



Appendix A

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

Product Name: Mixer amplifier

Trade Mark: Mr DJ

Test Model: PMX9800

Environmental Conditions

Temperature:	25.5℃
Relative Humidity:	52.1%
ATM Pressure:	101Kpa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung



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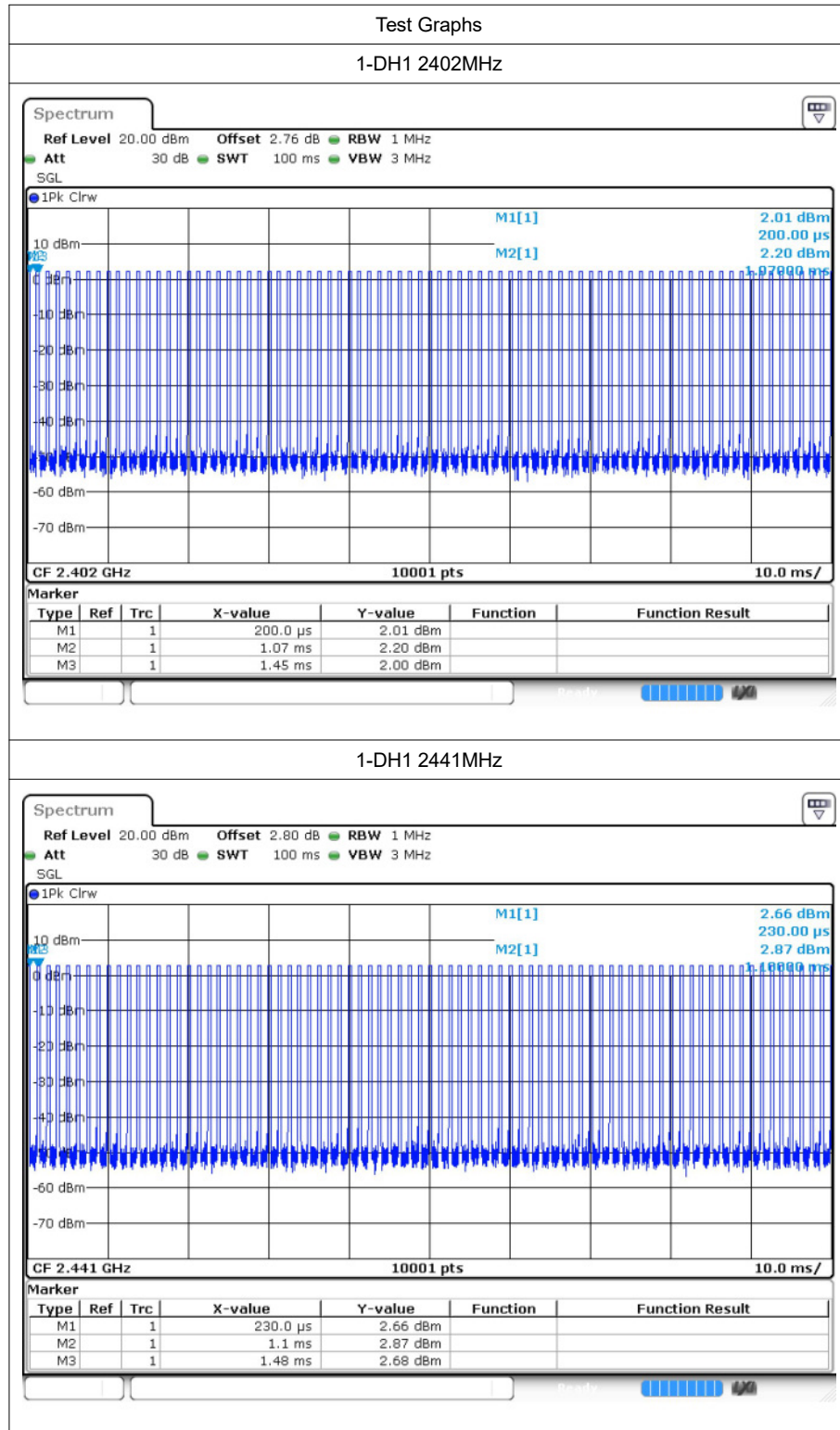
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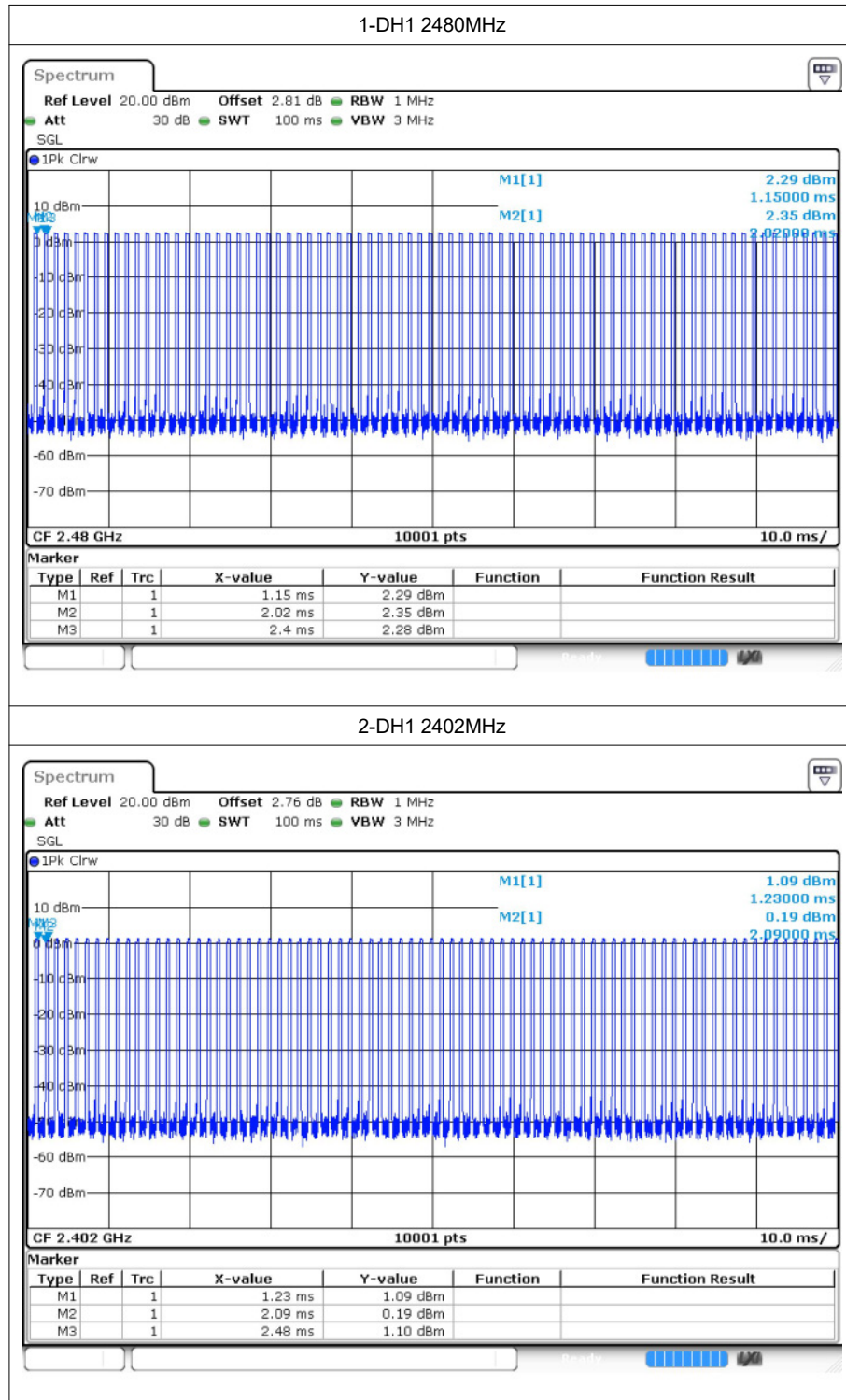
1 Duty Cycle

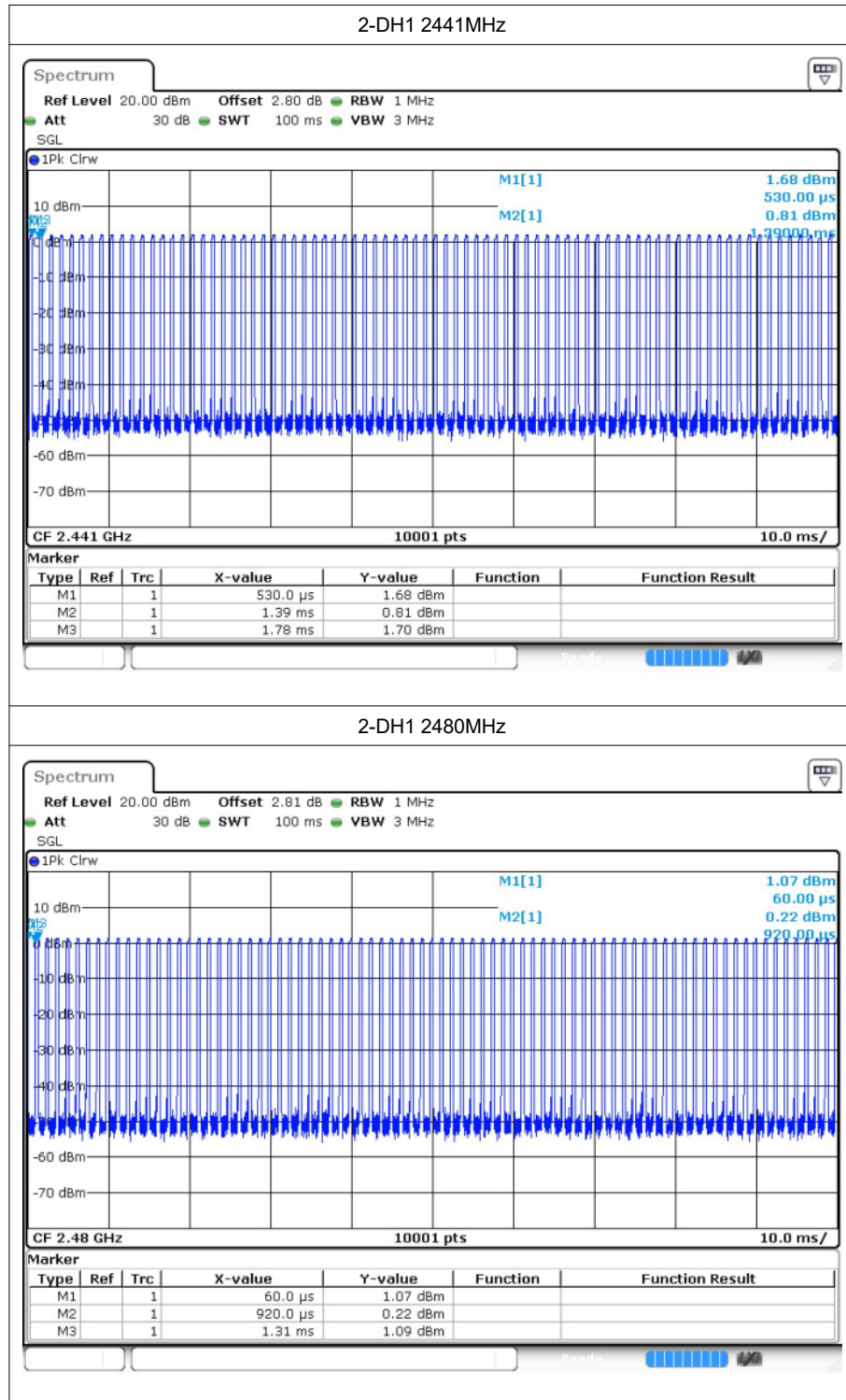
1.1 Test Result

Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor	1/T (kHz)
1-DH1	2402	31.21	5.06	2.63
1-DH1	2441	31.21	5.06	2.63
1-DH1	2480	31.2	5.06	2.63
2-DH1	2402	32	4.95	2.56
2-DH1	2441	32	4.95	2.56
2-DH1	2480	32.01	4.95	2.56

1.2 Test Graphs





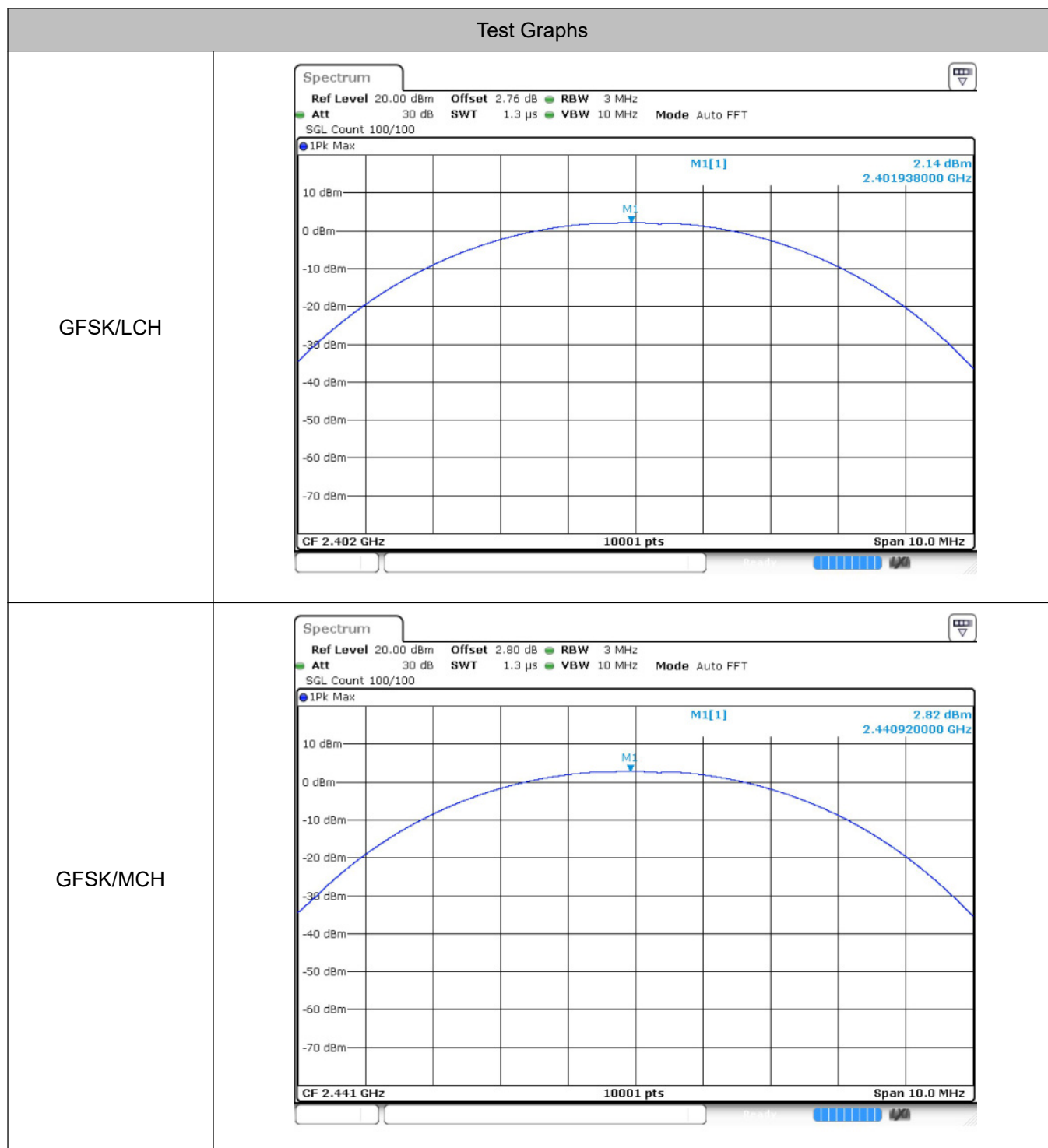


2 Maximum Conducted Peak Output Power

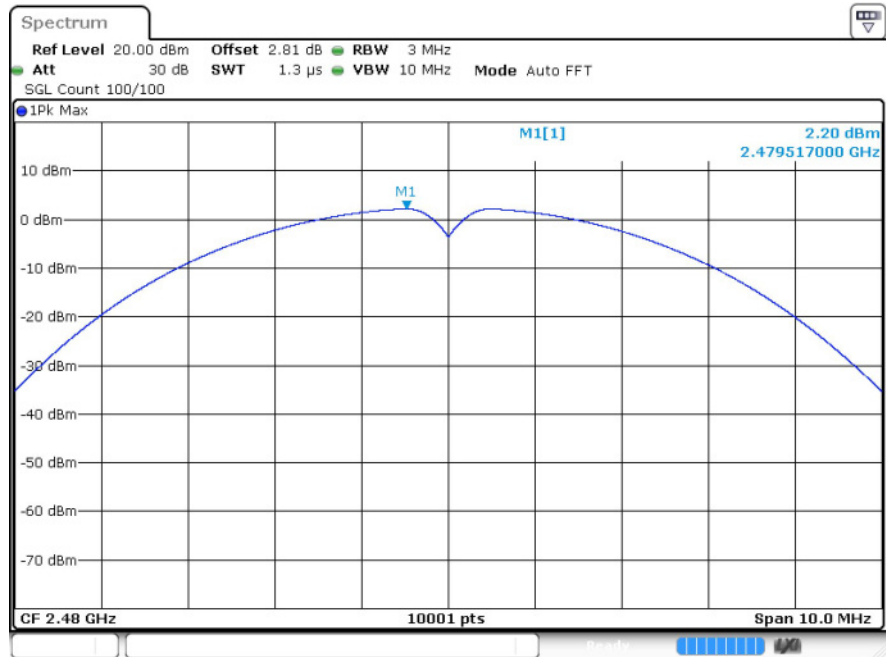
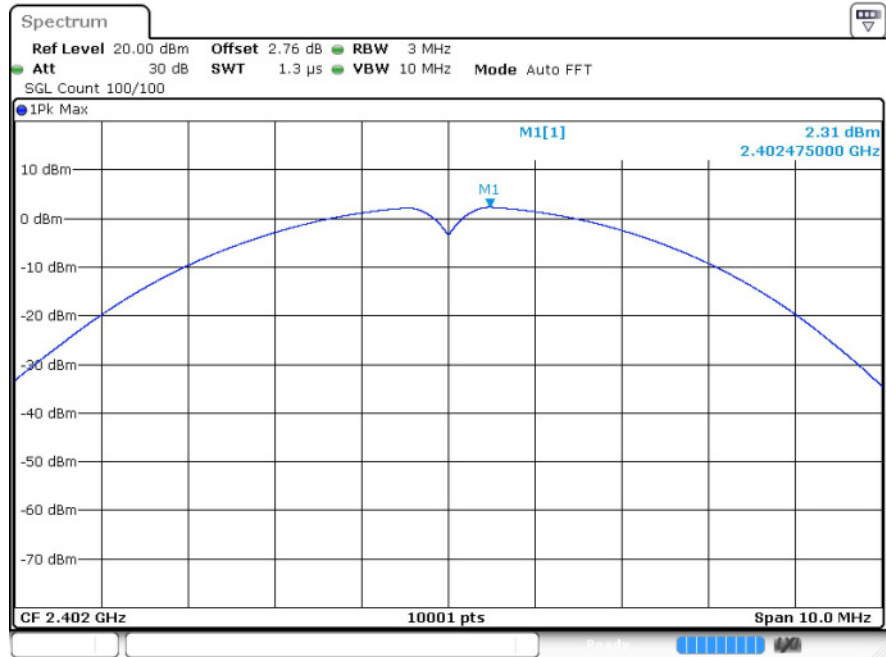
2.1 Test Result

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2.14	21	Pass
	MCH	2.82	21	Pass
	HCH	2.2	21	Pass
$\pi/4$ DQPSK	LCH	2.31	21	Pass
	MCH	2.89	21	Pass
	HCH	2.22	21	Pass

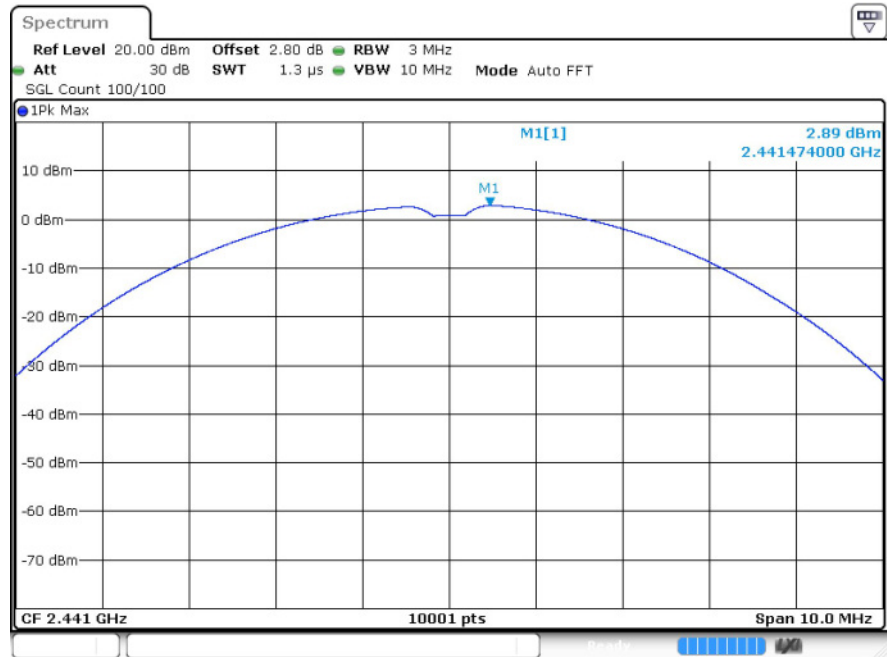
2.2 Test Graphs



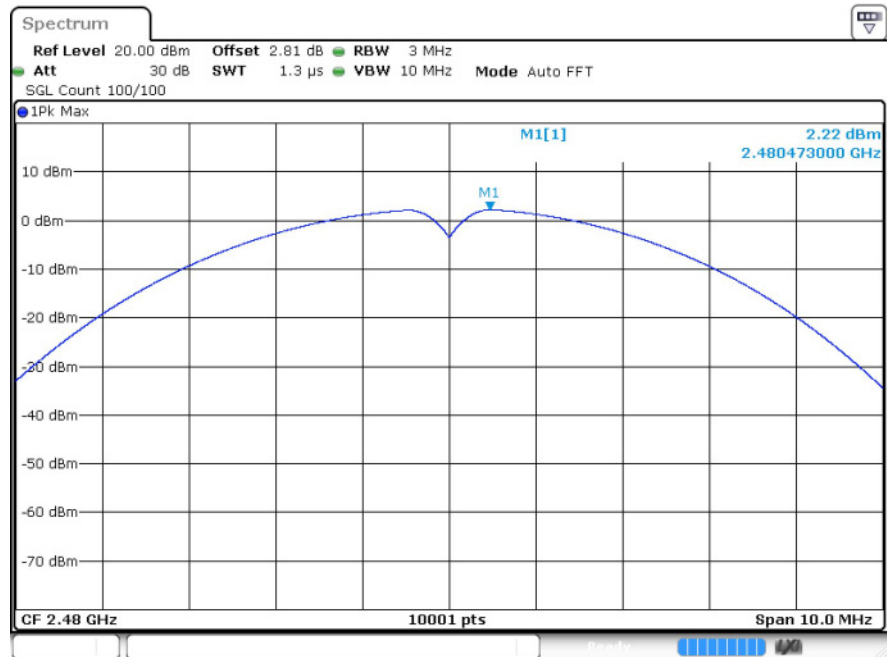
GFSK/HCH


 $\pi/4$ DQPSK/LCH


$\pi/4$ DQPSK/MCH



$\pi/4$ DQPSK/HCH

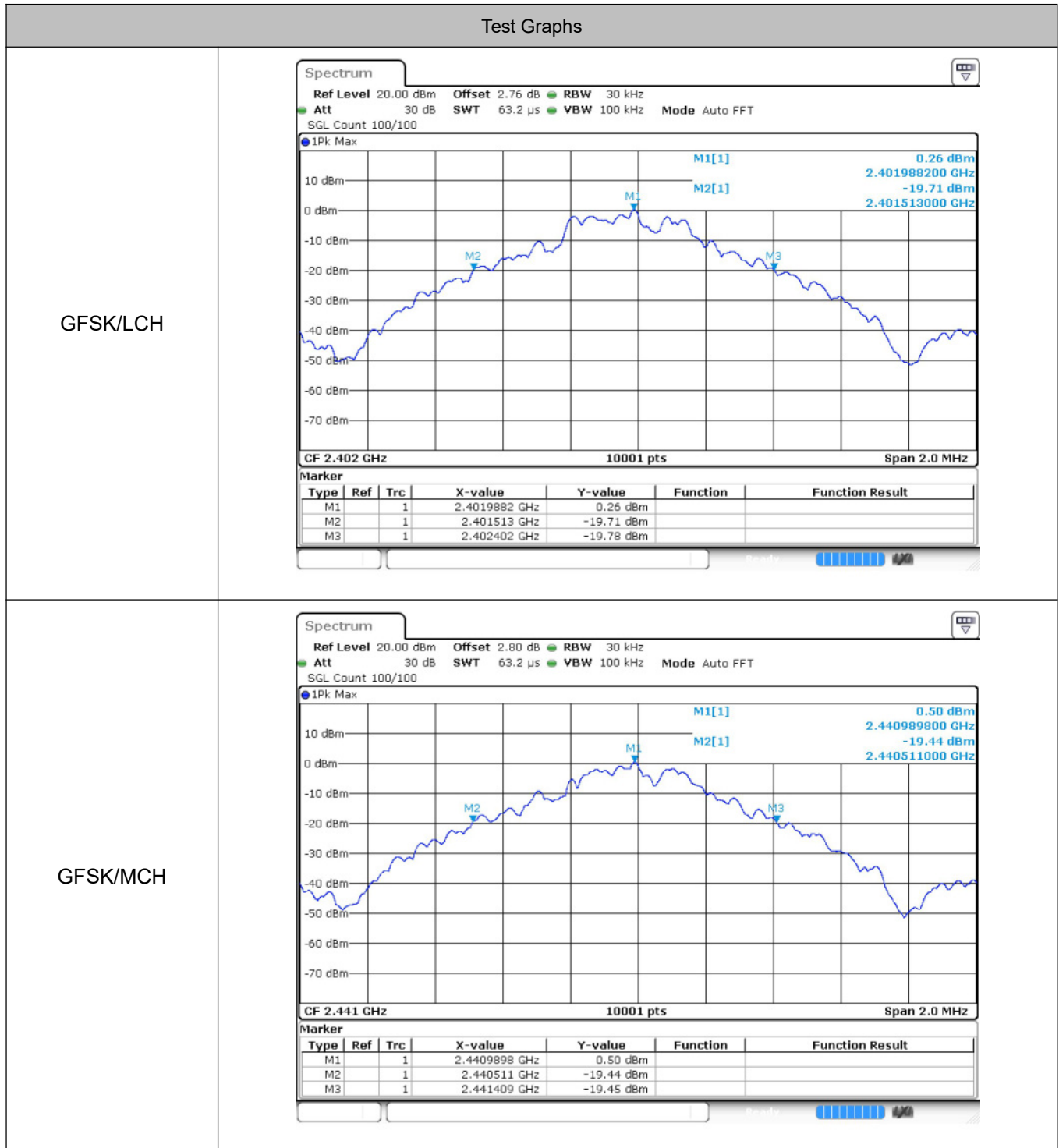


3 20dB Bandwidth

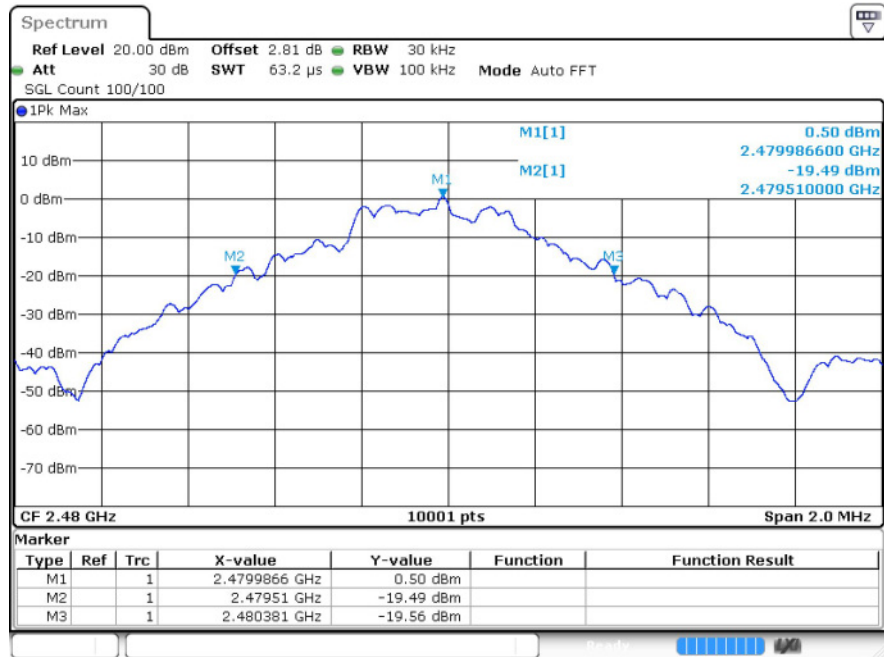
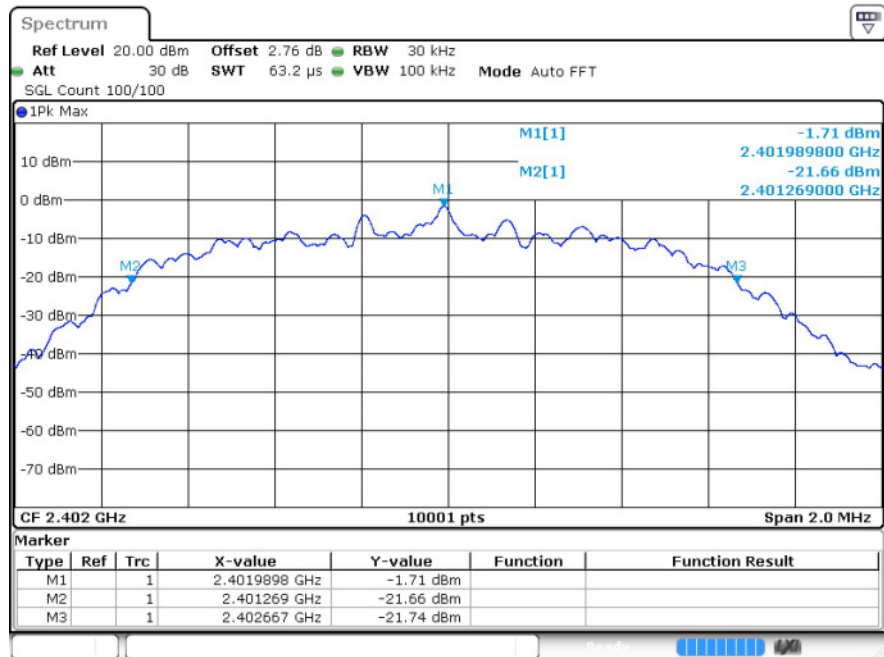
3.1 Test Result

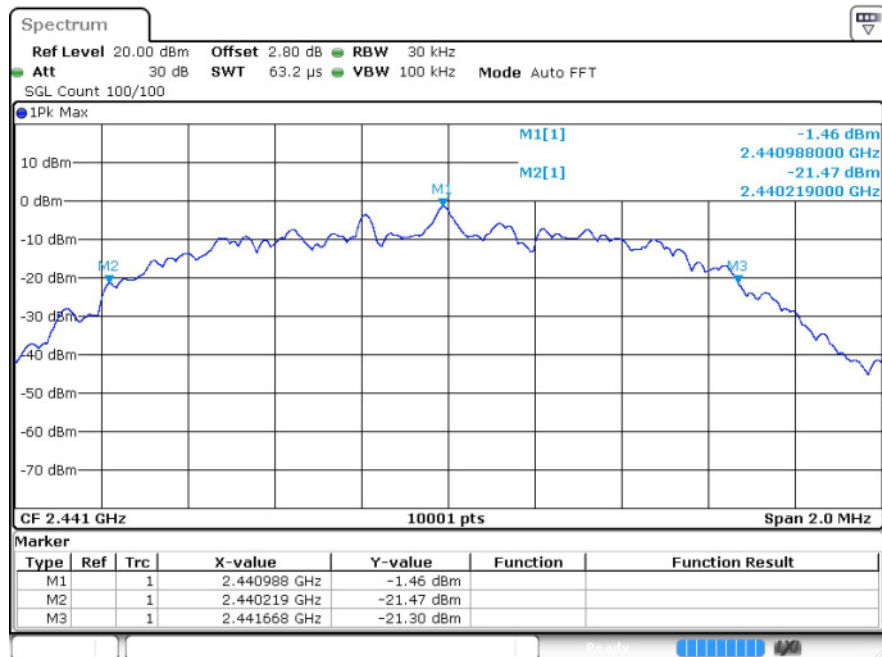
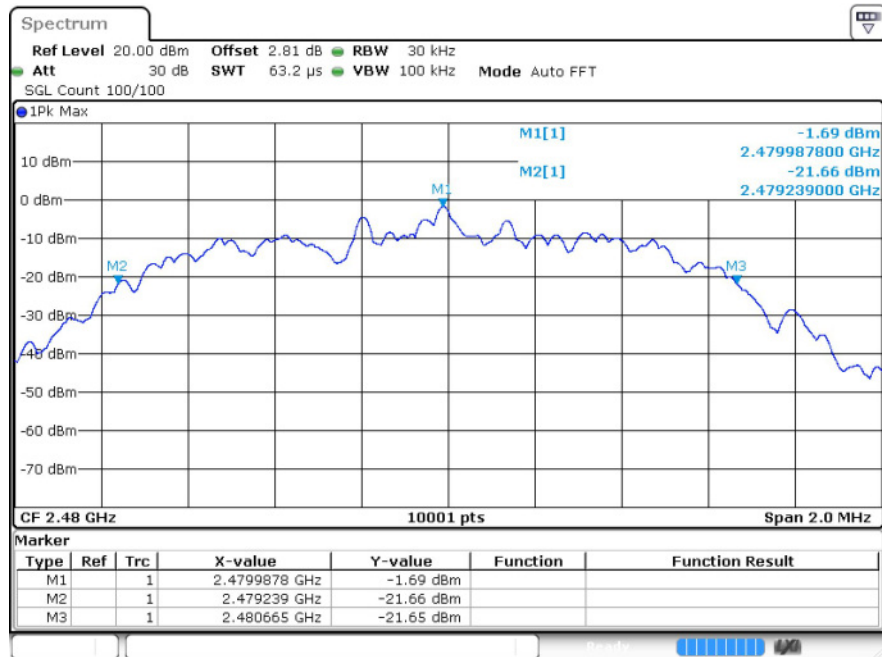
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.889	Not Specified	Pass
	MCH	0.899	Not Specified	Pass
	HCH	0.871	Not Specified	Pass
$\pi/4$ DQPSK	LCH	1.398	Not Specified	Pass
	MCH	1.45	Not Specified	Pass
	HCH	1.427	Not Specified	Pass

3.2 Test Graphs



GFSK/HCH


 $\pi/4$ DQPSK/LCH


$\pi/4$ DQPSK/MCH

 $\pi/4$ DQPSK/HCH


4 Carrier Frequency Separation

4.1 Test Result

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	MCH	0.993	0.599	Pass
$\pi/4$ DQPSK	MCH	0.989	0.967	Pass

4.2 Test Graphs

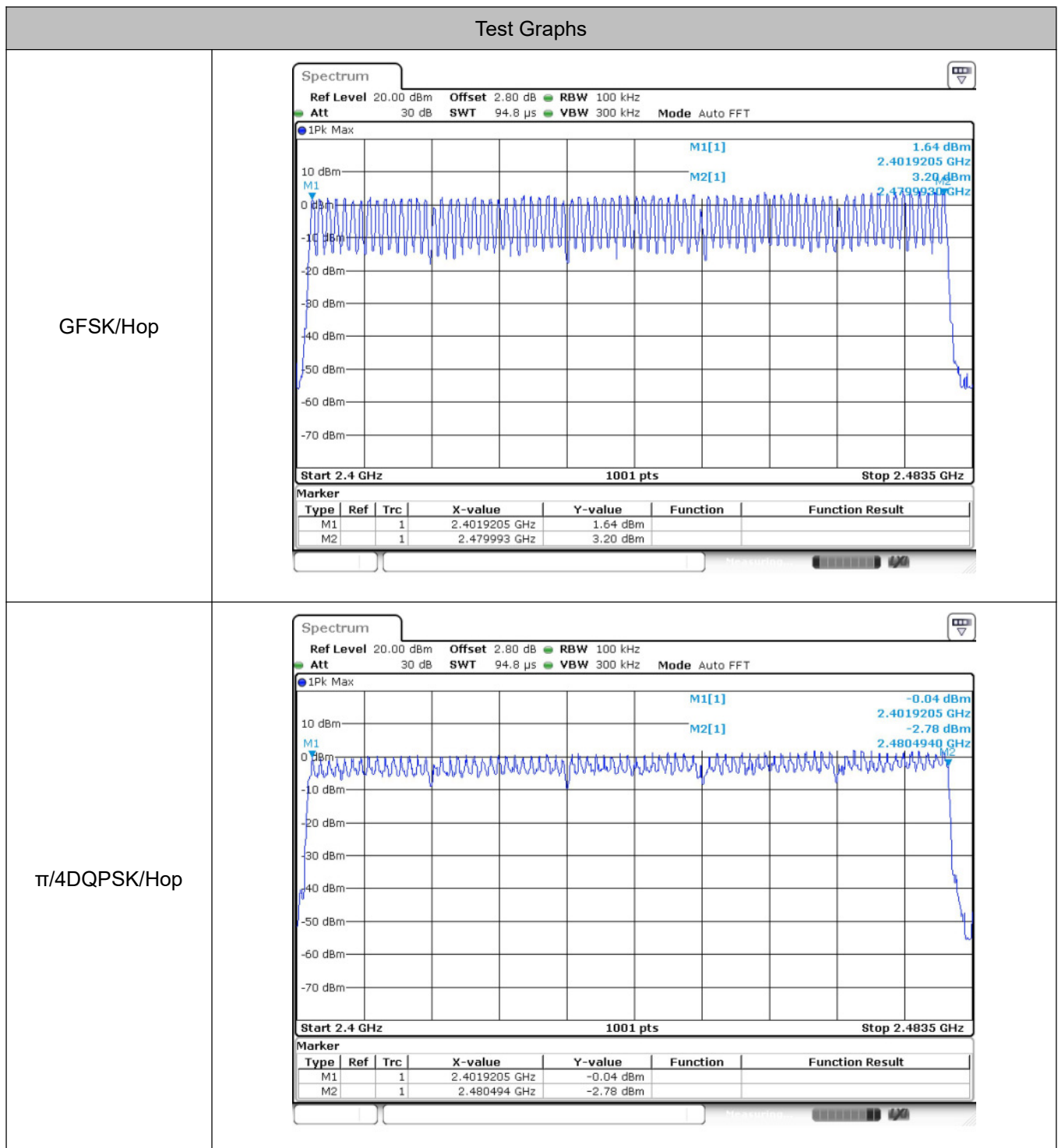


5 Hopping Channel Number

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

5.2 Test Graphs



6 Dwell Time

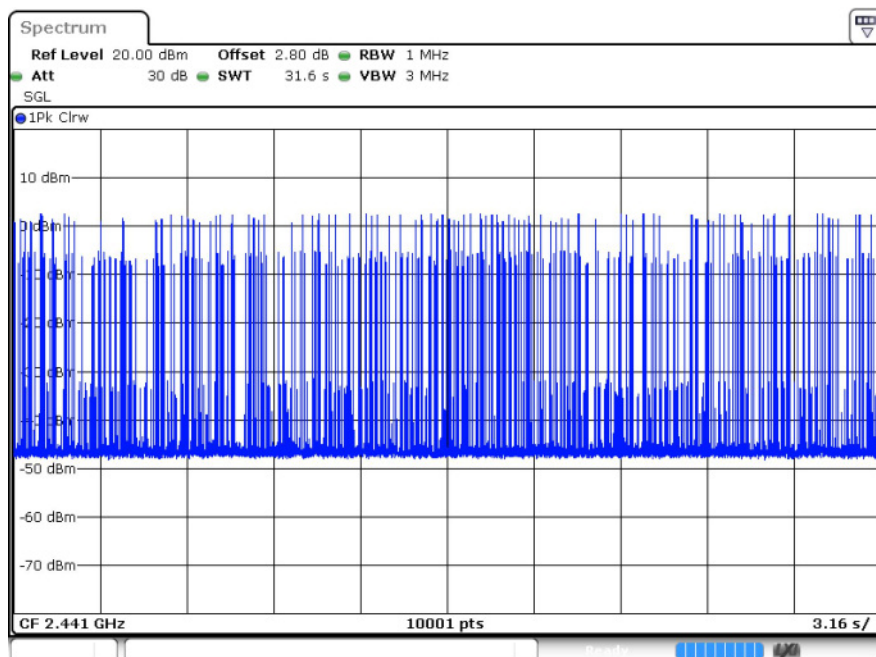
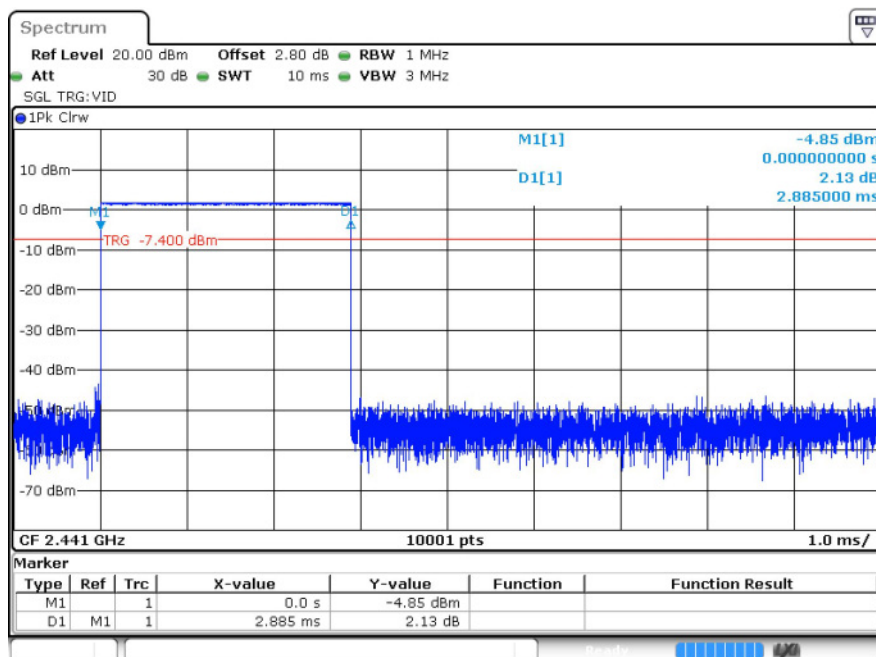
6.1 Test Result

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[ms]	Limit [s]	Verdict
GFSK	DH5	MCH	2.885	117	337.545	0.4	Pass
$\pi/4$ DQPSK	2DH5	MCH	2.89	119	343.91	0.4	Pass

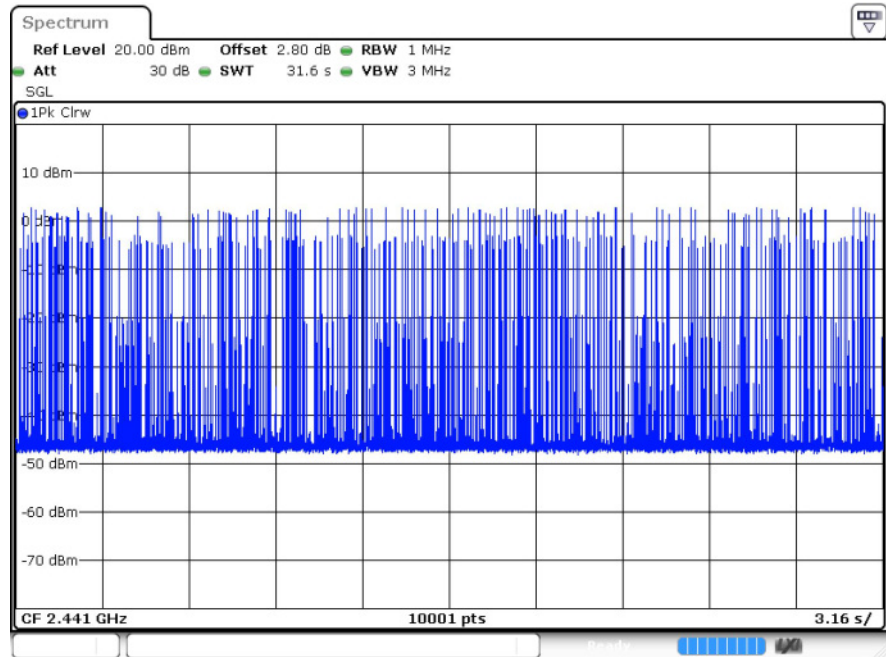
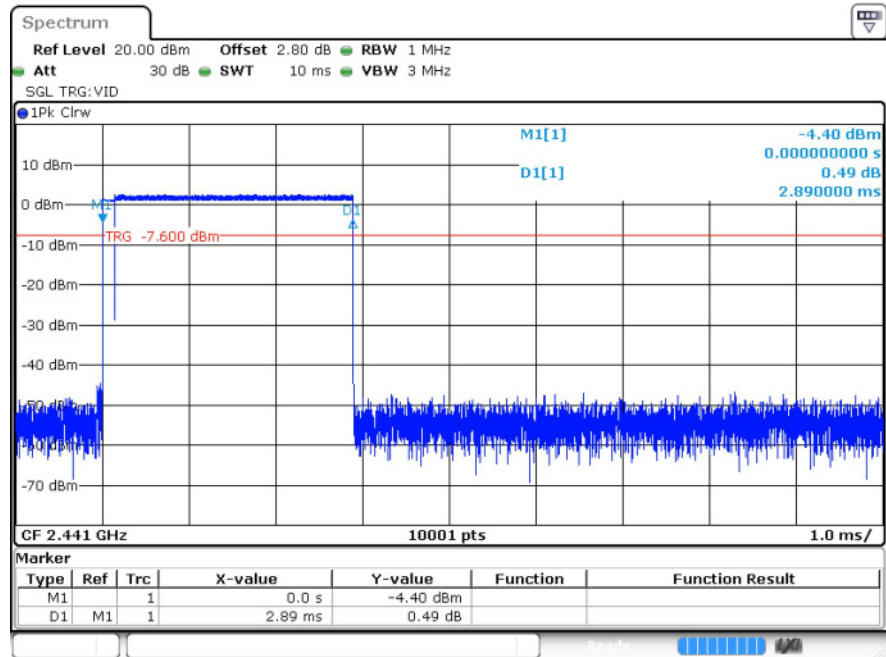
6.2 Test Graphs

Test Graphs

GFSK_DH5/MCH



$\pi/4$ DQPSK
_2DH5/MCH



7 RF Conducted Spurious Emissions

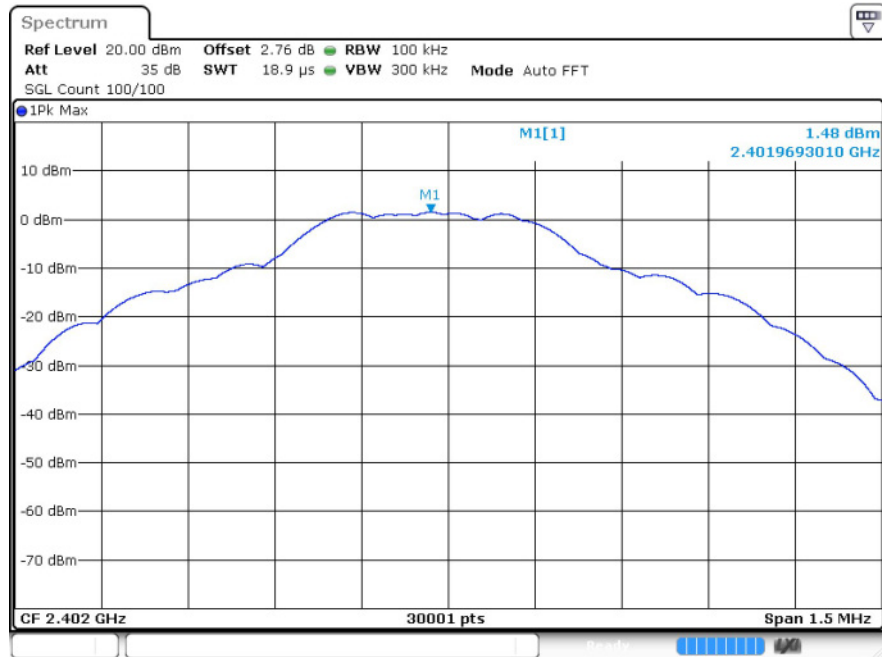
7.1 Test Result

Mode	Channel	Max. Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	-42.7	-20	Pass
	MCH	-44.7	-20	Pass
	HCH	-44.05	-20	Pass
$\pi/4$ DQPSK	LCH	-40.58	-20	Pass
	MCH	-42.44	-20	Pass
	HCH	-41.63	-20	Pass

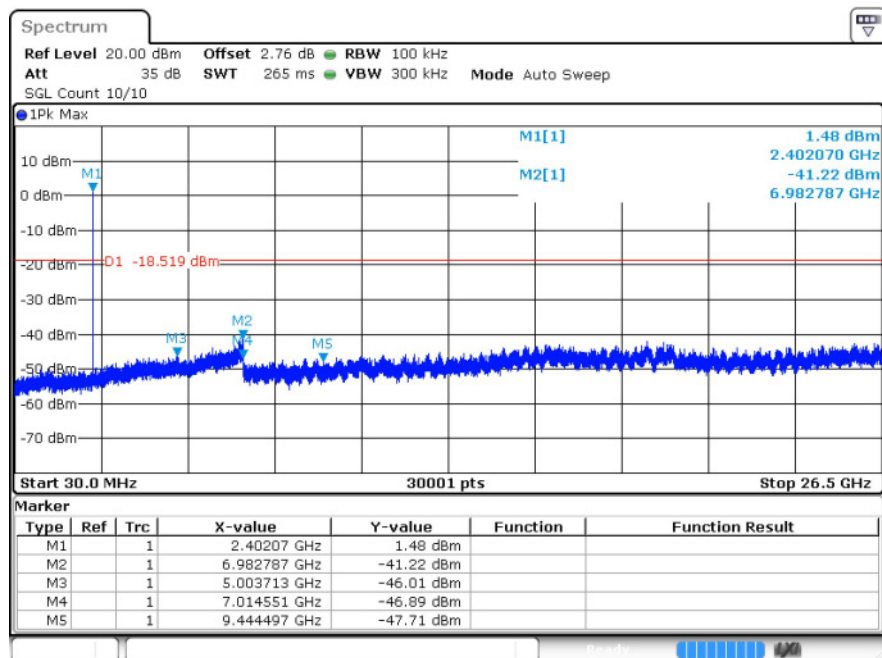
7.2 Test Graphs

GFSK_LCH_Graphs

Pref

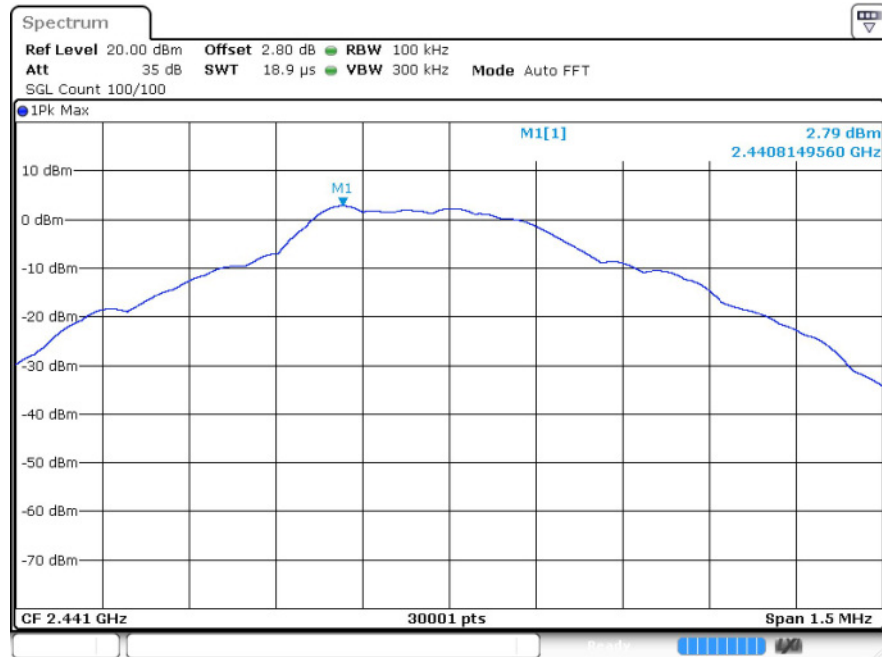


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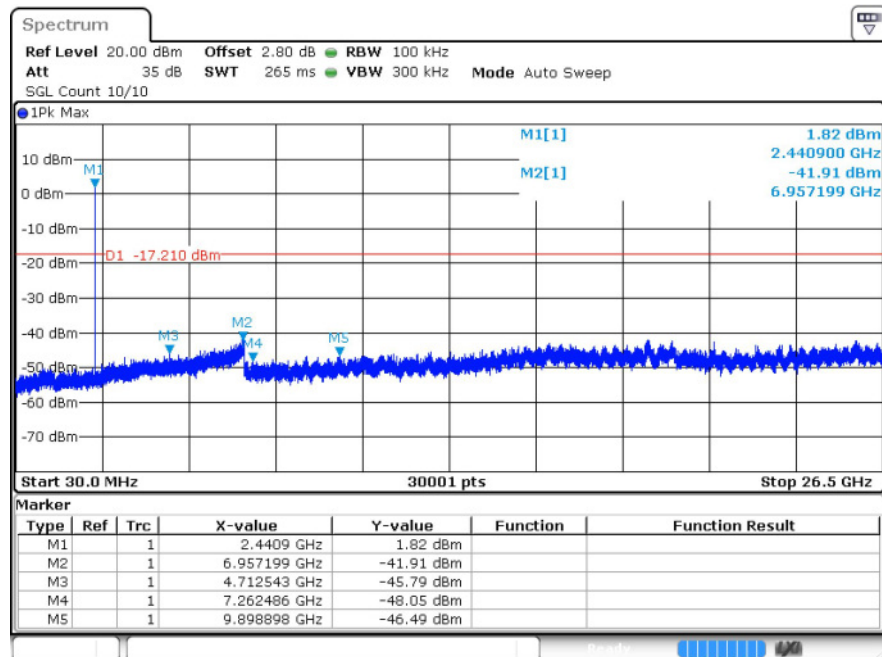


GFSK_MCH_Graphs

Pref

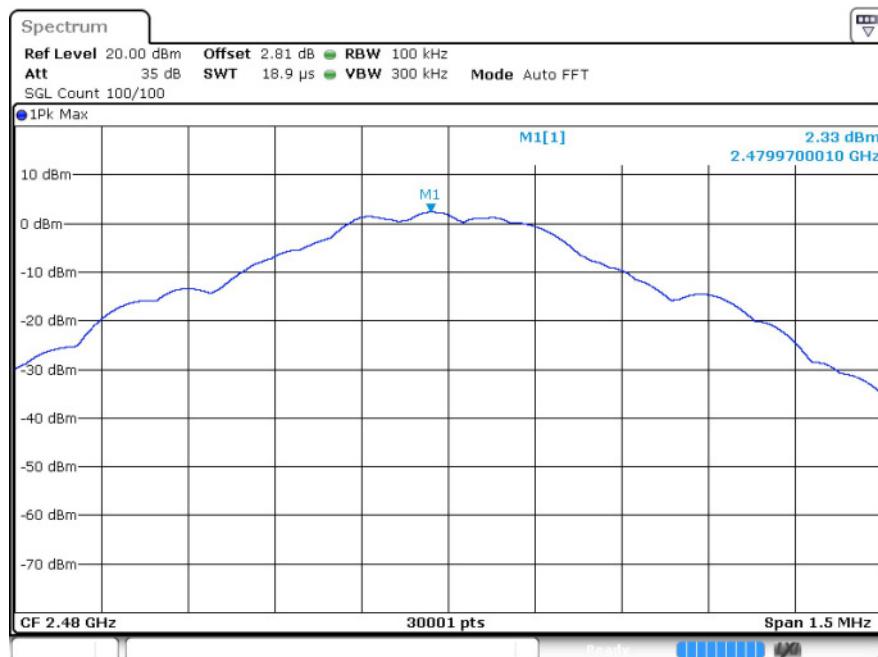


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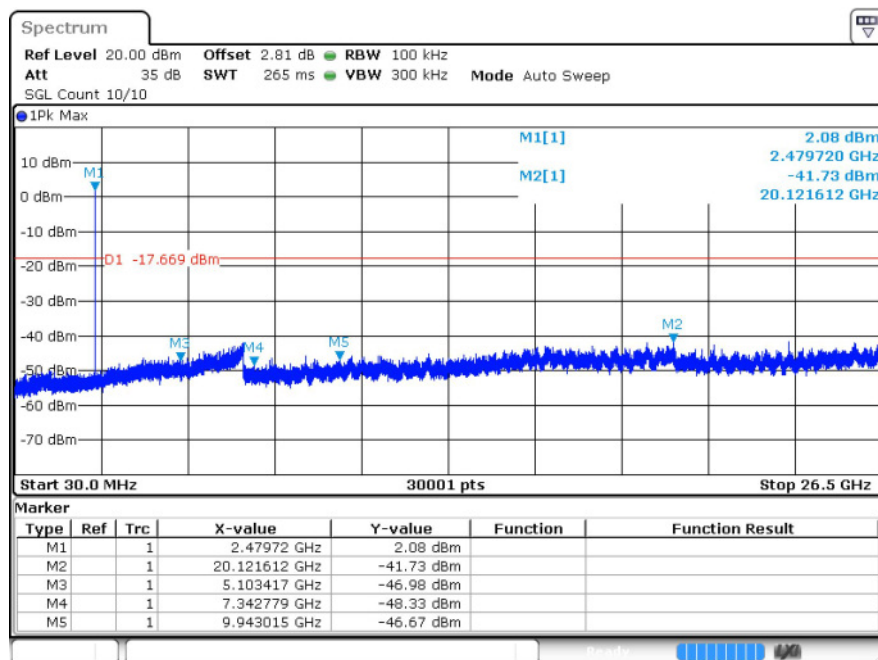


GFSK_HCH_Graphs

Pref

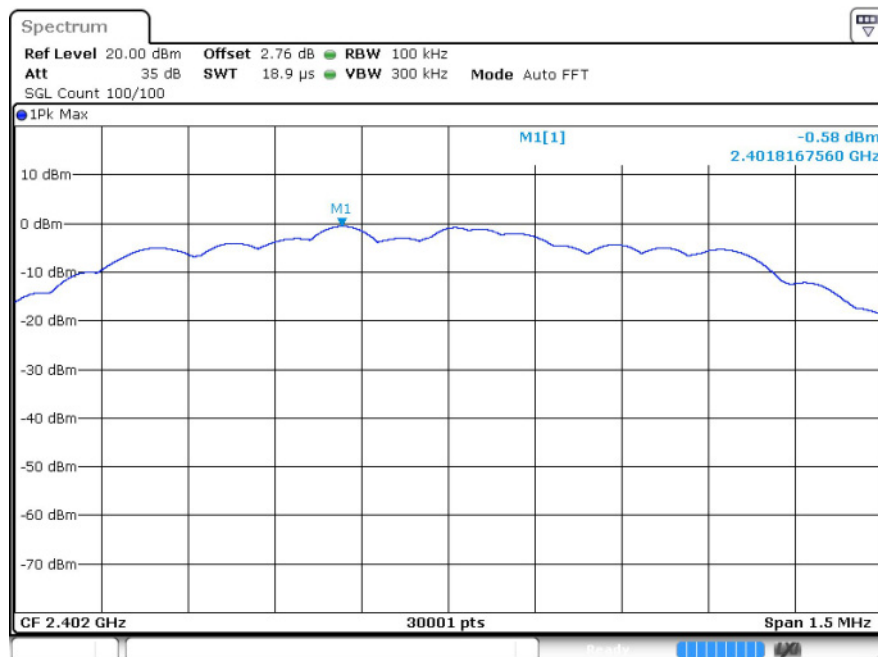


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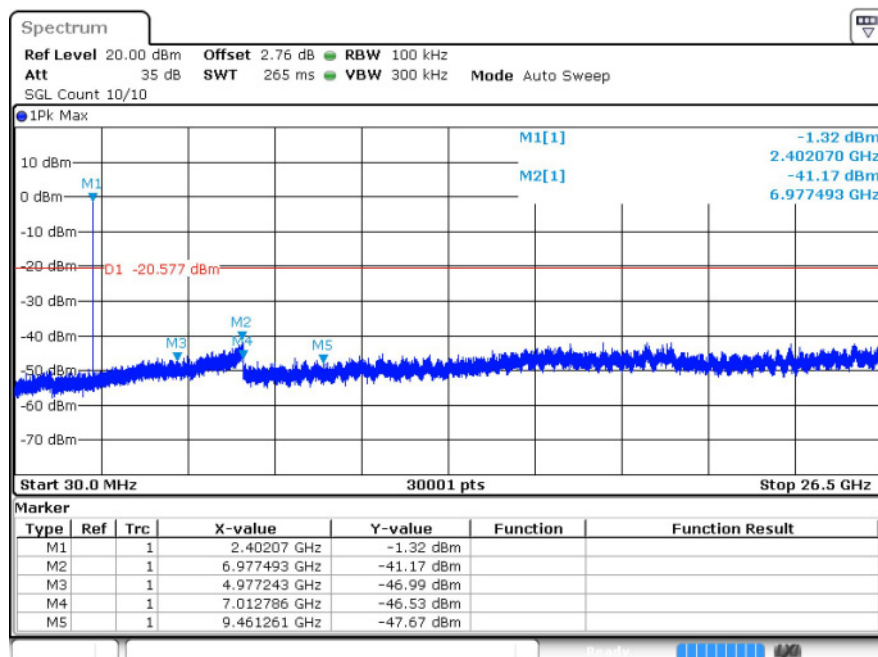


$\pi/4$ DQPSK_LCH_Graphs

Pref

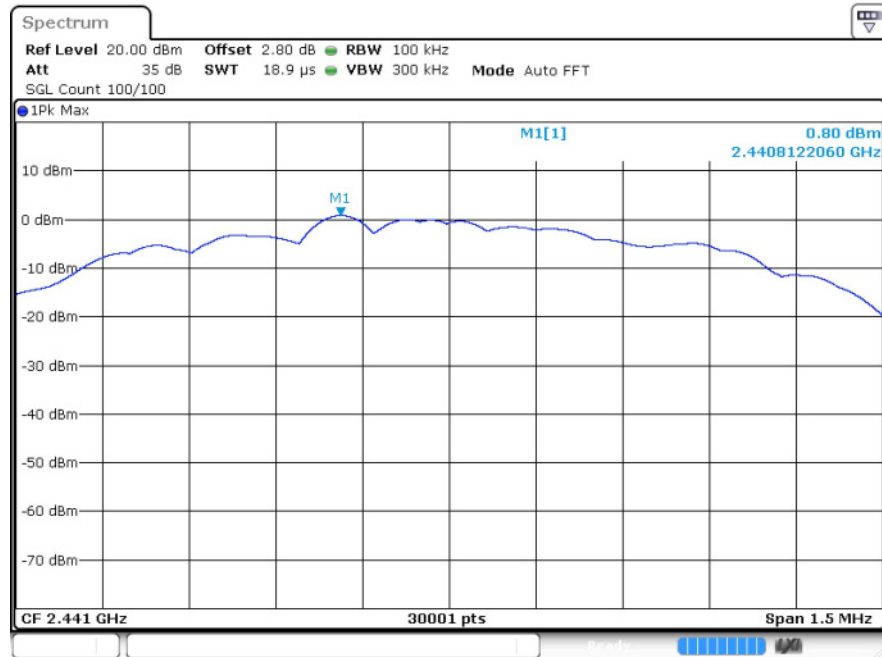


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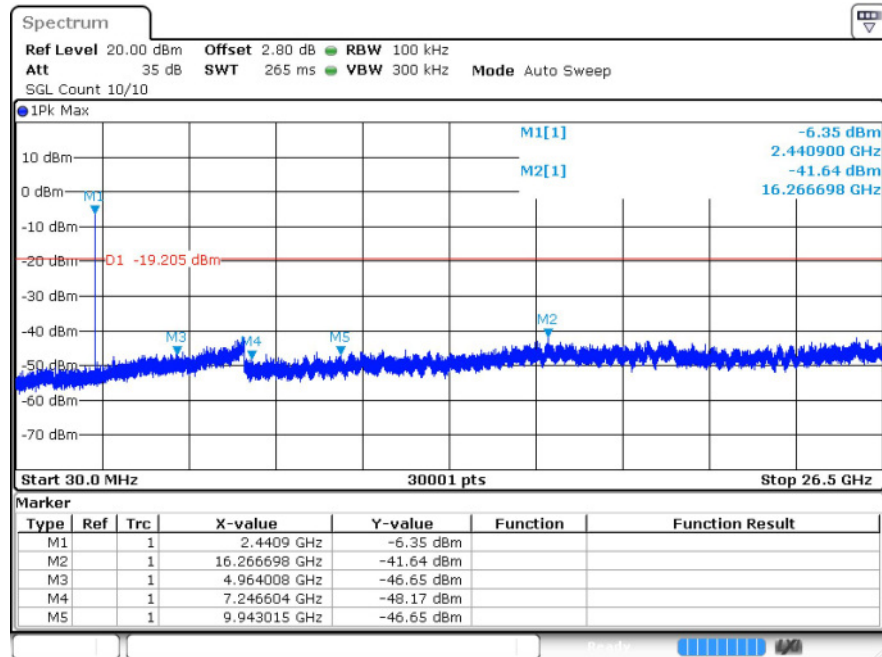


π /4DQPSK_MCH_Graphs

Pref

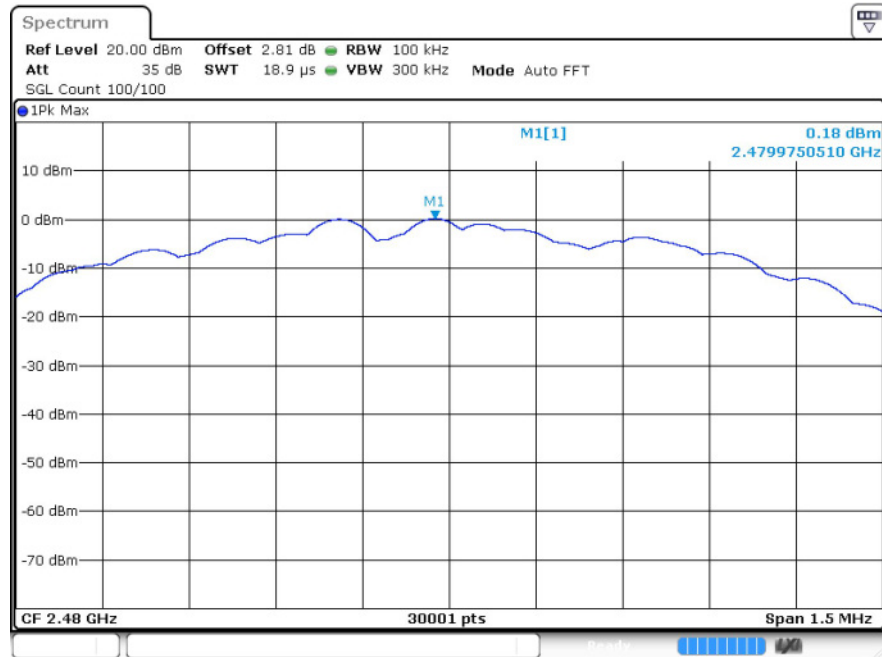


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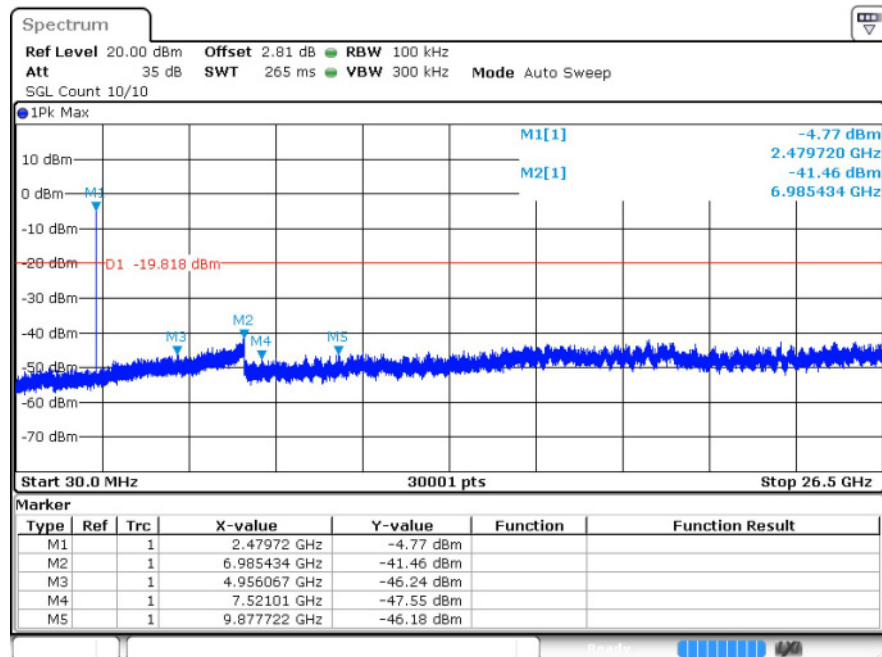


$\pi/4$ DQPSK_HCH_Graphs

Pref



Puw

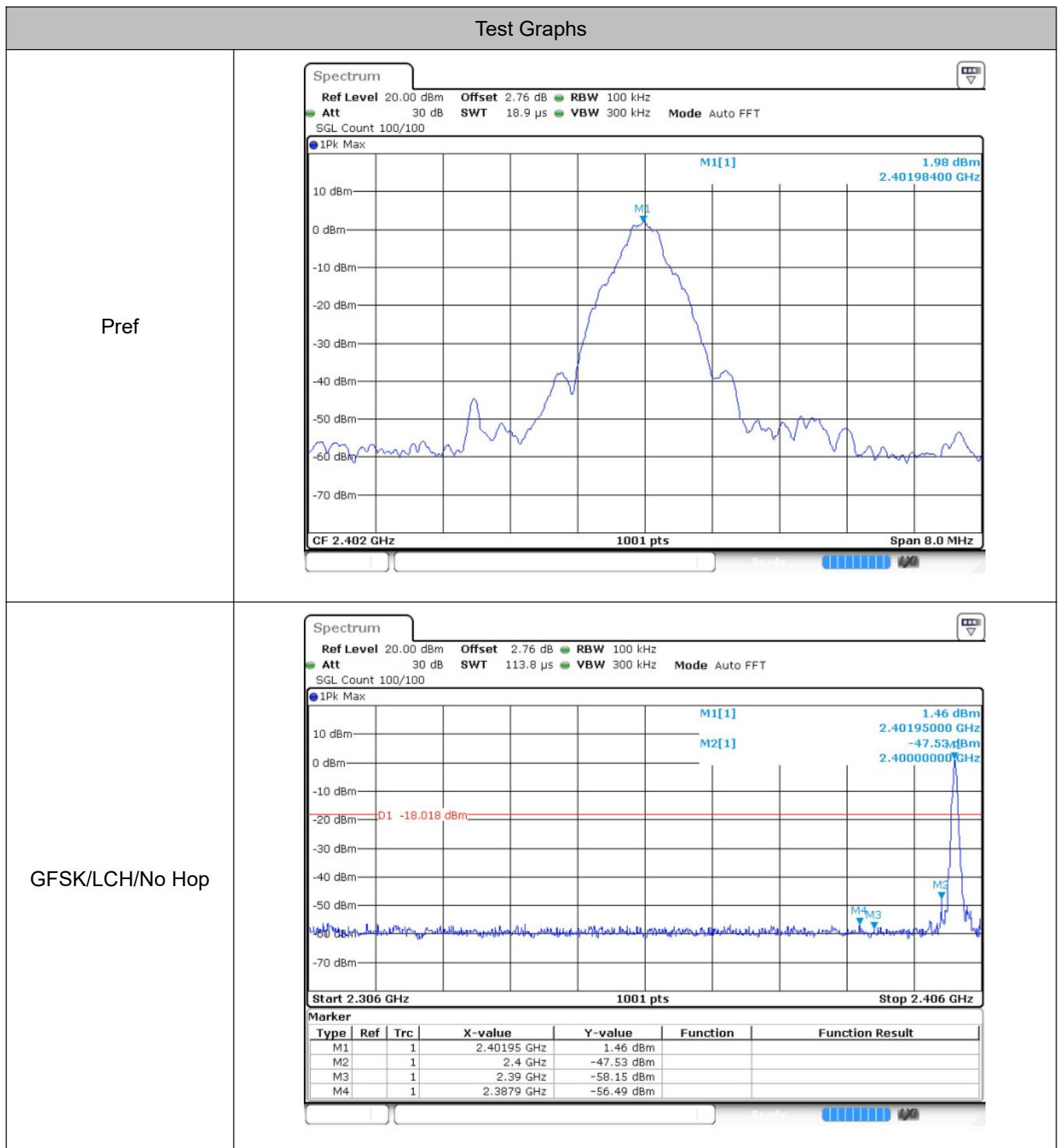


8 Band-edge for RF Conducted Emissions

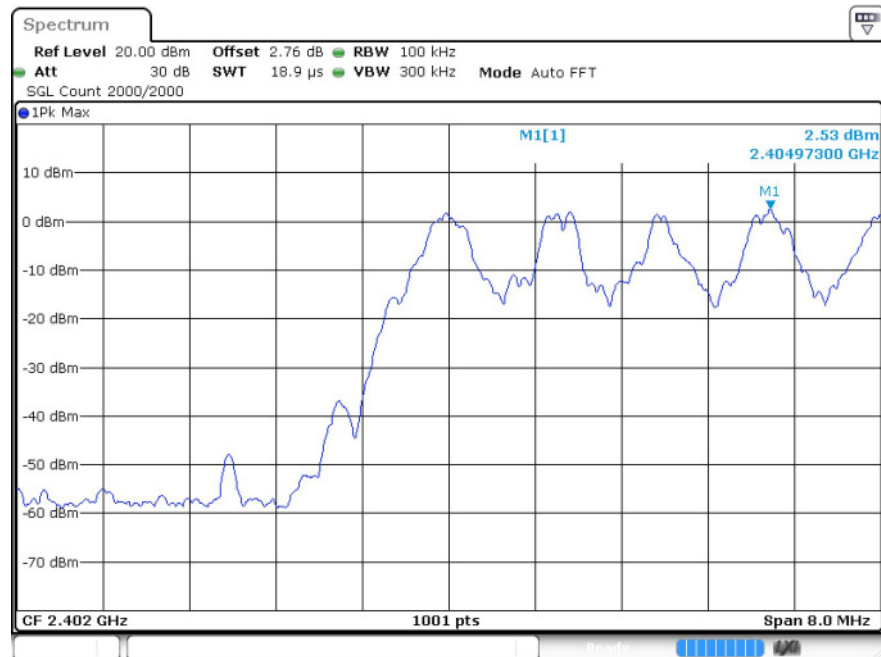
8.1 Test Result

Mode	Channel	Carrier Frequency [MHz]	Frequency Hopping	Max Spurious Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	2402	Off	-58.47	-20	Pass
			On	-57.12	-20	Pass
	HCH	2480	Off	-58.09	-20	Pass
			On	-55.12	-20	Pass
$\pi/4$ DQPSK	LCH	2402	Off	-55.65	-20	Pass
			On	-54.43	-20	Pass
	HCH	2480	Off	-47.11	-20	Pass
			On	-53.99	-20	Pass

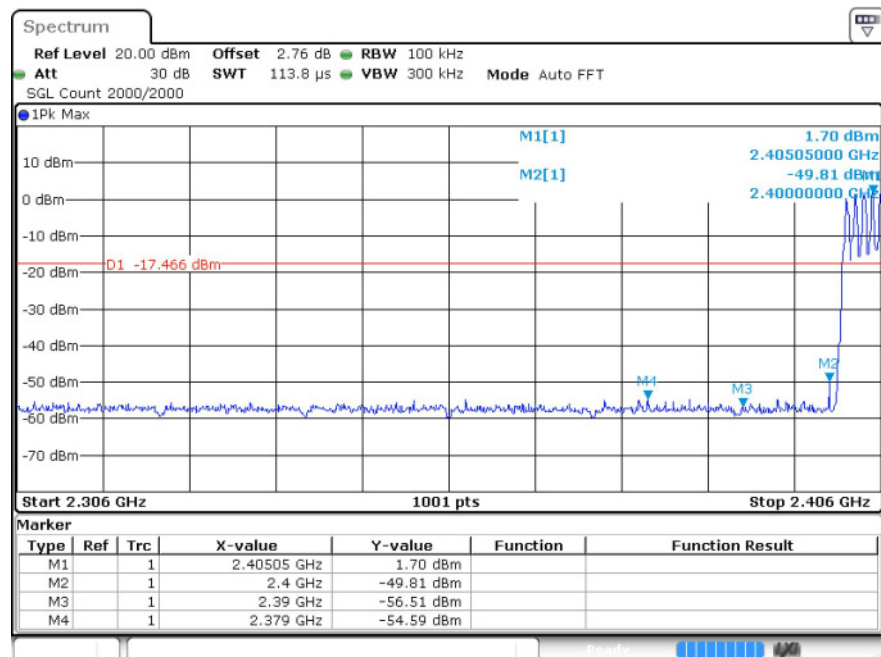
8.2 Test Graphs



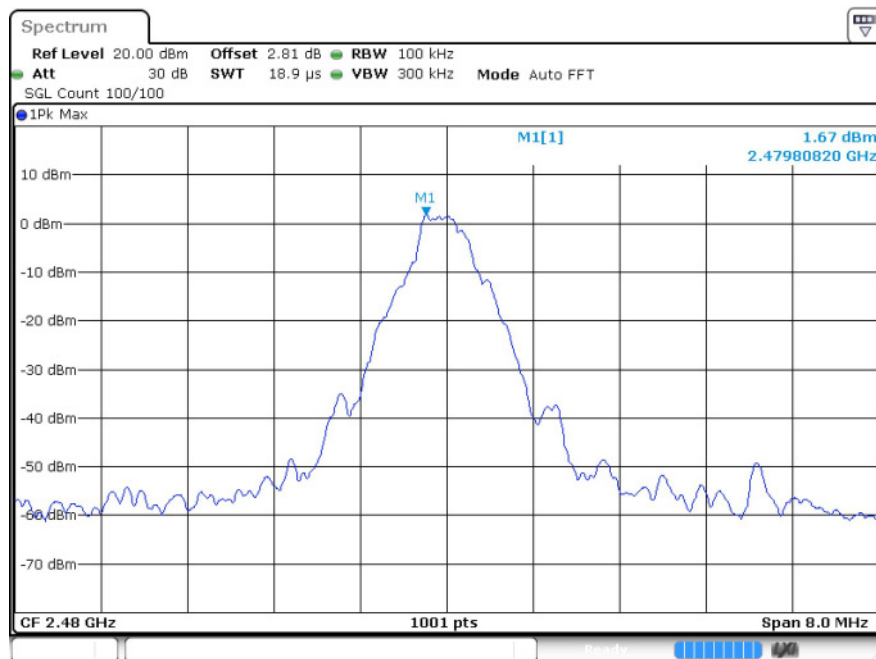
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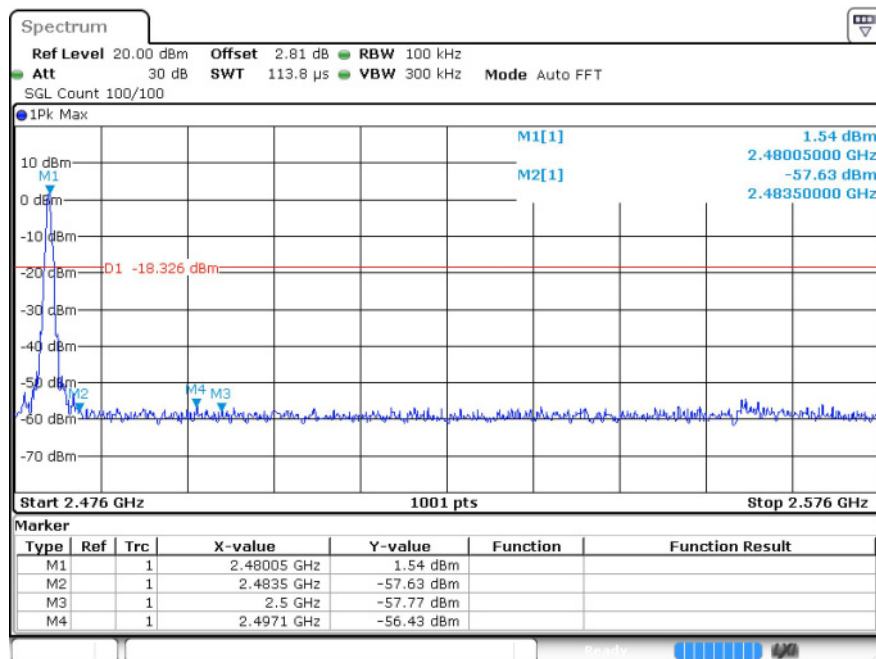
GFSK/LCH/Hop



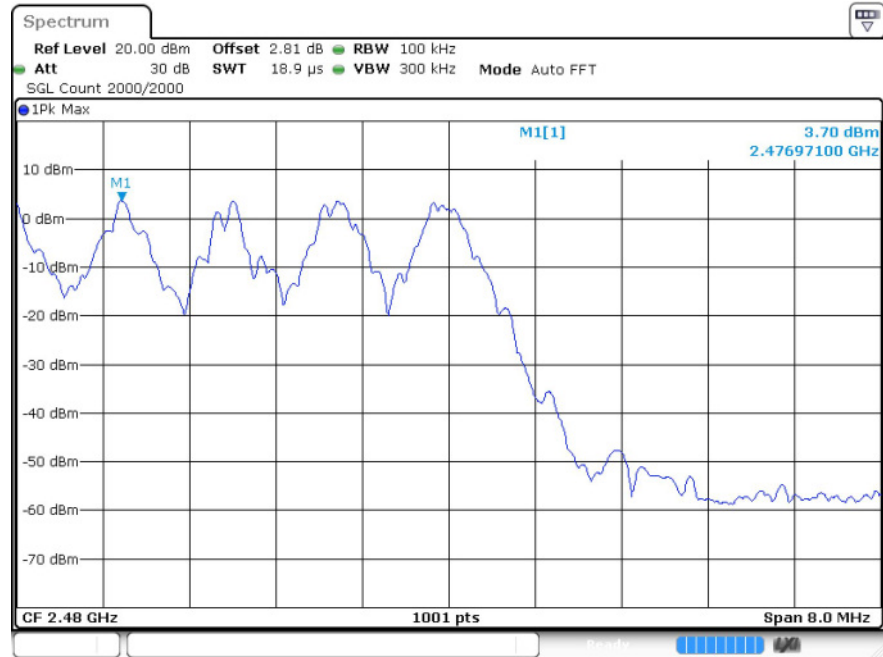
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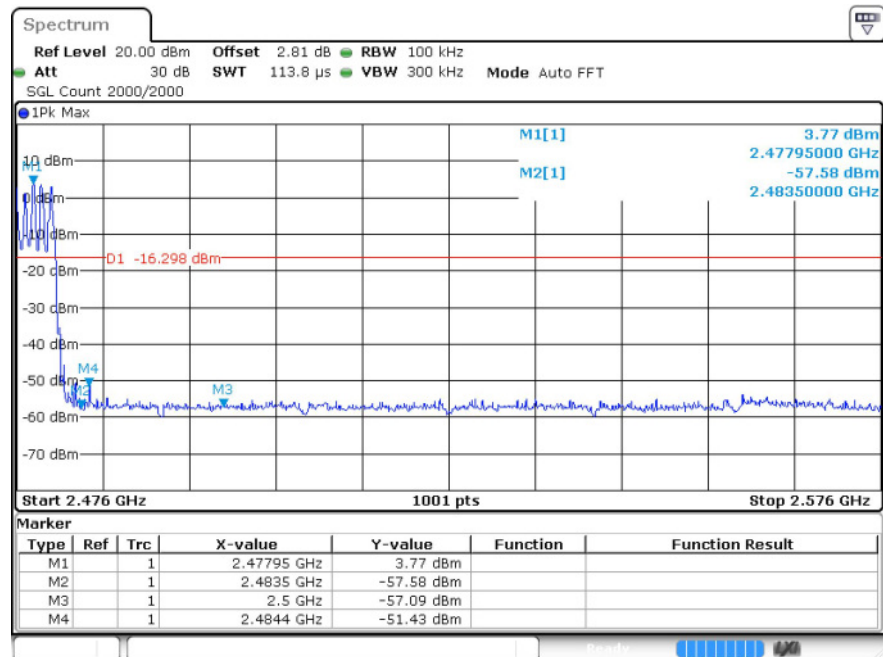
GFSK/HCH/No Hop



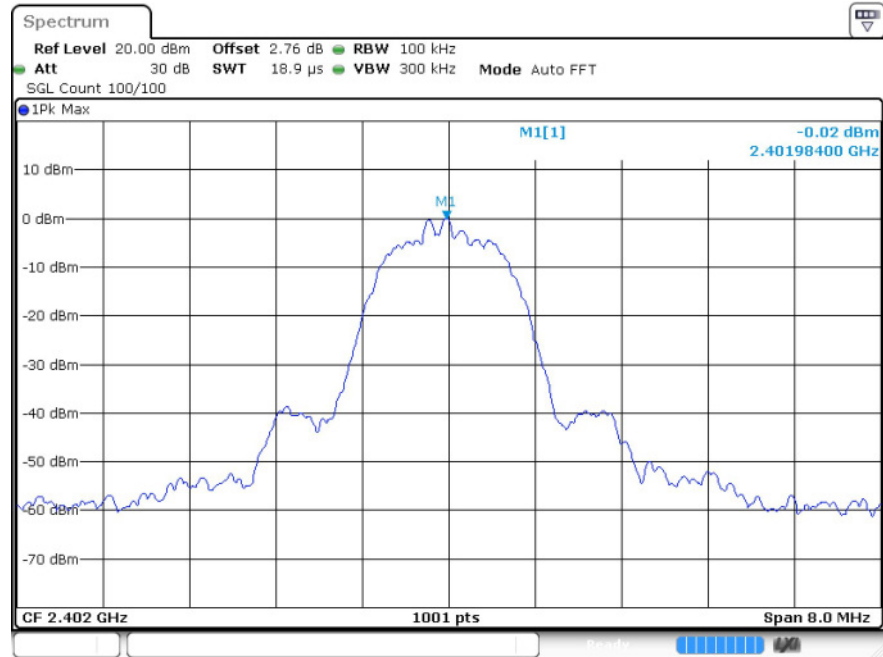
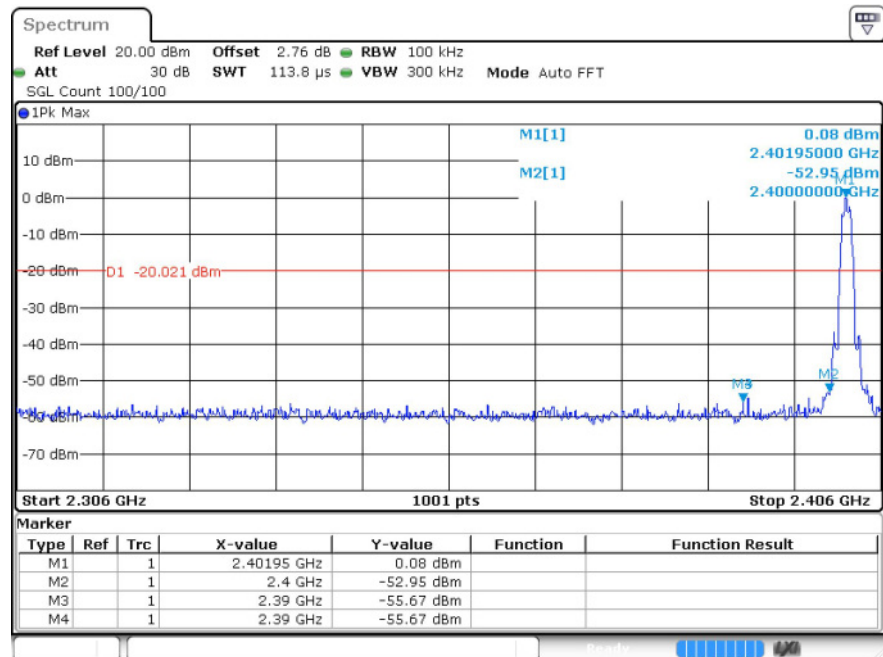
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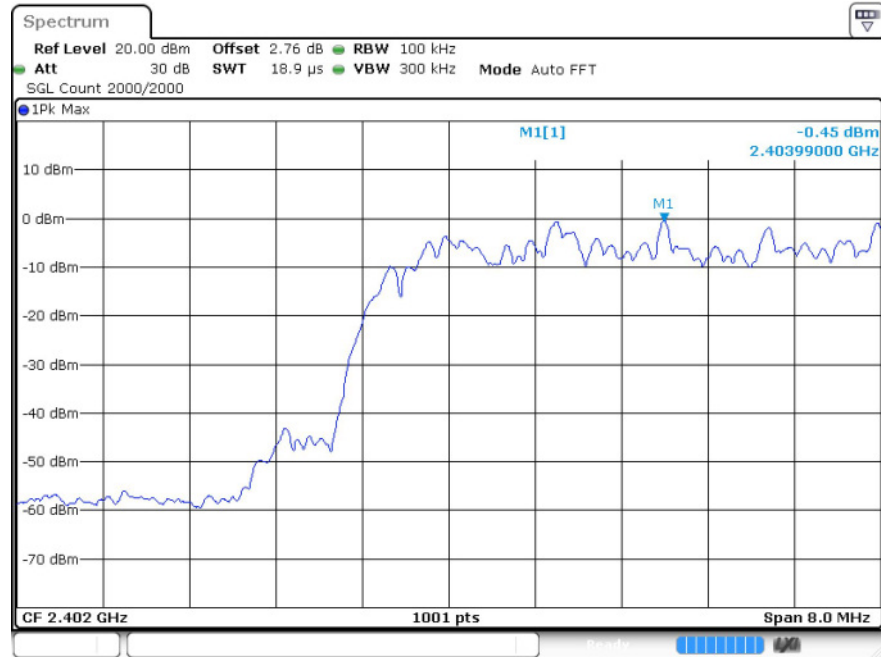
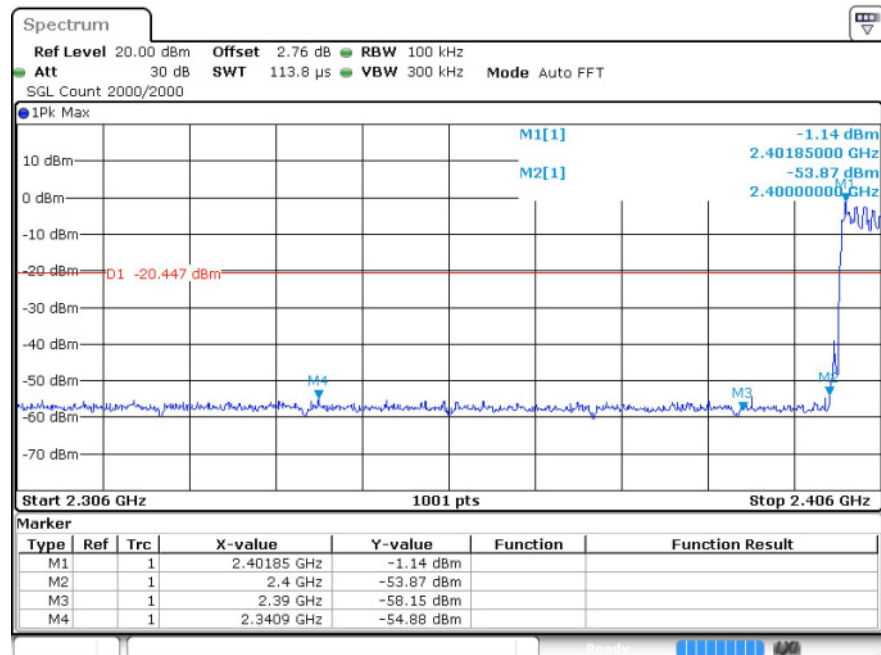
GFSK/HCH/Hop



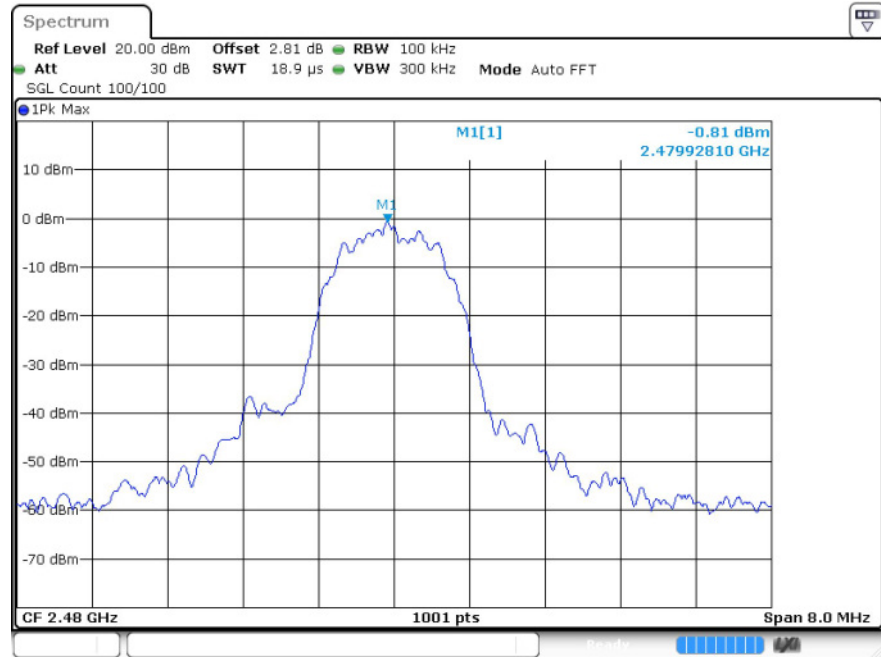
Ref


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


Ref


 $\pi/4$ DQPSK/LCH/Hop


Ref


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