



Appendix A

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

Product Name: Glasses-free 3D Display

Trade Mark: STARTEK

Test Model: KD430UHFVA024

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	52.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Emiya Lin
Supervised by:	Simba Huang



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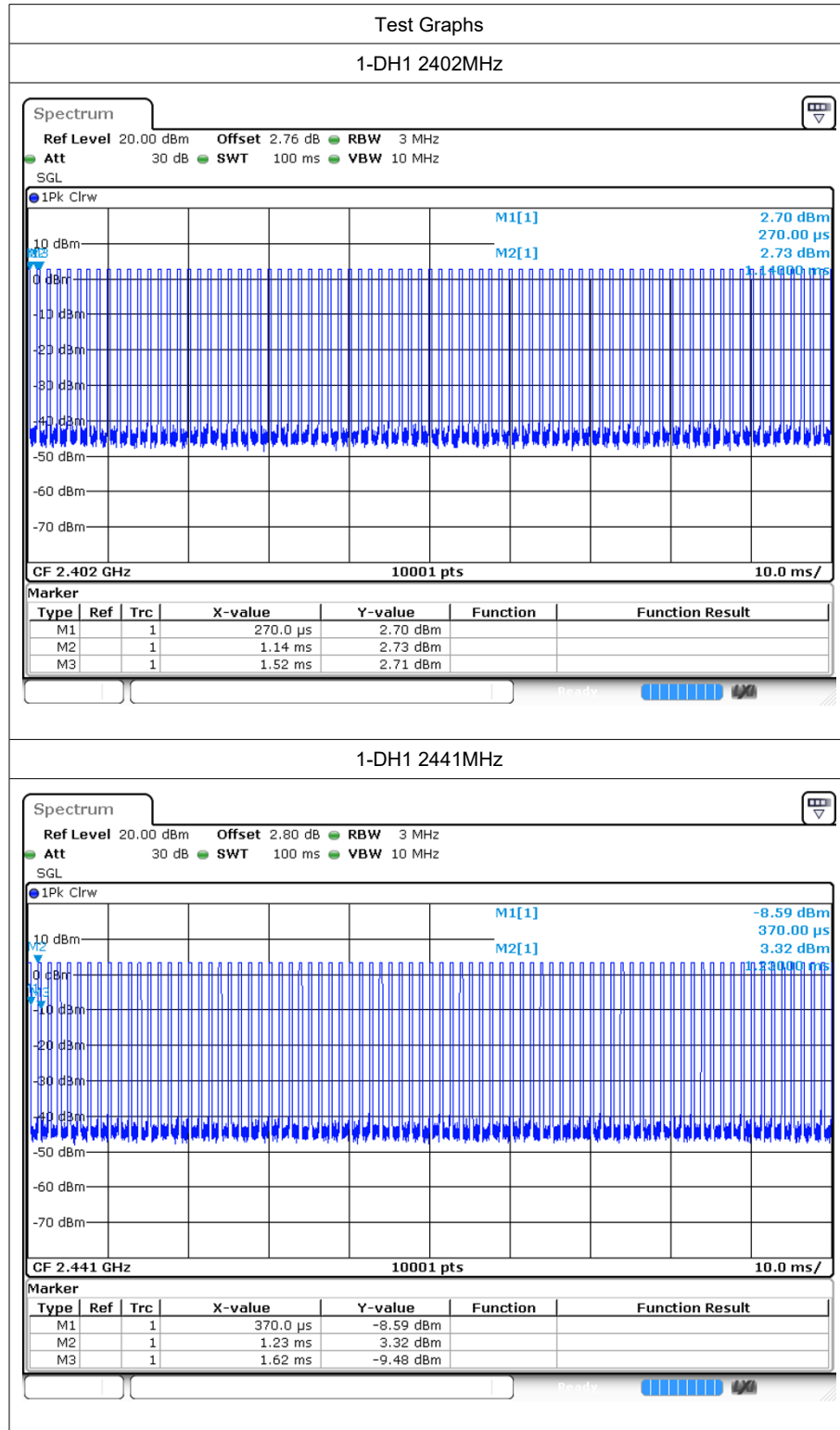


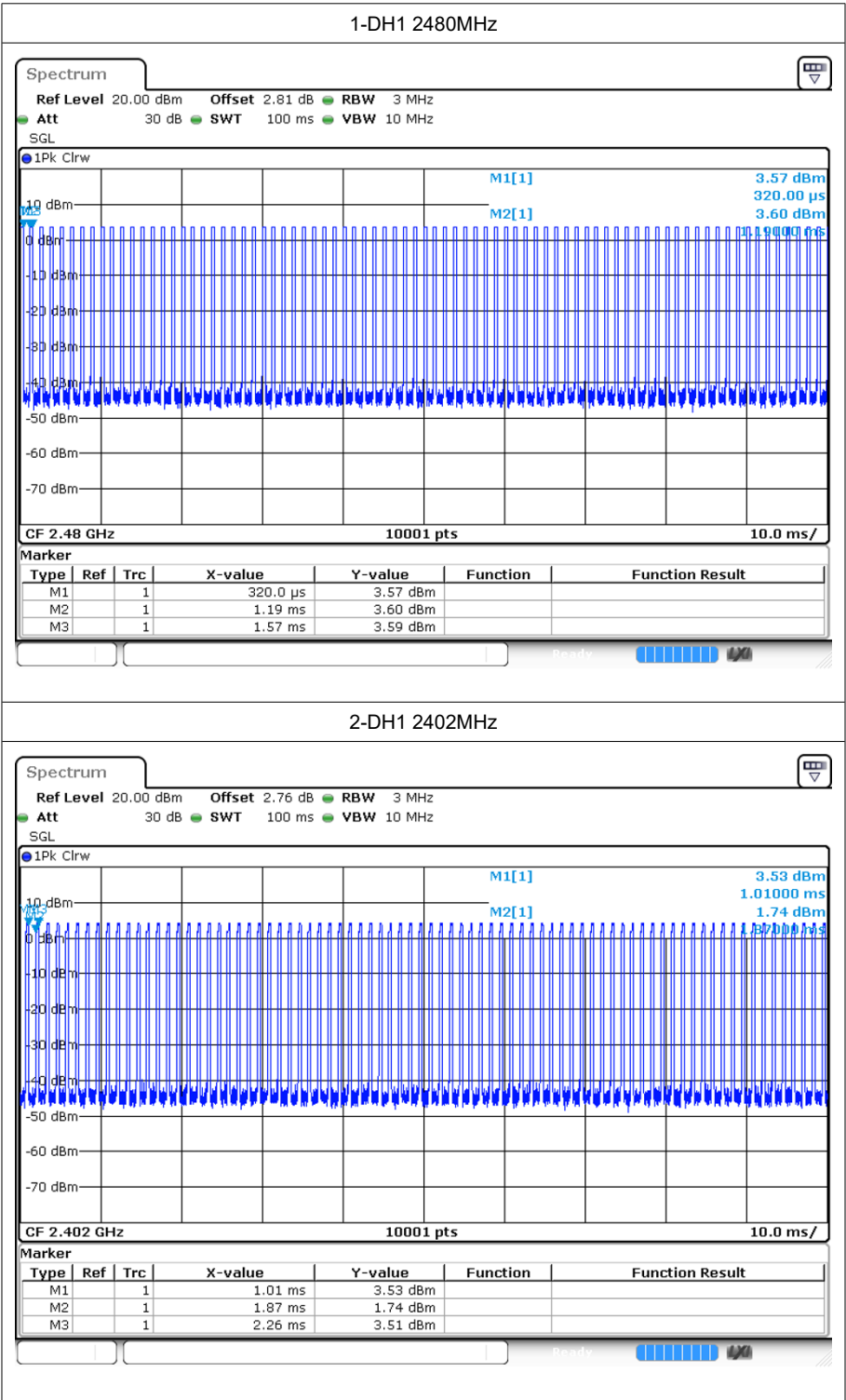
1 Duty Cycle

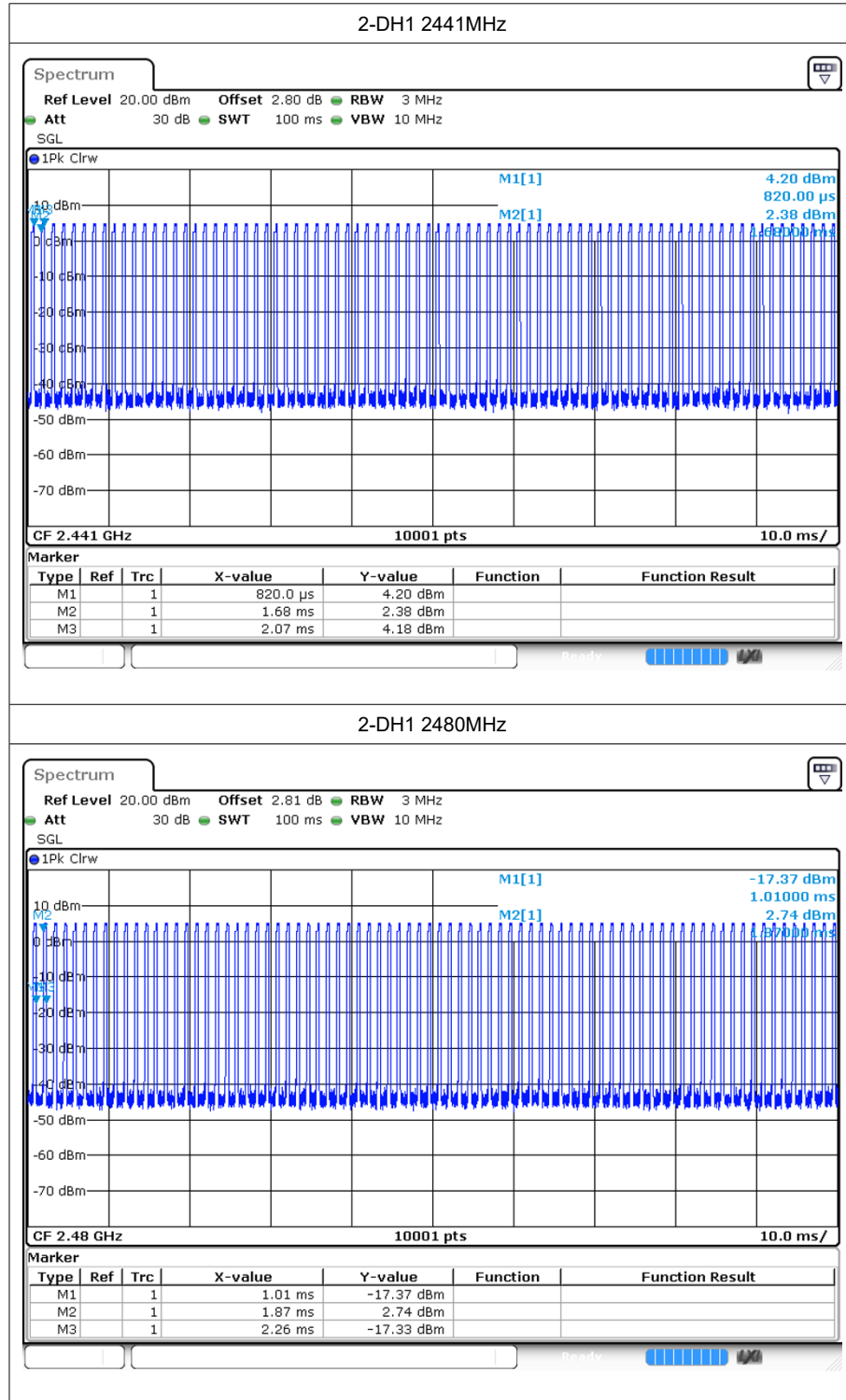
1.1 Test Result

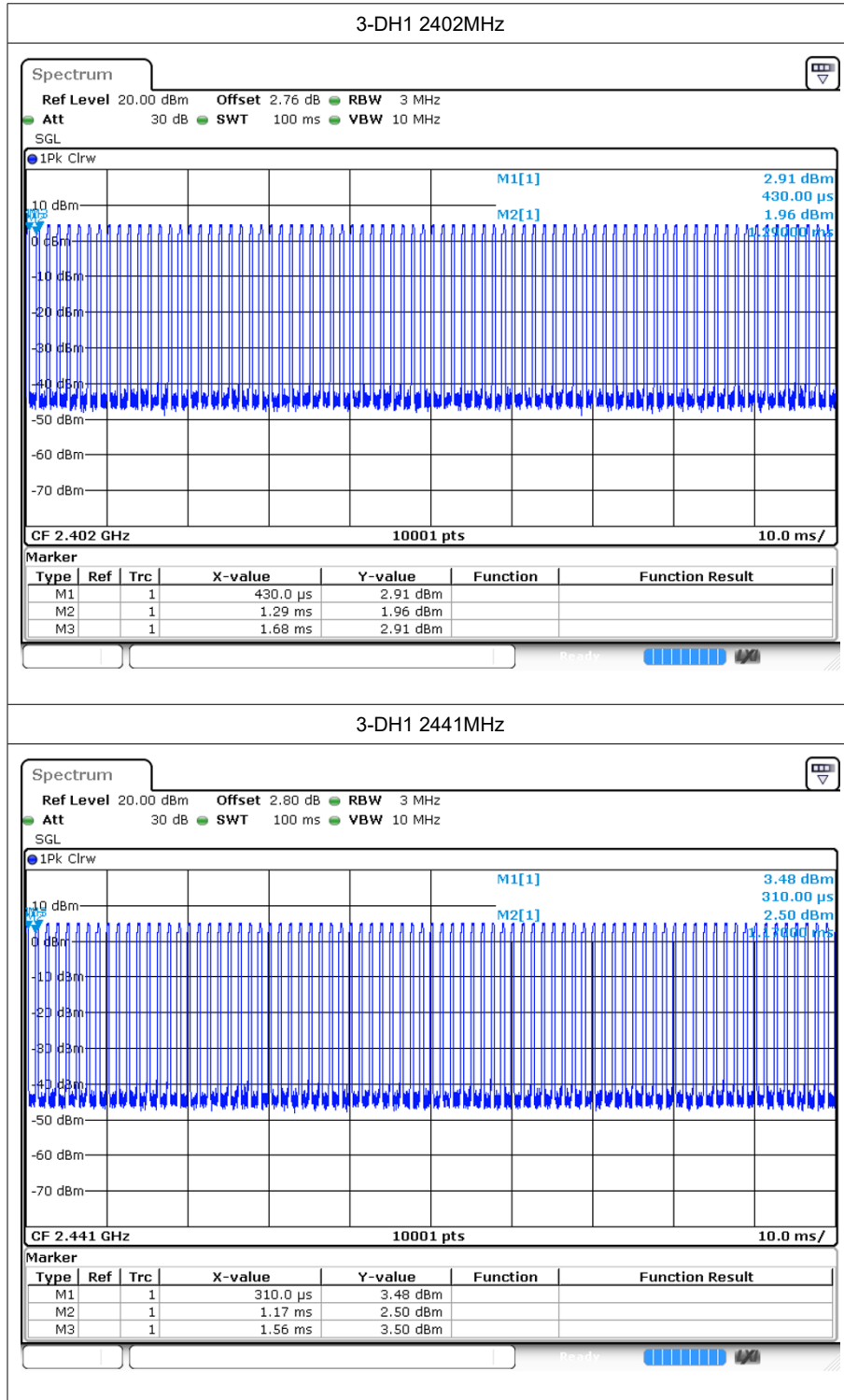
Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor	1/T (kHz)
1-DH1	2402	31.21	5.06	2.63
1-DH1	2441	31.89	4.96	2.56
1-DH1	2480	31.21	5.06	2.63
2-DH1	2402	32	4.95	2.56
2-DH1	2441	32.27	4.91	2.56
2-DH1	2480	32	4.95	2.56
3-DH1	2402	32	4.95	2.56
3-DH1	2441	32.01	4.95	2.56
3-DH1	2480	32	4.95	2.56

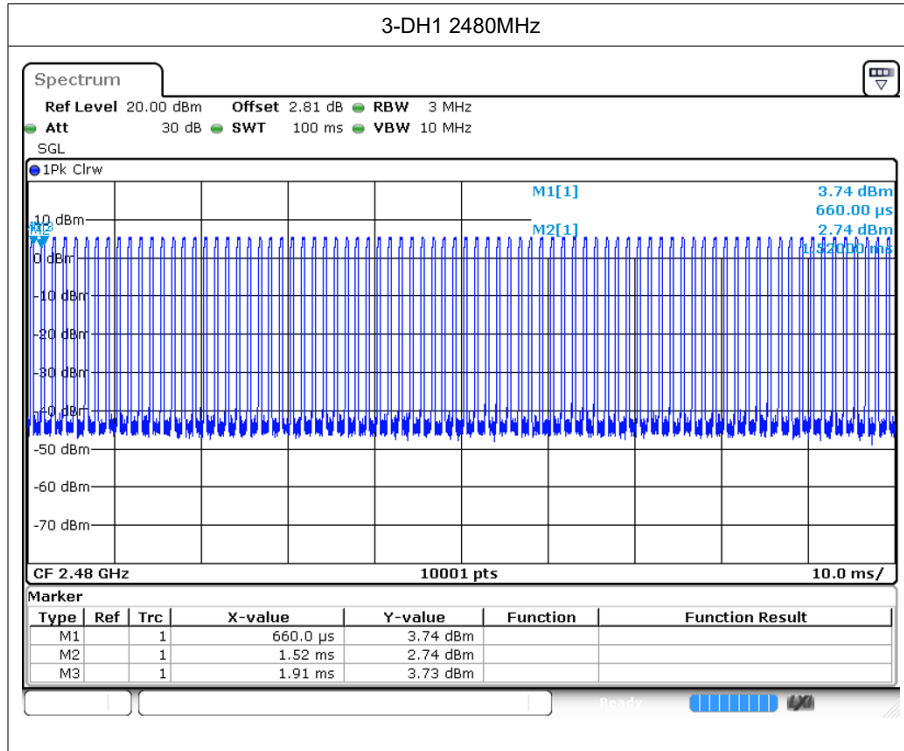
1.2 Test Graphs











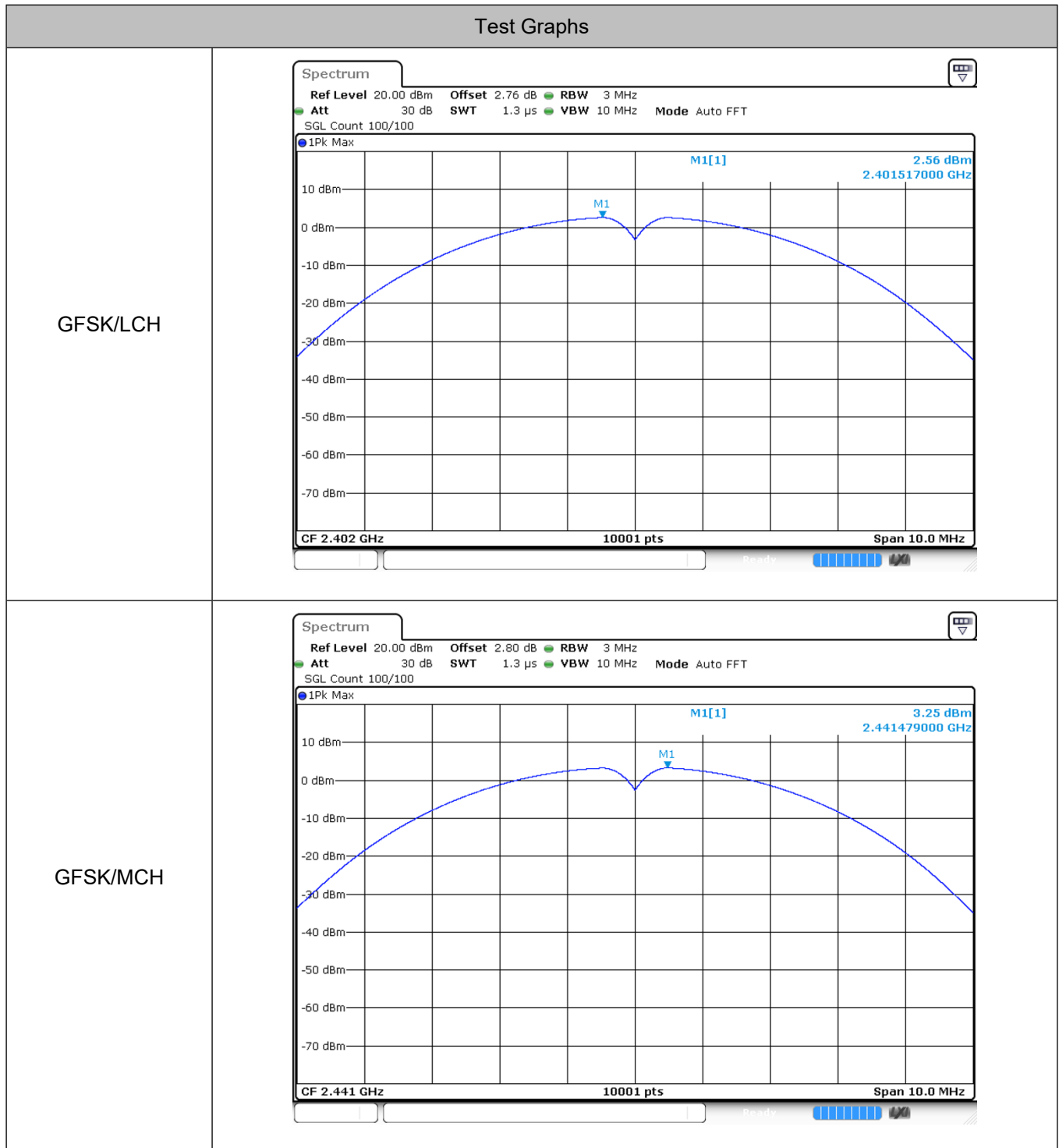


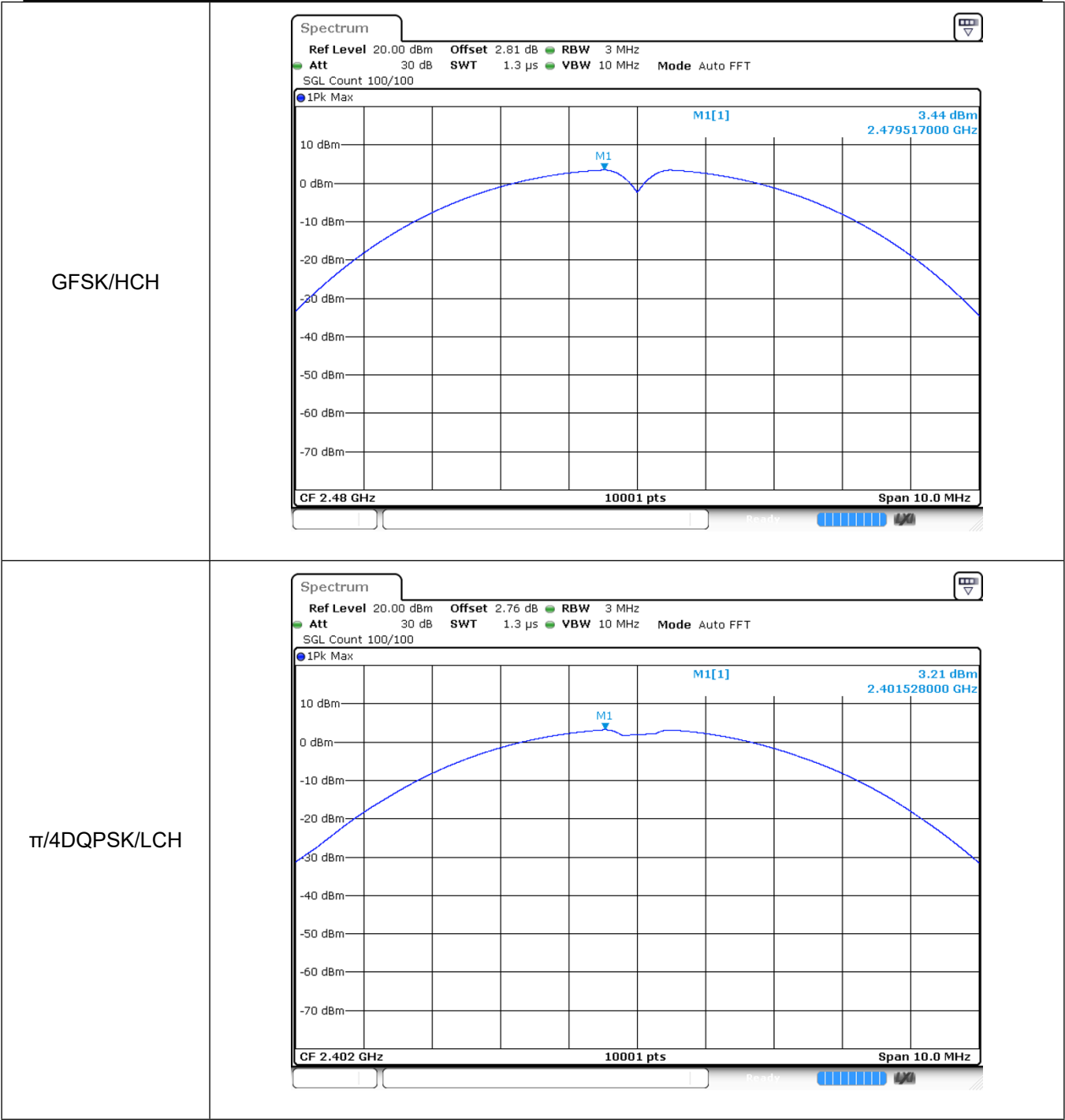
2 Maximum Conducted Peak Output Power

2.1 Test Result

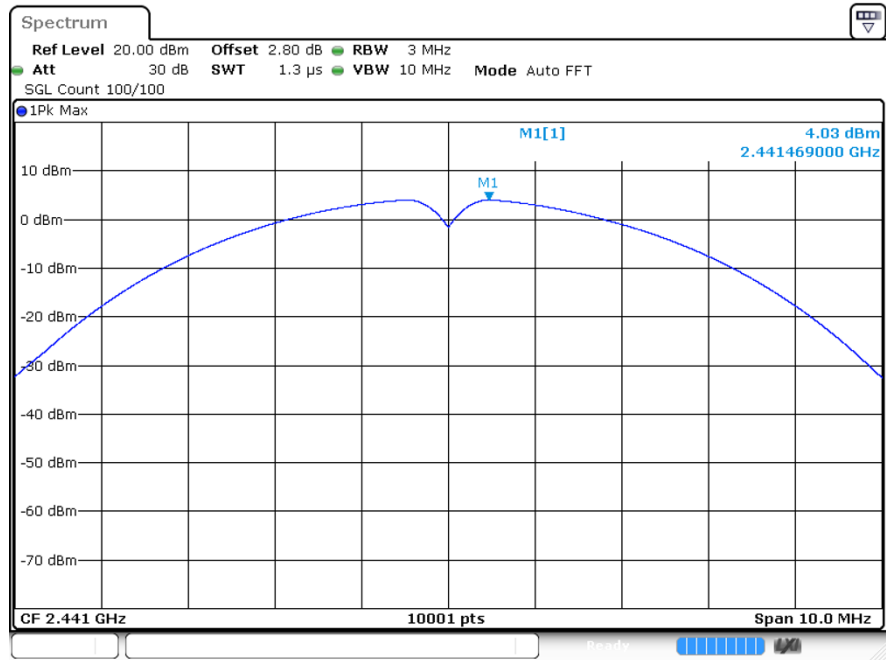
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2.56	21	Pass
	MCH	3.25	21	Pass
	HCH	3.44	21	Pass
$\pi/4$ DQPSK	LCH	3.21	21	Pass
	MCH	4.03	21	Pass
	HCH	4.69	21	Pass
8DPSK	LCH	4.1	21	Pass
	MCH	4.34	21	Pass
	HCH	5.08	21	Pass

2.2 Test Graphs

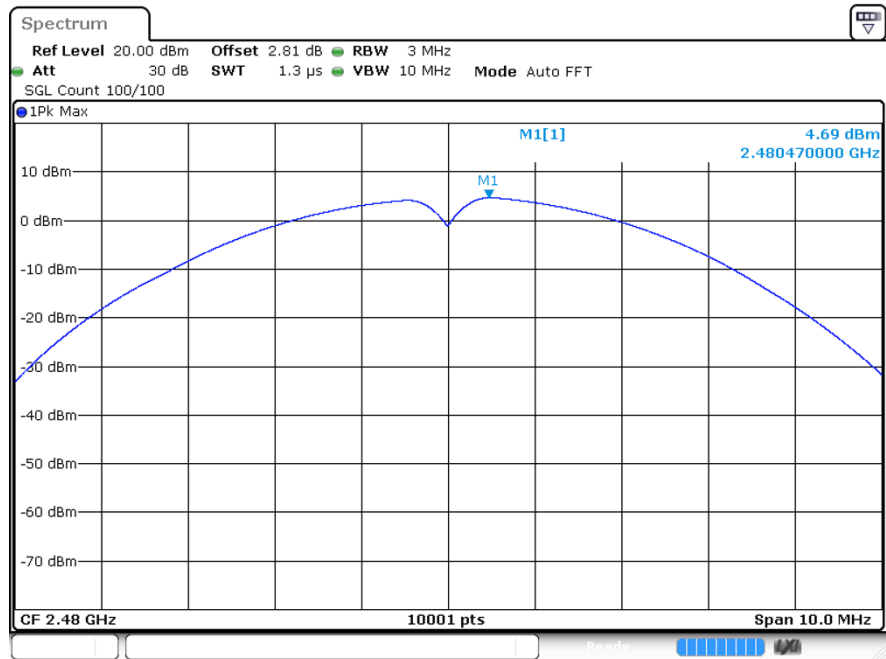


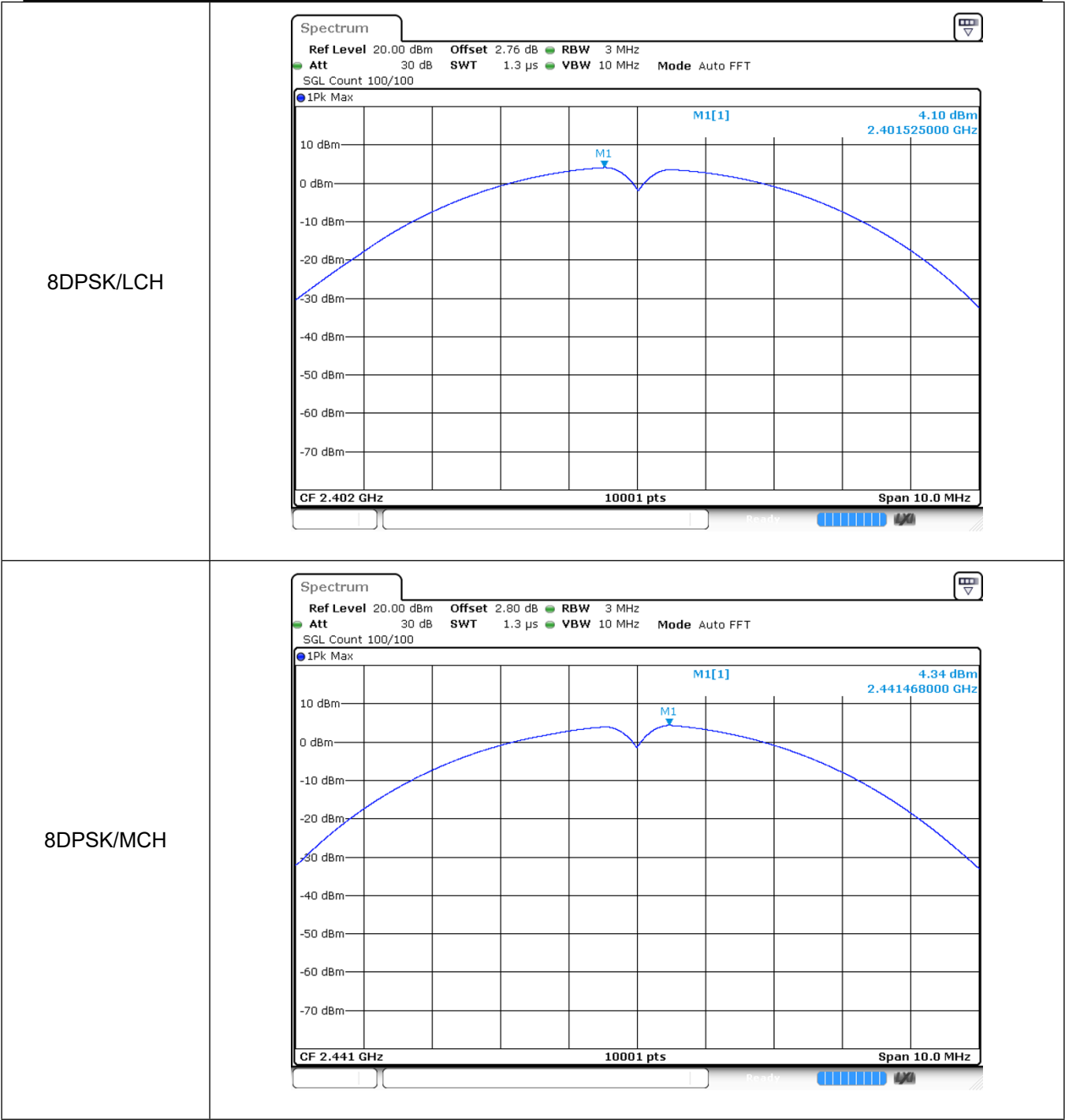


$\pi/4$ DQPSK/MCH



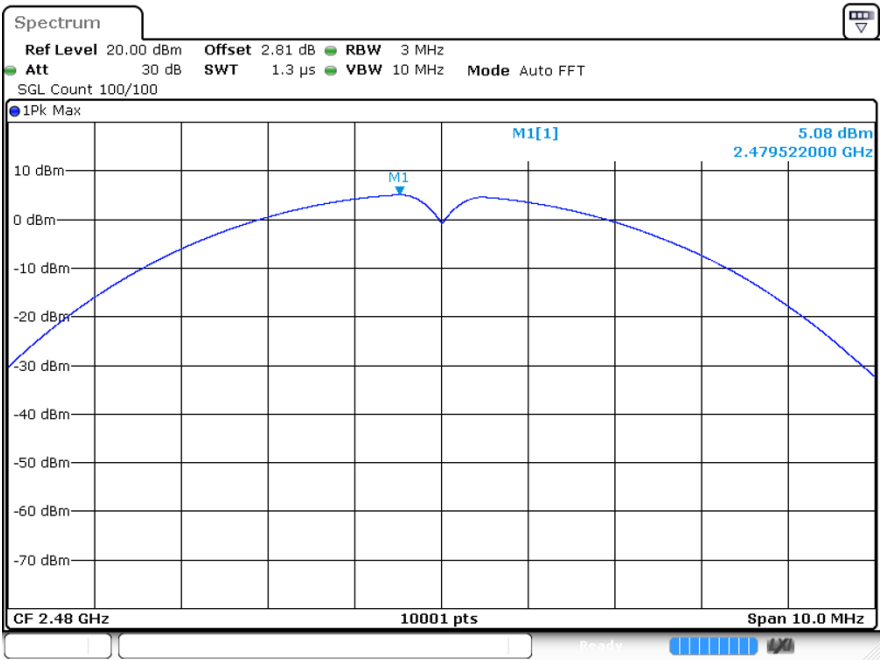
$\pi/4$ DQPSK/HCH







8DPSK/HCH

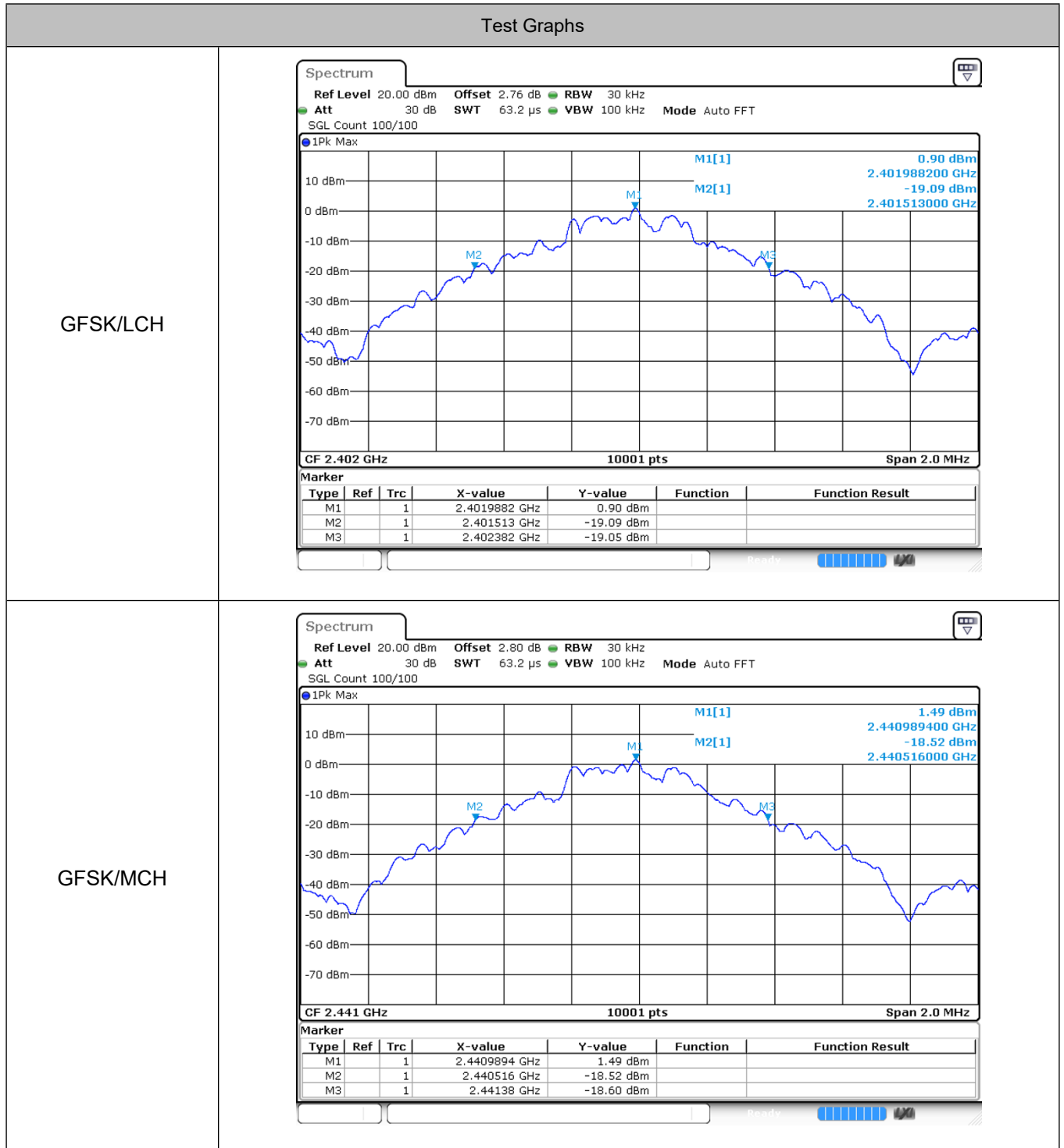


3 20dB Bandwidth

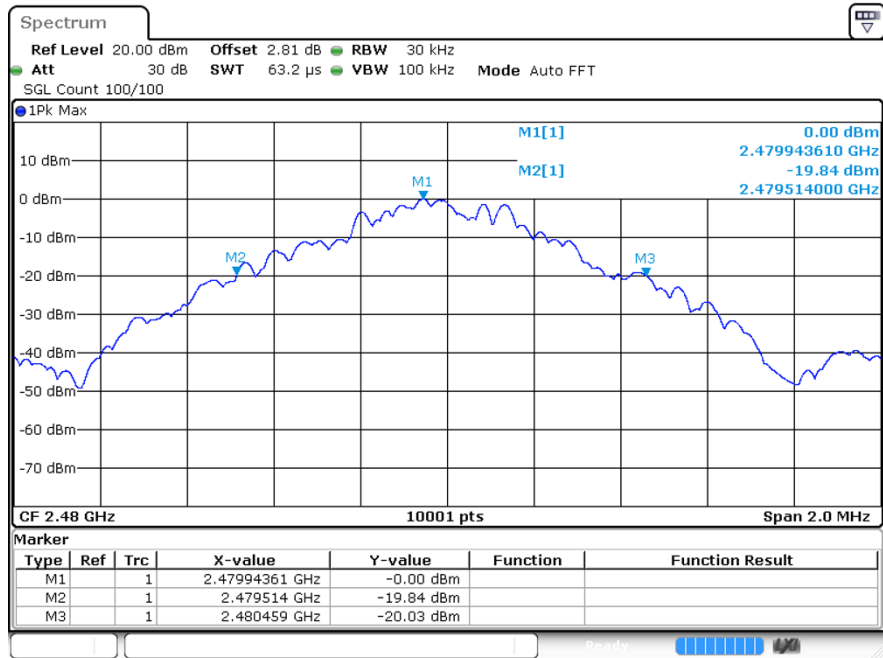
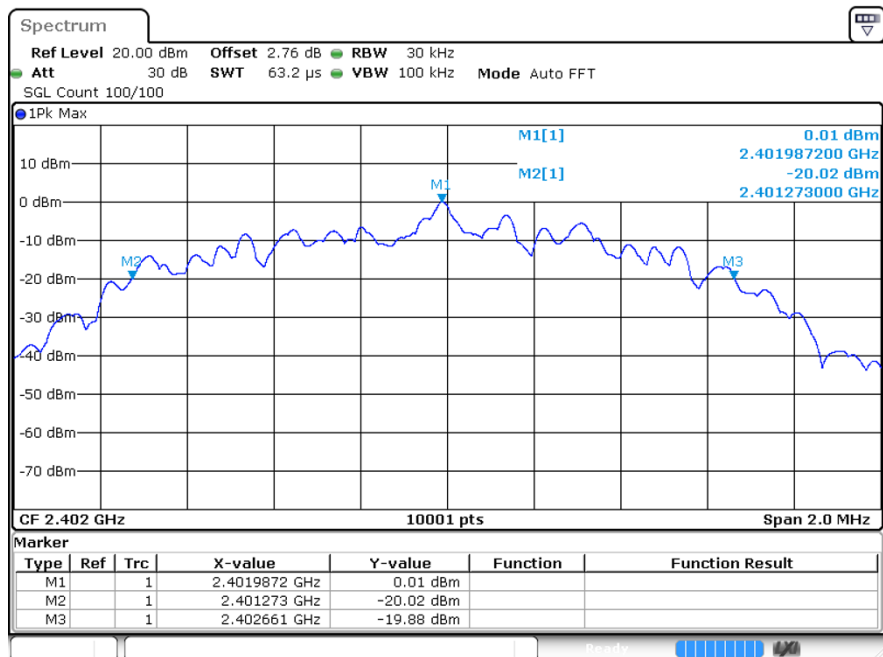
3.1 Test Result

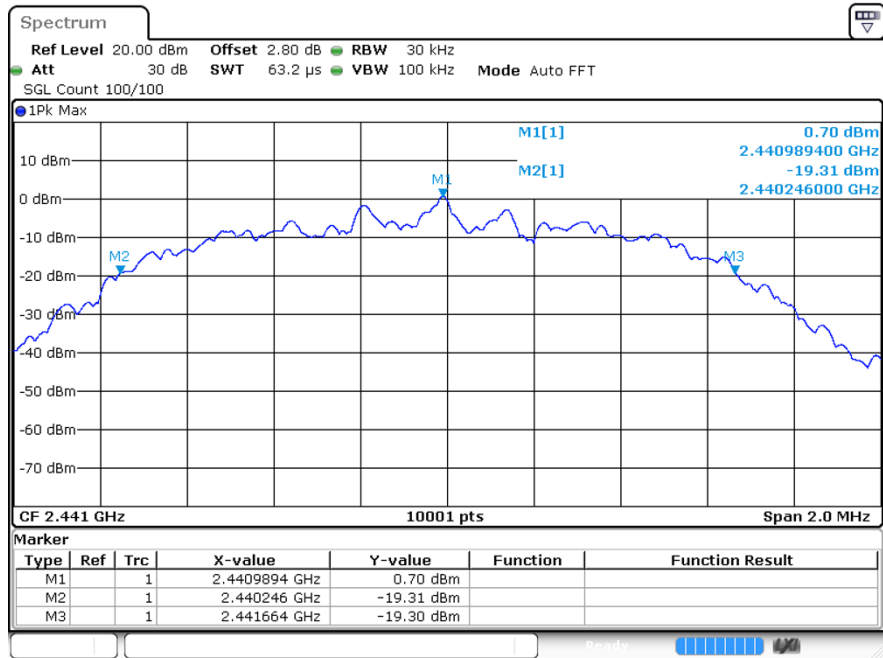
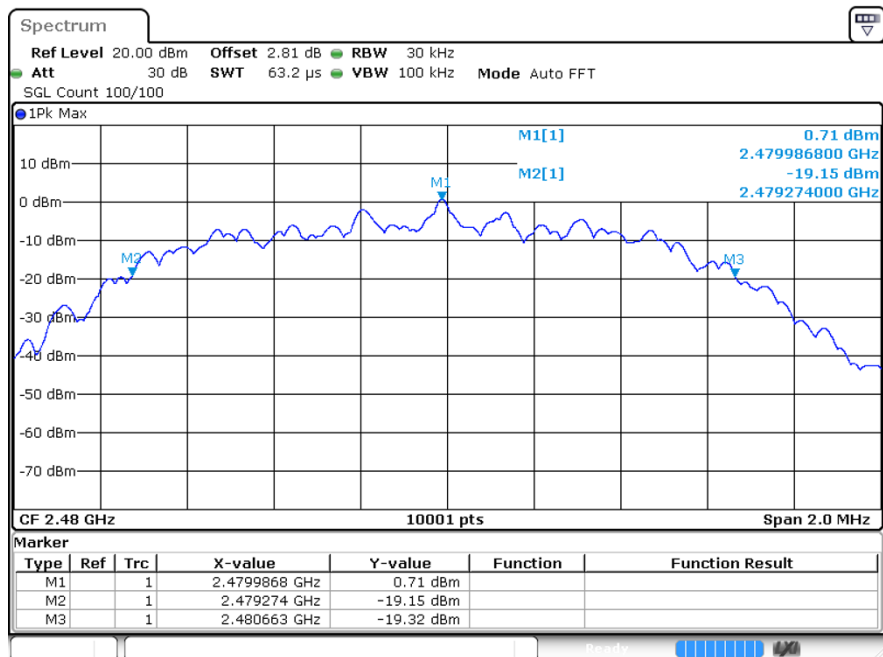
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.869	Not Specified	Pass
	MCH	0.864	Not Specified	Pass
	HCH	0.945	Not Specified	Pass
$\pi/4$ DQPSK	LCH	1.388	Not Specified	Pass
	MCH	1.418	Not Specified	Pass
	HCH	1.389	Not Specified	Pass
8DPSK	LCH	1.436	Not Specified	Pass
	MCH	1.439	Not Specified	Pass
	HCH	1.402	Not Specified	Pass

3.2 Test Graphs



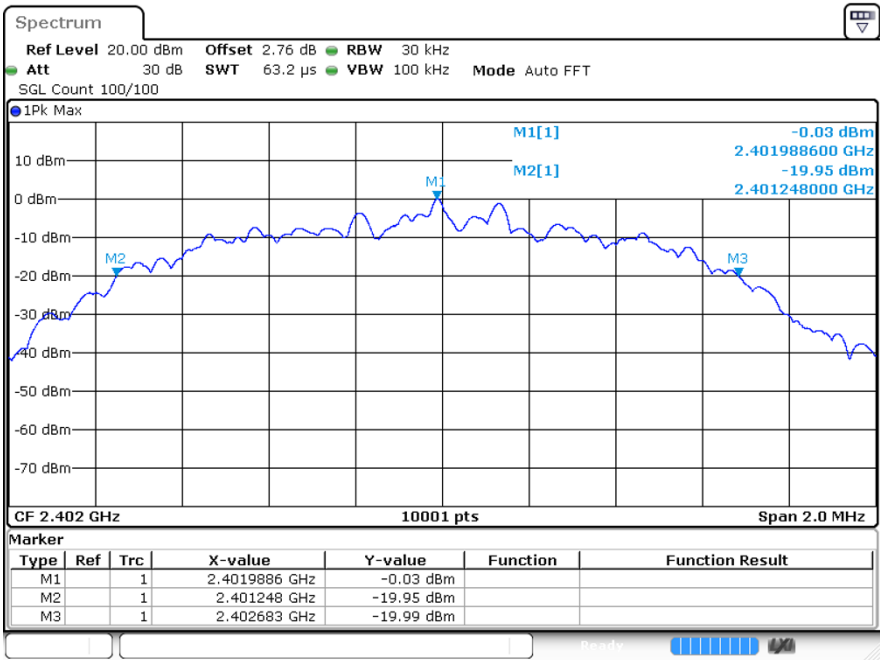
GFSK/HCH


 $\pi/4$ DQPSK/LCH


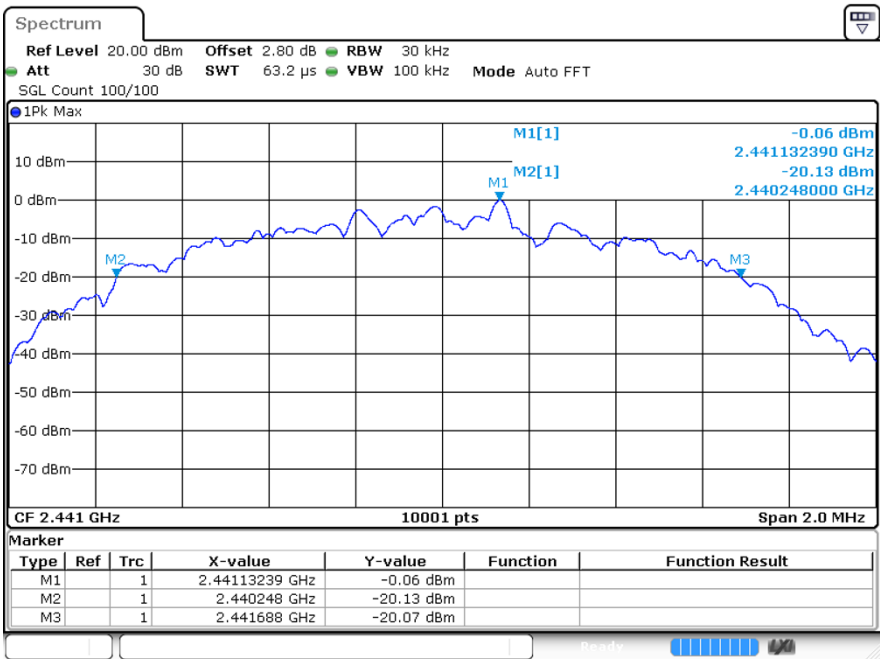
$\pi/4$ DQPSK/MCH

 $\pi/4$ DQPSK/HCH




8DPSK/LCH

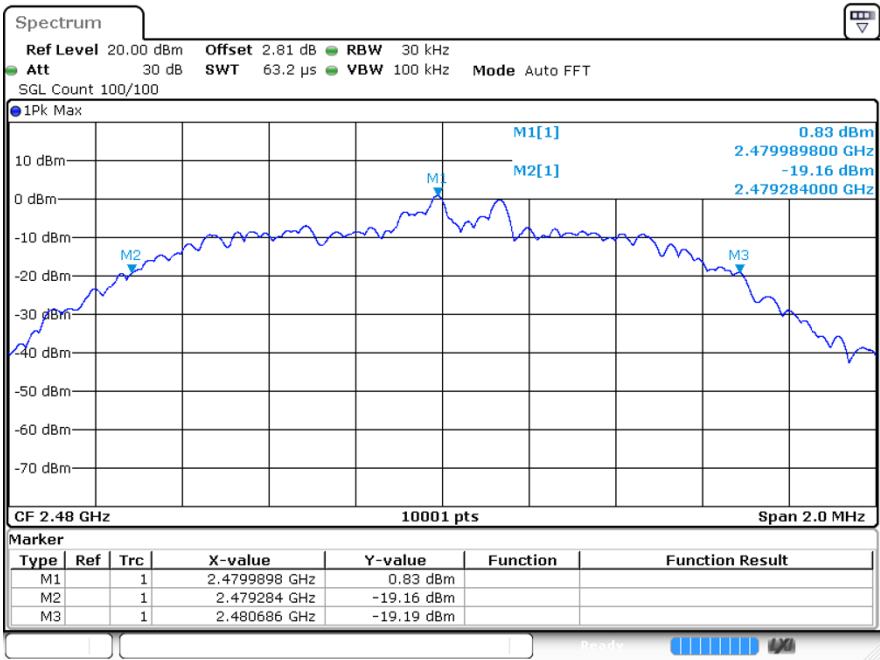


8DPSK/MCH





8DPSK/HCH





4 Carrier Frequency Separation

4.1 Test Result

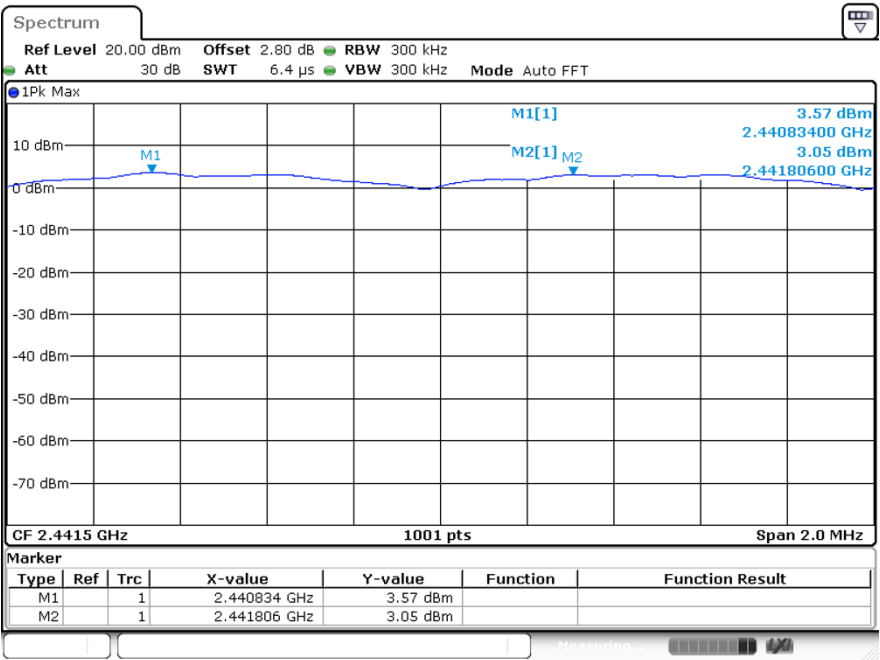
Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	MCH	1.001	0.576	Pass
$\pi/4$ DQPSK	MCH	1.012	0.945	Pass
8DPSK	MCH	0.972	0.959	Pass

4.2 Test Graphs





8DPSK/MCH



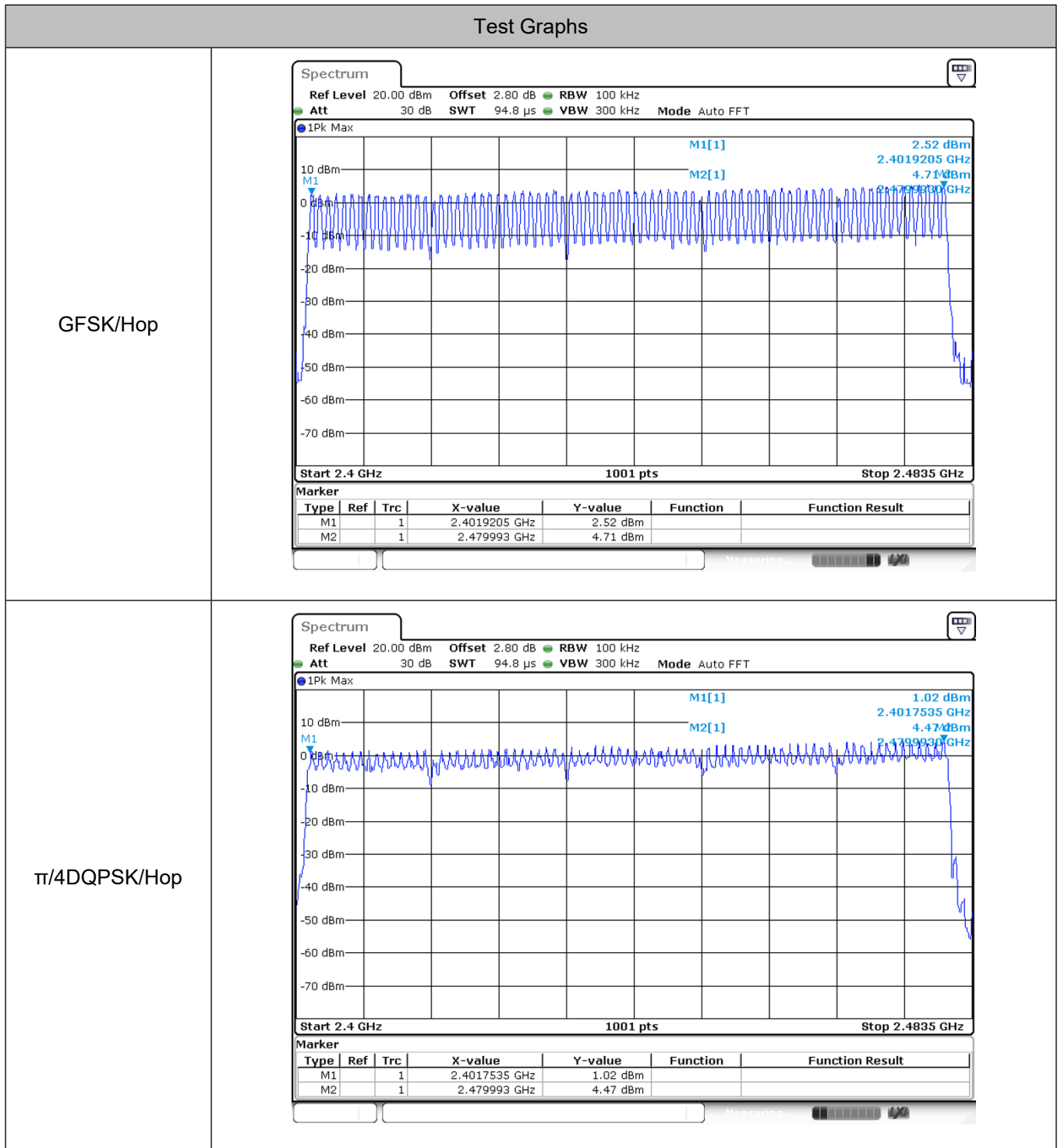


5 Hopping Channel Number

5.1 Test Result

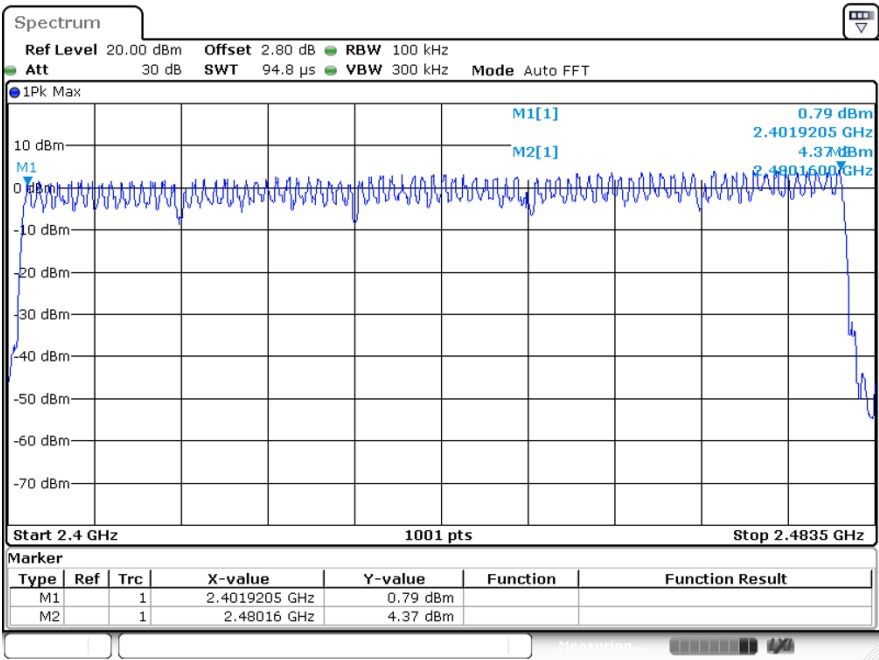
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	≥ 15	PASS
$\pi/4$ DQPSK	Hop	79	≥ 15	PASS
8DPSK	Hop	79	≥ 15	PASS

5.2 Test Graphs





8DPSK/Hop



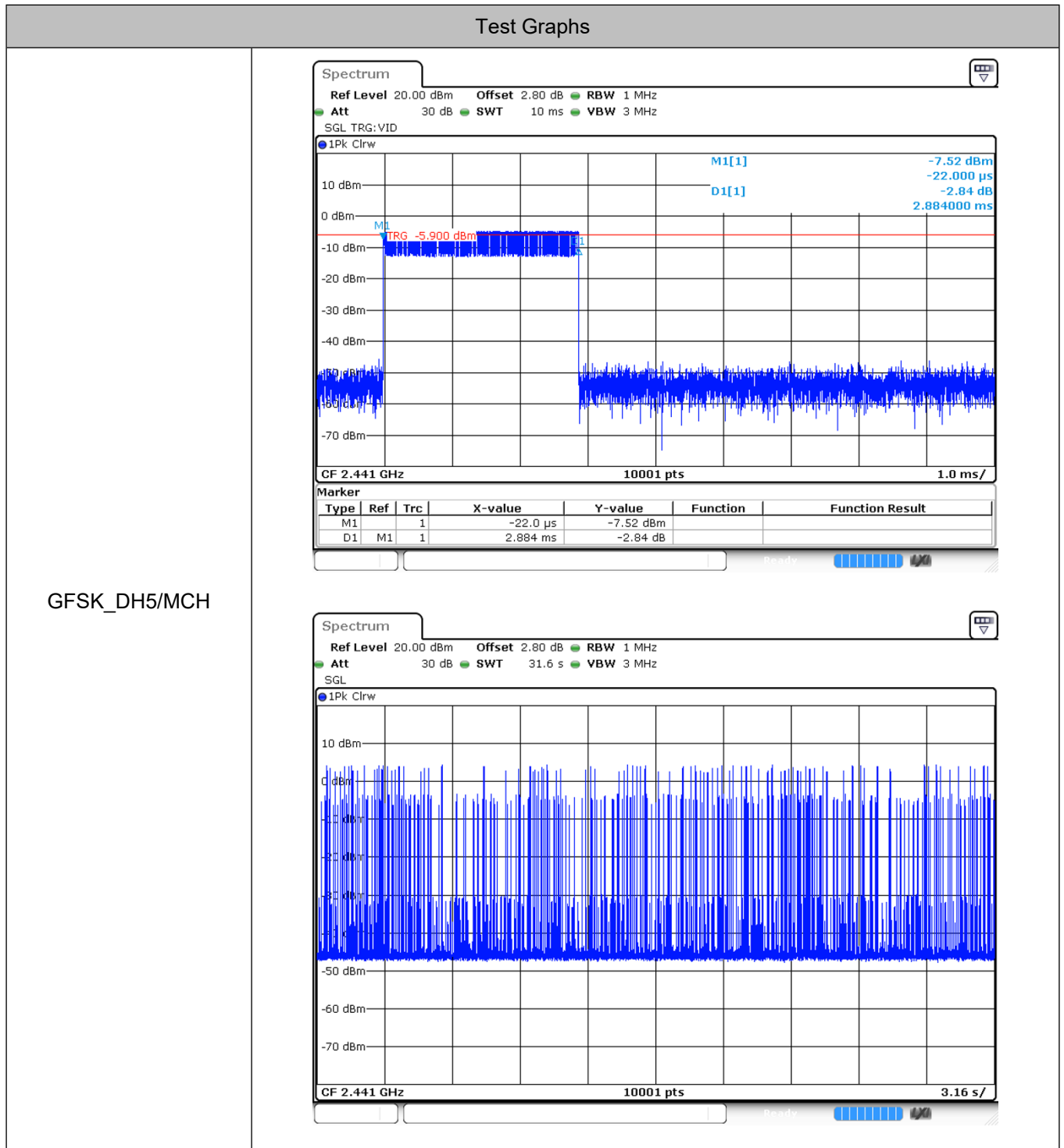


6 Dwell Time

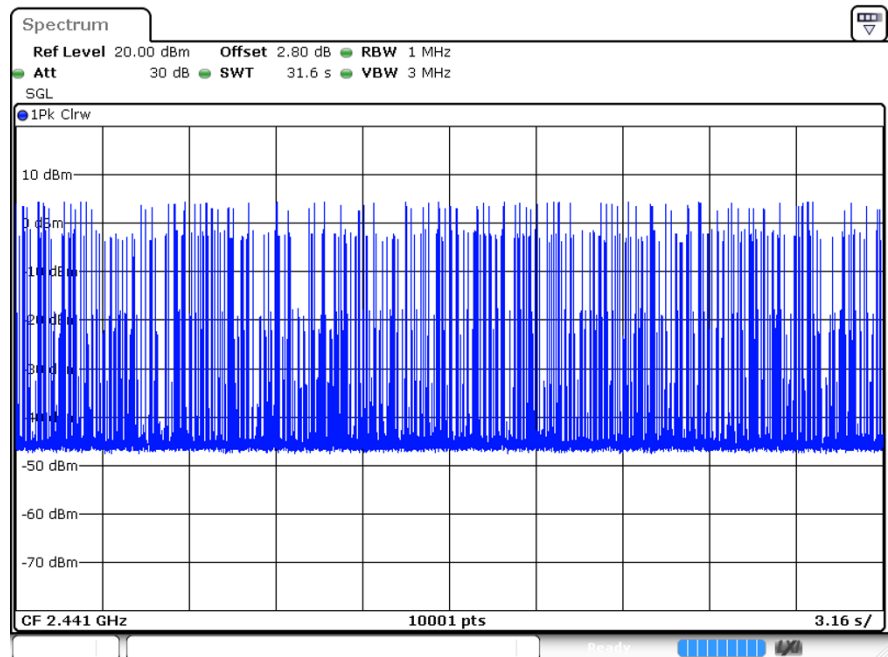
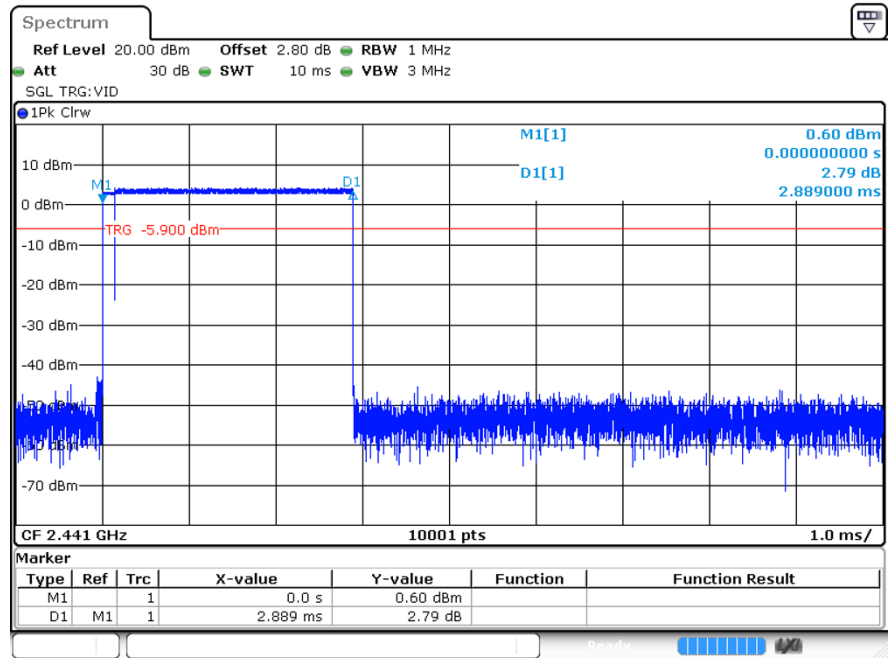
6.1 Test Result

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[ms]	Limit [s]	Verdict
GFSK	DH5	MCH	2.884	109	314.356	0.4	Pass
$\pi/4$ DQPSK	2DH5	MCH	2.889	103	297.567	0.4	Pass
8DPSK	3DH5	MCH	2.891	103	297.773	0.4	Pass

6.2 Test Graphs

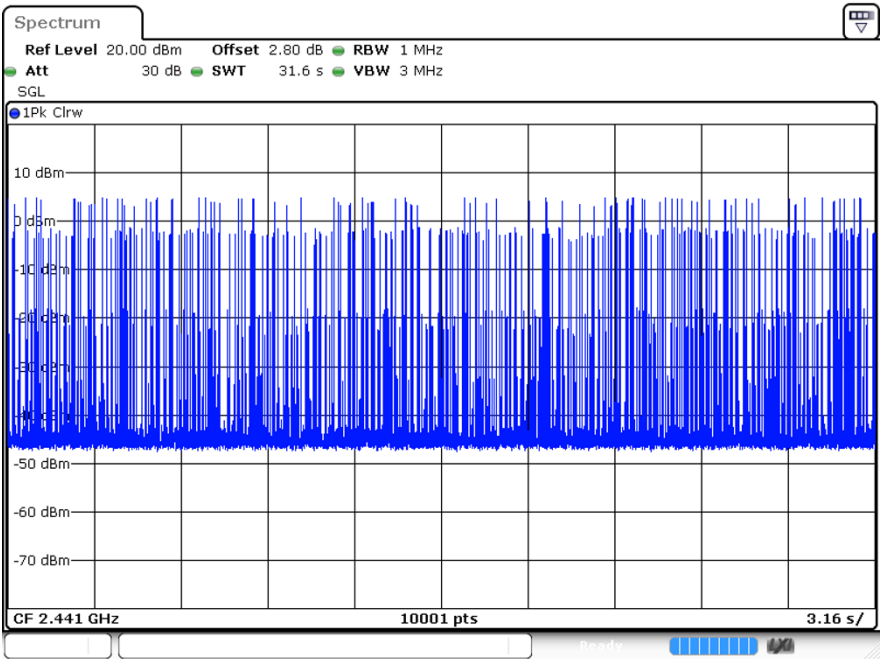
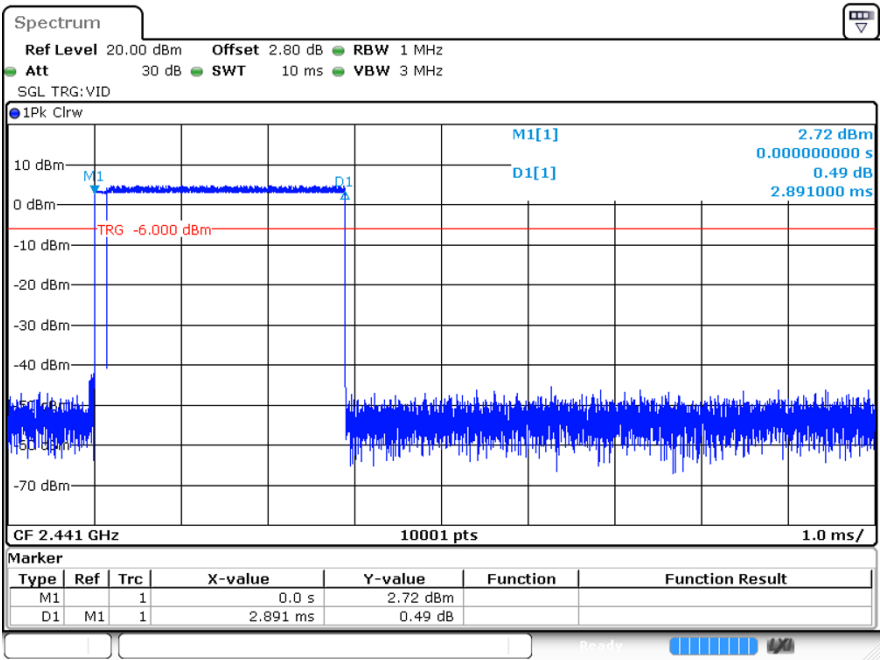


$\pi/4$ DQPSK
_2DH5/MCH





8DPSK_3DH5/MCH

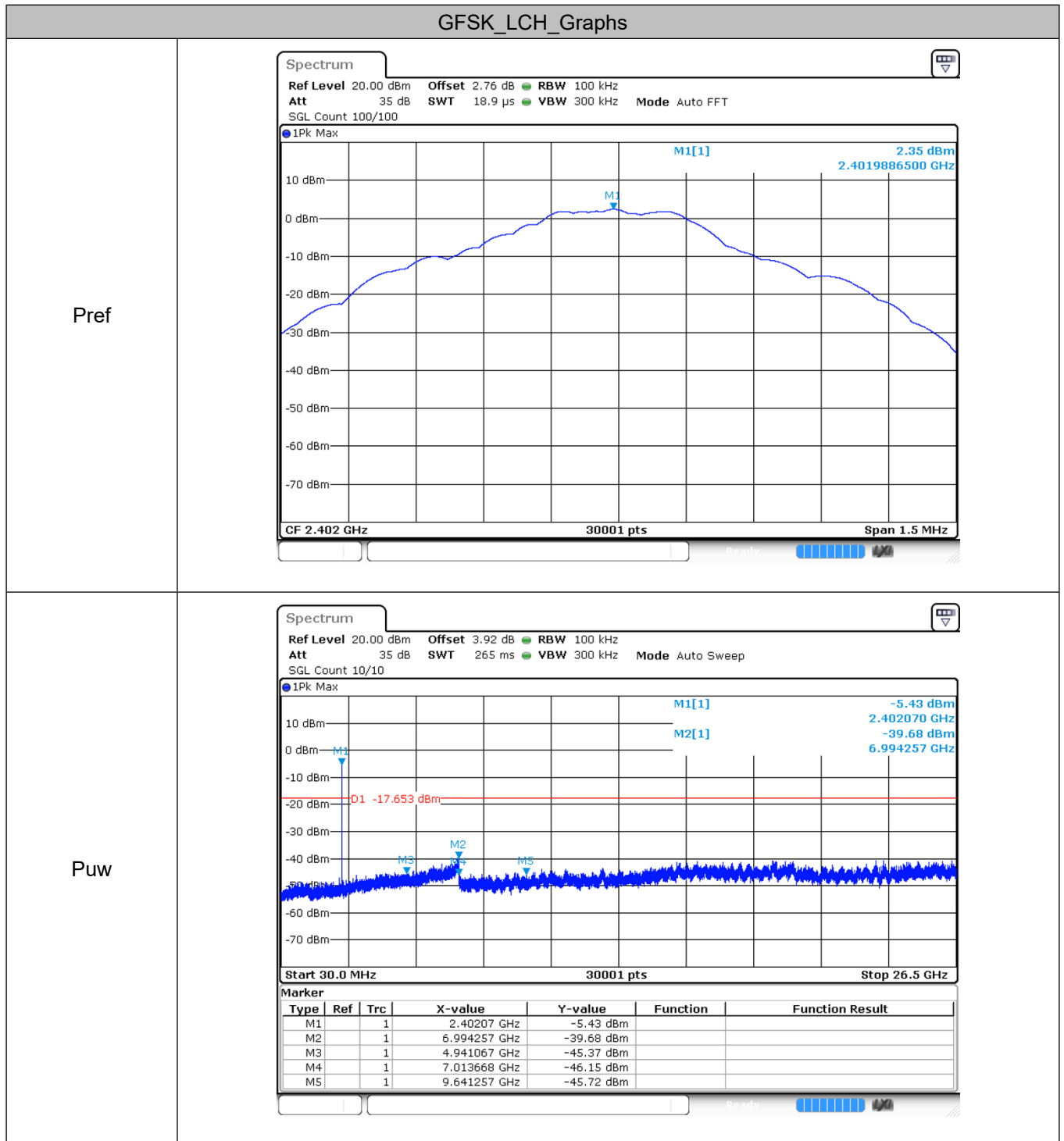


7 RF Conducted Spurious Emissions

7.1 Test Result

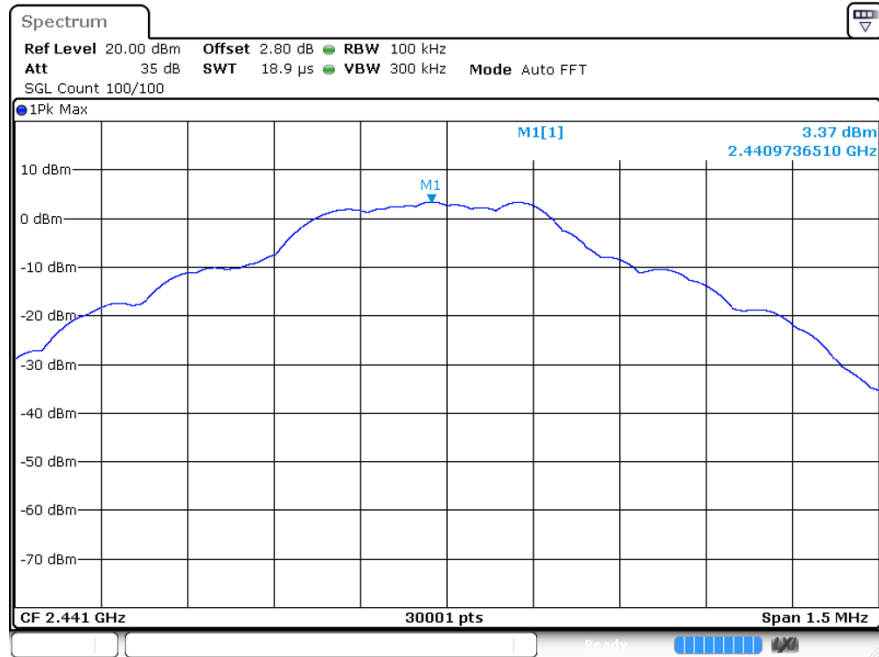
Mode	Channel	Max. Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	-42.02	-20	Pass
	MCH	-43.38	-20	Pass
	HCH	-43.72	-20	Pass
$\pi/4$ DQPSK	LCH	-40.42	-20	Pass
	MCH	-41.77	-20	Pass
	HCH	-42.08	-20	Pass
8DPSK	LCH	-41.02	-20	Pass
	MCH	-42.34	-20	Pass
	HCH	-42.52	-20	Pass

7.2 Test Graphs

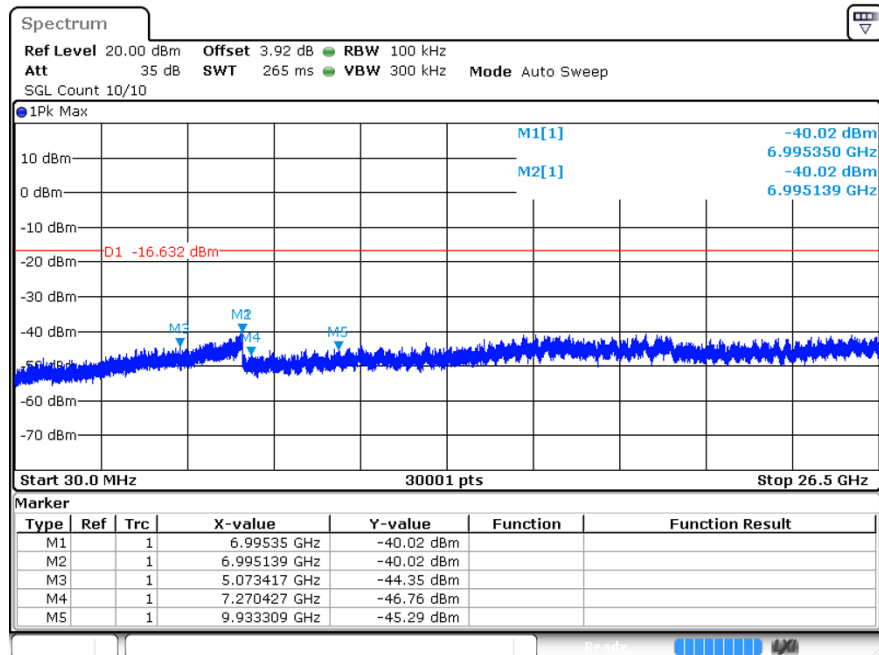


GFSK_MCH_Graphs

Pref

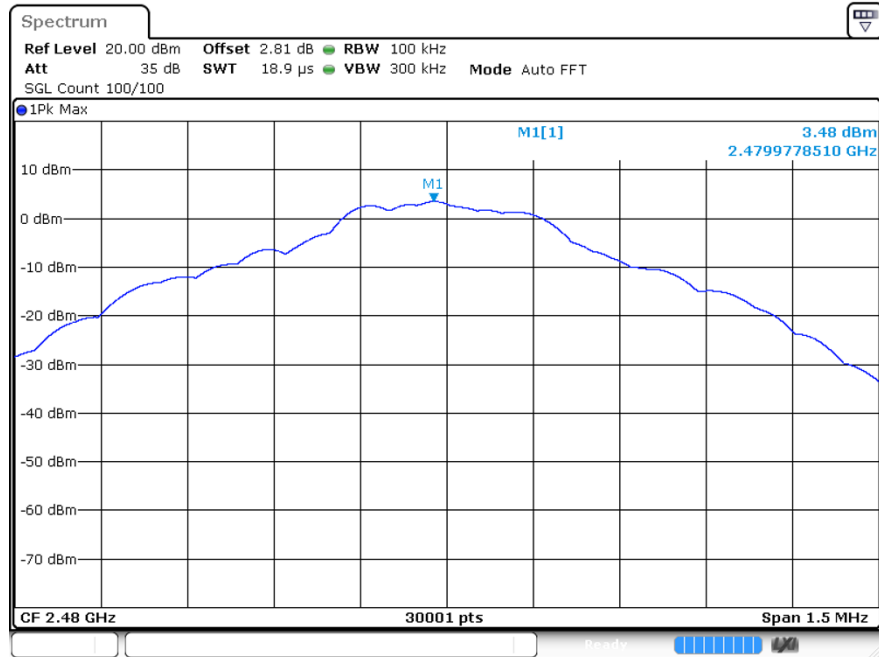


Puw

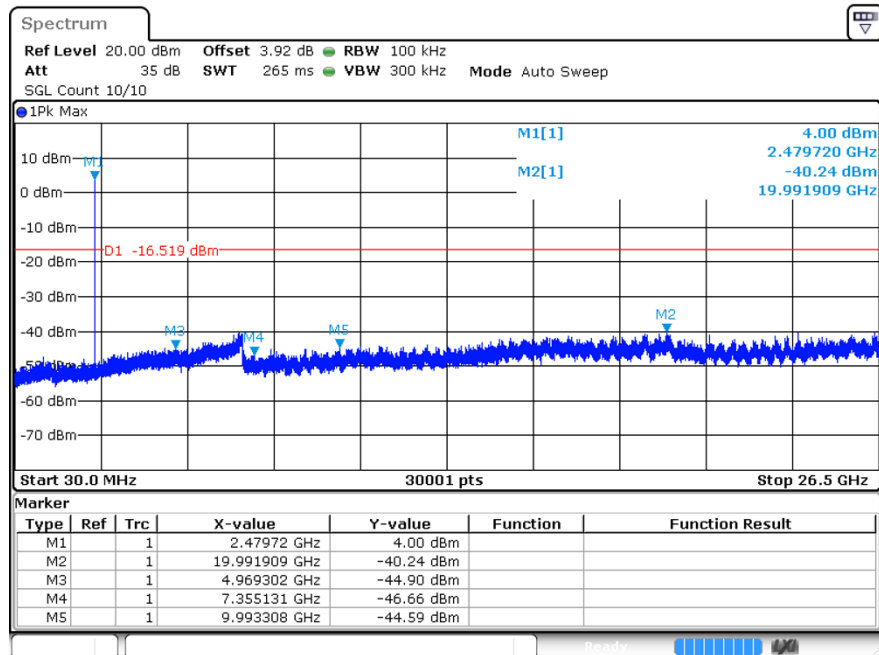


GFSK_HCH_Graphs

Pref

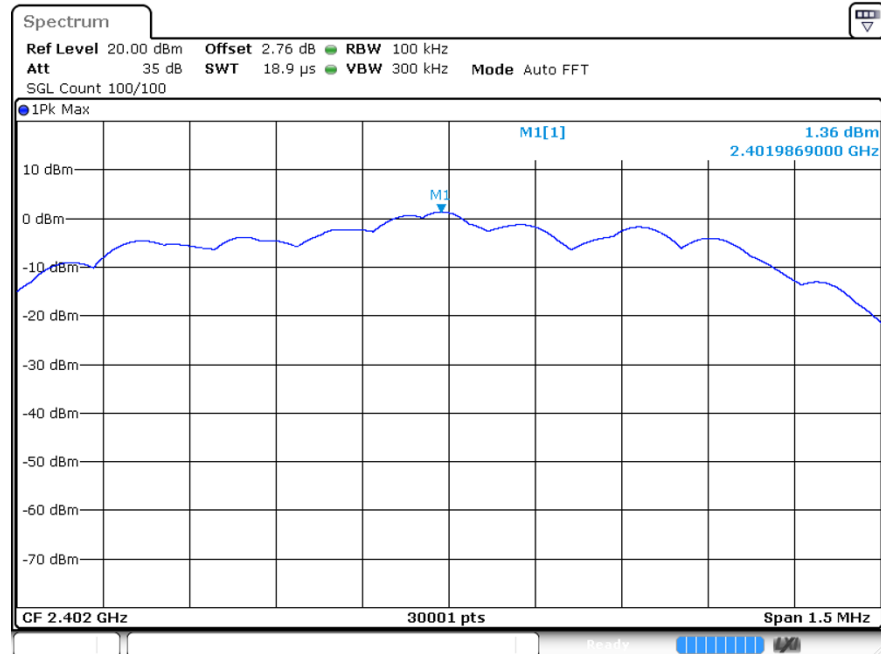


Puw

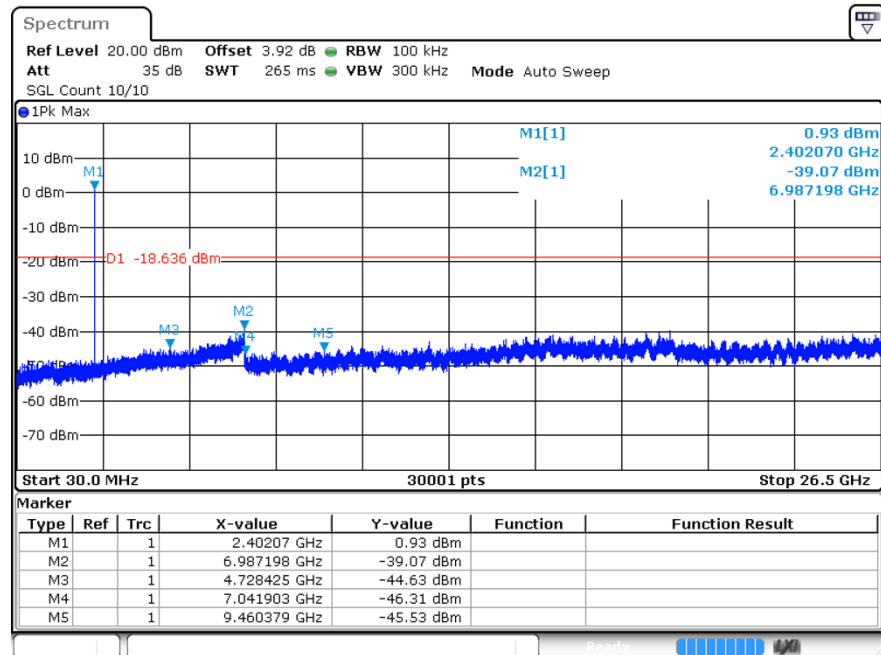


$\pi/4$ DQPSK_LCH_Graphs

Pref

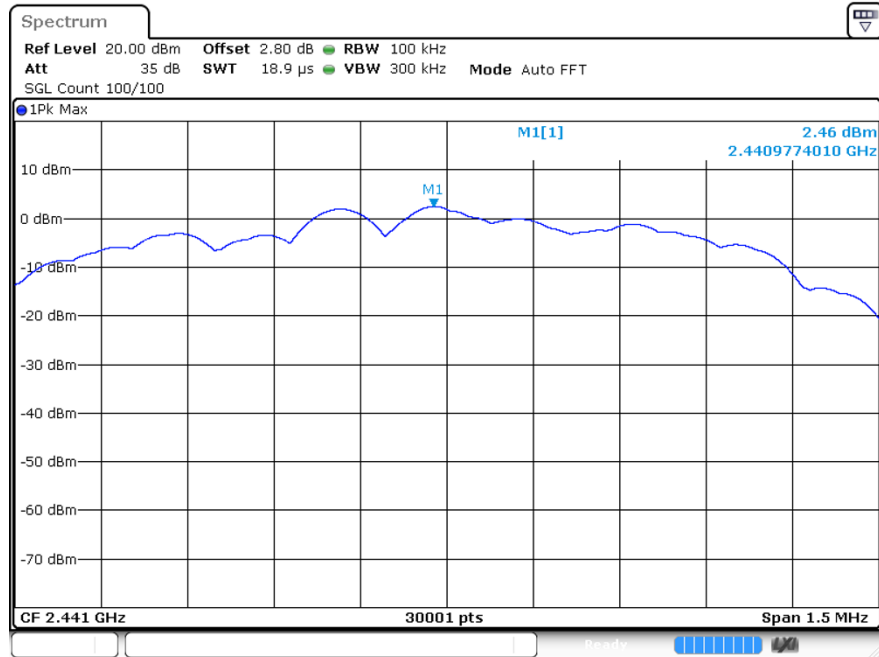


Puw

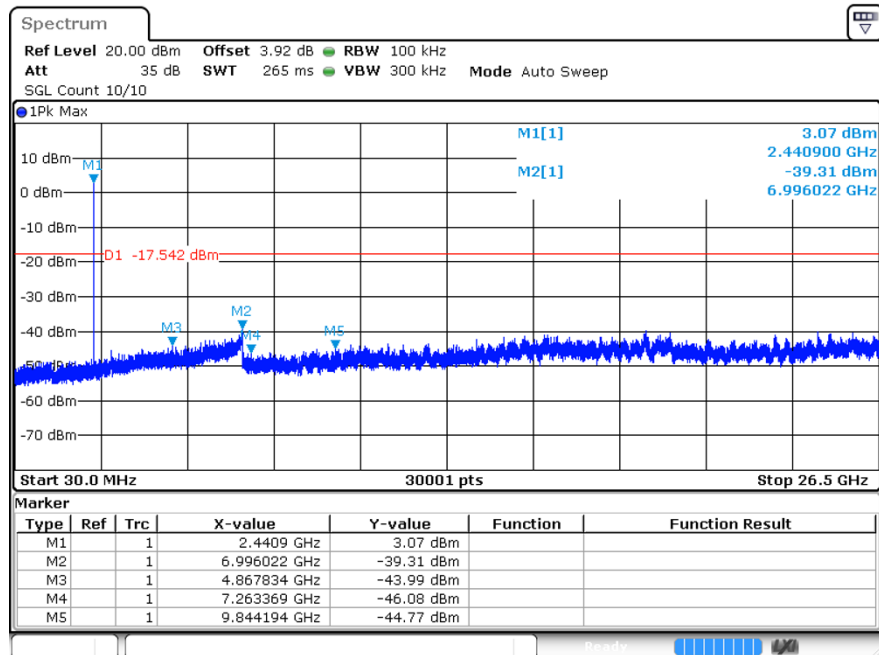


π/4DQPSK_MCH_Graphs

Pref

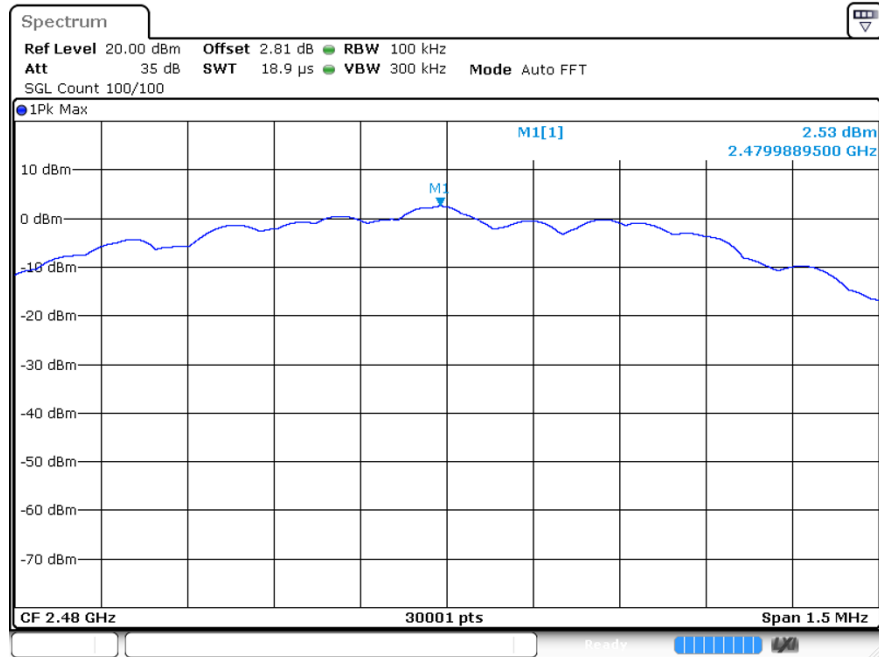


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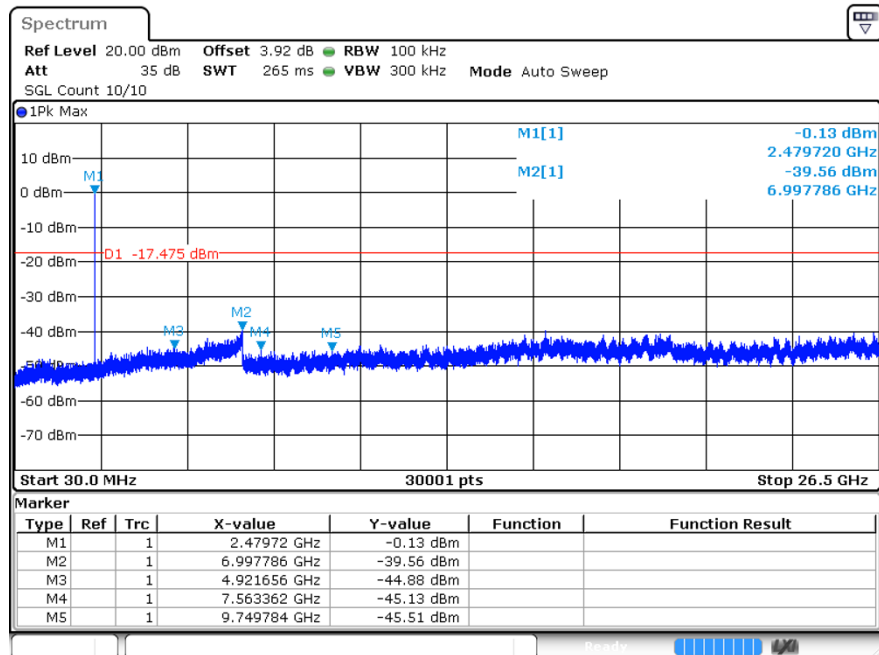


π /4DQPSK_HCH_Graphs

Pref

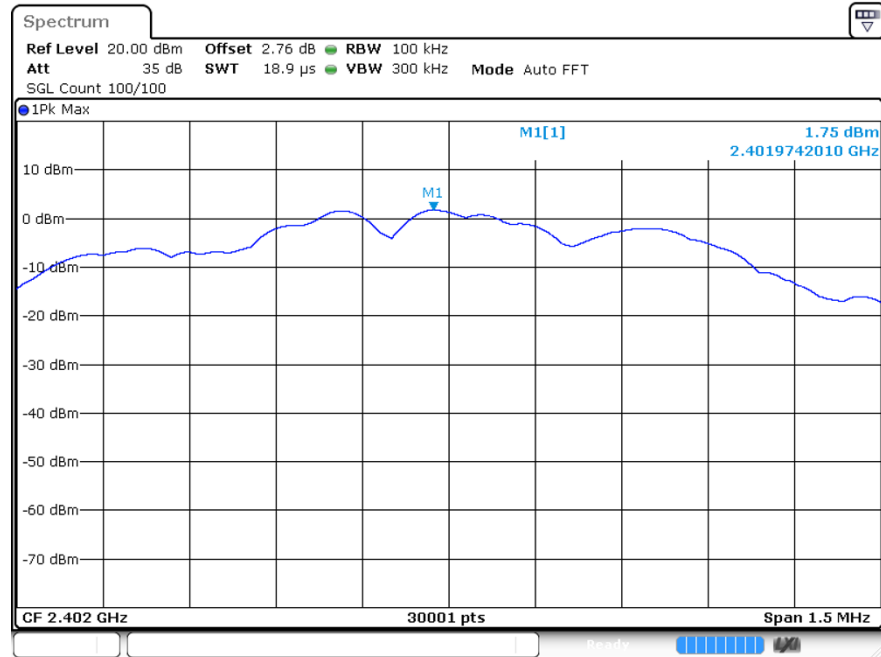


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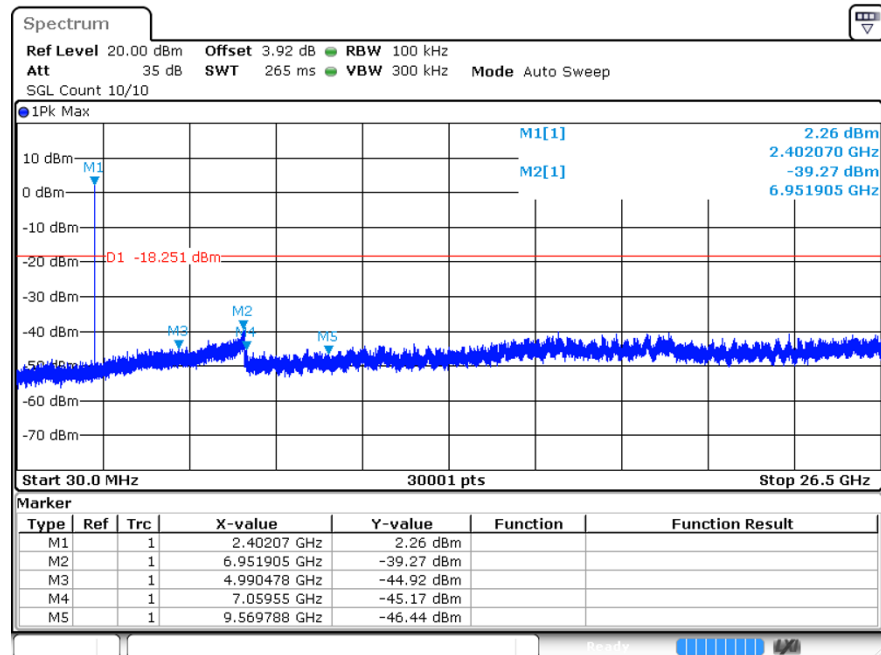


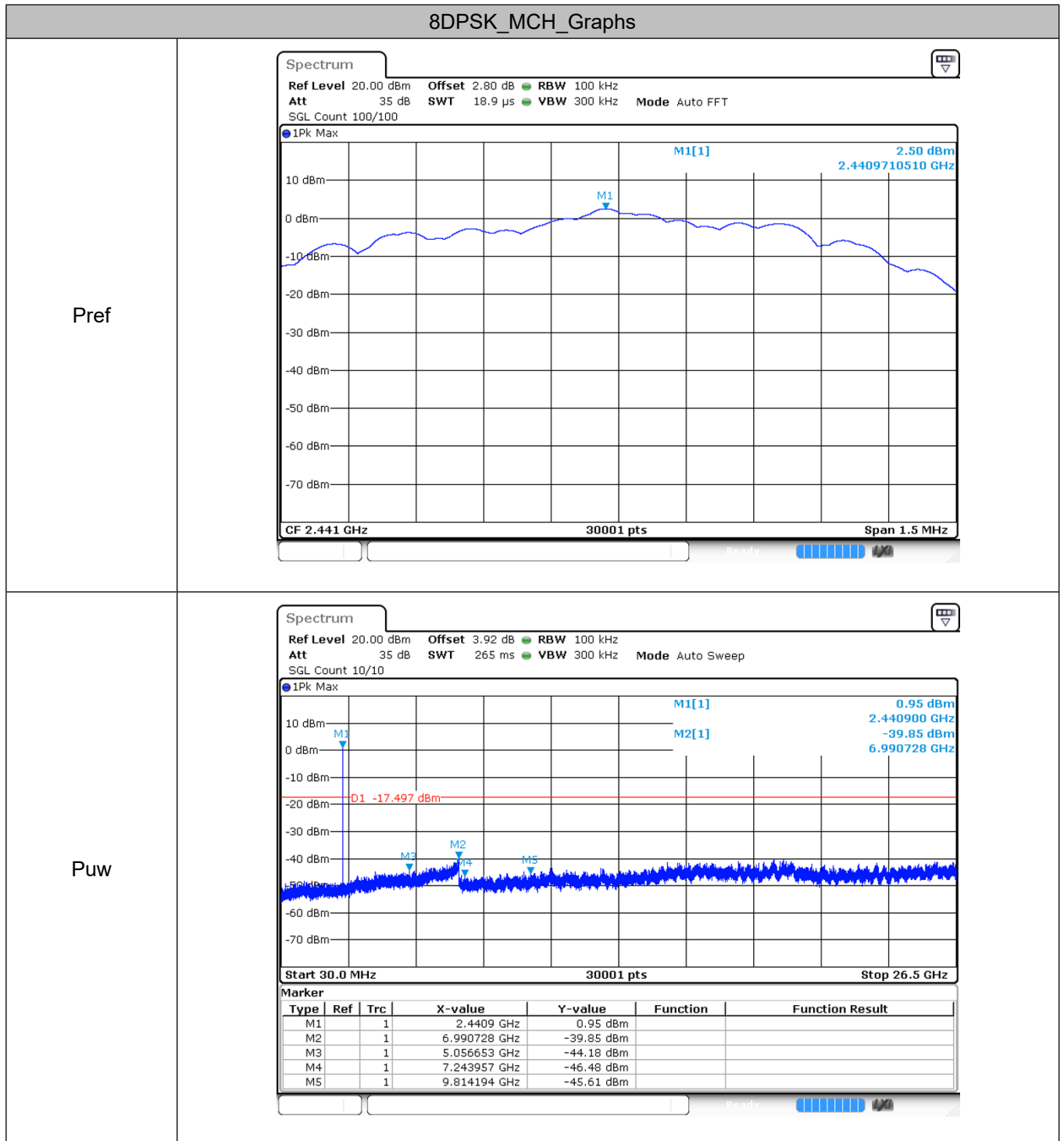
8DPSK_LCH_Graphs

Pref



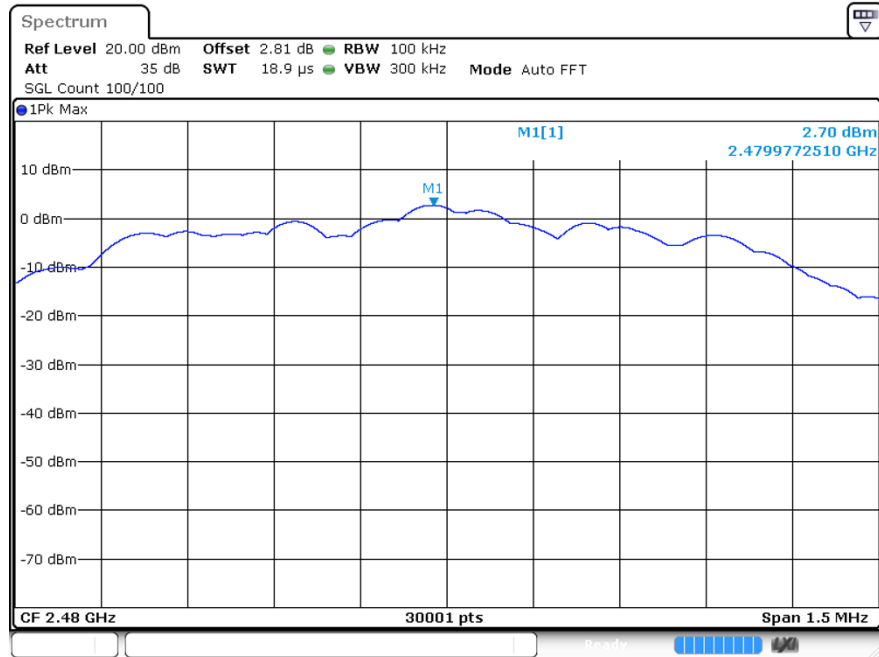
Puw



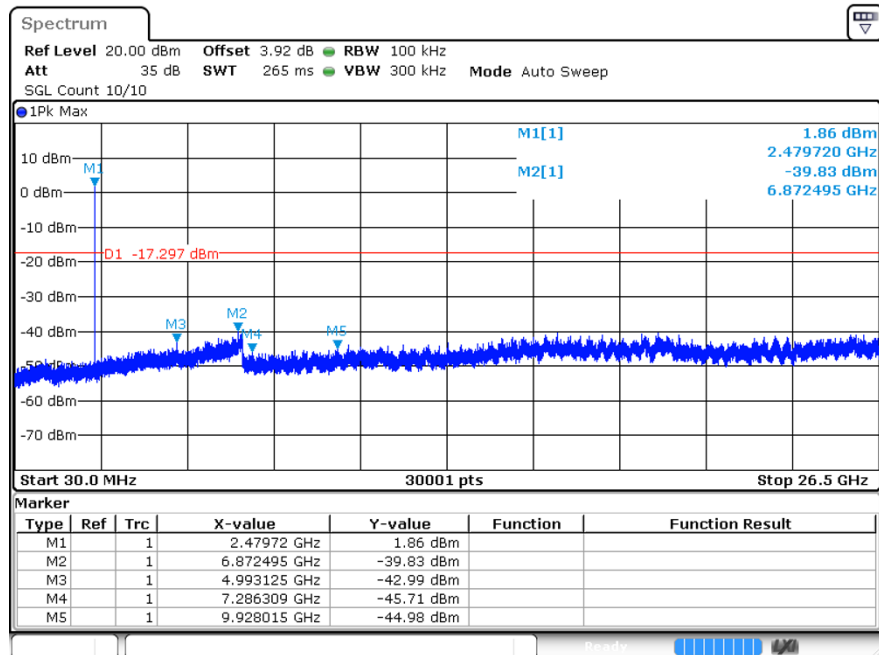


8DPSK_HCH_Graphs

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	-58.31	-20	Pass
			On	-55.9	-20	Pass
	HCH	2480	Off	-52.17	-20	Pass
			On	-54.26	-20	Pass
$\pi/4$ DQPSK	LCH	2402	Off	-54.63	-20	Pass
			On	-55.19	-20	Pass
	HCH	2480	Off	-51.43	-20	Pass
			On	-48.49	-20	Pass
8DPSK	LCH	2402	Off	-57.22	-20	Pass
			On	-54.93	-20	Pass
	HCH	2480	Off	-49.47	-20	Pass
			On	-53.68	-20	Pass

8.2 Test Graphs

