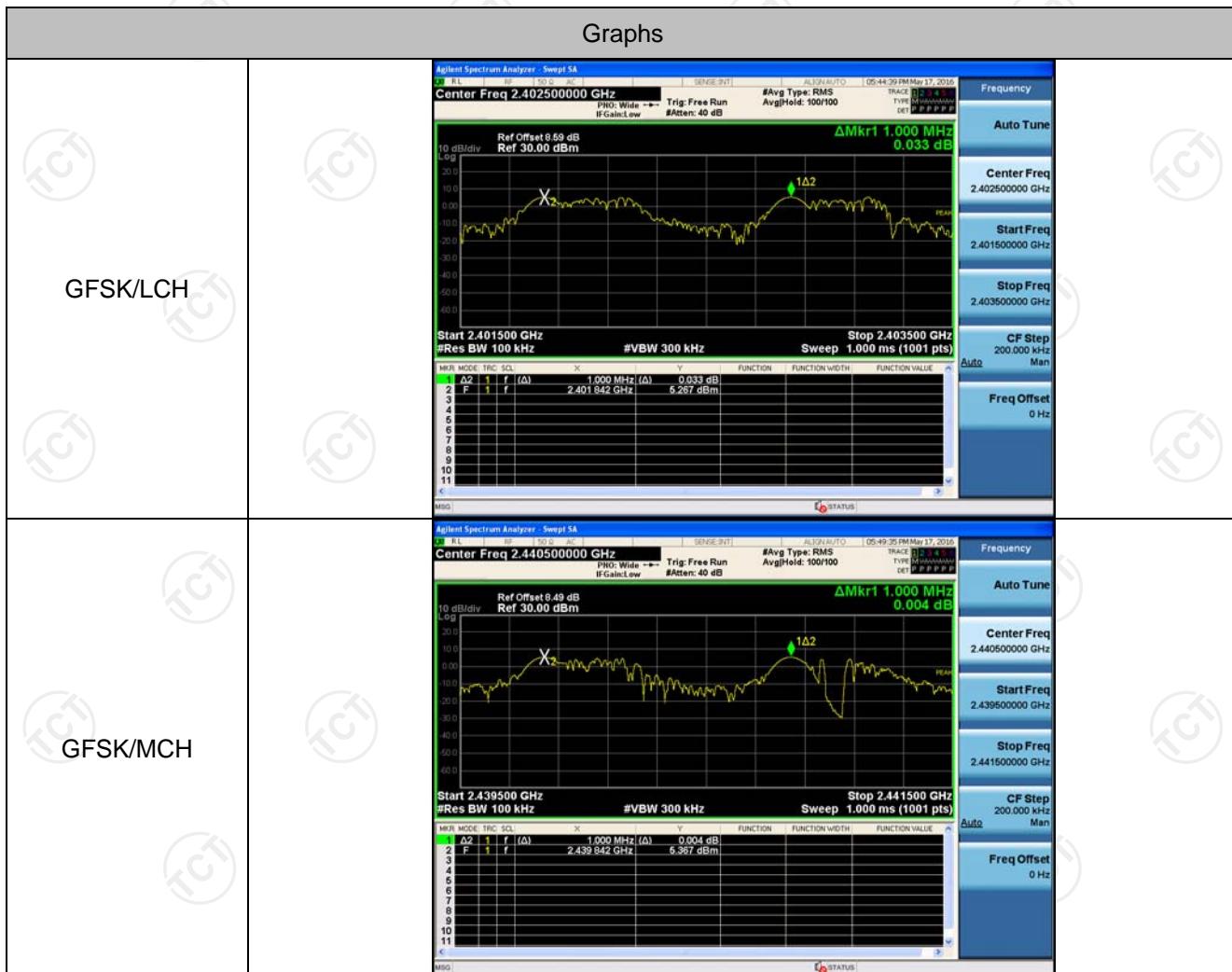


Carrier Frequency Separation

Result Table

Mode	Channel.	Carrier Frequency Separation [MHz]	Verdict
GFSK	LCH	1.000	PASS
GFSK	MCH	1.000	PASS
GFSK	HCH	1.002	PASS
π/4DQPSK	LCH	1.362	PASS
π/4DQPSK	MCH	1.026	PASS
π/4DQPSK	HCH	1.324	PASS
8DPSK	LCH	0.988	PASS
8DPSK	MCH	1.016	PASS
8DPSK	HCH	0.996	PASS

Test Graph



GFSK/HCH

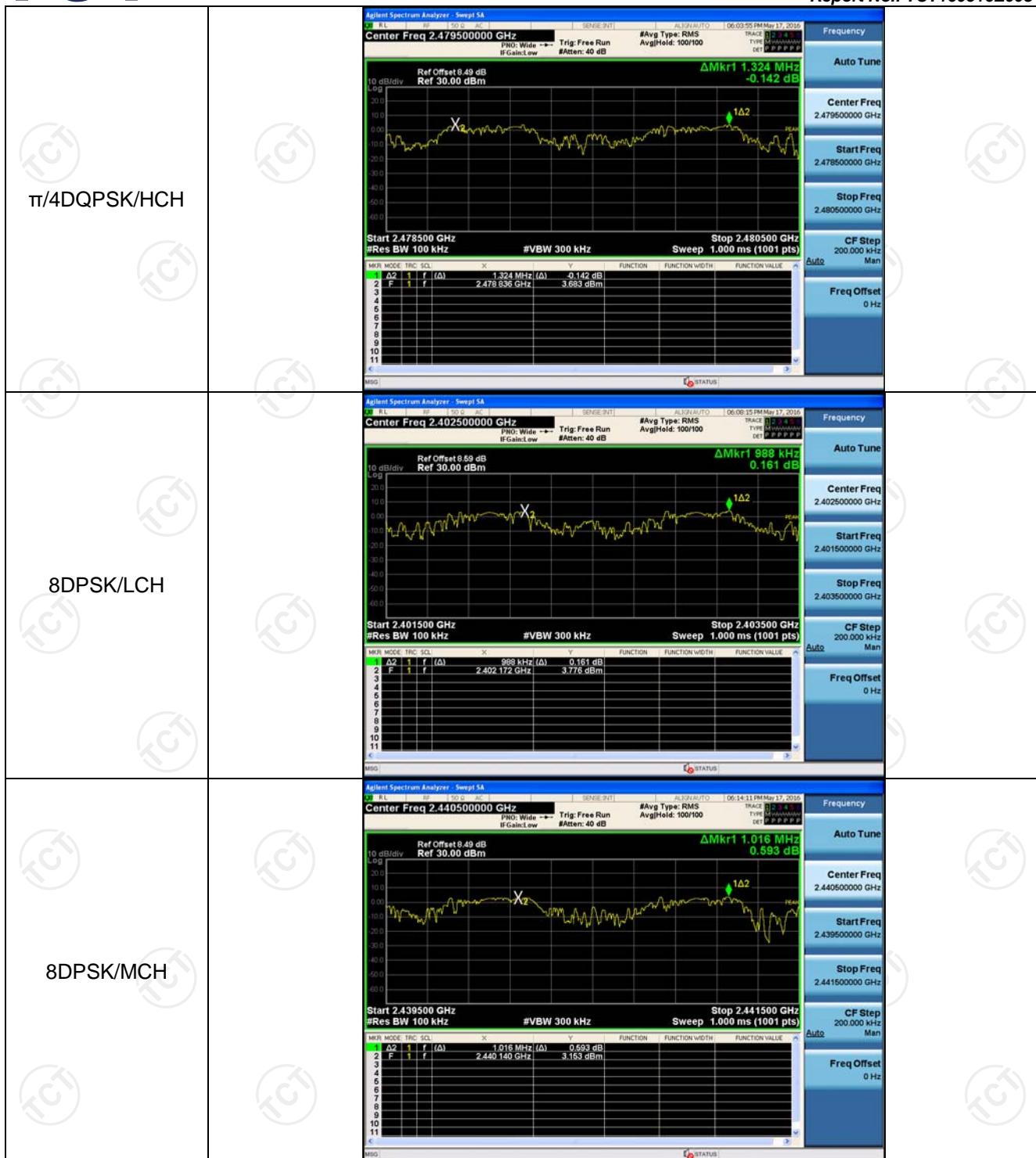


π/4DQPSK/LCH

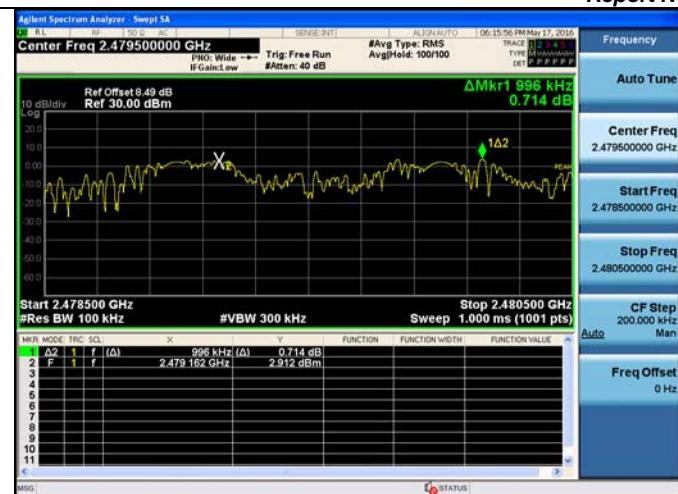


π/4DQPSK/MCH





8DPSK/HCH



Dwell Time

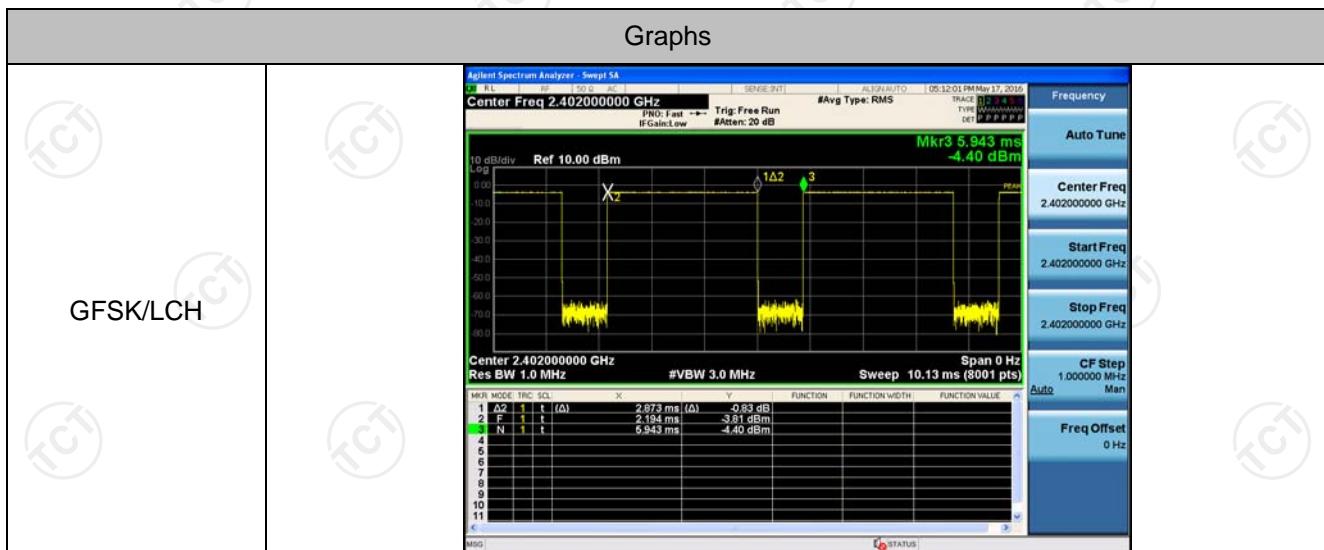
Result Table

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

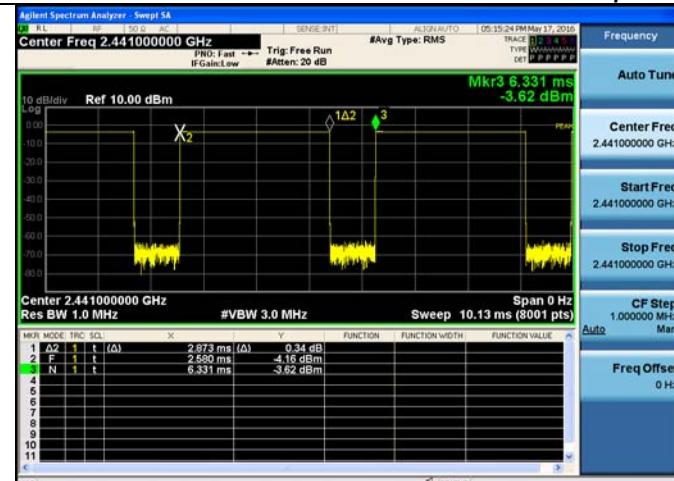
- The duration for dwell time calculation: $0.4[\text{s}]*\text{hopping number}=0.4[\text{s}]*79[\text{ch}]=31.6[\text{s}*\text{ch}]$;
- The burst width [ms/hop/ch], which is directly measured, refers to the duration on one channel hop.
- The hops per second for all channels: The selected EUT Conf uses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

Mode	Chann el	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Duty Cycle [%]	Verdic t
GFSK	LCH	2.873	106.7	0.307	76.62	PASS
GFSK	MCH	2.873	106.7	0.307	76.60	PASS
GFSK	HCH	2.873	106.7	0.307	76.62	PASS
$\pi/4$ DQPSK	LCH	2.877	106.7	0.307	76.72	PASS
$\pi/4$ DQPSK	MCH	2.877	106.7	0.307	76.70	PASS
$\pi/4$ DQPSK	HCH	2.877	106.7	0.307	76.72	PASS
8DPSK	LCH	2.879	106.7	0.307	76.76	PASS
8DPSK	MCH	2.879	106.7	0.307	76.76	PASS
8DPSK	HCH	2.879	106.7	0.307	76.76	PASS

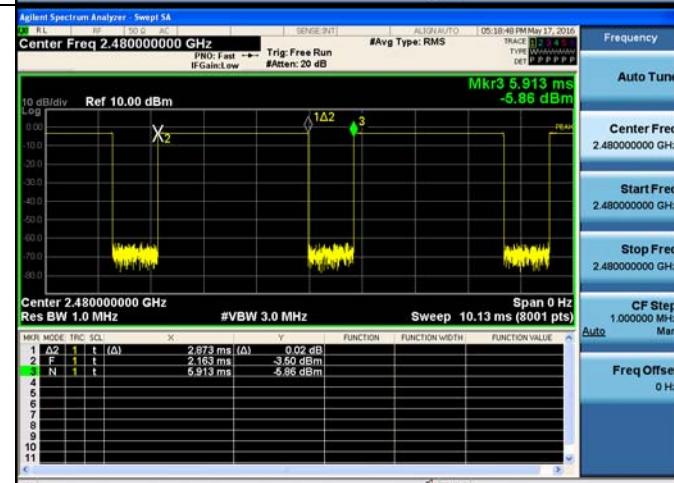
Test Graph



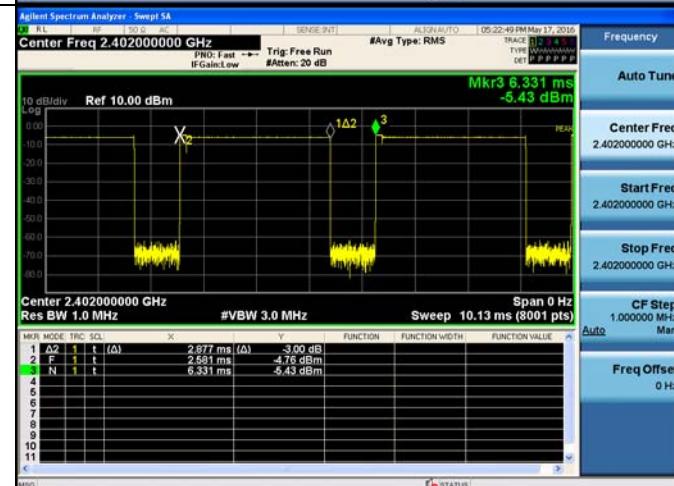
GFSK/MCH



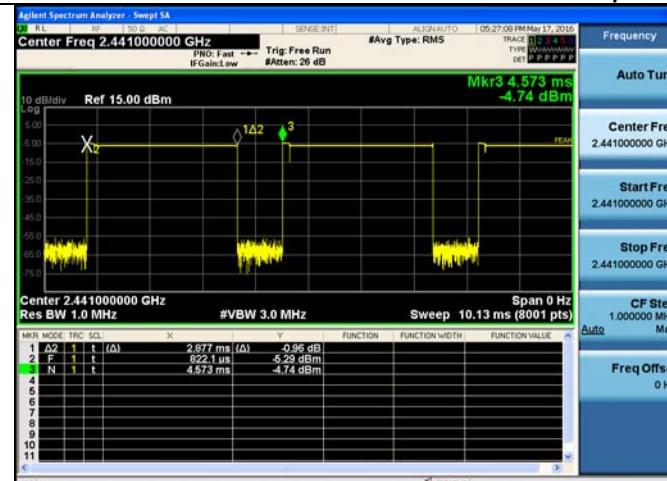
GFSK/HCH



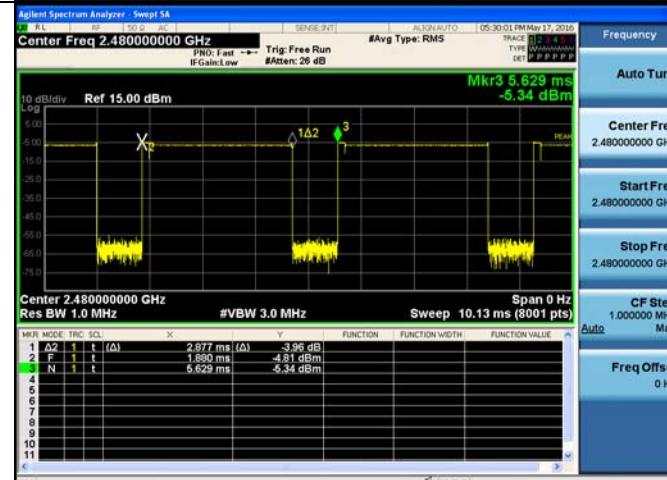
π/4DQPSK/LCH



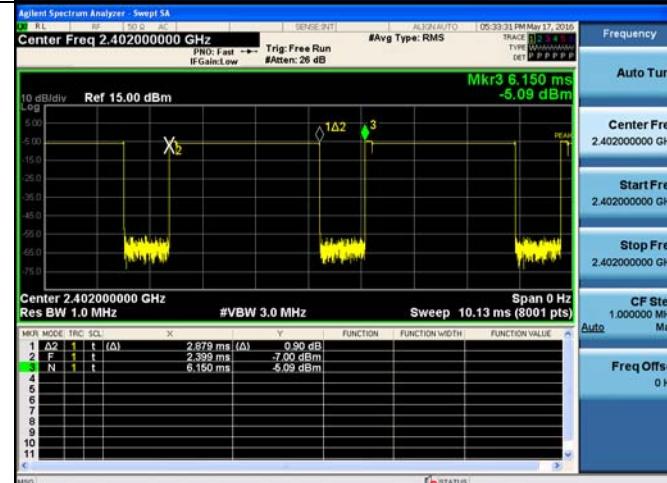
π/4DQPSK/MCH



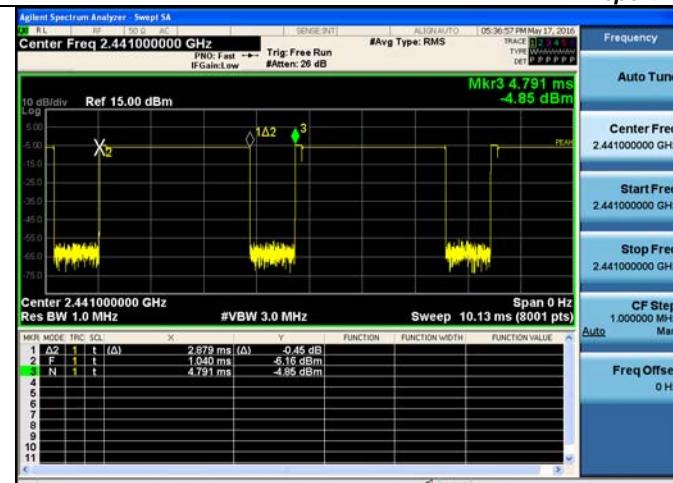
π/4DQPSK/HCH



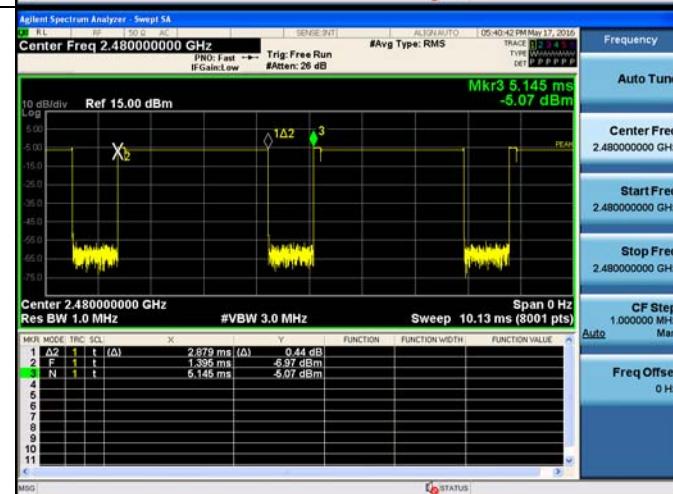
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

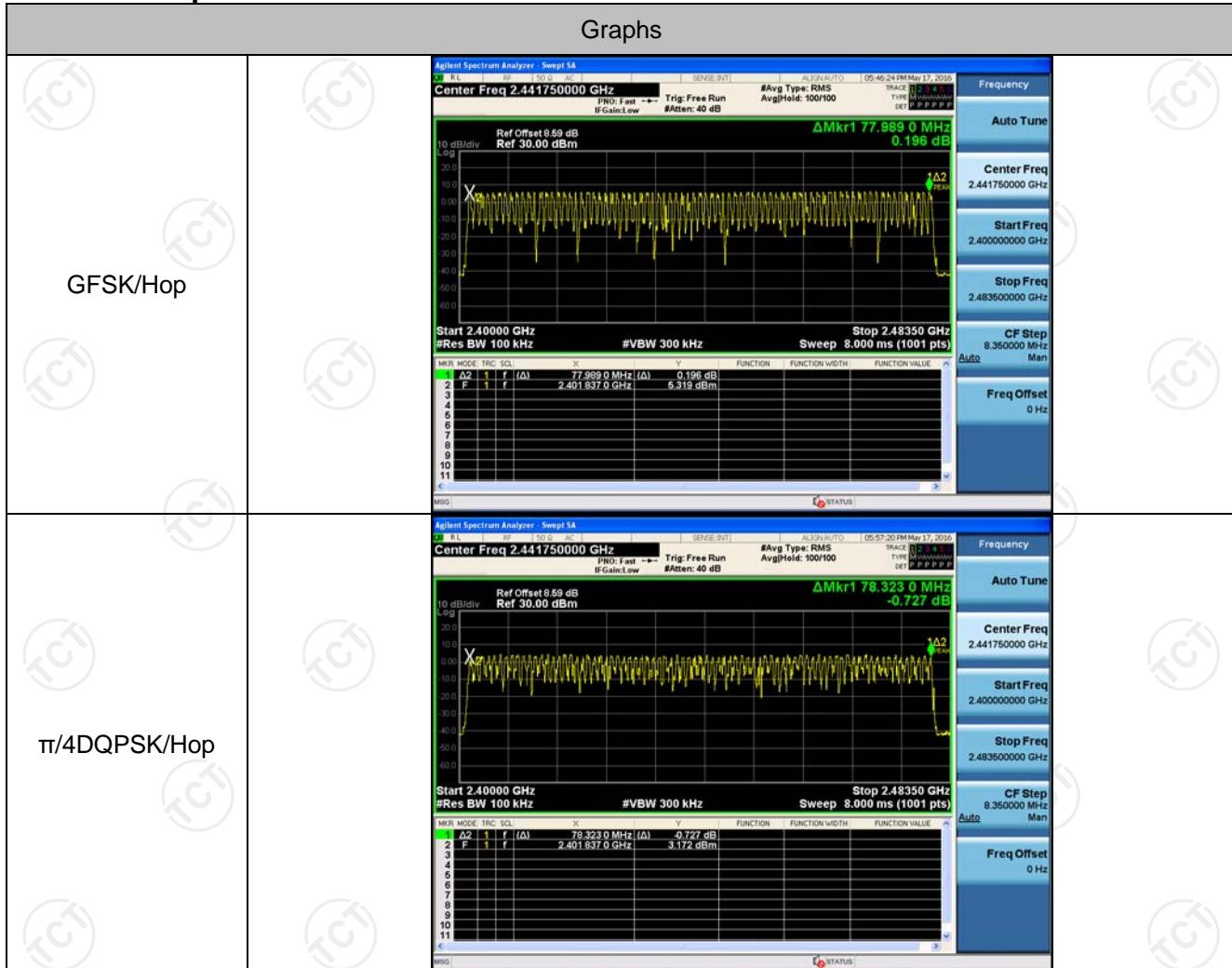


Hopping Channel Number

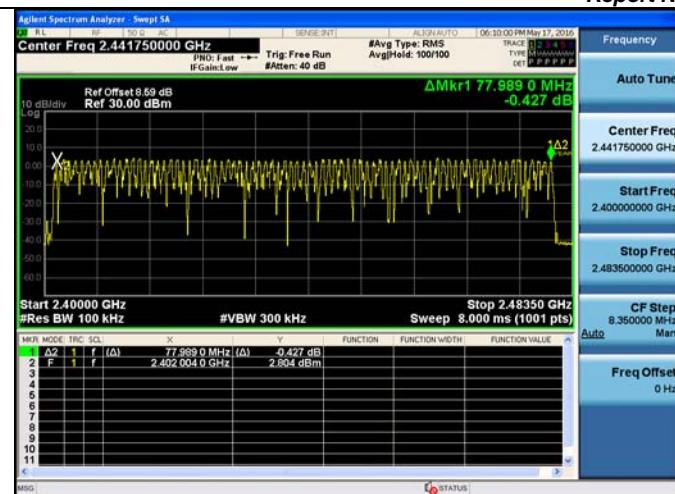
Result Table

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	5.264	PASS
GFSK	MCH	5.660	PASS
GFSK	HCH	5.714	PASS
$\pi/4$ DQPSK	LCH	4.477	PASS
$\pi/4$ DQPSK	MCH	4.481	PASS
$\pi/4$ DQPSK	HCH	4.383	PASS
8DPSK	LCH	4.513	PASS
8DPSK	MCH	4.459	PASS
8DPSK	HCH	4.342	PASS

Test Graph



GFSK/HCH



π/4DQPSK/LCH



π/4DQPSK/MCH



π/4DQPSK/HCH	<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 2.48000000 GHz</p> <p>Ref Offset 8.49 dB</p> <p>Ref 30.00 dBm</p> <p>Span 5.000 MHz</p> <p>#Res BW 3.0 MHz</p> <p>#VBW 8.0 MHz</p> <p>Sweep 1.000 ms (1001 pts)</p> <p>Mkr1 2.479825 GHz 4.383 dBm</p> <p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.48000000 GHz</p> <p>Start Freq 2.47750000 GHz</p> <p>Stop Freq 2.48250000 GHz</p> <p>CF Step 500.000 kHz</p> <p>Auto Man</p> <p>Freq Offset 0 Hz</p>
8DPSK/LCH	<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 2.40200000 GHz</p> <p>Ref Offset 8.59 dB</p> <p>Ref 30.00 dBm</p> <p>Span 5.000 MHz</p> <p>#Res BW 3.0 MHz</p> <p>#VBW 8.0 MHz</p> <p>Sweep 1.000 ms (1001 pts)</p> <p>Mkr1 2.402075 GHz 4.513 dBm</p> <p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.40200000 GHz</p> <p>Start Freq 2.39950000 GHz</p> <p>Stop Freq 2.40450000 GHz</p> <p>CF Step 500.000 kHz</p> <p>Auto Man</p> <p>Freq Offset 0 Hz</p>
8DPSK/MCH	<p>Agilent Spectrum Analyzer - Swept SA</p> <p>Center Freq 2.44100000 GHz</p> <p>Ref Offset 8.49 dB</p> <p>Ref 30.00 dBm</p> <p>Span 5.000 MHz</p> <p>#Res BW 3.0 MHz</p> <p>#VBW 8.0 MHz</p> <p>Sweep 1.000 ms (1001 pts)</p> <p>Mkr1 2.441015 GHz 4.459 dBm</p> <p>Frequency</p> <p>Auto Tune</p> <p>Center Freq 2.44100000 GHz</p> <p>Start Freq 2.43850000 GHz</p> <p>Stop Freq 2.44350000 GHz</p> <p>CF Step 500.000 kHz</p> <p>Auto Man</p> <p>Freq Offset 0 Hz</p>

8DPSK/HCH

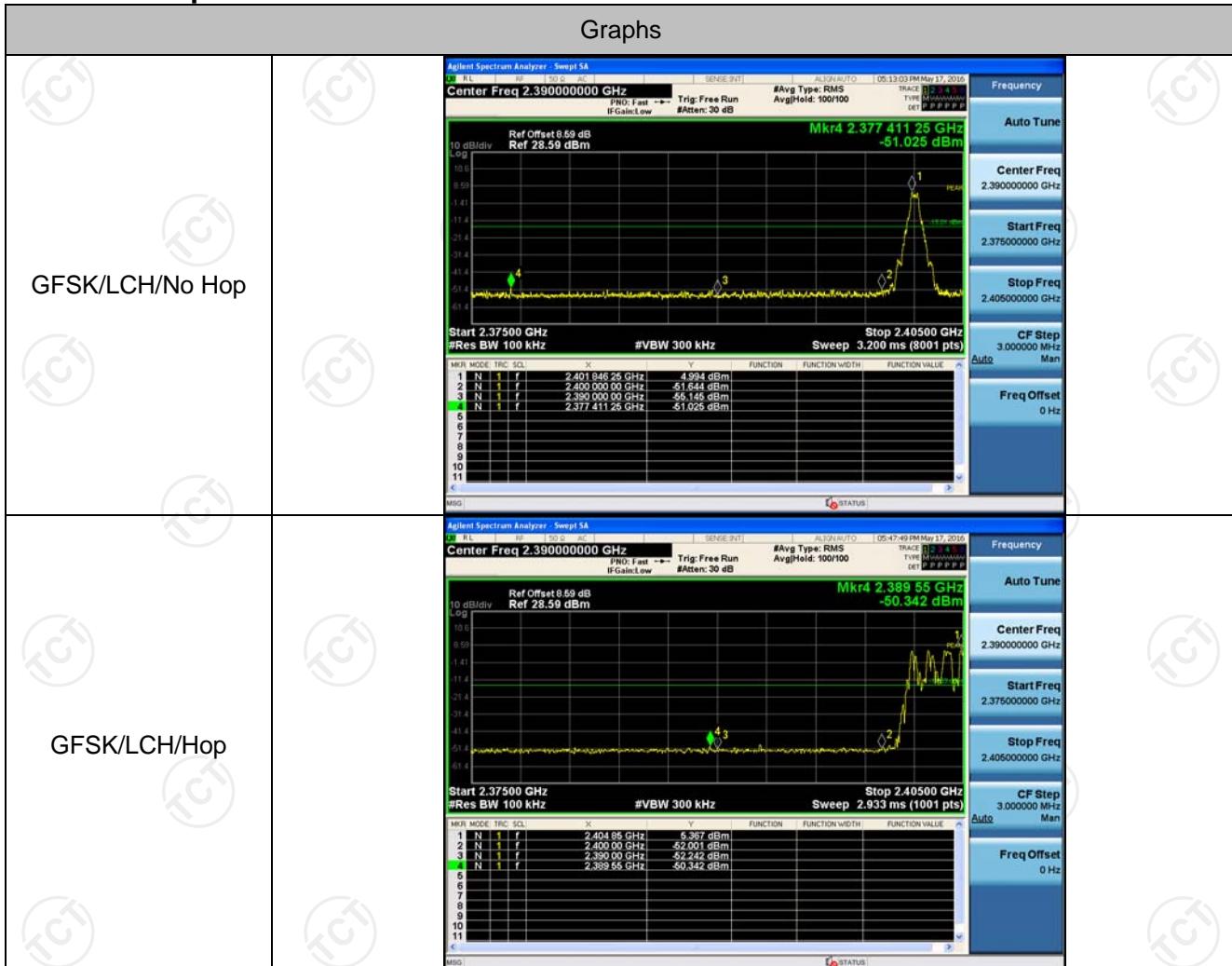


Band-edge for RF Conducted Emissions

Result Table

Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	4.994	Off	-51.025	-15.01	PASS
			5.367	On	-50.342	-14.63	PASS
GFSK	HCH	2480	5.419	Off	-50.900	-14.58	PASS
			5.476	On	-50.900	-14.52	PASS
$\pi/4$ DQPSK	LCH	2402	3.452	Off	-51.628	-16.55	PASS
			3.782	On	-50.198	-16.22	PASS
$\pi/4$ DQPSK	HCH	2480	3.667	Off	-50.876	-16.33	PASS
			3.541	On	-50.304	-16.46	PASS
8DPSK	LCH	2402	3.824	Off	-51.026	-16.18	PASS
			3.619	On	-50.687	-16.38	PASS
8DPSK	HCH	2480	3.704	Off	-51.436	-16.3	PASS
			3.727	On	-49.819	-16.27	PASS

Test Graph

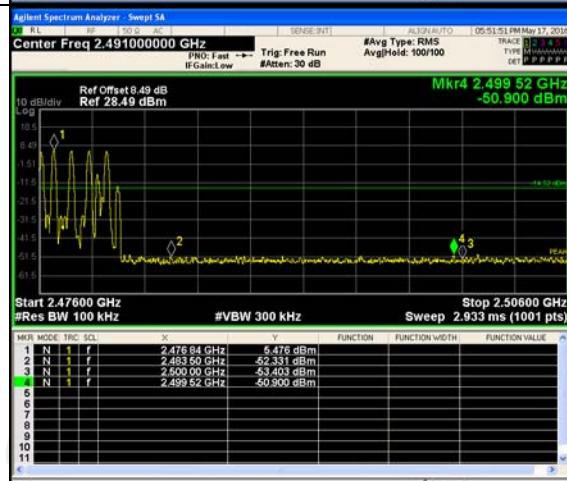


GFSK/HCH/No Hop



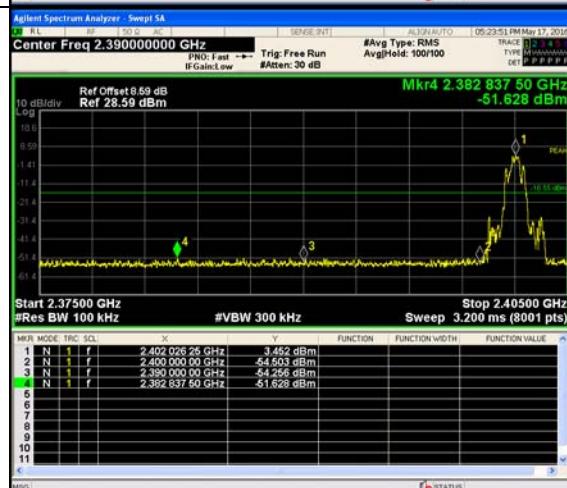
Frequency
Auto Tune
Center Freq
2.491000000 GHz
Start Freq
2.476000000 GHz
Stop Freq
2.506000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

GFSK/HCH/Hop



Frequency
Auto Tune
Center Freq
2.491000000 GHz
Start Freq
2.476000000 GHz
Stop Freq
2.506000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

π/4DQPSK/LCH/No Hop



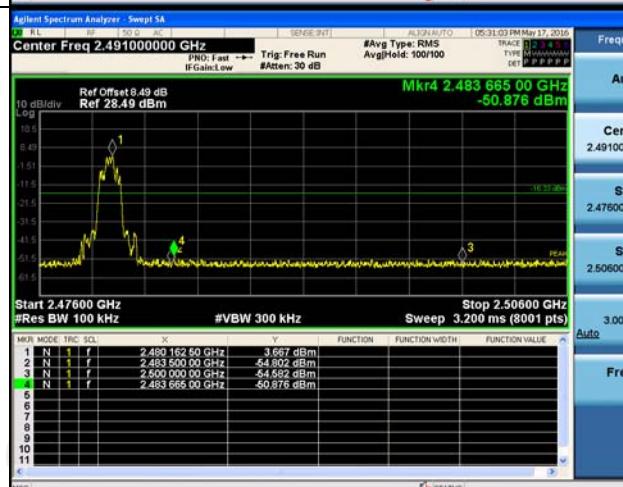
Frequency
Auto Tune
Center Freq
2.390000000 GHz
Start Freq
2.375000000 GHz
Stop Freq
2.405000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

π/4DQPSK/LCH/Hop



Frequency
Auto Tune
Center Freq
2.390000000 GHz
Start Freq
2.375000000 GHz
Stop Freq
2.405000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

π/4DQPSK/HCH/No Hop



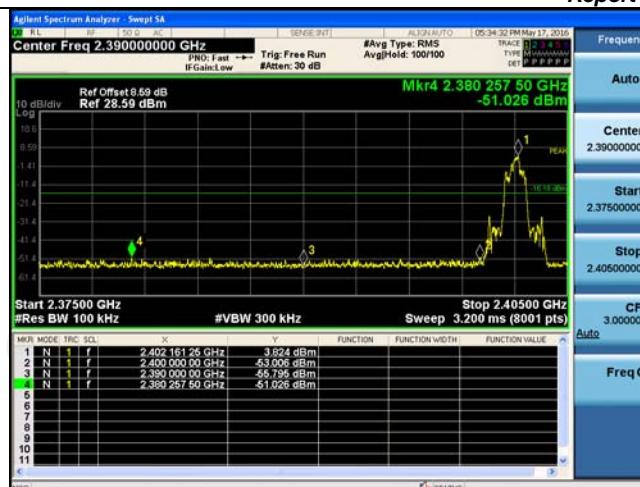
Frequency
Auto Tune
Center Freq
2.491000000 GHz
Start Freq
2.476000000 GHz
Stop Freq
2.506000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

π/4DQPSK/HCH/Hop



Frequency
Auto Tune
Center Freq
2.491000000 GHz
Start Freq
2.476000000 GHz
Stop Freq
2.506000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

8DPSK/LCH/No Hop



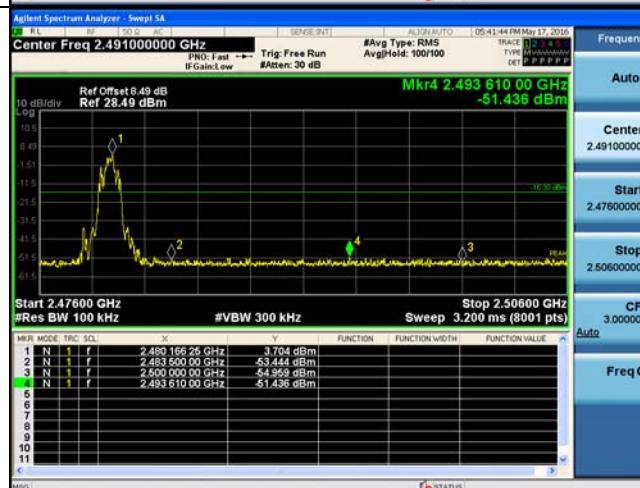
Frequency
Auto Tune
Center Freq
2.390000000 GHz
Start Freq
2.375000000 GHz
Stop Freq
2.405000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

8DPSK/LCH/Hop



Frequency
Auto Tune
Center Freq
2.390000000 GHz
Start Freq
2.375000000 GHz
Stop Freq
2.405000000 GHz
CF Step
3.000000 MHz
Auto
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Freq Offset
0 Hz

8DPSK/HCH/No Hop



Frequency
Auto Tune
Center Freq
2.491000000 GHz
Start Freq
2.476000000 GHz
Stop Freq
2.506000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

8DPSK/HCH/Hop



RF Conducted Spurious Emissions

Result Table

Mode	Channel	Pref [dBm]	Puw[dBm]	Verdict
GFSK	LCH	5.022	<Limit	PASS
GFSK	MCH	5.421	<Limit	PASS
GFSK	HCH	5.43	<Limit	PASS
π/4DQPSK	LCH	3.852	<Limit	PASS
π/4DQPSK	MCH	3.868	<Limit	PASS
π/4DQPSK	HCH	3.762	<Limit	PASS
8DPSK	LCH	3.948	<Limit	PASS
8DPSK	MCH	3.575	<Limit	PASS
8DPSK	HCH	3.08	<Limit	PASS

Test Graph

