



Appendix A

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

Product Name: wireless headset

Trade Mark: PYTHON FLY

Test Model: DKQ200

Environmental Conditions

Temperature:	25.4℃
Relative Humidity:	52.1%
ATM Pressure:	101Kpa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen

Contents

Page

COVER PAGE

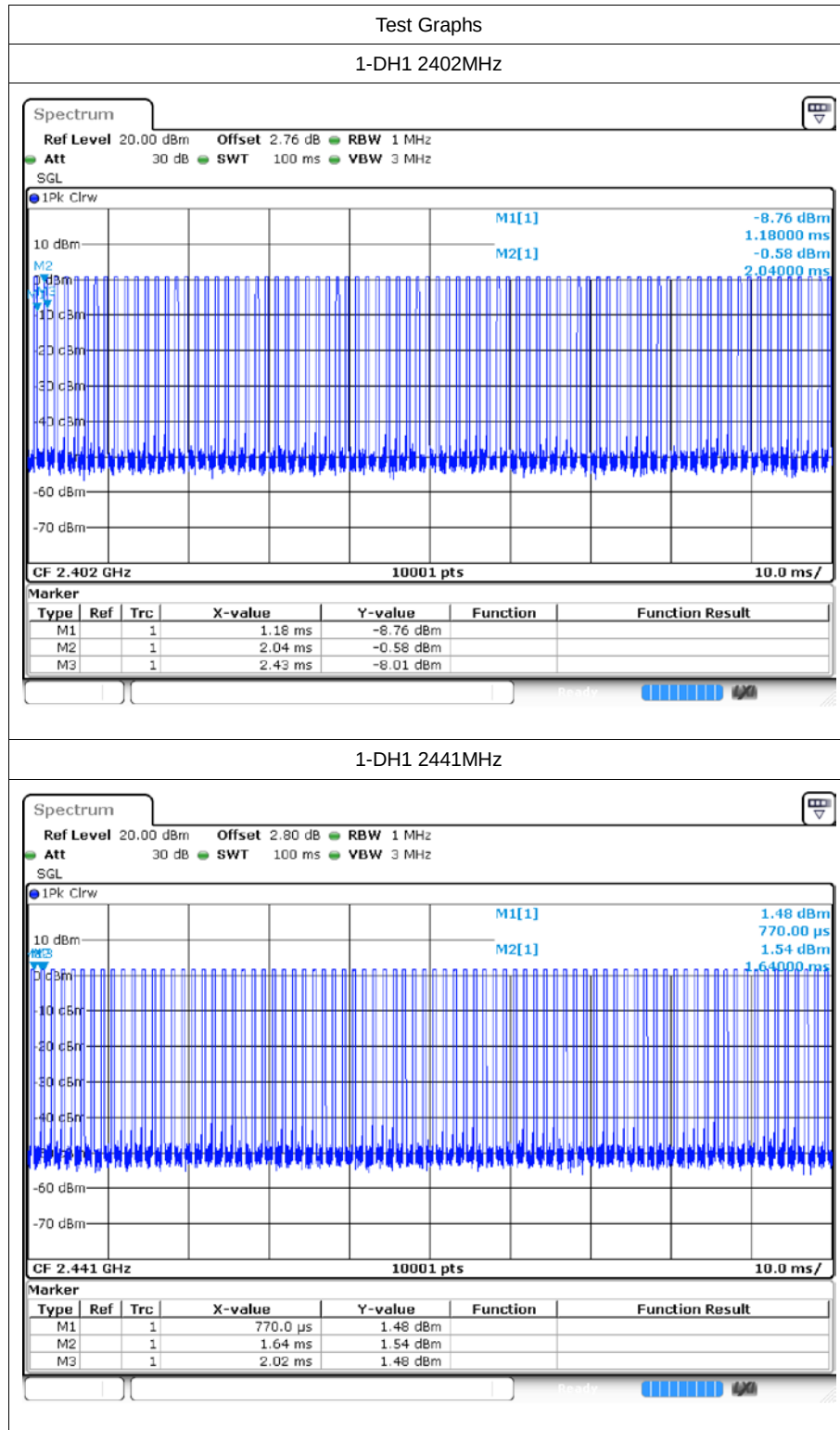
1	Duty Cycle.....	3
1.1	Test Result	3
1.2	Test Graphs.....	4
2	Maximum Conducted Peak Output Power	7
2.1	Test Result	7
2.2	Test Graphs.....	8
3	20dB Bandwidth.....	11
3.1	Test Result	11
3.2	Test Graphs.....	12
4	Carrier Frequency Separation	15
4.1	Test Result	15
4.2	Test Graphs.....	16
5	Hopping Channel Number.....	17
5.1	Test Result	17
5.2	Test Graphs.....	18
6	Dwell Time	19
6.1	Test Result	19
6.2	Test Graphs.....	20
7	RF Conducted Spurious Emissions	22
7.1	Test Result	22
7.2	Test Graphs.....	23
8	Band-edge for RF Conducted Emissions.....	29
8.1	Test Result	29
8.2	Test Graphs.....	30
9	Restrict-band band-edge measurements.....	38
9.1	Test Result	38
9.2	Test Graphs.....	39

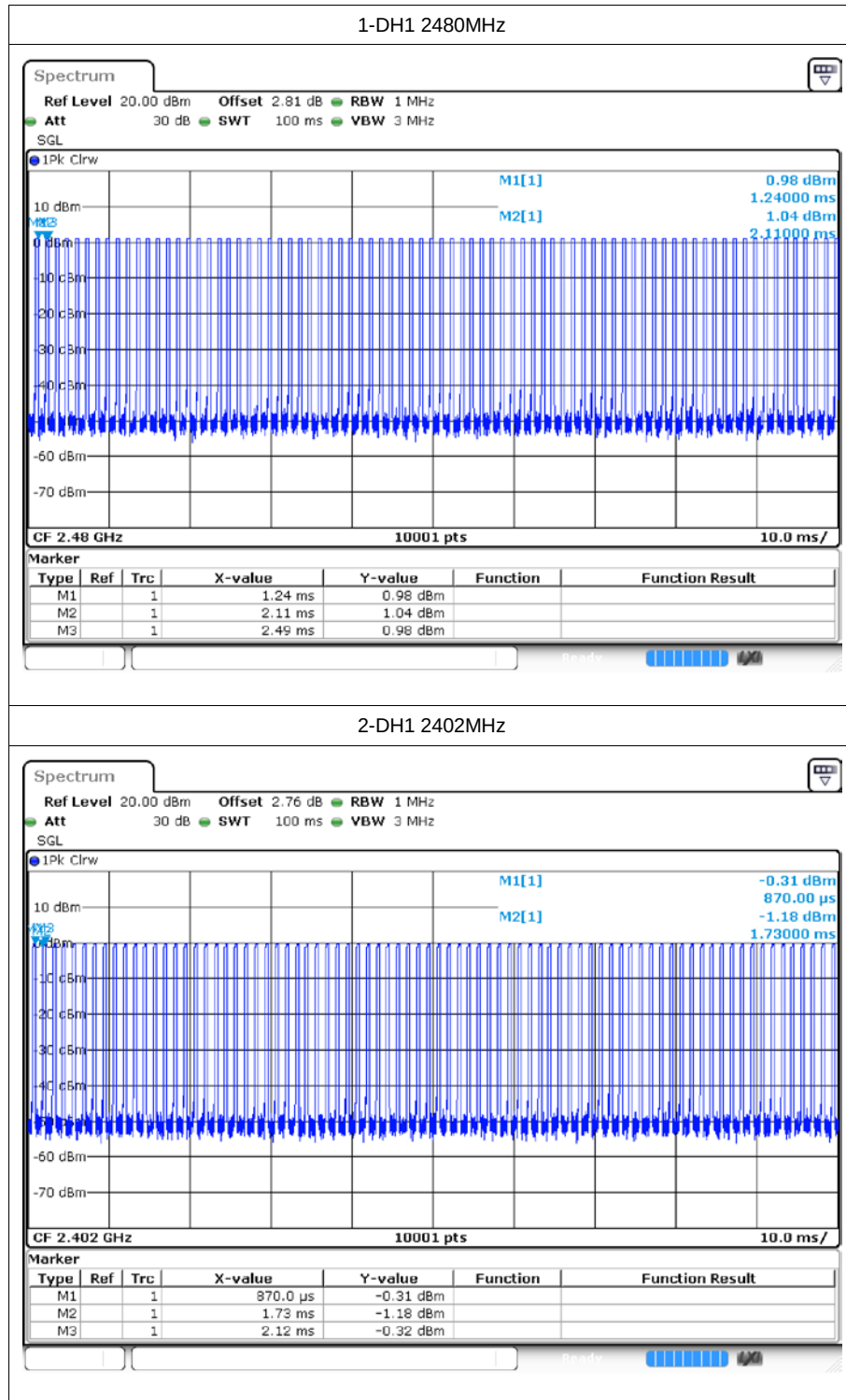
1 Duty Cycle

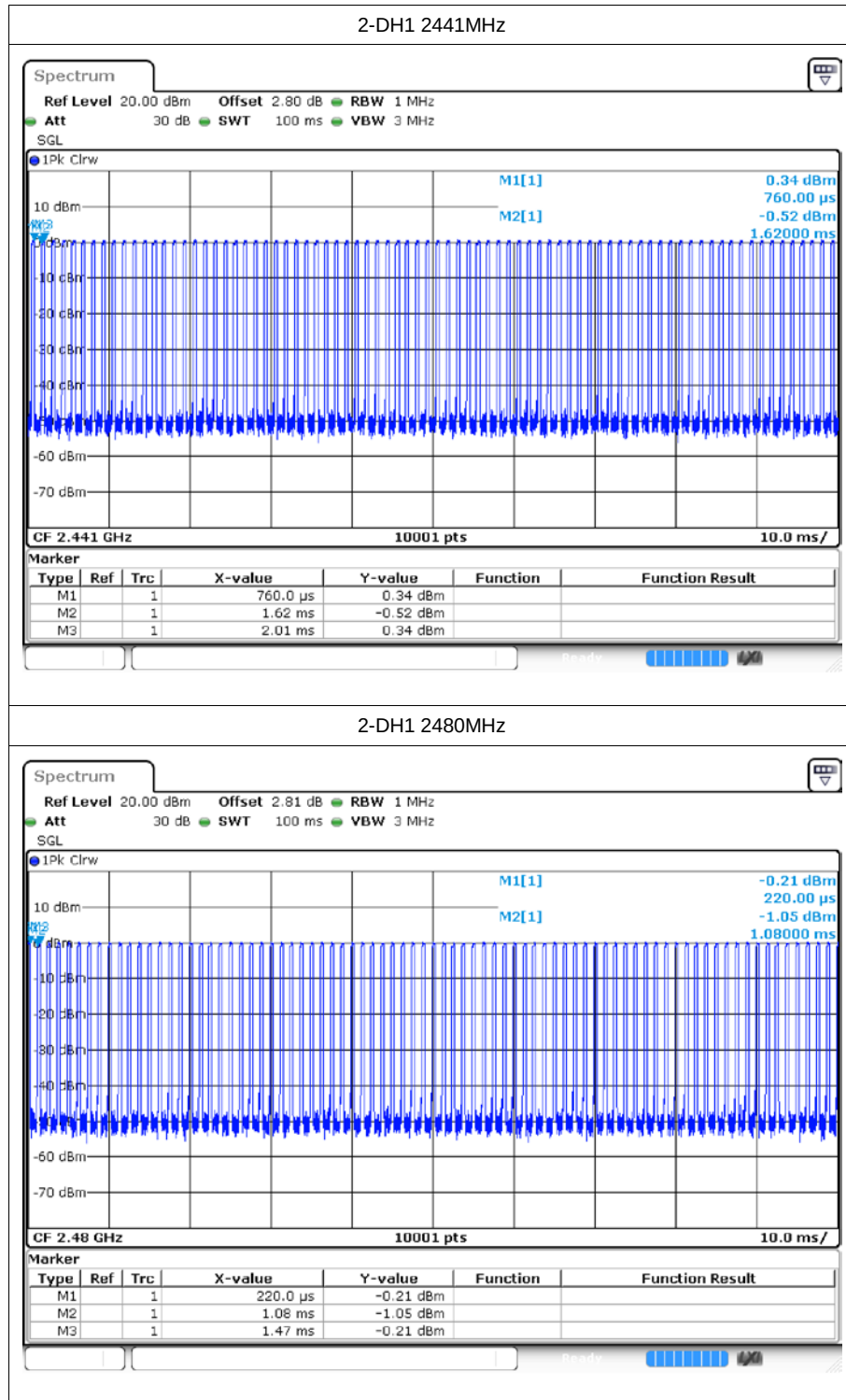
1.1 Test Result

Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor	1/T (kHz)
1-DH1	2402	31.91	4.96	2.56
1-DH1	2441	31.55	5.01	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





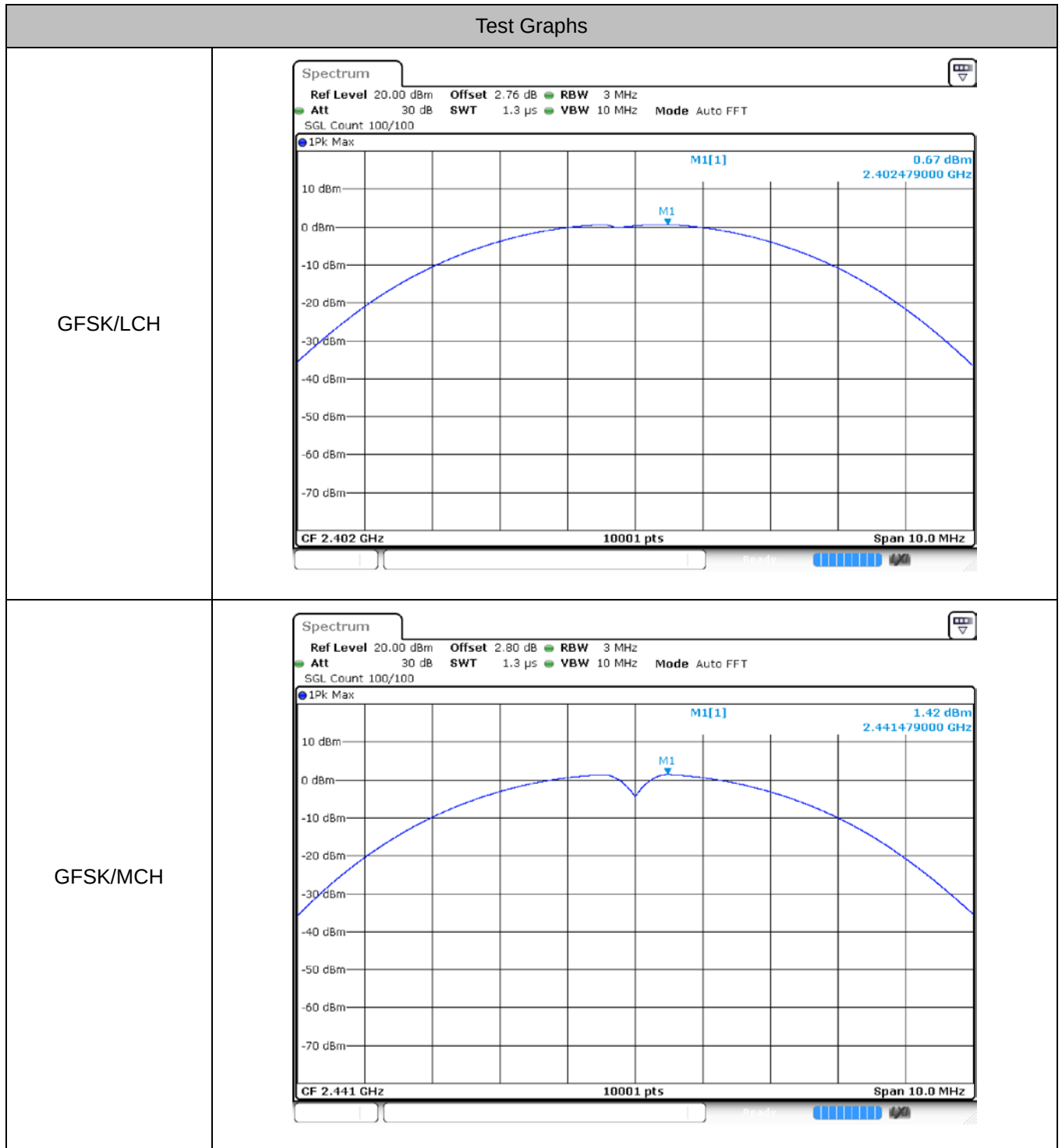


2 Maximum Conducted Peak Output Power

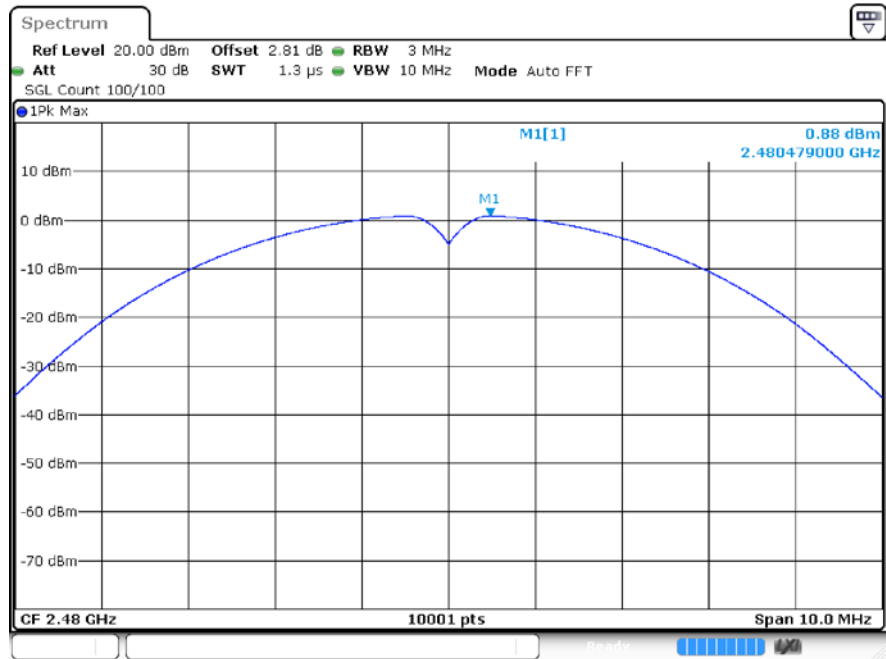
2.1 Test Result

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	0.67	21	Pass
	MCH	1.42	21	Pass
	HCH	0.88	21	Pass
$\pi/4$ DQPSK	LCH	0.86	21	Pass
	MCH	1.52	21	Pass
	HCH	1.03	21	Pass

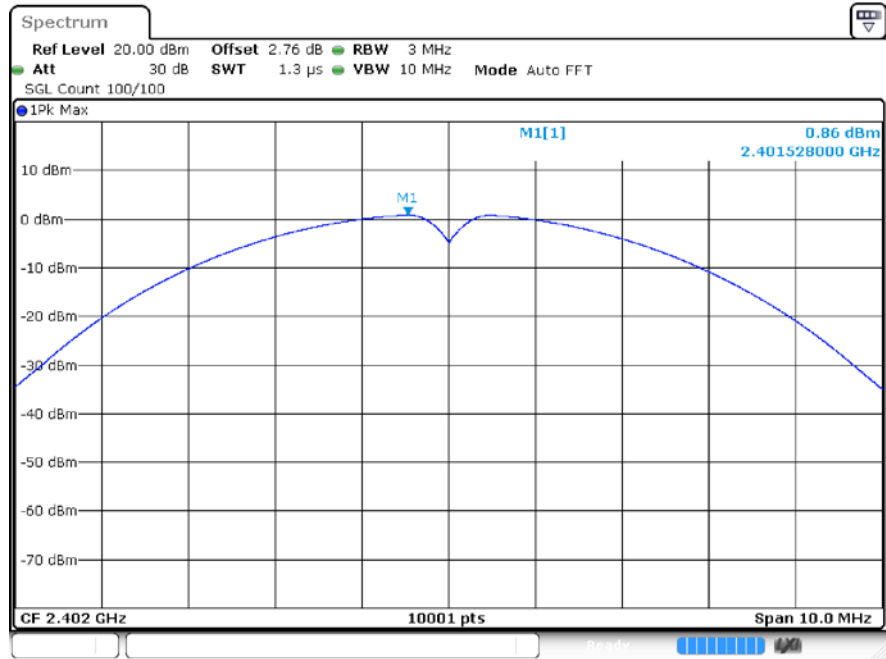
2.2 Test Graphs



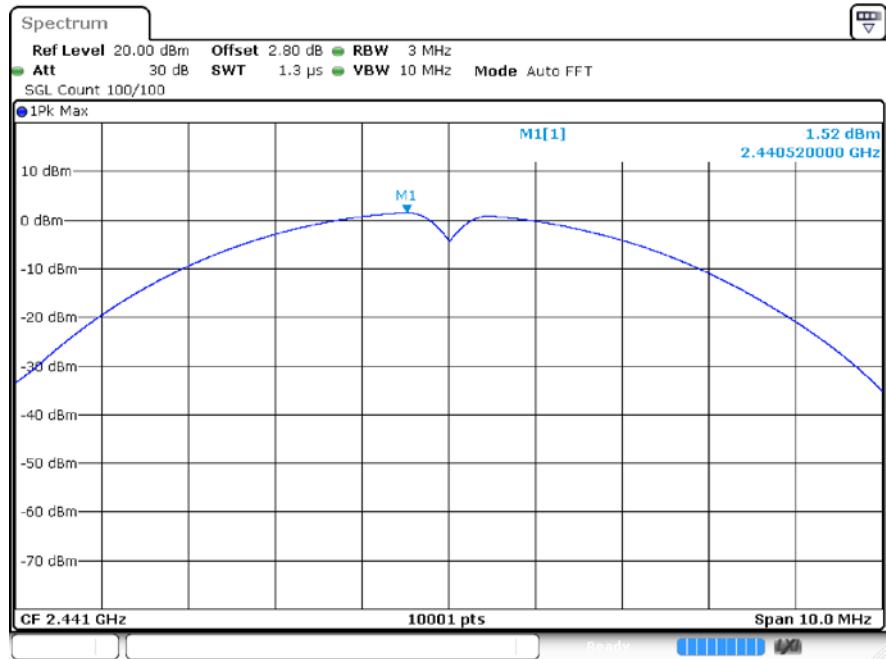
GFSK/HCH



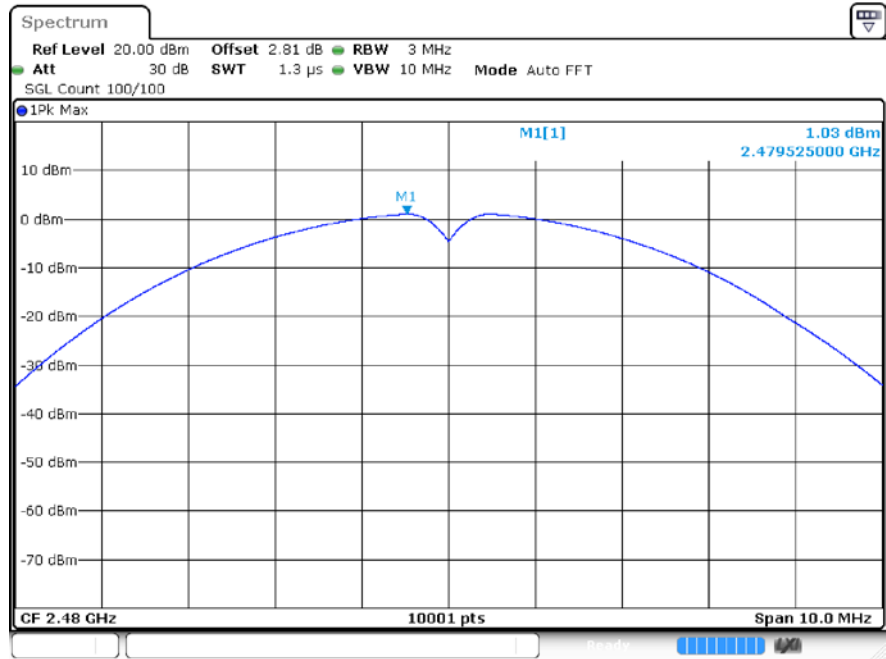
$\pi/4$ DQPSK/LCH



$\pi/4$ DQPSK/MCH



$\pi/4$ DQPSK/HCH

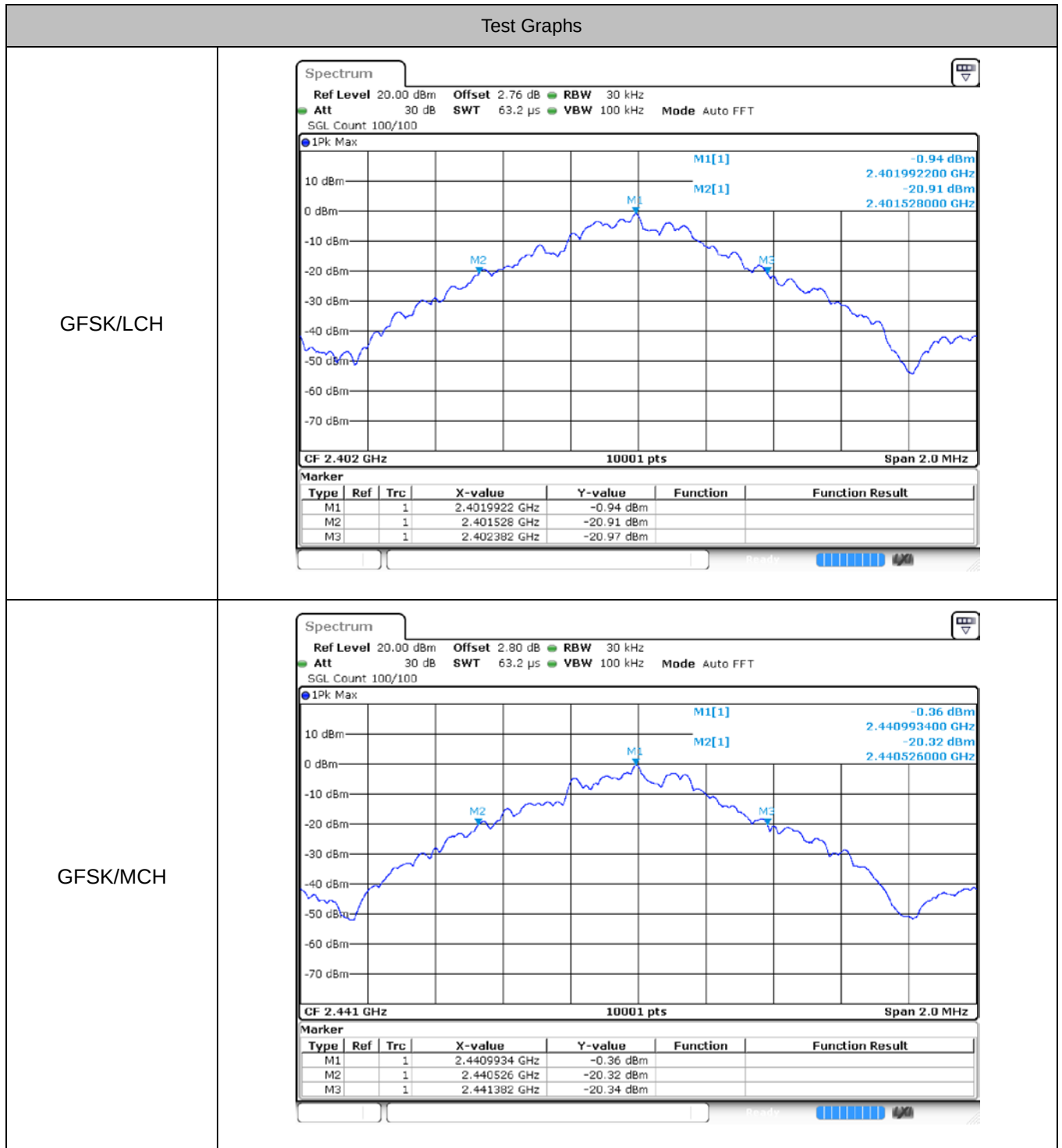


3 20dB Bandwidth

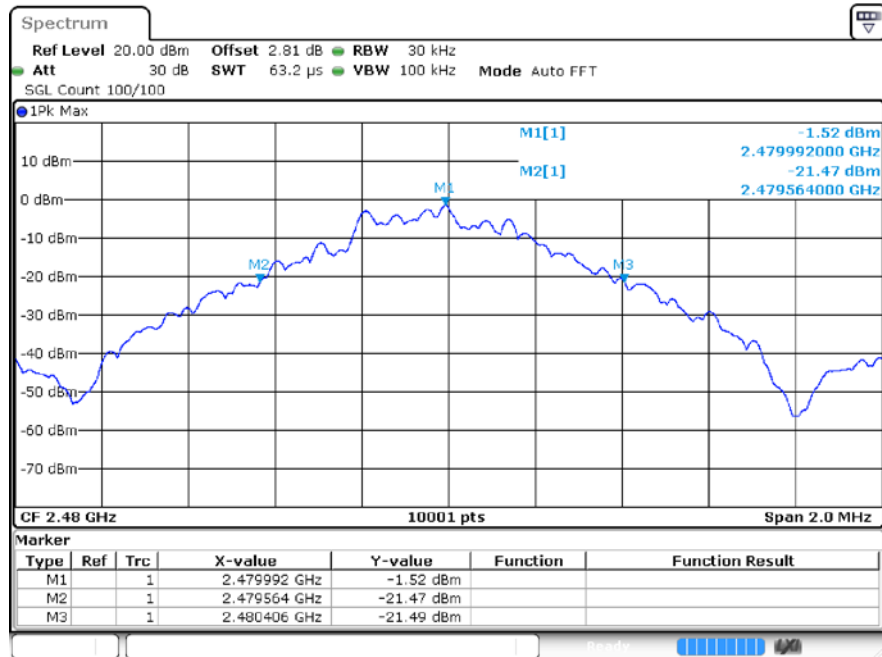
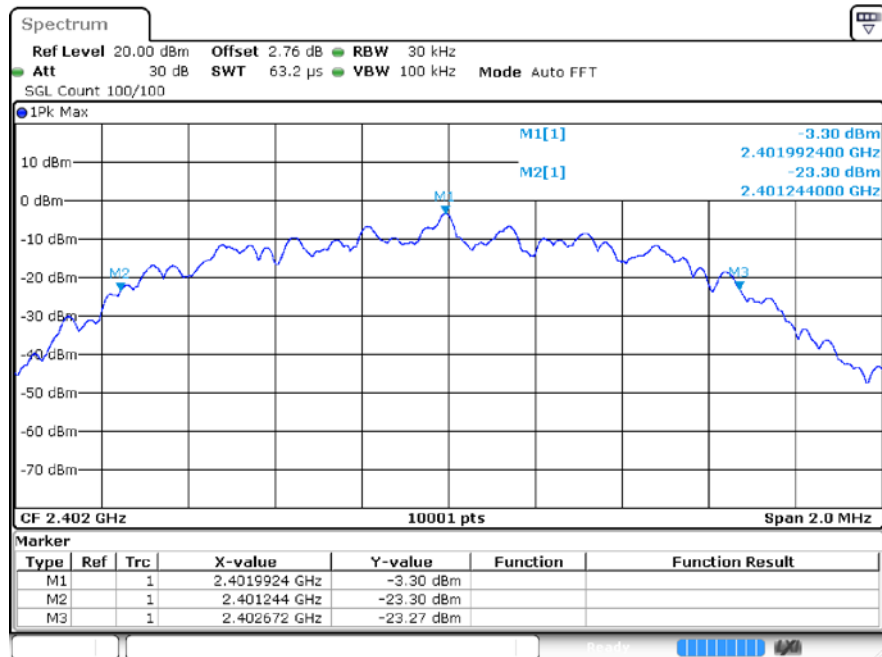
3.1 Test Result

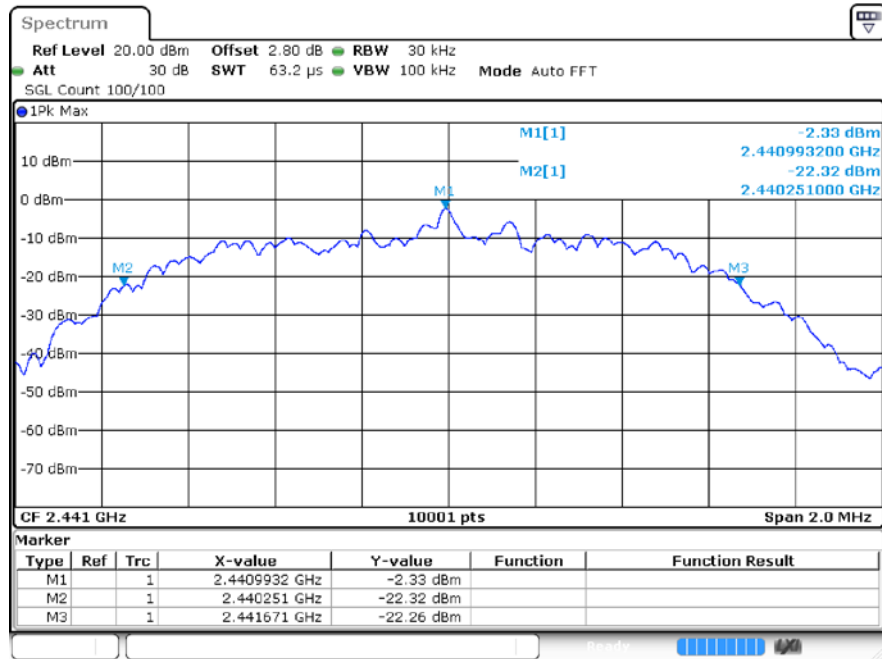
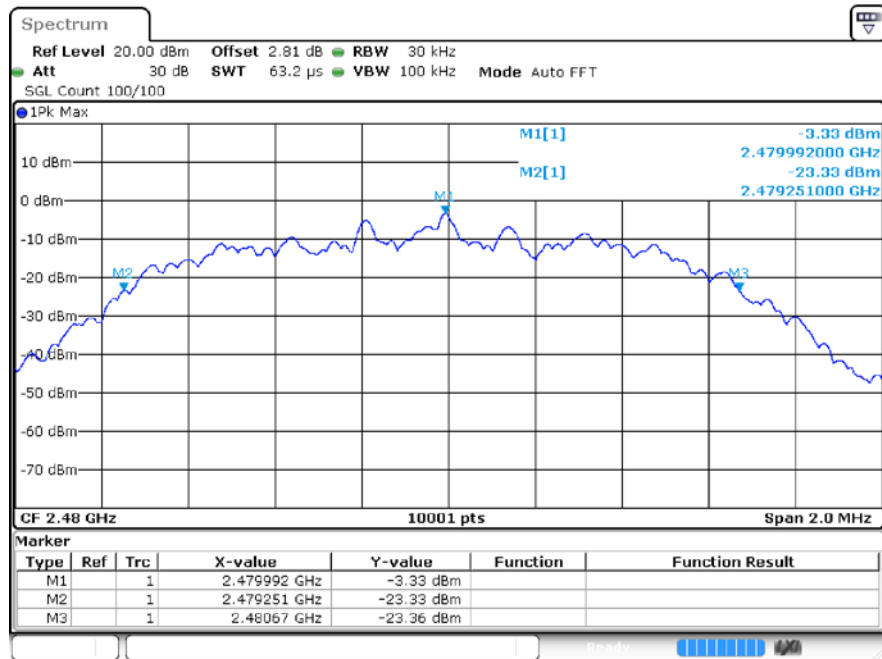
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.854	Not Specified	Pass
	MCH	0.856	Not Specified	Pass
	HCH	0.842	Not Specified	Pass
$\pi/4$ DQPSK	LCH	1.428	Not Specified	Pass
	MCH	1.42	Not Specified	Pass
	HCH	1.418	Not Specified	Pass

3.2 Test Graphs



GFSK/HCH


 $\pi/4$ DQPSK/LCH


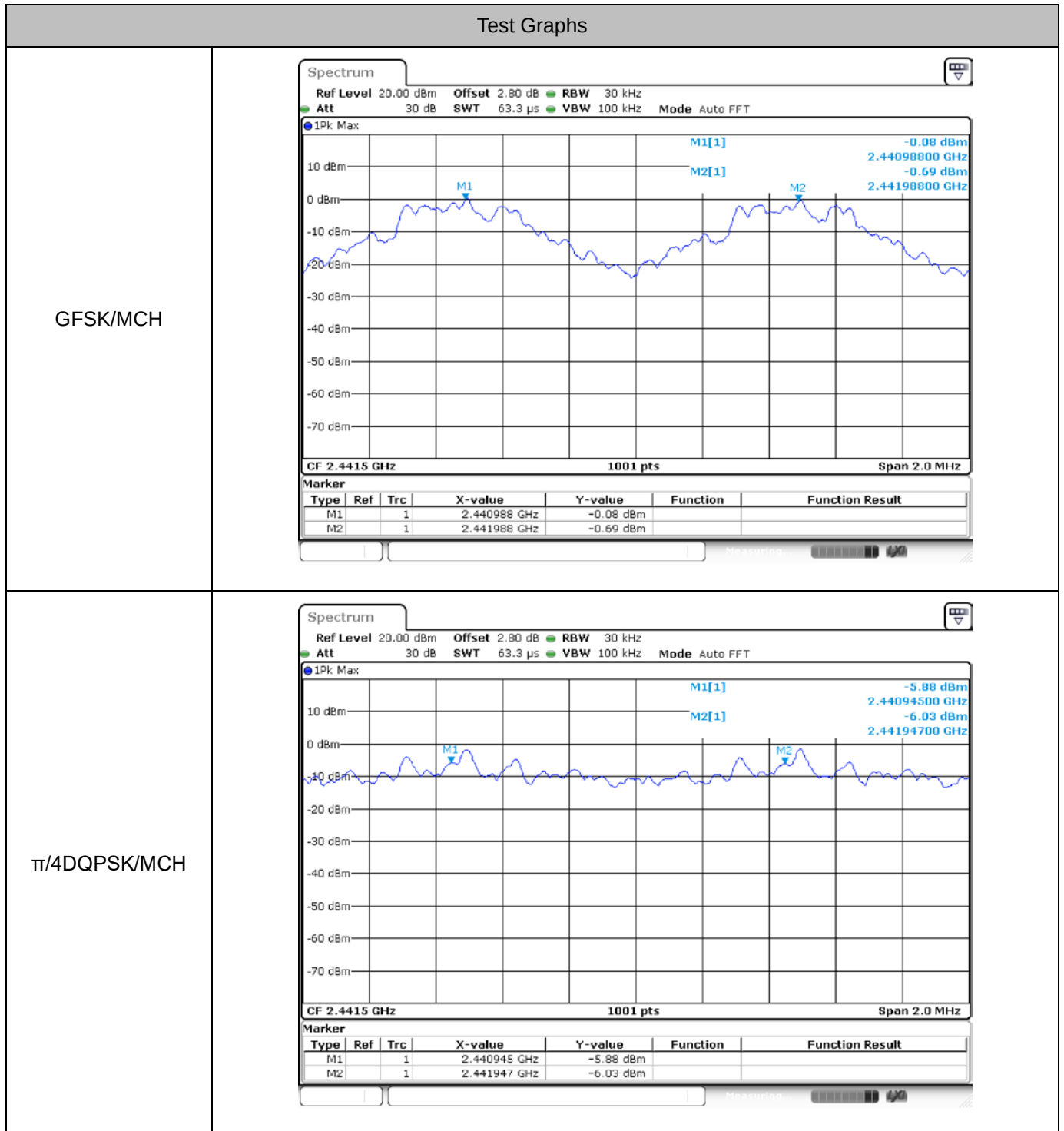
$\pi/4$ DQPSK/MCH

 $\pi/4$ DQPSK/HCH


4 Carrier Frequency Separation

4.1 Test Result

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	MCH	1	0.571	Pass
$\pi/4$ DQPSK	MCH	1.002	0.947	Pass

4.2 Test Graphs

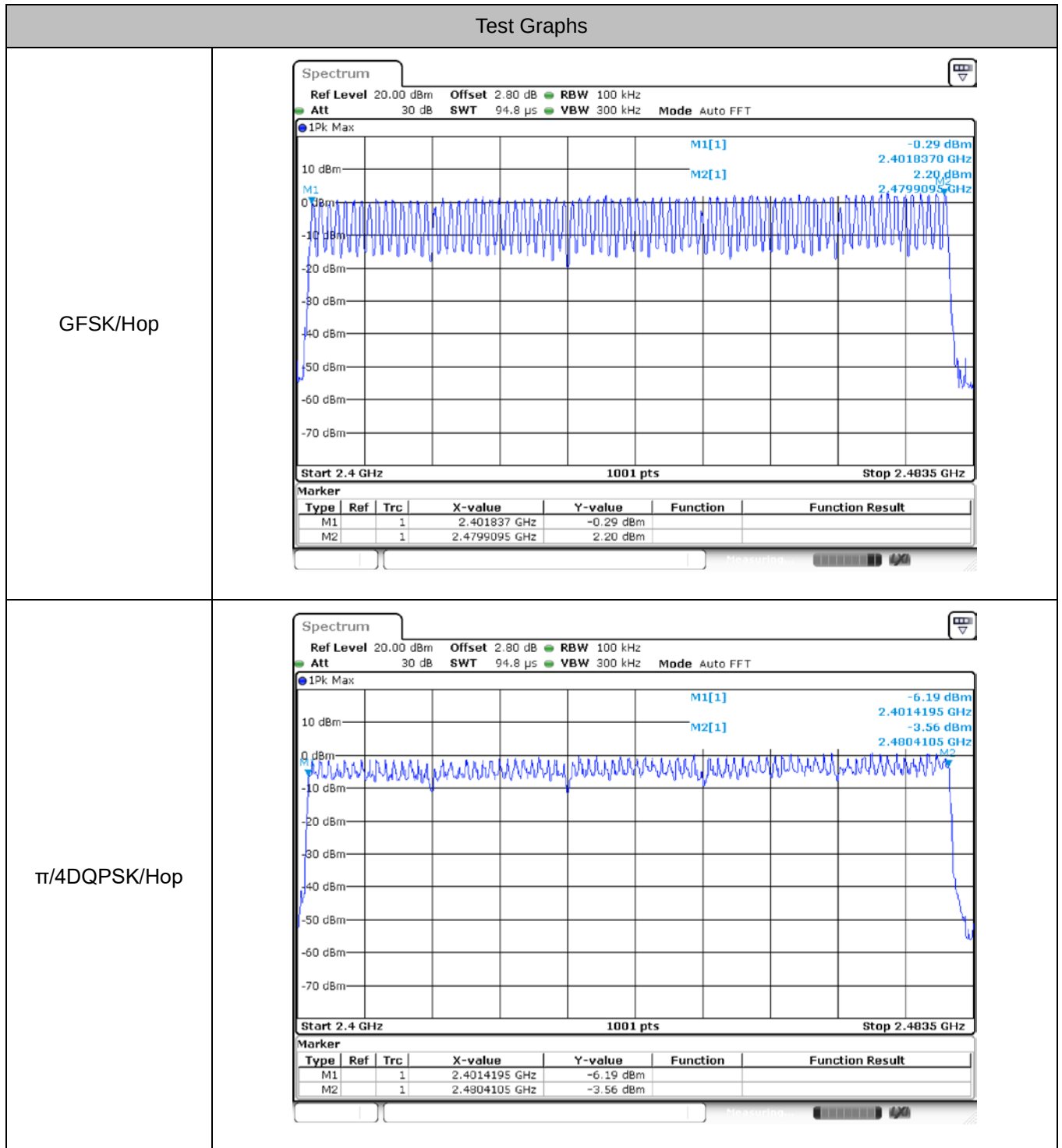


5 Hopping Channel Number

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

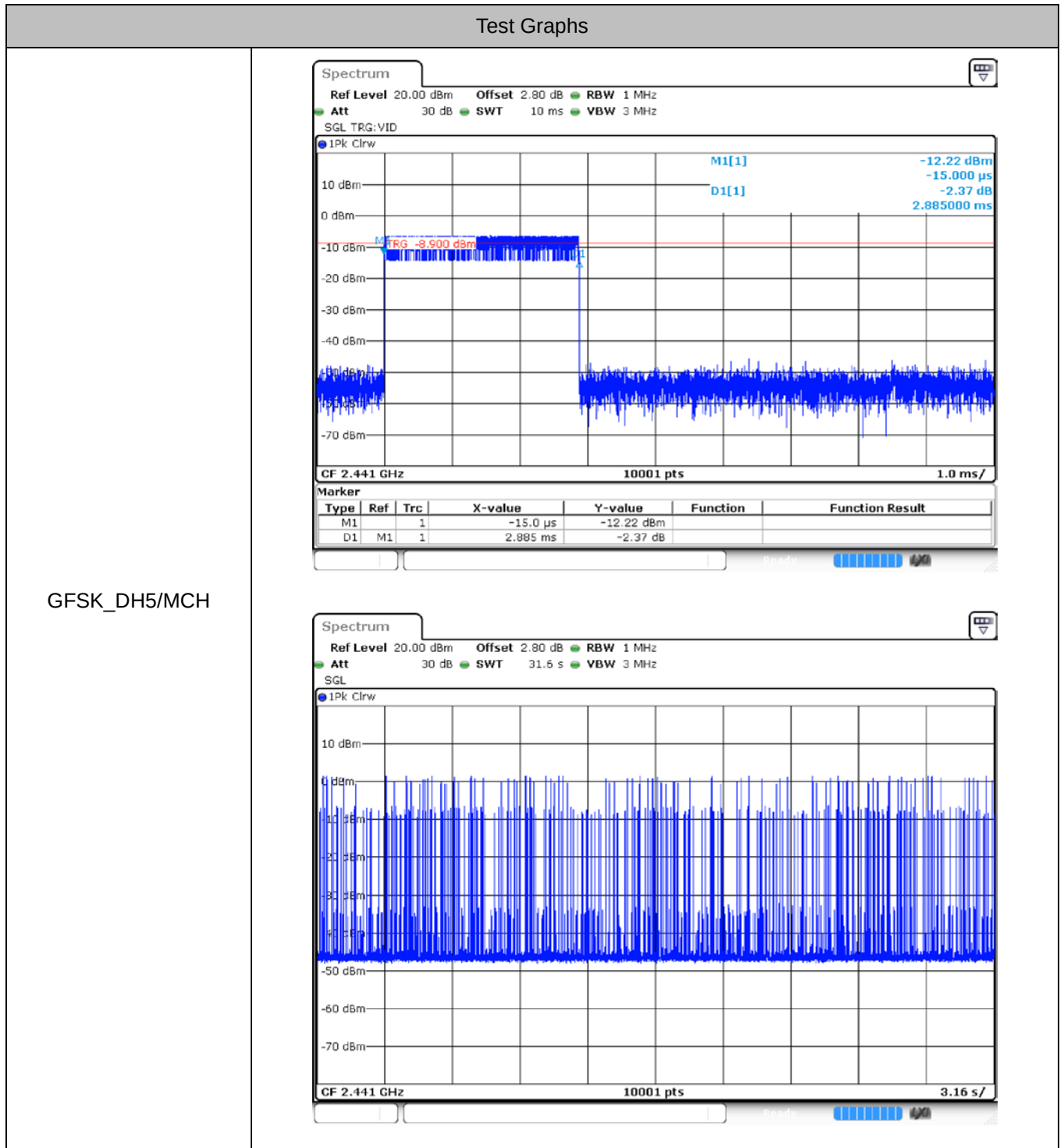


6 Dwell Time

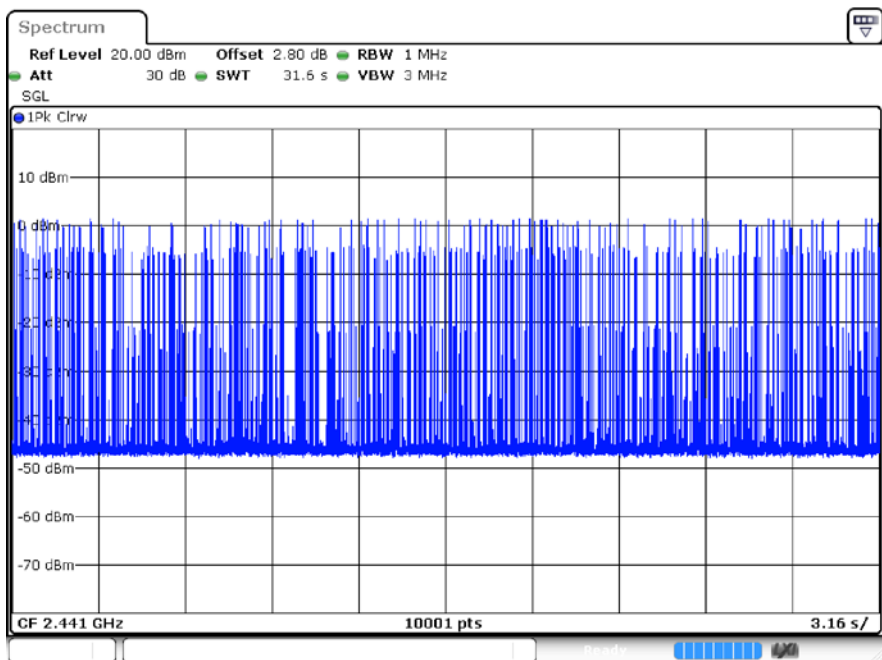
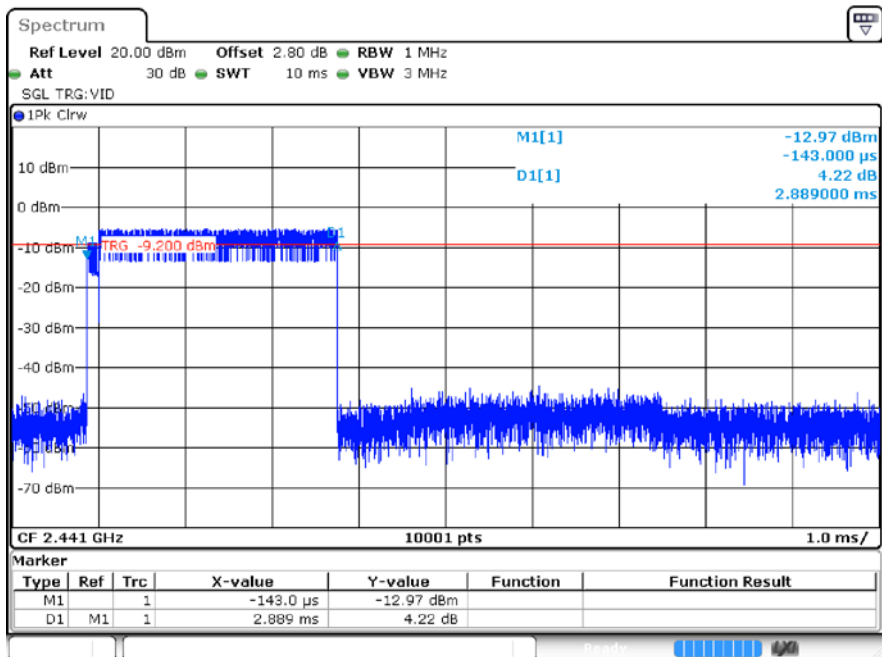
6.1 Test Result

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[ms]	Limit [s]	Verdict
GFSK	DH5	MCH	2.885	103	297.155	0.4	Pass
$\pi/4$ DQPSK	2DH5	MCH	2.889	119	343.791	0.4	Pass

6.2 Test Graphs



$\pi/4$ DQPSK
_2DH5/MCH

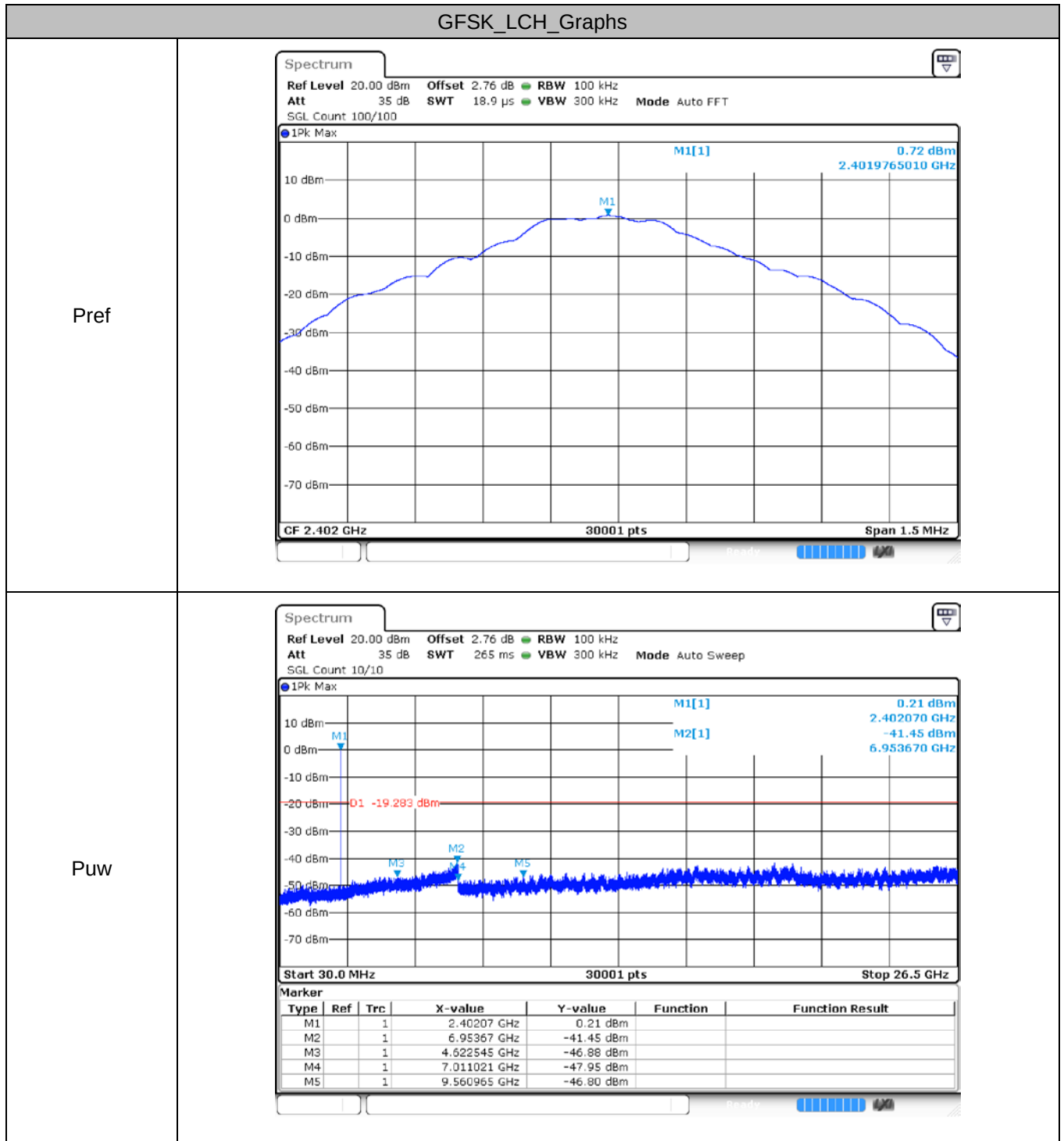


7 RF Conducted Spurious Emissions

7.1 Test Result

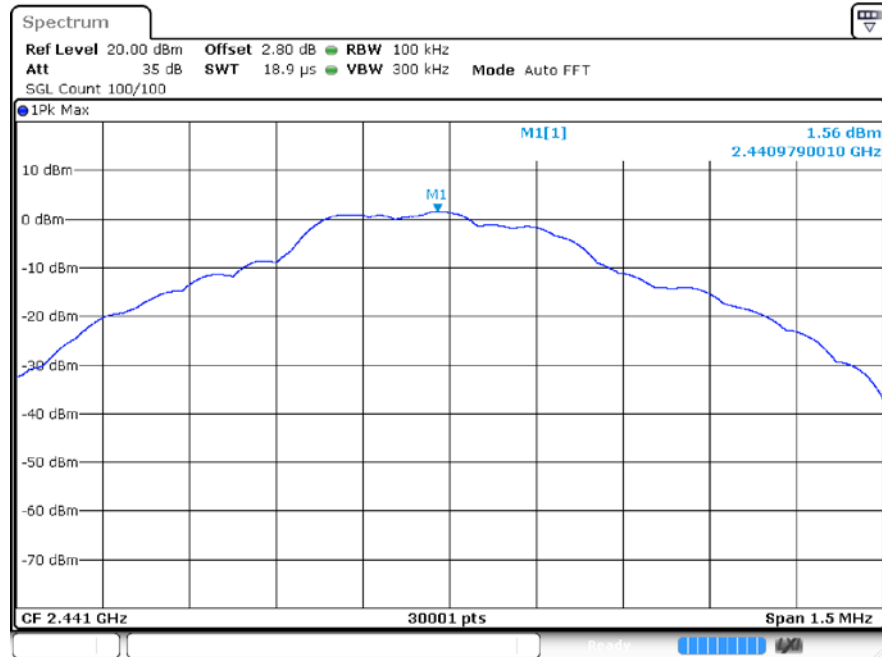
Mode	Channel	Max. Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	-42.17	-20	Pass
	MCH	-42.9	-20	Pass
	HCH	-42.63	-20	Pass
$\pi/4$ DQPSK	LCH	-38.16	-20	Pass
	MCH	-39.79	-20	Pass
	HCH	-39.88	-20	Pass

7.2 Test Graphs

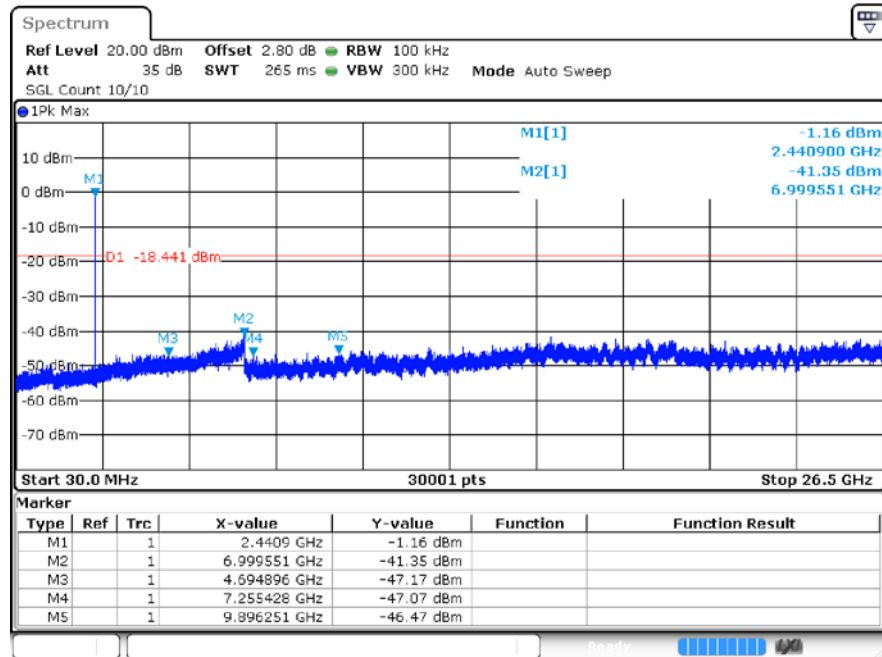


GFSK_MCH_Graphs

Pref

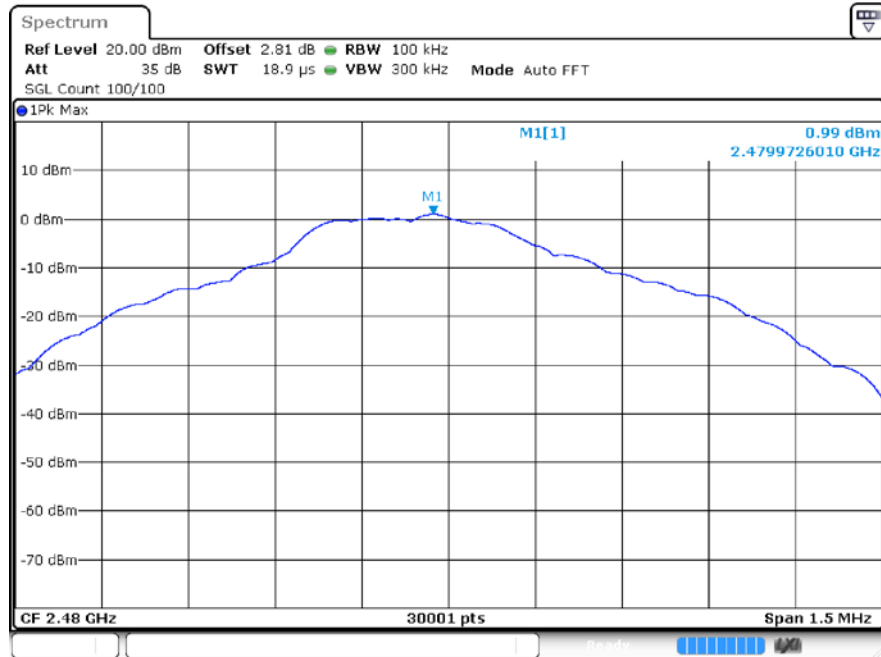


Puw

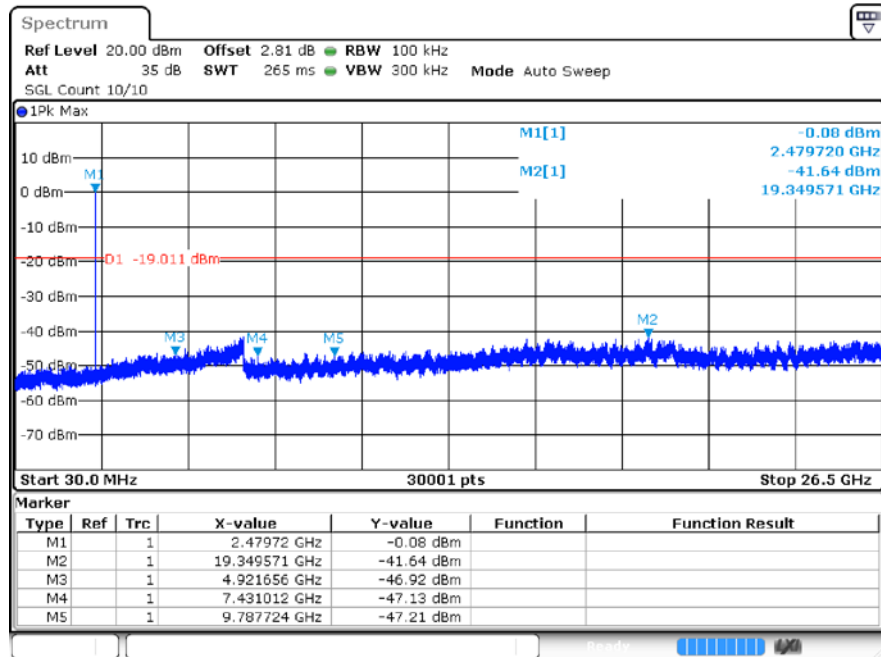


GFSK_HCH_Graphs

Pref

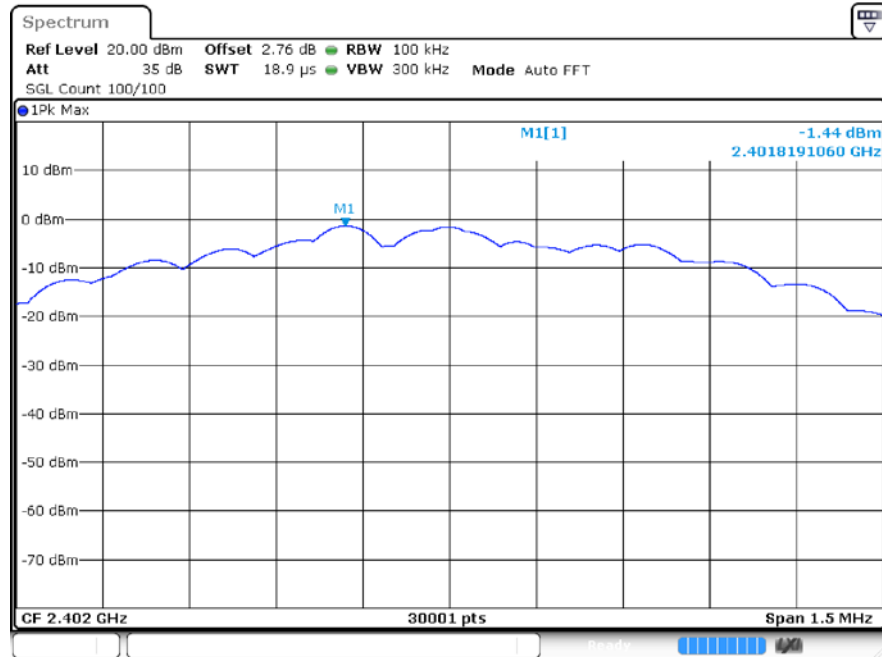


Puw

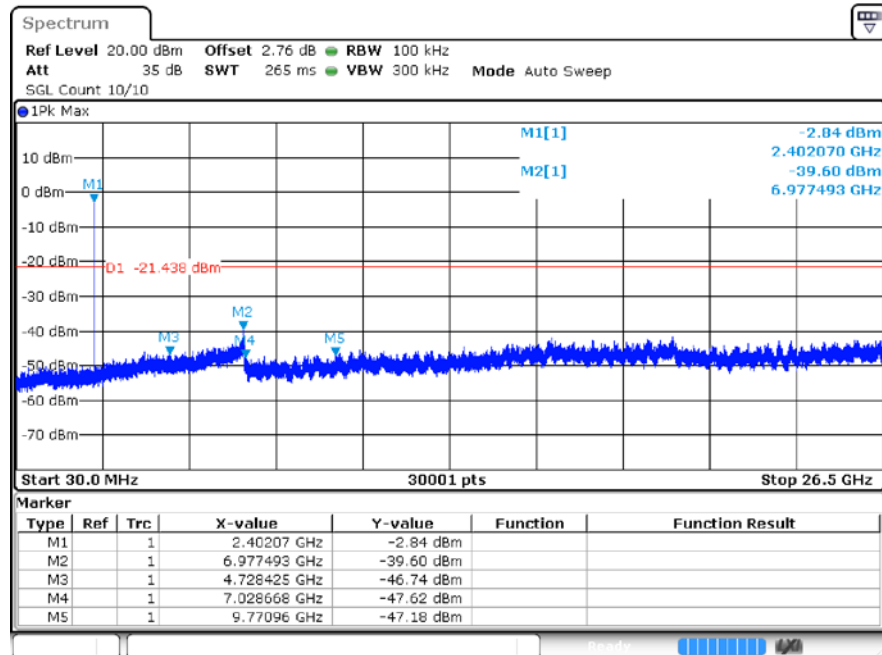


$\pi/4$ DQPSK_LCH_Graphs

Pref

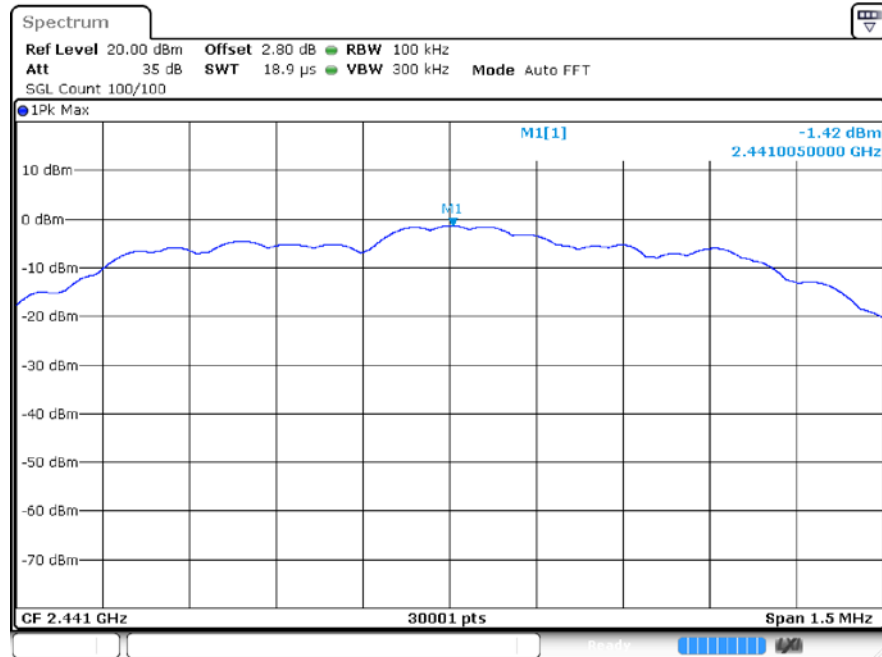


Puw

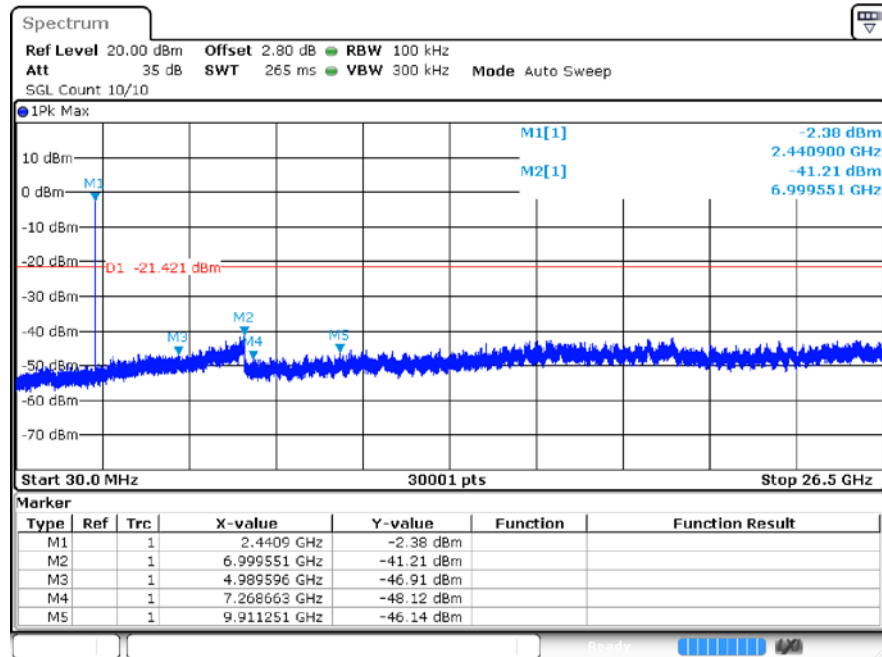


π /4DQPSK_MCH_Graphs

Pref

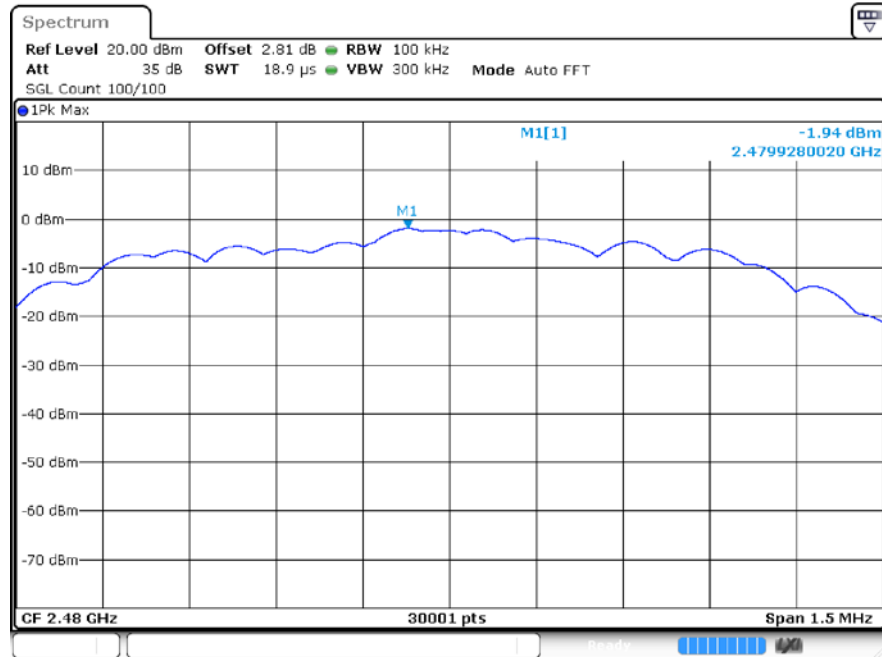


Puw

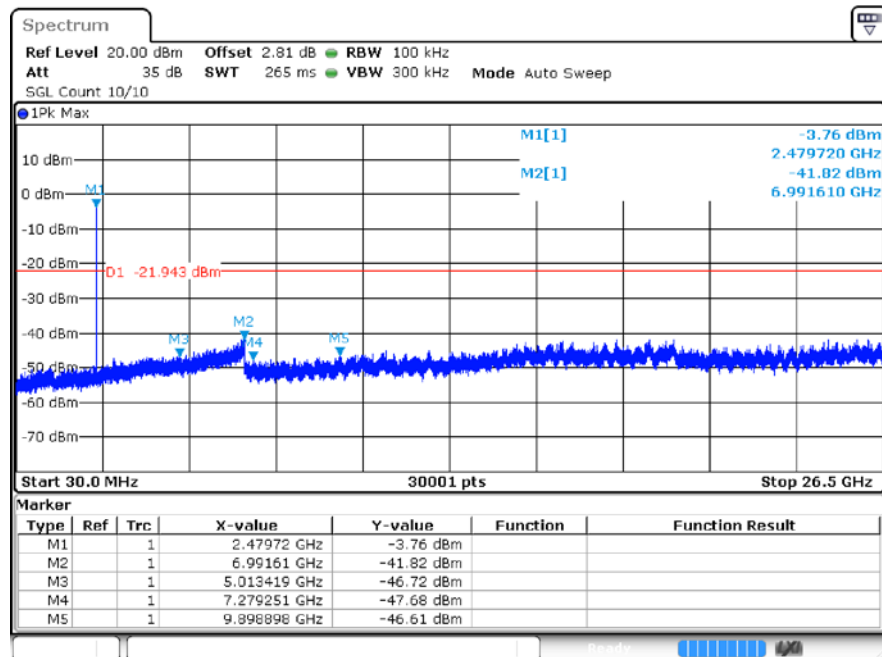


$\pi/4$ DQPSK_HCH_Graphs

Pref



Puw

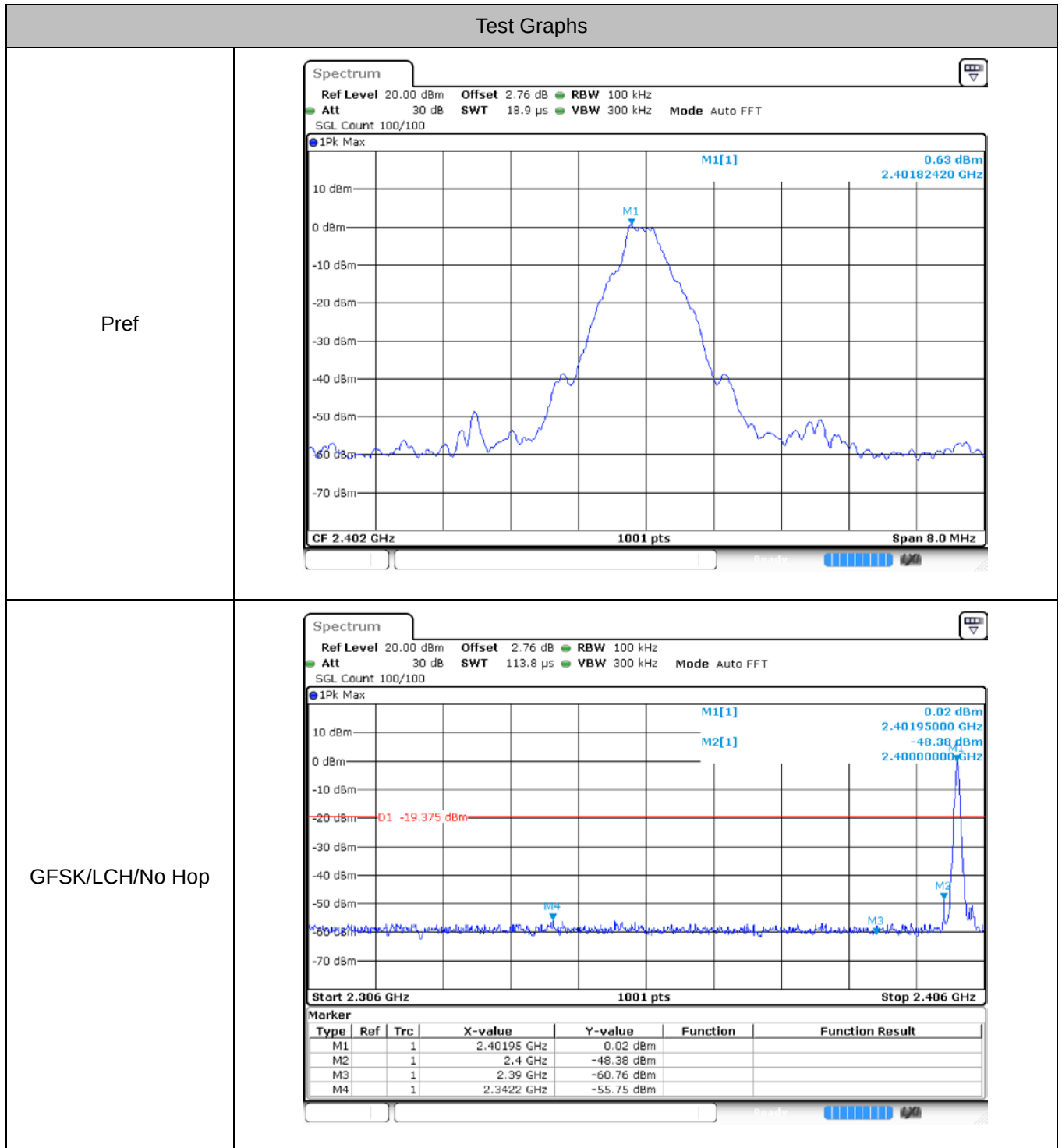


8 Band-edge for RF Conducted Emissions

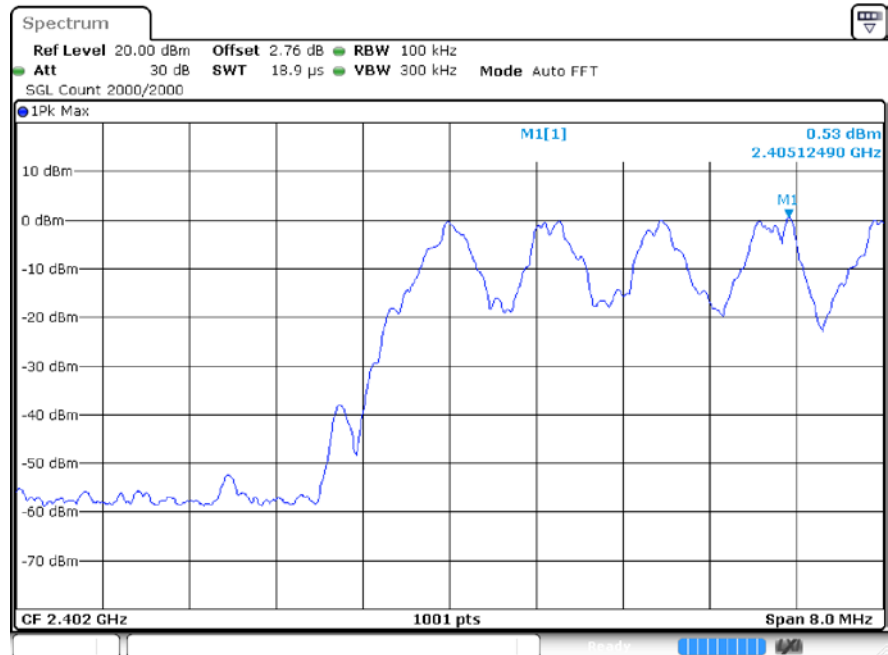
8.1 Test Result

Mode	Channel	Carrier Frequency [MHz]	Frequency Hopping	Max Spurious Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	2402	Off	-56.38	-20	Pass
			On	-54.94	-20	Pass
	HCH	2480	Off	-46.82	-20	Pass
			On	-57.49	-20	Pass
$\pi/4$ DQPSK	LCH	2402	Off	-53.77	-20	Pass
			On	-52.65	-20	Pass
	HCH	2480	Off	-46.26	-20	Pass
			On	-48.81	-20	Pass

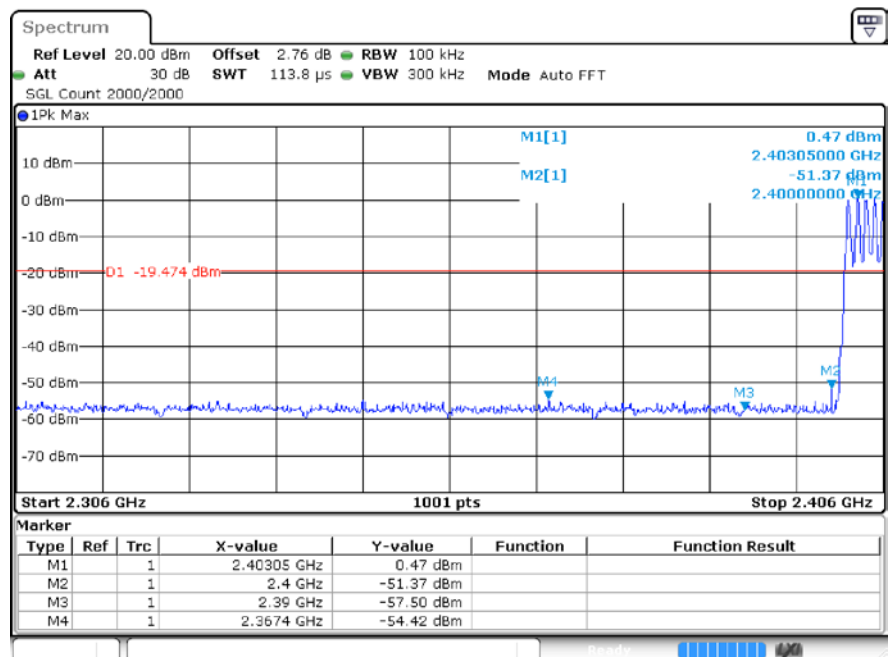
8.2 Test Graphs



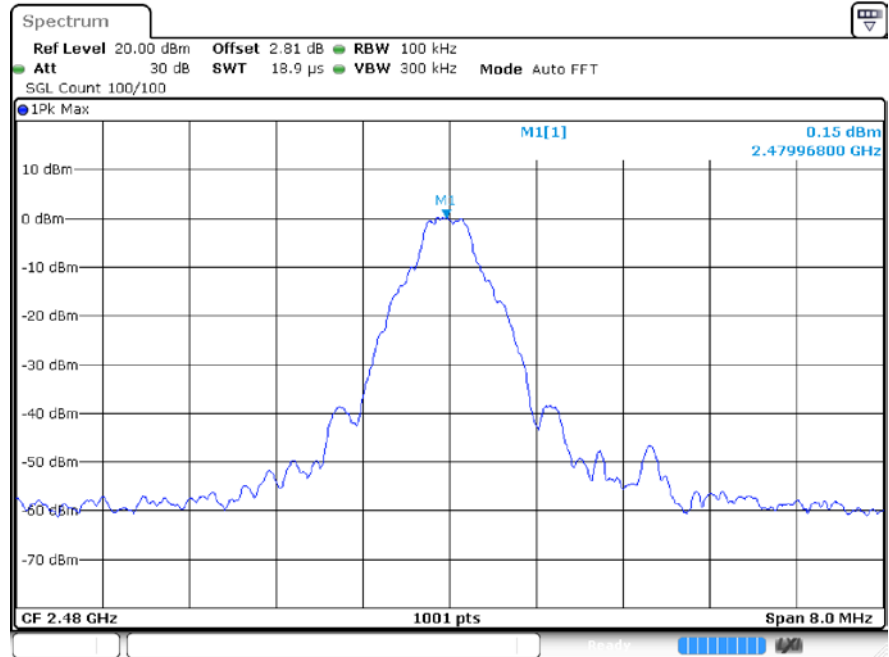
Ref



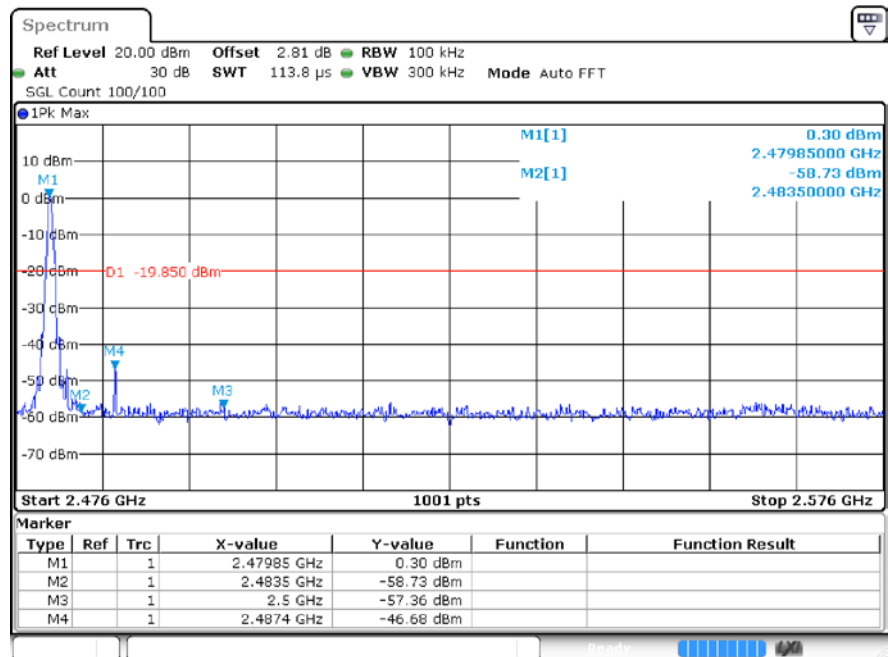
GFSK/LCH/Hop



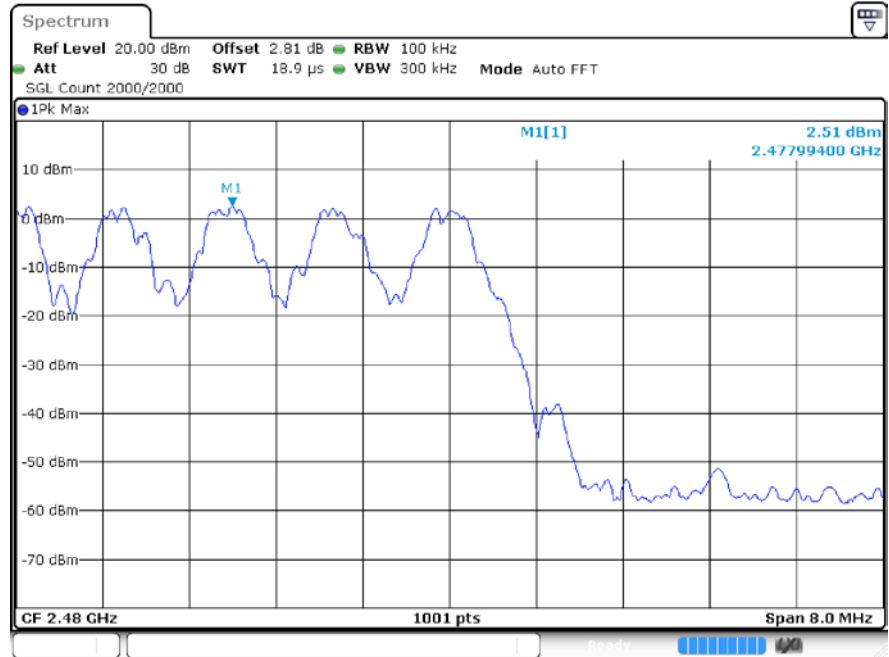
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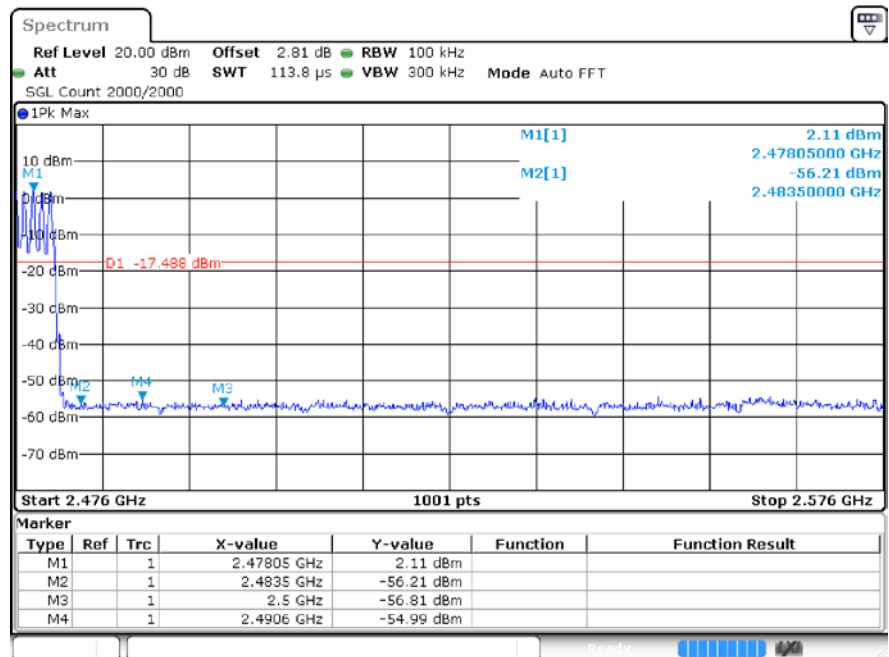
GFSK/HCH/No Hop



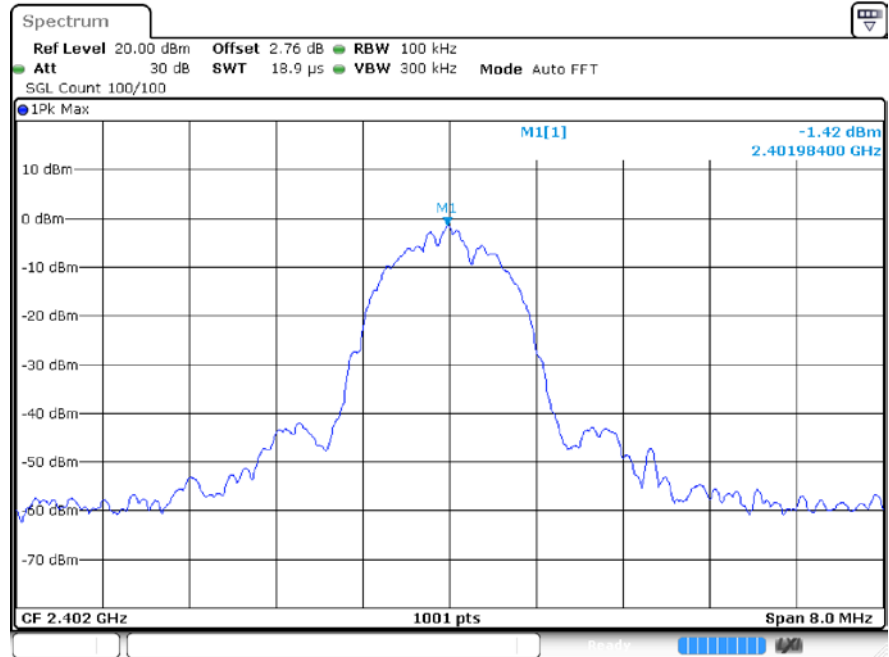
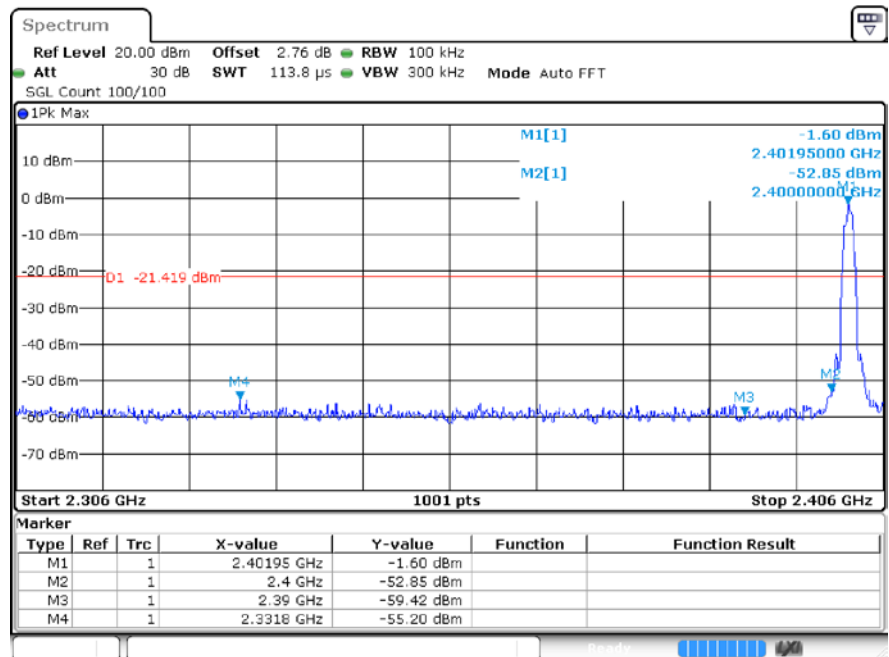
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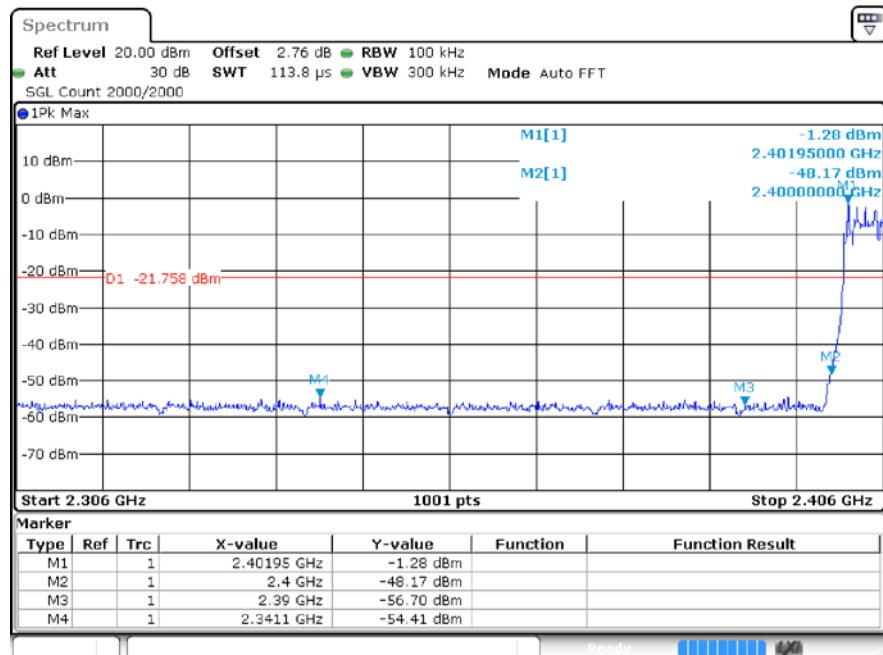
GFSK/HCH/Hop



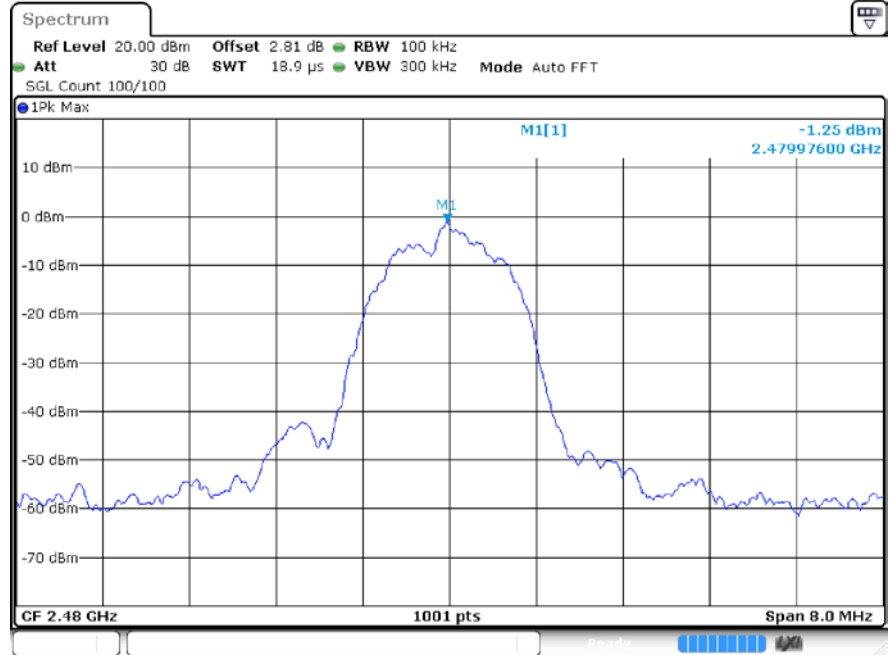
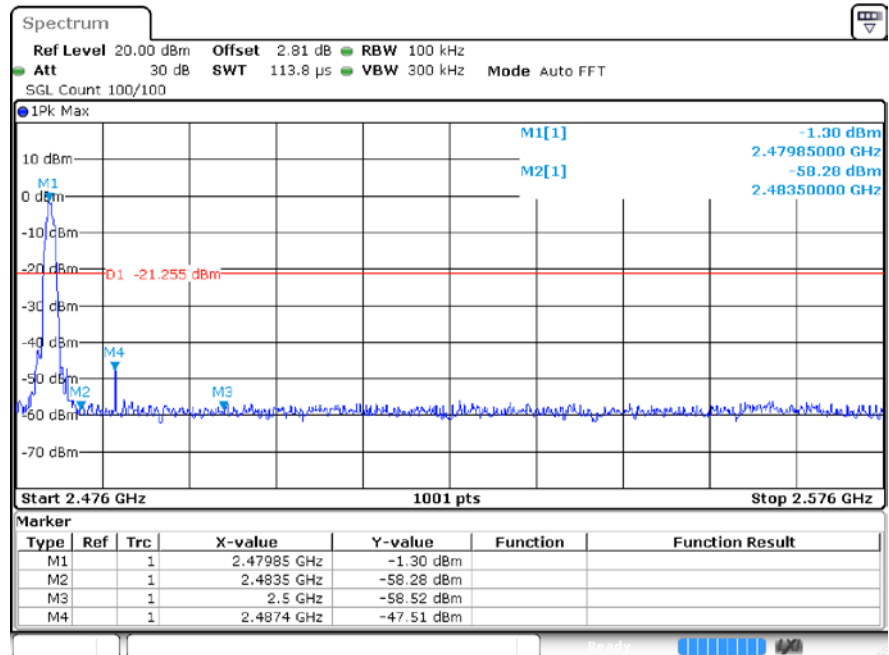
Ref


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


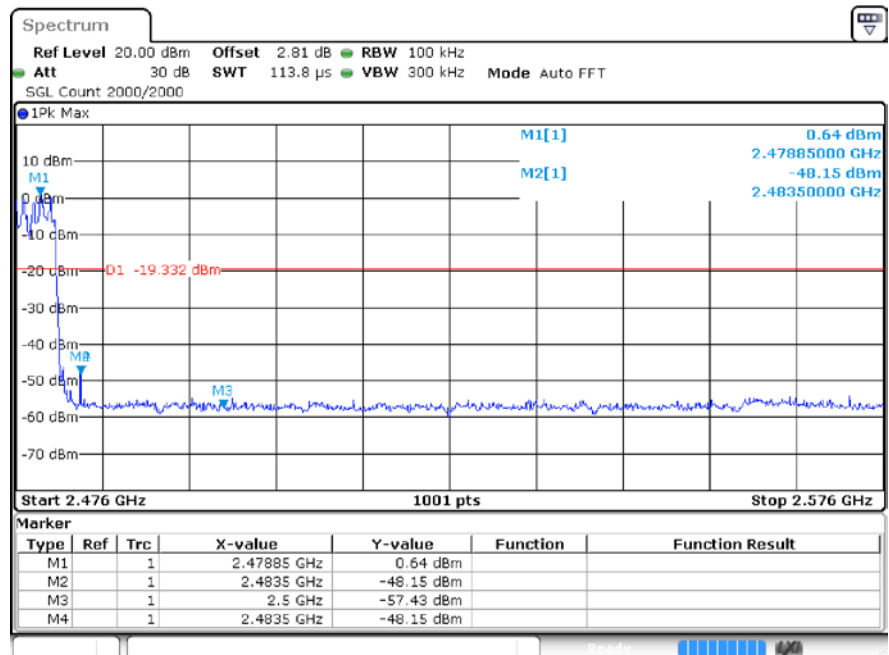
Ref


 $\pi/4$ DQPSK/LCH/Hop


Ref


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


Ref


 $\pi/4$ DQPSK/HCH/Hop


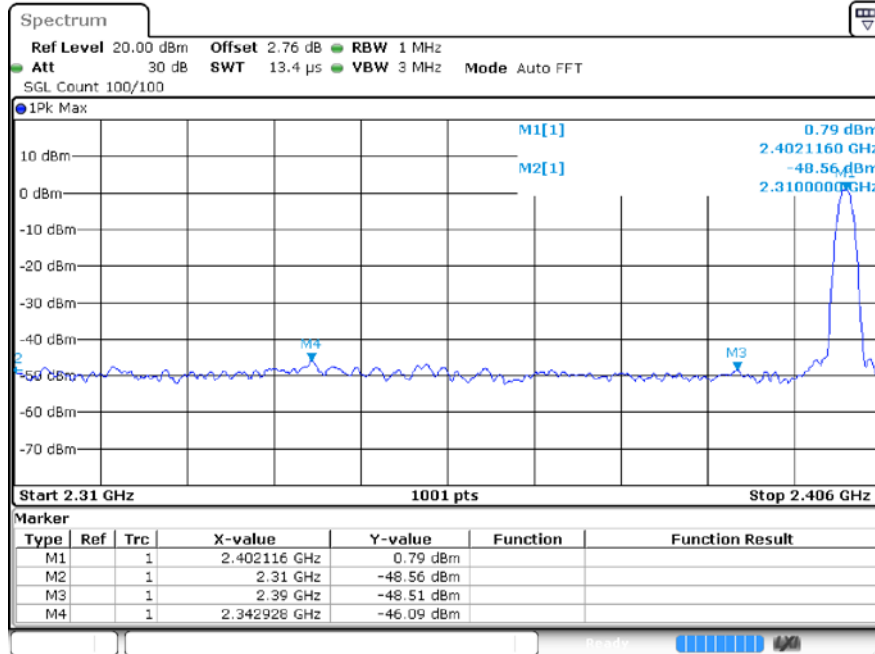
9 Restrict-band band-edge measurements

9.1 Test Result

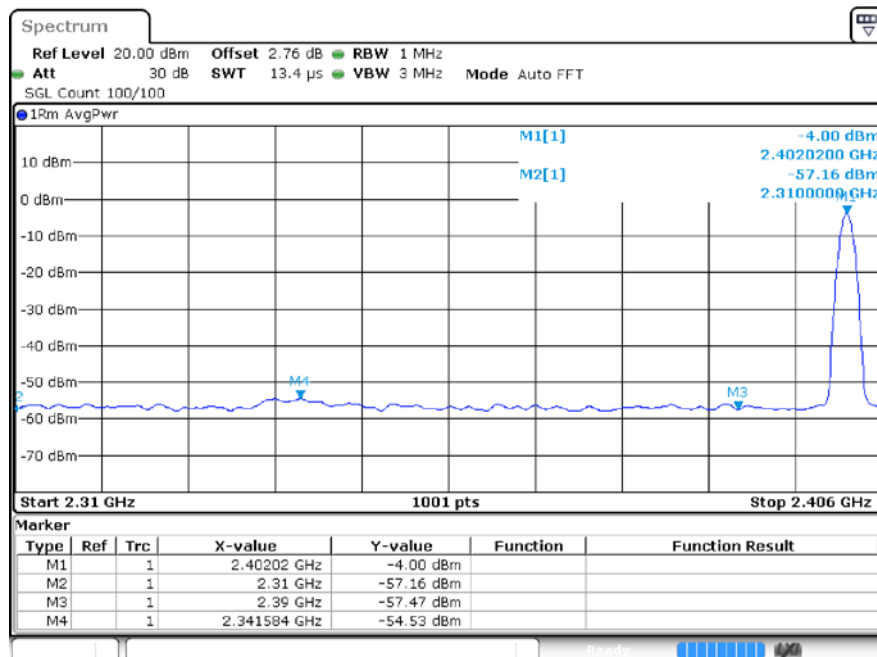
Test Mode	Hopping	Freq.	Power [dBm]	Gain	Duty Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-48.56	2	-	48.7	PEAK	74	Pass
	Off	2310.0	-57.16	2	4.96	45.06	AV	54	Pass
	Off	2342.928	-46.08	2	-	51.18	PEAK	74	Pass
	Off	2341.584	-54.53	2	4.96	47.69	AV	54	Pass
	Off	2390.0	-48.51	2	-	48.75	PEAK	74	Pass
	Off	2390.0	-57.47	2	4.96	44.75	AV	54	Pass
	Off	2483.5	-46.14	2	-	51.12	PEAK	74	Pass
	Off	2483.5	-56.55	2	5.06	45.77	AV	54	Pass
	Off	2483.512	-46.13	2	-	51.13	PEAK	74	Pass
	Off	2490.424	-55.8	2	5.06	46.52	AV	54	Pass
	Off	2500.0	-49.21	2	-	48.05	PEAK	74	Pass
	Off	2500.0	-56.59	2	5.06	45.73	AV	54	Pass
$\pi/4$ DQPSK	Off	2310.0	-48.35	2	-	48.91	PEAK	74	Pass
	Off	2310.0	-56.28	2	4.95	45.93	AV	54	Pass
	Off	2371.152	-46.77	2	-	50.49	PEAK	74	Pass
	Off	2342.064	-54.18	2	4.95	48.03	AV	54	Pass
	Off	2390.0	-49.46	2	-	47.8	PEAK	74	Pass
	Off	2390.0	-56.86	2	4.95	45.35	AV	54	Pass
	Off	2483.5	-48.43	2	-	48.83	PEAK	74	Pass
	Off	2483.5	-56.39	2	4.95	45.82	AV	54	Pass
	Off	2487.376	-42.89	2	-	54.37	PEAK	74	Pass
	Off	2487.784	-55.87	2	4.95	46.34	AV	54	Pass
	Off	2500.0	-49.91	2	-	47.35	PEAK	74	Pass
	Off	2500.0	-56.64	2	4.95	45.57	AV	54	Pass

9.2 Test Graphs

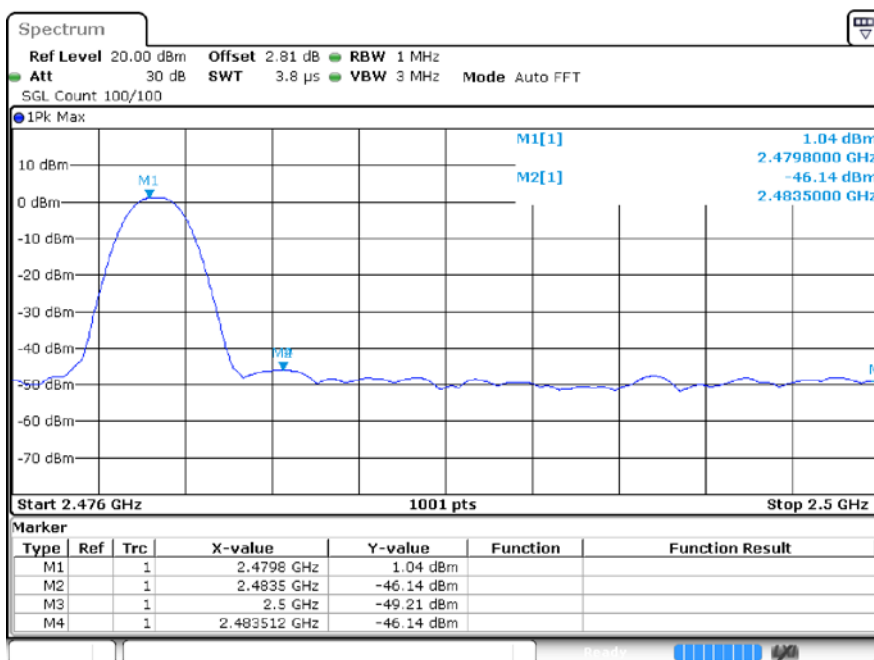
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (Low Channel)



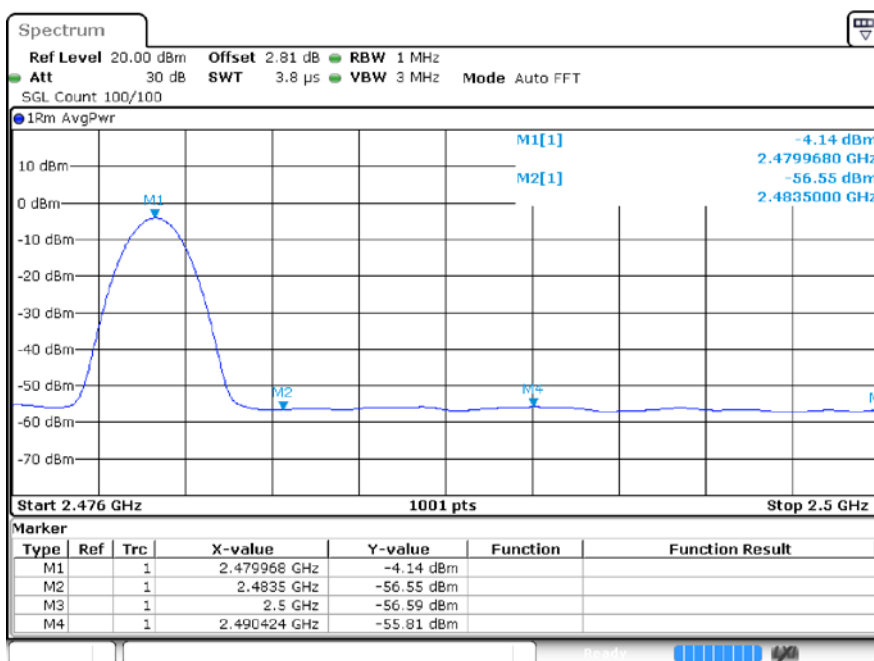
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (Low Channel)



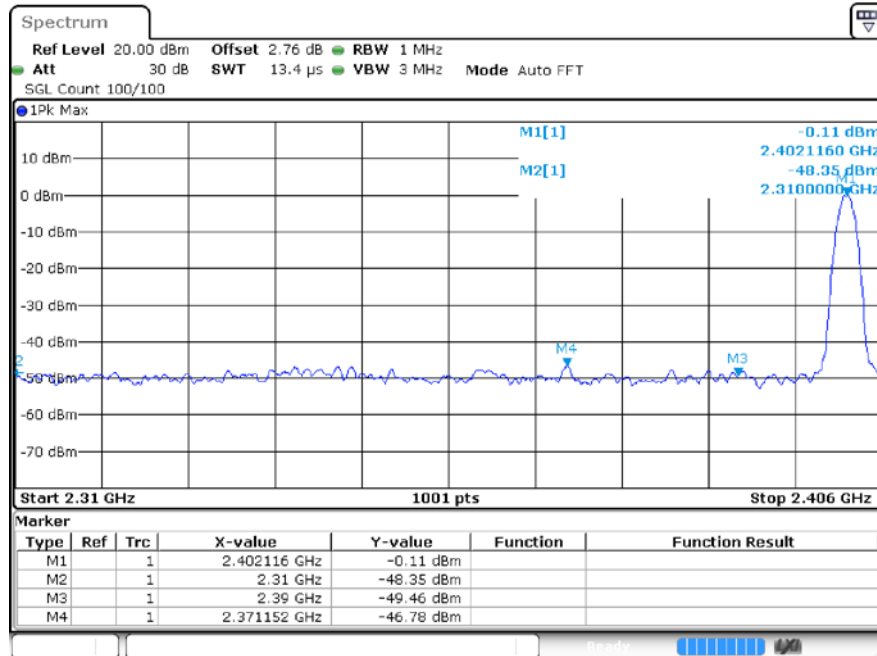
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (High Channel)



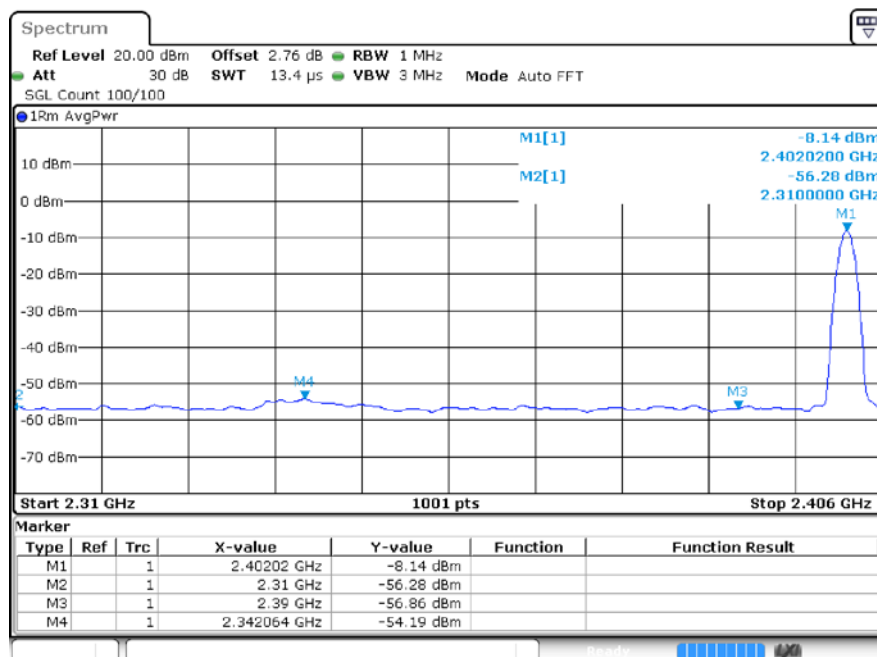
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (High Channel)



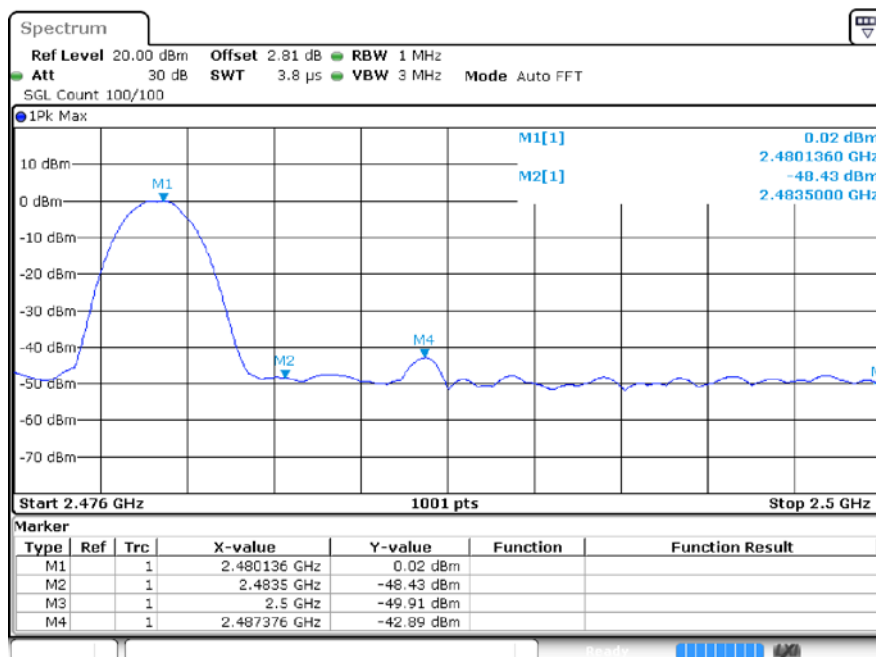
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (Low Channel)



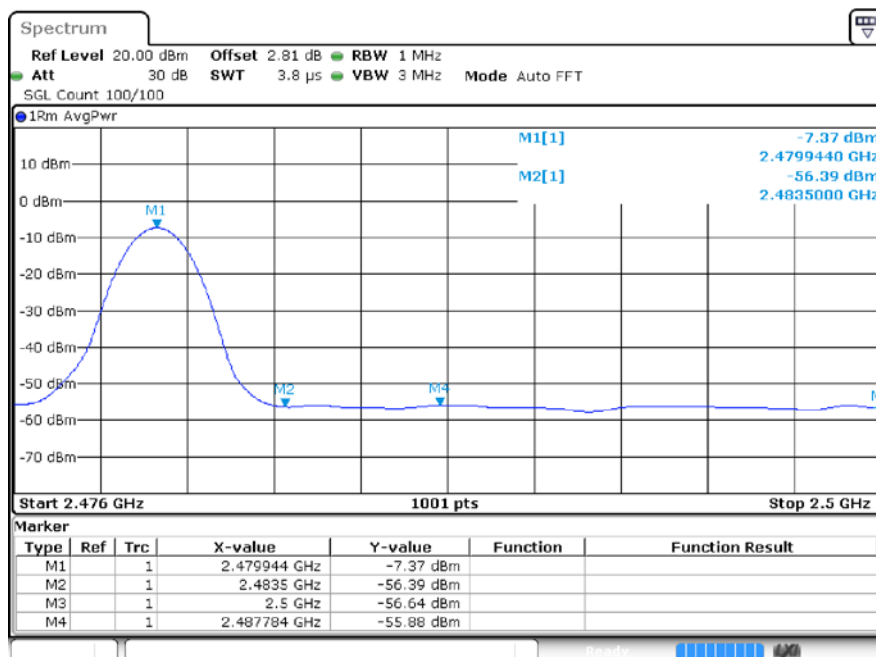
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (Low Channel)



Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (High Channel)



Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (High Channel)



---The End---