

Appendix A

RF Test Data for BR_EDR(Conducted Measurement)

Product Name: All in One karaoke party Box

Trade Mark: N/A

Test Model: Stage PartyFree

Environmental Conditions

Temperature:	25°C
Relative Humidity:	53%
ATM Pressure:	101Kpa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen

Contents

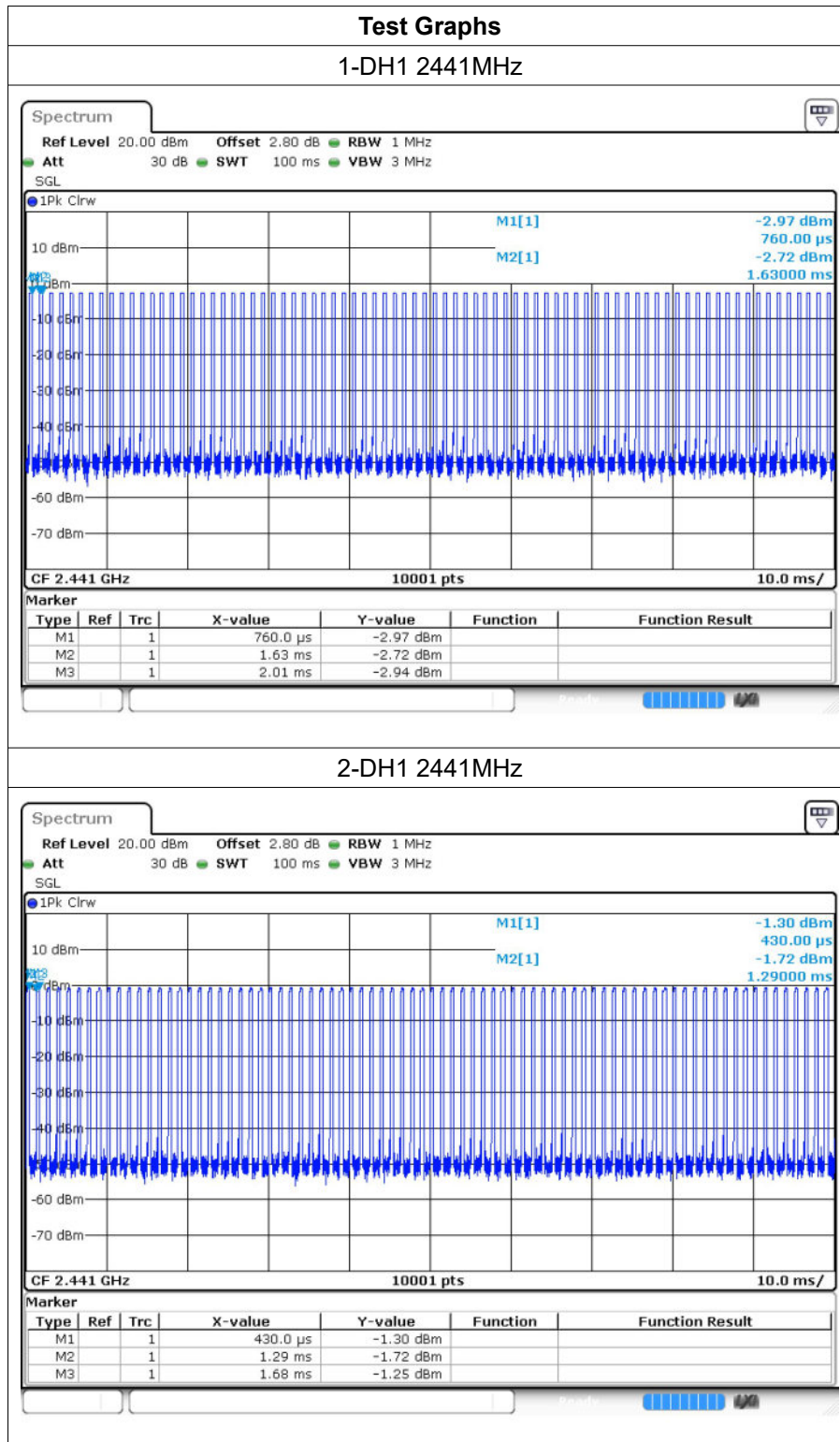
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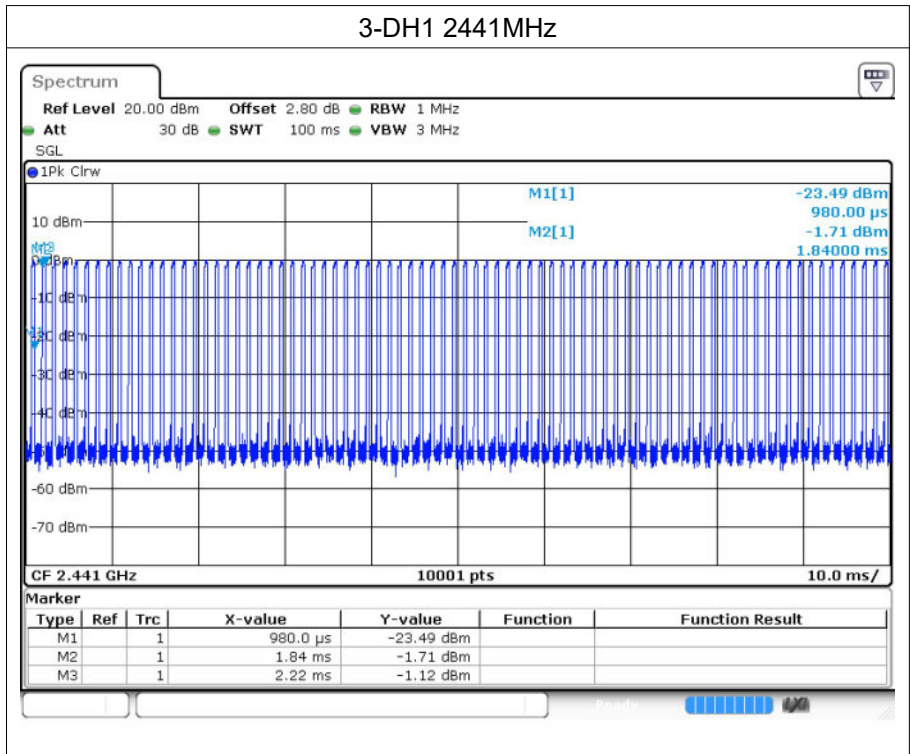
1 .Duty Cycle

1.1 Test Result

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

1.2 Test Graphs



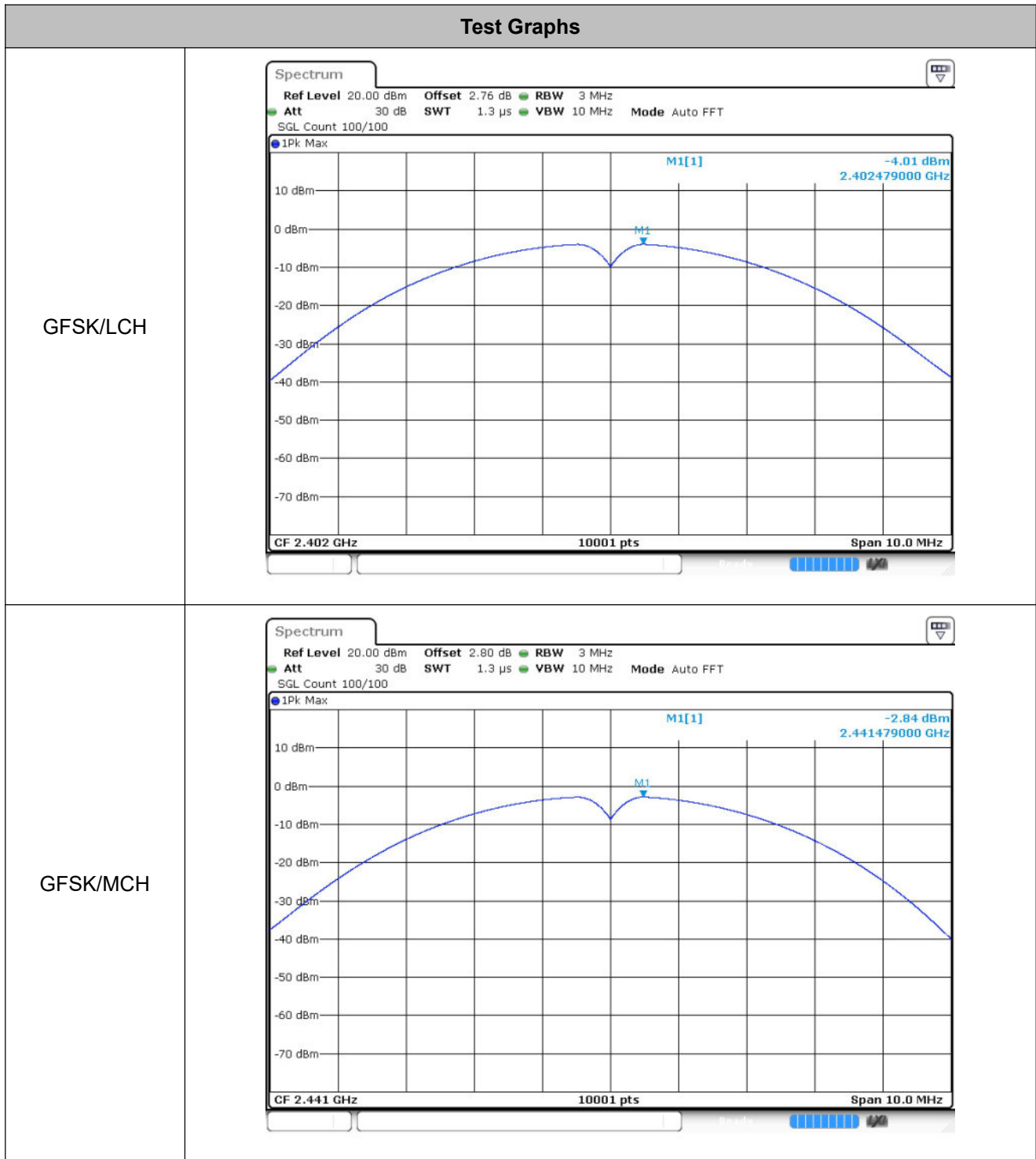


2 Maximum Conducted Peak Output Power

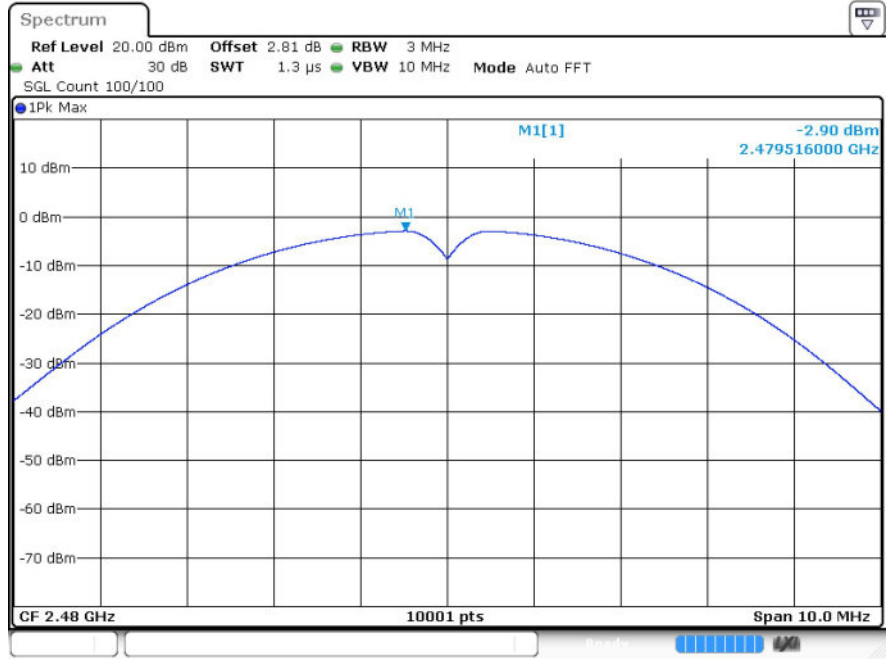
2.1 Test Result

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-4.01	≤ 21	Pass
	MCH	-2.84	≤ 21	Pass
	HCH	-2.9	≤ 21	Pass
$\pi/4$ DQPSK	LCH	-0.81	≤ 21	Pass
	MCH	0.08	≤ 21	Pass
	HCH	0.17	≤ 21	Pass
8DPSK	LCH	-1.13	≤ 21	Pass
	MCH	0.72	≤ 21	Pass
	HCH	0.24	≤ 21	Pass

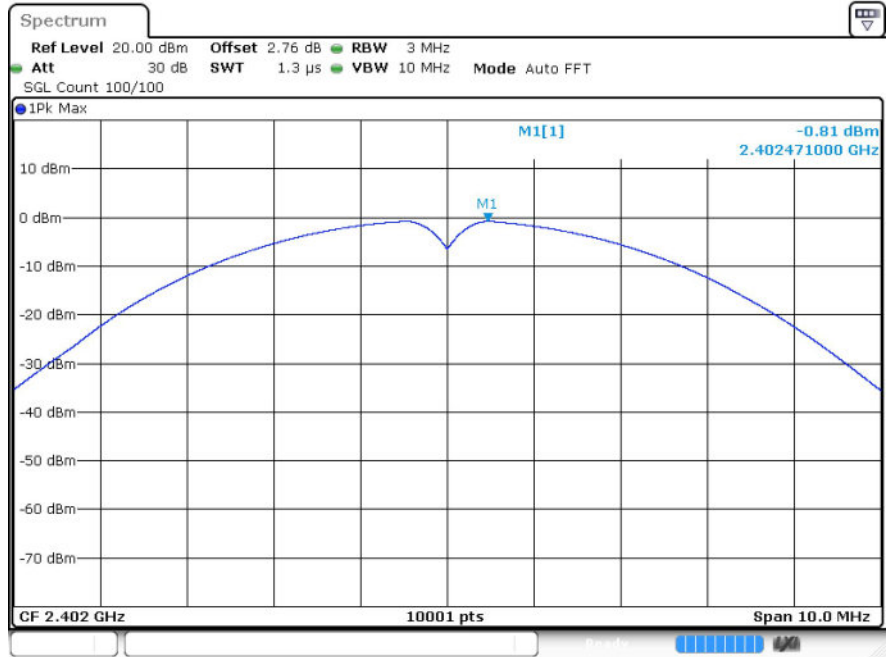
2.2 Test Graphs



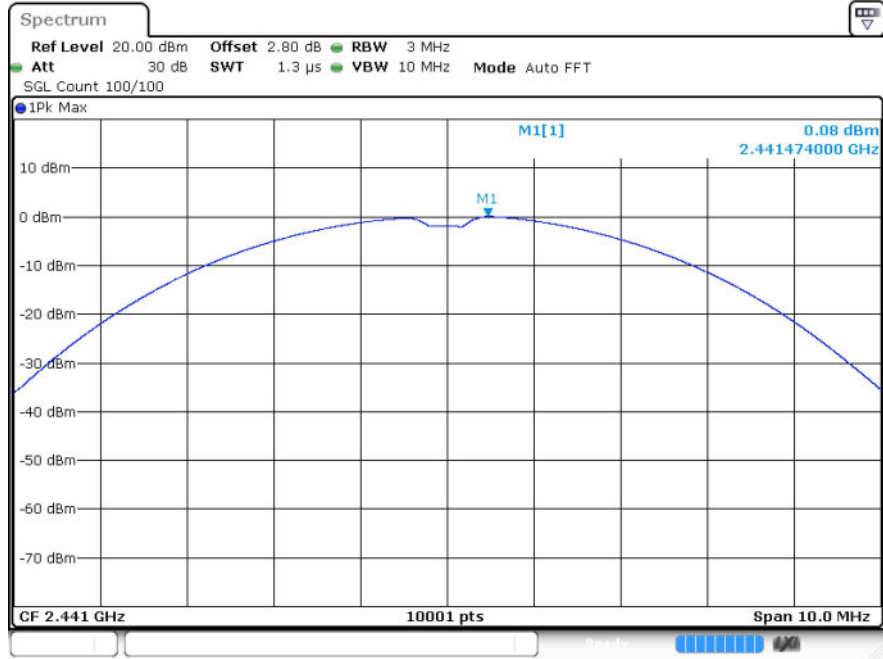
GFSK/HCH



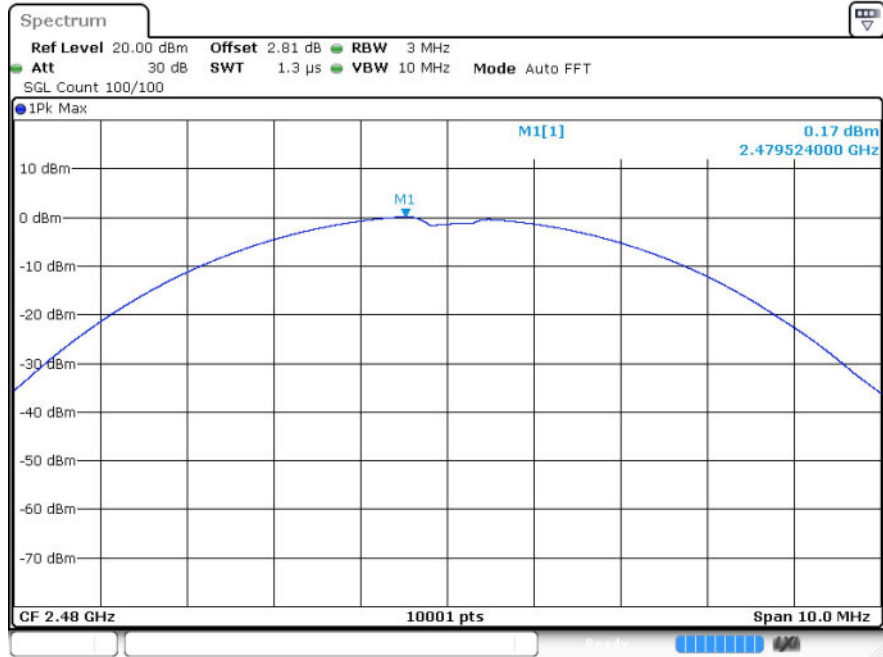
$\pi/4$ DQPSK/LCH



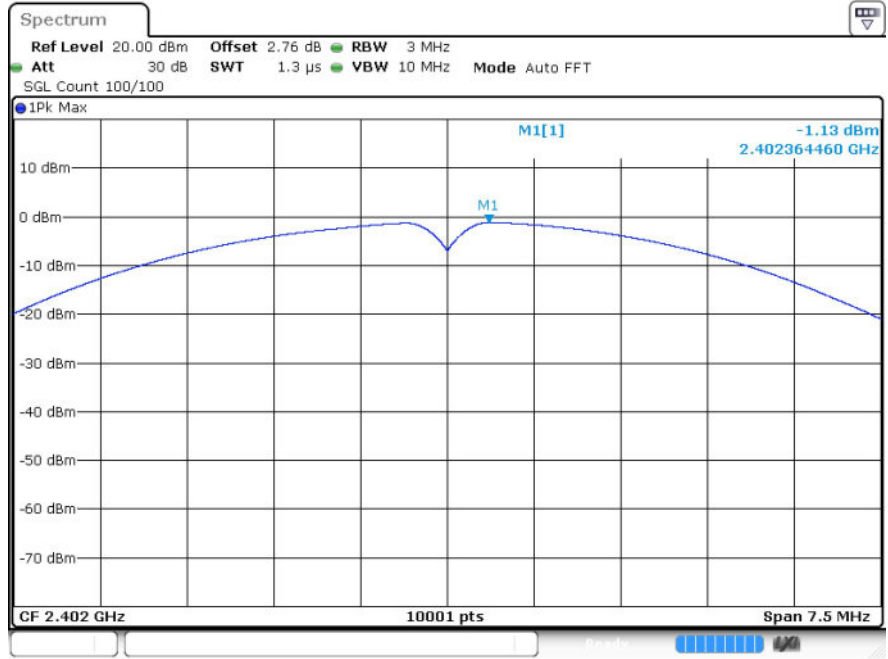
$\pi/4$ DQPSK/MC
H



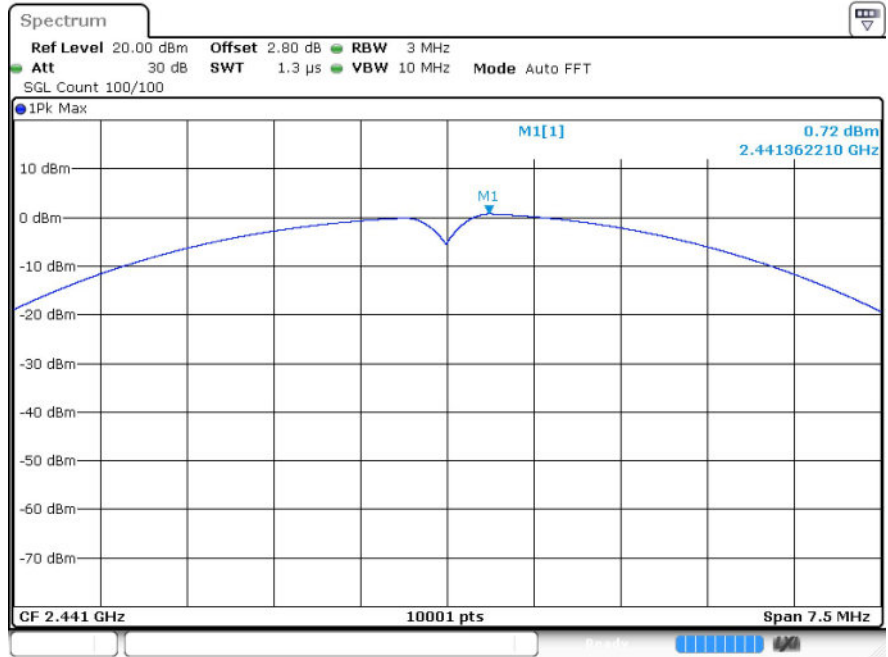
$\pi/4$ DQPSK/HCH



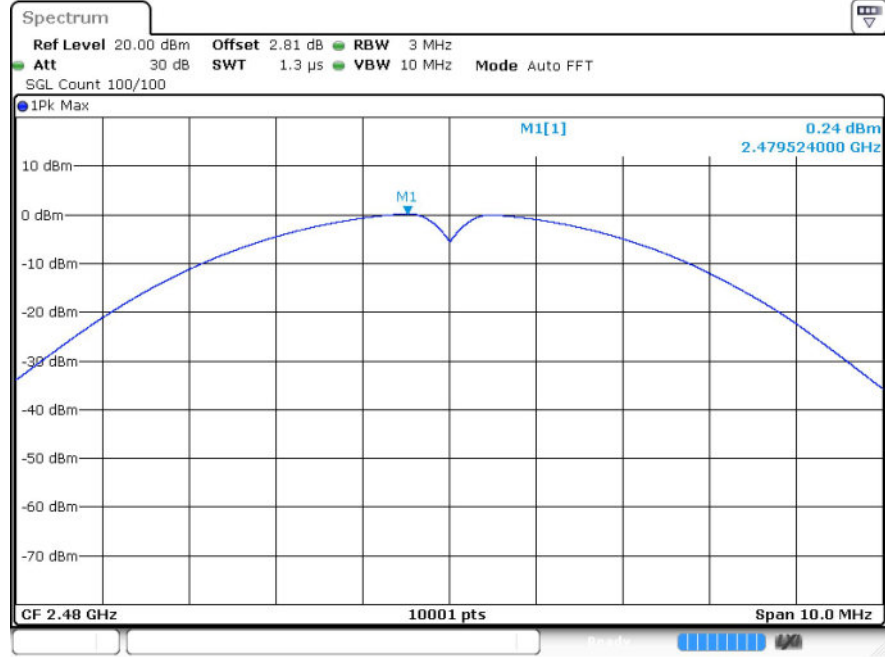
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

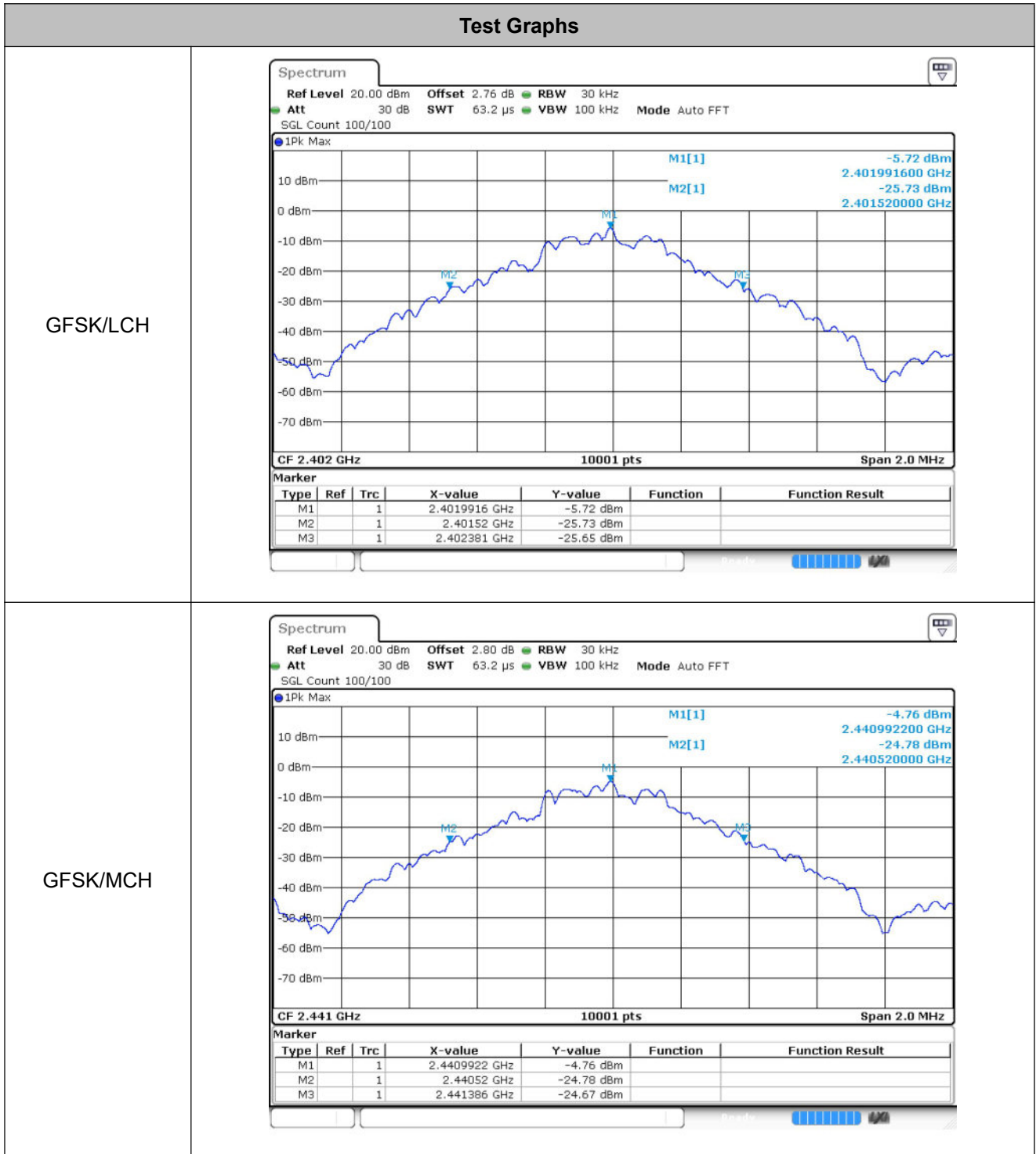


3 20dB Bandwidth

3.1 Test Result

Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.861	Not Specified	Pass
	MCH	0.866	Not Specified	Pass
	HCH	0.89	Not Specified	Pass
$\pi/4$ DQPSK	LCH	1.489	Not Specified	Pass
	MCH	1.421	Not Specified	Pass
	HCH	1.427	Not Specified	Pass
8DPSK	LCH	1.426	Not Specified	Pass
	MCH	1.437	Not Specified	Pass
	HCH	1.43	Not Specified	Pass

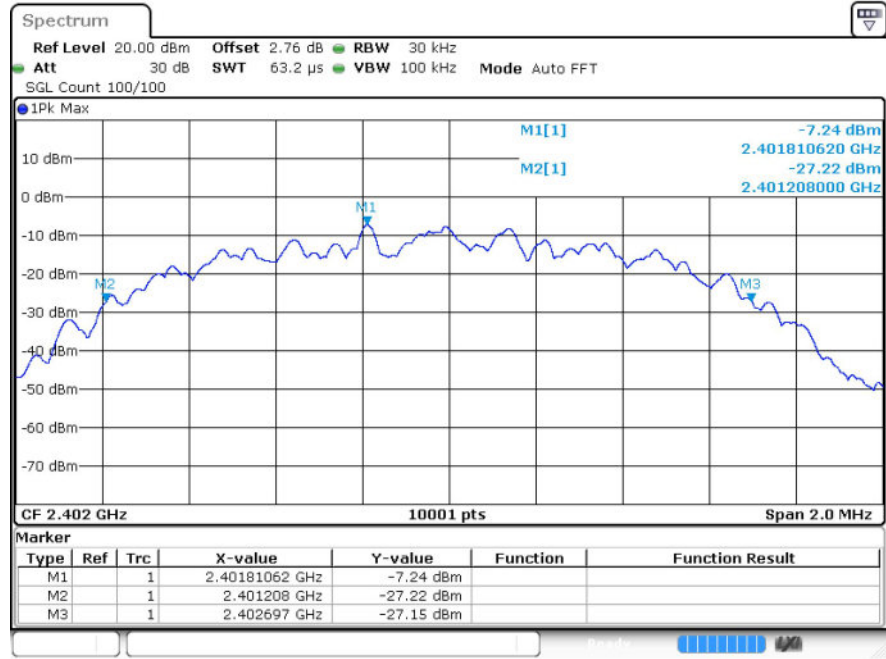
3.2 Test Graphs



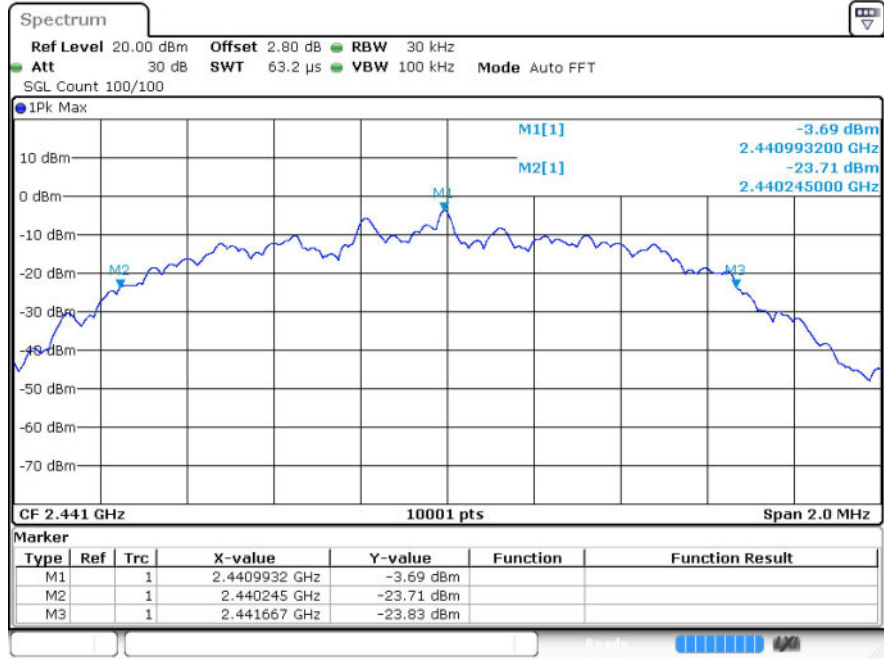
GFSK/HCH



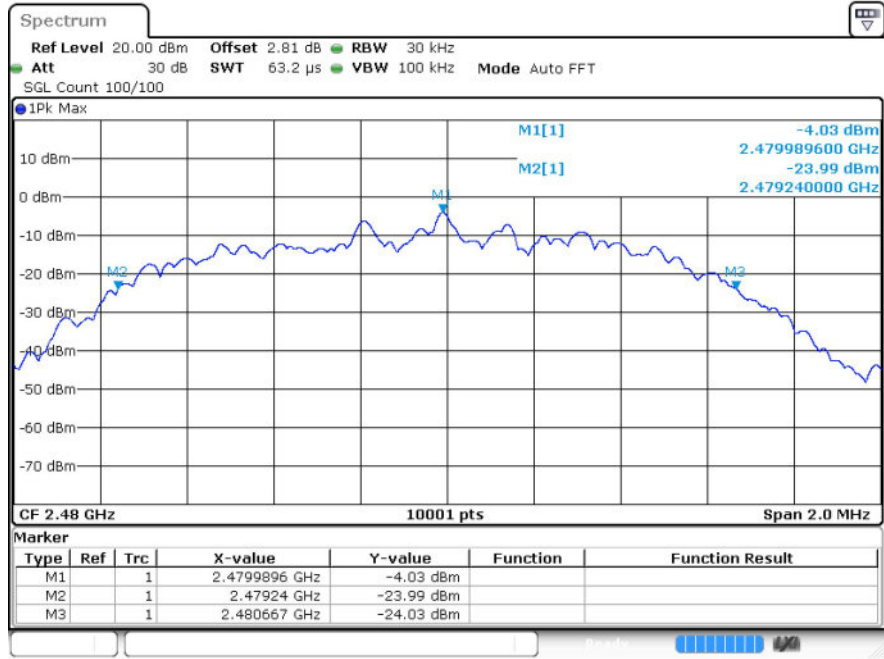
π /4DQPSK/LCH



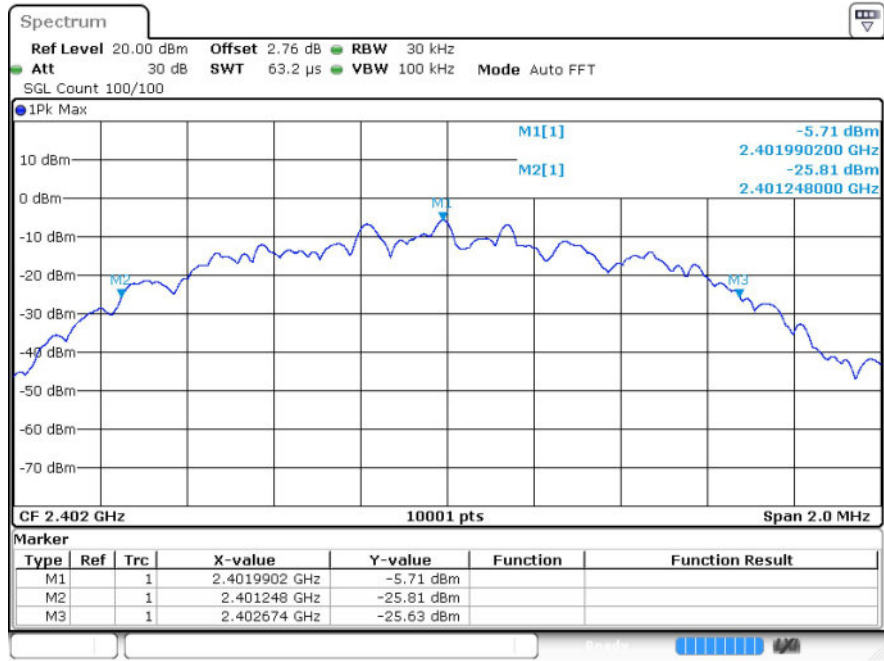
$\pi/4$ DQPSK/MCH



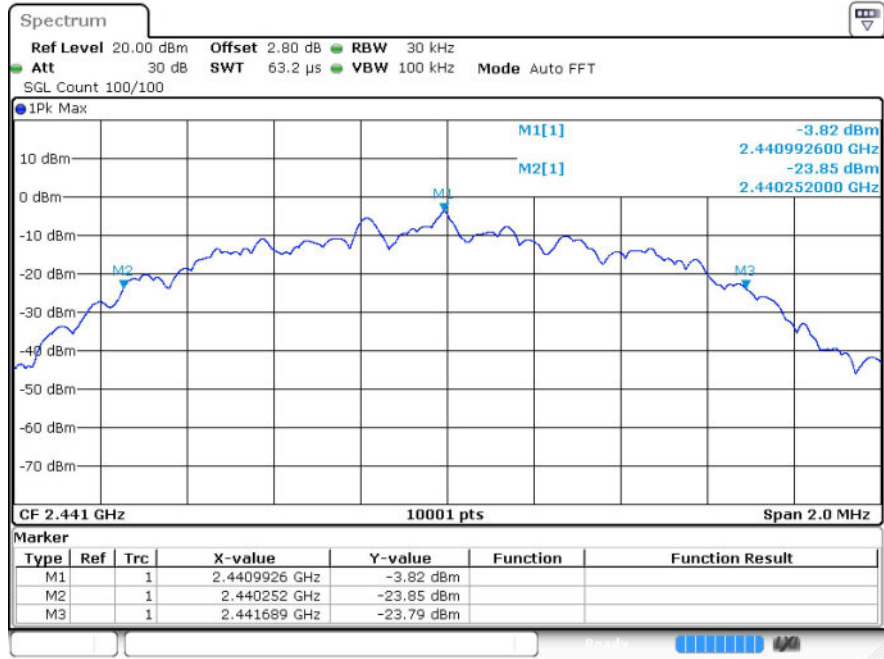
$\pi/4$ DQPSK/HCH



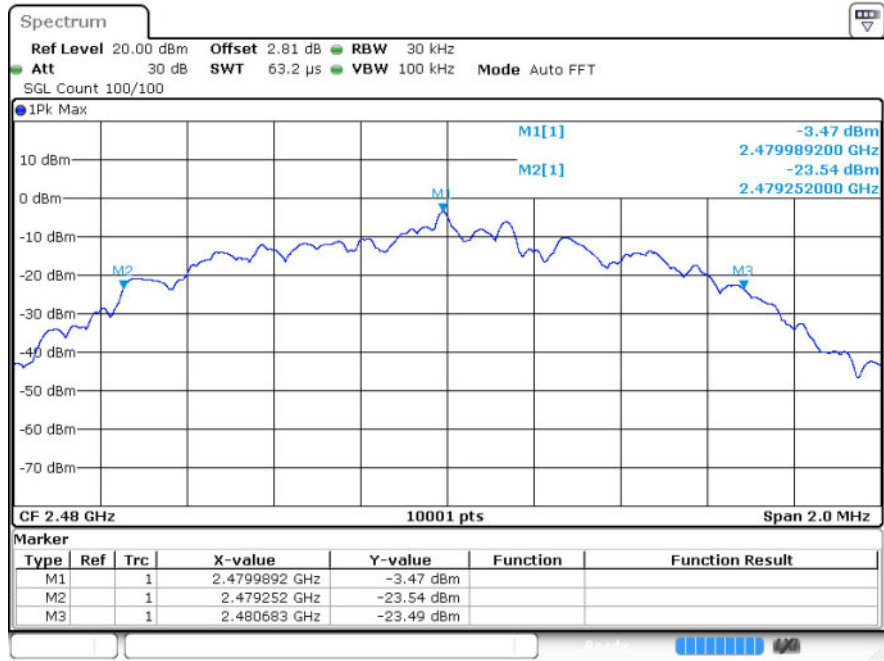
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

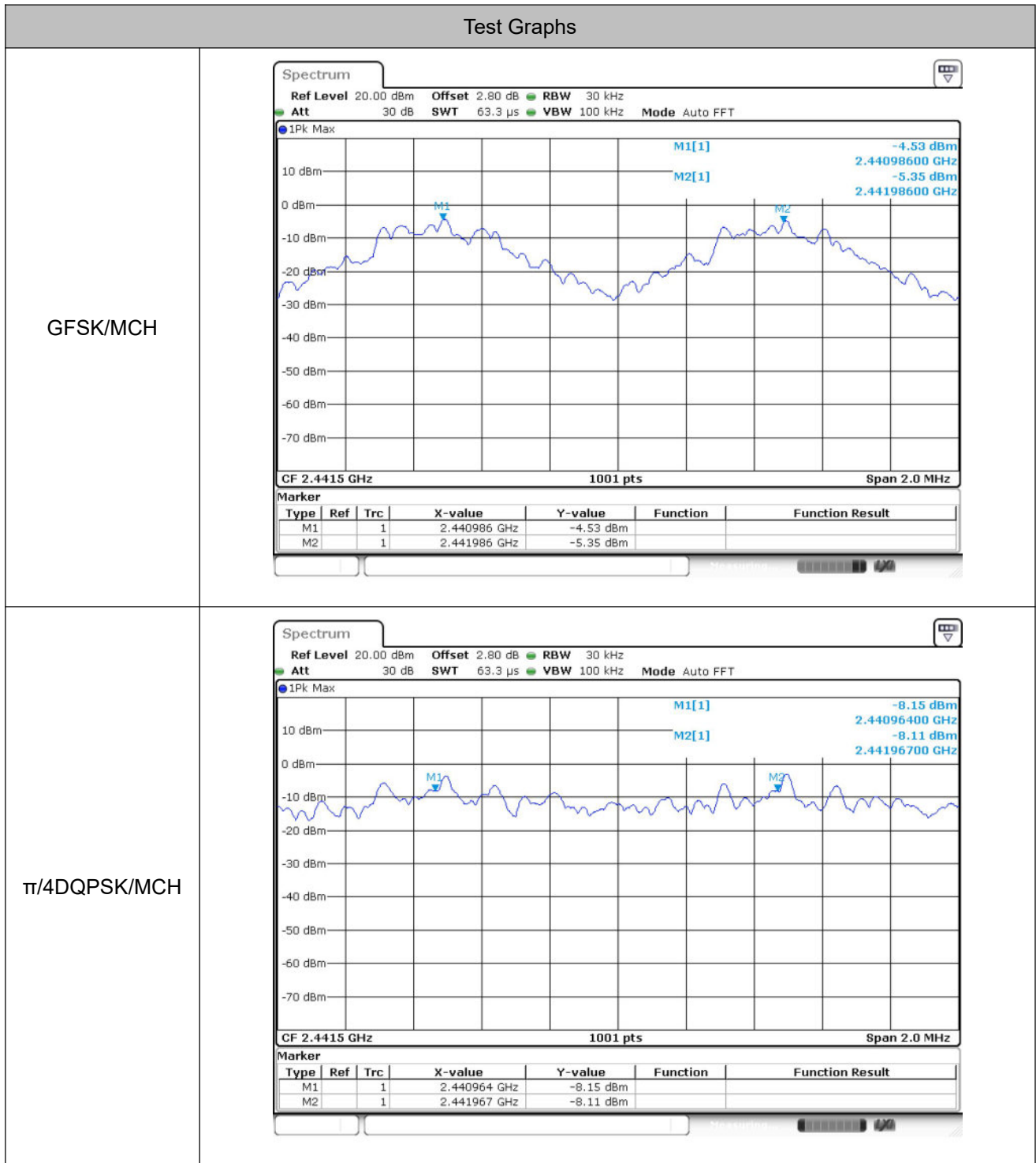


4 Carrier Frequency Separation

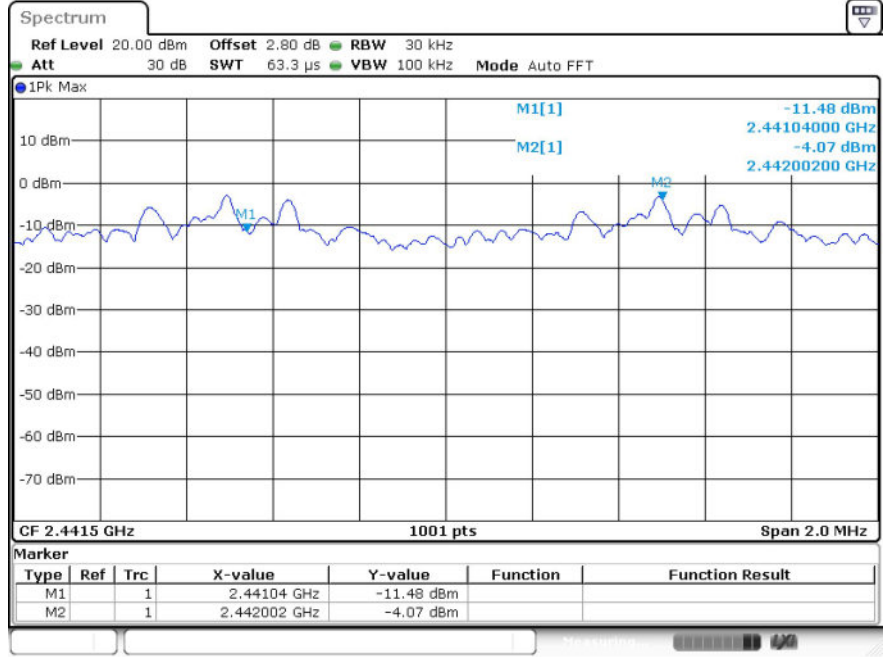
4.1 Test Result

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	MCH	1	0.577	Pass
$\pi/4$ DQPSK	MCH	1.003	0.947	Pass
8DPSK	MCH	0.962	0.958	Pass

4.2 Test Graphs



8DPSK/MCH

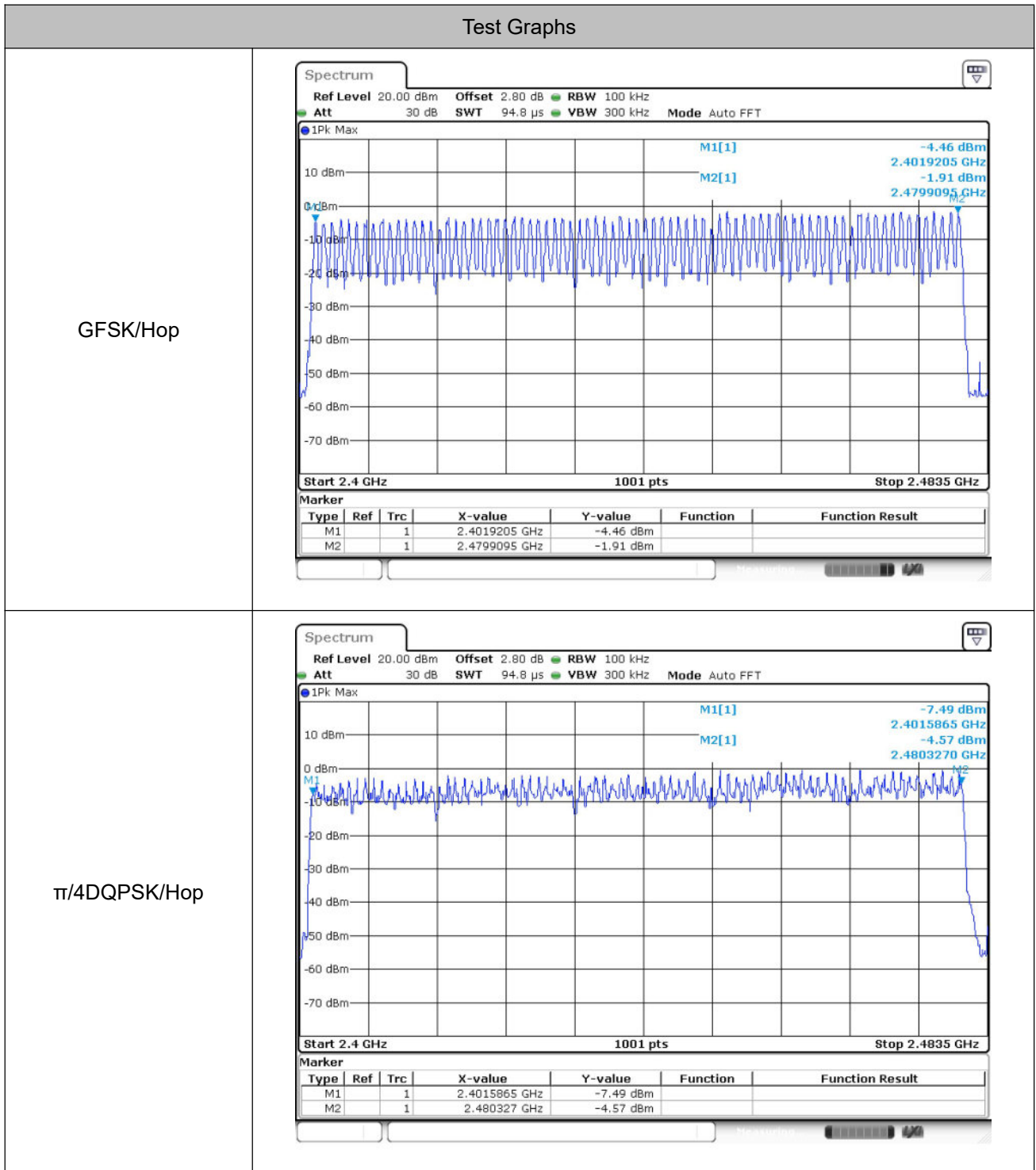


5 Hopping Channel Number

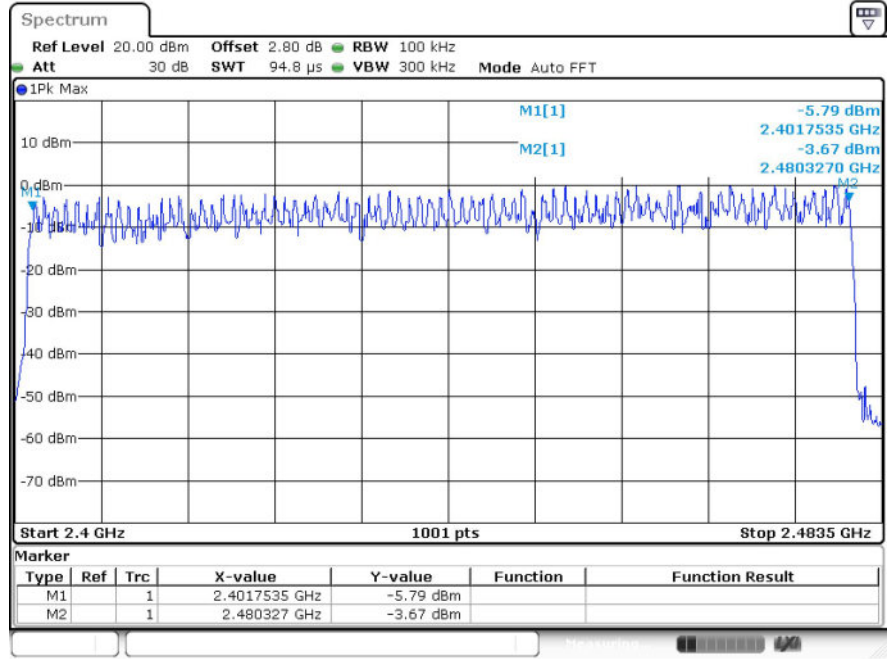
5.1 Test Result

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

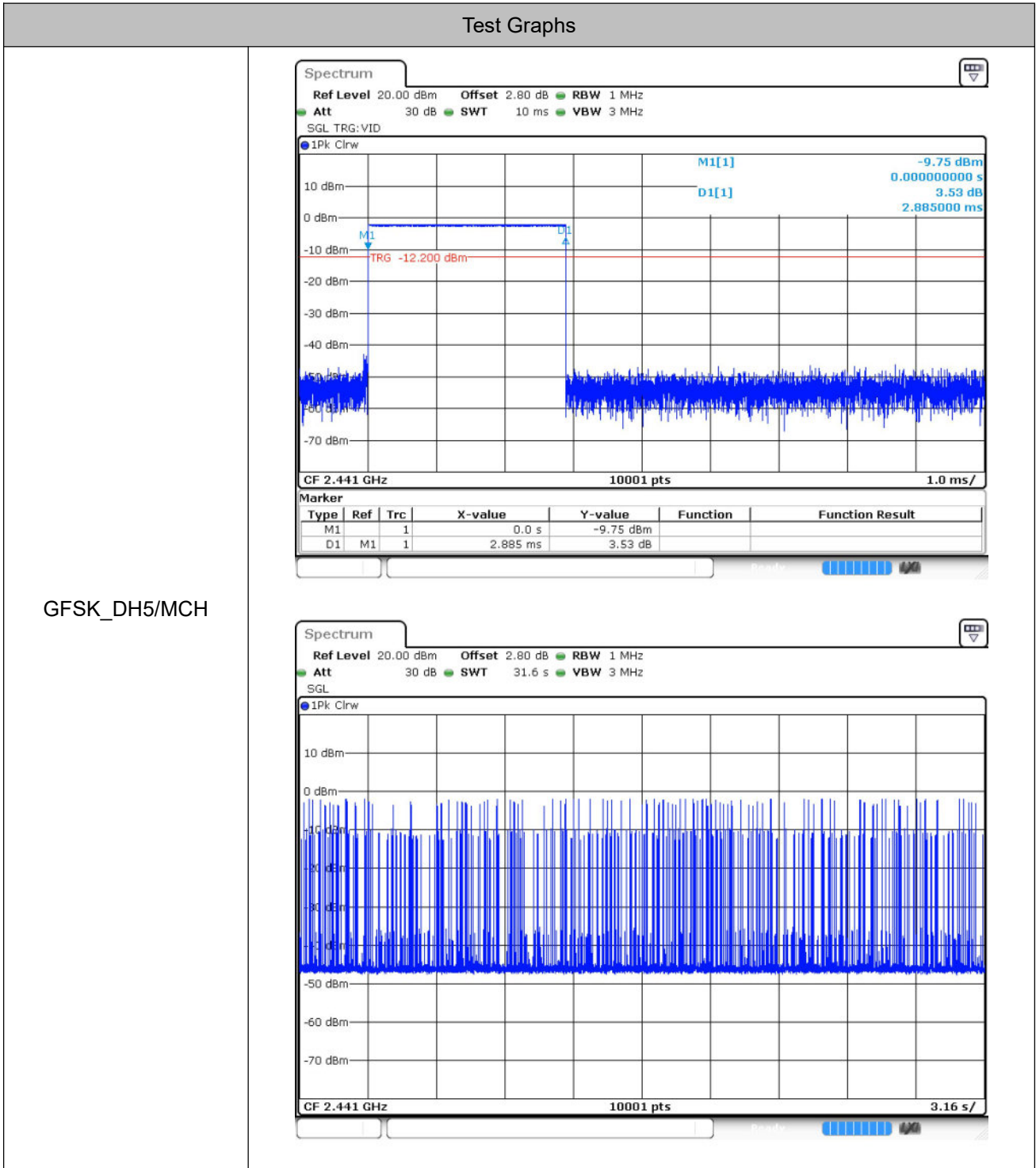


6 Dwell Time

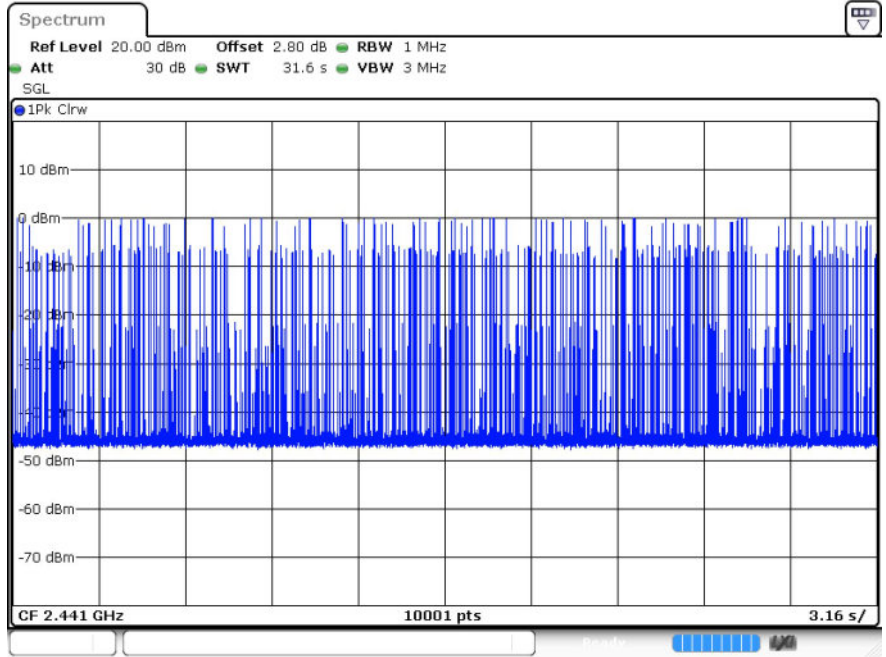
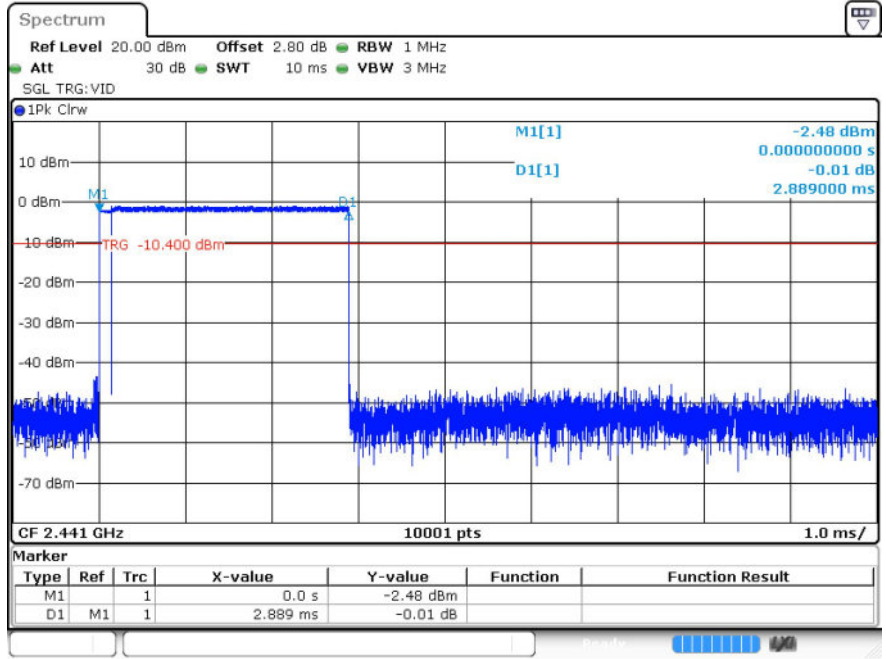
6.1 Test Result

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[ms]	Limit [s]	Verdict
GFSK	DH5	MCH	2.885	118	340.43	0.4	Pass
$\pi/4$ DQPSK	2DH5	MCH	2.889	102	294.678	0.4	Pass
8DPSK	3DH5	MCH	2.892	110	318.12	0.4	Pass

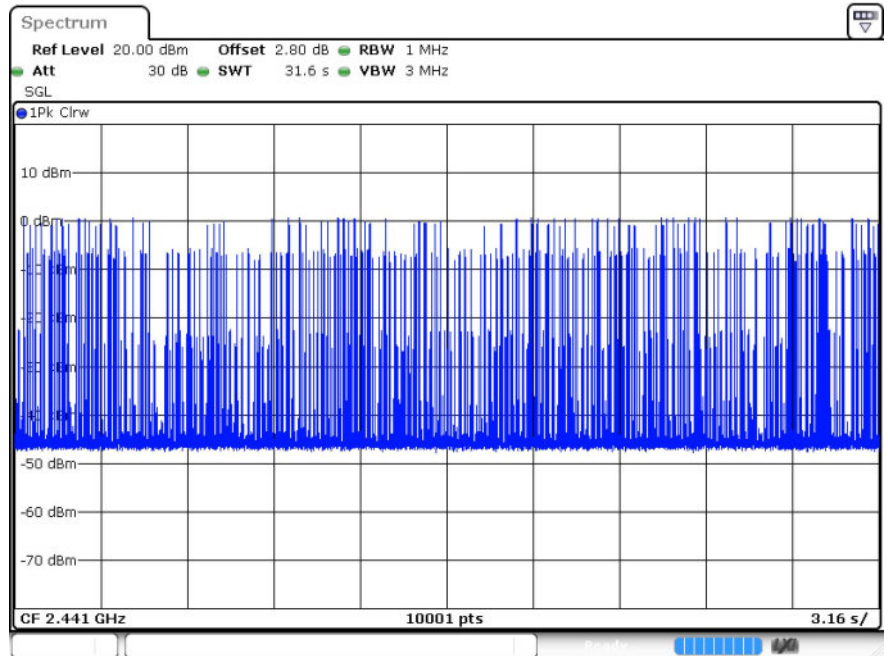
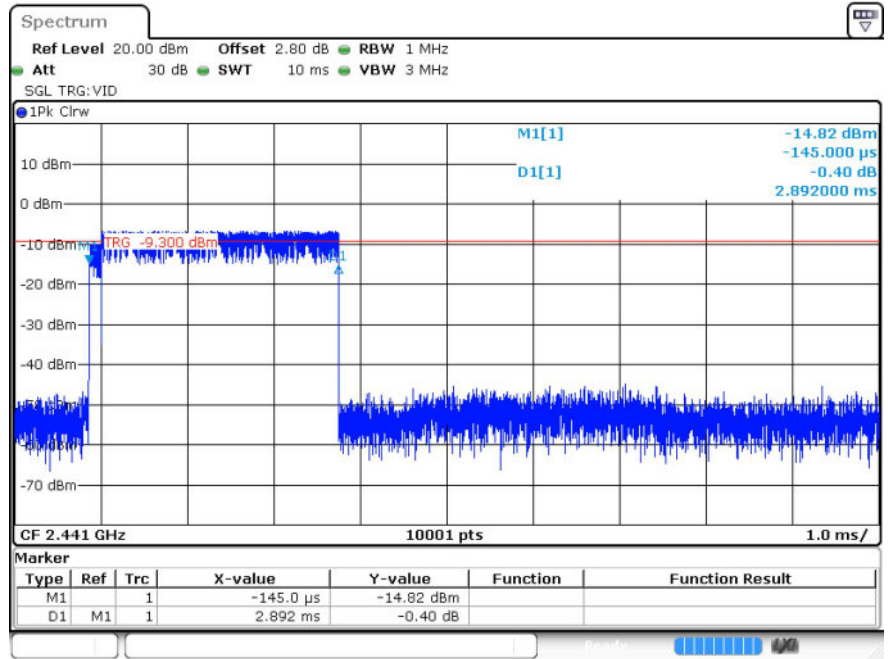
6.2 Test Graphs



$\pi/4$ DQPSK
_2DH5/MCH



8DPSK_3DH5/MCH

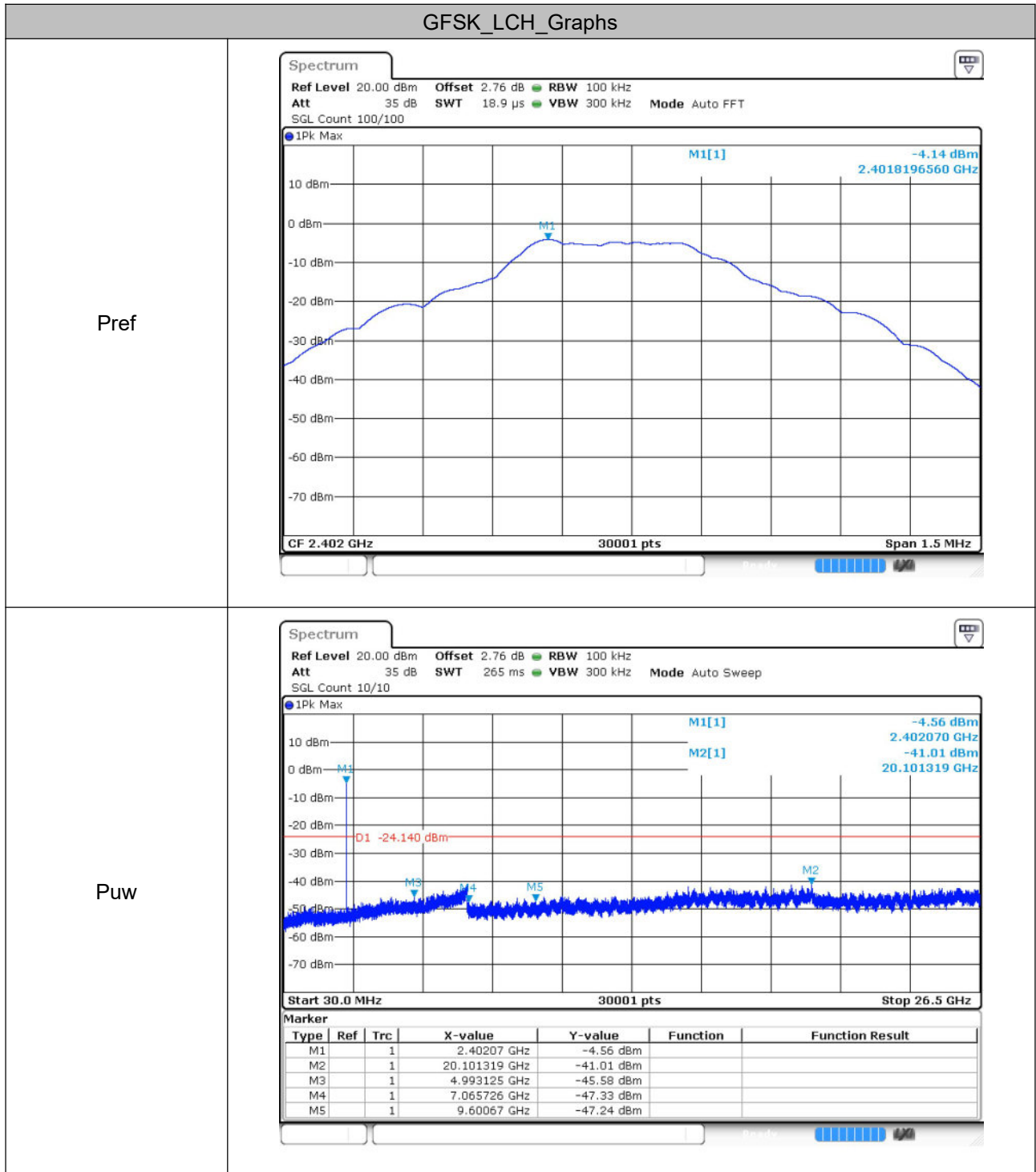


7 RF Conducted Spurious Emissions

7.1 Test Result

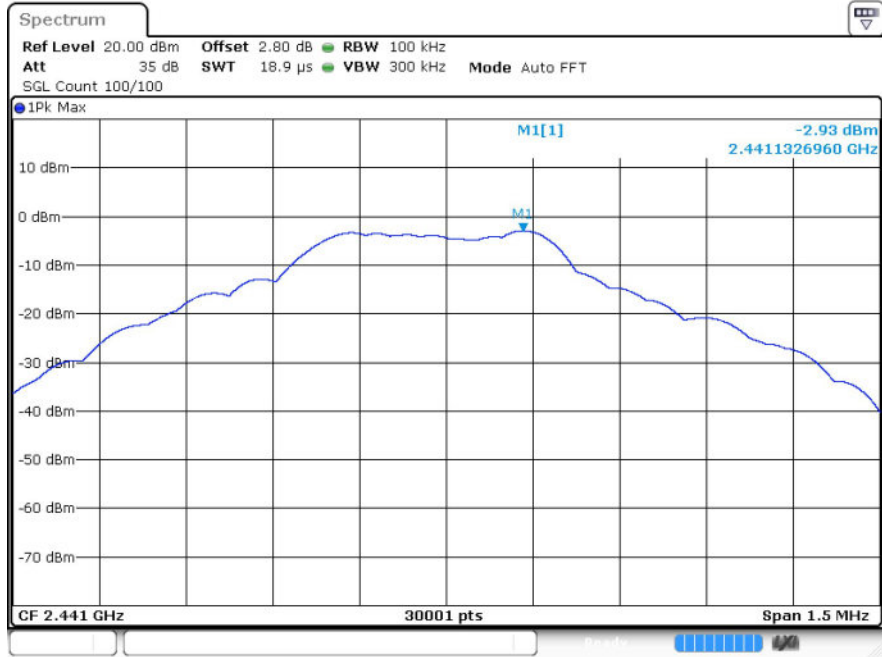
Mode	Channel	Max. Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	-36.87	-20	Pass
	MCH	-37.71	-20	Pass
	HCH	-37.43	-20	Pass
$\pi/4$ DQPSK	LCH	-38.41	-20	Pass
	MCH	-38.6	-20	Pass
	HCH	-39.54	-20	Pass
8DPSK	LCH	-38.34	-20	Pass
	MCH	-37.99	-20	Pass
	HCH	-39.29	-20	Pass

7.2 Test Graphs

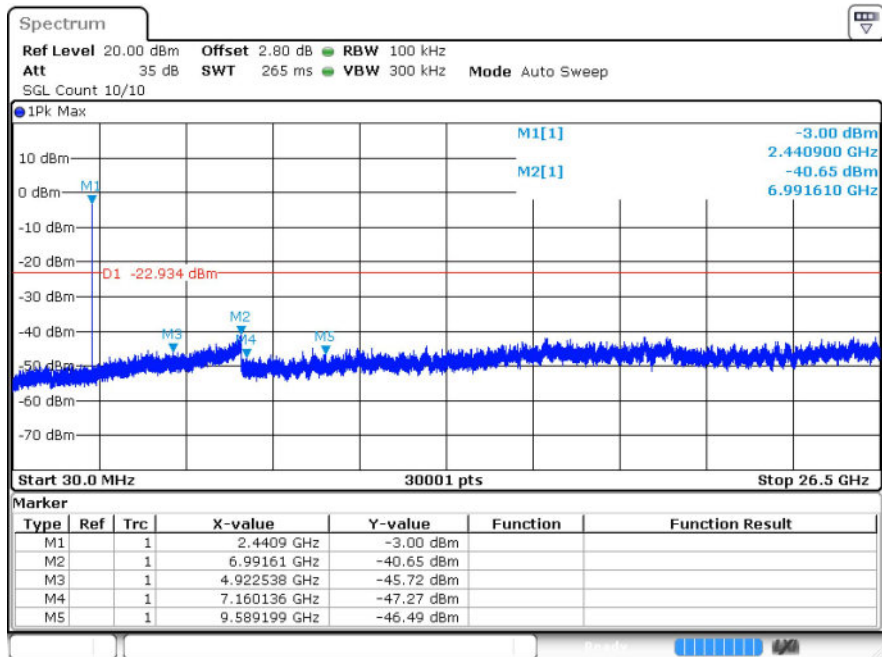


GFSK_MCH_Graphs

Pref

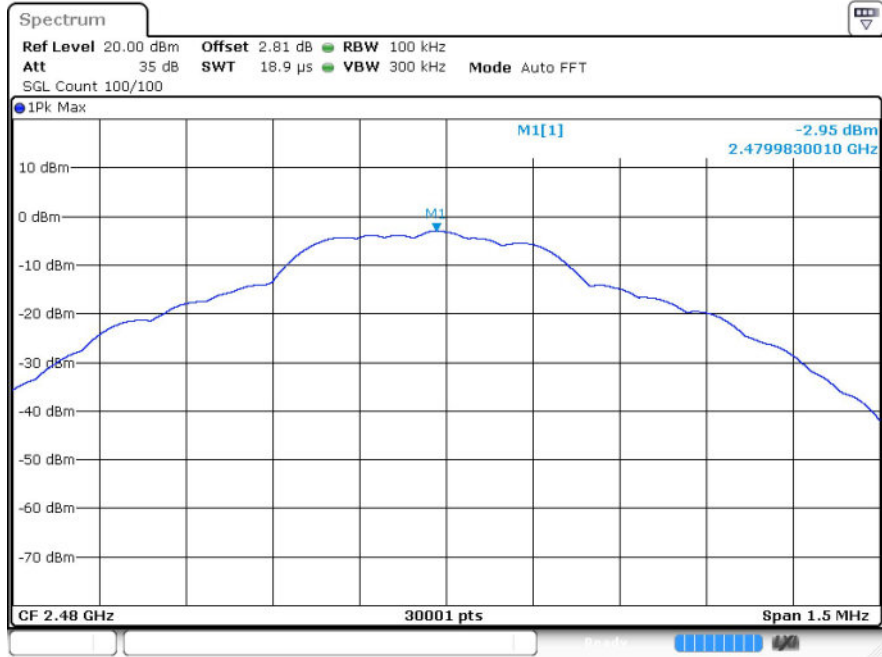


Puw

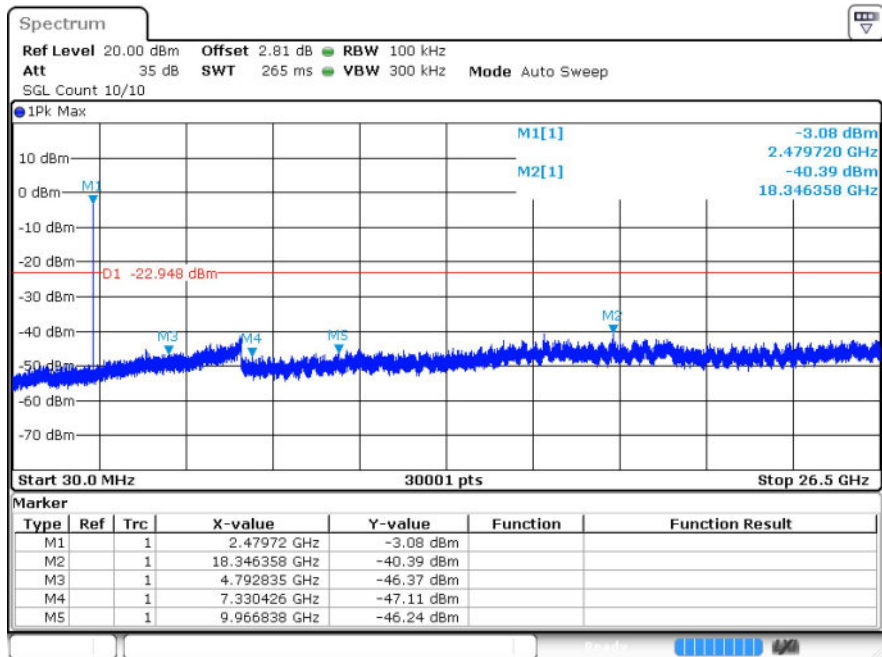


GFSK_HCH_Graphs

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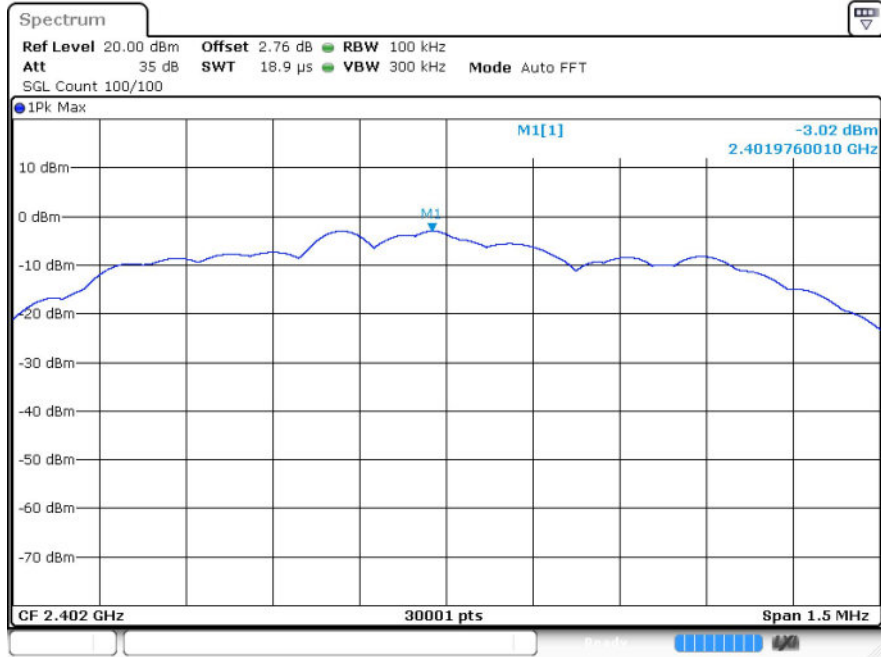


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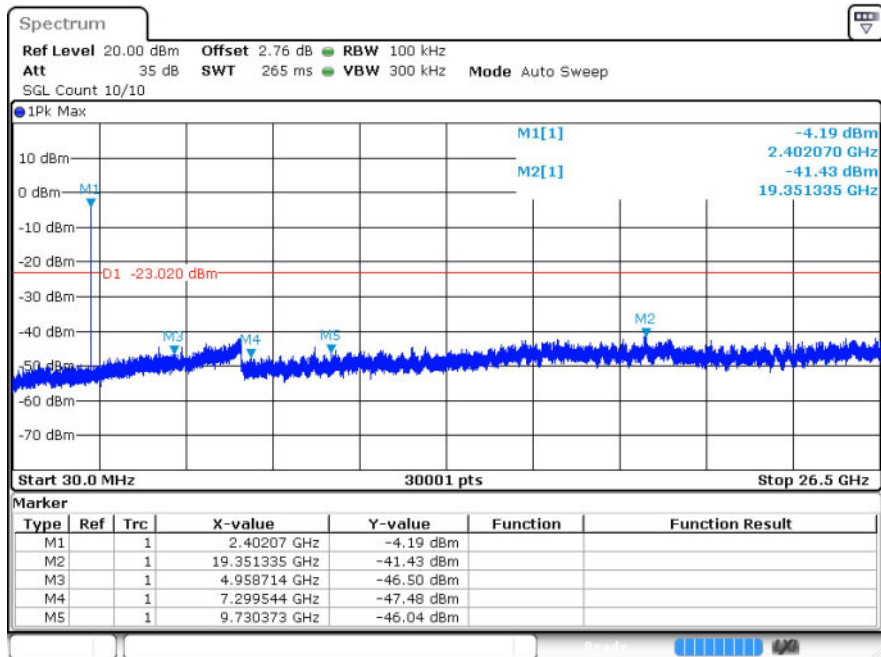


$\pi/4$ DQPSK_LCH_Graphs

Pref

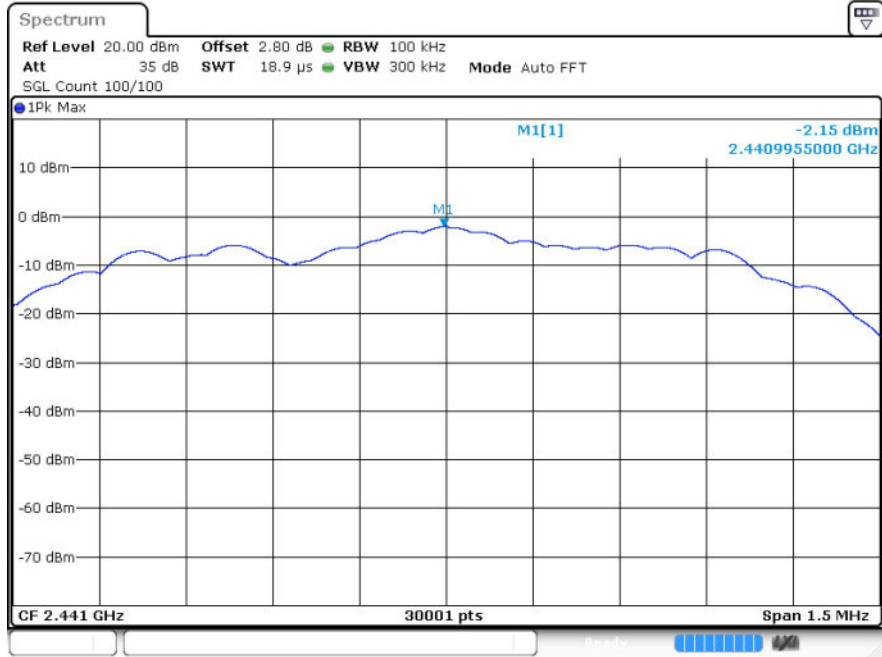


Puw

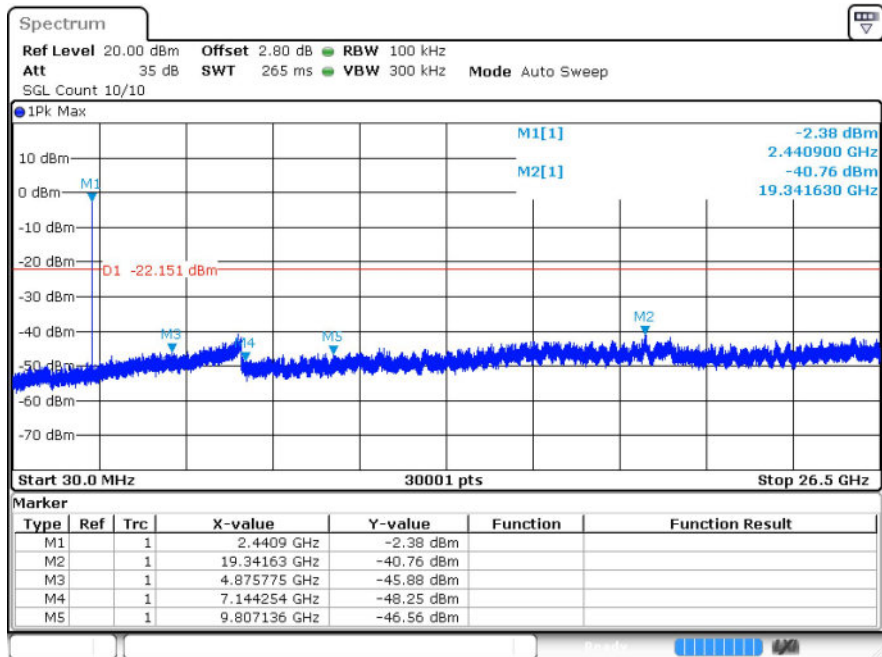


π /4DQPSK_MCH_Graphs

Pref

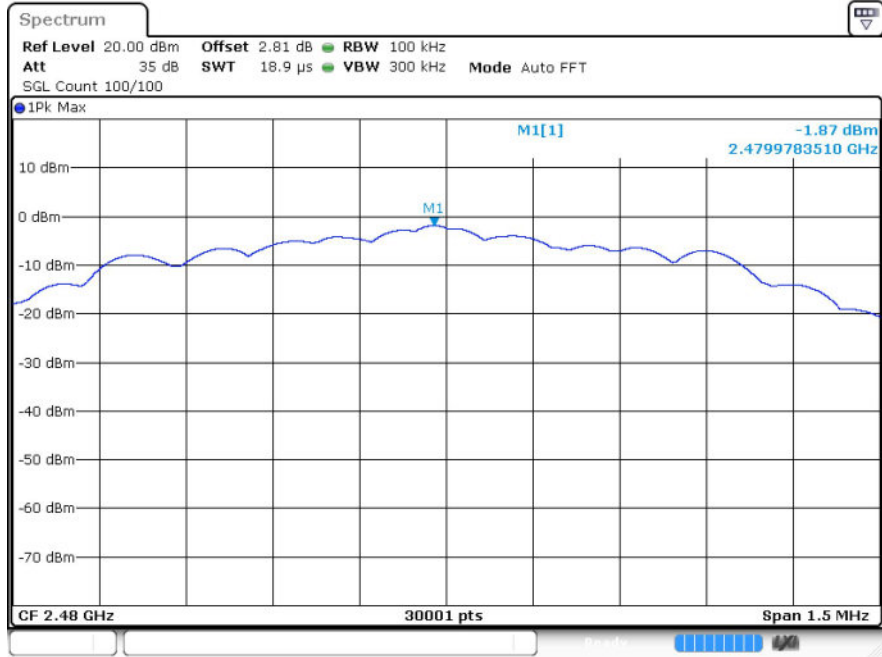


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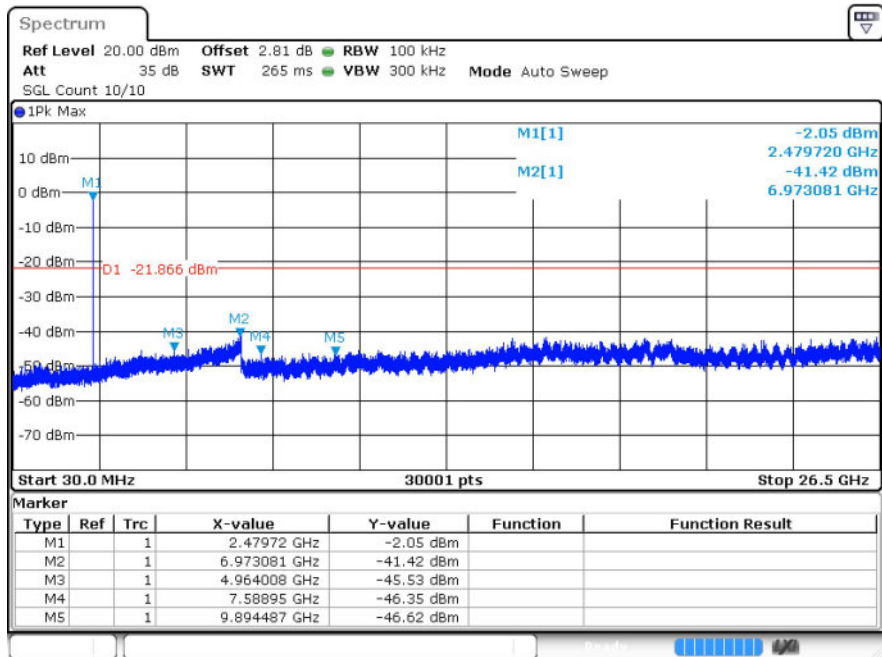


π /4DQPSK_HCH_Graphs

Pref

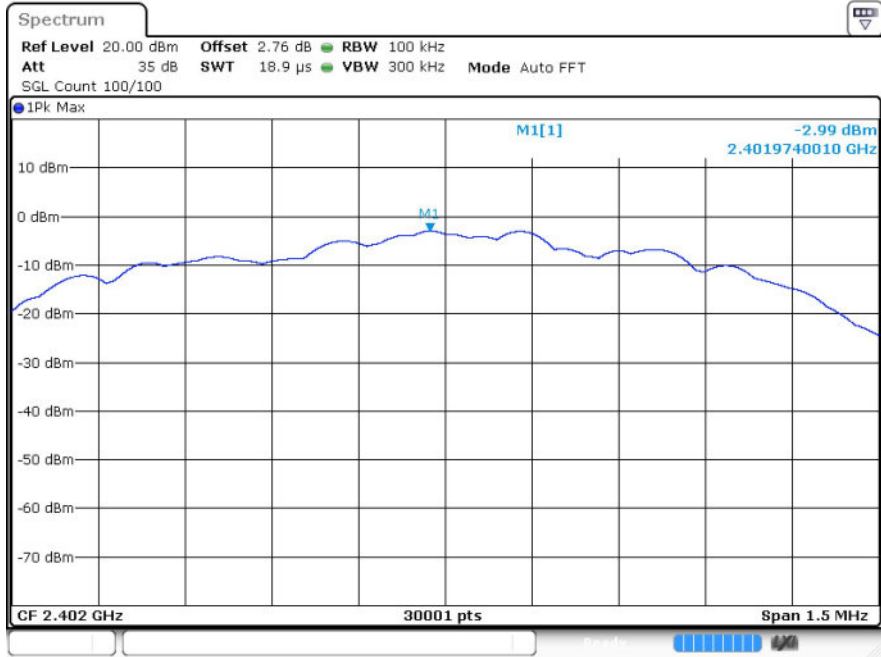


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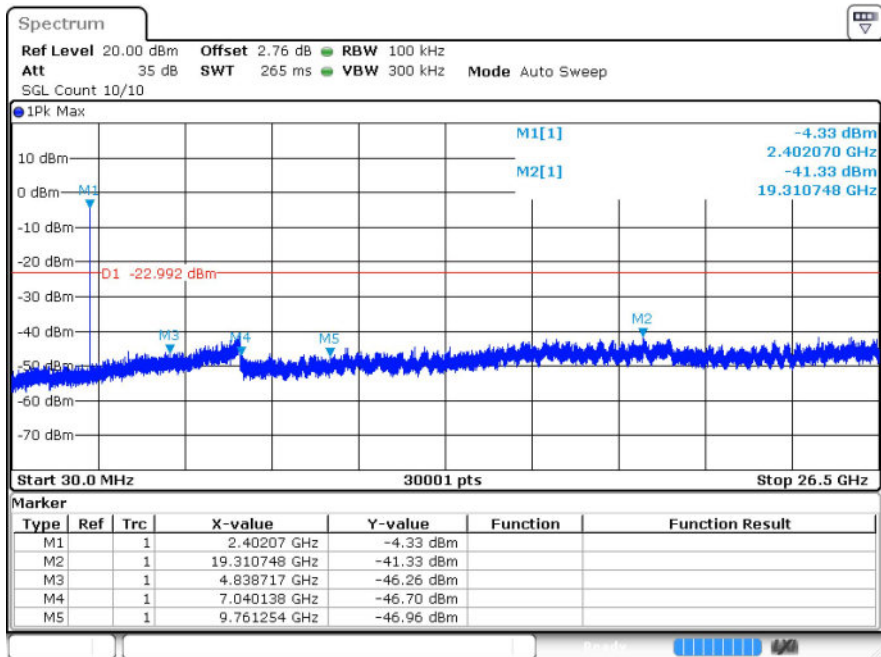


8DPSK_LCH_Graphs

Pref

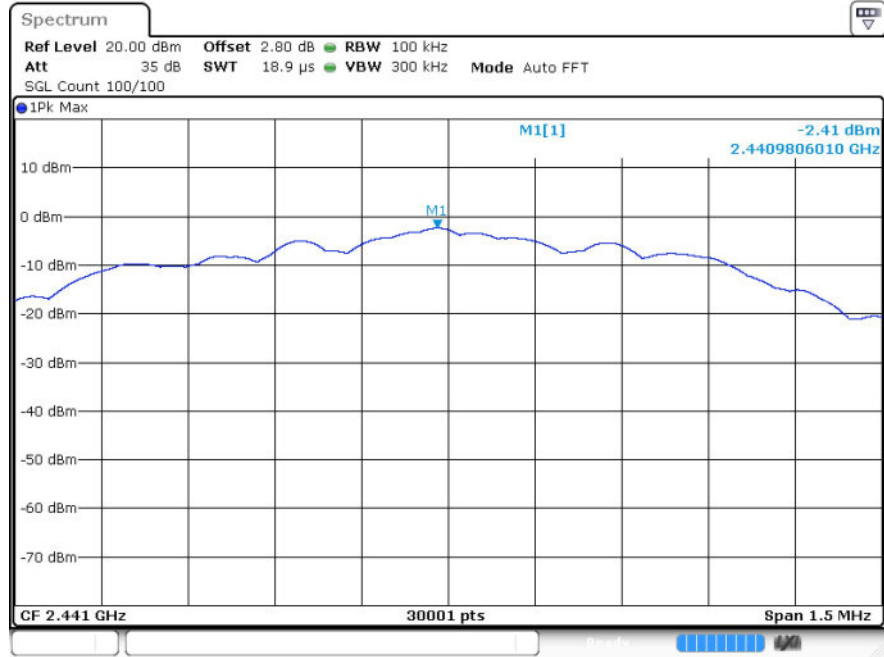


Puw



8DPSK_MCH_Graphs

Pref



Puw

