



Appendix A

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

Product Name: FIBONACCI CLOCK

Trade Mark: FIBONAX

Test Model: PRACTICA

Environmental Conditions

Temperature:	25.6°C
Relative Humidity:	56.4%
ATM Pressure:	101Kpa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung



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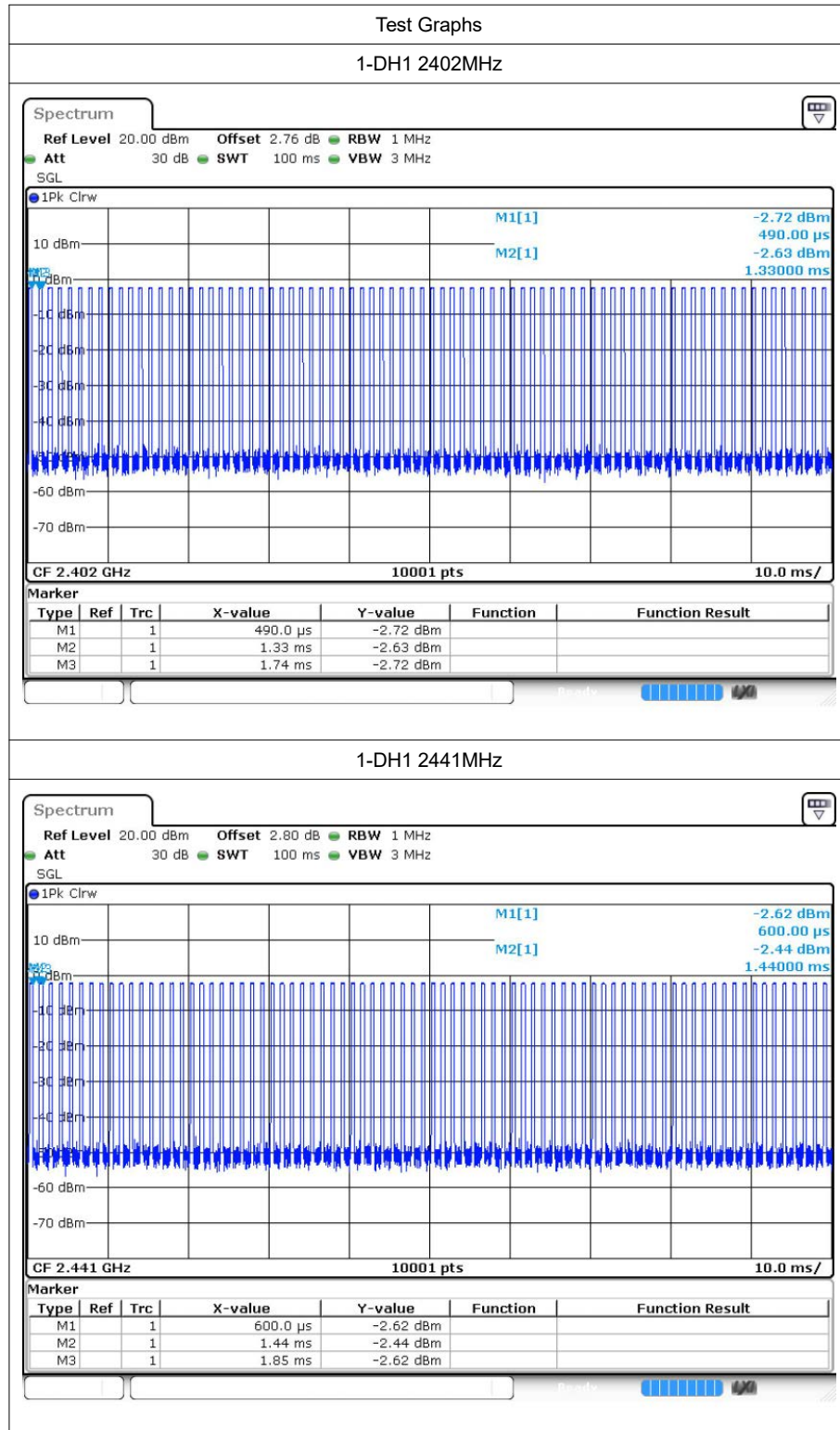
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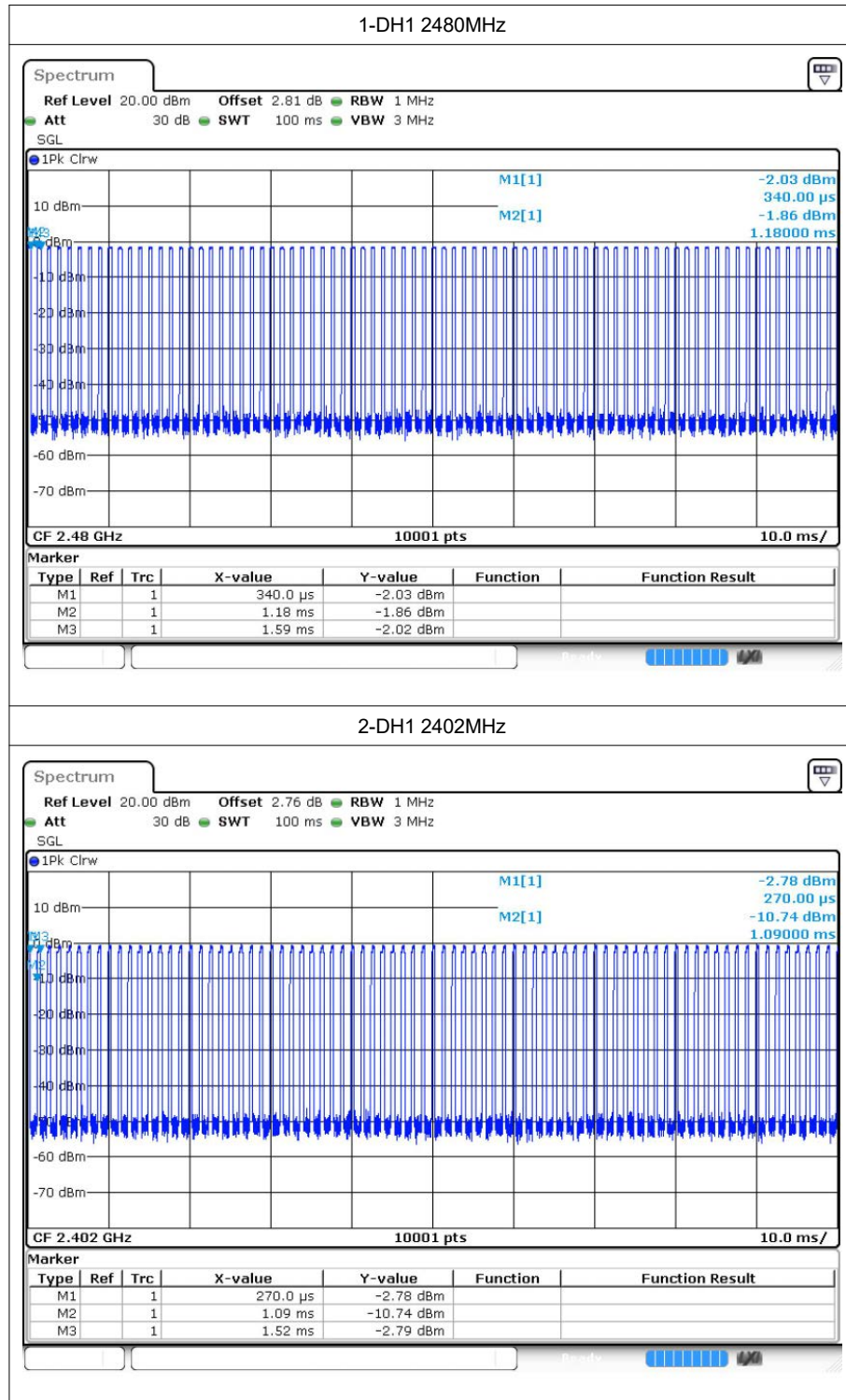
1 Duty Cycle

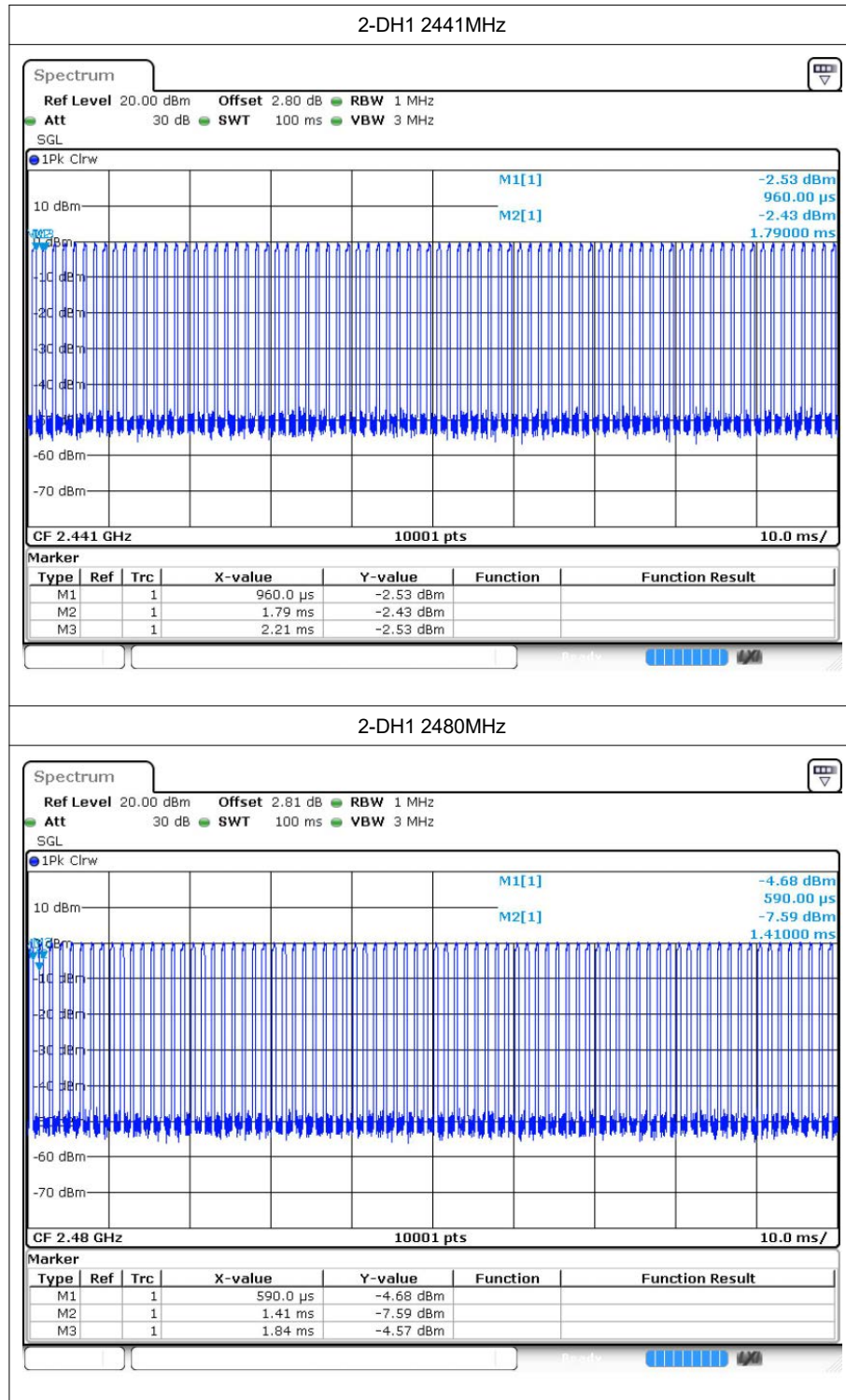
1.1 Test Result

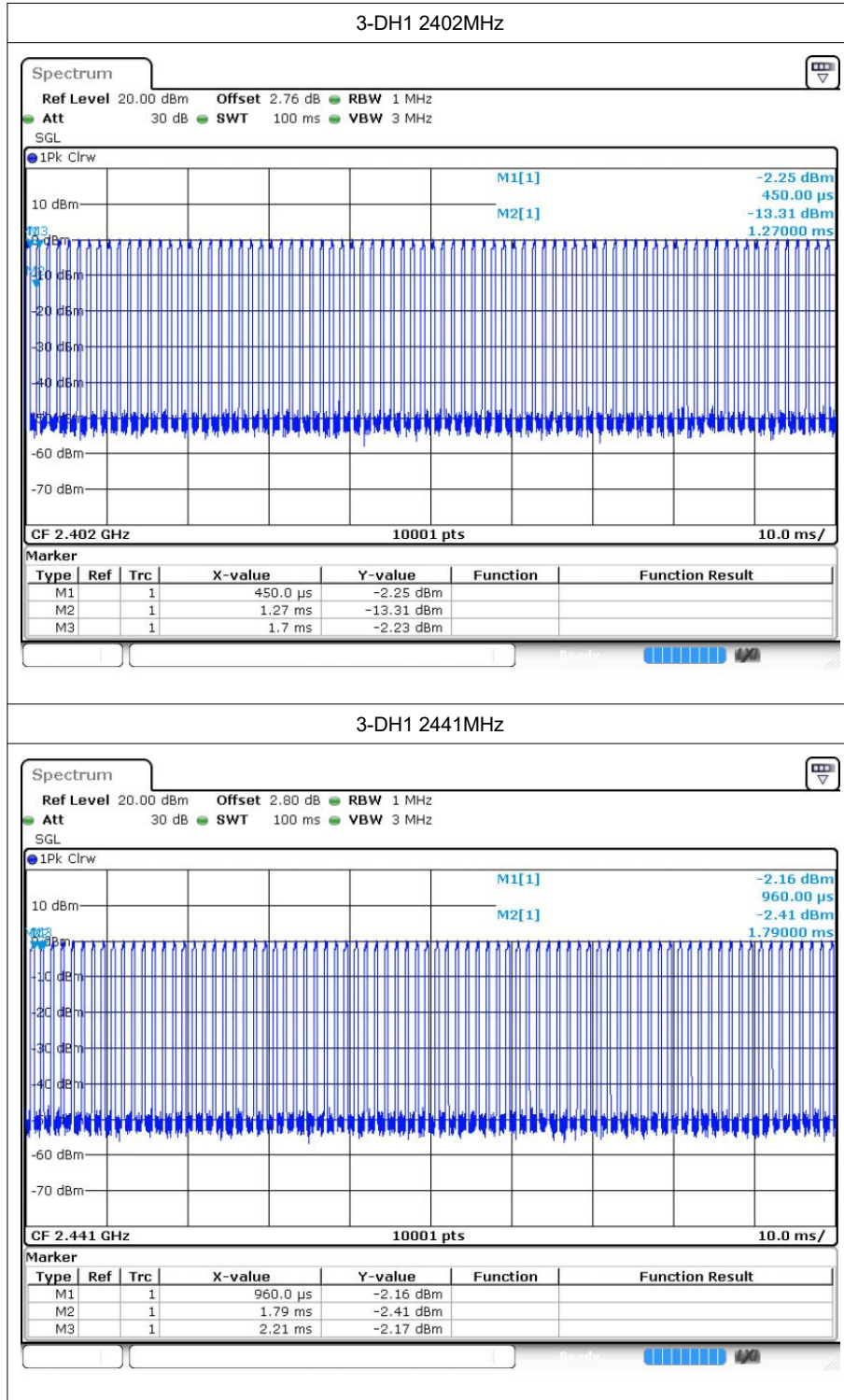
Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor	1/T (kHz)
1-DH1	2402	34.26	4.65	2.44
1-DH1	2441	33.6	4.74	2.44
1-DH1	2480	33.61	4.74	2.44
2-DH1	2402	35.21	4.53	2.33
2-DH1	2441	34.4	4.63	2.38
2-DH1	2480	35.2	4.54	2.33
3-DH1	2402	35.08	4.55	2.33
3-DH1	2441	34.4	4.63	2.38
3-DH1	2480	34.4	4.63	2.38

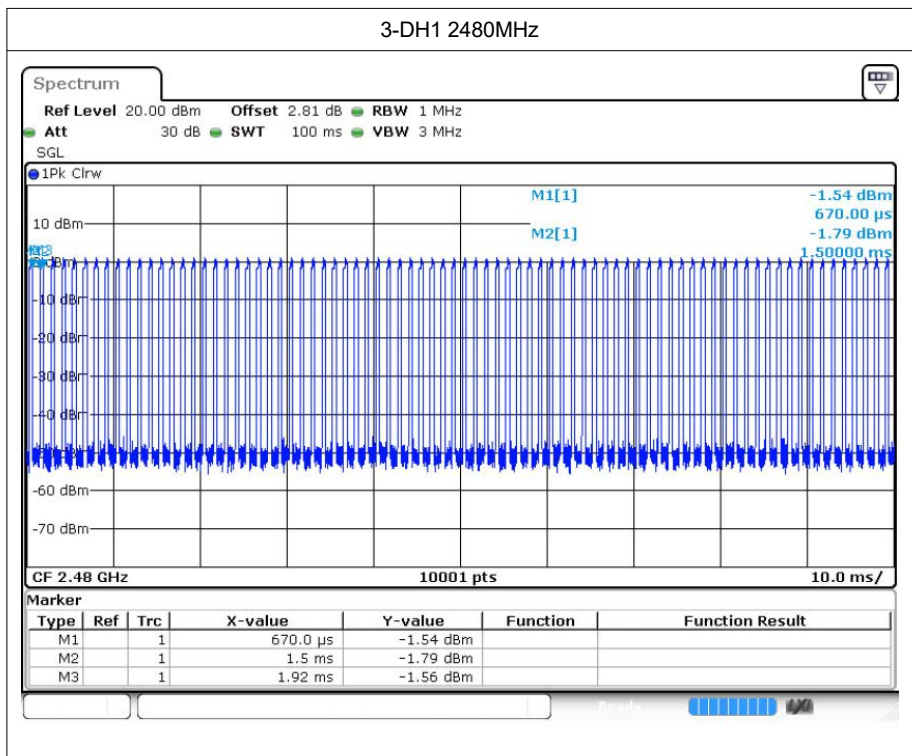
1.2 Test Graphs









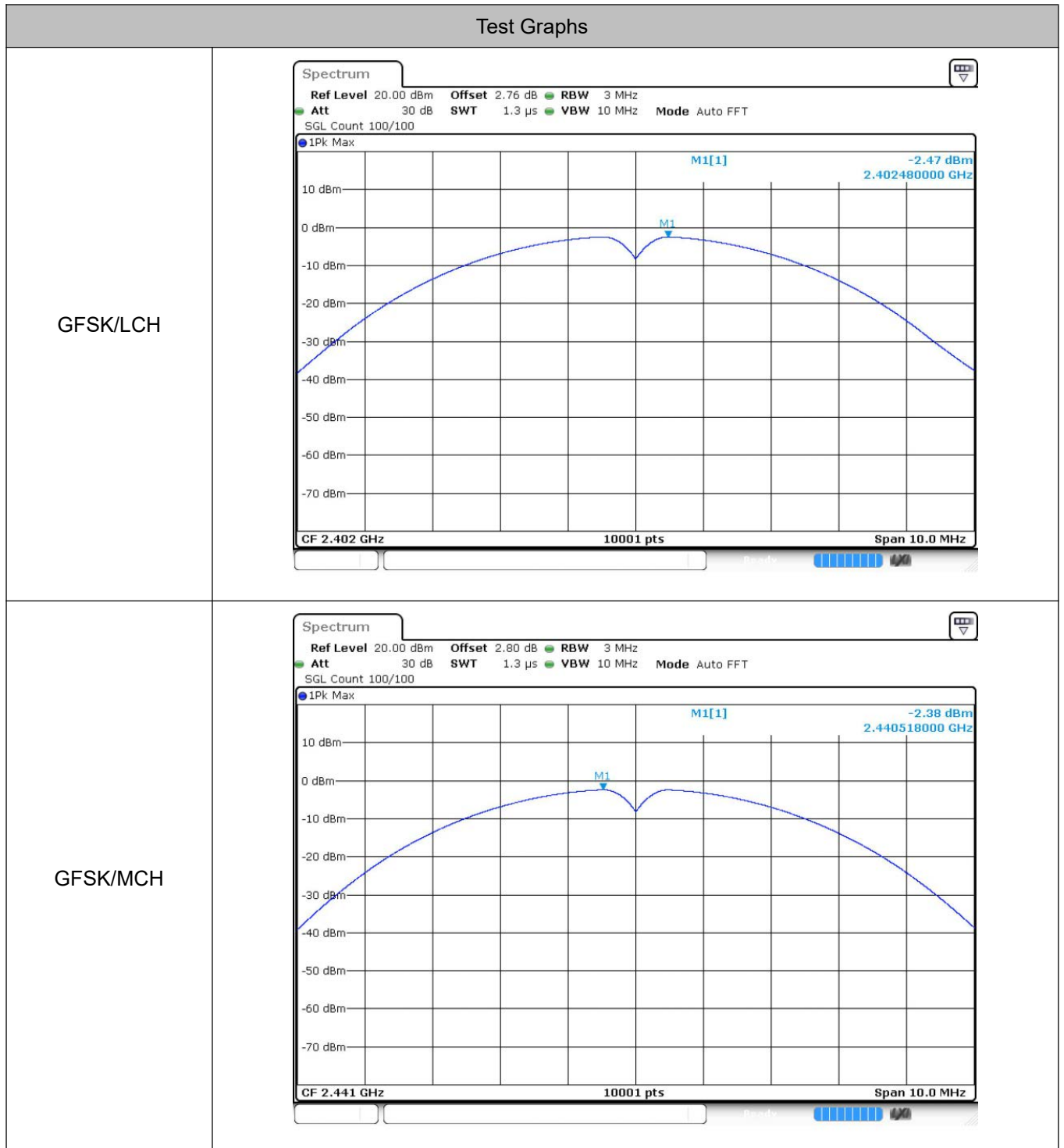


2 Maximum Conducted Peak Output Power

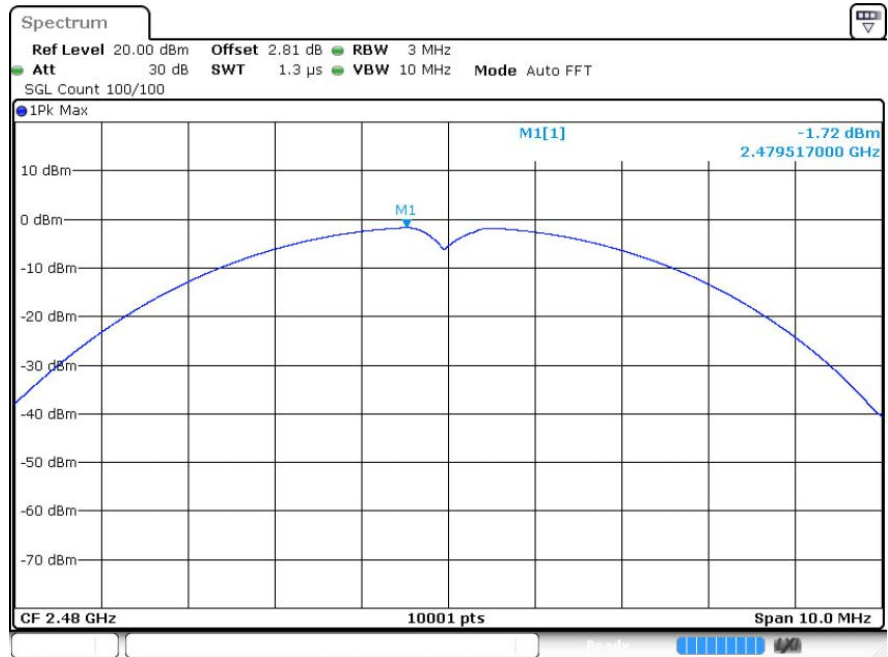
2.1 Test Result

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-2.47	21	Pass
	MCH	-2.38	21	Pass
	HCH	-1.72	21	Pass
$\pi/4$ DQPSK	LCH	-0.63	21	Pass
	MCH	-0.44	21	Pass
	HCH	0.23	21	Pass
8DPSK	LCH	0.16	21	Pass
	MCH	0.06	21	Pass
	HCH	0.15	21	Pass

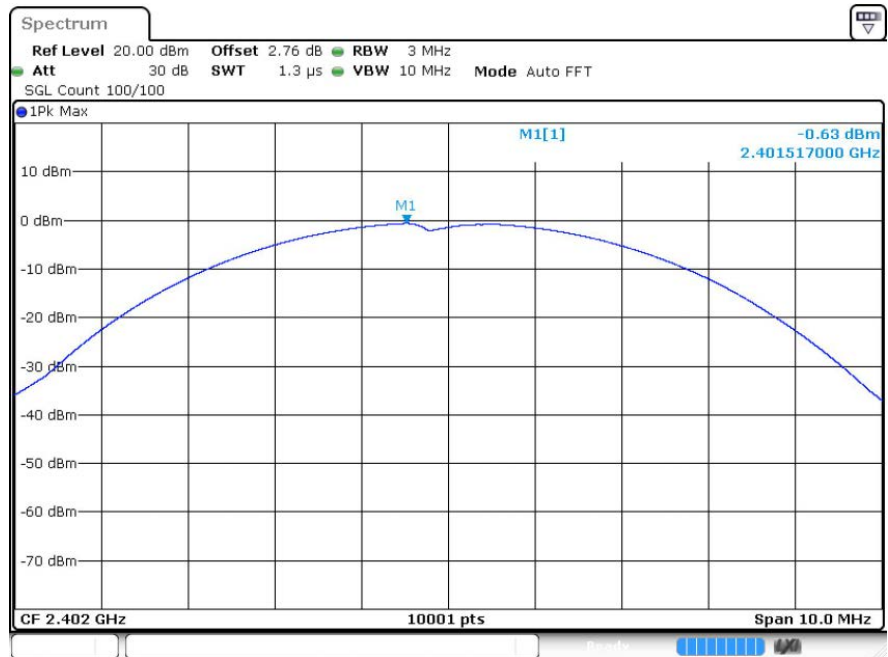
2.2 Test Graphs



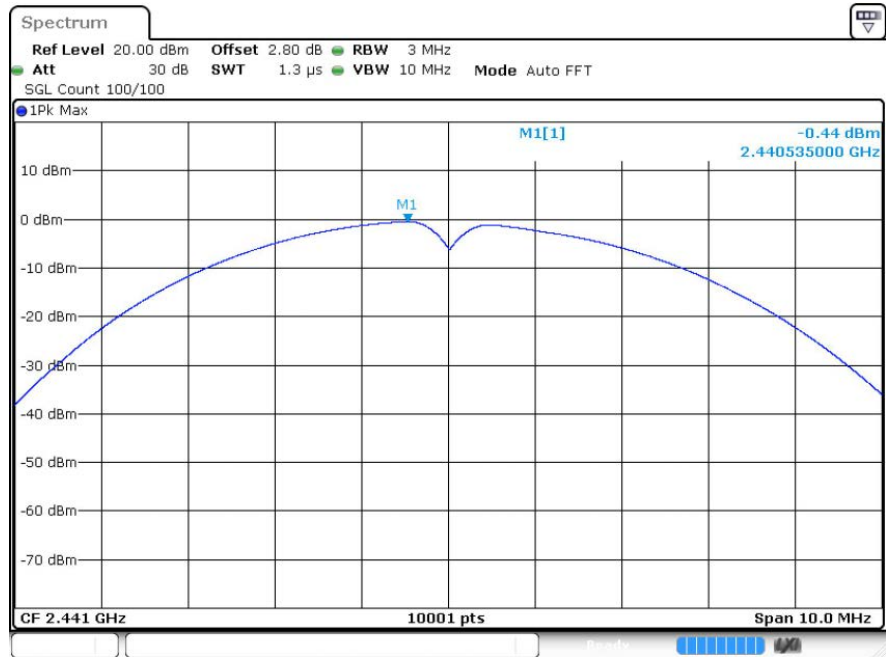
GFSK/HCH



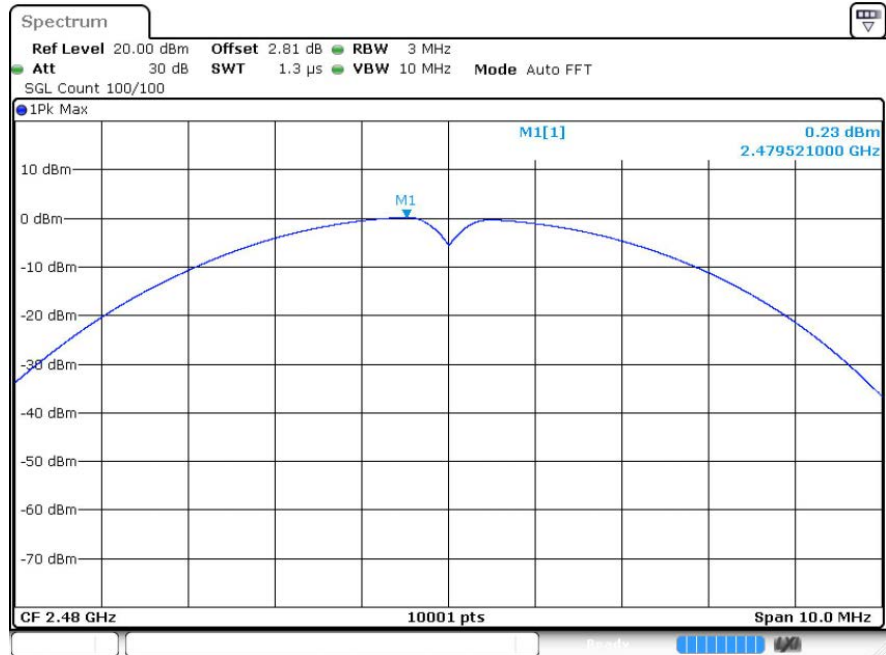
$\pi/4$ DQPSK/LCH



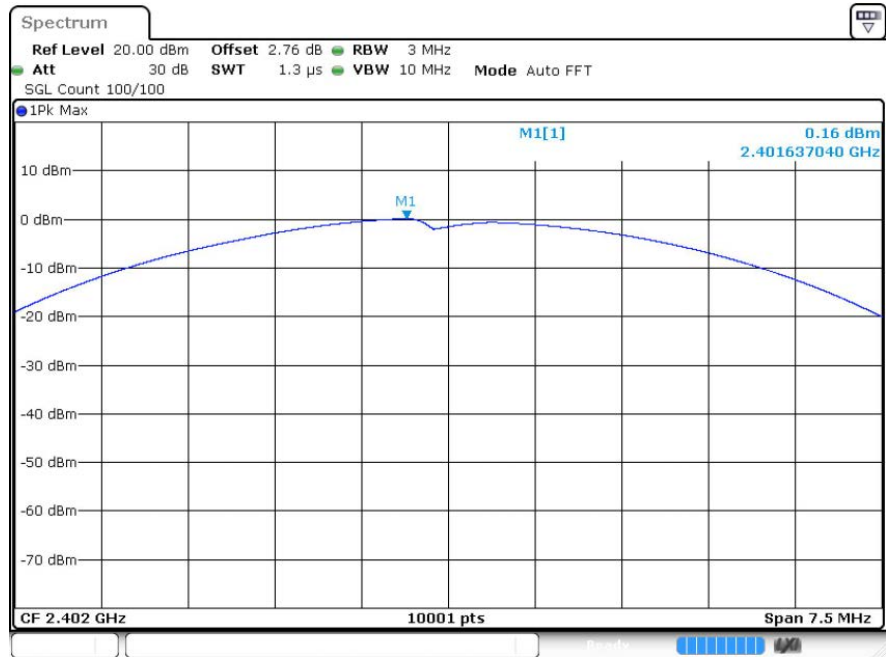
$\pi/4$ DQPSK/MCH



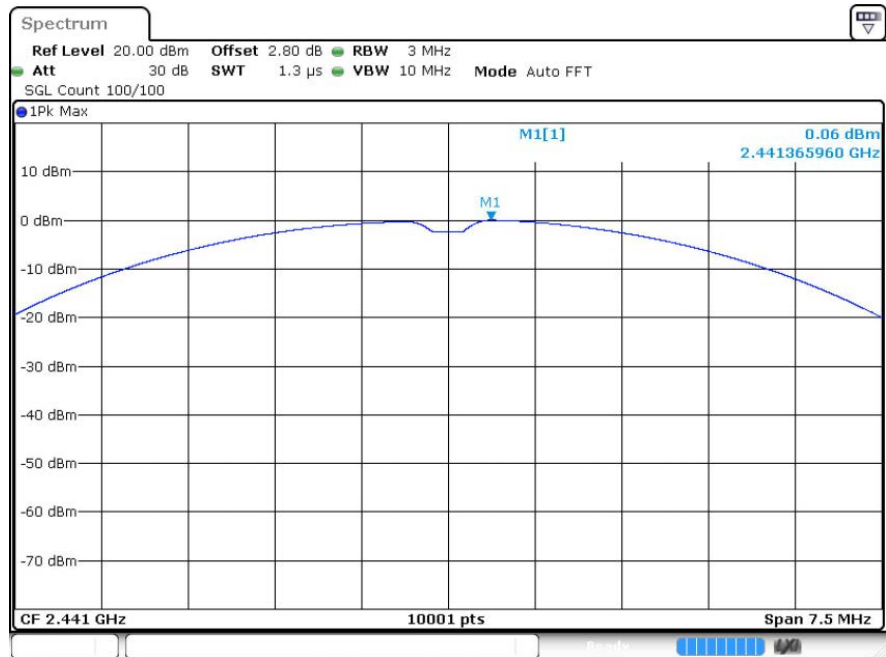
$\pi/4$ DQPSK/HCH



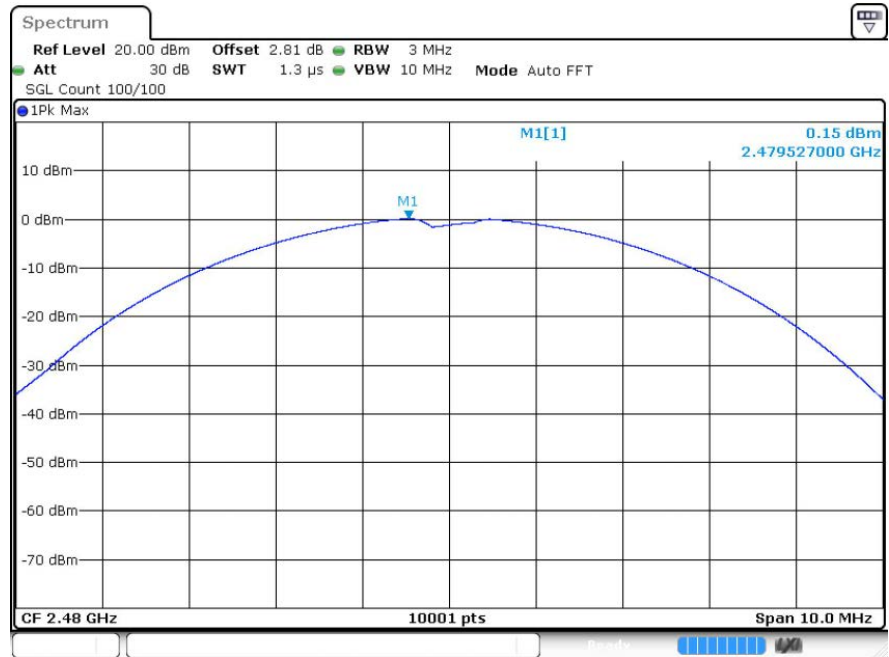
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

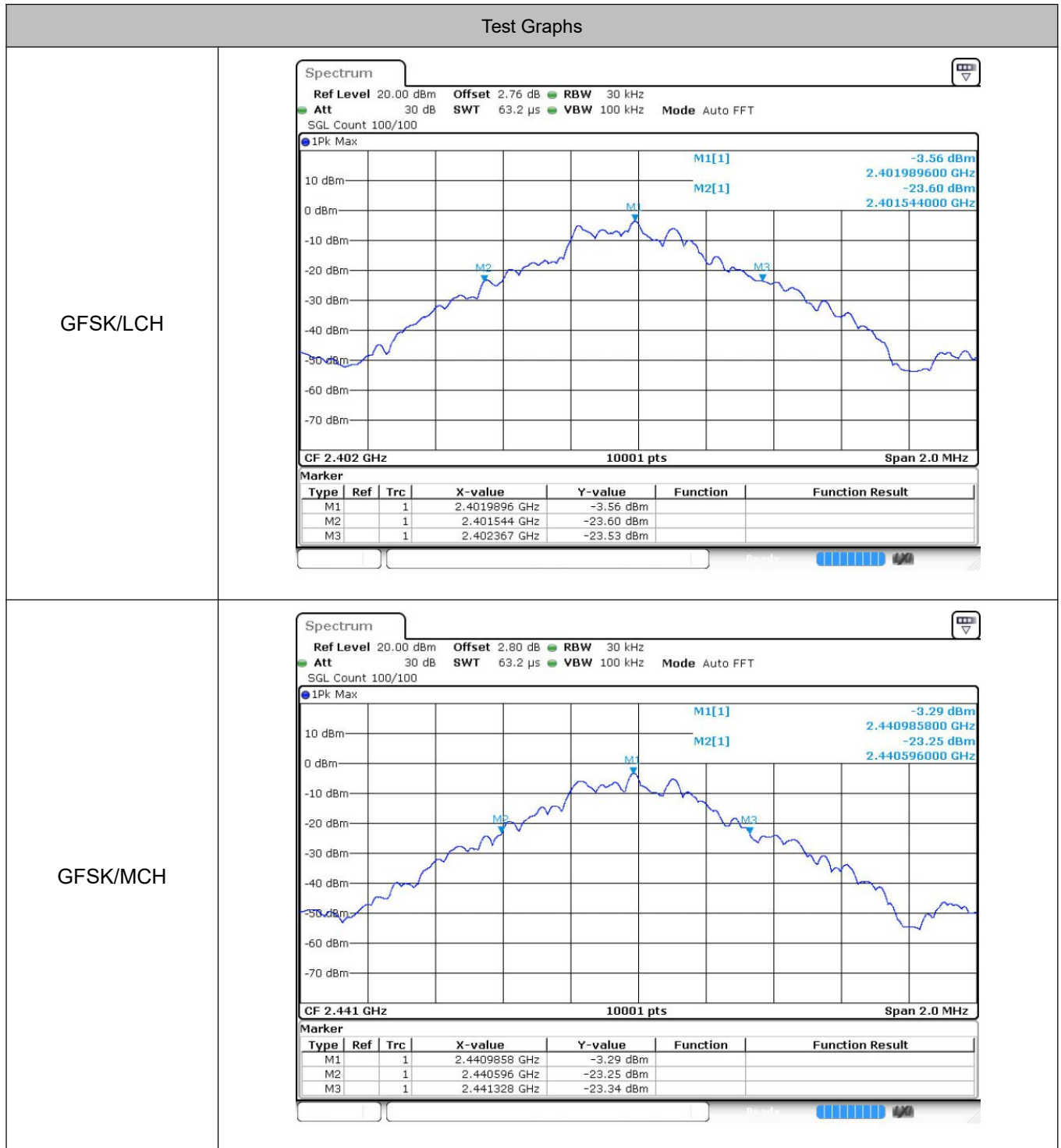


3 20dB Bandwidth

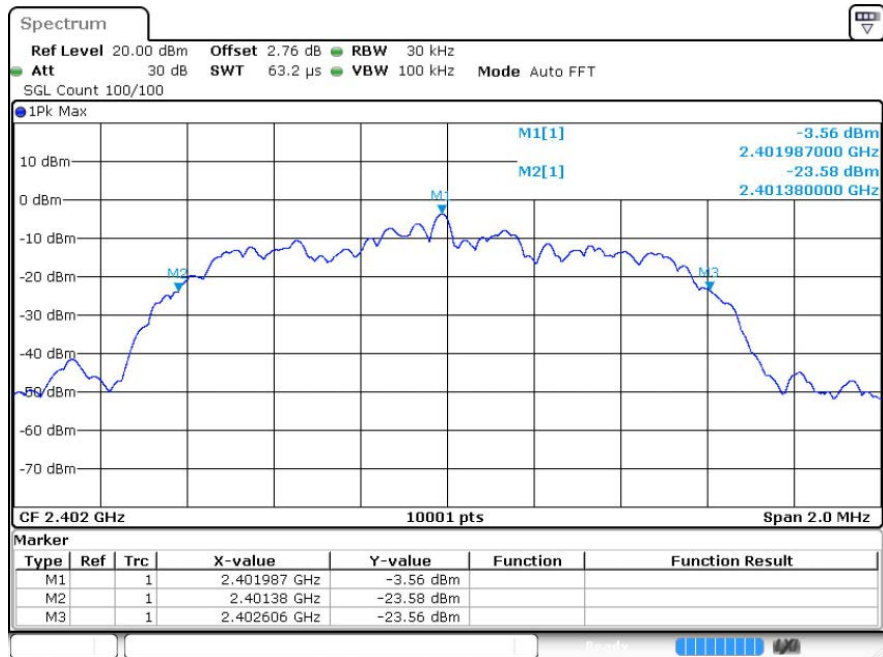
3.1 Test Result

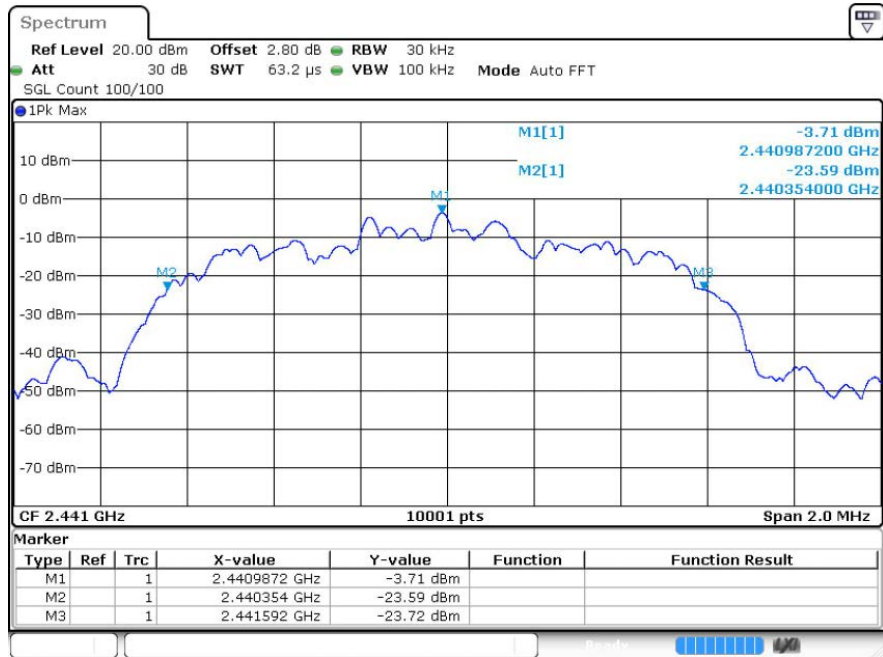
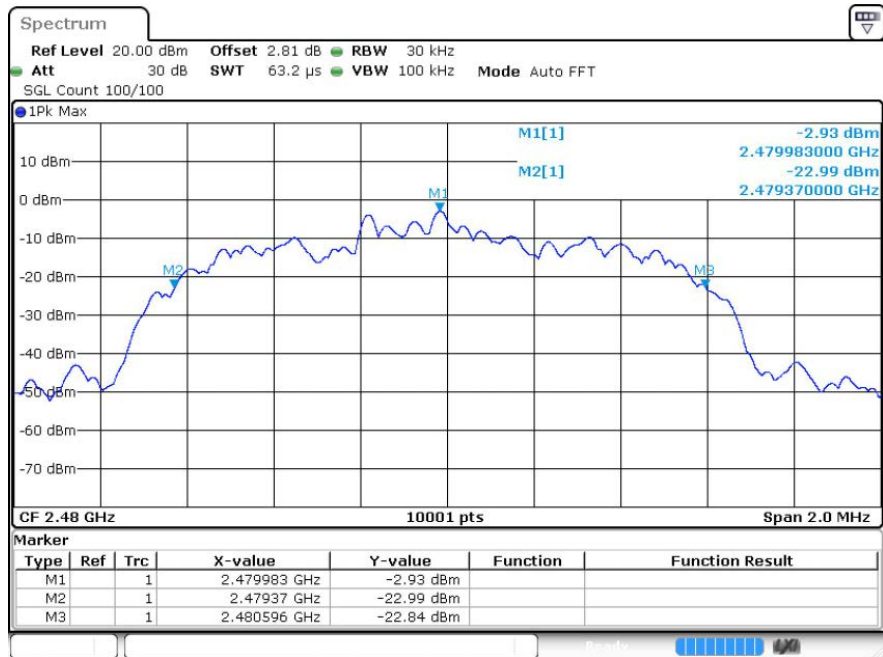
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.823	Not Specified	Pass
	MCH	0.732	Not Specified	Pass
	HCH	0.871	Not Specified	Pass
$\pi/4$ DQPSK	LCH	1.226	Not Specified	Pass
	MCH	1.238	Not Specified	Pass
	HCH	1.226	Not Specified	Pass
8DPSK	LCH	1.199	Not Specified	Pass
	MCH	1.242	Not Specified	Pass
	HCH	1.241	Not Specified	Pass

3.2 Test Graphs

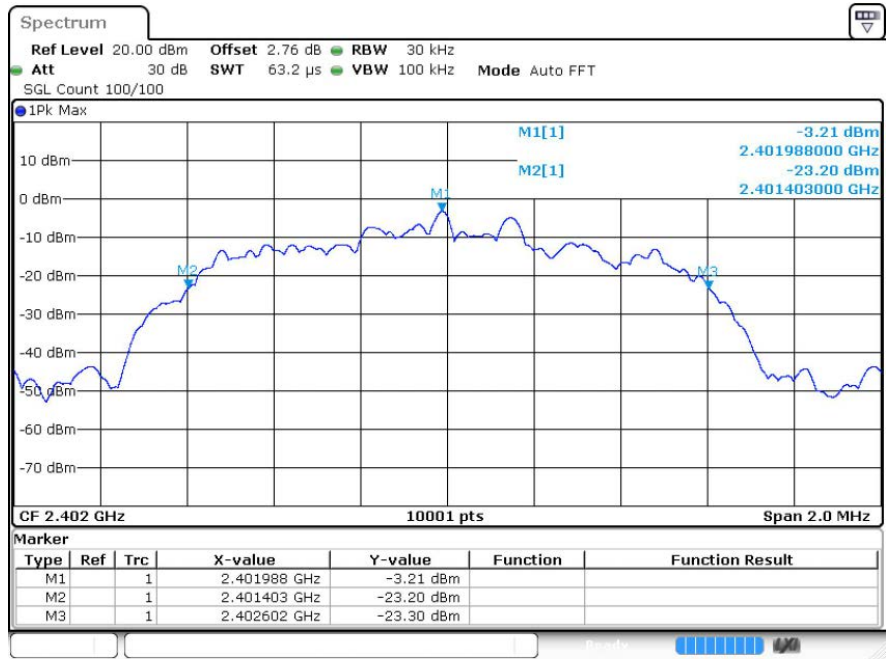


GFSK/HCH

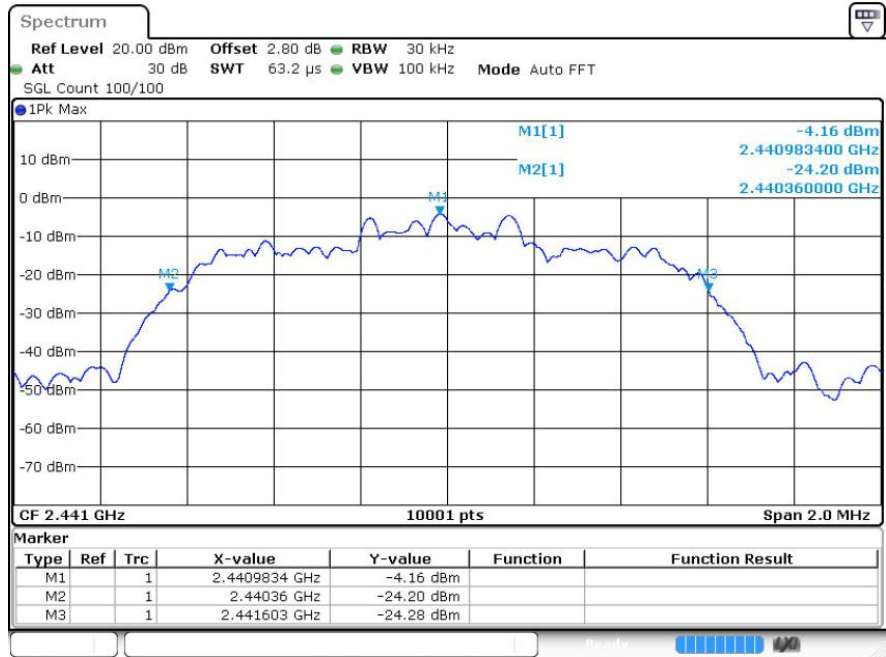

 $\pi/4$ DQPSK/LCH


$\pi/4$ DQPSK/MCH

 $\pi/4$ DQPSK/HCH


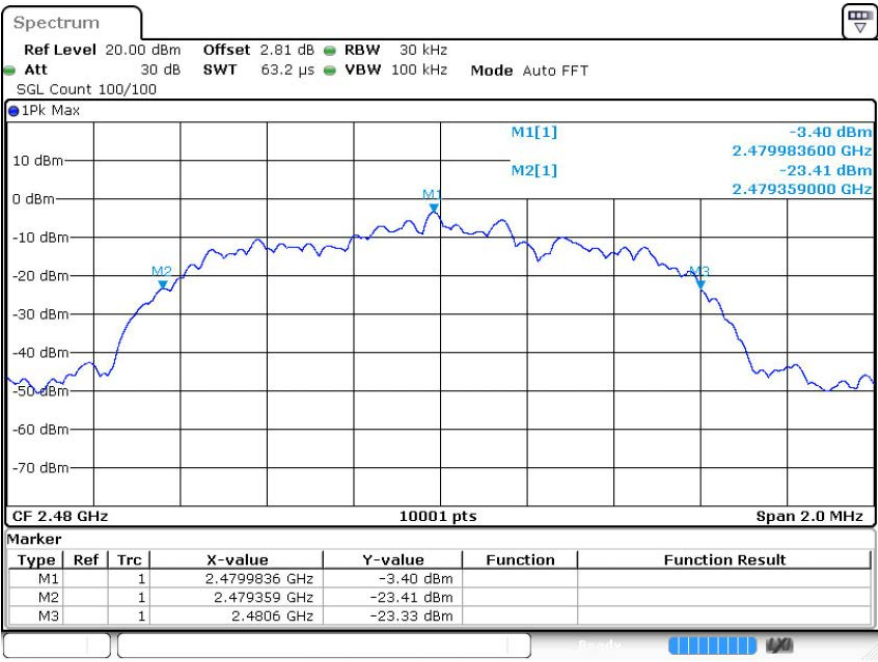
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH



4 Carrier Frequency Separation

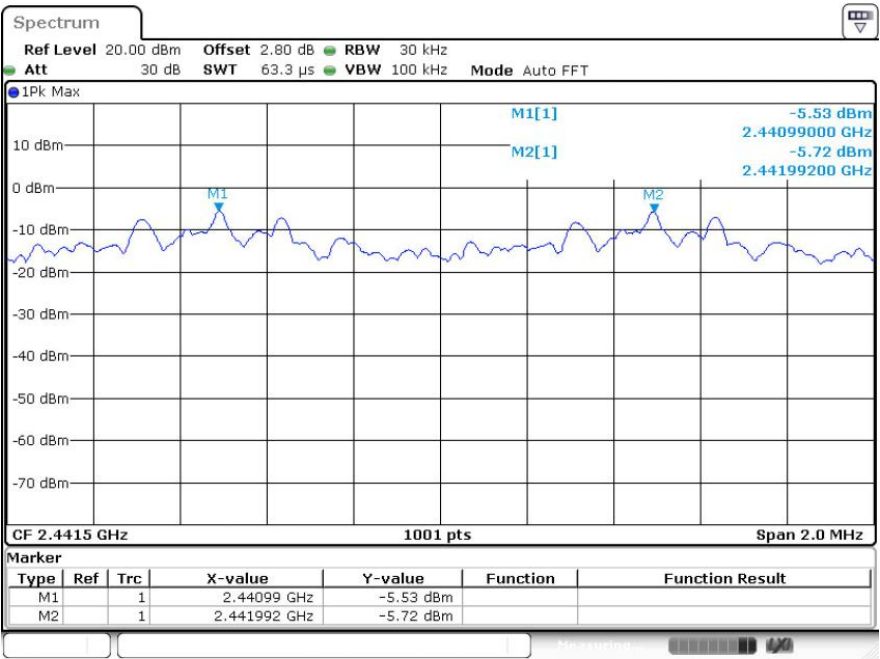
4.1 Test Result

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	MCH	1.001	0.488	Pass
$\pi/4$ DQPSK	MCH	1.004	0.825	Pass
8DPSK	MCH	1.002	0.828	Pass

4.2 Test Graphs



8DPSK/MCH

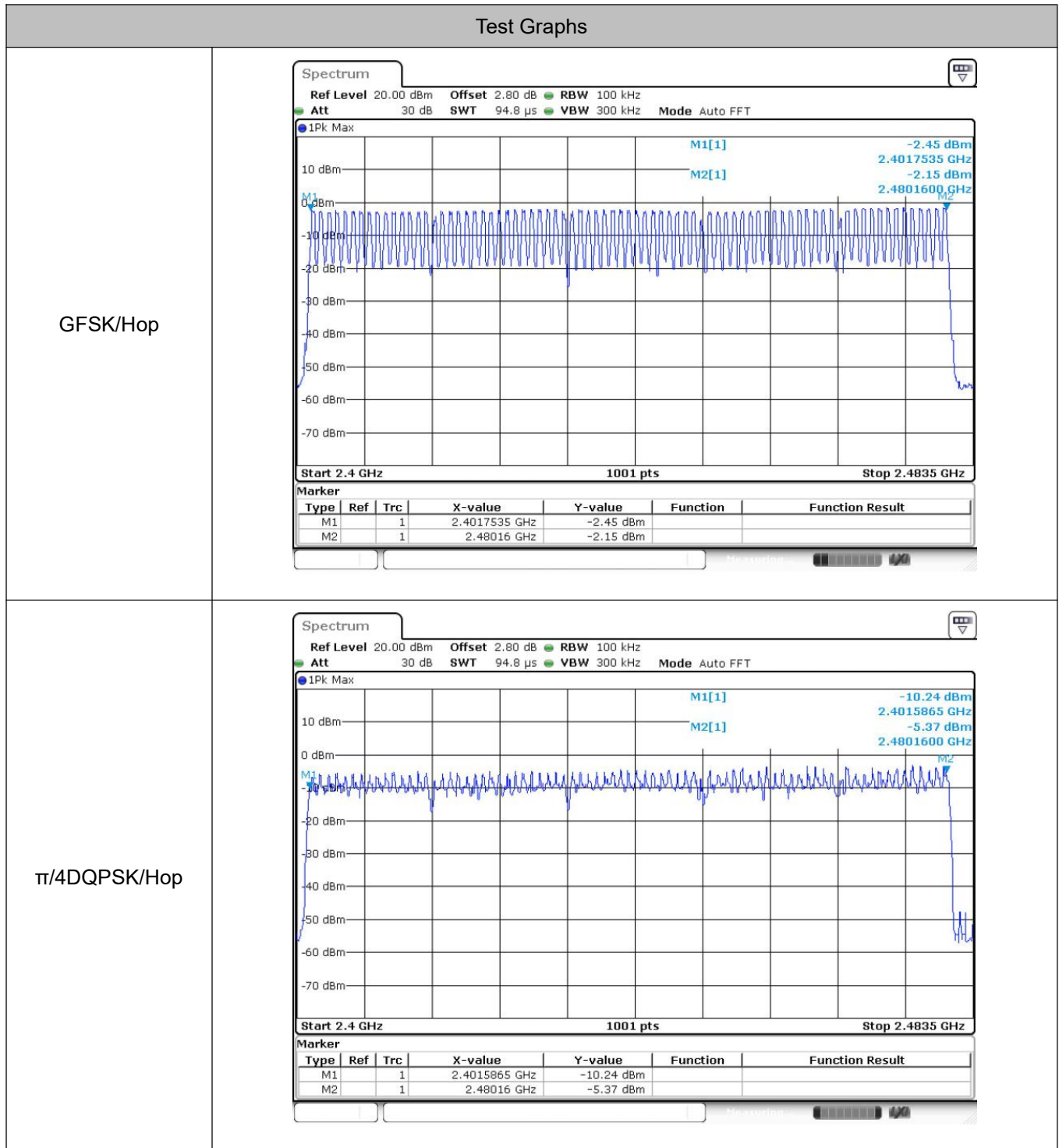


5 Hopping Channel Number

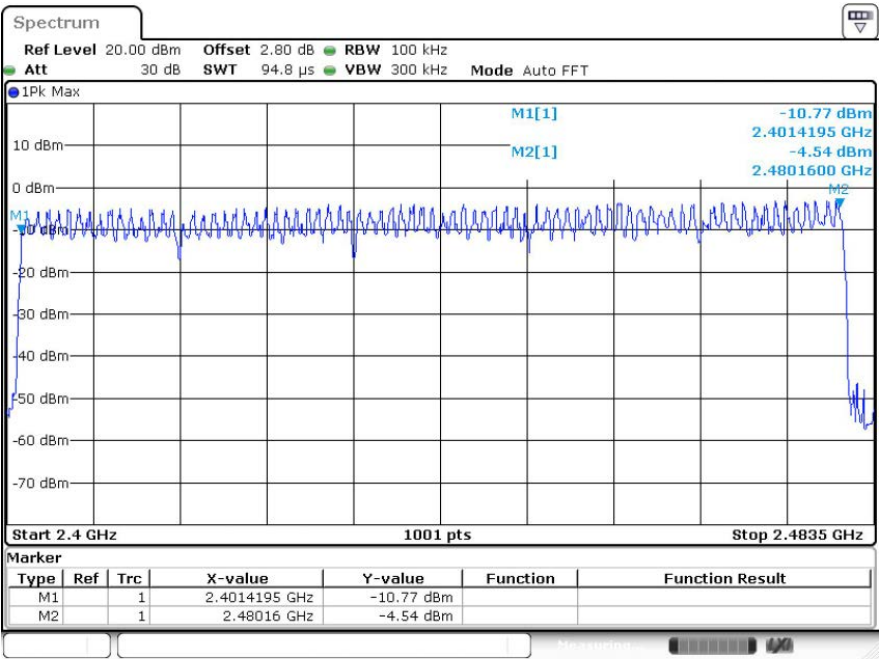
5.1 Test Result

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

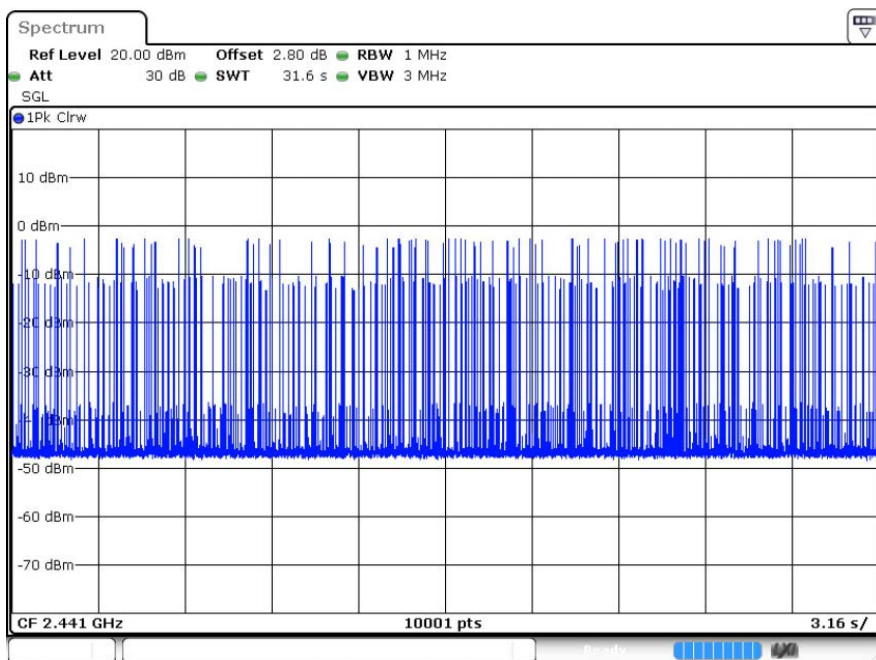
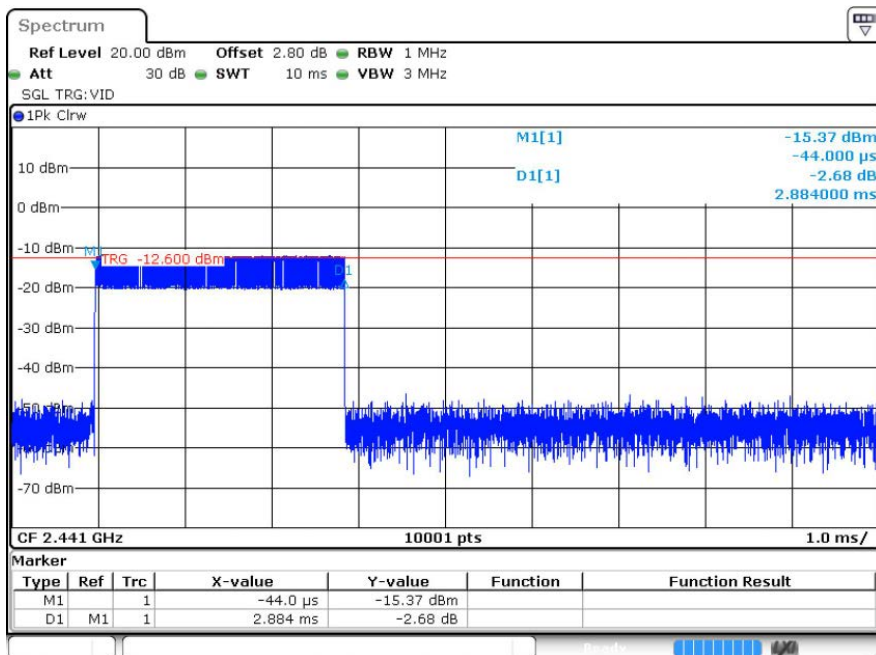
6.1 Test Result

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[ms]	Limit [s]	Verdict
GFSK	DH5	MCH	2.884	101	291.284	0.4	Pass
$\pi/4$ DQPSK	2DH5	MCH	2.889	110	317.79	0.4	Pass
8DPSK	3DH5	MCH	2.891	110	318.01	0.4	Pass

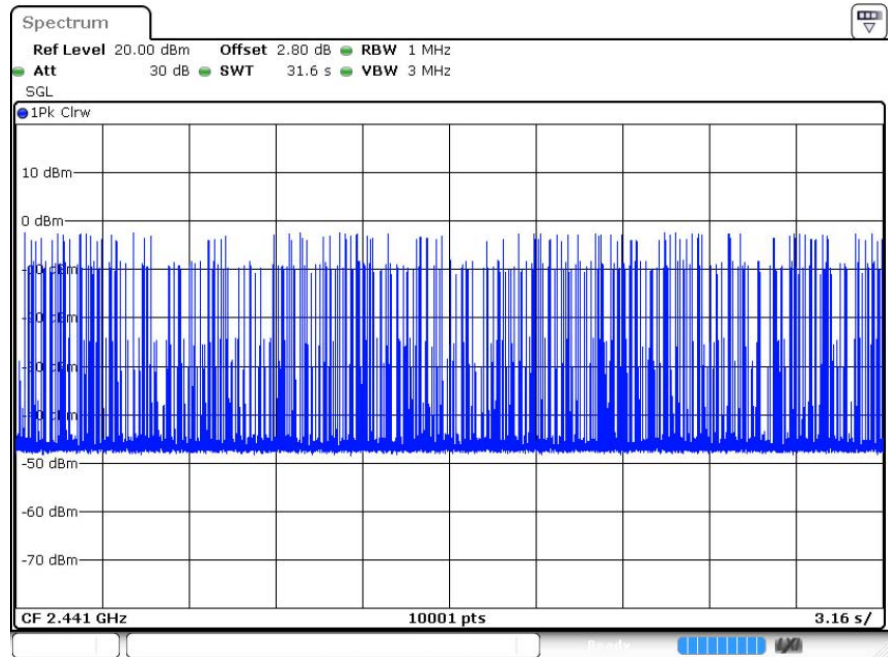
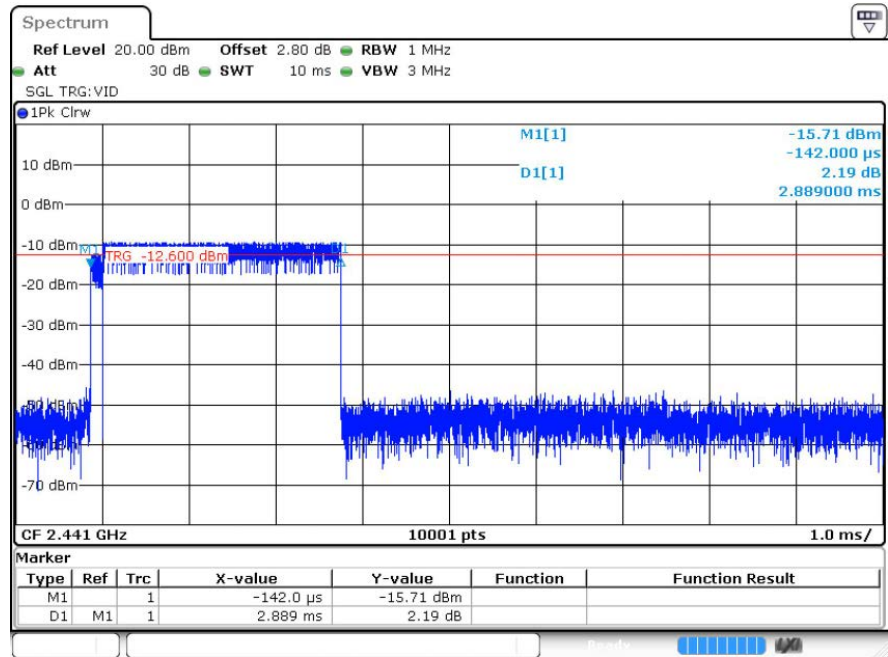
6.2 Test Graphs

Test Graphs

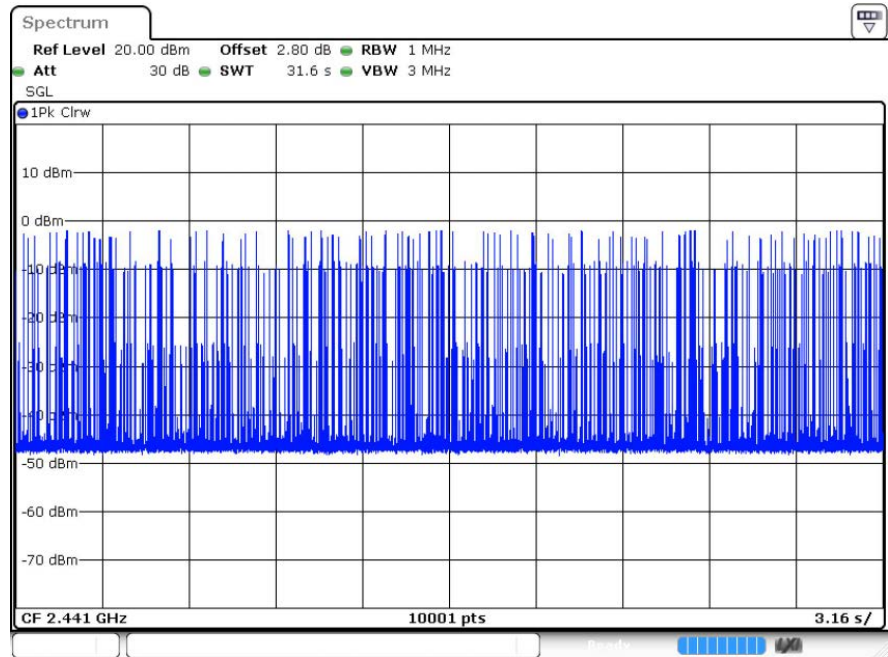
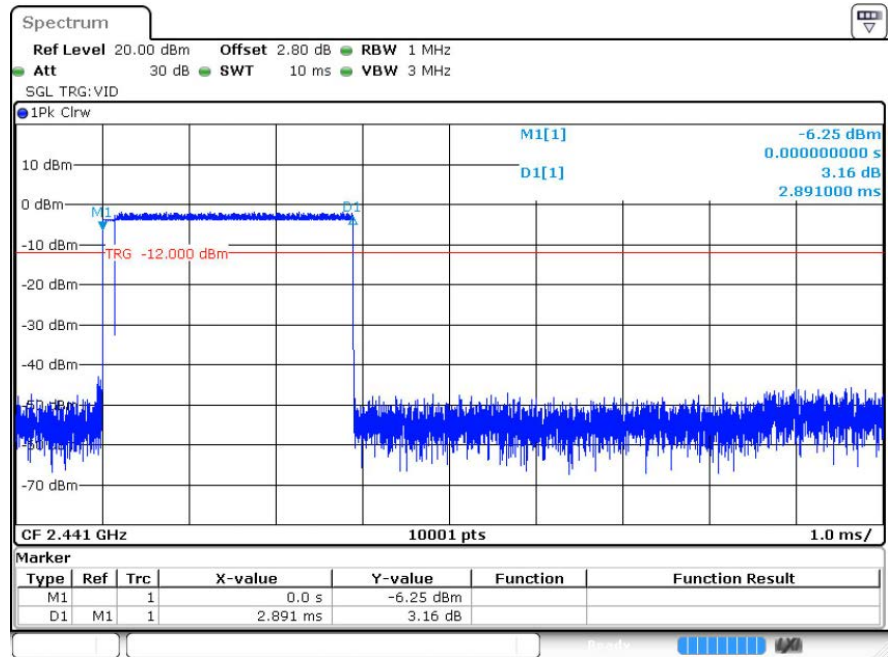
GFSK_DH5/MCH



$\pi/4$ DQPSK
_2DH5/MCH



8DPSK_3DH5/MCH

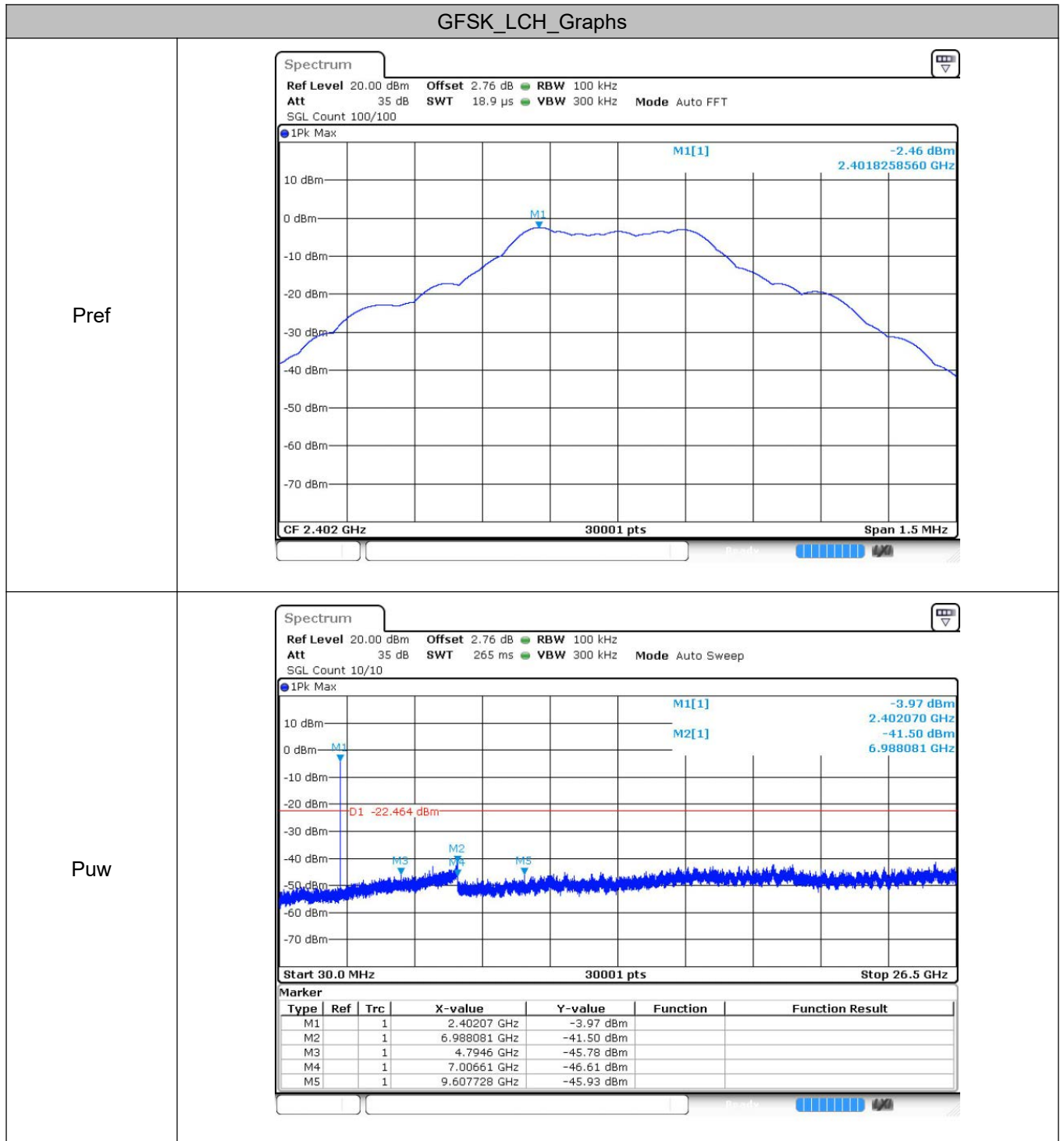


7 RF Conducted Spurious Emissions

7.1 Test Result

Mode	Channel	Max. Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	-39.04	-20	Pass
	MCH	-39.55	-20	Pass
	HCH	-39.03	-20	Pass
$\pi/4$ DQPSK	LCH	-39.54	-20	Pass
	MCH	-38.89	-20	Pass
	HCH	-38.76	-20	Pass
8DPSK	LCH	-38.77	-20	Pass
	MCH	-38.98	-20	Pass
	HCH	-40.25	-20	Pass

7.2 Test Graphs

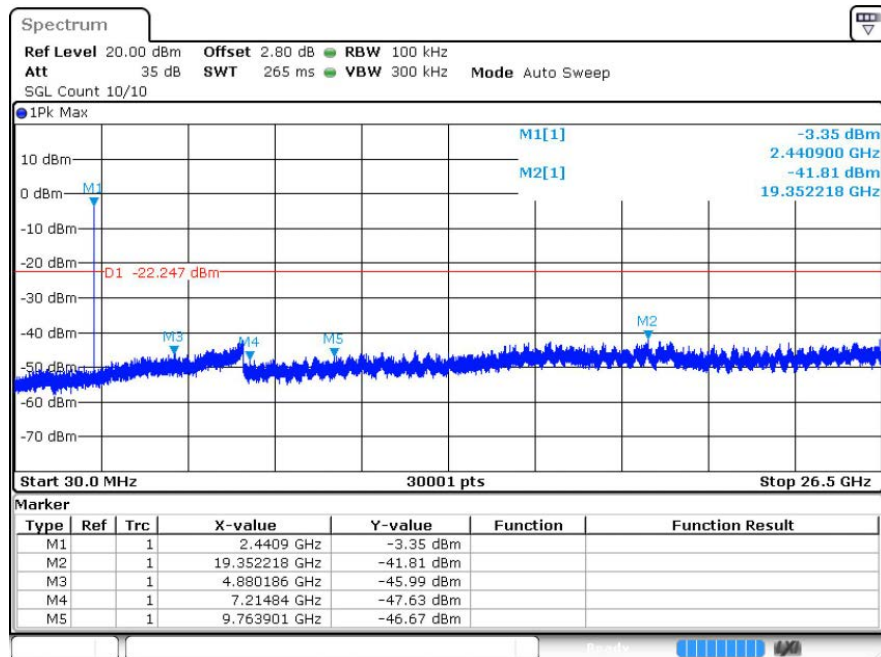


GFSK_MCH_Graphs

Pref



Puw

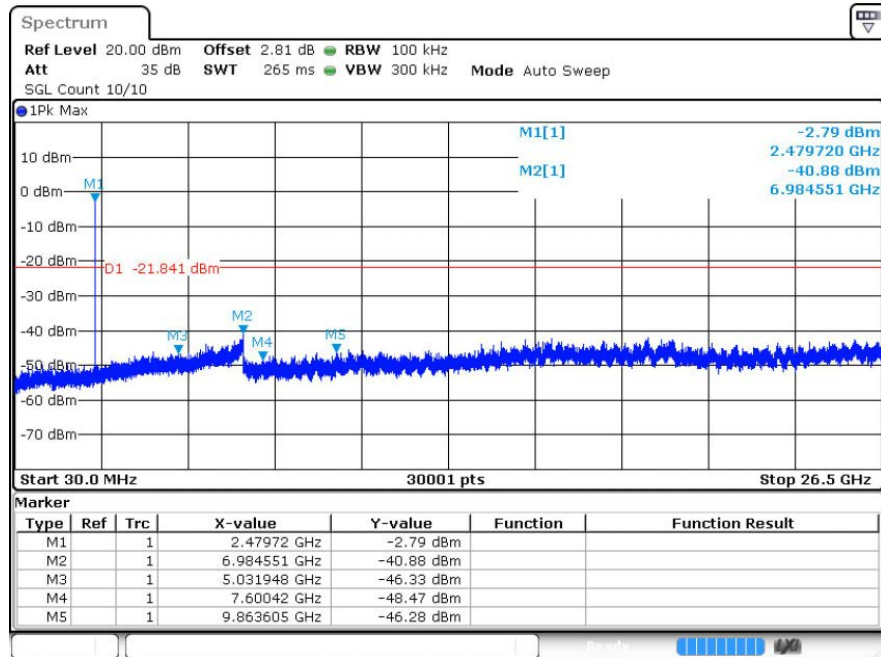


GFSK_HCH_Graphs

Pref

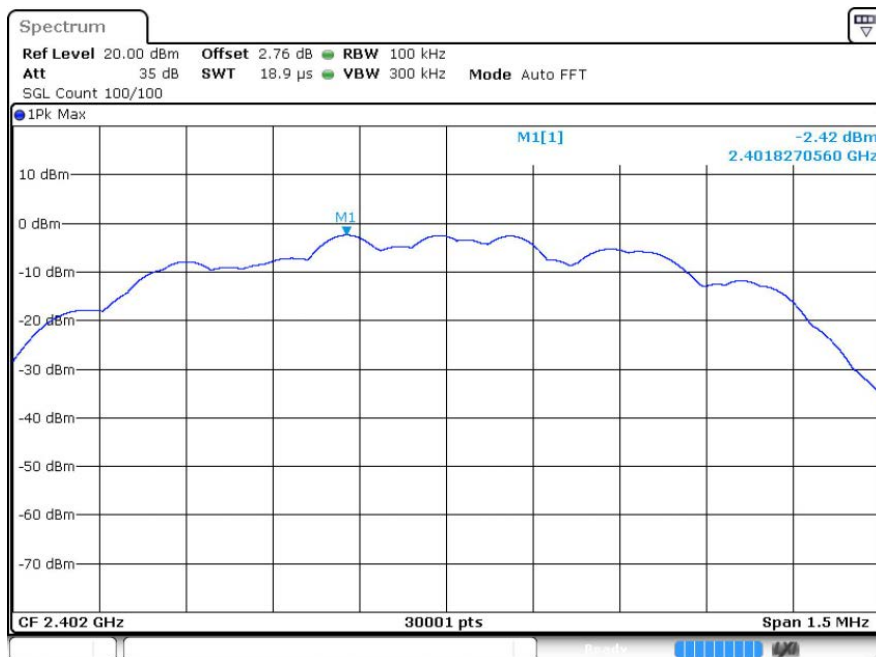


Puw

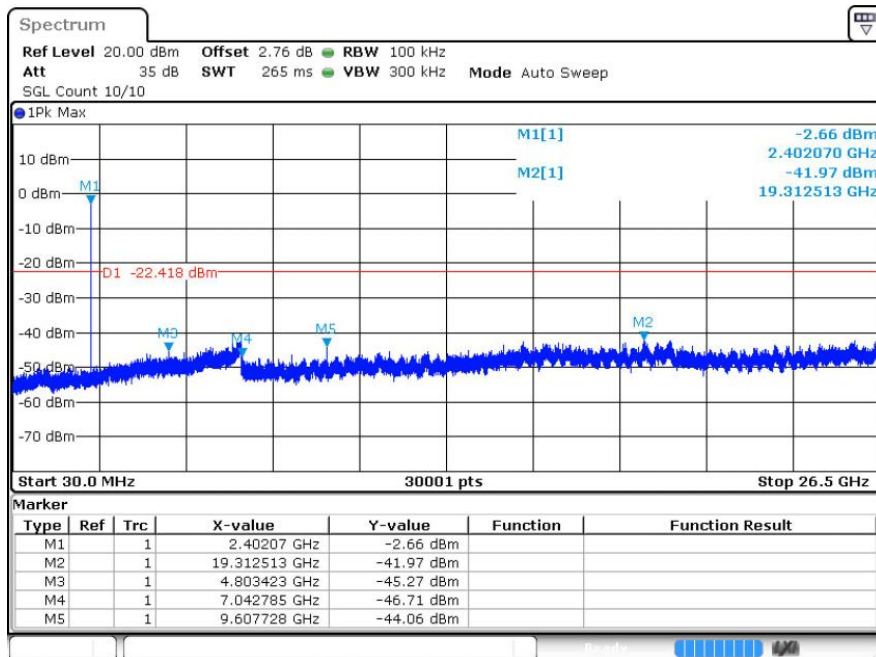


$\pi/4$ DQPSK_LCH_Graphs

Pref

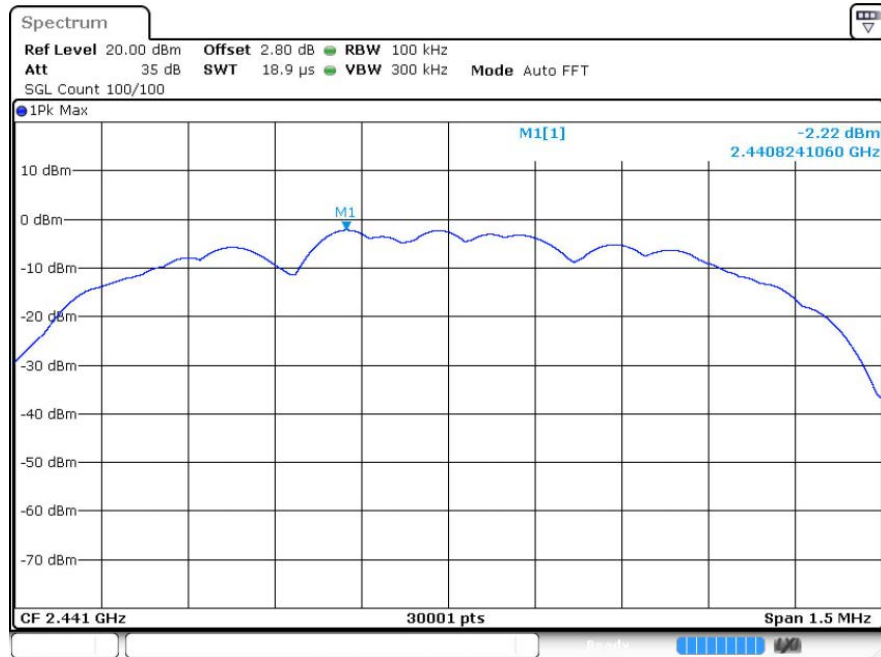


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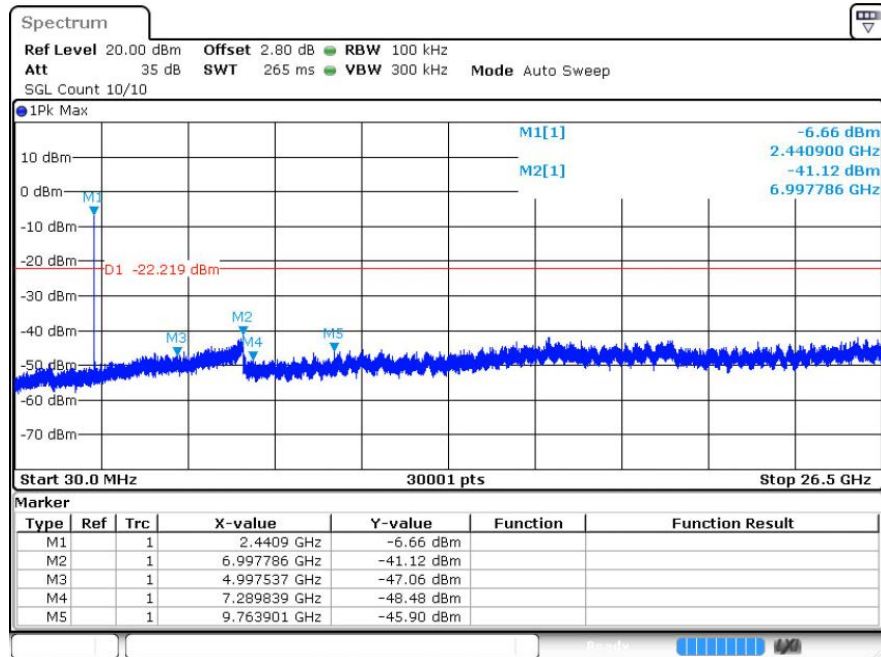


π /4DQPSK_MCH_Graphs

Pref

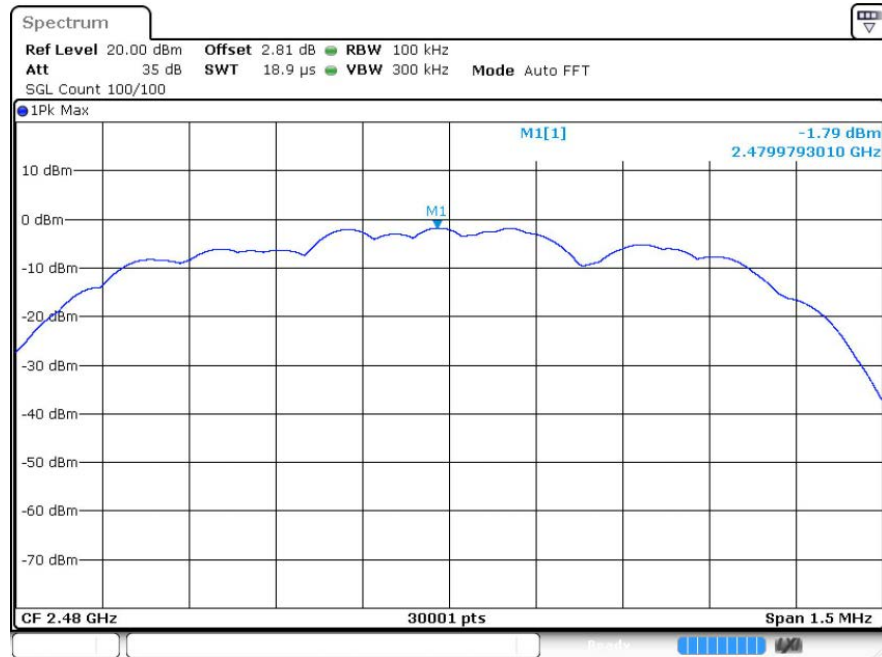


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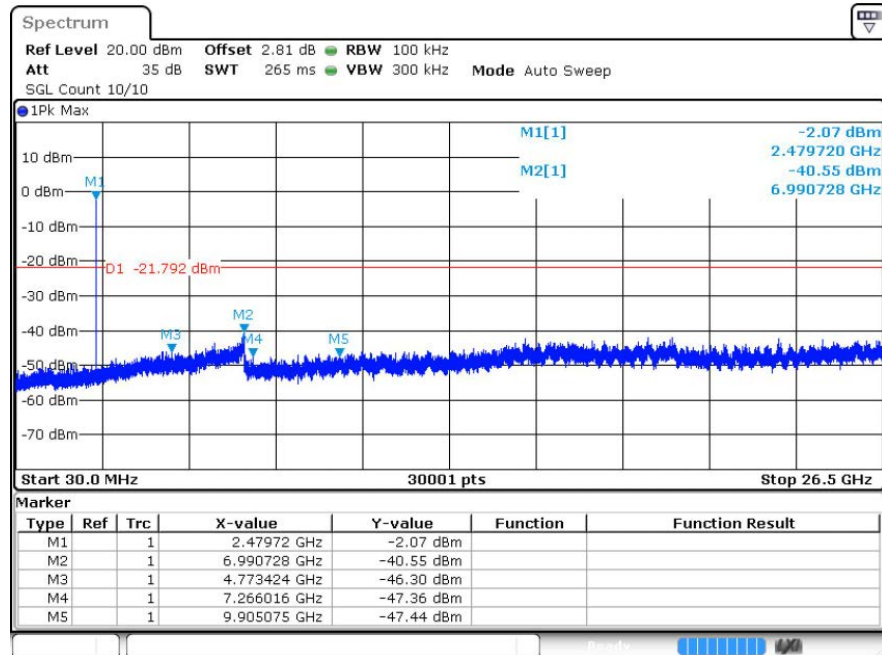


$\pi/4$ DQPSK_HCH_Graphs

Pref

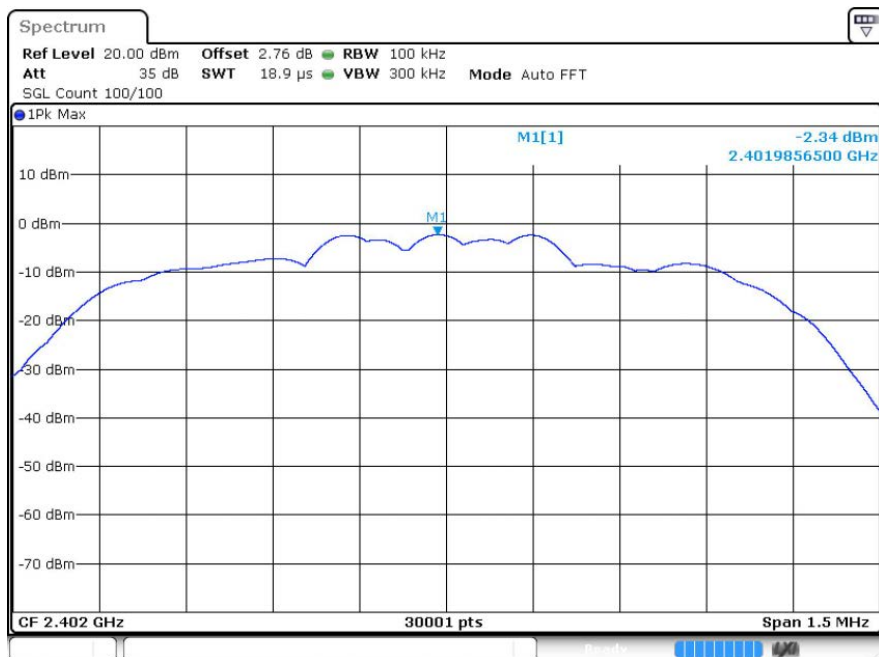


Puw



8DPSK_LCH_Graphs

Pref



Puw

