



Appendix A

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

Product Name: 3-Axis Gimbal Stabilizer

Trade Mark: FUNSNAP

Test Model: Capture 5

Environmental Conditions

Temperature:	24.5℃
Relative Humidity:	55.4%
ATM Pressure:	101Kpa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen



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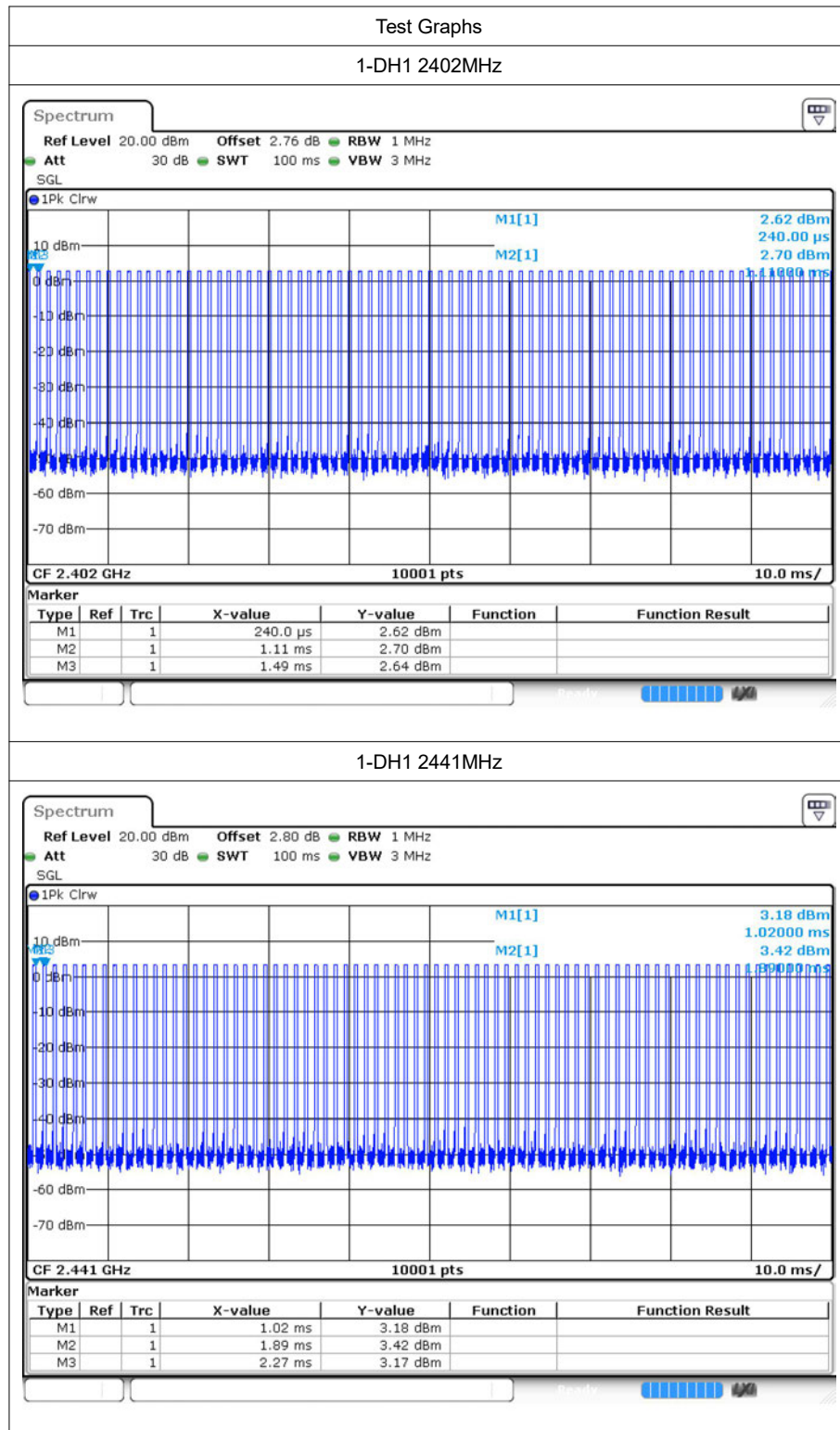
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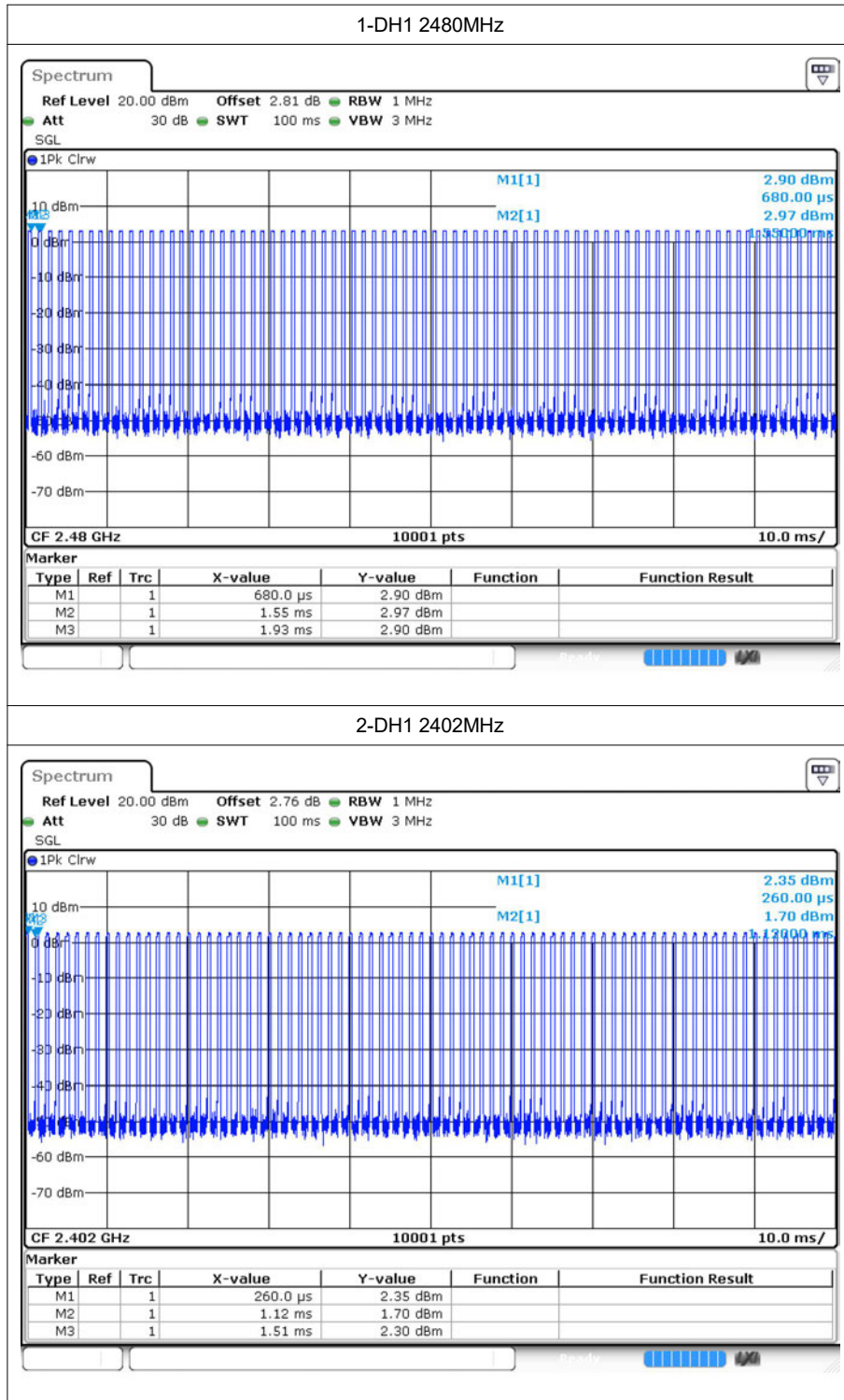
1 Duty Cycle

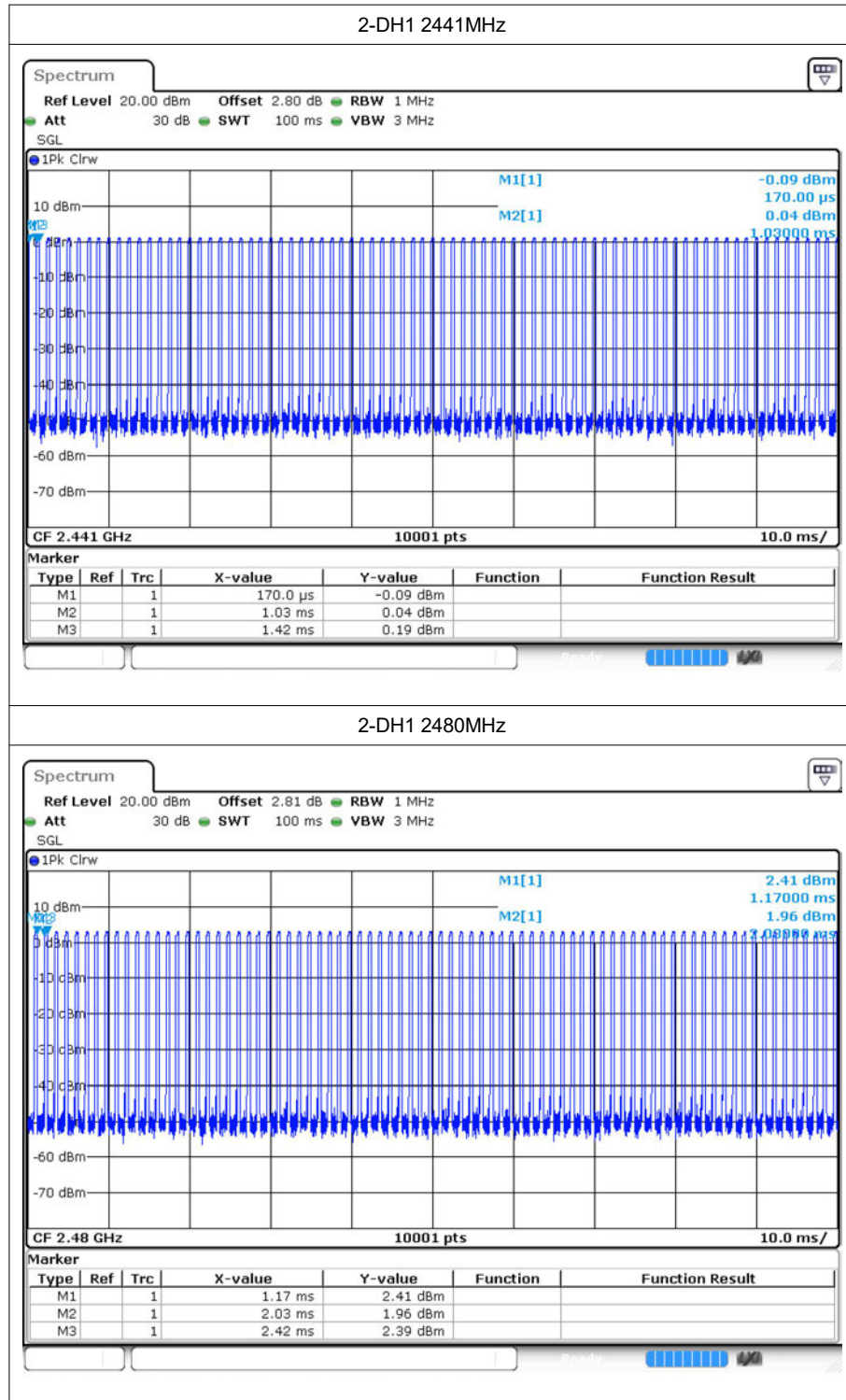
1.1 Test Result

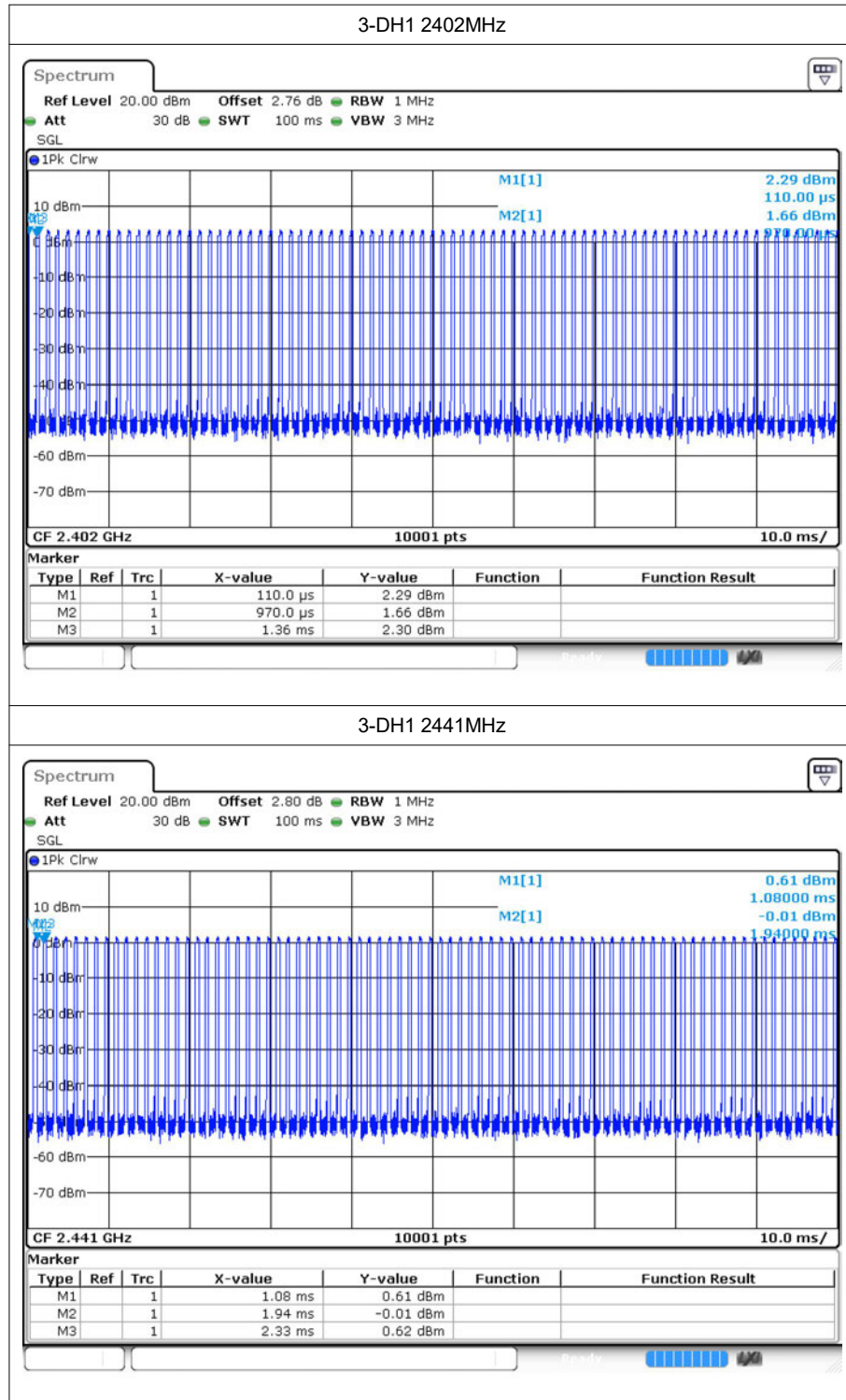
Mode	Frequency (MHz)	Duty Cycle (%)	1/T (kHz)
1-DH1	2402	31.21	2.63
1-DH1	2441	31.2	2.63
1-DH1	2480	31.2	2.63
2-DH1	2402	32.01	2.56
2-DH1	2441	32.01	2.56
2-DH1	2480	32	2.56
3-DH1	2402	32.01	2.56
3-DH1	2441	32	2.56
3-DH1	2480	32	2.56

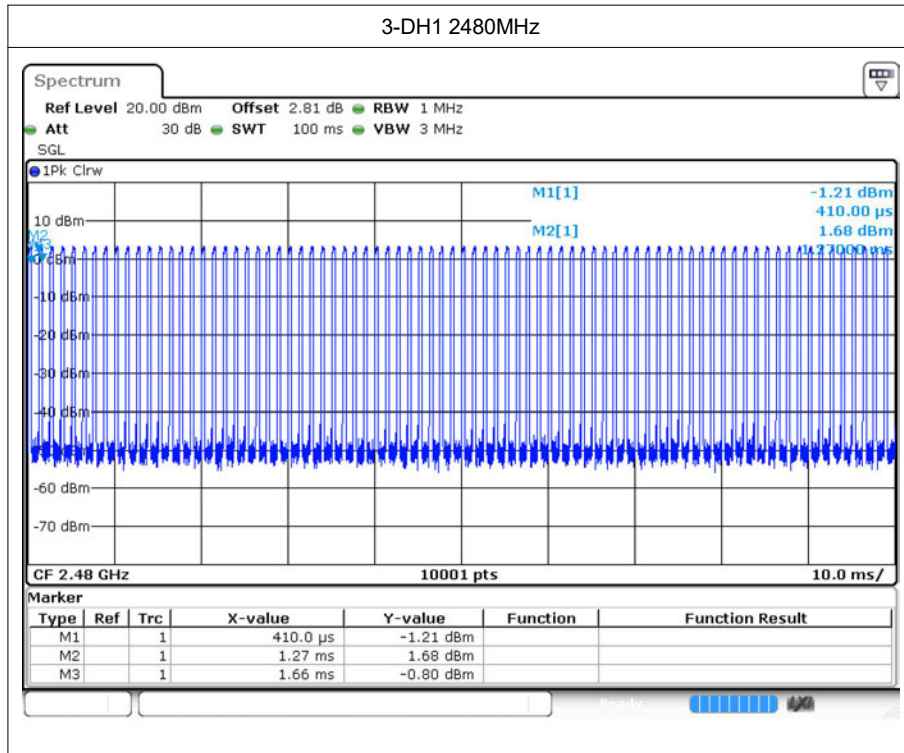
1.2 Test Graphs









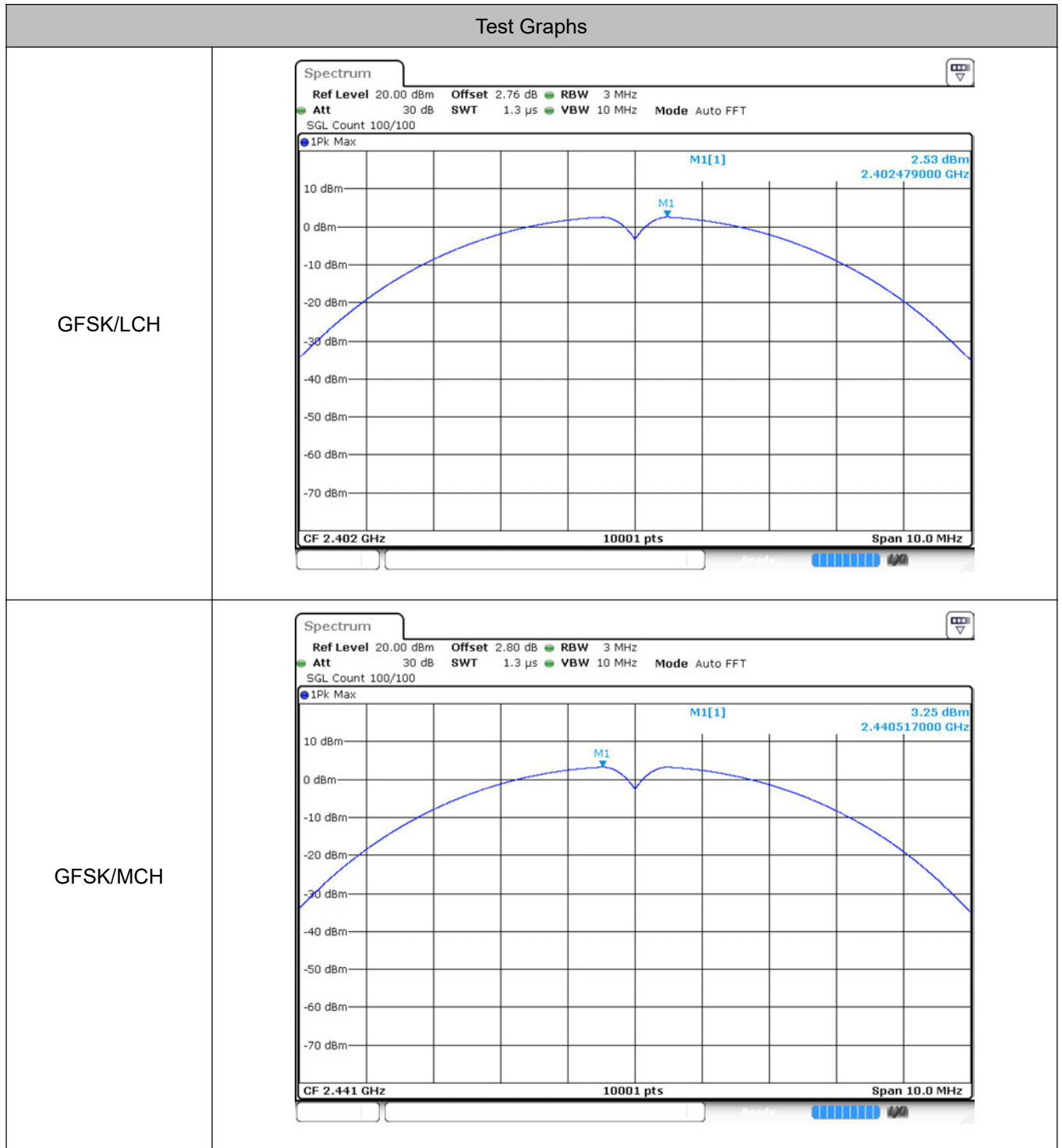


2 Maximum Conducted Peak Output Power

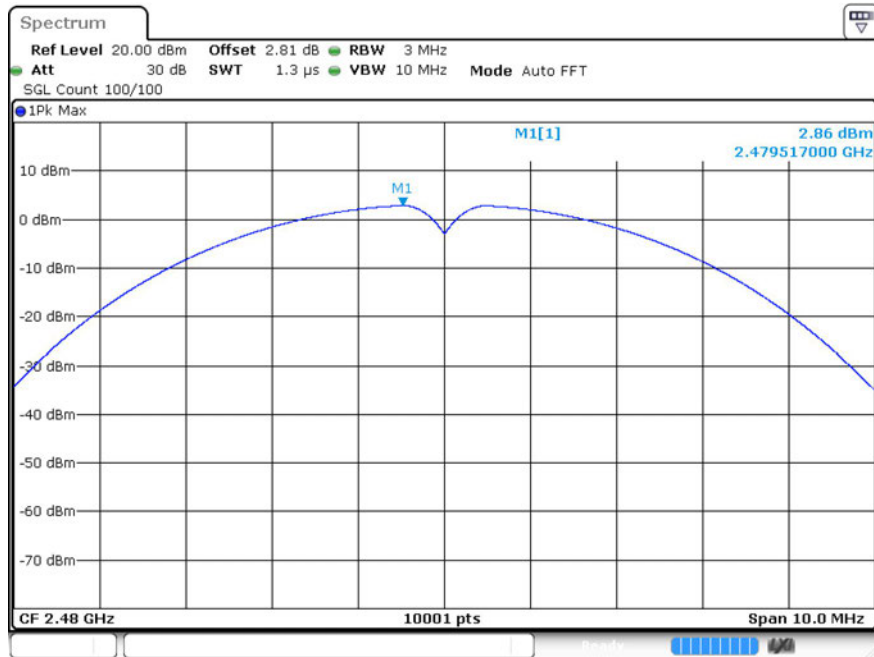
2.1 Test Result

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2.53	21	Pass
	MCH	3.25	21	Pass
	HCH	2.86	21	Pass
$\pi/4$ DQPSK	LCH	3.46	21	Pass
	MCH	2.12	21	Pass
	HCH	3.85	21	Pass
8DPSK	LCH	3.88	21	Pass
	MCH	2.33	21	Pass
	HCH	3.72	21	Pass

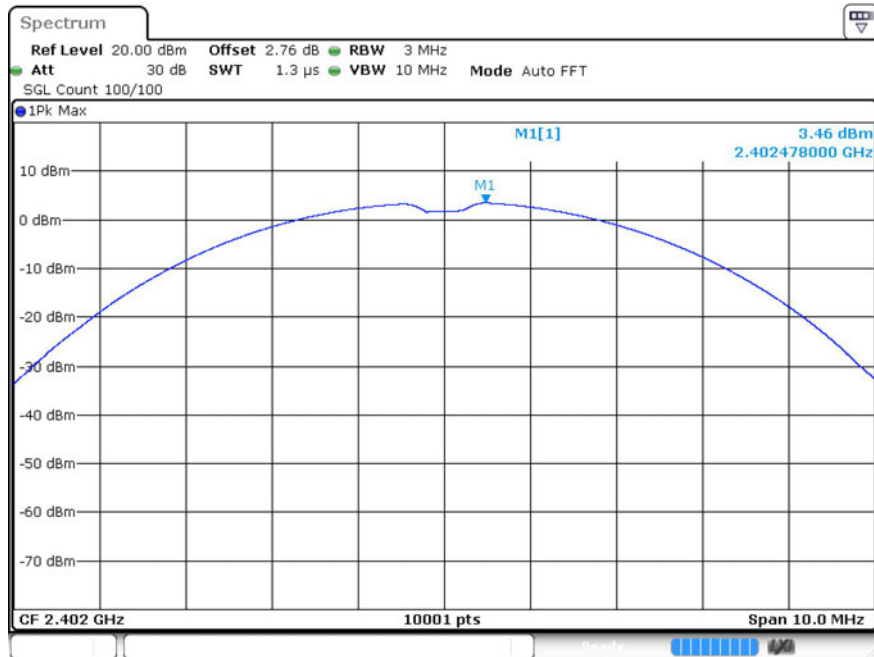
2.2 Test Graphs



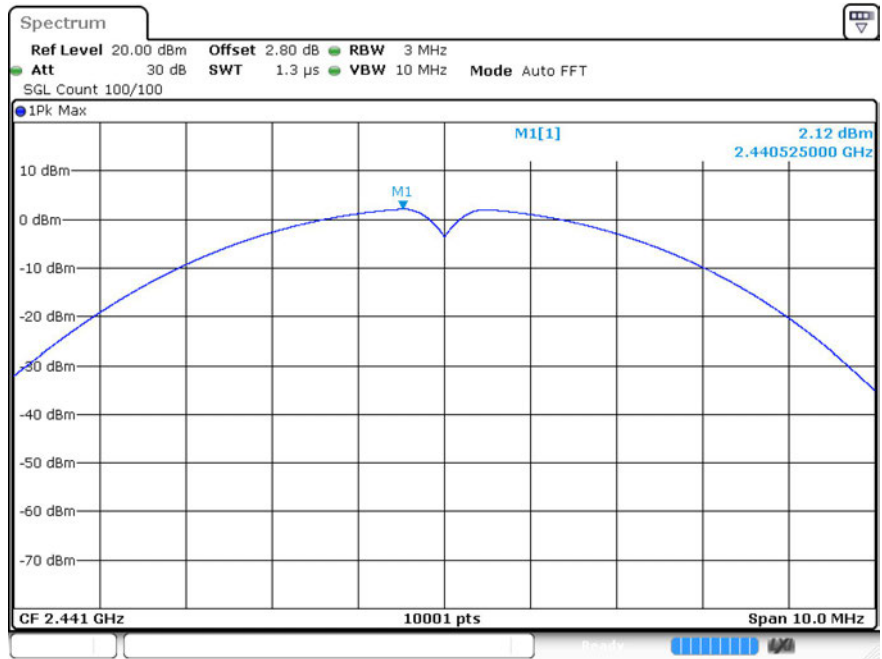
GFSK/HCH



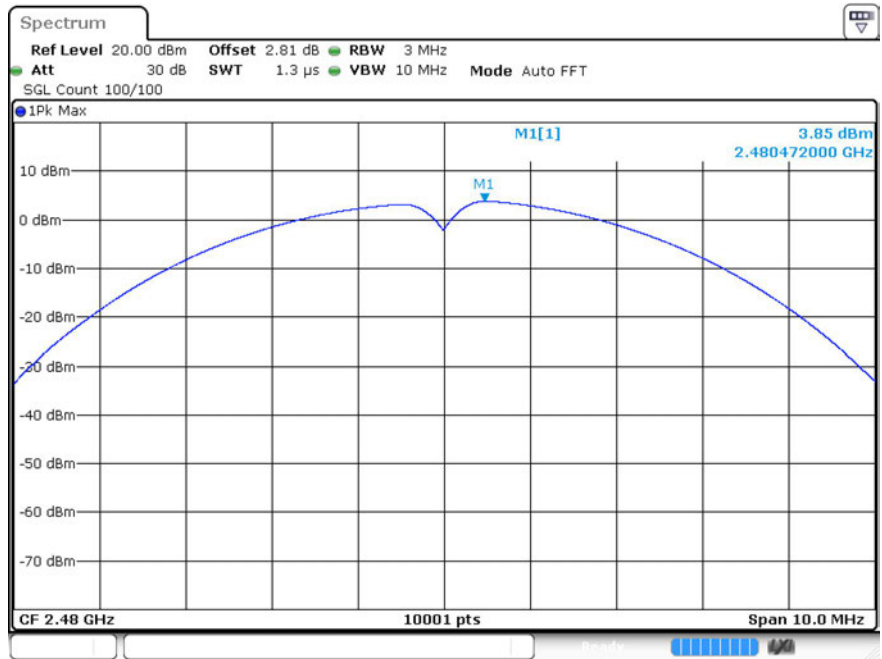
$\pi/4$ DQPSK/LCH



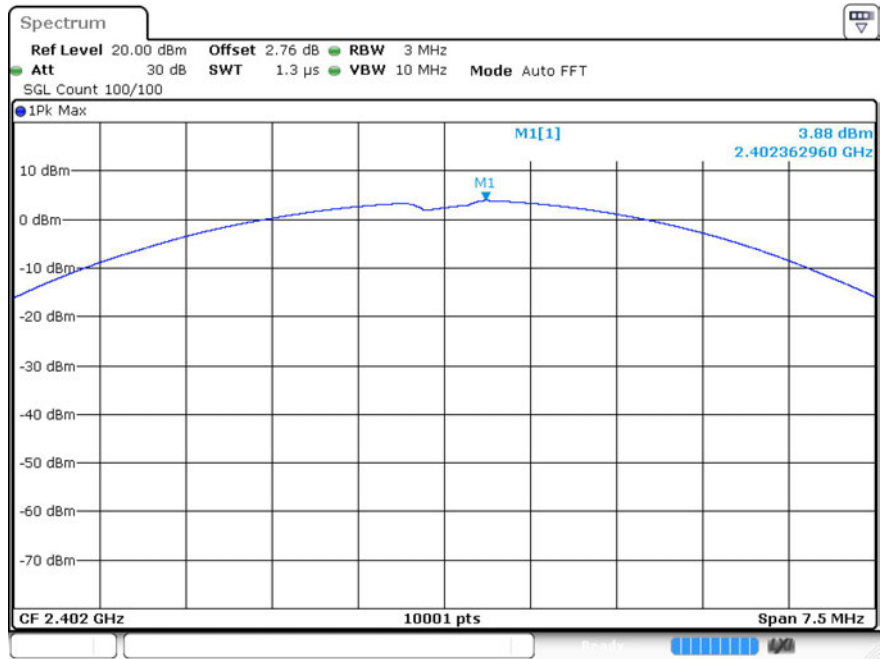
$\pi/4$ DQPSK/MCH



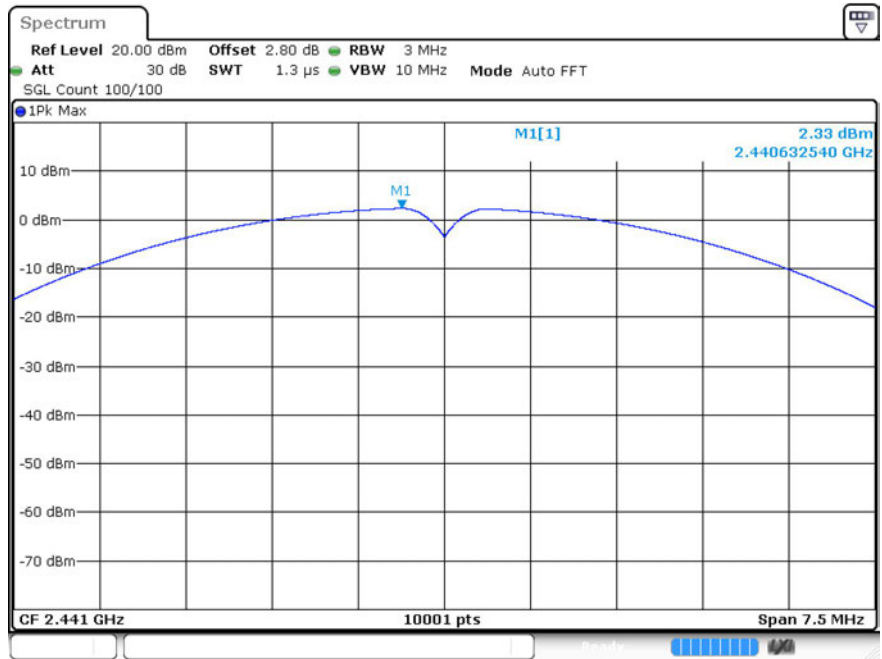
$\pi/4$ DQPSK/HCH



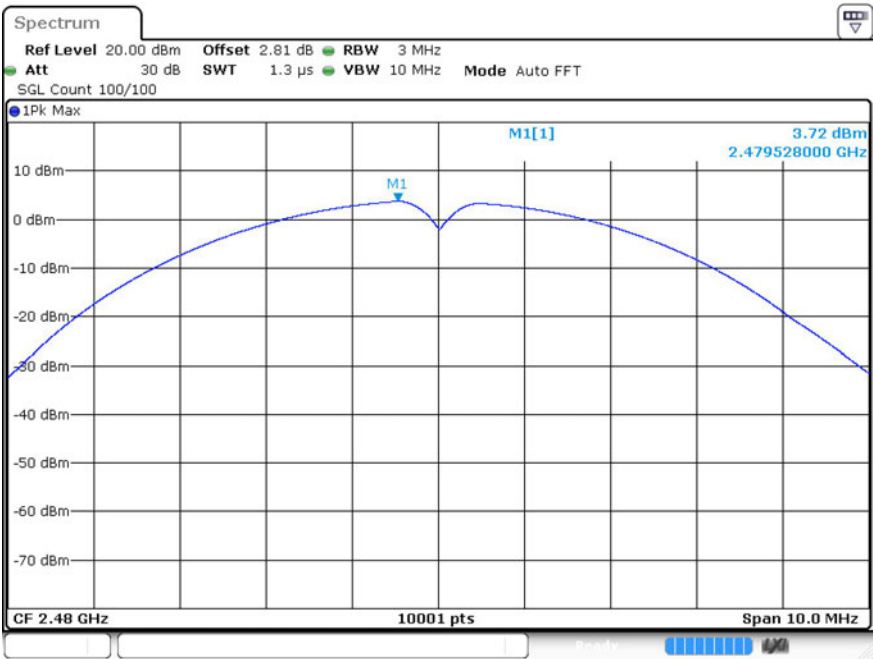
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

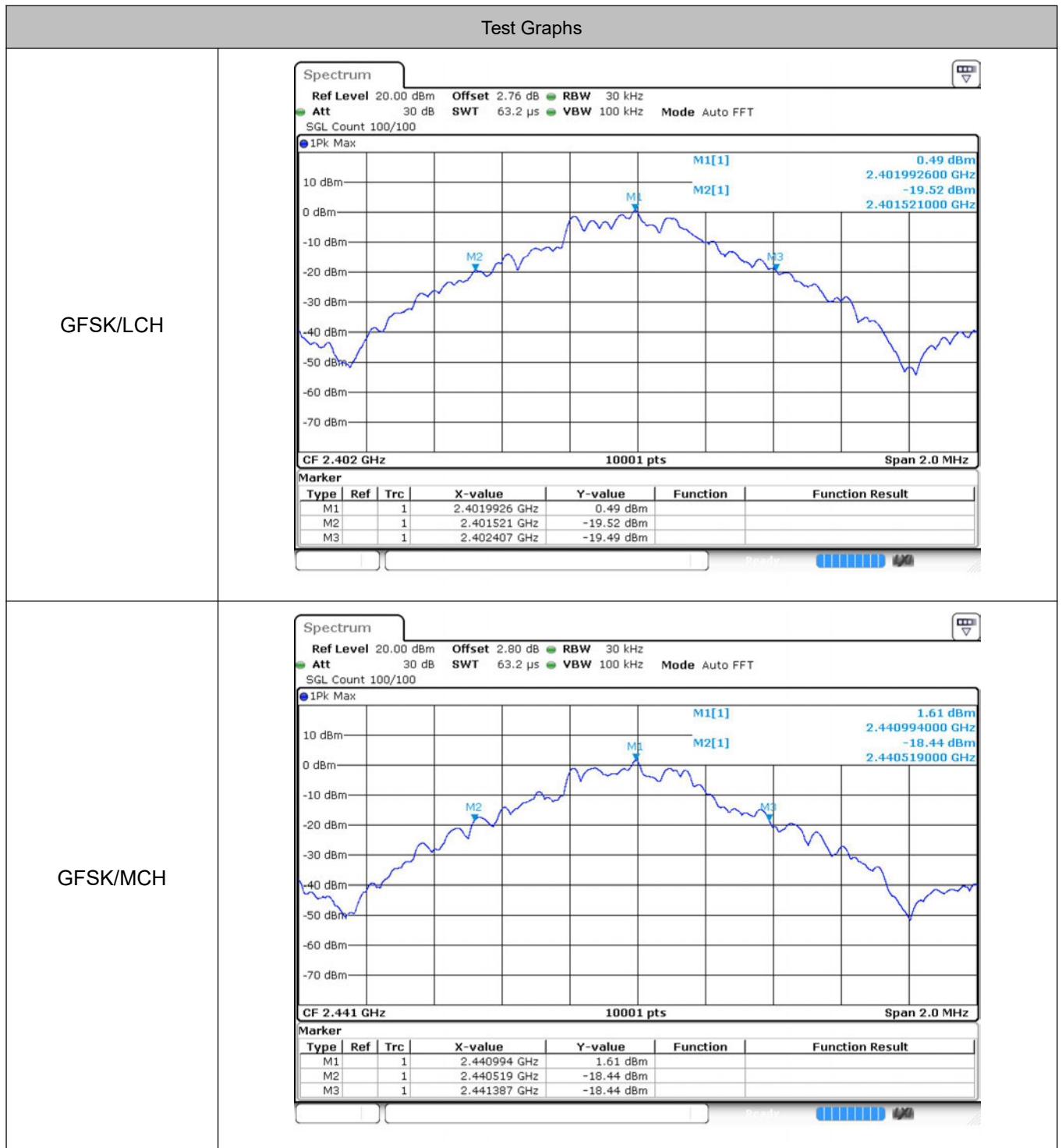


3 20dB Bandwidth

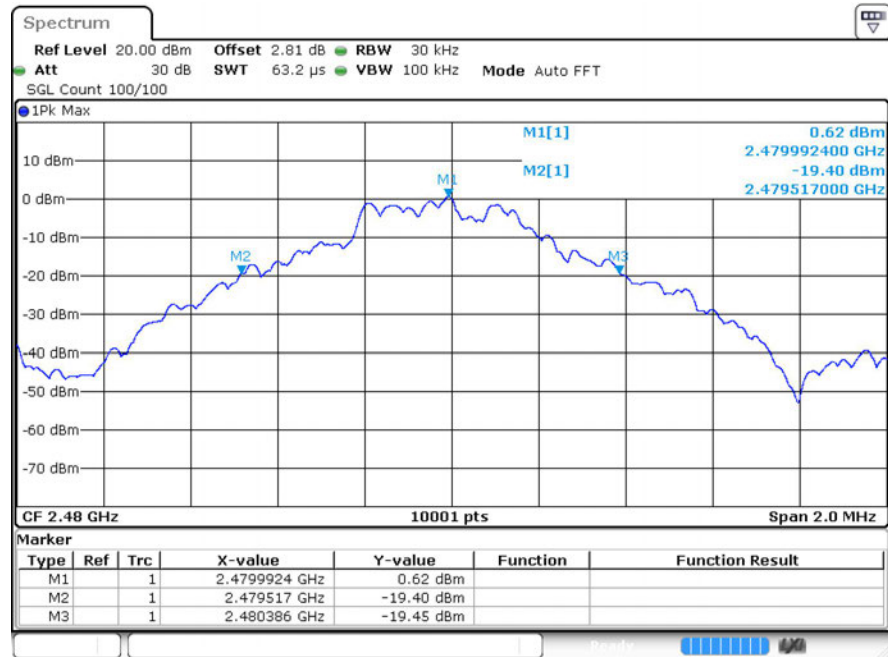
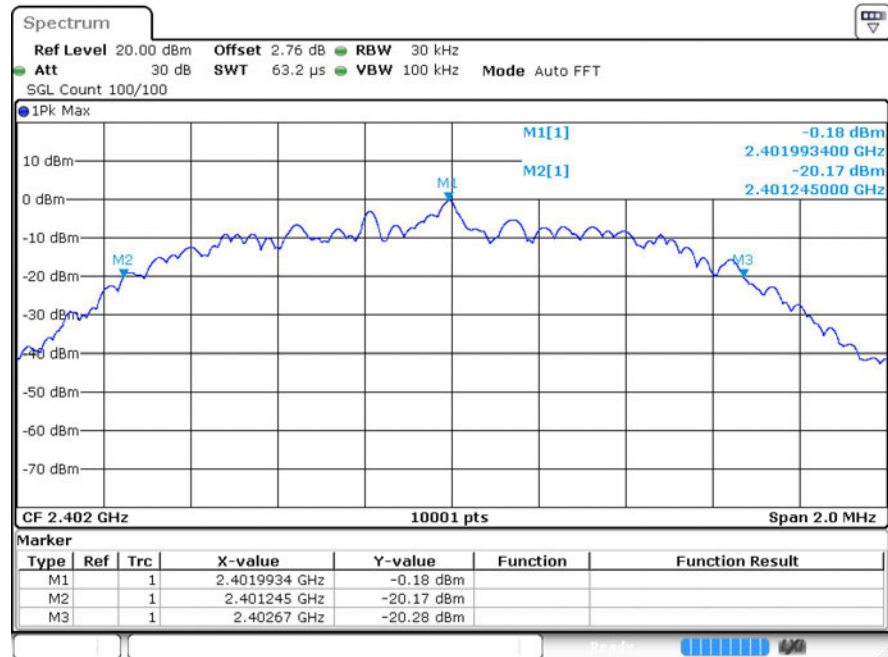
3.1 Test Result

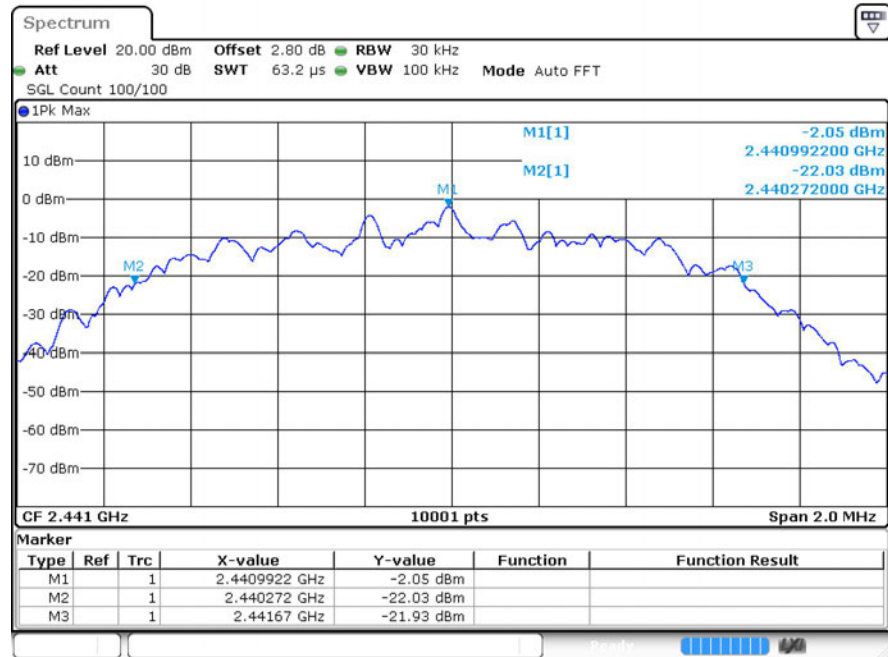
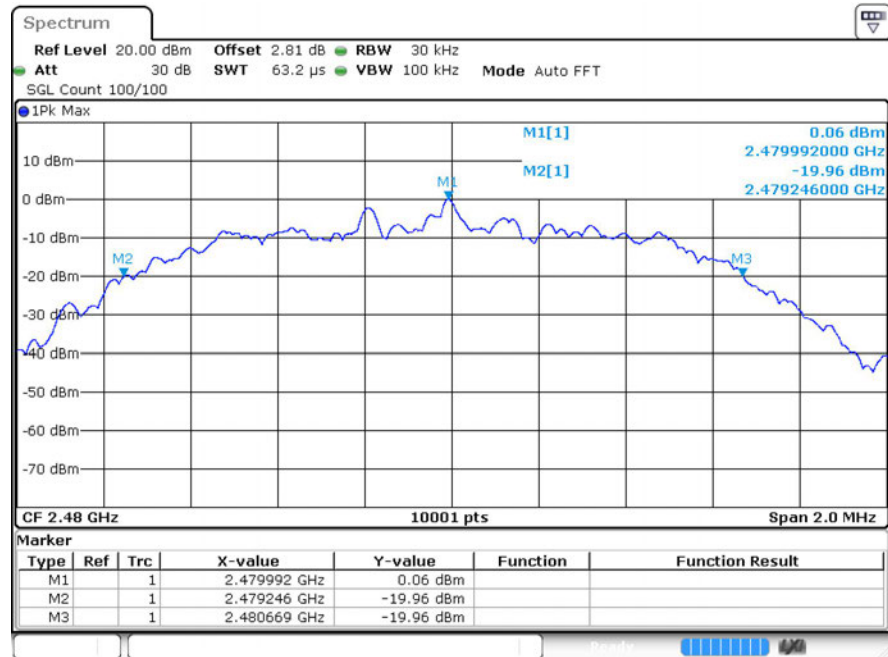
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.886	Not Specified	Pass
	MCH	0.867	Not Specified	Pass
	HCH	0.868	Not Specified	Pass
$\pi/4$ DQPSK	LCH	1.425	Not Specified	Pass
	MCH	1.399	Not Specified	Pass
	HCH	1.423	Not Specified	Pass
8DPSK	LCH	1.41	Not Specified	Pass
	MCH	1.441	Not Specified	Pass
	HCH	1.42	Not Specified	Pass

3.2 Test Graphs

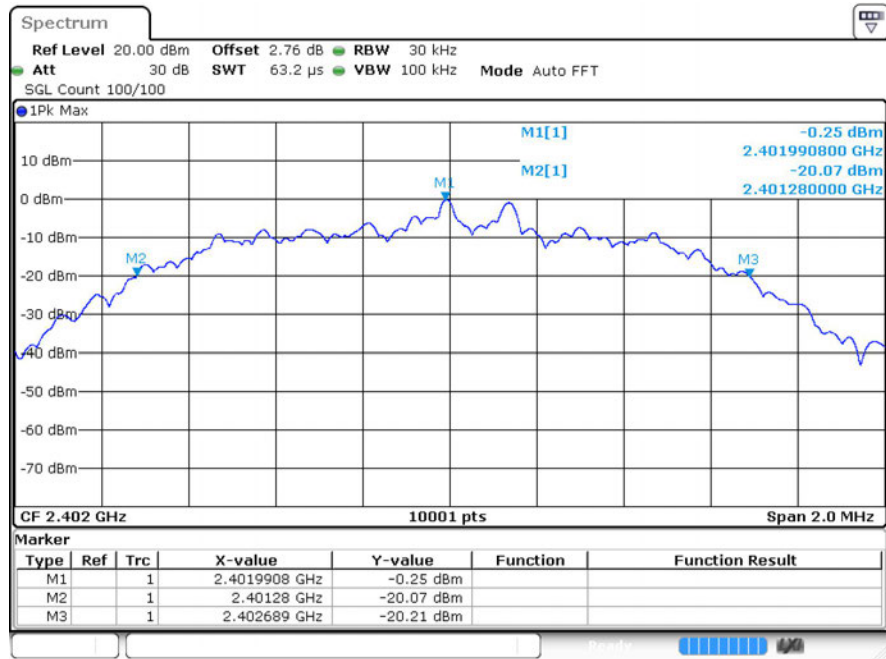


GFSK/HCH

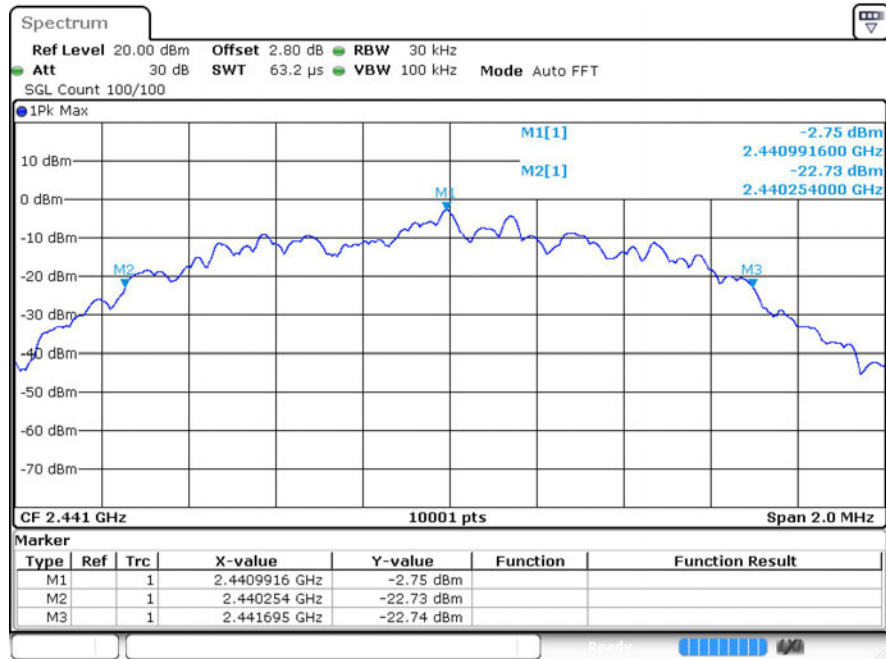

 $\pi/4$ DQPSK/LCH


$\pi/4$ DQPSK/MCH

 $\pi/4$ DQPSK/HCH


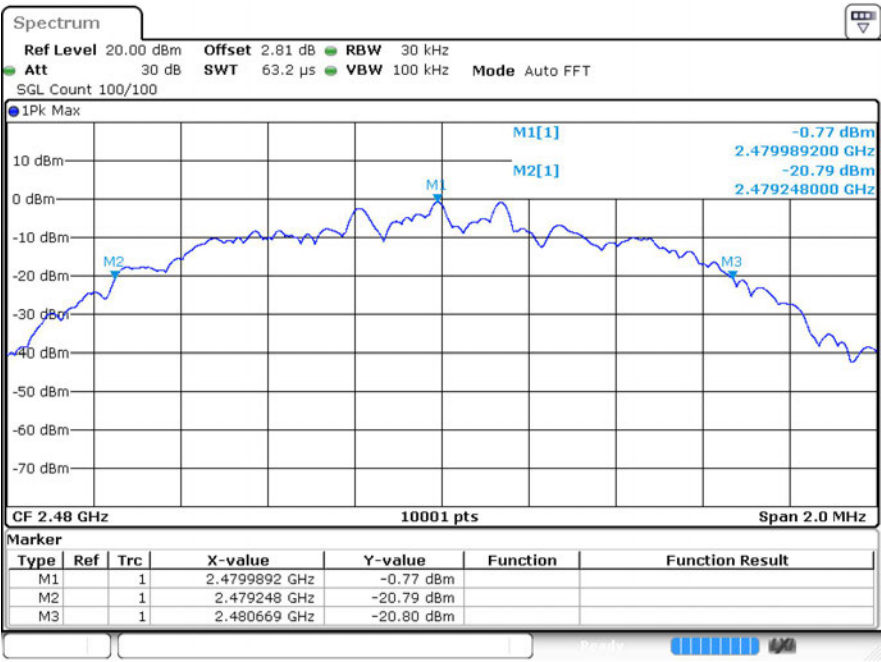
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

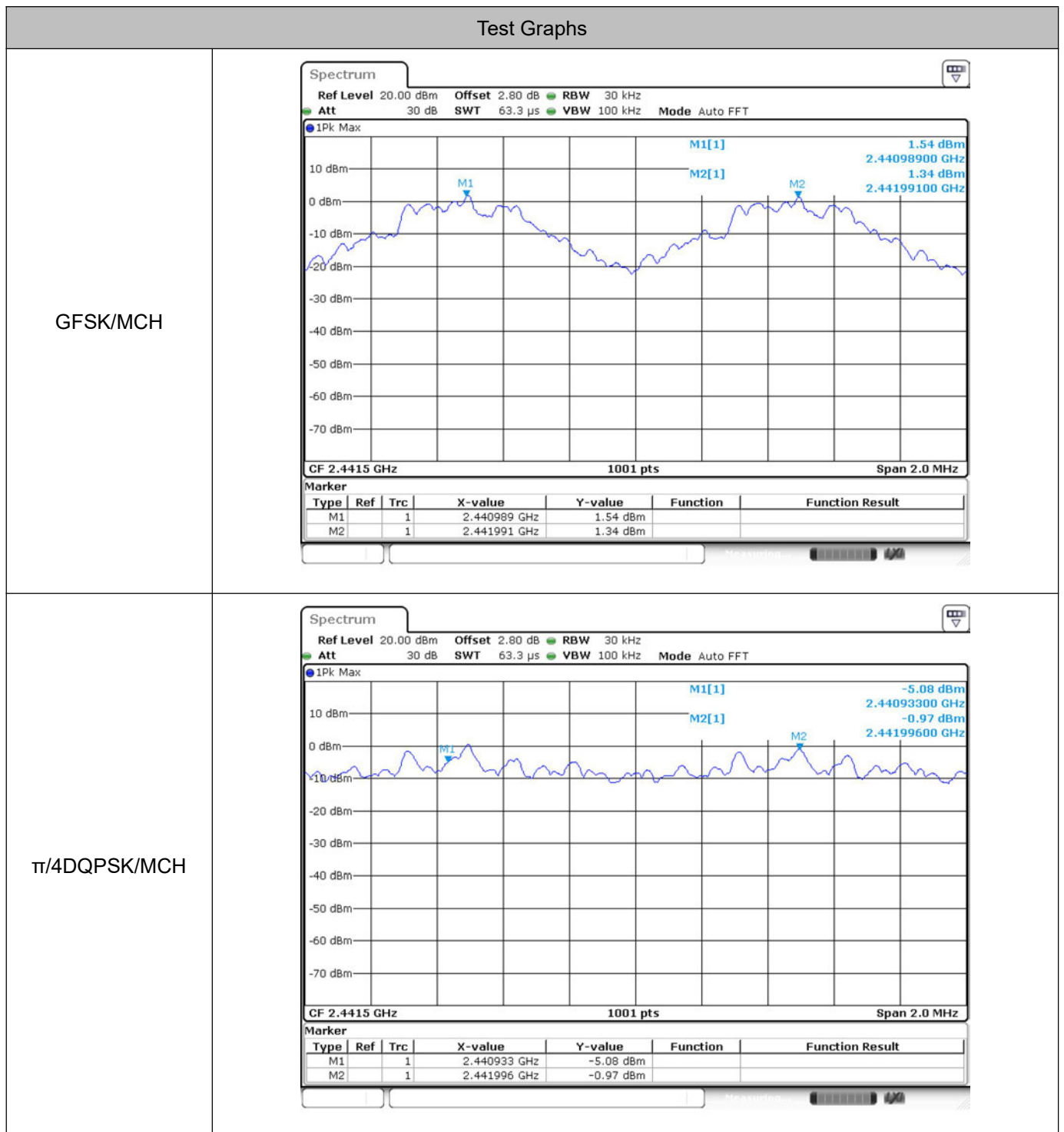


4 Carrier Frequency Separation

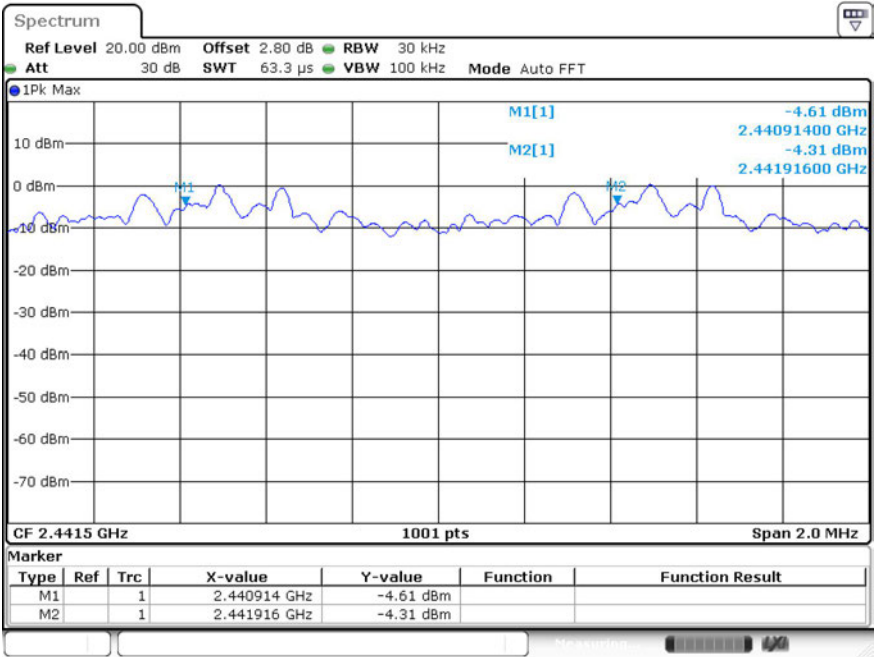
4.1 Test Result

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	MCH	1.002	0.578	Pass
$\pi/4$ DQPSK	MCH	1.063	0.953	Pass
8DPSK	MCH	1.002	0.94	Pass

4.2 Test Graphs



8DPSK/MCH

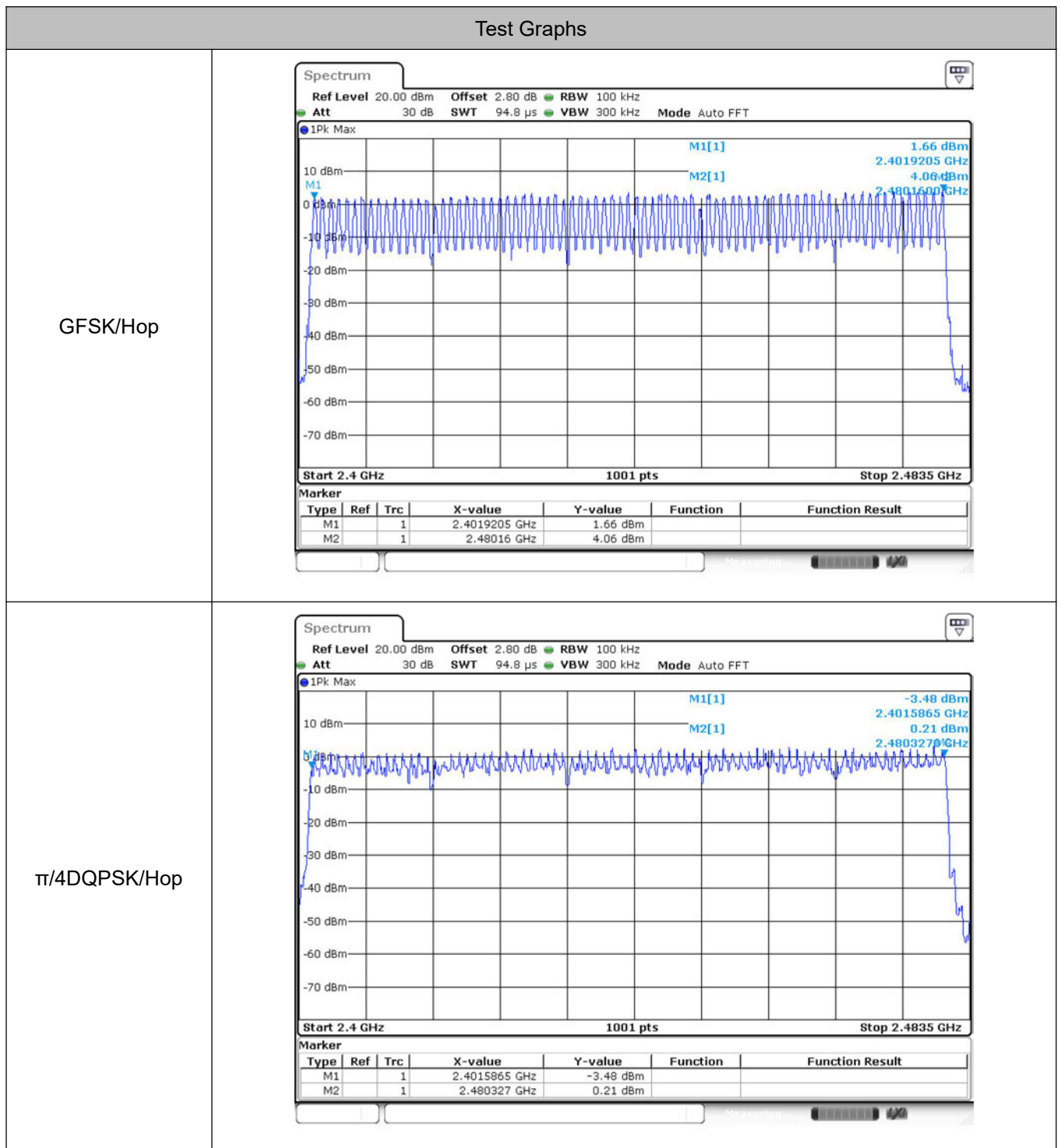


5 Hopping Channel Number

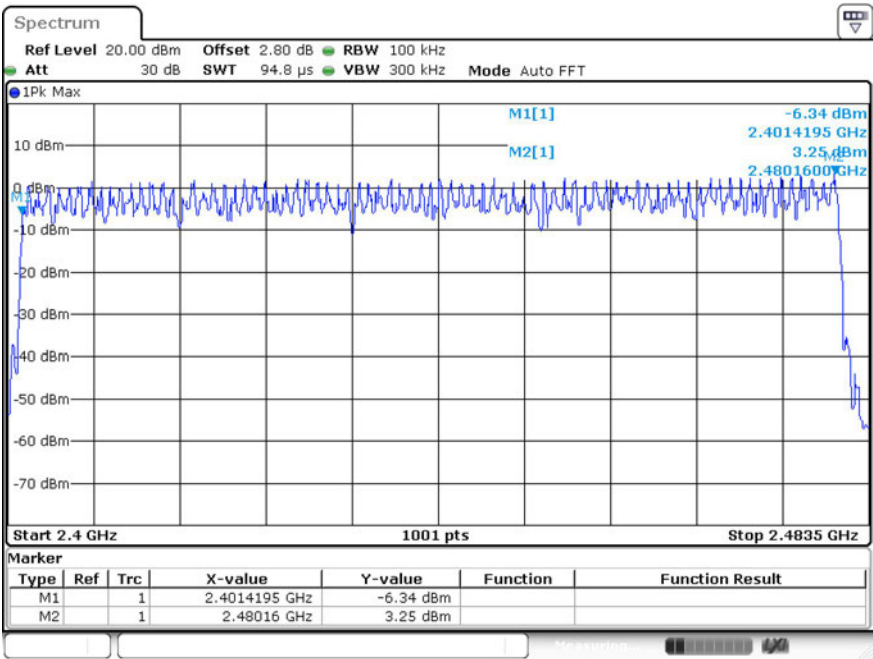
5.1 Test Result

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

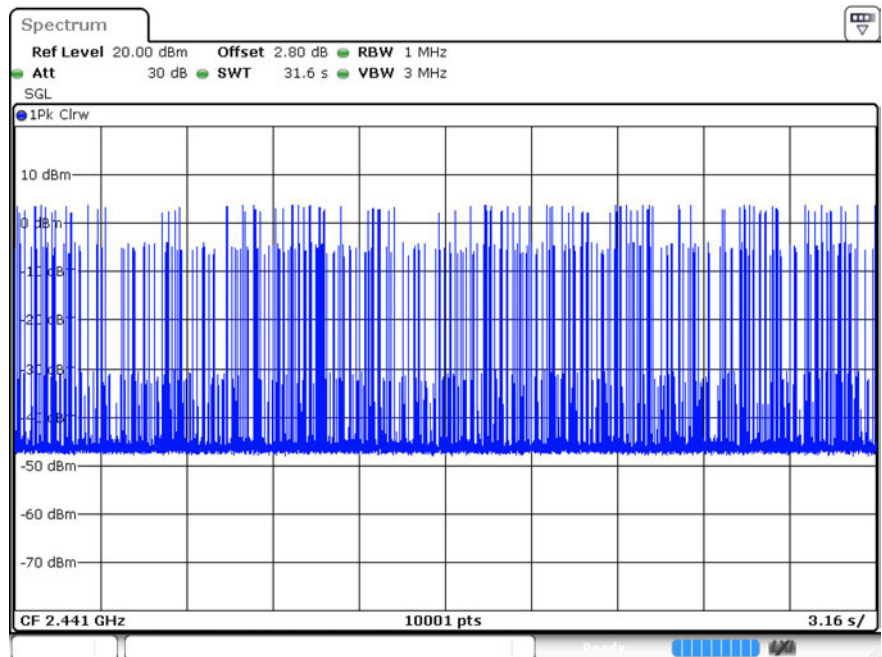
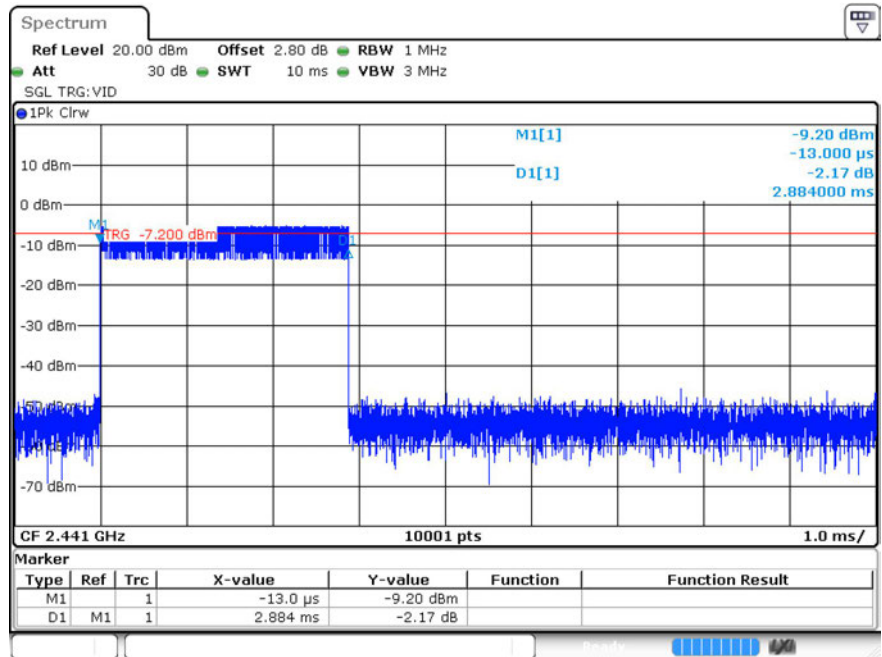
6.1 Test Result

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[ms]	Limit [s]	Verdict
GFSK	DH5	MCH	2.884	107	308.588	0.4	Pass
$\pi/4$ DQPSK	2DH5	MCH	2.889	106	306.234	0.4	Pass
8DPSK	3DH5	MCH	2.891	109	315.119	0.4	Pass

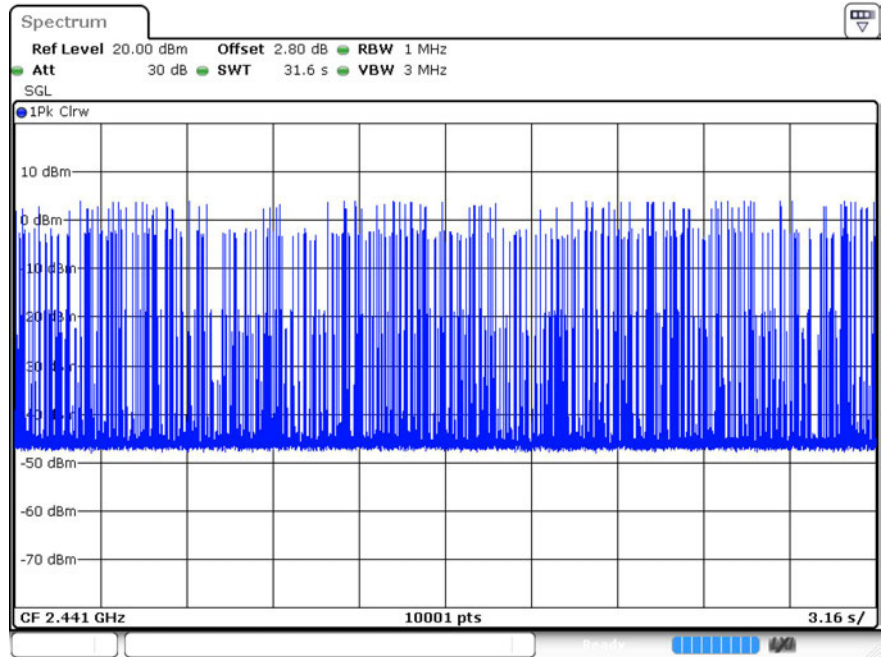
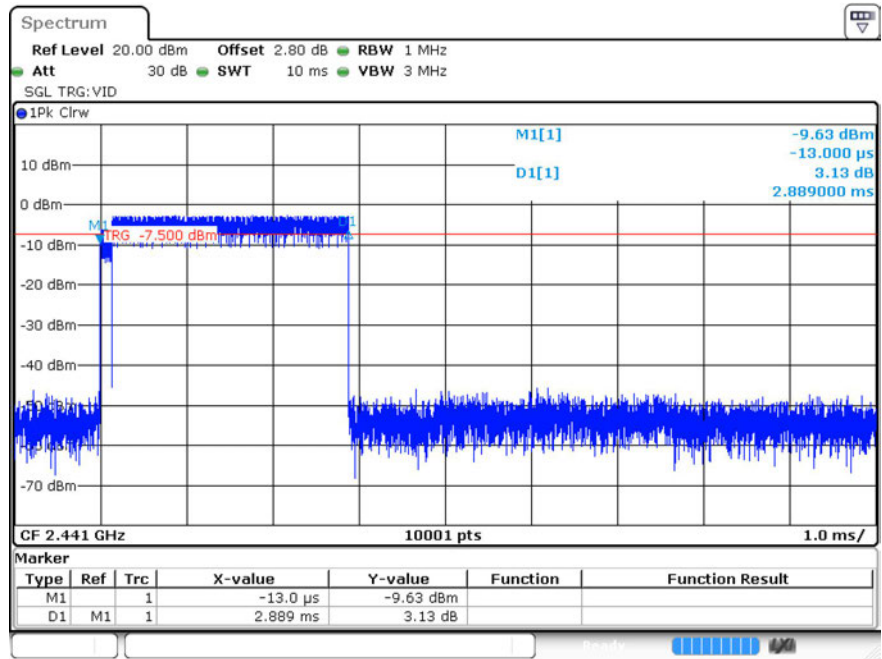
6.2 Test Graphs

Test Graphs

GFSK_DH5/MCH



$\pi/4$ DQPSK
_2DH5/MCH



Spectrum

Ref Level 20.00 dBm Offset 2.80 dB RBW 1 MHz
Att 30 dB SWT 31.6 s VBW 3 MHz
SGL

1Pk Clrw

10 dBm
0 dBm
-10 dBm
-20 dBm
-30 dBm
-40 dBm
-50 dBm
-60 dBm
-70 dBm

CF 2.441 GHz 10001 pts 3.16 s/

7 RF Conducted Spurious Emissions

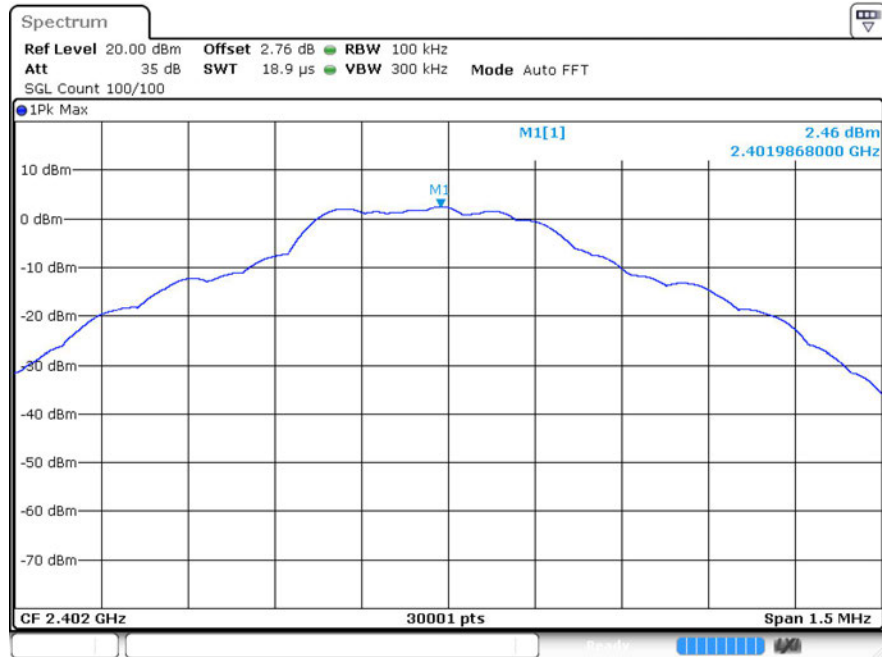
7.1 Test Result

Mode	Channel	Max. Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	-44.03	-20	Pass
	MCH	-44.54	-20	Pass
	HCH	-43.37	-20	Pass
π /4DQPSK	LCH	-43.35	-20	Pass
	MCH	-41.23	-20	Pass
	HCH	-42.5	-20	Pass
8DPSK	LCH	-42.71	-20	Pass
	MCH	-40.91	-20	Pass
	HCH	-43.32	-20	Pass

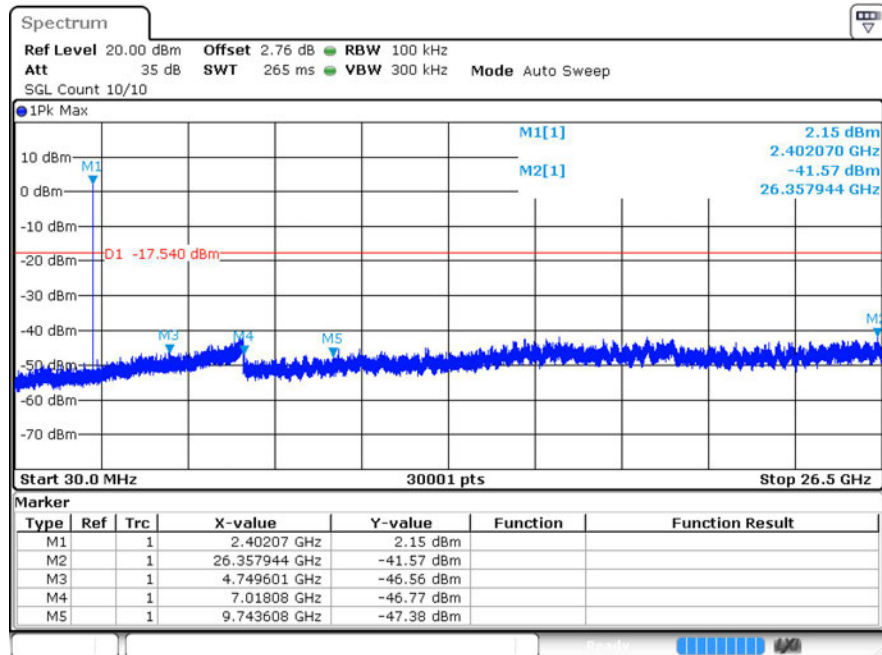
7.2 Test Graphs

GFSK_LCH_Graphs

Pref

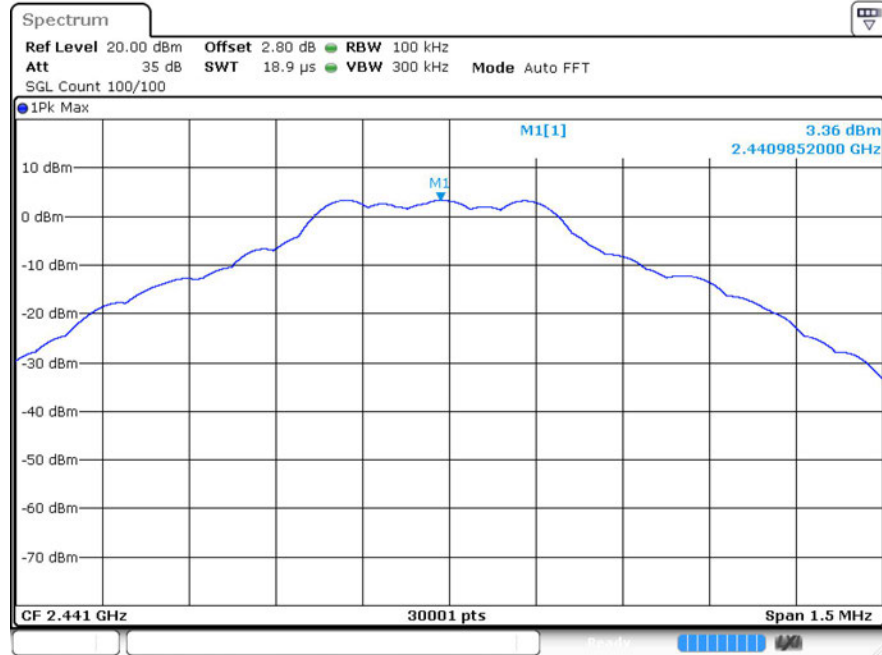


Puw

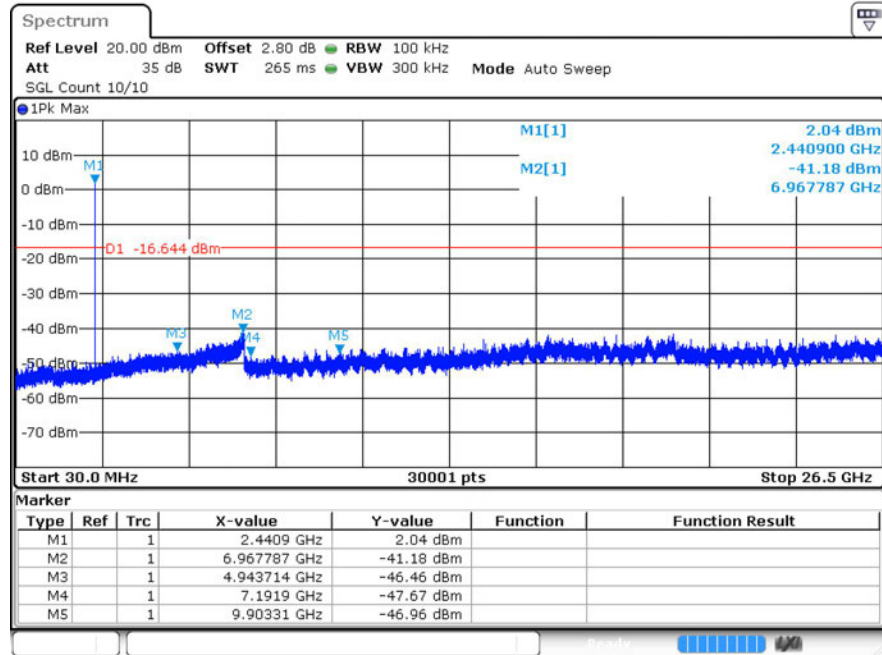


GFSK_MCH_Graphs

Pref

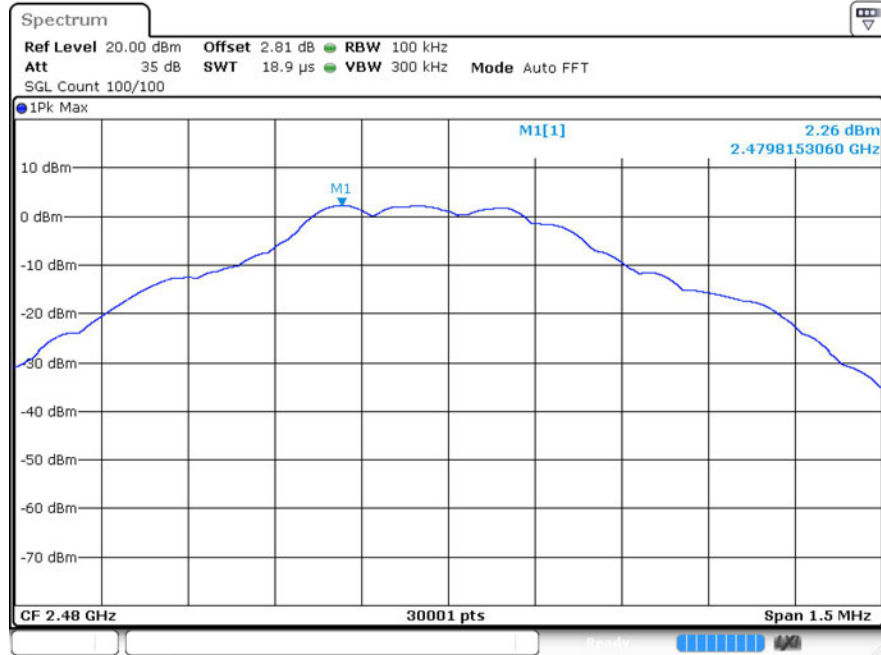


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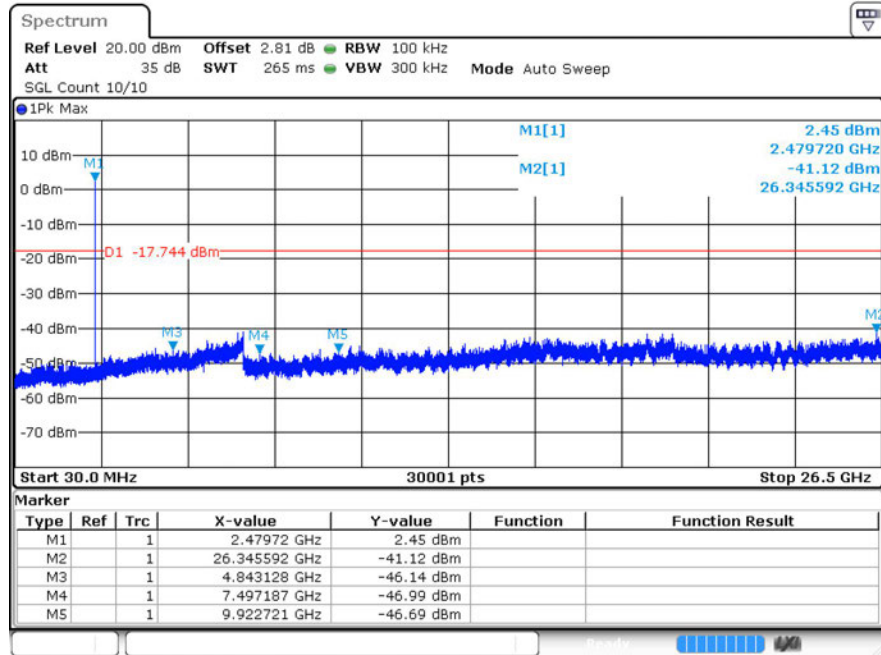


GFSK_HCH_Graphs

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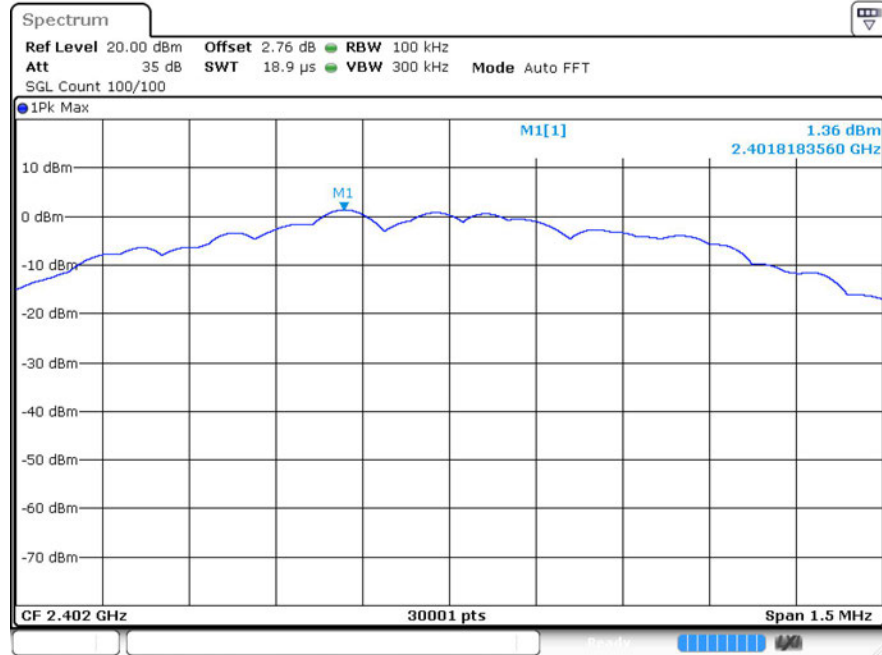


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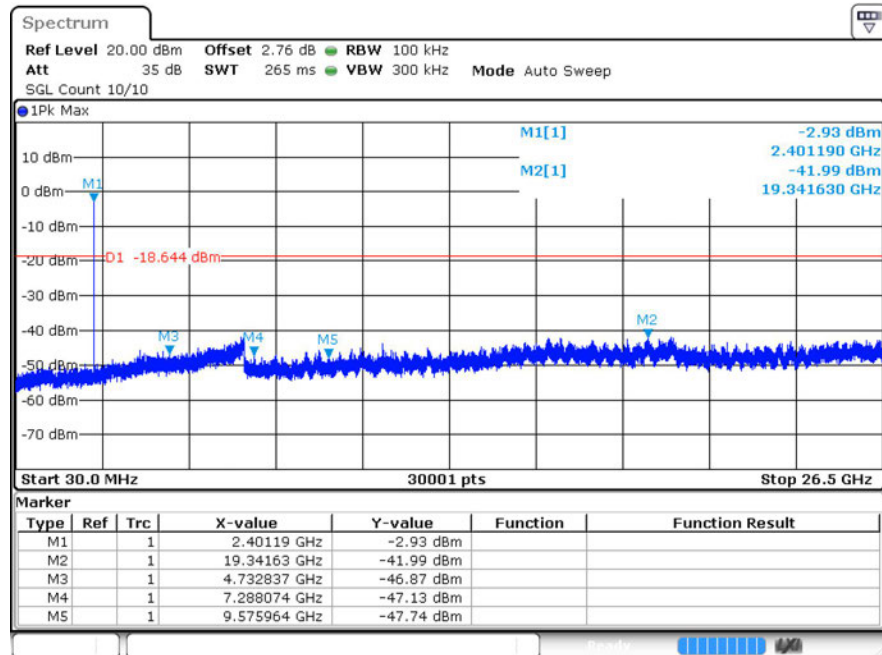


$\pi/4$ DQPSK_LCH_Graphs

Pref

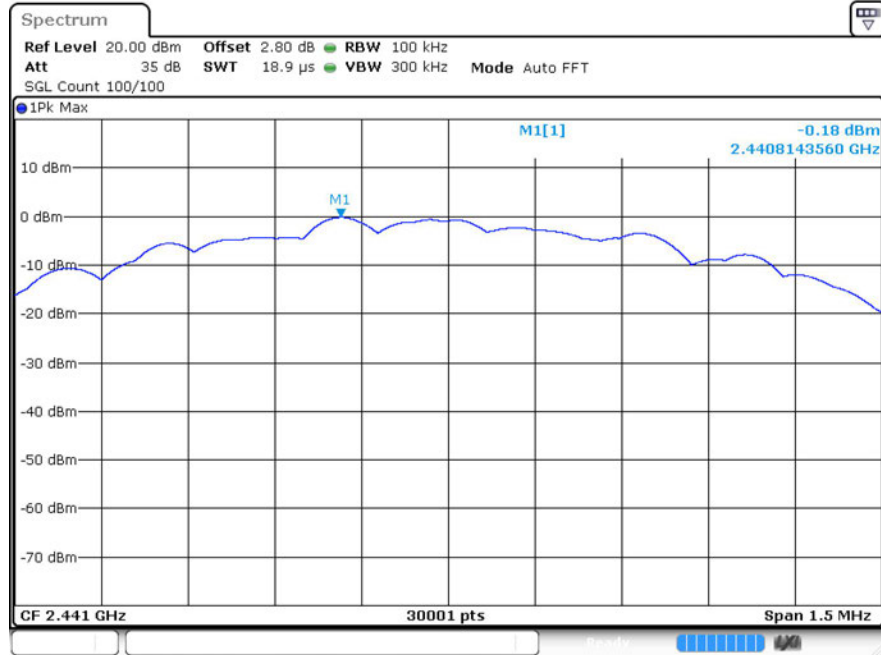


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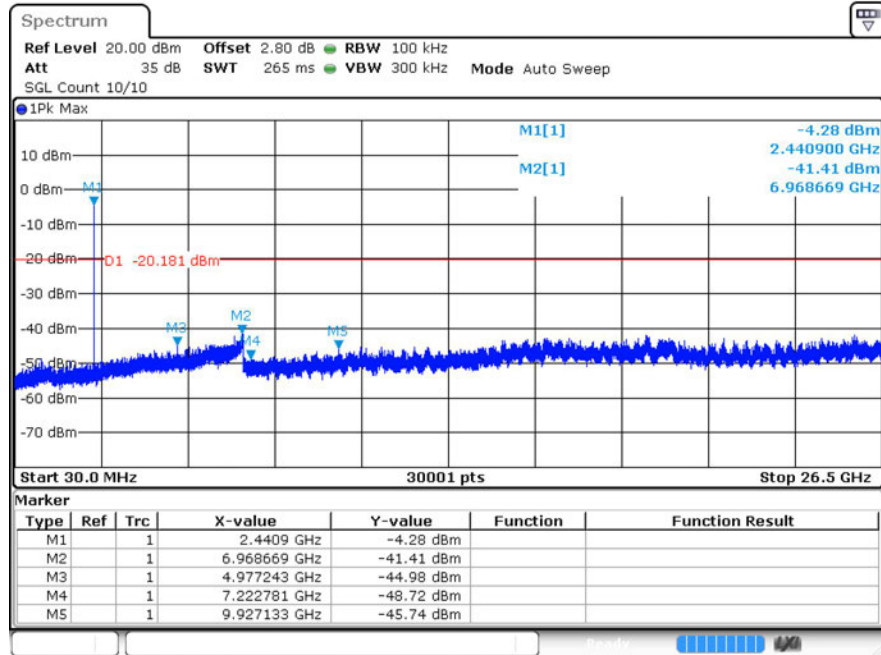


π /4DQPSK_MCH_Graphs

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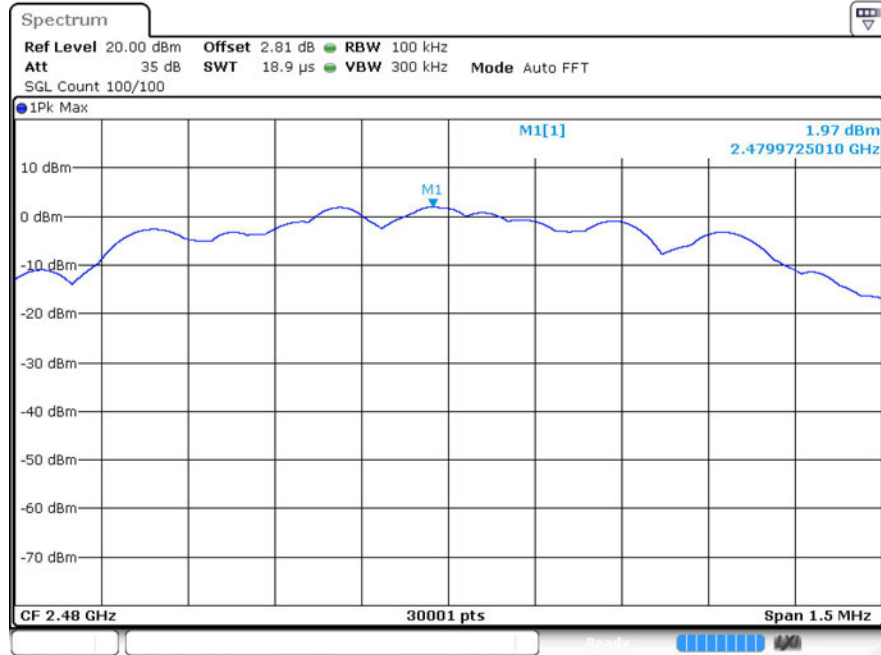


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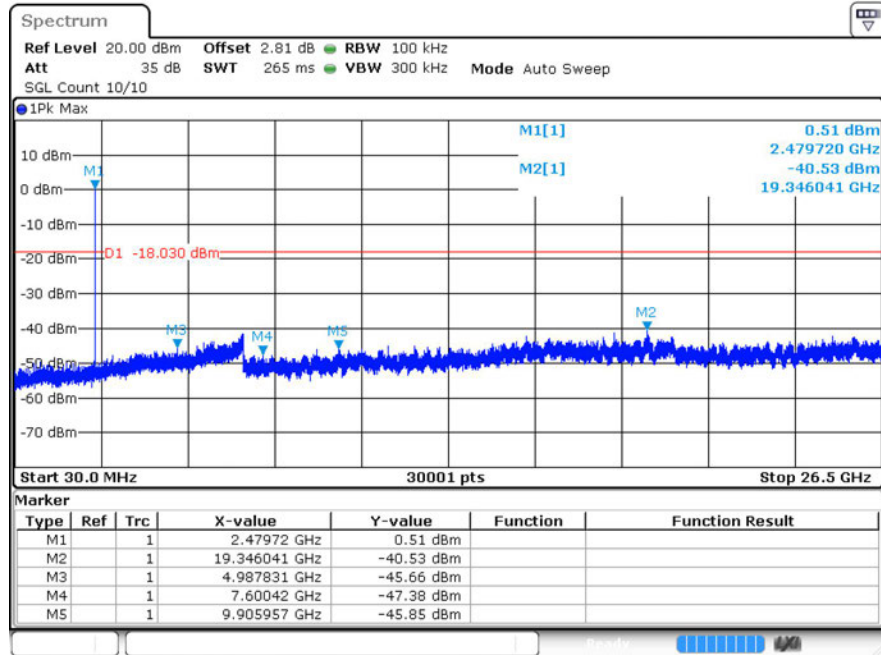


$\pi/4$ DQPSK_HCH_Graphs

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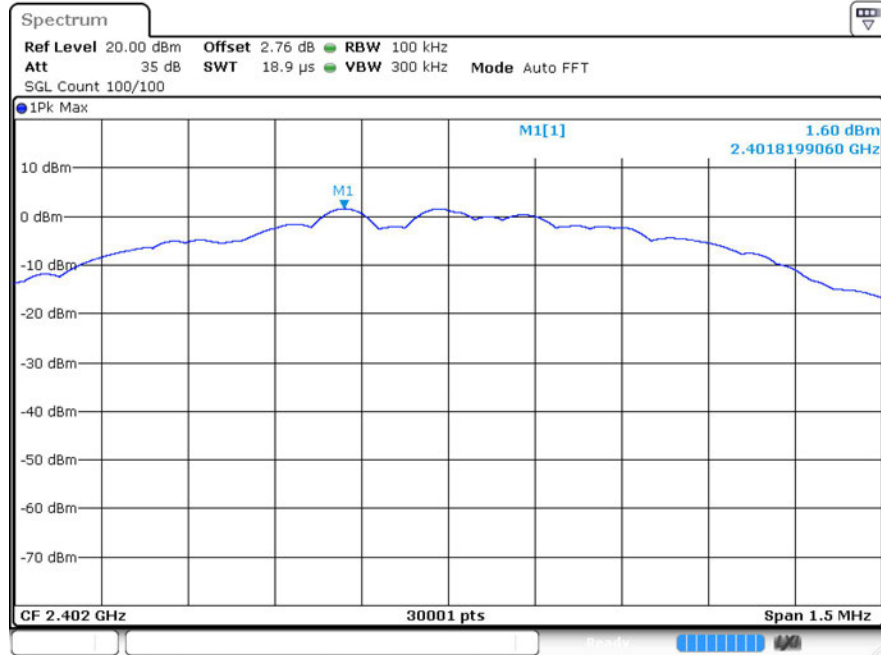


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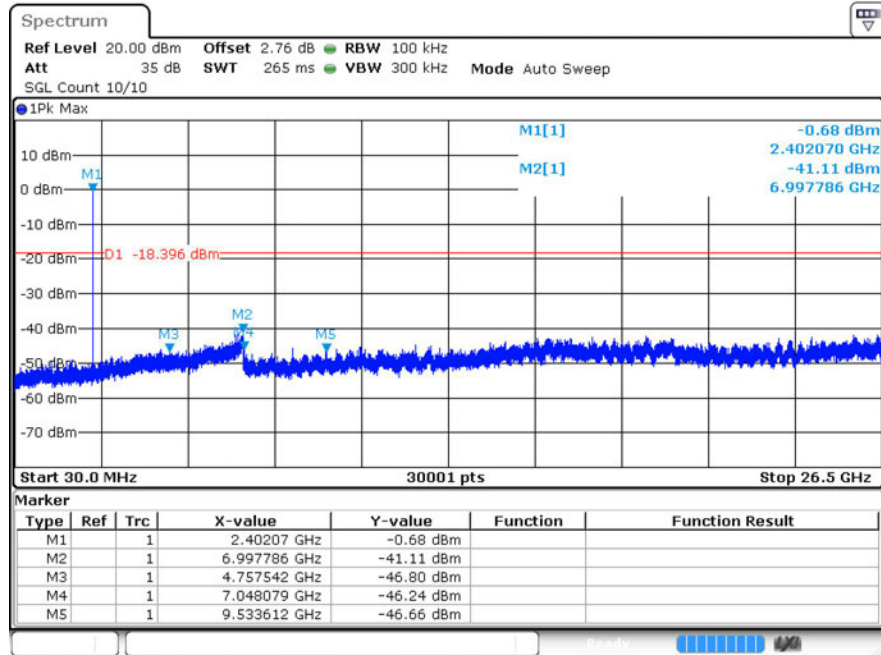


8DPSK_LCH_Graphs

Pref

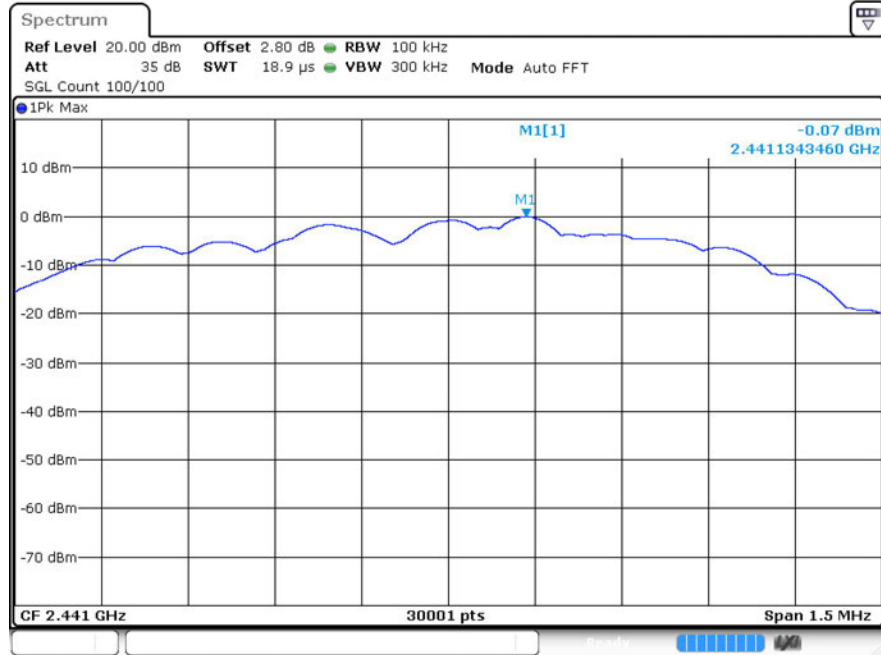


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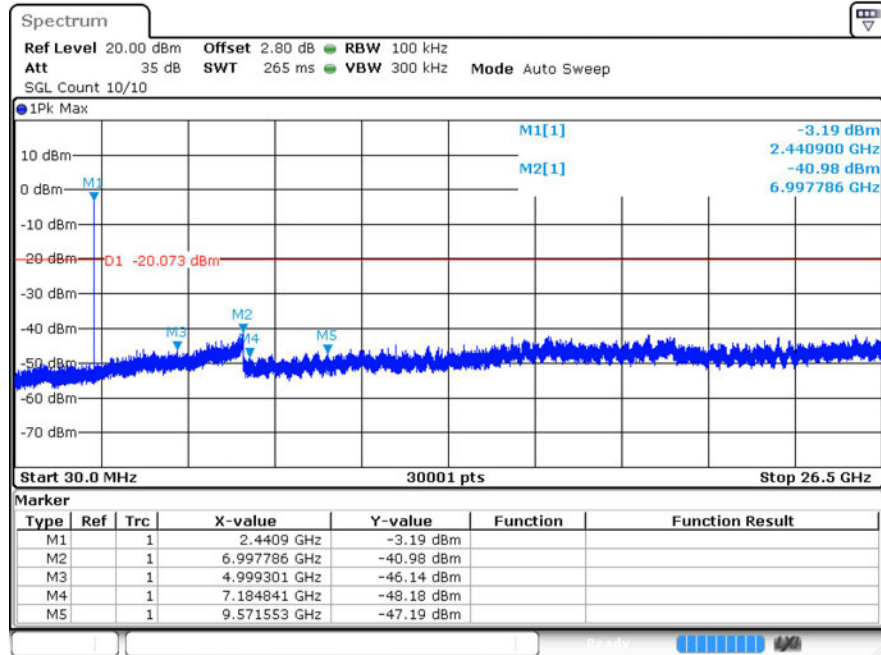


8DPSK_MCH_Graphs

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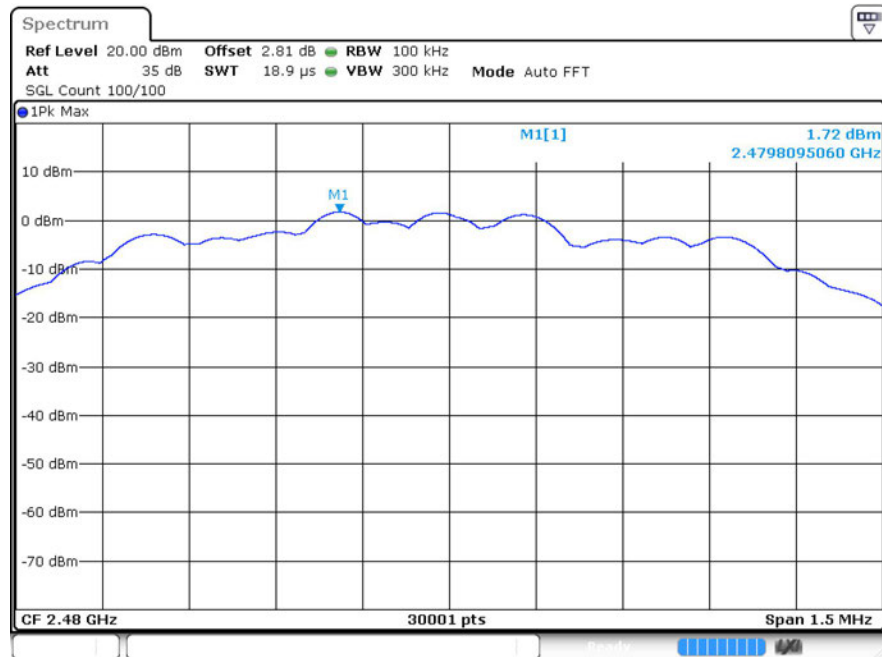


Puw



8DPSK_HCH_Graphs

Pref



Puw

