

Dwell Time

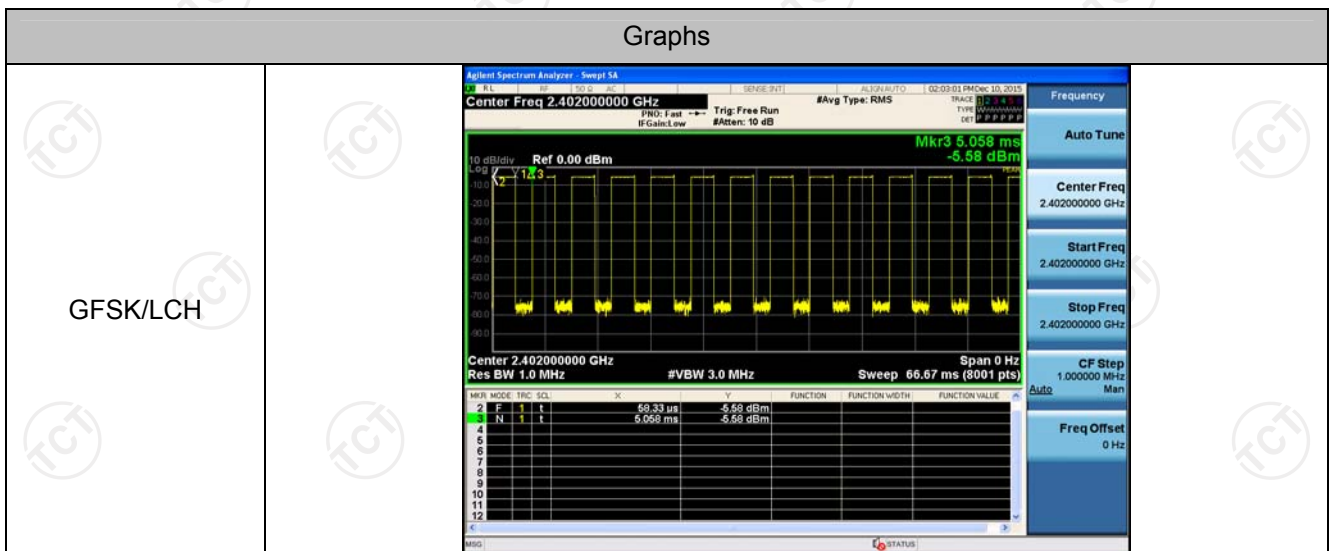
Result Table

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

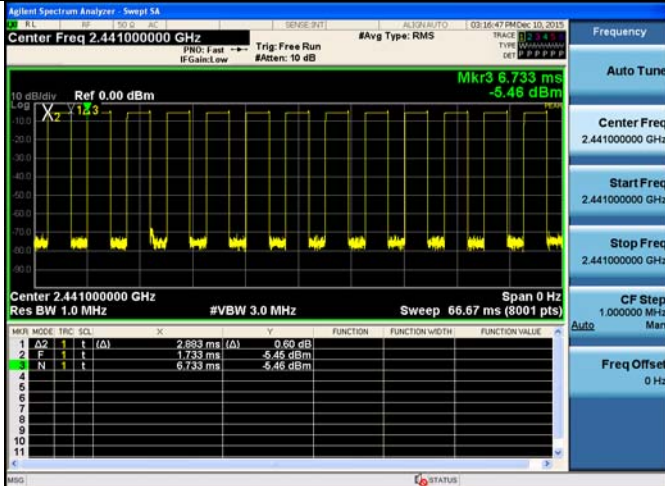
- The duration for dwell time calculation: $0.4[s] \times \text{hopping number} = 0.4[s] \times 79[\text{ch}] = 31.6[s \cdot \text{ch}]$;
- The burst width [ms/hop/ch], which is directly measured, refers to the duration on one channel hop.
- The hops per second for all channels: The selected EUT Conf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

Mode	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Duty Cycle [%]	Verdict
GFSK	LCH	2.883	106.7	0.308	57.67	PASS
GFSK	MCH	2.883	106.7	0.308	57.67	PASS
GFSK	HCH	2.875	106.7	0.307	57.50	PASS
$\pi/4$ DQPSK	LCH	2.867	106.7	0.306	57.33	PASS
$\pi/4$ DQPSK	MCH	2.875	106.7	0.307	57.50	PASS
$\pi/4$ DQPSK	HCH	2.867	106.7	0.306	57.33	PASS
8DPSK	LCH	2.867	106.7	0.306	57.33	PASS
8DPSK	MCH	2.875	106.7	0.307	57.50	PASS
8DPSK	HCH	2.867	106.7	0.306	57.33	PASS

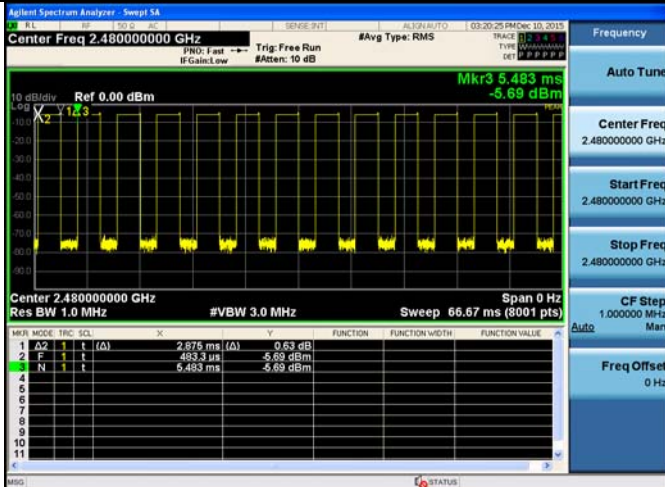
Test Graph



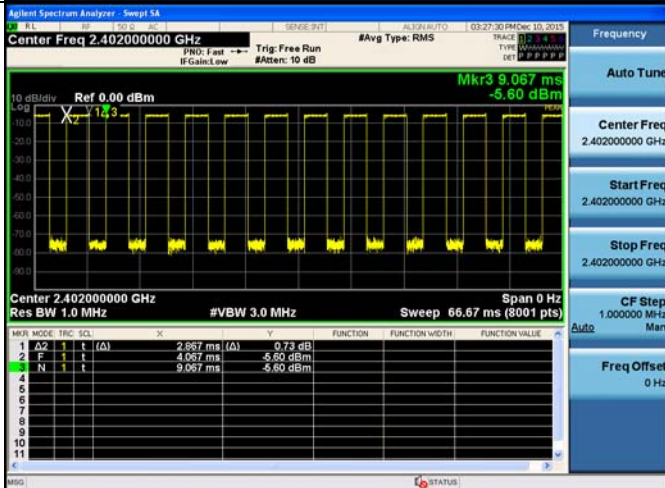
GFSK/MCH



GFSK/HCH

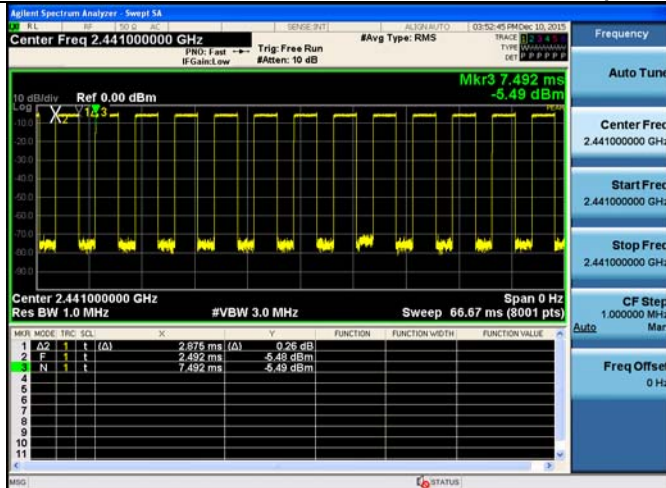


π /4DQPSK/LCH

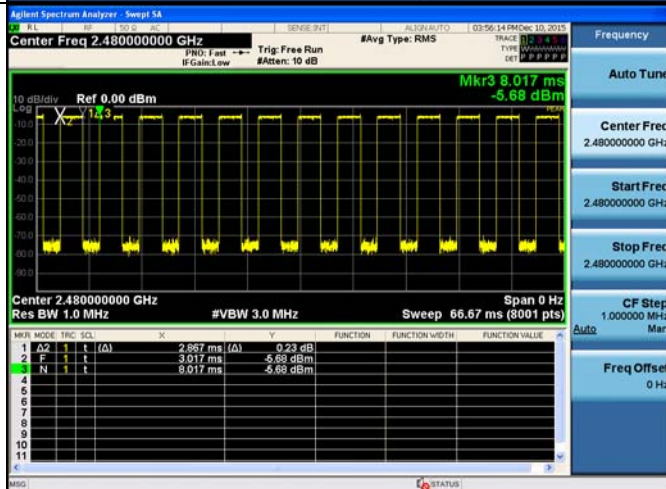


<p>$\pi/4$DQPSK/MCH</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.441000000 GHz</p> <p>Start Freq 2.441000000 GHz</p> <p>Stop Freq 2.441000000 GHz</p> <p>CF Step 1.000000 MHz</p> <p>Freq Offset 0 Hz</p>
<p>$\pi/4$DQPSK/HCH</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.480000000 GHz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

8DPSK/MCH



8DPSK/HCH

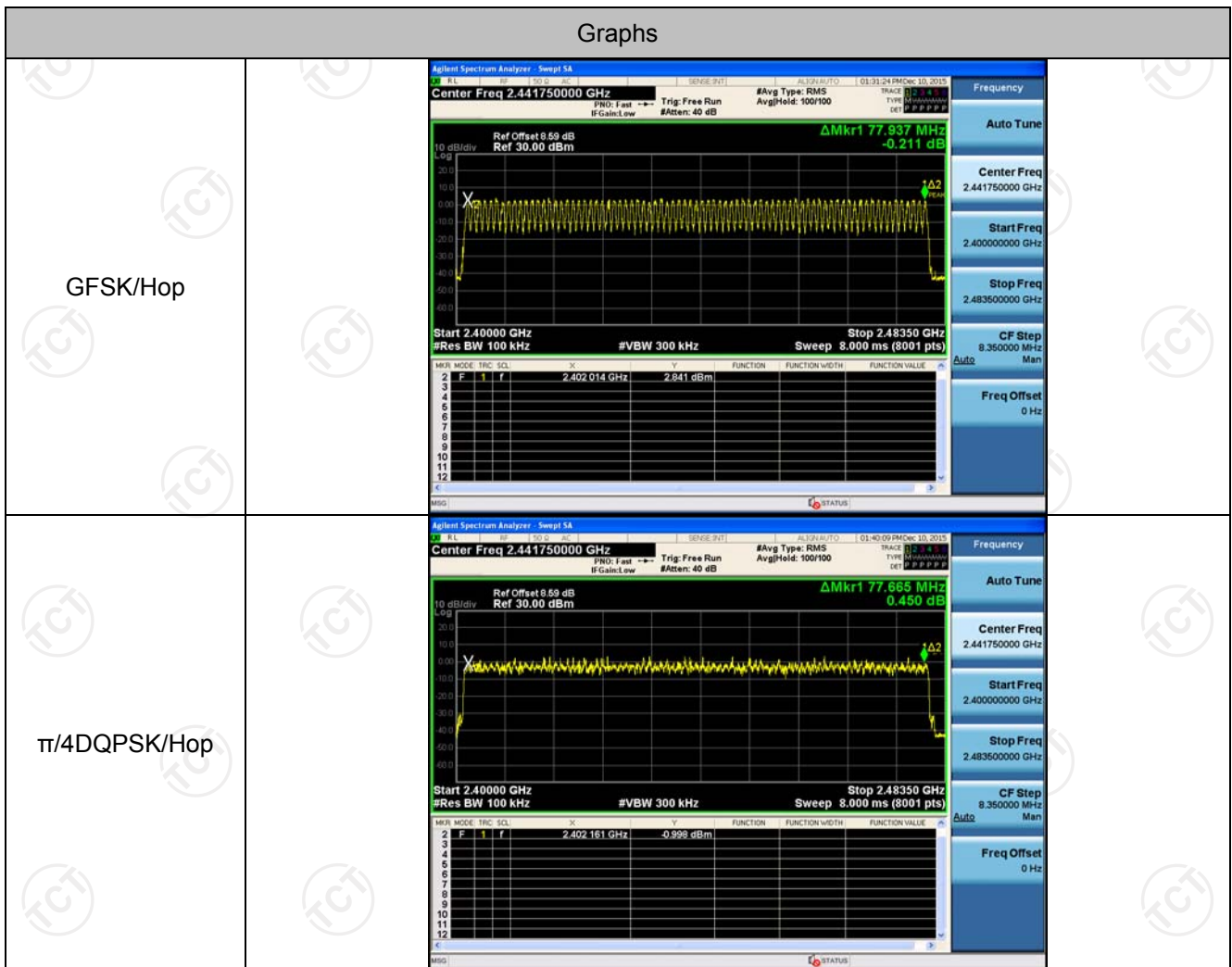


Hopping Channel Number

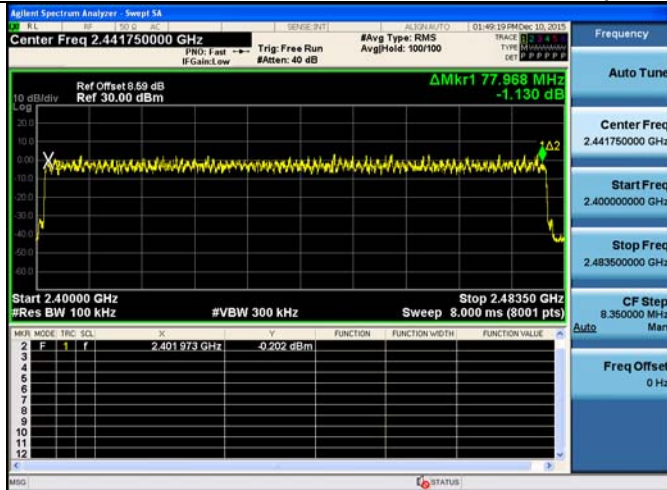
Result Table

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

Test Graph



8DPSK/Hop






Conducted Peak Output Power




Result Table

Mode	Channel.	Maximum Peak Output Power [dBm]	Verdict
GFSK	LCH	4.148	PASS
GFSK	MCH	4.163	PASS
GFSK	HCH	3.925	PASS
$\pi/4$ DQPSK	LCH	4.413	PASS
$\pi/4$ DQPSK	MCH	4.516	PASS
$\pi/4$ DQPSK	HCH	4.327	PASS
8DPSK	LCH	4.655	PASS
8DPSK	MCH	4.716	PASS
8DPSK	HCH	4.496	PASS

Test Graph



<p>GFSK/HCH</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.48000000 GHz</p> <p>Start Freq 2.477500000 GHz</p> <p>Stop Freq 2.482500000 GHz</p> <p>CF Step 500.000 kHz Auto Man</p> <p>Freq Offset 0 Hz</p>
<p>$\pi/4$DQPSK/LCH</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.40200000 GHz</p> <p>Start Freq 2.399500000 GHz</p> <p>Stop Freq 2.404500000 GHz</p> <p>CF Step 500.000 kHz Auto Man</p> <p>Freq Offset 0 Hz</p>
<p>$\pi/4$DQPSK/MCH</p>		<p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.44100000 GHz</p> <p>Start Freq 2.438500000 GHz</p> <p>Stop Freq 2.443500000 GHz</p> <p>CF Step 500.000 kHz Auto Man</p> <p>Freq Offset 0 Hz</p>

<p>TT/4DQPSK/HCH</p>	
<p>8DPSK/LCH</p>	
<p>8DPSK/MCH</p>	

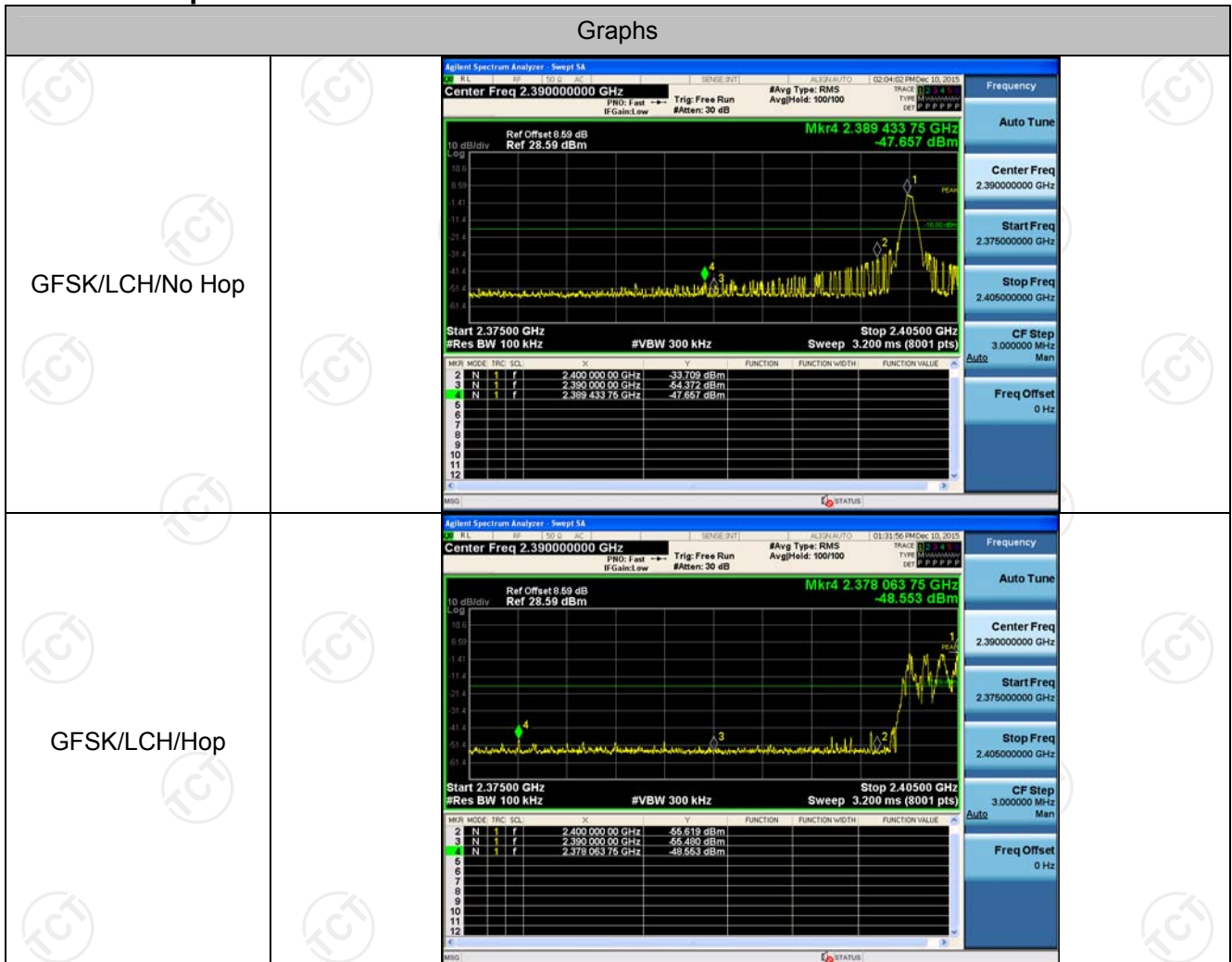


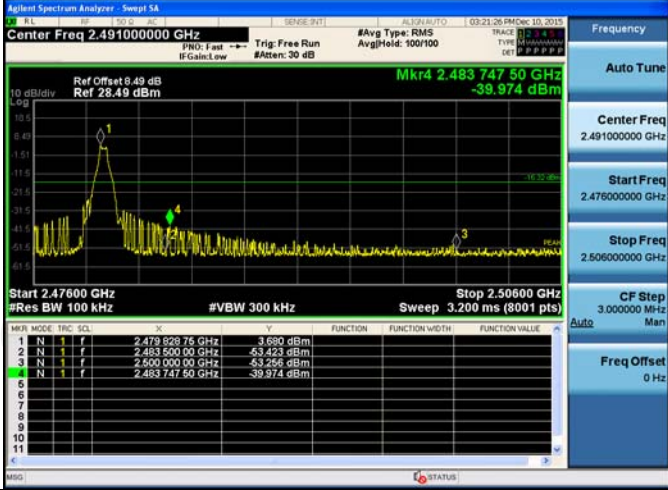
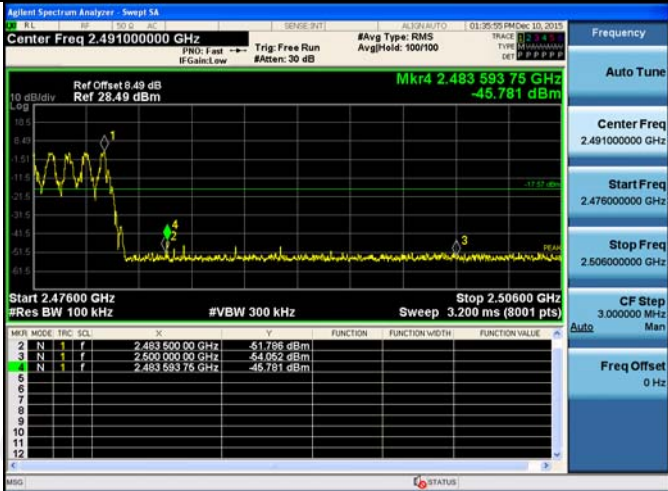
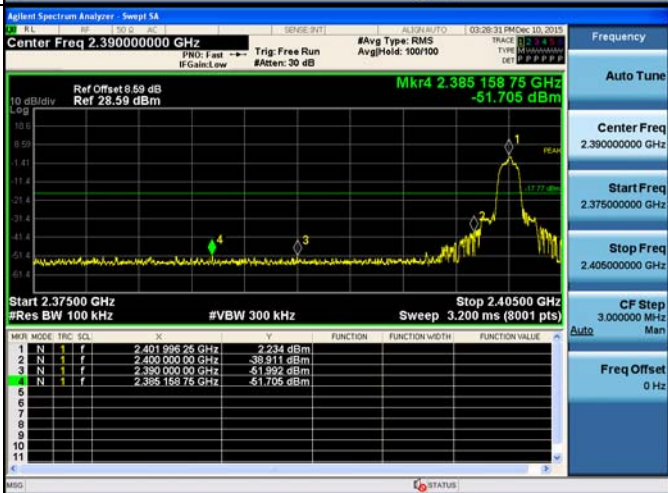
Band-edge for RF Conducted Emissions

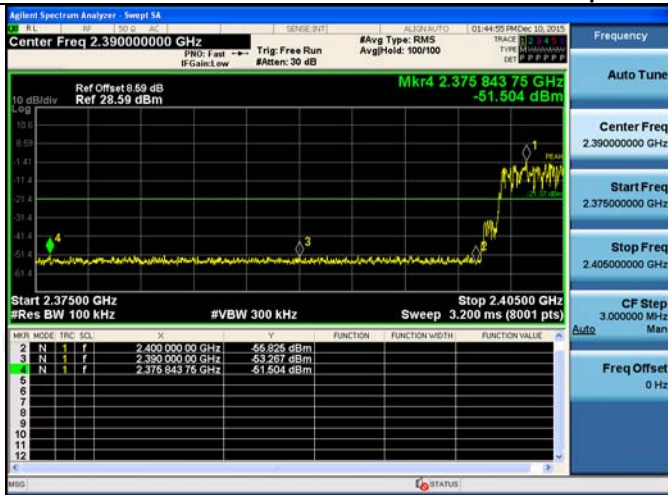
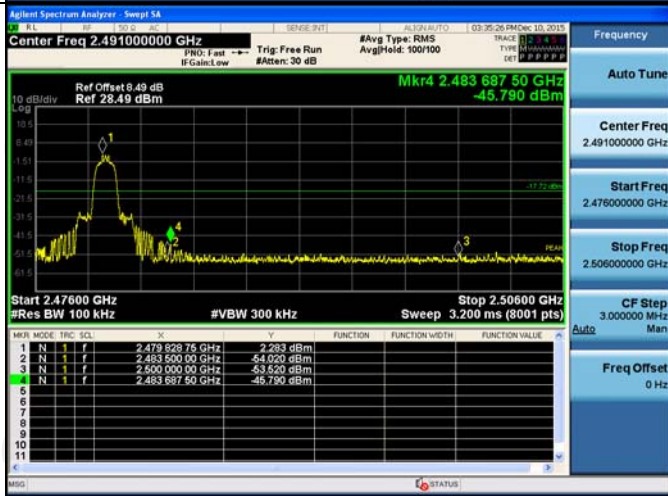
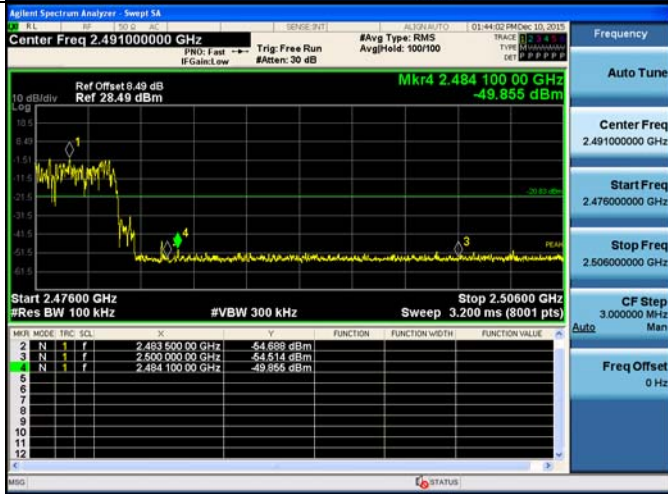
Result Table

Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	3.201	Off	-47.657	-16.8	PASS
			2.710	On	-48.553	-17.29	PASS
GFSK	HCH	2480	3.680	Off	-39.974	-16.32	PASS
			2.433	On	-45.781	-17.57	PASS
$\pi/4$ DQPSK	LCH	2402	2.234	Off	-51.705	-17.77	PASS
			-1.369	On	-51.504	-21.37	PASS
$\pi/4$ DQPSK	HCH	2480	2.283	Off	-45.790	-17.72	PASS
			-0.828	On	-49.855	-20.83	PASS
8DPSK	LCH	2402	2.369	Off	-52.128	-17.63	PASS
			1.444	On	-51.367	-18.56	PASS
8DPSK	HCH	2480	1.499	Off	-47.414	-18.5	PASS
			1.711	On	-48.066	-18.29	PASS

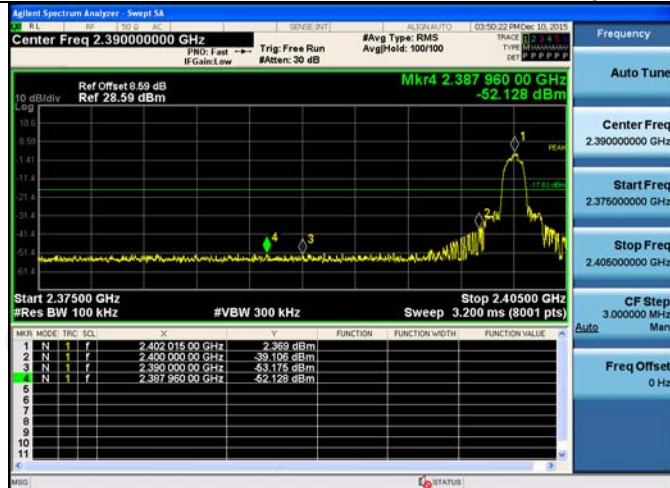
Test Graph



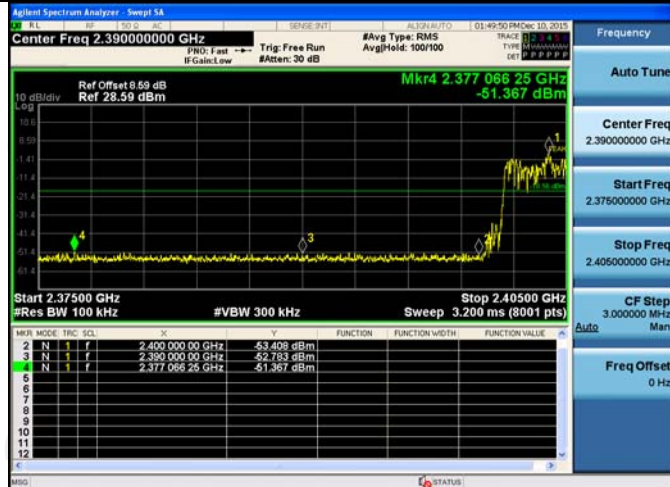
<p>GFSK/HCH/No Hop</p>	
<p>GFSK/HCH/Hop</p>	
<p>$\pi/4$DQPSK/LCH/No Hop</p>	

<p>$\pi/4$DQPSK/LCH/Hop</p>	
<p>$\pi/4$DQPSK/HCH/No Hop</p>	
<p>$\pi/4$DQPSK/HCH/Hop</p>	

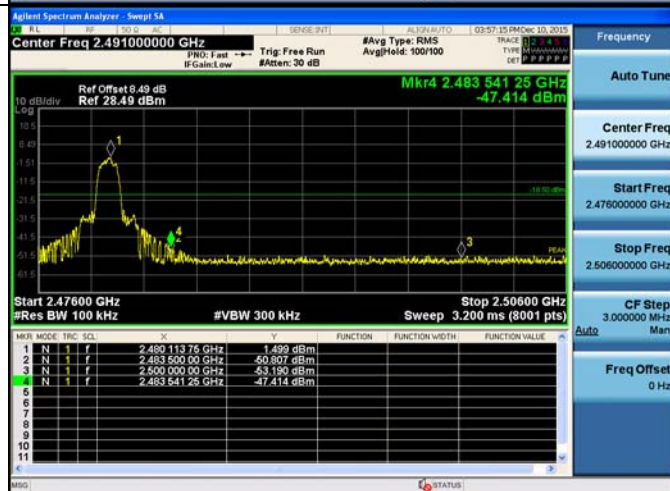
8DPSK/LCH/No Hop



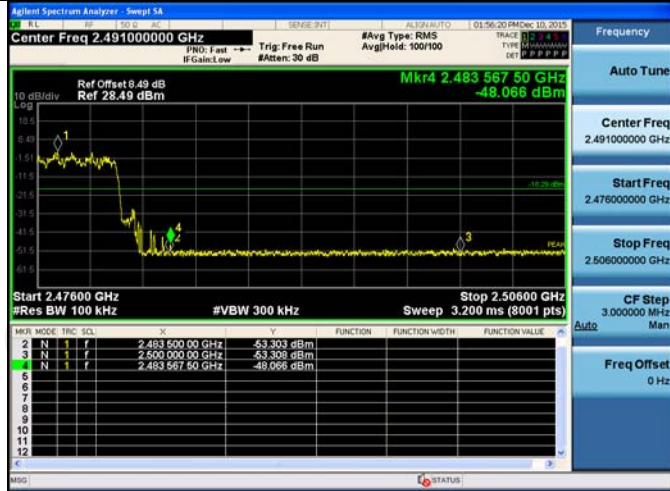
8DPSK/LCH/Hop



8DPSK/HCH/No Hop



8DPSK/HCH/Hop

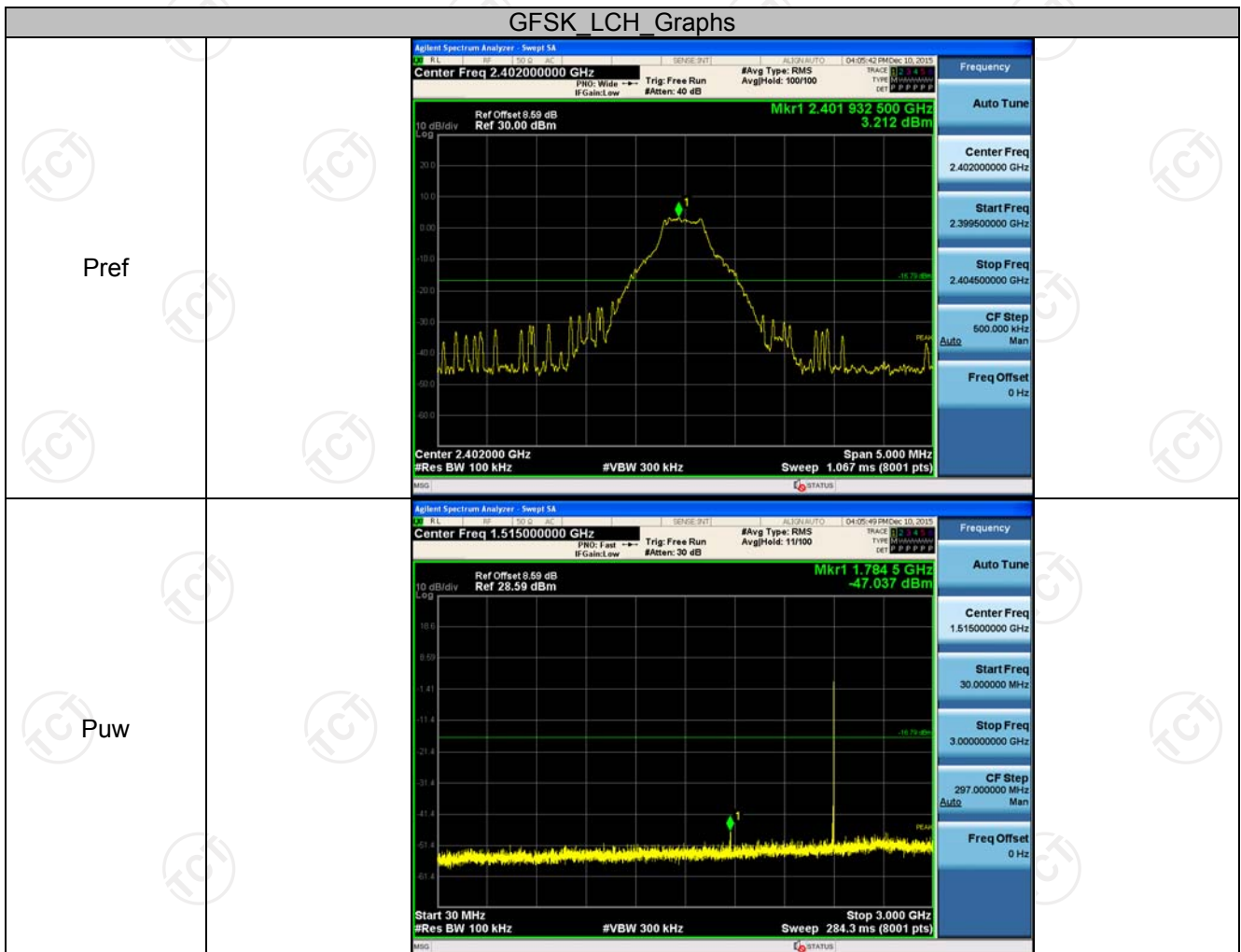


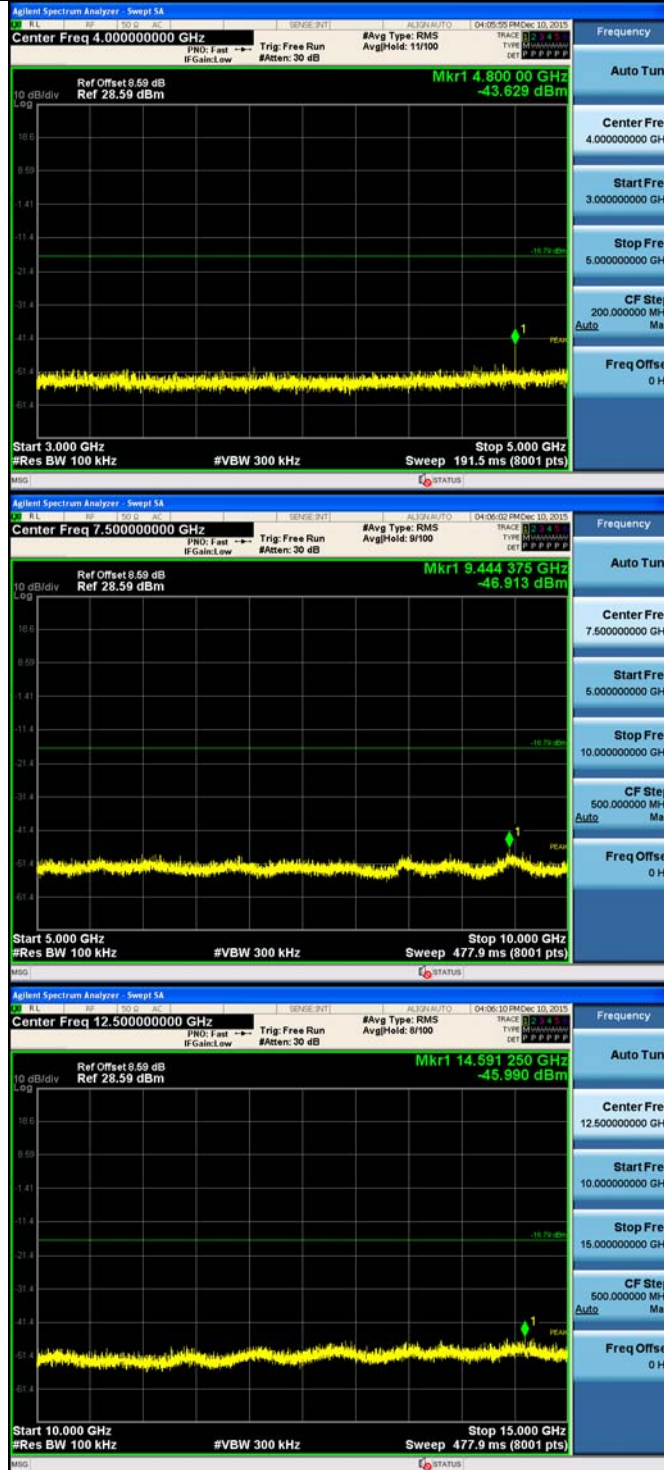
RF Conducted Spurious Emissions

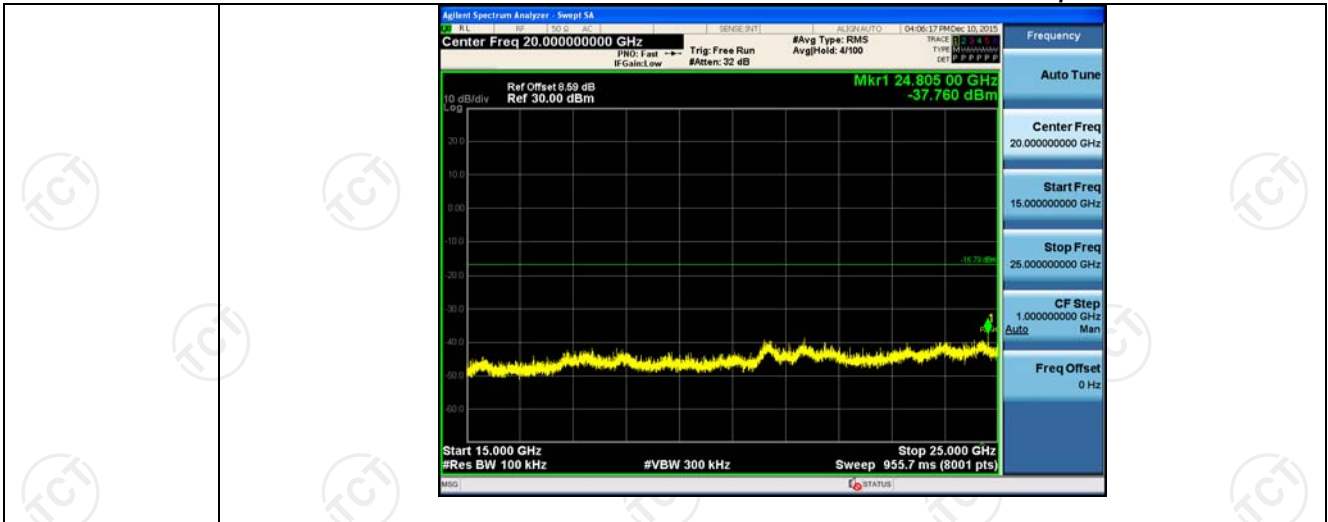
Result Table

Mode	Channel	Pref [dBm]	Puw[dBm]	Verdict
GFSK	LCH	3.212	<Limit	PASS
GFSK	MCH	3.939	<Limit	PASS
GFSK	HCH	2.298	<Limit	PASS
$\pi/4$ DQPSK	LCH	2.191	<Limit	PASS
$\pi/4$ DQPSK	MCH	2.14	<Limit	PASS
$\pi/4$ DQPSK	HCH	2.264	<Limit	PASS
8DPSK	LCH	2.854	<Limit	PASS
8DPSK	MCH	2.922	<Limit	PASS
8DPSK	HCH	2.734	<Limit	PASS

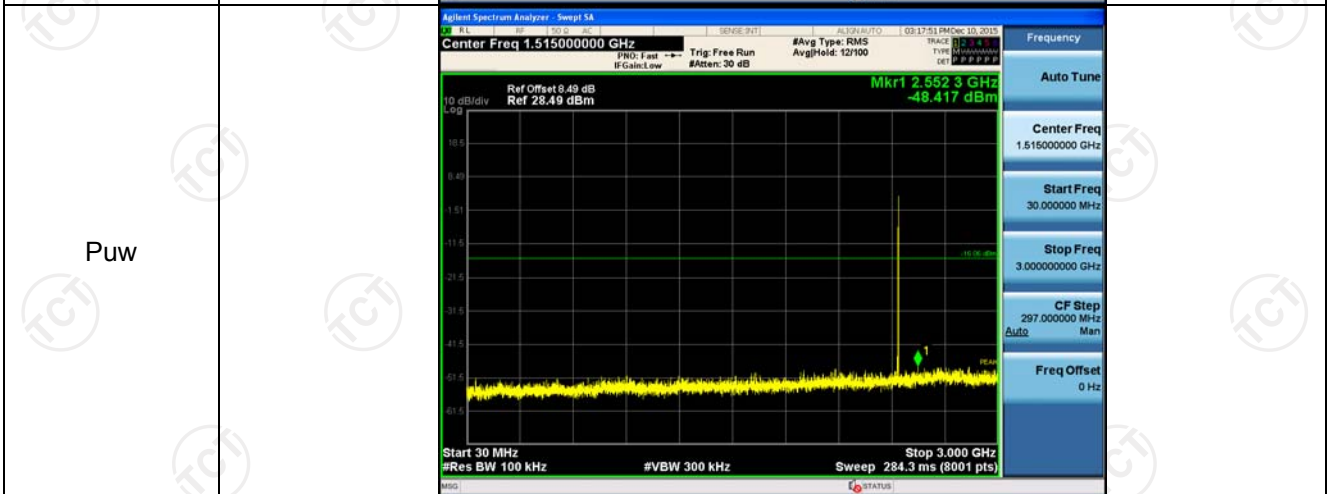
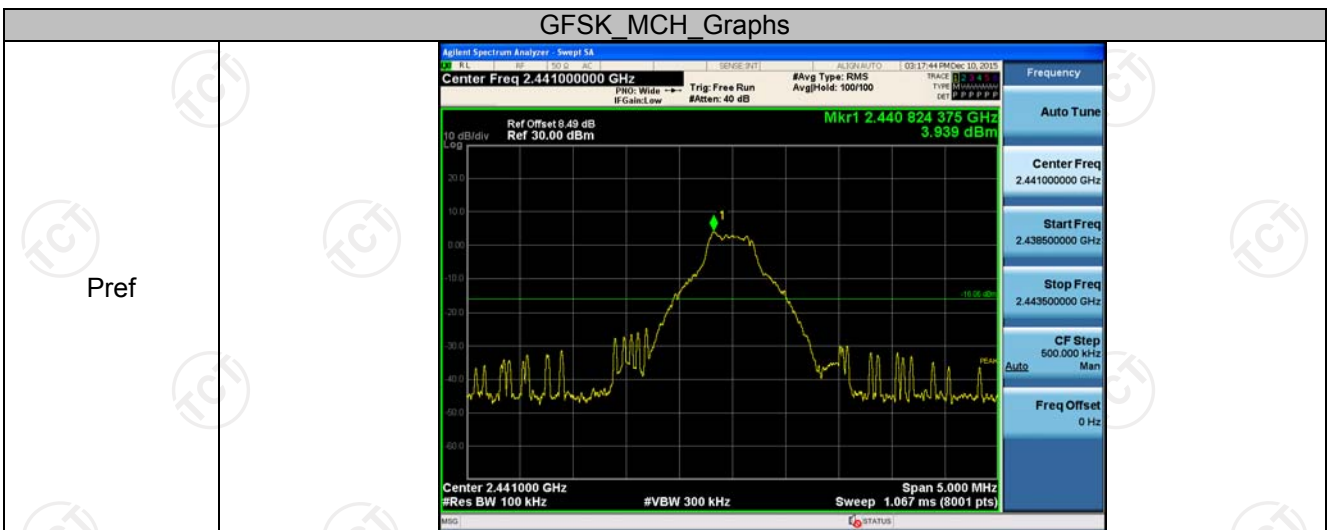
Test Graph

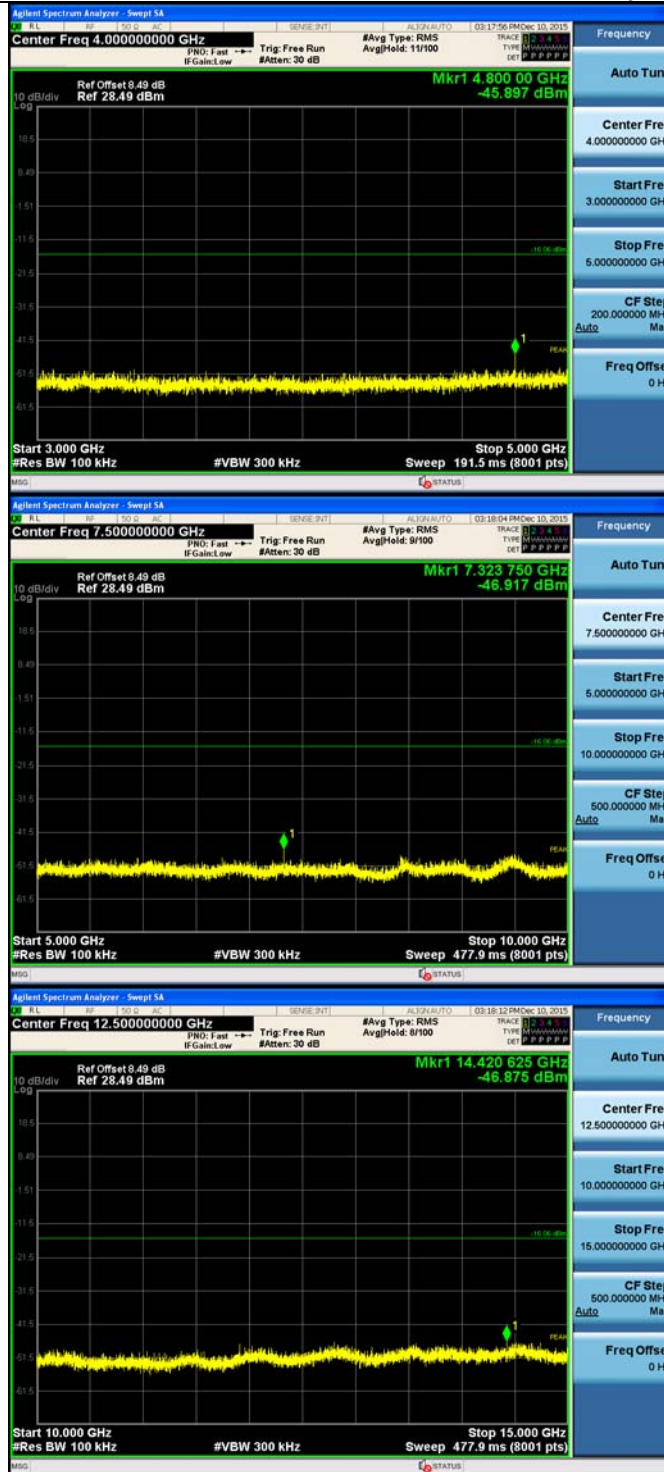


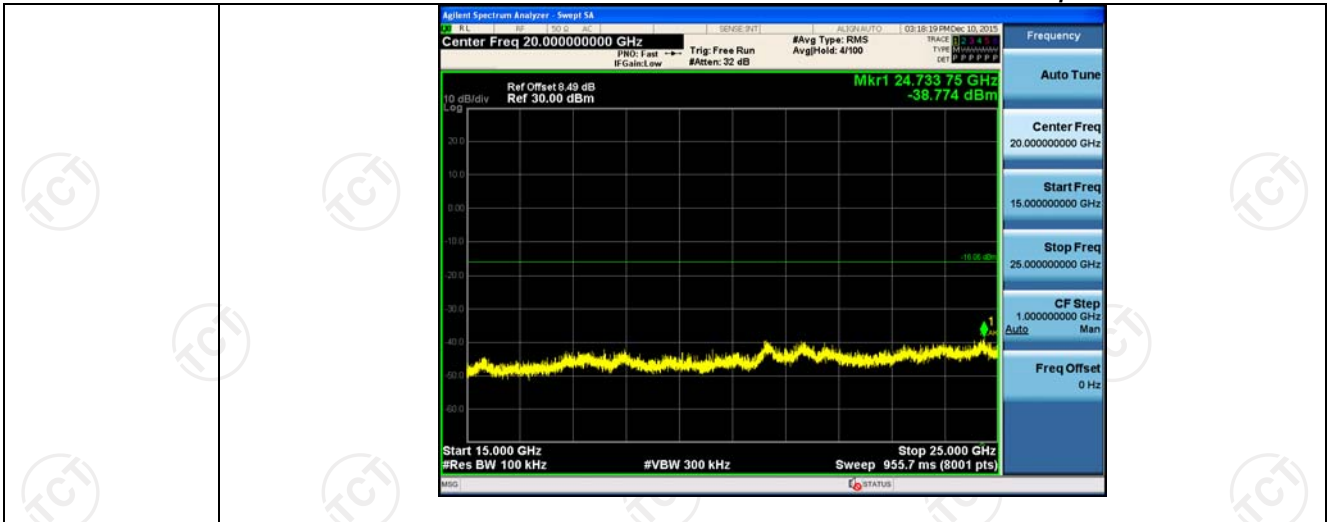




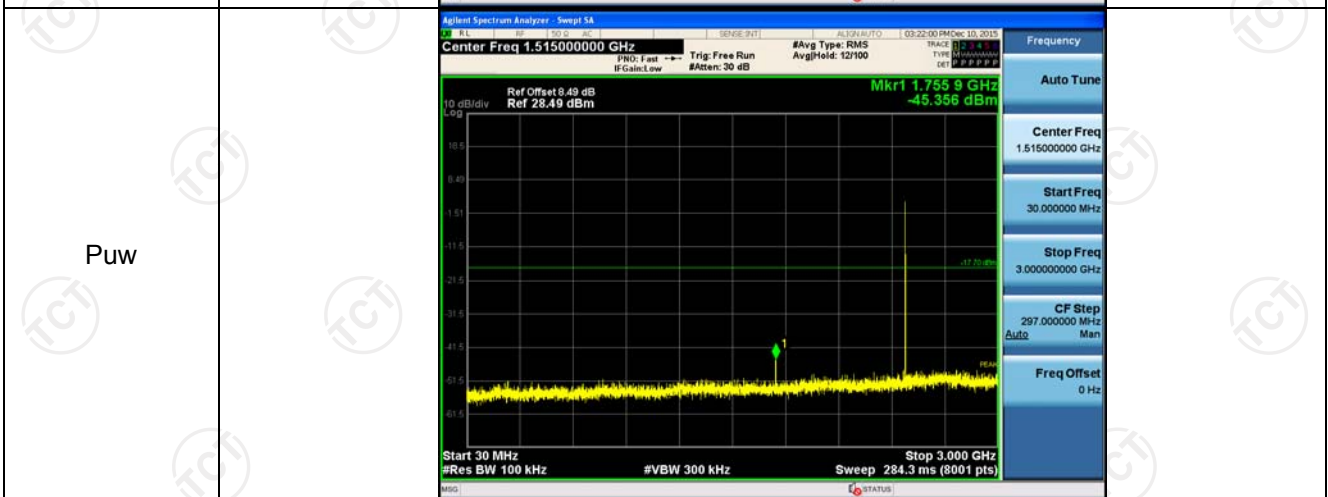
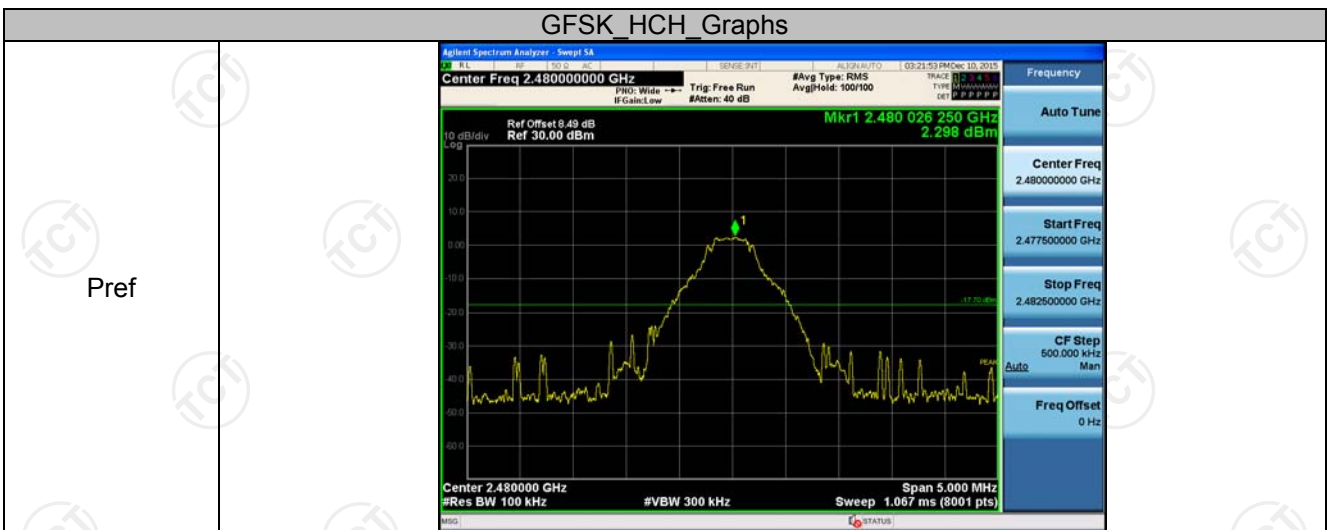
GFSK_MCH_Graphs

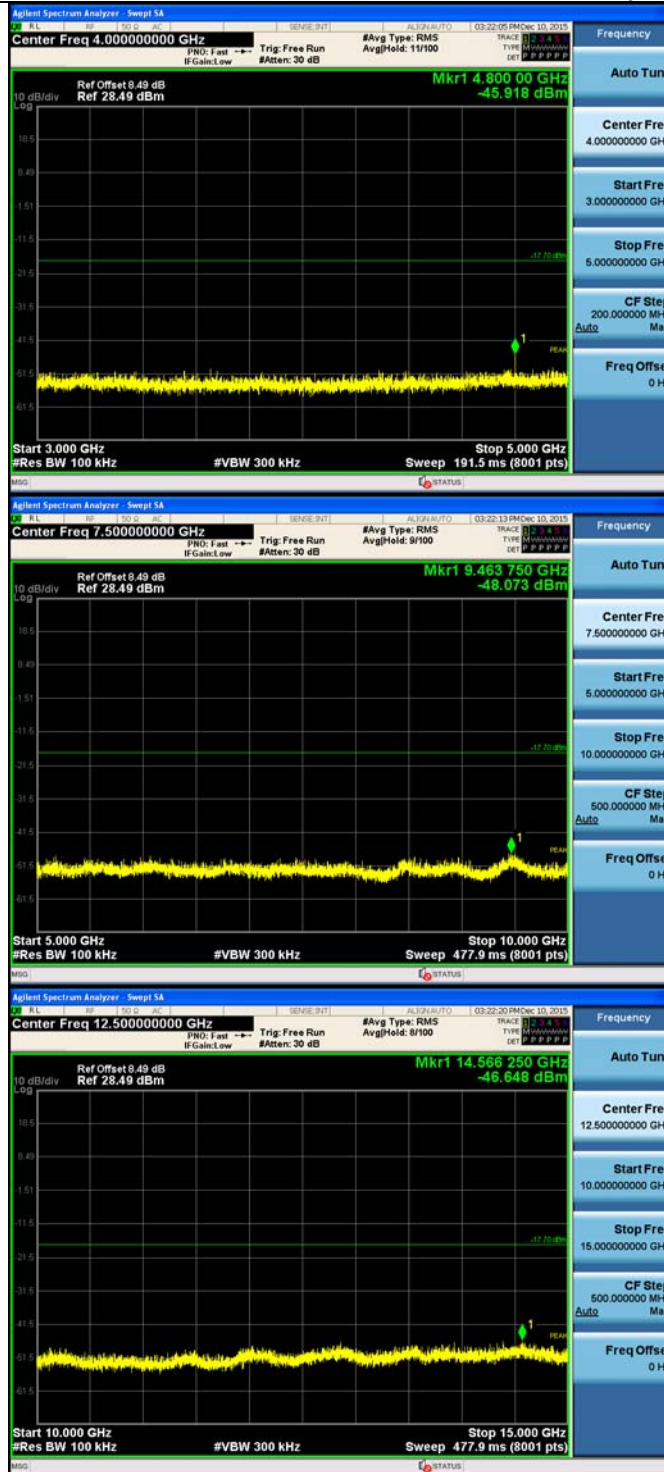


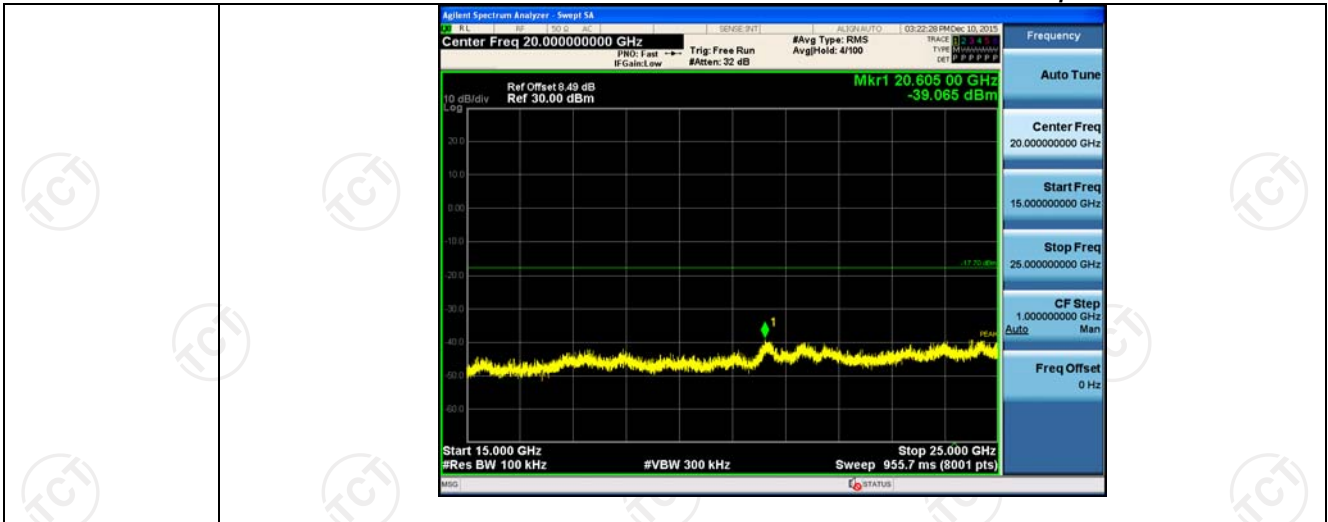




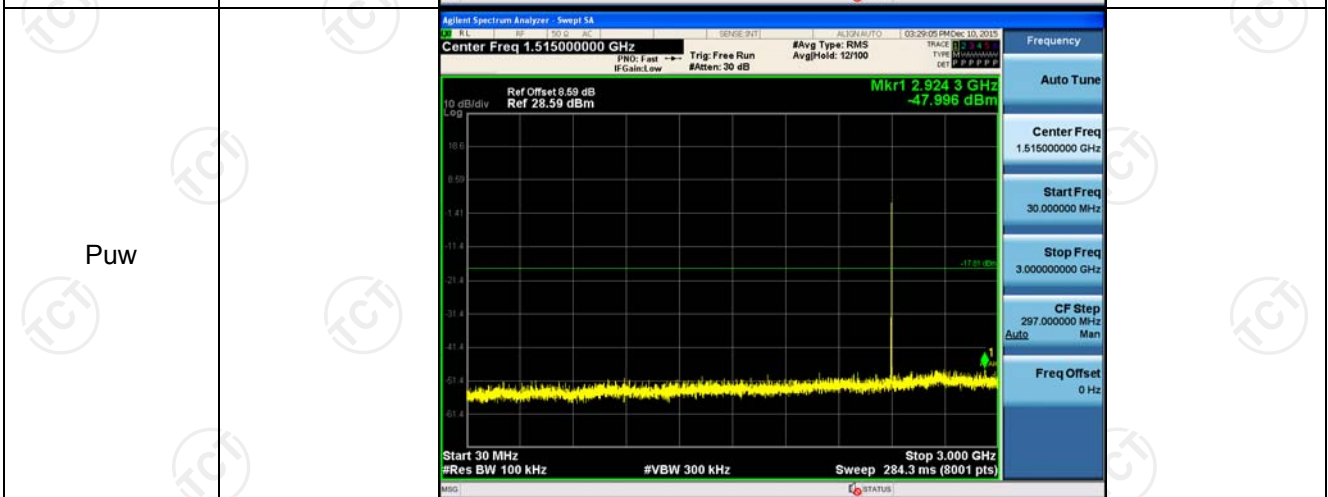
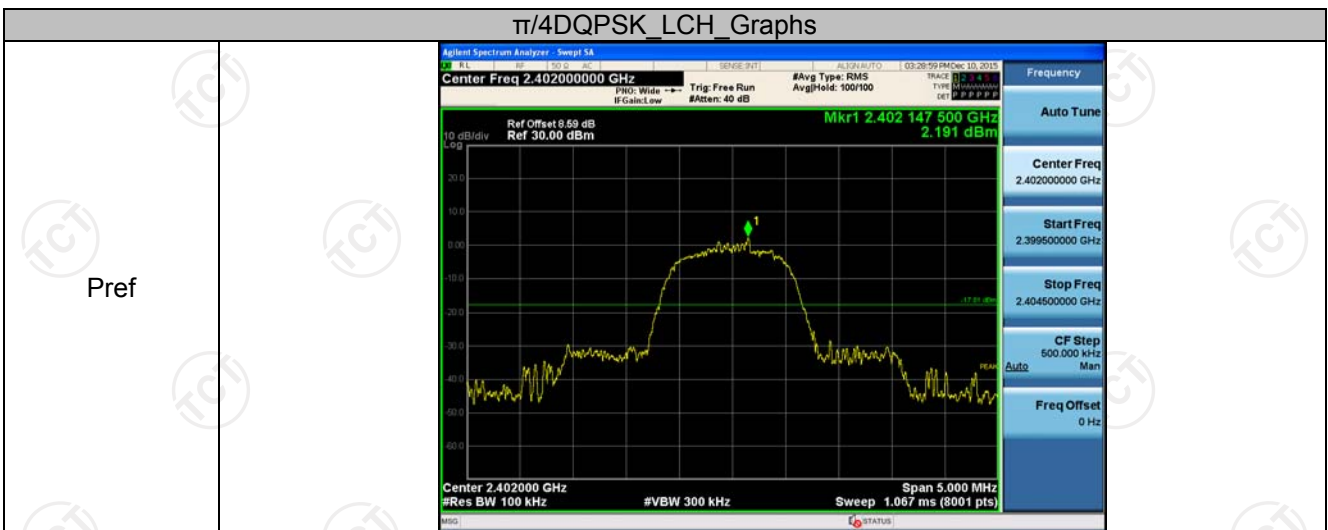
GFSK HCH Graphs

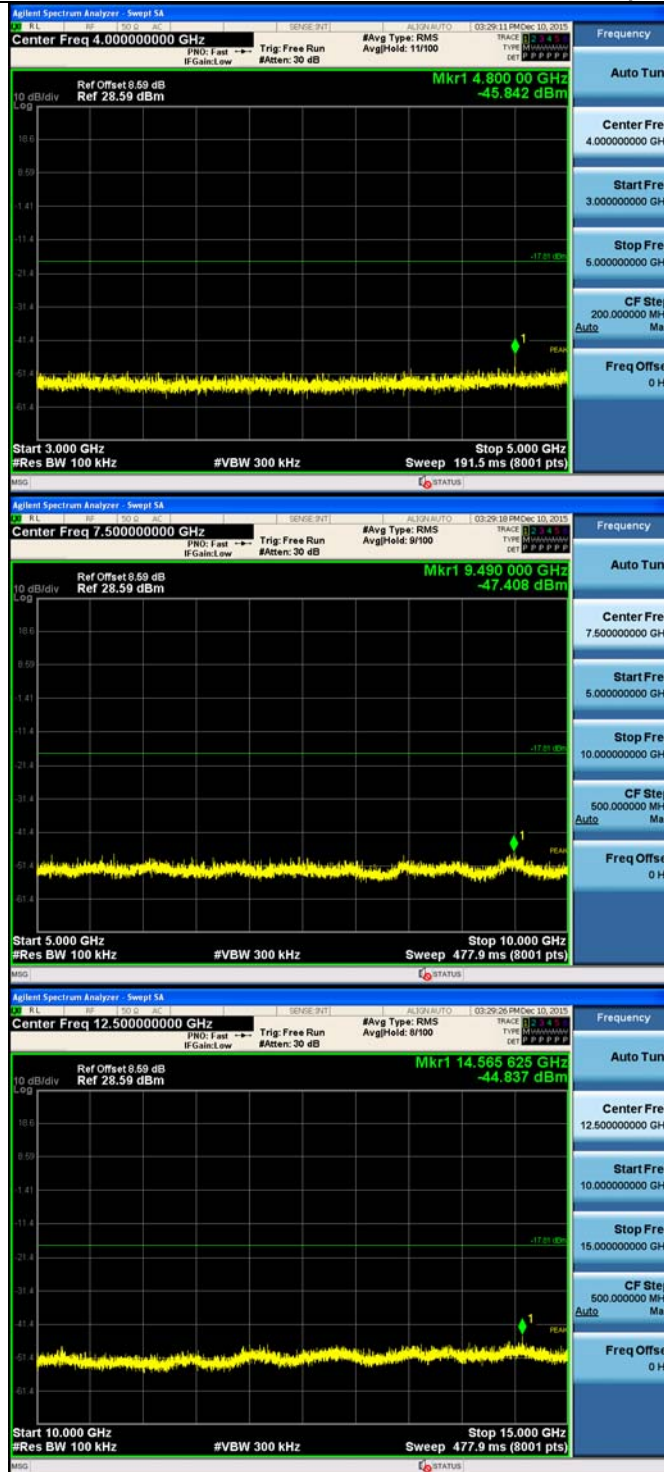


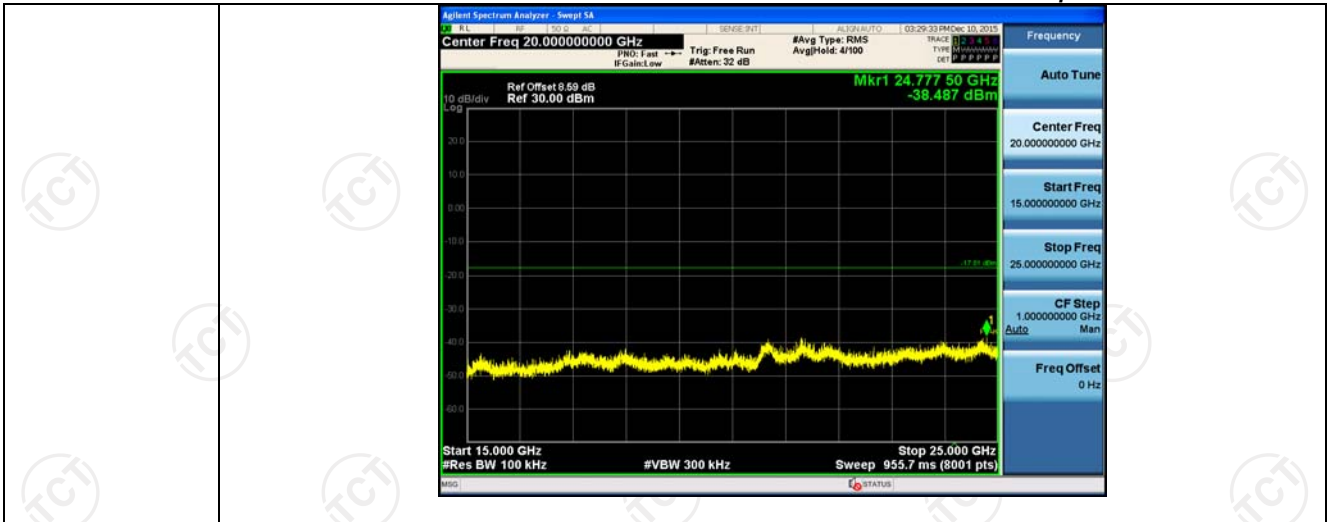




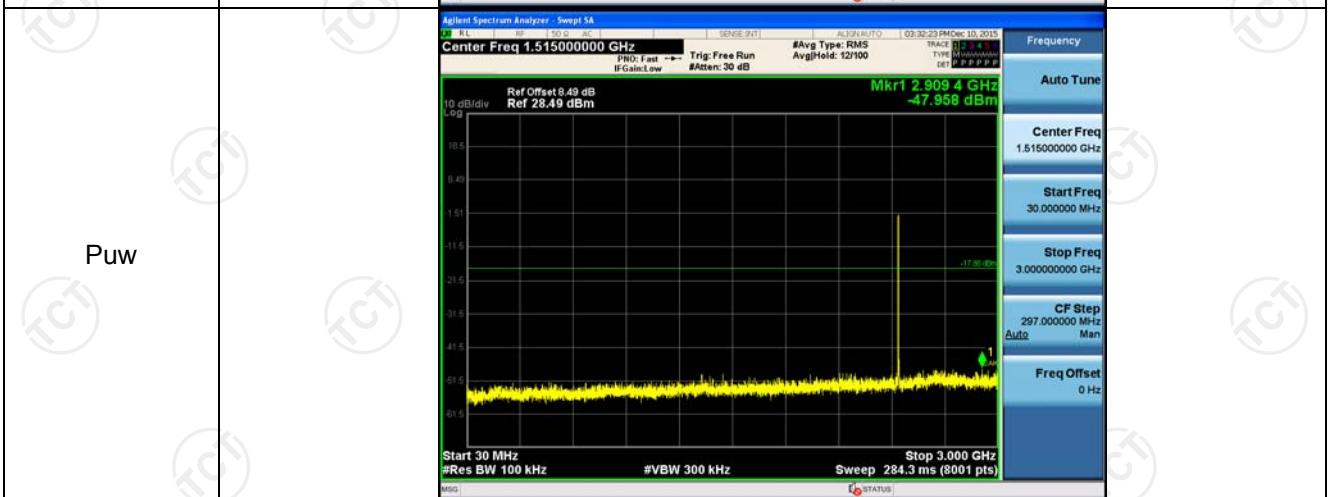
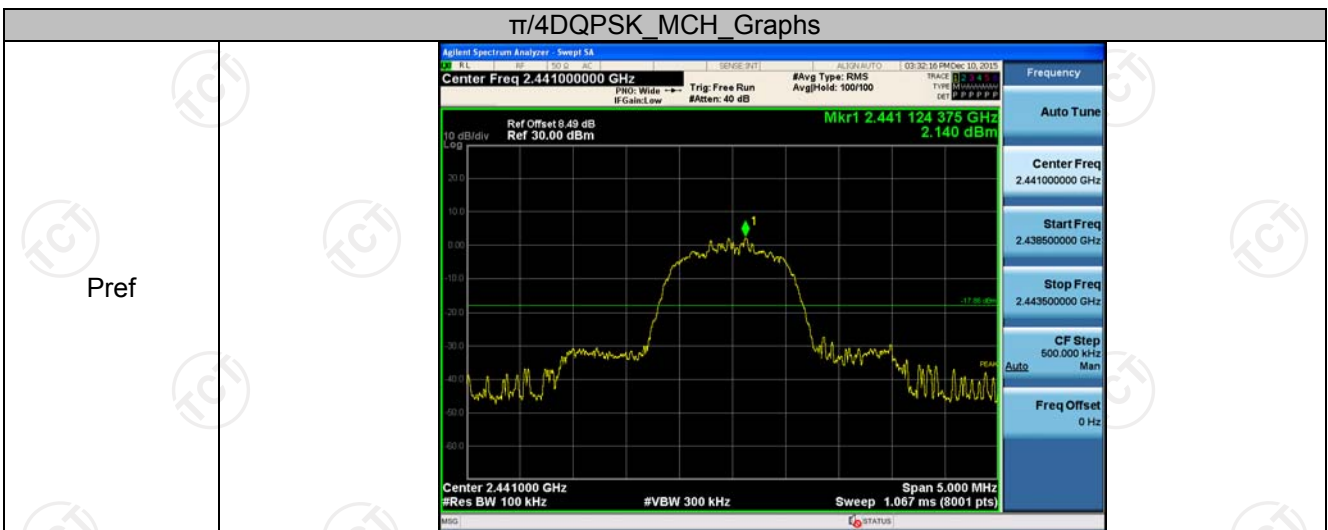
$\pi/4$ DQPSK LCH_Graphs

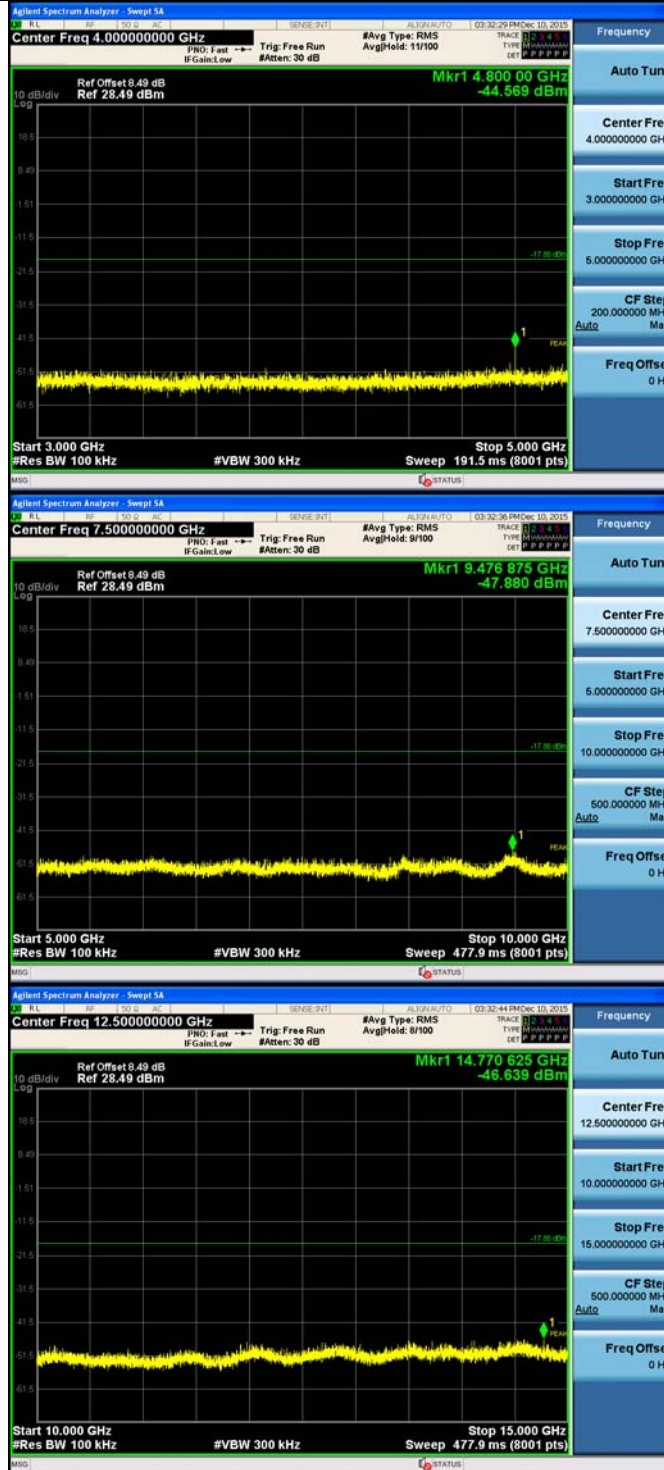


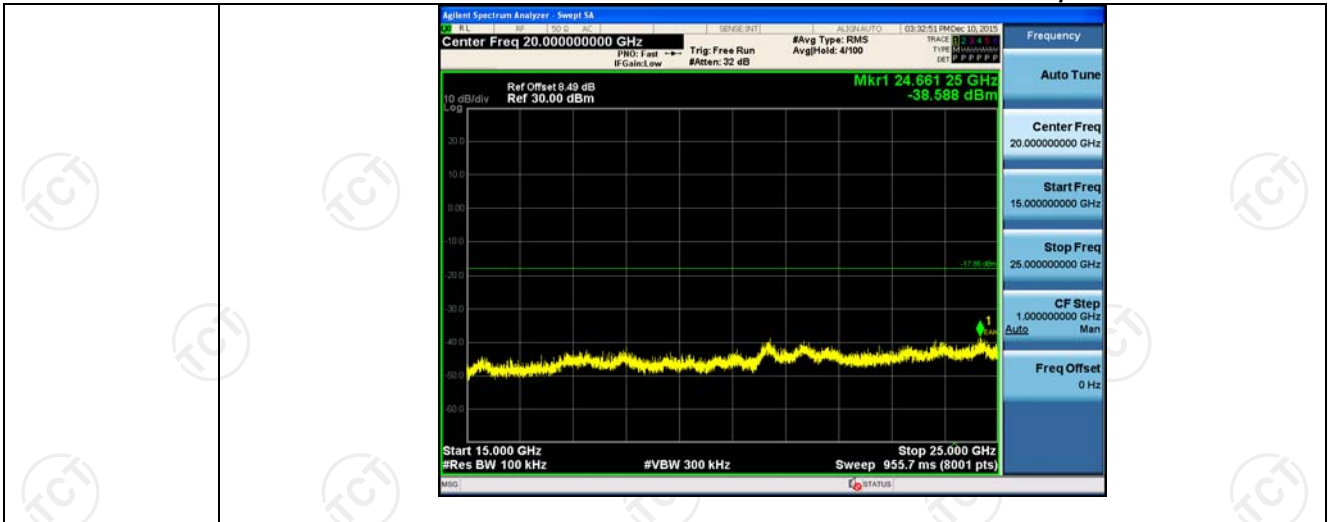




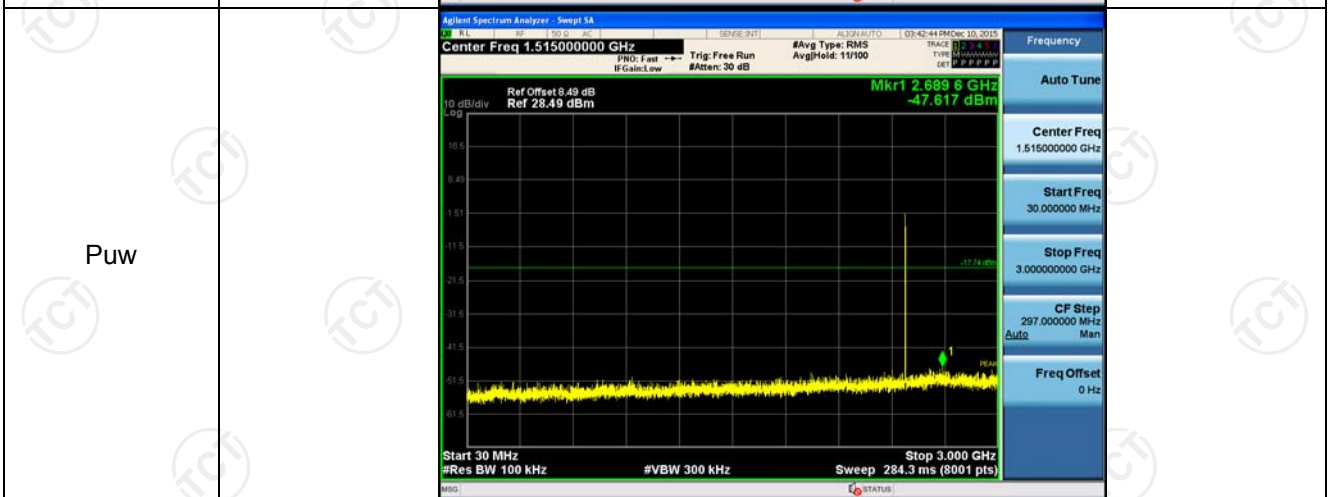
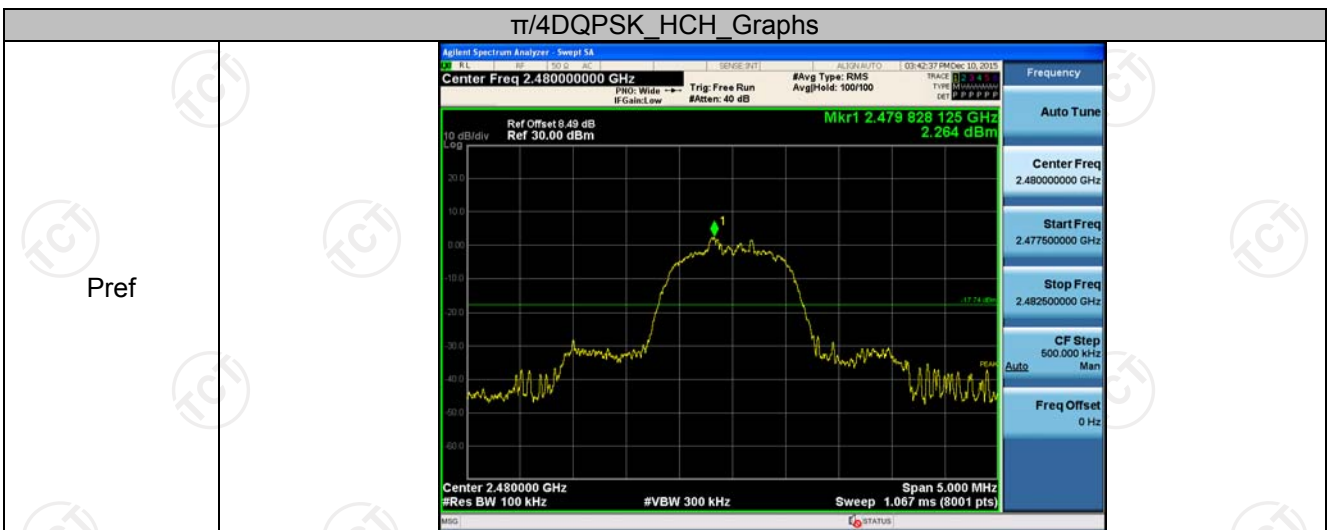
$\pi/4$ DQPSK_MCH_Graphs

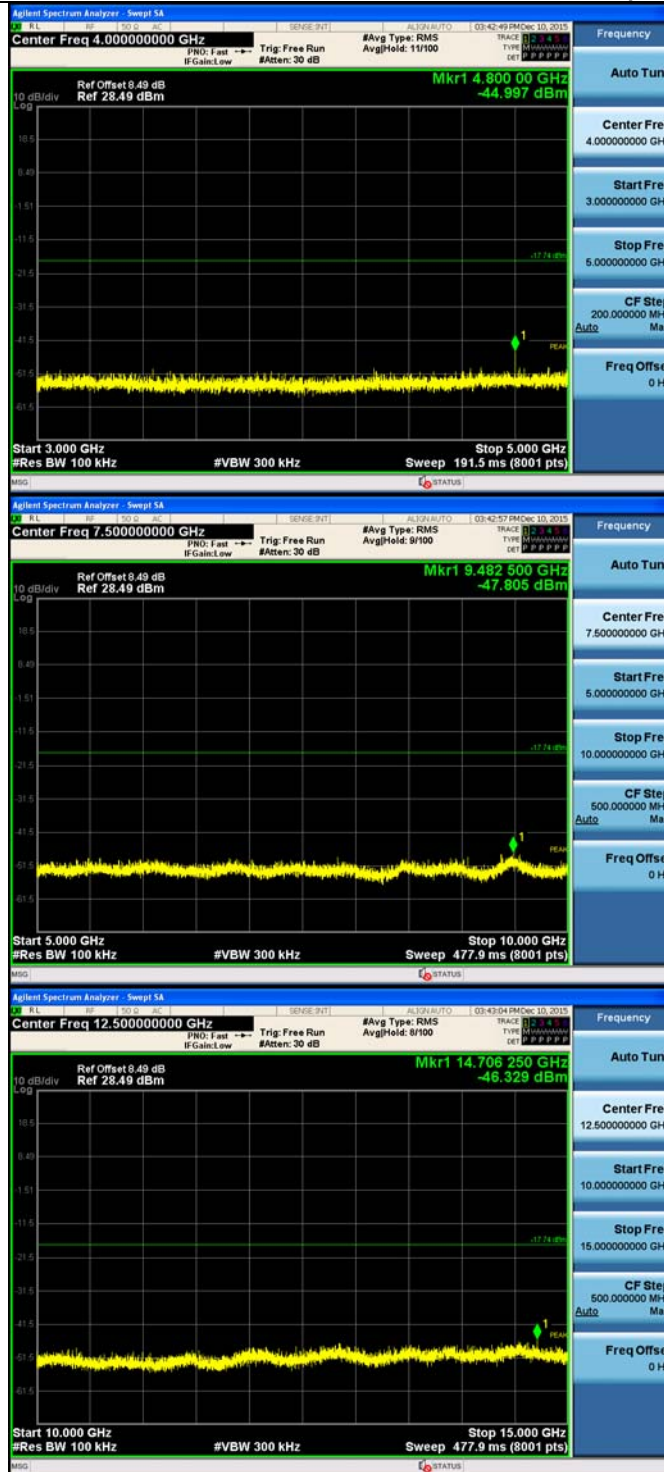


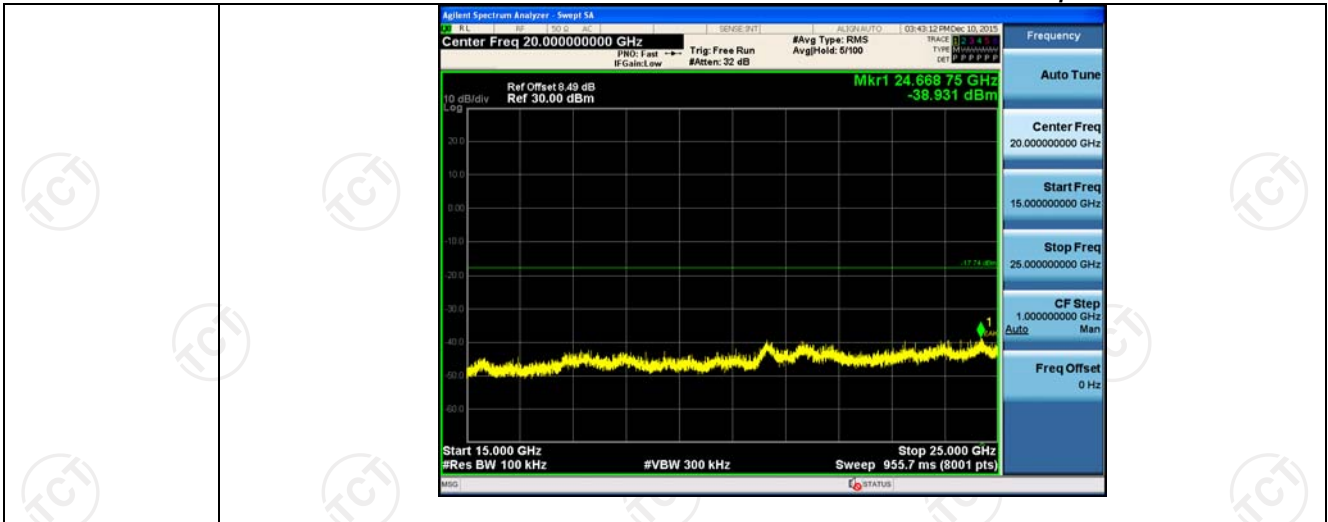




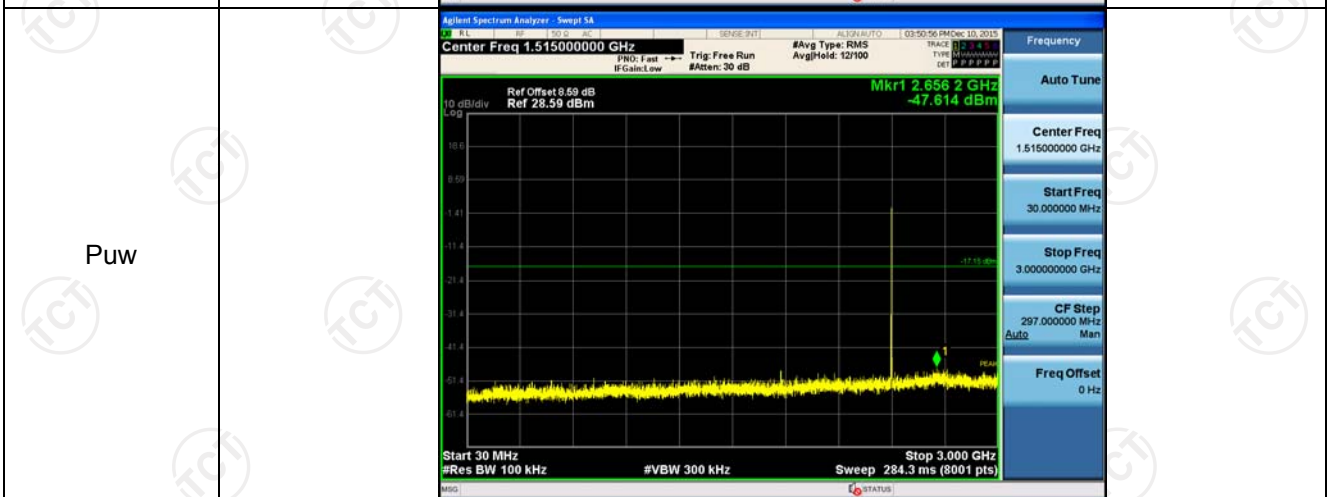
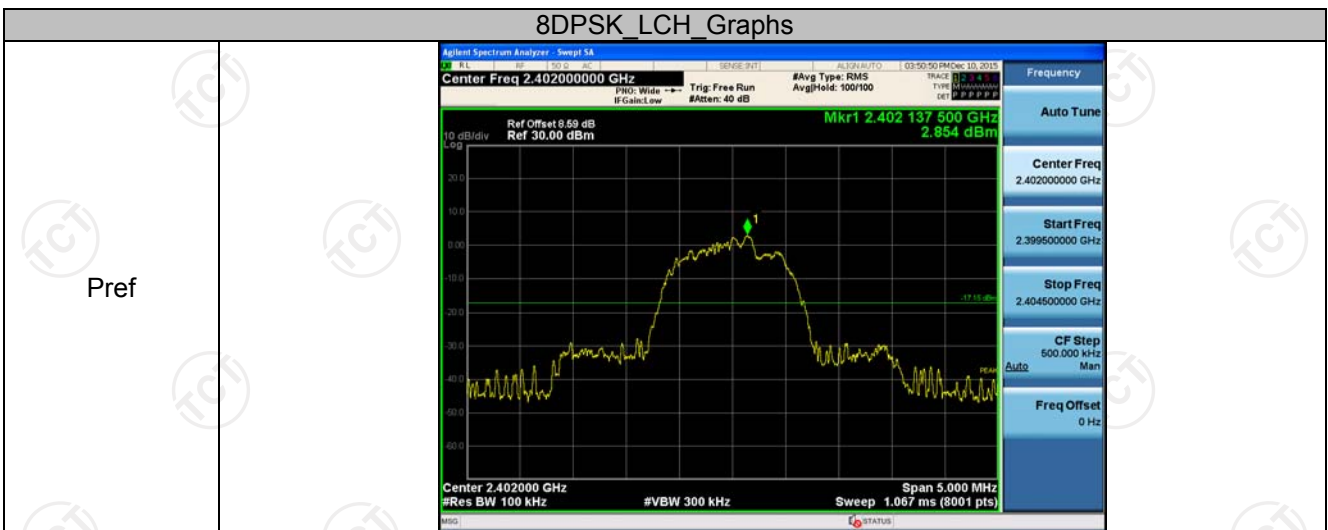
$\pi/4$ DQPSK_HCH_Graphs

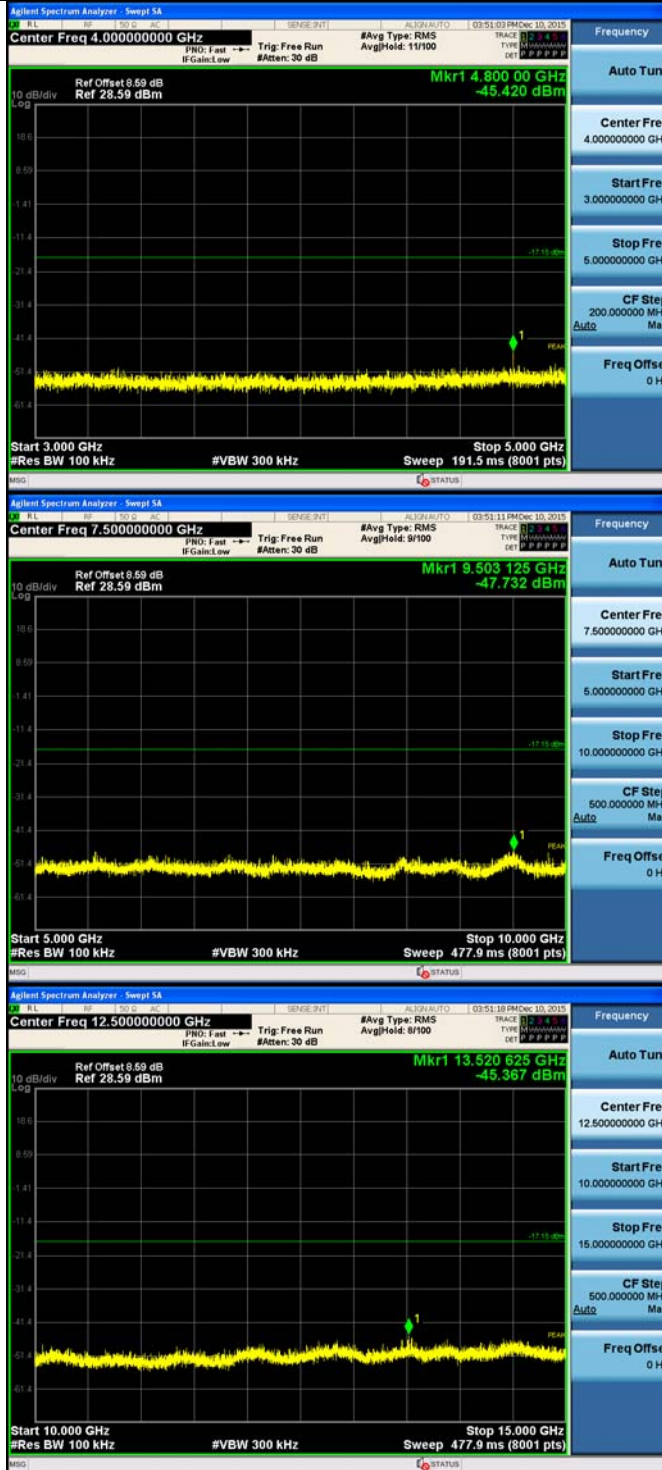


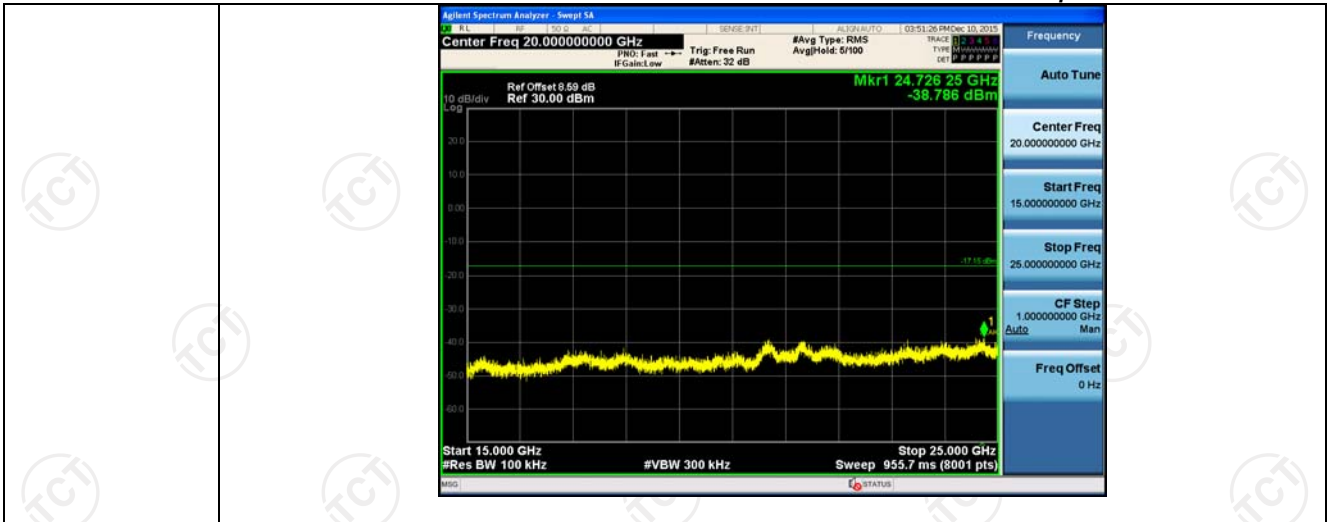




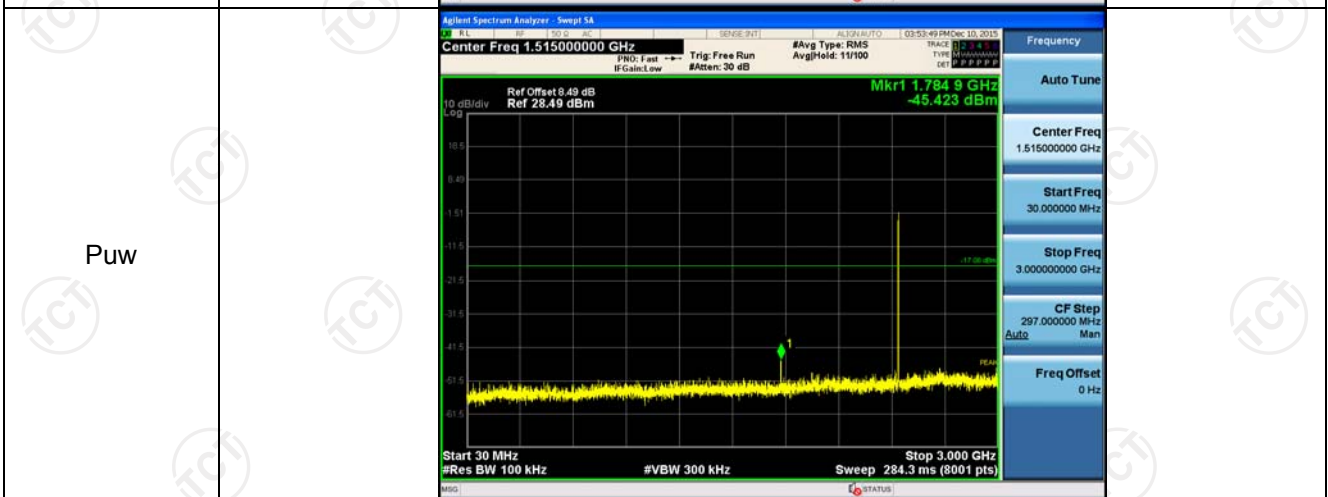
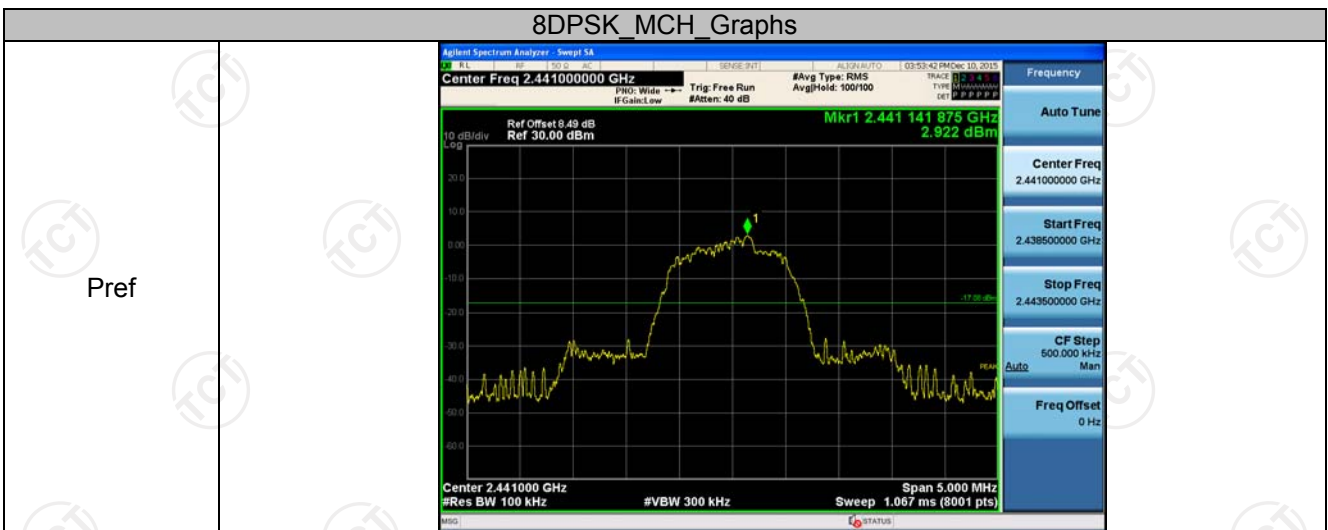
8DPSK_LCH_Graphs

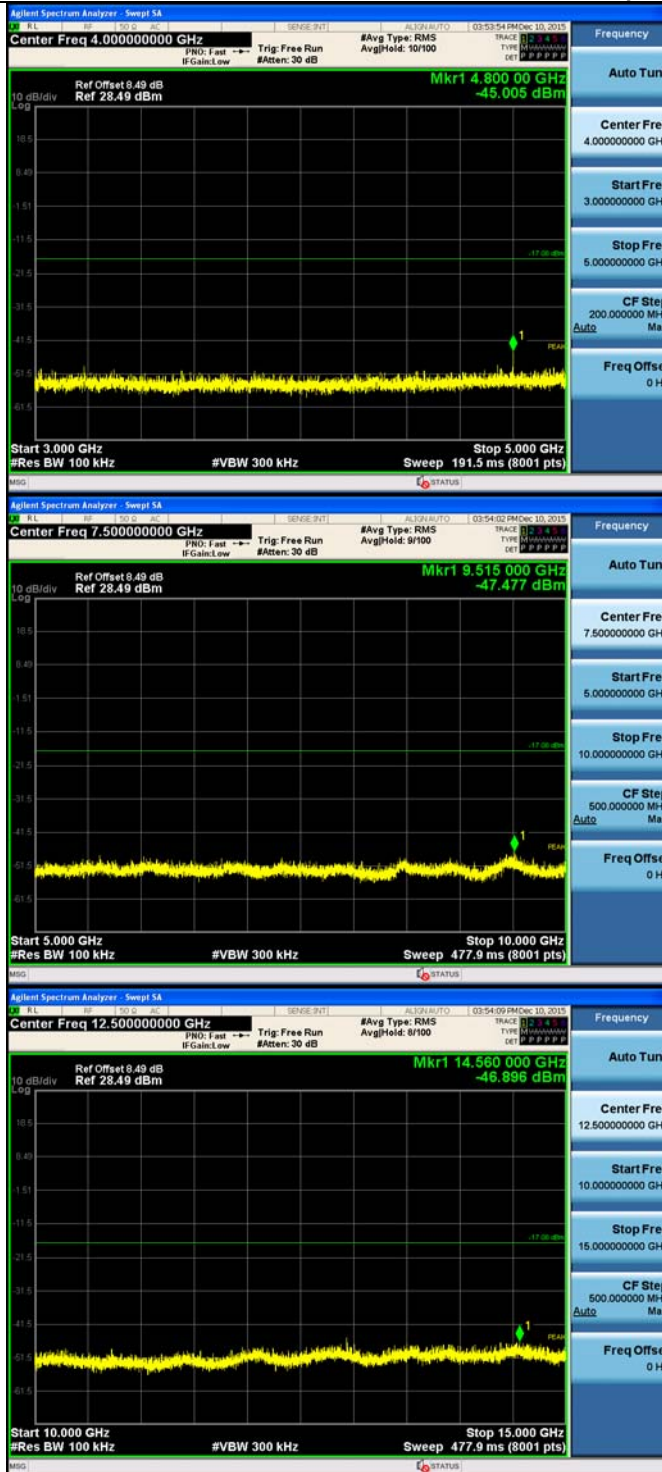


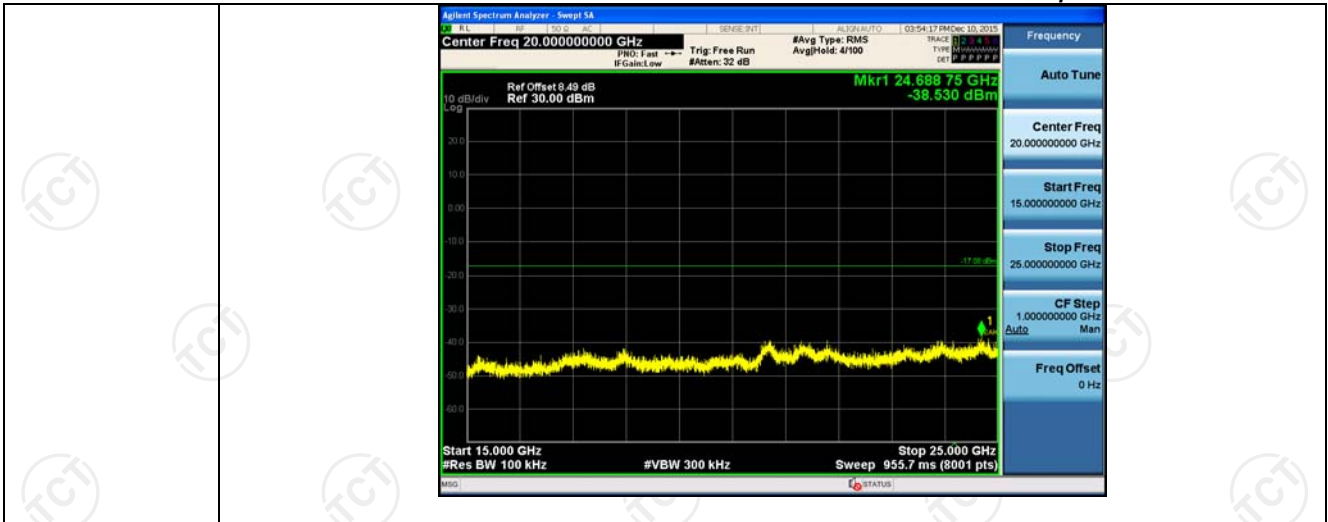




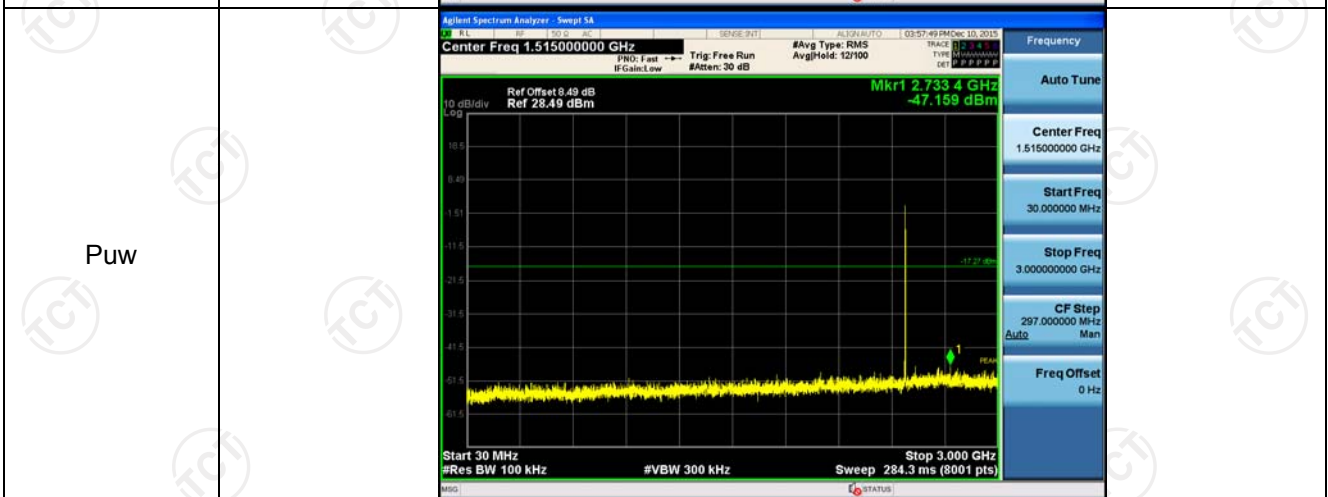
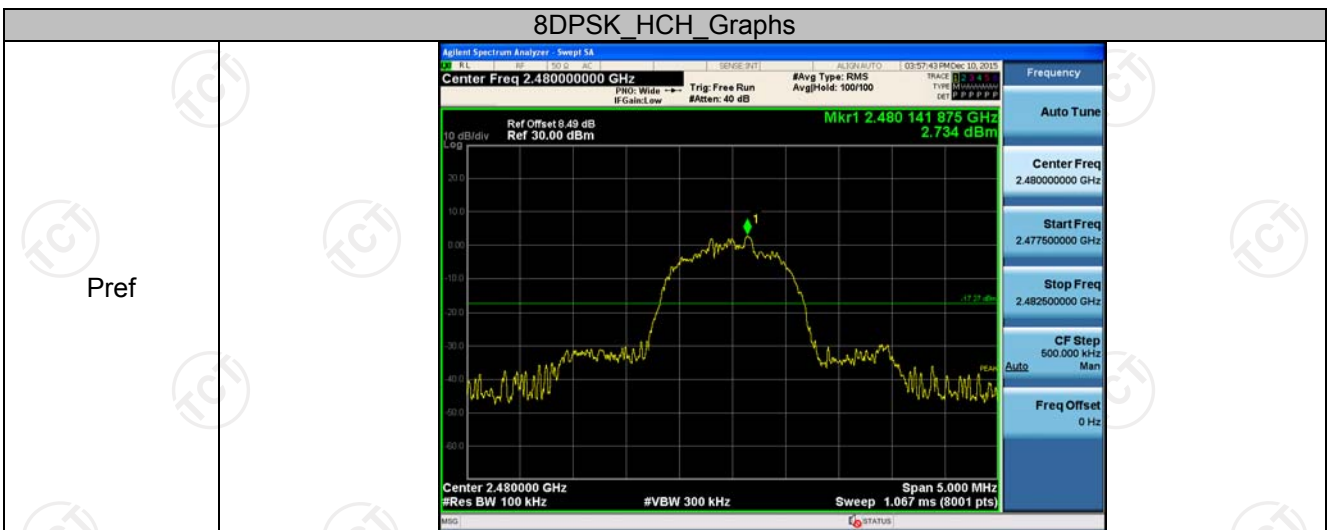
8DPSK MCH_Graphs

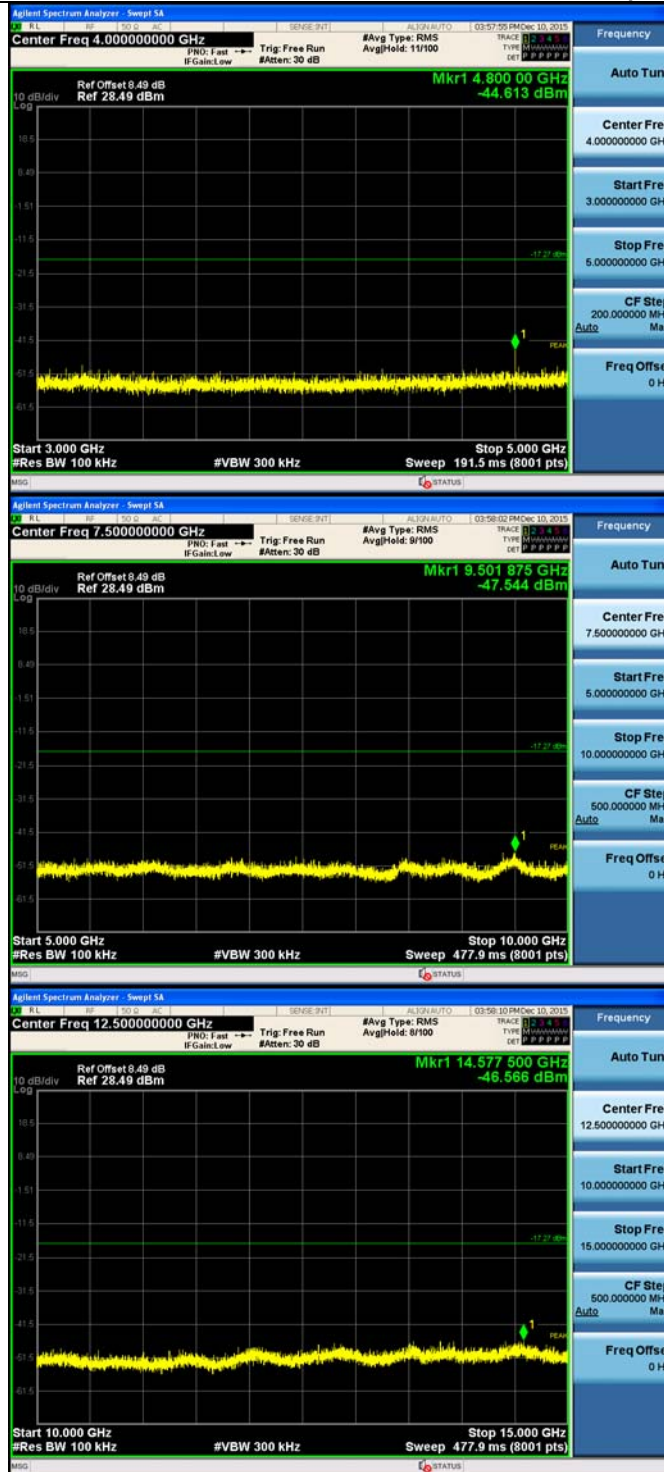


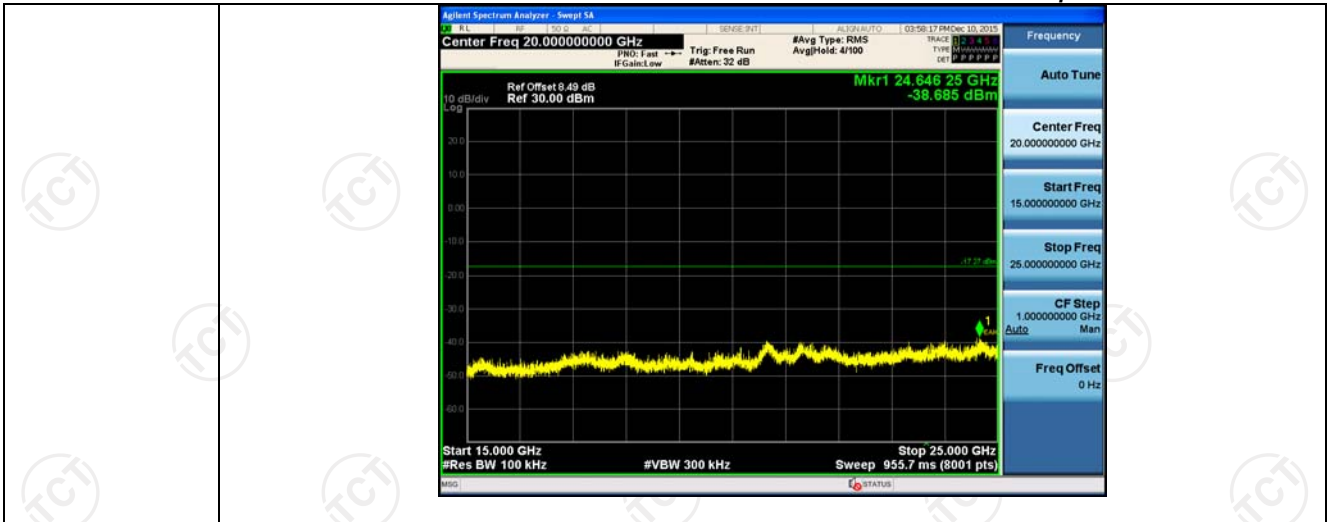




8DPSK_HCH_Graphs







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