

Appendix A: Test Result of Conducted Test

20dB Occupied Bandwidth

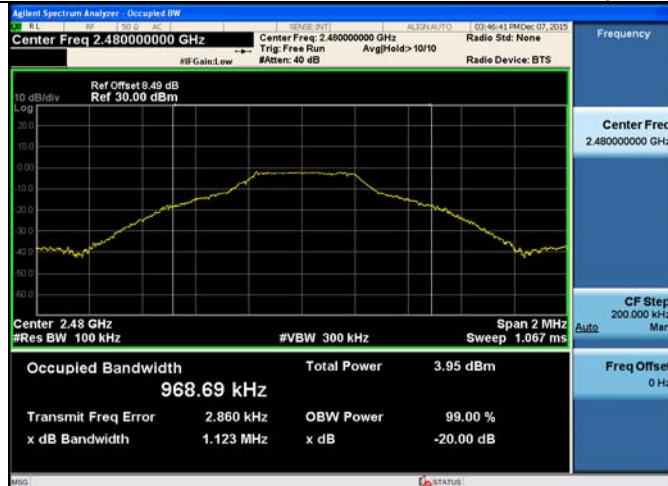
Test Result

Mode	Channel.	20dB Bandwidth [MHz]	99% OBW [MHz]	Verdict
GFSK	LCH	1.103	0.96038	PASS
GFSK	MCH	1.111	0.96884	PASS
GFSK	HCH	1.123	0.96869	PASS
$\pi/4$ DQPSK	LCH	1.343	1.1982	PASS
$\pi/4$ DQPSK	MCH	1.338	1.2001	PASS
$\pi/4$ DQPSK	HCH	1.343	1.2012	PASS
8DPSK	LCH	1.351	1.2179	PASS
8DPSK	MCH	1.356	1.2112	PASS
8DPSK	HCH	1.360	1.2109	PASS

Test Graph



GFSK/HCH



π /4DQPSK/LCH



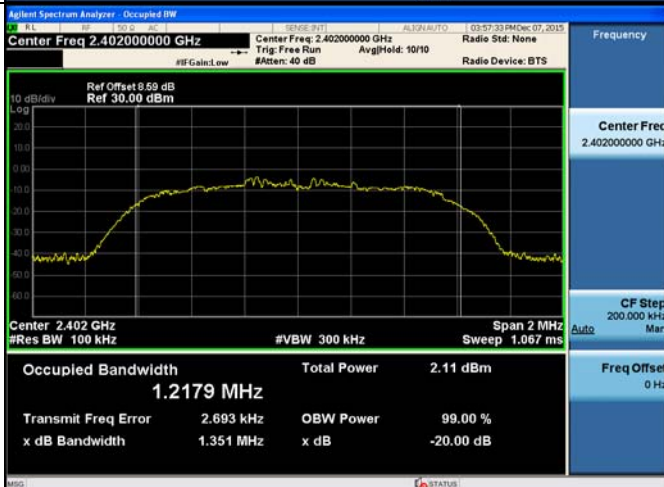
π /4DQPSK/MCH



π/4DQPSK/HCH



8DPSK/LCH



8DPSK/MCH



8DPSK/HCH



Carrier Frequency Separation

Result Table

Mode	Channel.	Carrier Frequency Separation [MHz]	Verdict
GFSK	LCH	0.718	PASS
GFSK	MCH	0.960	PASS
GFSK	HCH	1.015	PASS
$\pi/4$ DQPSK	LCH	1.305	PASS
$\pi/4$ DQPSK	MCH	0.884	PASS
$\pi/4$ DQPSK	HCH	0.861	PASS
8DPSK	LCH	1.148	PASS
8DPSK	MCH	1.005	PASS
8DPSK	HCH	0.890	PASS

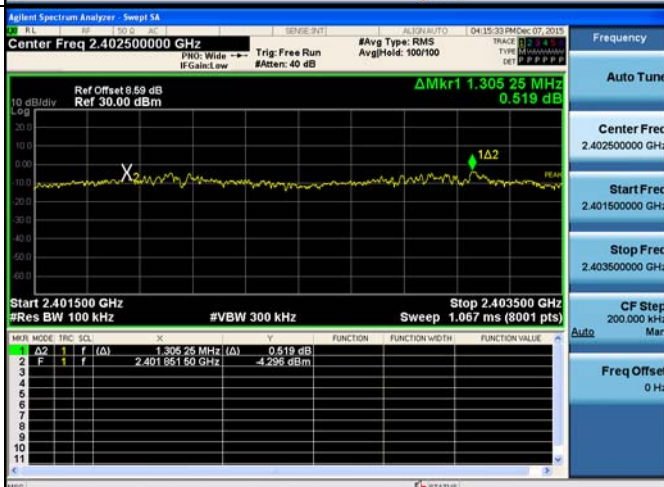
Test Graph



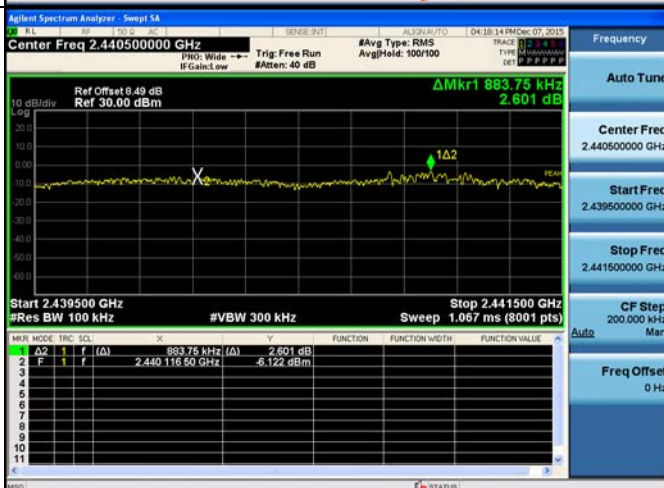
GFSK/HCH



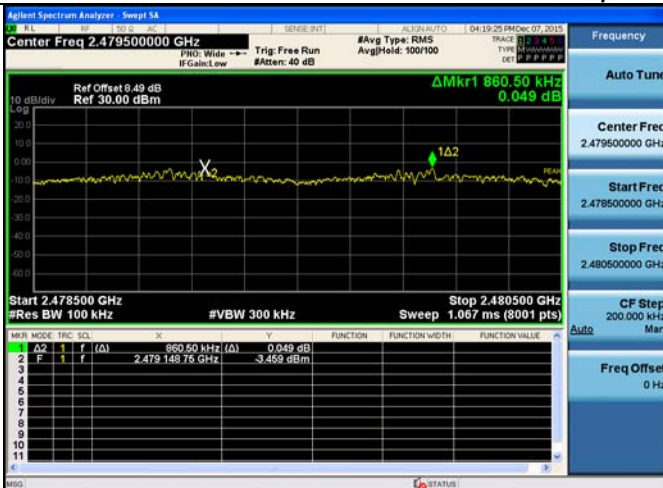
$\pi/4$ DQPSK/LCH



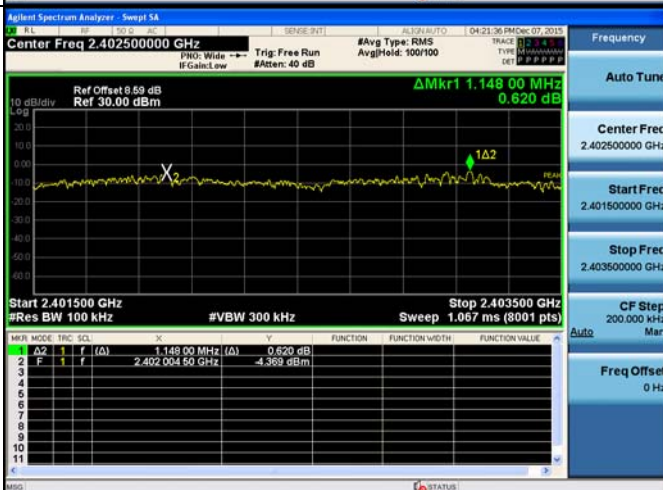
$\pi/4$ DQPSK/MCH



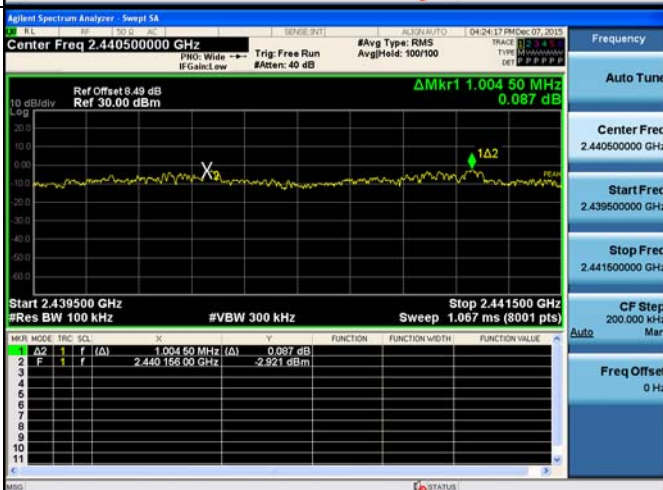
π/4DQPSK/HCH



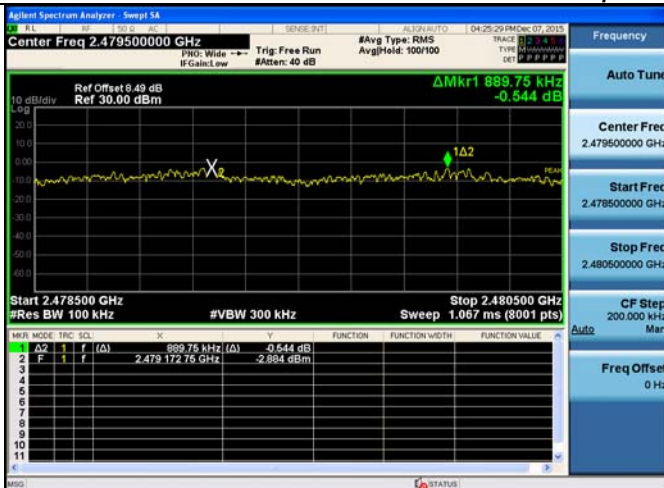
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH



Dwell Time

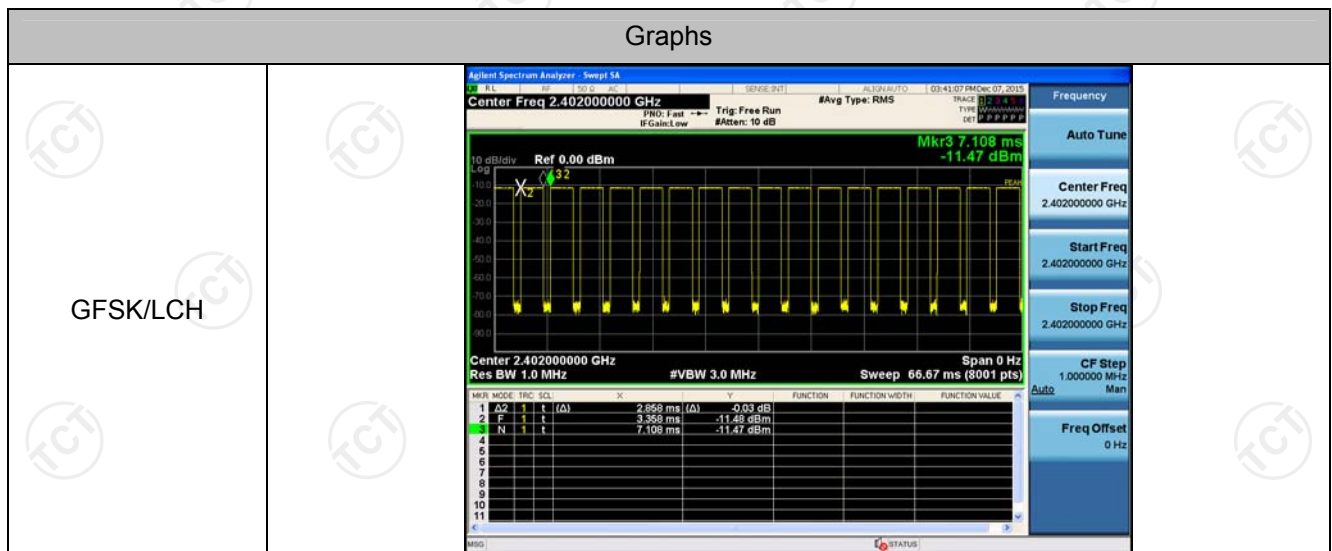
Result Table

The Dwell Time=Burst Width*Total Hops. The detailed calculations are showed as follows:

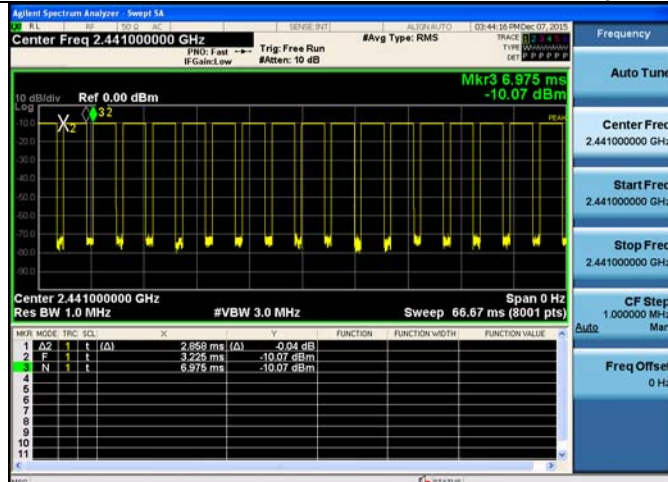
- The duration for dwell time calculation: $0.4[s] \times \text{hopping number} = 0.4[s] \times 79[\text{ch}] = 31.6[s \cdot \text{ch}]$;
- The burst width [ms/hop/ch], which is directly measured, refers to the duration on one channel hop.
- The hops per second for all channels: The selected EUT Conf uses a slot type of 5-Tx&1-Rx and a hopping rate of 1600 [ch*hop/s] for all channels. So the final hopping rate for all channels is $1600/6 = 266.67 [\text{ch} \cdot \text{hop/s}]$
- The hops per second on one channel: $266.67 [\text{ch} \cdot \text{hops/s}] / 79 [\text{ch}] = 3.38 [\text{hop/s}]$;
- The total hops for all channels within the dwell time calculation duration: $3.38 [\text{hop/s}] \times 31.6[s \cdot \text{ch}] = 106.67 [\text{hop} \cdot \text{ch}]$;
- The dwell time for all channels hopping: $106.67 [\text{hop} \cdot \text{ch}] \times \text{Burst Width} [\text{ms/hop/ch}]$.

Mode	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Duty Cycle [%]	Verdict
GFSK	LCH	2.858	106.7	0.305	76.22	PASS
GFSK	MCH	2.858	106.7	0.305	76.22	PASS
GFSK	HCH	2.867	106.7	0.306	76.44	PASS
$\pi/4$ DQPSK	LCH	2.867	106.7	0.306	76.44	PASS
$\pi/4$ DQPSK	MCH	2.858	106.7	0.305	76.22	PASS
$\pi/4$ DQPSK	HCH	2.858	106.7	0.305	76.22	PASS
8DPSK	LCH	2.867	106.7	0.306	76.44	PASS
8DPSK	MCH	2.858	106.7	0.305	76.22	PASS
8DPSK	HCH	2.867	106.7	0.306	76.44	PASS

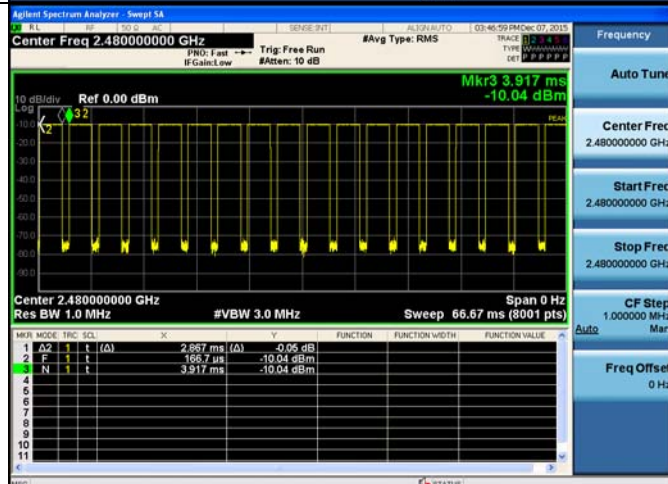
Test Graph



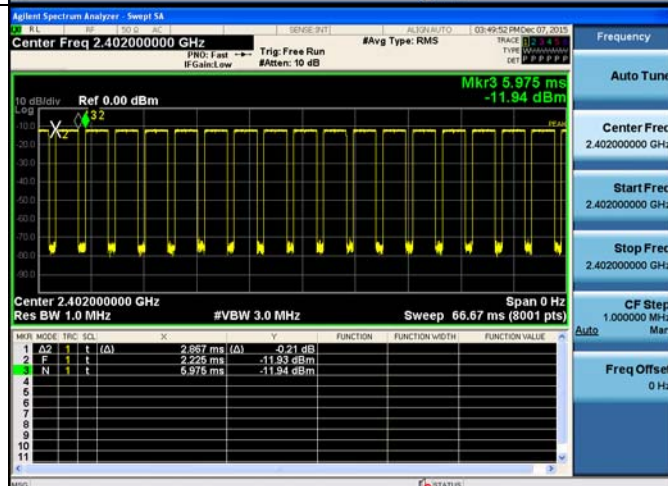
GFSK/MCH

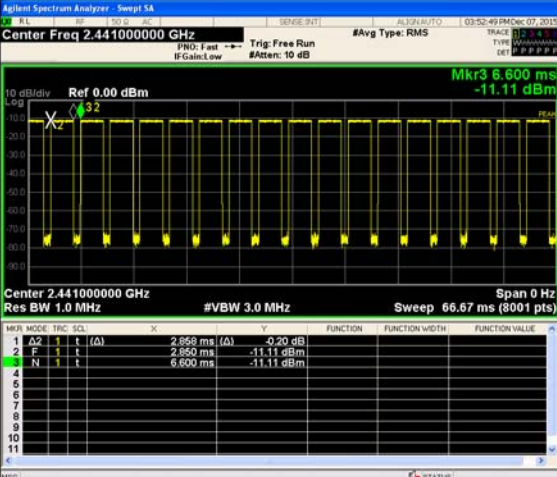
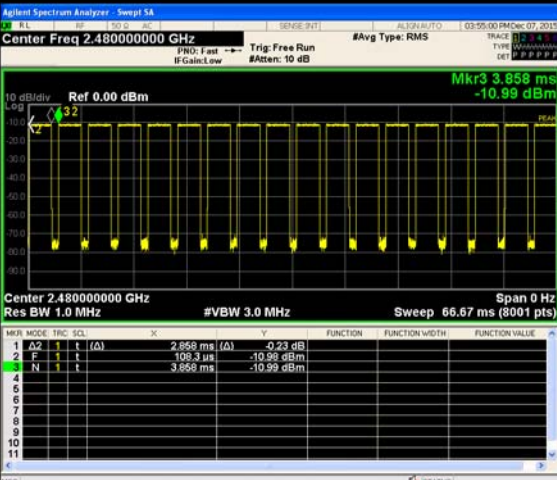
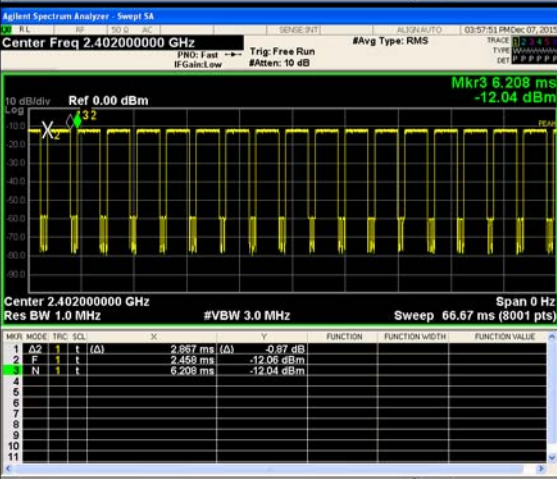


GFSK/HCH

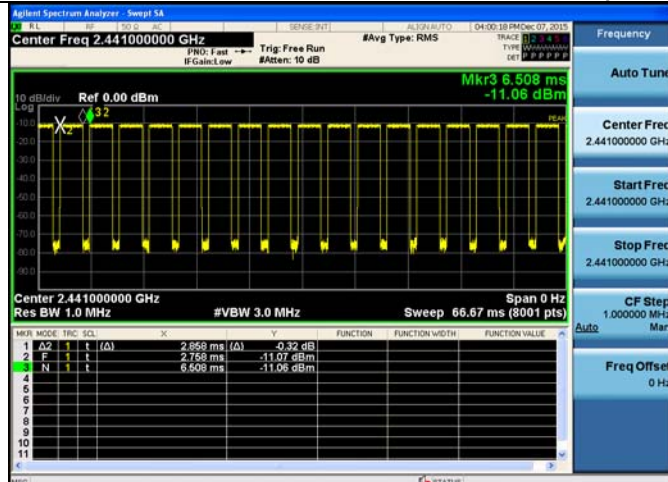


$\pi/4$ DQPSK/LCH

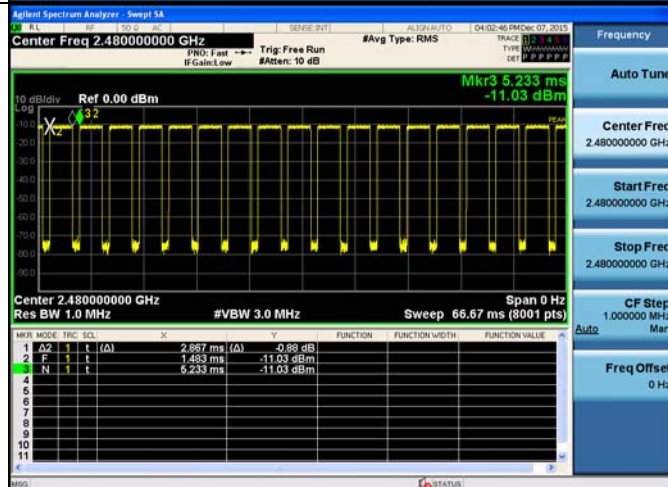


$\pi/4$DQPSK/MCH		Frequency Auto Tune Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 1.000000 MHz Freq Offset 0 Hz
$\pi/4$DQPSK/HCH		Frequency Auto Tune Center Freq 2.480000000 GHz Start Freq 2.480000000 GHz Stop Freq 2.480000000 GHz CF Step 1.000000 MHz Freq Offset 0 Hz
8DPSK/LCH		Frequency Auto Tune Center Freq 2.402000000 GHz Start Freq 2.402000000 GHz Stop Freq 2.402000000 GHz CF Step 1.000000 MHz Freq Offset 0 Hz

8DPSK/MCH



8DPSK/HCH



Hopping Channel Number

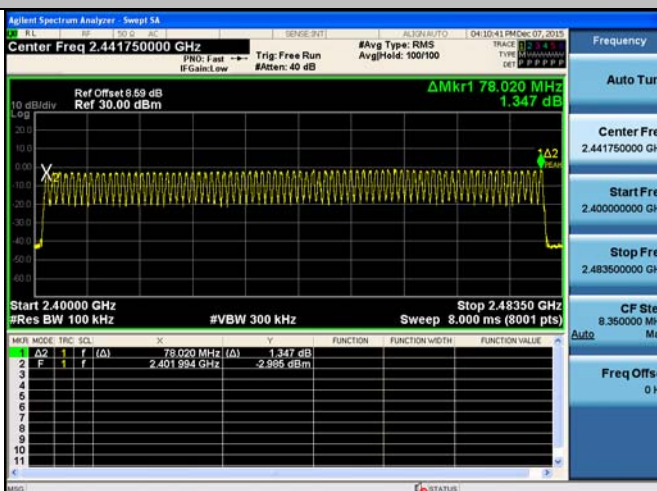
Result Table

Mode	Channel.	Number of Hopping Channel	Verdict
GFSK	Hop	79	PASS
$\pi/4$ DQPSK	Hop	79	PASS
8DPSK	Hop	79	PASS

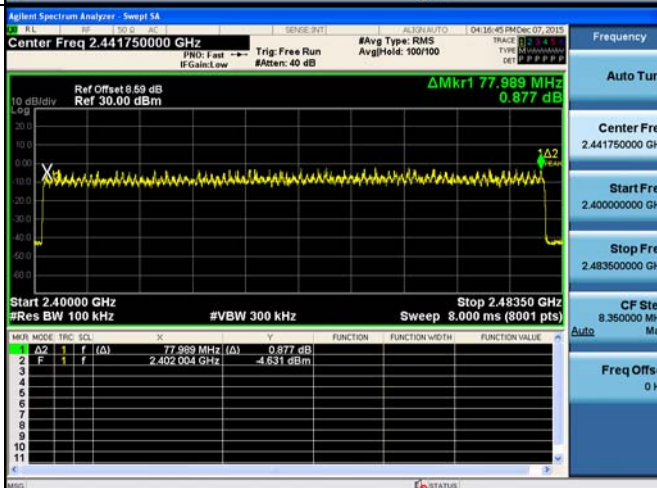
Test Graph

Graphs

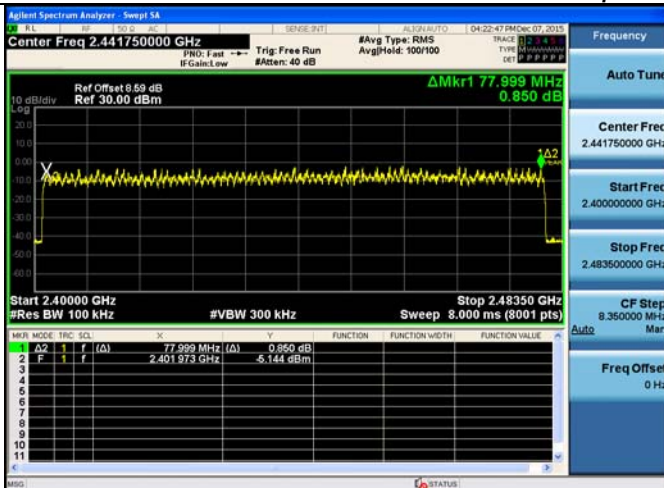
GFSK/Hop



$\pi/4$ DQPSK/Hop



8DPSK/Hop



Conducted Peak Output Power

Result Table

Mode	Channel.	Maximum Peak Output Power [dBm]	Verdict
GFSK	LCH	-2.442	PASS
GFSK	MCH	-1.191	PASS
GFSK	HCH	-1.068	PASS
$\pi/4$ DQPSK	LCH	-2.315	PASS
$\pi/4$ DQPSK	MCH	-1.508	PASS
$\pi/4$ DQPSK	HCH	-1.342	PASS
8DPSK	LCH	-2.204	PASS
8DPSK	MCH	-1.303	PASS
8DPSK	HCH	-1.199	PASS

Test Graph



GFSK/HCH



$\pi/4$ DQPSK/LCH



$\pi/4$ DQPSK/MCH



π/4DQPSK/HCH



8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

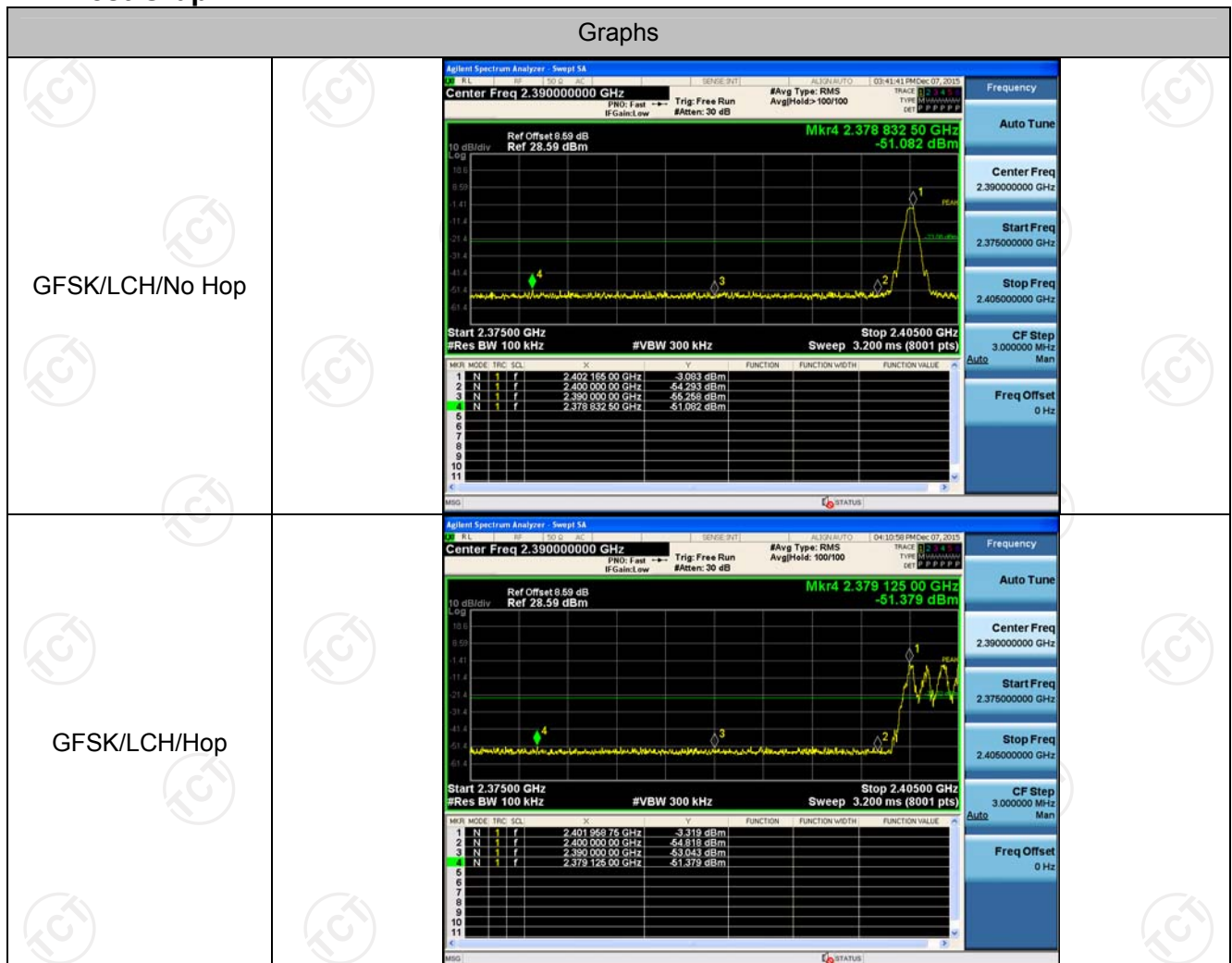


Band-edge for RF Conducted Emissions

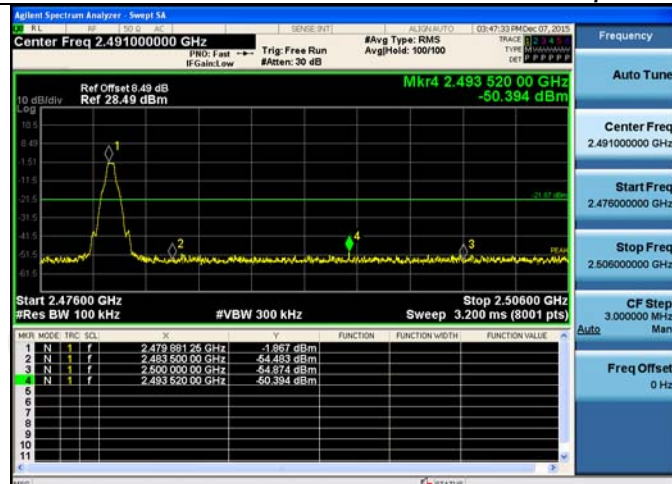
Result Table

Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-3.083	Off	-51.082	-23.08	PASS
			-3.319	On	-51.379	-23.32	PASS
GFSK	HCH	2480	-1.867	Off	-50.394	-21.87	PASS
			-1.695	On	-50.823	-21.7	PASS
$\pi/4$ DQPSK	LCH	2402	-3.565	Off	-51.323	-23.57	PASS
			-7.474	On	-51.499	-27.47	PASS
$\pi/4$ DQPSK	HCH	2480	-2.679	Off	-51.063	-22.68	PASS
			-6.543	On	-50.961	-26.54	PASS
8DPSK	LCH	2402	-4.004	Off	-51.619	-24	PASS
			-7.396	On	-51.210	-27.4	PASS
8DPSK	HCH	2480	-2.695	Off	-51.286	-22.7	PASS
			-6.061	On	-51.484	-26.06	PASS

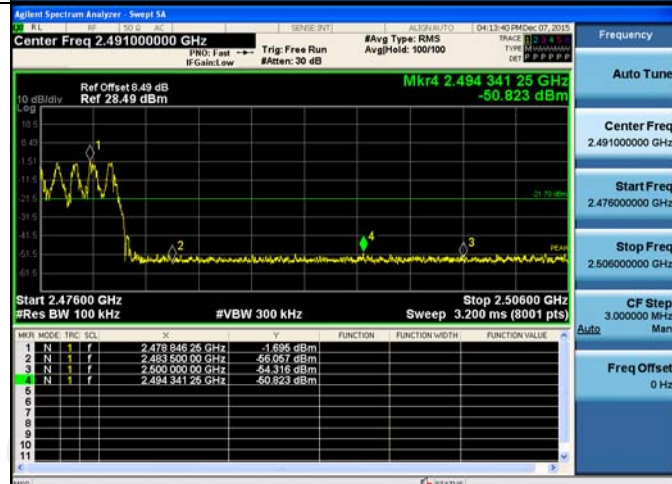
Test Graph



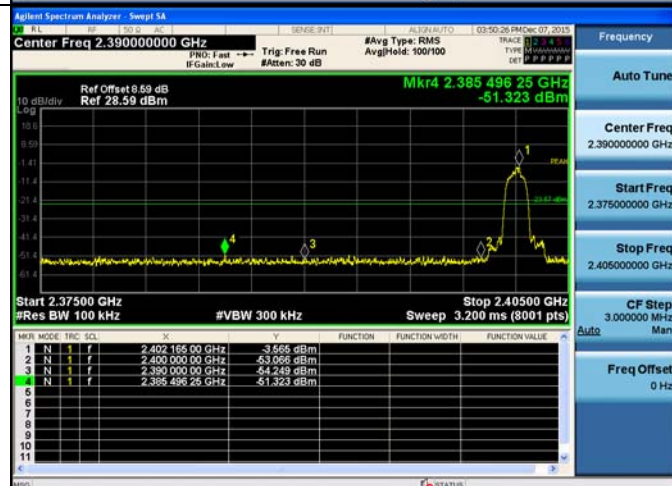
GFSK/HCH/No Hop



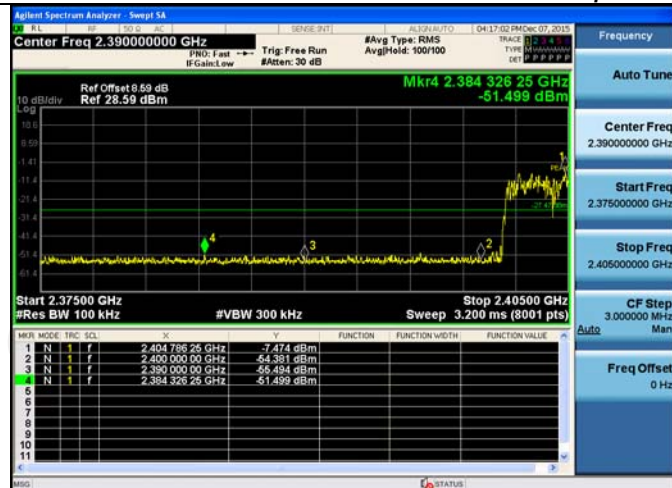
GFSK/HCH/Hop



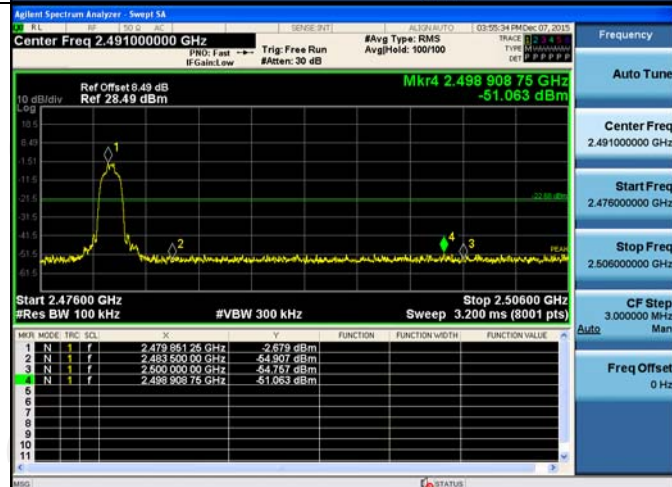
$\pi/4$ DQPSK/LCH/No Hop



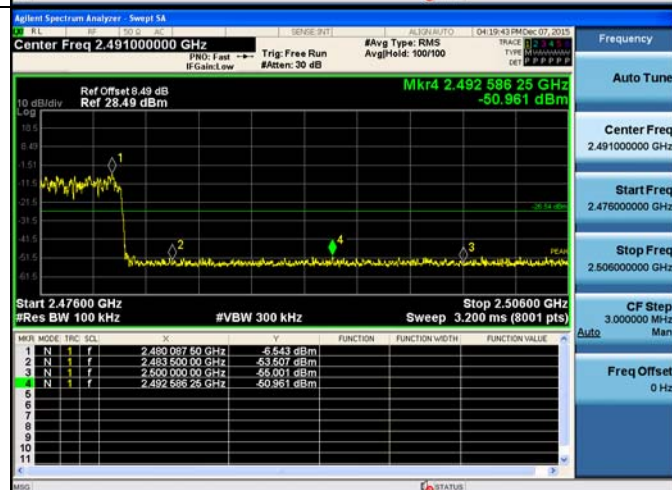
$\pi/4$ DQPSK/LCH/Hop



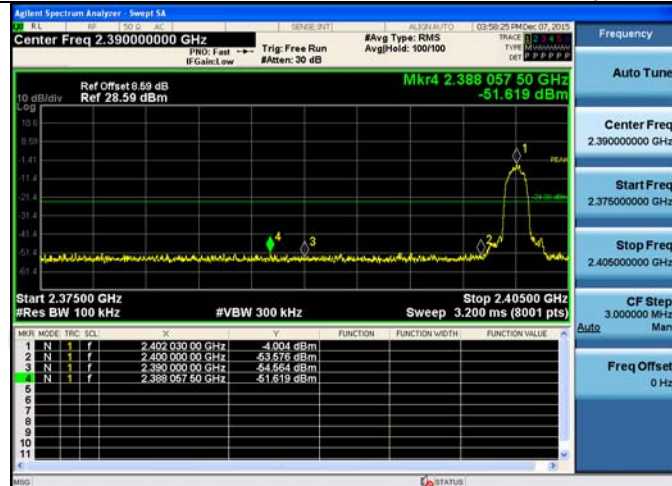
$\pi/4$ DQPSK/HCH/No Hop



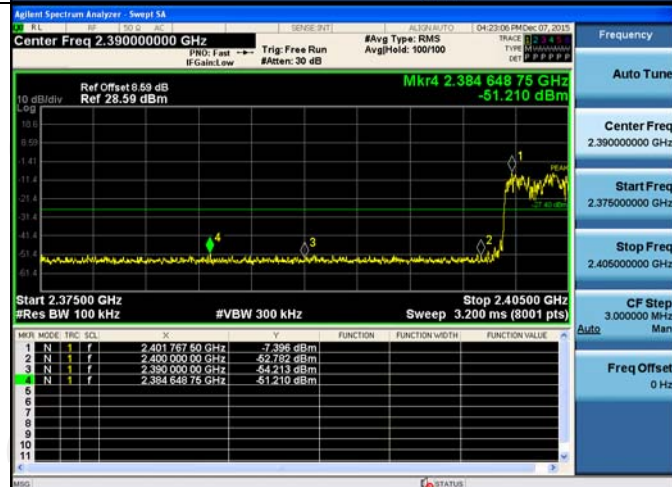
$\pi/4$ DQPSK/HCH/Hop



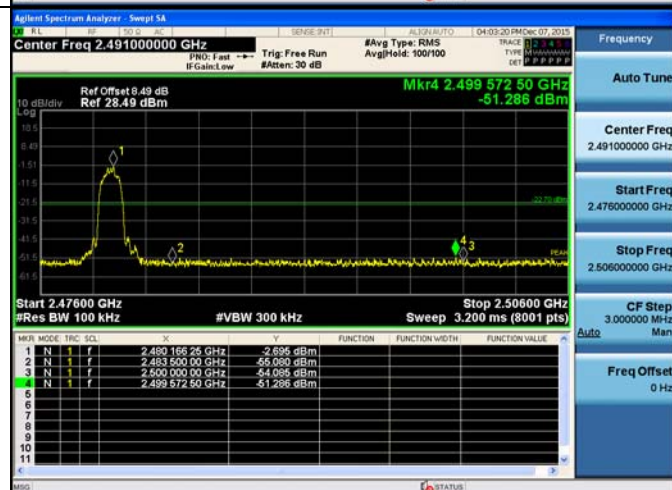
8DPSK/LCH/No Hop



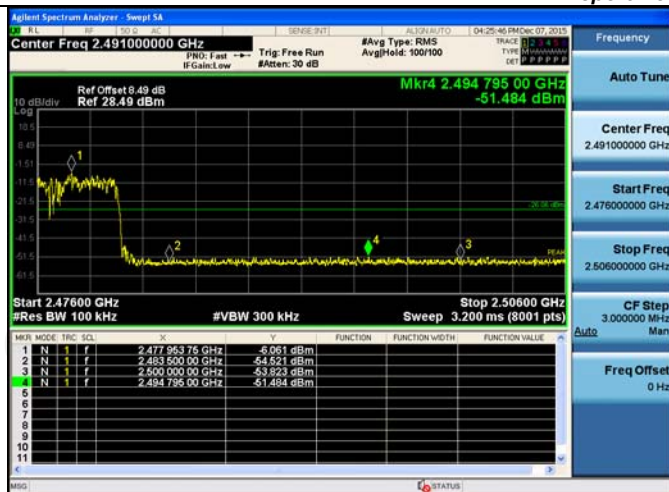
8DPSK/LCH/Hop



8DPSK/HCH/No Hop



8DPSK/HCH/Hop

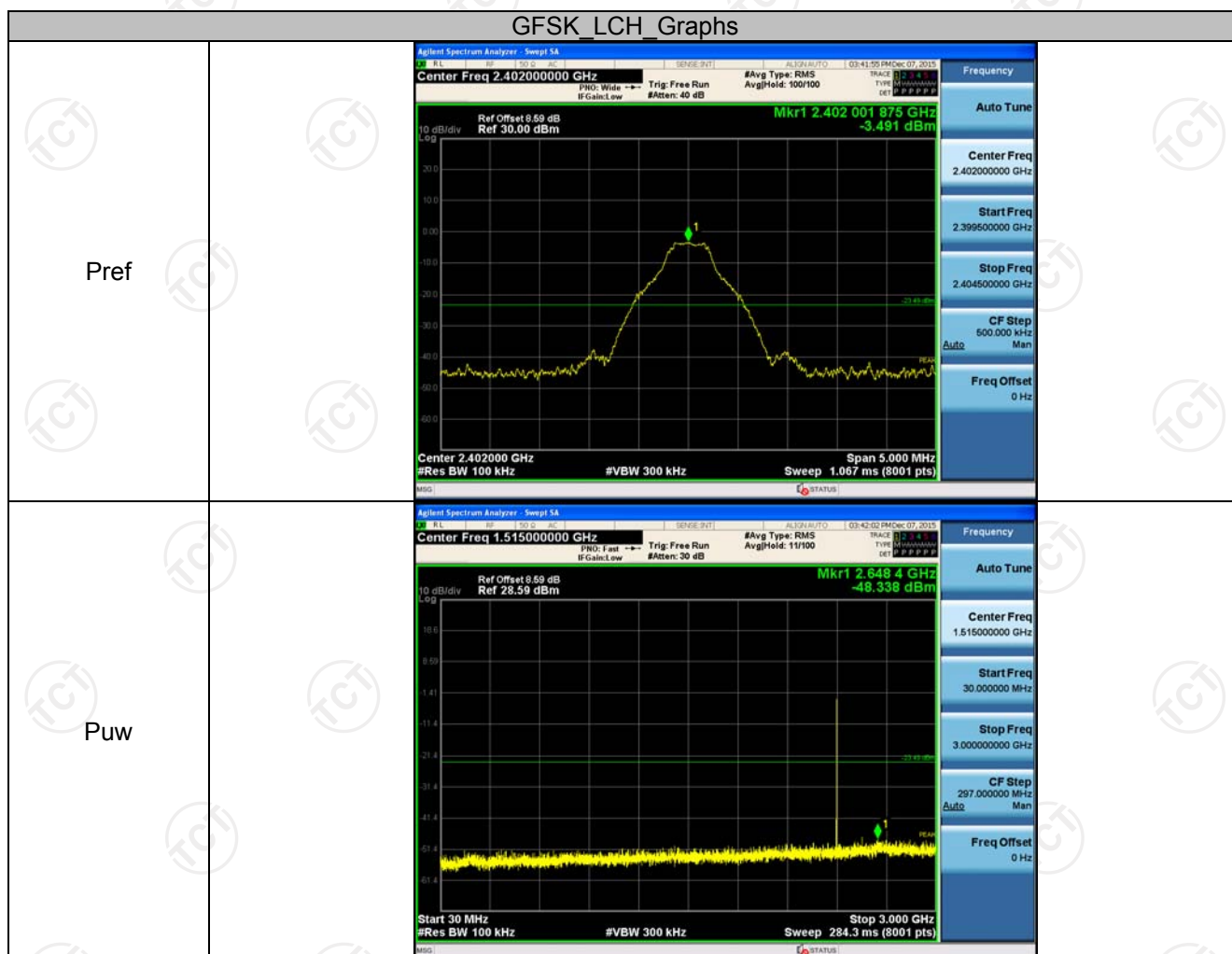


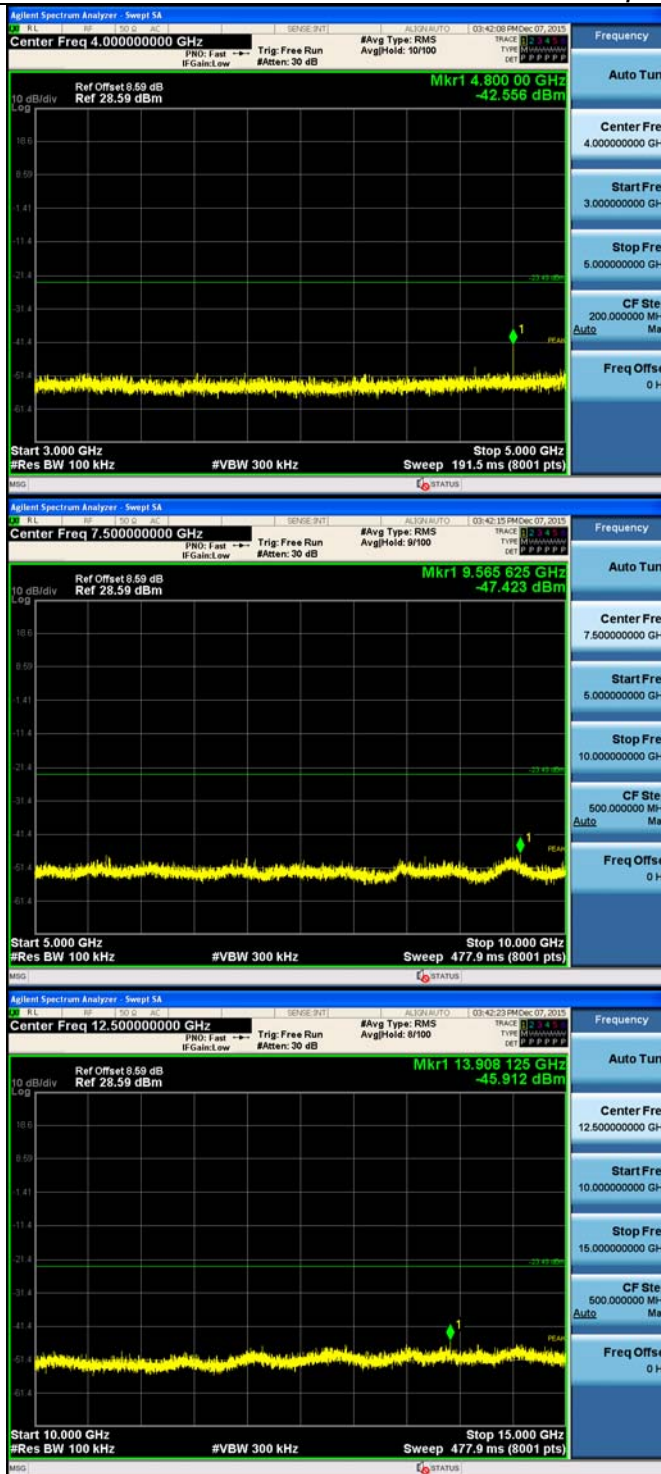
RF Conducted Spurious Emissions

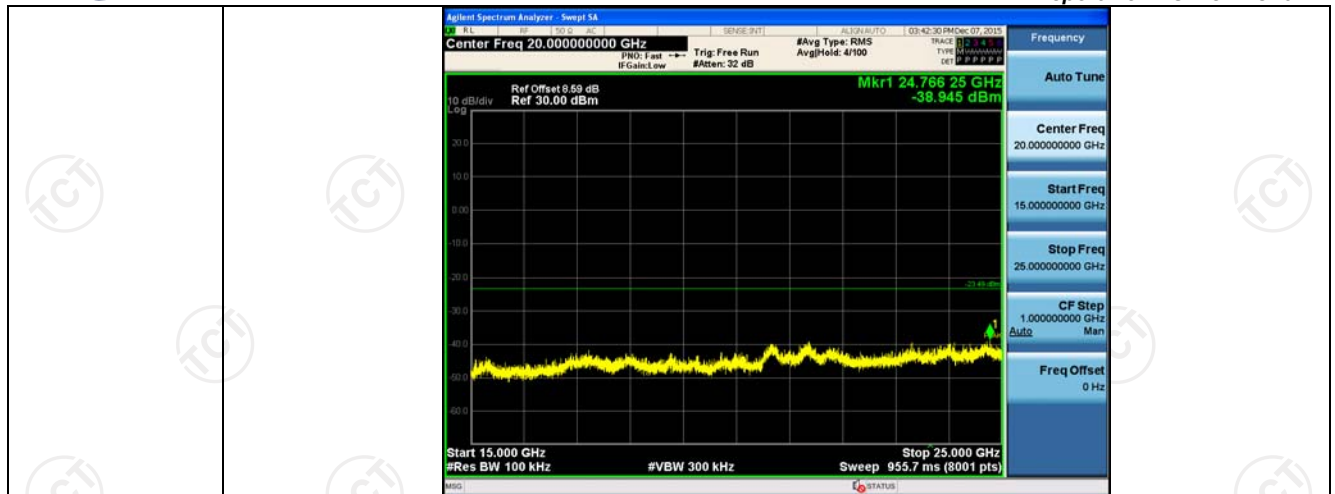
Result Table

Mode	Channel	Pref [dBm]	Puw[dBm]	Verdict
GFSK	LCH	-3.491	<Limit	PASS
GFSK	MCH	-2.212	<Limit	PASS
GFSK	HCH	-2.062	<Limit	PASS
$\pi/4$ DQPSK	LCH	-3.749	<Limit	PASS
$\pi/4$ DQPSK	MCH	-3.541	<Limit	PASS
$\pi/4$ DQPSK	HCH	-2.809	<Limit	PASS
8DPSK	LCH	-5.705	<Limit	PASS
8DPSK	MCH	-2.912	<Limit	PASS
8DPSK	HCH	-3.12	<Limit	PASS

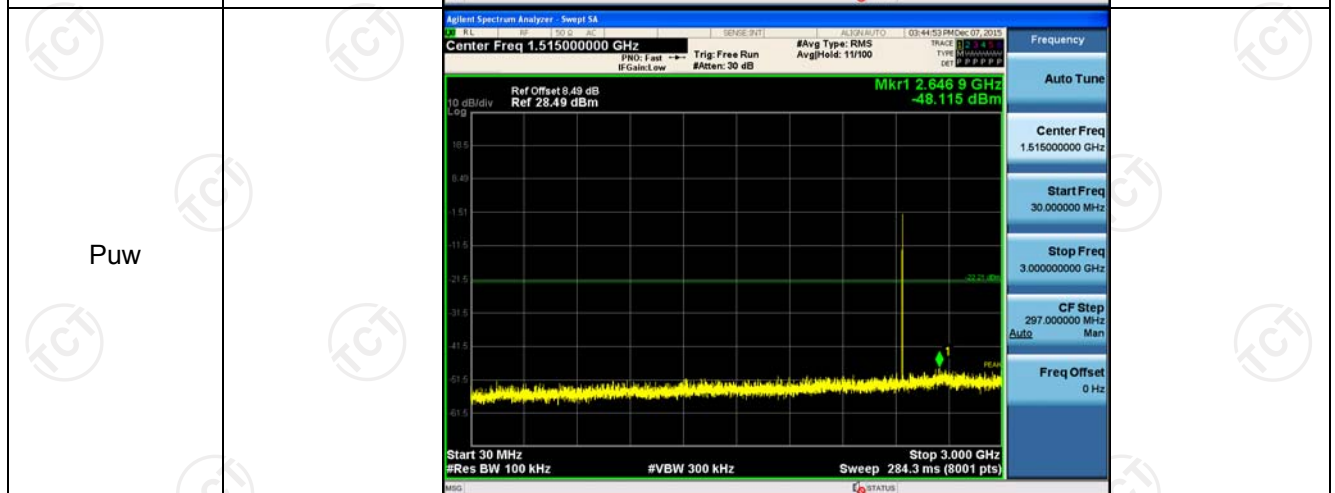
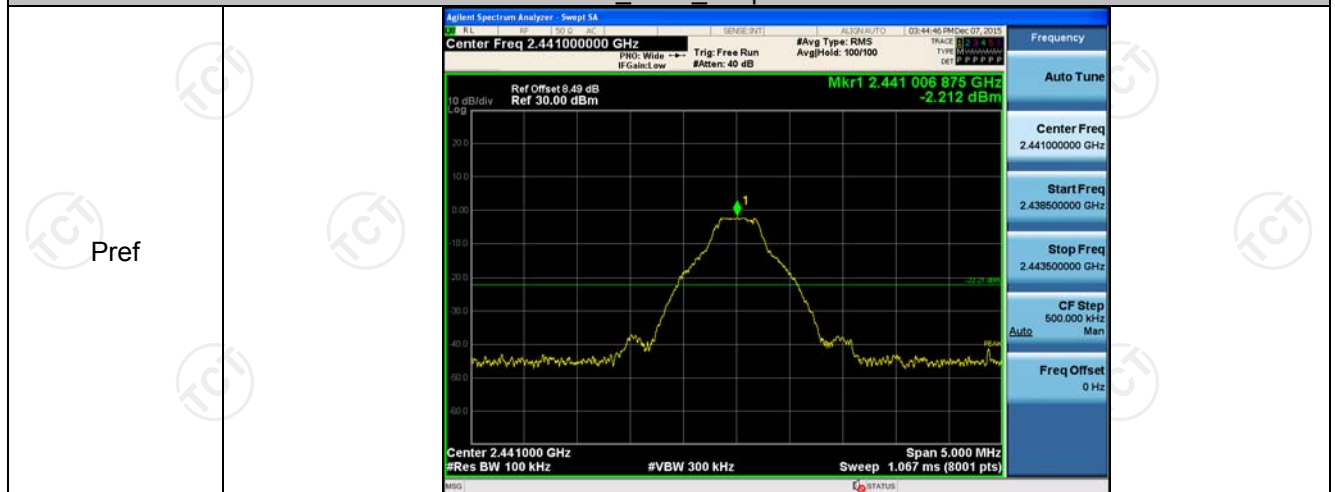
Test Graph

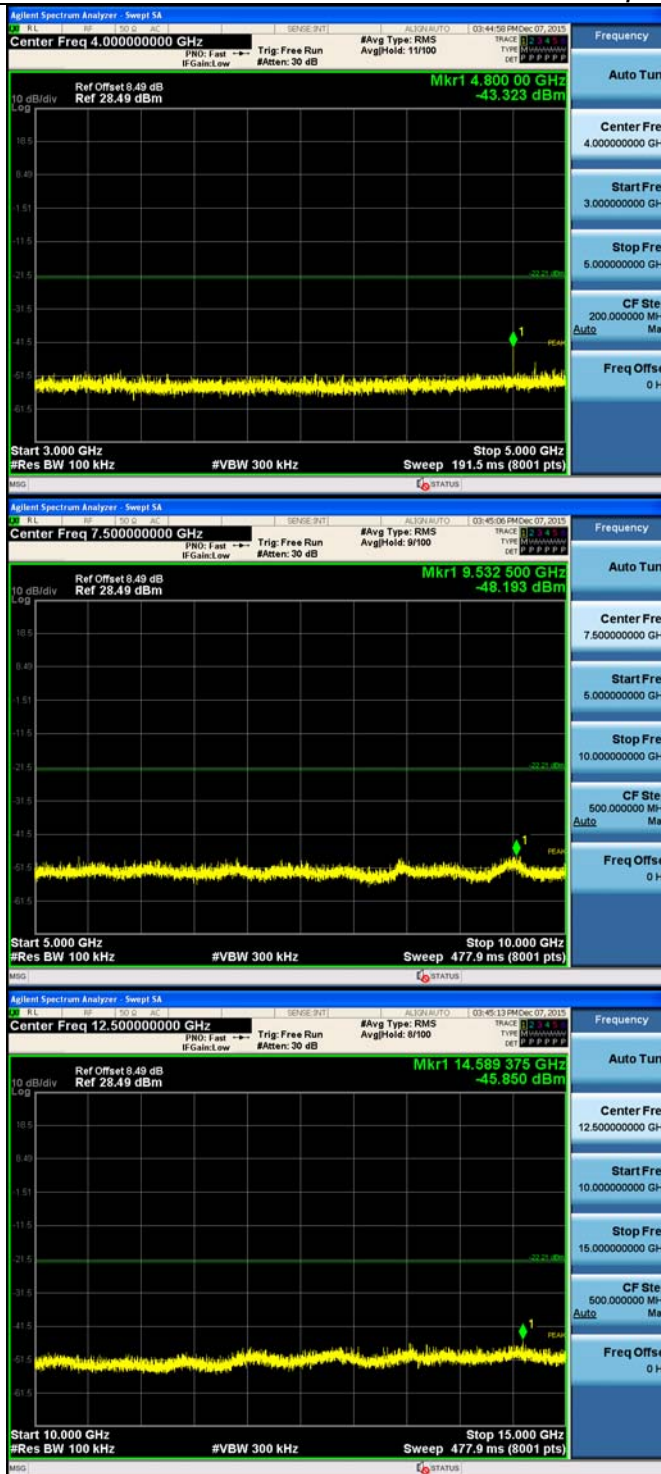


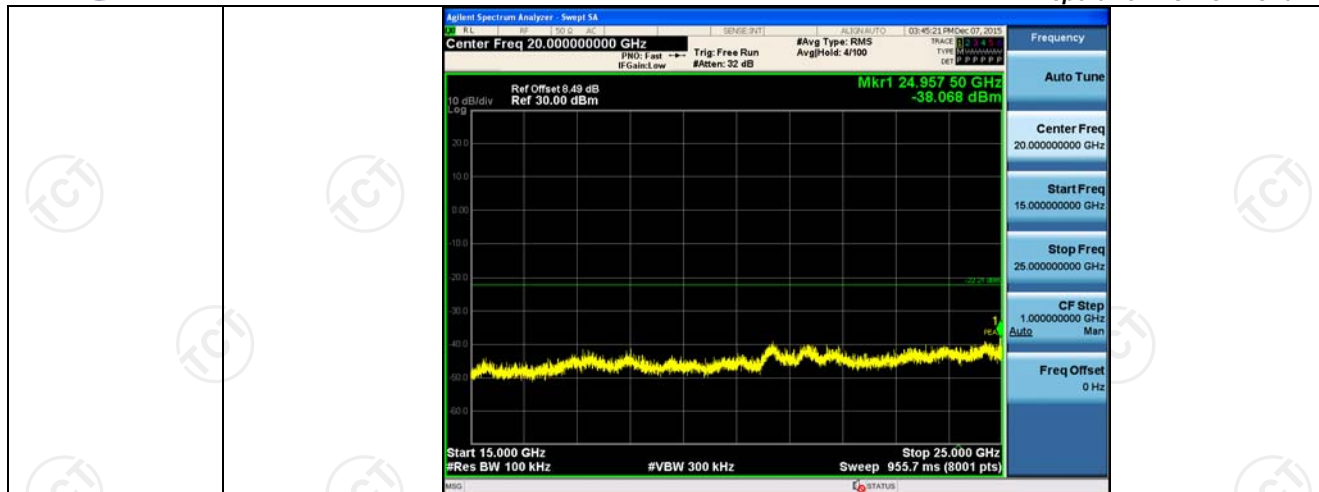




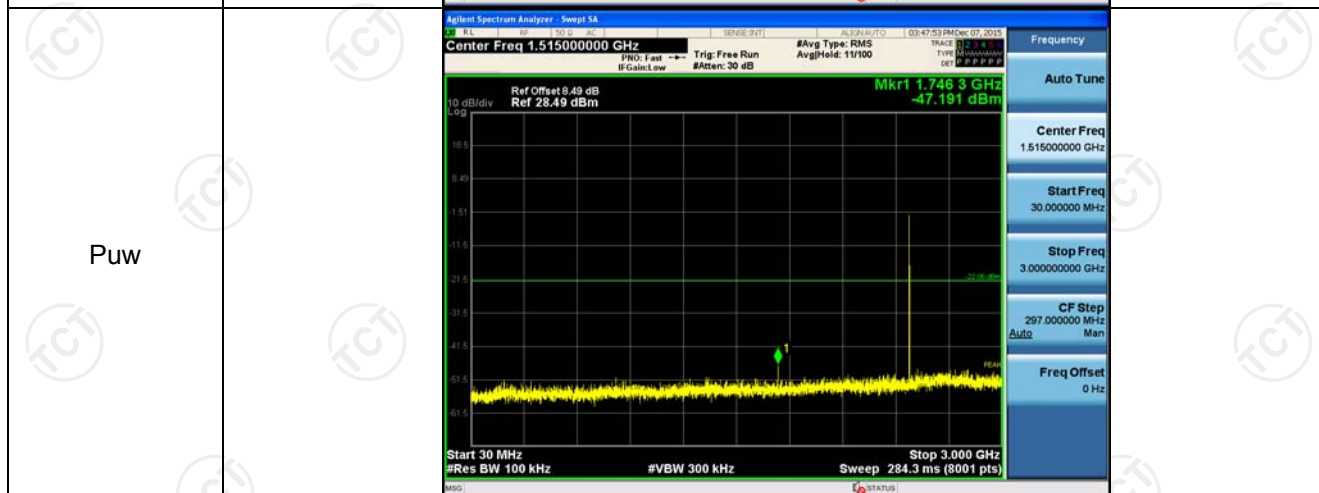
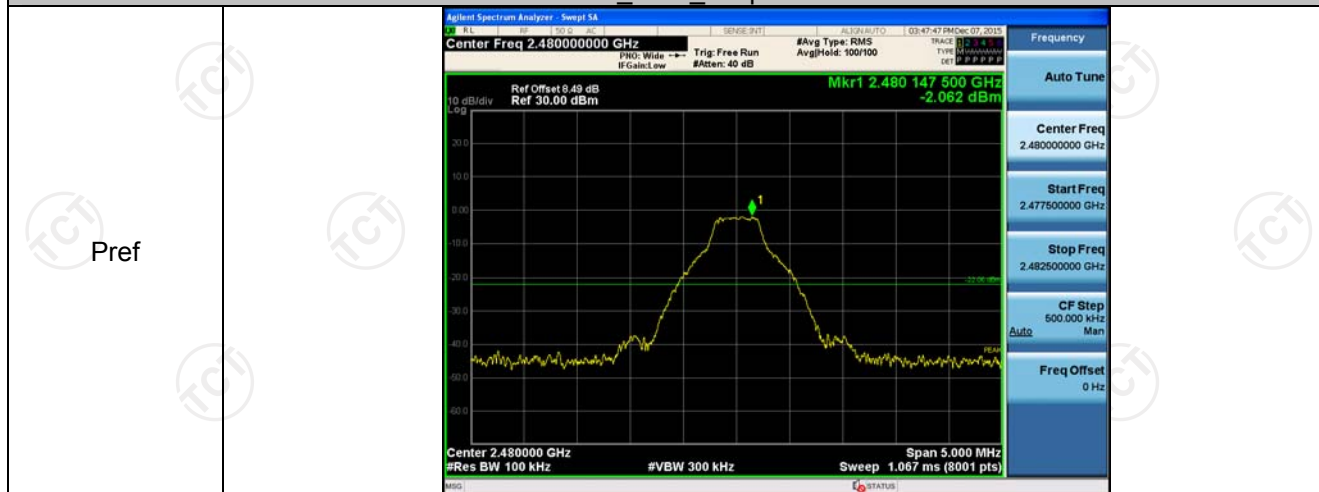
GFSK_MCH_Graphs

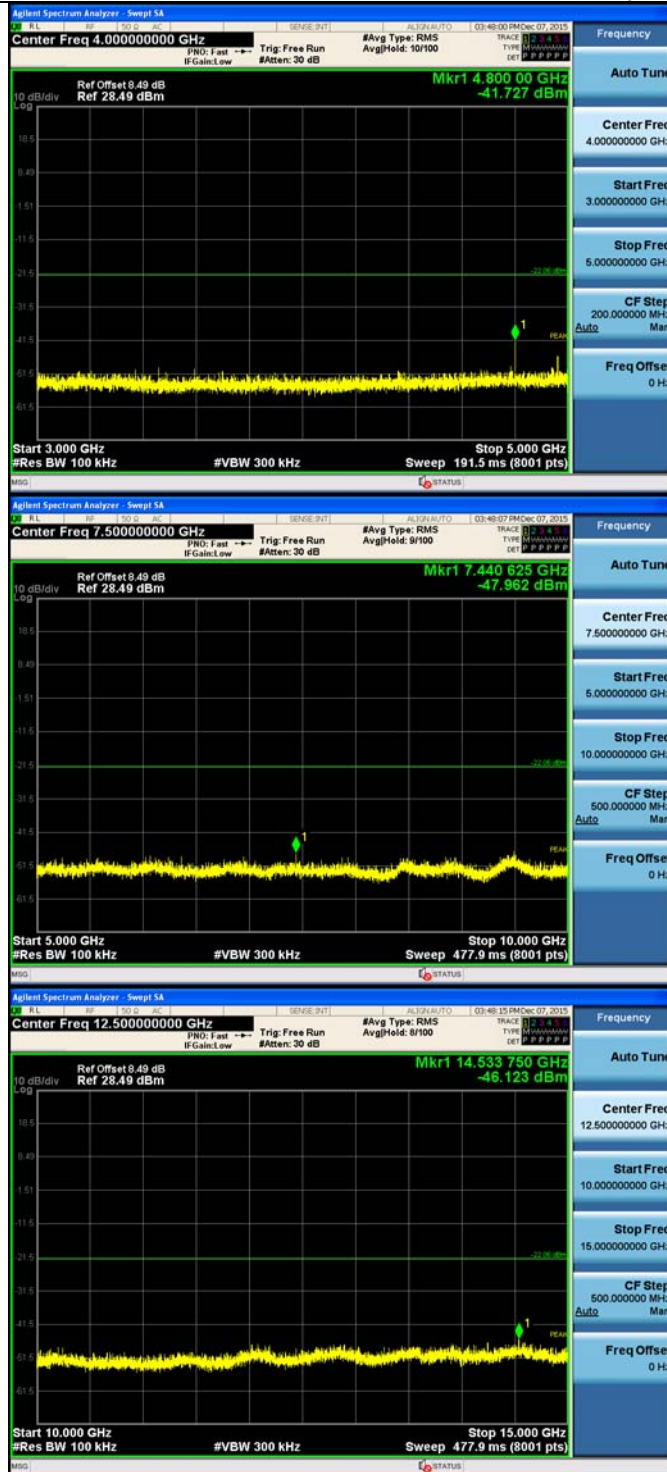


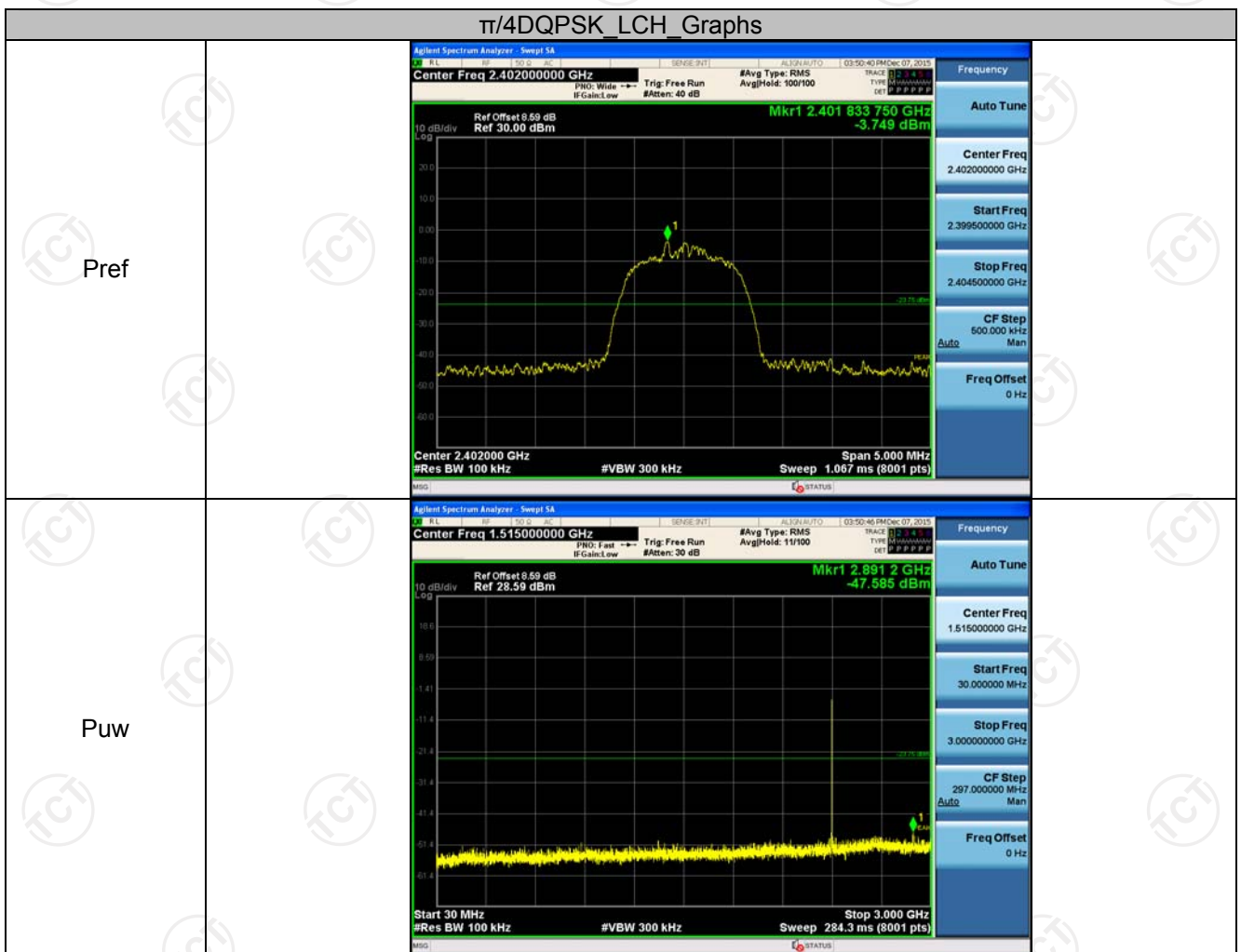
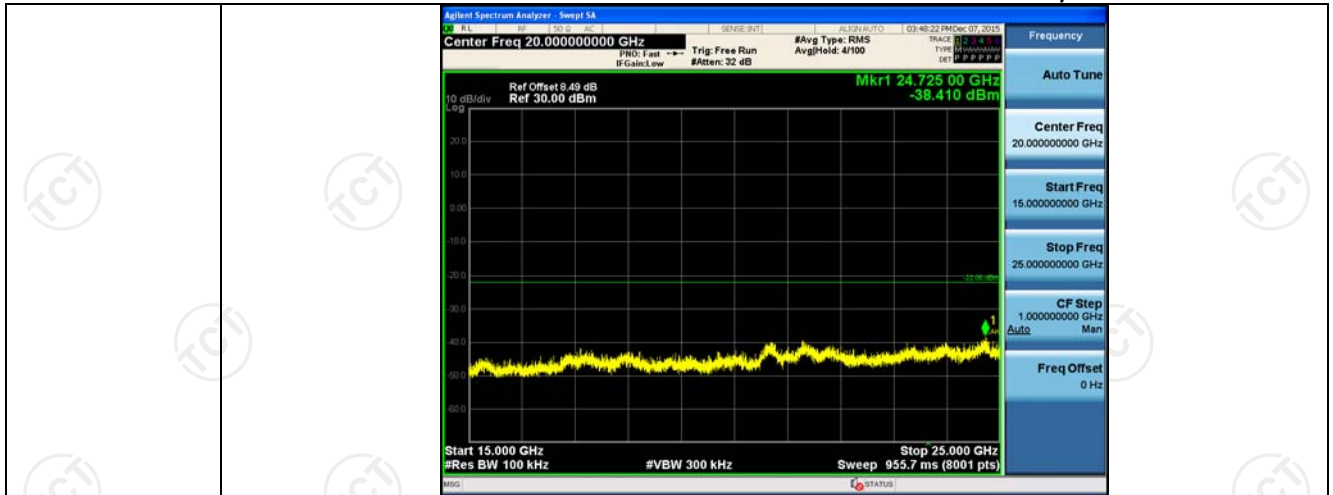


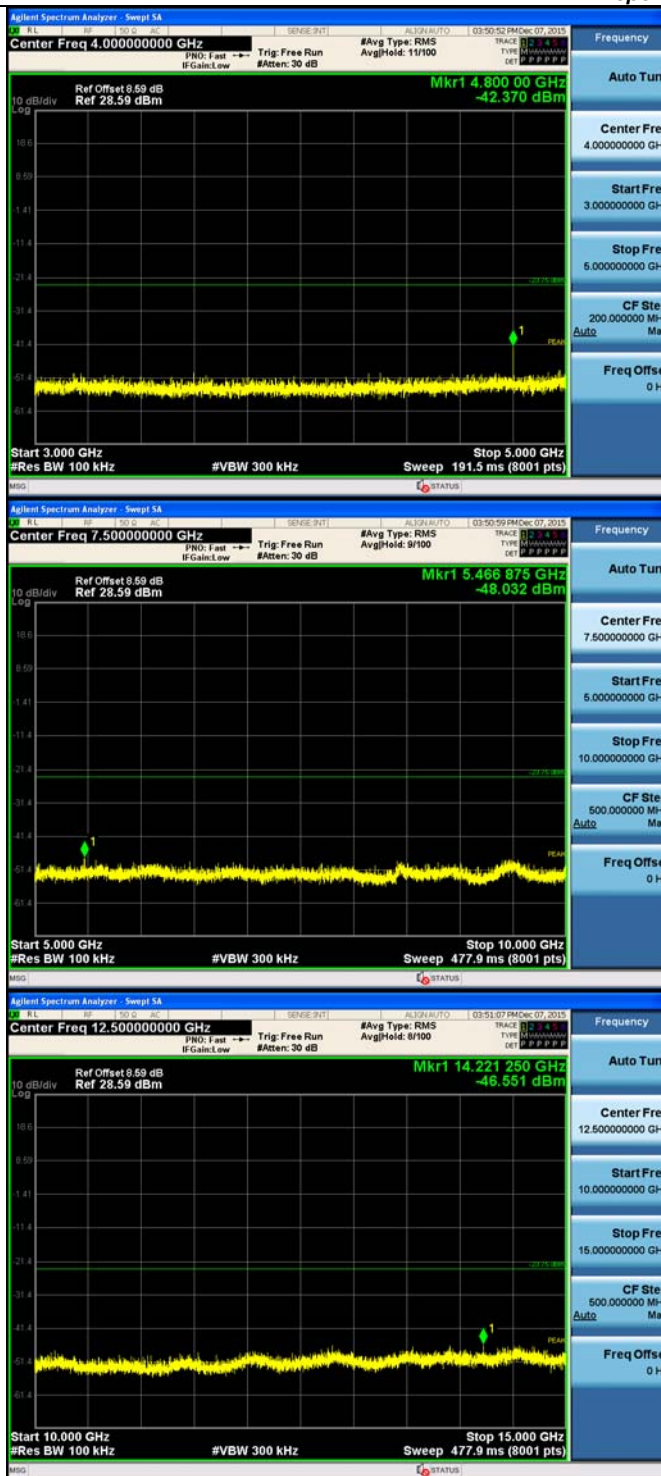


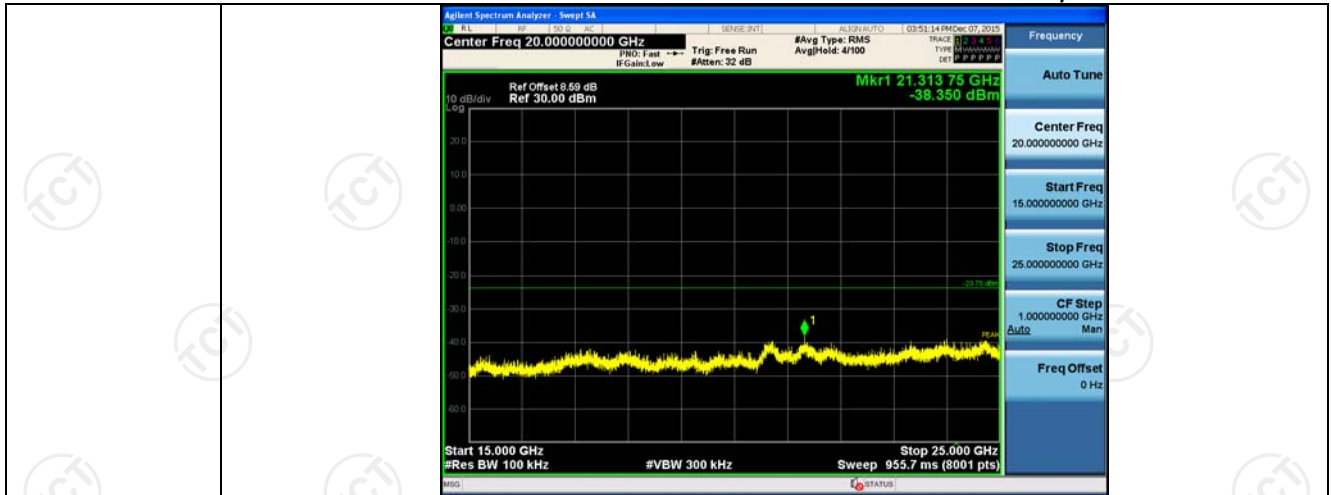
GFSK HCH_Graphs



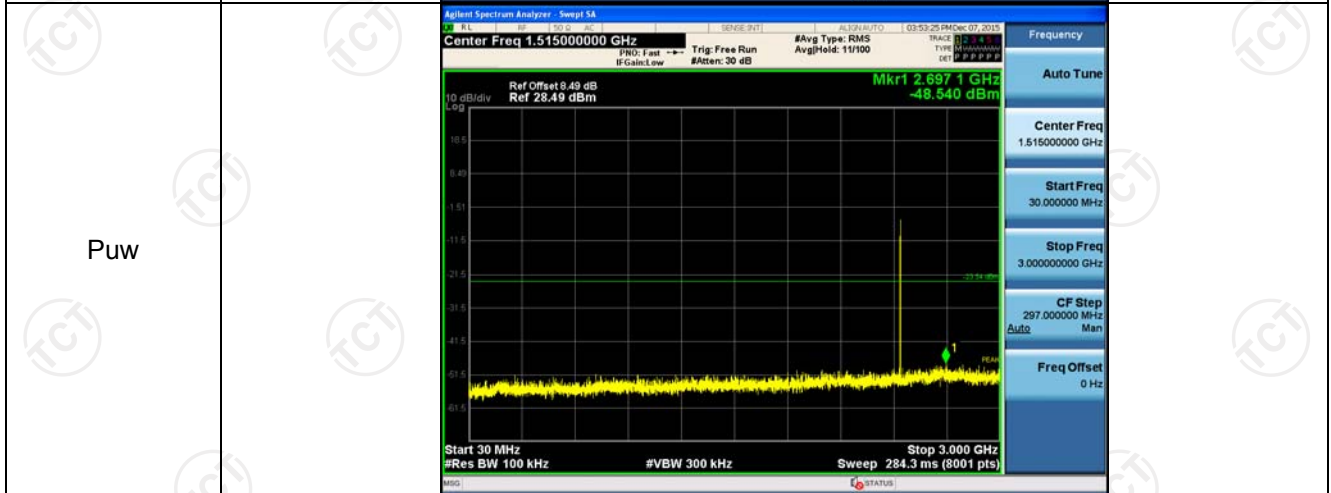
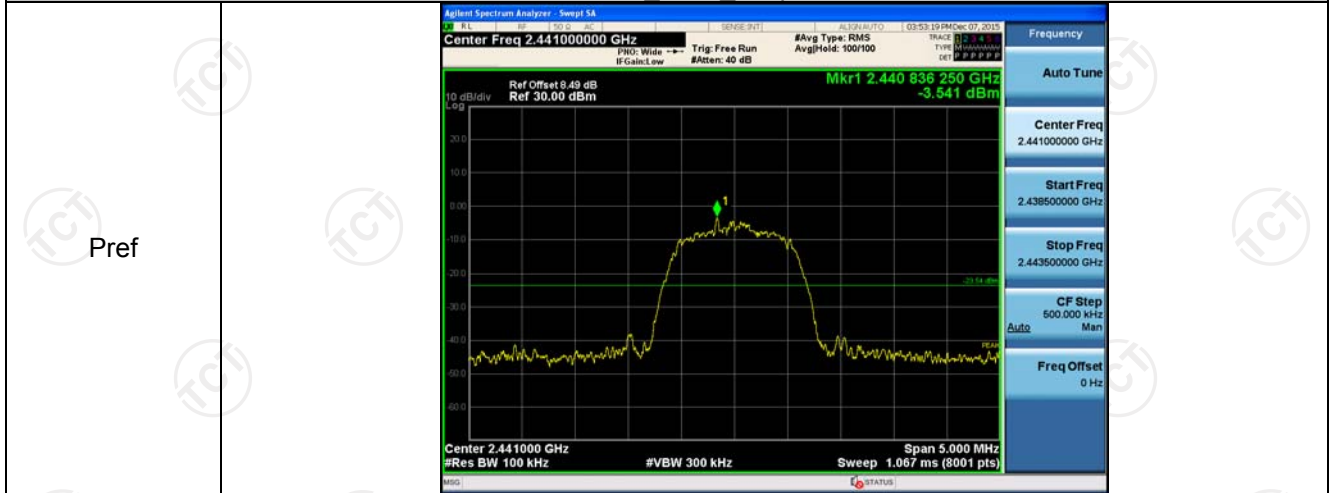


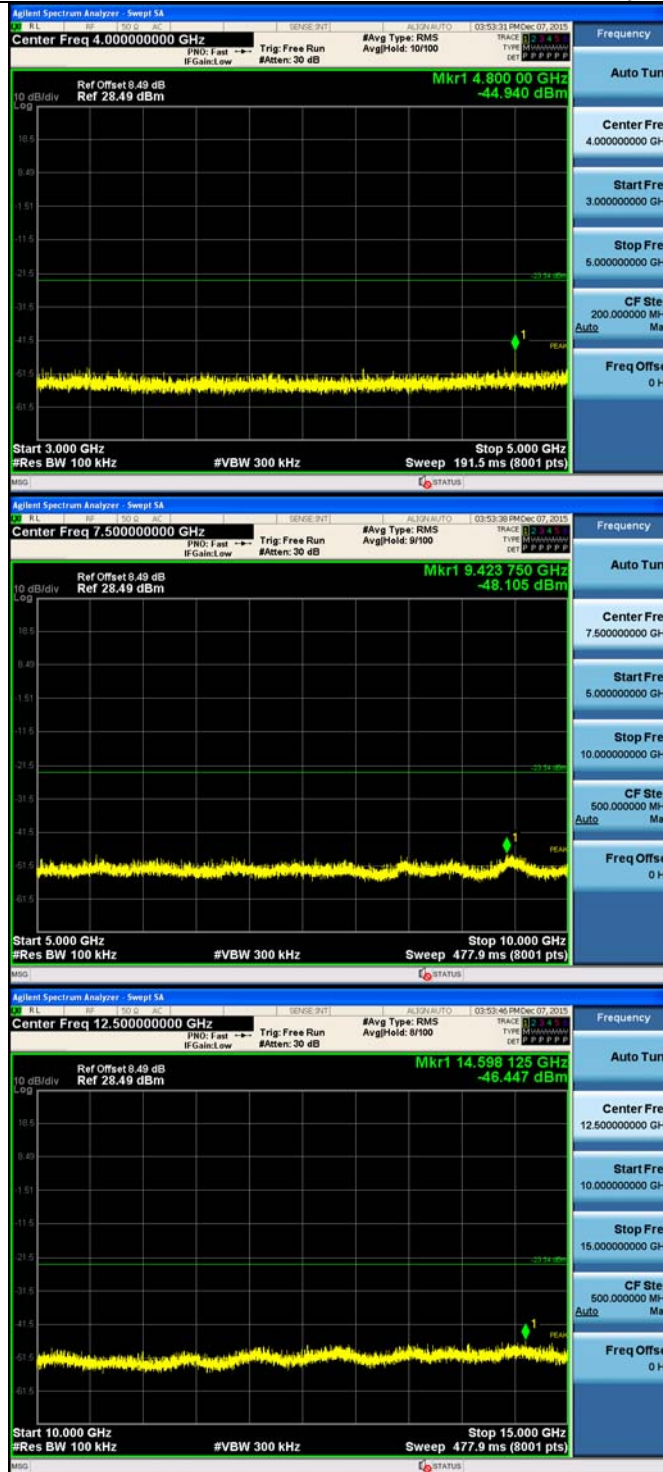


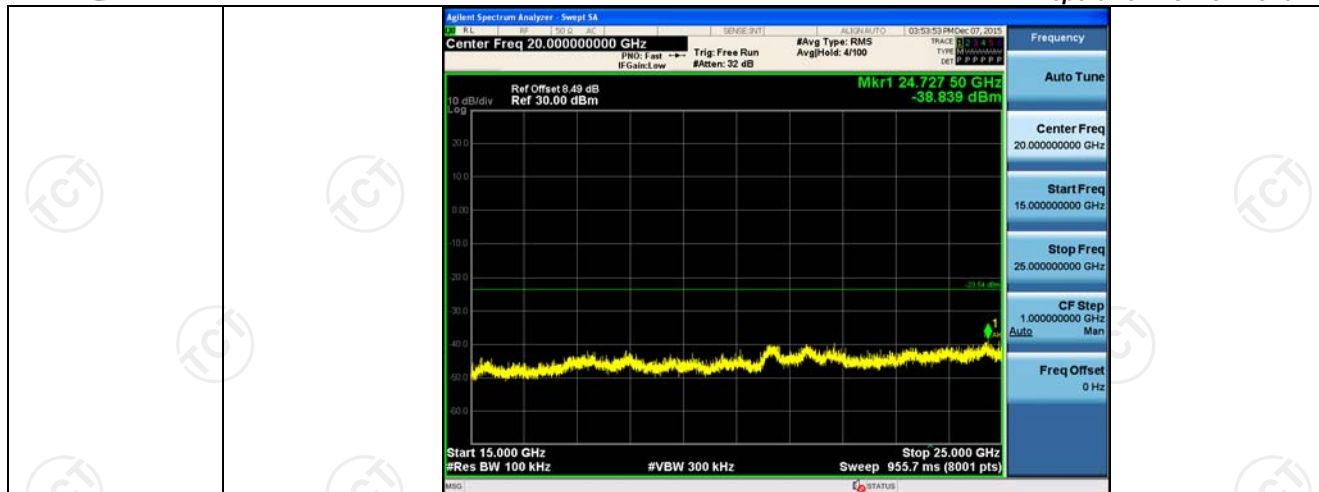




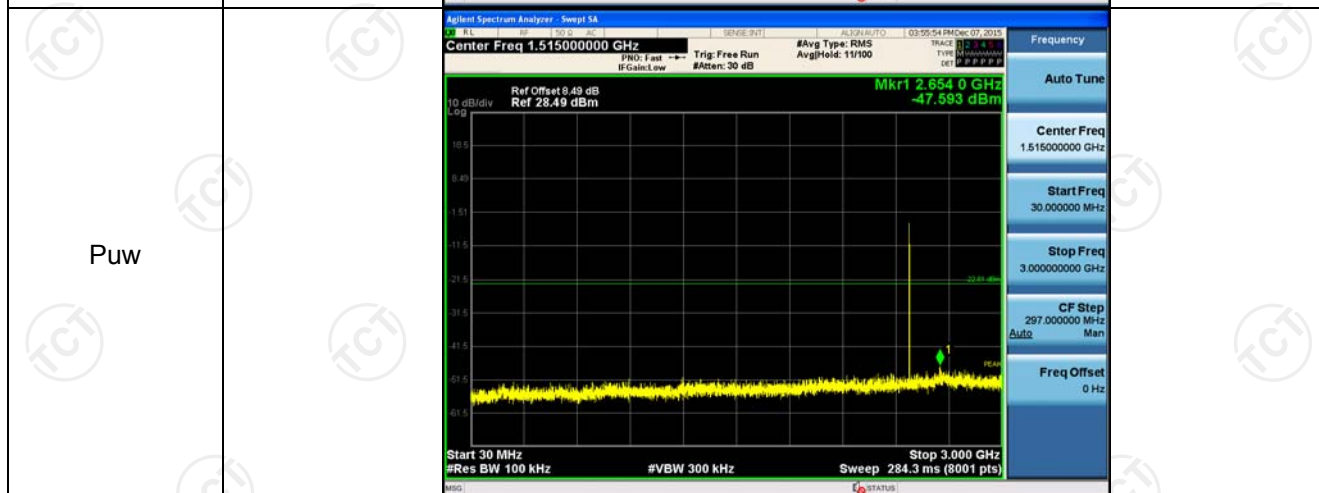
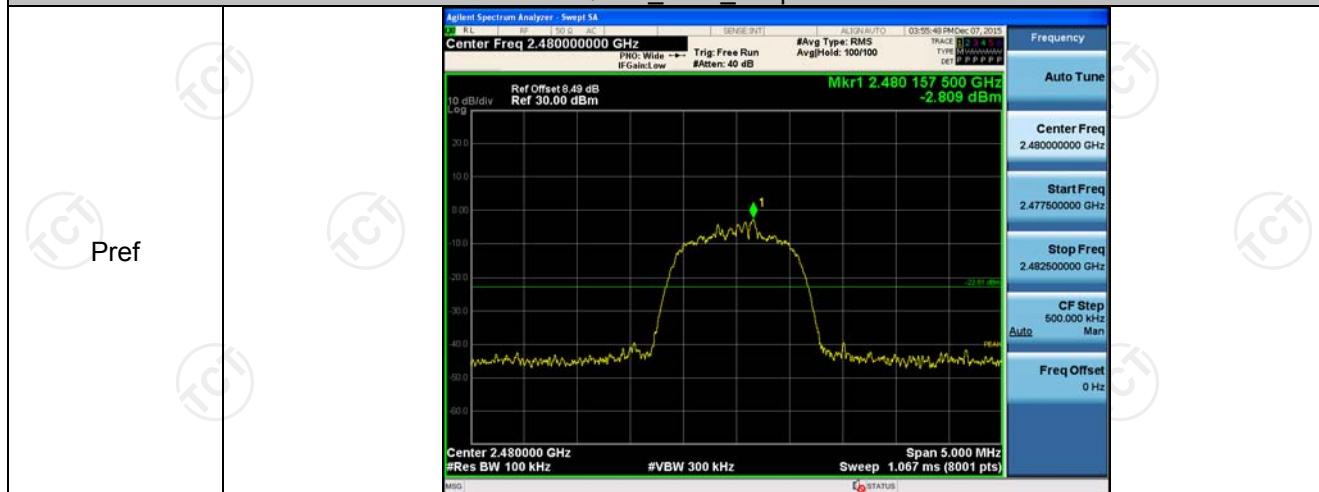
$\pi/4$ DQPSK_MCH_Graphs

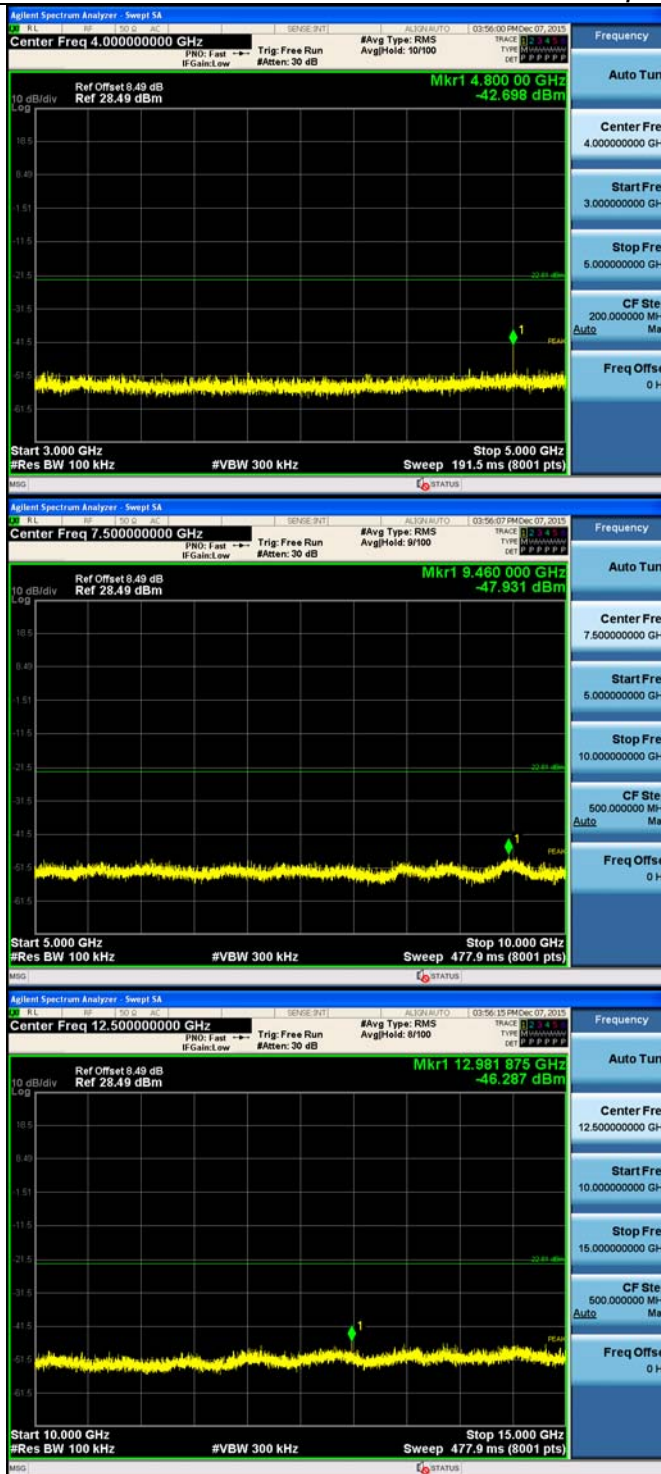


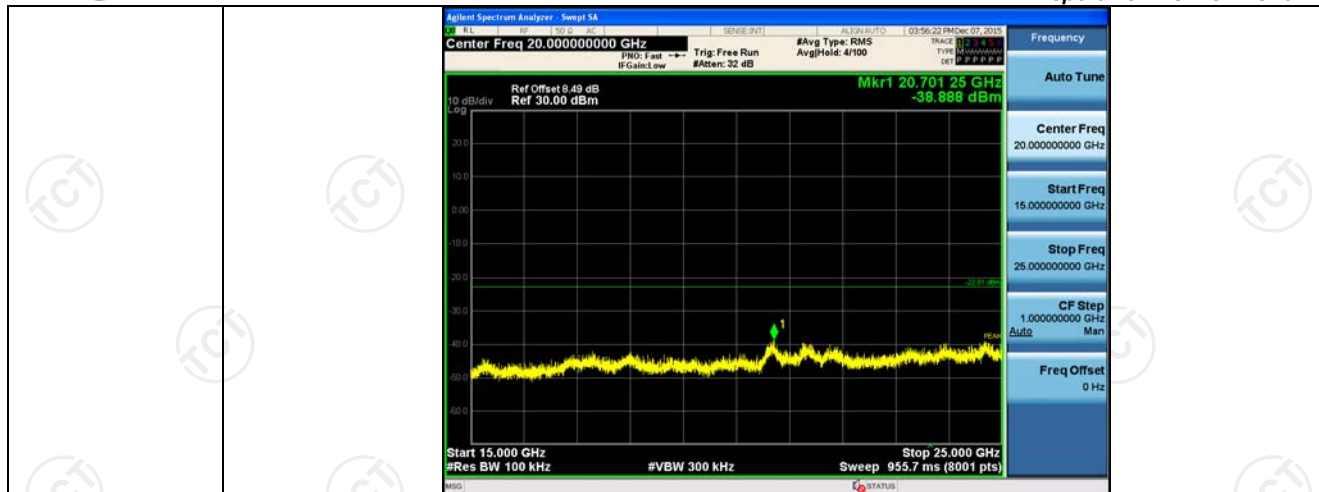




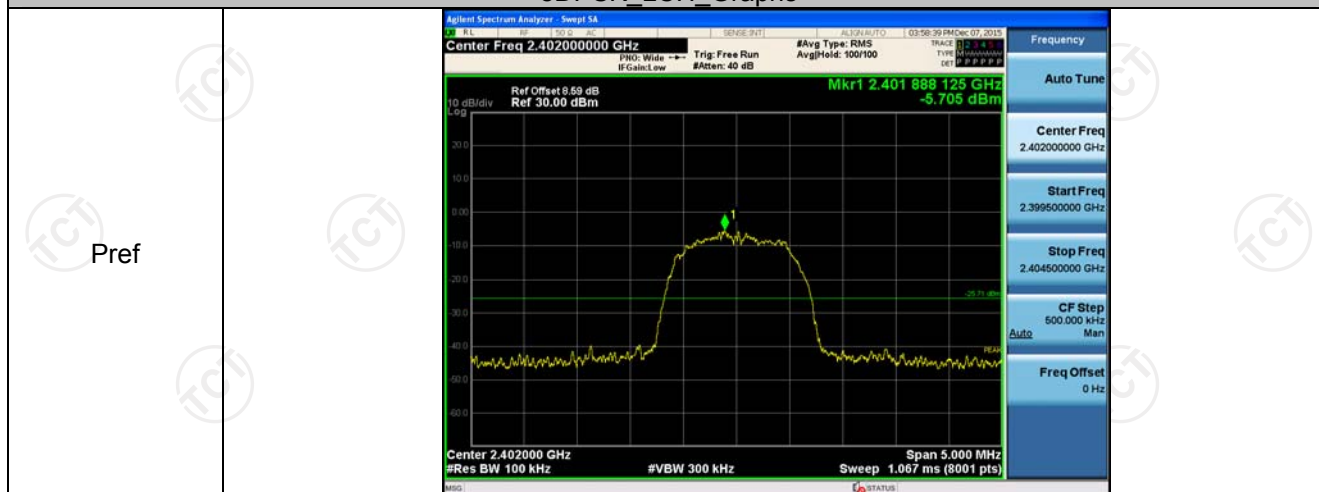
$\pi/4$ DQPSK_HCH_Graphs



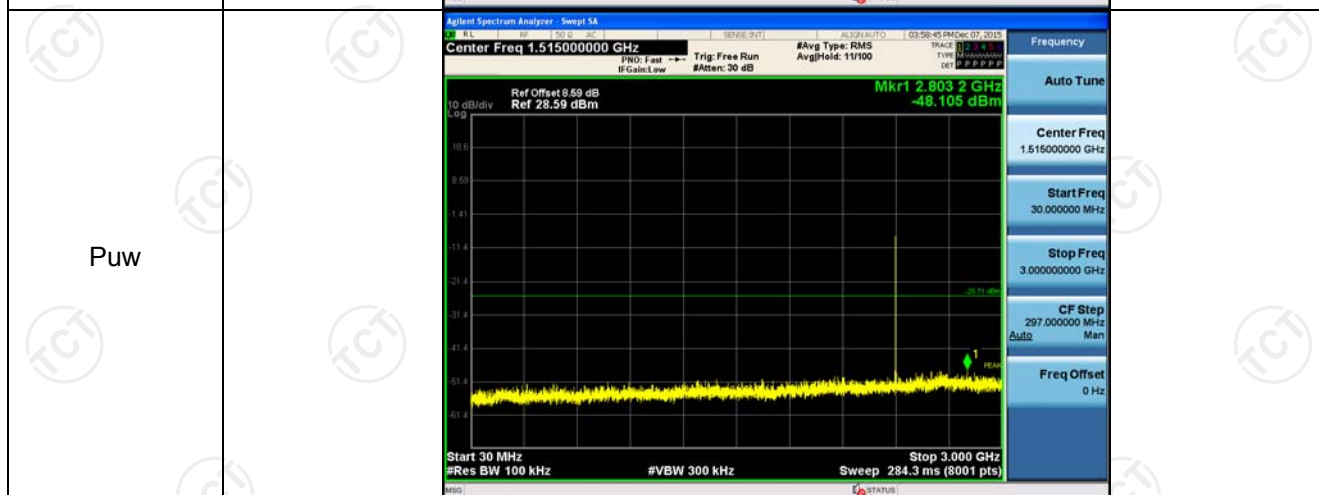




8DPSK_LCH_Graphs

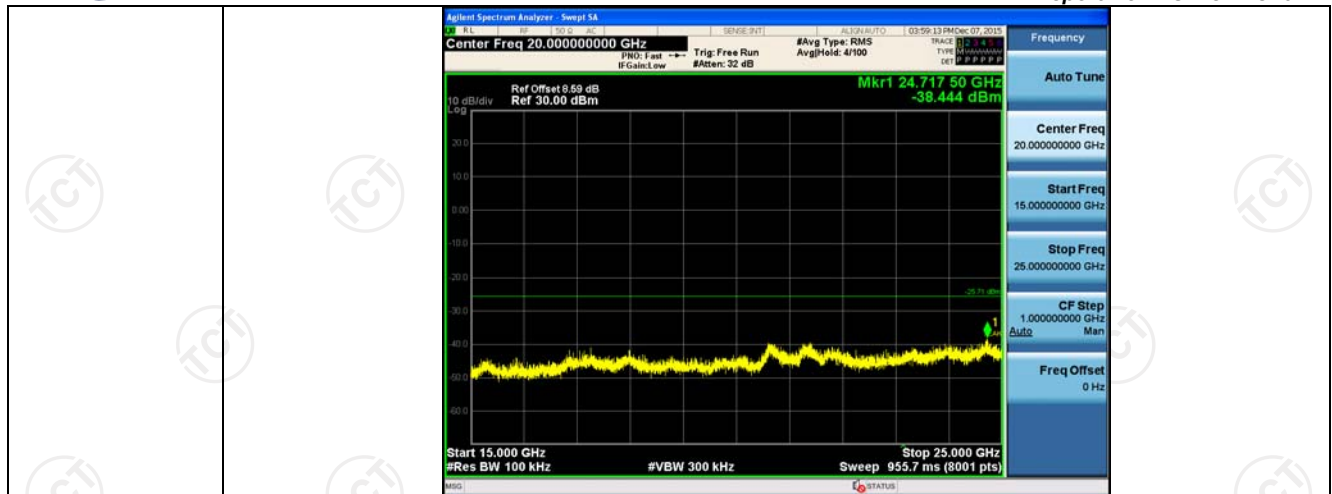


Pref

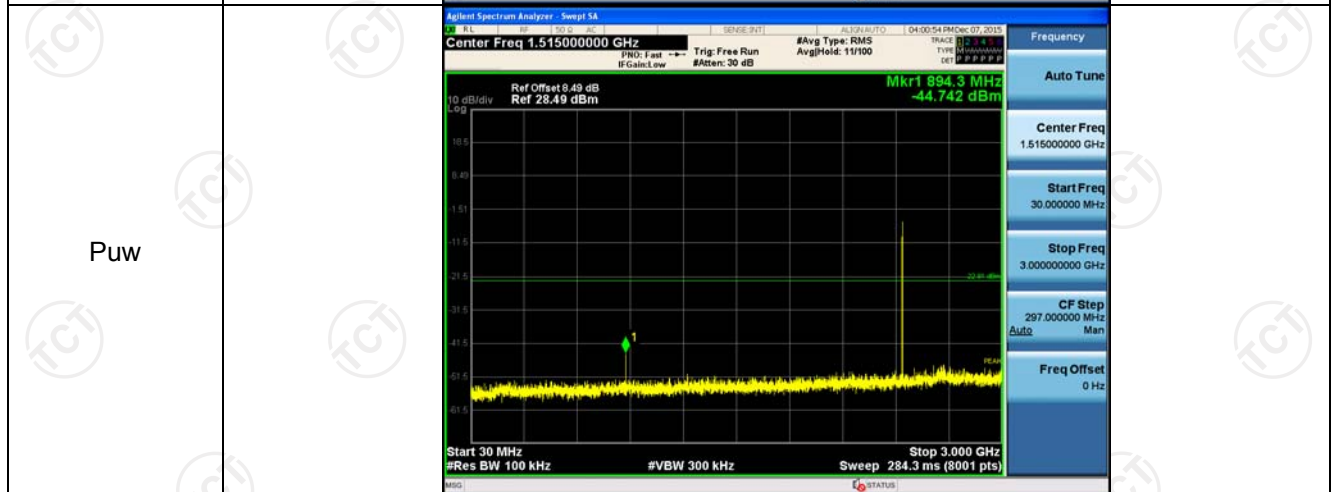
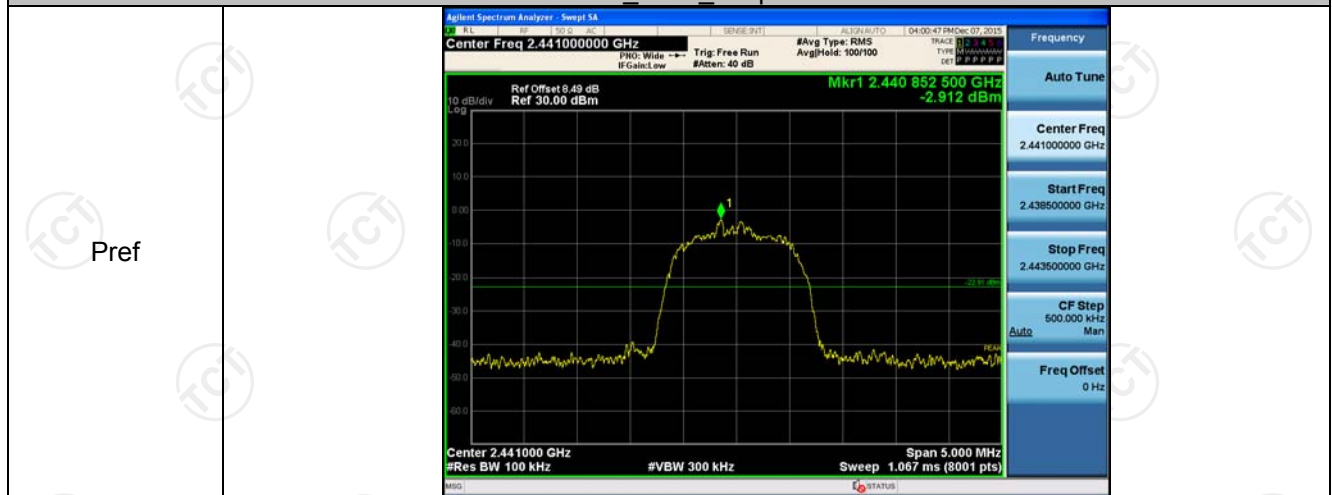


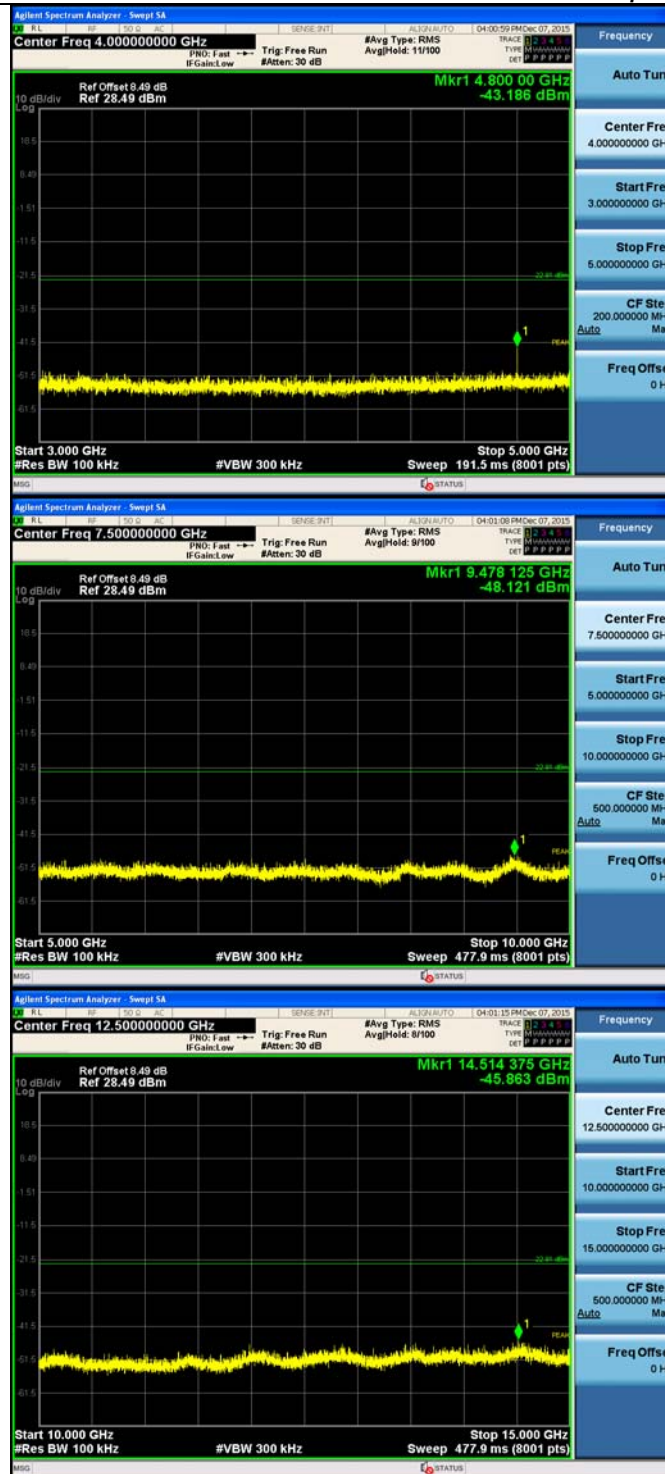
Puw

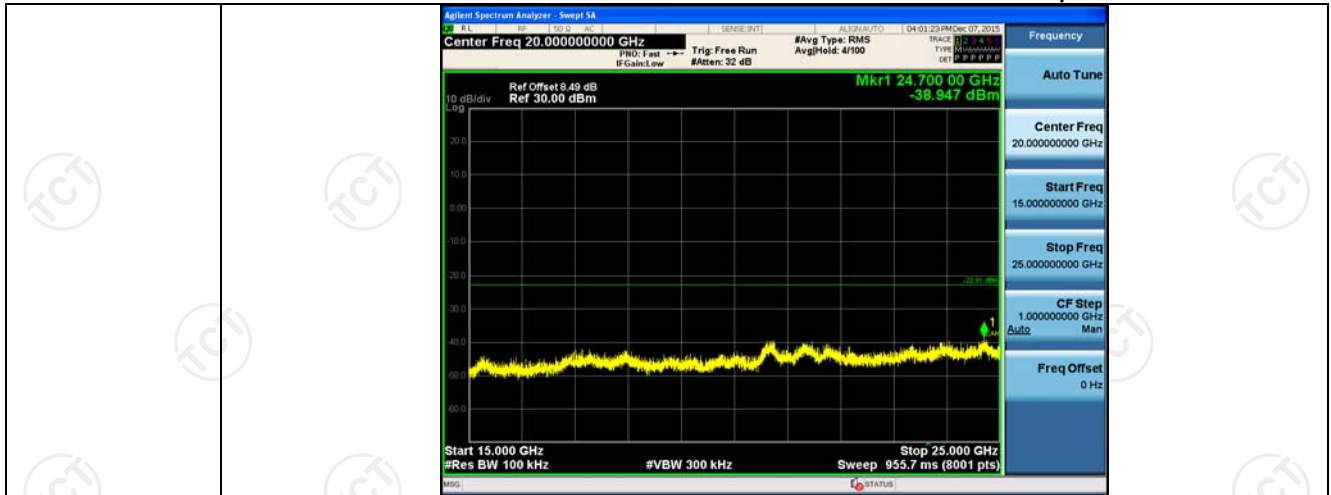




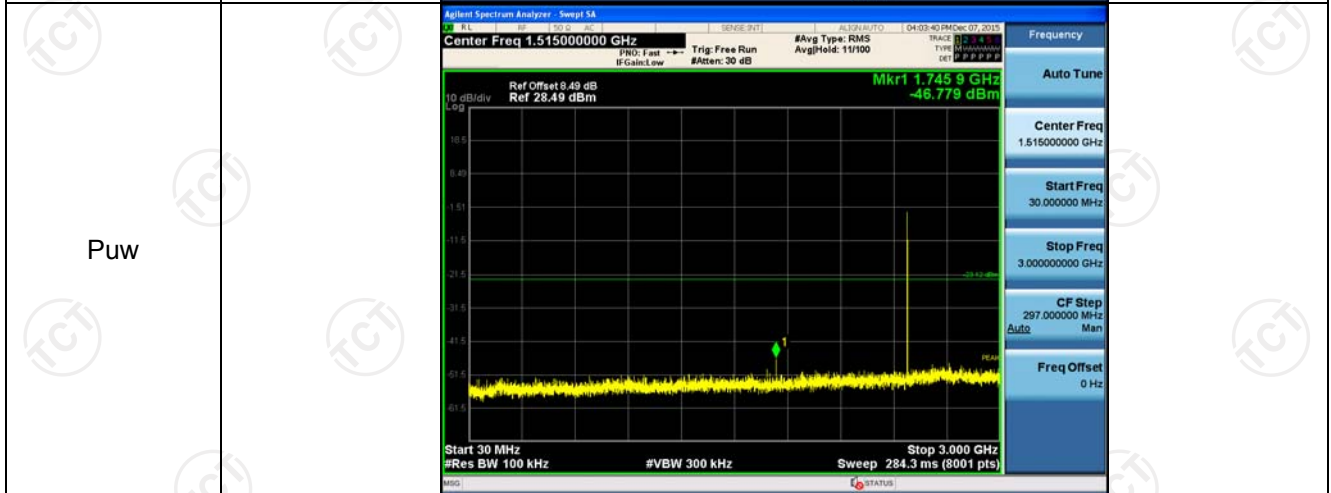
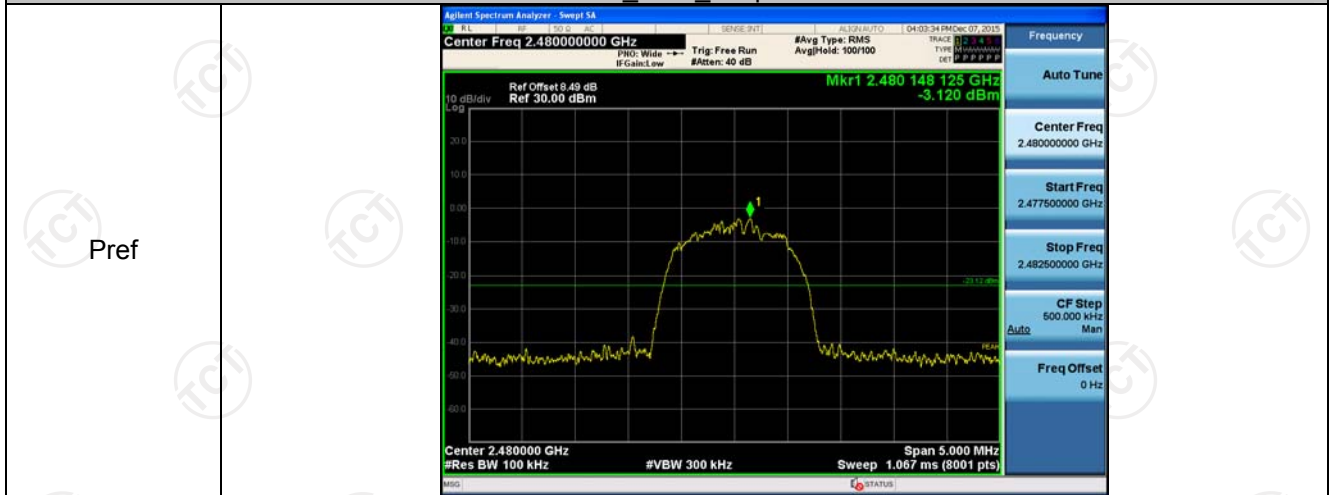
8DPSK_MCH_Graphs

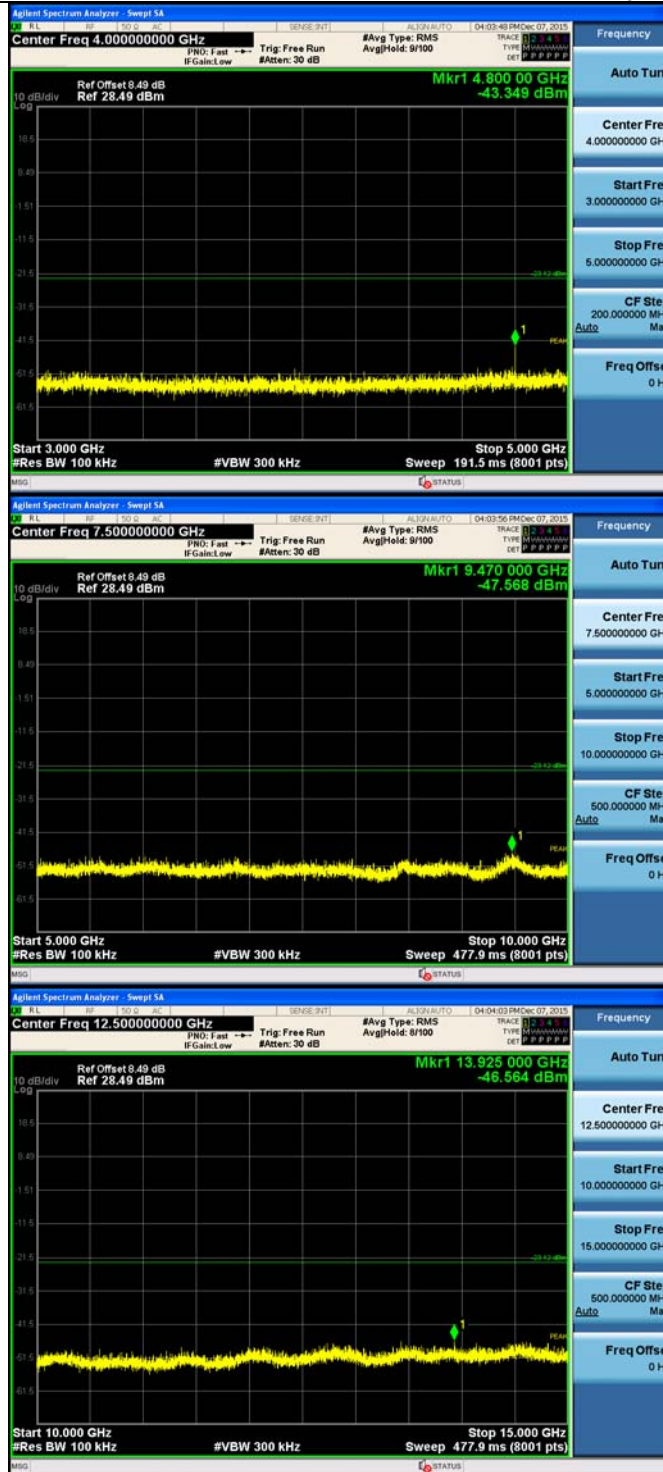


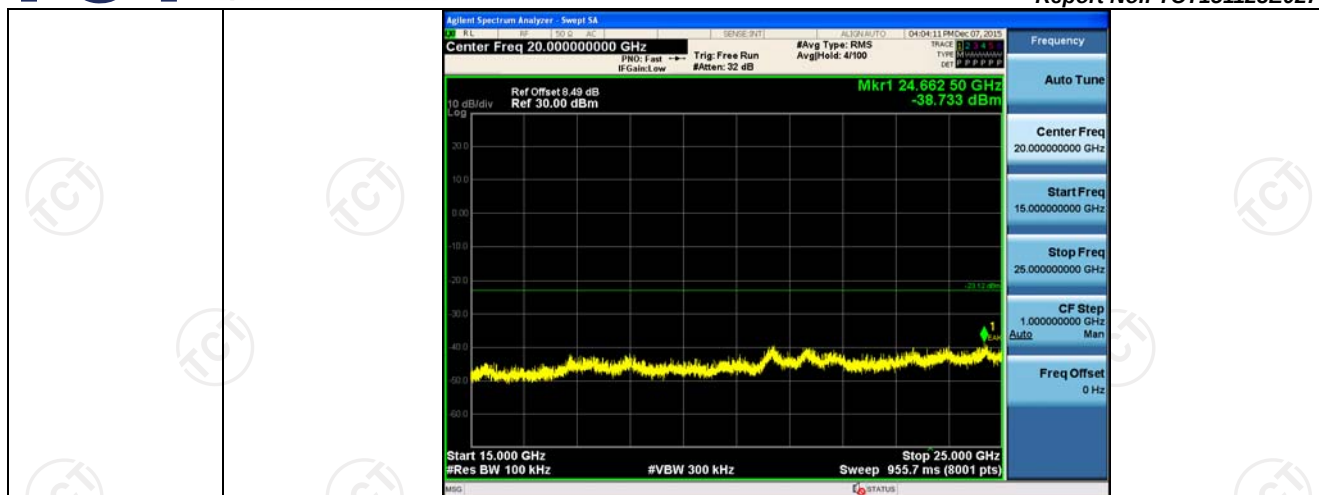




8DPSK_HCH Graphs







*******END OF REPORT*******