



Appendix A

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

Product Name: Turntable Player with CD Player and Recorder

Trade Mark: N/A

Test Model: LP-560R

Environmental Conditions

Temperature:	24.6℃
Relative Humidity:	52.2%
ATM Pressure:	101Kpa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung



Contents

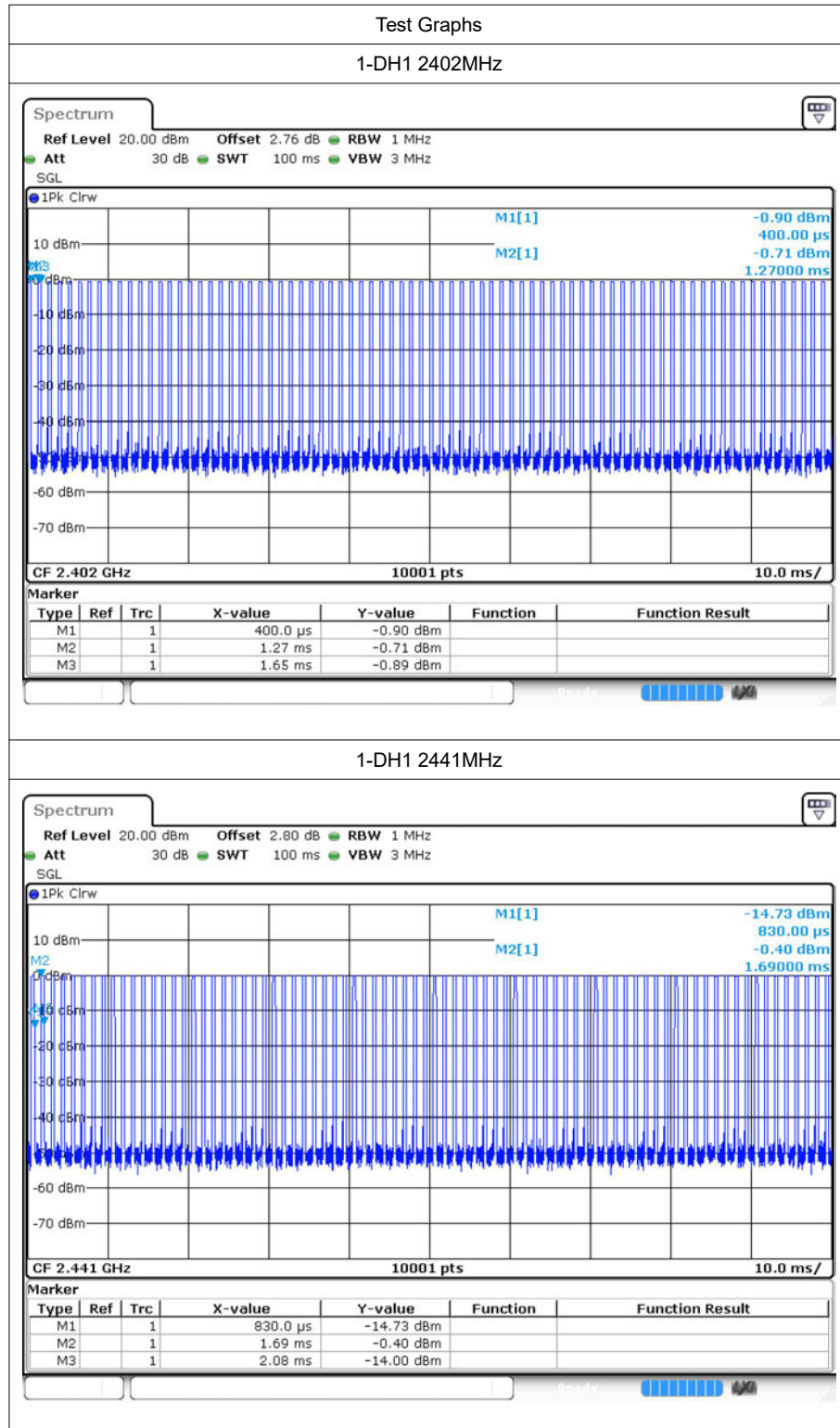
	Page
COVER PAGE	
1 Duty Cycle.....	3
1.1 Test Result.....	3
1.2 Test Graphs.....	4
2 Maximum Conducted Peak Output Power.....	9
2.1 Test Result.....	9
2.2 Test Graphs.....	10
3 20dB Bandwidth.....	15
3.1 Test Result.....	15
3.2 Test Graphs.....	16
4 Carrier Frequency Separation.....	21
4.1 Test Result.....	21
4.2 Test Graphs.....	22
5 Hopping Channel Number.....	24
5.1 Test Result.....	24
5.2 Test Graphs.....	25
6 Dwell Time.....	27
6.1 Test Result.....	27
6.2 Test Graphs.....	28
7 RF Conducted Spurious Emissions.....	31
7.1 Test Result.....	31
7.2 Test Graphs.....	32
8 Band-edge for RF Conducted Emissions.....	41
8.1 Test Result.....	41
8.2 Test Graphs.....	42
9 Restrict-band band-edge measurements.....	54
9.1 Test Result.....	54
9.2 Test Graphs.....	56

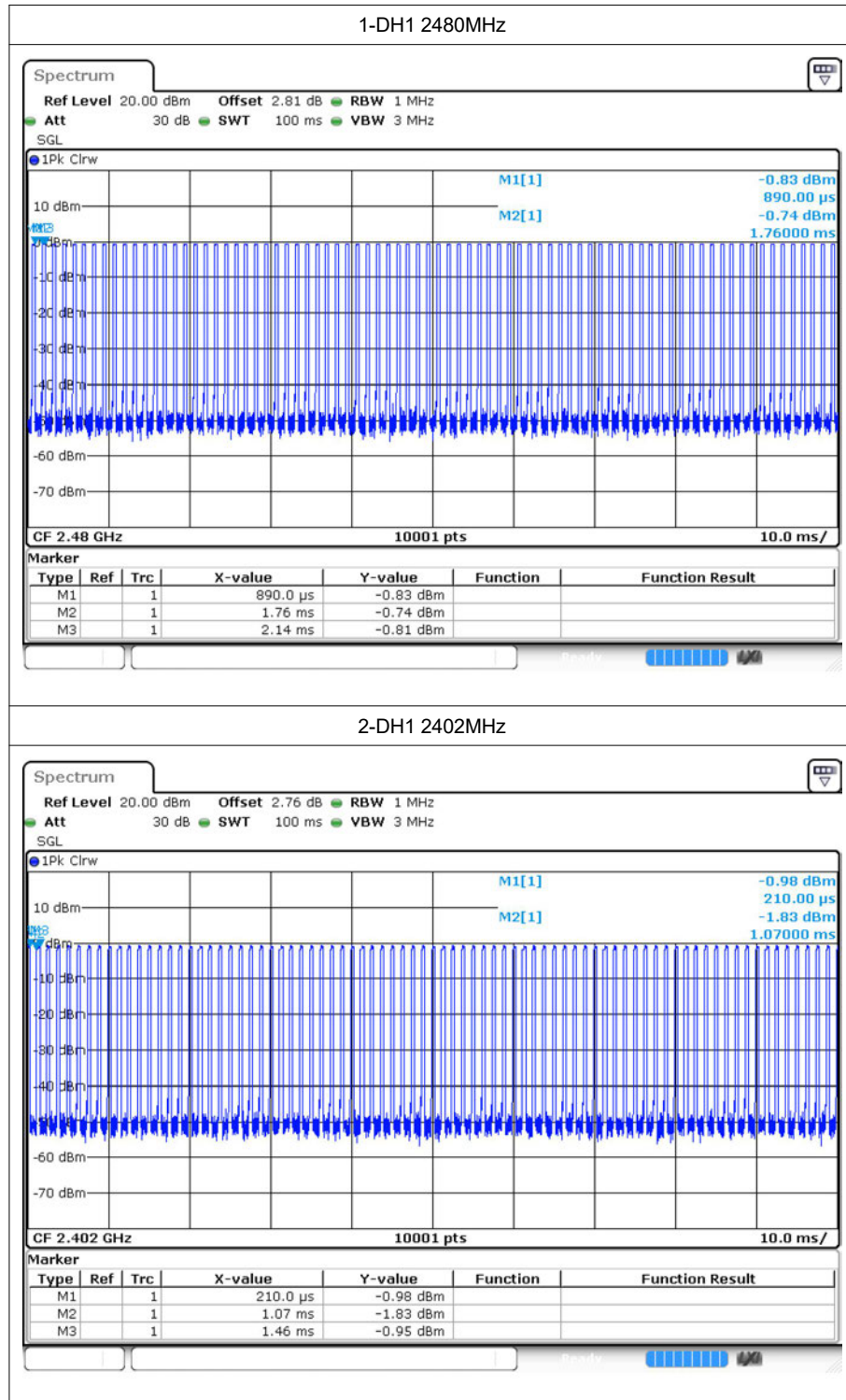
1 Duty Cycle

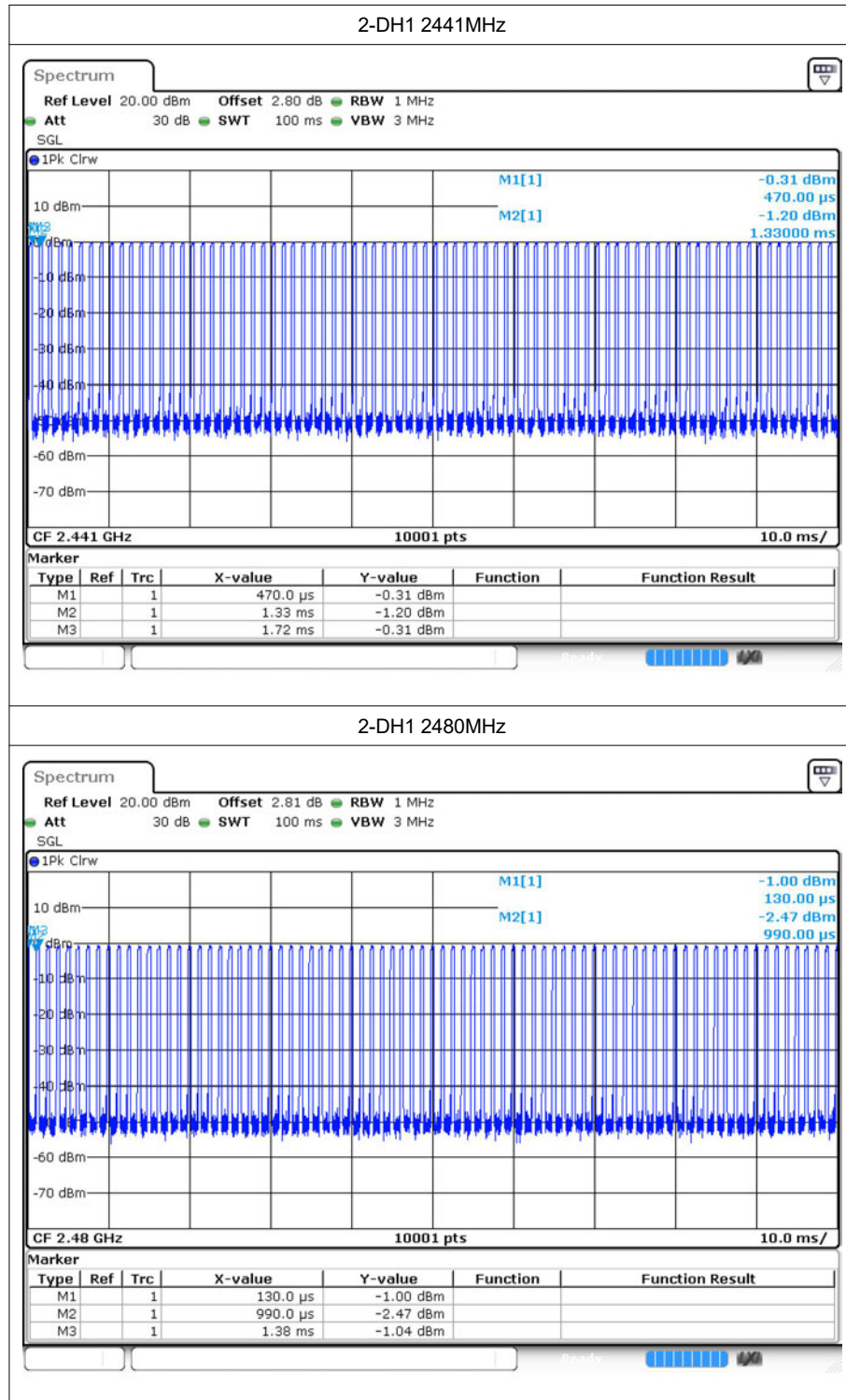
1.1 Test Result

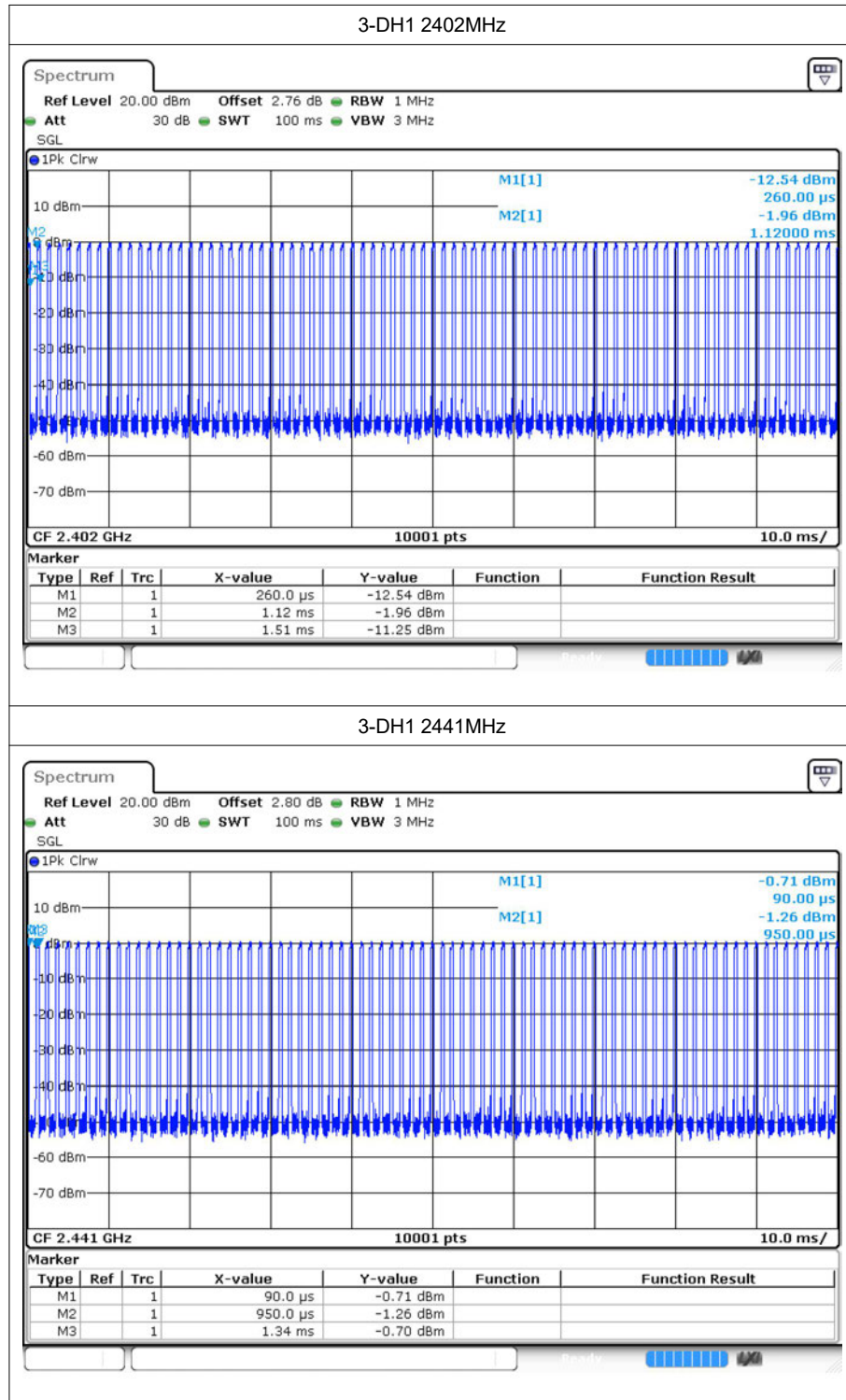
Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor	1/T (kHz)
1-DH1	2402	31.2	5.06	2.63
1-DH1	2441	32	4.95	2.56
1-DH1	2480	31.2	5.06	2.63
2-DH1	2402	32.01	4.95	2.56
2-DH1	2441	32	4.95	2.56
2-DH1	2480	31.94	4.96	2.56
3-DH1	2402	32.01	4.95	2.56
3-DH1	2441	32.01	4.95	2.56
3-DH1	2480	32	4.95	2.56

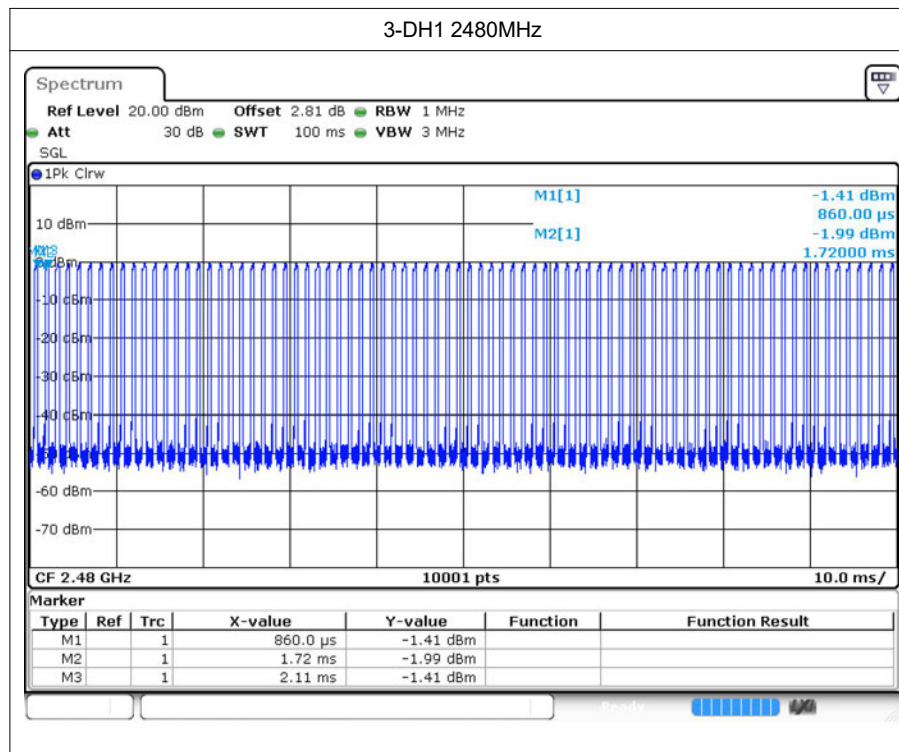
1.2 Test Graphs









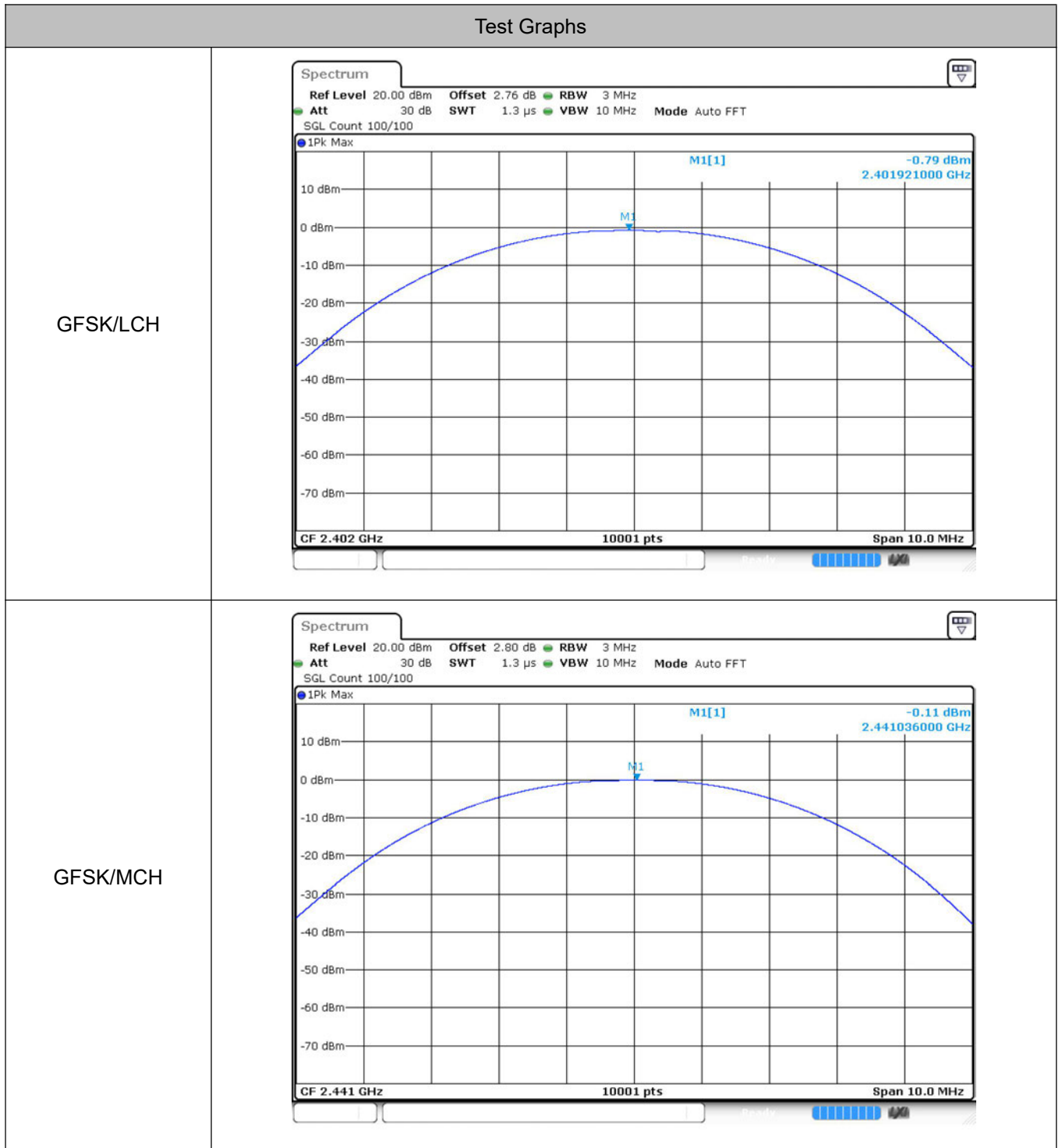


2 Maximum Conducted Peak Output Power

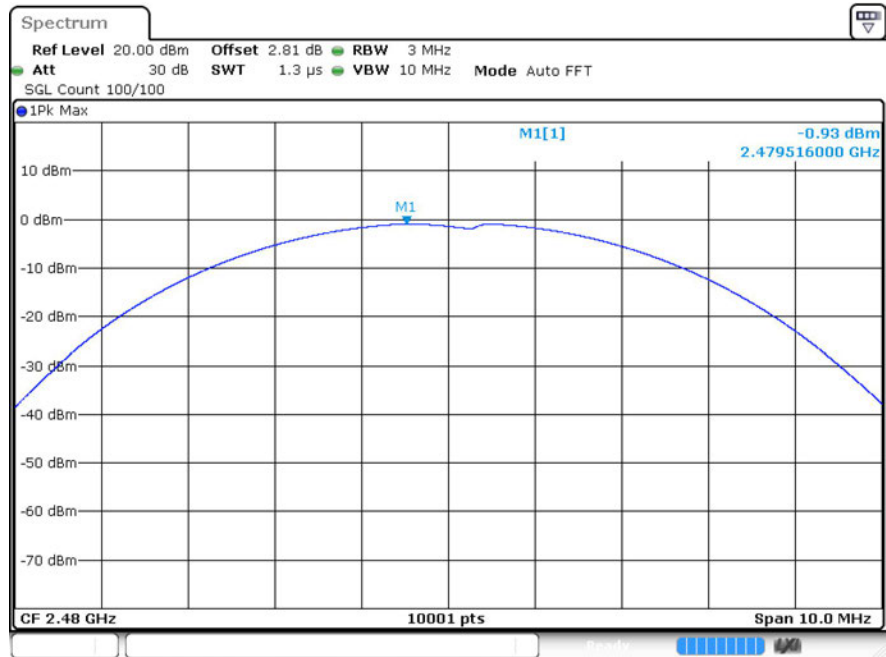
2.1 Test Result

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-0.79	21	Pass
	MCH	-0.11	21	Pass
	HCH	-0.93	21	Pass
$\pi/4$ DQPSK	LCH	0.08	21	Pass
	MCH	0.71	21	Pass
	HCH	0.08	21	Pass
8DPSK	LCH	0.15	21	Pass
	MCH	0.91	21	Pass
	HCH	-0.01	21	Pass

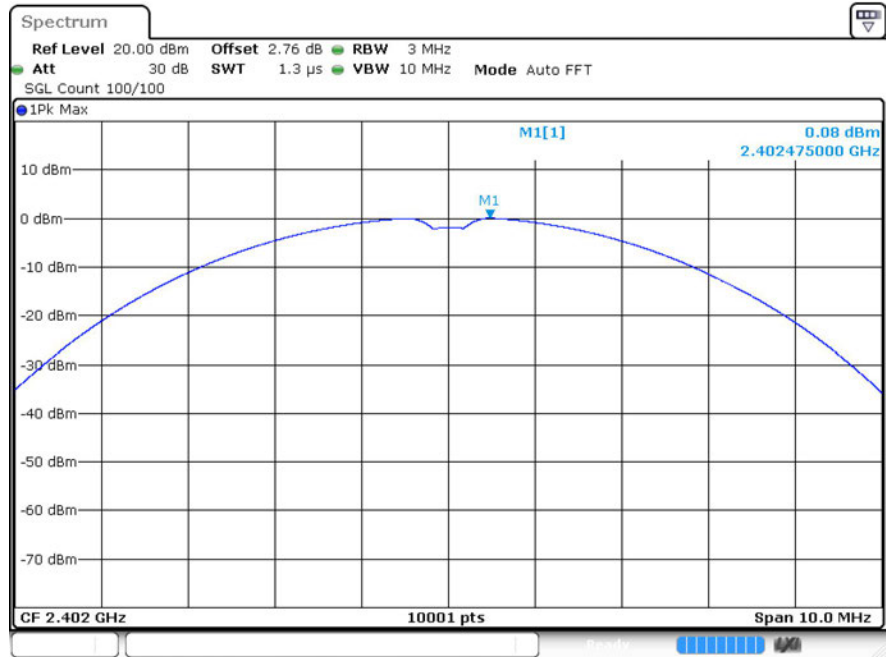
2.2 Test Graphs



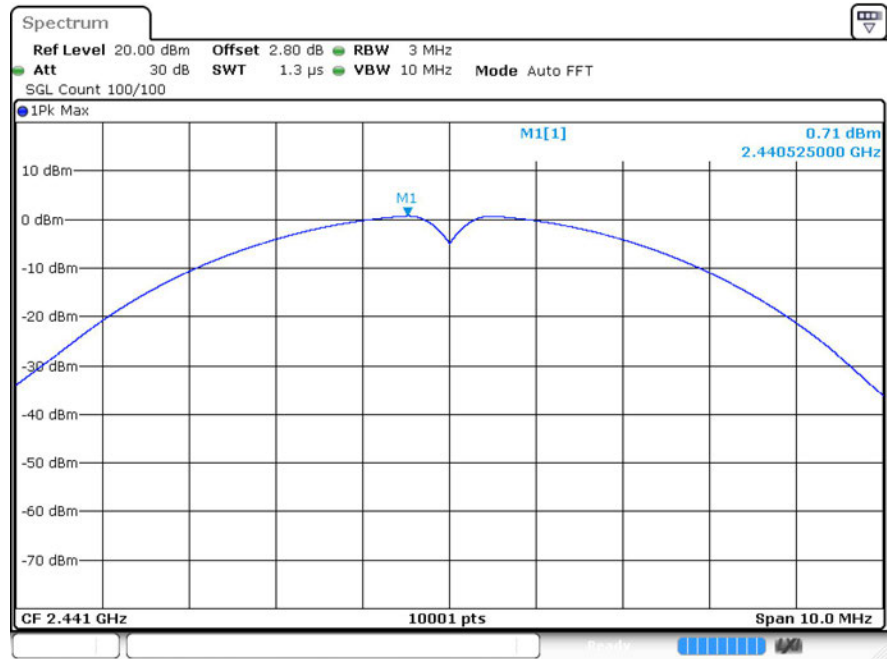
GFSK/HCH



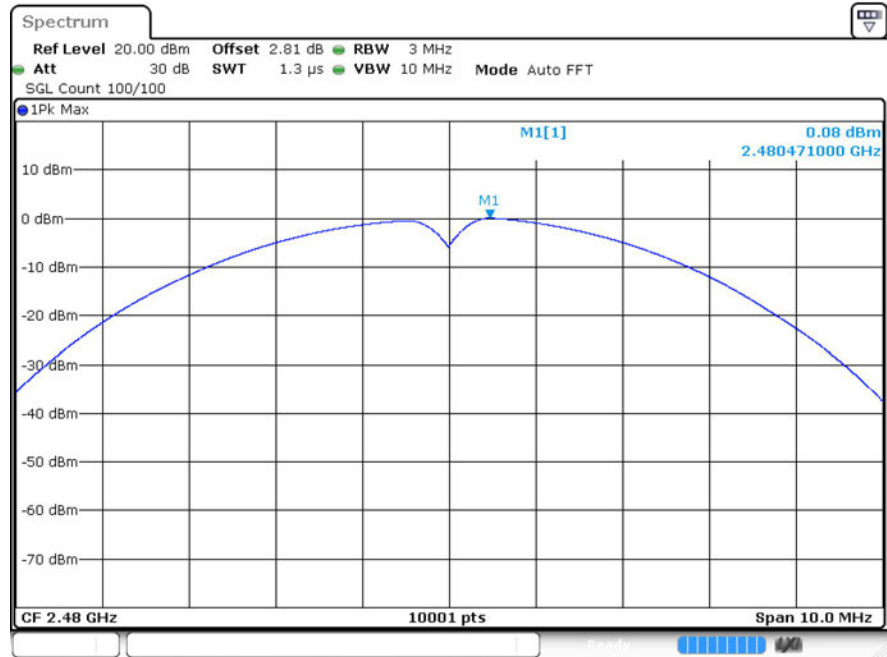
$\pi/4$ DQPSK/LCH



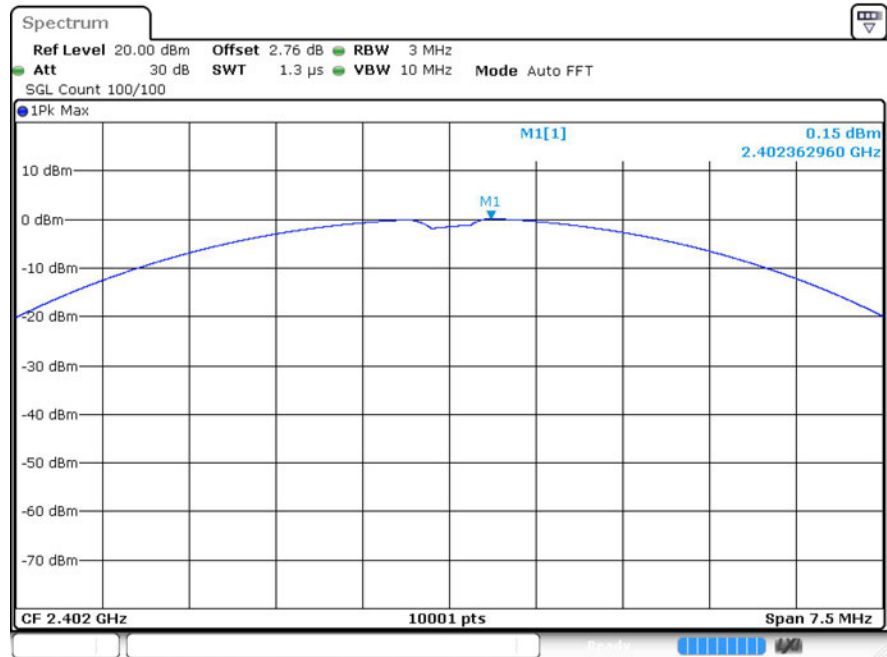
$\pi/4$ DQPSK/MCH



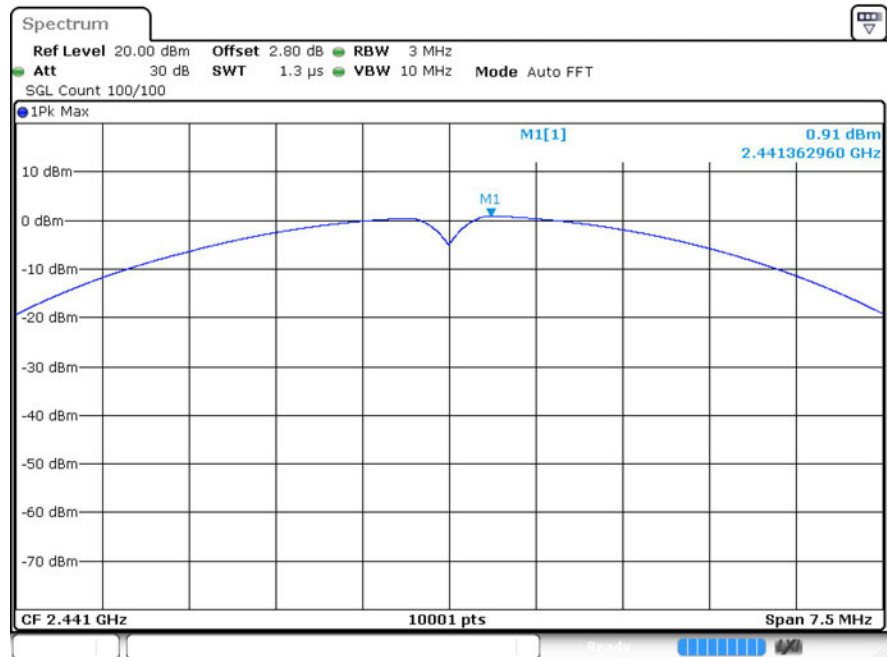
$\pi/4$ DQPSK/HCH



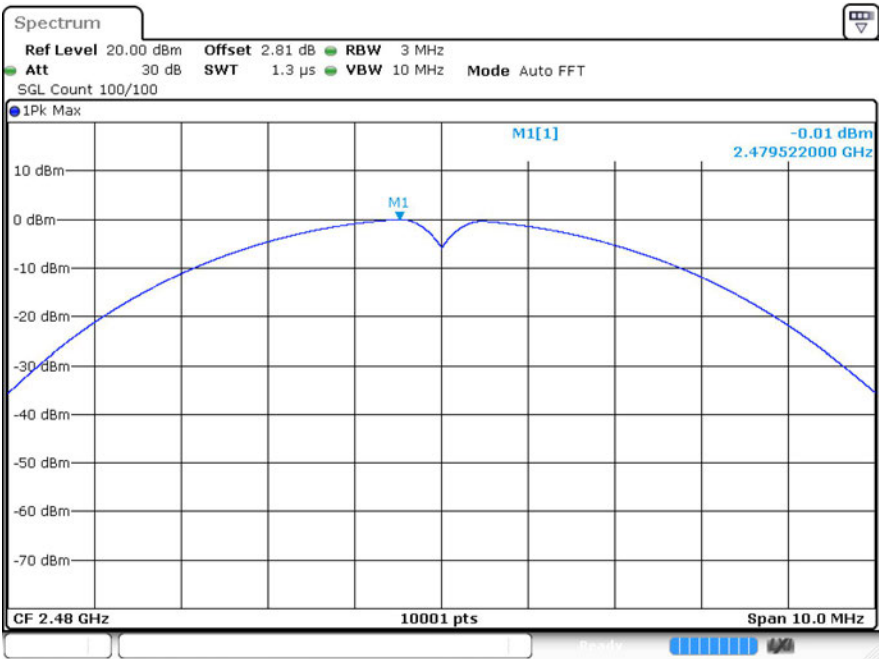
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

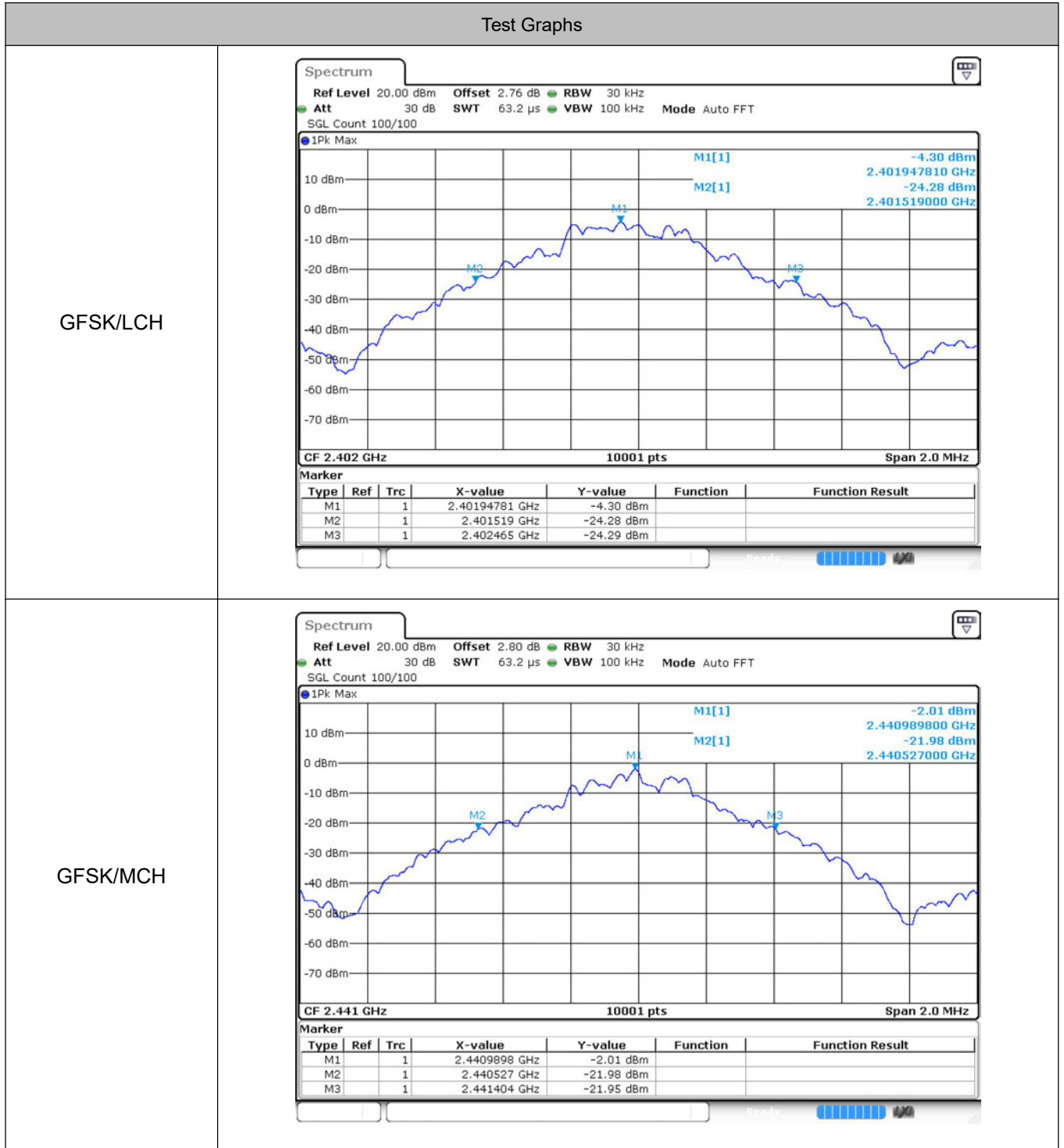


3 20dB Bandwidth

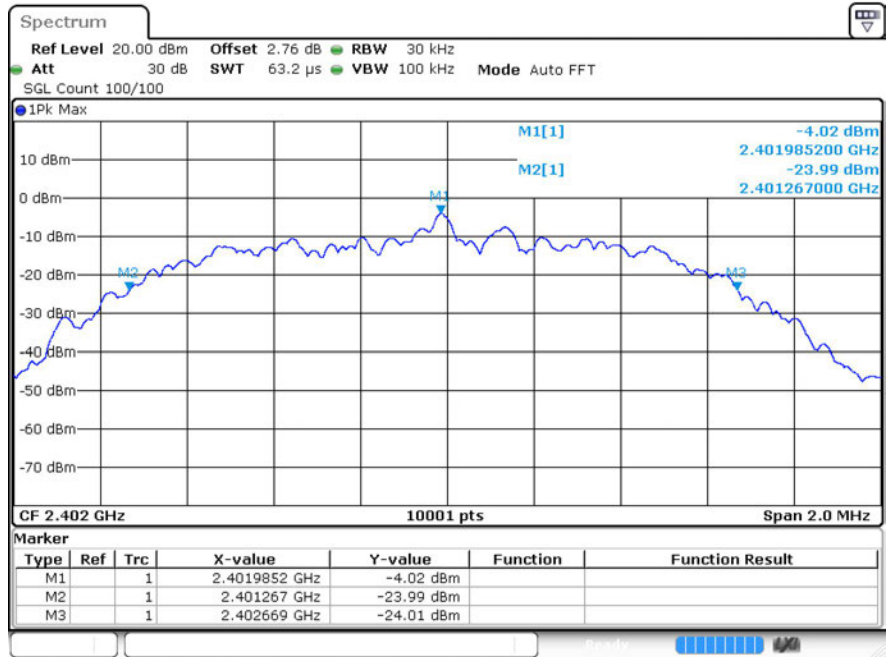
3.1 Test Result

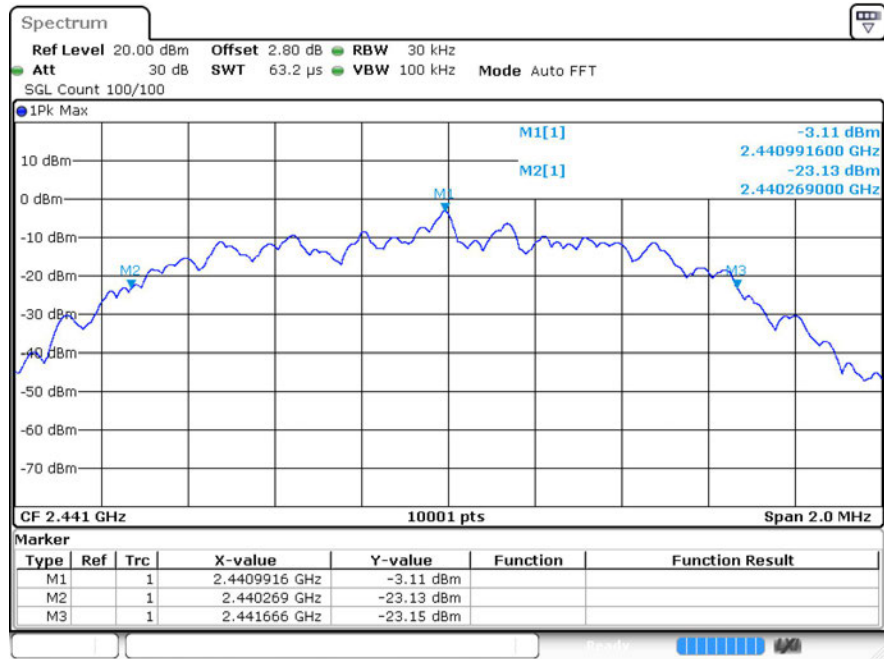
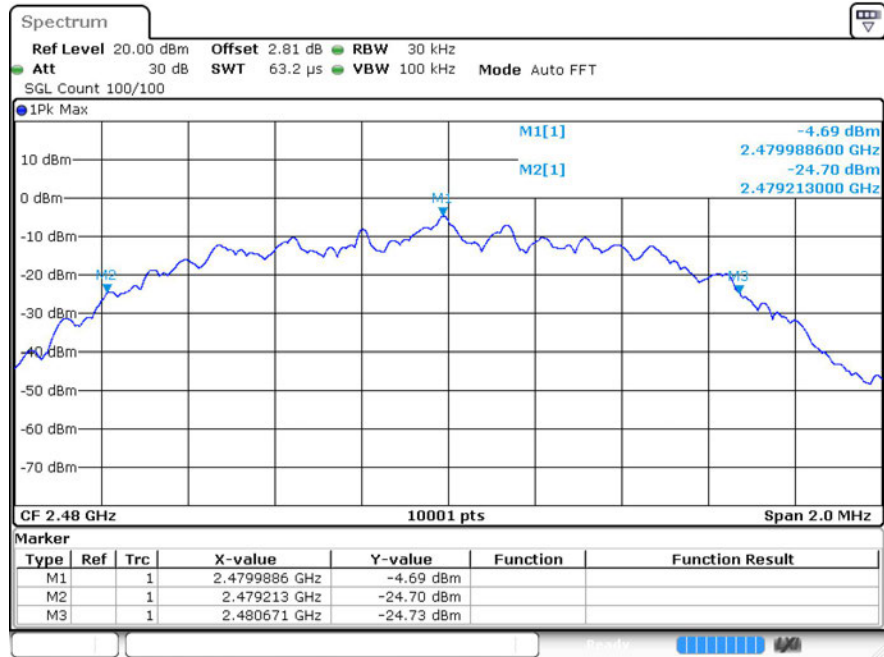
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.946	Not Specified	Pass
	MCH	0.878	Not Specified	Pass
	HCH	0.888	Not Specified	Pass
$\pi/4$ DQPSK	LCH	1.402	Not Specified	Pass
	MCH	1.396	Not Specified	Pass
	HCH	1.457	Not Specified	Pass
8DPSK	LCH	1.412	Not Specified	Pass
	MCH	1.413	Not Specified	Pass
	HCH	1.411	Not Specified	Pass

3.2 Test Graphs

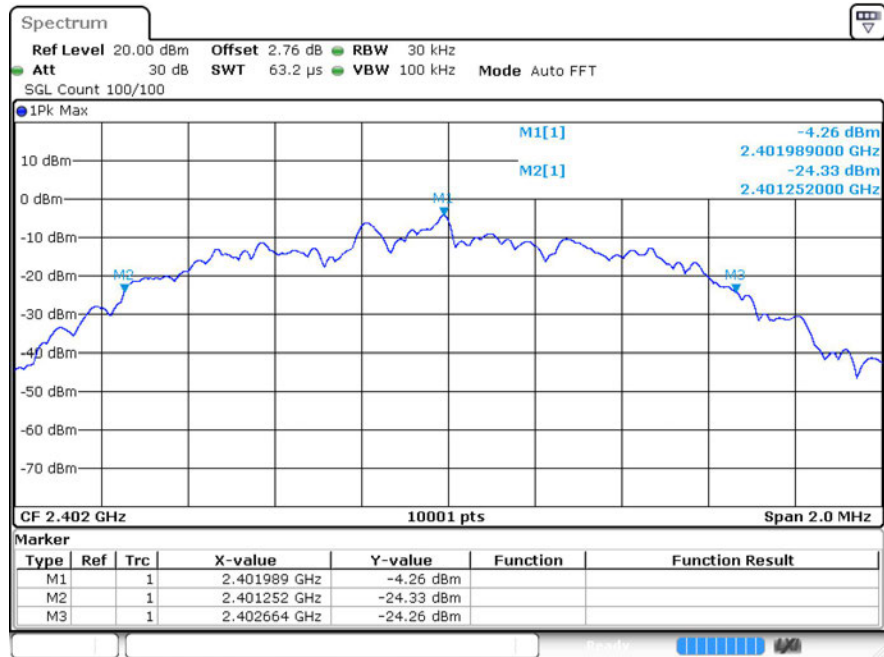


GFSK/HCH

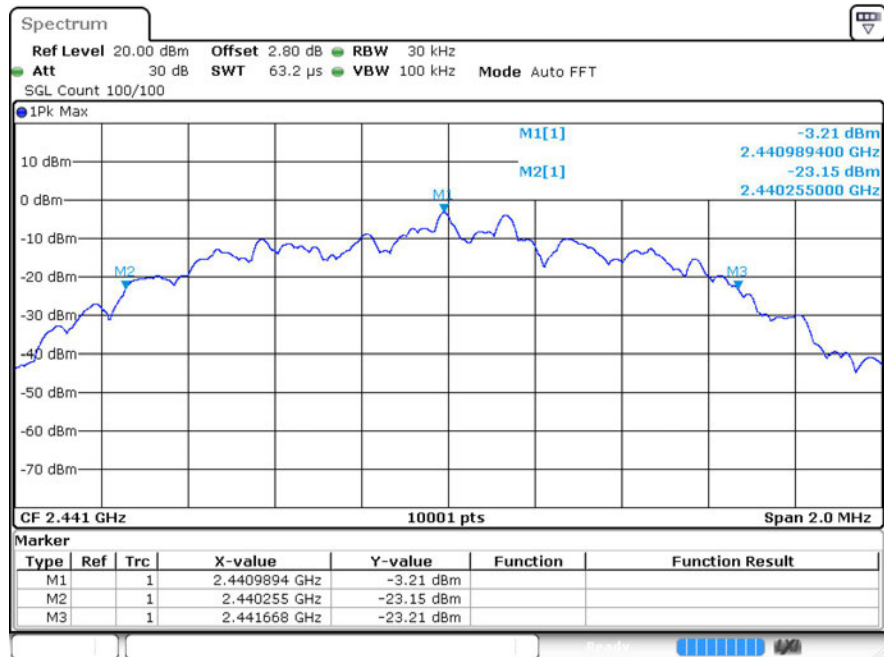

 $\pi/4$ DQPSK/LCH


$\pi/4$ DQPSK/MCH

 $\pi/4$ DQPSK/HCH


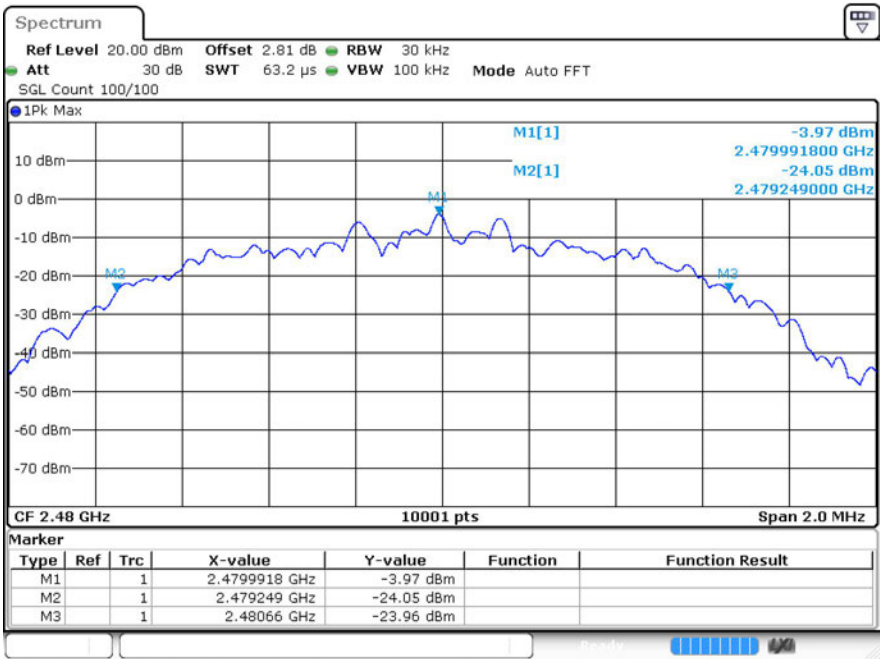
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

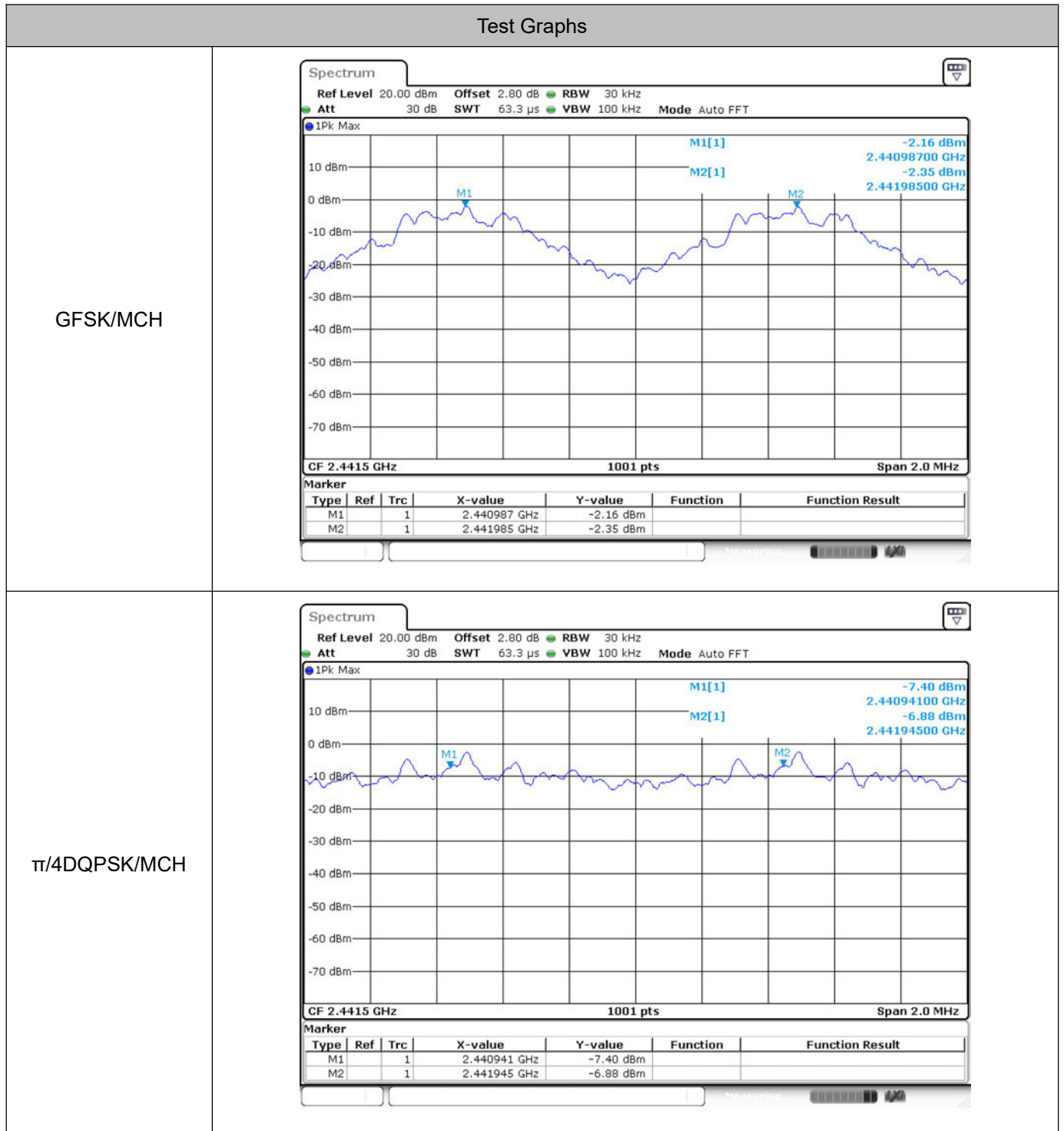


4 Carrier Frequency Separation

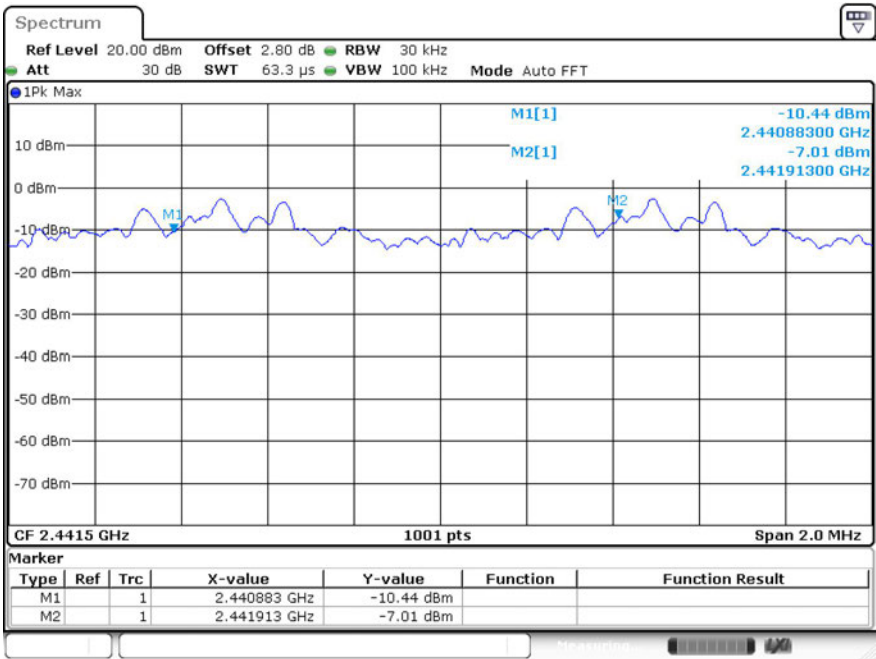
4.1 Test Result

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	MCH	0.998	0.585	Pass
$\pi/4$ DQPSK	MCH	1.004	0.931	Pass
8DPSK	MCH	1.03	0.942	Pass

4.2 Test Graphs



8DPSK/MCH

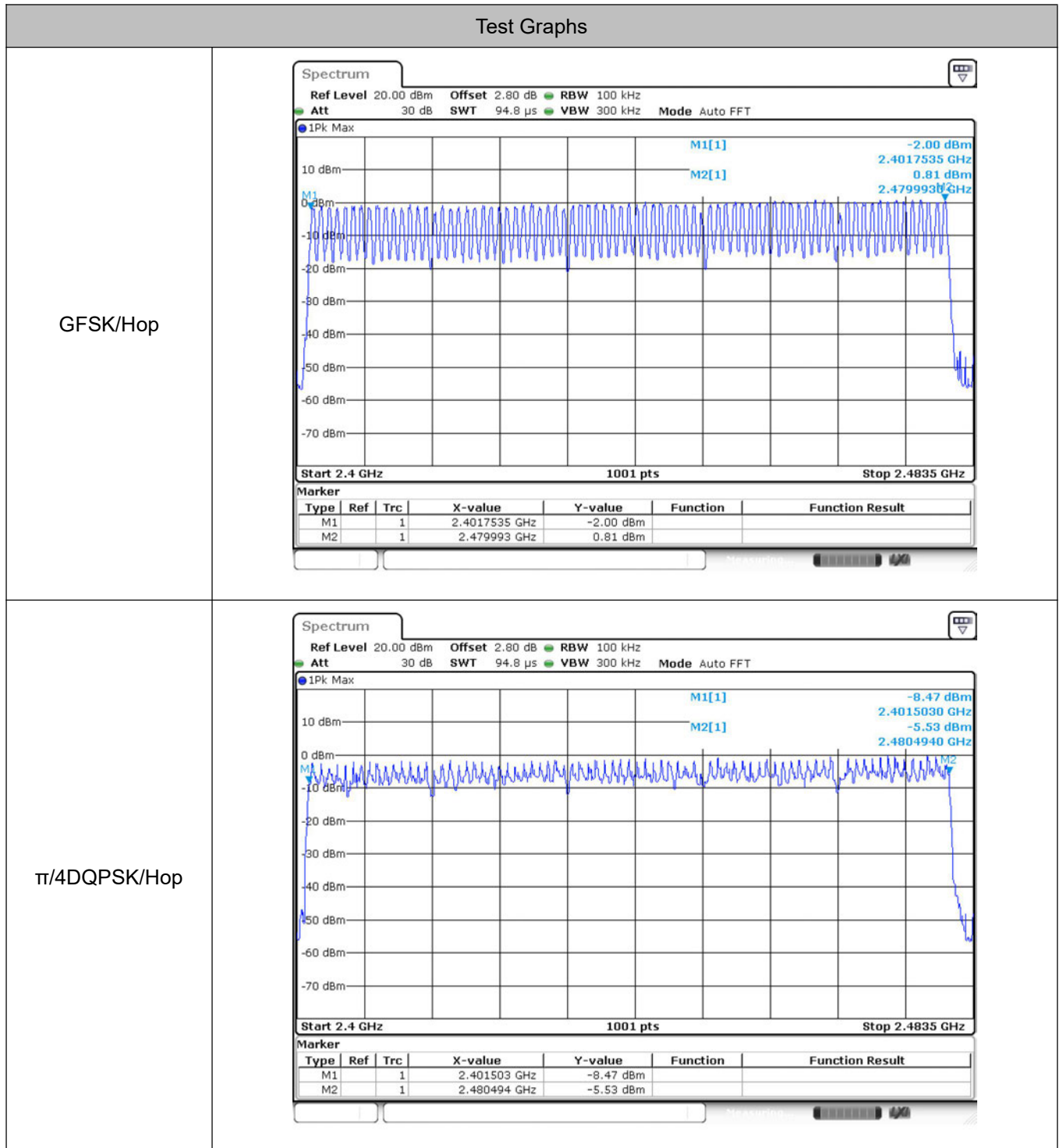


5 Hopping Channel Number

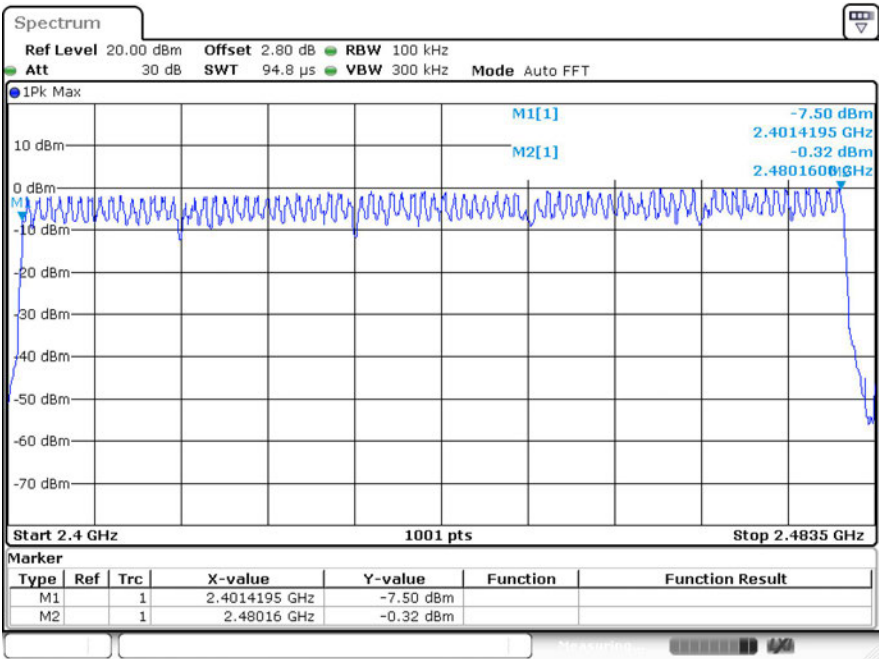
5.1 Test Result

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



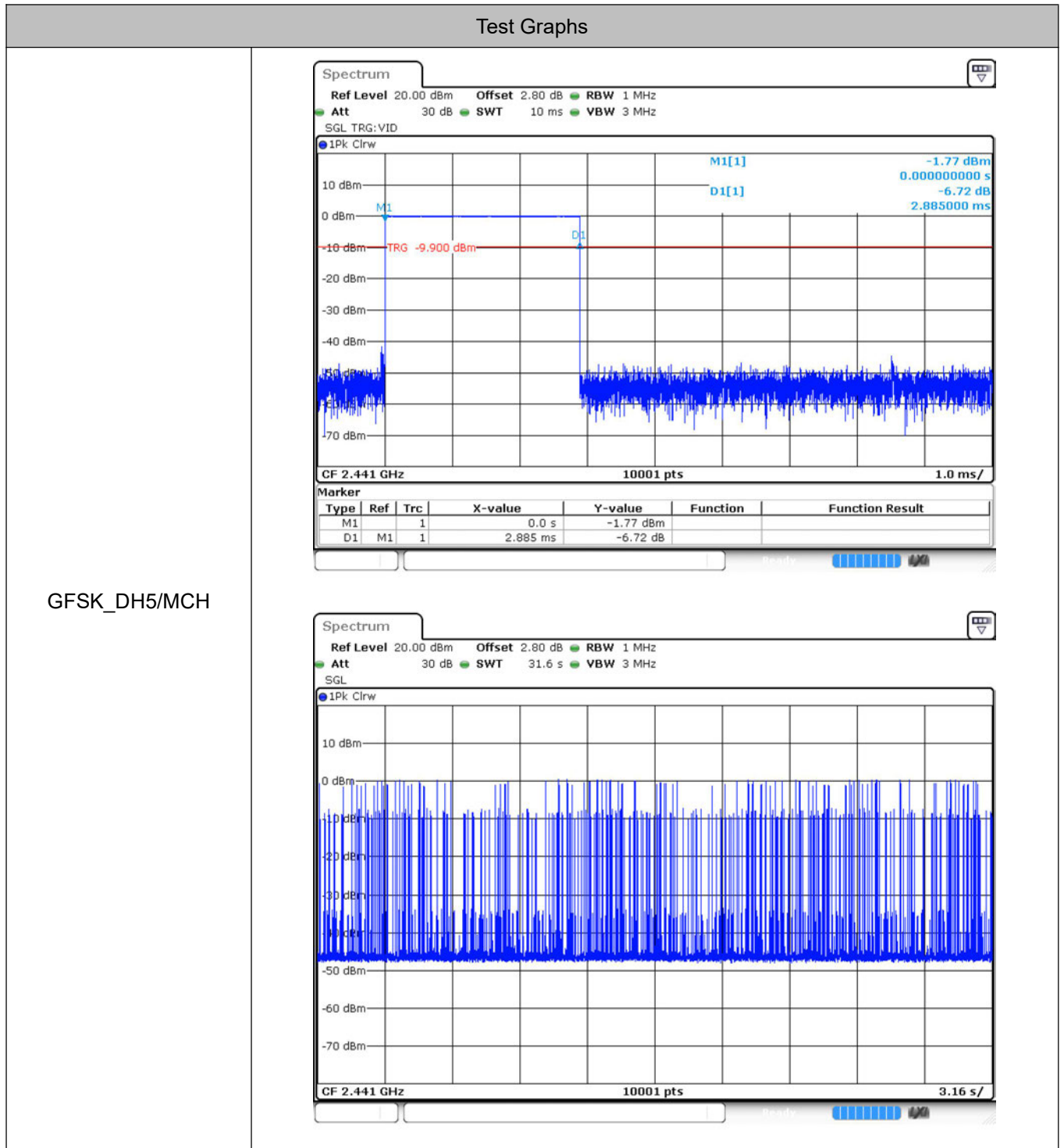


6 Dwell Time

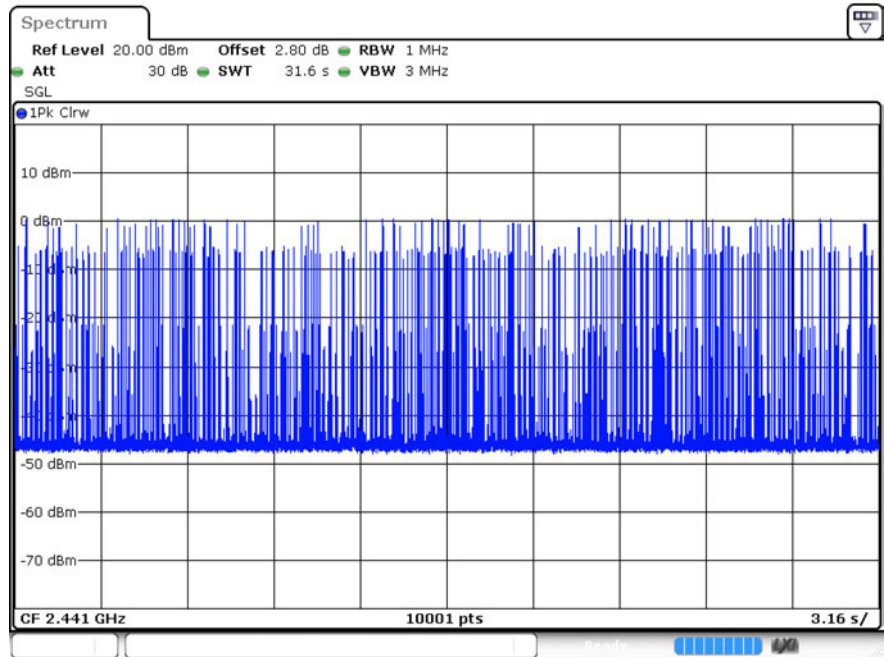
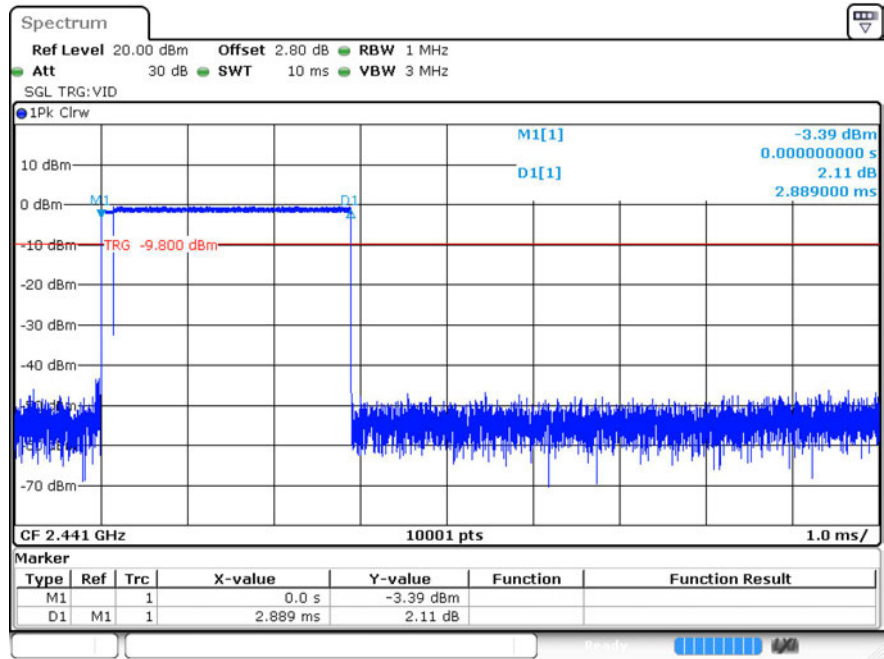
6.1 Test Result

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[ms]	Limit [s]	Verdict
GFSK	DH5	MCH	2.885	106	305.81	0.4	Pass
$\pi/4$ DQPSK	2DH5	MCH	2.889	99	286.011	0.4	Pass
8DPSK	3DH5	MCH	2.891	116	335.356	0.4	Pass

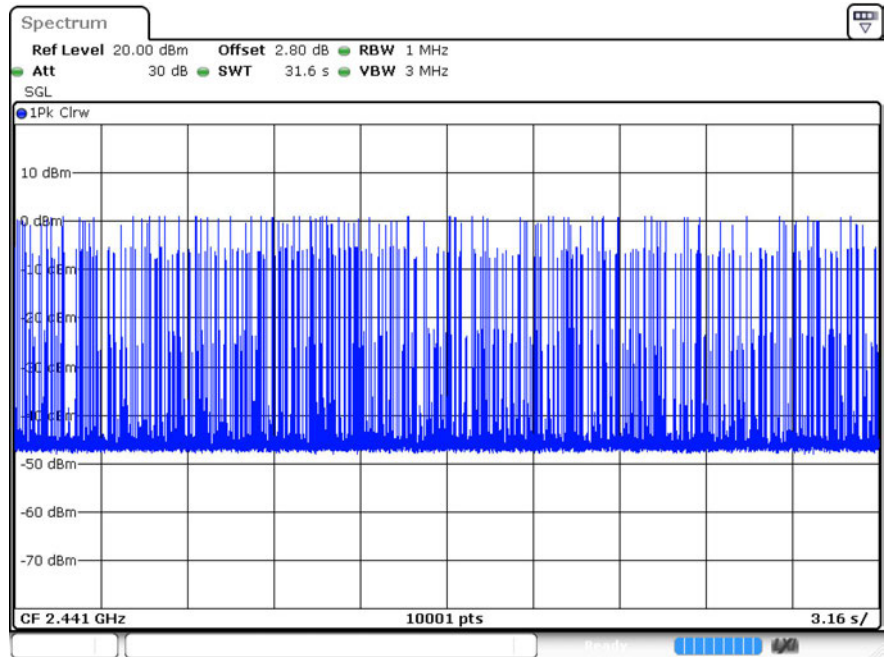
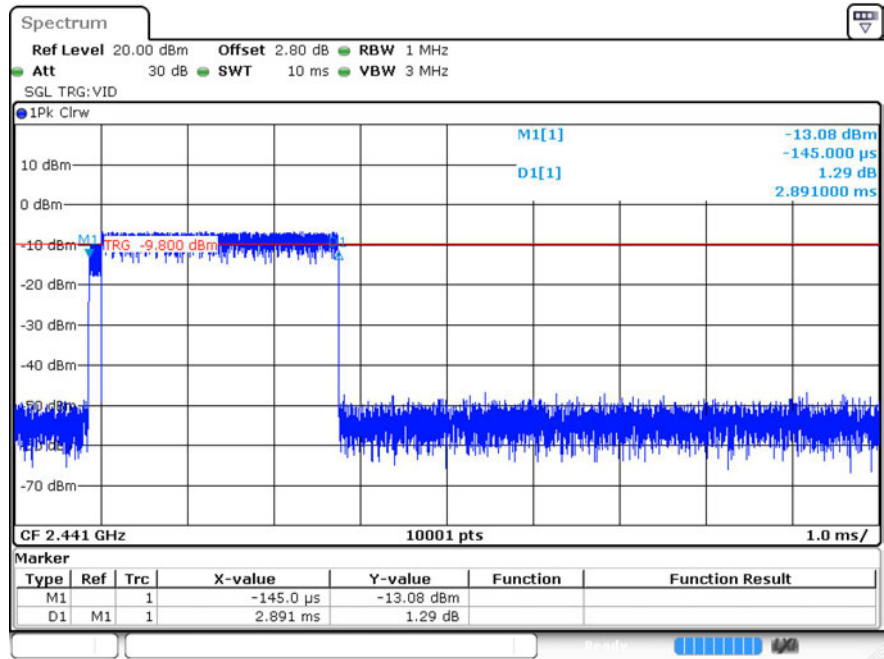
6.2 Test Graphs



$\pi/4$ DQPSK
_2DH5/MCH



8DPSK_3DH5/MCH

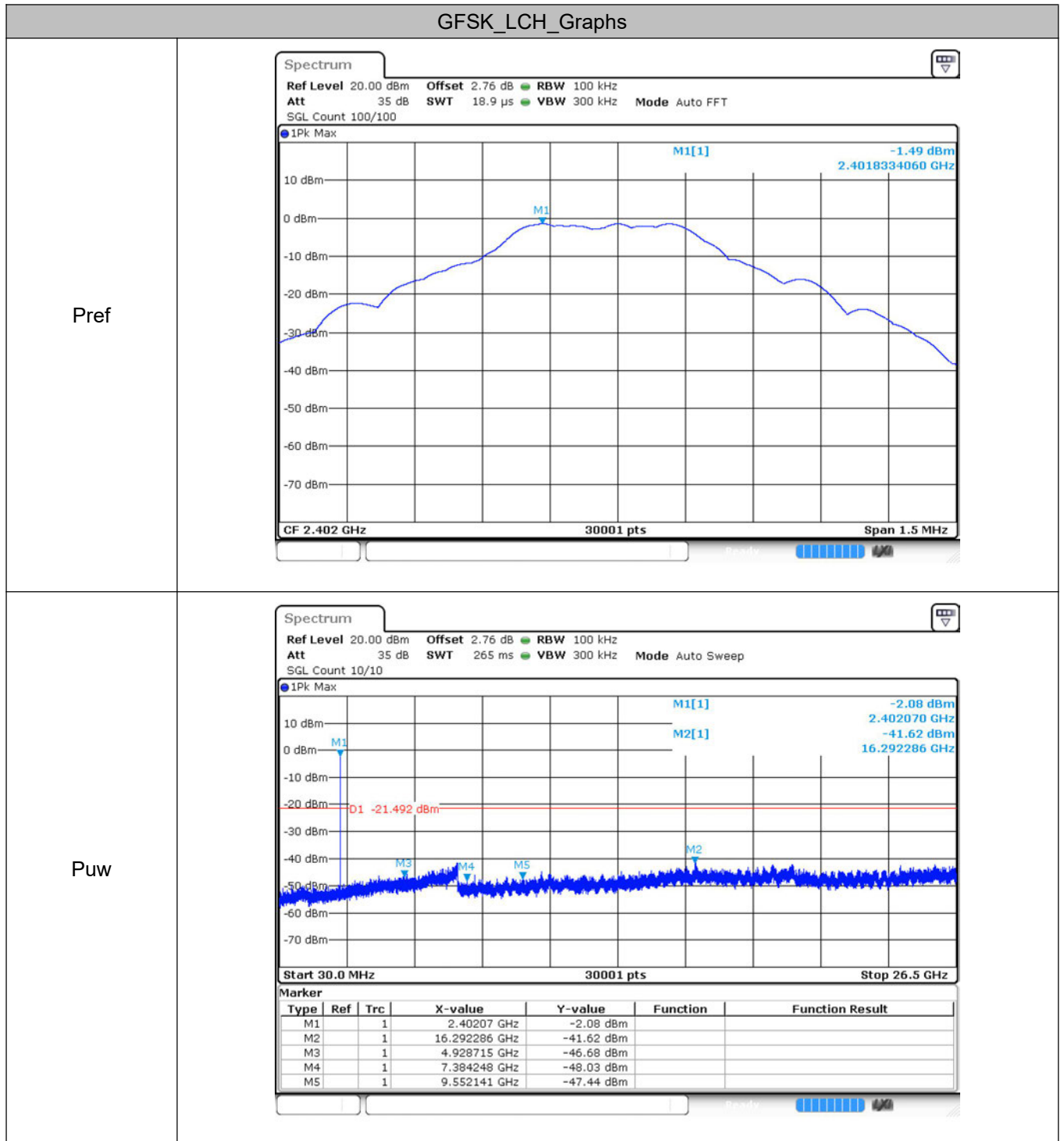


7 RF Conducted Spurious Emissions

7.1 Test Result

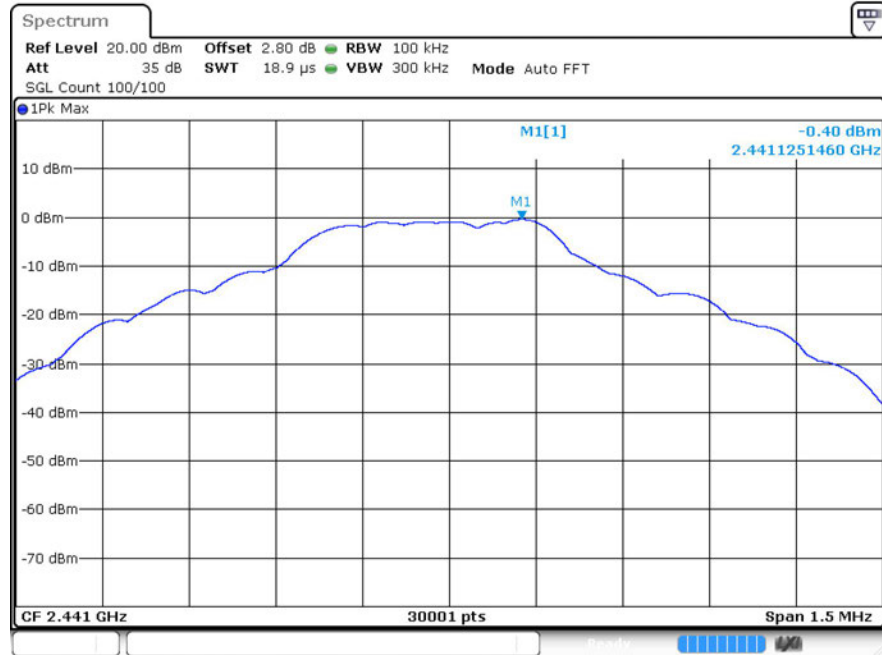
Mode	Channel	Max. Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	-40.12	-20	Pass
	MCH	-40.27	-20	Pass
	HCH	-39.35	-20	Pass
$\pi/4$ DQPSK	LCH	-39.73	-20	Pass
	MCH	-40.13	-20	Pass
	HCH	-39.56	-20	Pass
8DPSK	LCH	-39.4	-20	Pass
	MCH	-39.76	-20	Pass
	HCH	-39.56	-20	Pass

7.2 Test Graphs

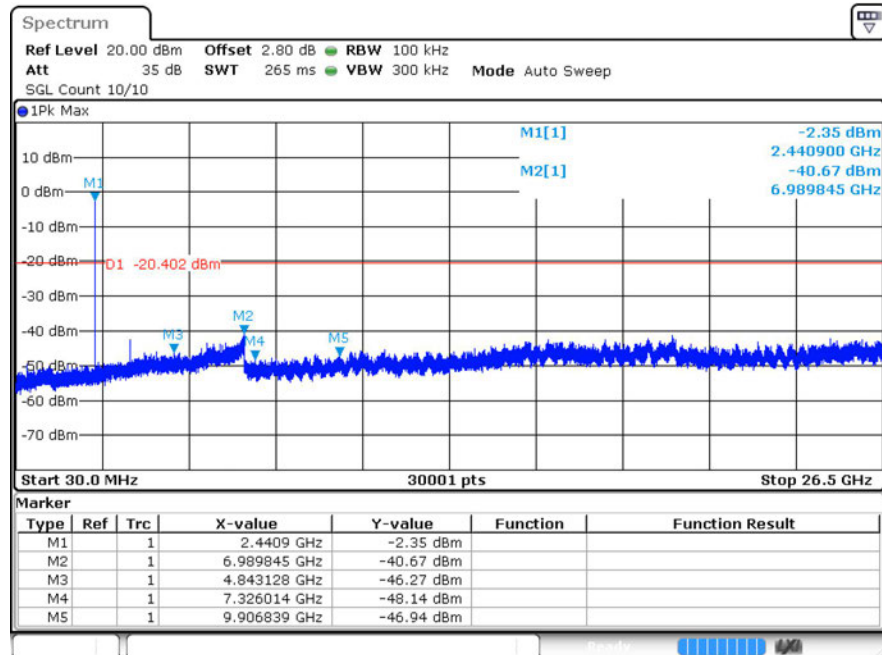


GFSK_MCH_Graphs

Pref

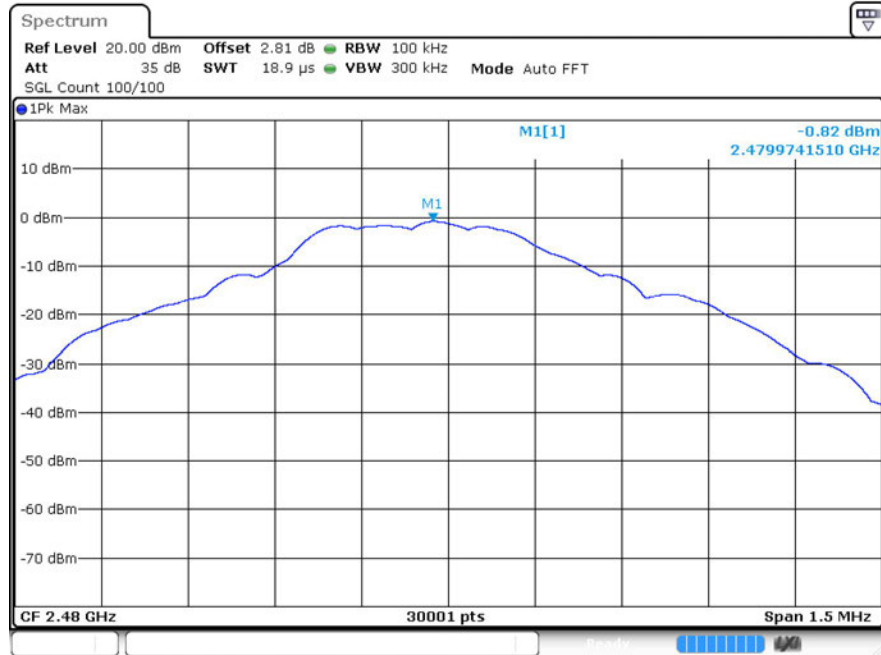


Puw

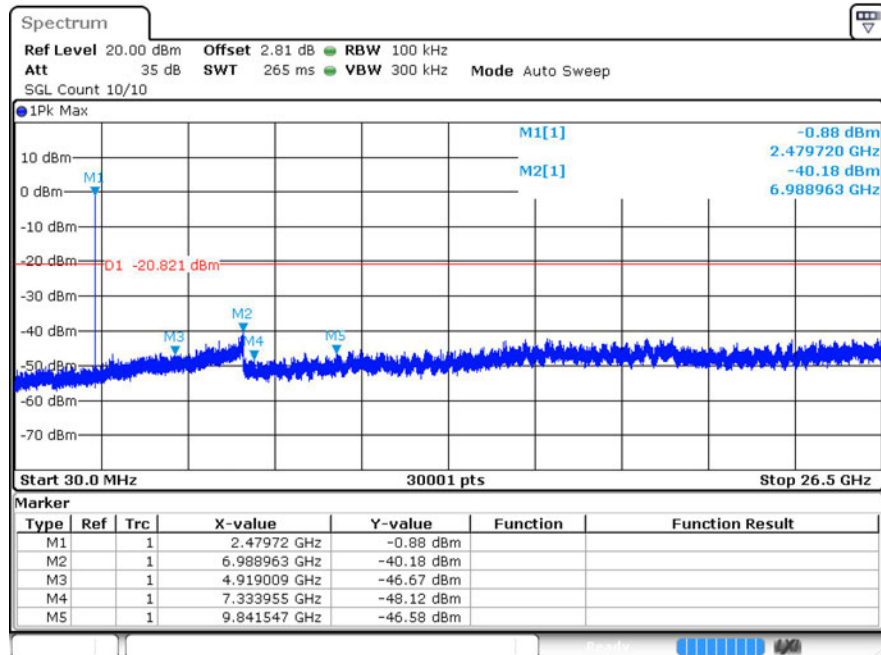


GFSK_HCH_Graphs

Pref

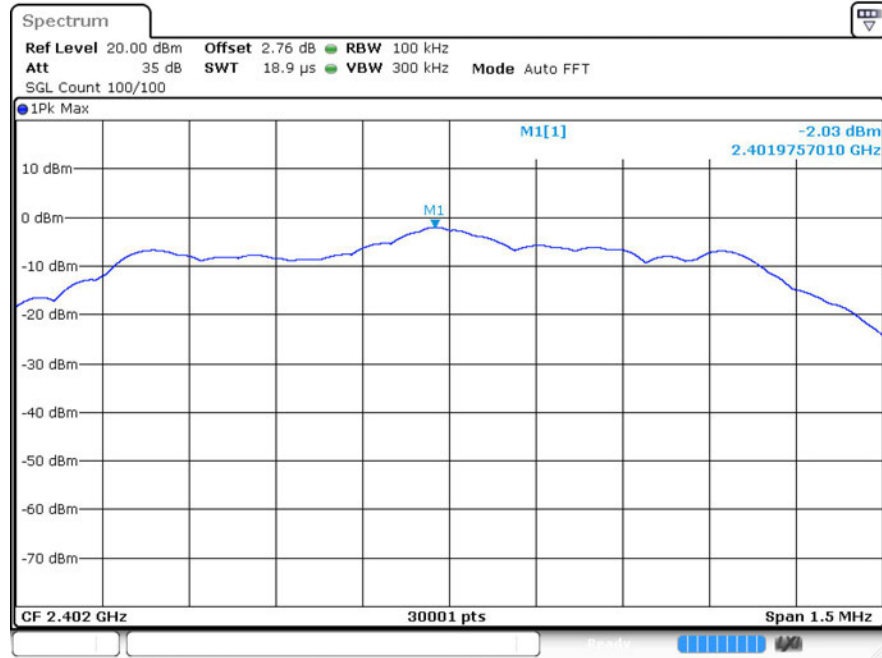


Puw

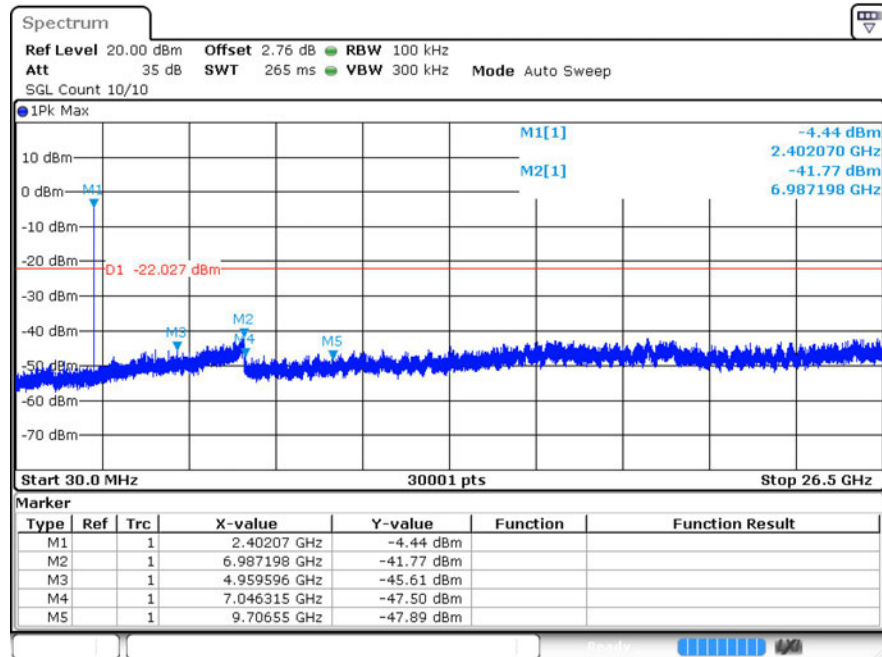


$\pi/4$ DQPSK_LCH_Graphs

Pref

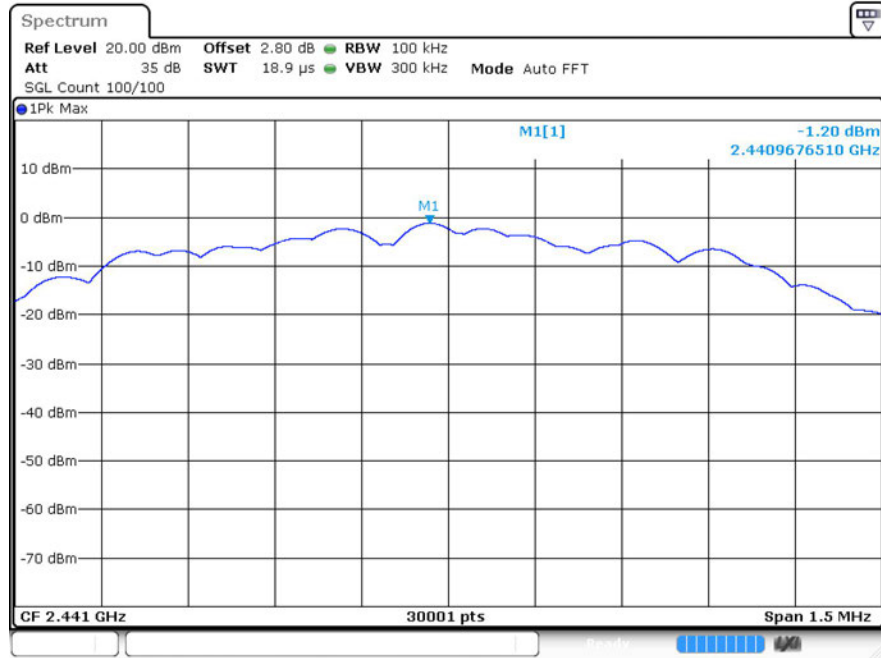


Puw

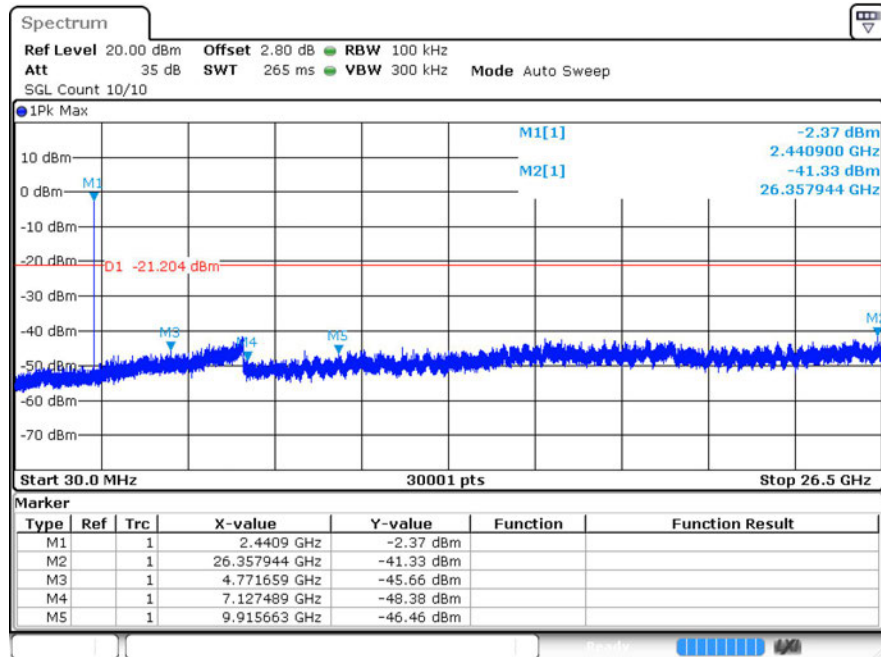


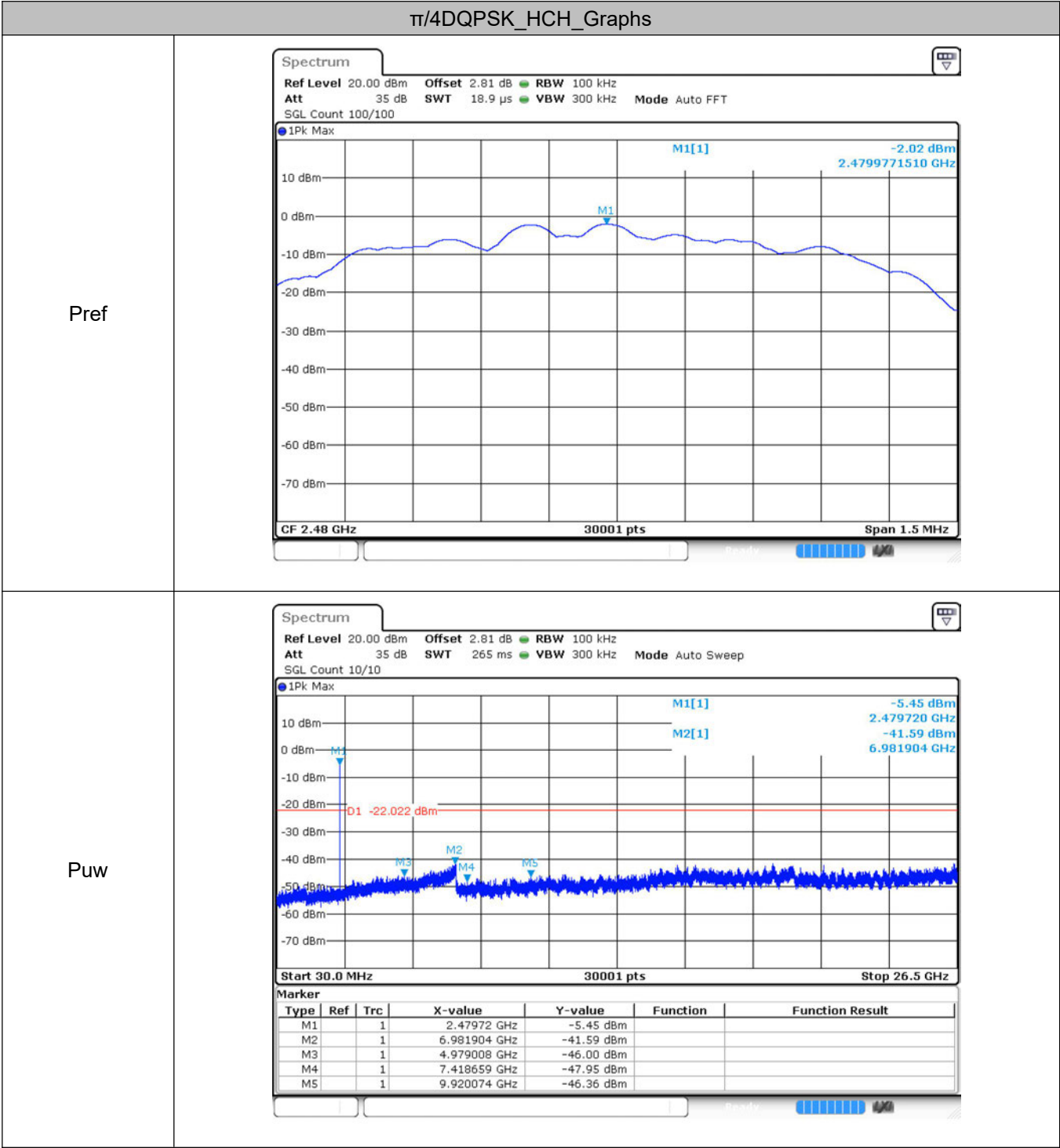
$\pi/4$ DQPSK_MCH_Graphs

Pref



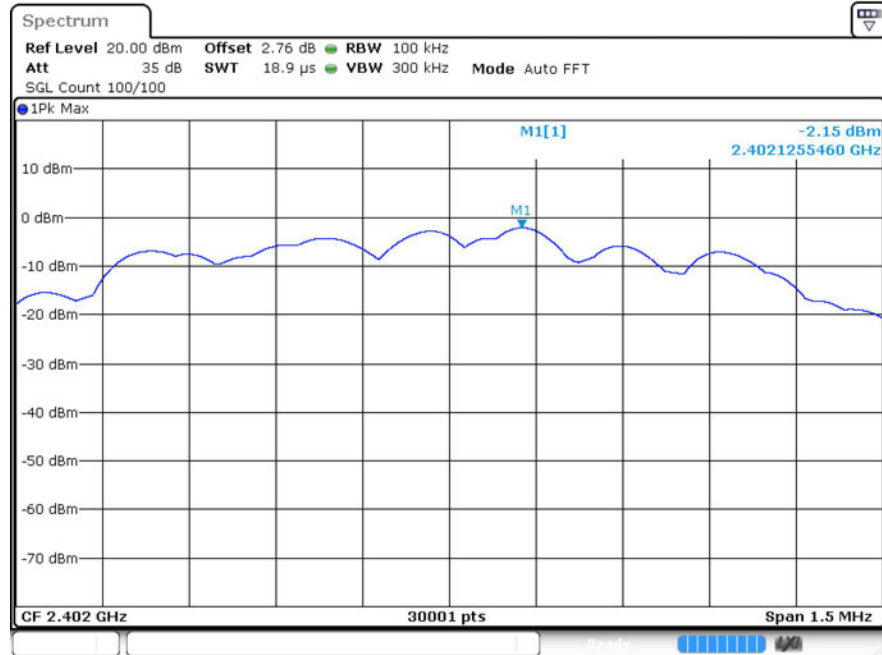
Puw



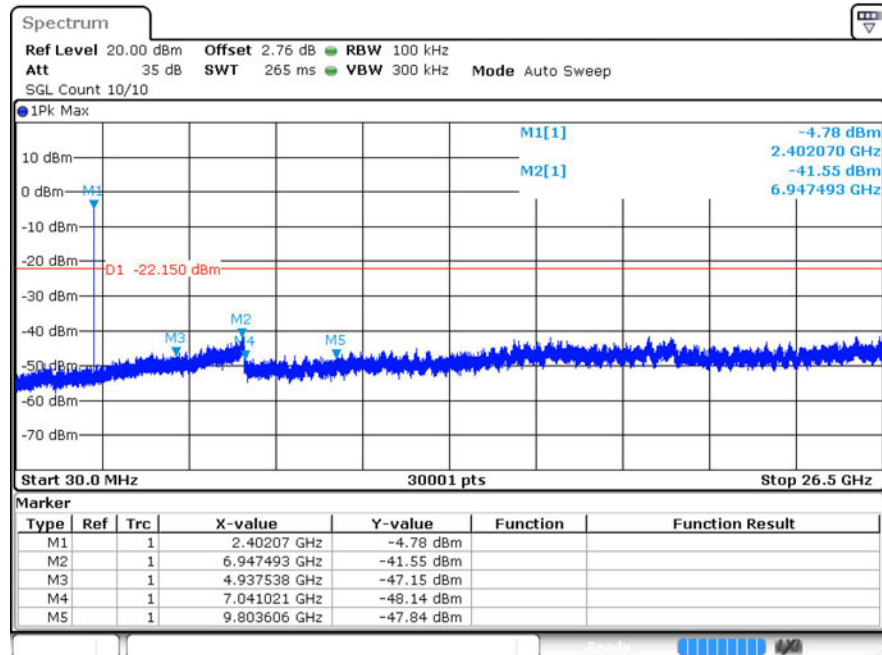


8DPSK_LCH_Graphs

Pref

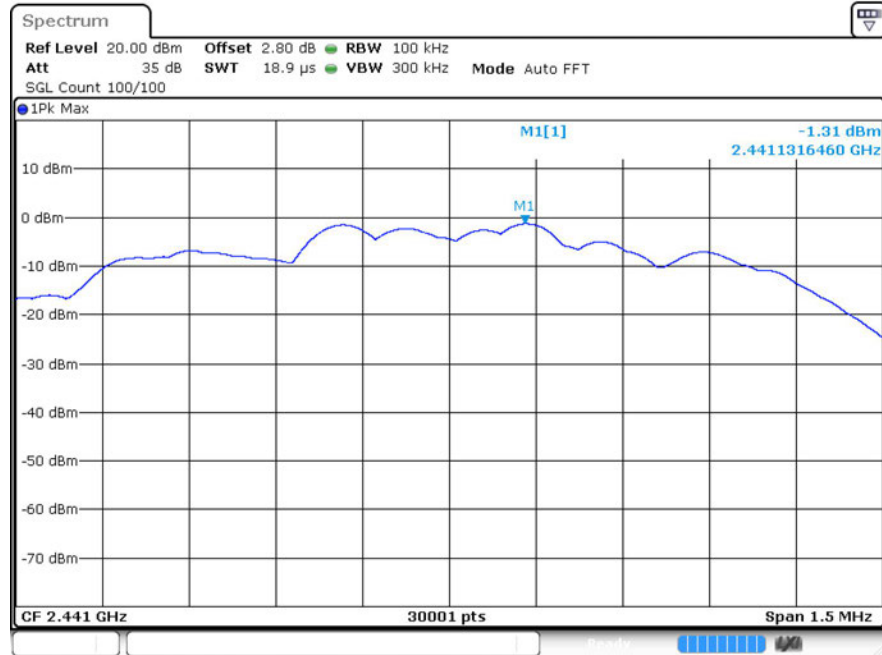


Puw

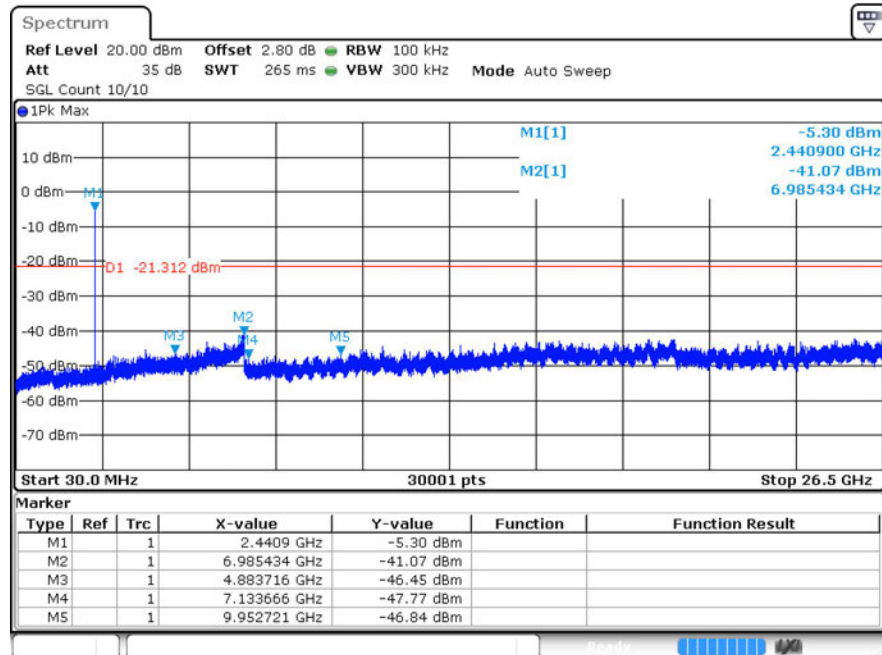


8DPSK_MCH_Graphs

Pref

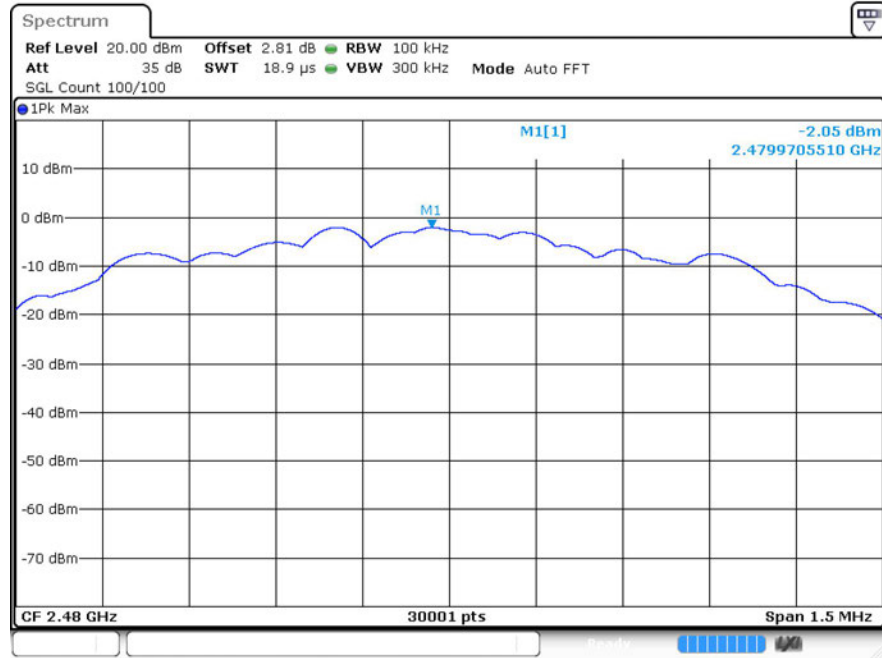


Puw

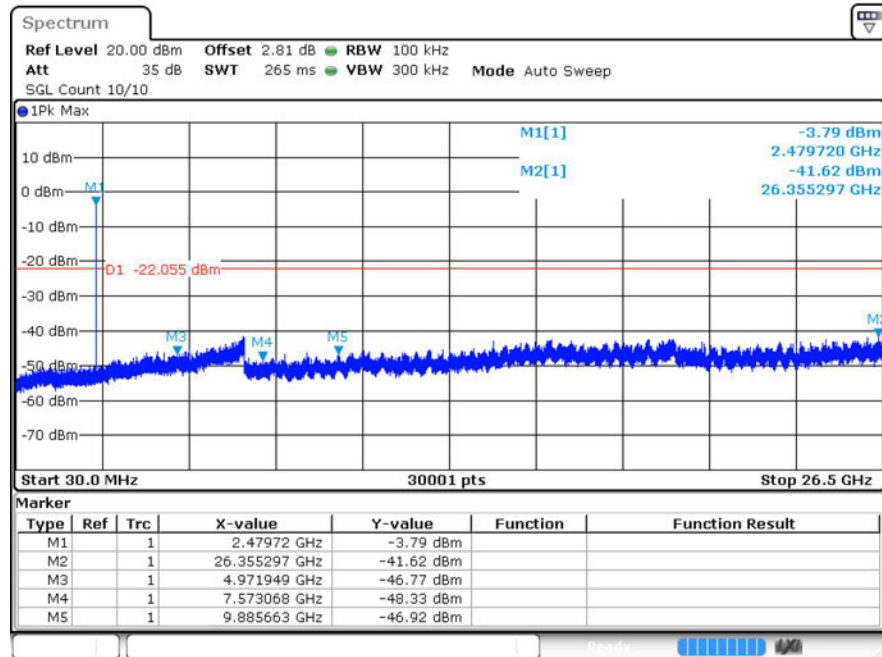


8DPSK_HCH_Graphs

Pref



Puw

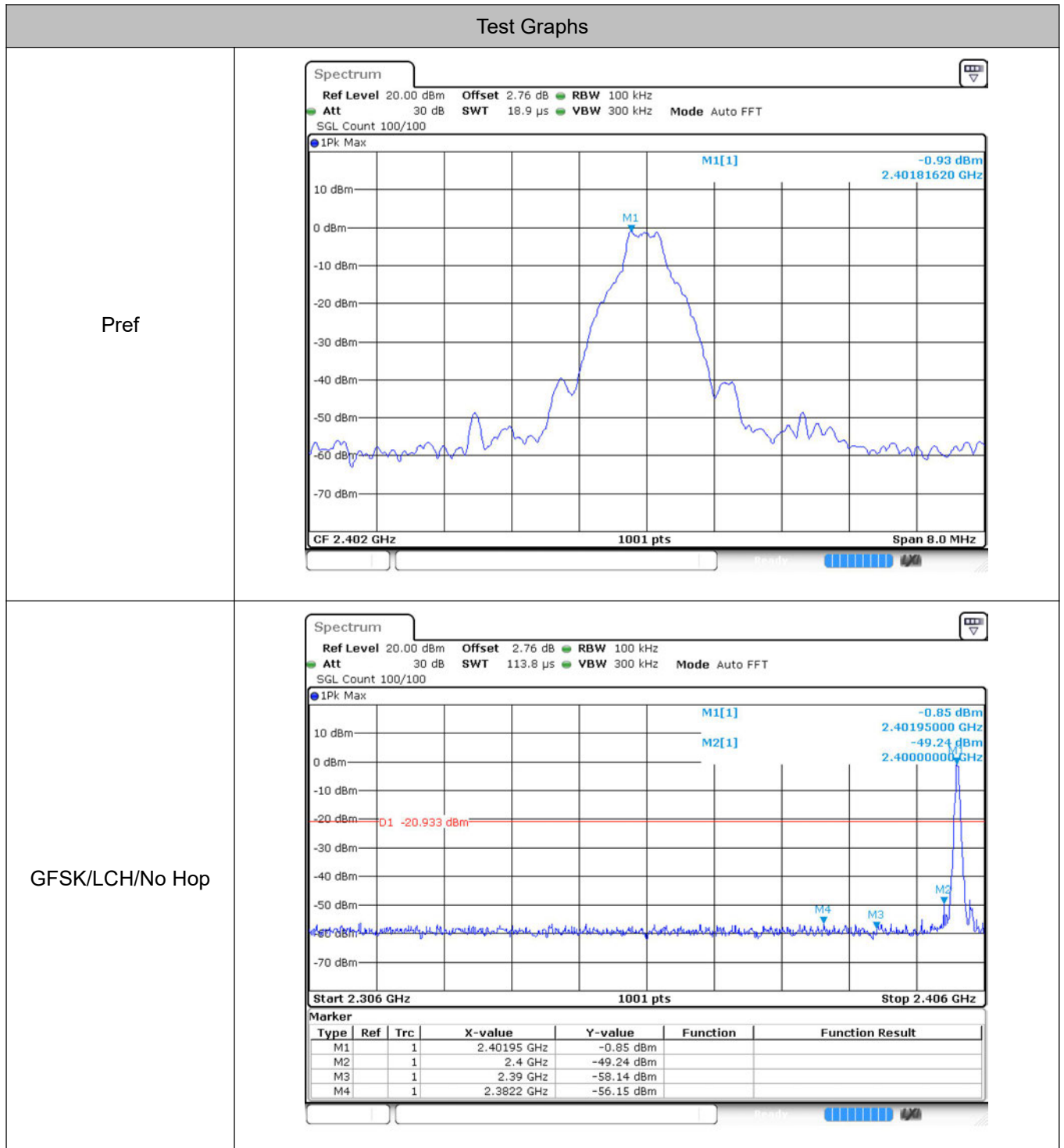


8 Band-edge for RF Conducted Emissions

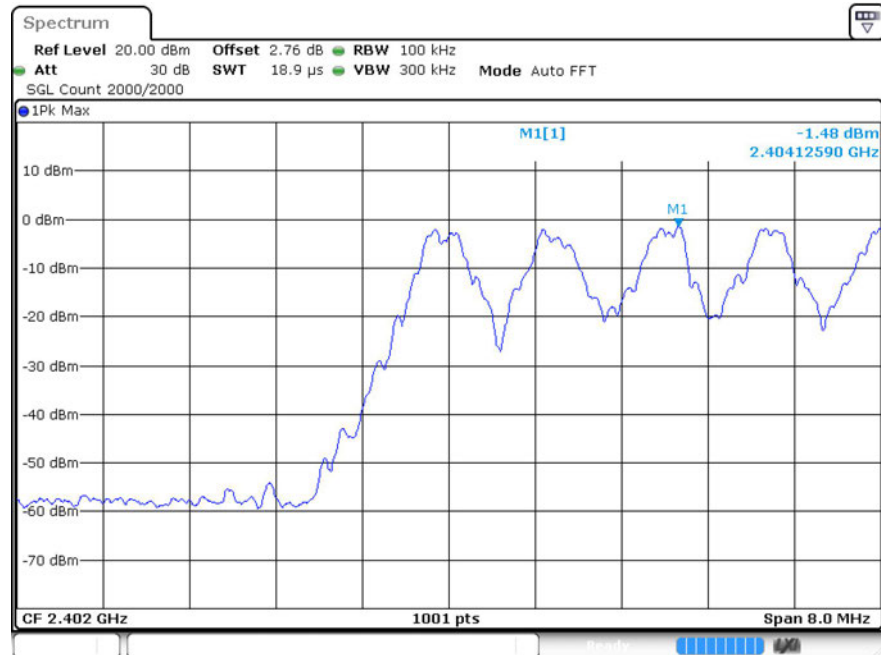
8.1 Test Result

Mode	Channel	Carrier Frequency [MHz]	Frequency Hopping	Max Spurious Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	2402	Off	-55.21	-20	Pass
			On	-53.06	-20	Pass
	HCH	2480	Off	-55.1	-20	Pass
			On	-46.45	-20	Pass
$\pi/4$ DQPSK	LCH	2402	Off	-52.47	-20	Pass
			On	-52.11	-20	Pass
	HCH	2480	Off	-54.33	-20	Pass
			On	-45.65	-20	Pass
8DPSK	LCH	2402	Off	-53.81	-20	Pass
			On	-52.48	-20	Pass
	HCH	2480	Off	-51.66	-20	Pass
			On	-45.86	-20	Pass

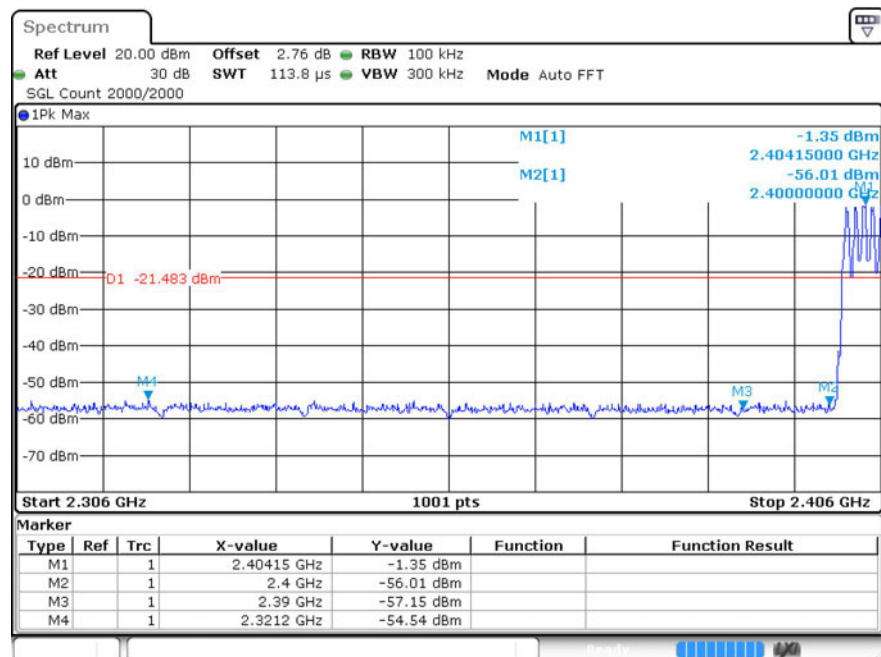
8.2 Test Graphs



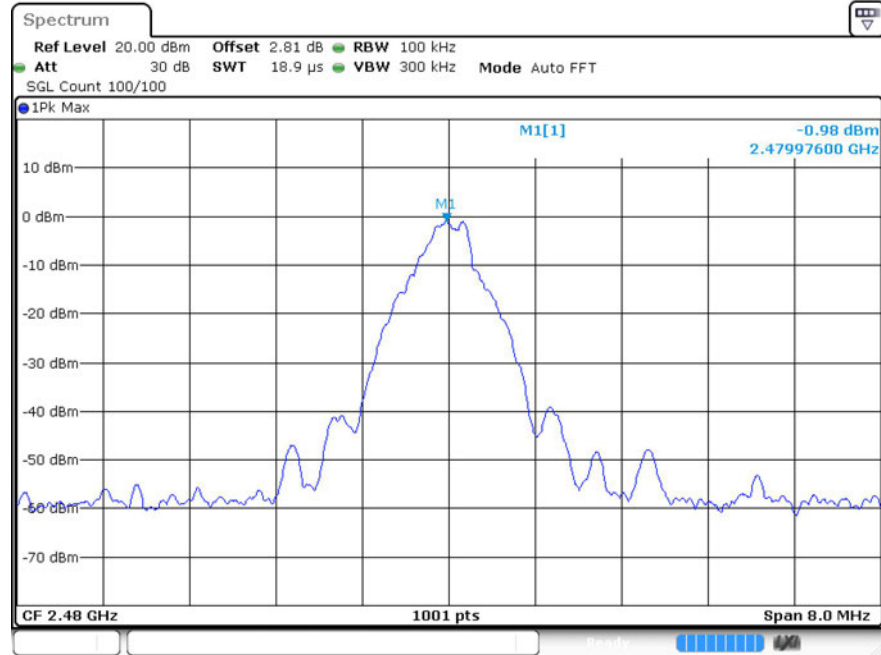
Ref



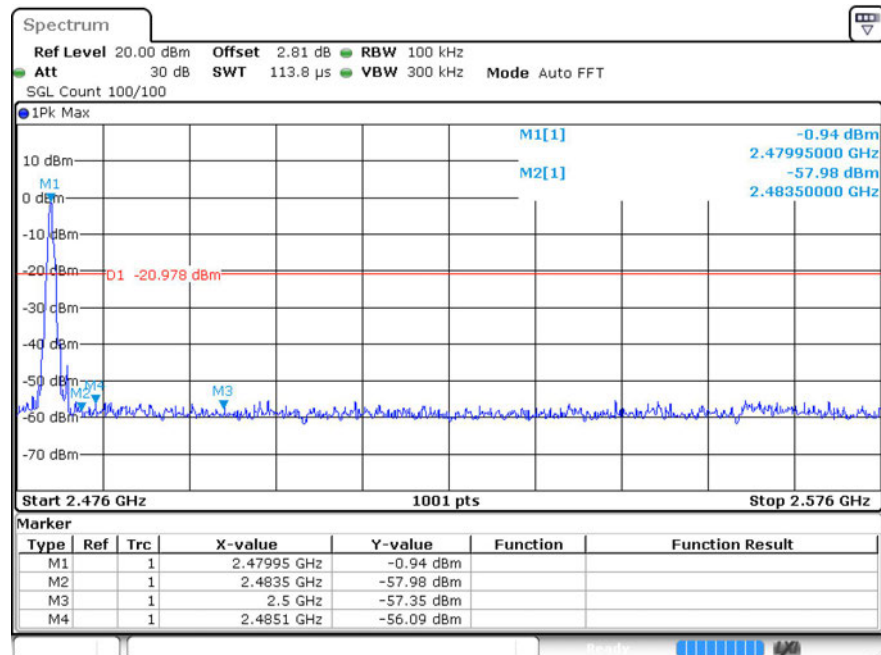
GFSK/LCH/Hop



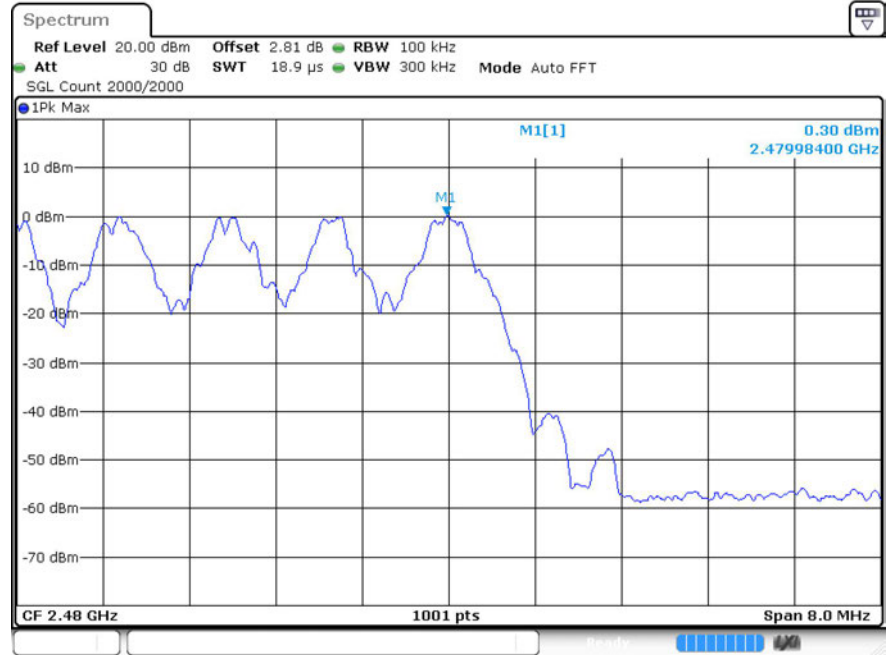
Ref



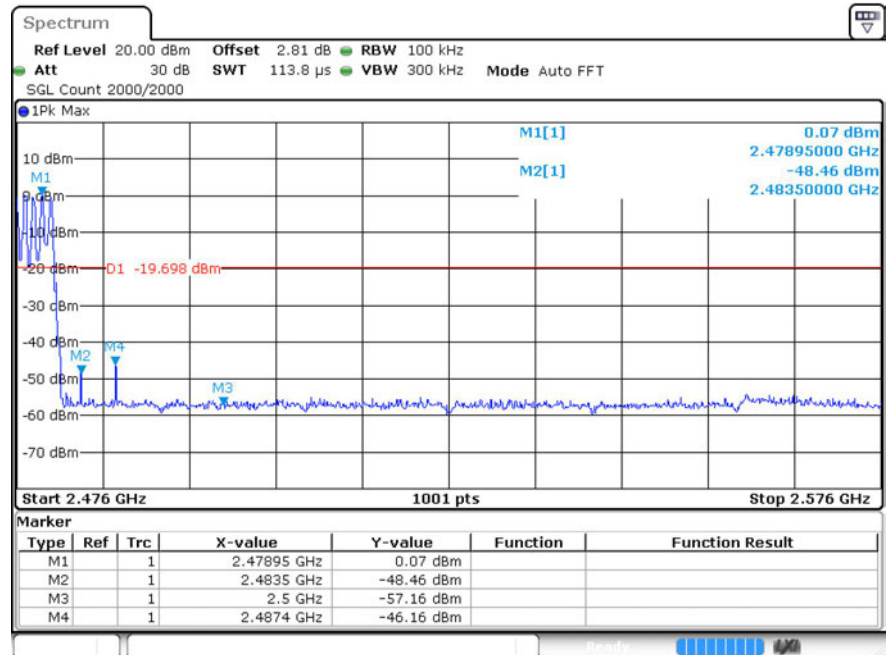
GFSK/HCH/No Hop



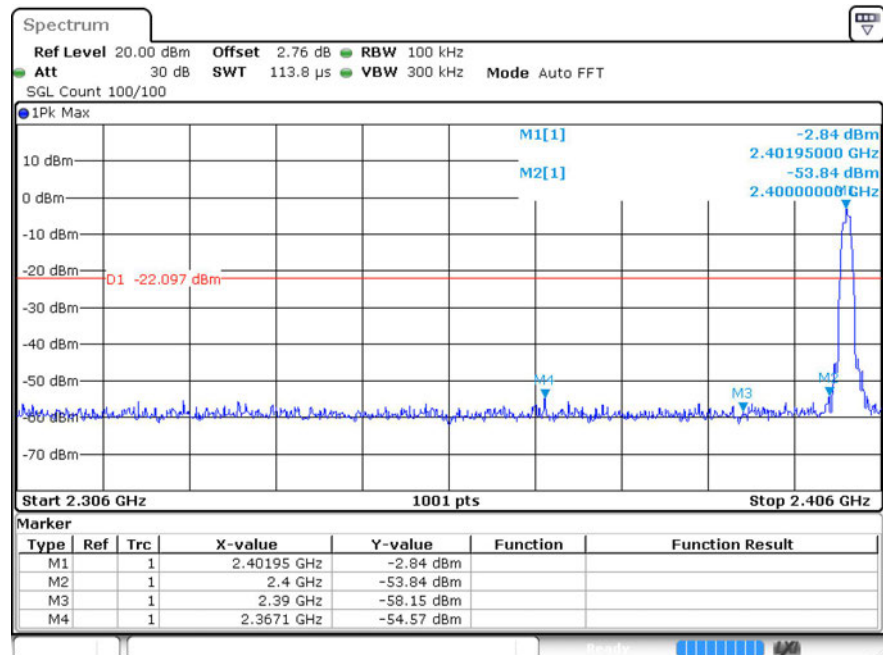
Ref.



GFSK/HCH/Hop



Ref


 $\pi/4$ DQPSK/LCH/No
Hop


Ref


 $\pi/4$ DQPSK/LCH/Hop
