



## Appendix A

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

Product Name: Notebook PC

Trade Mark: Emdoor

Test Model: NP14IC-X(IC918)

#### Environmental Conditions

Temperature:	26°C
Relative Humidity:	55%
ATM Pressure:	101Kpa
Test Engineer:	Simba Huang
Supervised by:	Seal Chen

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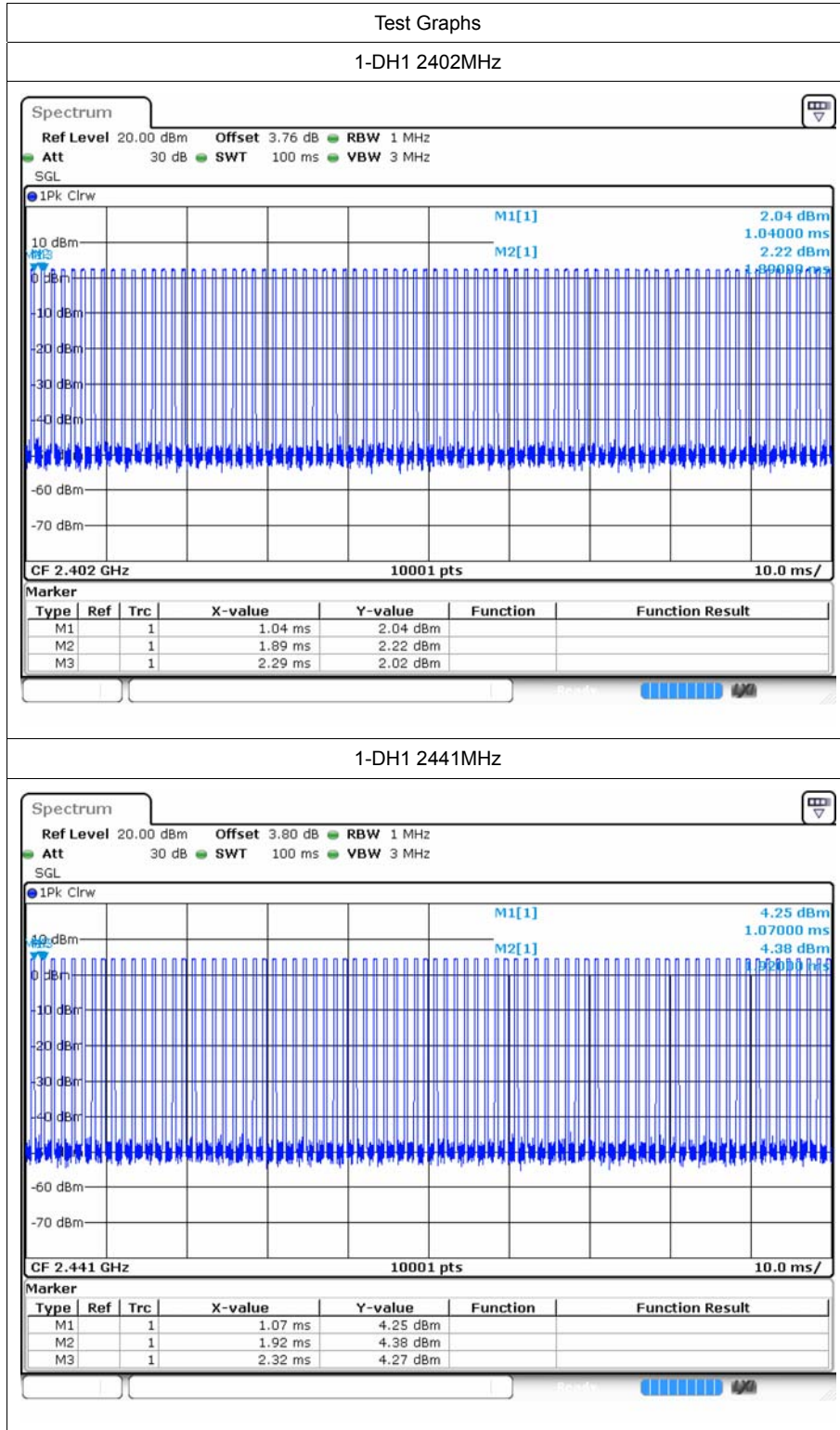


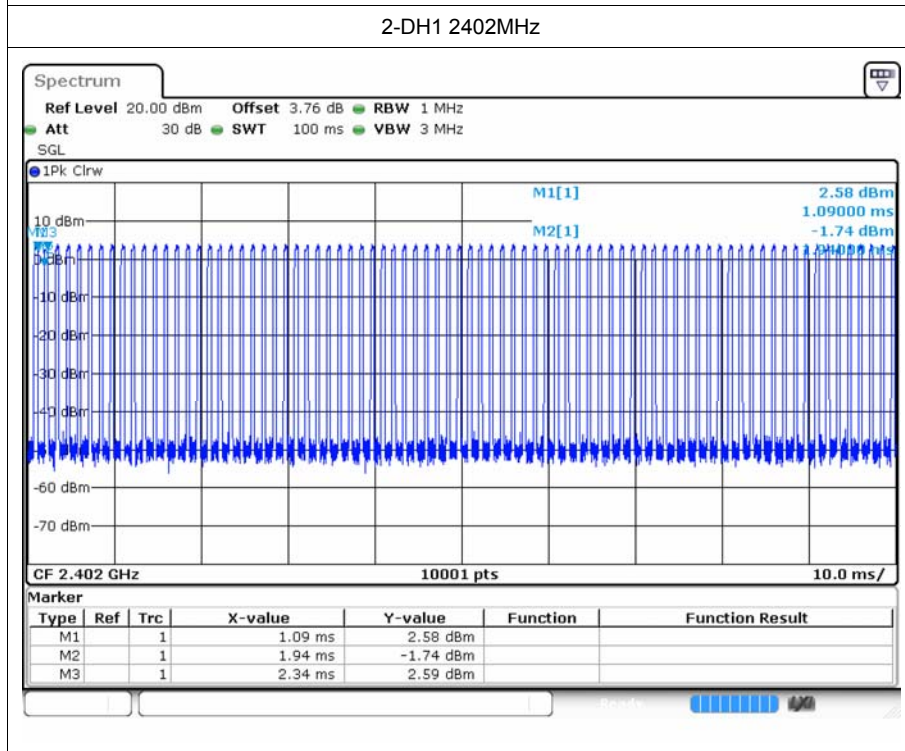
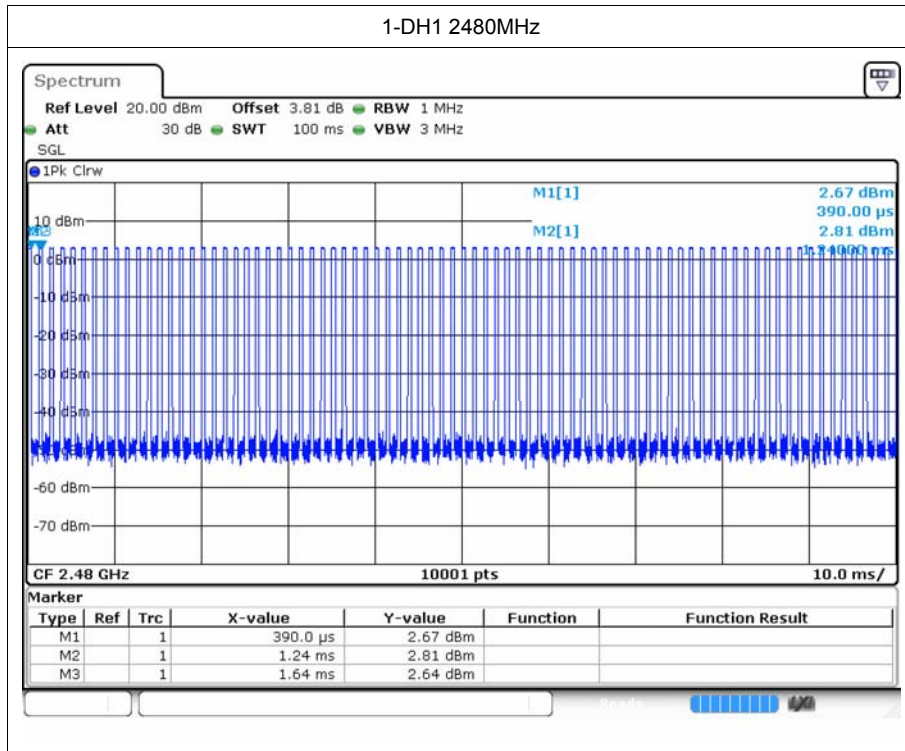
# 1 Duty Cycle

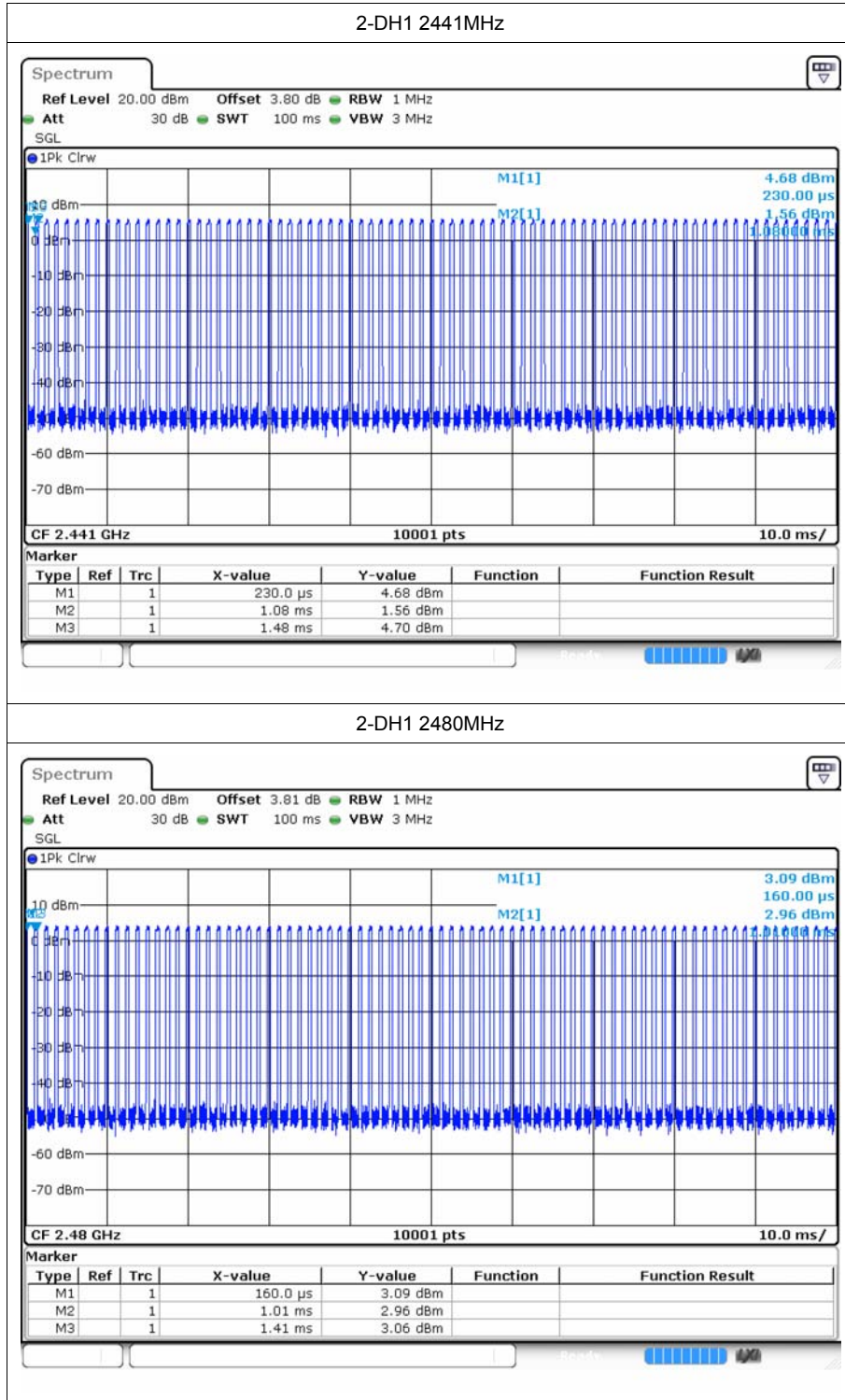
## 1.1 Test Result

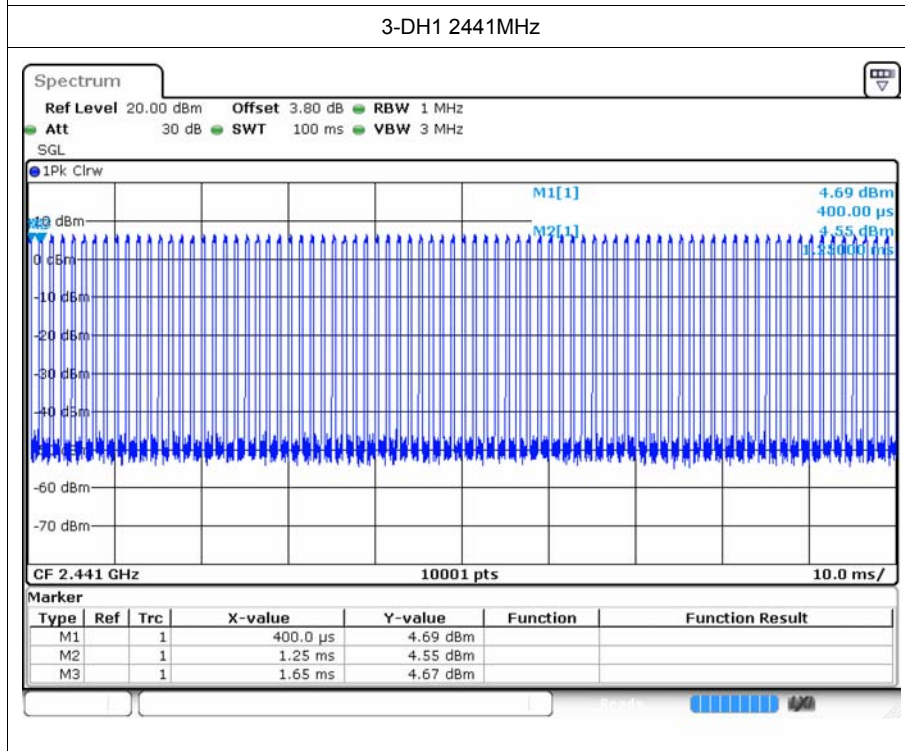
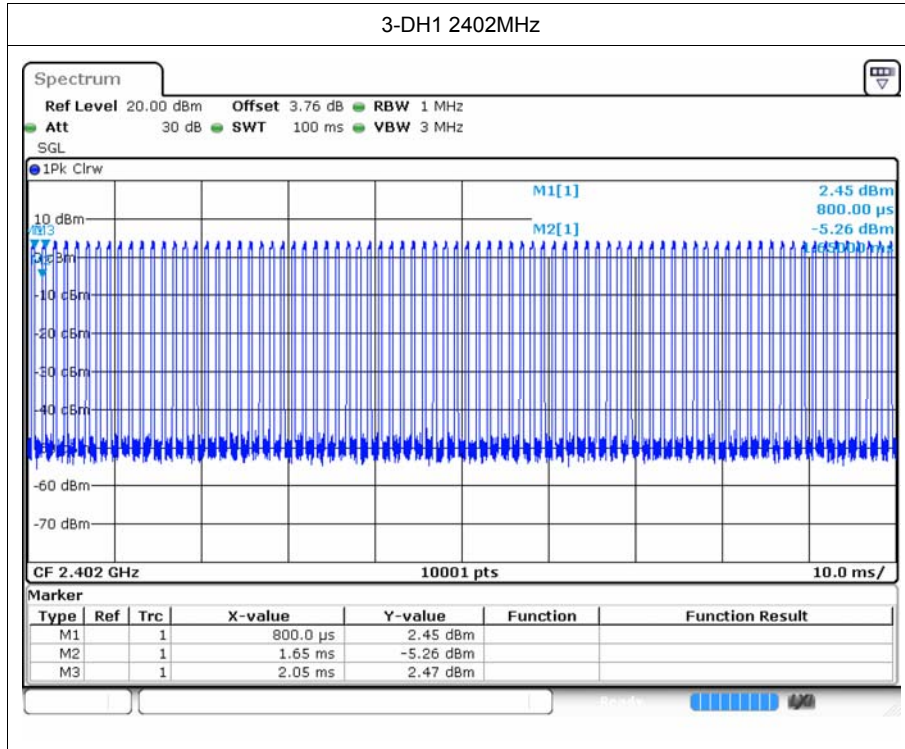
Mode	Frequency (MHz)	Duty Cycle (%)	1/T (kHz)
1-DH1	2402	32.8	2.5
1-DH1	2441	32.8	2.5
1-DH1	2480	32.81	2.5
2-DH1	2402	32.8	2.5
2-DH1	2441	32.81	2.5
2-DH1	2480	32.81	2.5
3-DH1	2402	32.8	2.5
3-DH1	2441	32.81	2.5
3-DH1	2480	32.81	2.5

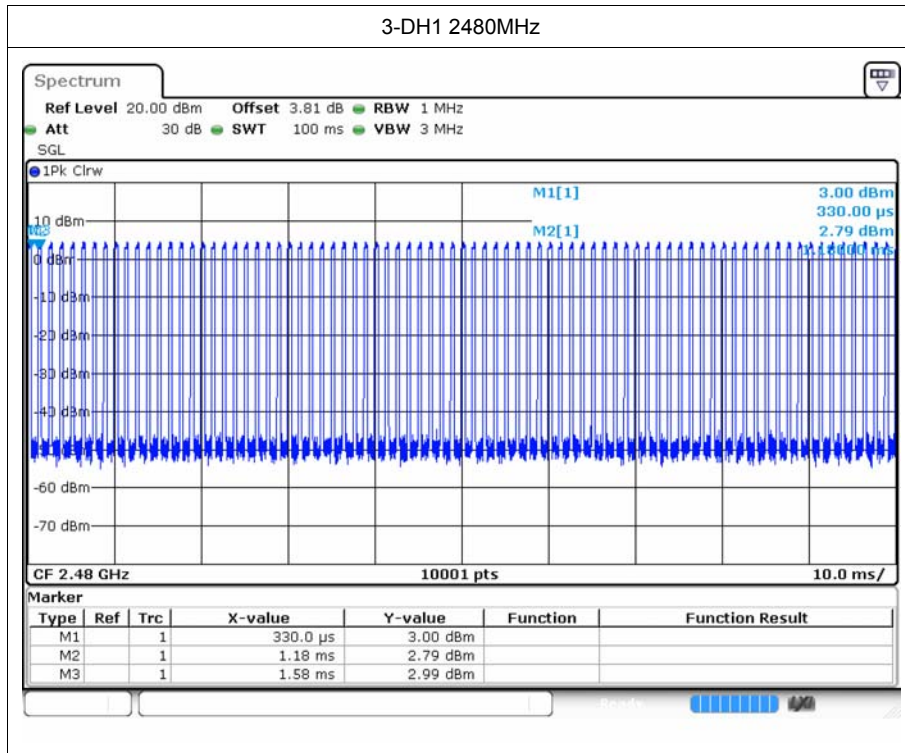
## 1.2 Test Graphs











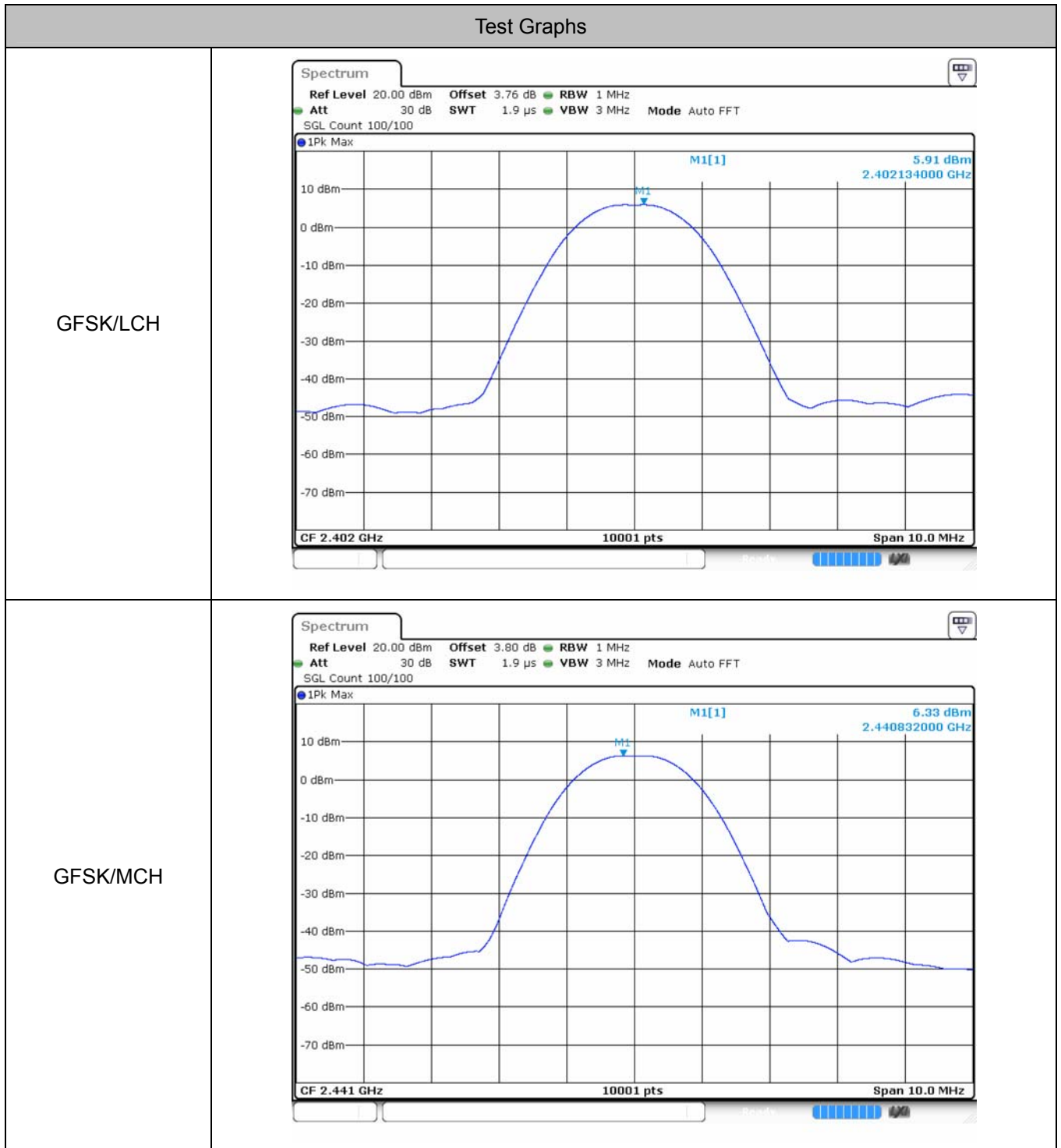


## 2 Maximum Conducted Peak Output Power

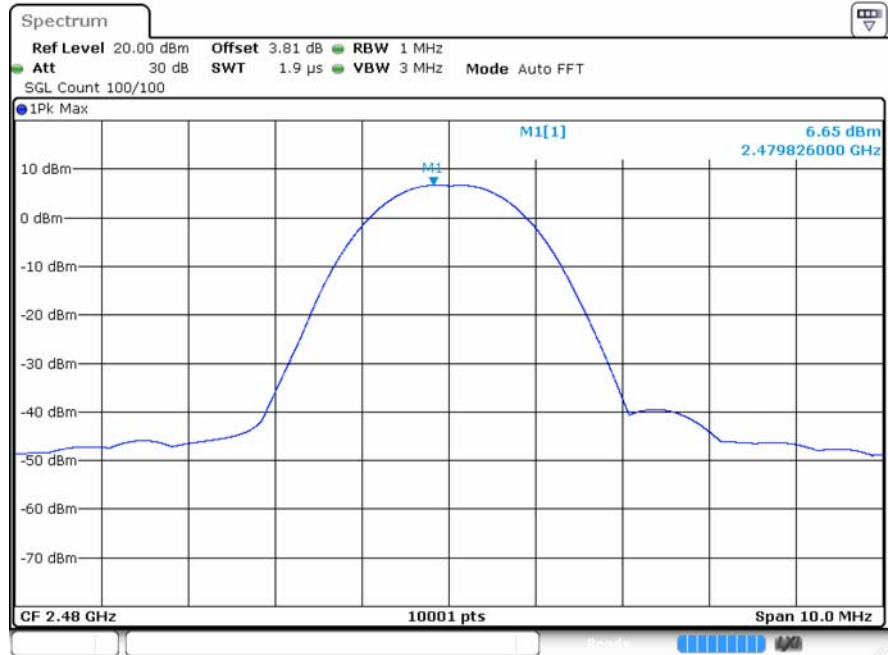
### 2.1 Test Result

Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	5.91	21	Pass
	MCH	6.33	21	Pass
	HCH	6.65	21	Pass
$\pi/4$ DQPSK	LCH	5.31	21	Pass
	MCH	5.07	21	Pass
	HCH	5.01	21	Pass
8DPSK	LCH	5.68	21	Pass
	MCH	5.36	21	Pass
	HCH	4.99	21	Pass

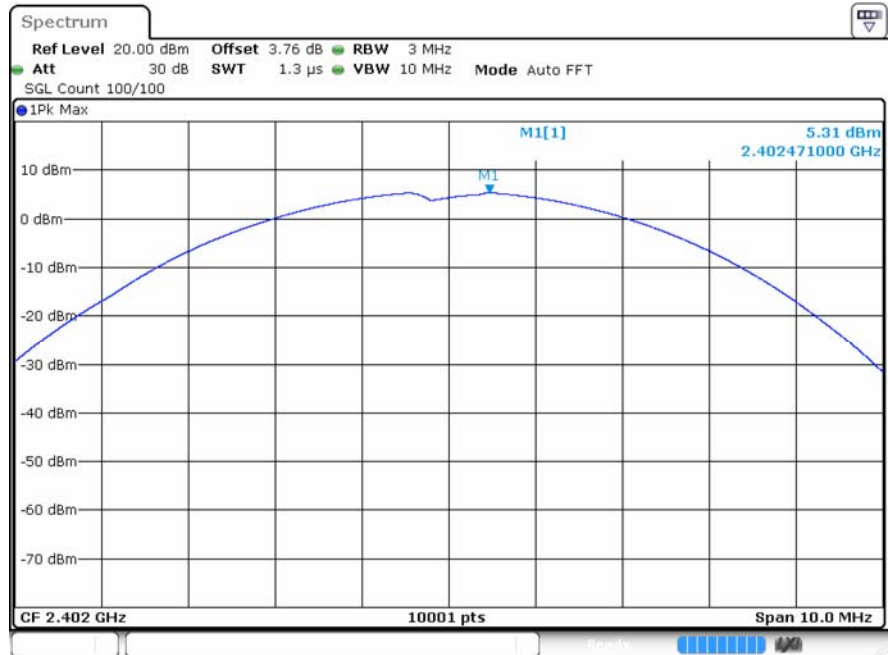
## 2.2 Test Graphs



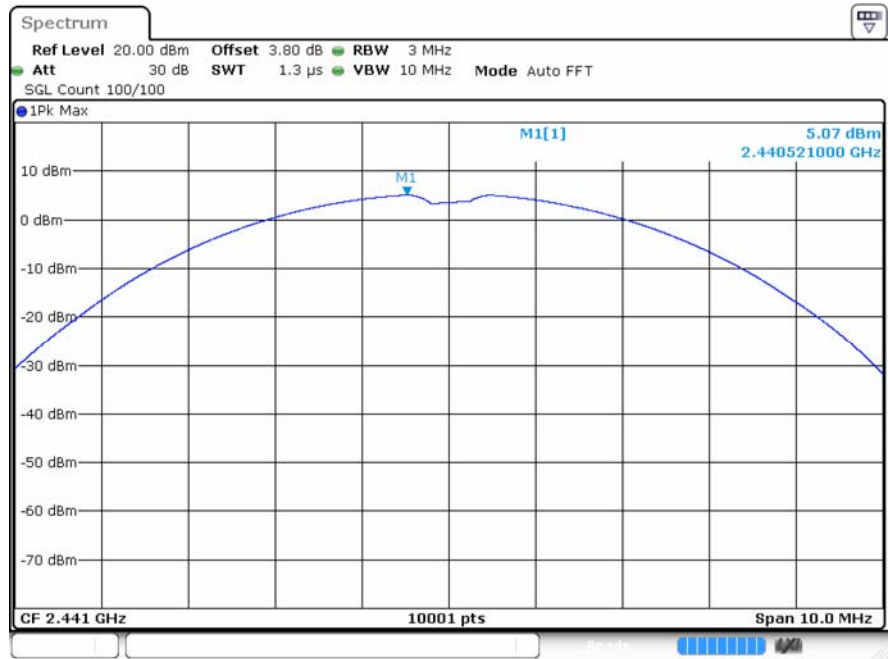
GFSK/HCH



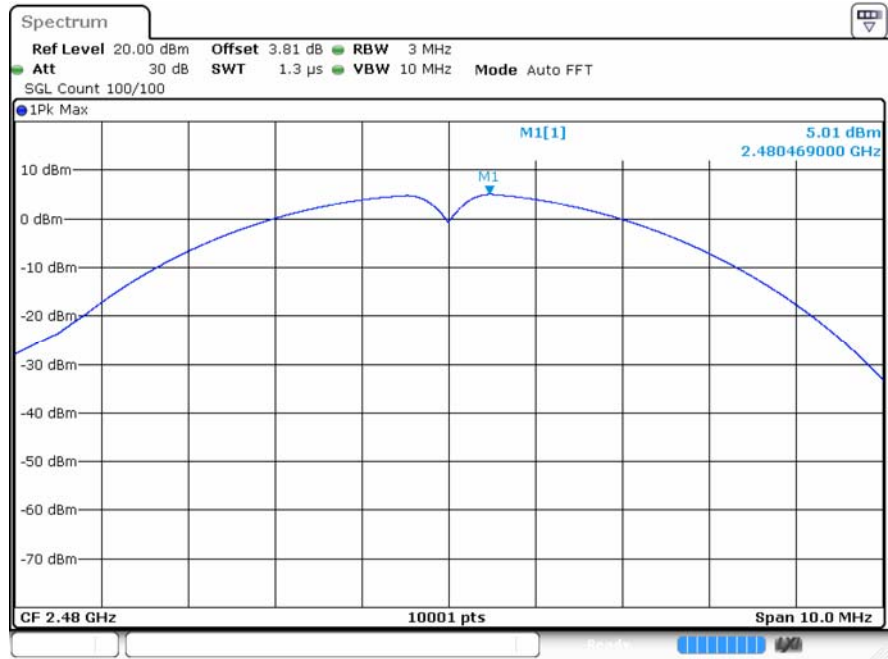
$\pi/4$ DQPSK/LCH



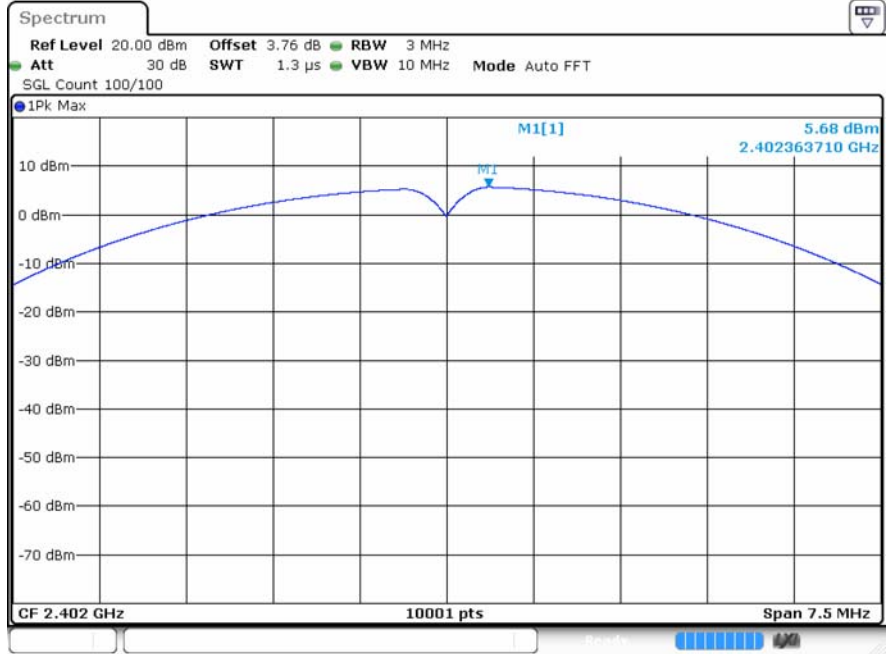
$\pi/4$ DQPSK/MCH



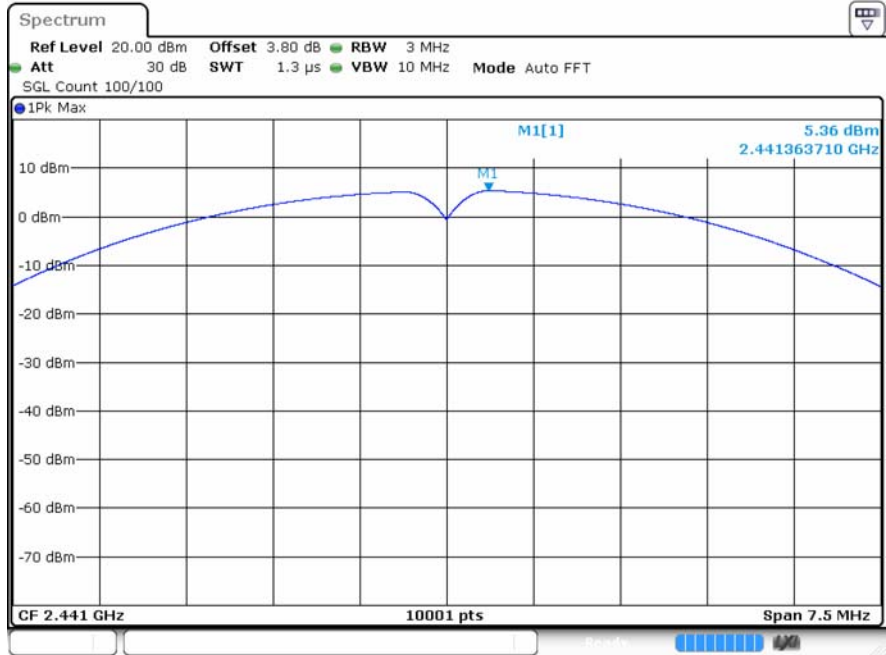
$\pi/4$ DQPSK/HCH



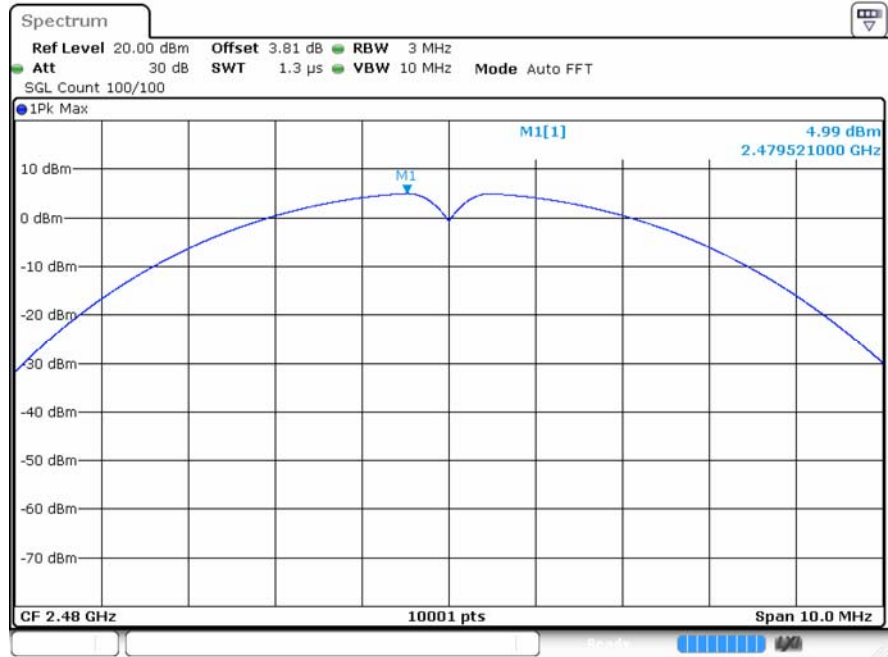
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

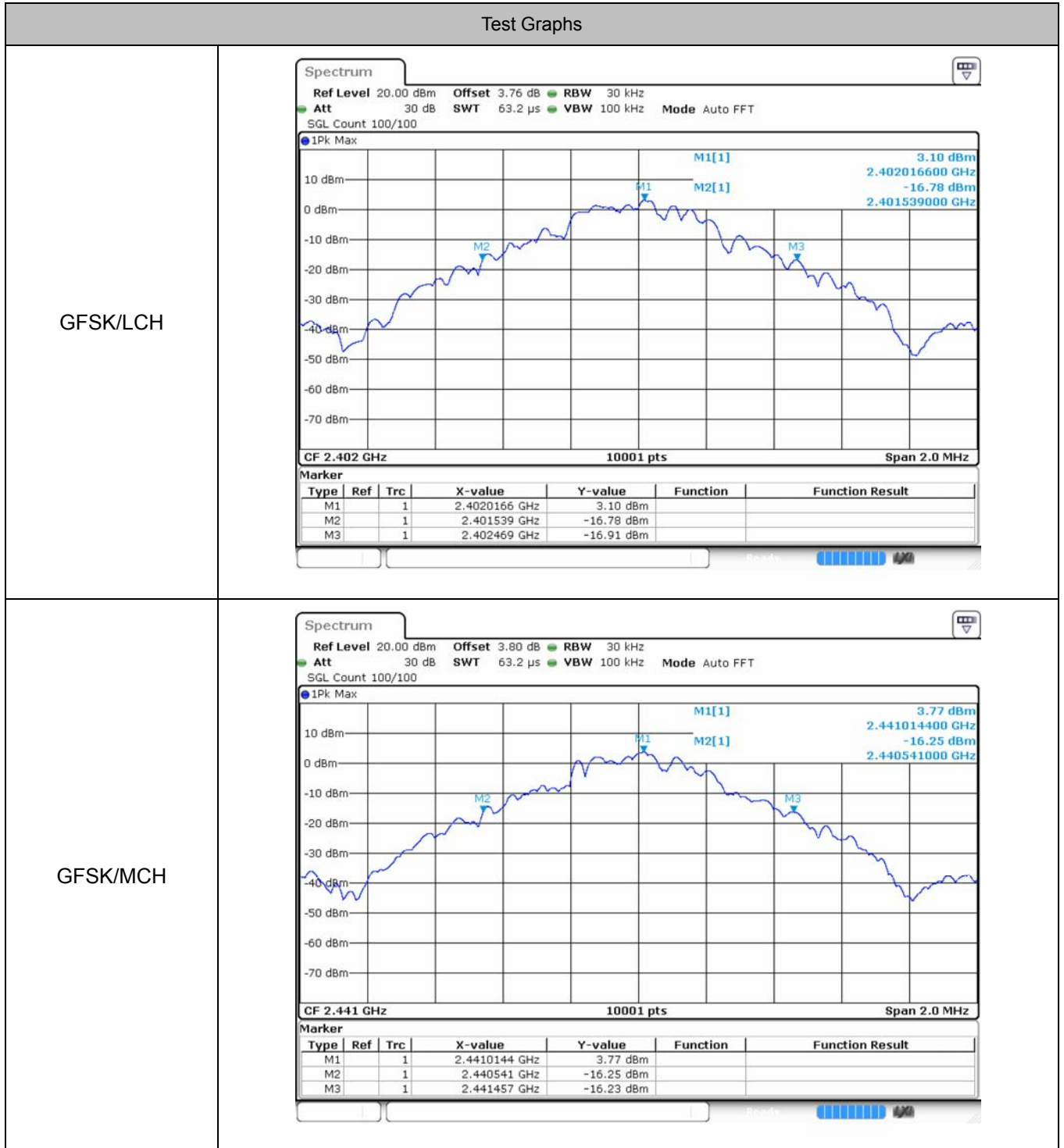


### 3 20dB Bandwidth

#### 3.1 Test Result

Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.93	Not Specified	Pass
	MCH	0.916	Not Specified	Pass
	HCH	0.883	Not Specified	Pass
$\pi/4$ DQPSK	LCH	1.399	Not Specified	Pass
	MCH	1.475	Not Specified	Pass
	HCH	1.38	Not Specified	Pass
8DPSK	LCH	1.439	Not Specified	Pass
	MCH	1.451	Not Specified	Pass
	HCH	1.429	Not Specified	Pass

### 3.2 Test Graphs

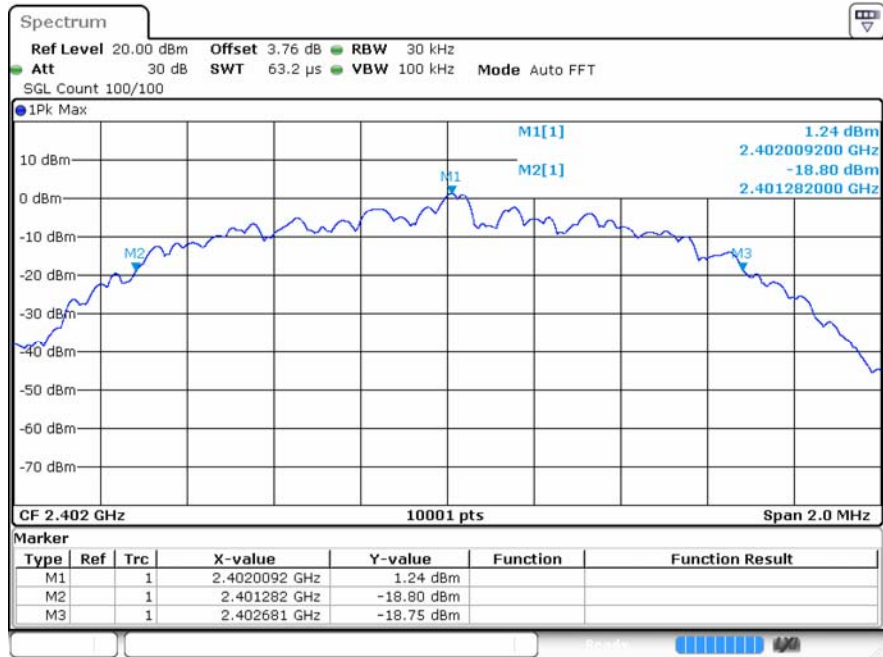




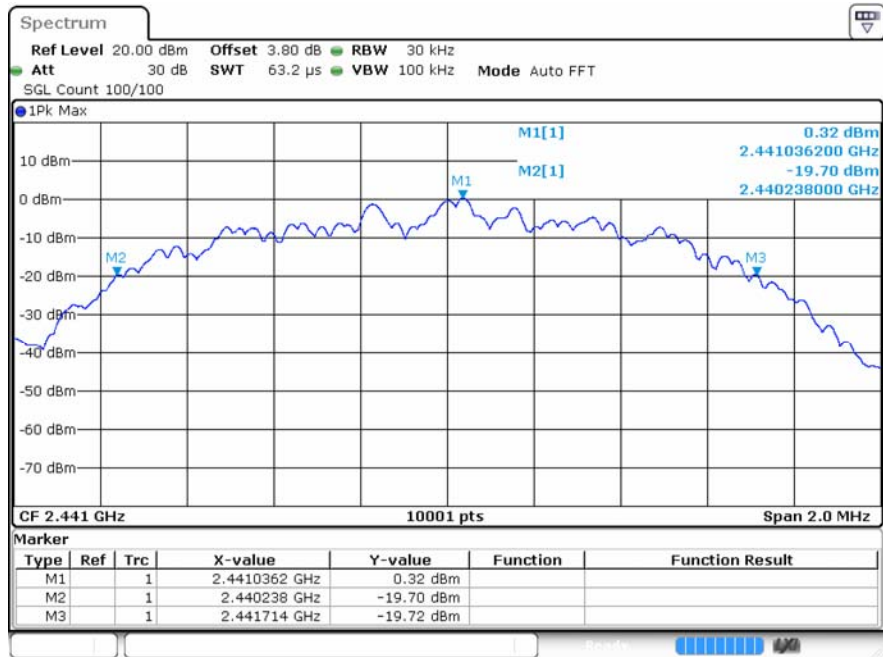
GFSK/HCH



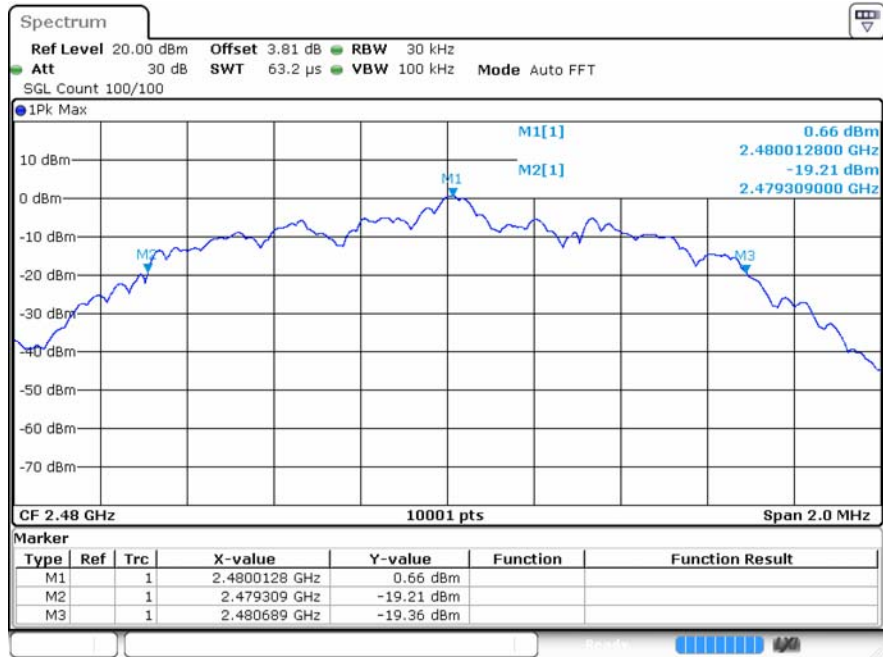
$\pi/4$ DQPSK/LCH



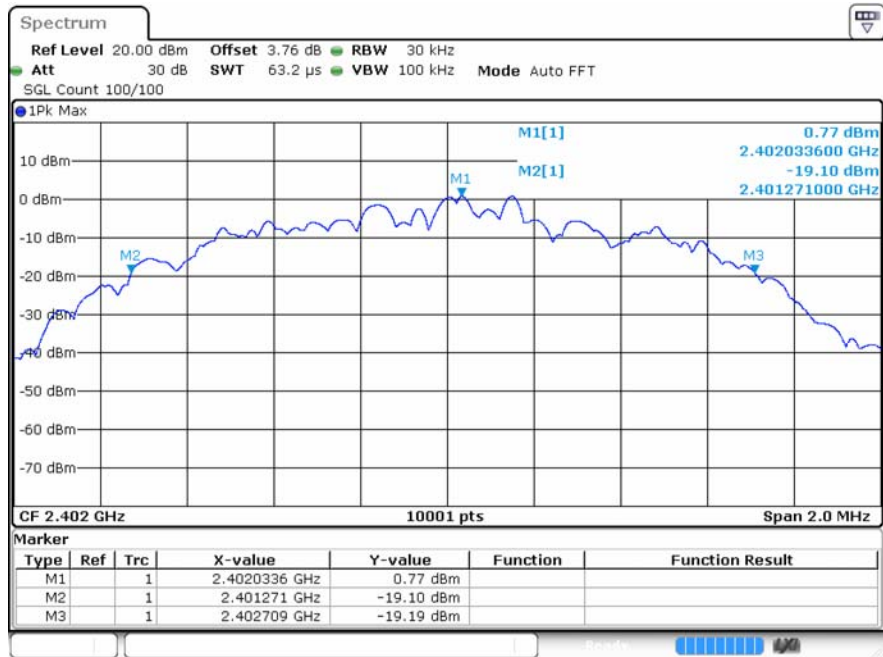
$\pi/4$ DQPSK/MCH



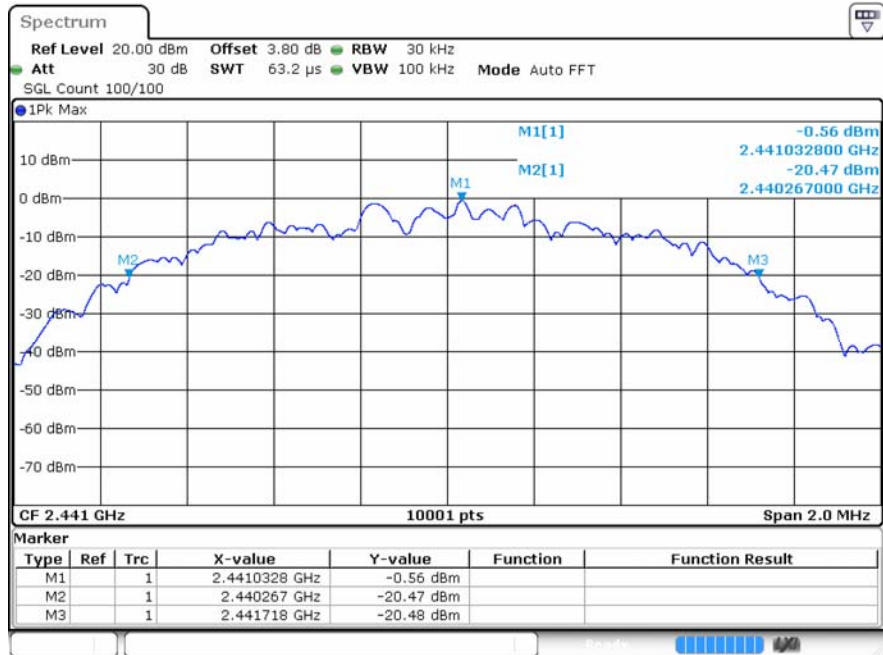
$\pi/4$ DQPSK/HCH



8DPSK/LCH

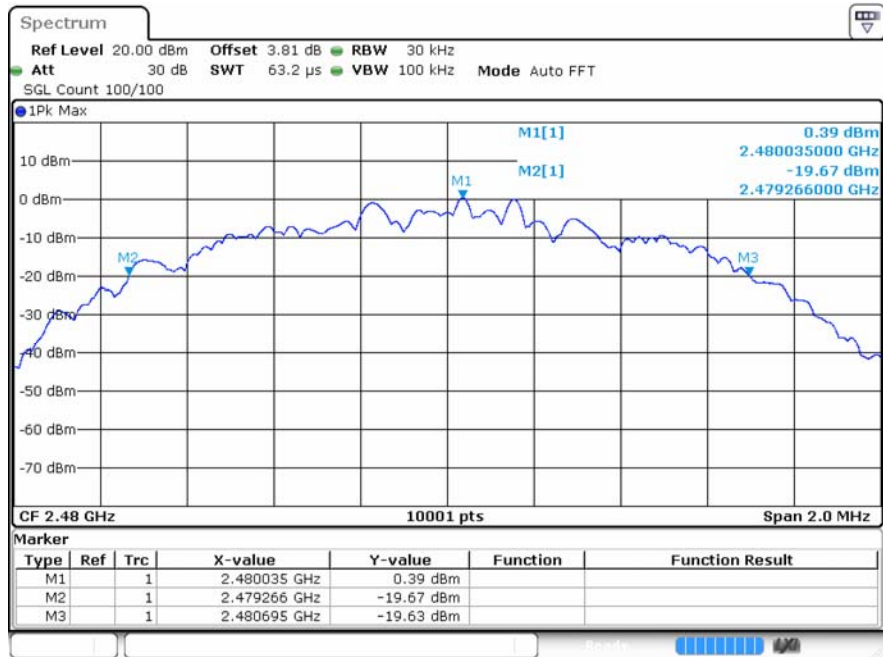


8DPSK/MCH





8DPSK/HCH

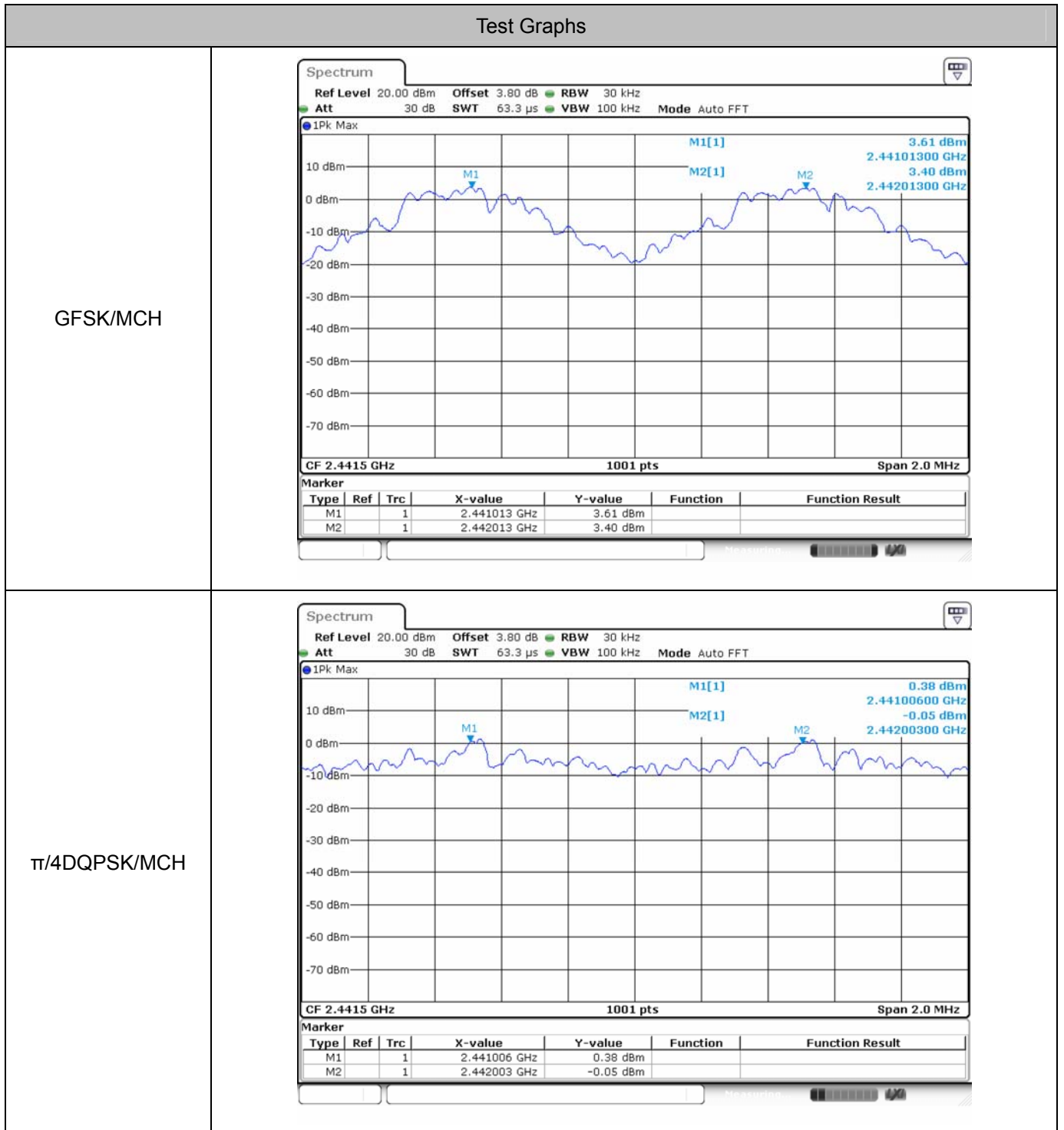


## 4 Carrier Frequency Separation

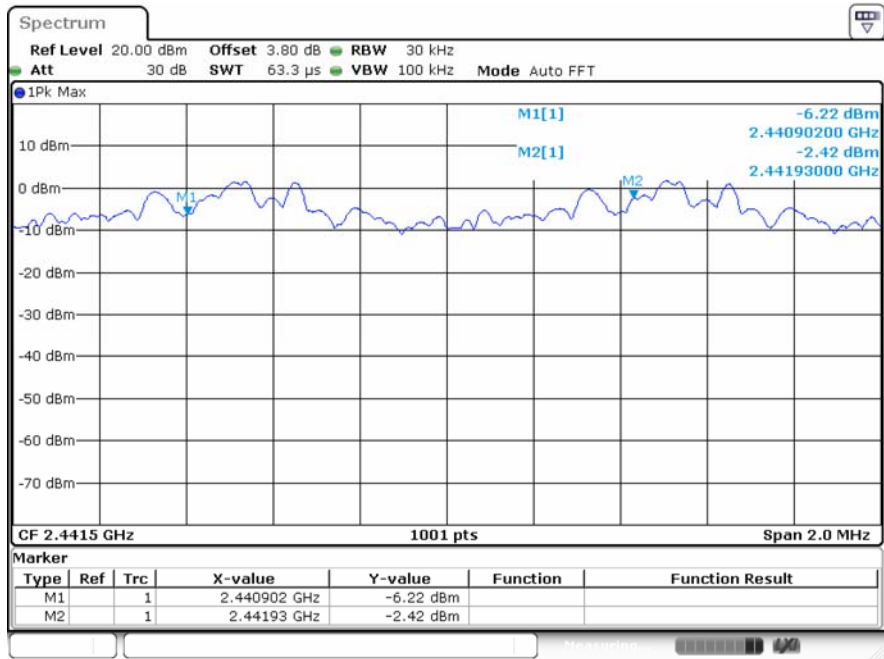
### 4.1 Test Result

Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	MCH	1	0.611	Pass
$\pi/4$ DQPSK	MCH	0.997	0.983	Pass
8DPSK	MCH	1.028	0.967	Pass

## 4.2 Test Graphs



8DPSK/MCH



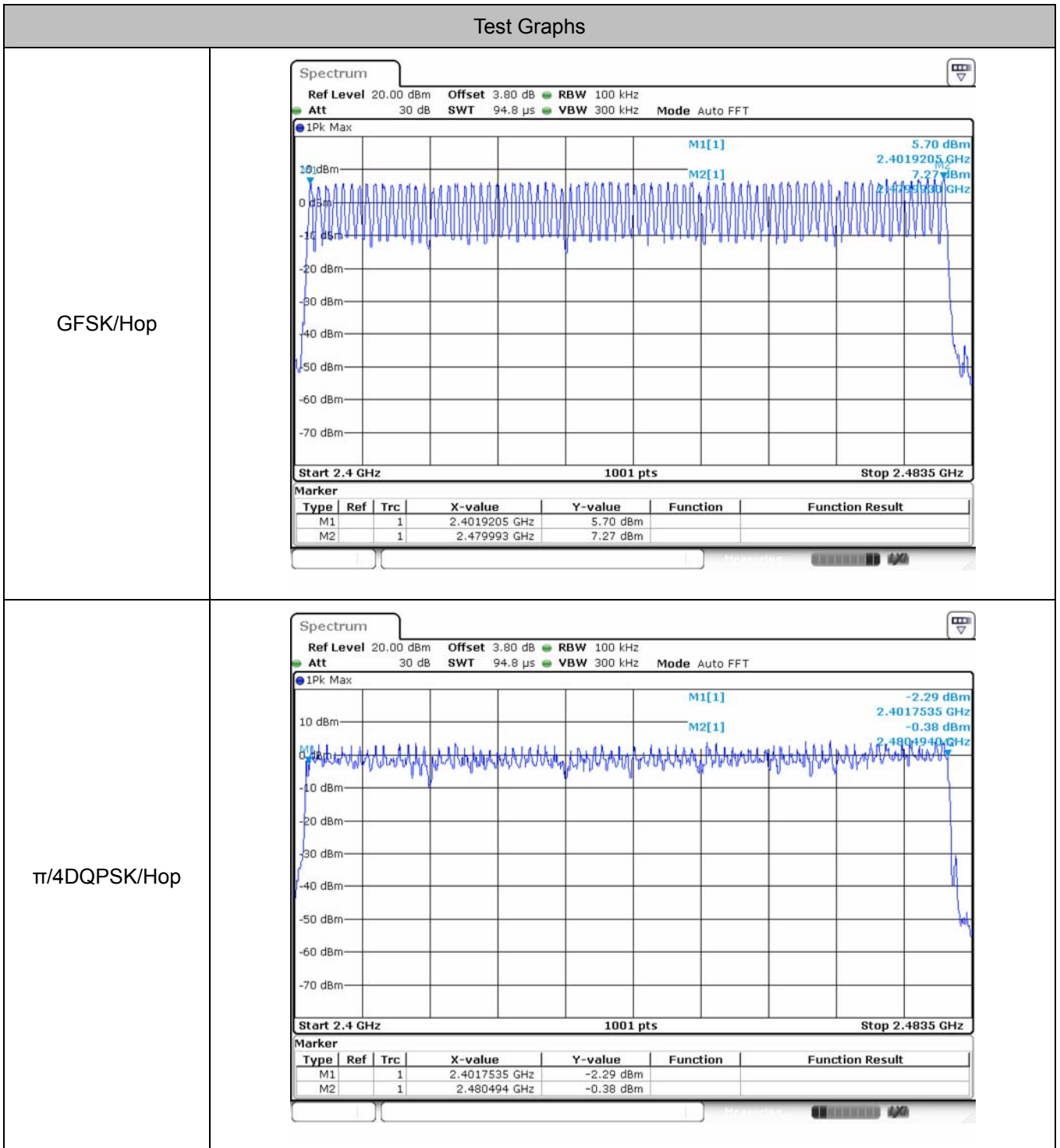
## 5 Hopping Channel Number

### 5.1 Test Result

Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	$\geq 15$	PASS
$\pi/4$ DQPSK	Hop	79	$\geq 15$	PASS
8DPSK	Hop	79	$\geq 15$	PASS

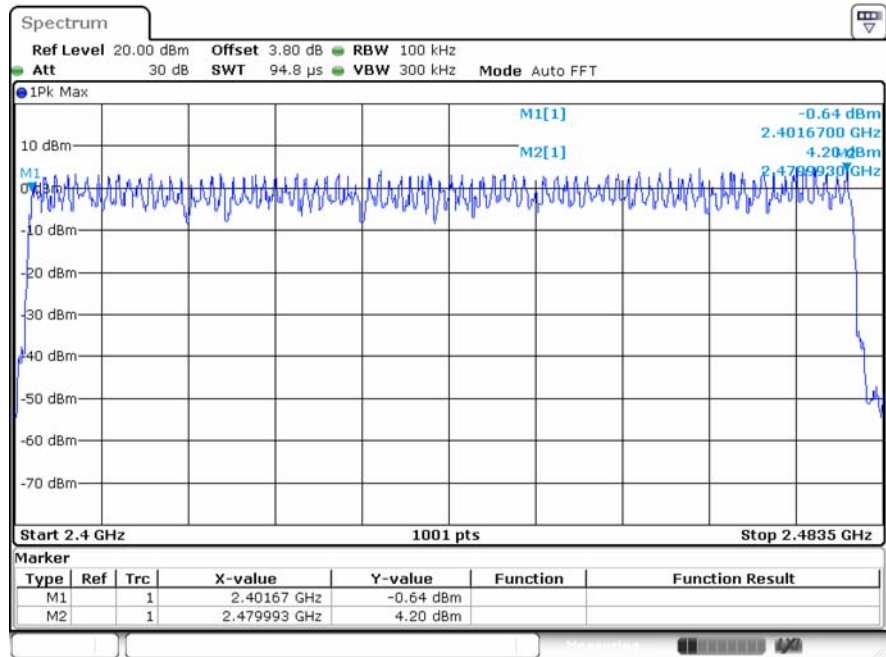


## 5.2 Test Graphs





8DPSK/Hop

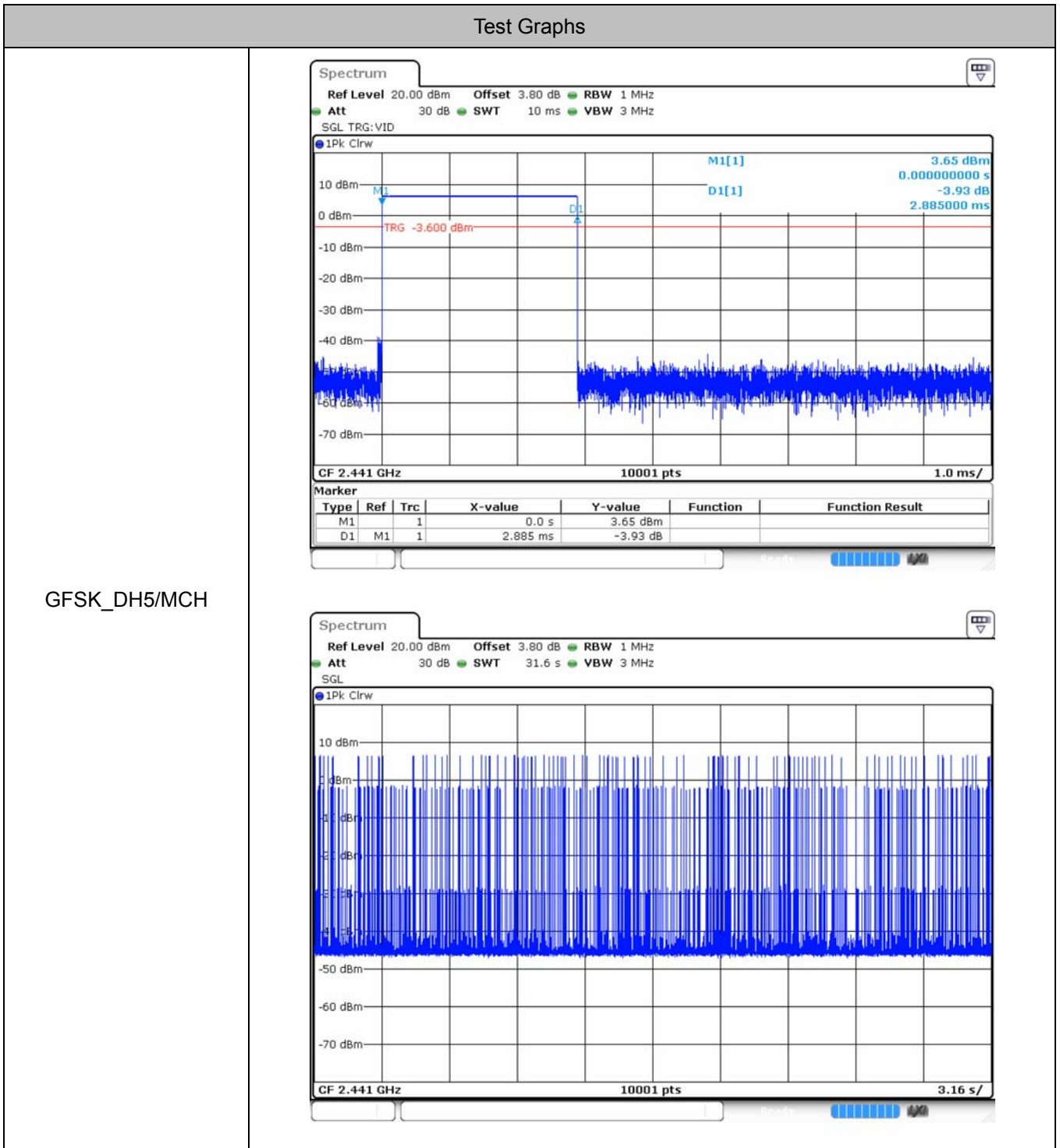


## 6 Dwell Time

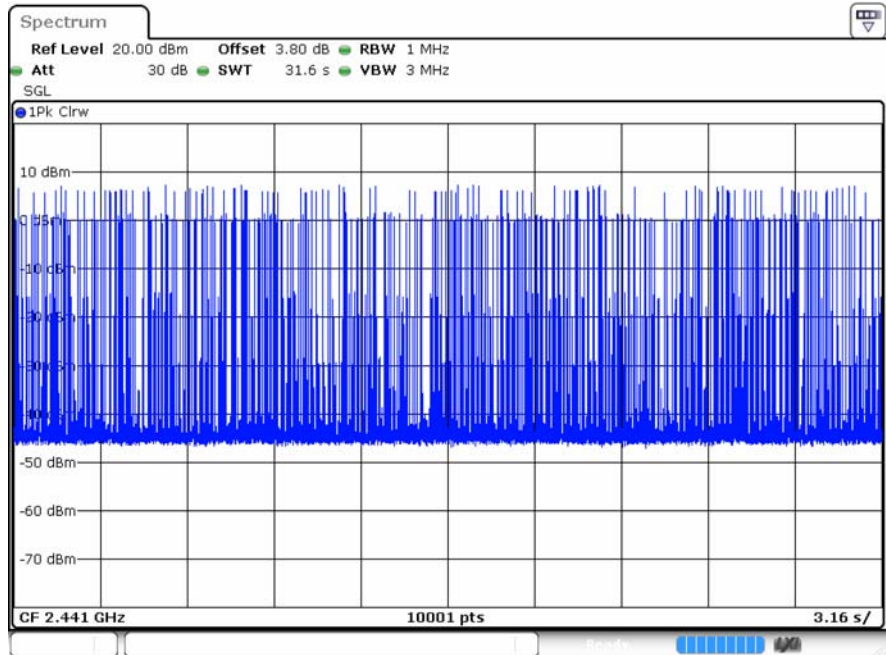
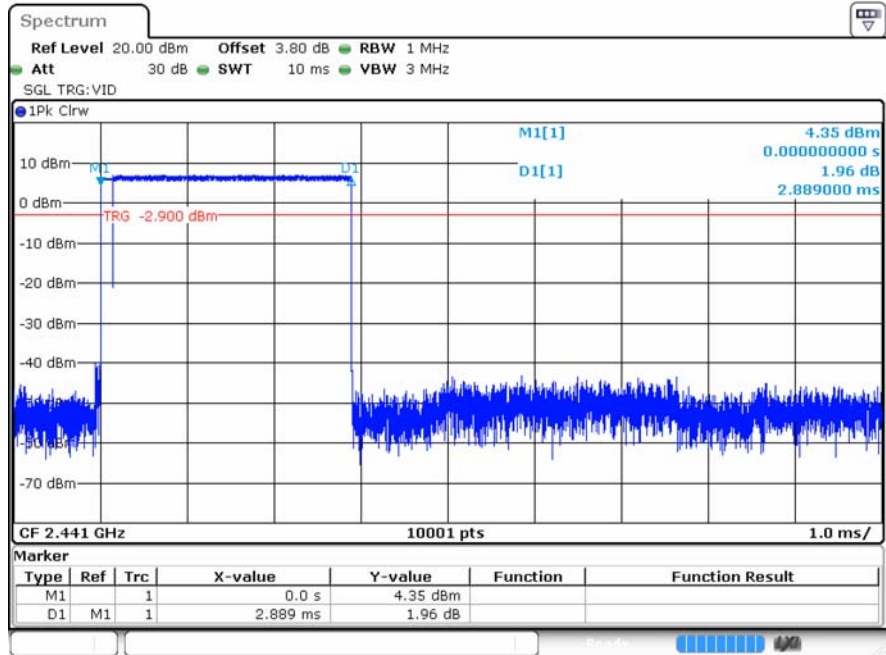
### 6.1 Test Result

Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[ms]	Limit [s]	Verdict
GFSK	DH5	MCH	2.885	111	320.235	0.4	Pass
$\pi/4$ DQPSK	2DH5	MCH	2.889	110	317.79	0.4	Pass
8DPSK	3DH5	MCH	2.891	113	326.683	0.4	Pass

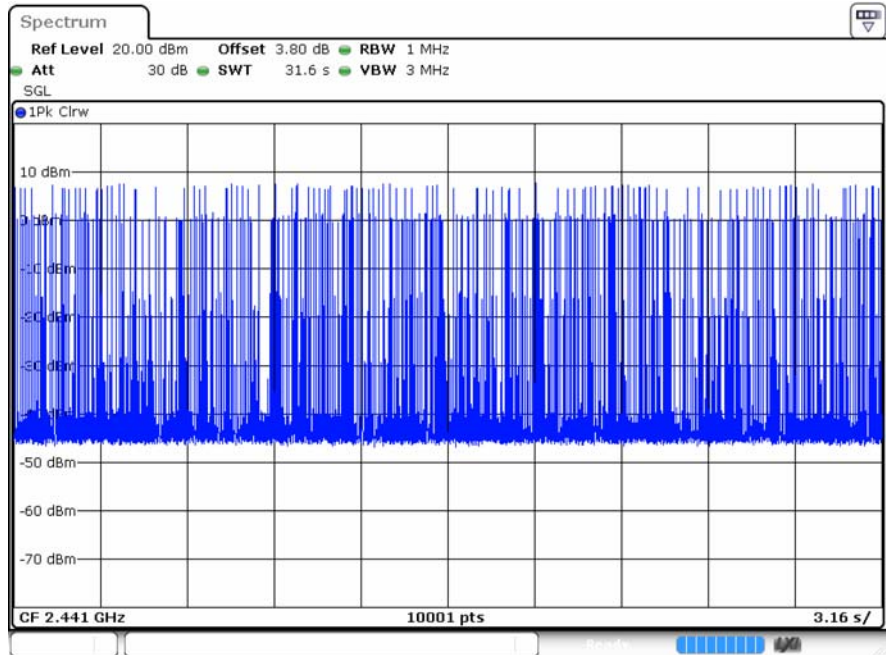
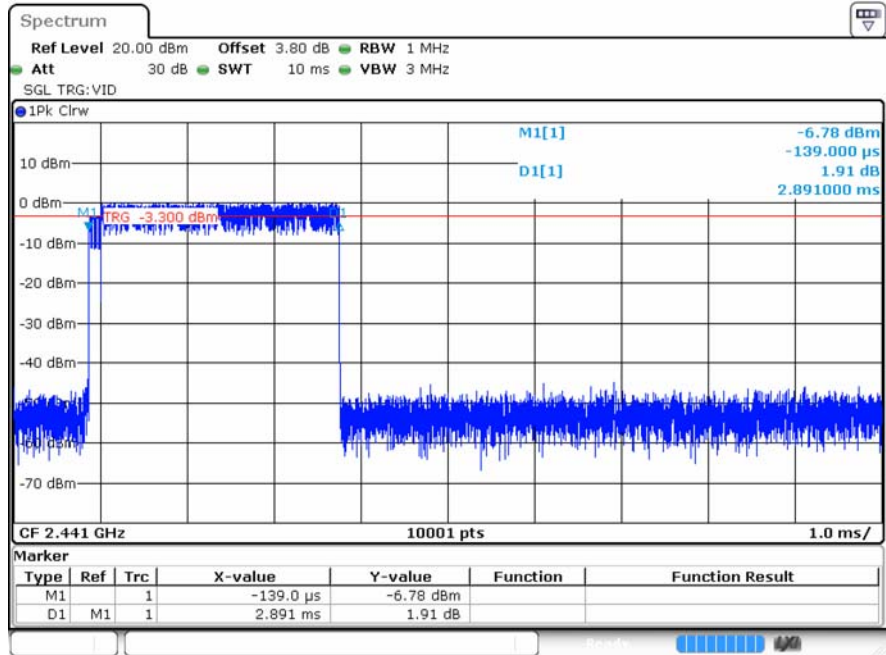
## 6.2 Test Graphs



$\pi/4$ DQPSK  
\_2DH5/MCH



8DPSK\_3DH5/MCH

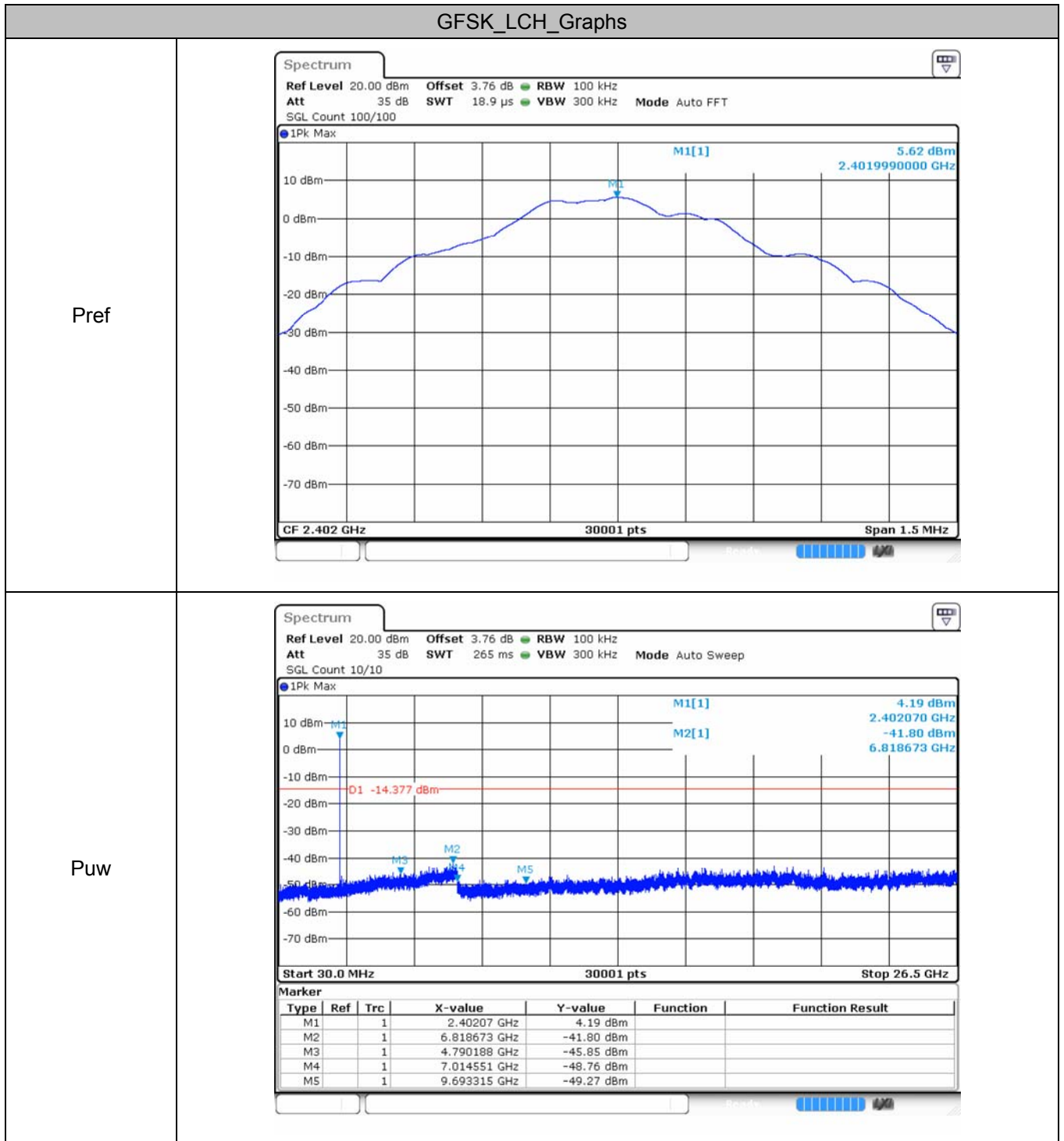


## 7 RF Conducted Spurious Emissions

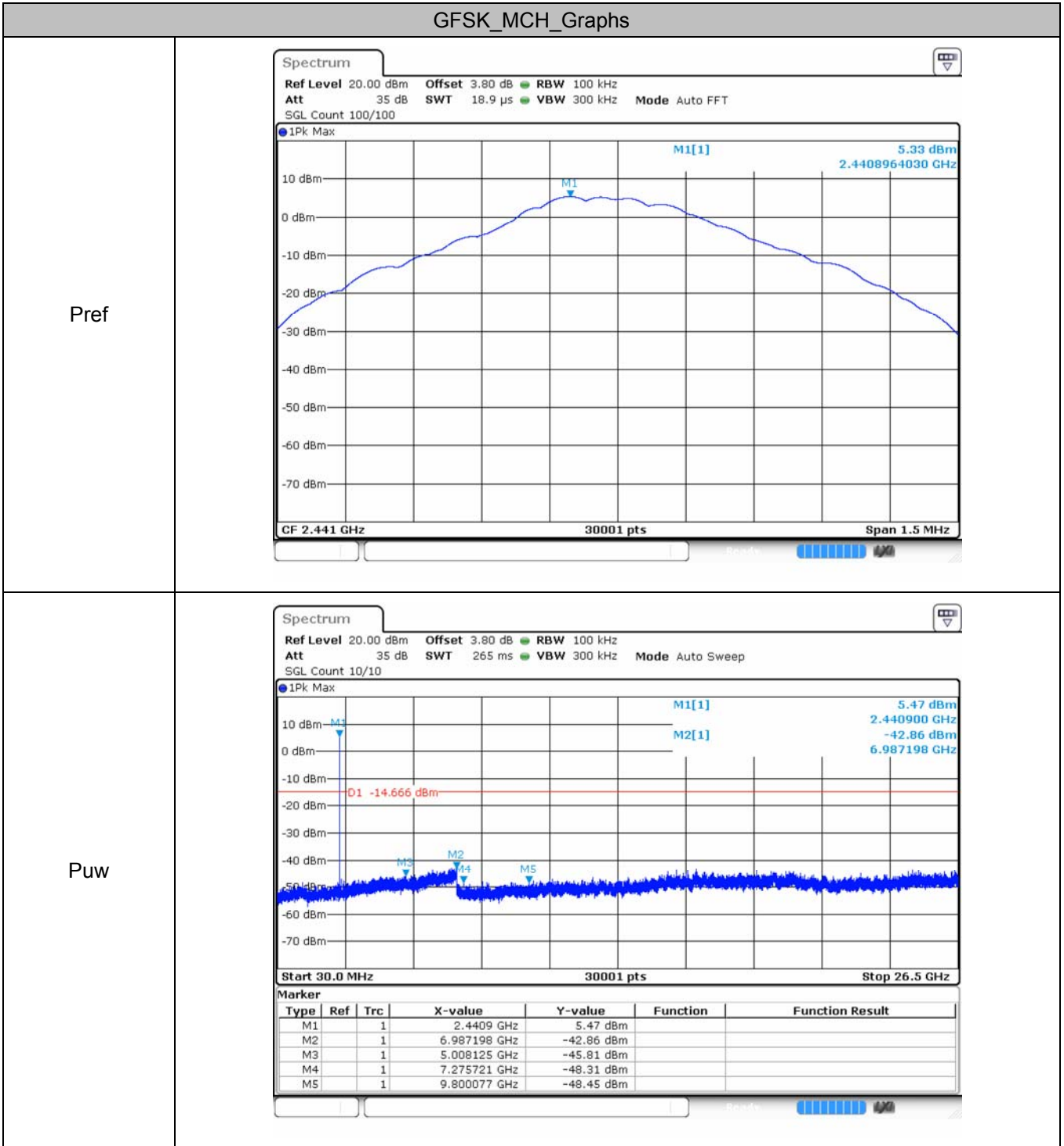
### 7.1 Test Result

Mode	Channel	Max. Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	-47.42	-20	Pass
	MCH	-48.18	-20	Pass
	HCH	-48.91	-20	Pass
$\pi/4$ DQPSK	LCH	-45.91	-20	Pass
	MCH	-46.42	-20	Pass
	HCH	-44.98	-20	Pass
8DPSK	LCH	-46.11	-20	Pass
	MCH	-46.11	-20	Pass
	HCH	-46.03	-20	Pass

## 7.2 Test Graphs

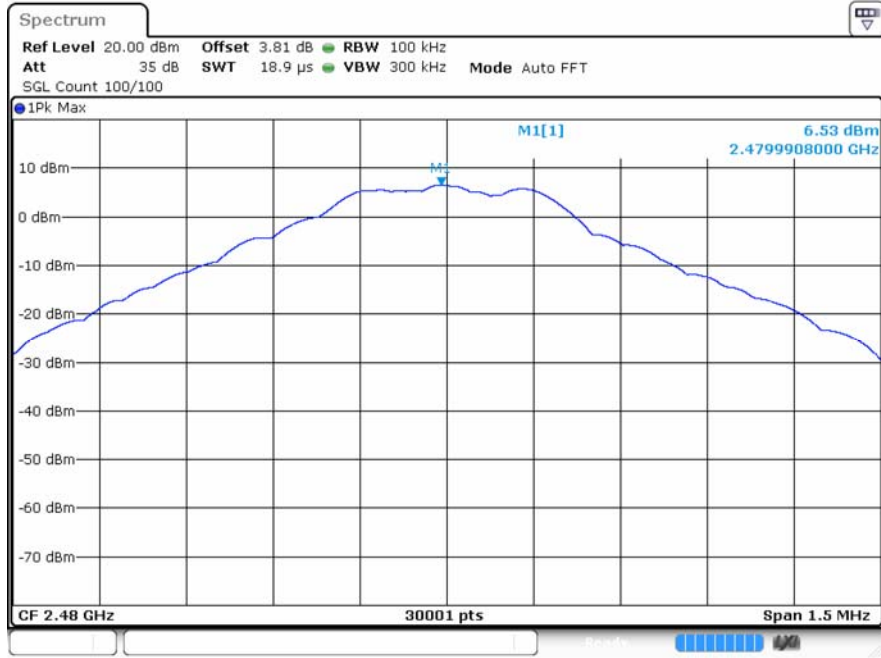




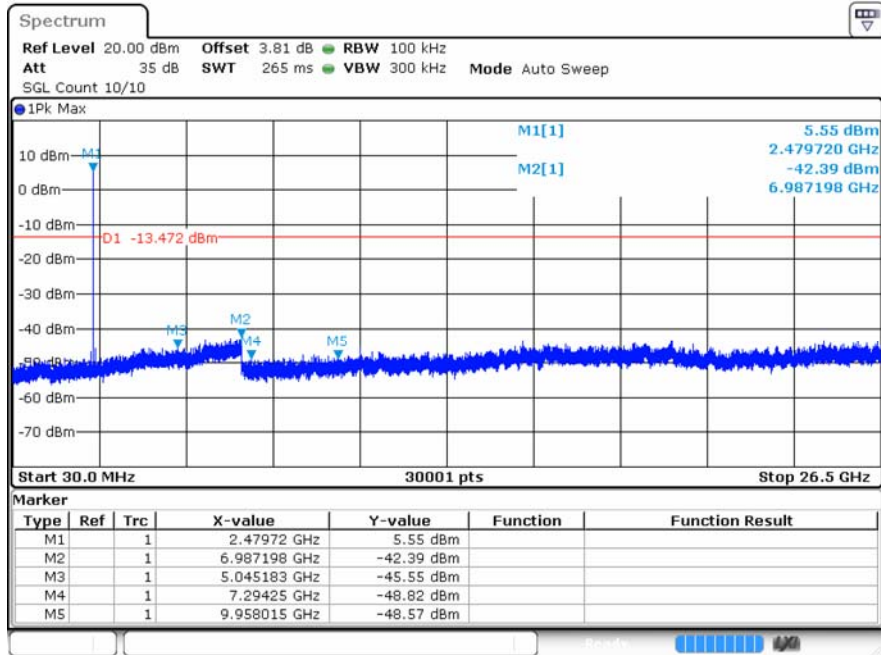


GFSK\_HCH\_Graphs

Pref

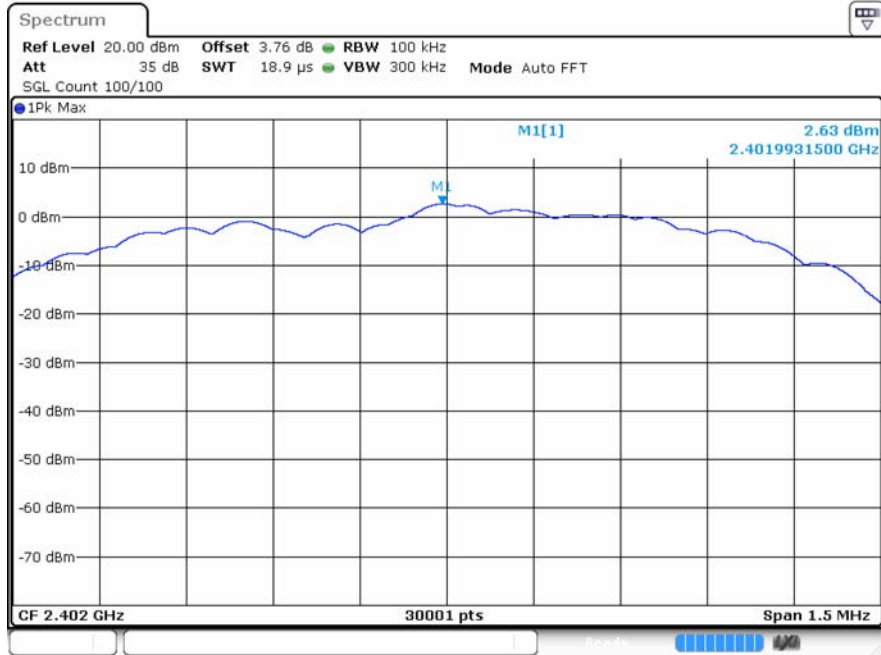


Puw

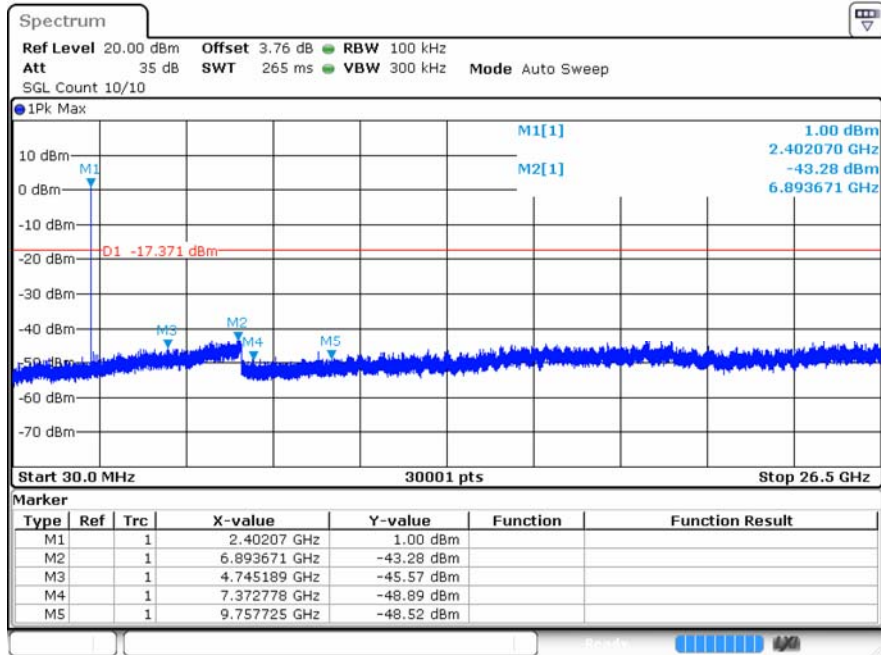


$\pi/4$ DQPSK\_LCH\_Graphs

Pref

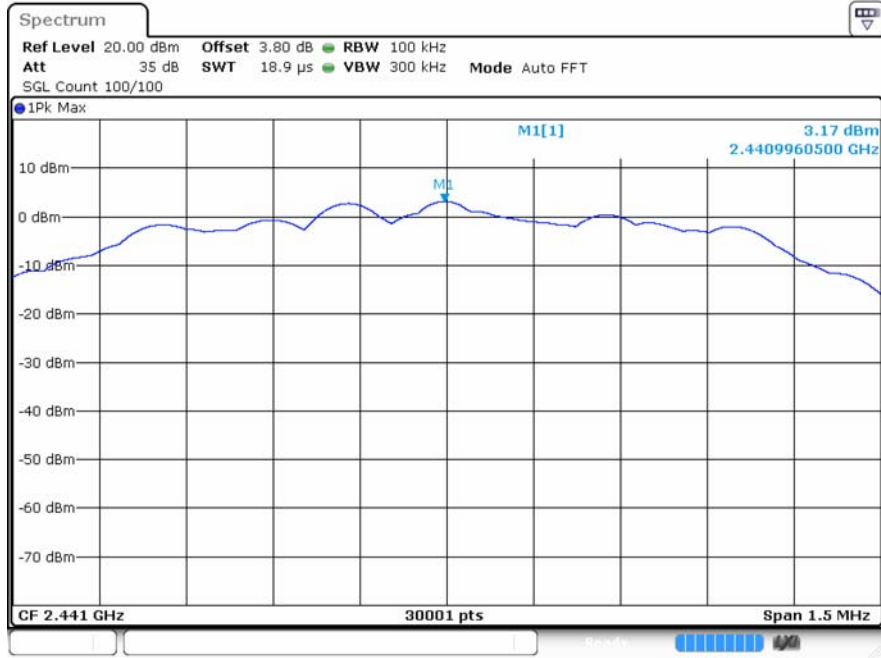


Puw

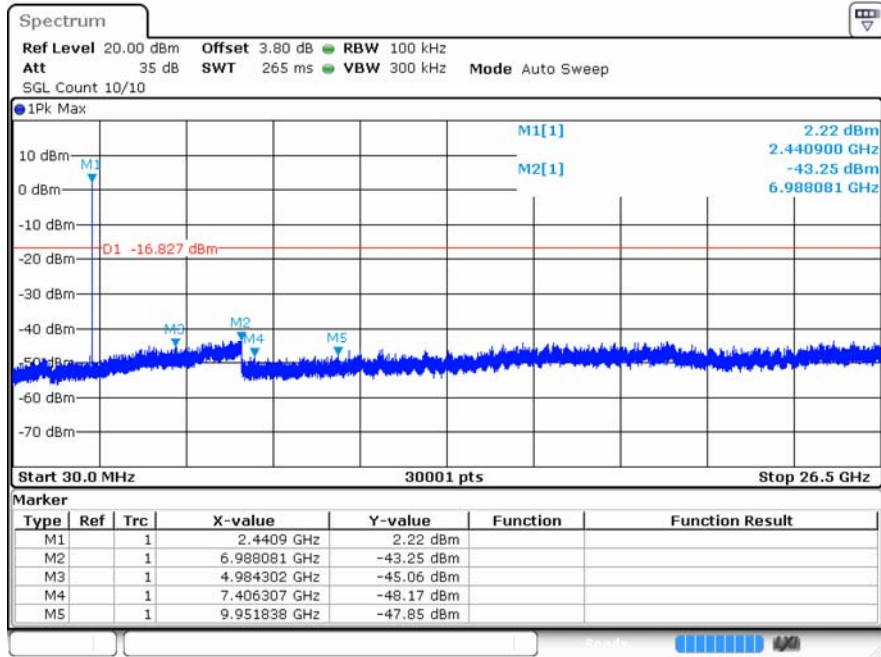


$\pi/4$ DQPSK\_MCH\_Graphs

Pref

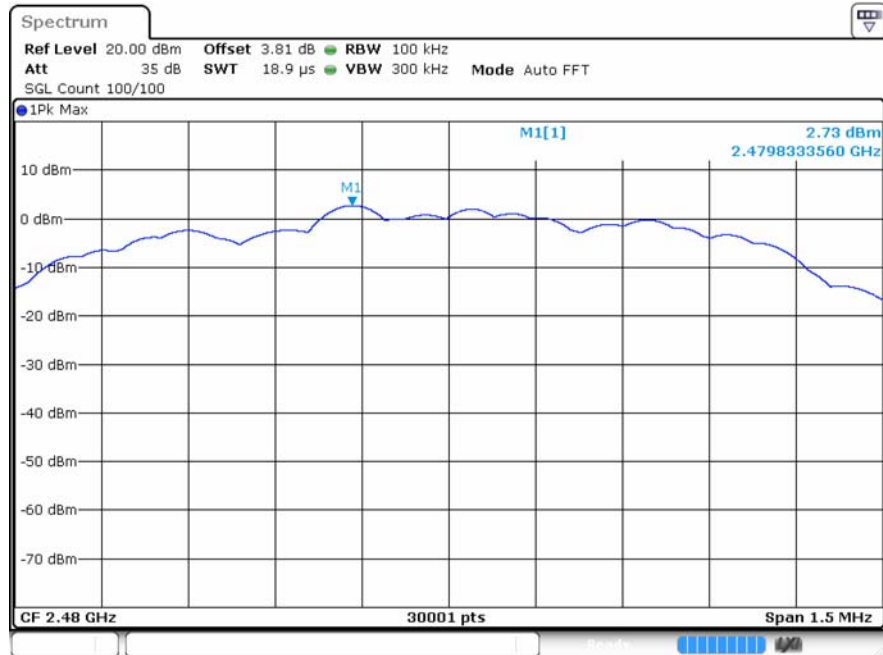


Puw

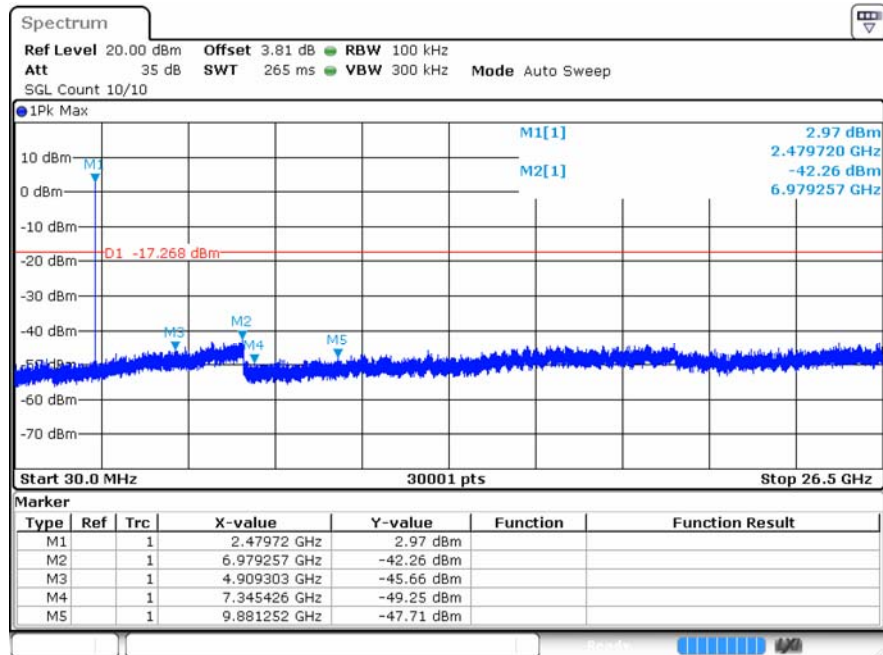


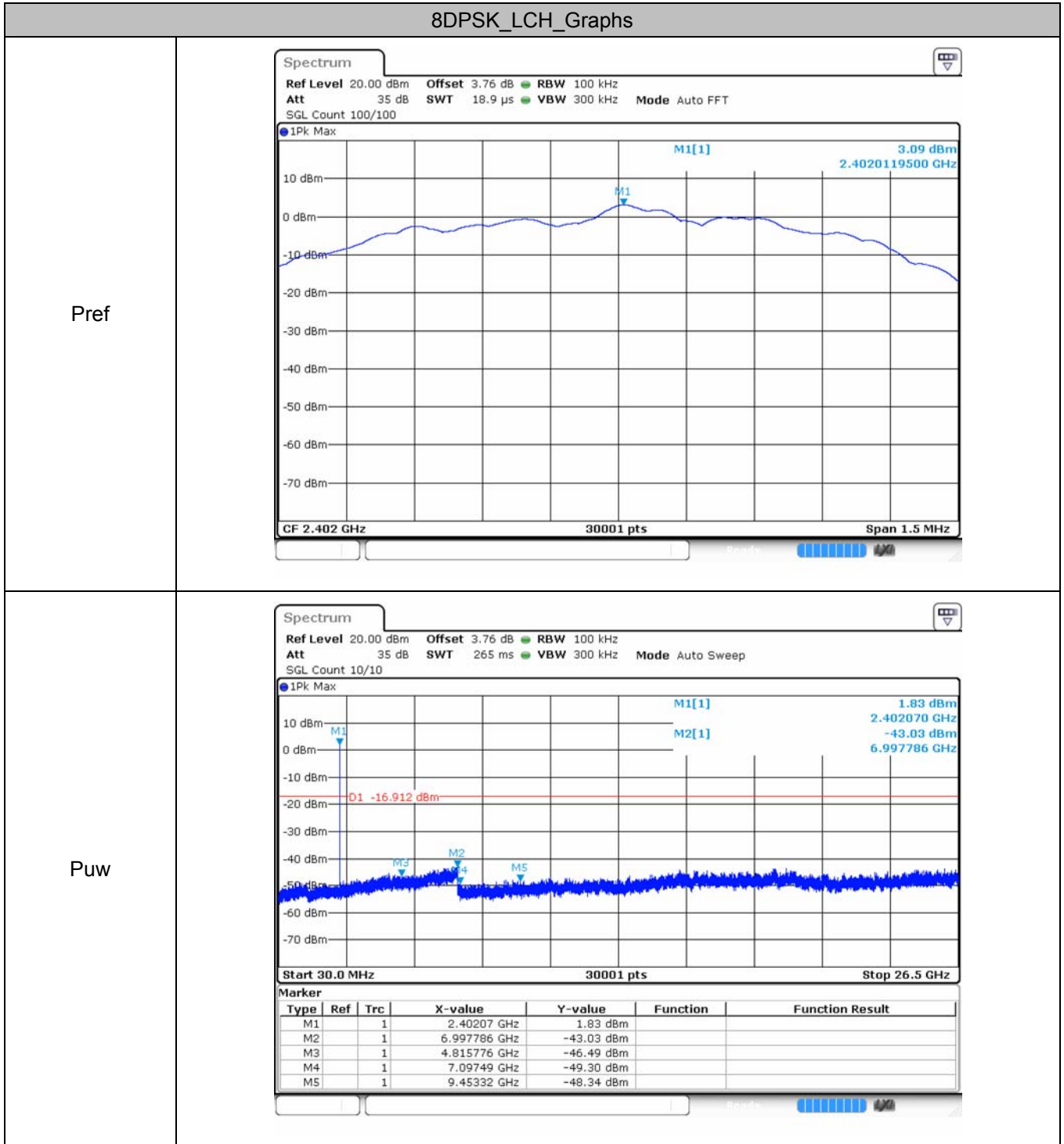
$\pi/4$ DQPSK\_HCH\_Graphs

Pref



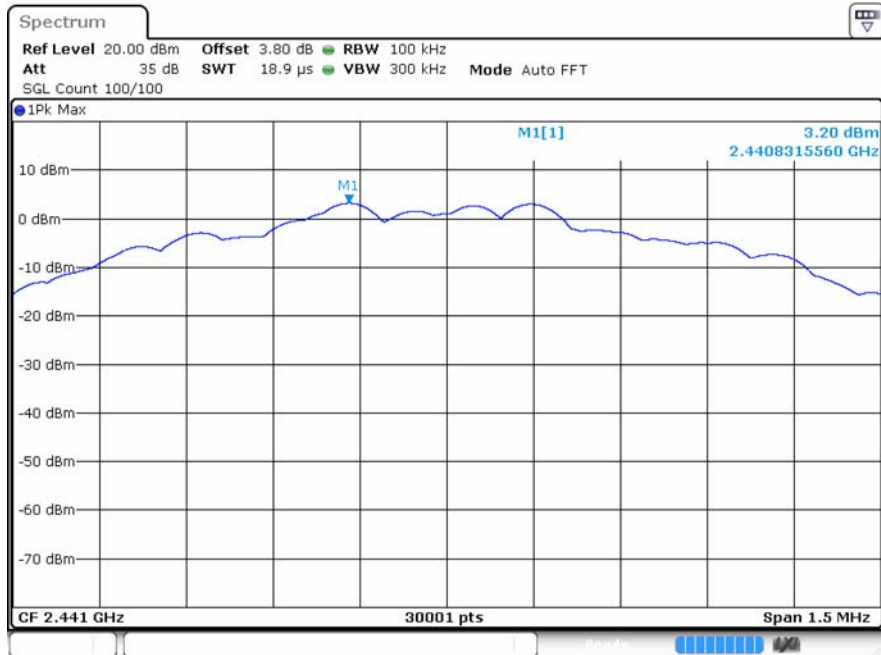
Puw



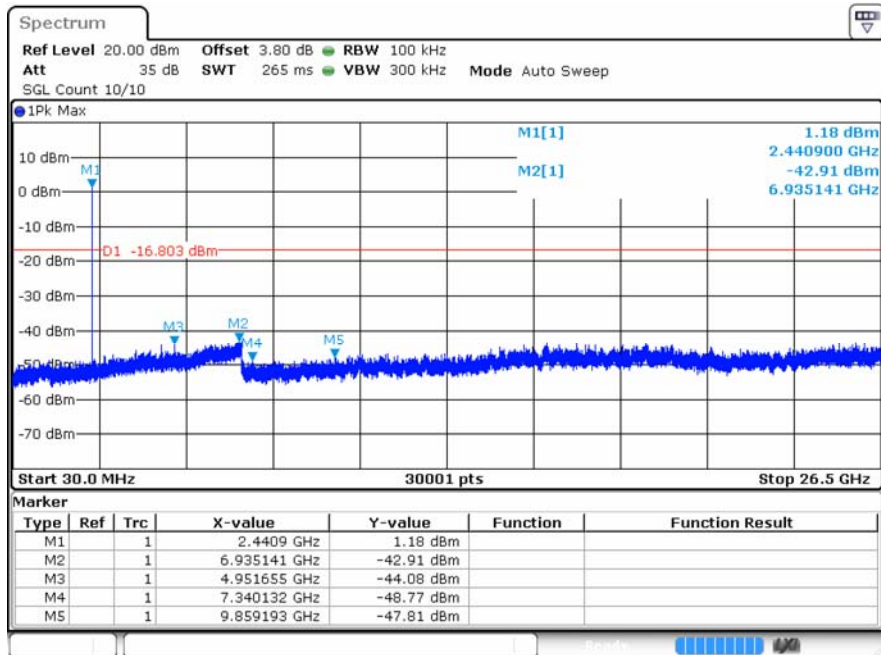


8DPSK\_MCH\_Graphs

Pref

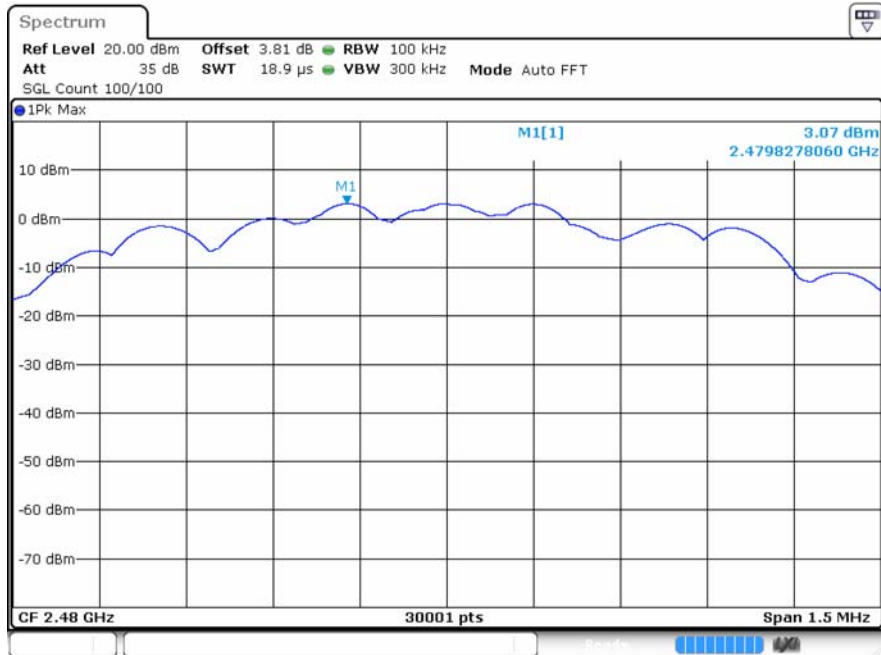


Puw

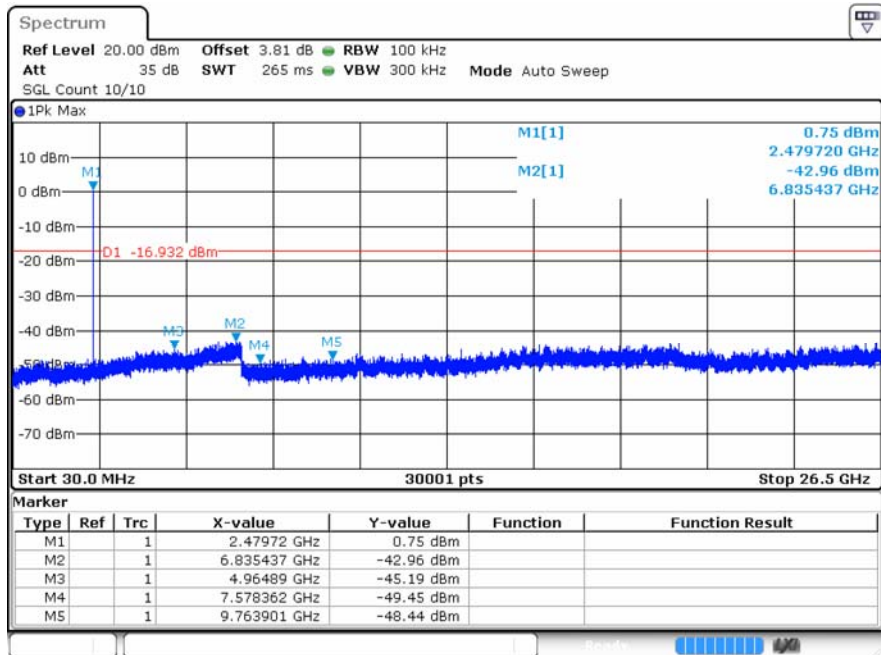


8DPSK\_HCH\_Graphs

Pref



Puw



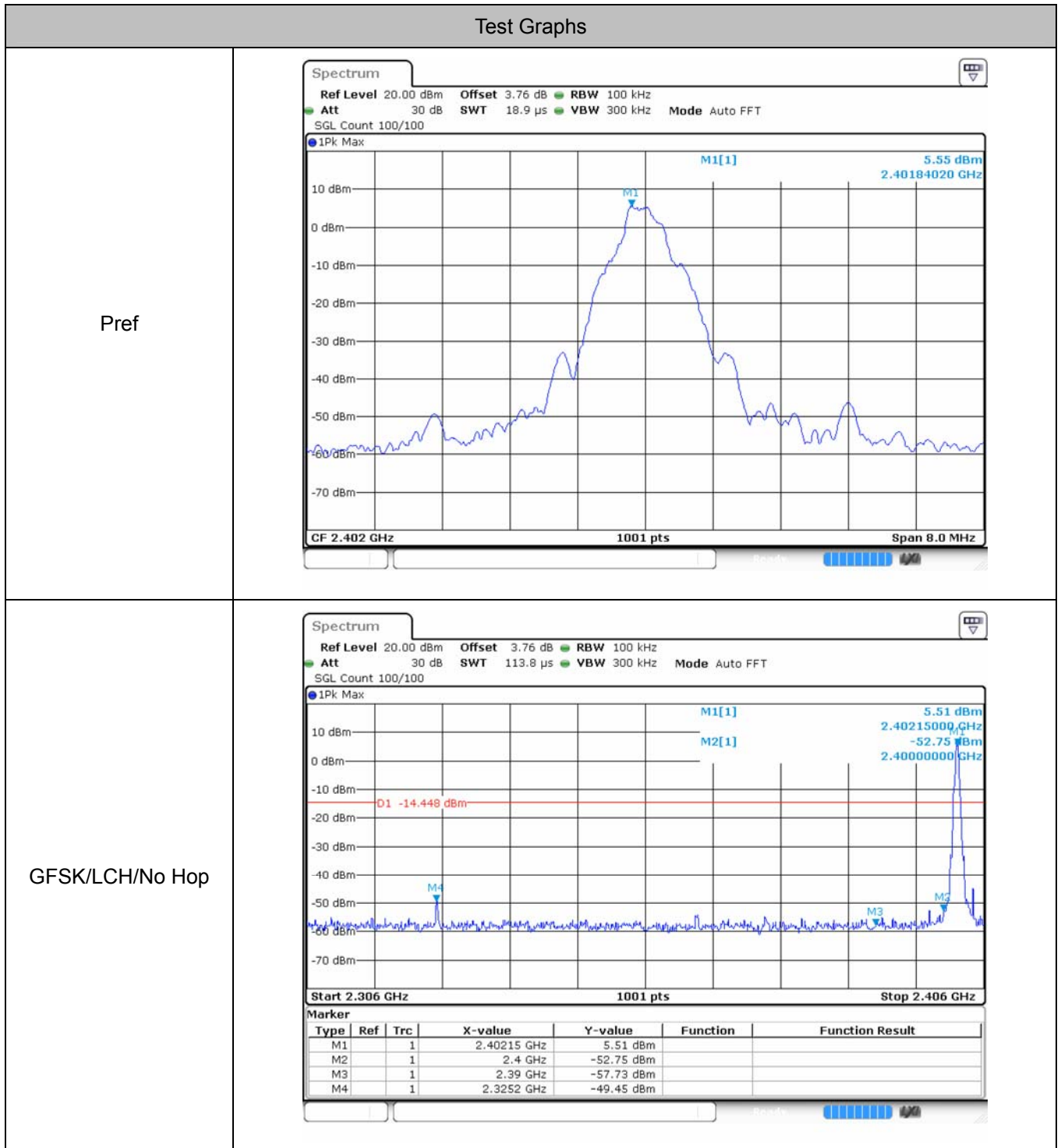


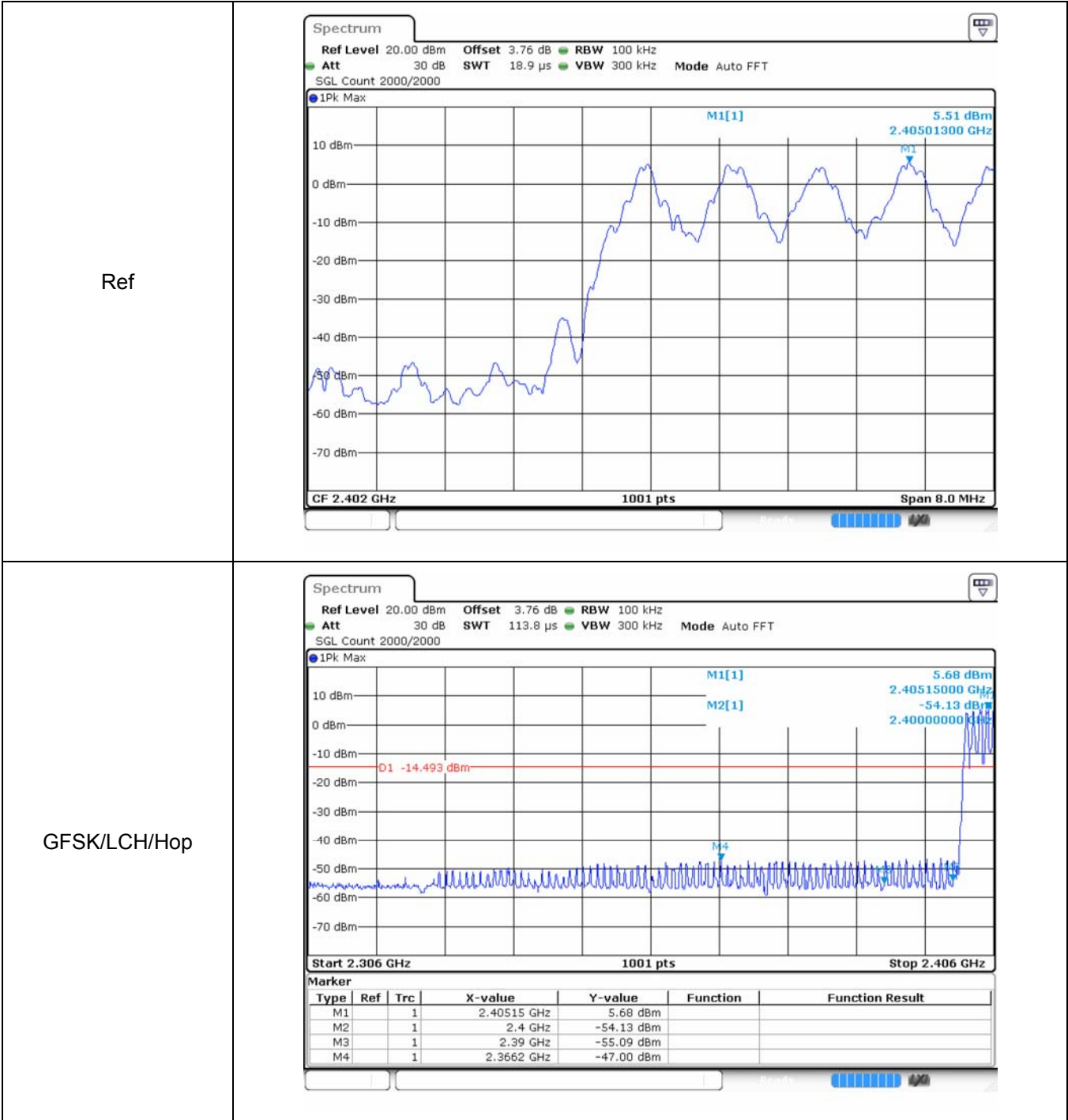
## 8 Band-edge for RF Conducted Emissions

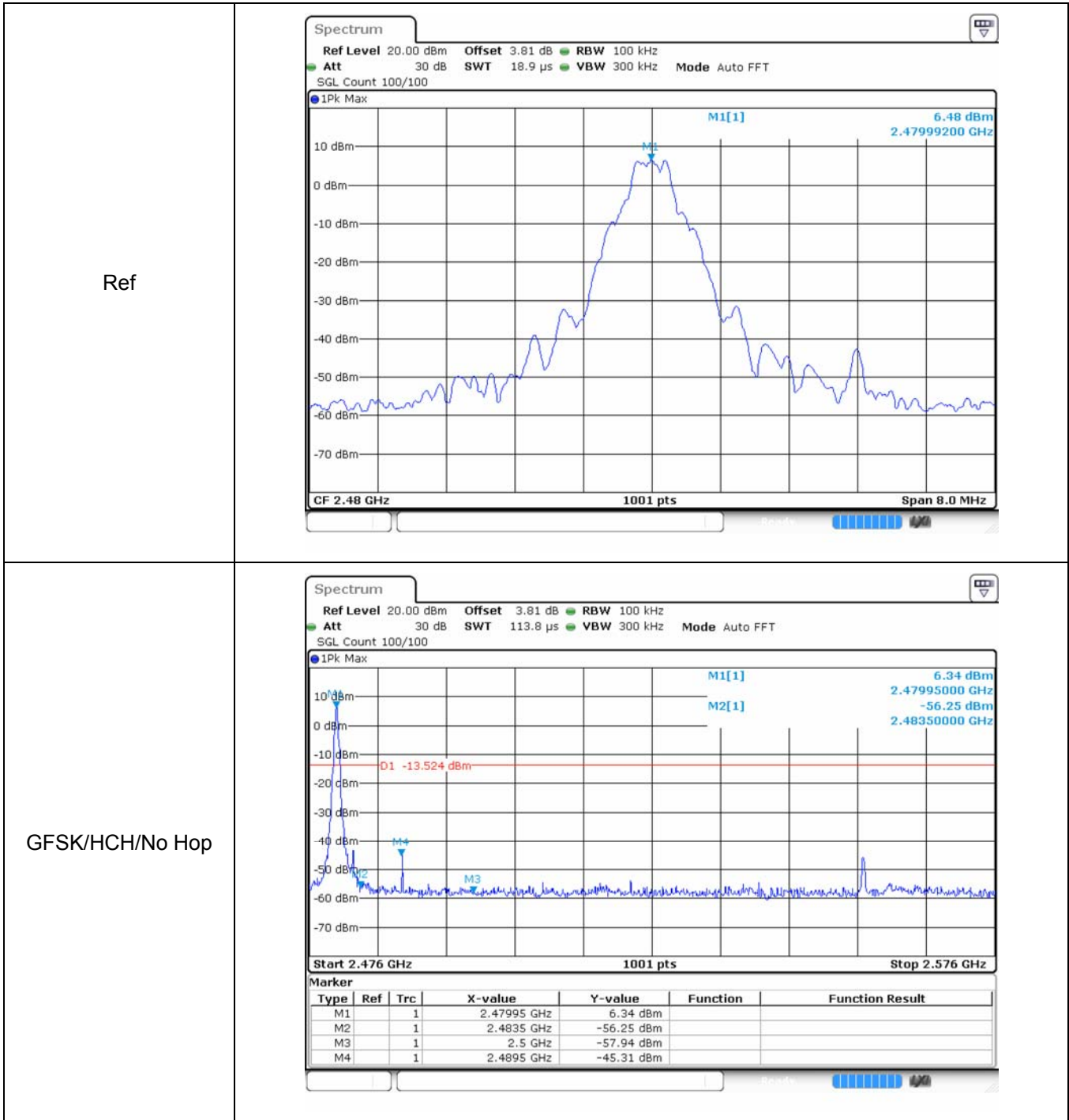
### 8.1 Test Result

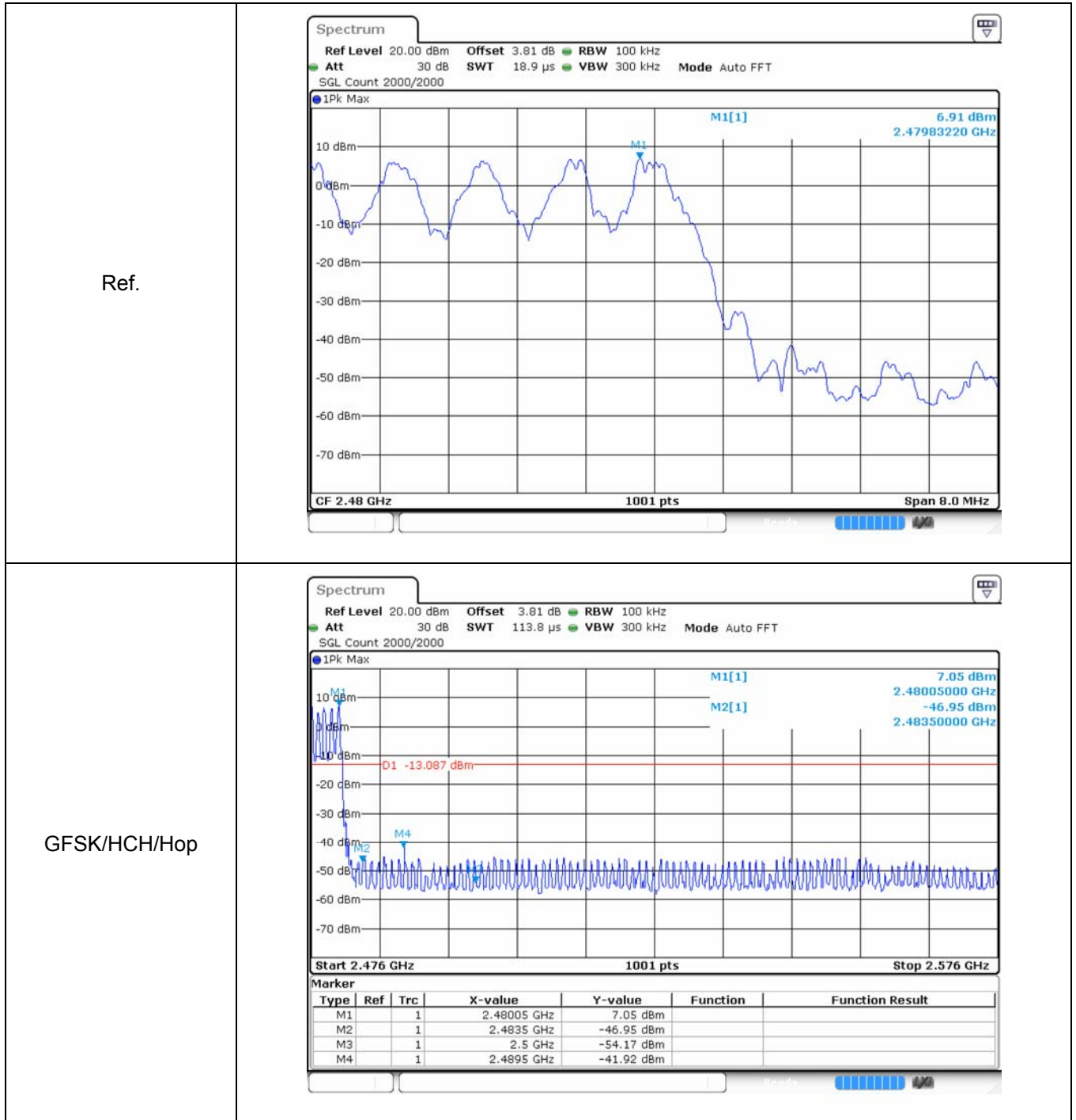
Mode	Channel	Carrier Frequency [MHz]	Frequency Hopping	Max Spurious Level [dBc]	Limit [dBc]	Verdict
GFSK	LCH	2402	Off	-54.99	-20	Pass
			On	-52.51	-20	Pass
	HCH	2480	Off	-51.79	-20	Pass
			On	-48.83	-20	Pass
$\pi/4$ DQPSK	LCH	2402	Off	-55.58	-20	Pass
			On	-51.03	-20	Pass
	HCH	2480	Off	-51.12	-20	Pass
			On	-51.54	-20	Pass
8DPSK	LCH	2402	Off	-54.39	-20	Pass
			On	-51.38	-20	Pass
	HCH	2480	Off	-46.46	-20	Pass
			On	-47.48	-20	Pass

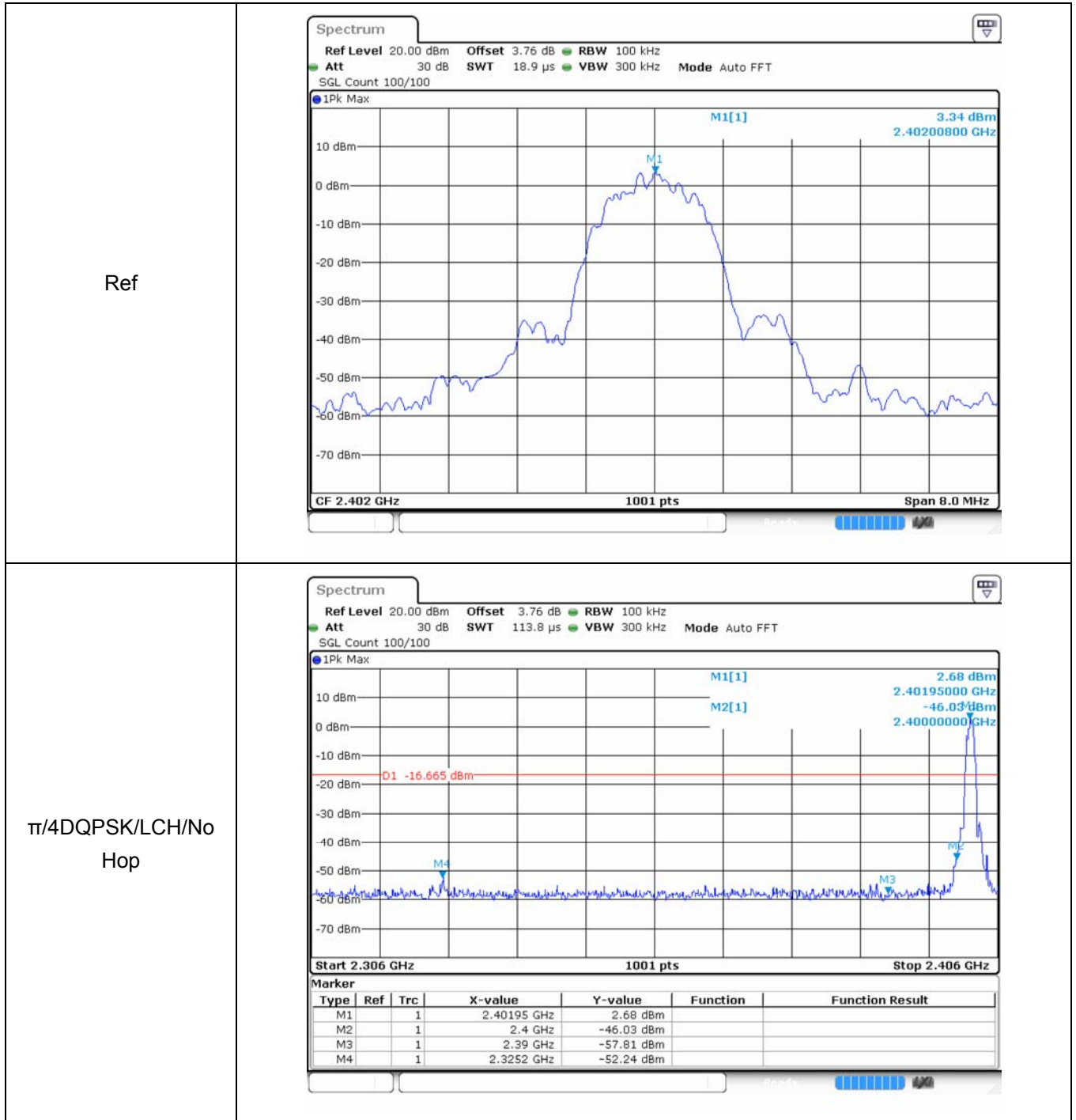
## 8.2 Test Graphs

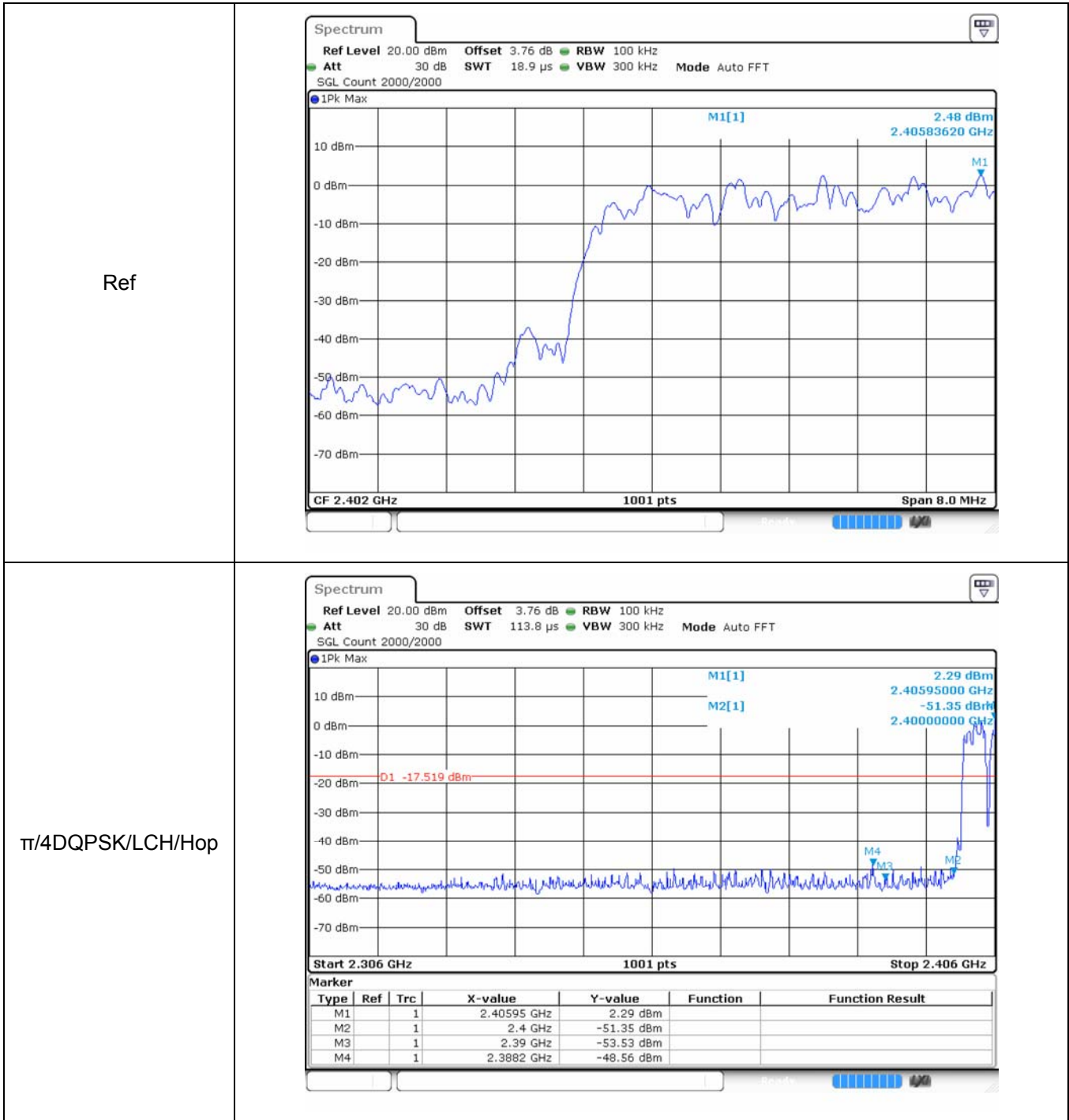


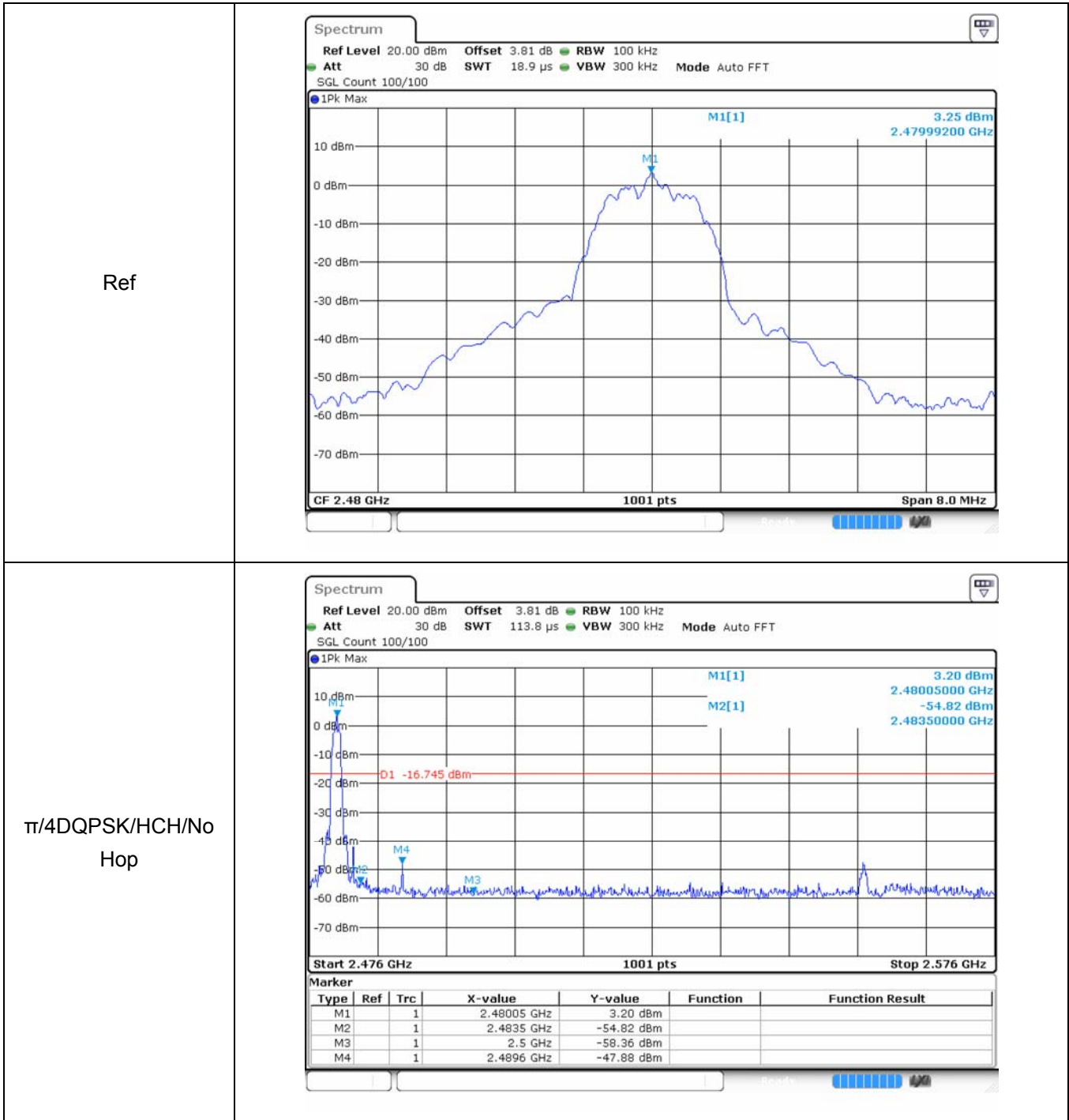




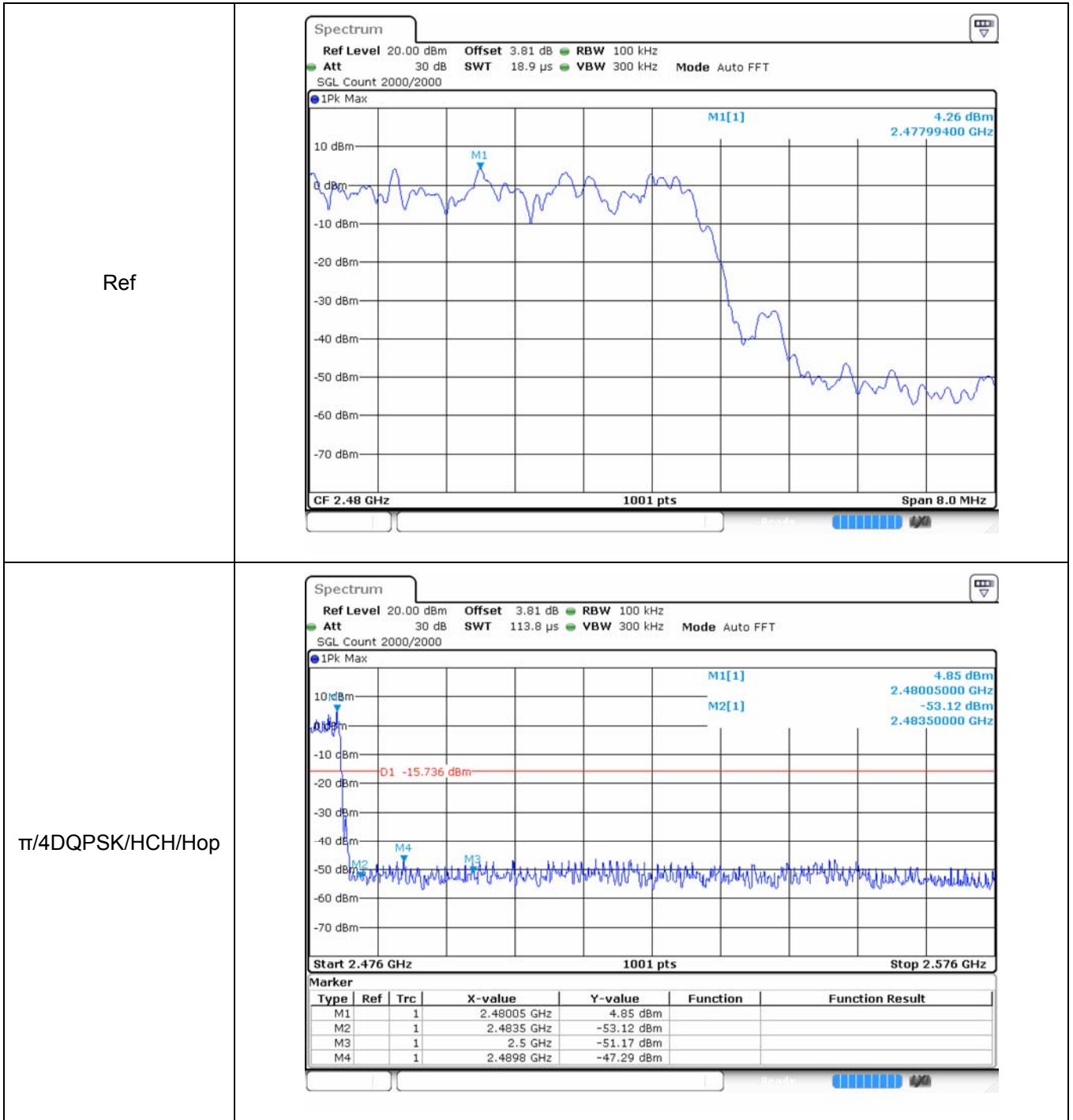


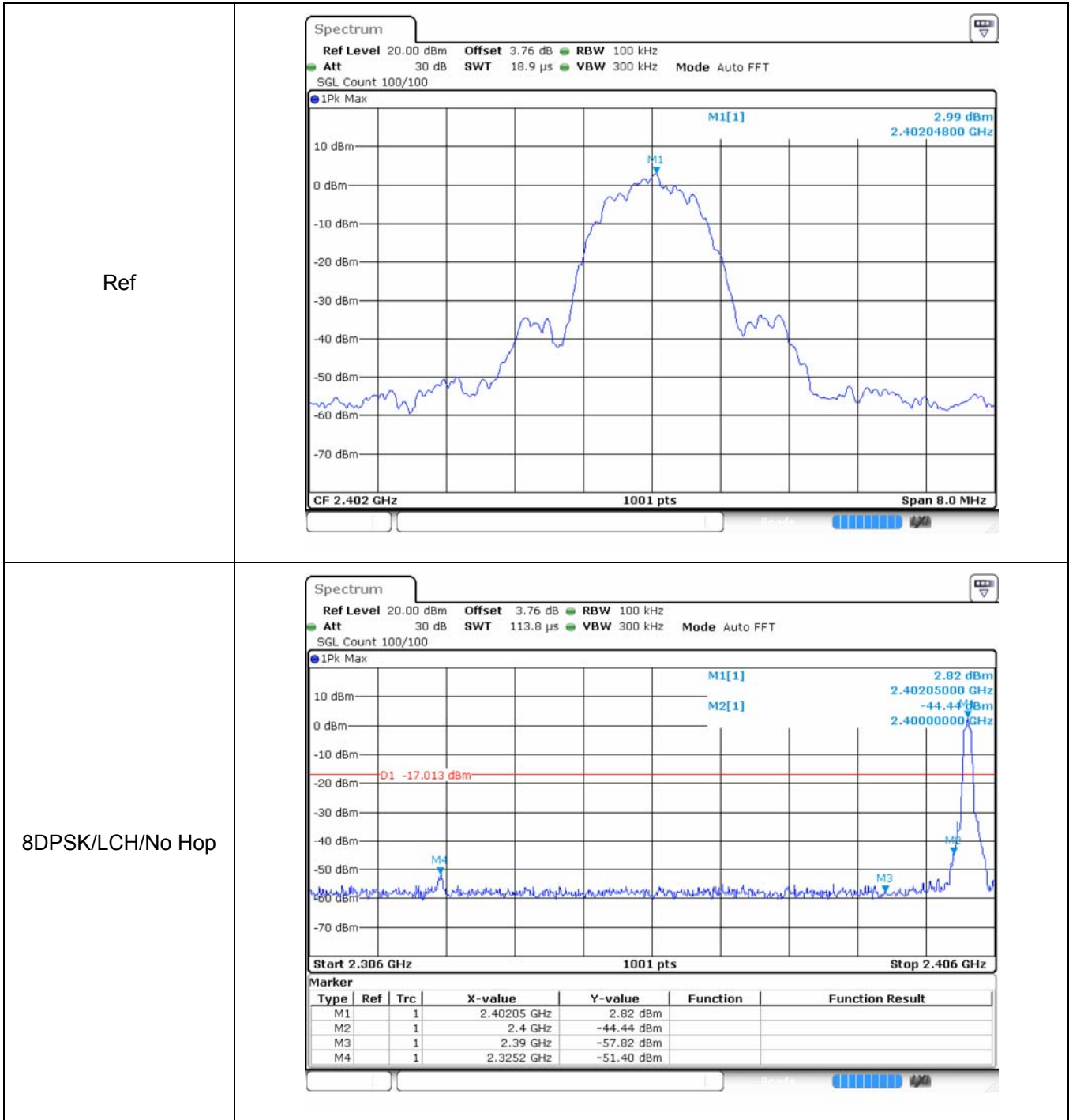


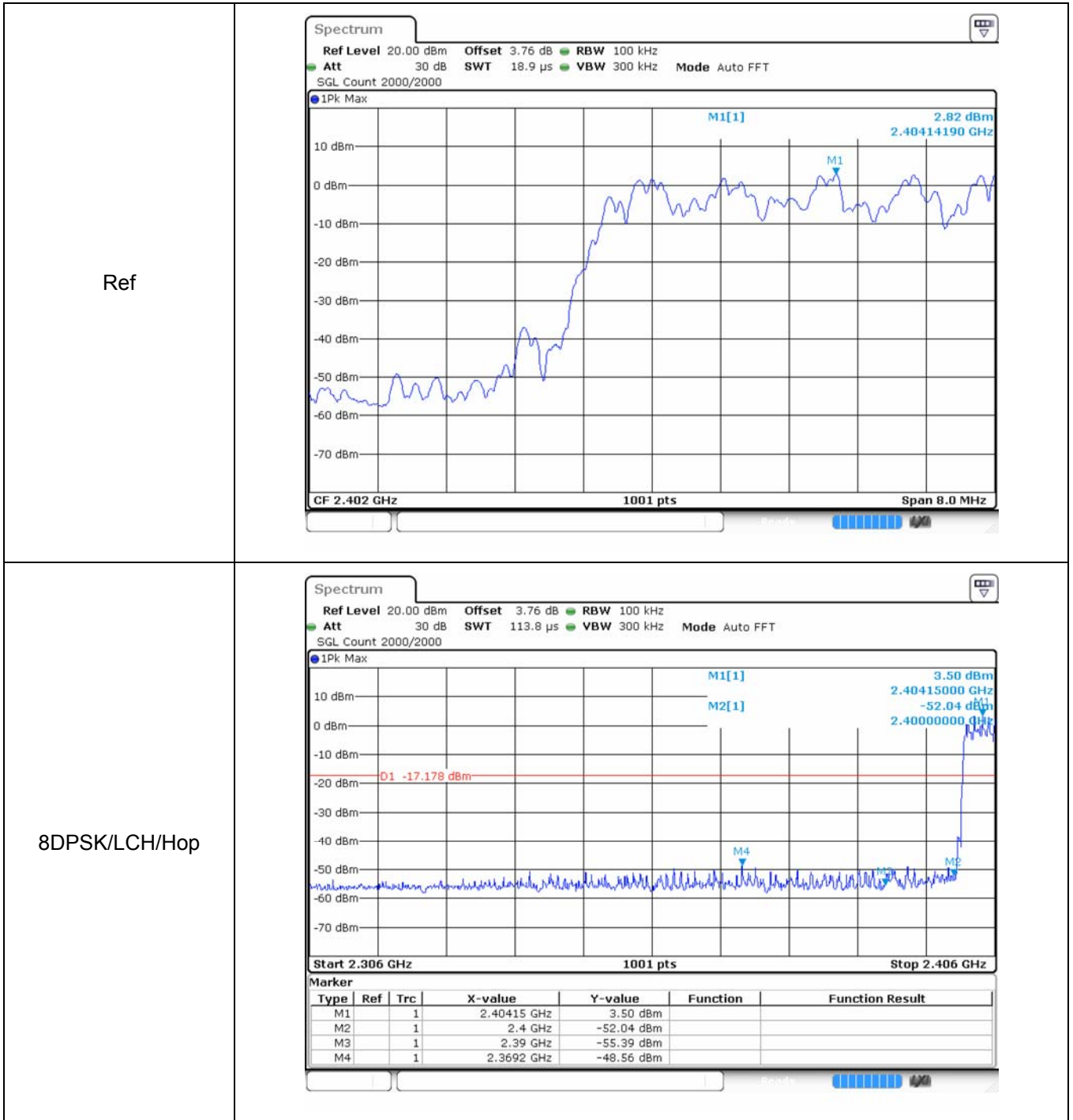


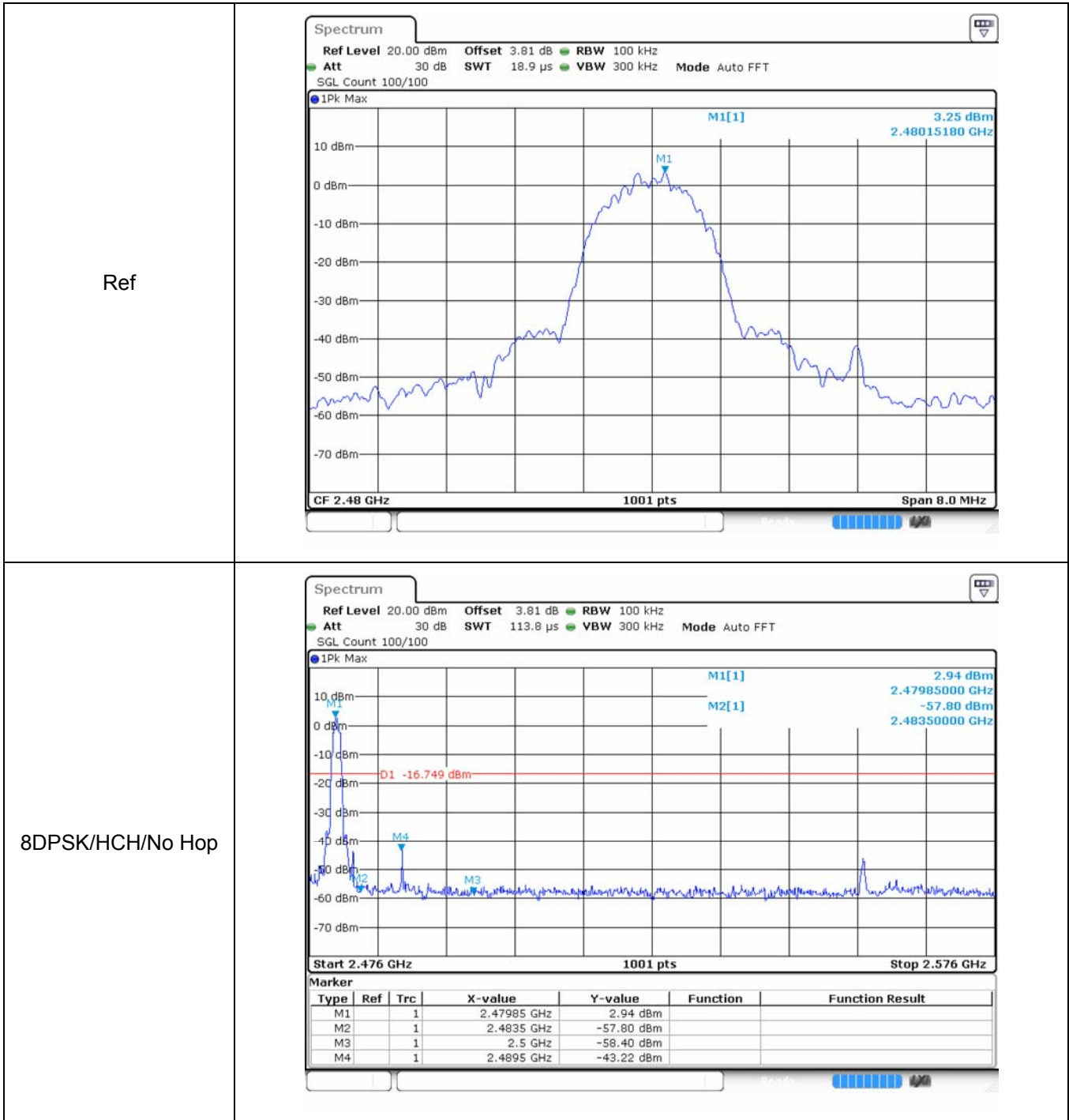


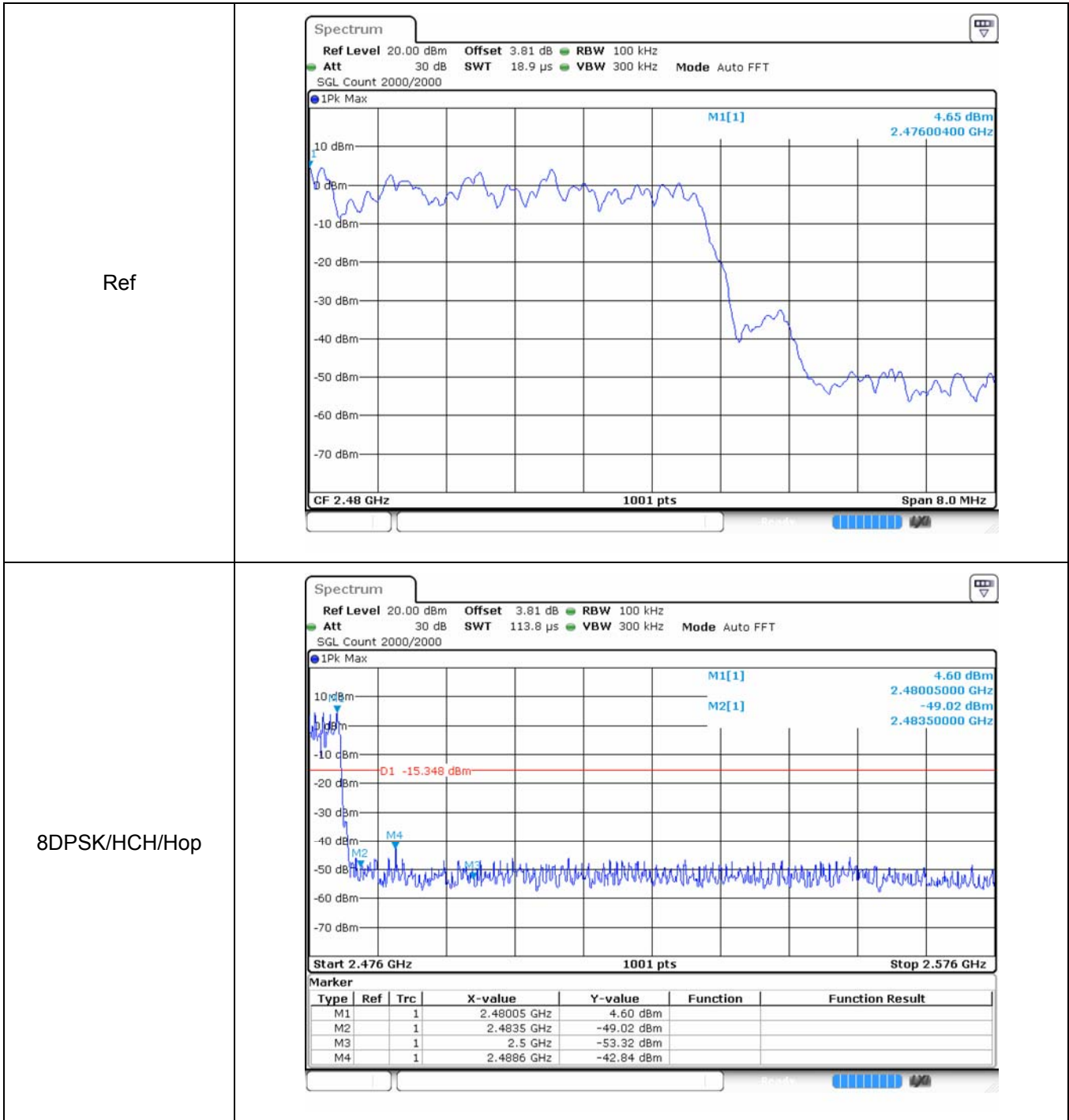










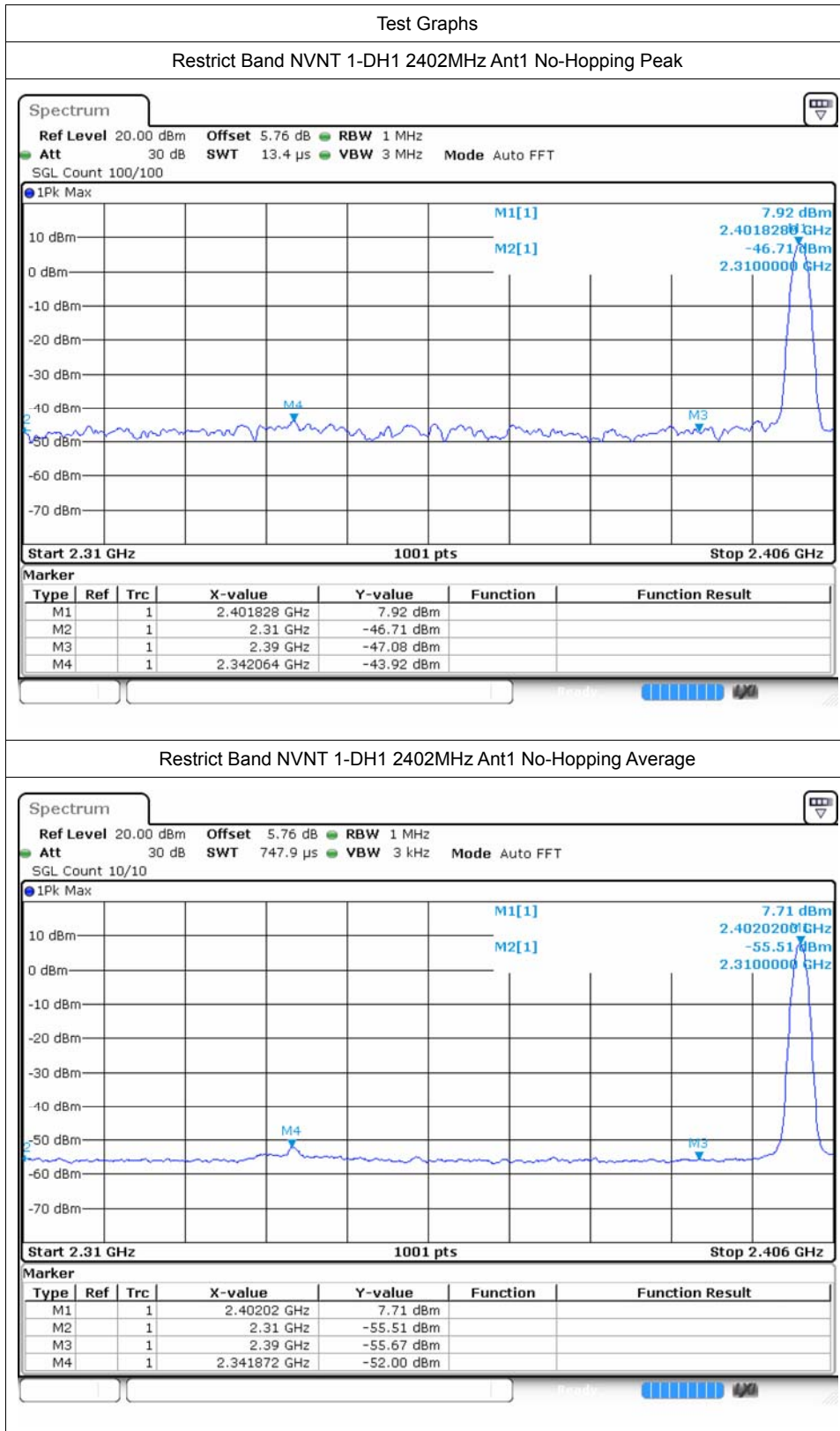


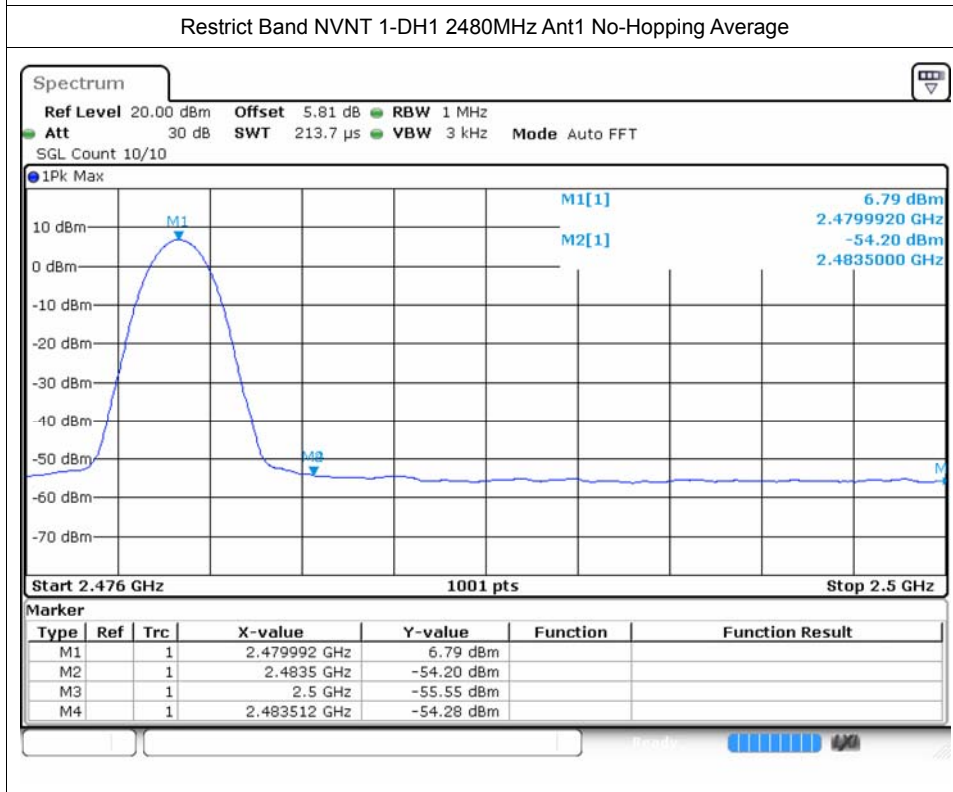
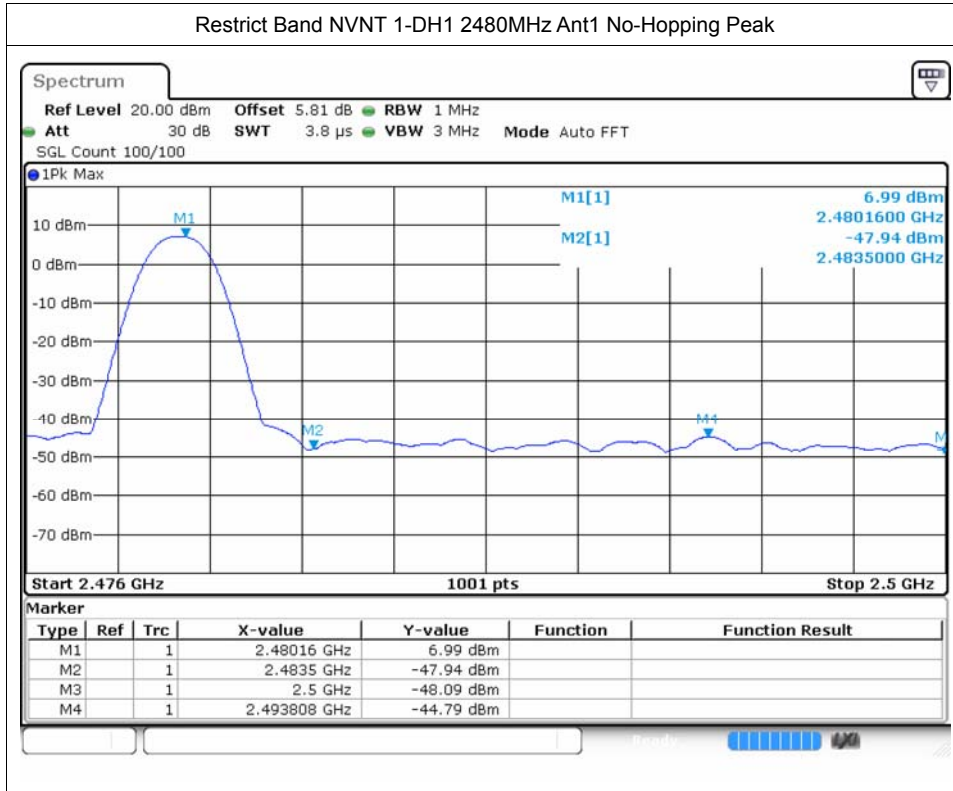
## 9 Restrict-band band-edge measurements

### 9.1 Test Result

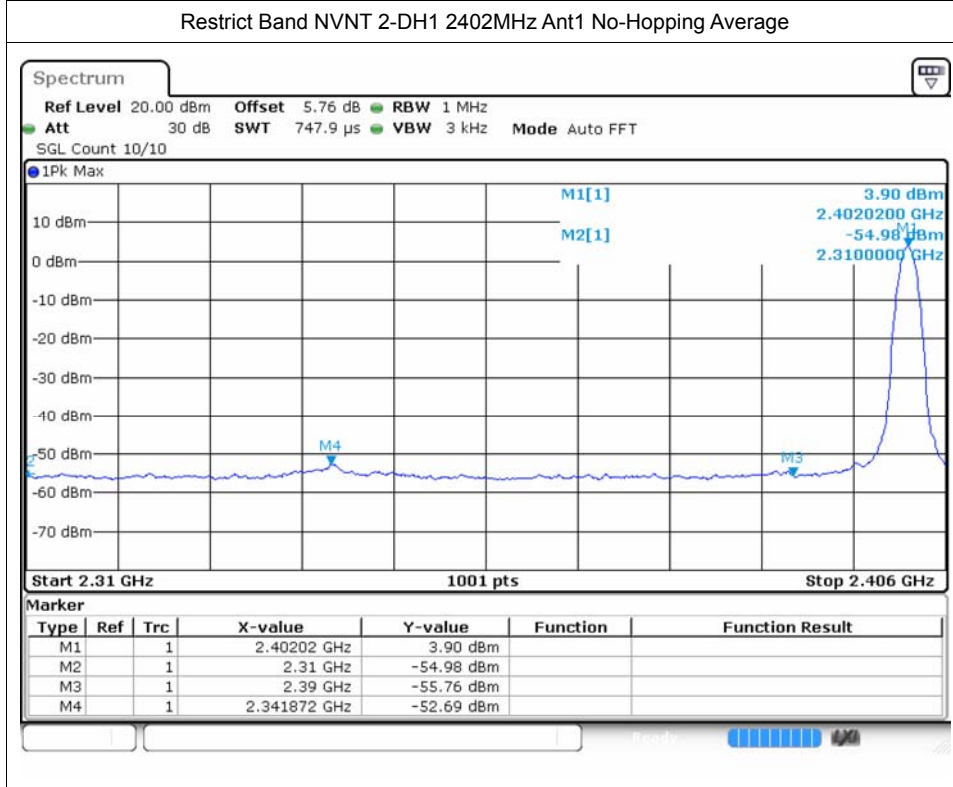
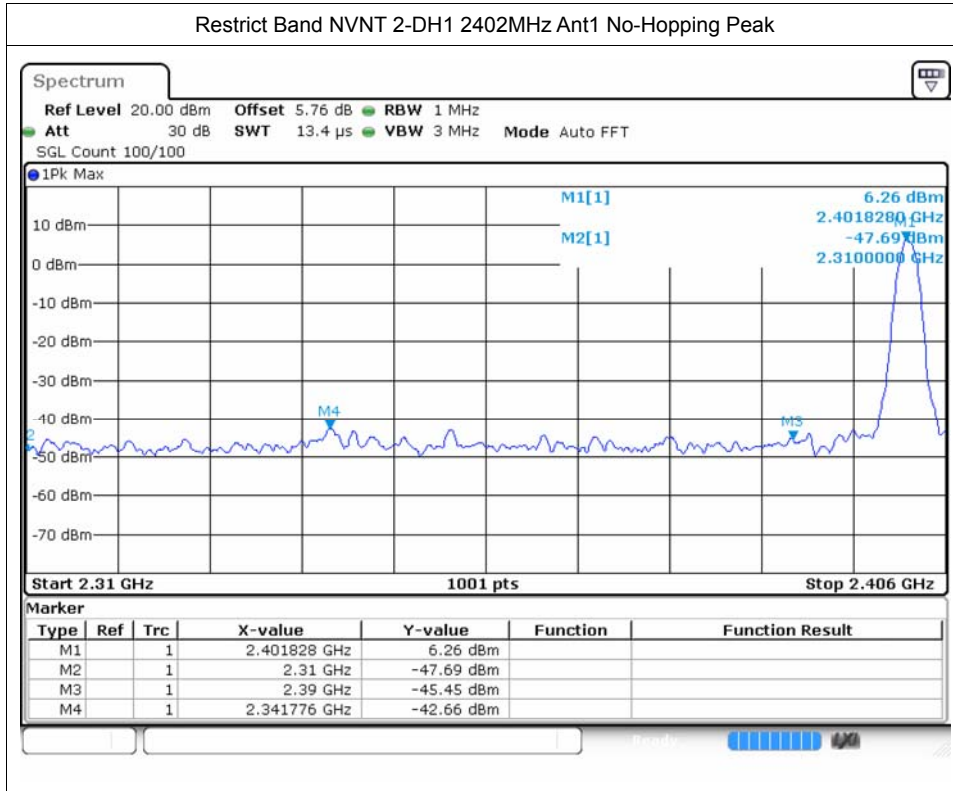
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-46.71	2	50.55	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-55.5	2	41.76	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2342.064	-43.92	2	53.34	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2341.872	-51.99	2	45.27	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-47.07	2	50.19	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.67	2	41.59	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-47.88	2	49.38	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-54.28	2	42.98	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2493.808	-44.78	2	52.48	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.512	-54.28	2	42.98	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-48.09	2	49.17	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55.54	2	41.72	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-47.68	2	49.58	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-54.97	2	42.29	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2341.776	-42.65	2	54.61	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2341.872	-52.69	2	44.57	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-45.45	2	51.81	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.75	2	41.51	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-43.14	2	54.12	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-51.44	2	45.82	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2487.424	-34.46	2	62.8	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.512	-51.44	2	45.82	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-47.59	2	49.67	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.85	2	41.41	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-46.25	2	51.01	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-55.55	2	41.71	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2341.872	-43.72	2	53.54	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2342.16	-53.43	2	43.83	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-46.44	2	50.82	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-55.33	2	41.93	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-41.76	2	55.5	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-50.87	2	46.39	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2487.4	-35.19	2	62.07	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2484.136	-50.8	2	46.46	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-46.72	2	50.54	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-55.31	2	41.95	Average	54	Pass

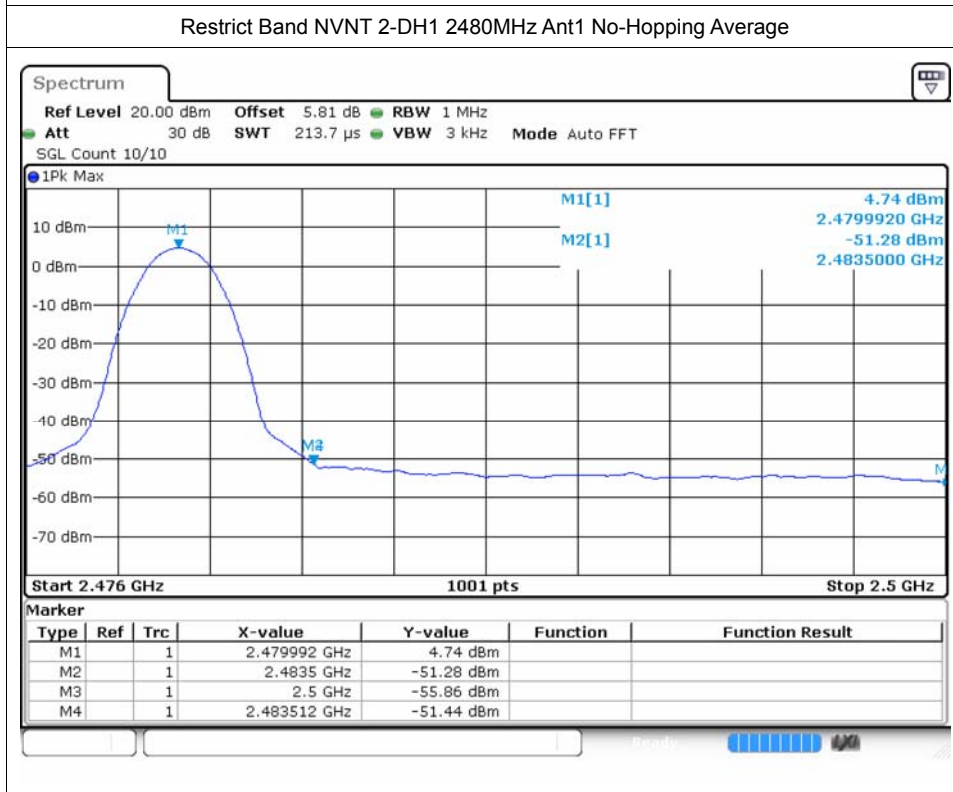
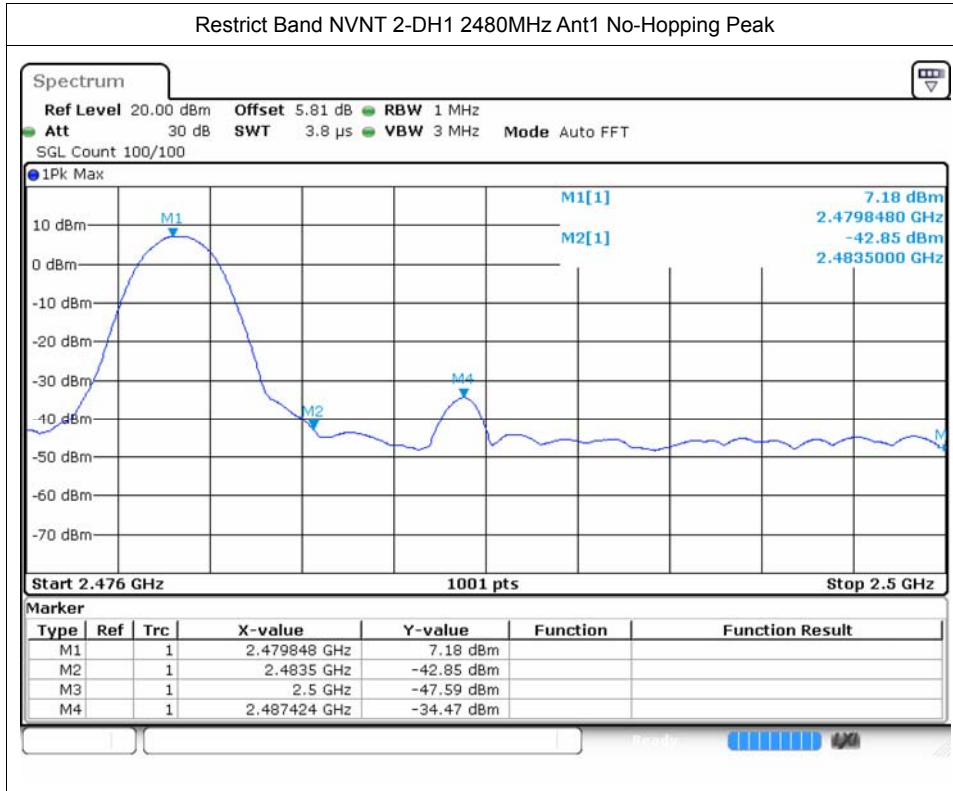
## 9.2 Test Graphs

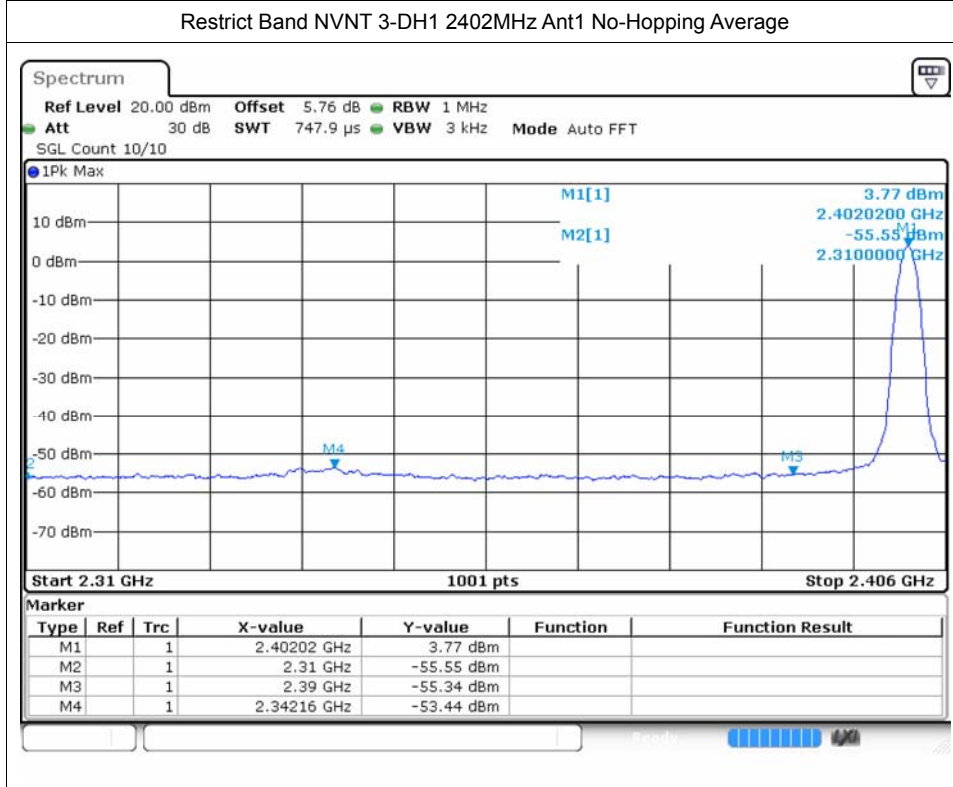
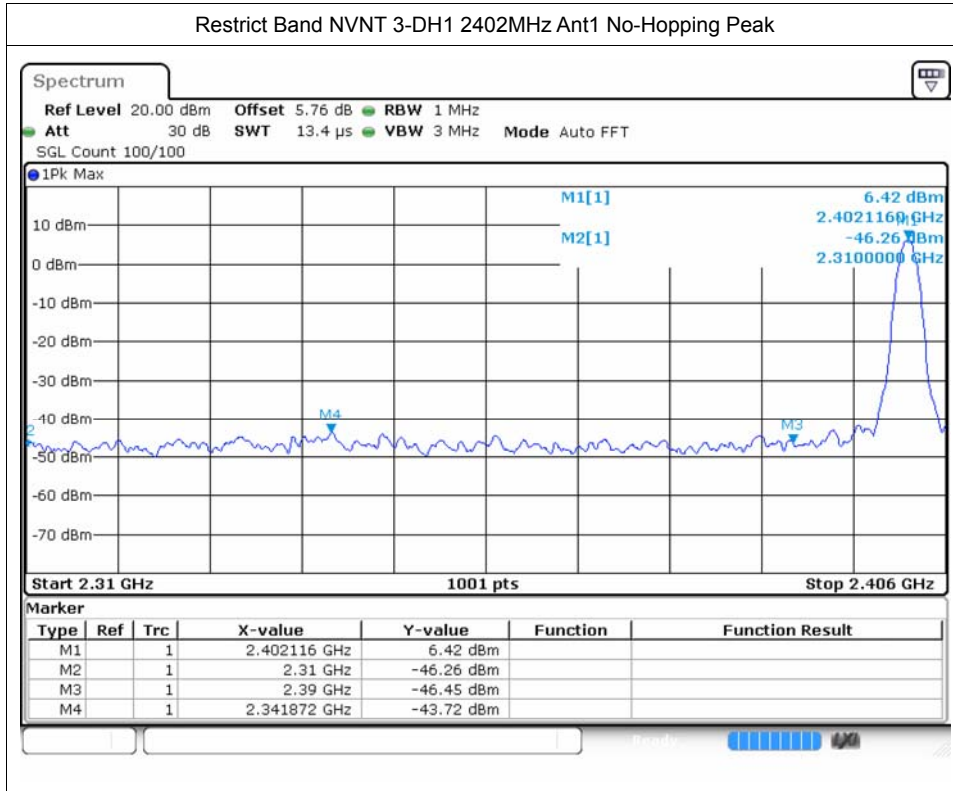


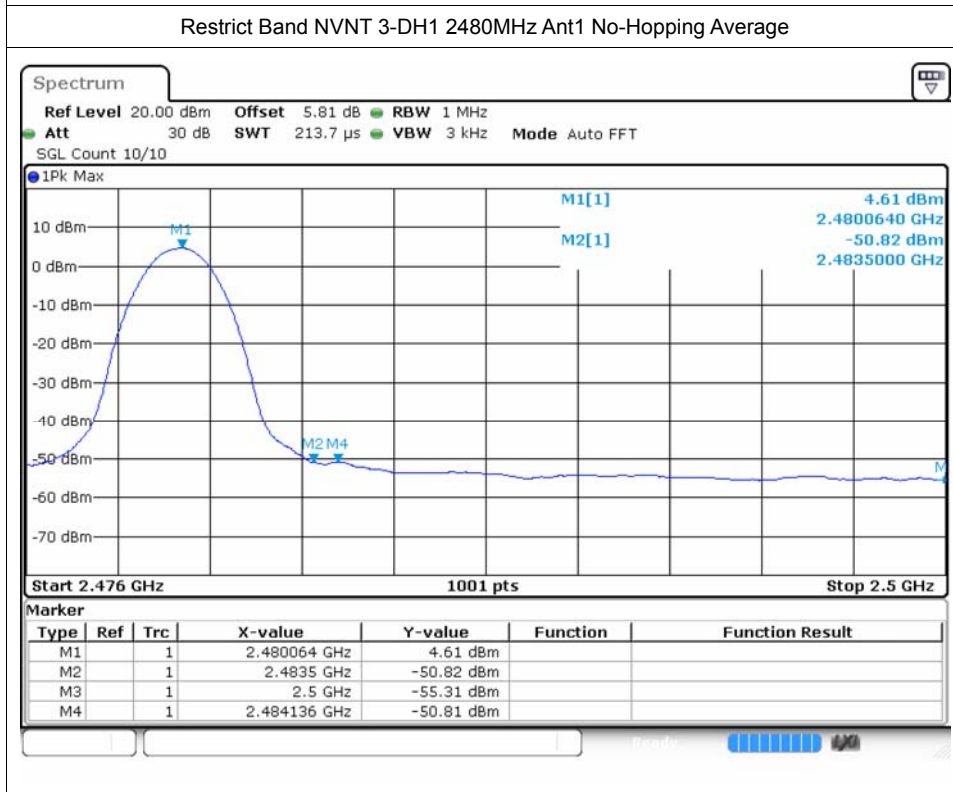
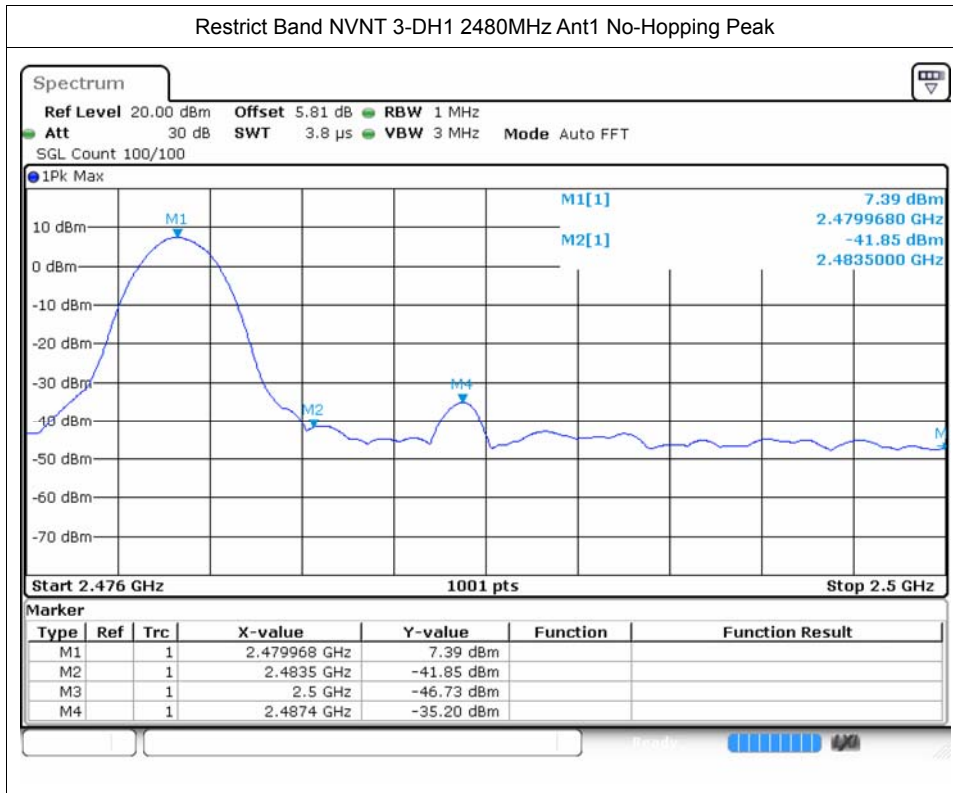












---The End---