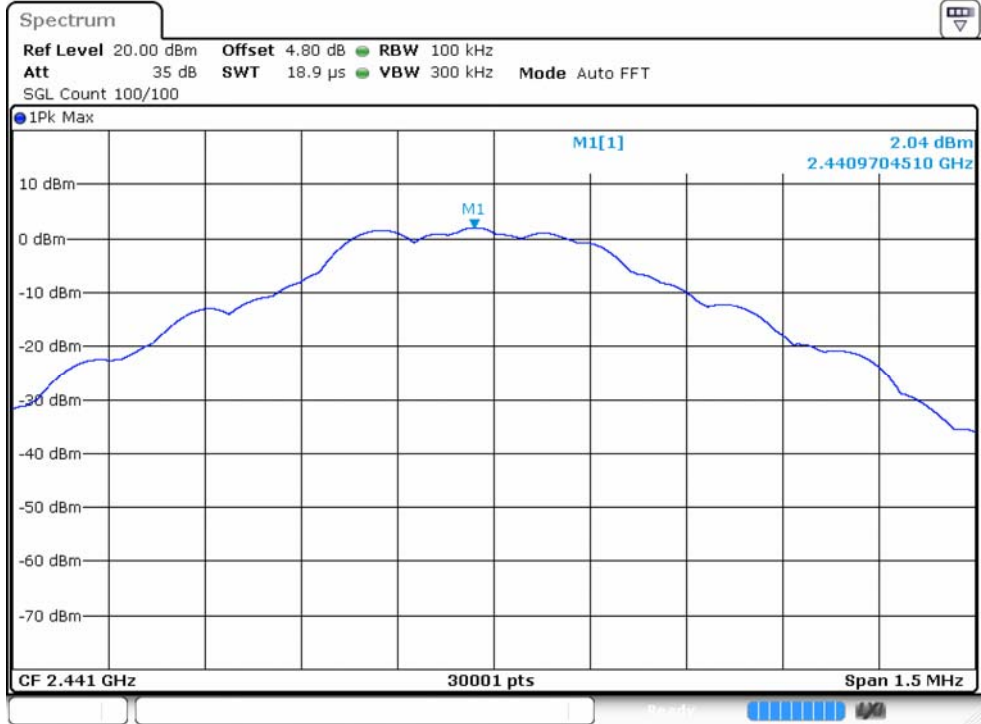


Puw

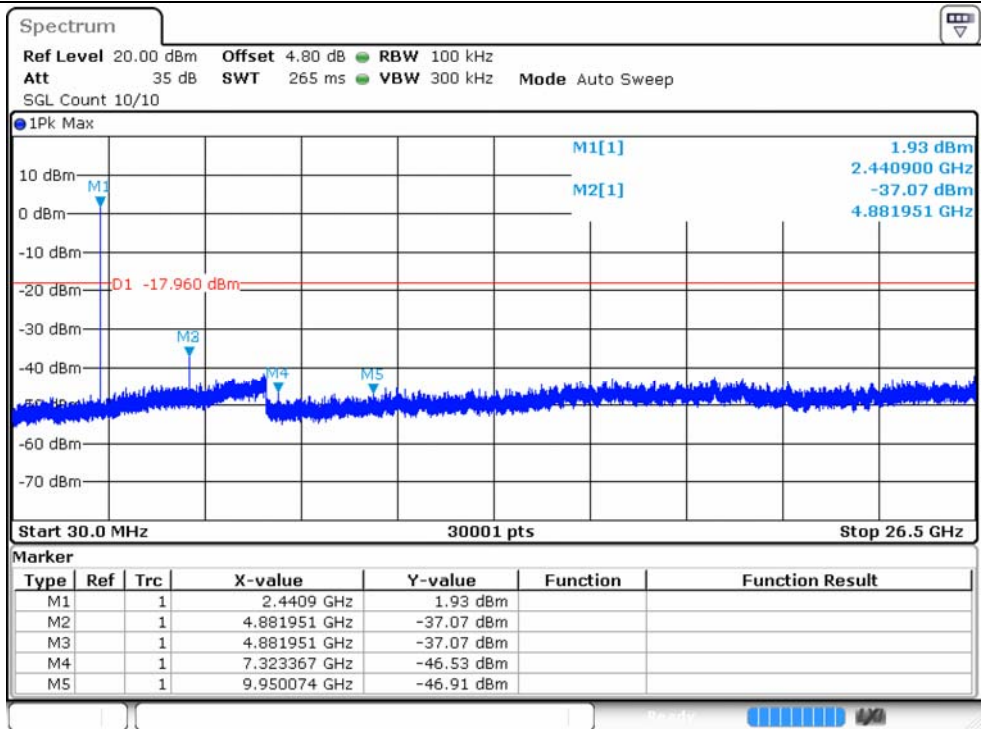


GFSK_MCH_Graphs

Pref

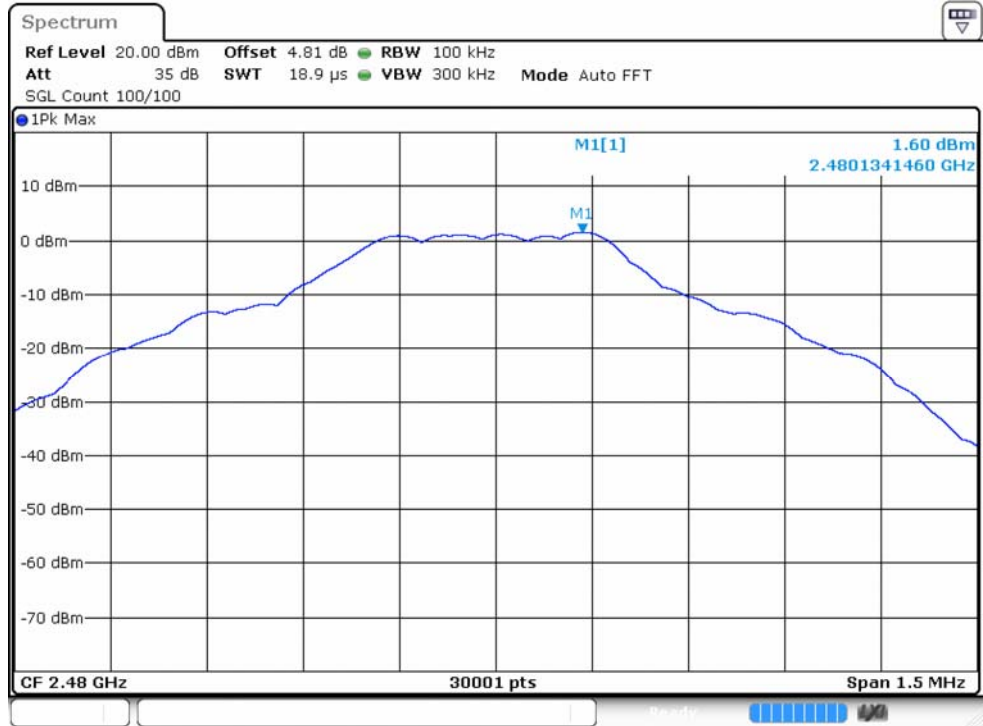


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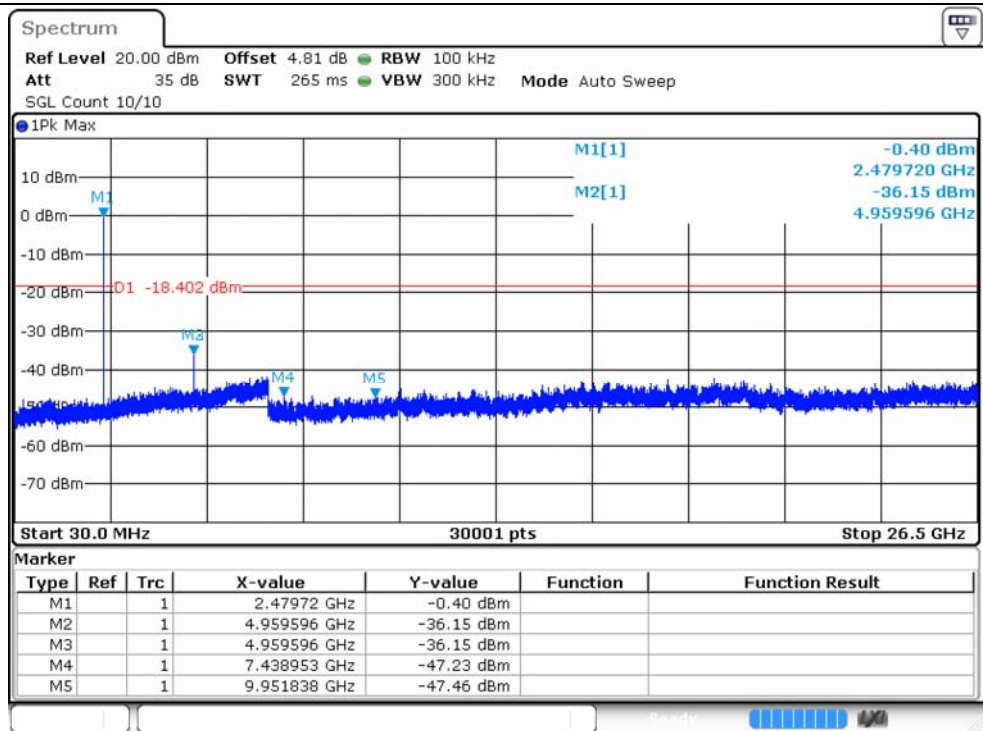


GFSK_HCH_Graphs

Pref

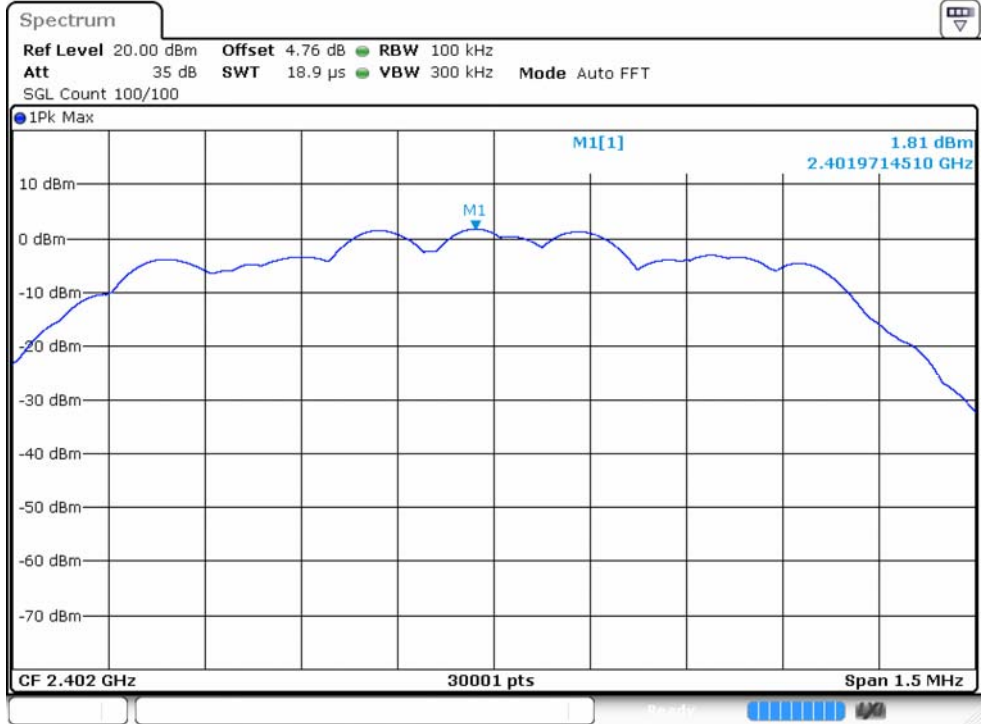


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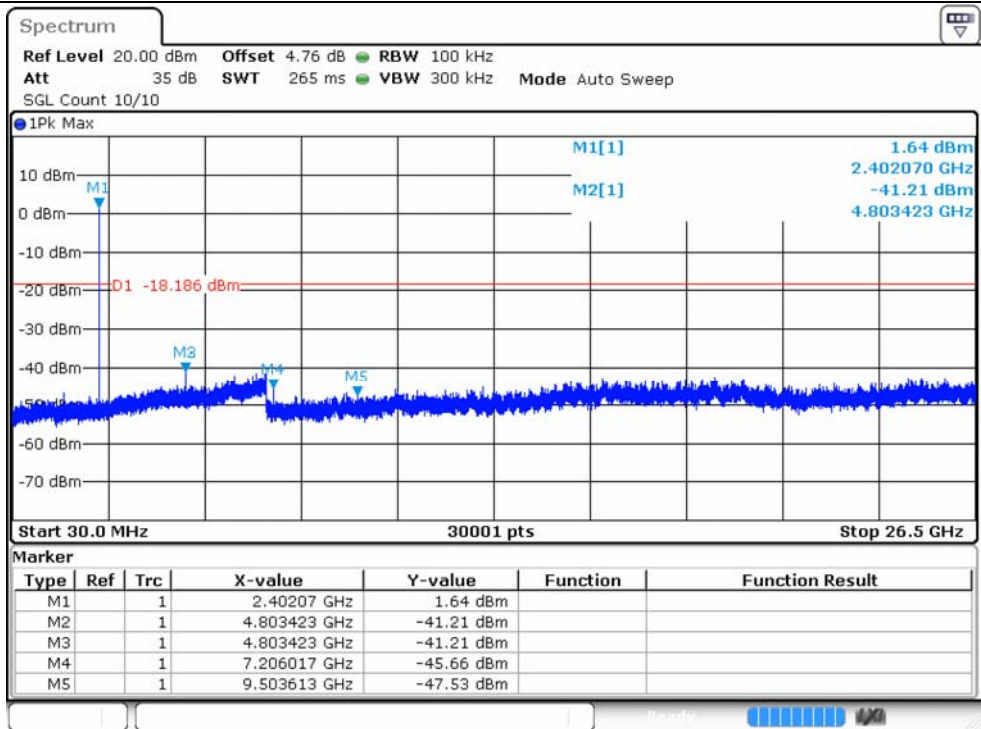


$\pi/4$ DQPSK_LCH_Graphs

Pref

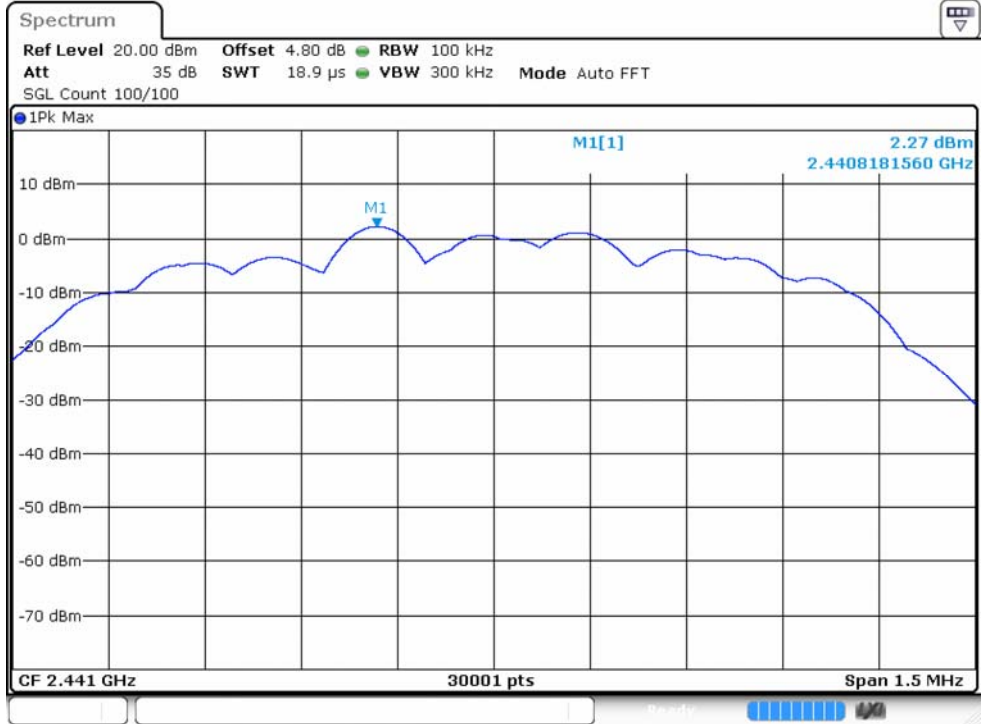


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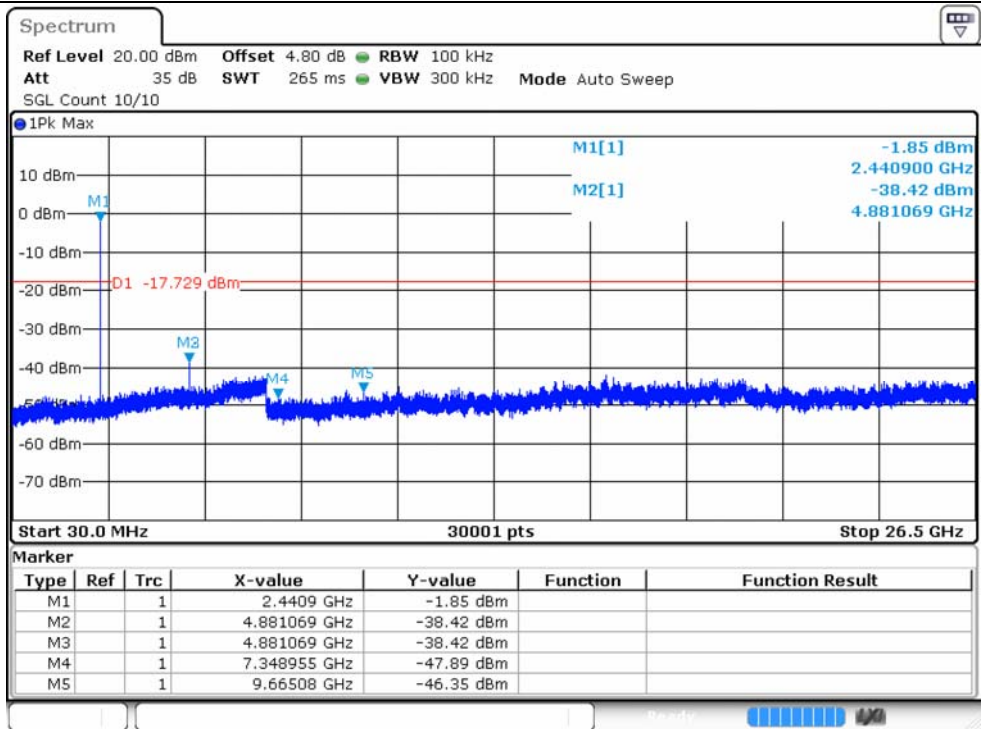


$\pi/4$ DQPSK_MCH_Graphs

Pref

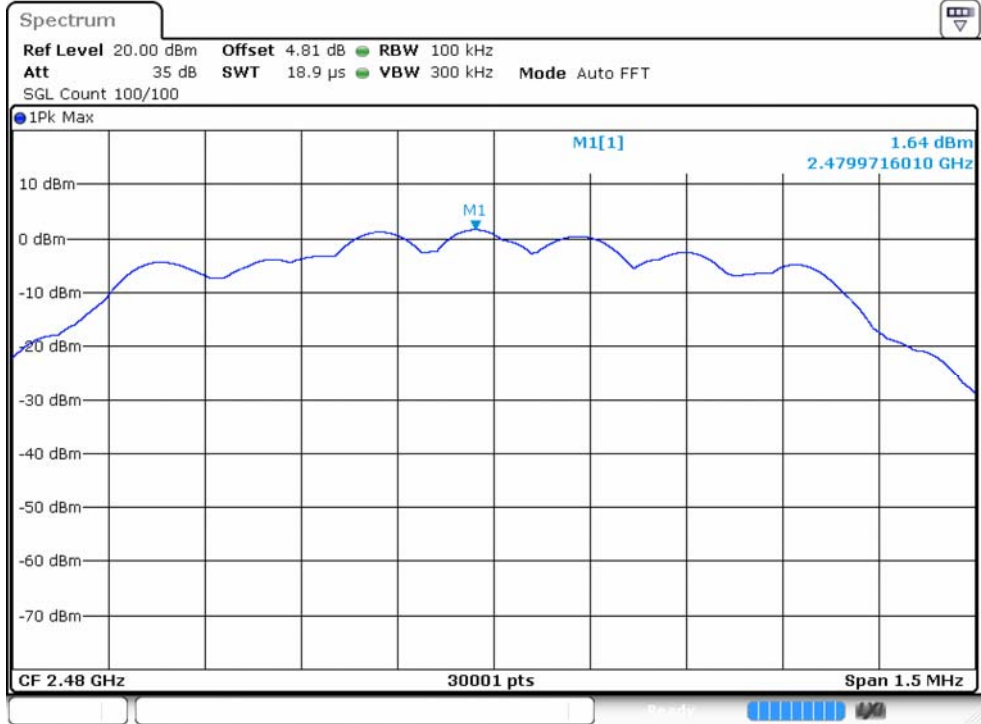


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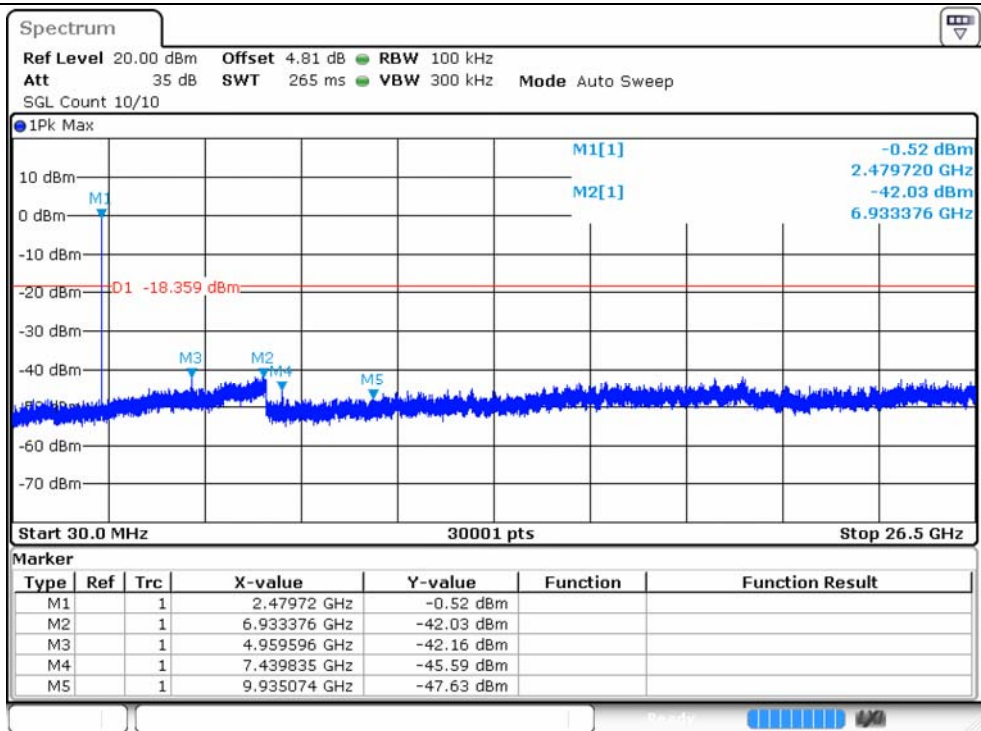


$\pi/4$ DQPSK_HCH_Graphs

Pref

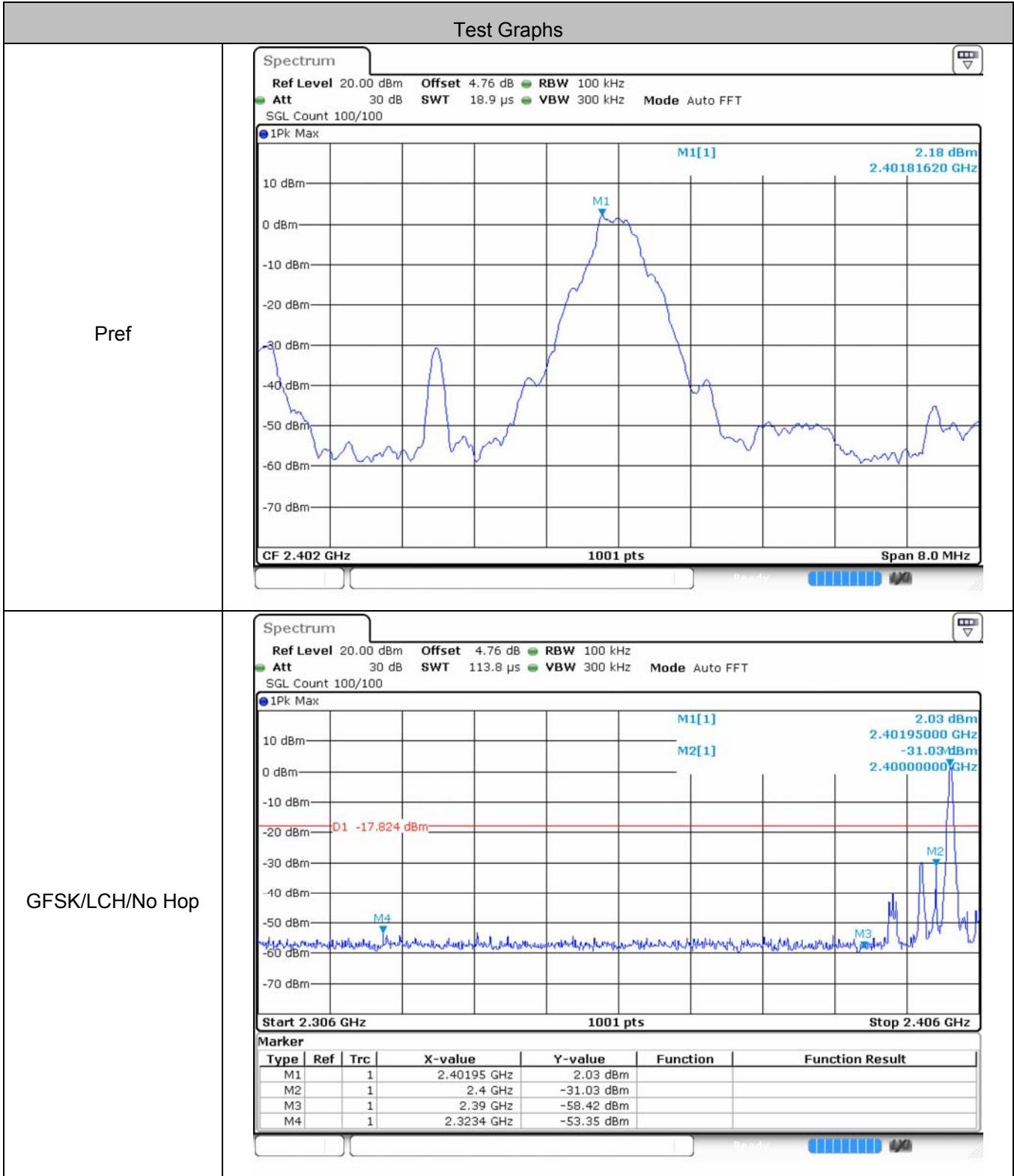


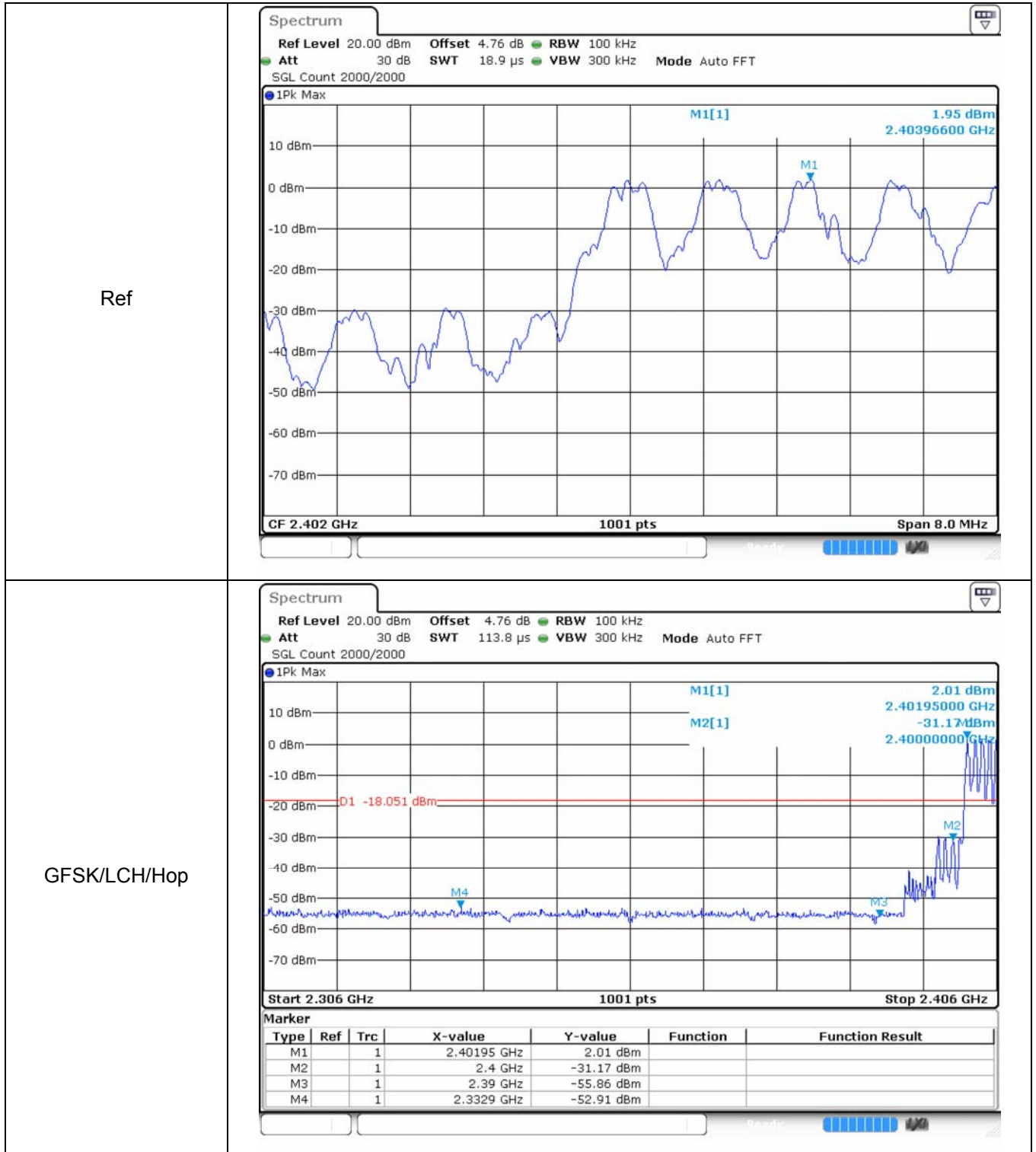
Puw

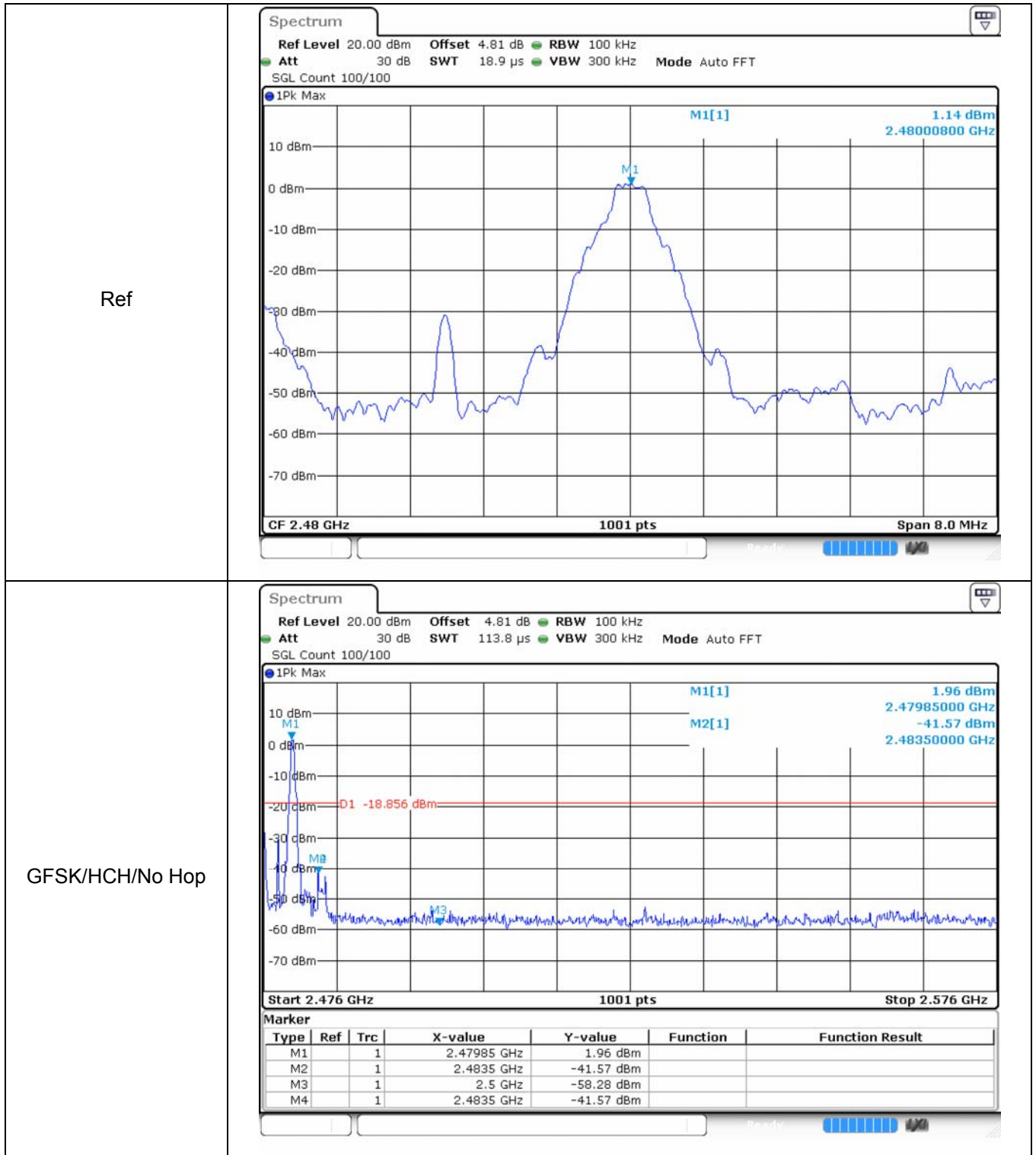


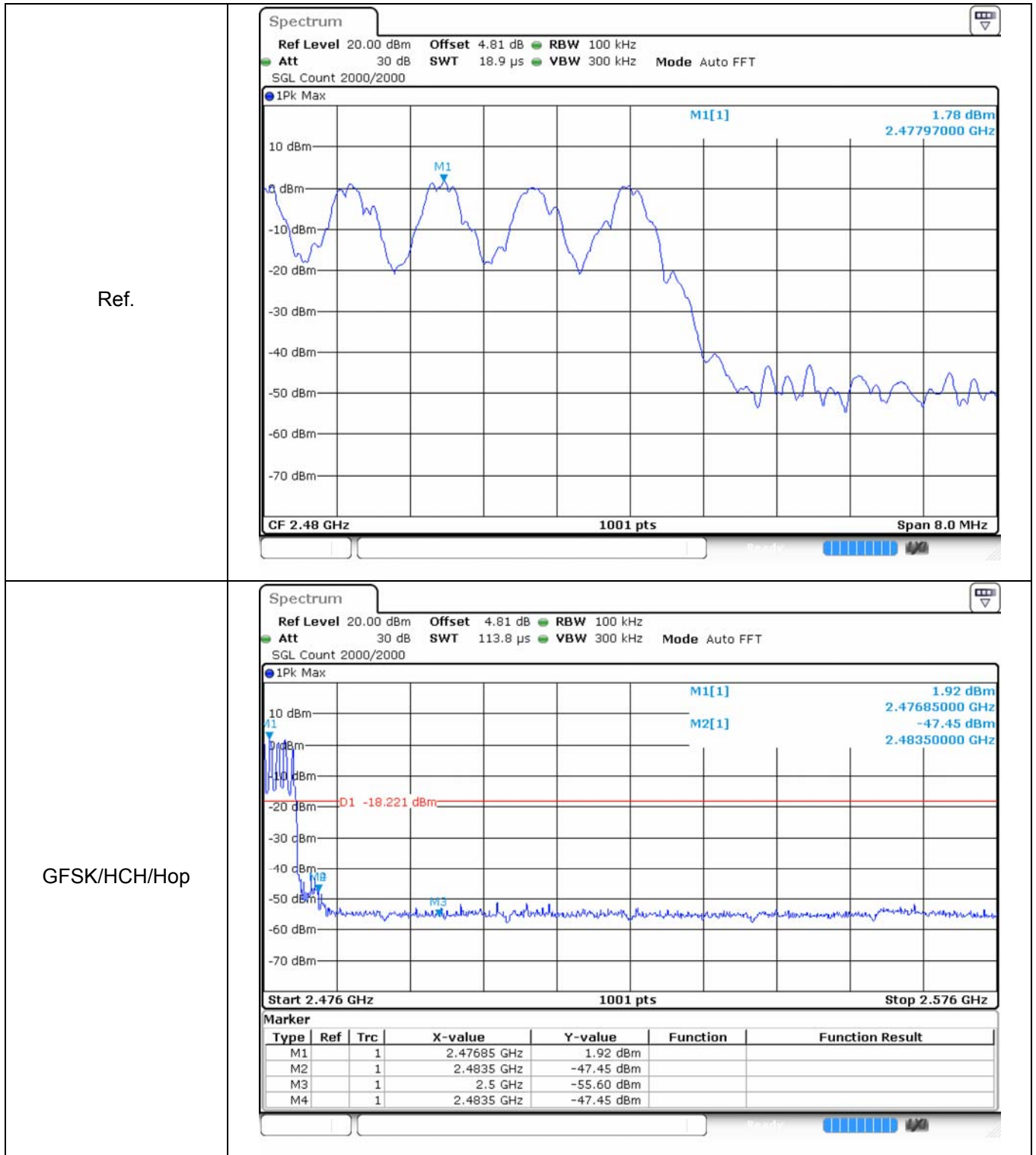
A.7 Band-edge for RF Conducted Emissions

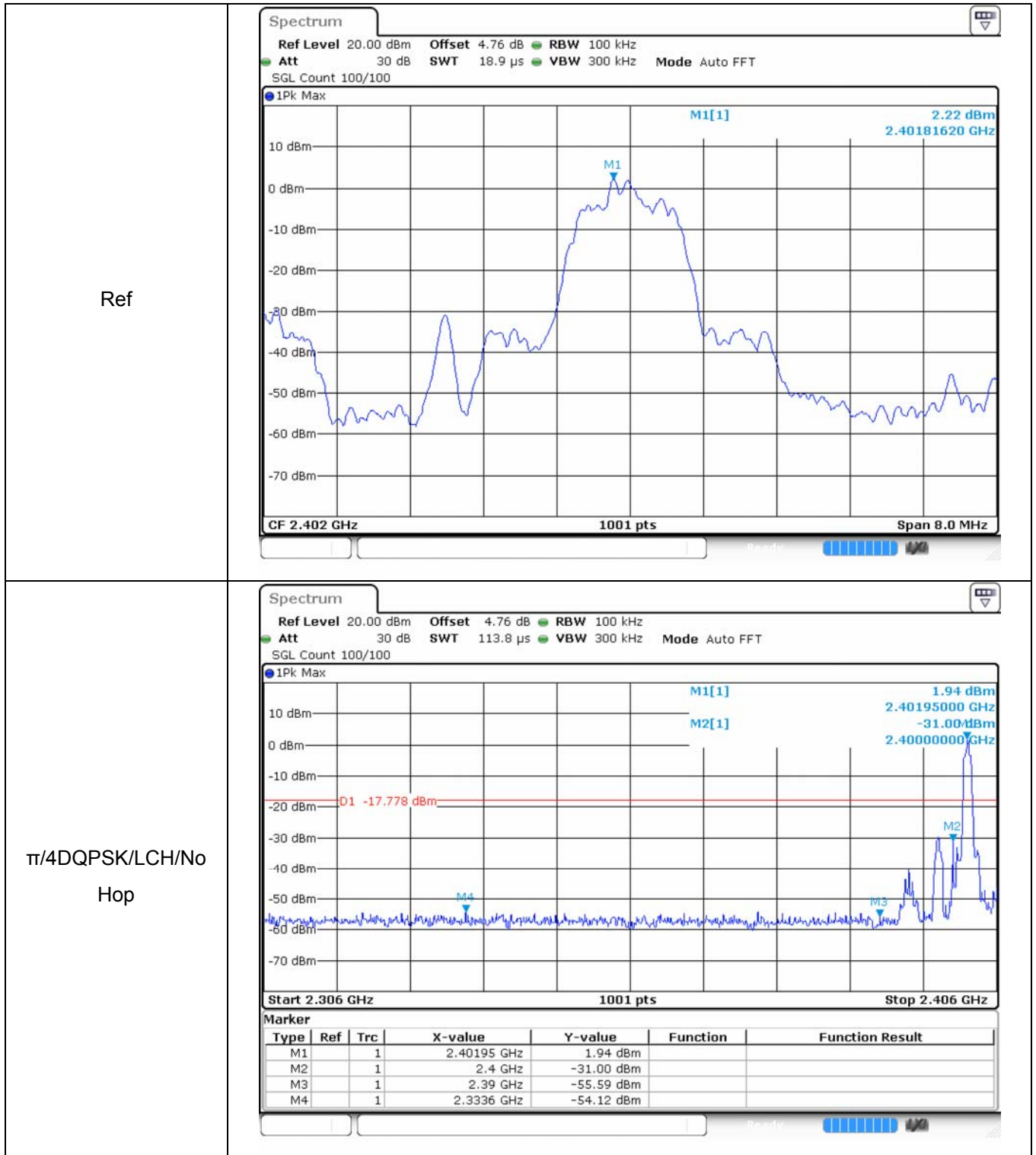
Mode	Channel	Carrier Frequency [MHz]	Frequency Hopping	Max Spurious Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	2402	Off	-55.52	-20	Pass
			On	-54.86	-20	Pass
	HCH	2480	Off	-42.7	-20	Pass
			On	-49.23	-20	Pass
π/4DQPSK	LCH	2402	Off	-56.34	-20	Pass
			On	-54.6	-20	Pass
	HCH	2480	Off	-43.99	-20	Pass
			On	-44.39	-20	Pass

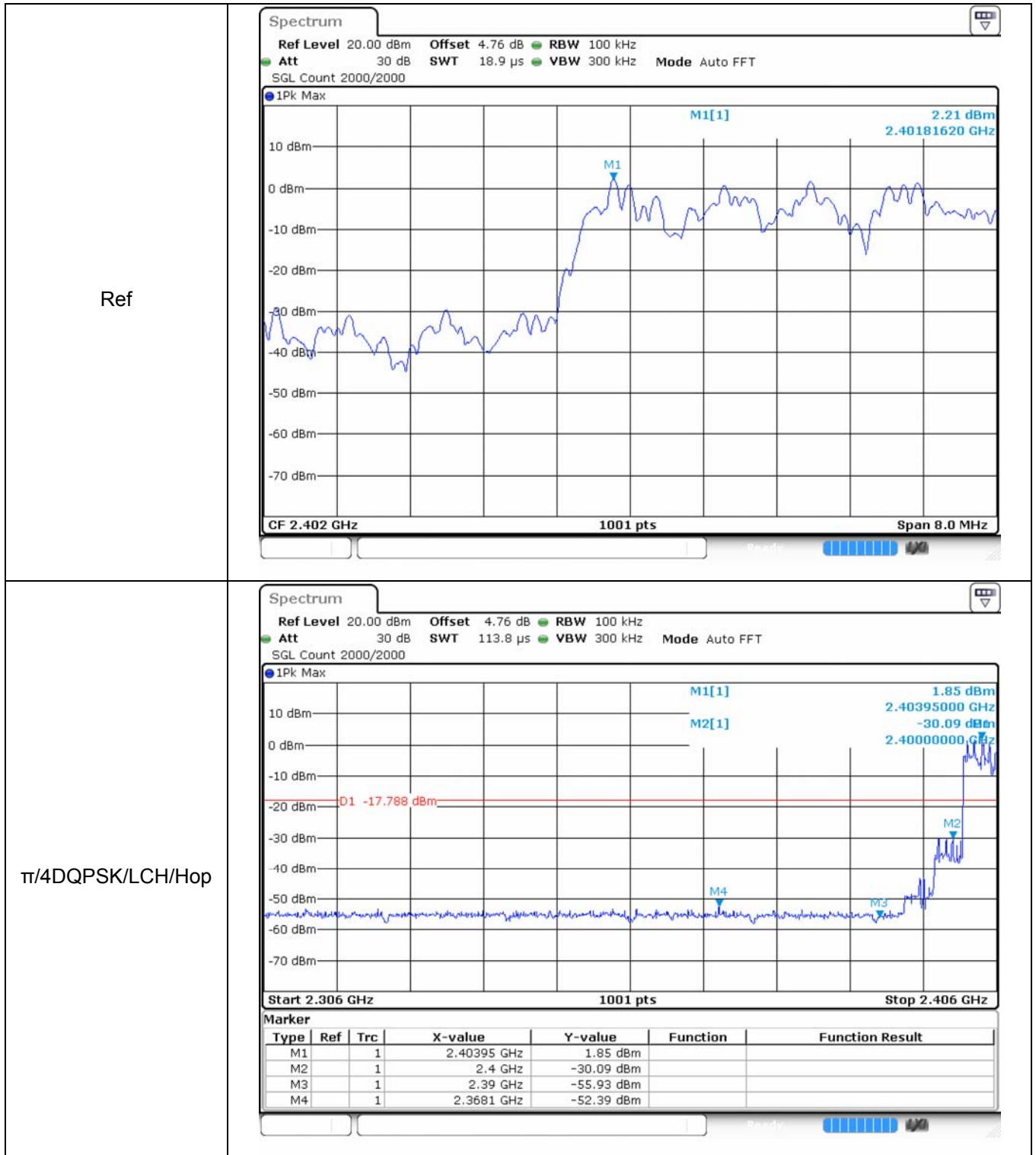


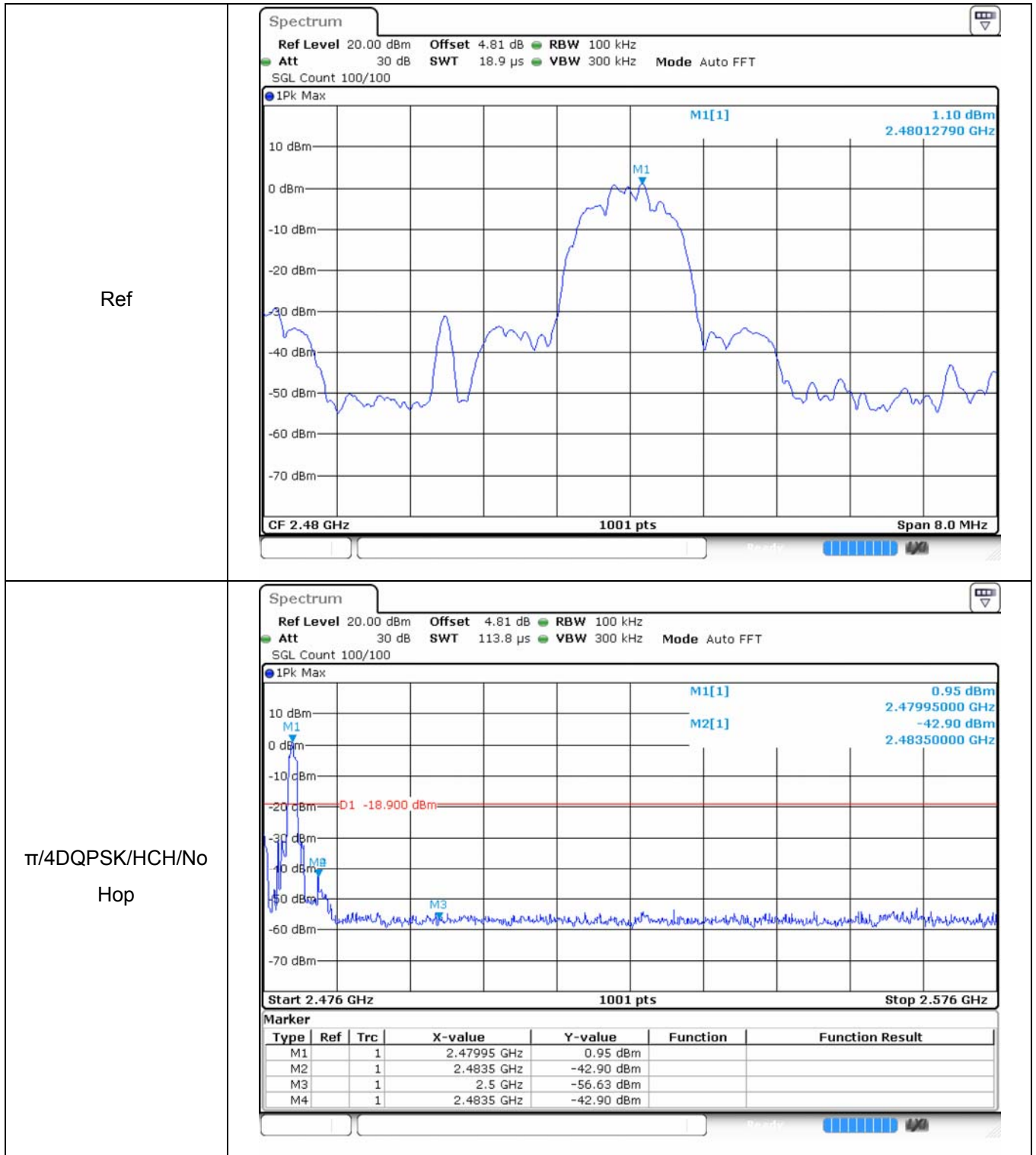


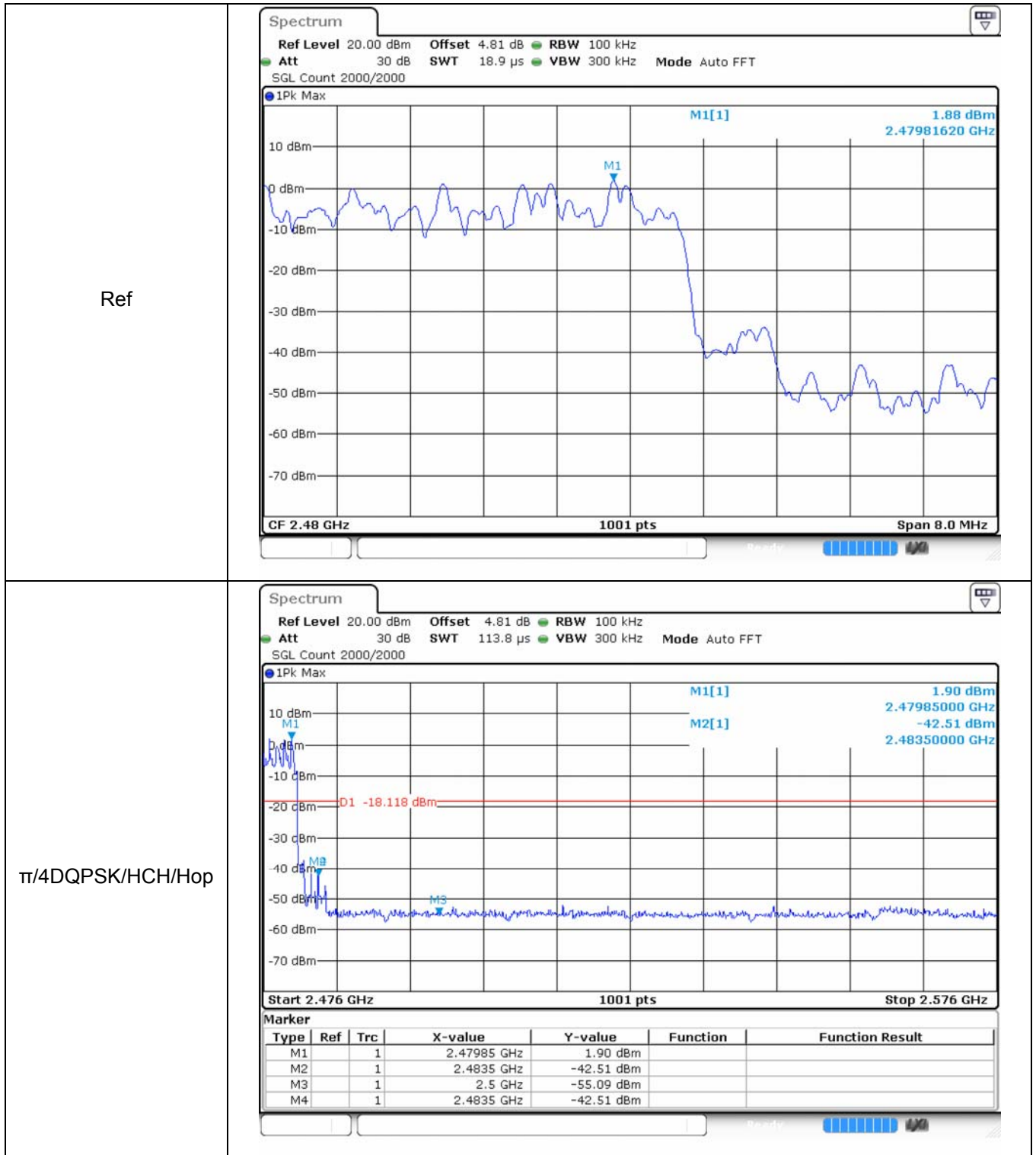








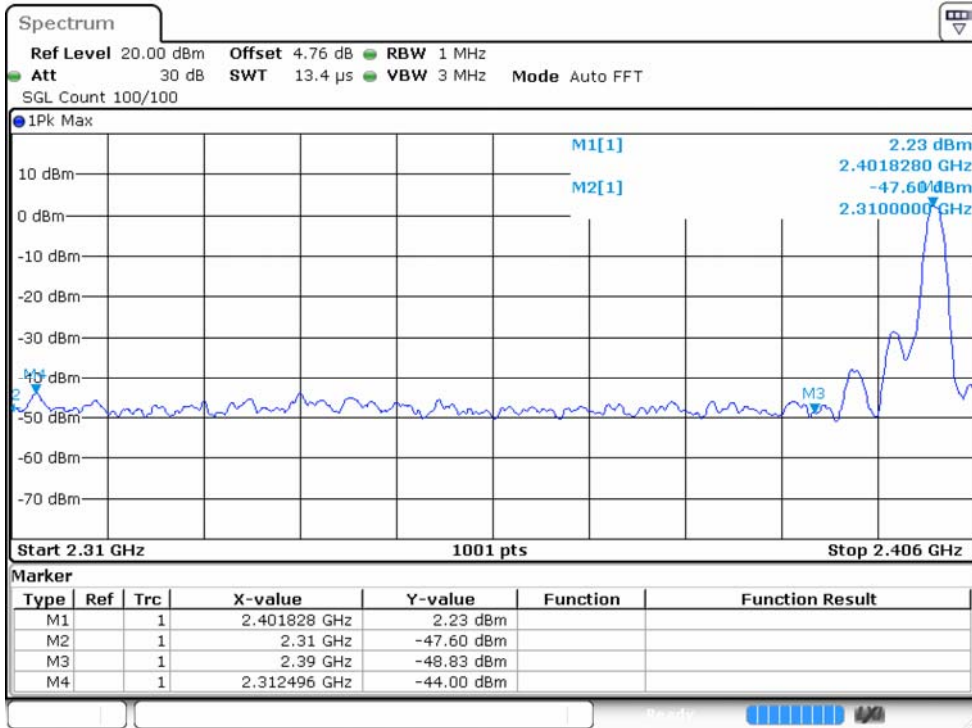




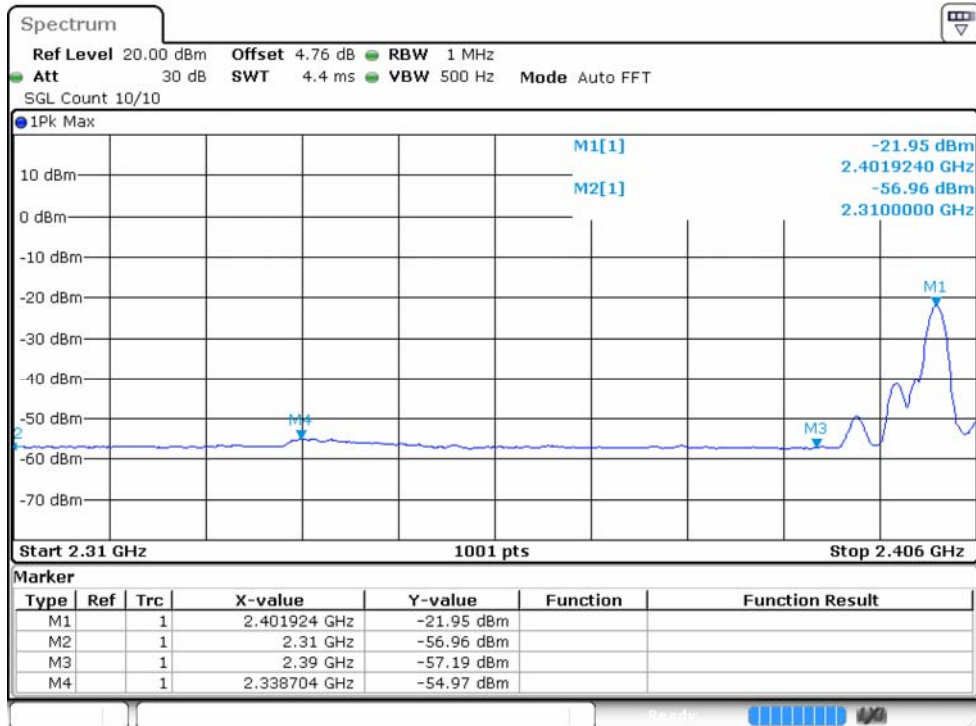
A.7 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-47.6	2	0	49.66	PEAK	74	Pass
	Off	2310.0	-56.95	2	0	40.31	AV	54	Pass
	Off	2312.496	-43.99	2	0	53.27	PEAK	74	Pass
	Off	2338.704	-54.96	2	0	42.3	AV	54	Pass
	Off	2390.0	-48.83	2	0	48.43	PEAK	74	Pass
	Off	2390.0	-57.19	2	0	40.07	AV	54	Pass
	Off	2483.5	-39.99	2	0	57.27	PEAK	74	Pass
	Off	2483.5	-50.25	2	0	47.01	AV	54	Pass
	Off	2483.608	-39.86	2	0	57.4	PEAK	74	Pass
	Off	2483.92	-49.13	2	0	48.13	AV	54	Pass
	Off	2500.0	-47.42	2	0	49.84	PEAK	74	Pass
	Off	2500.0	-56.66	2	0	40.6	AV	54	Pass
$\pi/4$ DQPSK	Off	2310.0	-49.92	2	0	47.34	PEAK	74	Pass
	Off	2310.0	-56.83	2	0	40.43	AV	54	Pass
	Off	2339.472	-43.24	2	0	54.02	PEAK	74	Pass
	Off	2338.128	-54.92	2	0	42.34	AV	54	Pass
	Off	2390.0	-47.68	2	0	49.58	PEAK	74	Pass
	Off	2390.0	-57.24	2	0	40.02	AV	54	Pass
	Off	2483.5	-39.52	2	0	57.74	PEAK	74	Pass
	Off	2483.5	-51.56	2	0	45.7	AV	54	Pass
	Off	2483.632	-39.36	2	0	57.9	PEAK	74	Pass
	Off	2483.968	-50.56	2	0	46.7	AV	54	Pass
	Off	2500.0	-47.44	2	0	49.82	PEAK	74	Pass
	Off	2500.0	-56.55	2	0	40.71	AV	54	Pass

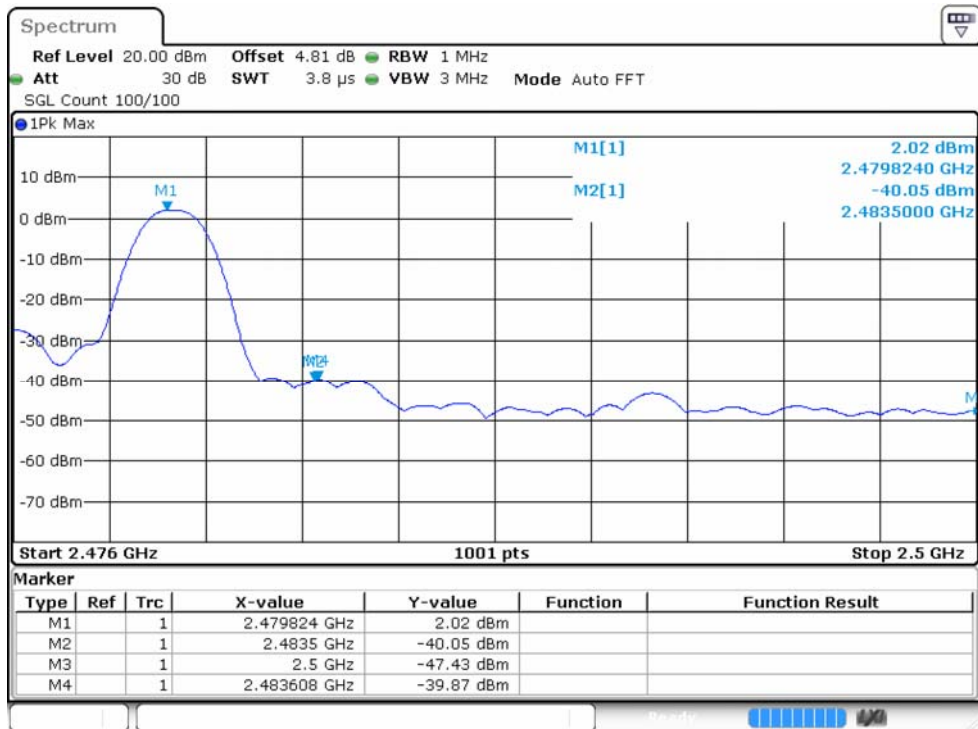
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



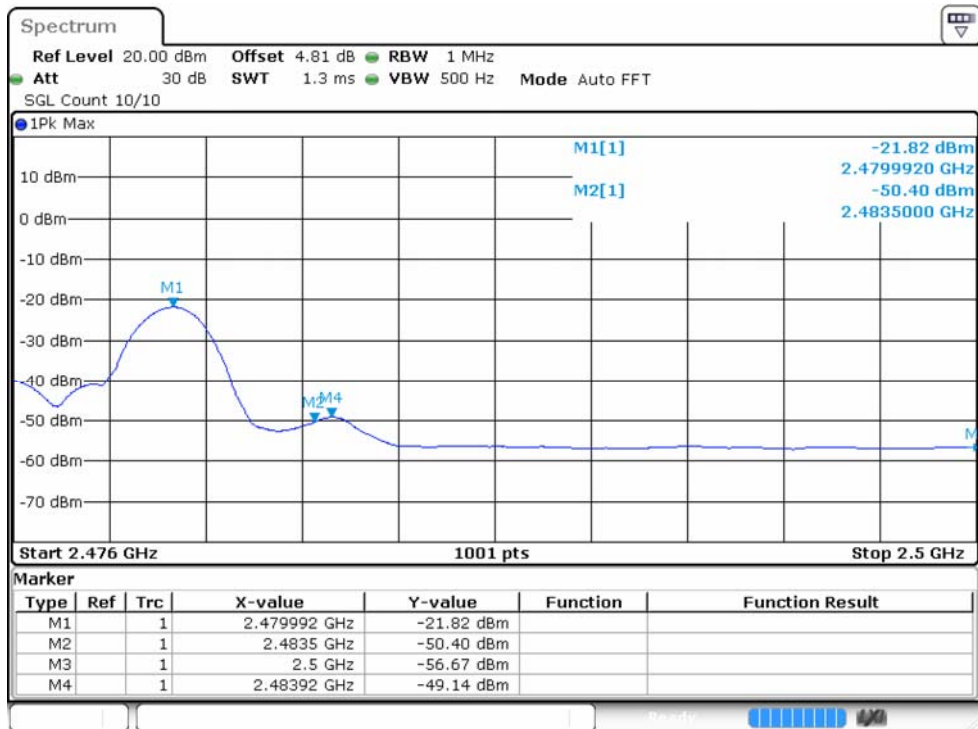
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)



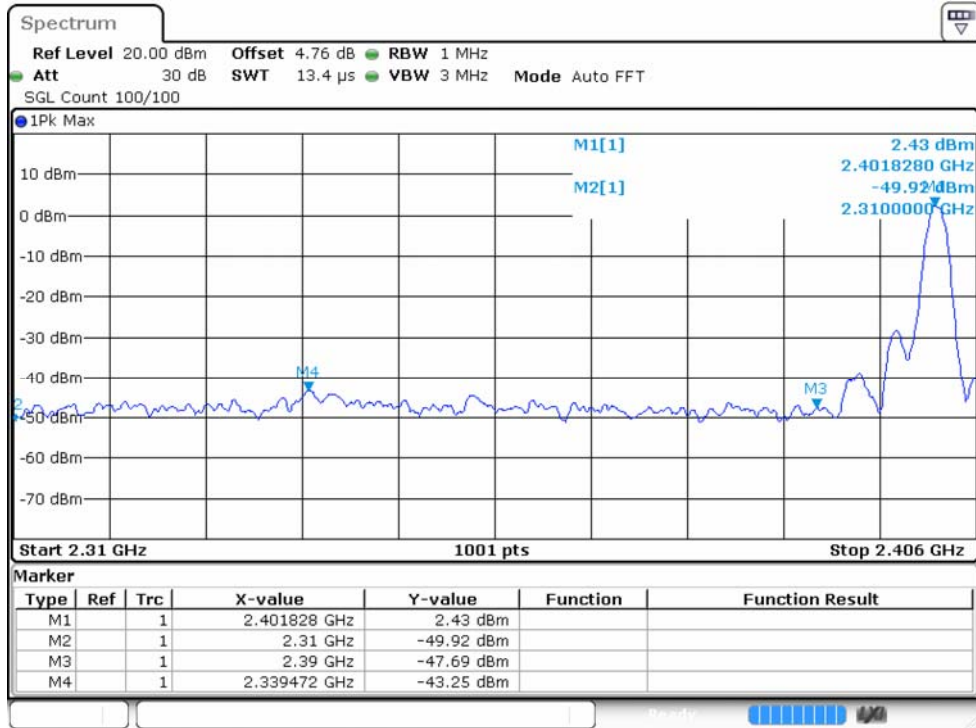
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (High Channel)



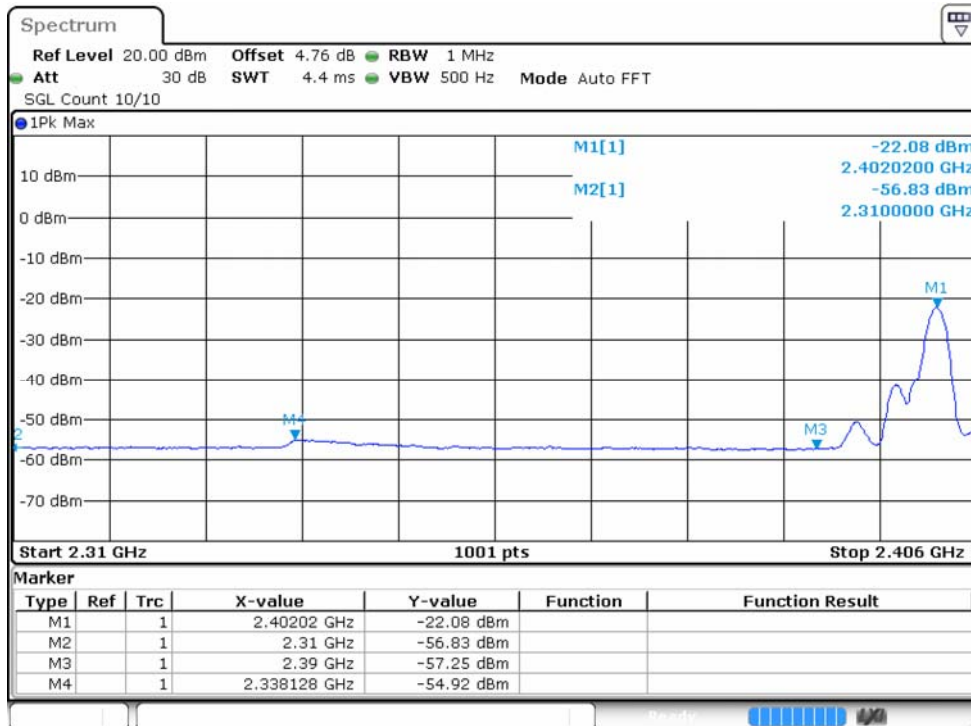
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (High Channel)



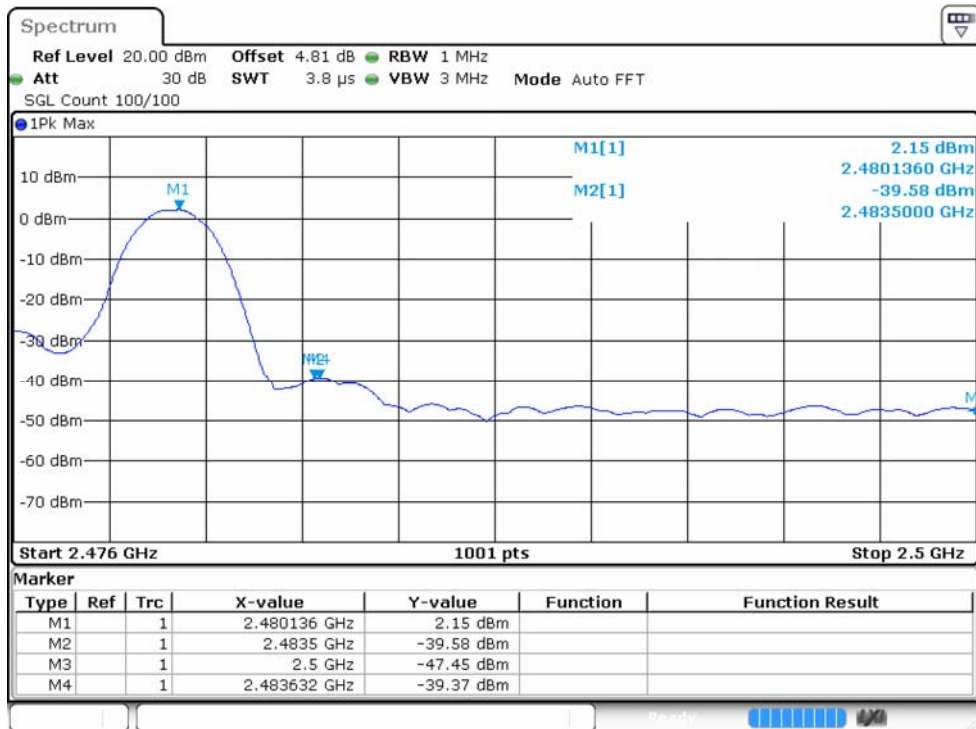
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (Low Channel)



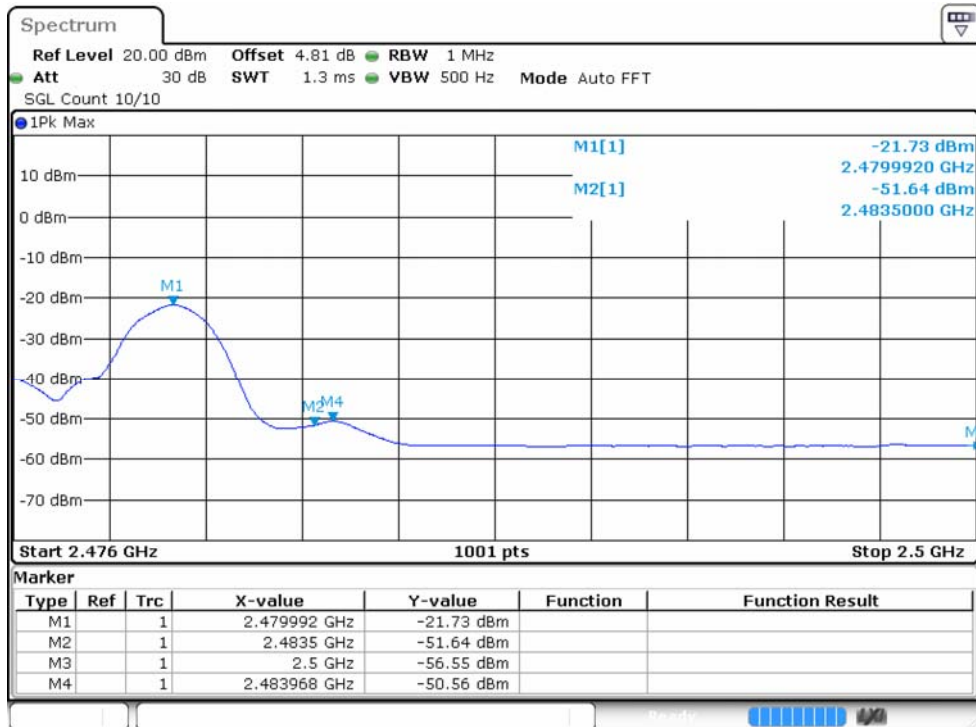
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (Low Channel)



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)



---The End---