



Appendix A

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

Product Name: Wireless Earphone

Trade Mark: Blackview

Test Model: AirBuds 8

Environmental Conditions

Temperature:	25.4℃
Relative Humidity:	52.3%
ATM Pressure:	101Kpa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen



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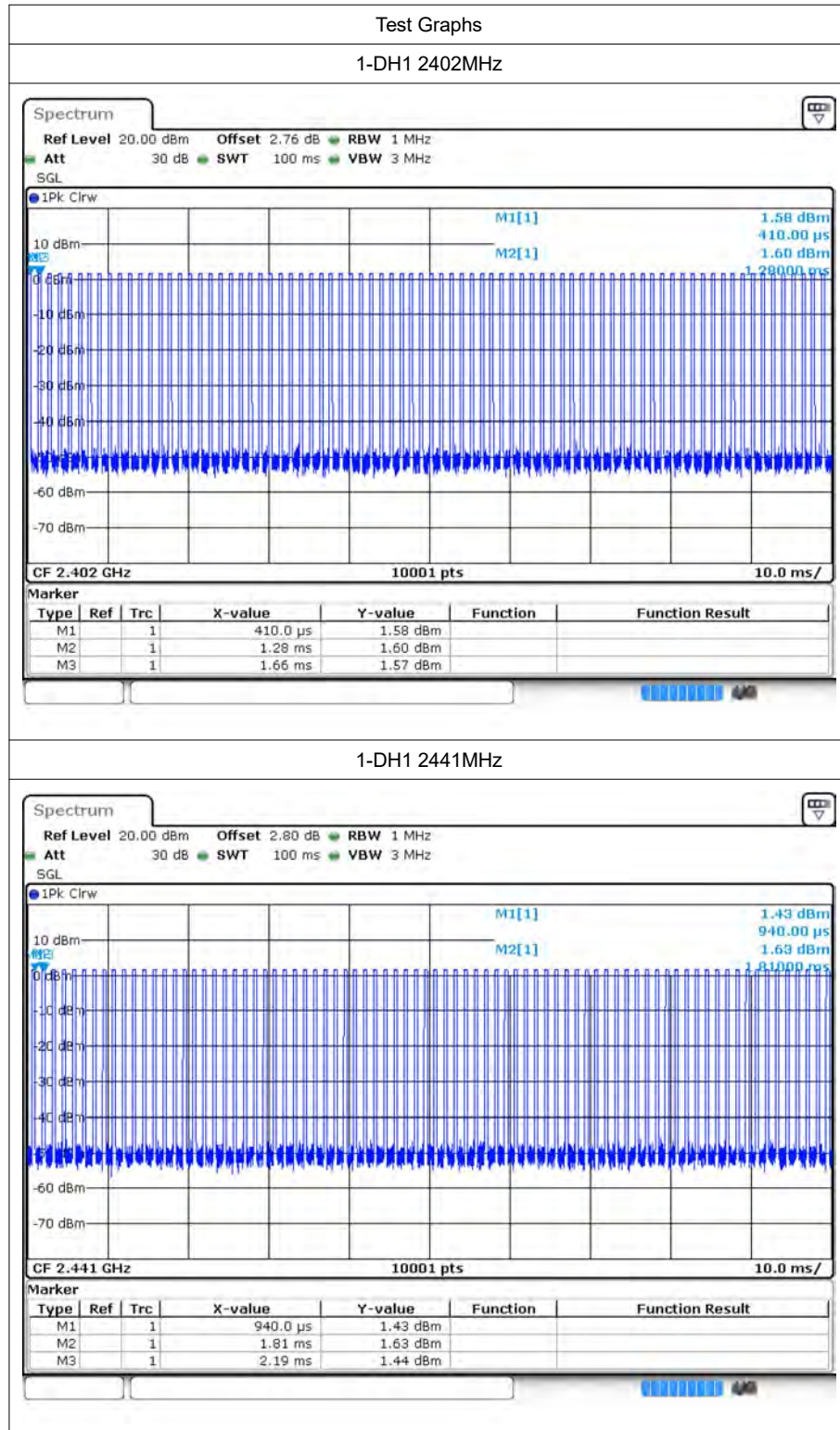
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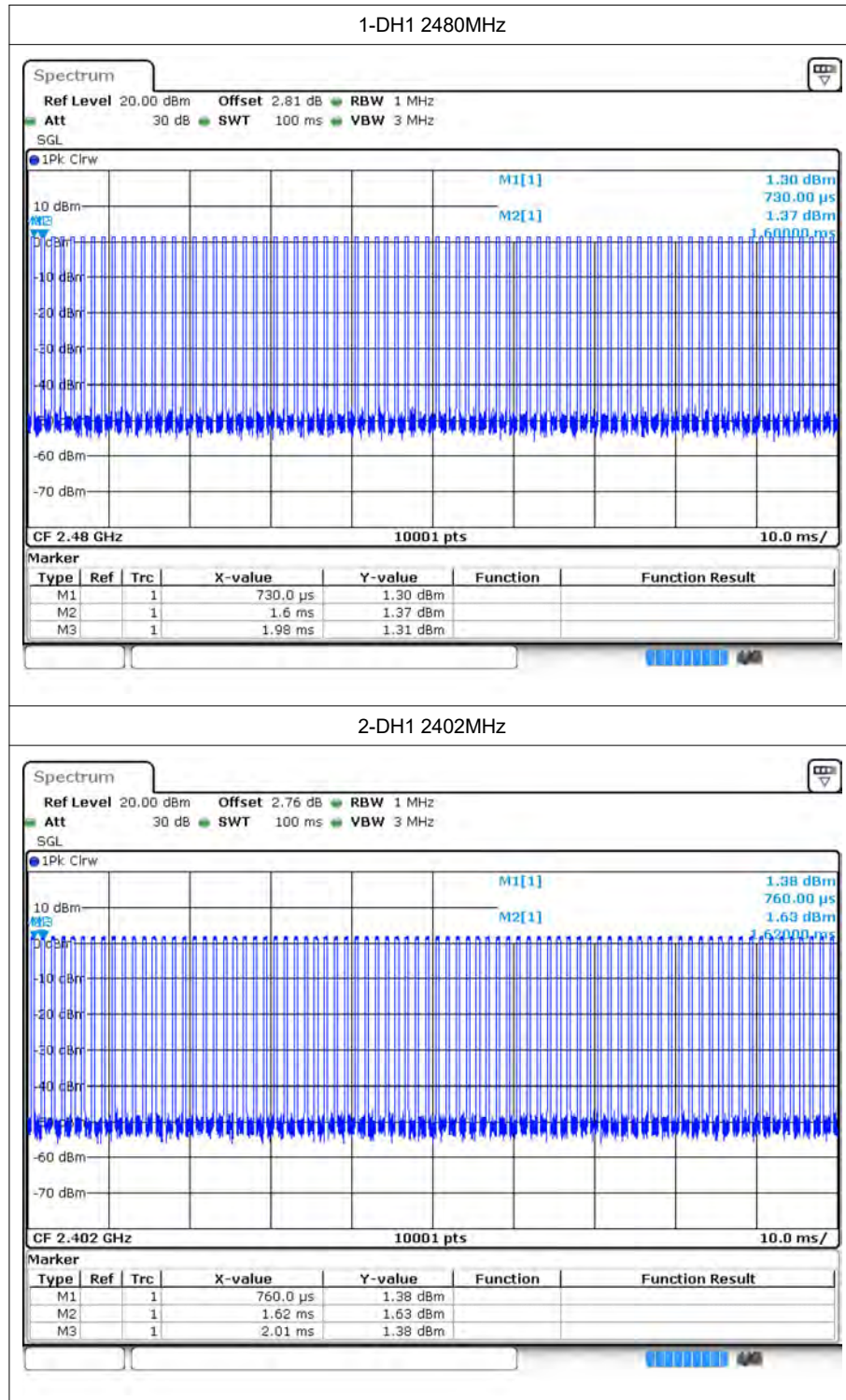
1 Duty Cycle

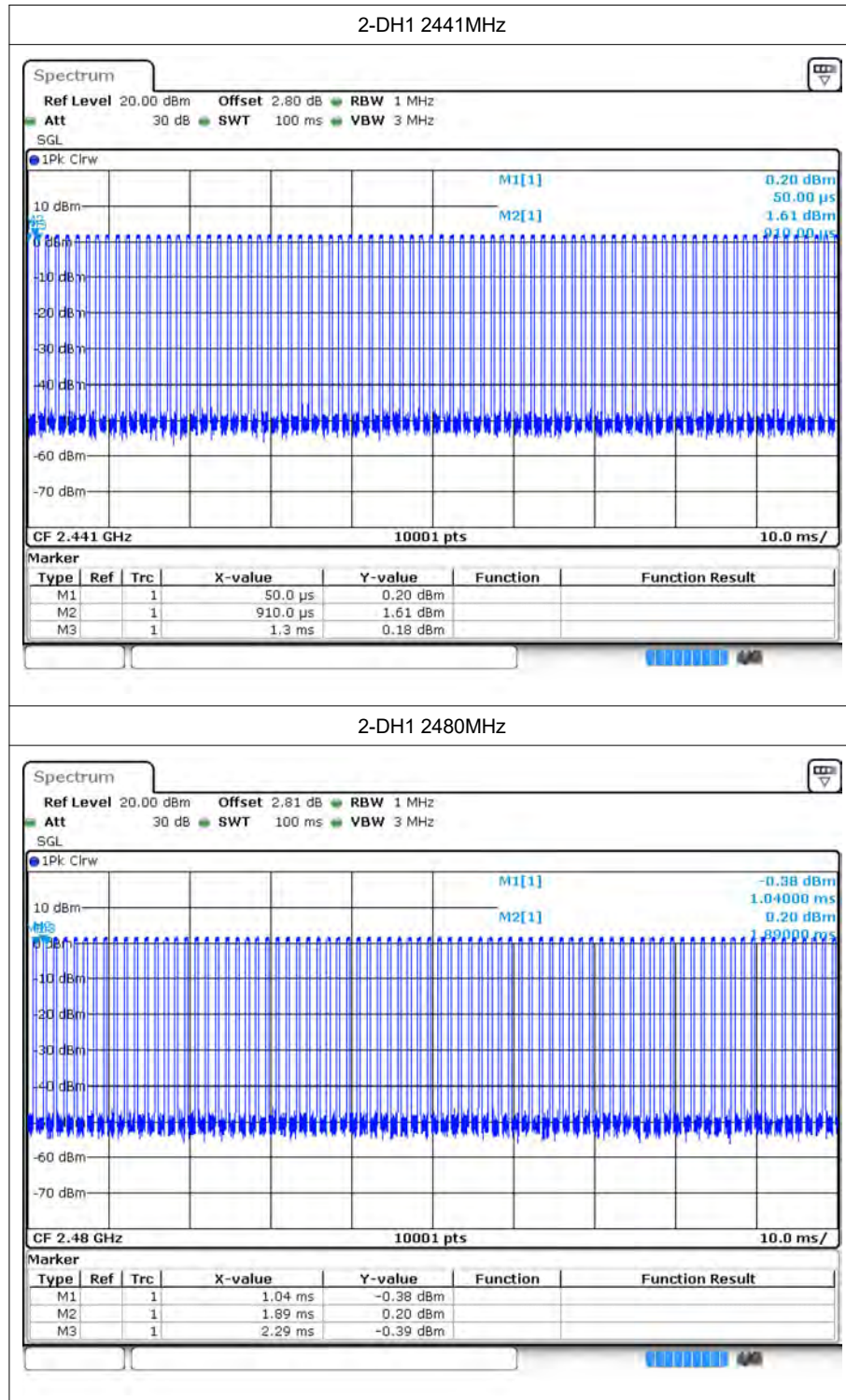
1.1 Test Result

Mode	Frequency (MHz)	Duty Cycle (%)	1/T (kHz)
1-DH1	2402	31.2	2.63
1-DH1	2441	31.87	2.63
1-DH1	2480	31.2	2.63
2-DH1	2402	32	2.56
2-DH1	2441	32.01	2.56
2-DH1	2480	32.8	2.5

1.2 Test Graphs





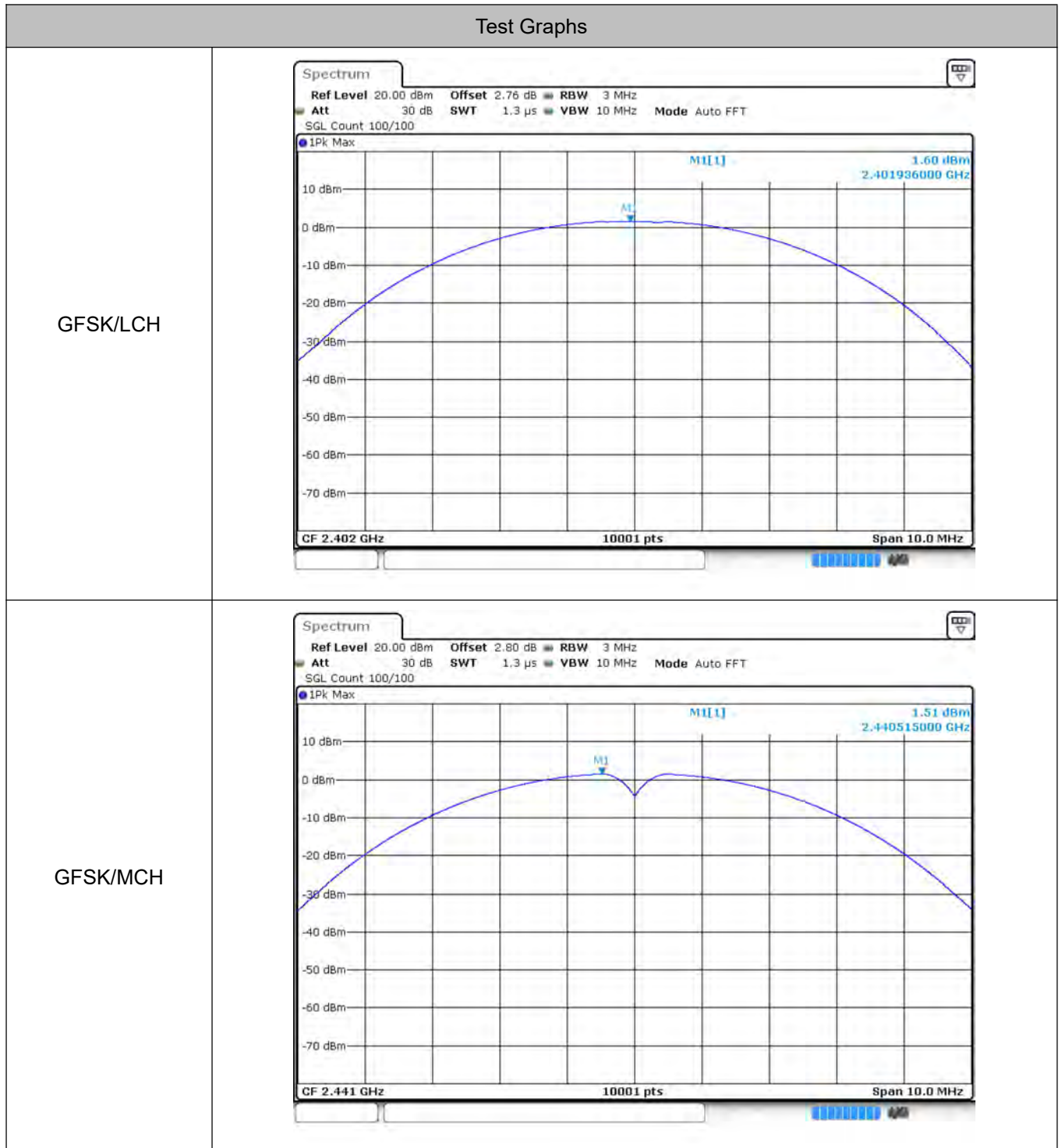


2 Maximum Conducted Peak Output Power

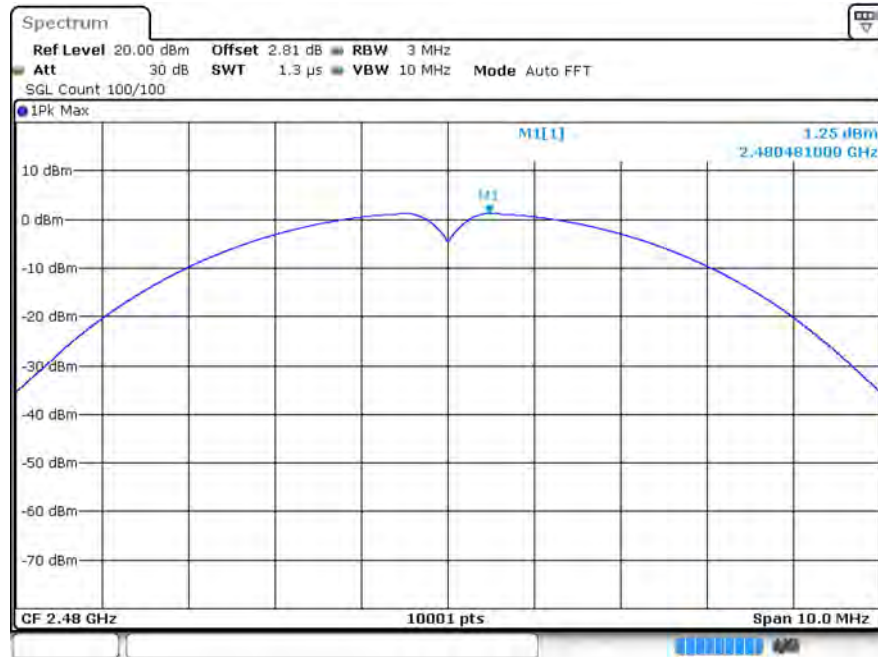
2.1 Test Result

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	1.6	21	Pass
	MCH	1.51	21	Pass
	HCH	1.25	21	Pass
$\pi/4$ DQPSK	LCH	2.03	21	Pass
	MCH	2.01	21	Pass
	HCH	1.43	21	Pass

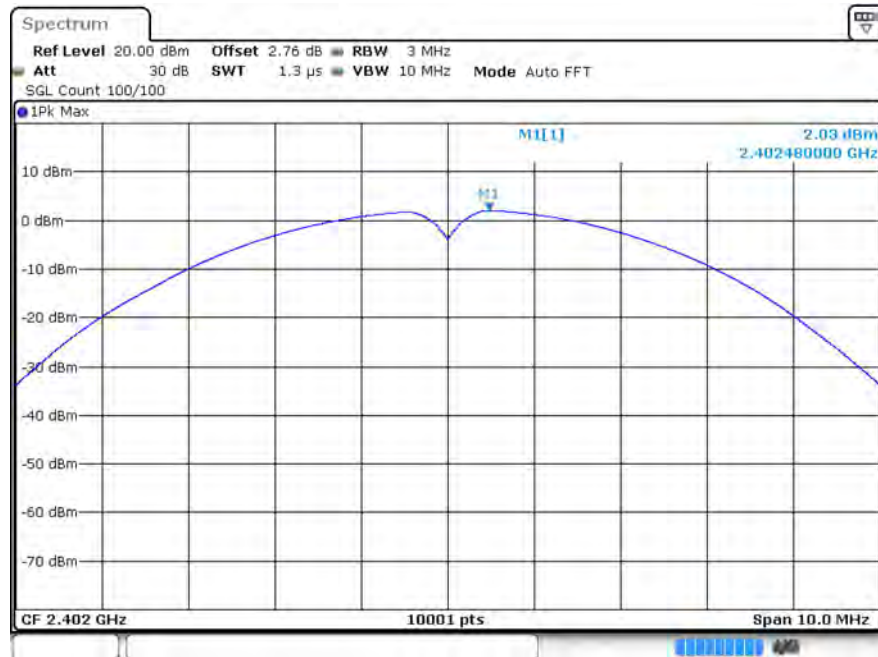
2.2 Test Graphs



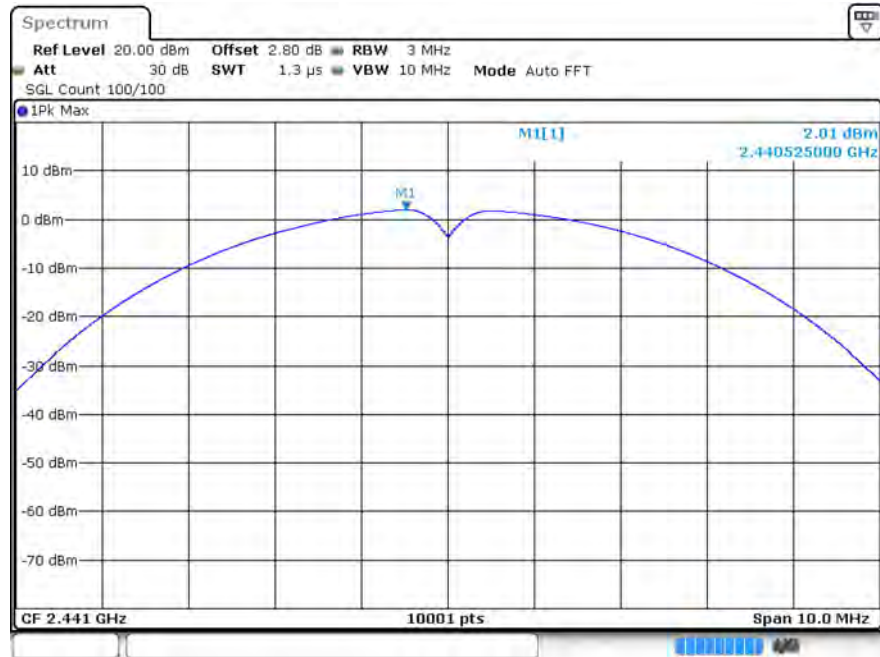
GFSK/HCH



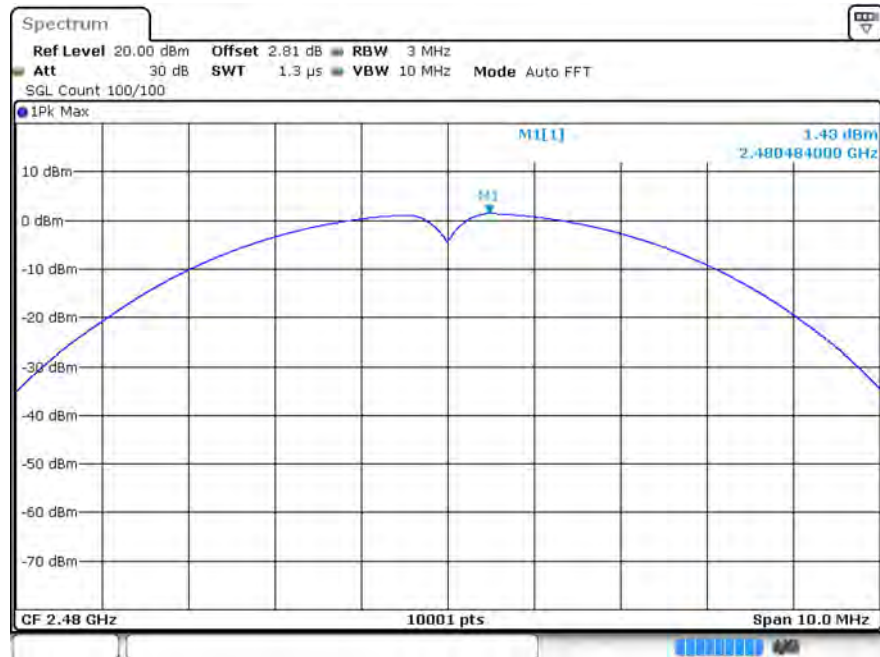
$\pi/4$ DQPSK/LCH



$\pi/4$ DQPSK/MCH



$\pi/4$ DQPSK/HCH

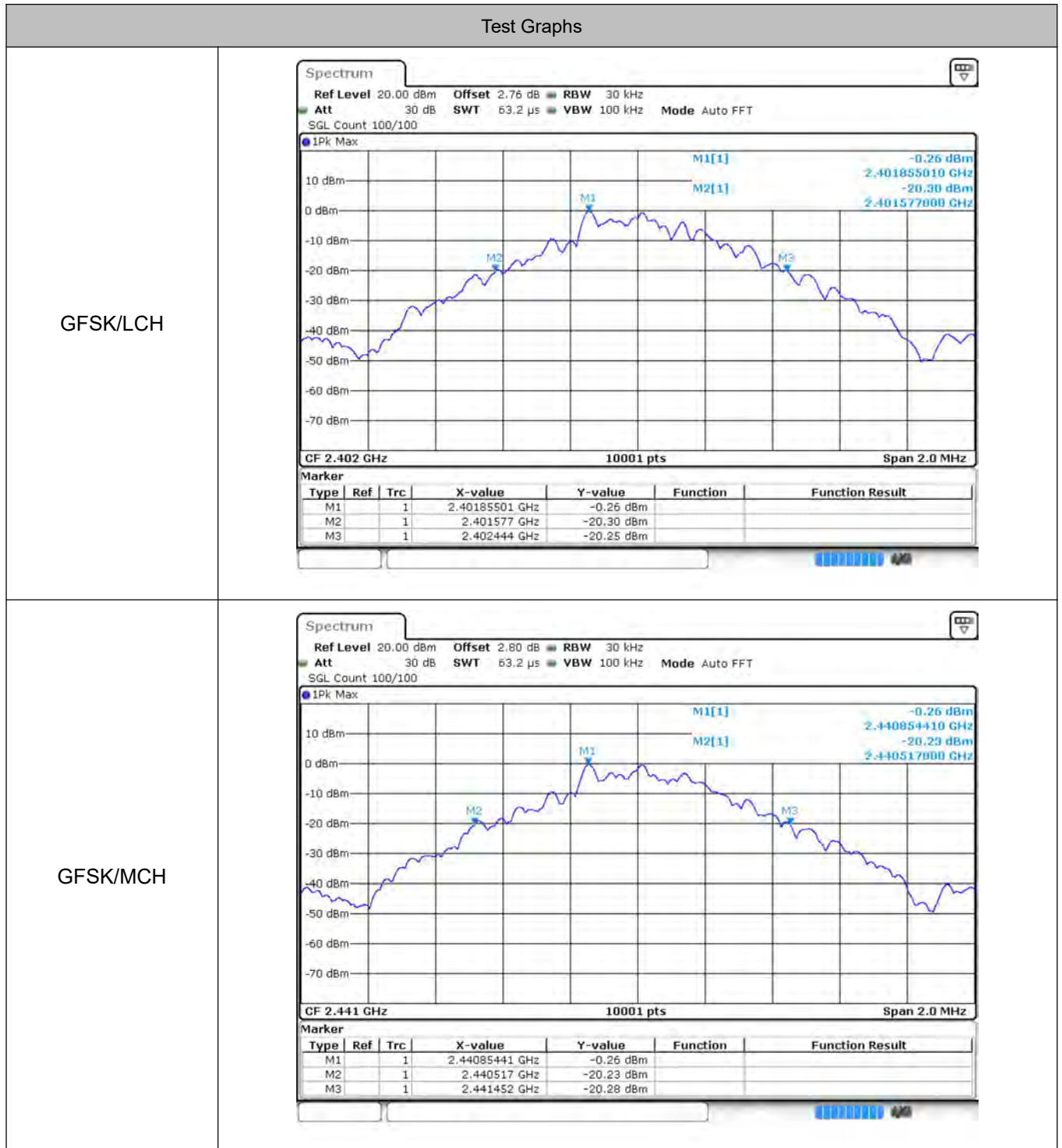


3 20dB Bandwidth

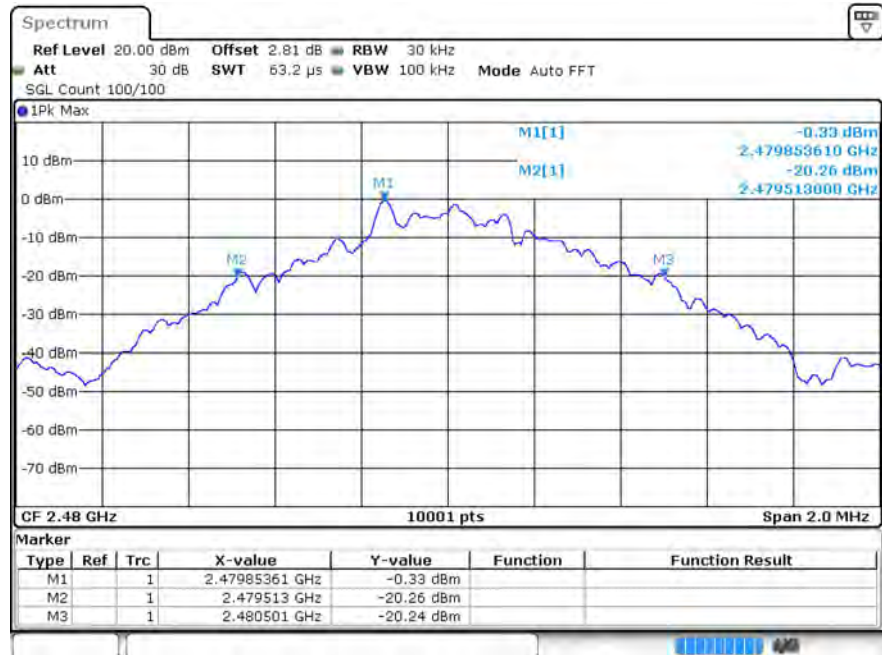
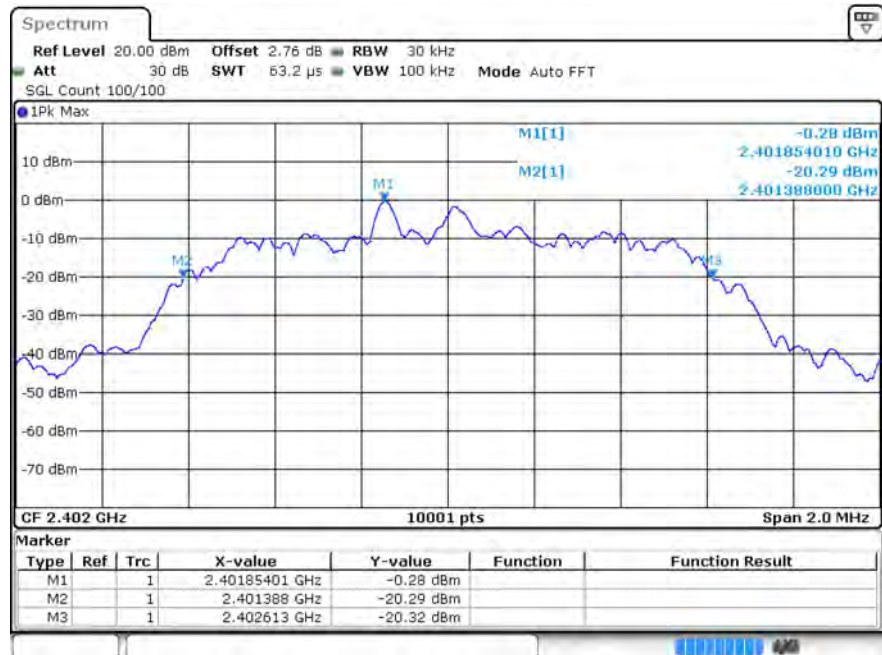
3.1 Test Result

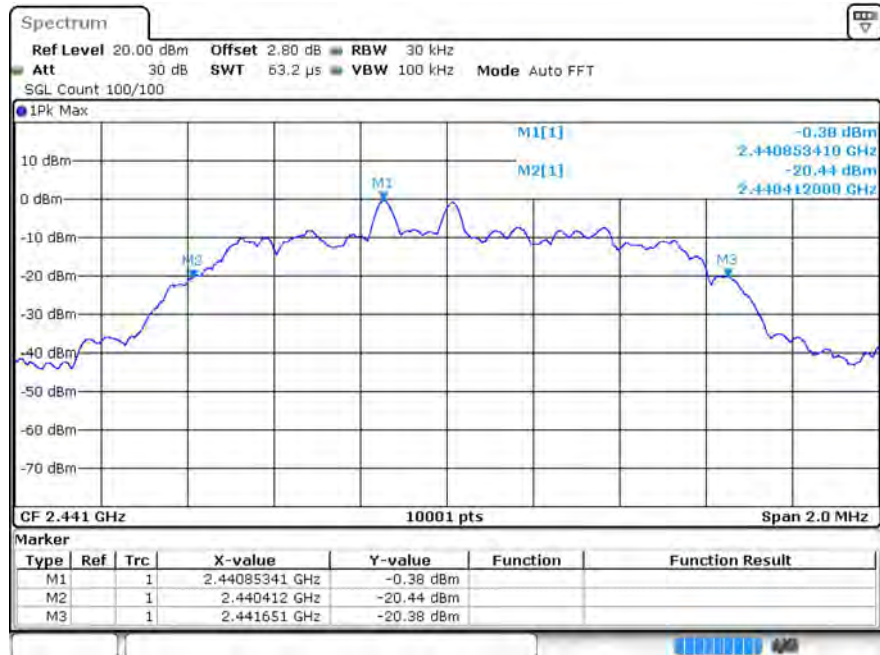
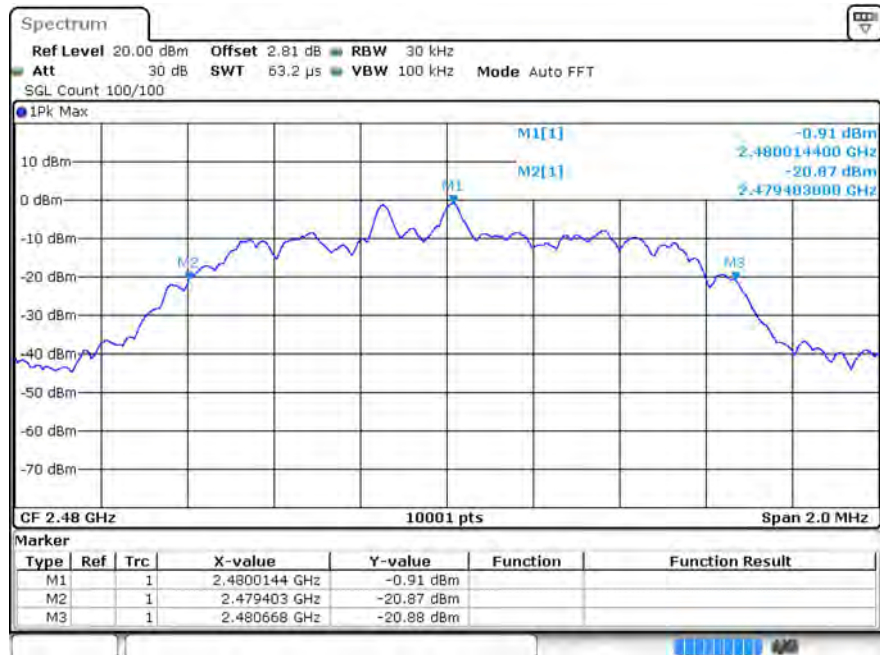
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.867	Not Specified	Pass
	MCH	0.935	Not Specified	Pass
	HCH	0.989	Not Specified	Pass
$\pi/4$ DQPSK	LCH	1.225	Not Specified	Pass
	MCH	1.239	Not Specified	Pass
	HCH	1.265	Not Specified	Pass

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	1.001	0.623	Pass
$\pi/4$ DQPSK	MCH	1	0.826	Pass

4.2 Test Graphs

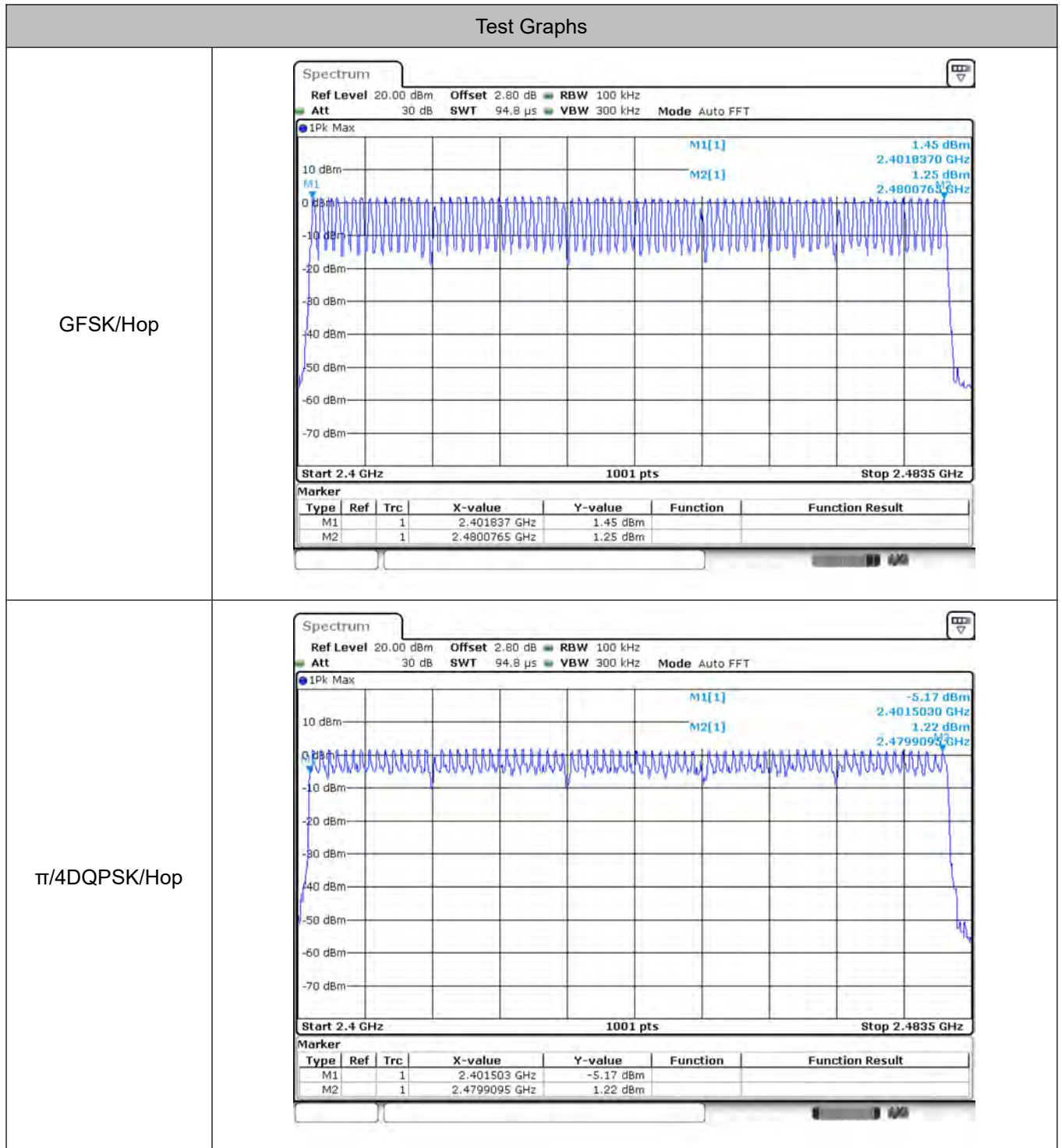


5 Hopping Channel Number

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

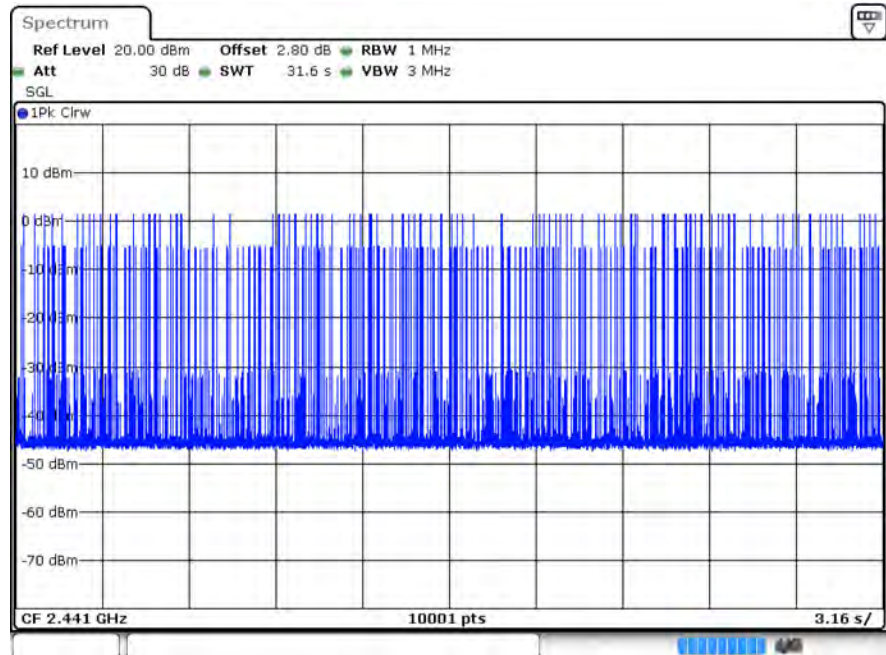
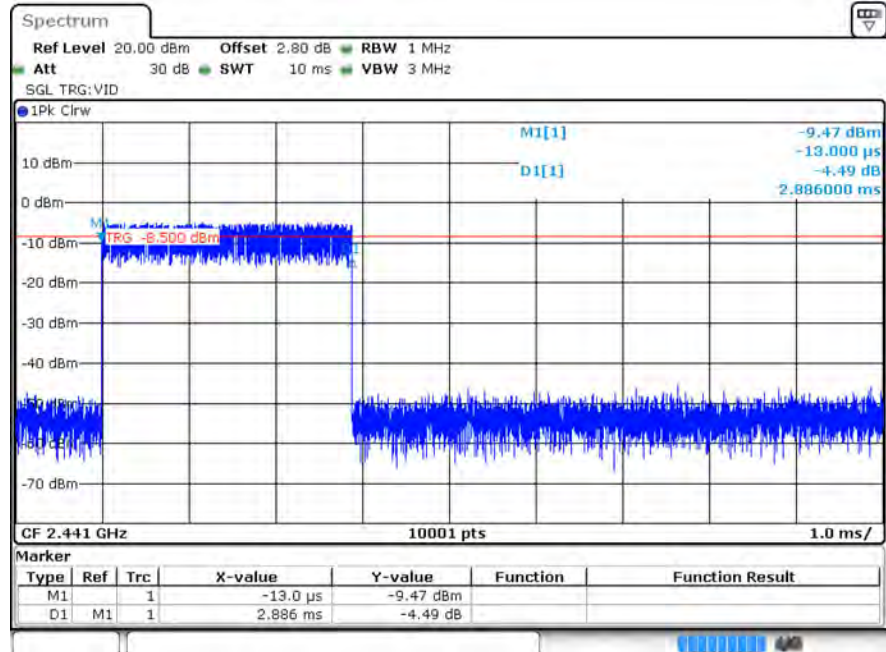
6.1 Test Result

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[ms]	Limit [s]	Verdict
GFSK	DH5	MCH	2.886	122	352.092	0.4	Pass
$\pi/4$ DQPSK	2DH5	MCH	2.892	104	300.768	0.4	Pass

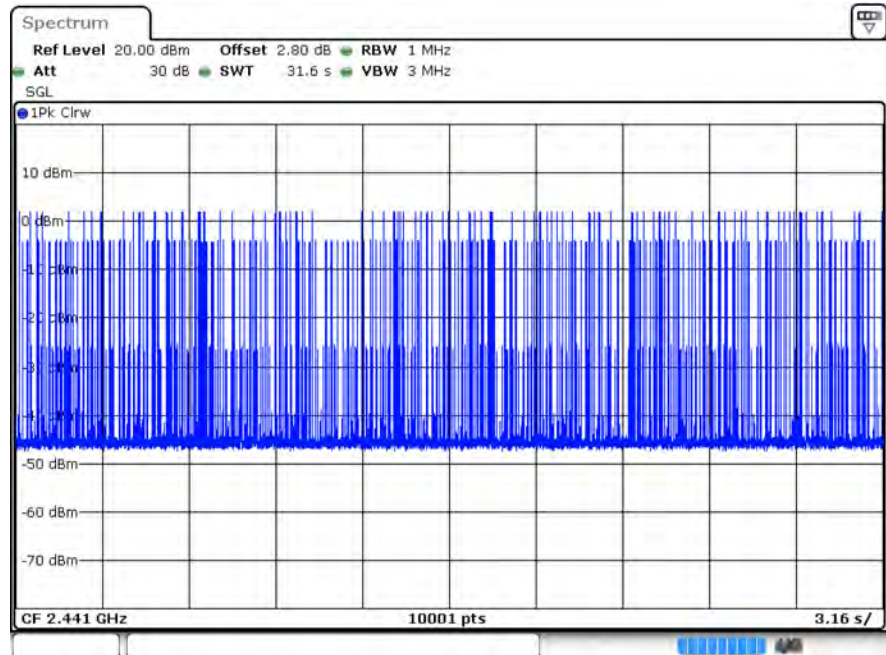
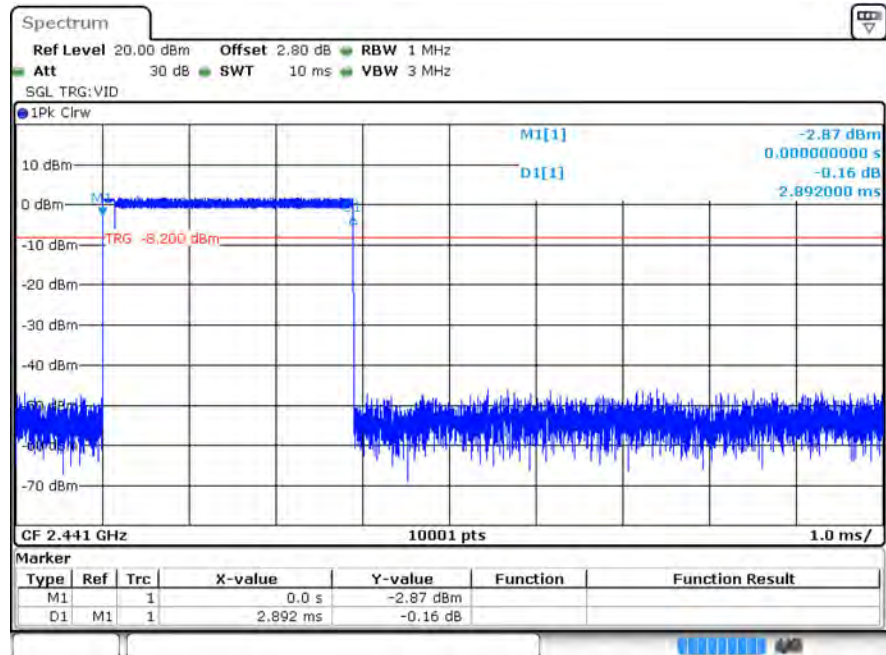
6.2 Test Graphs

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	-43.46	-20	Pass
	MCH	-42.89	-20	Pass
	HCH	-42.77	-20	Pass
$\pi/4$ DQPSK	LCH	-41.76	-20	Pass
	MCH	-41.75	-20	Pass
	HCH	-42.82	-20	Pass

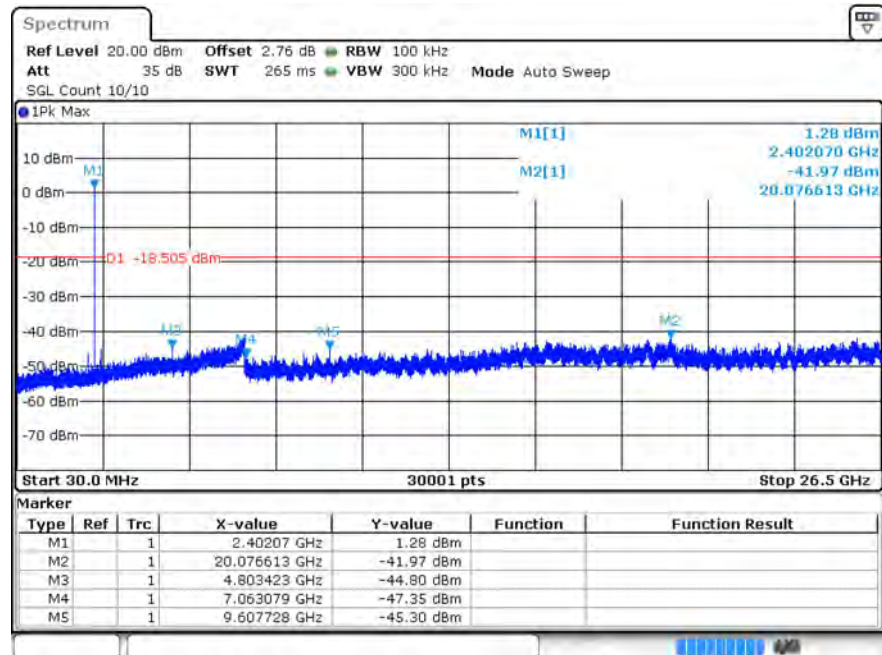
7.2 Test Graphs

GFSK_LCH_Graphs

Pref



Puw

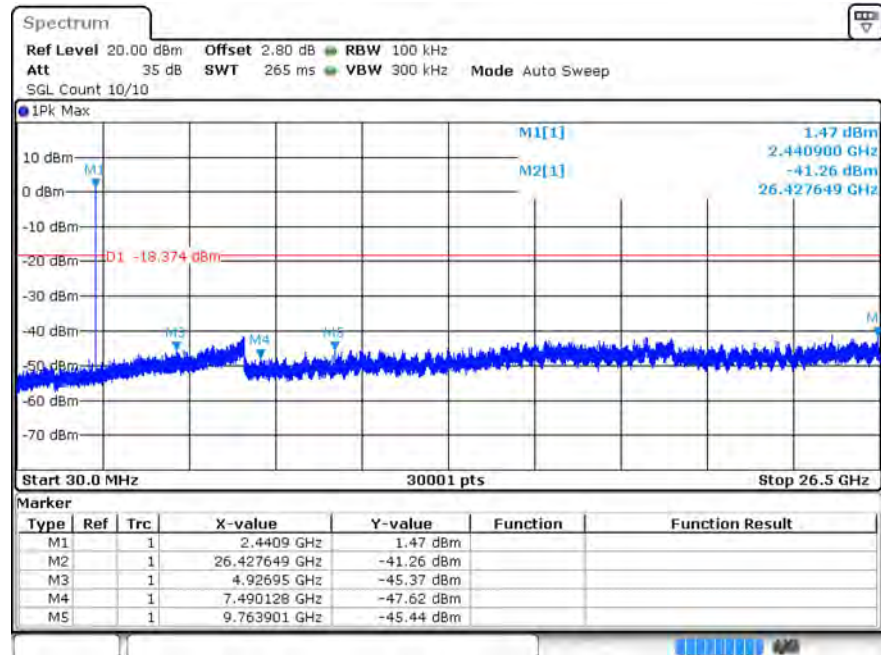


GFSK_MCH_Graphs

Pref



Puw

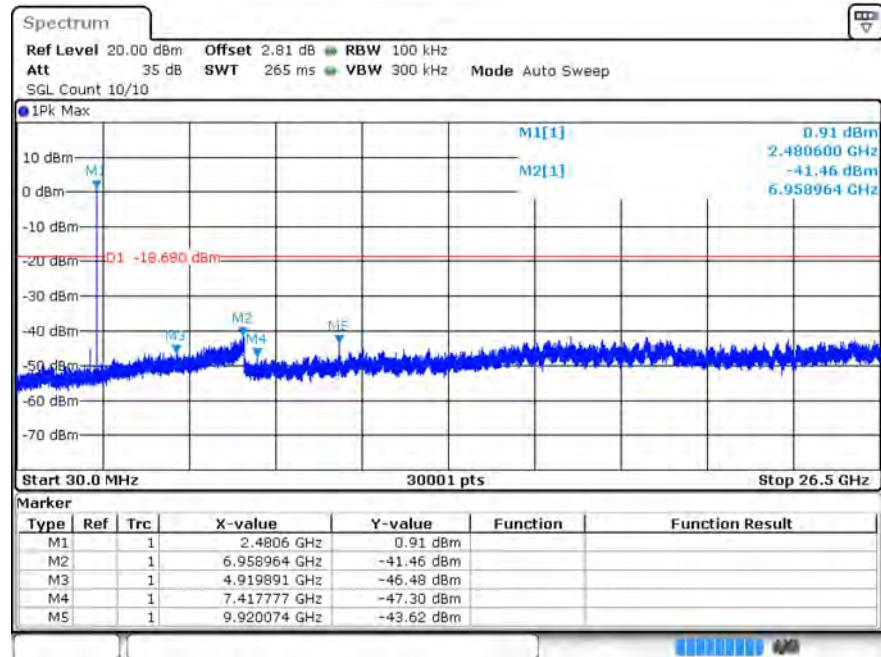


GFSK_HCH_Graphs

Pref



Puw

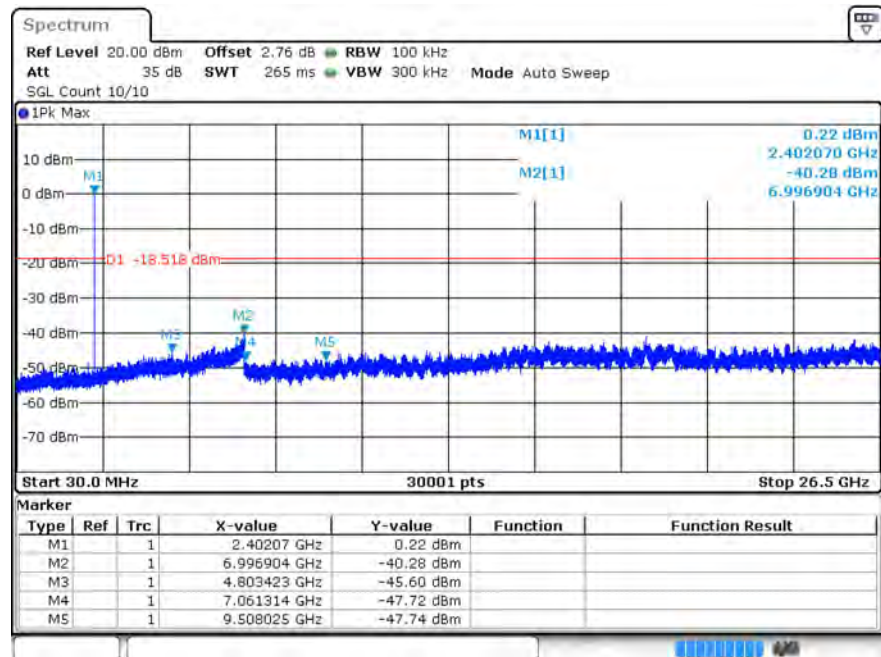


$\pi/4$ DQPSK_LCH_Graphs

Pref

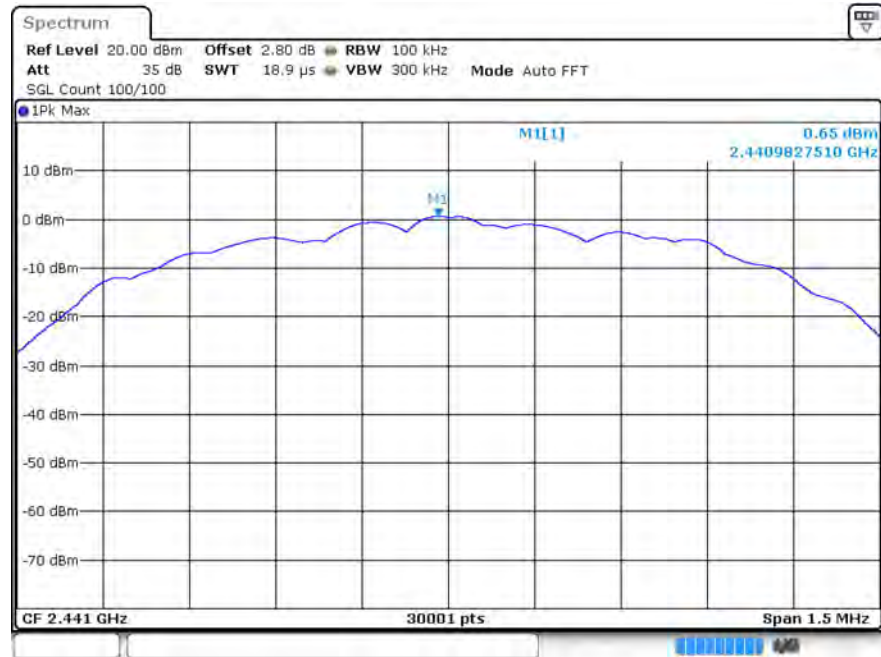


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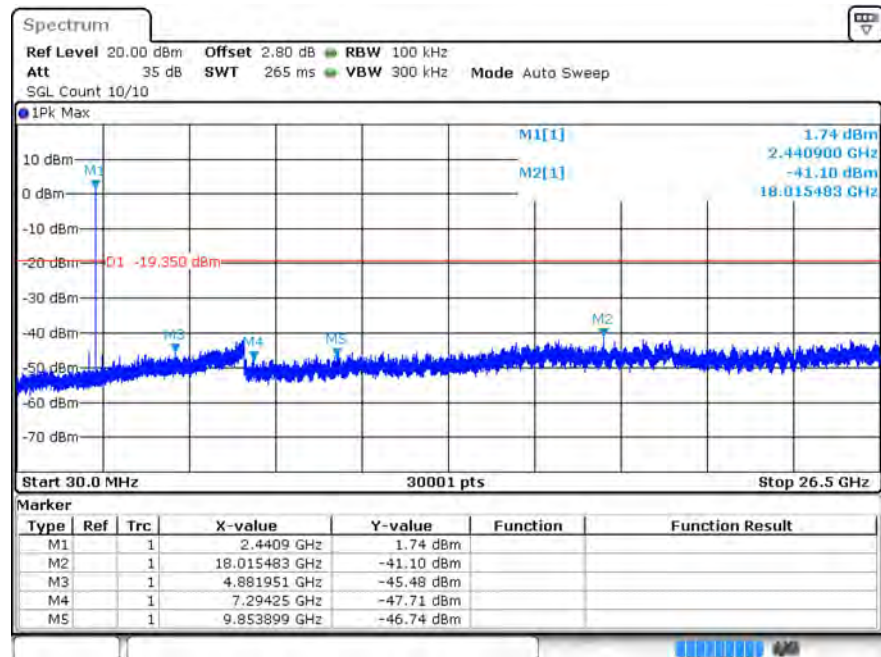


$\pi/4$ DQPSK_MCH_Graphs

Pref



Puw

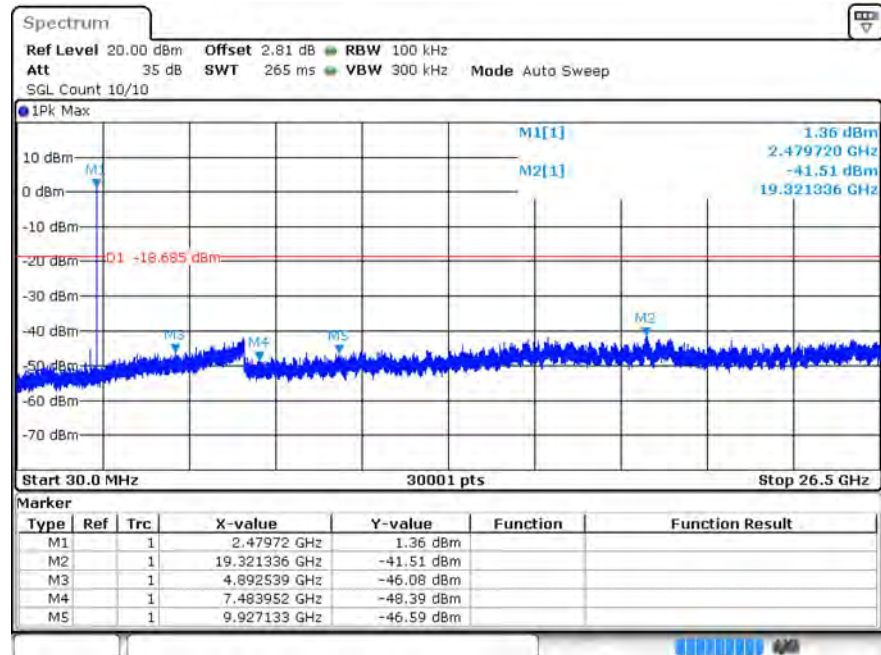


$\pi/4$ DQPSK_HCH_Graphs

Pref



Puw

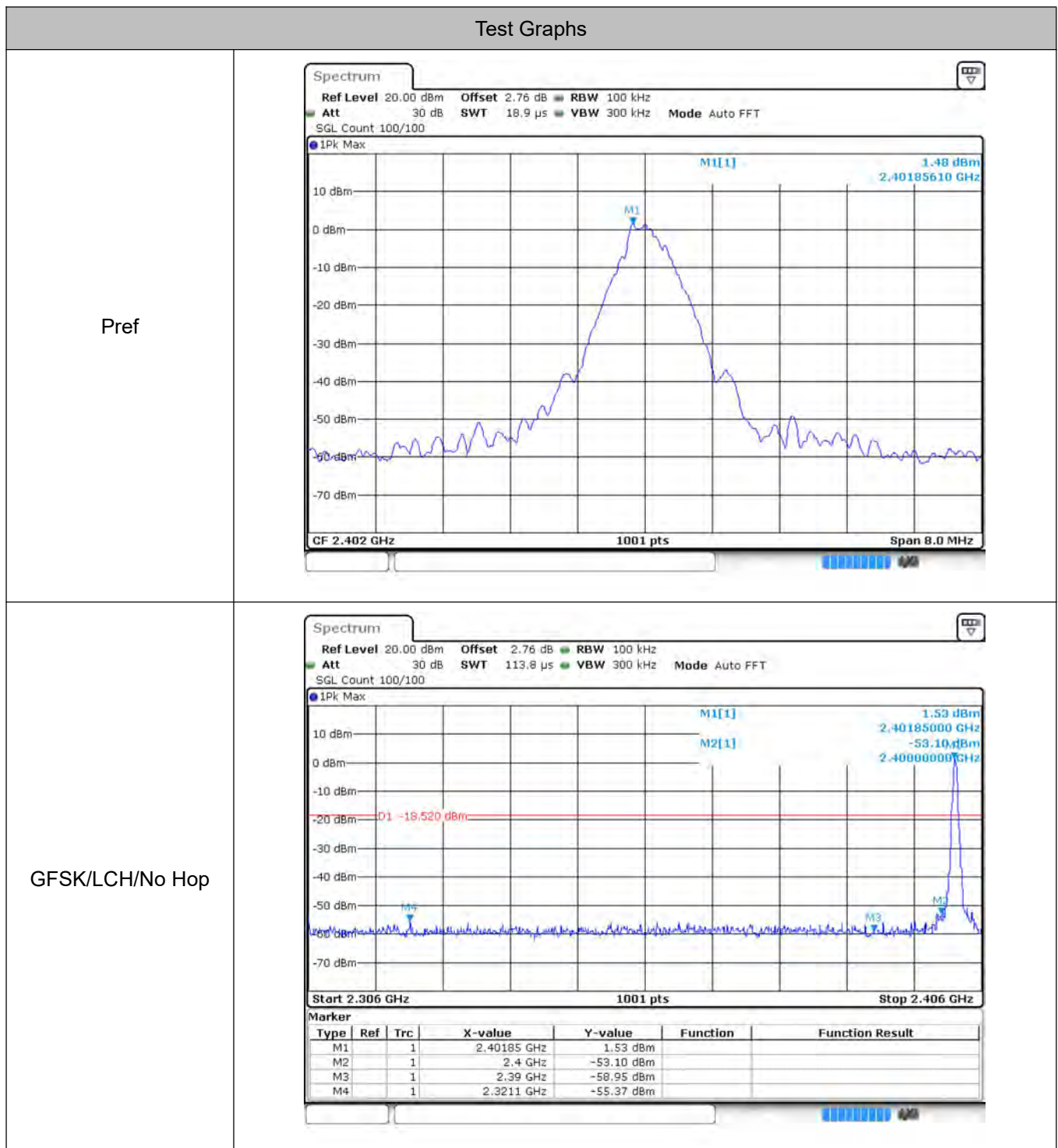


8 Band-edge for RF Conducted Emissions

8.1 Test Result

Mode	Channel	Carrier Frequency [MHz]	Frequency Hopping	Max Spurious Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	2402	Off	-56.85	-20	Pass
			On	-52.53	-20	Pass
	HCH	2480	Off	-57.8	-20	Pass
			On	-52.13	-20	Pass
$\pi/4$ DQPSK	LCH	2402	Off	-56.94	-20	Pass
			On	-51.49	-20	Pass
	HCH	2480	Off	-56.6	-20	Pass
			On	-52.35	-20	Pass

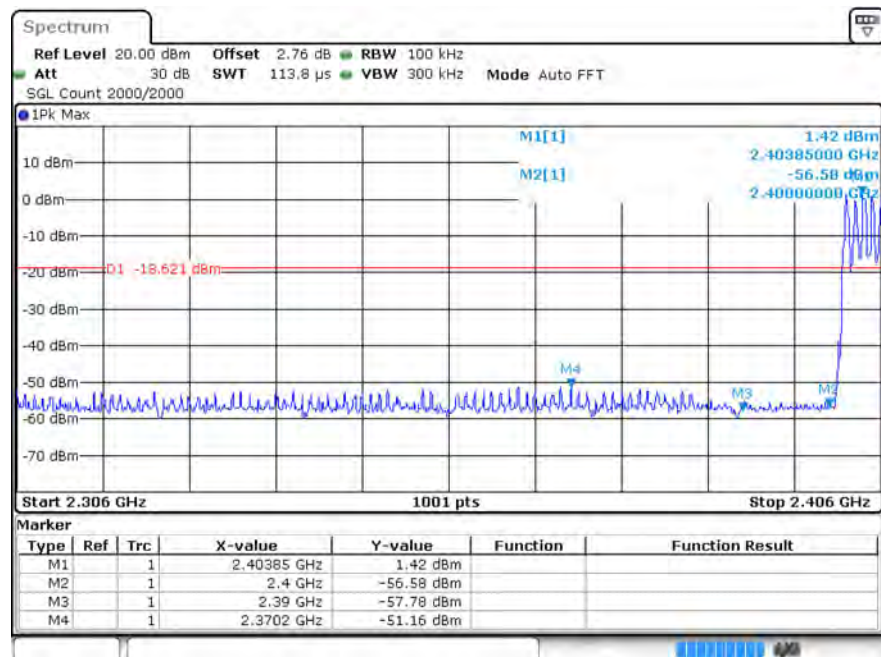
8.2 Test Graphs



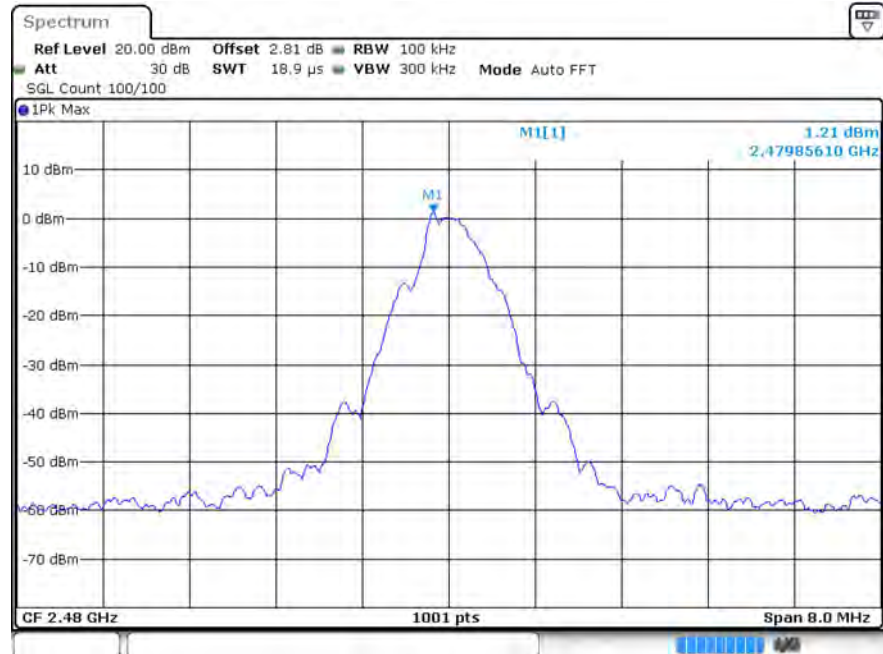
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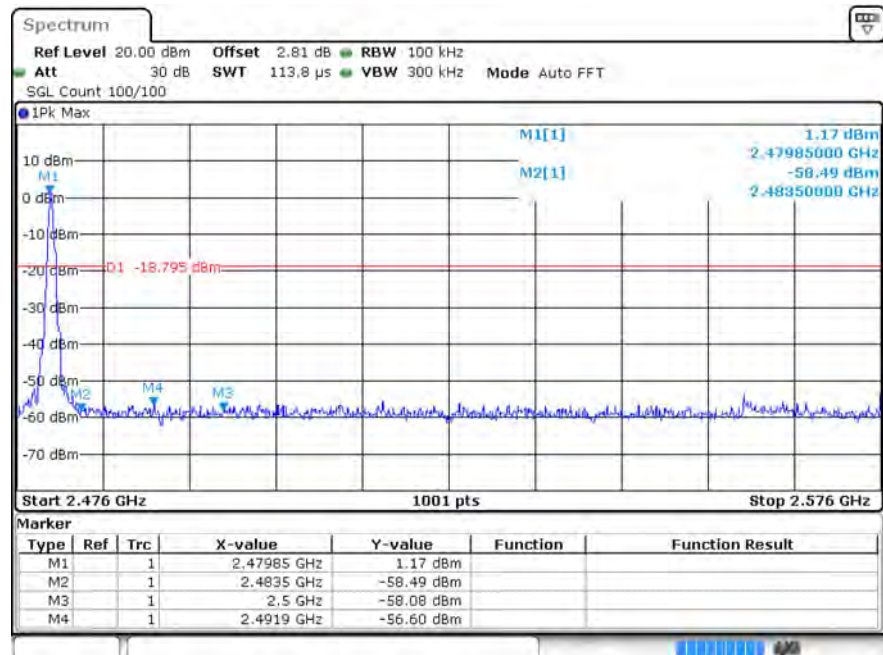
GFSK/LCH/Hop



Ref



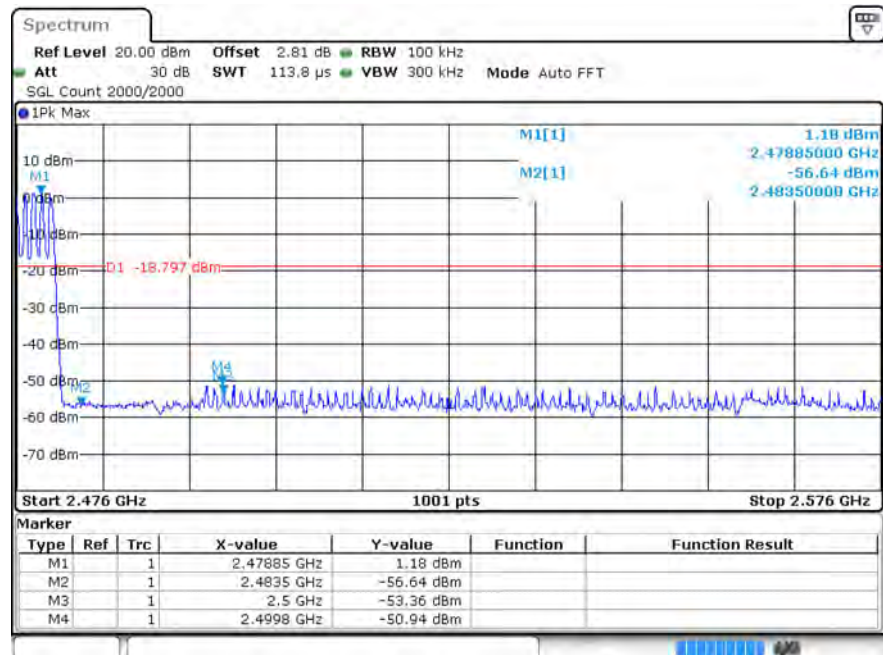
GFSK/HCH/No Hop



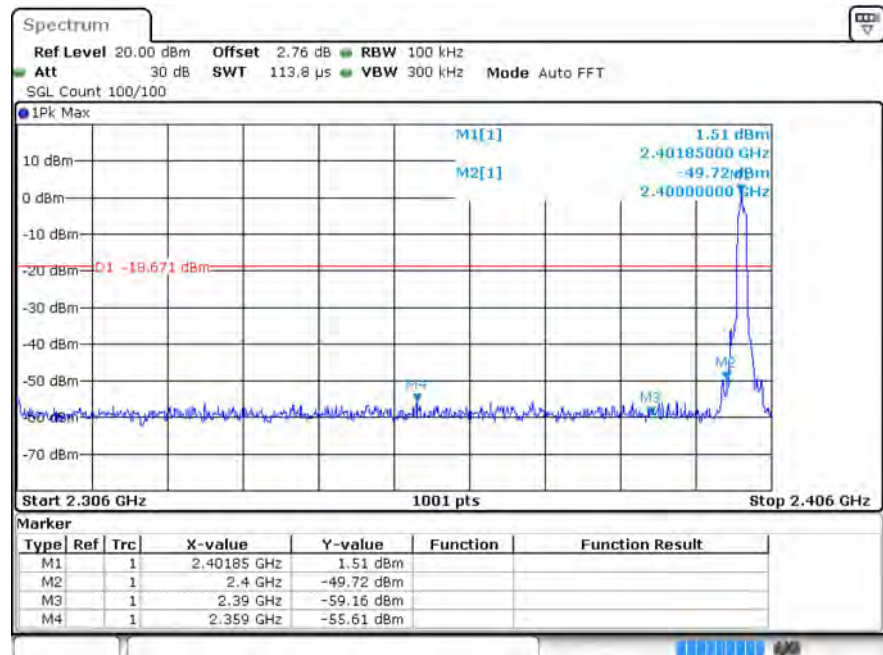
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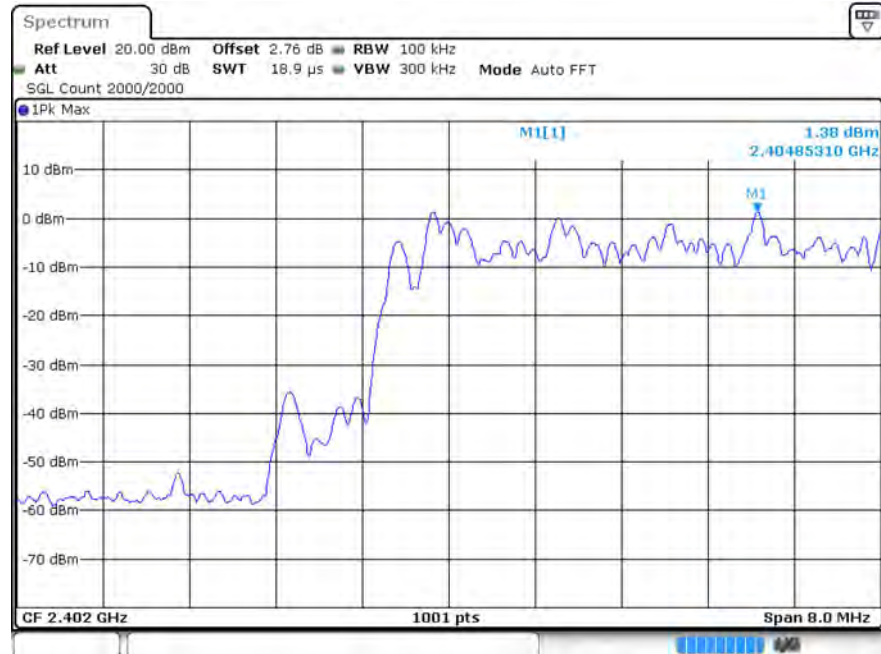
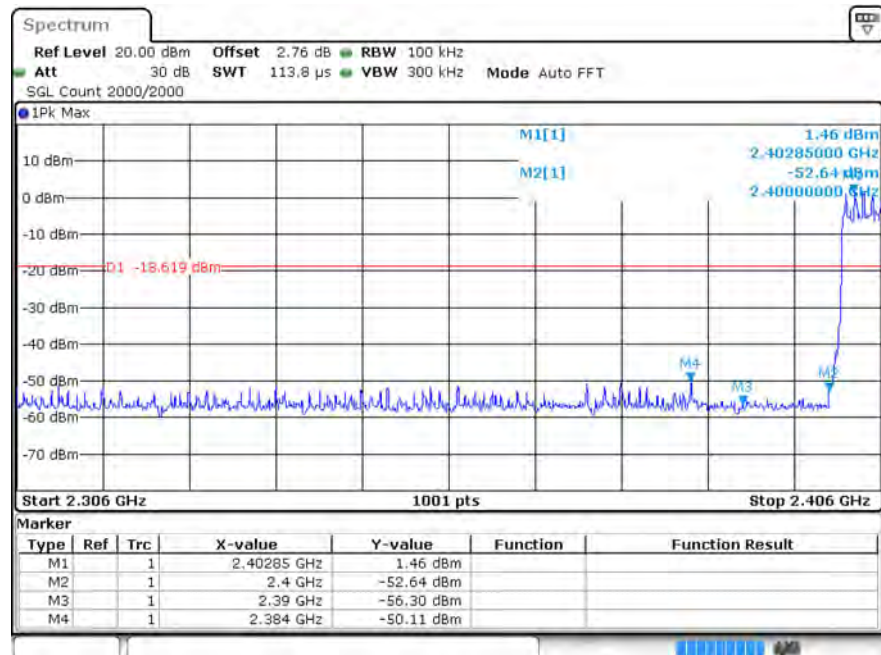
GFSK/HCH/Hop



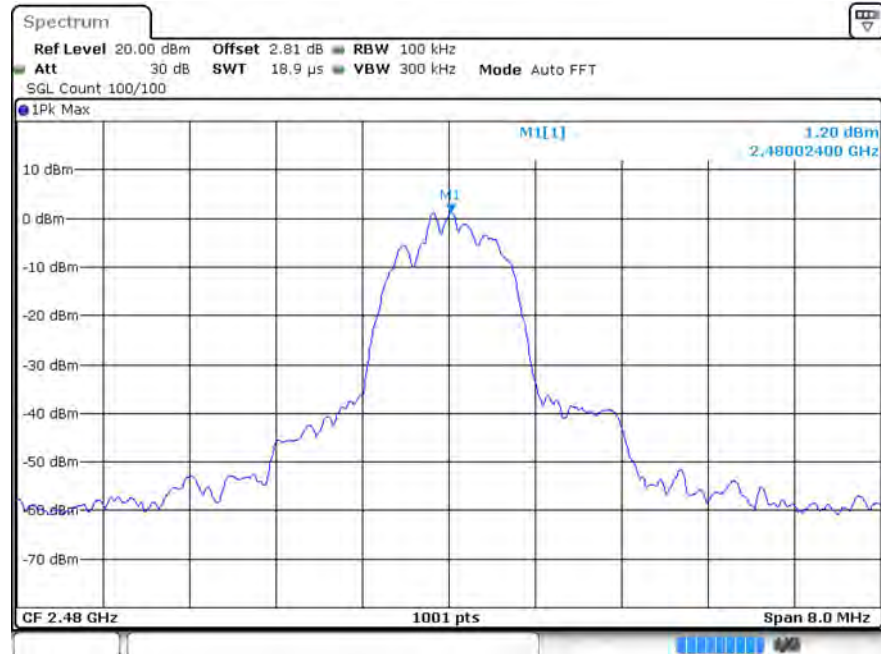
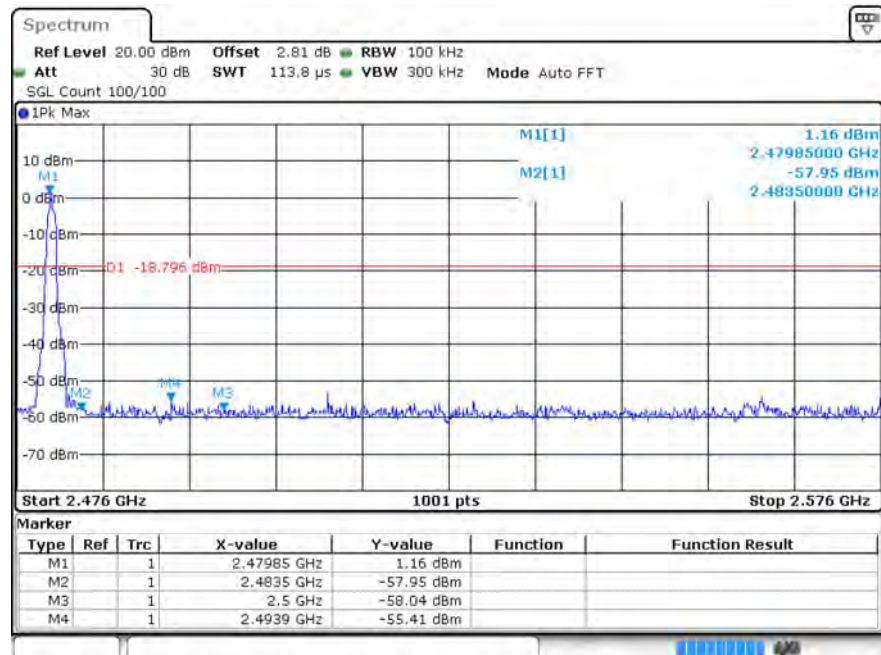
Ref


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


Ref


 $\pi/4$ DQPSK/LCH/Hop


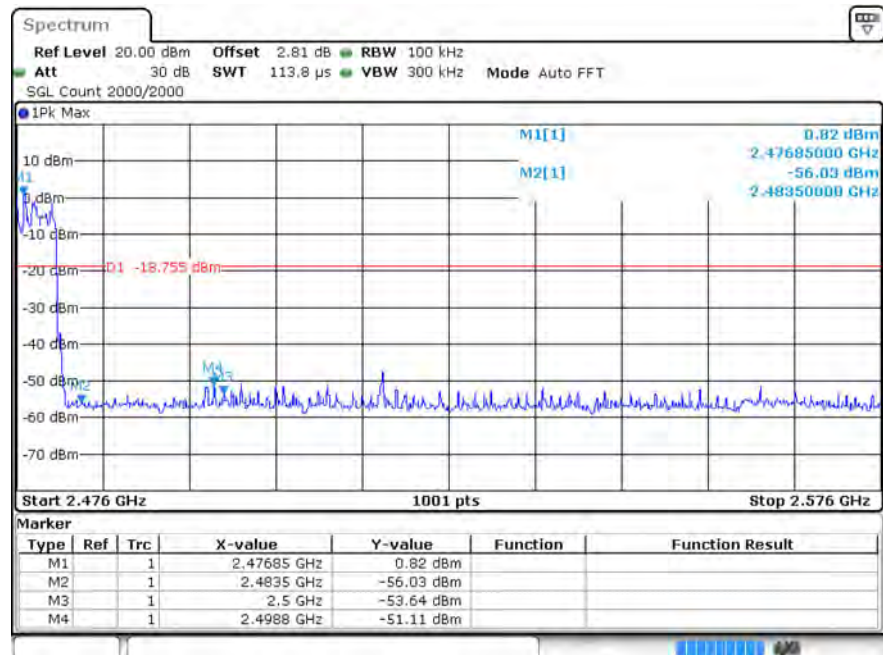
Ref


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


Ref



$\pi/4$ DQPSK/HCH/Hop



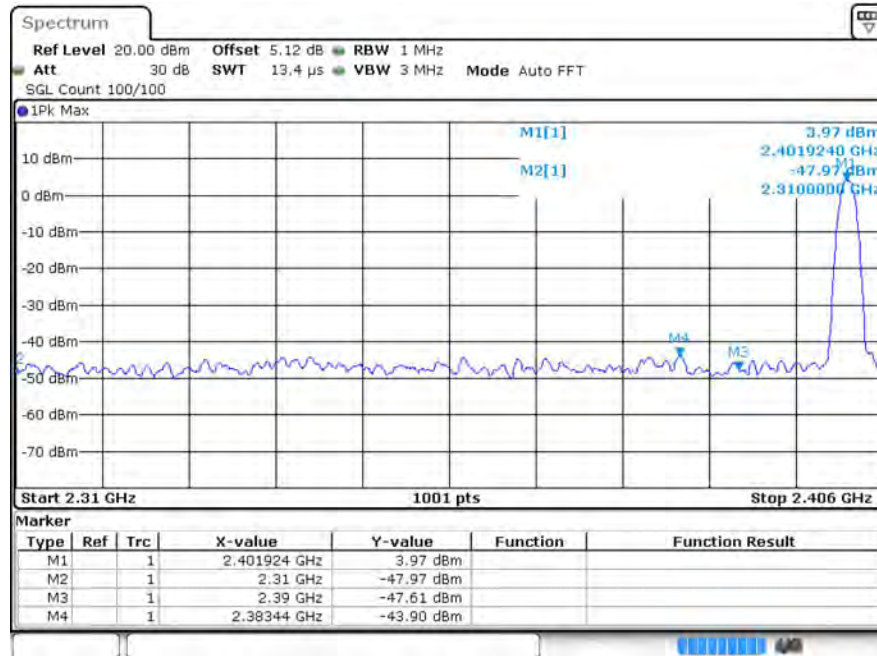
9 Restrict-band band-edge measurements

9.1 Test Result

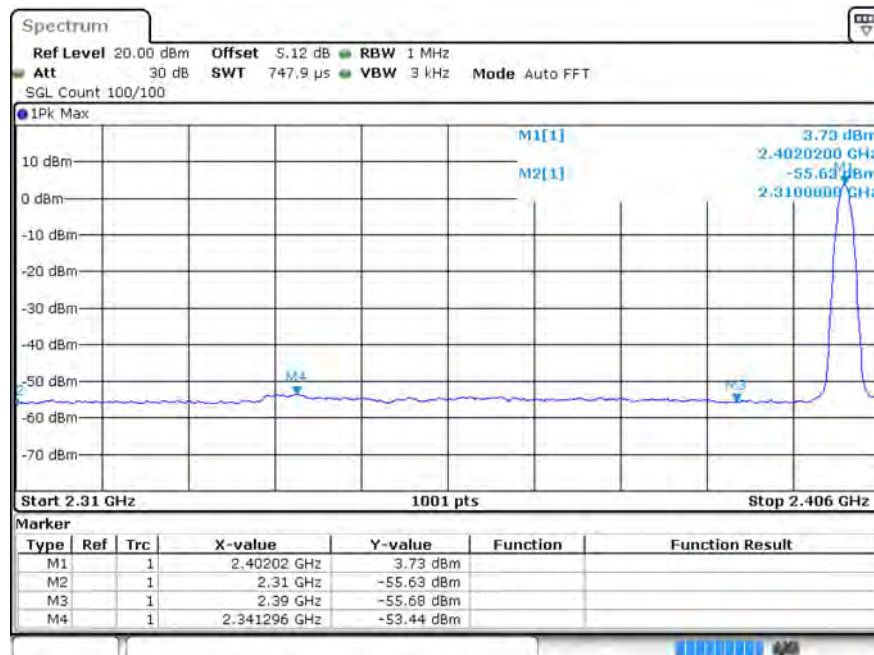
Test Mode	Hopping	Freq.	Power [dBm]	Gain	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-47.97	2.36	49.65	PEAK	74	Pass
	Off	2310.0	-55.63	2.36	41.99	AV	54	Pass
	Off	2383.44	-43.89	2.36	53.73	PEAK	74	Pass
	Off	2341.296	-53.43	2.36	44.19	AV	54	Pass
	Off	2390.0	-47.61	2.36	50.01	PEAK	74	Pass
	Off	2390.0	-55.68	2.36	41.94	AV	54	Pass
	Off	2483.5	-47.59	2.36	50.03	PEAK	74	Pass
	Off	2483.5	-54.88	2.36	42.74	AV	54	Pass
	Off	2499.88	-43.74	2.36	53.88	PEAK	74	Pass
	Off	2497.048	-54.43	2.36	43.19	AV	54	Pass
	Off	2500.0	-43.87	2.36	53.75	PEAK	74	Pass
	Off	2500.0	-55.26	2.36	42.36	AV	54	Pass
$\pi/4$ DQPSK	Off	2310.0	-47.46	2.36	50.16	PEAK	74	Pass
	Off	2310.0	-55.56	2.36	42.06	AV	54	Pass
	Off	2338.704	-43.89	2.36	53.73	PEAK	74	Pass
	Off	2339.088	-53.38	2.36	44.24	AV	54	Pass
	Off	2390.0	-46.69	2.36	50.93	PEAK	74	Pass
	Off	2390.0	-55.58	2.36	42.04	AV	54	Pass
	Off	2483.5	-48.28	2.36	49.34	PEAK	74	Pass
	Off	2483.5	-54.86	2.36	42.76	AV	54	Pass
	Off	2486.344	-45.12	2.36	52.5	PEAK	74	Pass
	Off	2498.176	-54.38	2.36	43.24	AV	54	Pass
	Off	2500.0	-45.48	2.36	52.14	PEAK	74	Pass
	Off	2500.0	-54.53	2.36	43.09	AV	54	Pass

9.2 Test Graphs

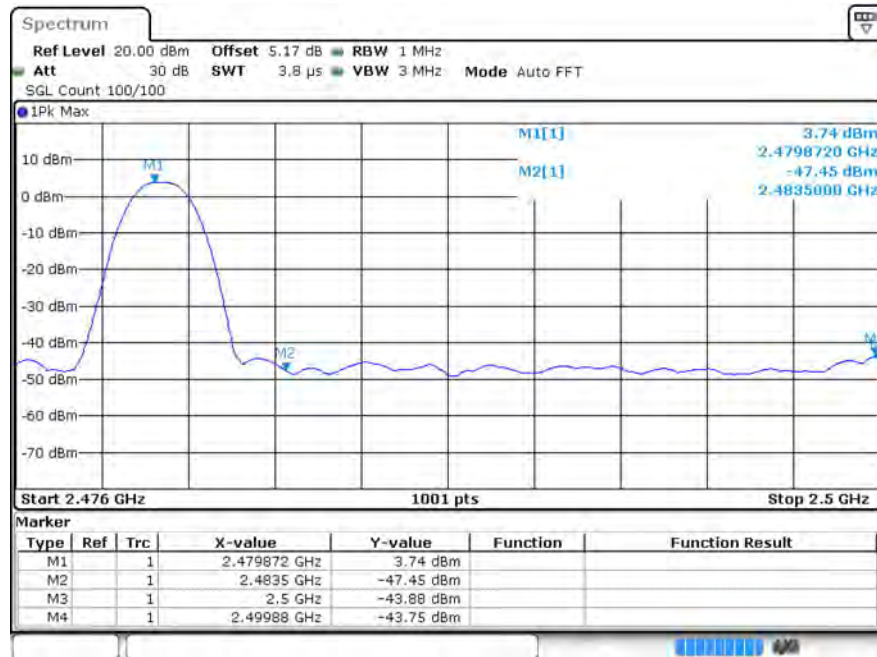
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (Low Channel)



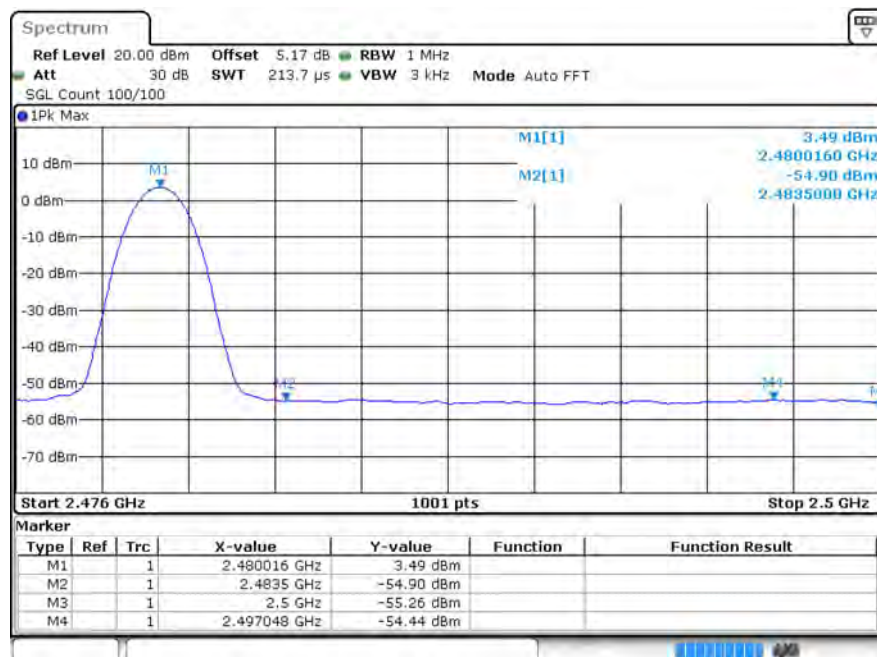
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (Low Channel)



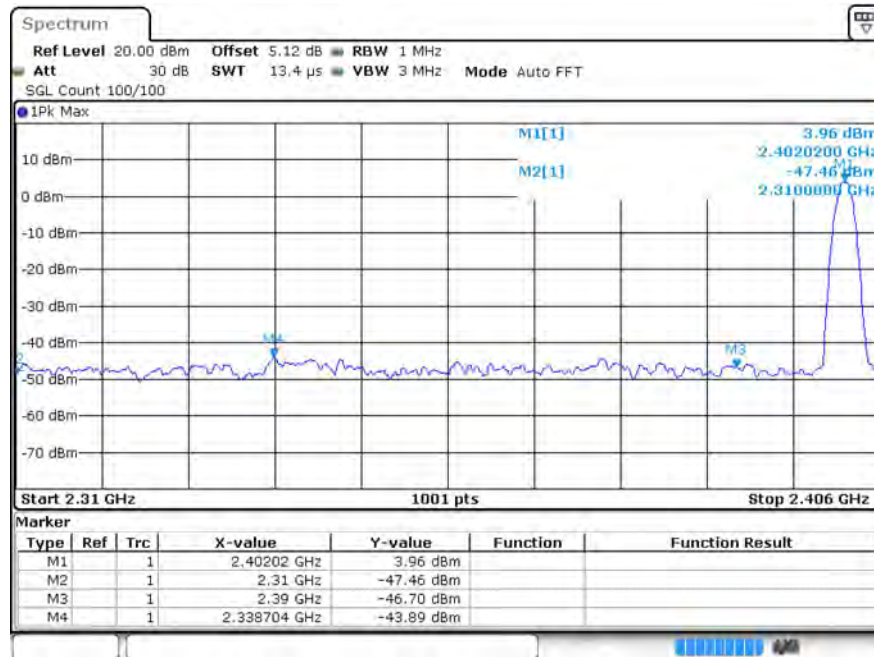
Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (High Channel)



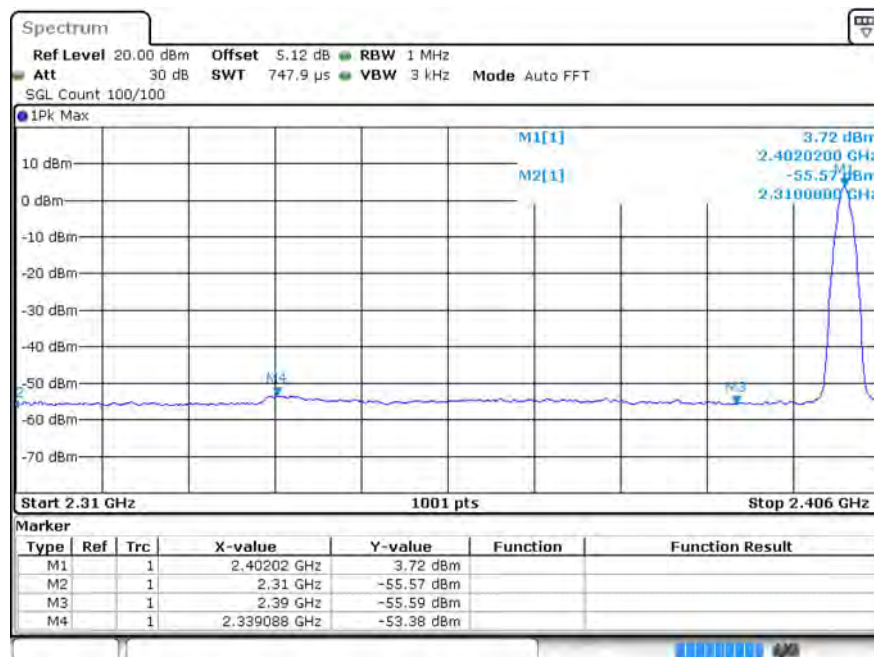
Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (High Channel)



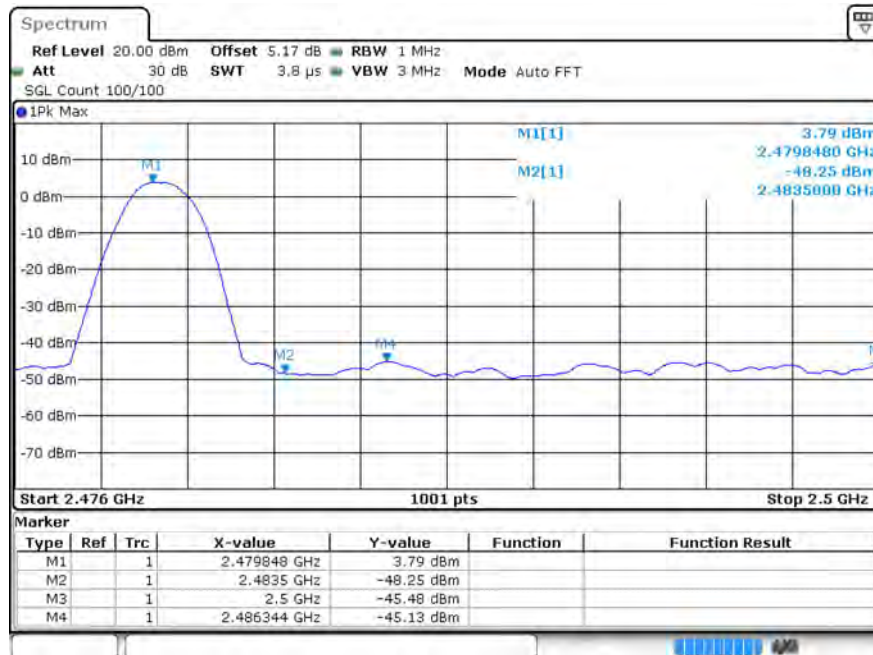
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (Low Channel)



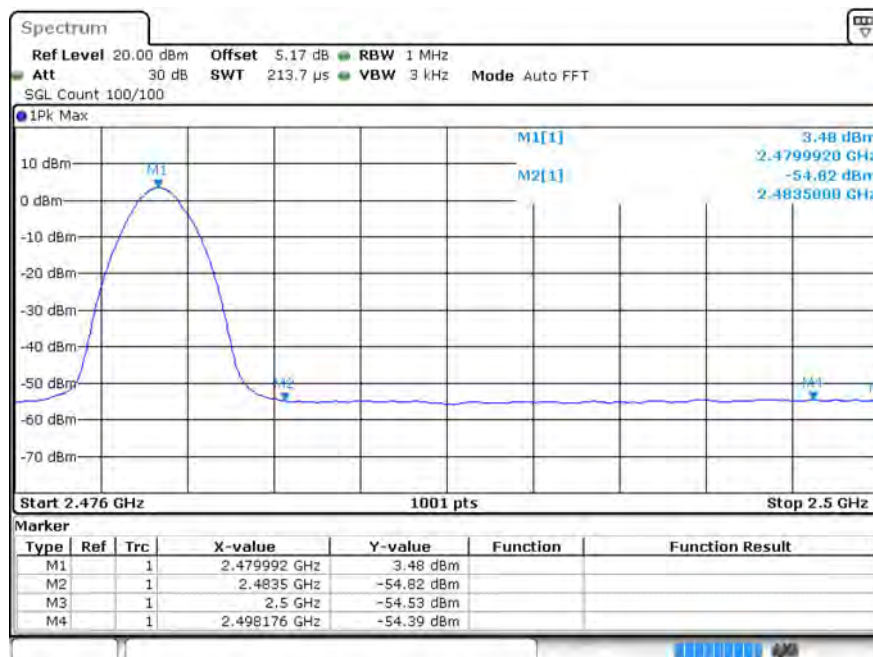
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (Low Channel)



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---