Appendix A

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

Product Name: Electric Balance Bike

Trade Mark: AOKDA

Test Model: AO-K8

Environmental Conditions

Temperature:	25.8℃
Relative Humidity:	52.4%
ATM Pressure:	101Kpa
Test Engineer:	Leon.yi
Supervised by:	Sean She

Contents

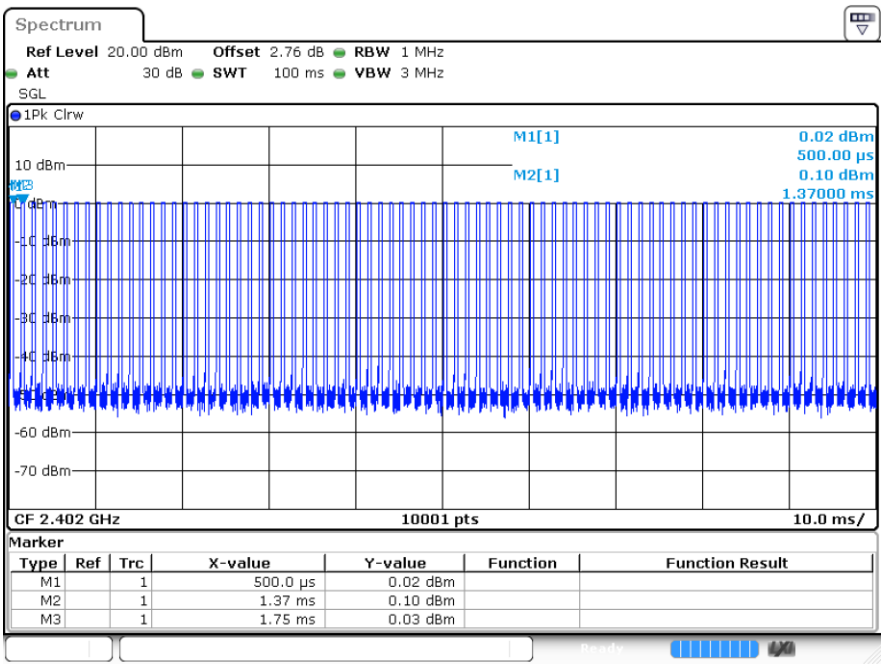
1 Duty Cycle

1.1 Test Result

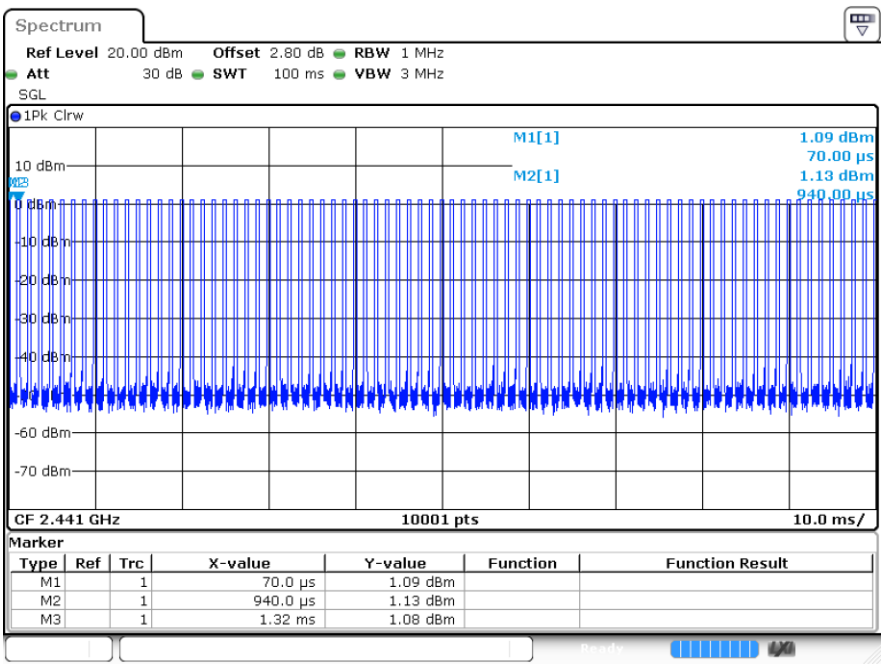
Mode	Frequency (MHz)	Duty Cycle (%)	1/T (kHz)	Factor (dB)
1-DH1	2402	31.2	2.63	5.06
1-DH1	2441	31.21	2.63	5.06
1-DH1	2480	31.43	2.63	5.03
2-DH1	2402	32	2.56	4.95
2-DH1	2441	32.04	2.56	4.94
2-DH1	2480	32	2.56	4.95

1.2 Test Graphs

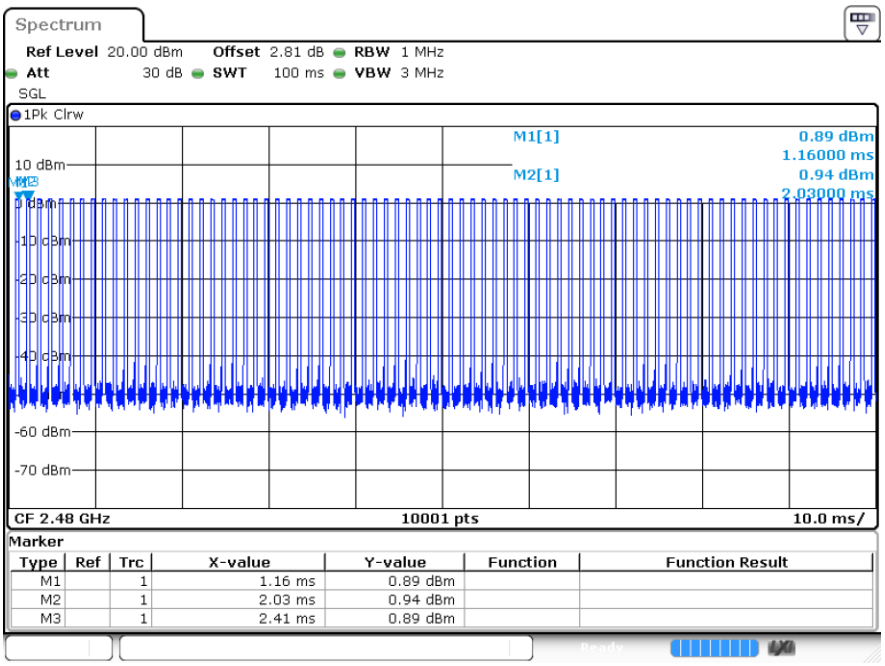
Test Graphs
1-DH1 2402MHz



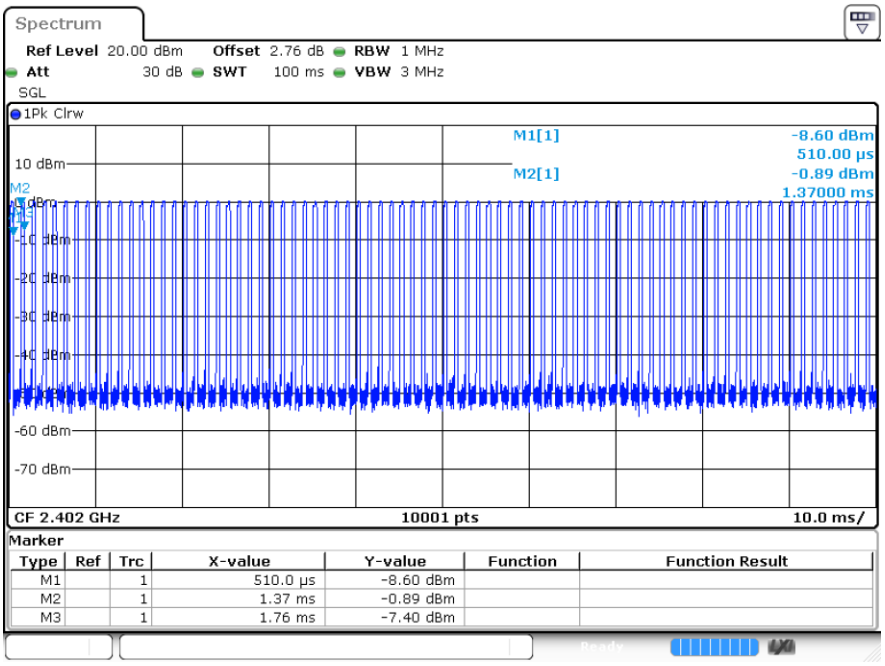
1-DH1 2441MHz



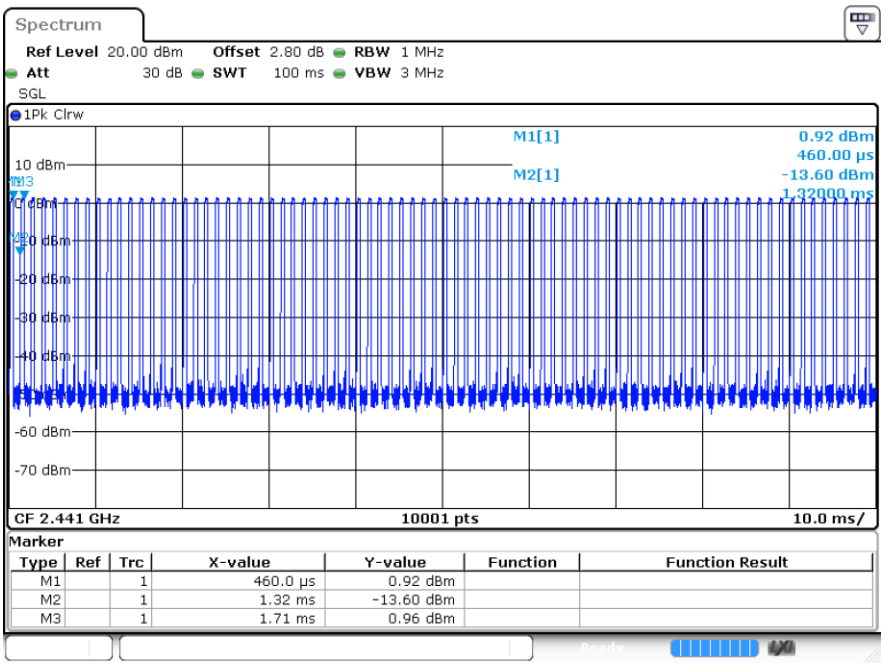
1-DH1 2480MHz



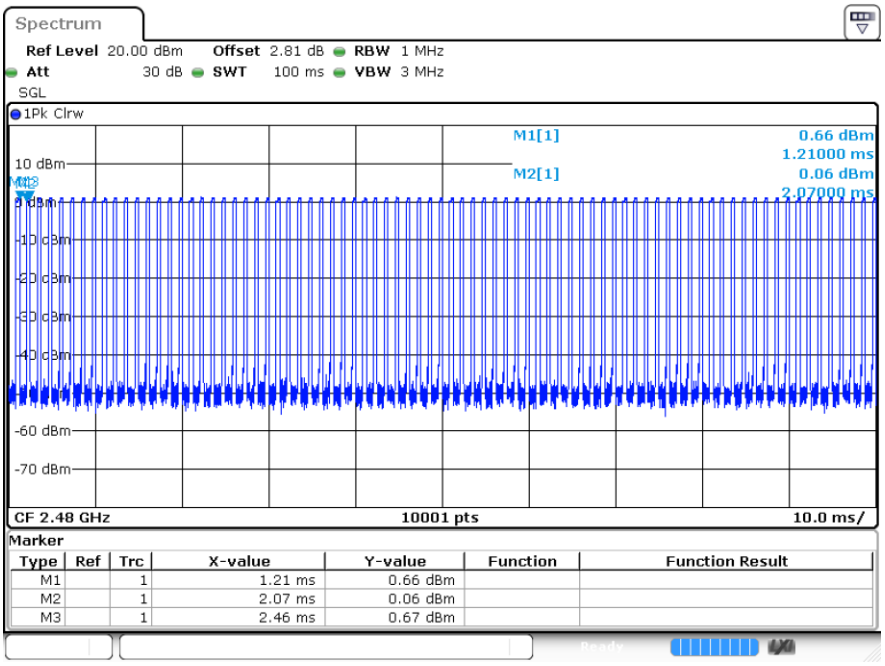
2-DH1 2402MHz



2-DH1 2441MHz



2-DH1 2480MHz

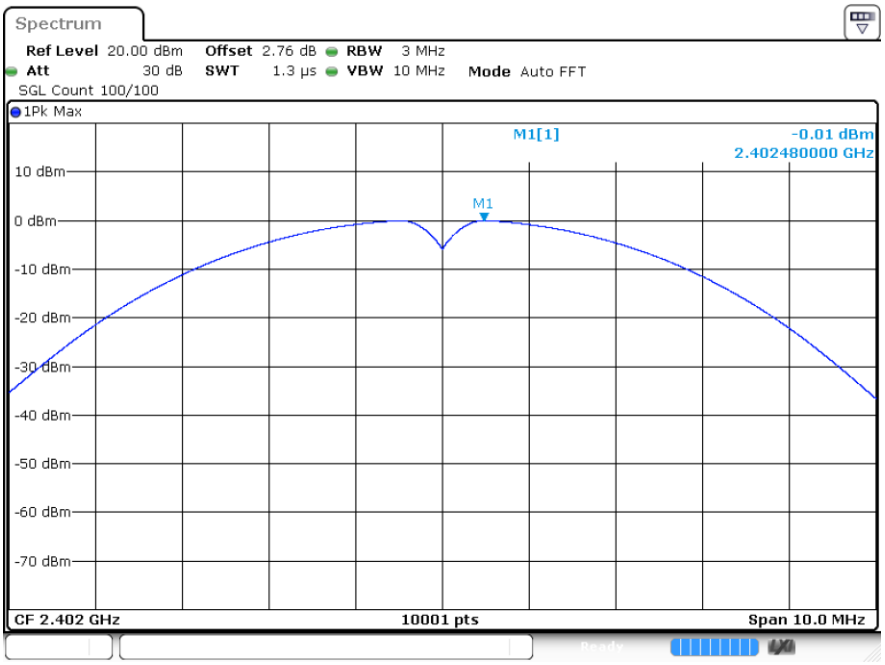
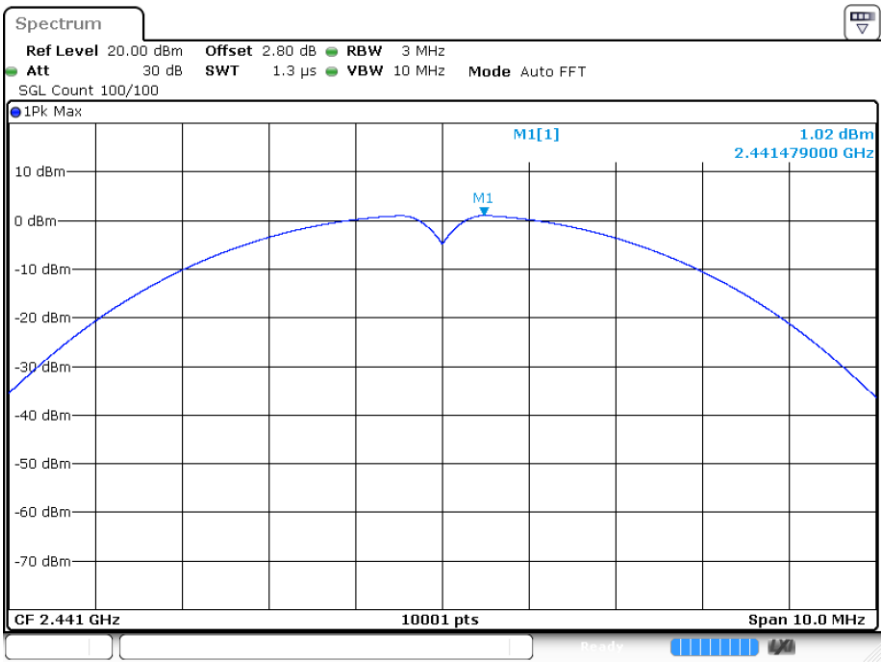


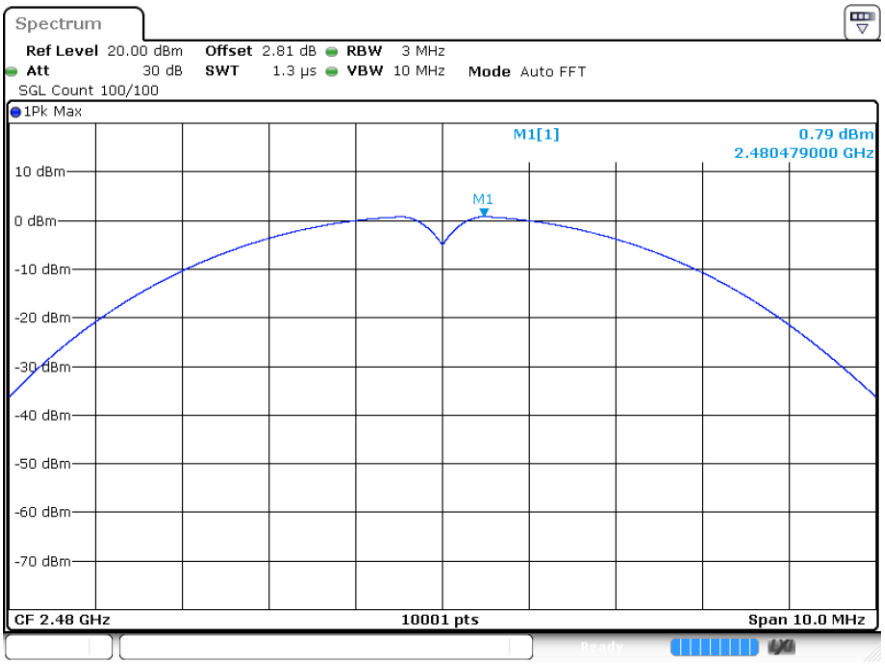
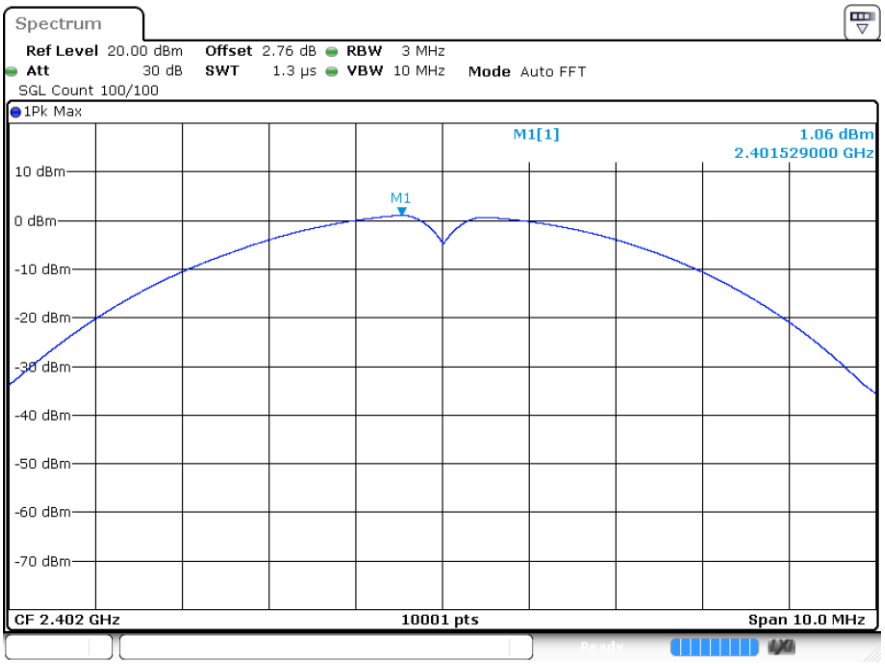
2 Maximum Conducted Peak Output Power

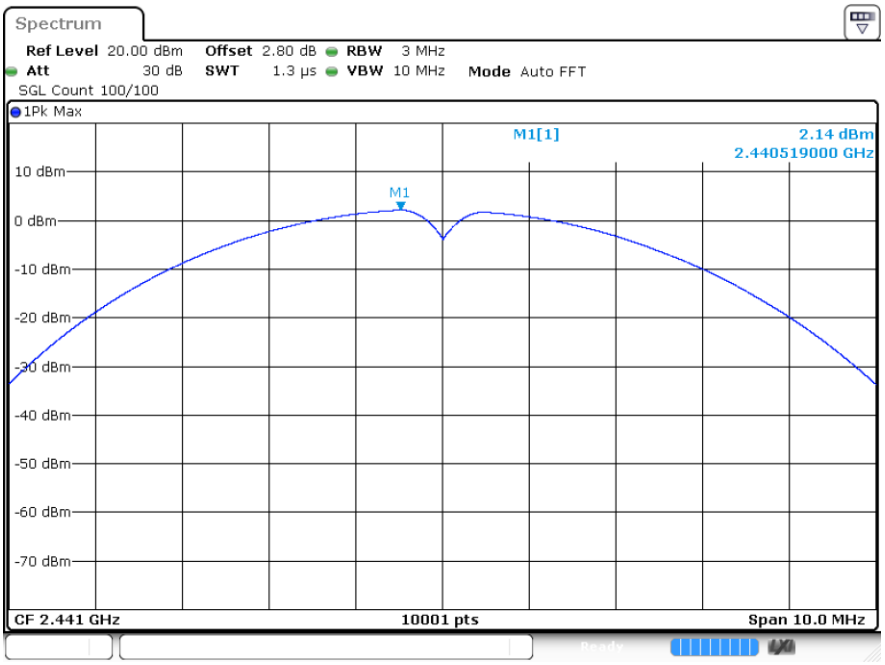
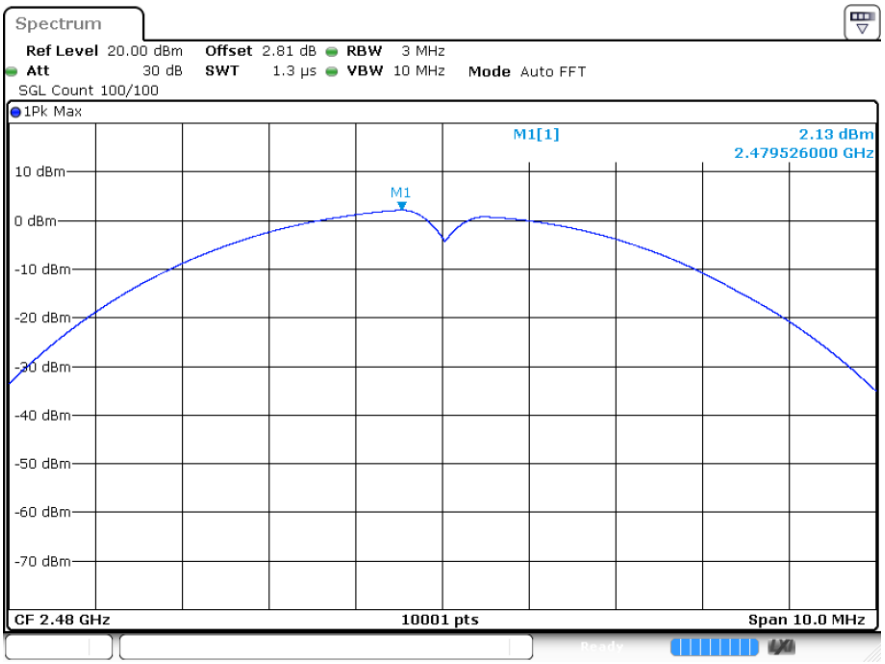
2.1 Test Result

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-0.01	21	Pass
	MCH	1.02	21	Pass
	HCH	0.79	21	Pass
π/4DQPSK	LCH	1.06	21	Pass
	MCH	2.14	21	Pass
	HCH	2.13	21	Pass

2.2 Test Graphs

Test Graphs	
GFSK/LCH	
GFSK/MCH	

GFSK/HCH	
π/4DQPSK/LCH	

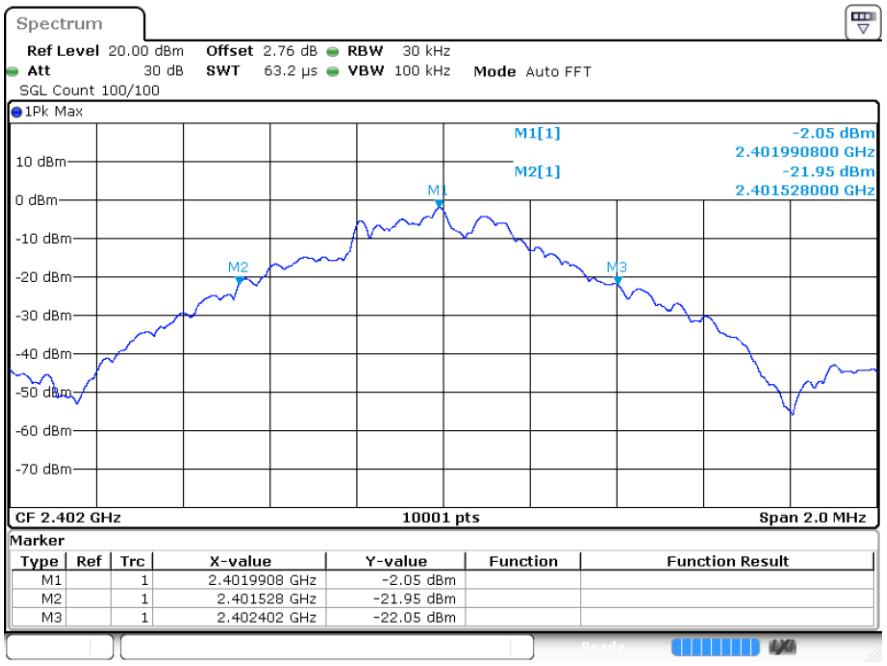
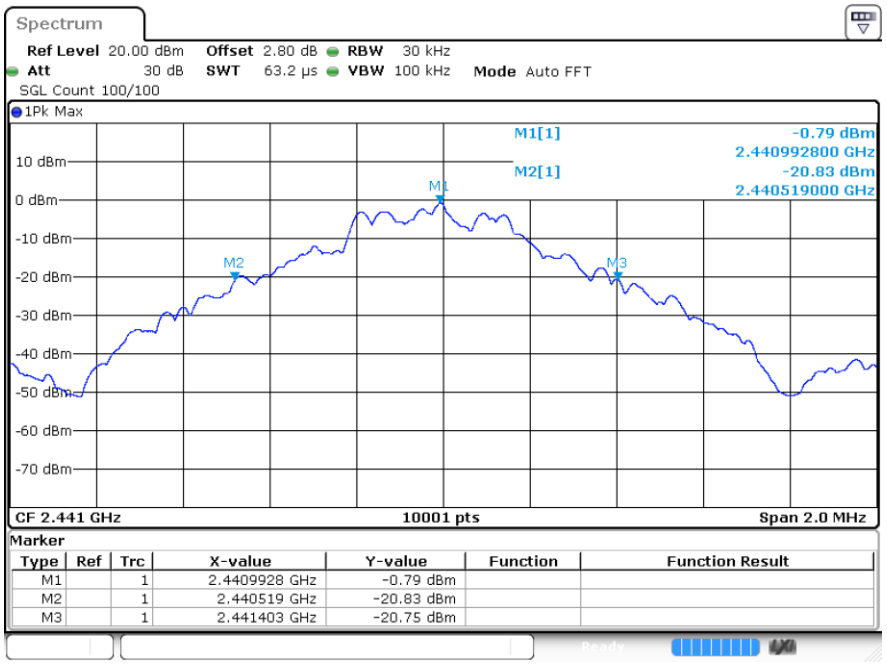
π/4DQPSK/MCH	
π/4DQPSK/HCH	

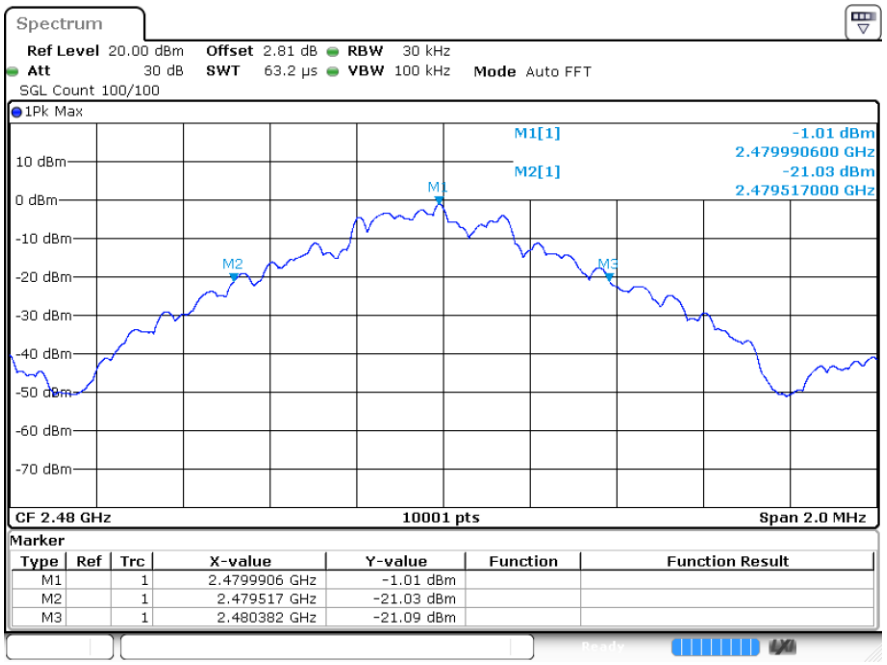
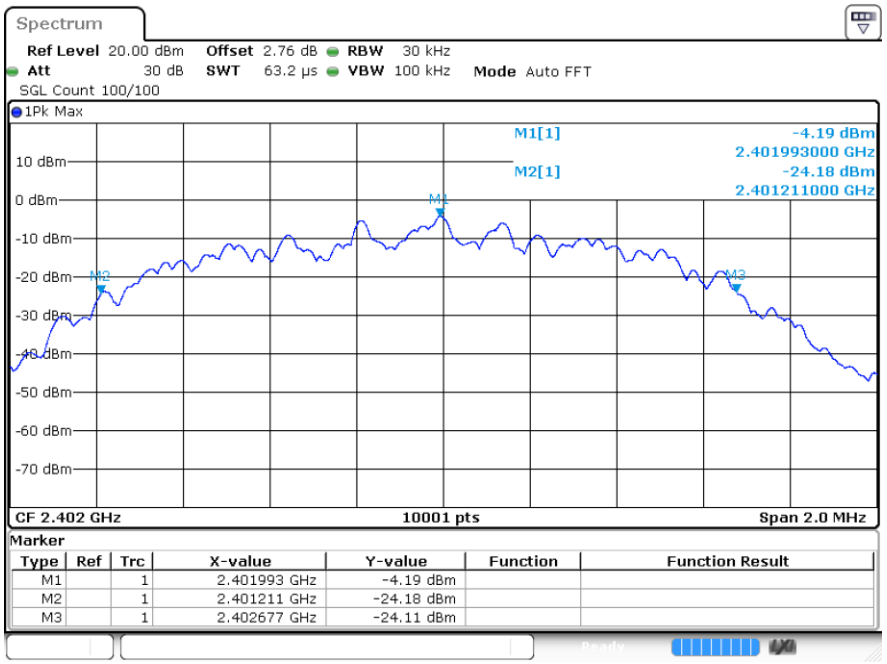
3 20dB Bandwidth

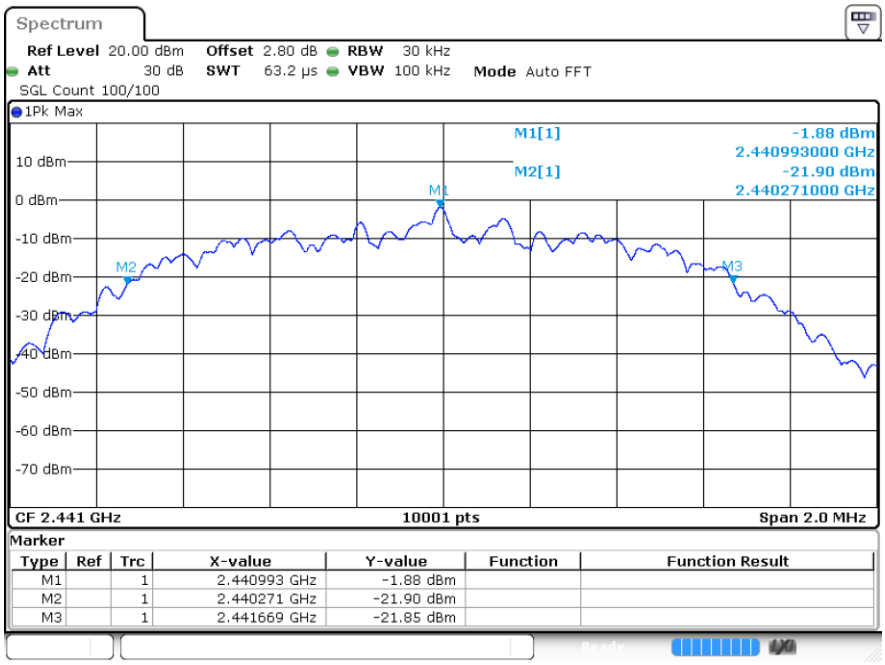
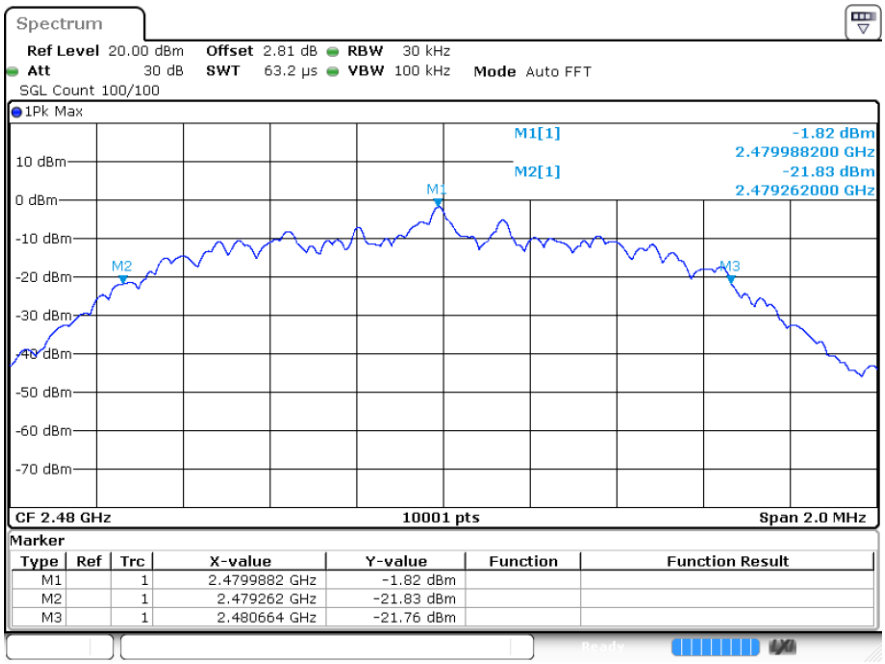
3.1 Test Result

Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.874	Not Specified	Pass
	MCH	0.884	Not Specified	Pass
	HCH	0.864	Not Specified	Pass
π/4DQPSK	LCH	1.466	Not Specified	Pass
	MCH	1.398	Not Specified	Pass
	HCH	1.402	Not Specified	Pass

3.2 Test Graphs

Test Graphs	
GFSK/LCH	
GFSK/MCH	

GFSK/HCH	
π/4DQPSK/LCH	

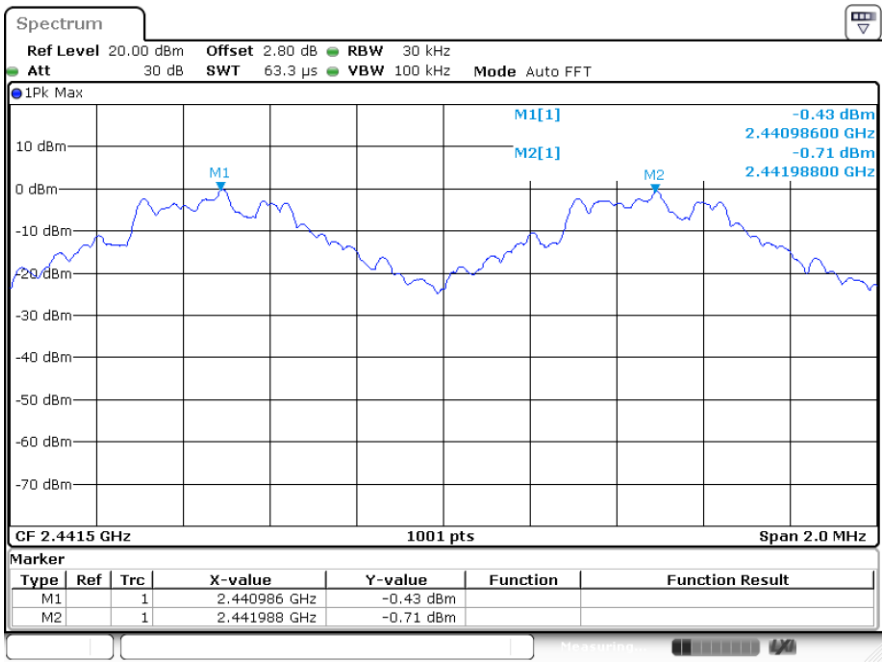
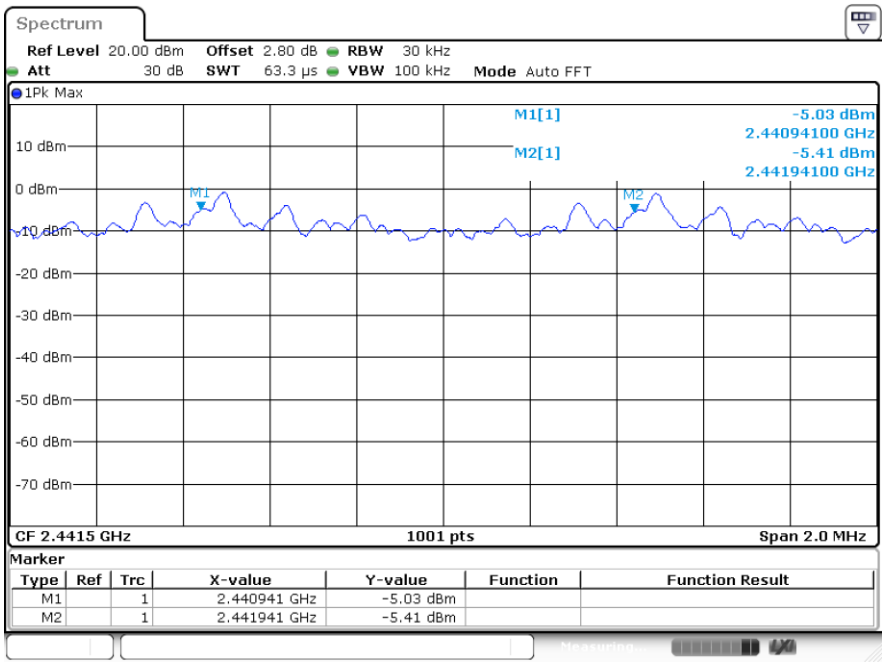
π/4DQPSK/MCH	
π/4DQPSK/HCH	

4 Carrier Frequency Separation

4.1 Test Result

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	MCH	1.002	0.589	Pass
π/4DQPSK	MCH	1	0.932	Pass

4.2 Test Graphs

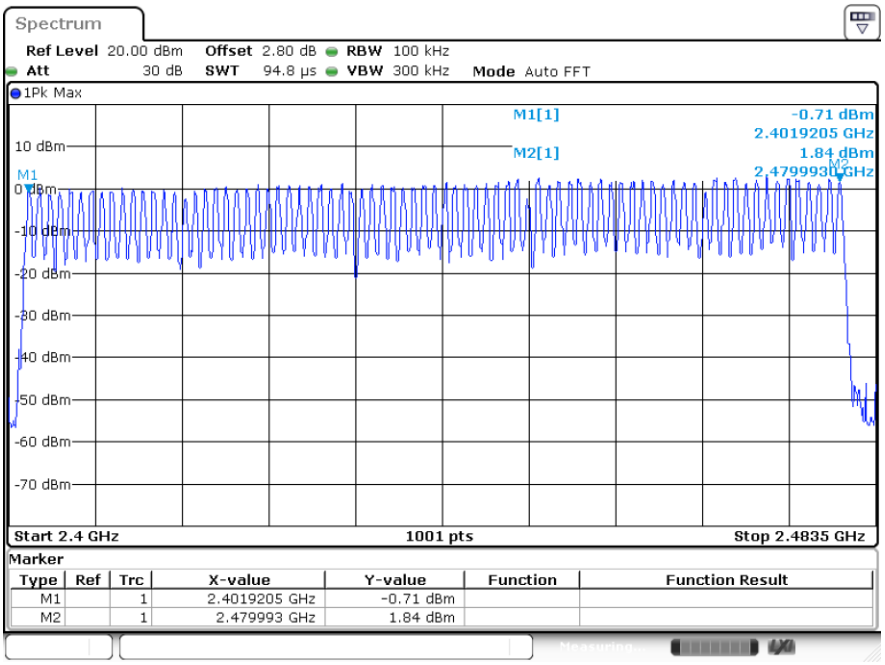
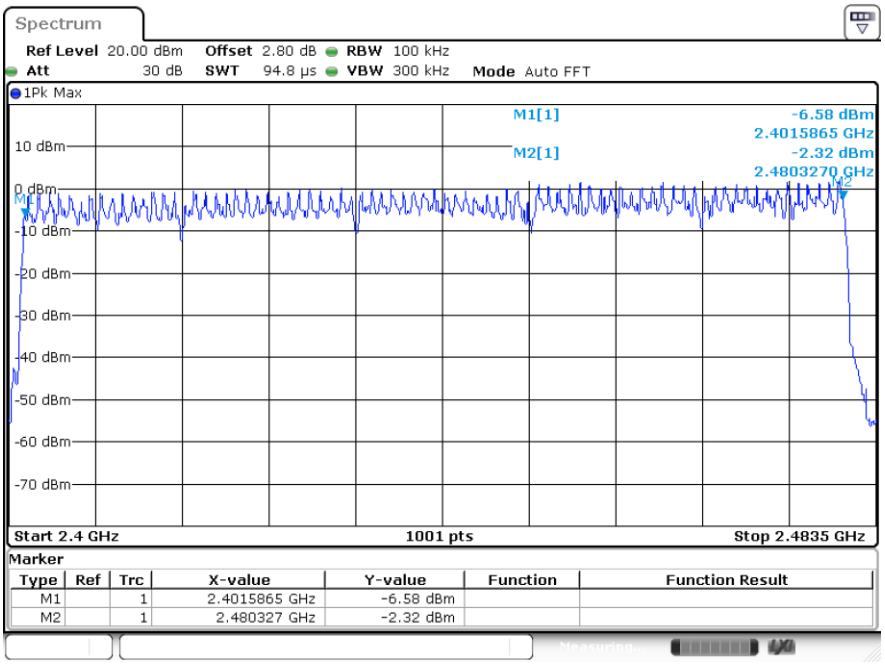
Test Graphs	
GFSK/MCH	
π/4DQPSK/MCH	

5 Hopping Channel Number

5.1 Test Result

Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	>=15	PASS
π/4DQPSK	Hop	79	>=15	PASS

5.2 Test Graphs

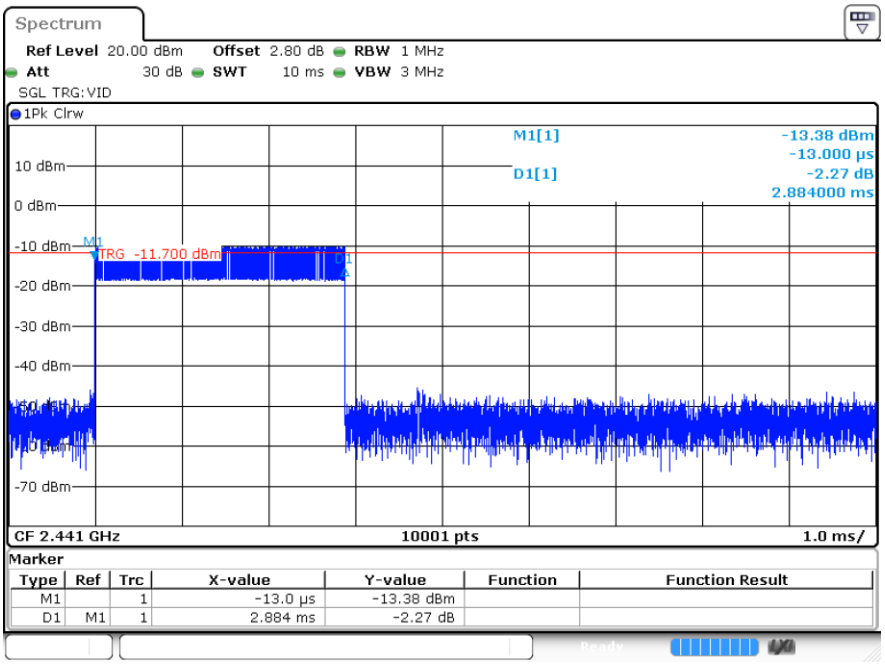
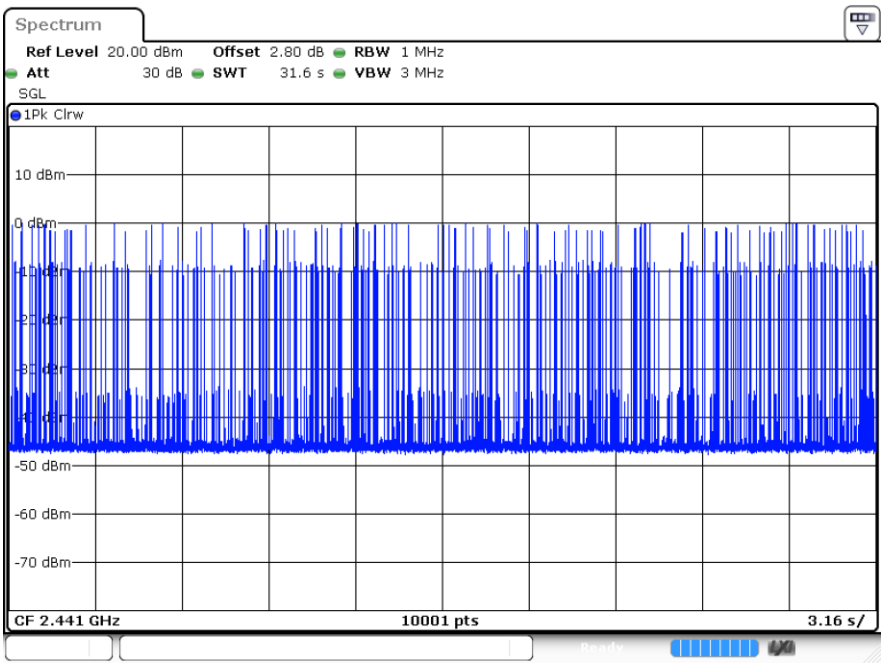
Test Graphs	
GFSK/Hop	
π/4DQPSK/Hop	

6 Dwell Time

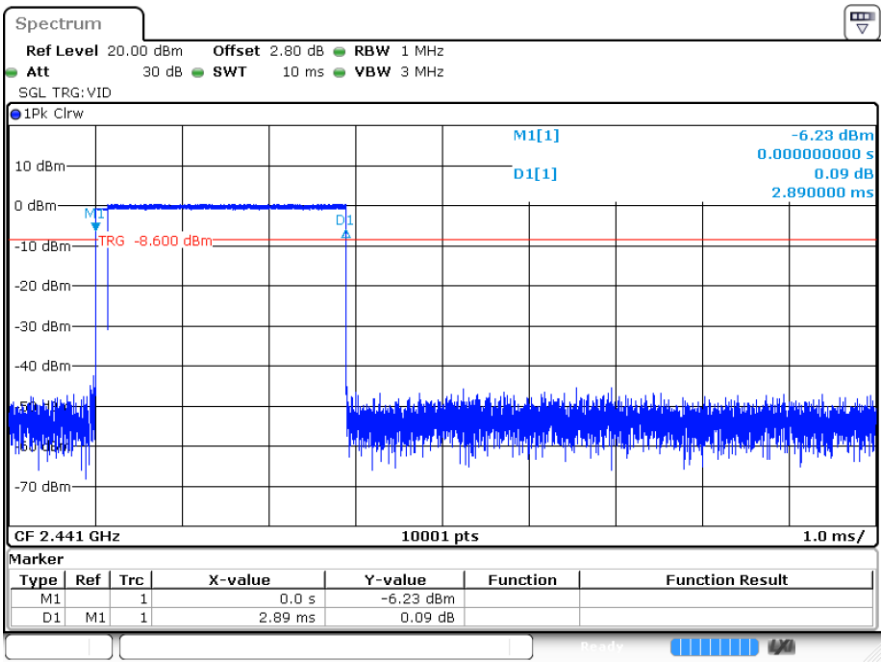
6.1 Test Result

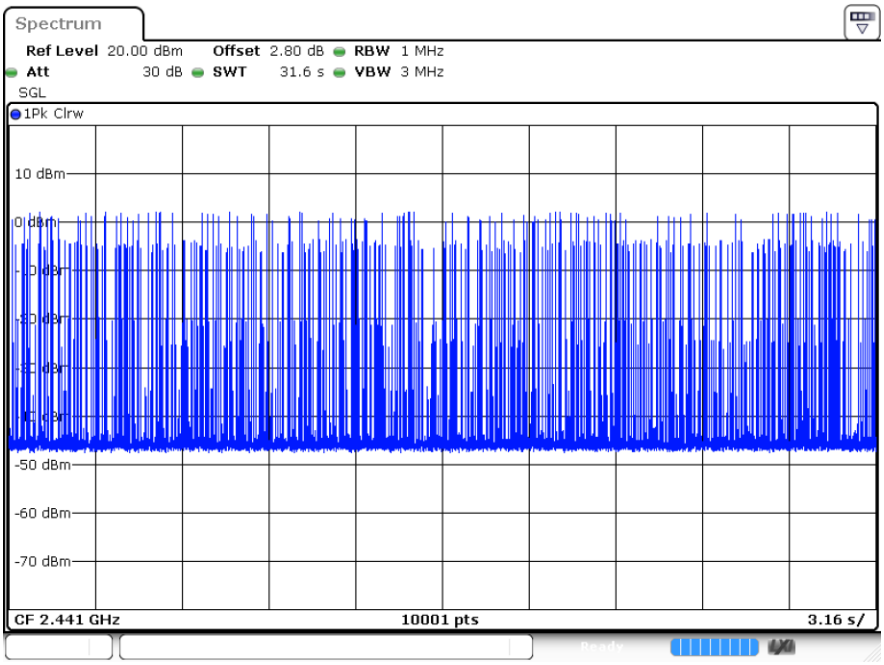
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[ms]	Limit [s]	Verdict
GFSK	DH5	MCH	2.884	112	323.008	0.4	Pass
π/4DQPSK	2DH5	MCH	2.89	111	320.79	0.4	Pass

6.2 Test Graphs

Test Graphs	
GFSK_DH5/MCH	 

π/4DQPSK
_2DH5/MCH



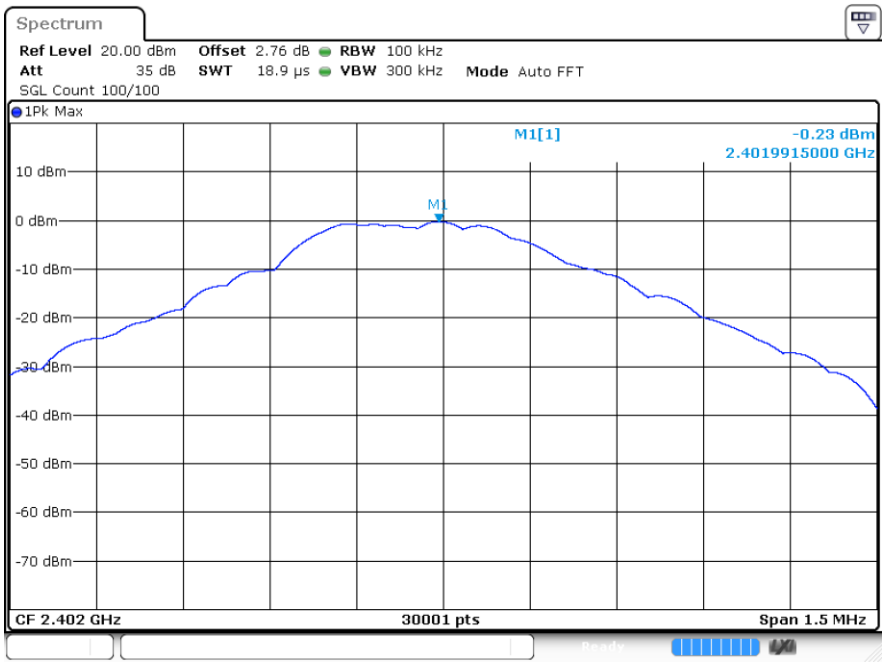
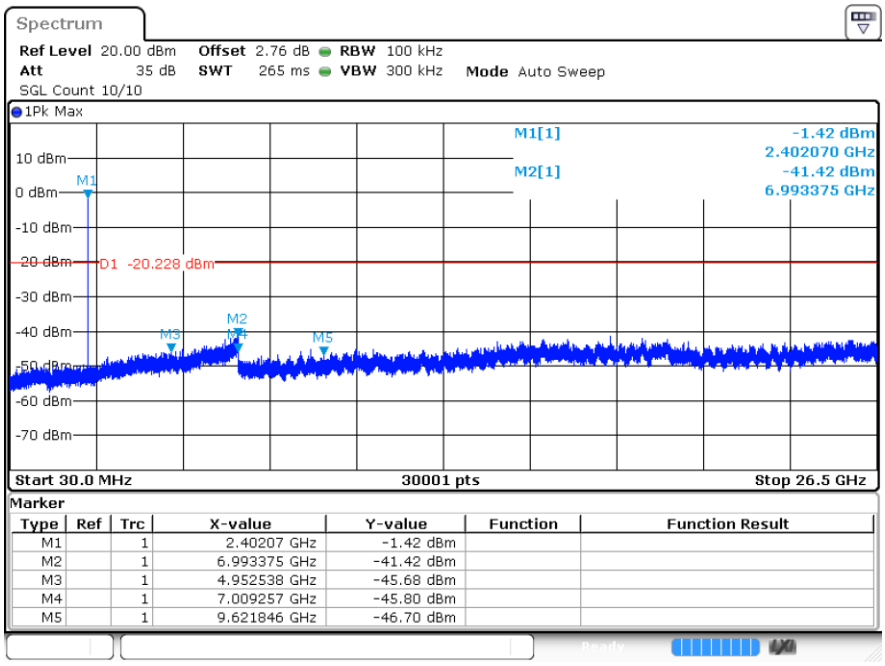


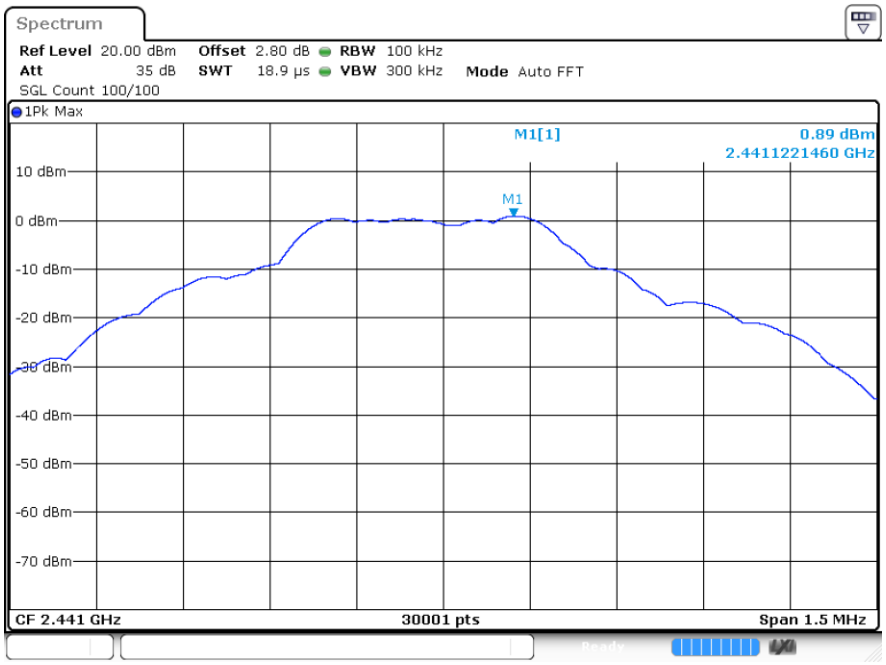
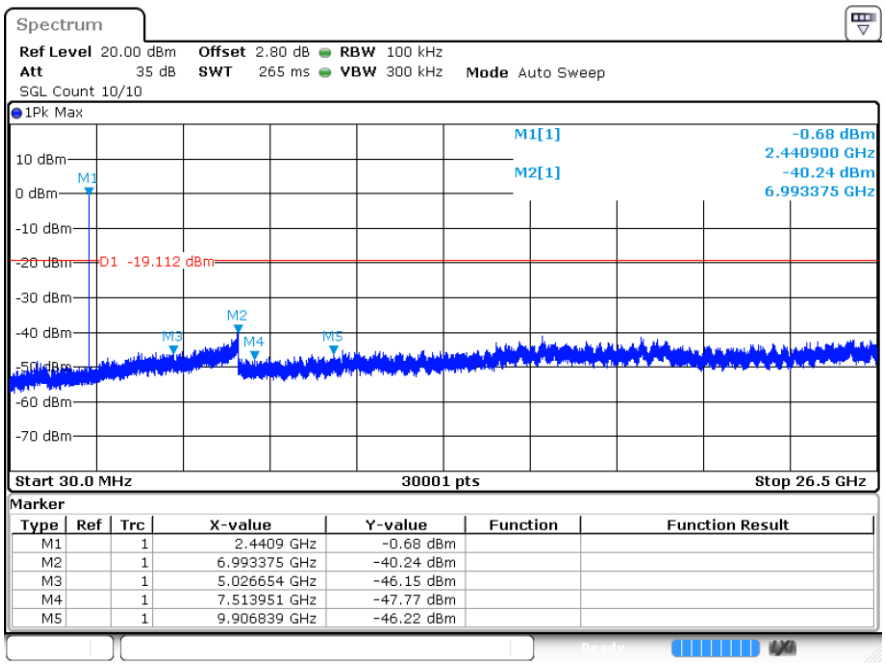
7 RF Conducted Spurious Emissions

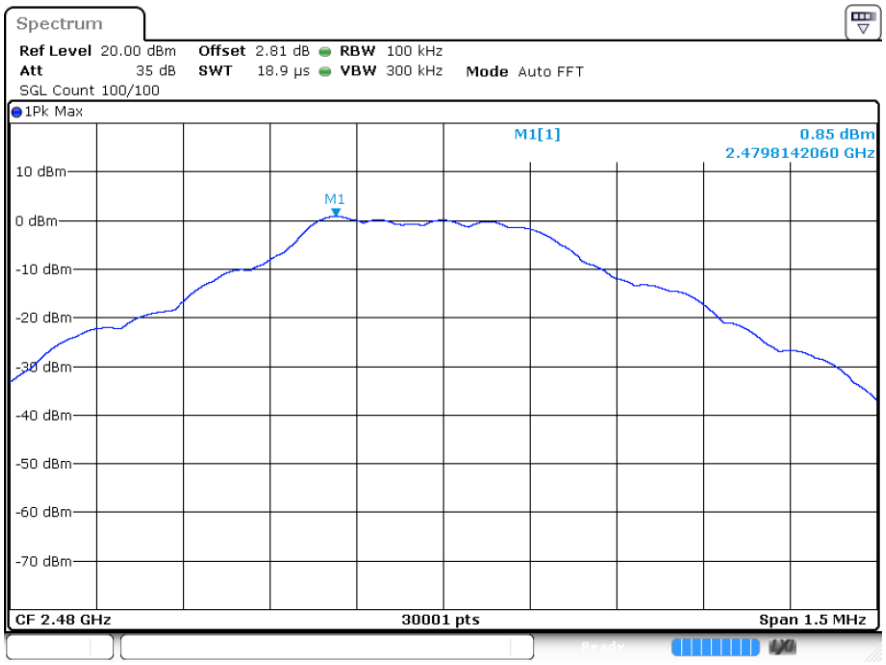
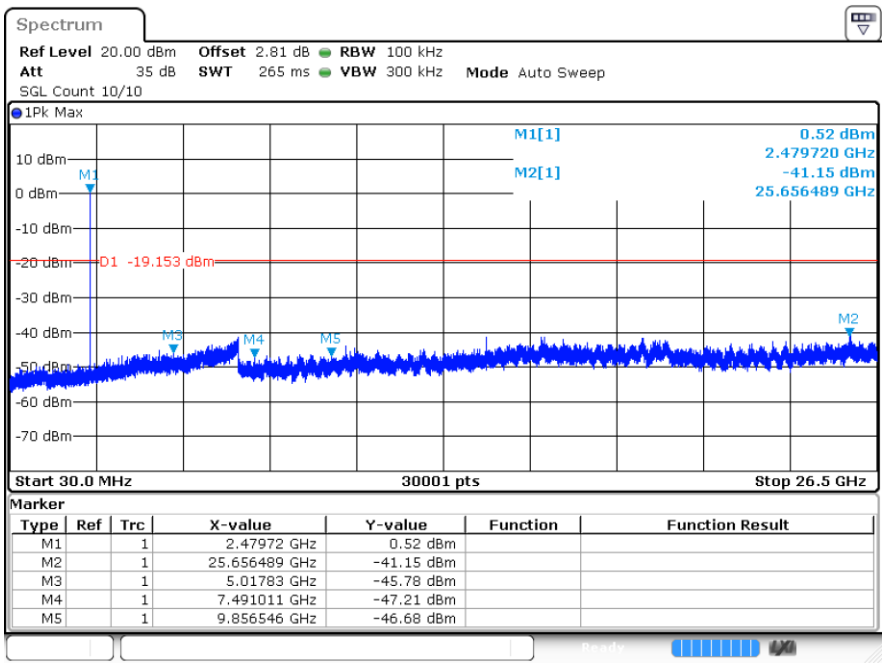
7.1 Test Result

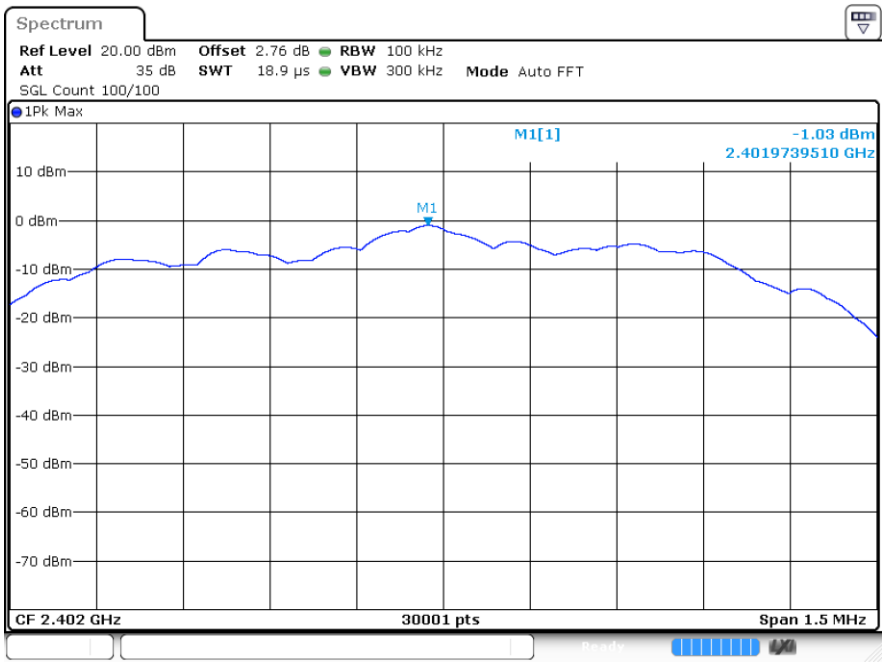
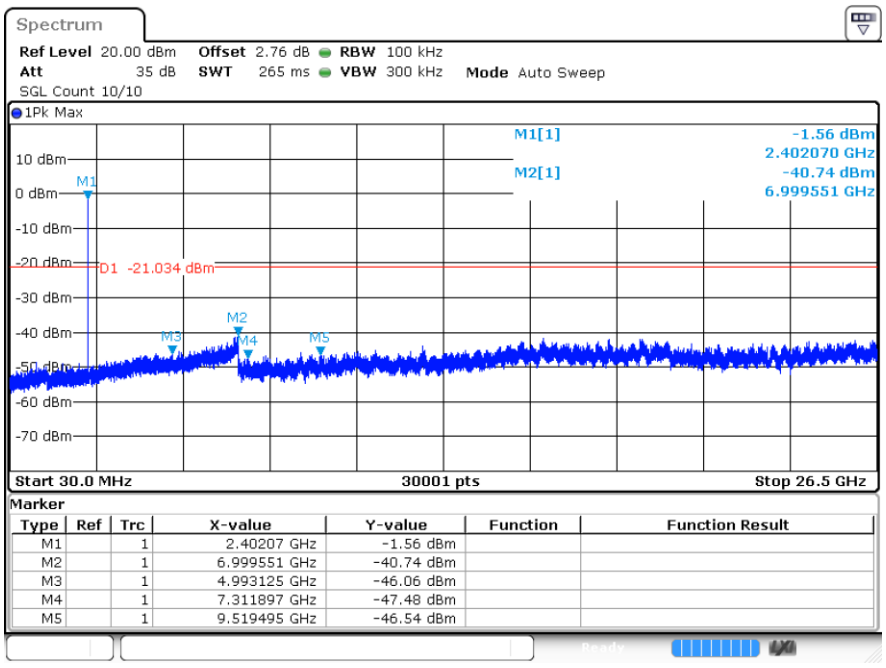
Mode	Channel	Max. Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	-41.19	-20	Pass
	MCH	-41.12	-20	Pass
	HCH	-41.99	-20	Pass
π/4DQPSK	LCH	-39.71	-20	Pass
	MCH	-40.44	-20	Pass
	HCH	-39.71	-20	Pass

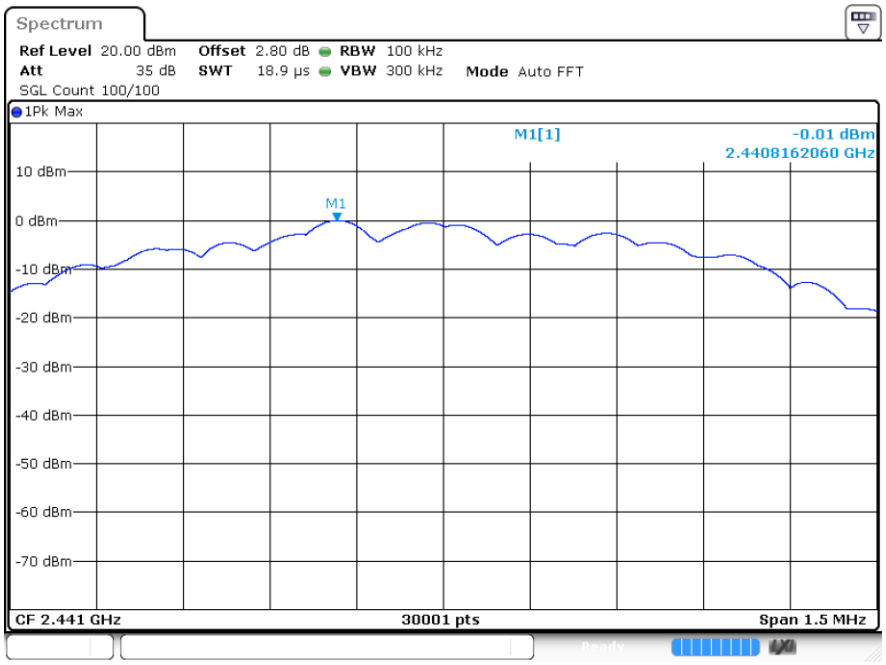
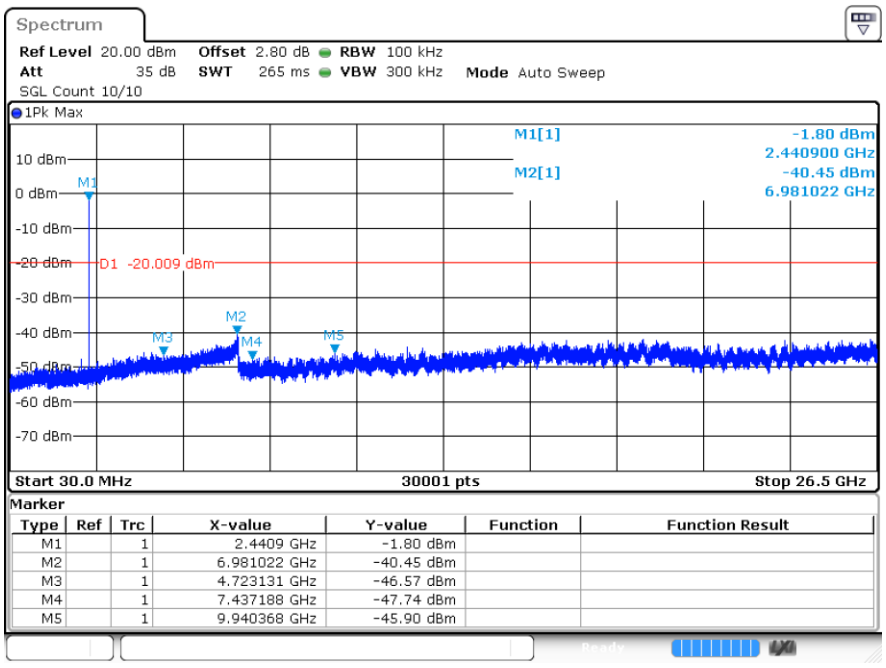
7.2 Test Graphs

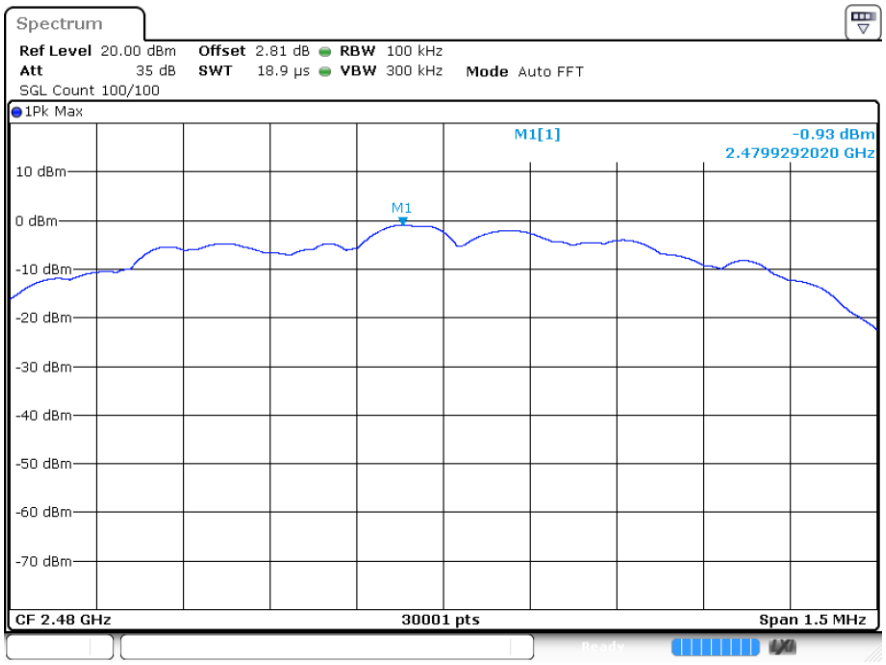
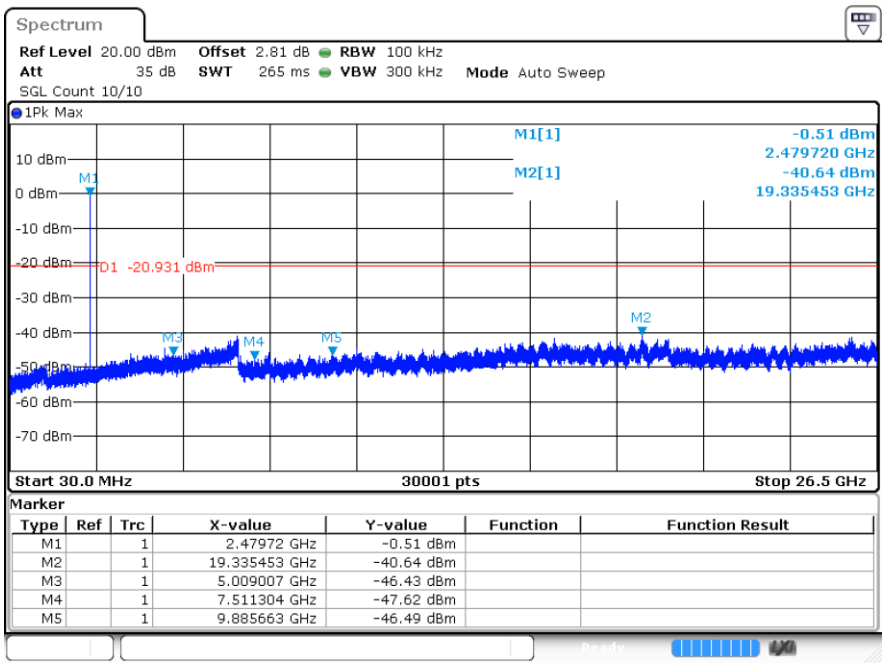
GFSK_LCH_Graphs	
Pref	
Puw	

GFSK_MCH_Graphs	
Pref	
Puw	

GFSK_HCH_Graphs	
Pref	
Puw	

π/4DQPSK_LCH_Graphs	
Pref	
Puw	

π/4DQPSK_MCH_Graphs	
Pref	
Puw	 Marker Type | Ref | Trc | X-value | Y-value | Function | Function Result M1 | 1 | 2.4409 GHz | -1.80 dBm M2 | 1 | 6.981022 GHz | -40.45 dBm M3 | 1 | 4.723131 GHz | -46.57 dBm M4 | 1 | 7.437188 GHz | -47.74 dBm M5 | 1 | 9.940368 GHz | -45.90 dBm

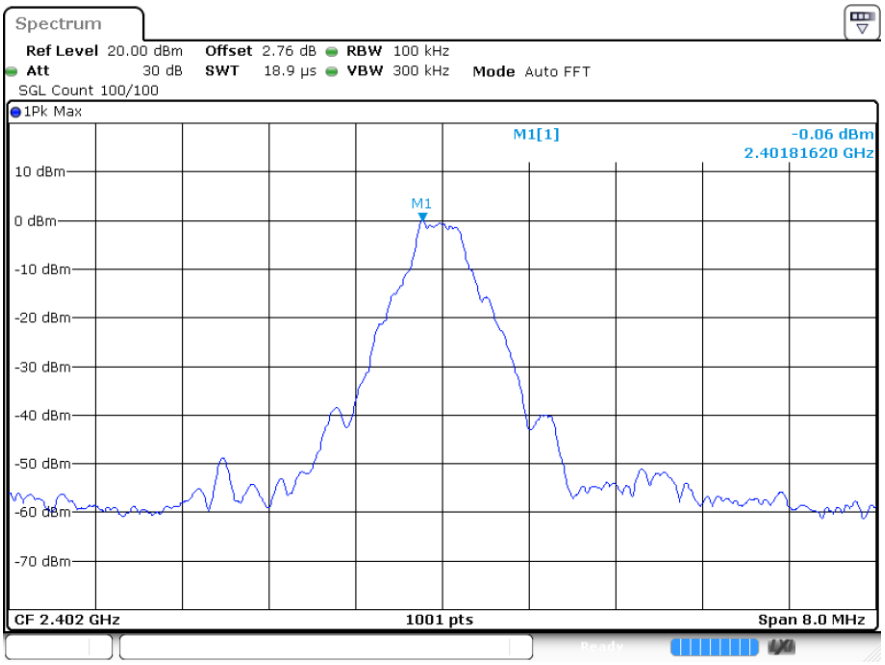
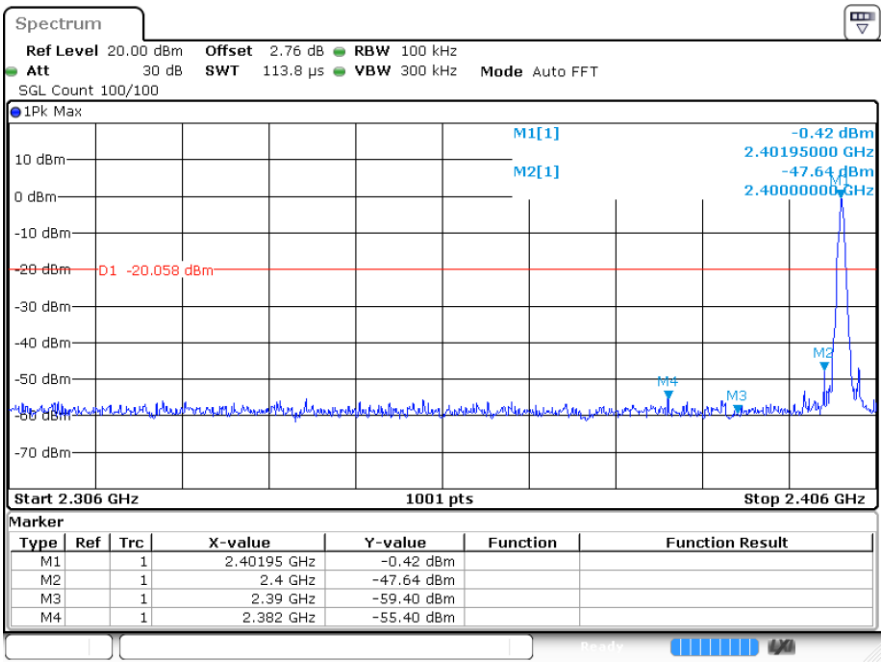
π/4DQPSK_HCH_Graphs	
Pref	
Puw	

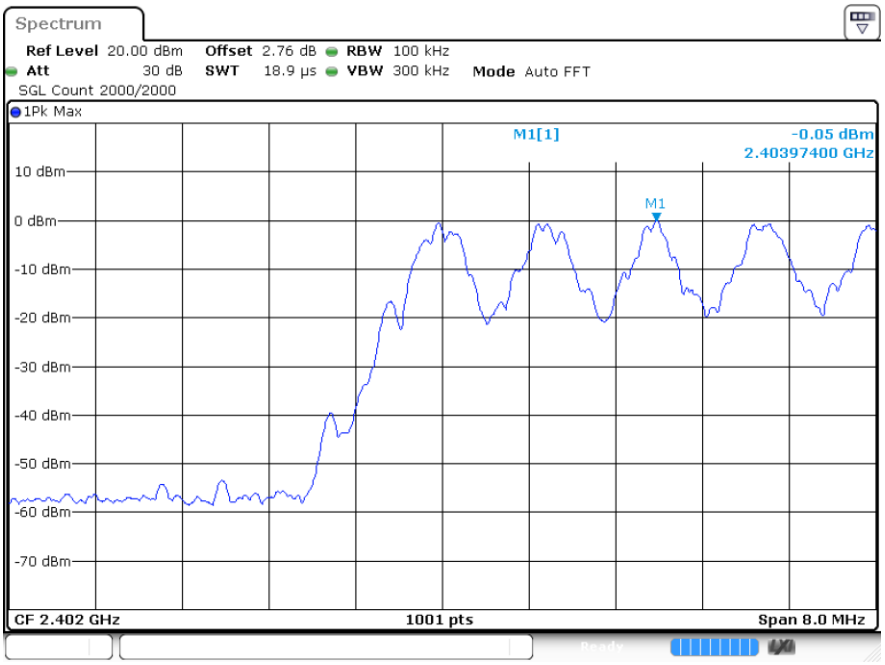
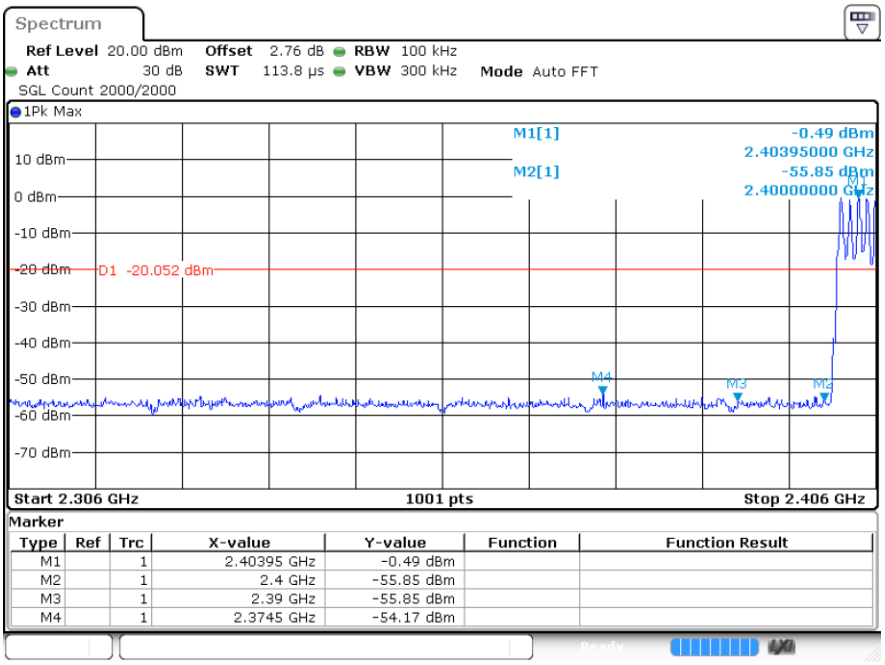
8 Band-edge for RF Conducted Emissions

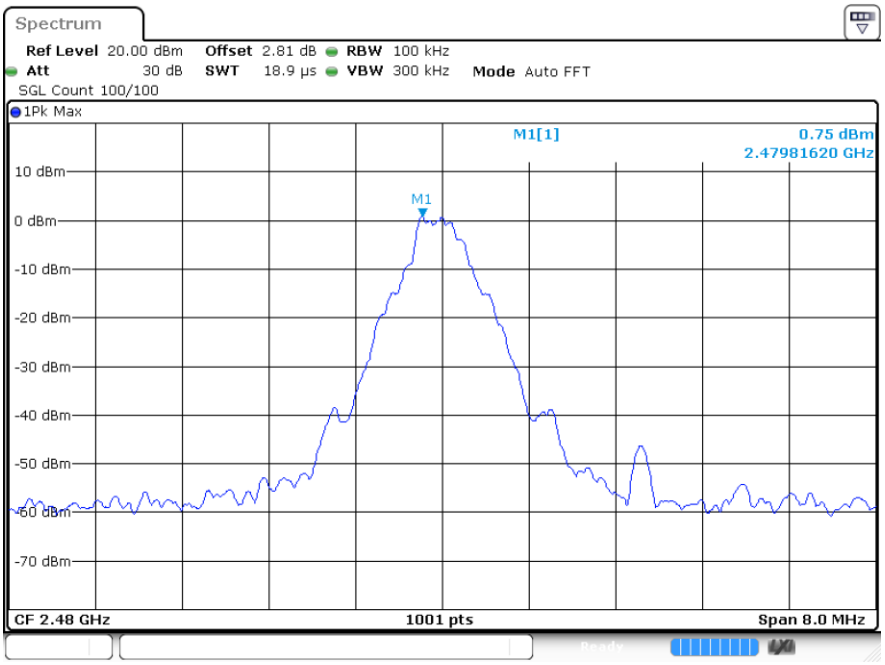
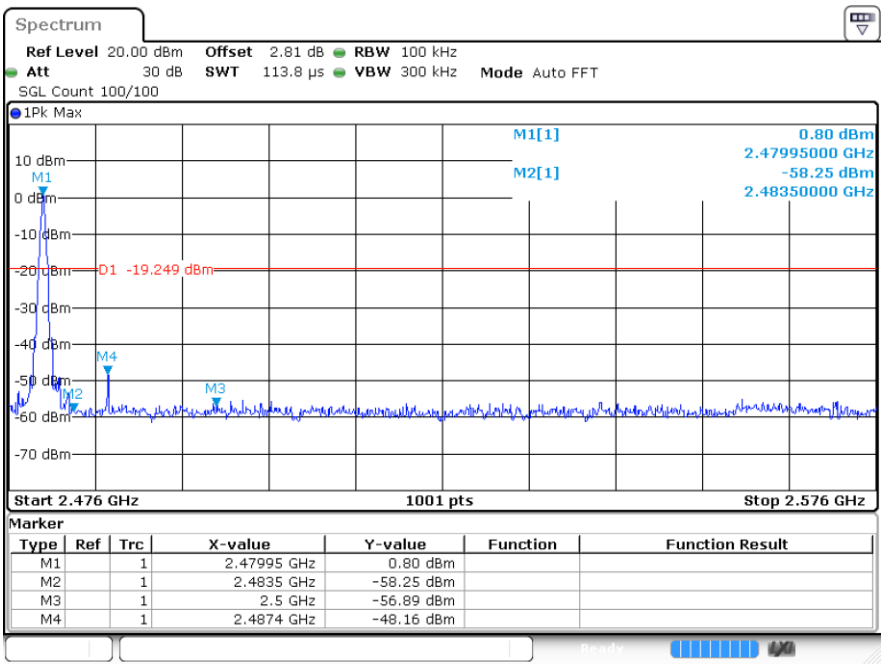
8.1 Test Result

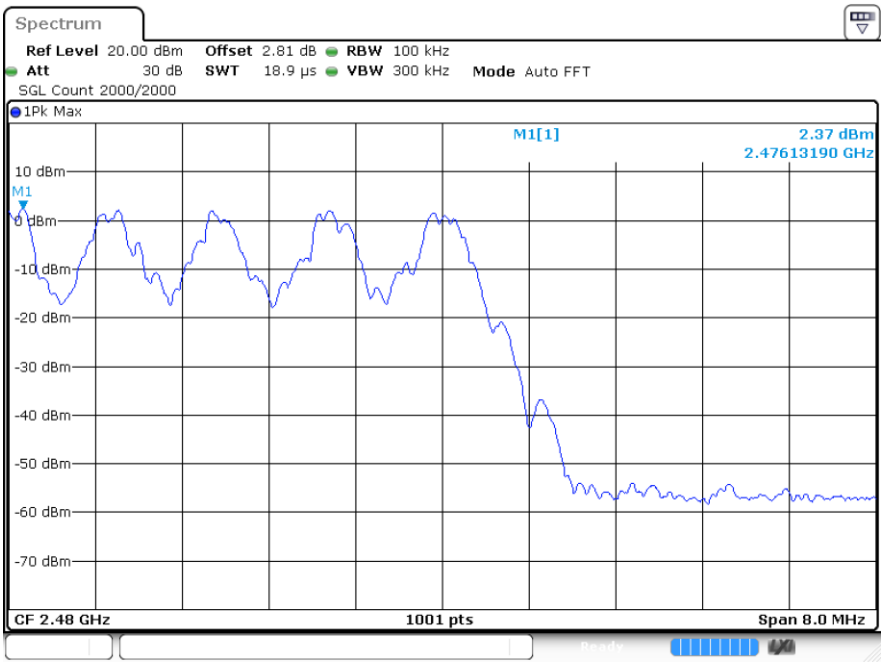
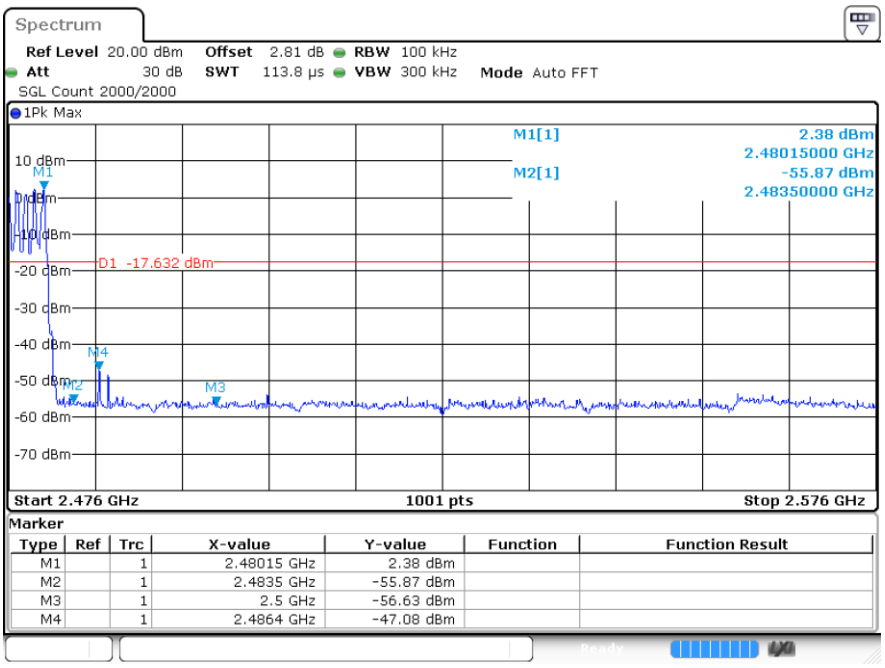
Mode	Channel	Carrier Frequency [MHz]	Frequency Hopping	Max Spurious Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	2402	Off	-55.33	-20	Pass
			On	-54.12	-20	Pass
	HCH	2480	Off	-48.91	-20	Pass
			On	-49.45	-20	Pass
π/4DQPSK	LCH	2402	Off	-54.36	-20	Pass
			On	-53.63	-20	Pass
	HCH	2480	Off	-48.26	-20	Pass
			On	-47.89	-20	Pass

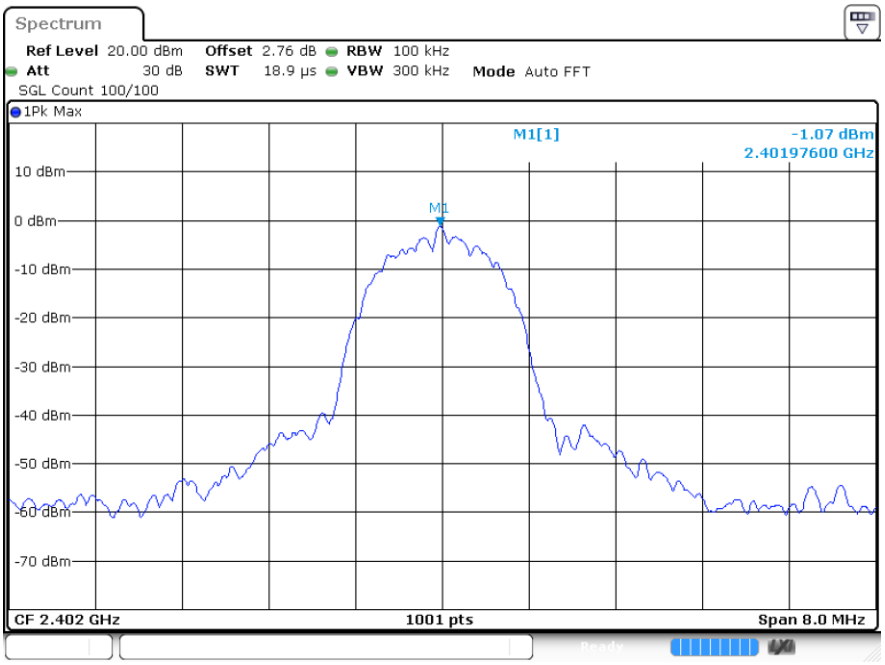
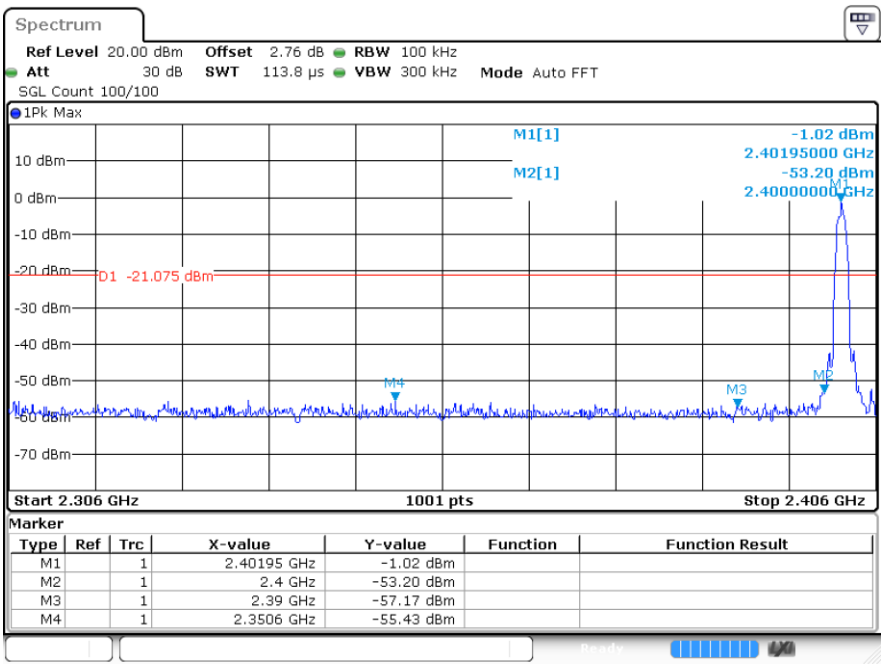
8.2 Test Graphs

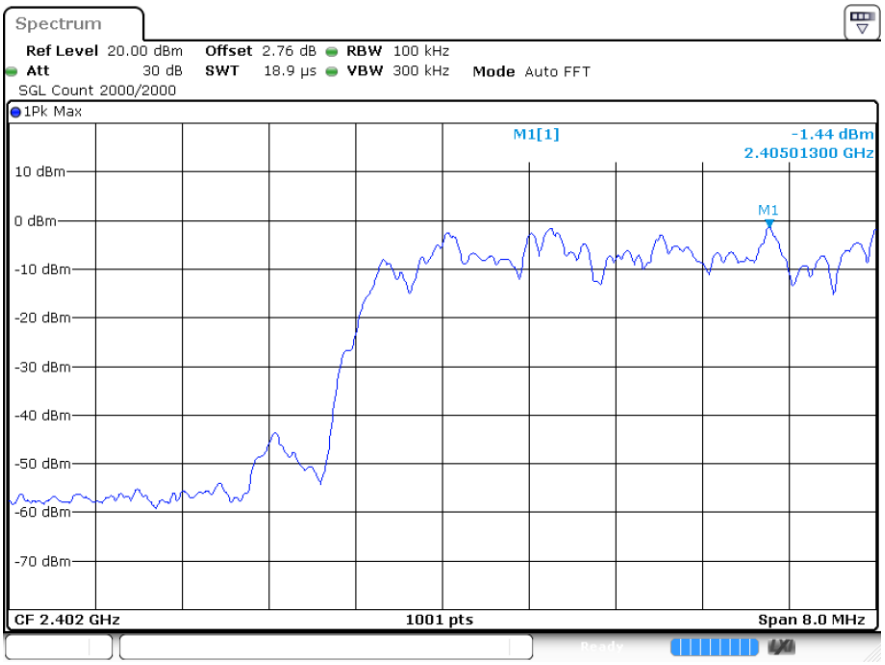
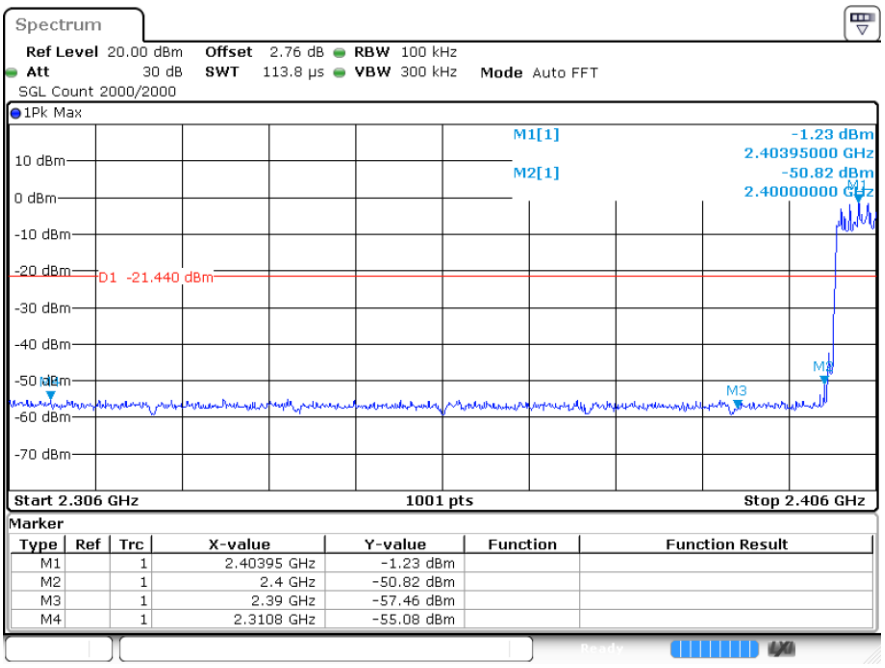
Test Graphs	
Pref	
GFSK/LCH/No Hop	

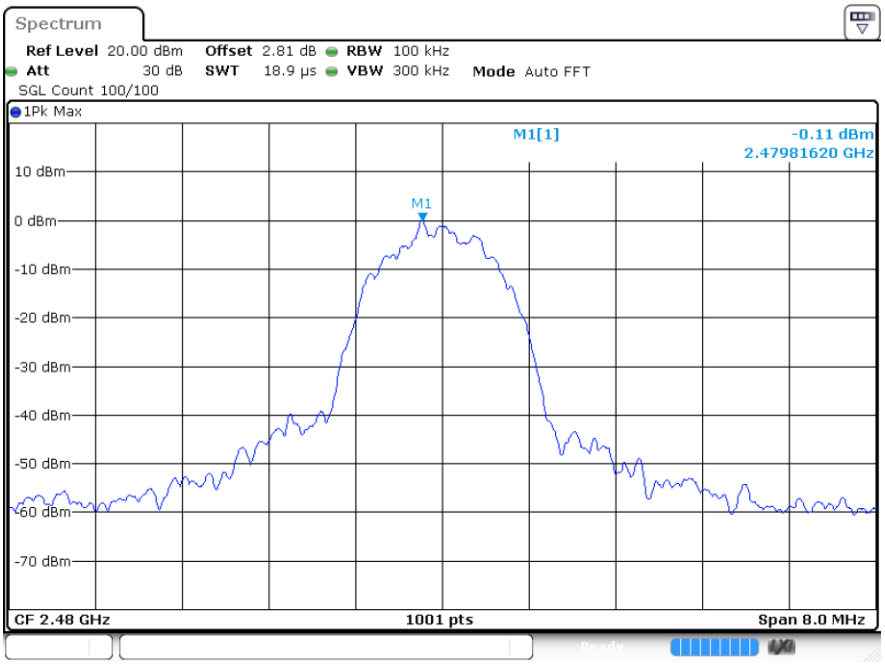
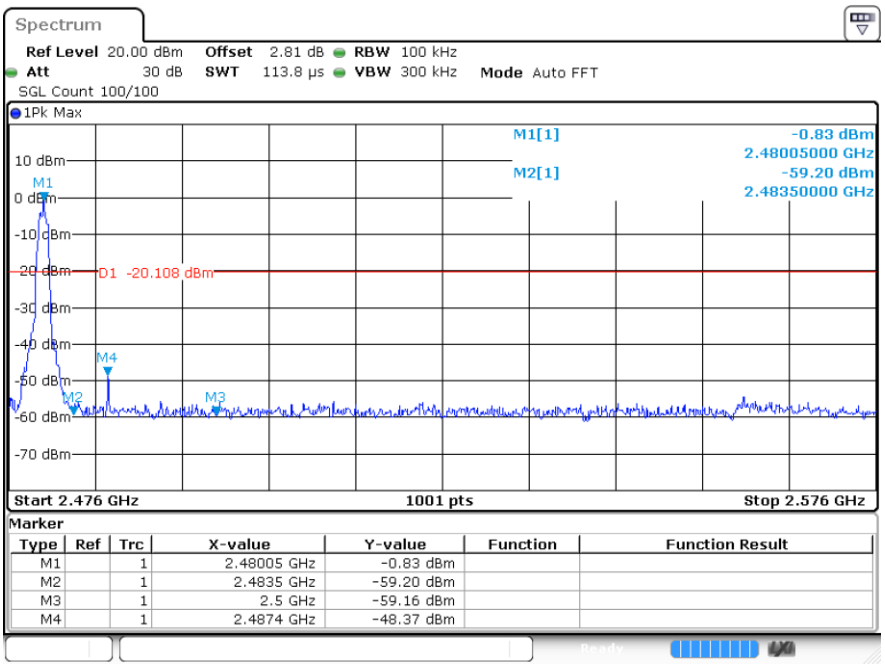
Ref	
GFSK/LCH/Hop	 Marker Type Ref Trc X-value Y-value Function Function Result M1 1 2.40395 GHz -0.49 dBm M2 1 2.4 GHz -55.85 dBm M3 1 2.39 GHz -55.85 dBm M4 1 2.3745 GHz -54.17 dBm

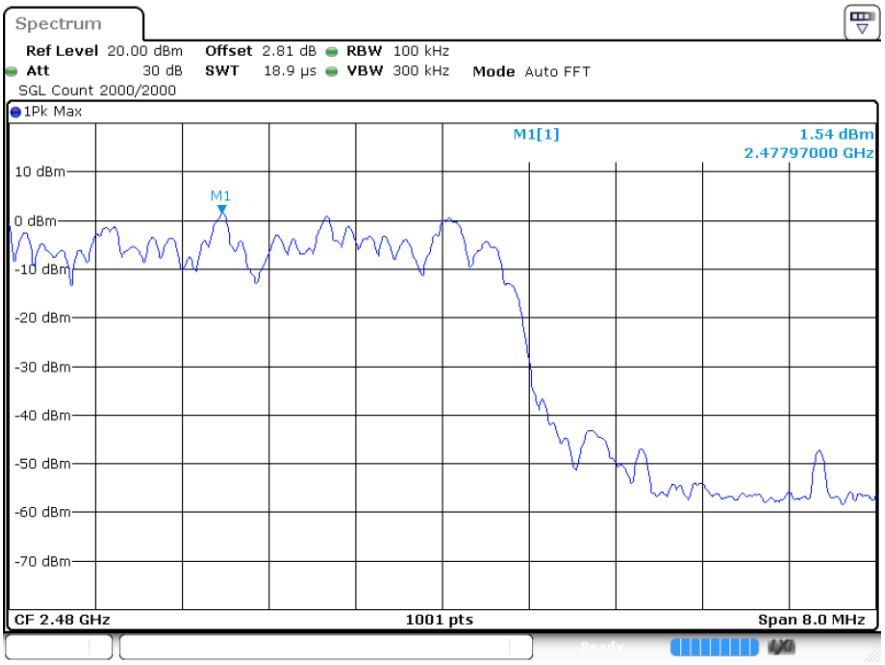
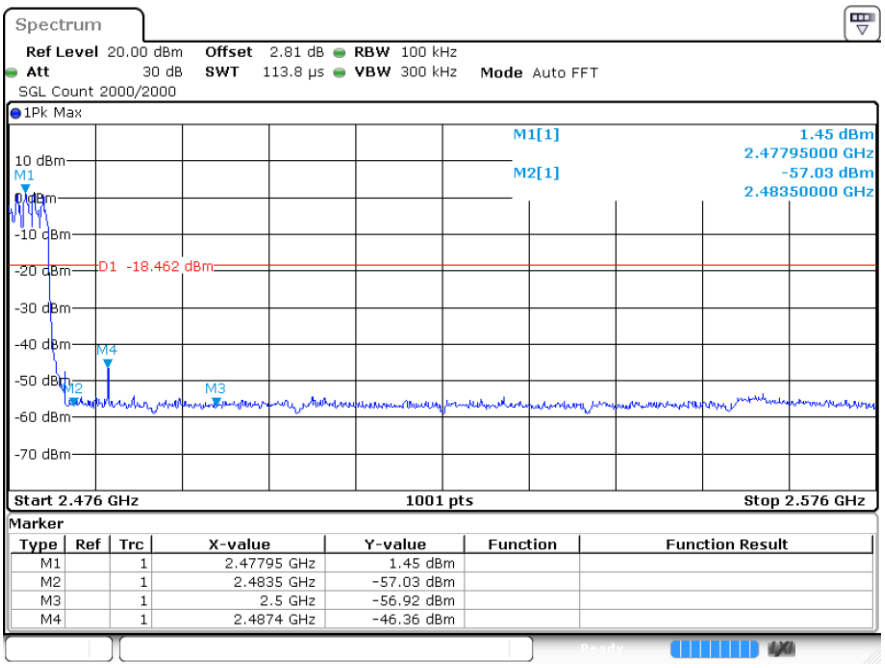
Ref	
GFSK/HCH/No Hop	

Ref.	
GFSK/HCH/Hop	

Ref	
π/4DQPSK/LCH/No Hop	

Ref	
π/4DQPSK/LCH/Hop	

Ref	
π/4DQPSK/HCH/No Hop	 Marker Type Ref Trc X-value Y-value Function Function Result M1 1 2.48005 GHz -0.83 dBm M2 1 2.4835 GHz -59.20 dBm M3 1 2.5 GHz -59.16 dBm M4 1 2.4874 GHz -48.37 dBm

Ref	
π/4DQPSK/HCH/Hop	

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