Appendix A

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

Product Name: True wireless headphones

Trade Mark: N/A

Test Model: Minipods2

Environmental Conditions

Temperature:	25.5℃
Relative Humidity:	52.4%
ATM Pressure:	101Kpa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen

Contents

1 Duty Cycle

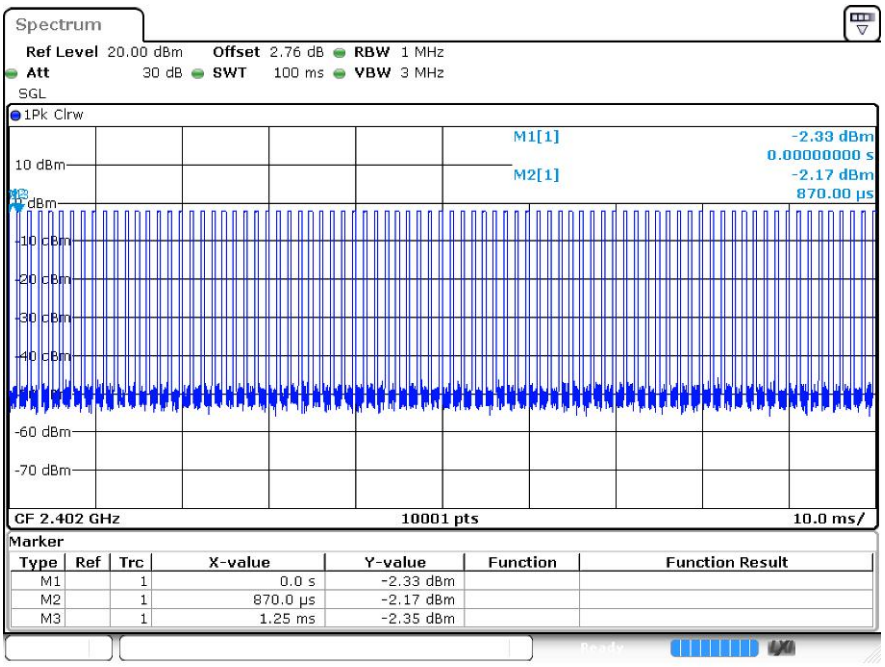
1.1 Test Result

Mode	Frequency (MHz)	Duty Cycle (%)	1/T (kHz)
1-DH1	2402	31.21	2.63
1-DH1	2441	32	2.56
1-DH1	2480	31.83	2.56
2-DH1	2402	32.8	2.5
2-DH1	2441	32.01	2.56
2-DH1	2480	32	2.56

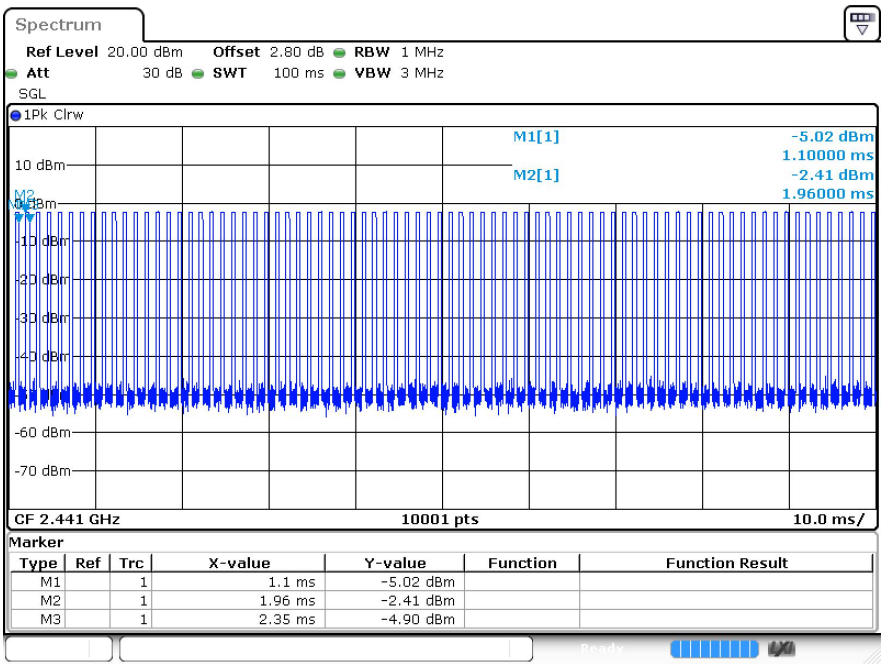
1.2 Test Graphs

Test Graphs

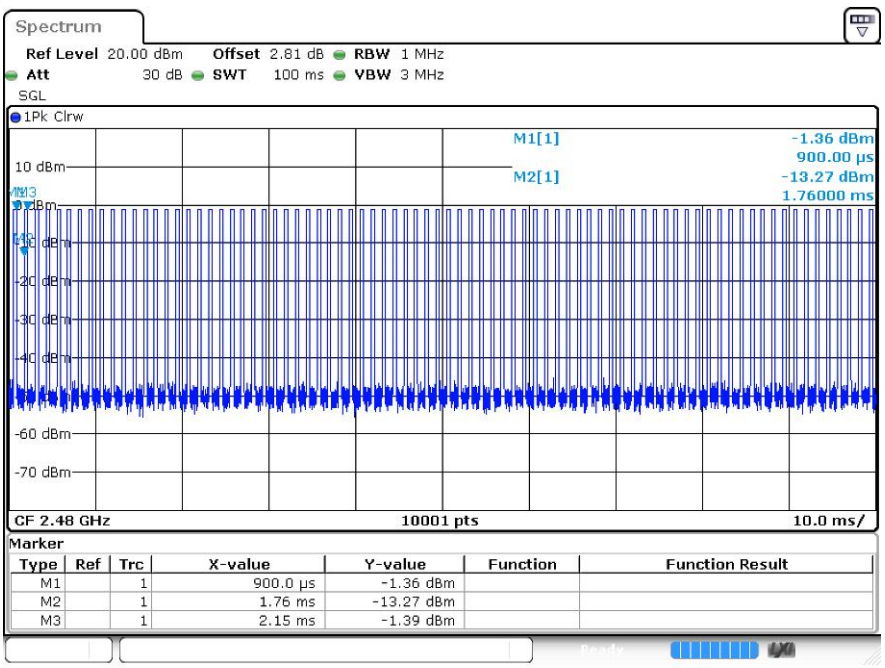
1-DH1 2402MHz



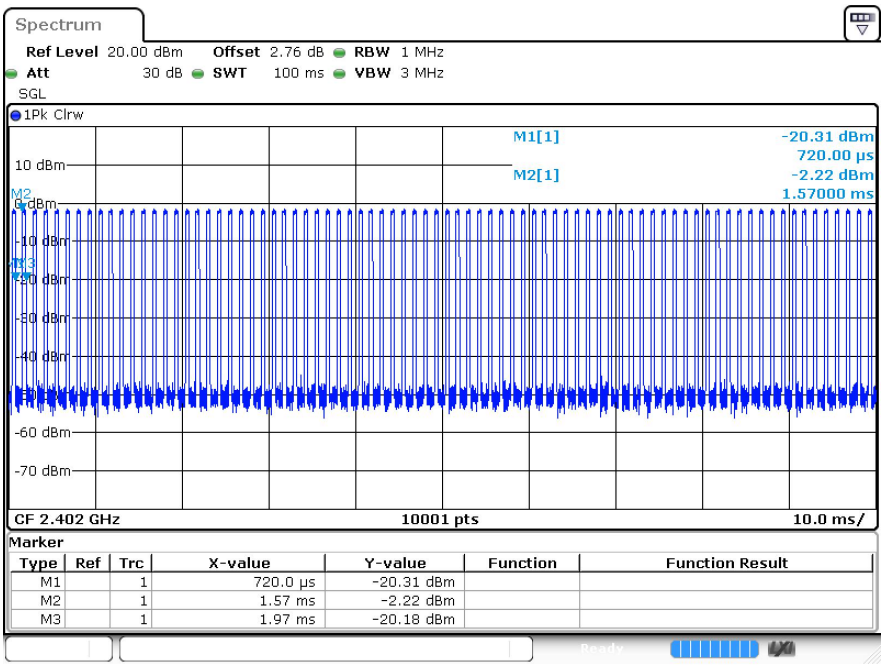
1-DH1 2441MHz



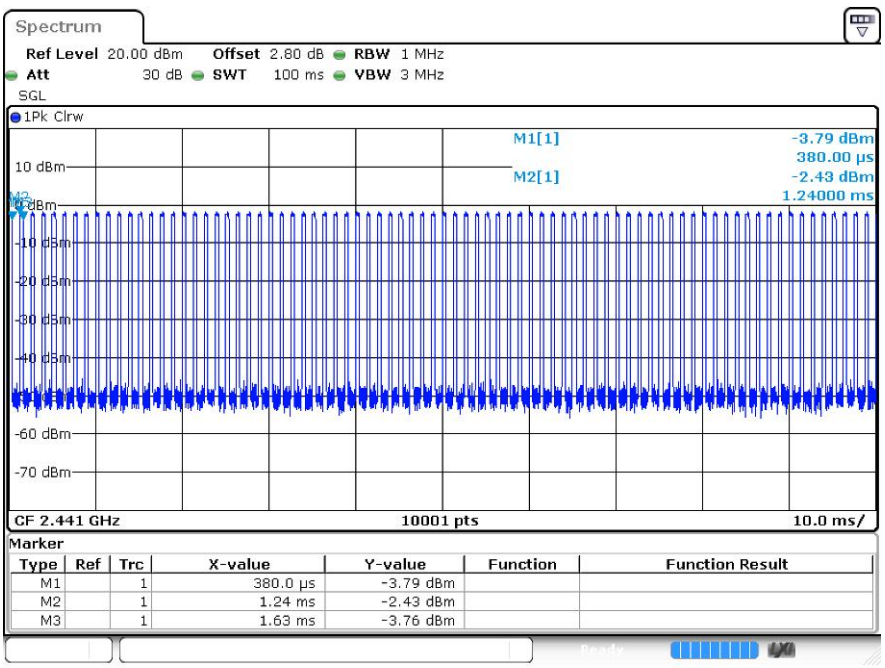
1-DH1 2480MHz



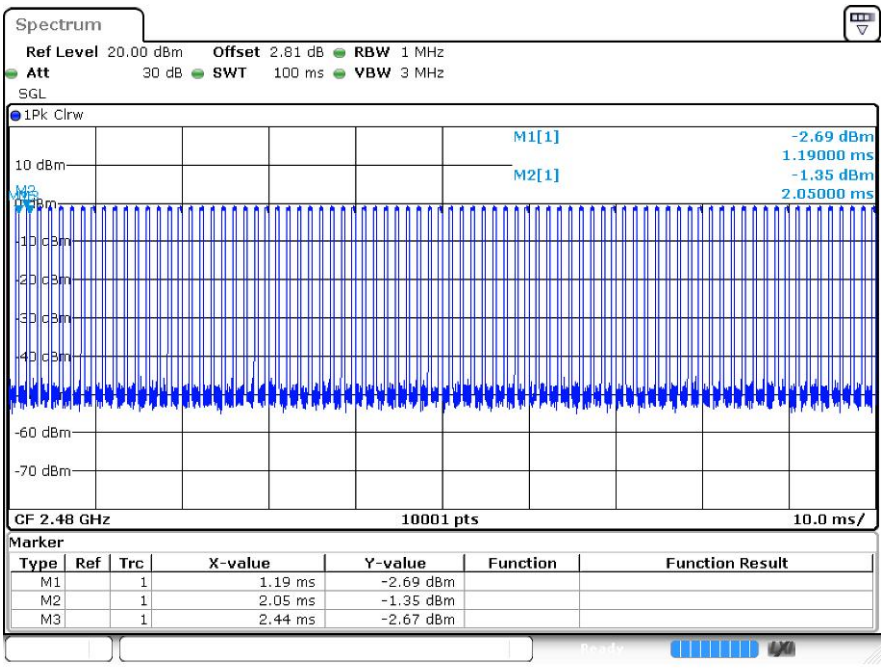
2-DH1 2402MHz



2-DH1 2441MHz



2-DH1 2480MHz

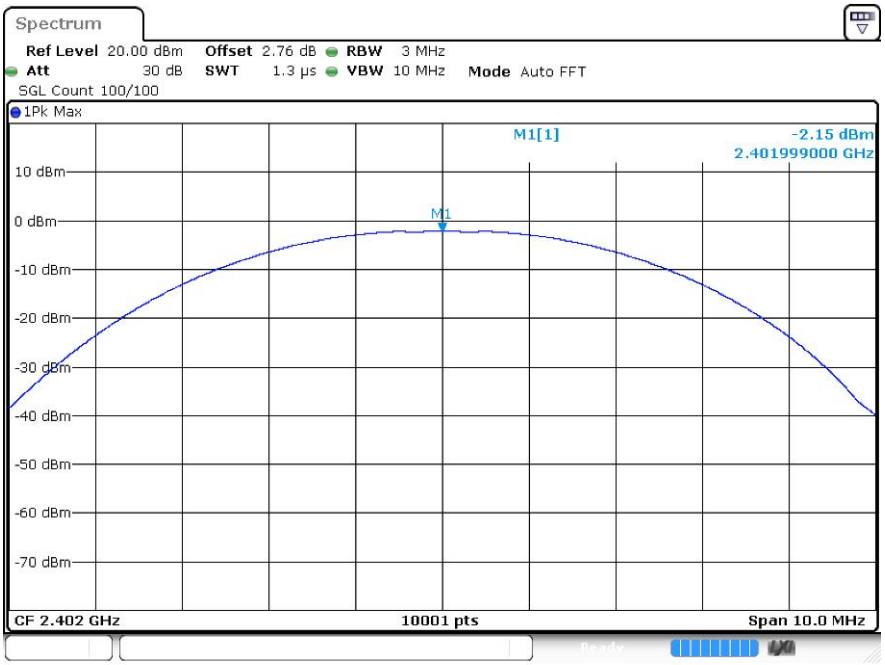
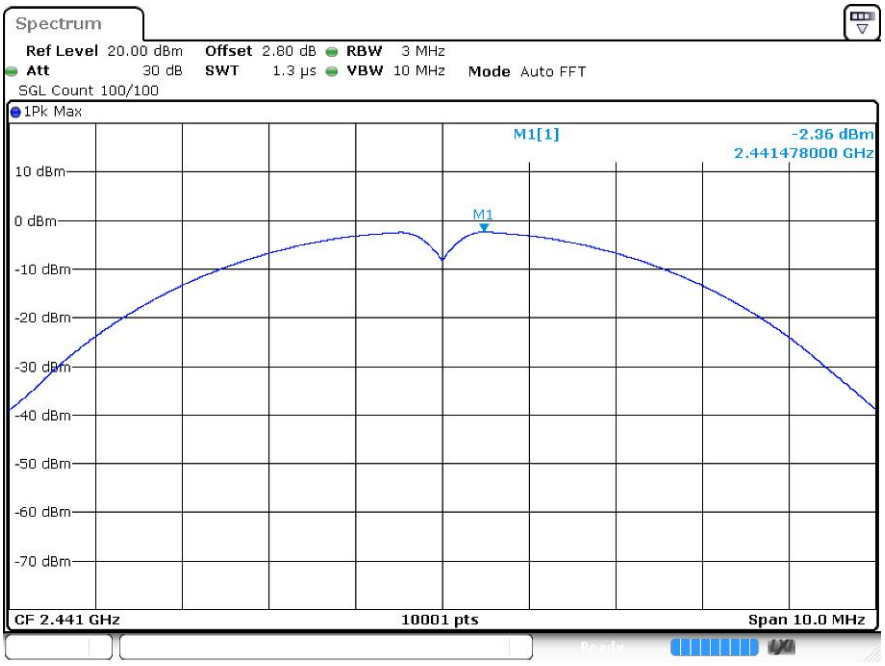


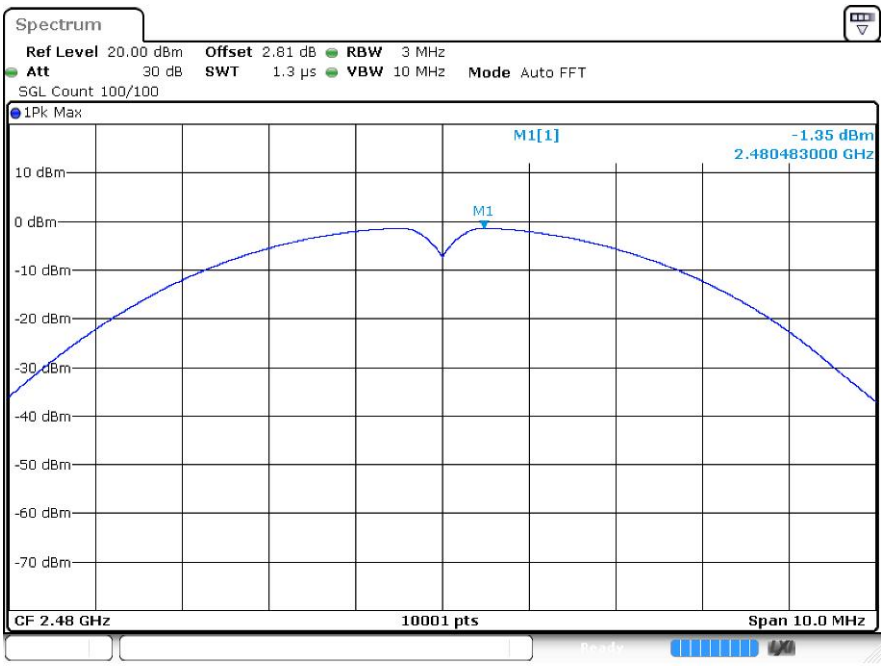
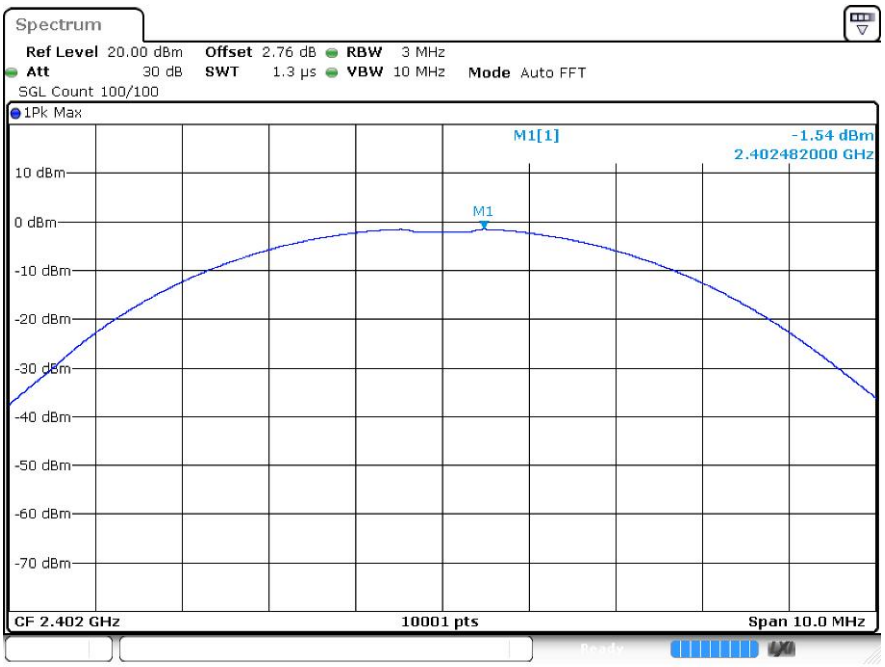
2 Maximum Conducted Peak Output Power

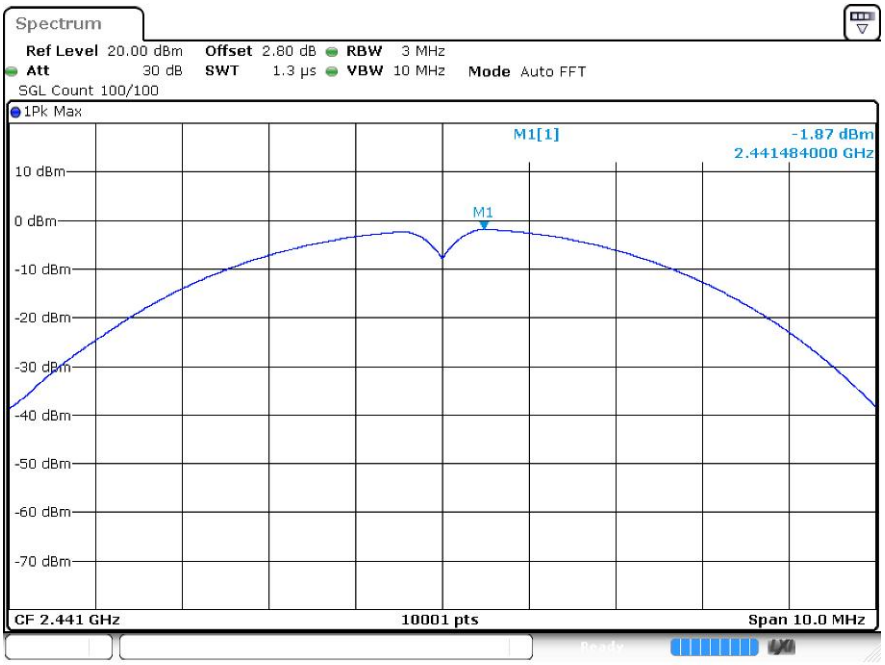
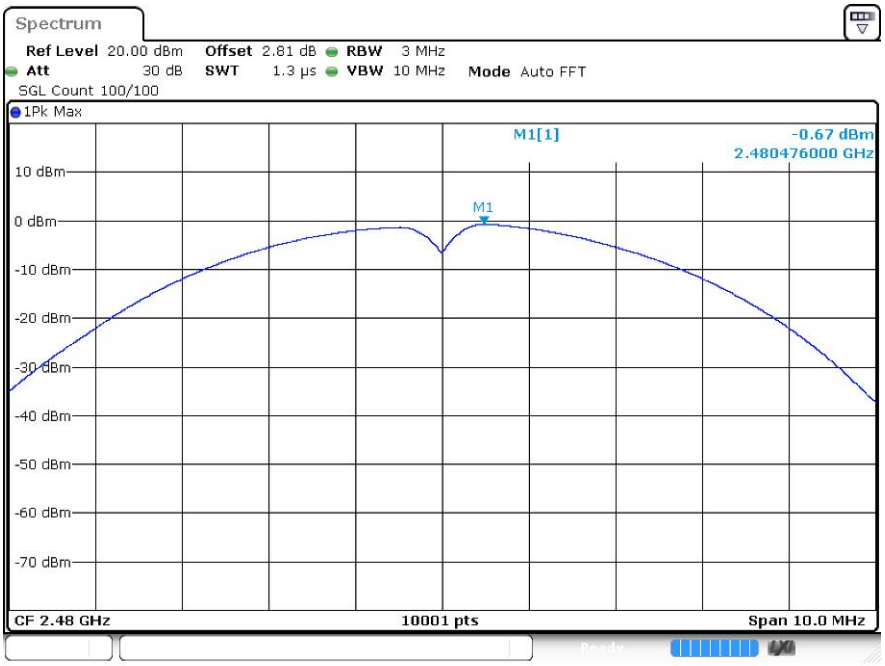
2.1 Test Result

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-2.15	21	Pass
	MCH	-2.36	21	Pass
	HCH	-1.35	21	Pass
π/4DQPSK	LCH	-1.54	21	Pass
	MCH	-1.87	21	Pass
	HCH	-0.67	21	Pass

2.2 Test Graphs

Test Graphs	
GFSK/LCH	
GFSK/MCH	

GFSK/HCH	
π/4DQPSK/LCH	

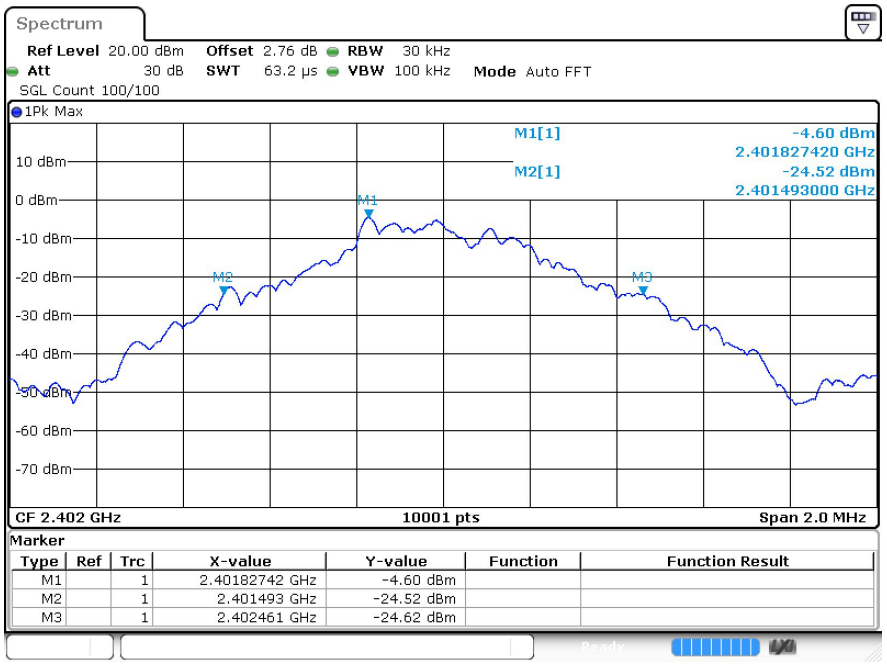
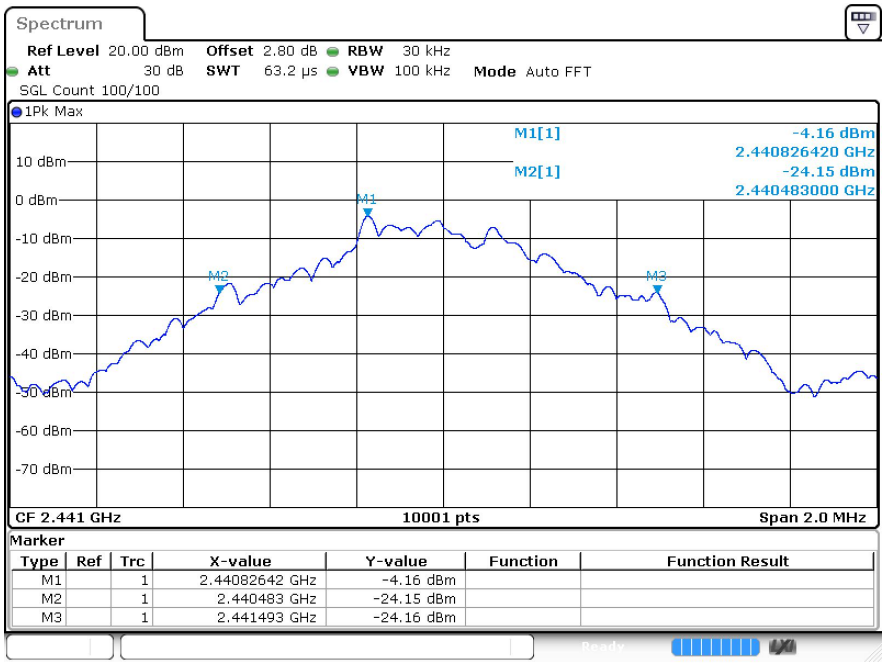
π/4DQPSK/MCH	
π/4DQPSK/HCH	

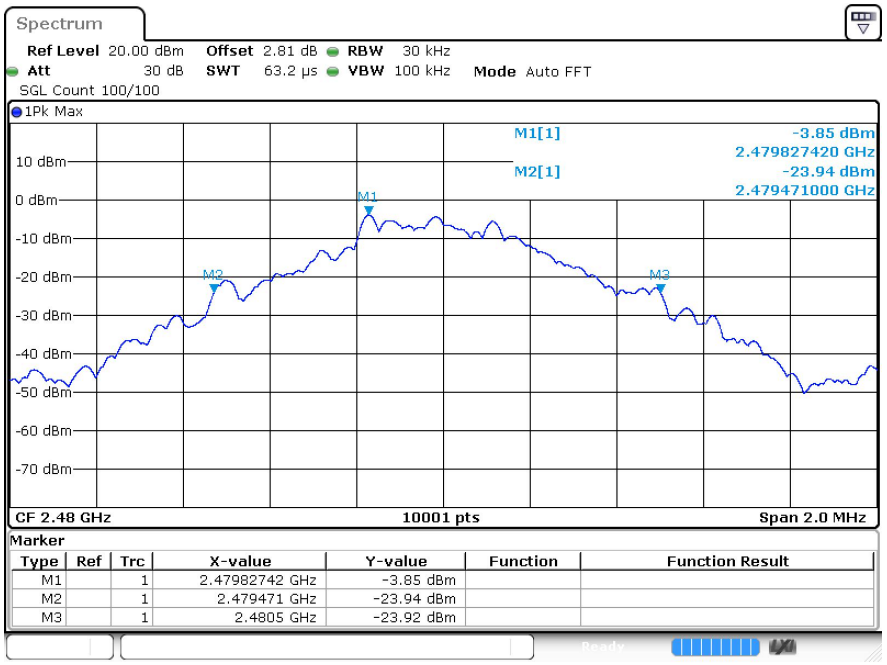
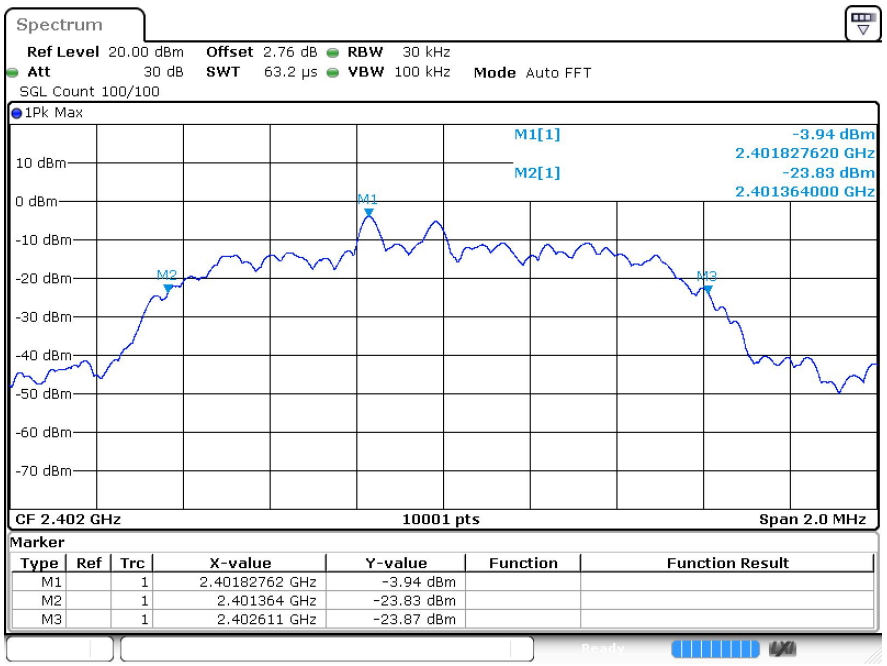
3 20dB Bandwidth

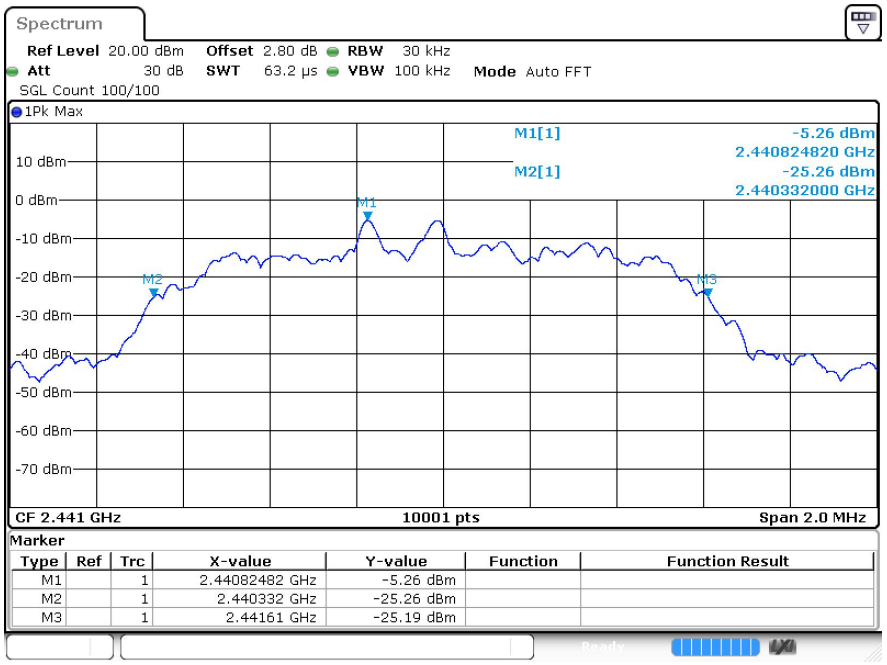
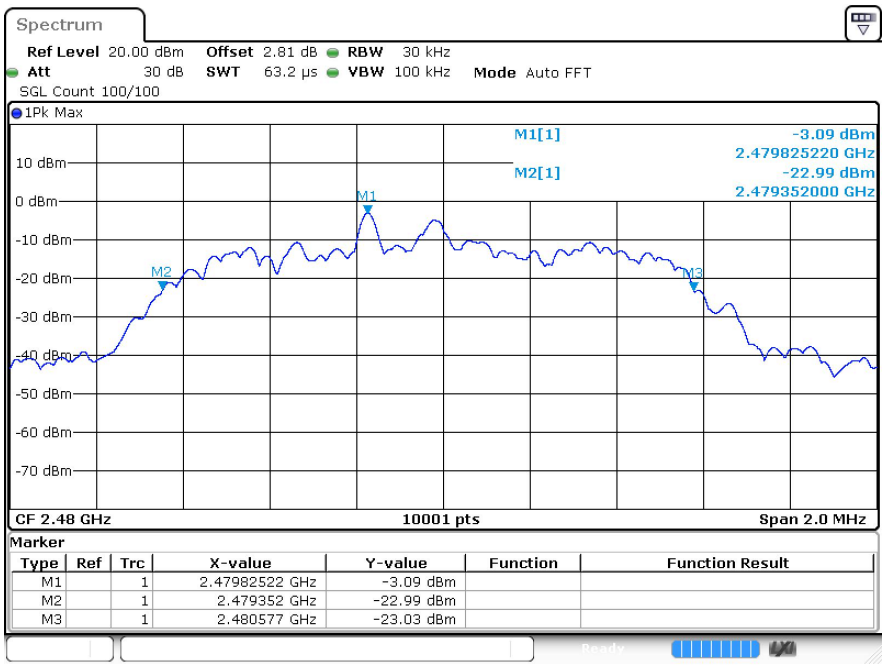
3.1 Test Result

Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.968	Not Specified	Pass
	MCH	1.01	Not Specified	Pass
	HCH	1.028	Not Specified	Pass
π/4DQPSK	LCH	1.248	Not Specified	Pass
	MCH	1.278	Not Specified	Pass
	HCH	1.226	Not Specified	Pass

3.2 Test Graphs

Test Graphs	
GFSK/LCH	
GFSK/MCH	

GFSK/HCH	
π/4DQPSK/LCH	

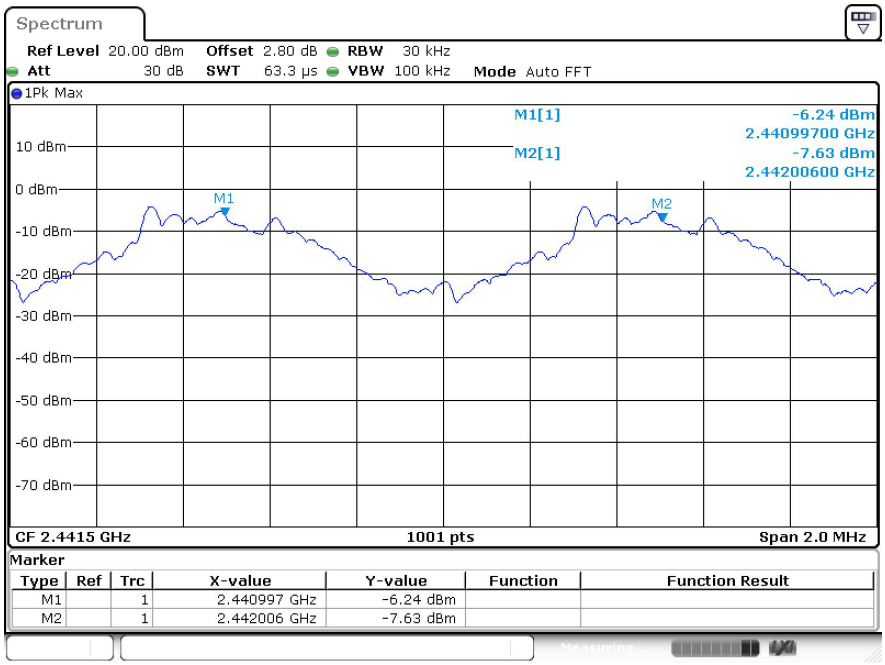
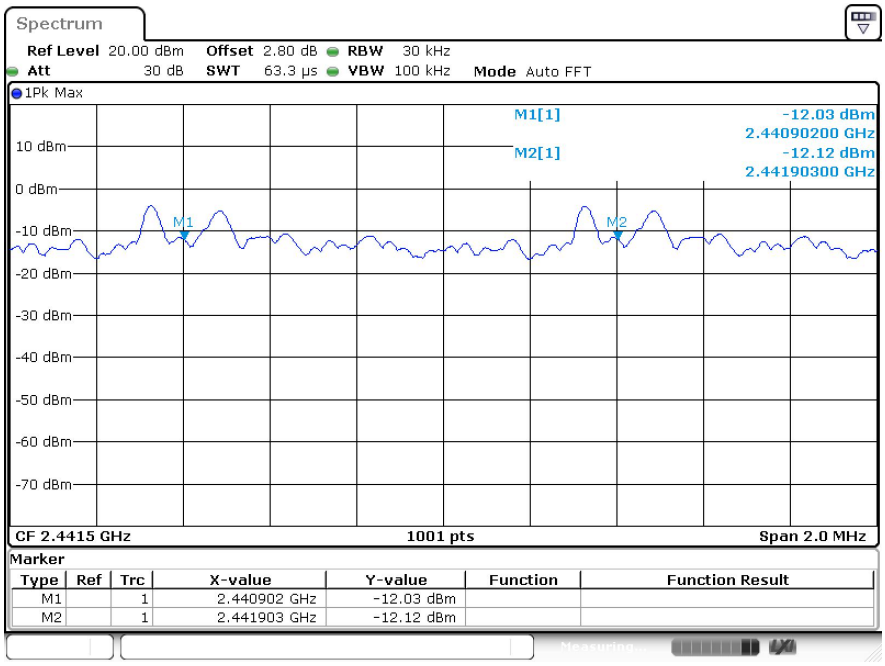
π/4DQPSK/MCH	
π/4DQPSK/HCH	

4 Carrier Frequency Separation

4.1 Test Result

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	MCH	1.009	0.673	Pass
π/4DQPSK	MCH	1.001	0.852	Pass

4.2 Test Graphs

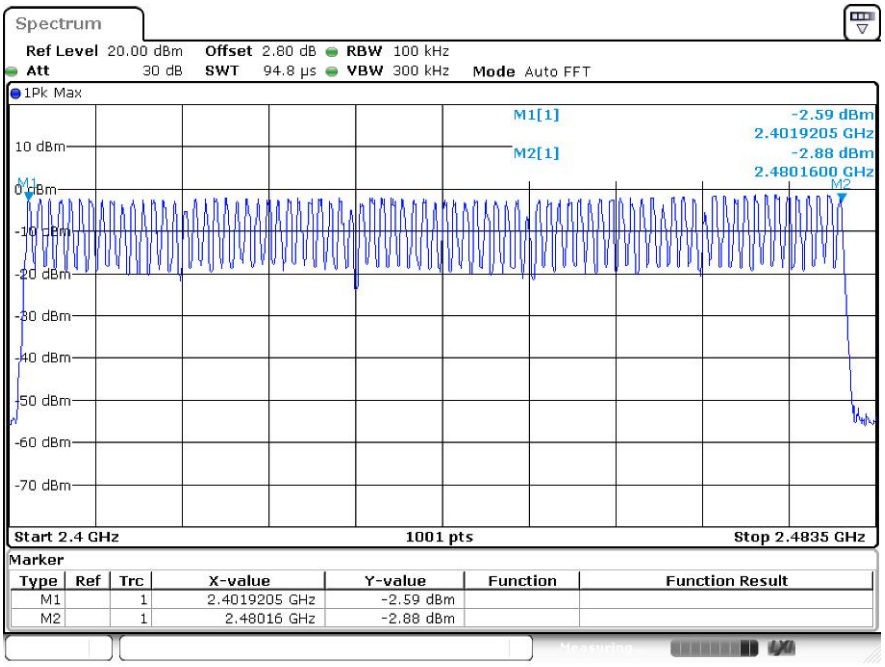
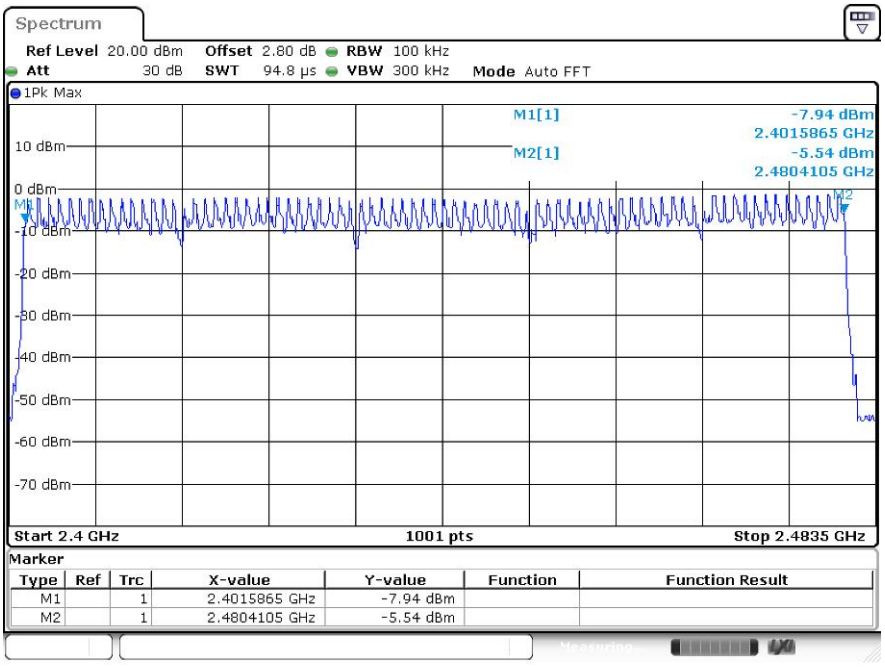
Test Graphs	
GFSK/MCH	
π/4DQPSK/MCH	

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

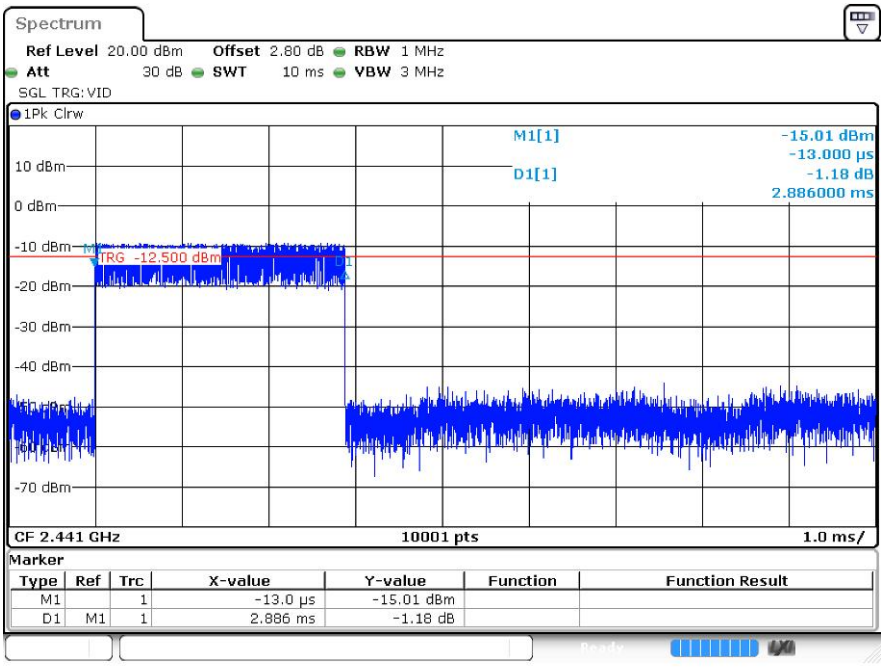
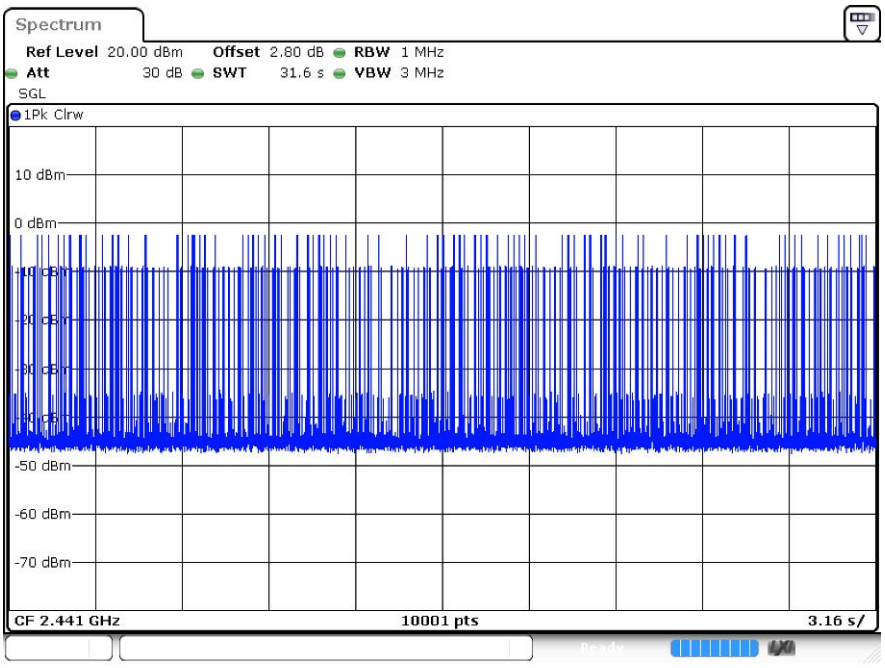
Test Graphs	
GFSK/Hop	
π/4DQPSK/Hop	

6 Dwell Time

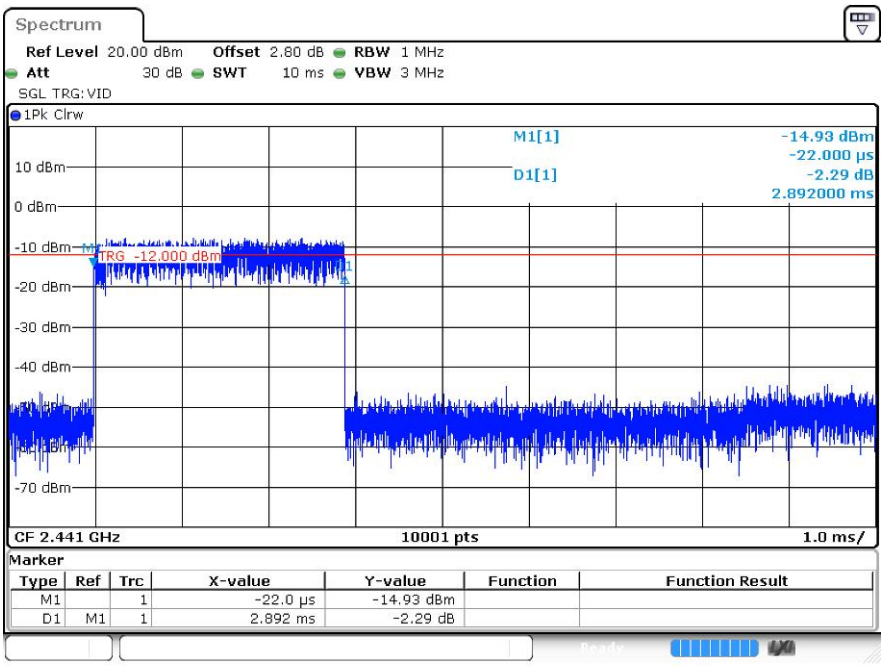
6.1 Test Result

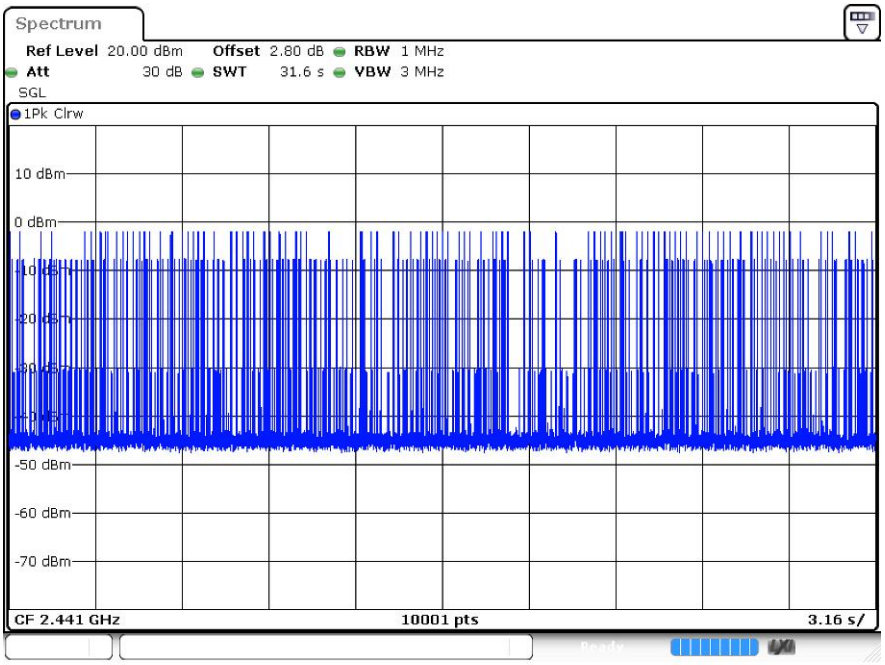
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[ms]	Limit [s]	Verdict
GFSK	DH5	MCH	2.886	113	326.118	0.4	Pass
π/4DQPSK	2DH5	MCH	2.892	123	355.716	0.4	Pass

6.2 Test Graphs

Test Graphs	
GFSK_DH5/MCH	 

π/4DQPSK
_2DH5/MCH



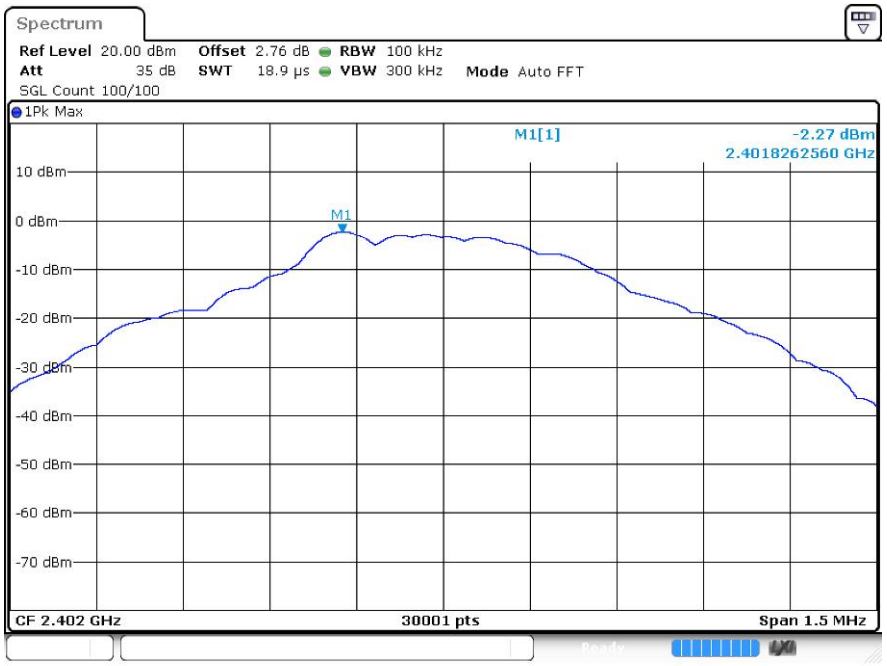
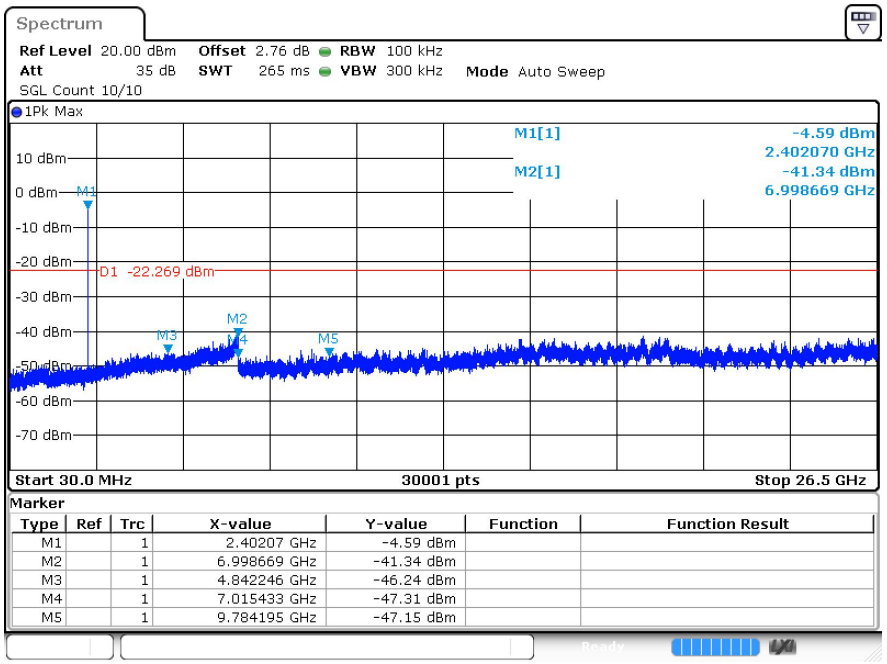


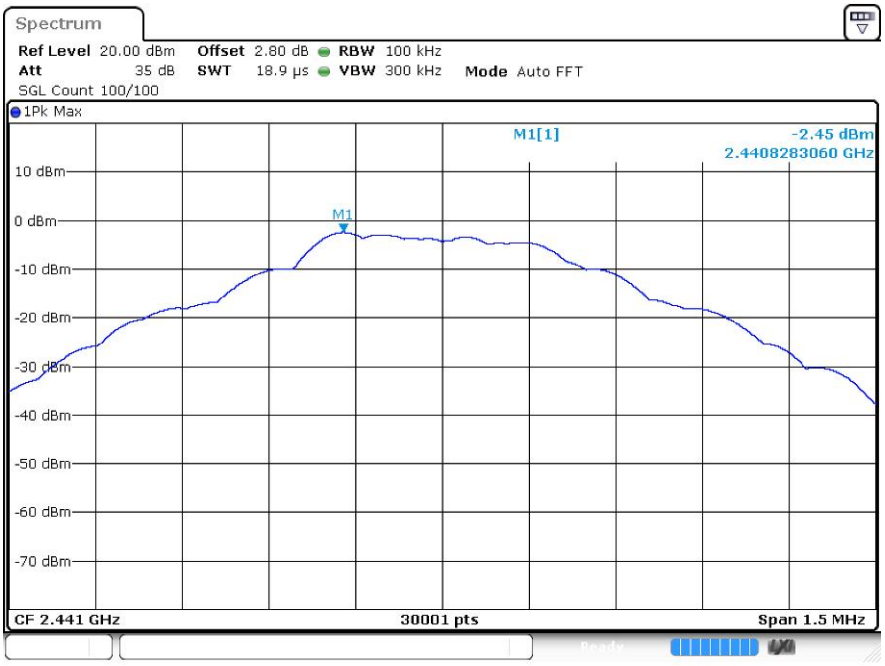
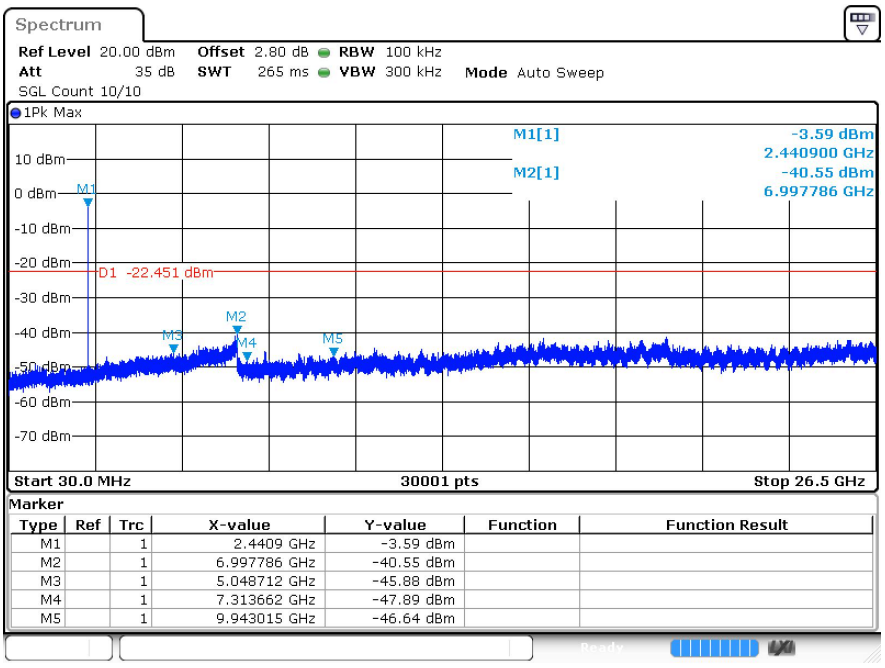
7 RF Conducted Spurious Emissions

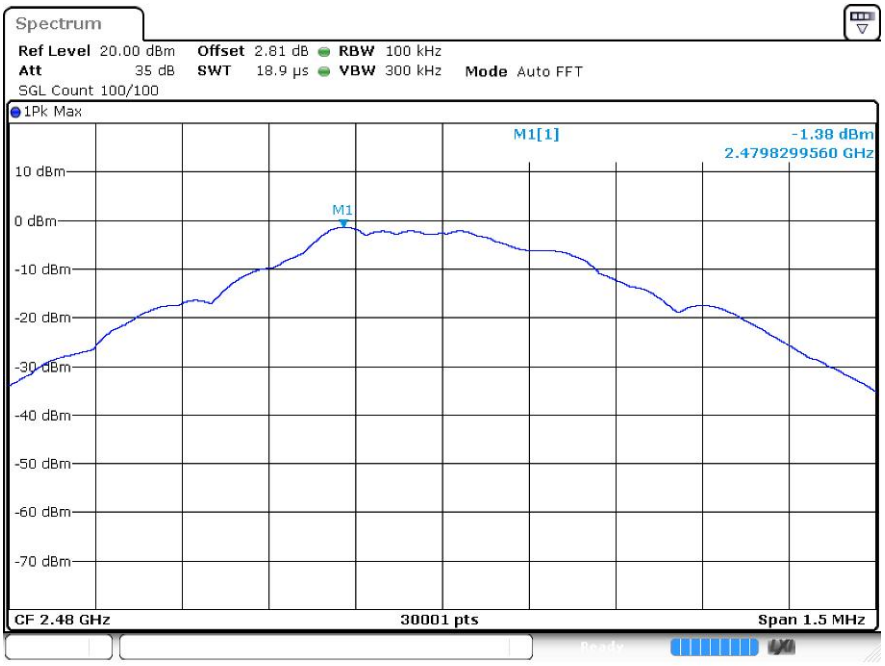
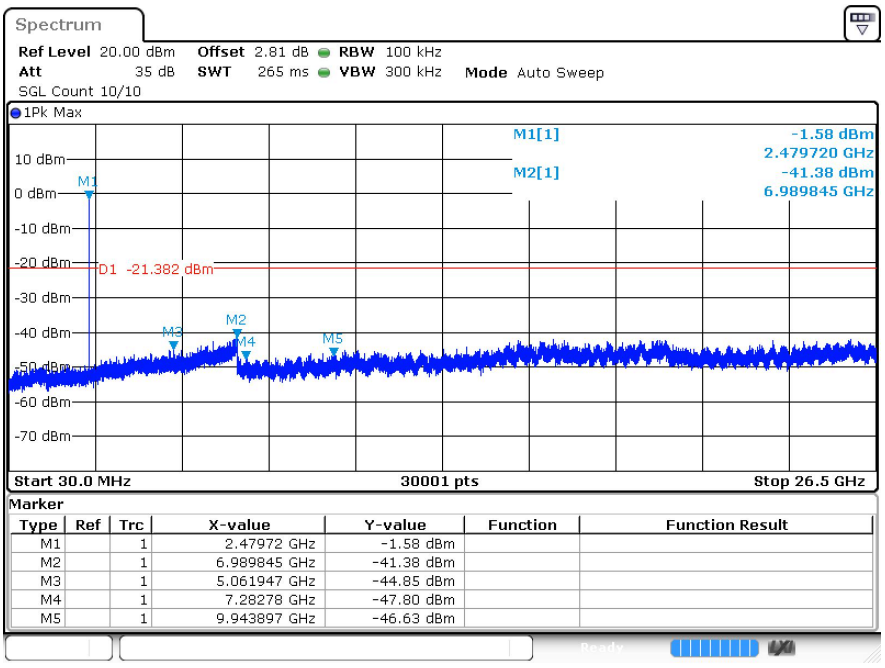
7.1 Test Result

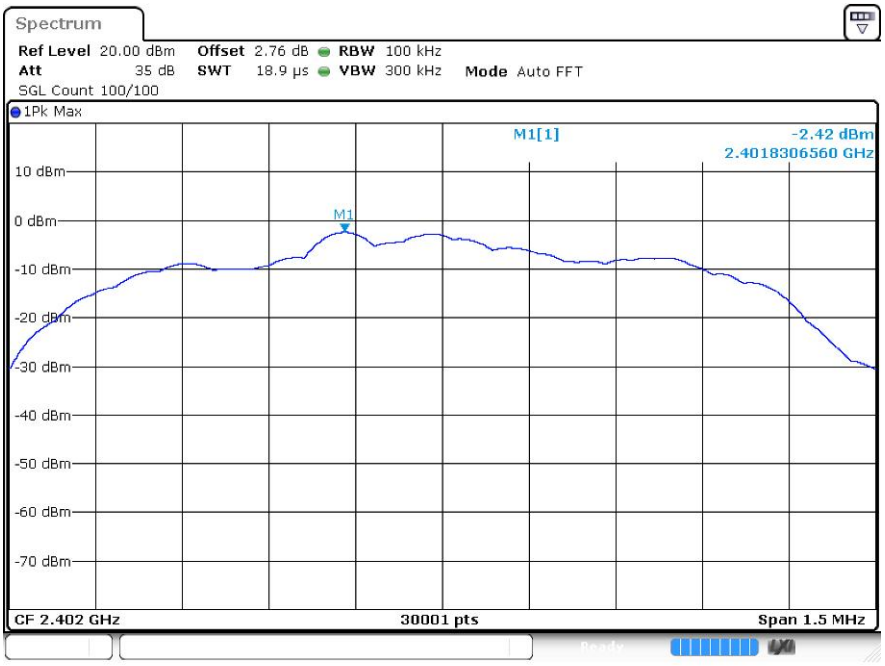
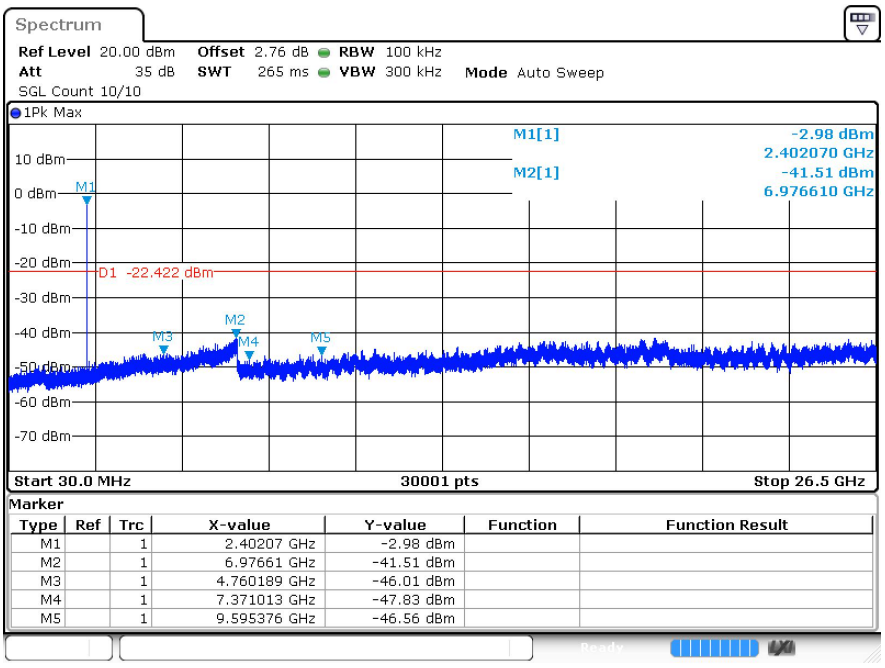
Mode	Channel	Max. Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	-39.06	-20	Pass
	MCH	-38.1	-20	Pass
	HCH	-40	-20	Pass
π/4DQPSK	LCH	-39.09	-20	Pass
	MCH	-38.49	-20	Pass
	HCH	-39.77	-20	Pass

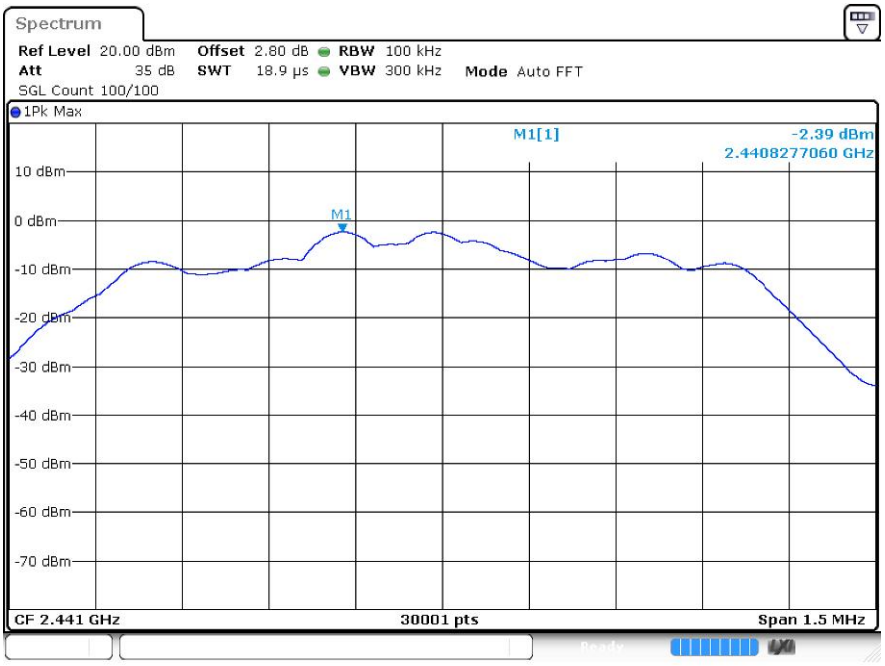
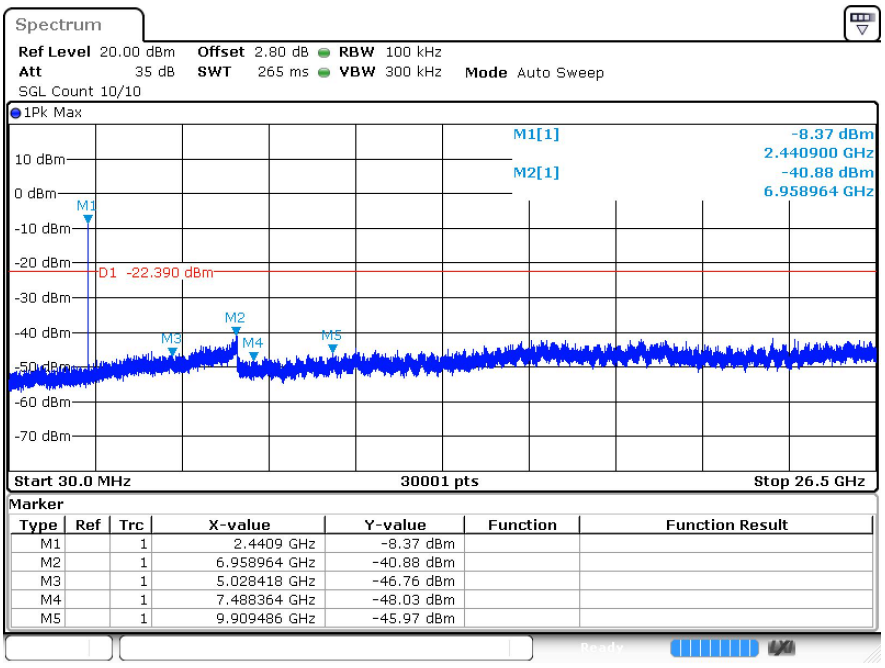
7.2 Test Graphs

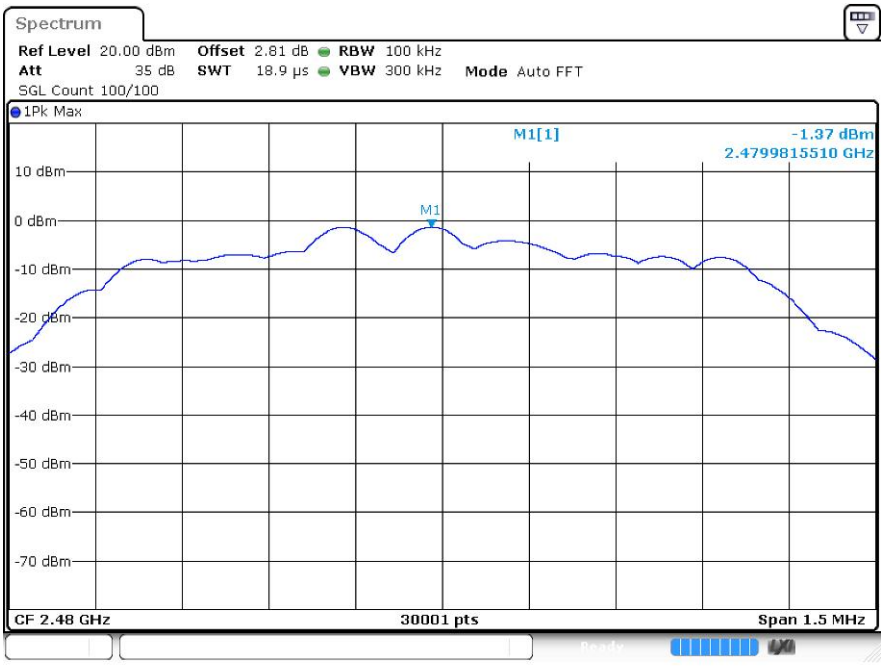
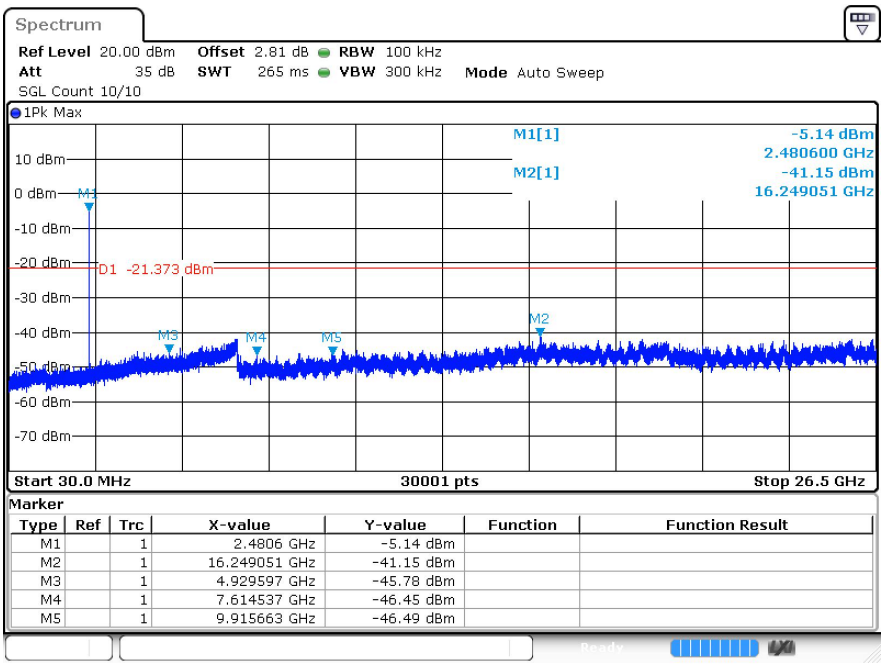
GFSK_LCH_Graphs	
Pref	
Puw	

GFSK_MCH_Graphs	
Pref	
Puw	

GFSK_HCH_Graphs	
Pref	
Puw	 Marker Type | Ref | Trc | X-value | Y-value | Function | Function Result M1 | | 1 | 2.47972 GHz | -1.58 dBm | | M2 | | 1 | 6.989845 GHz | -41.38 dBm | | M3 | | 1 | 5.061947 GHz | -44.85 dBm | | M4 | | 1 | 7.28278 GHz | -47.80 dBm | | M5 | | 1 | 9.943897 GHz | -46.63 dBm | |

π/4DQPSK_LCH_Graphs	
Pref	
Puw	 Marker Type | Ref | Trc | X-value | Y-value | Function | Function Result M1 | 1 | 2.40207 GHz | -2.98 dBm M2 | 1 | 6.97661 GHz | -41.51 dBm M3 | 1 | 4.760189 GHz | -46.01 dBm M4 | 1 | 7.371013 GHz | -47.83 dBm M5 | 1 | 9.595376 GHz | -46.56 dBm

π/4DQPSK_MCH_Graphs	
Pref	
Puw	 Marker Type | Ref | Trc | X-value | Y-value | Function | Function Result M1 | | 1 | 2.4409 GHz | -8.37 dBm M2 | | 1 | 6.958964 GHz | -40.88 dBm M3 | | 1 | 5.028418 GHz | -46.76 dBm M4 | | 1 | 7.488364 GHz | -48.03 dBm M5 | | 1 | 9.909486 GHz | -45.97 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	-52.51	-20	Pass
			On	-51.46	-20	Pass
	HCH	2480	Off	-52.19	-20	Pass
			On	-52.01	-20	Pass
π/4DQPSK	LCH	2402	Off	-52.94	-20	Pass
			On	-51.84	-20	Pass
	HCH	2480	Off	-52.37	-20	Pass
			On	-51.5	-20	Pass