



Appendix A

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

Product Name: Wireless Earphones

Trade Mark: N/A

Test Model: KZ806

Environmental Conditions

Temperature:	24.6℃
Relative Humidity:	52.3%
ATM Pressure:	101Kpa
Test Engineer:	Emiya lin
Supervised by:	Simba Haung



Contents

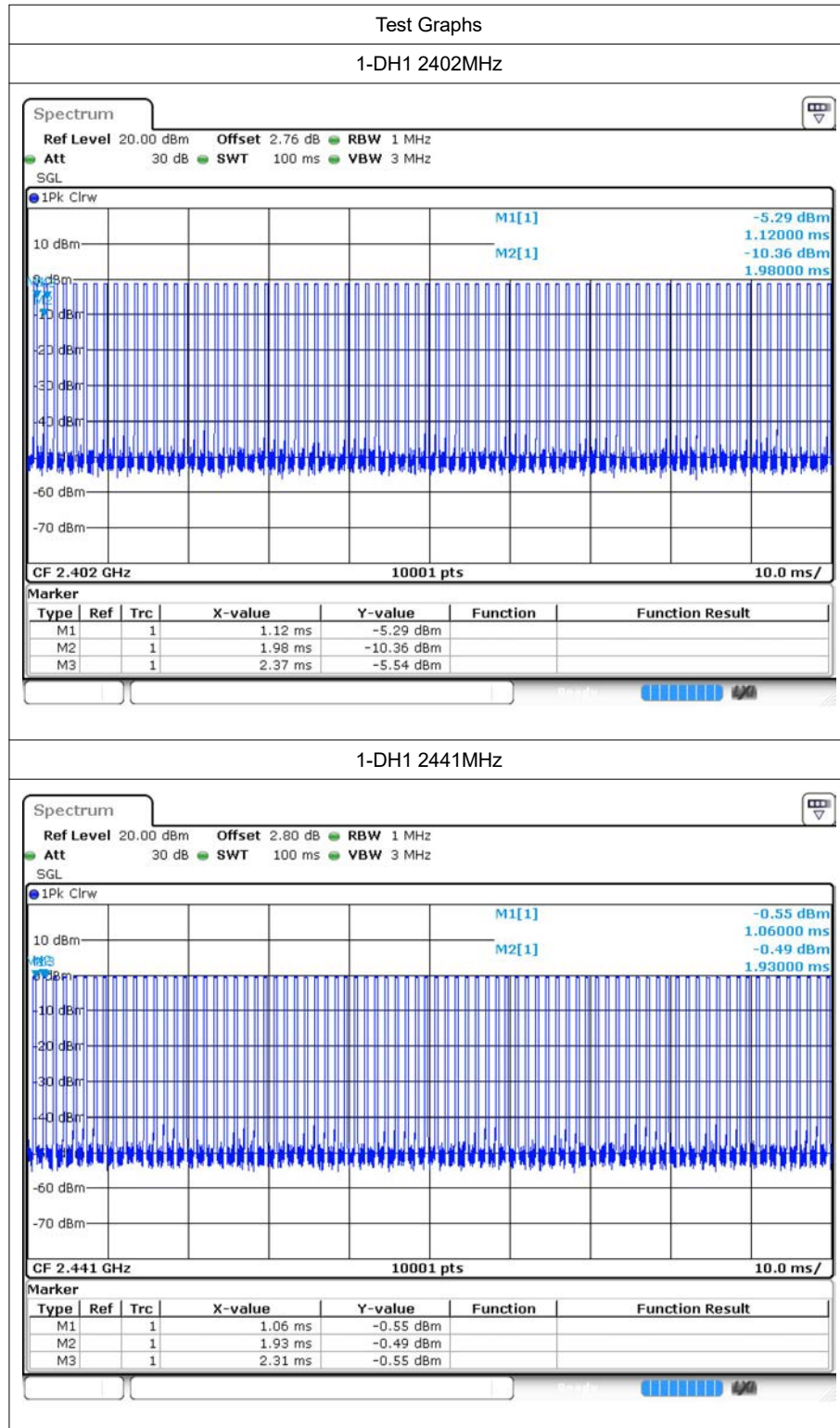
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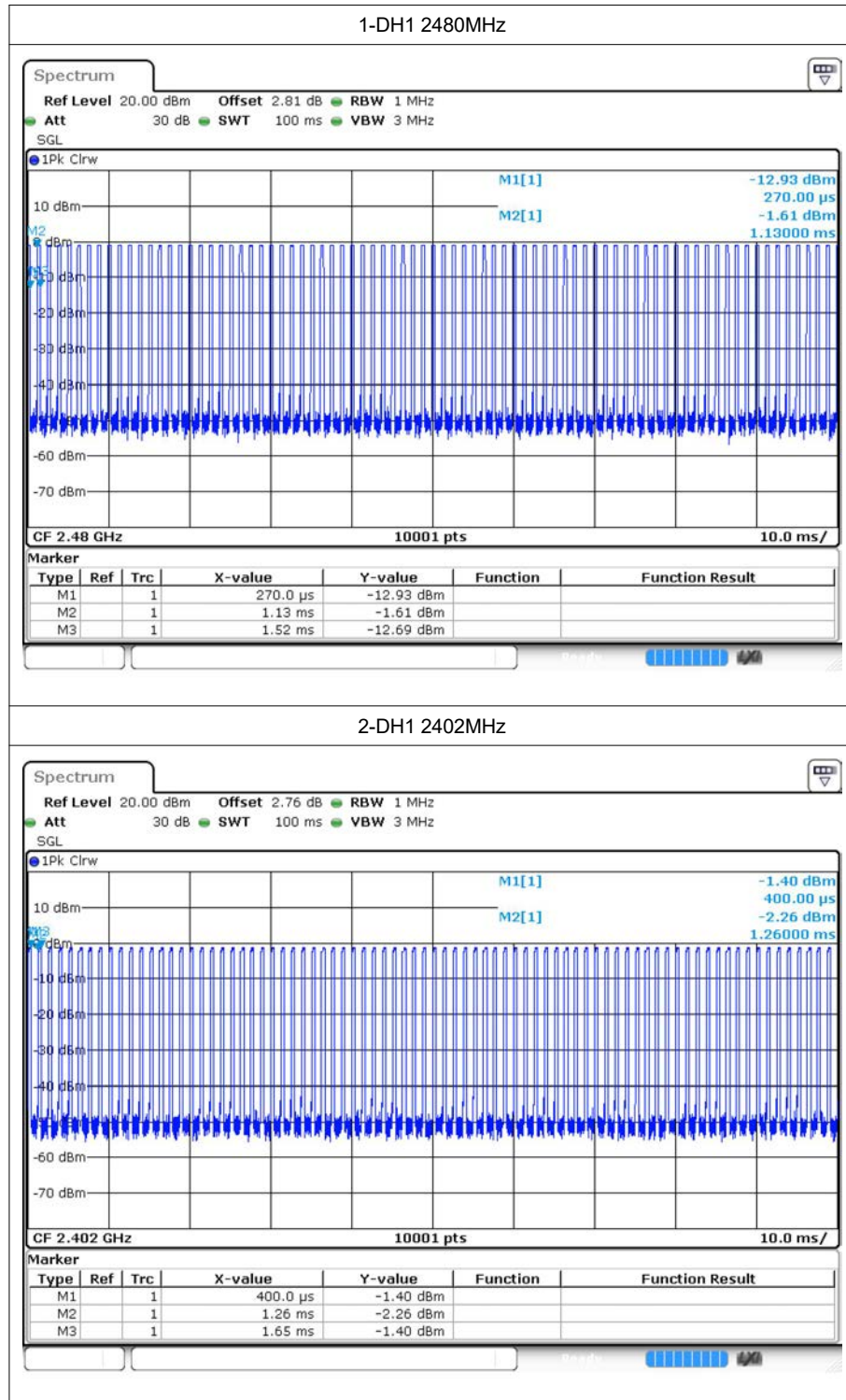
1 Duty Cycle

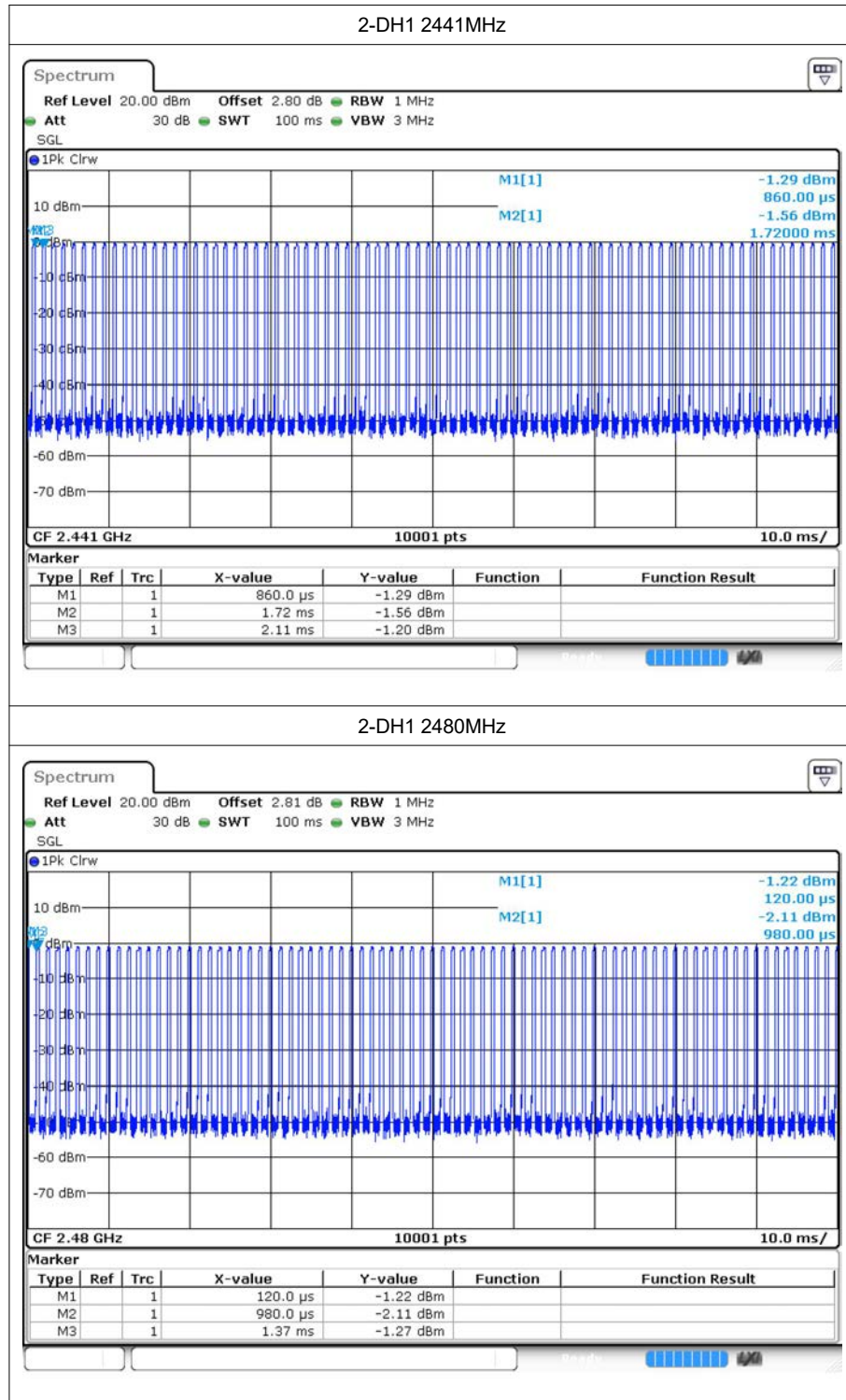
1.1 Test Result

Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor	1/T (kHz)
1-DH1	2402	31.48	5.02	2.56
1-DH1	2441	31.2	5.06	2.63
1-DH1	2480	31.96	4.95	2.56
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





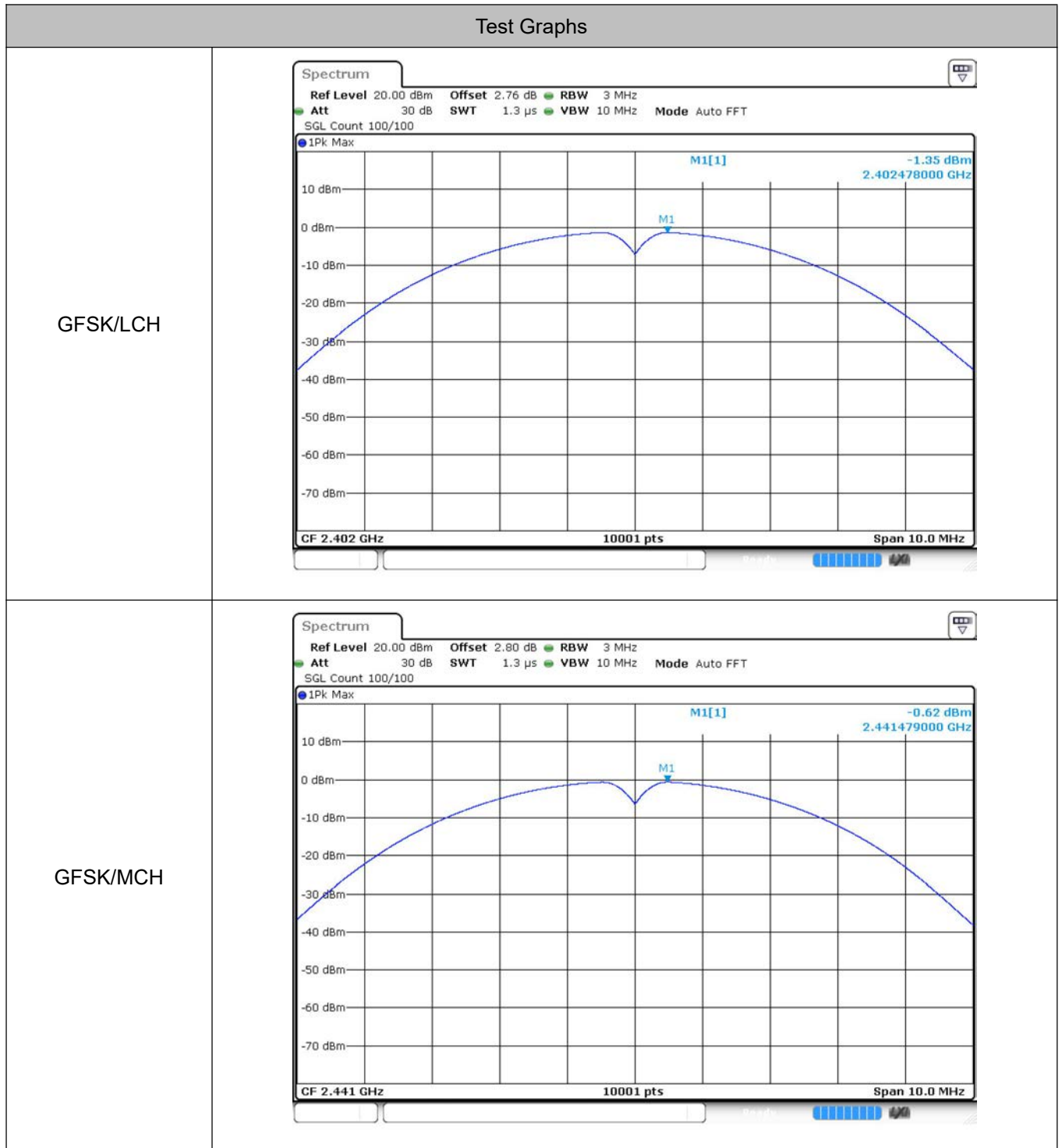


2 Maximum Conducted Peak Output Power

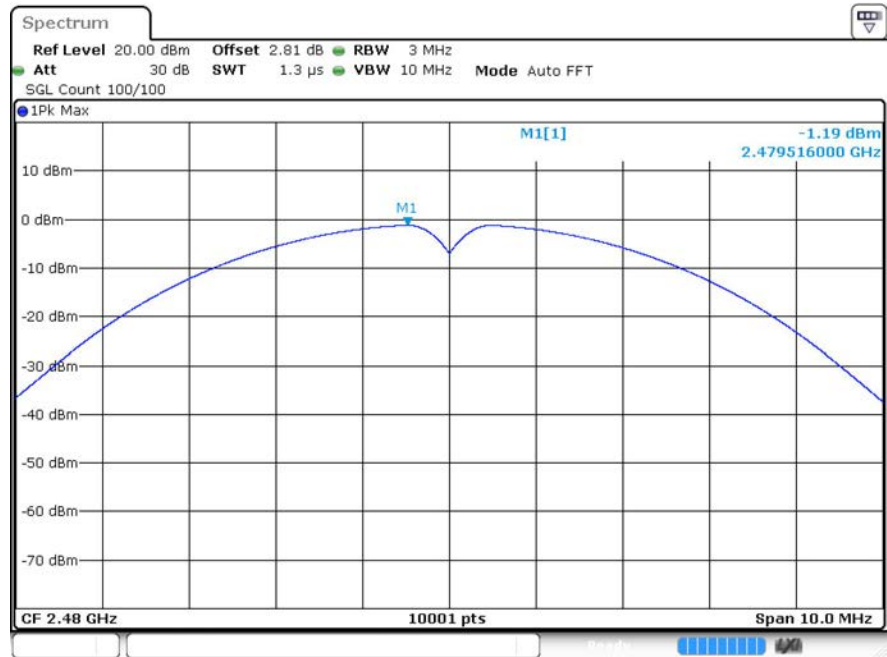
2.1 Test Result

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-1.35	21	Pass
	MCH	-0.62	21	Pass
	HCH	-1.19	21	Pass
$\pi/4$ DQPSK	LCH	-0.69	21	Pass
	MCH	0.5	21	Pass
	HCH	-0.47	21	Pass

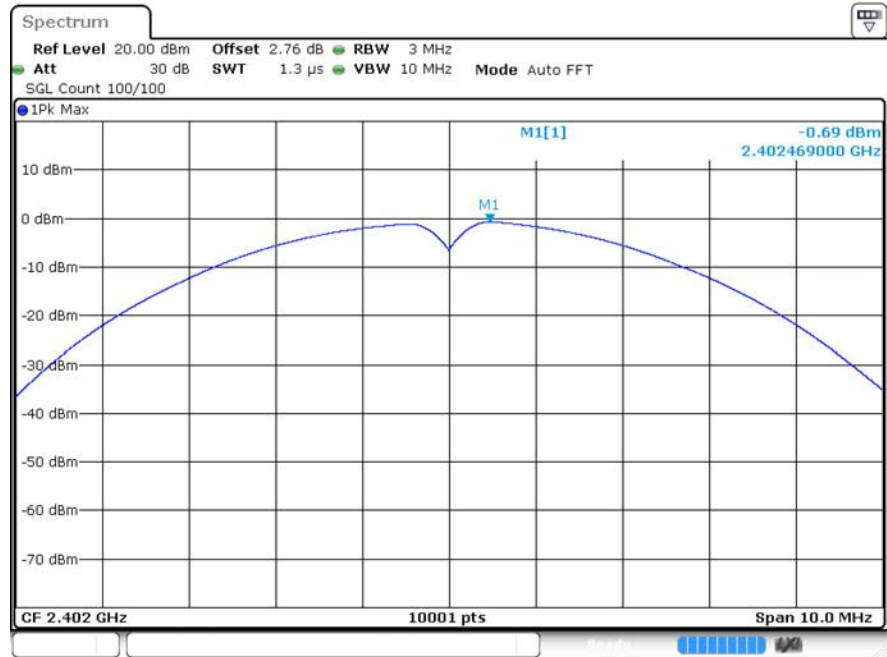
2.2 Test Graphs



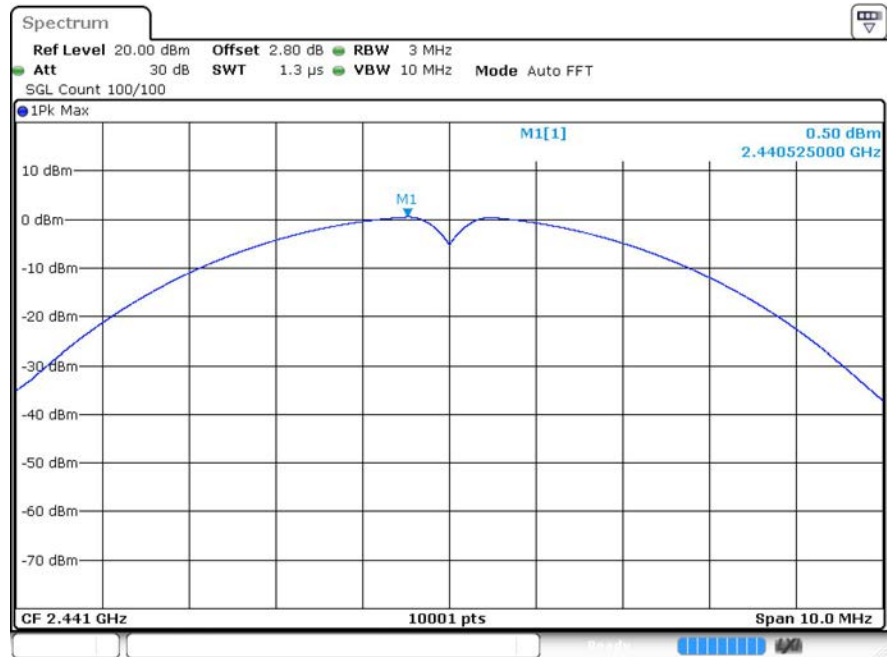
GFSK/HCH



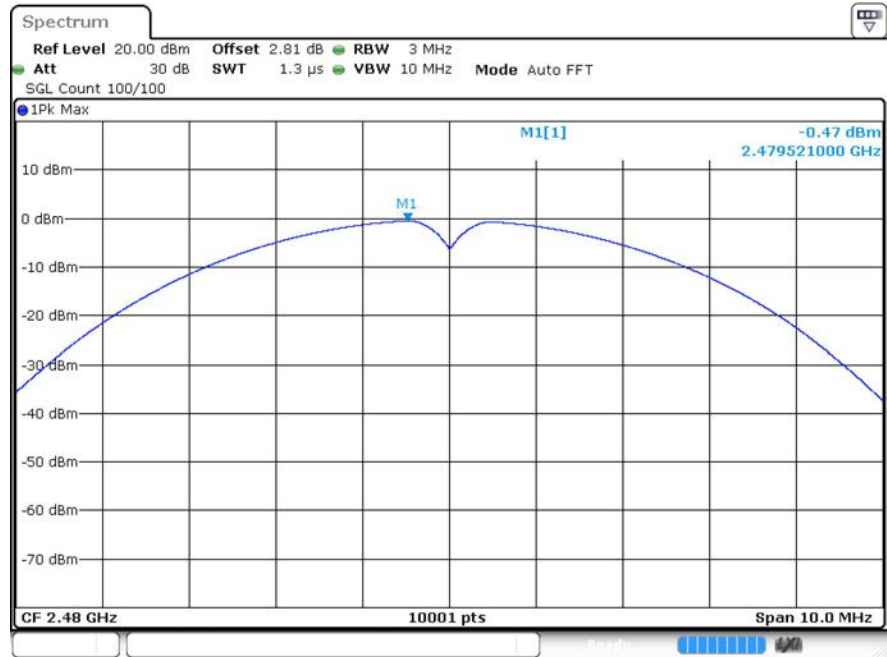
$\pi/4$ DQPSK/LCH



$\pi/4$ DQPSK/MCH



$\pi/4$ DQPSK/HCH

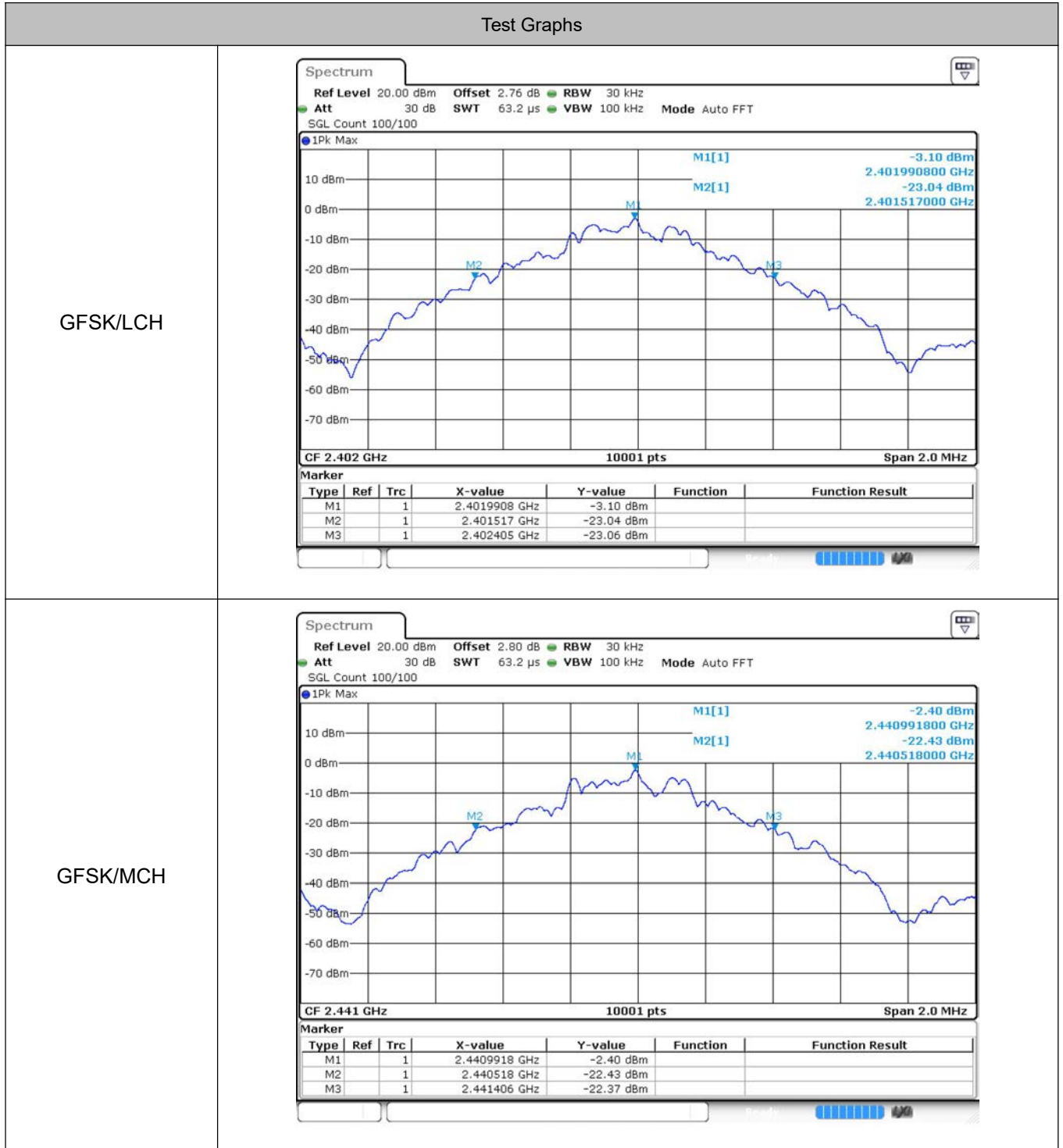


3 20dB Bandwidth

3.1 Test Result

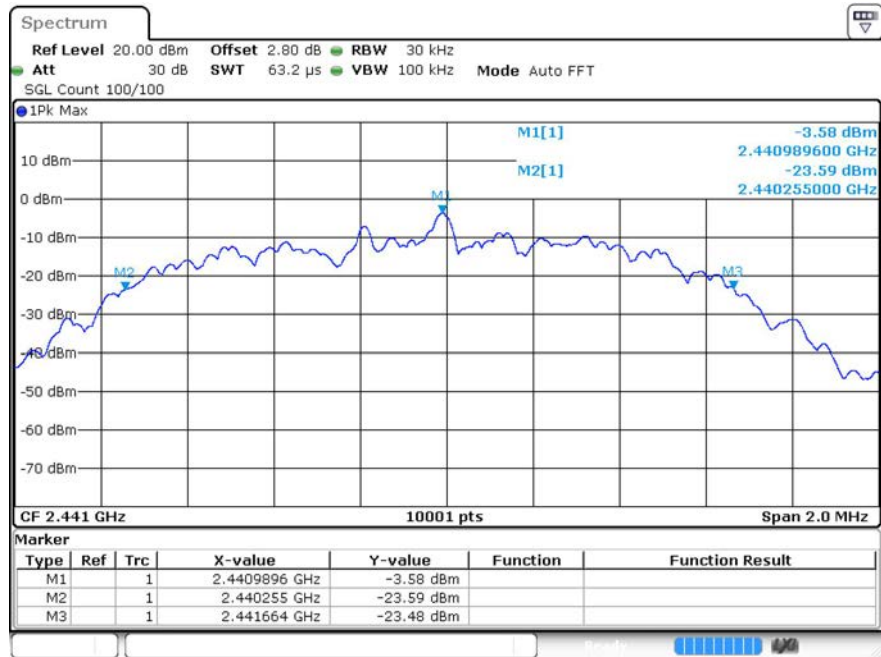
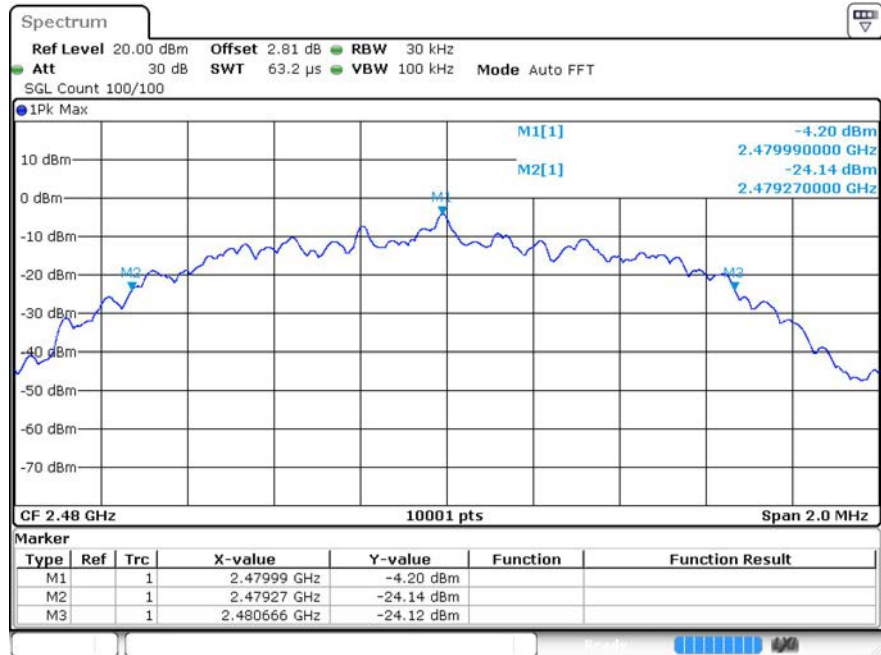
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.889	Not Specified	Pass
	MCH	0.888	Not Specified	Pass
	HCH	0.892	Not Specified	Pass
$\pi/4$ DQPSK	LCH	1.421	Not Specified	Pass
	MCH	1.409	Not Specified	Pass
	HCH	1.397	Not Specified	Pass

3.2 Test Graphs



GFSK/HCH


 $\pi/4$ DQPSK/LCH

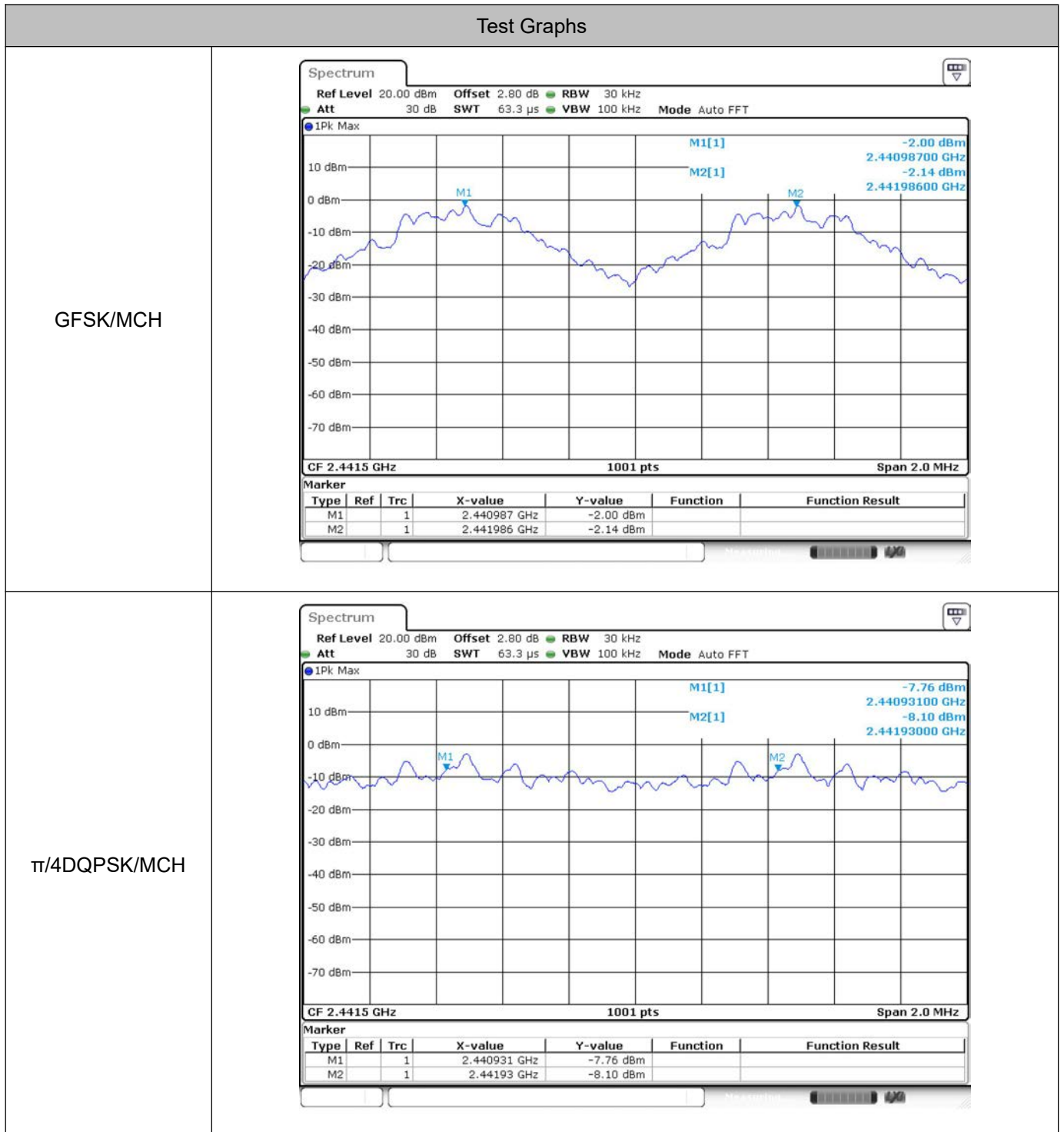

$\pi/4$ DQPSK/MCH

 $\pi/4$ DQPSK/HCH


4 Carrier Frequency Separation

4.1 Test Result

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	MCH	0.999	0.592	Pass
$\pi/4$ DQPSK	MCH	0.999	0.939	Pass

4.2 Test Graphs

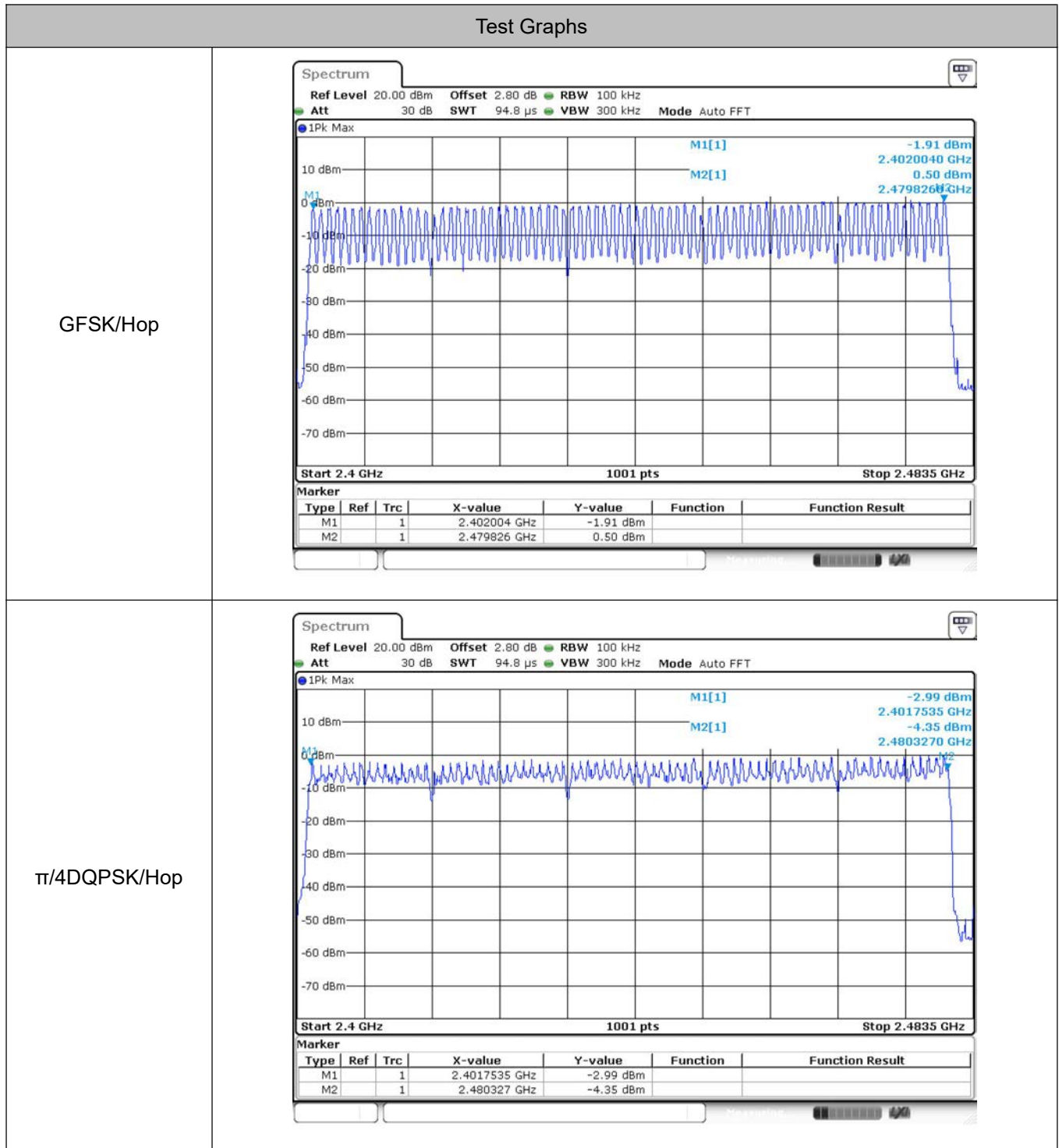


5 Hopping Channel Number

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

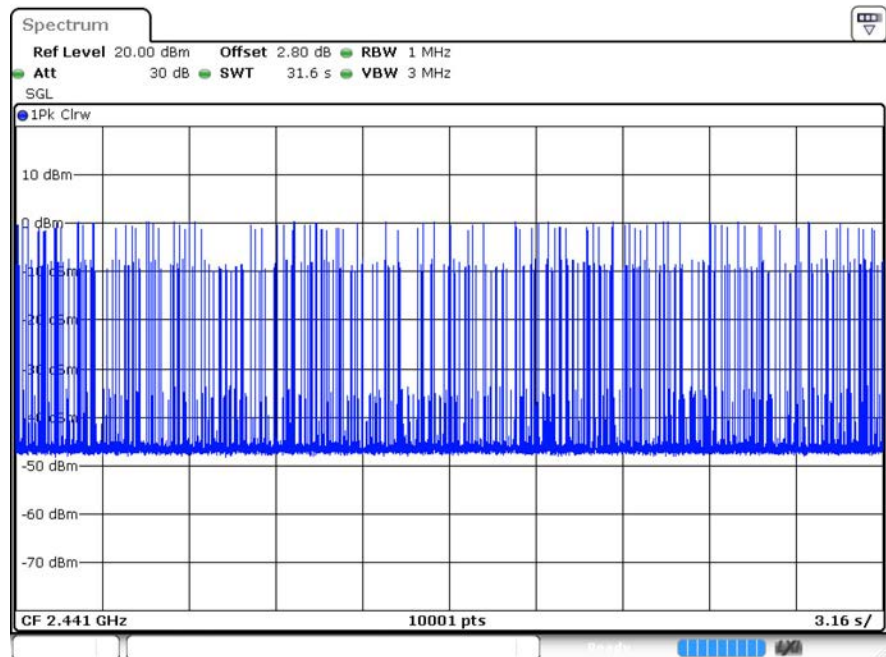
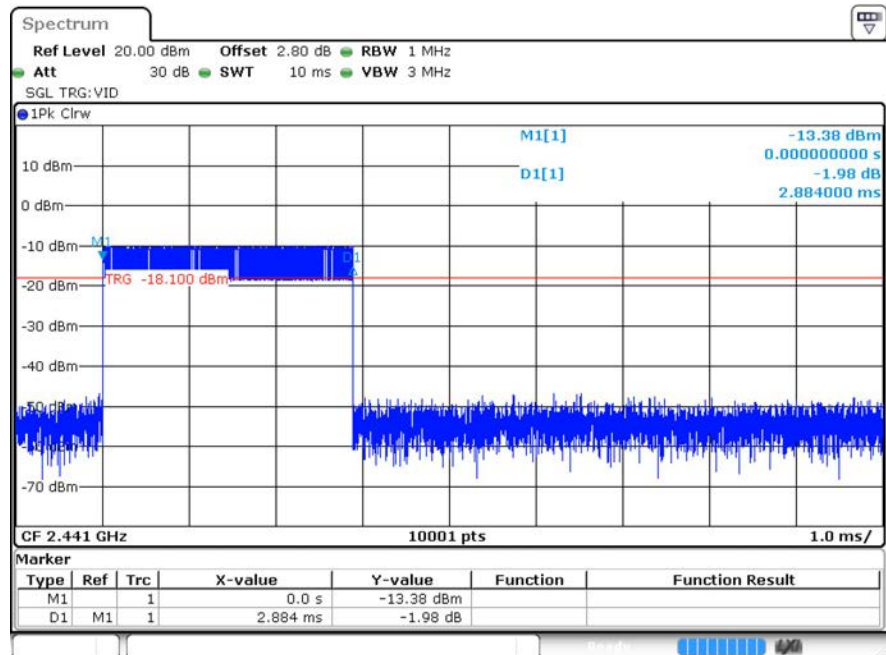
6.1 Test Result

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[ms]	Limit [s]	Verdict
GFSK	DH5	MCH	2.884	106	305.704	0.4	Pass
$\pi/4$ DQPSK	2DH5	MCH	2.89	116	335.24	0.4	Pass

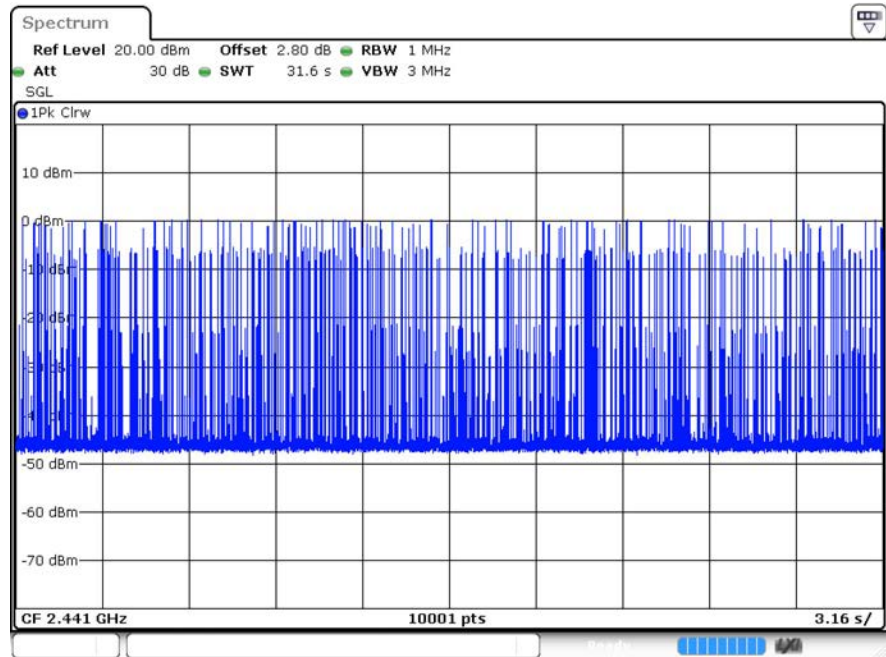
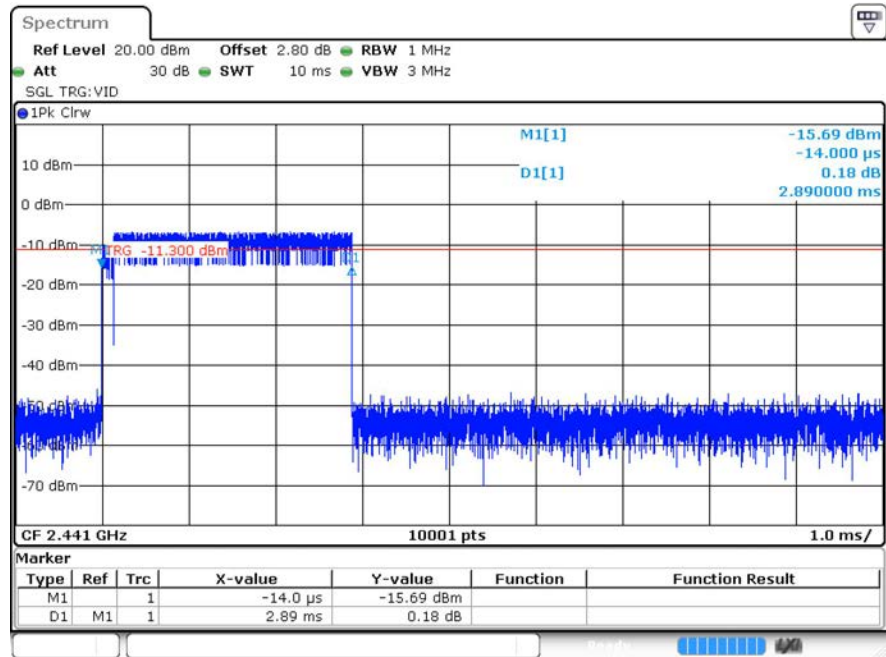
6.2 Test Graphs

Test Graphs

GFSK_DH5/MCH



$\pi/4$ DQPSK
_2DH5/MCH

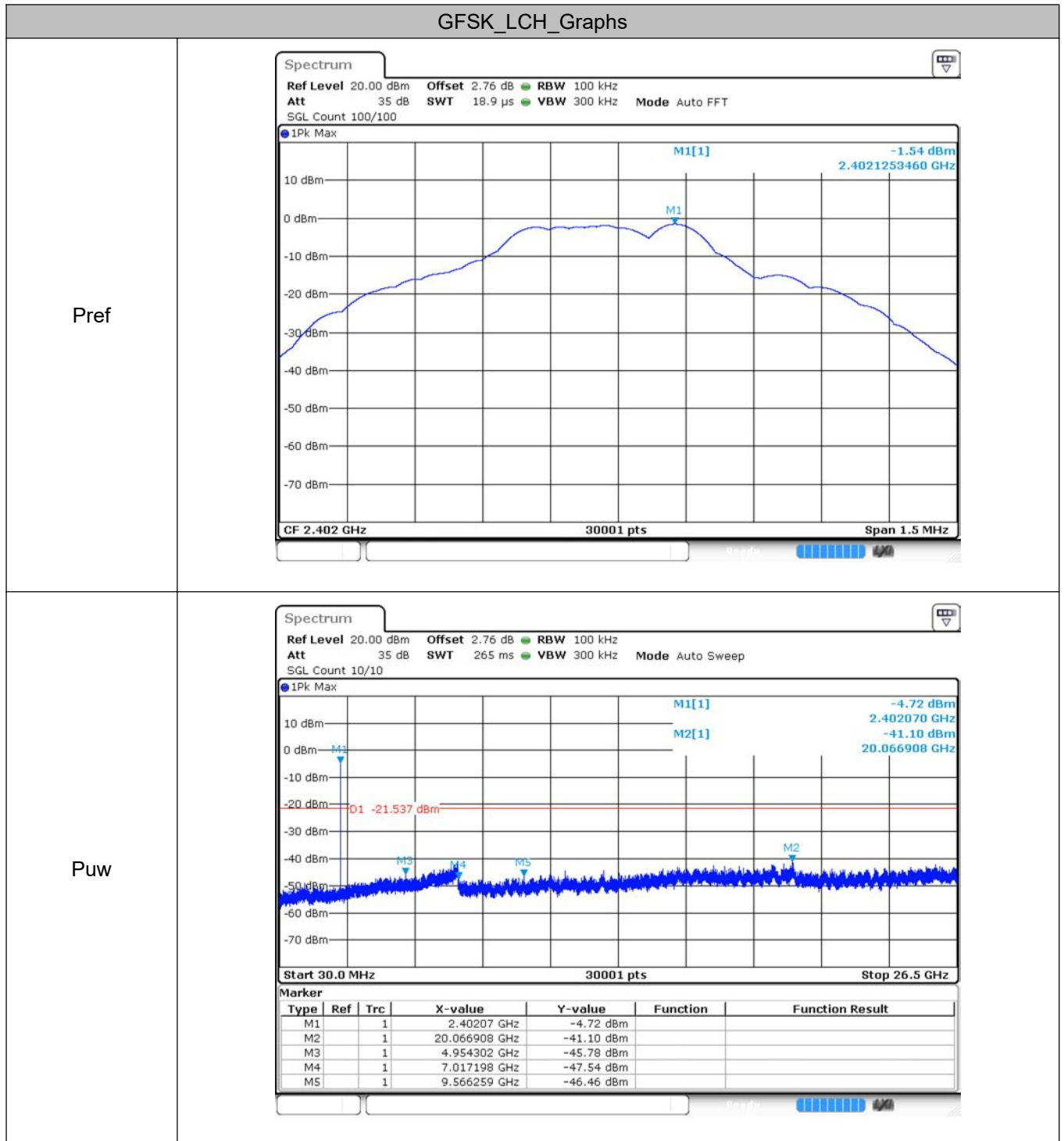


7 RF Conducted Spurious Emissions

7.1 Test Result

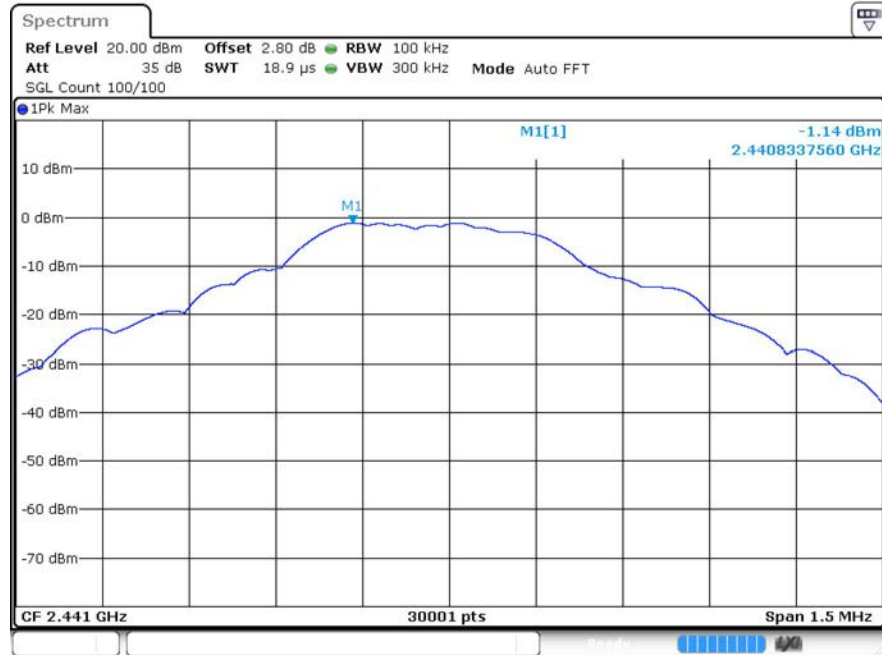
Mode	Channel	Max. Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	-39.55	-20	Pass
	MCH	-39.94	-20	Pass
	HCH	-40.49	-20	Pass
$\pi/4$ DQPSK	LCH	-38.77	-20	Pass
	MCH	-39.82	-20	Pass
	HCH	-38.57	-20	Pass

7.2 Test Graphs

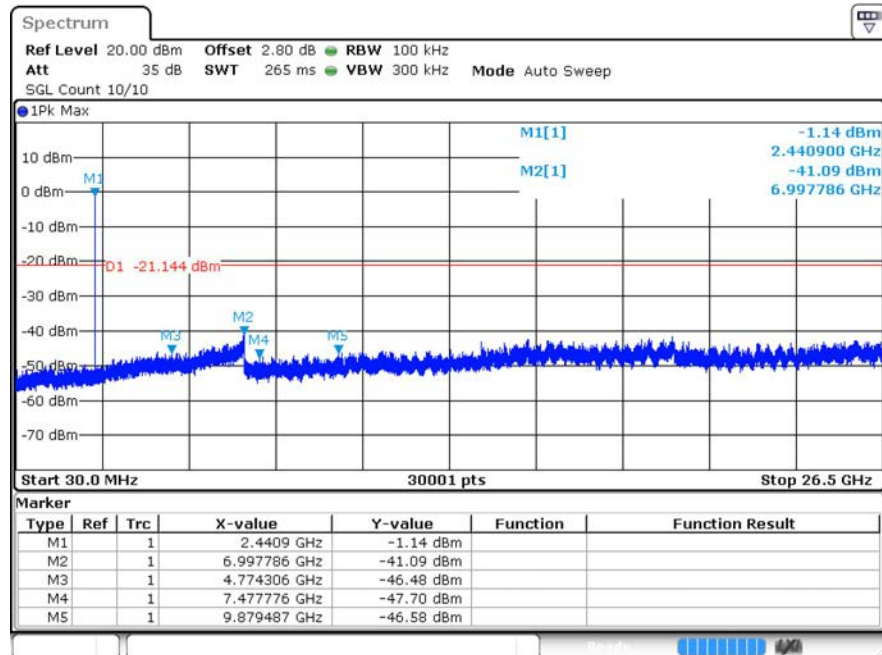


GFSK_MCH_Graphs

Pref



Puw

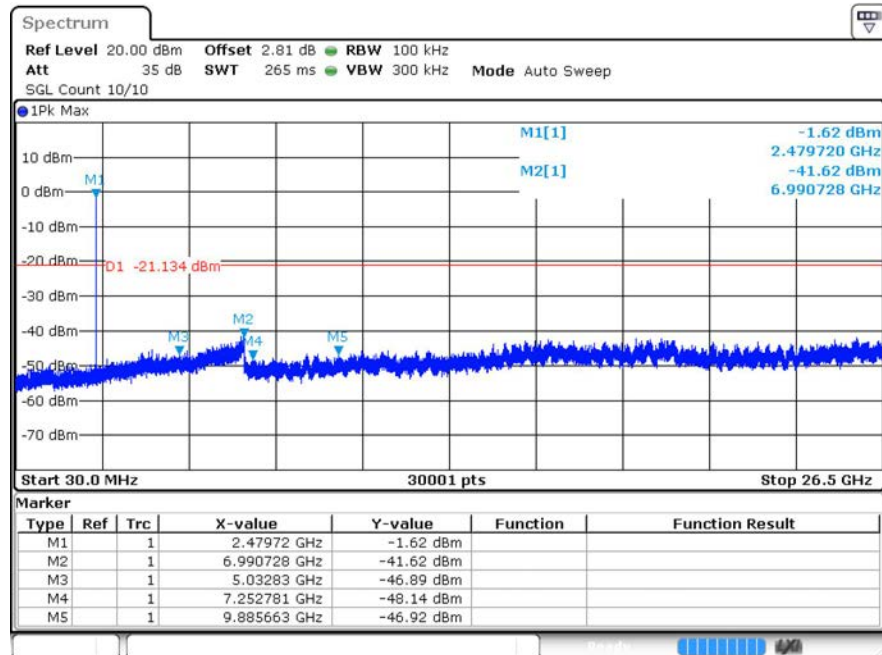


GFSK_HCH_Graphs

Pref

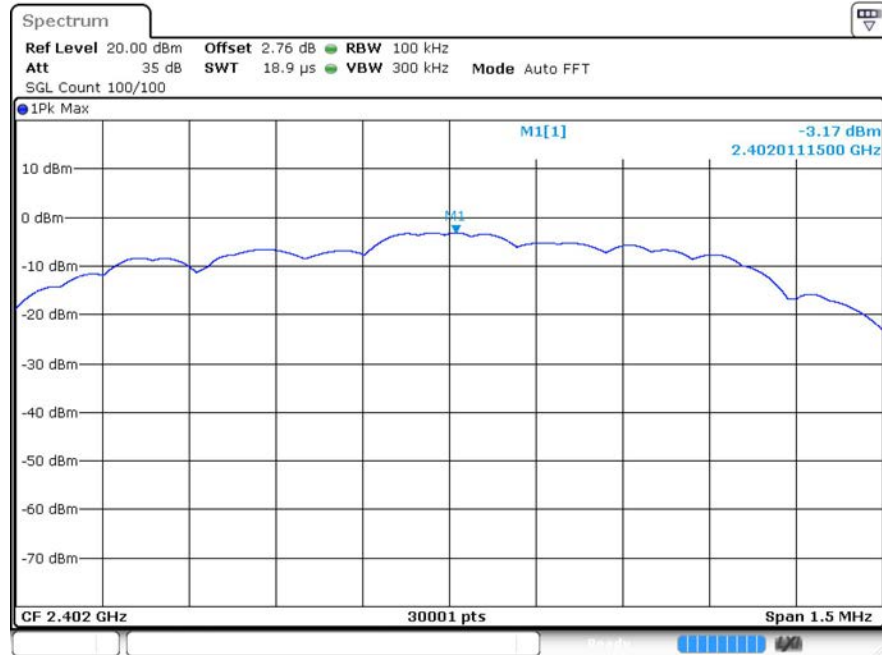


Puw

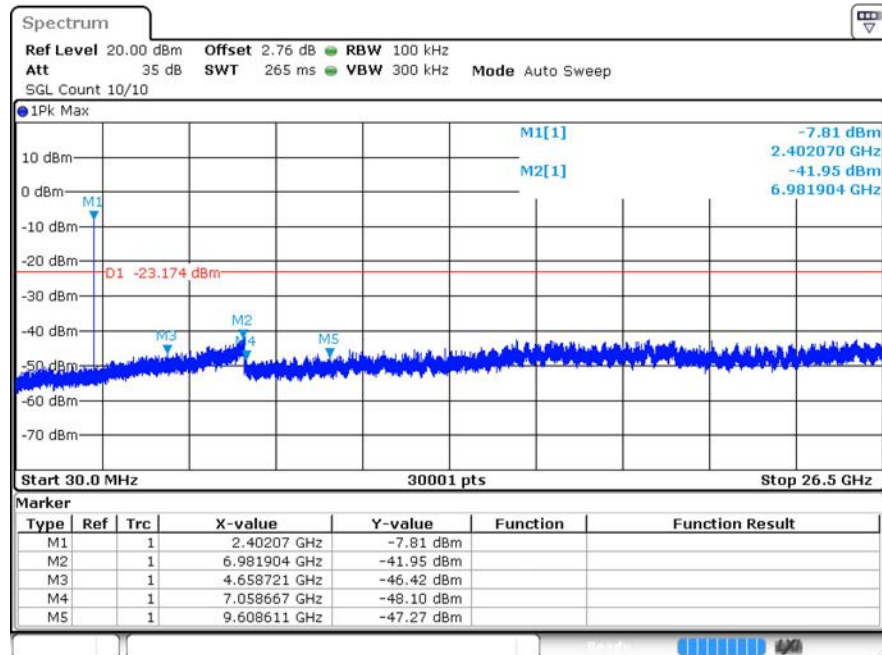


$\pi/4$ DQPSK_LCH_Graphs

Pref

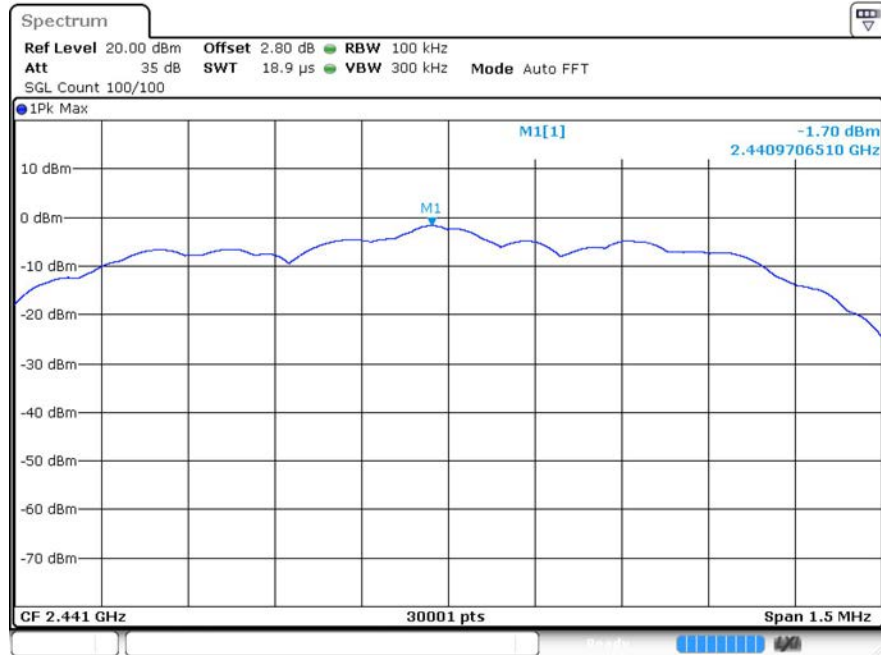


Puw

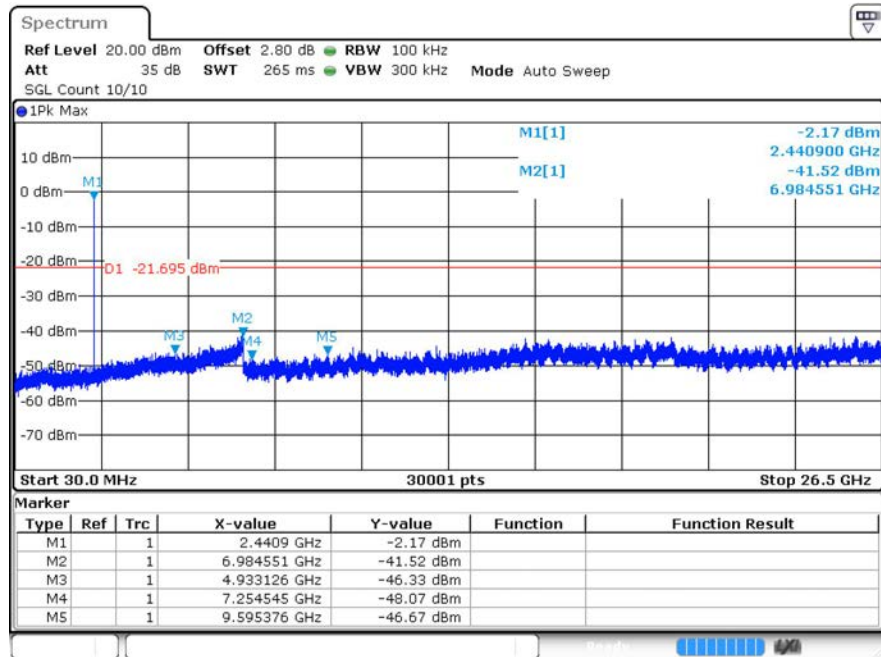


π /4DQPSK_MCH_Graphs

Pref

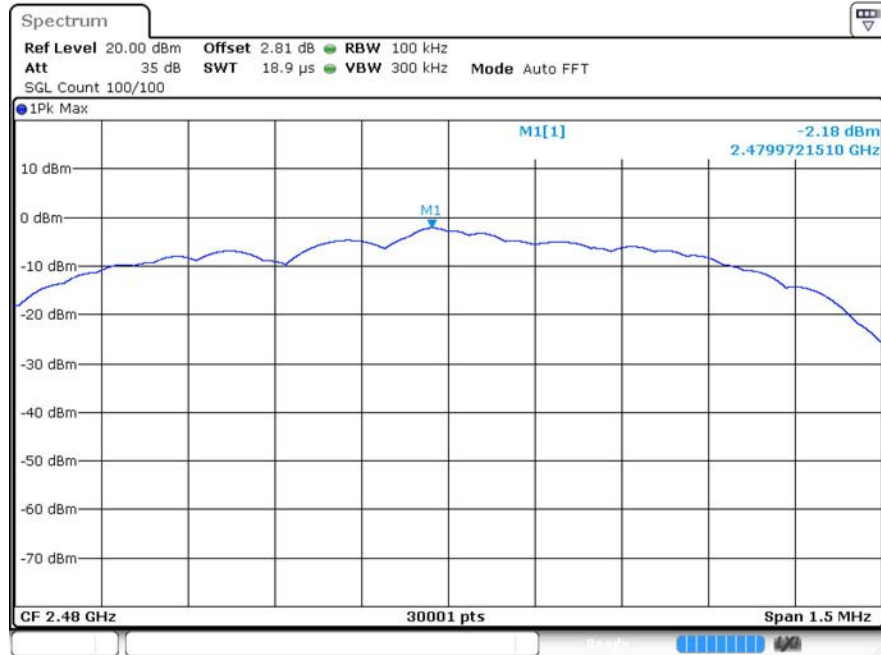


Puw

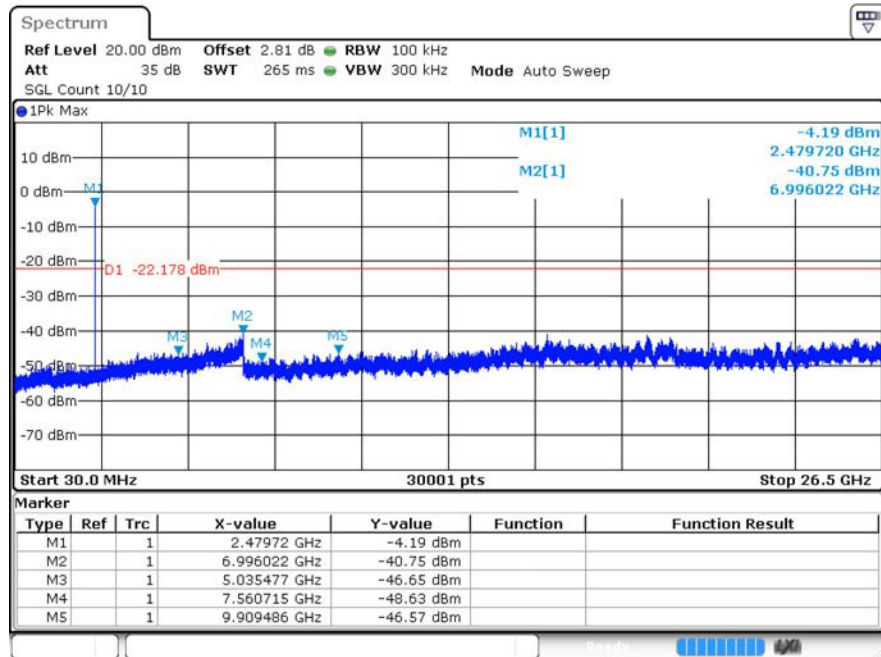


$\pi/4$ DQPSK_HCH_Graphs

Pref



Puw

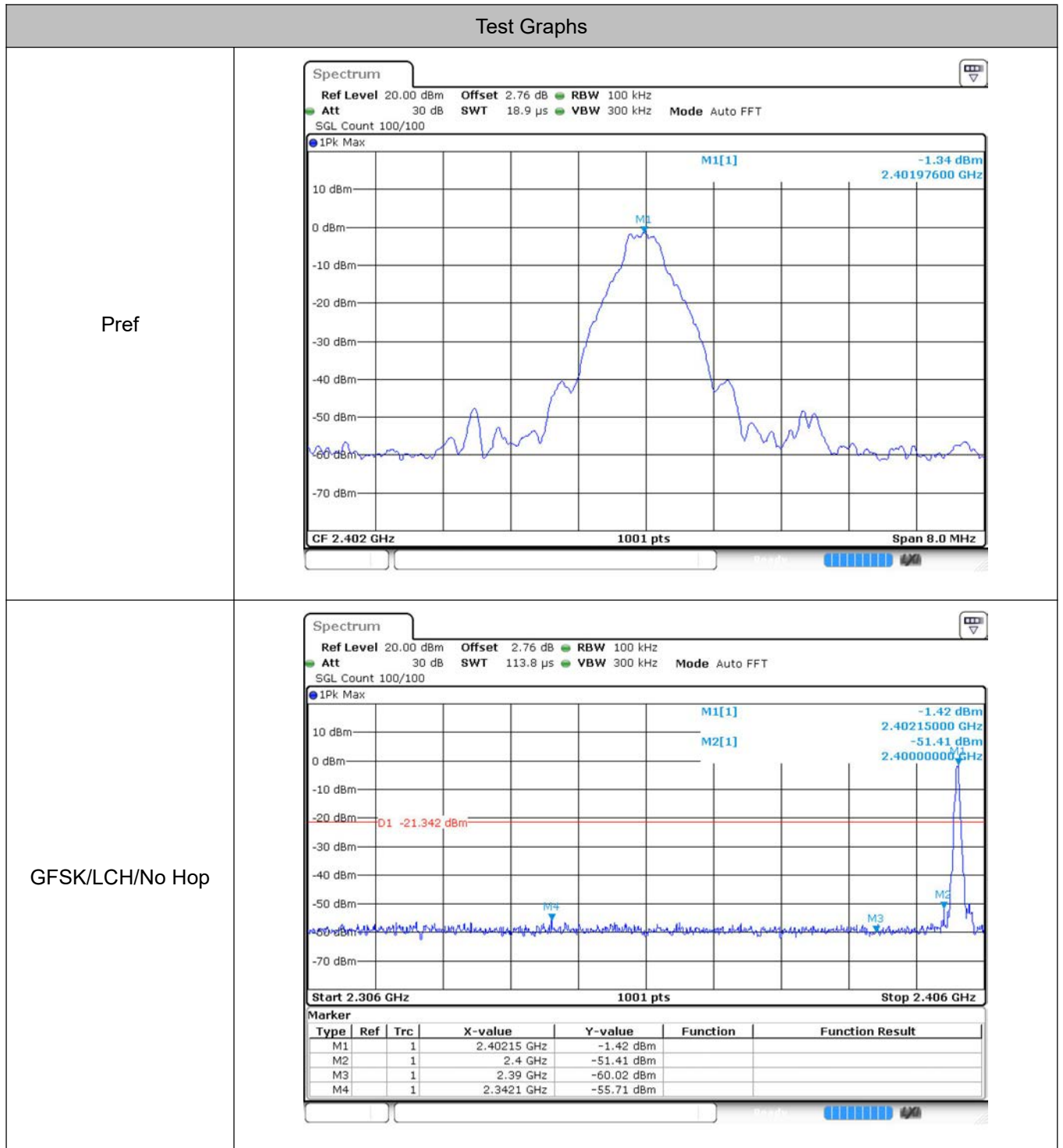


8 Band-edge for RF Conducted Emissions

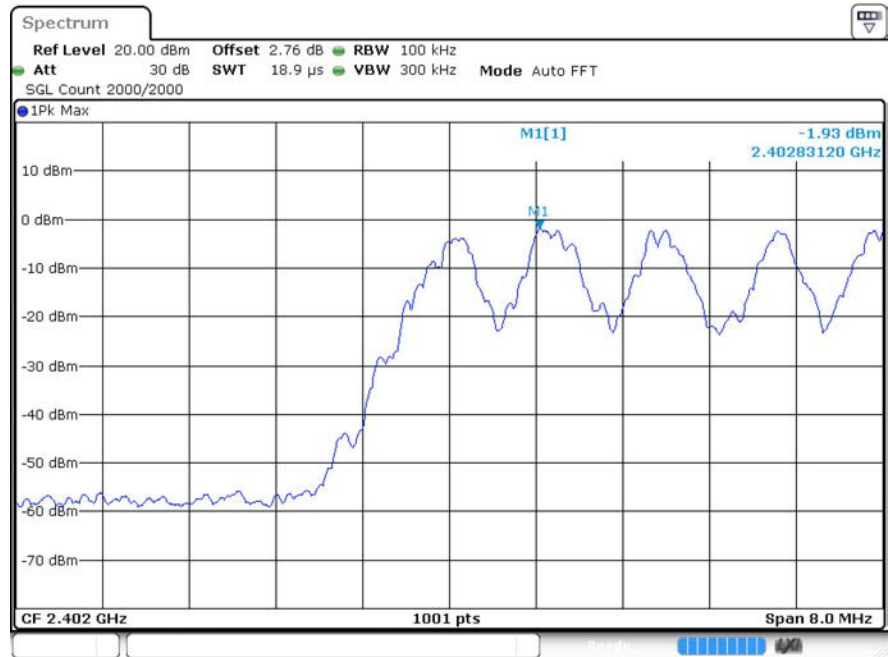
8.1 Test Result

Mode	Channel	Carrier Frequency [MHz]	Frequency Hopping	Max Spurious Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	2402	Off	-54.37	-20	Pass
			On	-52.68	-20	Pass
	HCH	2480	Off	-45.63	-20	Pass
			On	-46.66	-20	Pass
$\pi/4$ DQPSK	LCH	2402	Off	-53.79	-20	Pass
			On	-51.96	-20	Pass
	HCH	2480	Off	-53.56	-20	Pass
			On	-53.71	-20	Pass

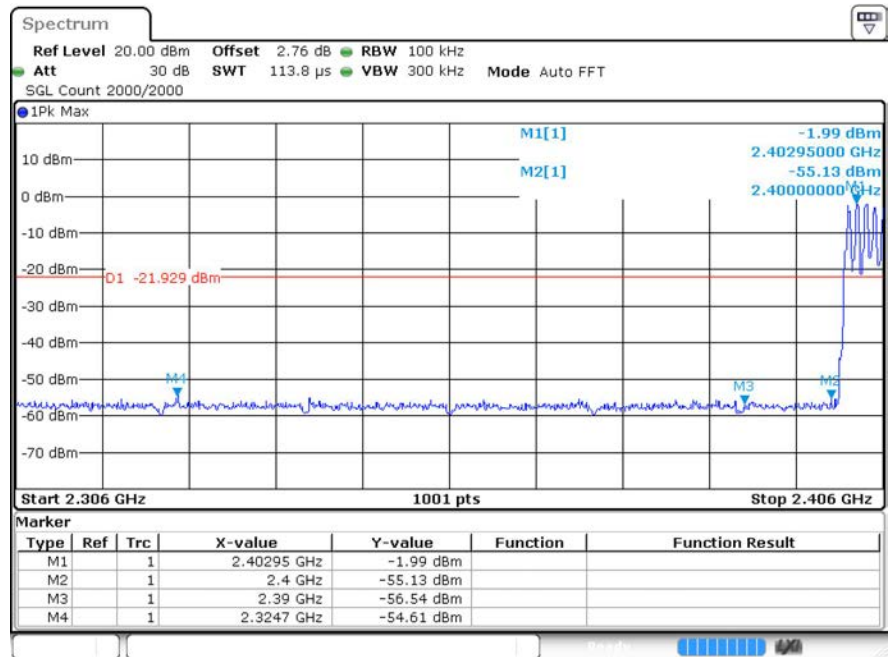
8.2 Test Graphs



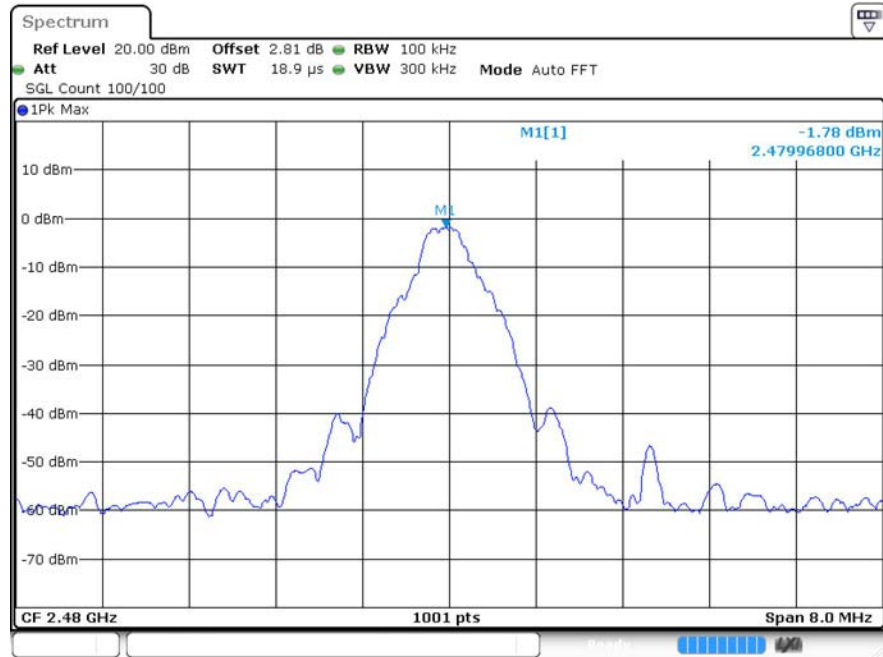
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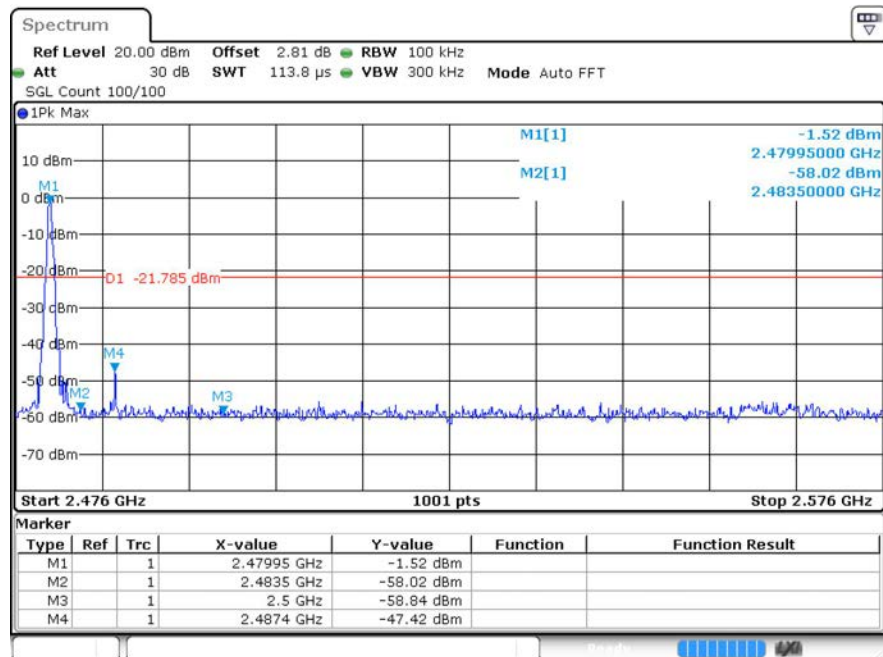
GFSK/LCH/Hop



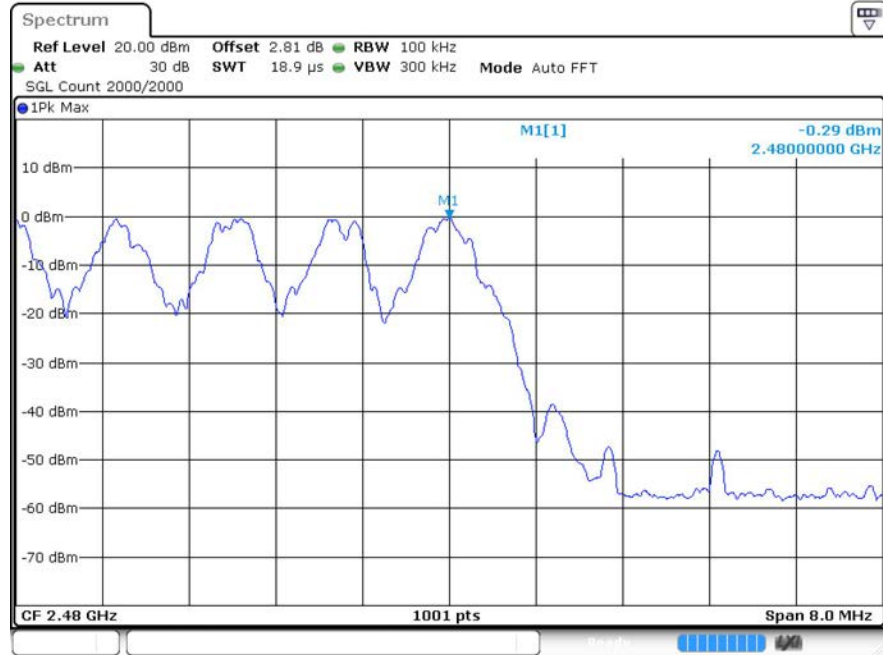
Ref



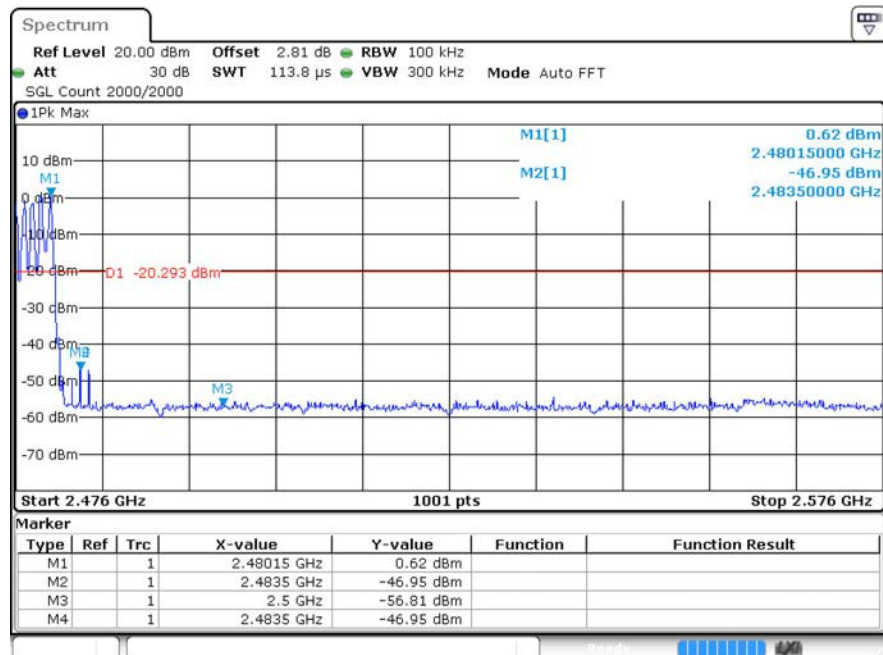
GFSK/HCH/No Hop



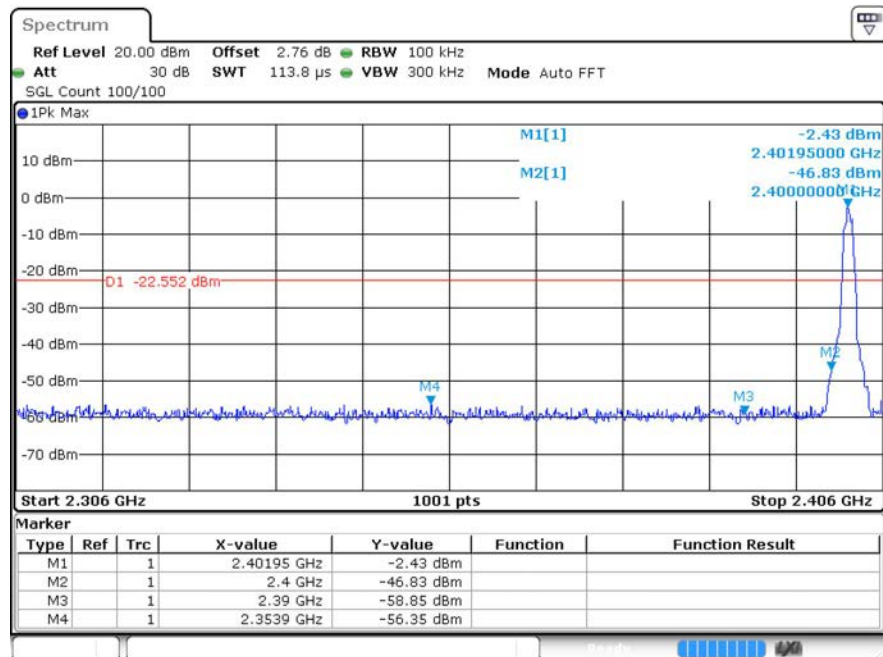
Ref.



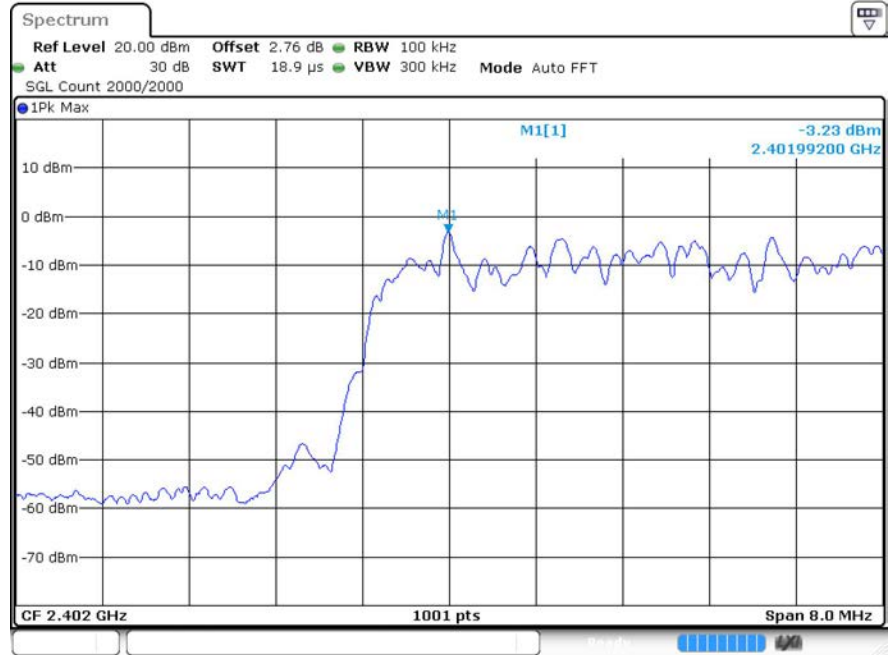
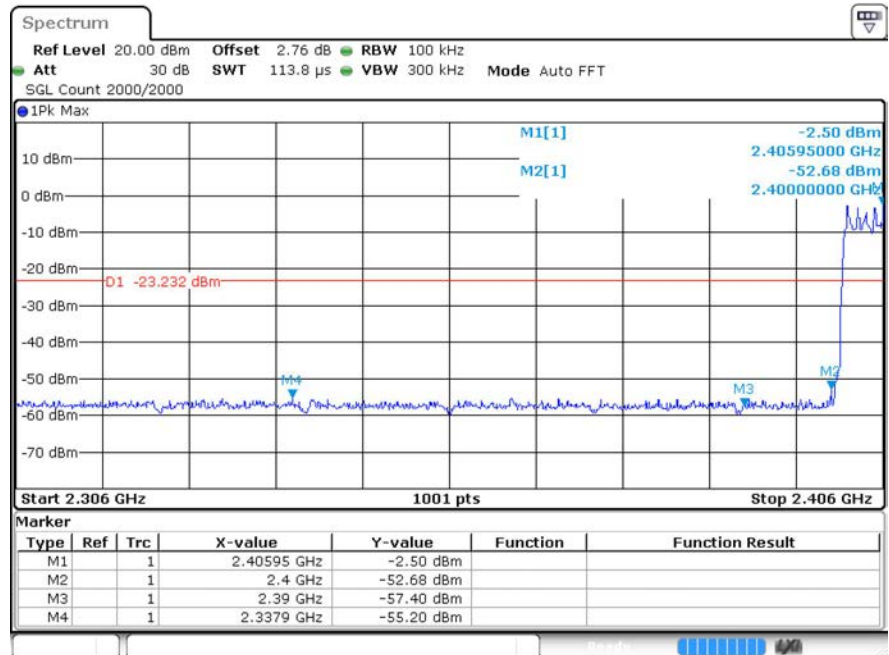
GFSK/HCH/Hop



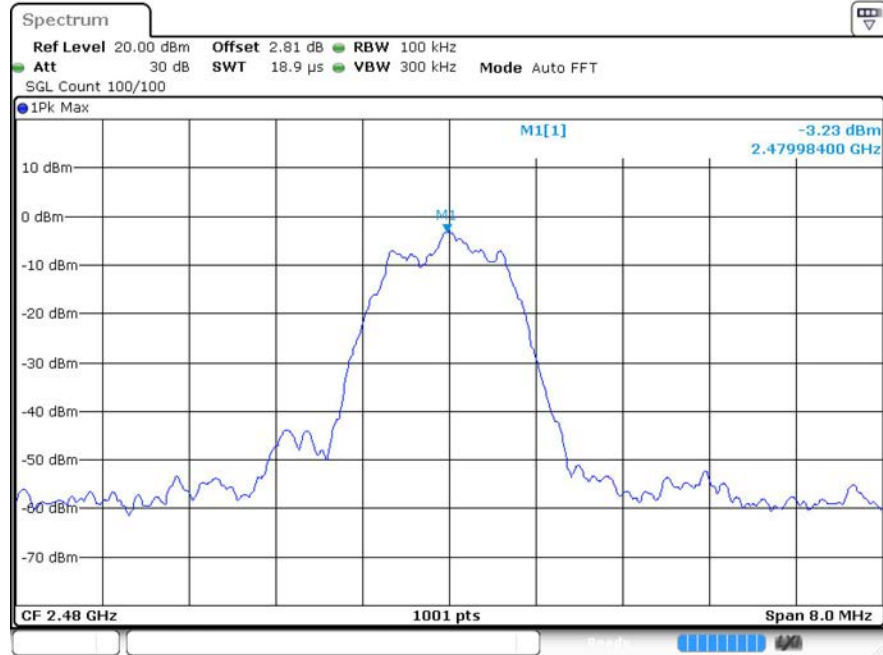
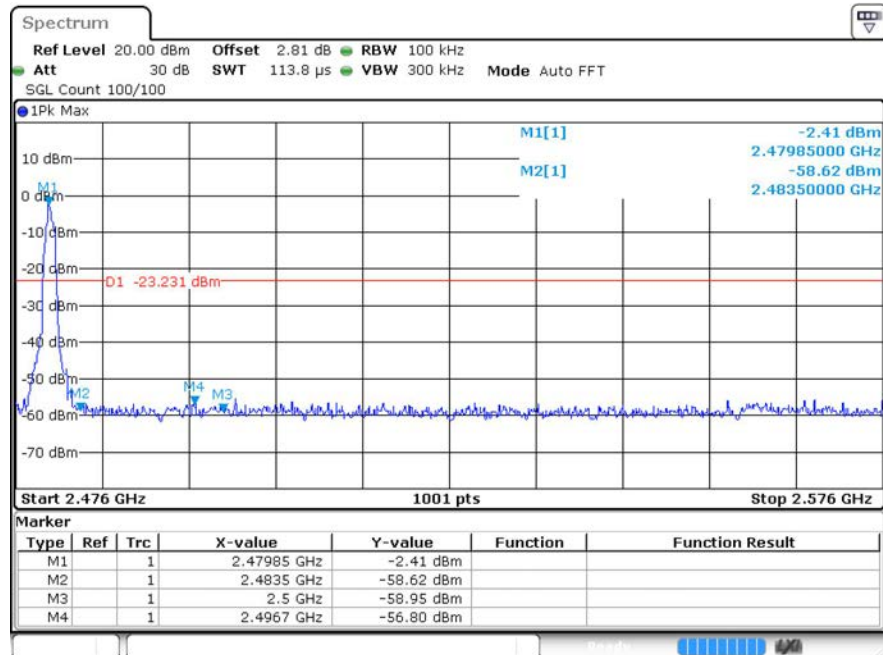
Ref


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


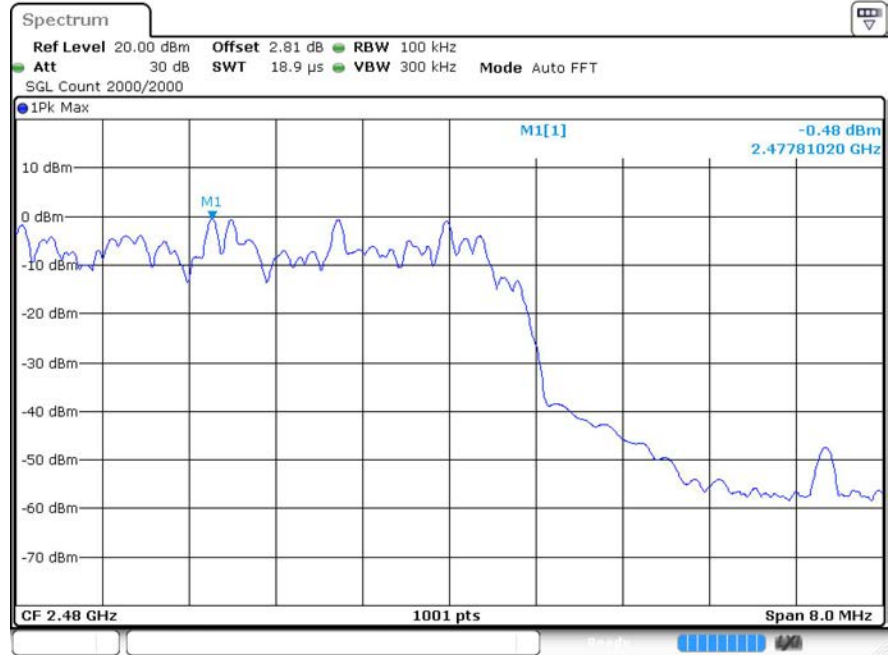
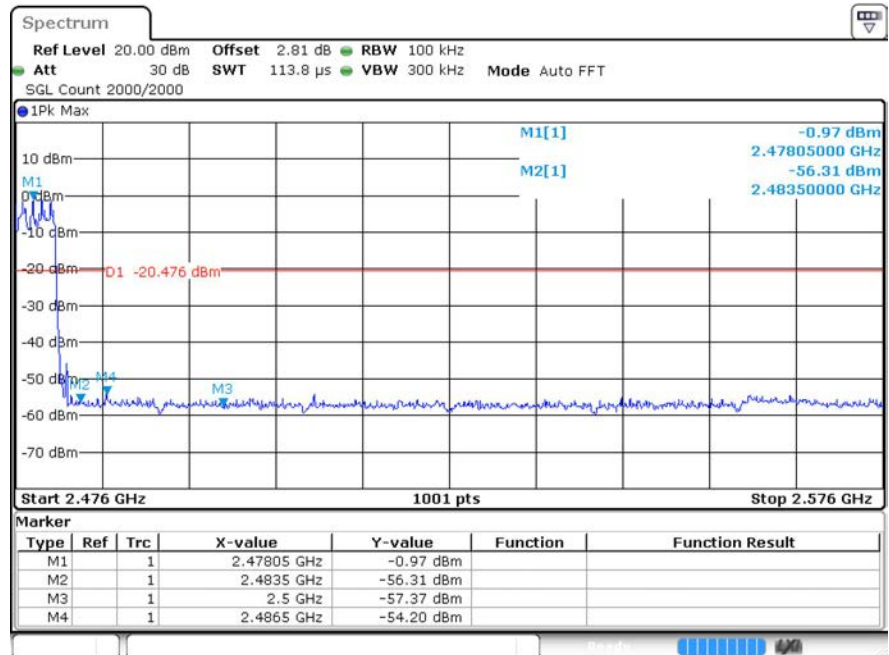
Ref


 $\pi/4$ DQPSK/LCH/Hop


Ref


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


Ref


 $\pi/4$ DQPSK/HCH/Hop


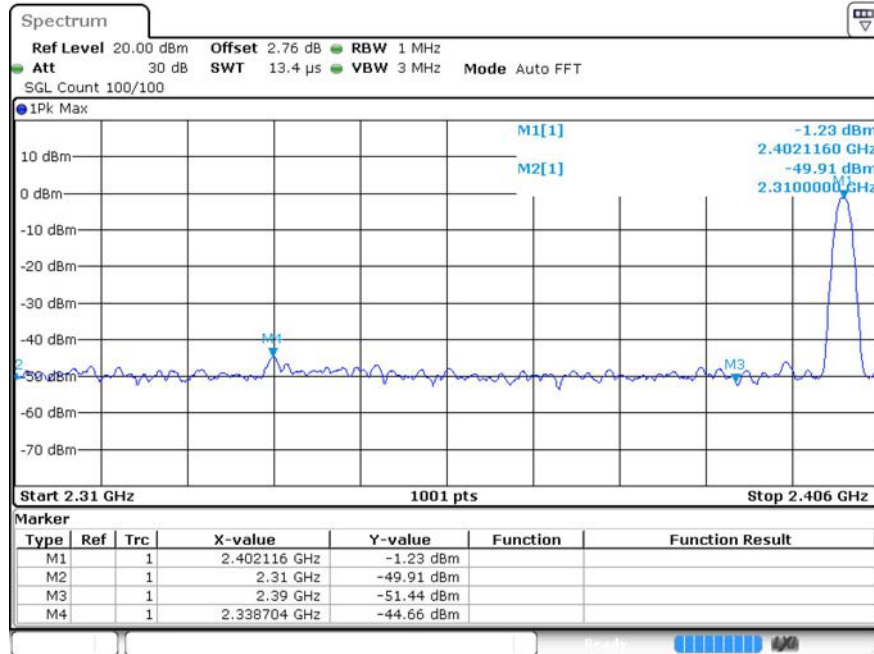
9 Restrict-band band-edge measurements

9.1 Test Result

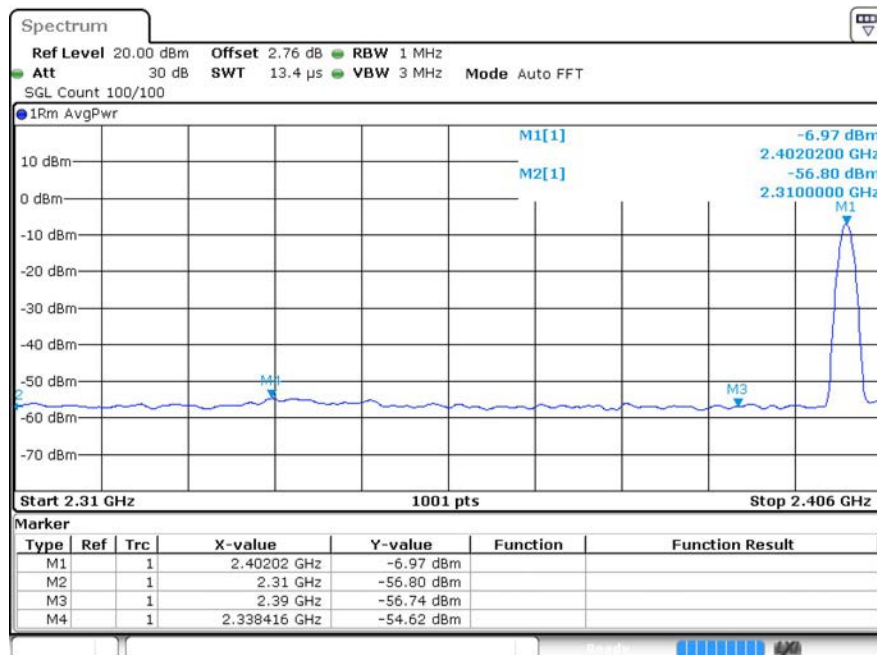
Test Mode	Hopping	Freq.	Power [dBm]	Gain	Duty Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-49.91	2	-	47.35	PEAK	74	Pass
	Off	2310.0	-56.8	2	5.02	45.48	AV	54	Pass
	Off	2338.704	-44.65	2	-	52.61	PEAK	74	Pass
	Off	2338.416	-54.61	2	5.02	47.67	AV	54	Pass
	Off	2390.0	-51.44	2	-	45.82	PEAK	74	Pass
	Off	2390.0	-56.74	2	5.02	45.54	AV	54	Pass
	Off	2483.5	-48.68	2	-	48.58	PEAK	74	Pass
	Off	2483.5	-55.49	2	4.95	46.72	AV	54	Pass
	Off	2487.04	-46.69	2	-	50.57	PEAK	74	Pass
	Off	2483.584	-55.44	2	4.95	46.77	AV	54	Pass
	Off	2500.0	-50.11	2	-	47.15	PEAK	74	Pass
	Off	2500.0	-56.91	2	4.95	45.3	AV	54	Pass
$\pi/4$ DQPSK	Off	2310.0	-50.27	2	-	46.99	PEAK	74	Pass
	Off	2310.0	-57.04	2	4.95	45.17	AV	54	Pass
	Off	2349.648	-46.45	2	-	50.81	PEAK	74	Pass
	Off	2338.128	-54.47	2	4.95	47.74	AV	54	Pass
	Off	2390.0	-50.04	2	-	47.22	PEAK	74	Pass
	Off	2390.0	-56.35	2	4.95	45.86	AV	54	Pass
	Off	2483.5	-48.59	2	-	48.67	PEAK	74	Pass
	Off	2483.5	-55.82	2	4.95	46.39	AV	54	Pass
	Off	2487.28	-47.13	2	-	50.13	PEAK	74	Pass
	Off	2487.544	-55.17	2	4.95	47.04	AV	54	Pass
	Off	2500.0	-49.08	2	-	48.18	PEAK	74	Pass
	Off	2500.0	-56.64	2	4.95	45.57	AV	54	Pass

9.2 Test Graphs

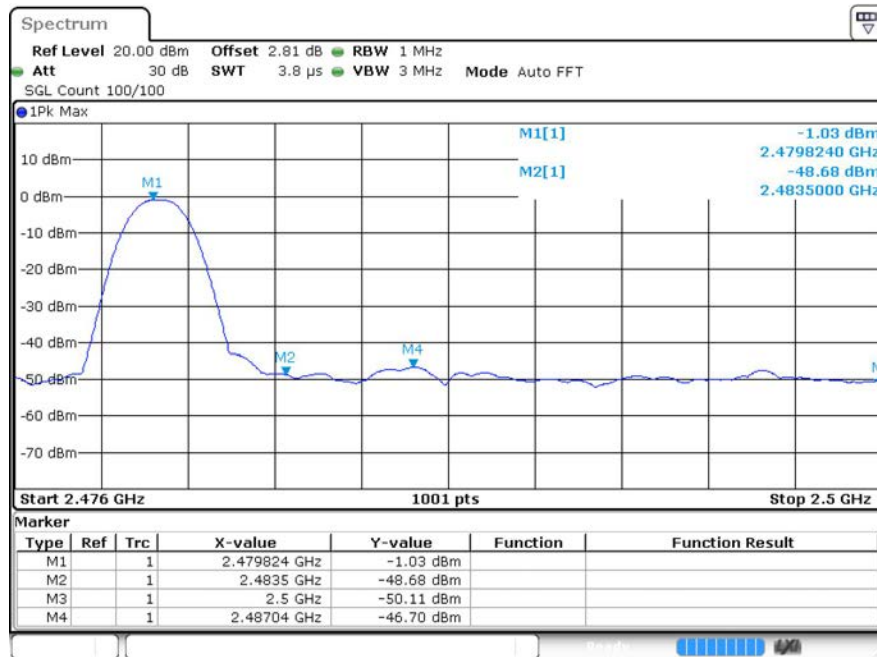
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (Low Channel)



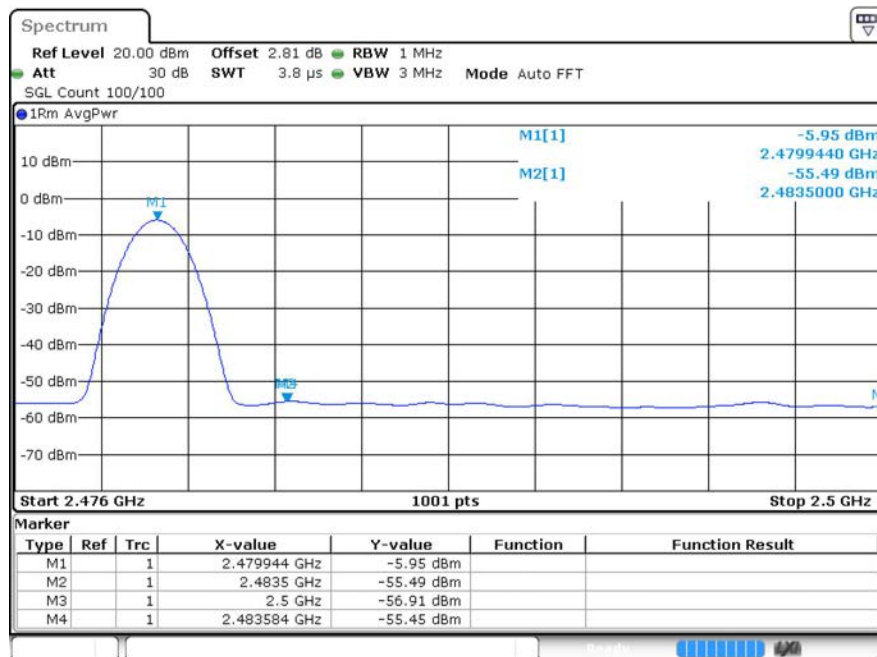
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (Low Channel)



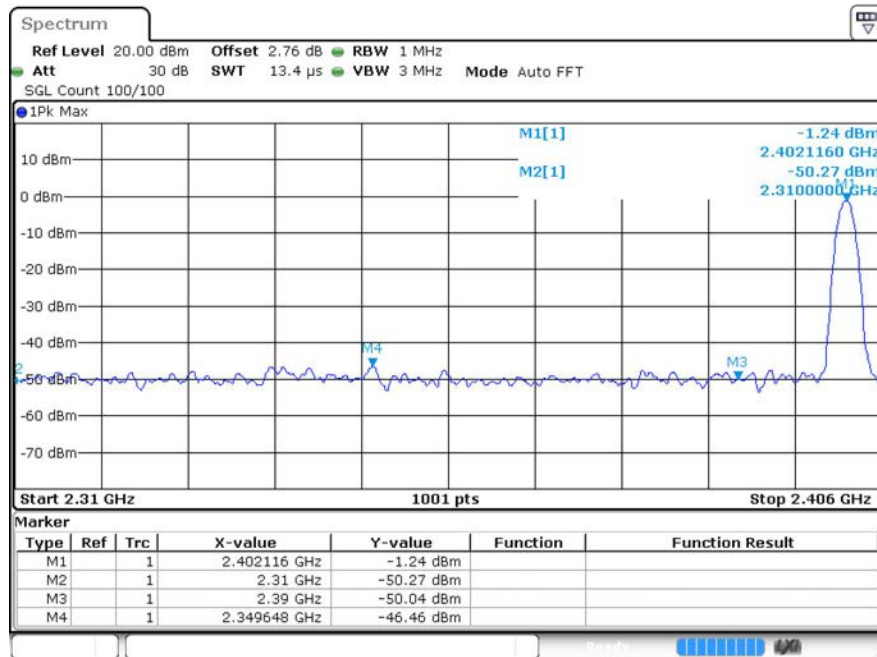
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (High Channel)



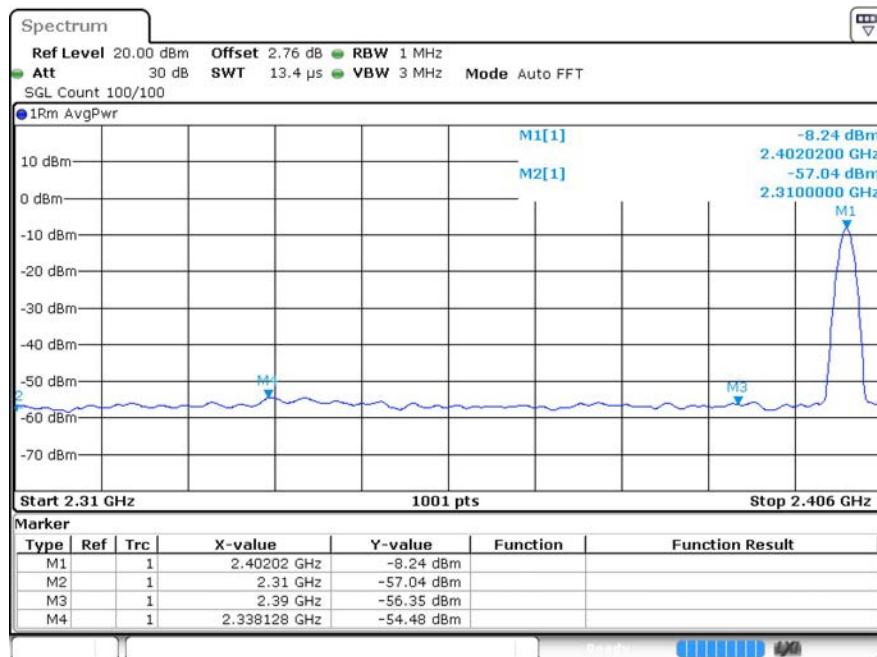
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (High Channel)



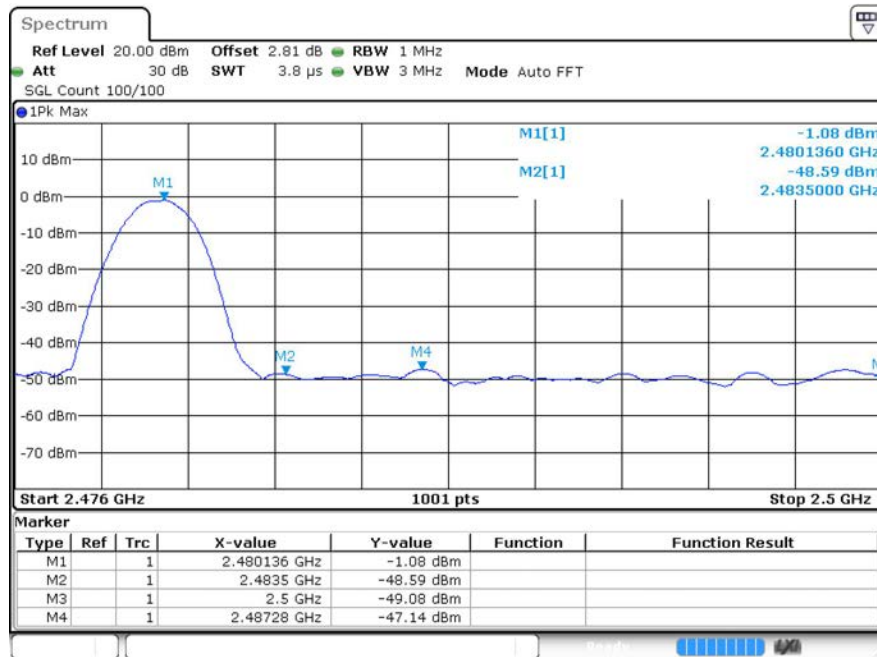
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (Low Channel)



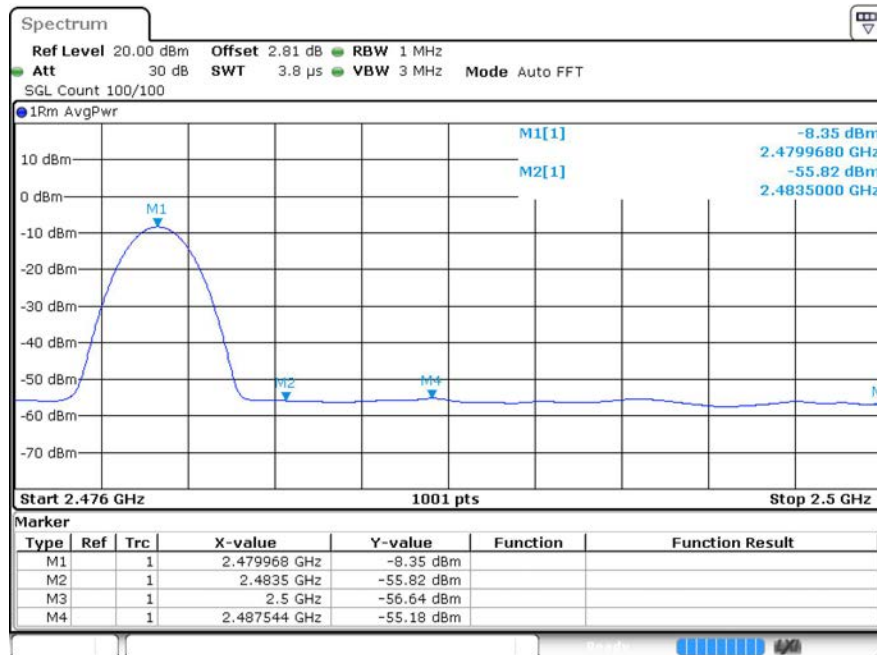
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (Low Channel)



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---