

Appendix A

RF Test Data for BR_EDR(Conducted Measurement)

Product Name: AZEADA Space Bear series TWS wireless speaker

Trade Mark:N/A

Test Model: AZ-S04

Environmental Conditions

Temperature:	℃
Relative Humidity:	%
ATM Pressure:	101Kpa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen

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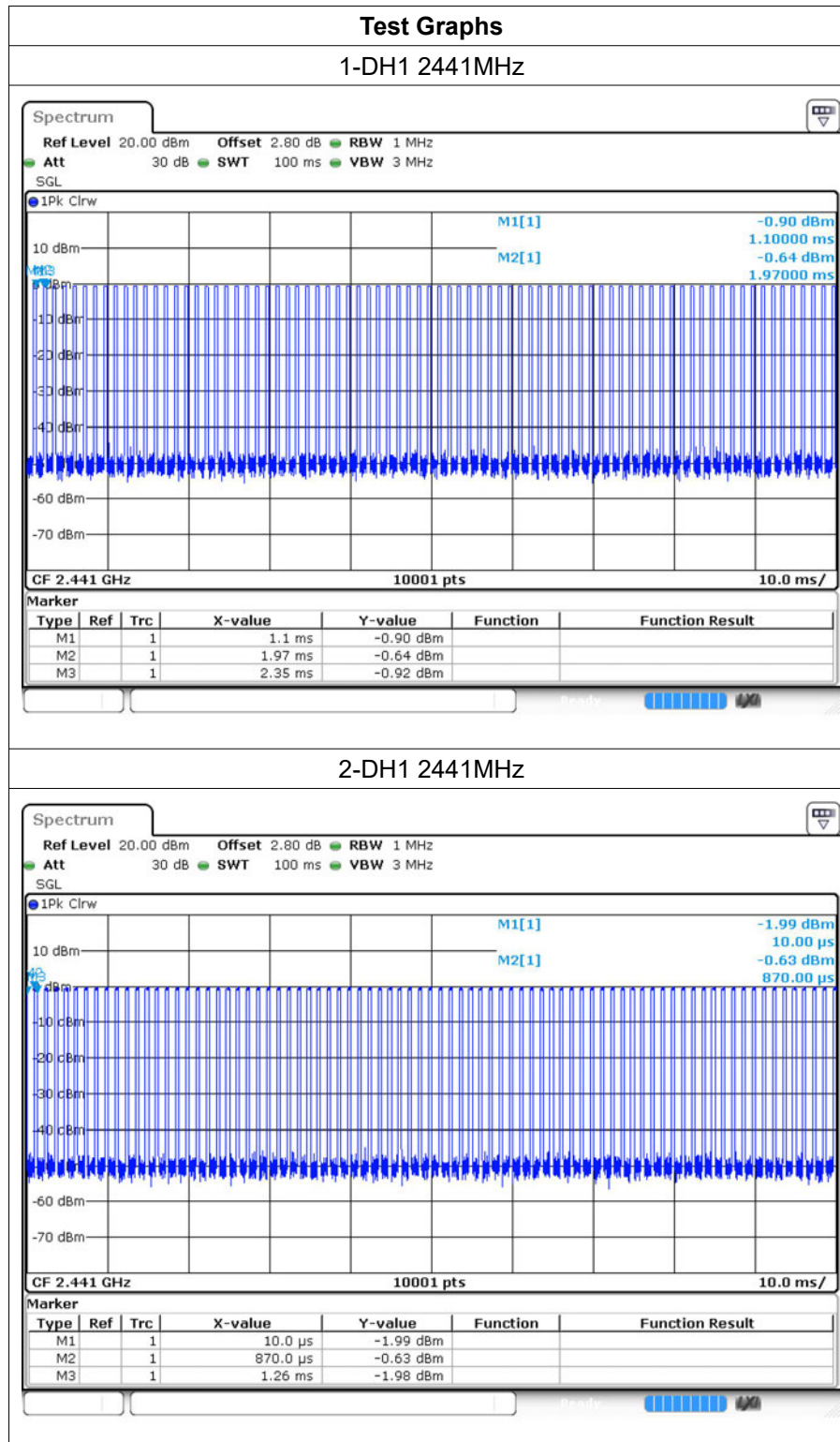
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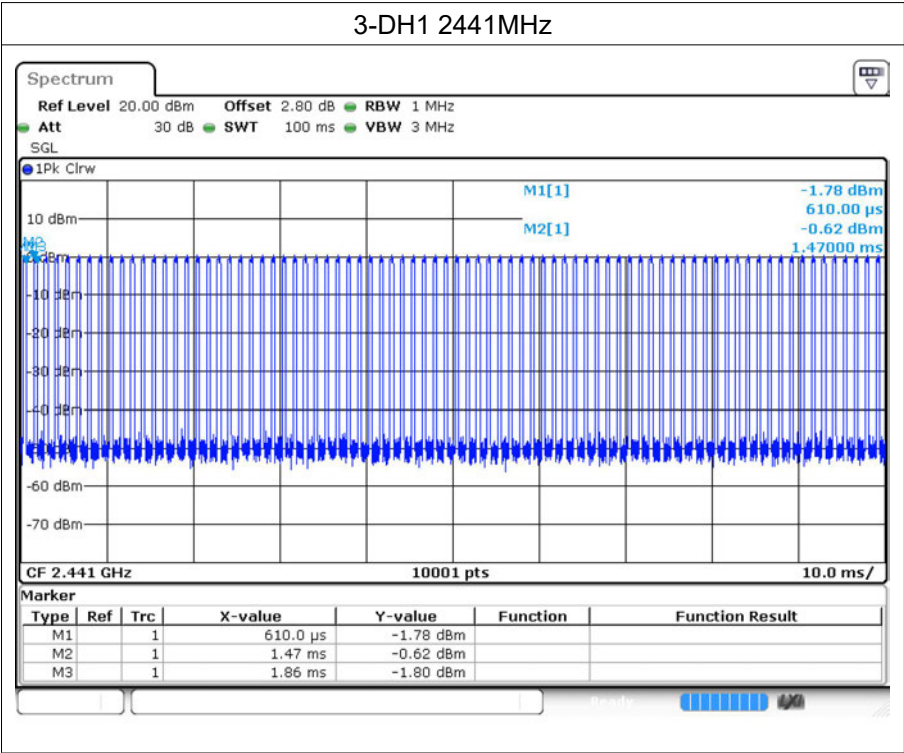
1 .Duty Cycle

1.1 Test Result

Mode	Frequency (MHz)	Duty Cycle (%)	1/T (kHz)
1-DH1	2441	31.2	2.63
2-DH1	2441	32.01	2.56
3-DH1	2441	32	2.56

1.2 Test Graphs



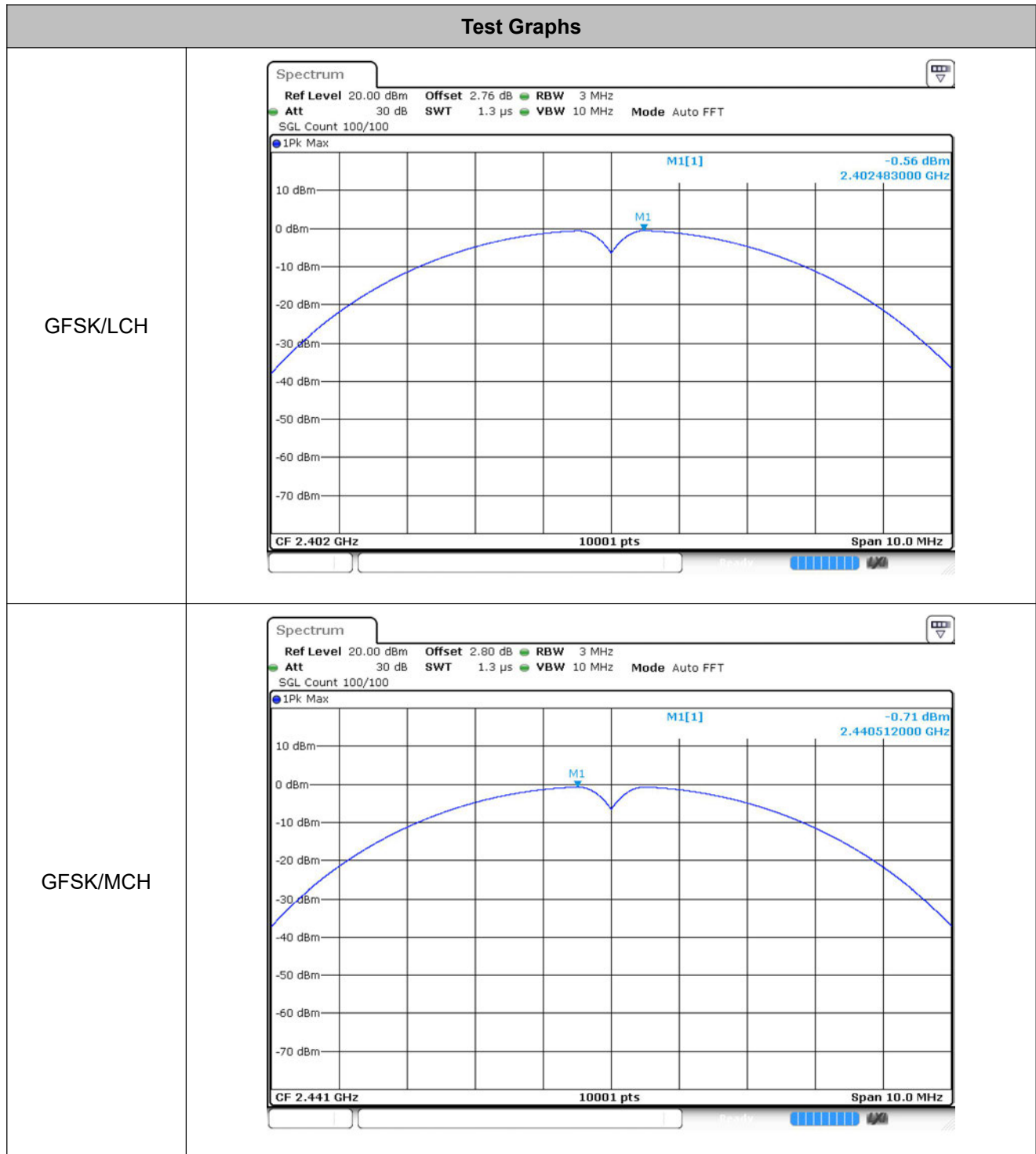


2 Maximum Conducted Peak Output Power

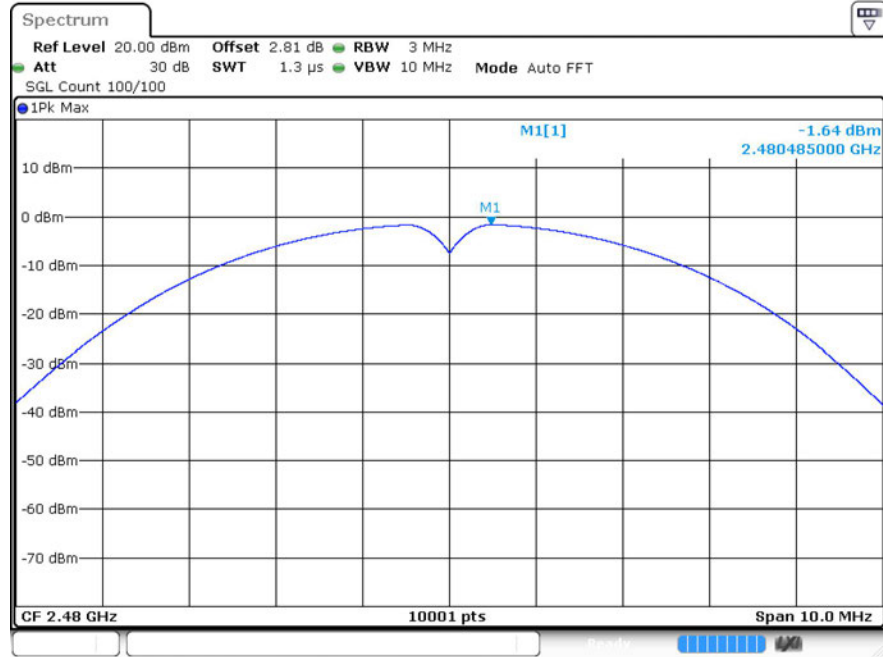
2.1 Test Result

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-0.56	≤ 21	Pass
	MCH	-0.71	≤ 21	Pass
	HCH	-1.64	≤ 21	Pass
$\pi/4$ DQPSK	LCH	0.07	≤ 21	Pass
	MCH	-0.26	≤ 21	Pass
	HCH	-0.99	≤ 21	Pass
8DPSK	LCH	-0.37	≤ 21	Pass
	MCH	-0.07	≤ 21	Pass
	HCH	-1.12	≤ 21	Pass

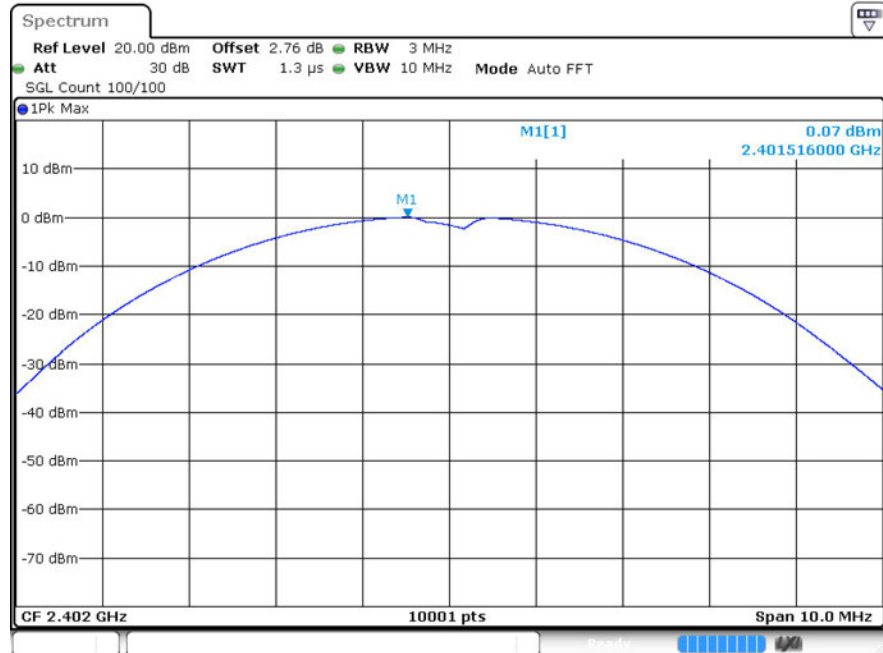
2.2 Test Graphs

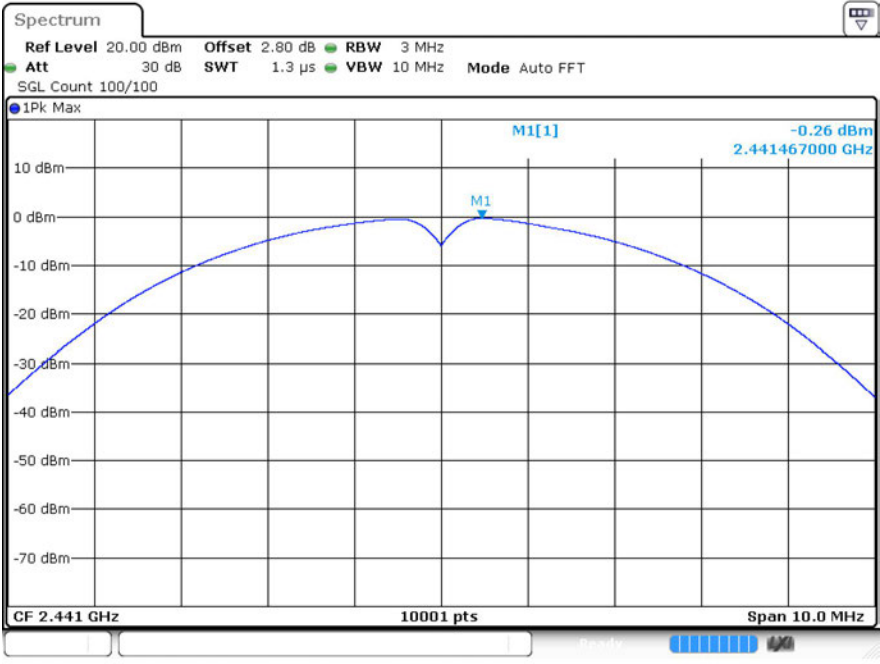
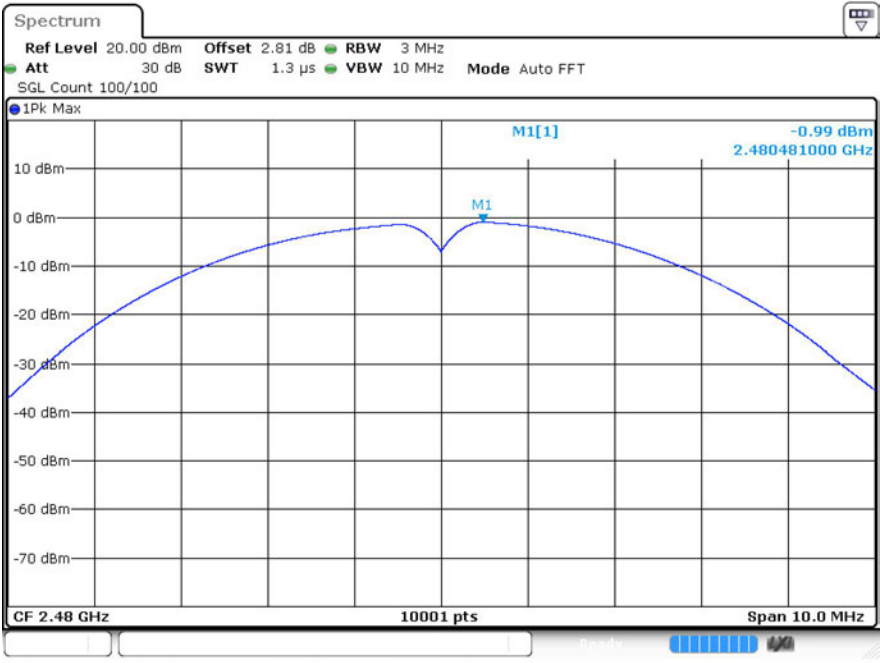


GFSK/HCH

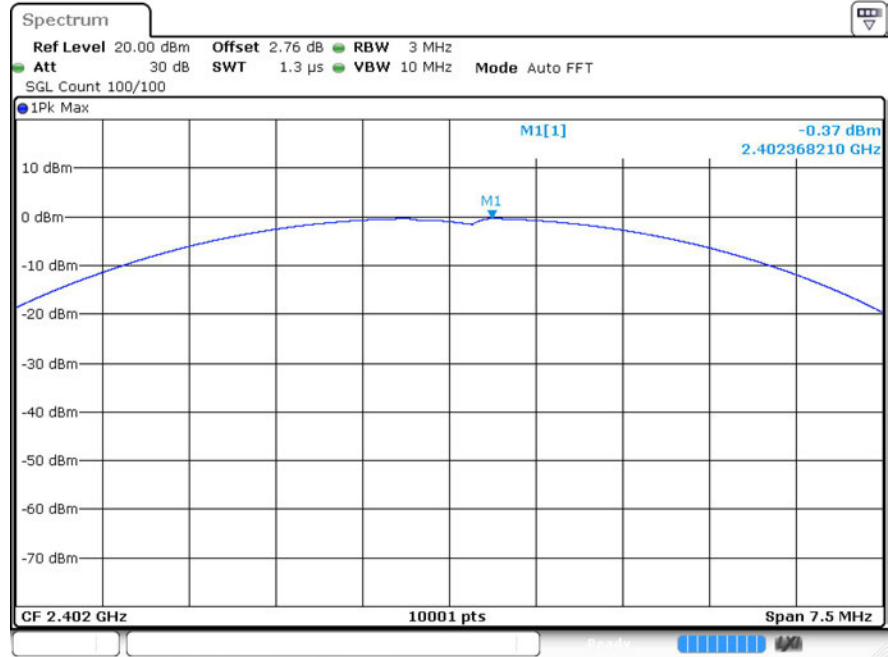


$\pi/4$ DQPSK/LCH

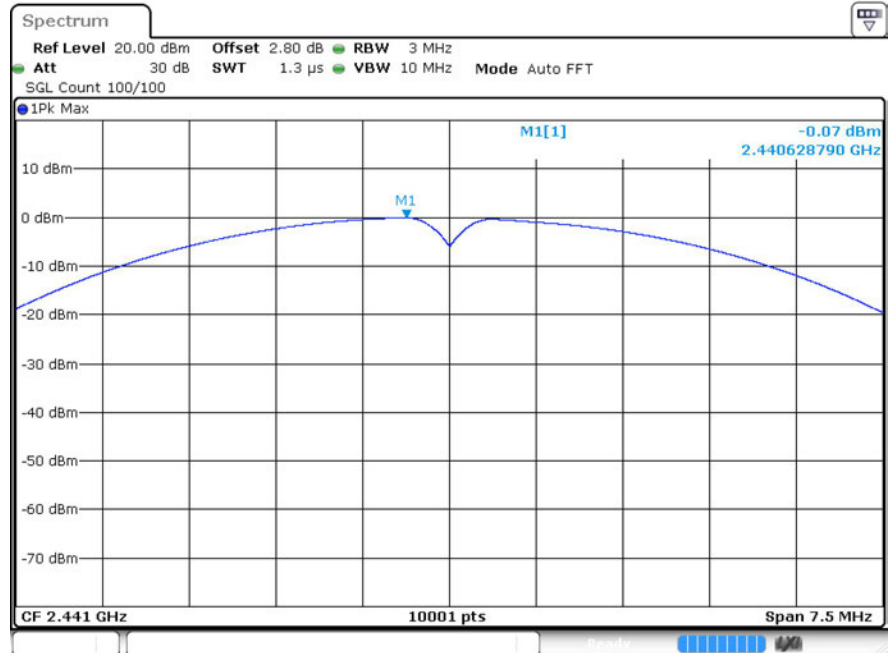


$\pi/4$DQPSK/MC H	
$\pi/4$DQPSK/HCH	

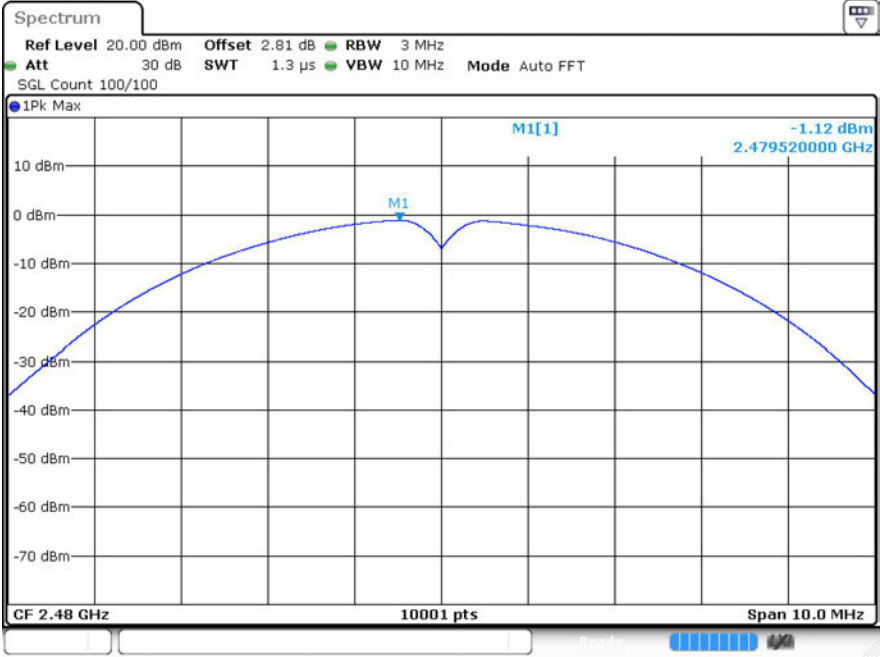
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

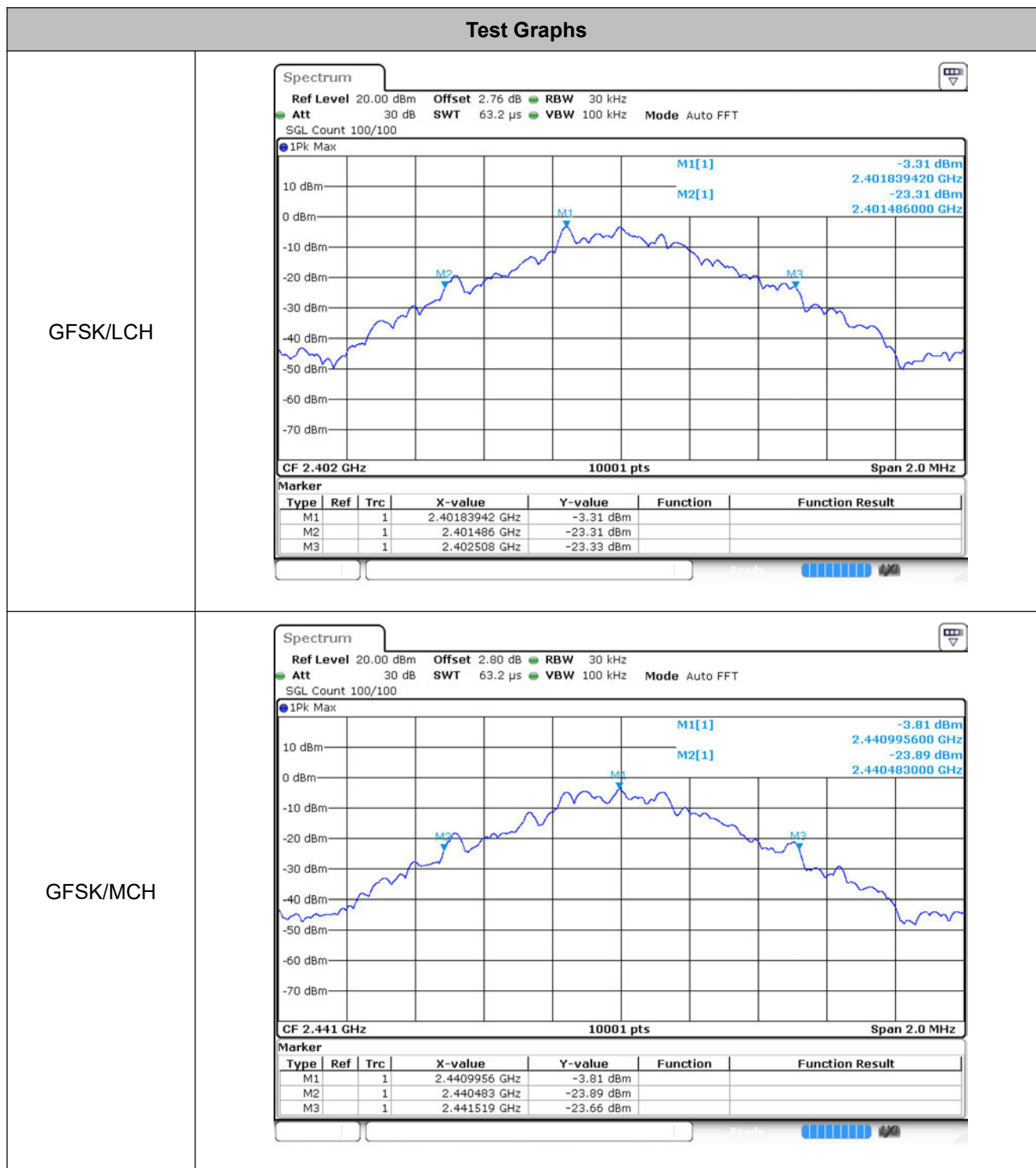


3 20dB Bandwidth

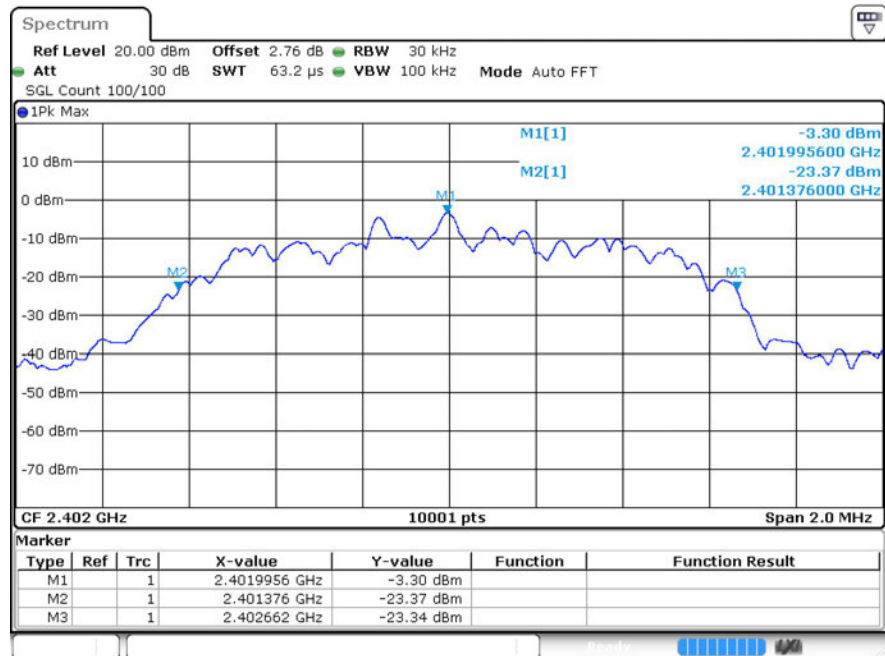
3.1 Test Result

Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.022	Not Specified	Pass
	MCH	1.036	Not Specified	Pass
	HCH	1.037	Not Specified	Pass
$\pi/4$ DQPSK	LCH	1.285	Not Specified	Pass
	MCH	1.286	Not Specified	Pass
	HCH	1.211	Not Specified	Pass
8DPSK	LCH	1.23	Not Specified	Pass
	MCH	1.247	Not Specified	Pass
	HCH	1.272	Not Specified	Pass

3.2 Test Graphs



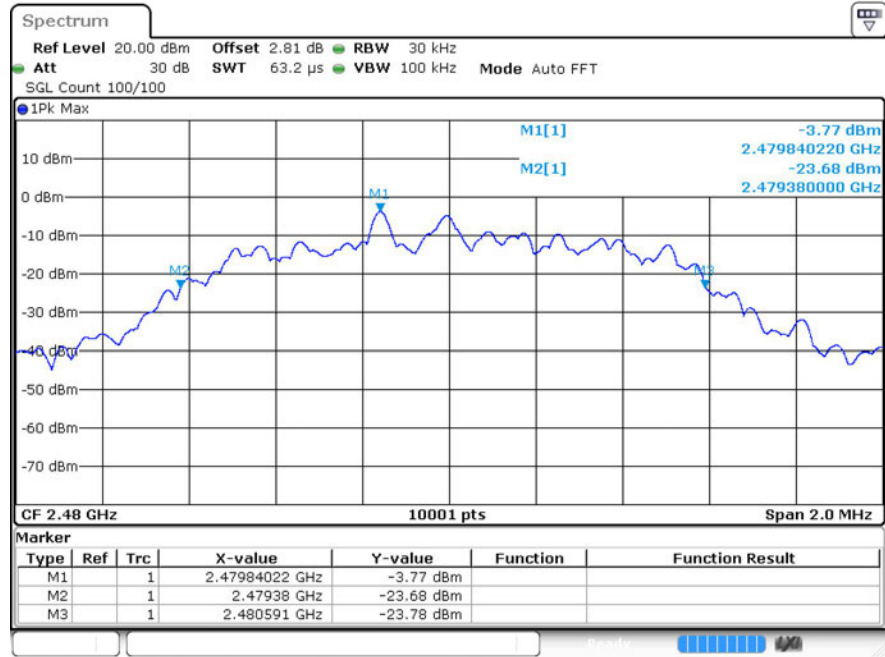
GFSK/HCH


 π /4DQPSK/LCH


$\pi/4$ DQPSK/MCH



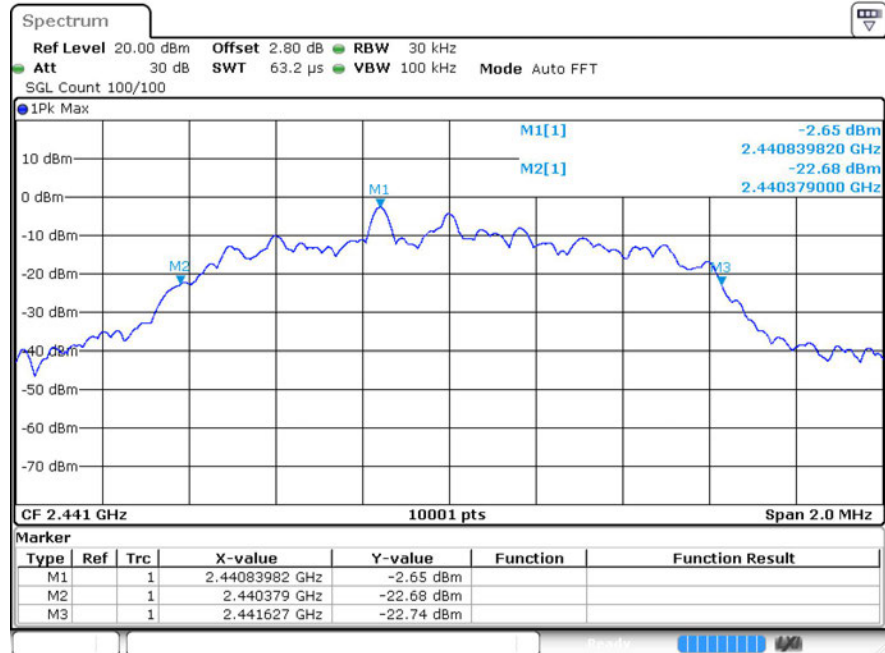
$\pi/4$ DQPSK/HCH



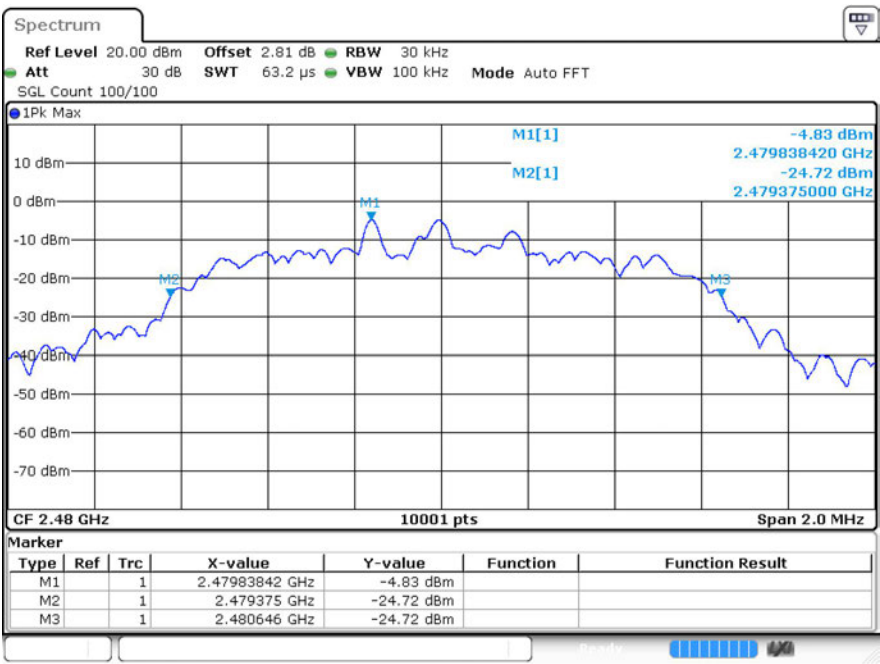
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH



4 Carrier Frequency Separation

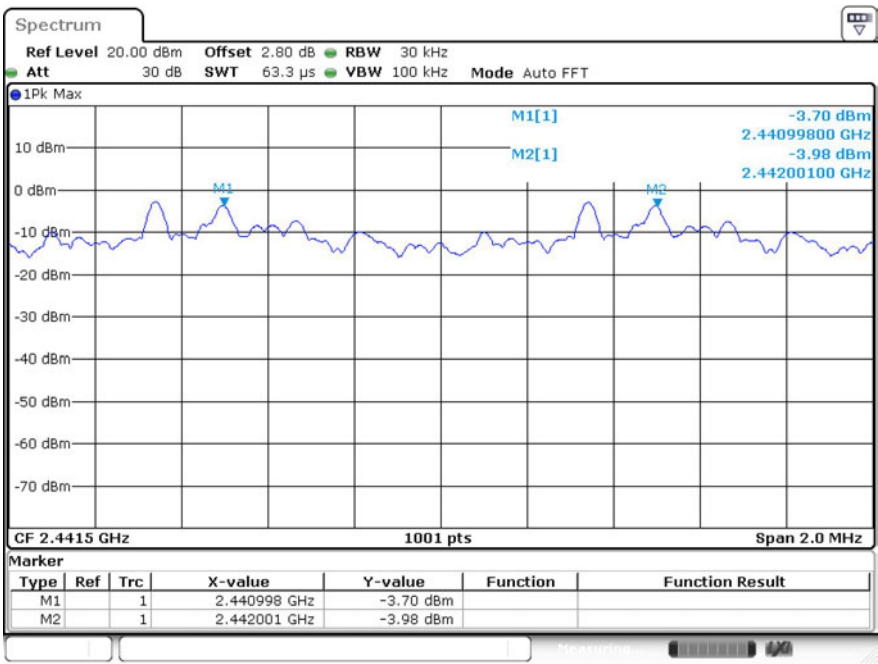
4.1 Test Result

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	MCH	1.007	0.691	Pass
$\pi/4$ DQPSK	MCH	0.988	0.857	Pass
8DPSK	MCH	1.003	0.831	Pass

4.2 Test Graphs



8DPSK/MCH

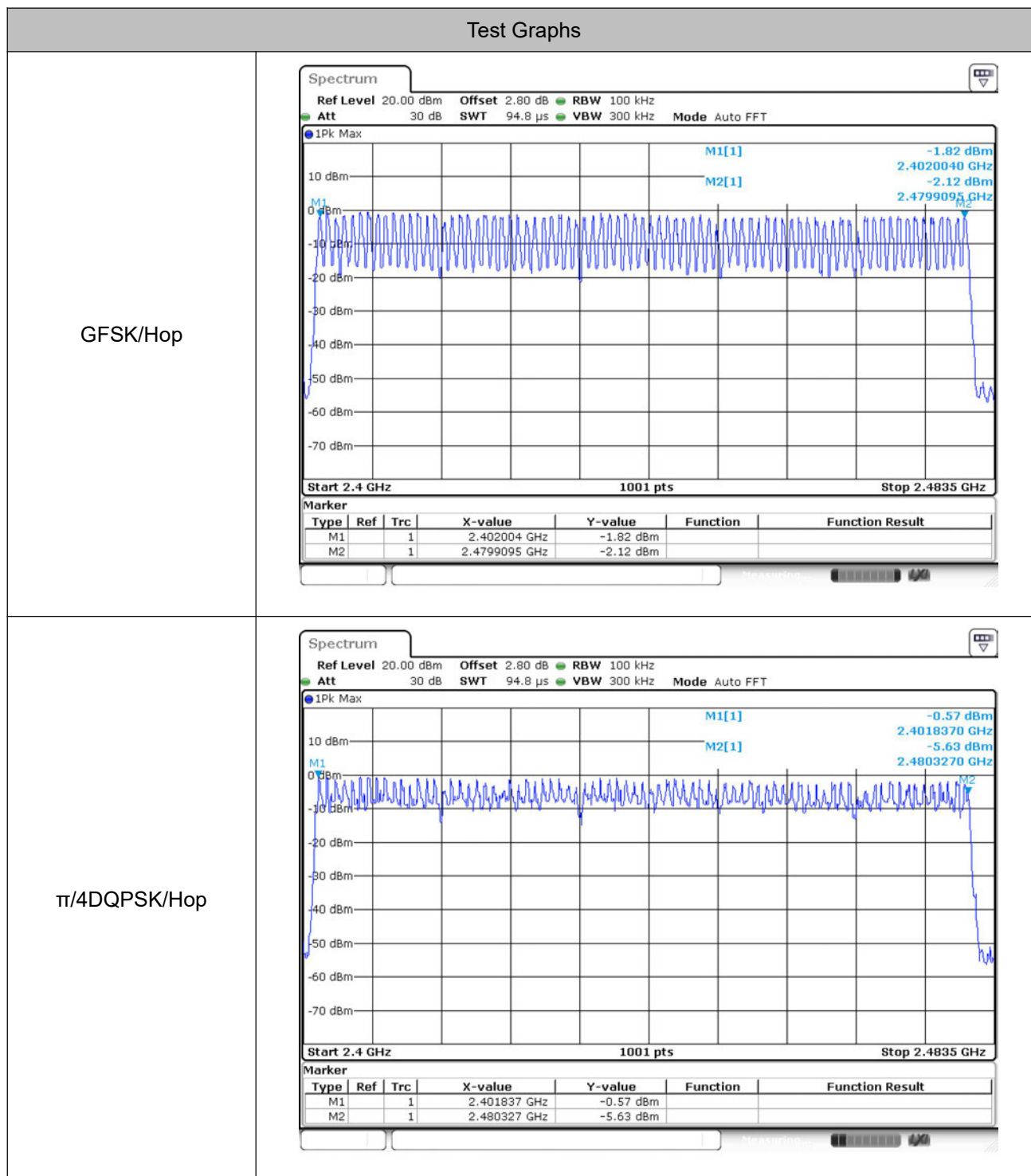


5 Hopping Channel Number

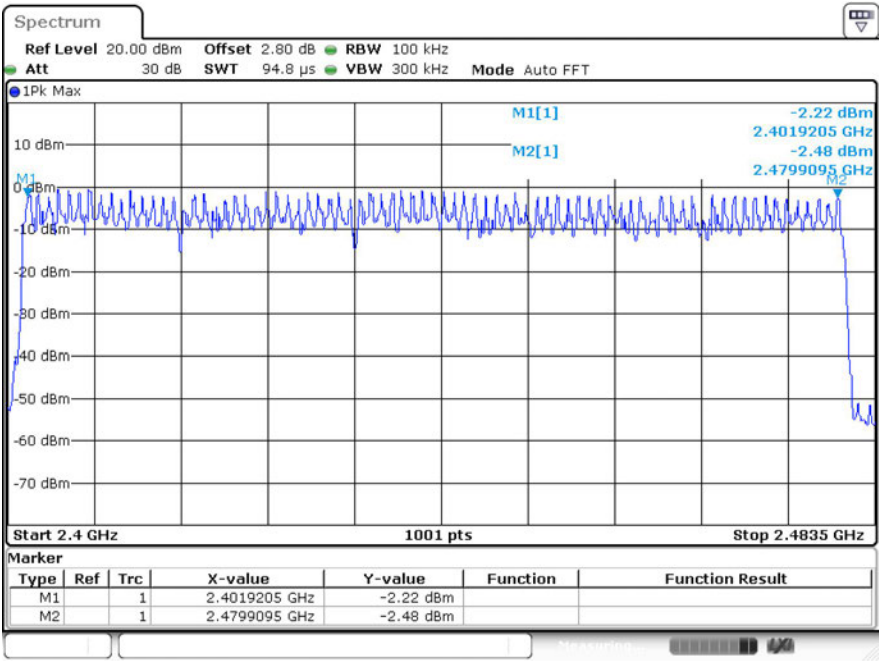
5.1 Test Result

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

5.2 Test Graphs



8DPSK/Hop

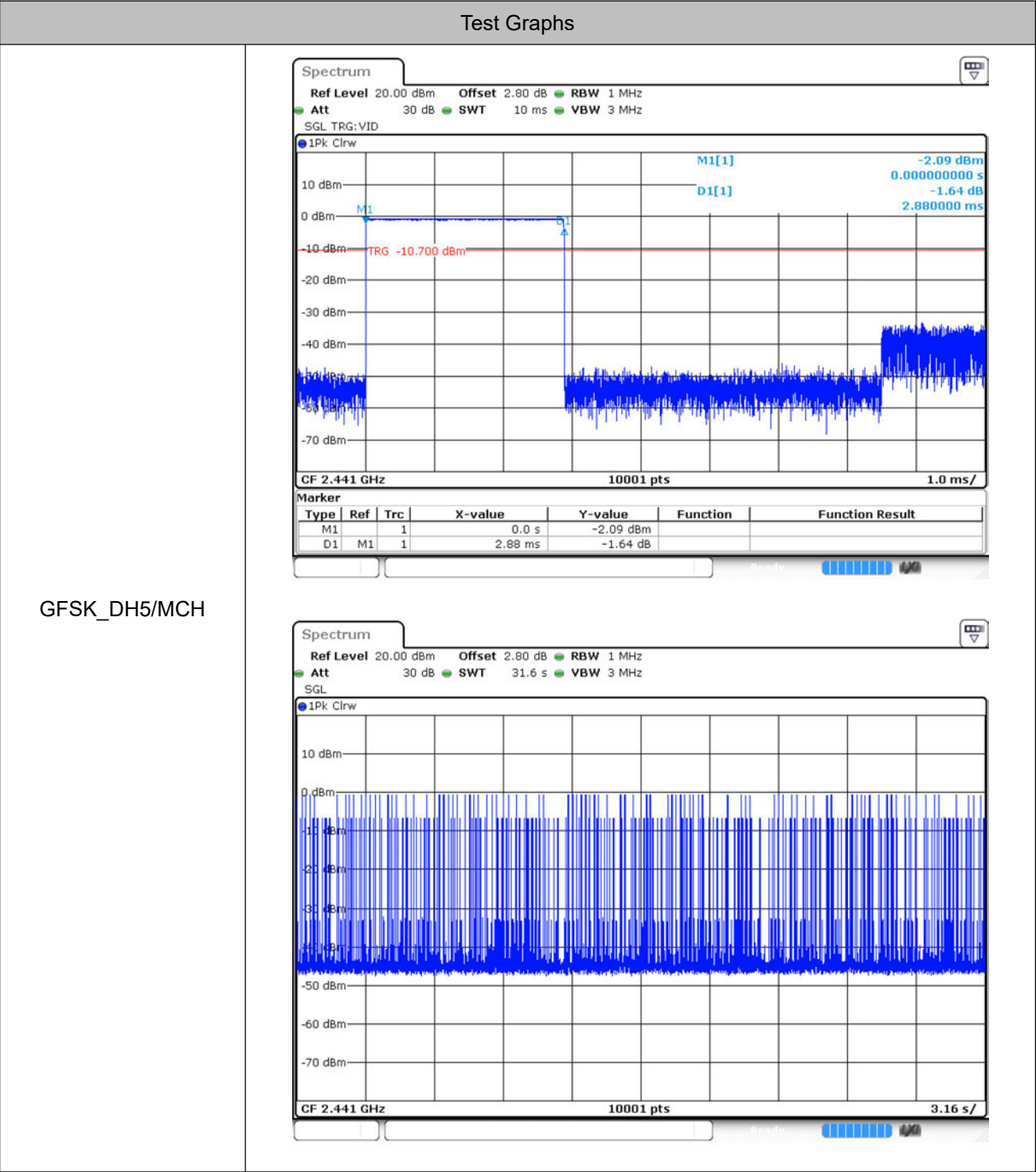


6 Dwell Time

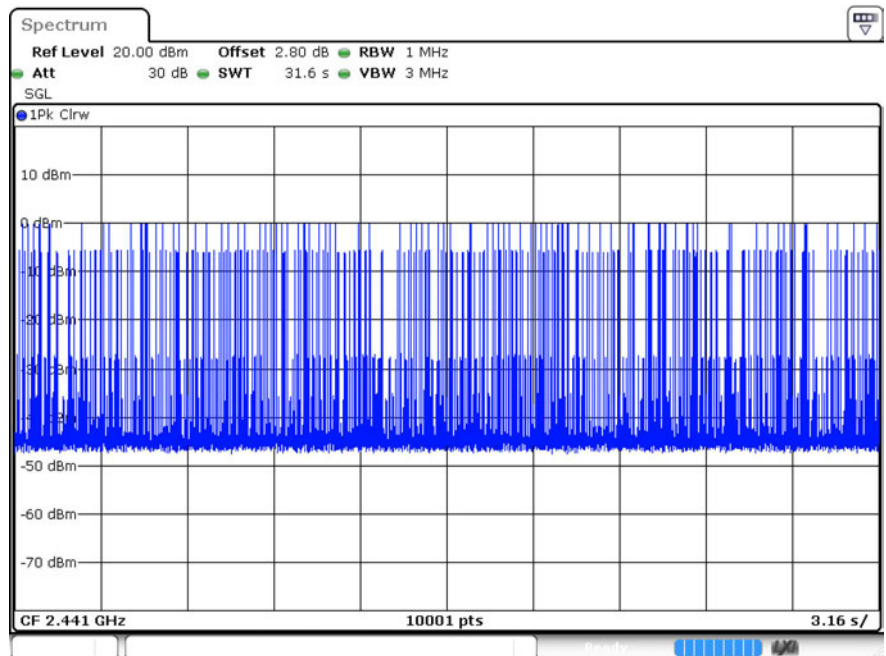
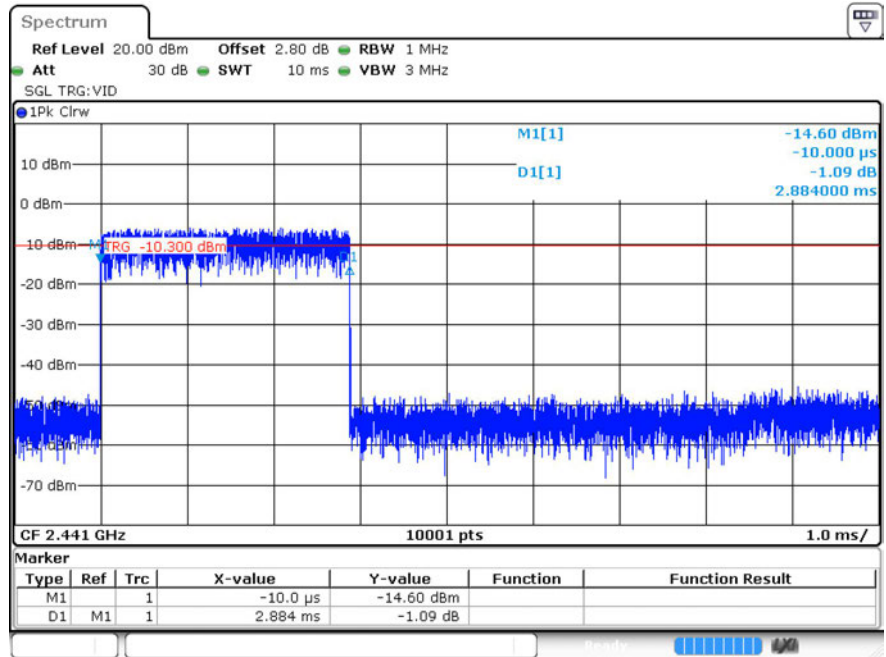
6.1 Test Result

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[ms]	Limit [s]	Verdict
GFSK	DH5	MCH	2.88	114	328.32	0.4	Pass
$\pi/4$ DQPSK	2DH5	MCH	2.884	100	288.4	0.4	Pass
8DPSK	3DH5	MCH	2.888	103	297.464	0.4	Pass

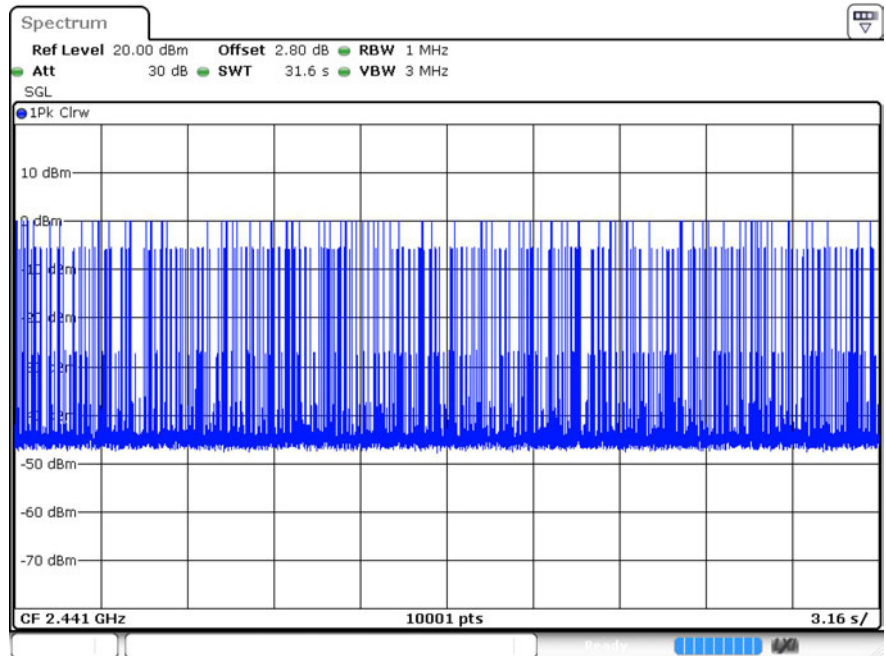
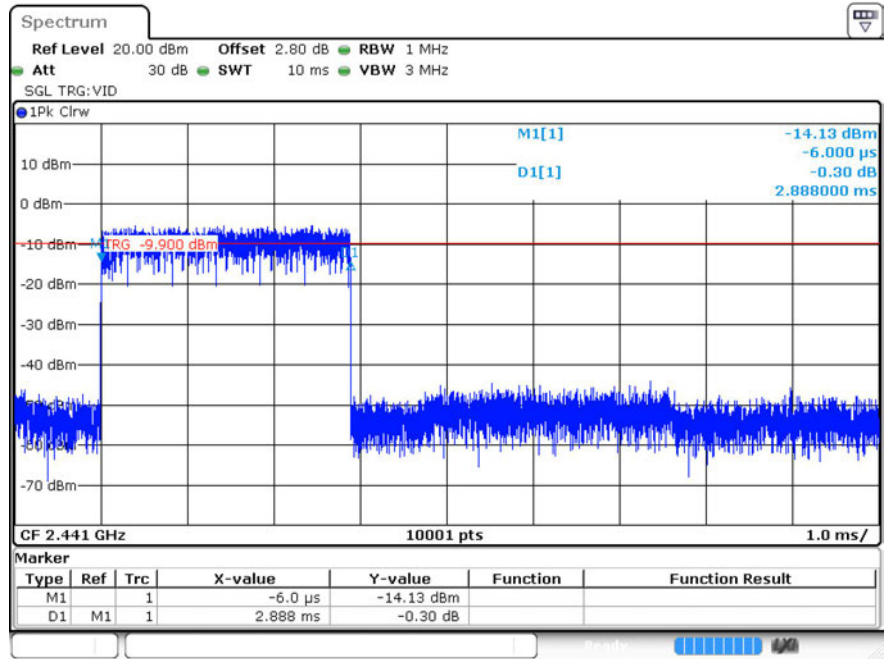
6.2 Test Graphs



$\pi/4$ DQPSK
_2DH5/MCH



8DPSK_3DH5/MCH



7 RF Conducted Spurious Emissions

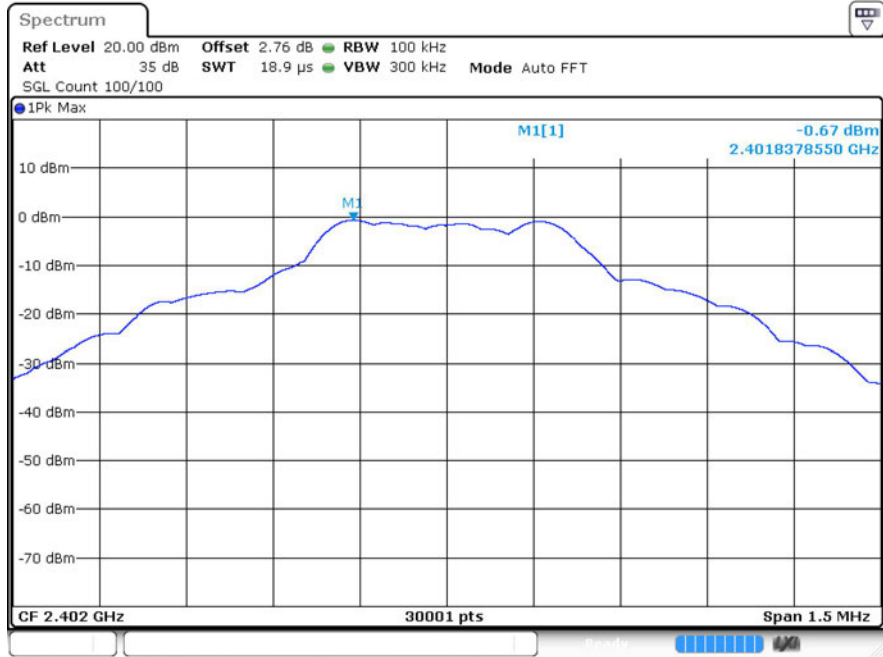
7.1 Test Result

Mode	Channel	Max. Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	-37.82	-20	Pass
	MCH	-39.61	-20	Pass
	HCH	-38.1	-20	Pass
$\pi/4$ DQPSK	LCH	-40.33	-20	Pass
	MCH	-40.23	-20	Pass
	HCH	-38.32	-20	Pass
8DPSK	LCH	-40.32	-20	Pass
	MCH	-38.36	-20	Pass
	HCH	-39.5	-20	Pass

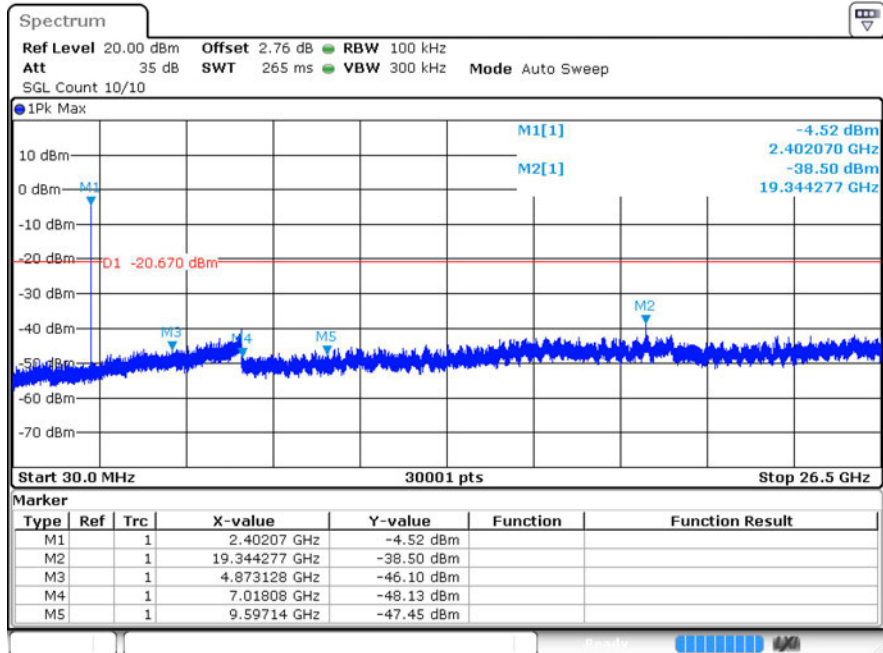
7.2 Test Graphs

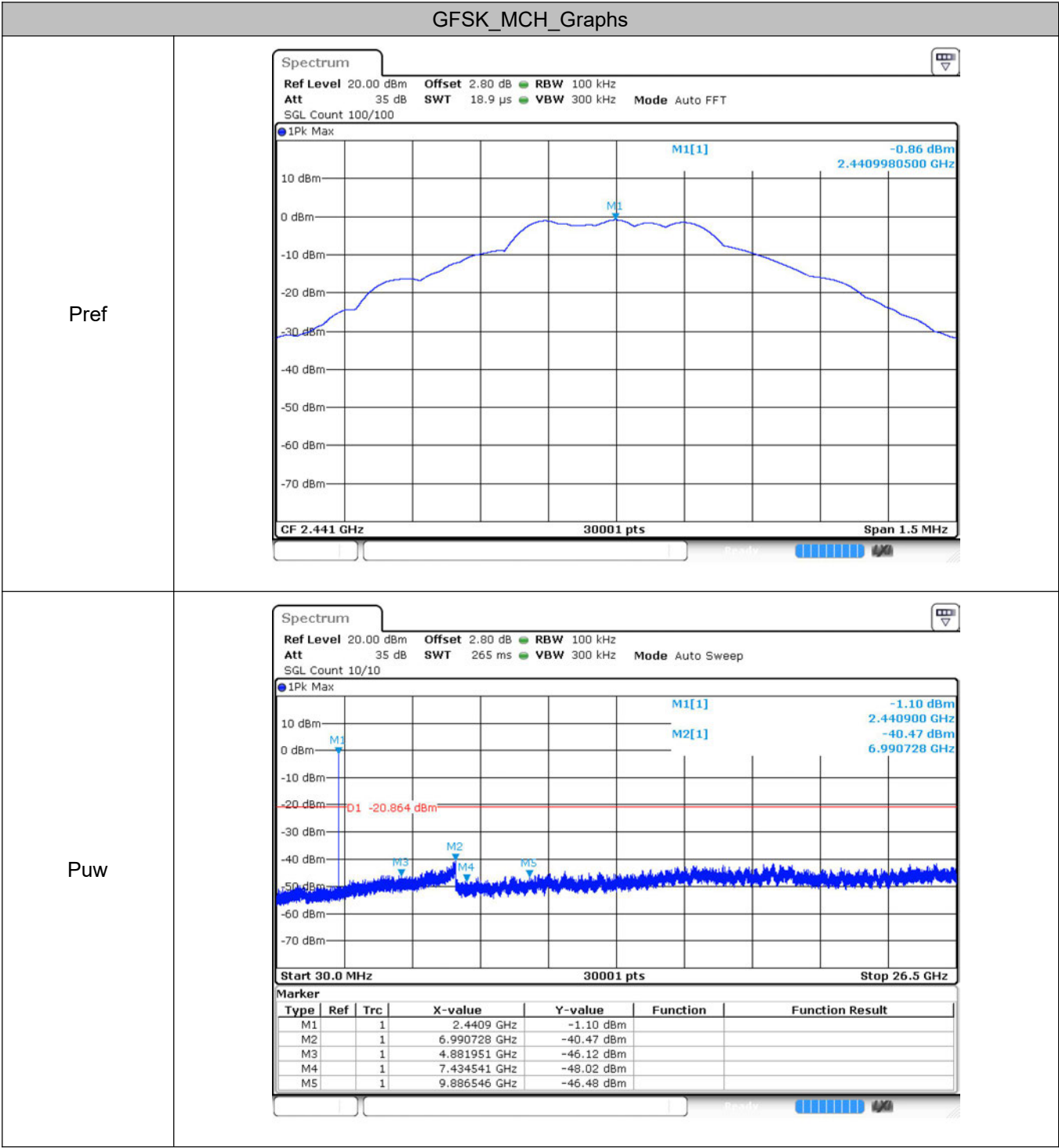
GFSK_LCH_Graphs

Pref



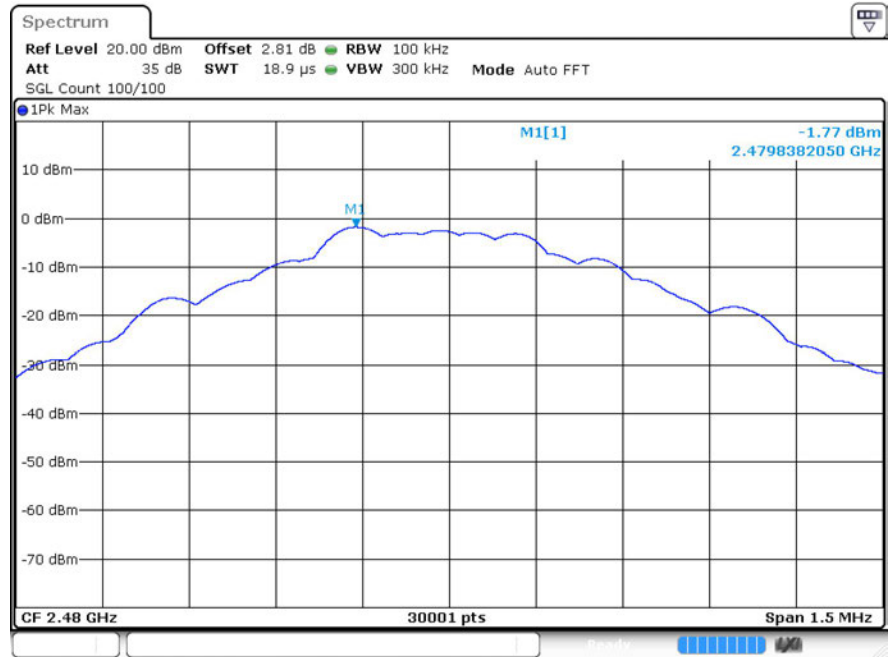
Puw



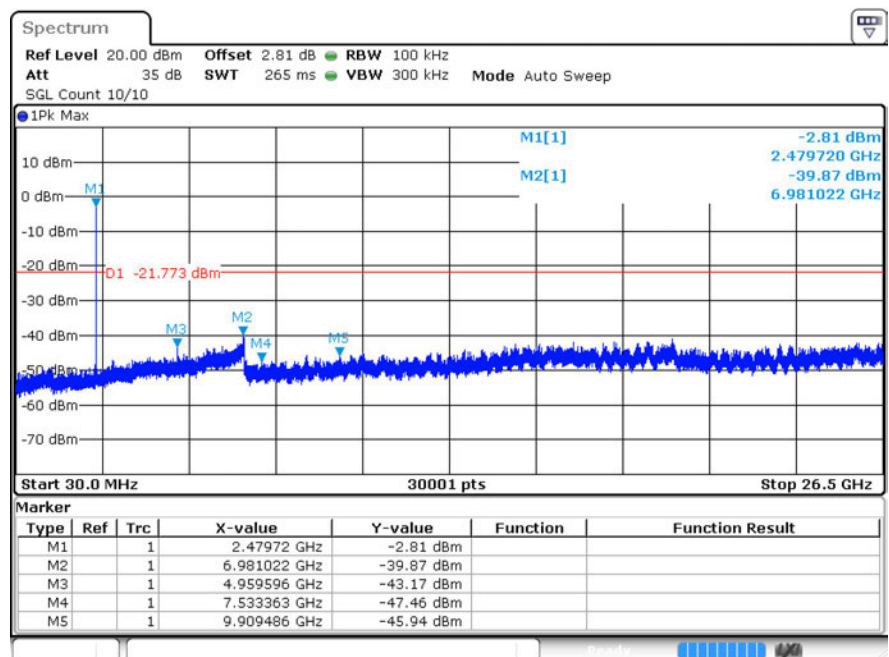


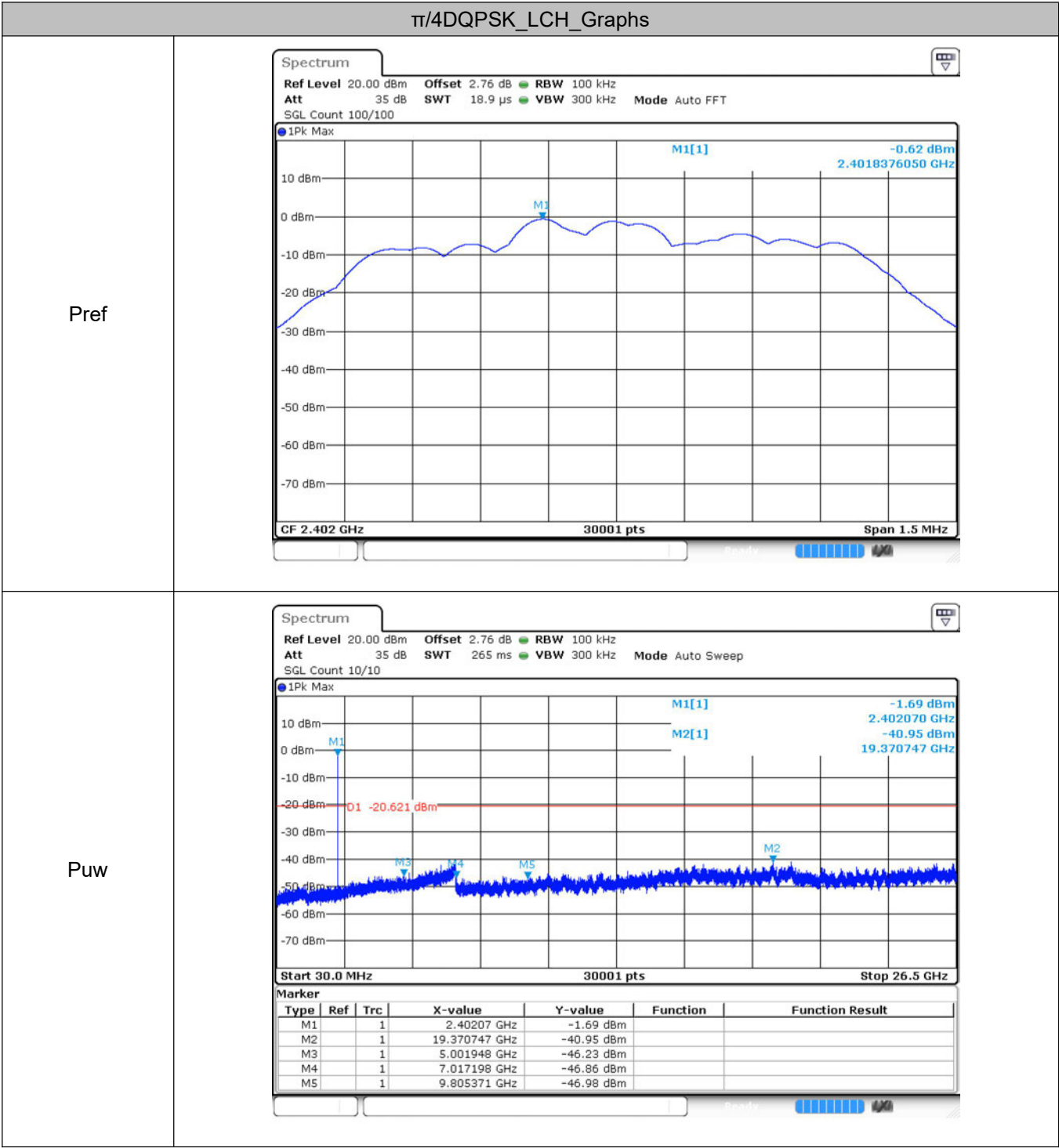
GFSK_HCH_Graphs

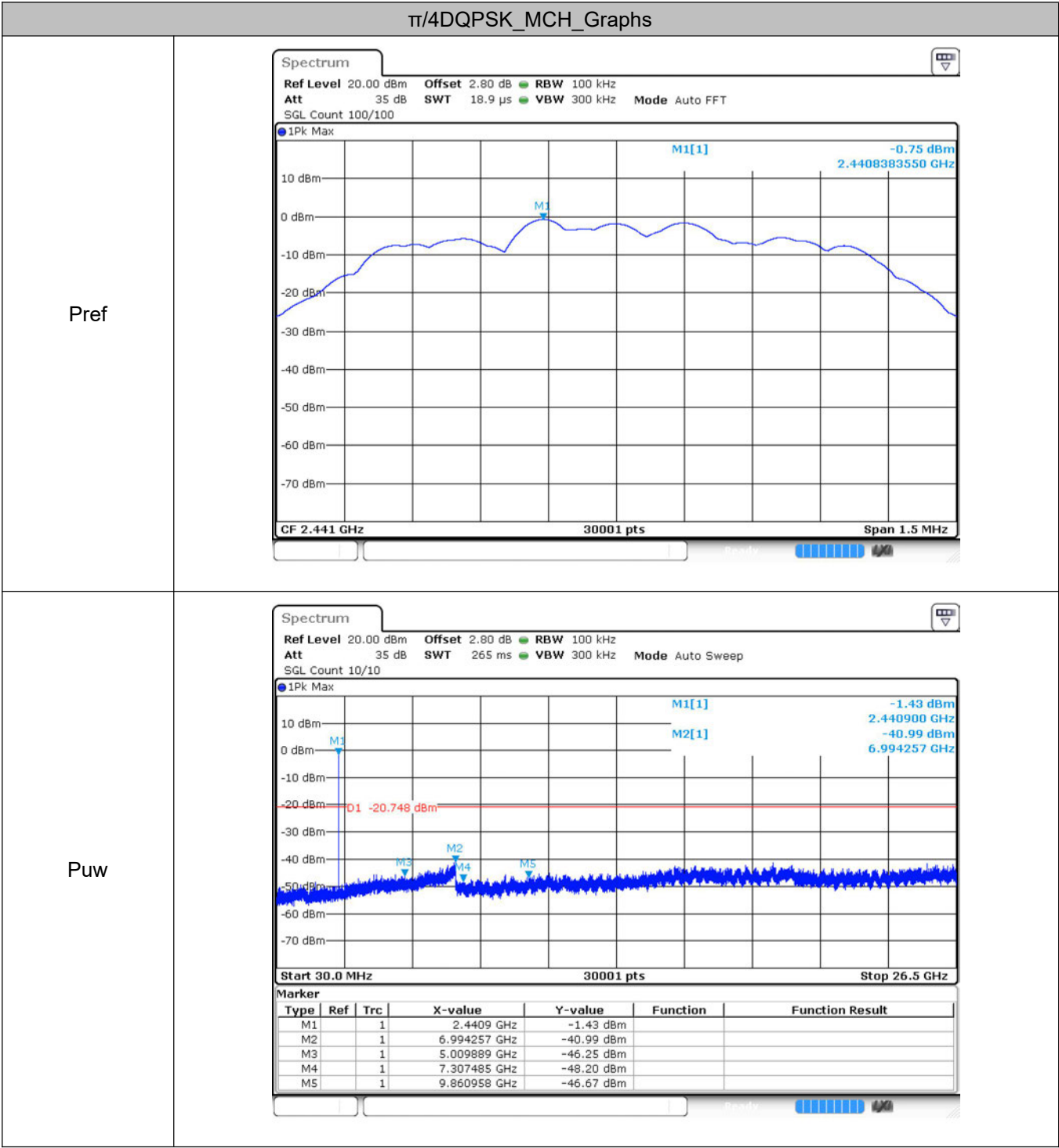
Pref

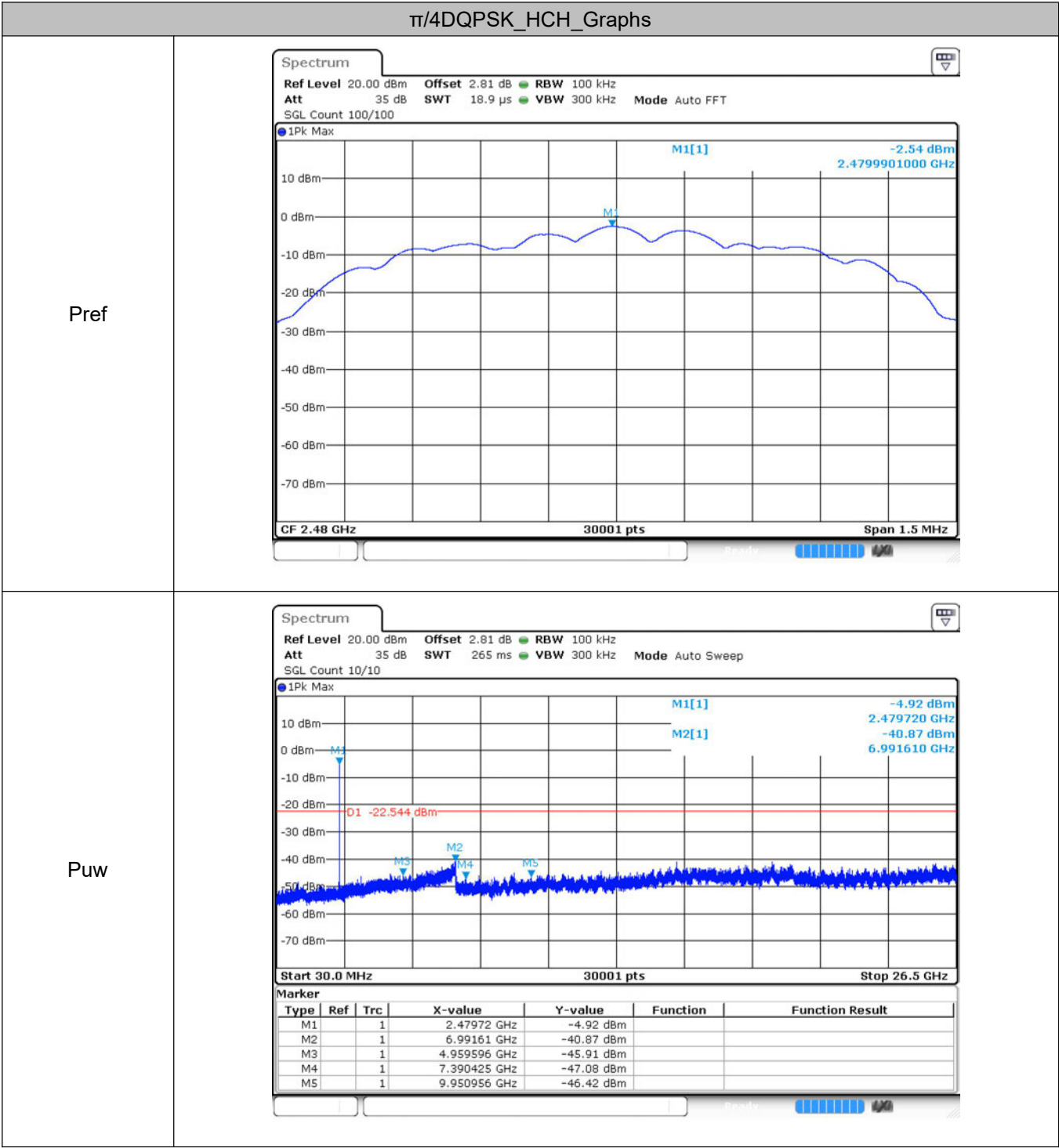


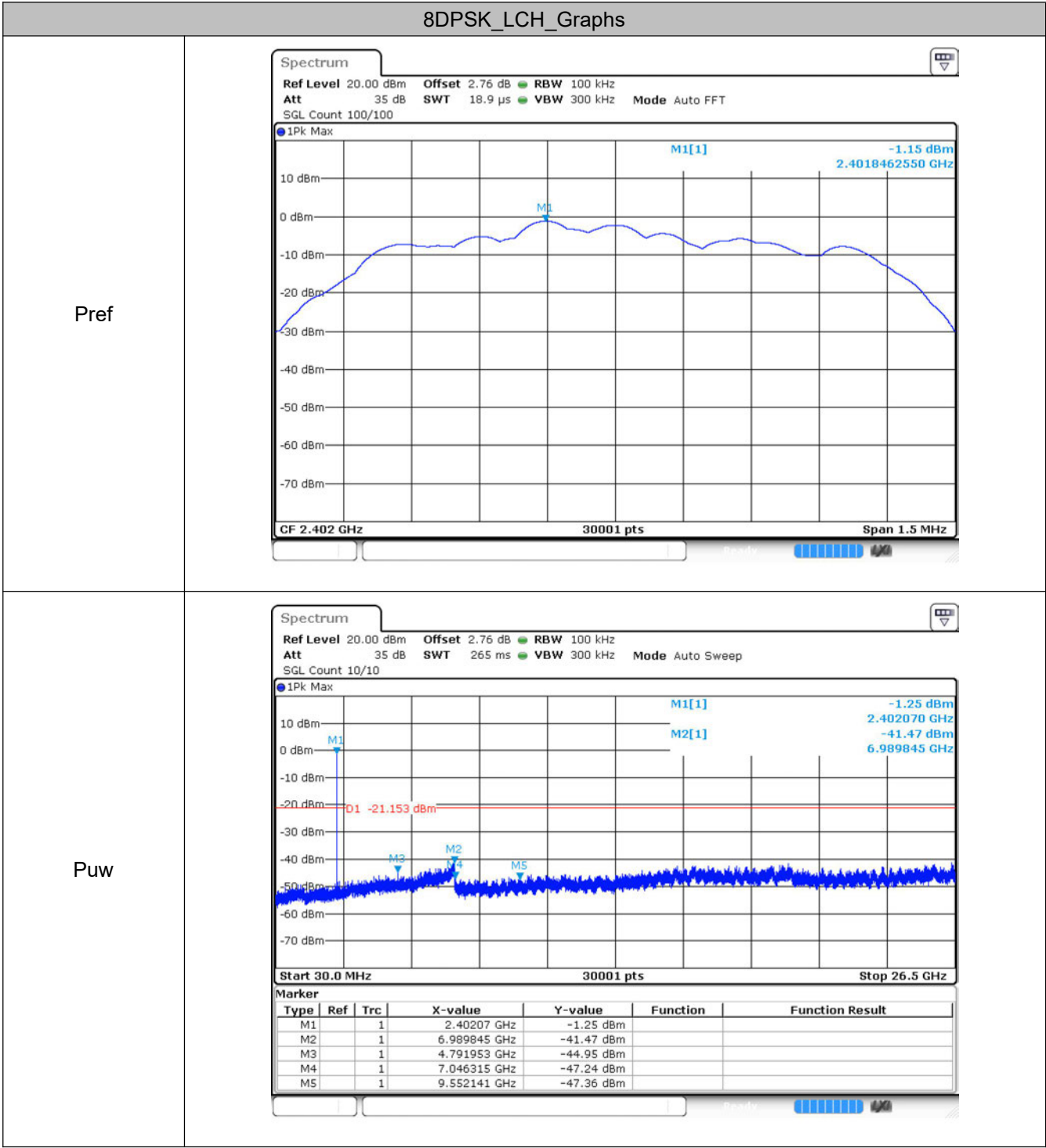
Puw

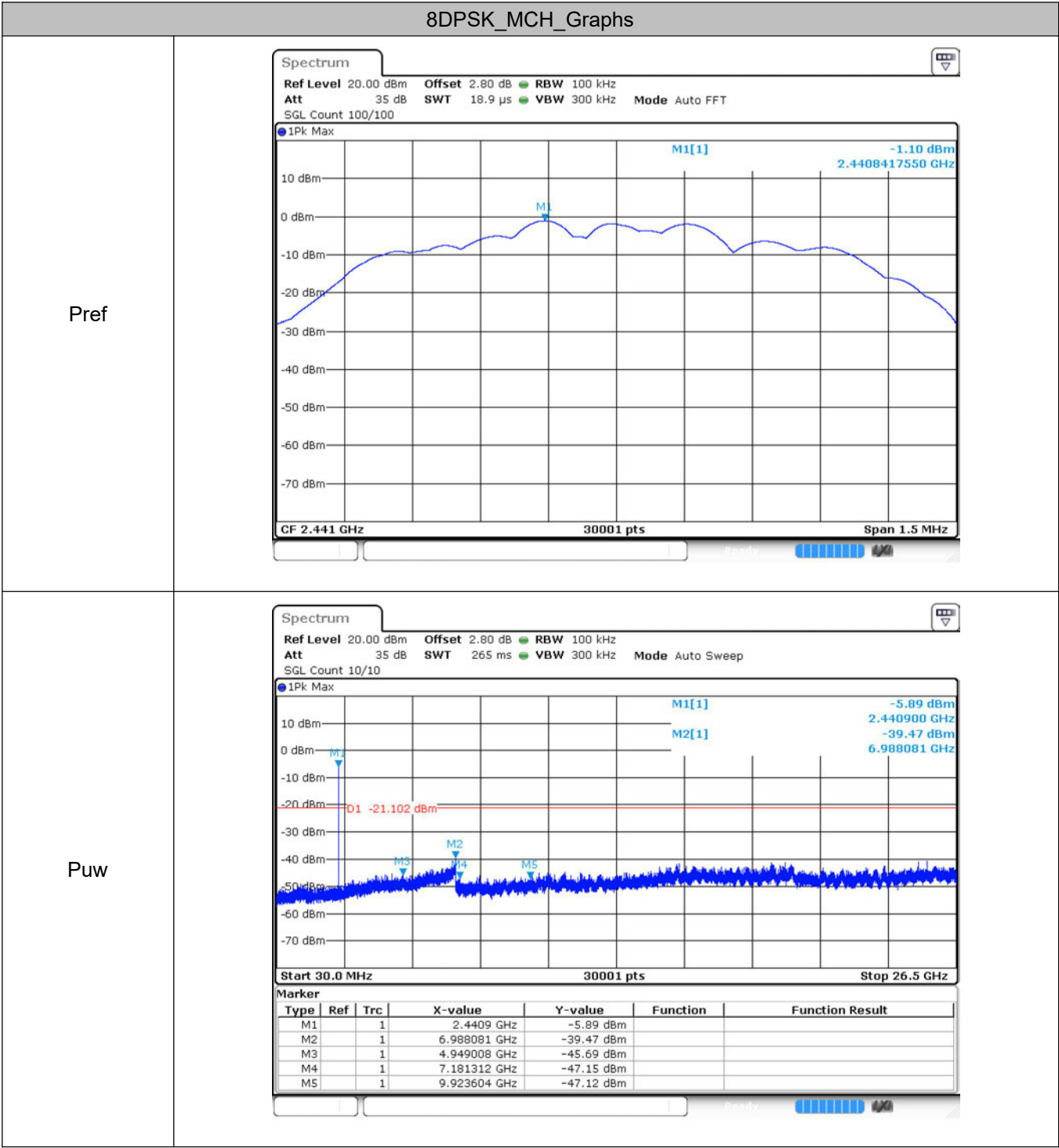






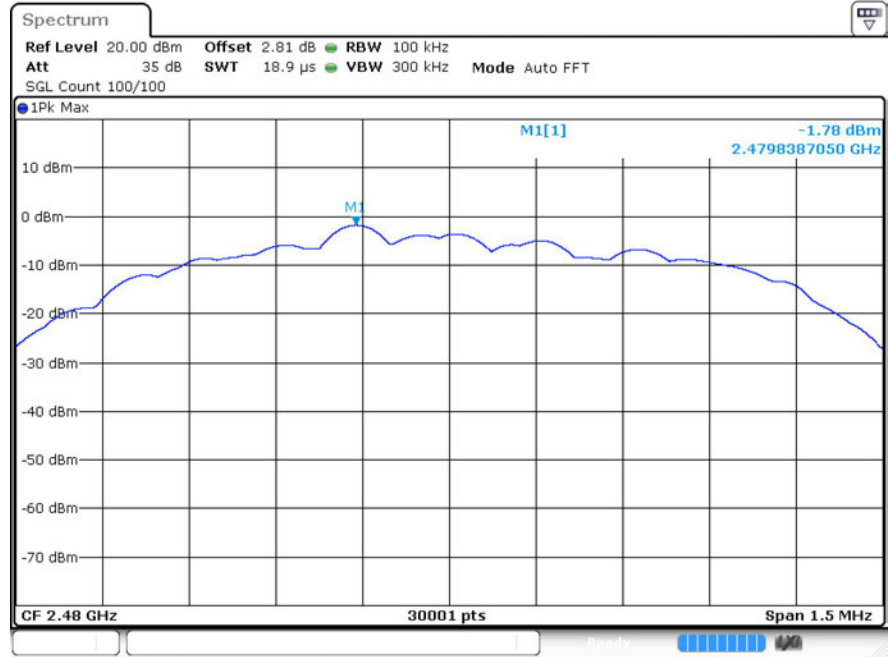




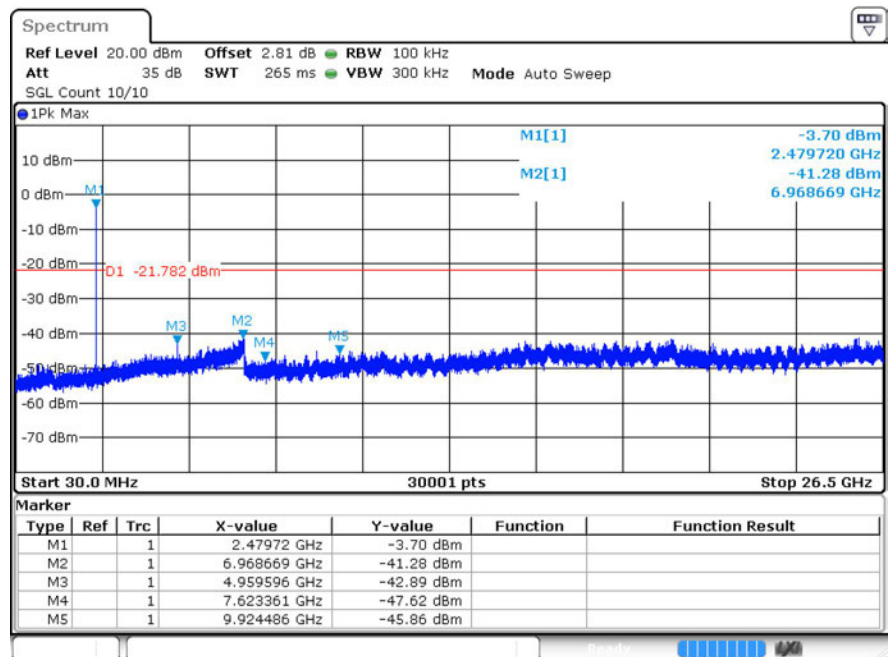


8DPSK_HCH_Graphs

Pref



Puw

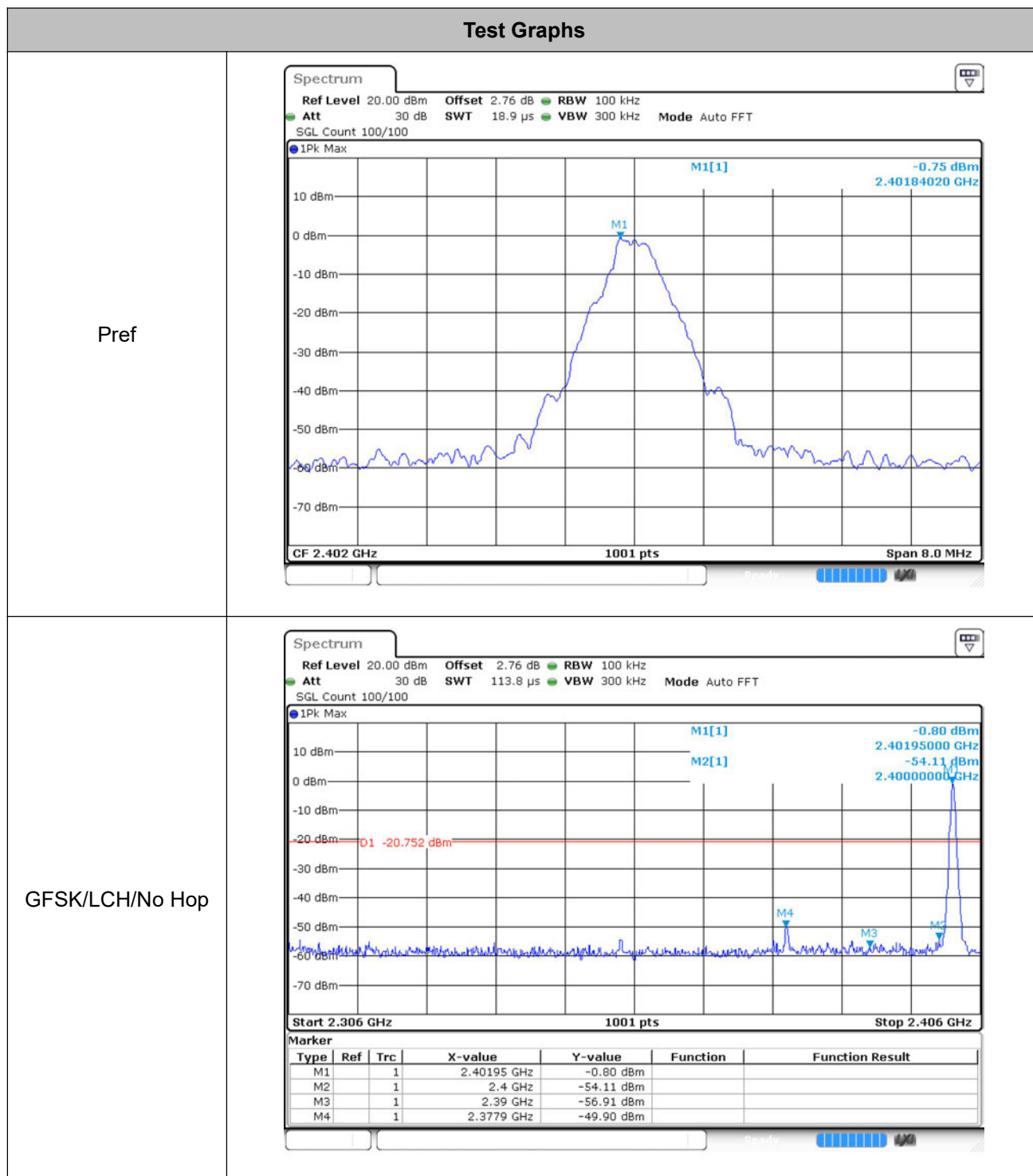


8 Band-edge for RF Conducted Emissions

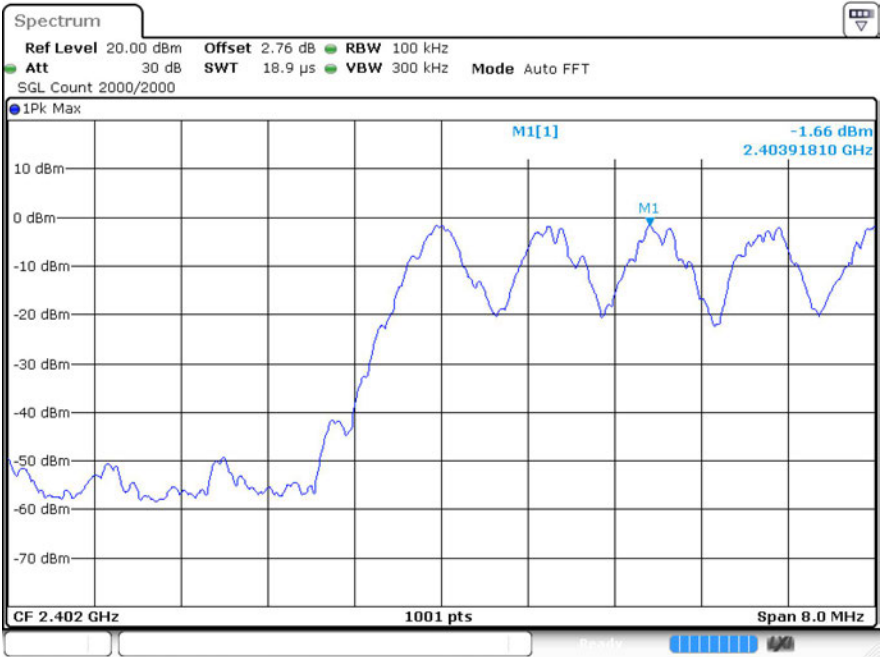
8.1 Test Result

Mode	Channel	Carrier Frequency [MHz]	Frequency Hopping	Max Spurious Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	2402	Off	-49.14	-20	Pass
			On	-47.25	-20	Pass
	HCH	2480	Off	-53.72	-20	Pass
			On	-47.09	-20	Pass
$\pi/4$ DQPSK	LCH	2402	Off	-48.11	-20	Pass
			On	-47.66	-20	Pass
	HCH	2480	Off	-54.09	-20	Pass
			On	-46.23	-20	Pass
8DPSK	LCH	2402	Off	-47.07	-20	Pass
			On	-47.03	-20	Pass
	HCH	2480	Off	-53.17	-20	Pass
			On	-46.65	-20	Pass

8.2 Test Graphs



Ref



GFSK/LCH/Hop

