

8DPSK/HCH



## Dwell Time

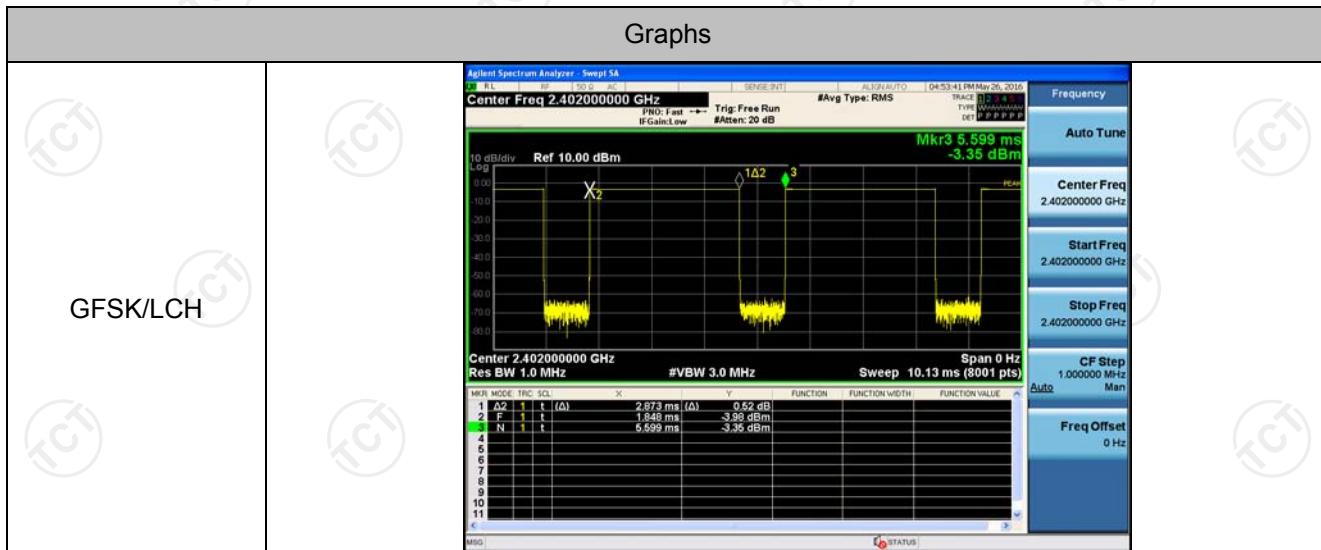
### Result Table

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

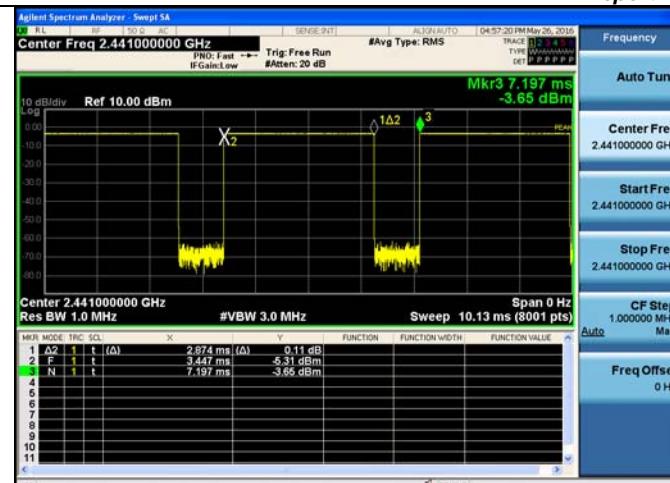
- The duration for dwell time calculation:  $0.4[\text{s}]*\text{hopping number}=0.4[\text{s}]*79[\text{ch}]=31.6[\text{s}*\text{ch}]$ ;
- The burst width [ms/hop/ch], which is directly measured, refers to the duration on one channel hop.
- The hops per second for all channels: The selected EUT Conf 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	Channe l	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Duty Cycle [%]	Verdict
GFSK	LCH	2.873	106.7	0.307	76.60	PASS
GFSK	MCH	2.874	106.7	0.307	76.63	PASS
GFSK	HCH	2.873	106.7	0.307	76.62	PASS
$\pi/4$ DQPSK	LCH	2.877	106.7	0.307	76.70	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	2.878	106.7	0.307	76.76	PASS
8DPSK	MCH	2.879	106.7	0.307	76.76	PASS
8DPSK	HCH	2.878	106.7	0.307	76.76	PASS

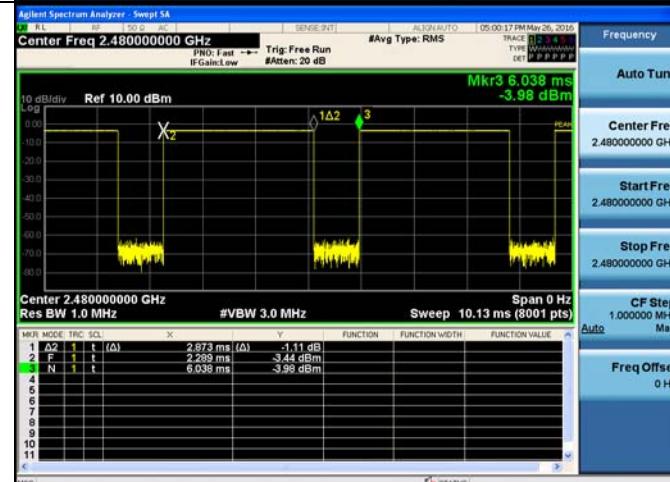
### Test Graph



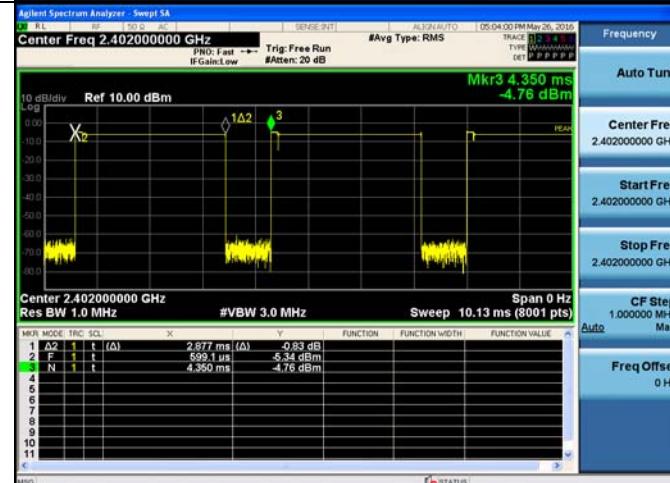
GFSK/MCH



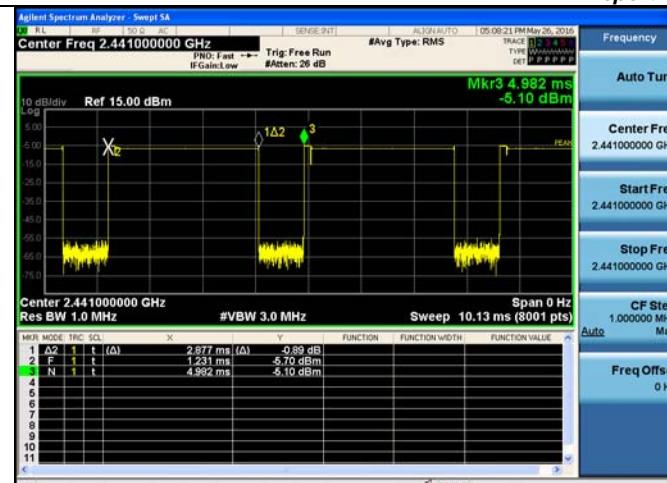
GFSK/HCH



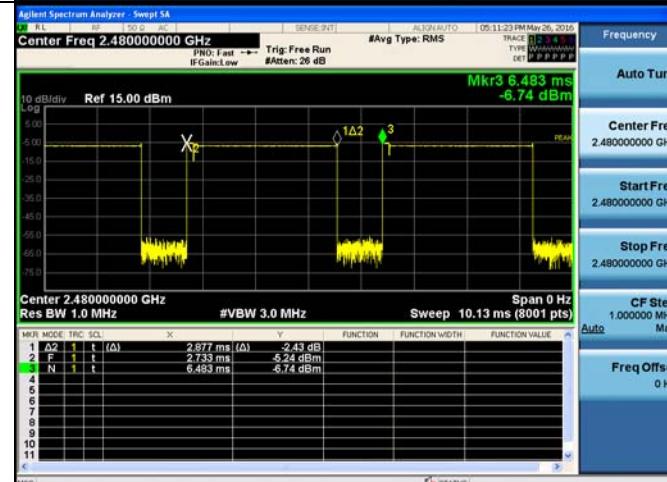
π/4DQPSK/LCH



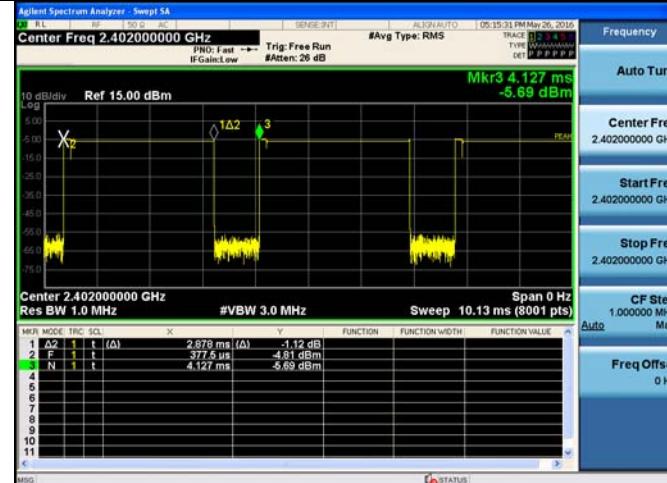
π/4DQPSK/MCH



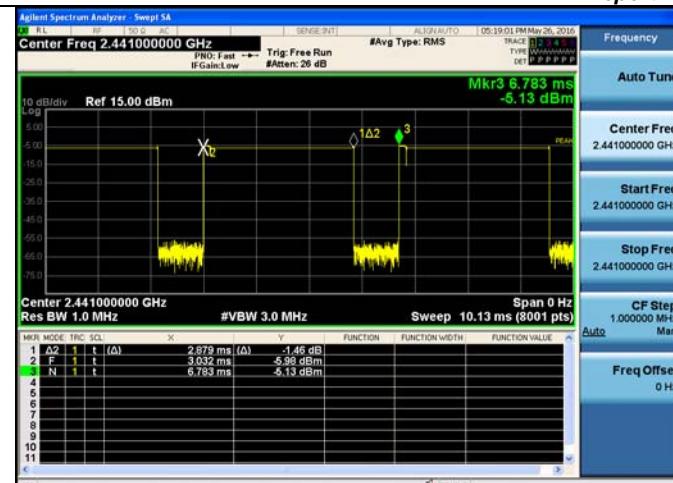
π/4DQPSK/HCH



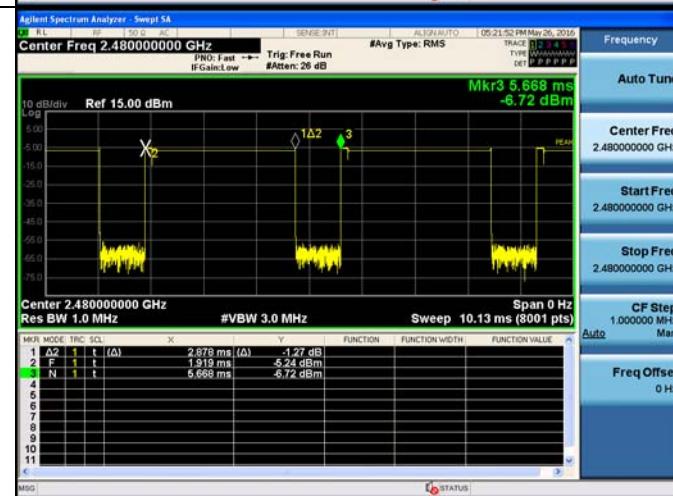
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

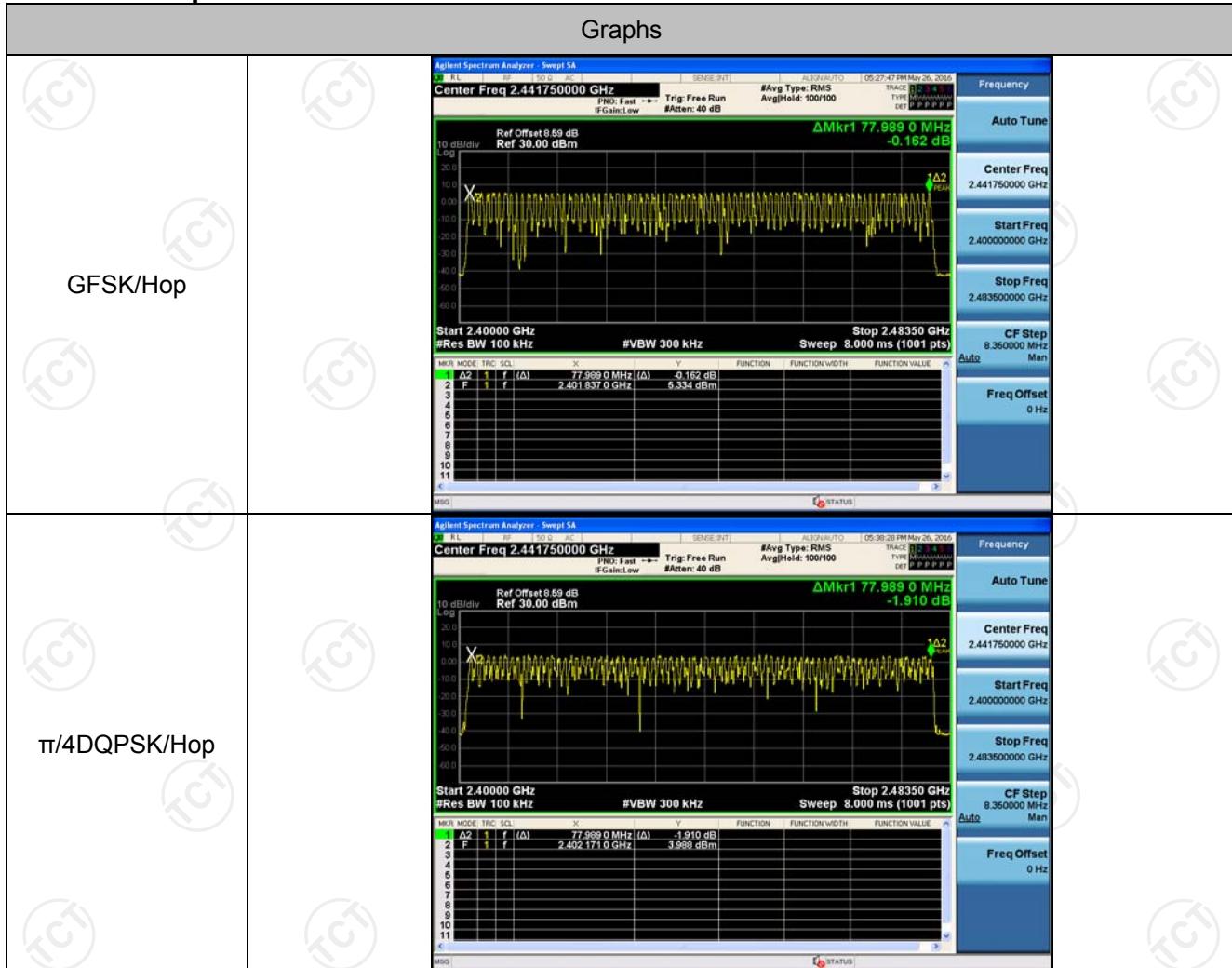


## Hopping Channel Number

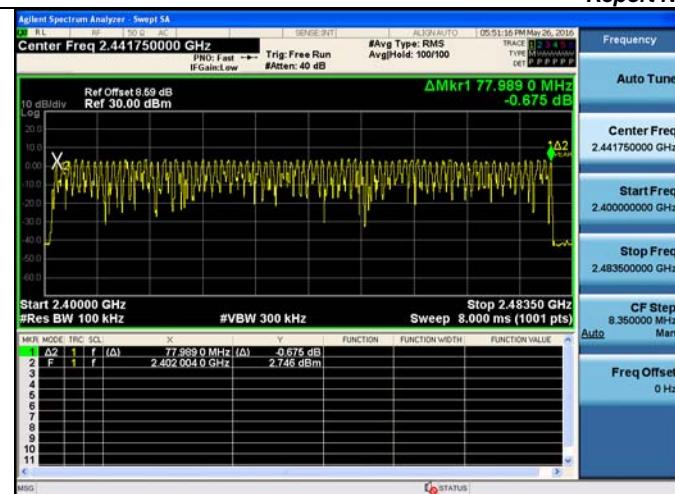
### Result Table

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

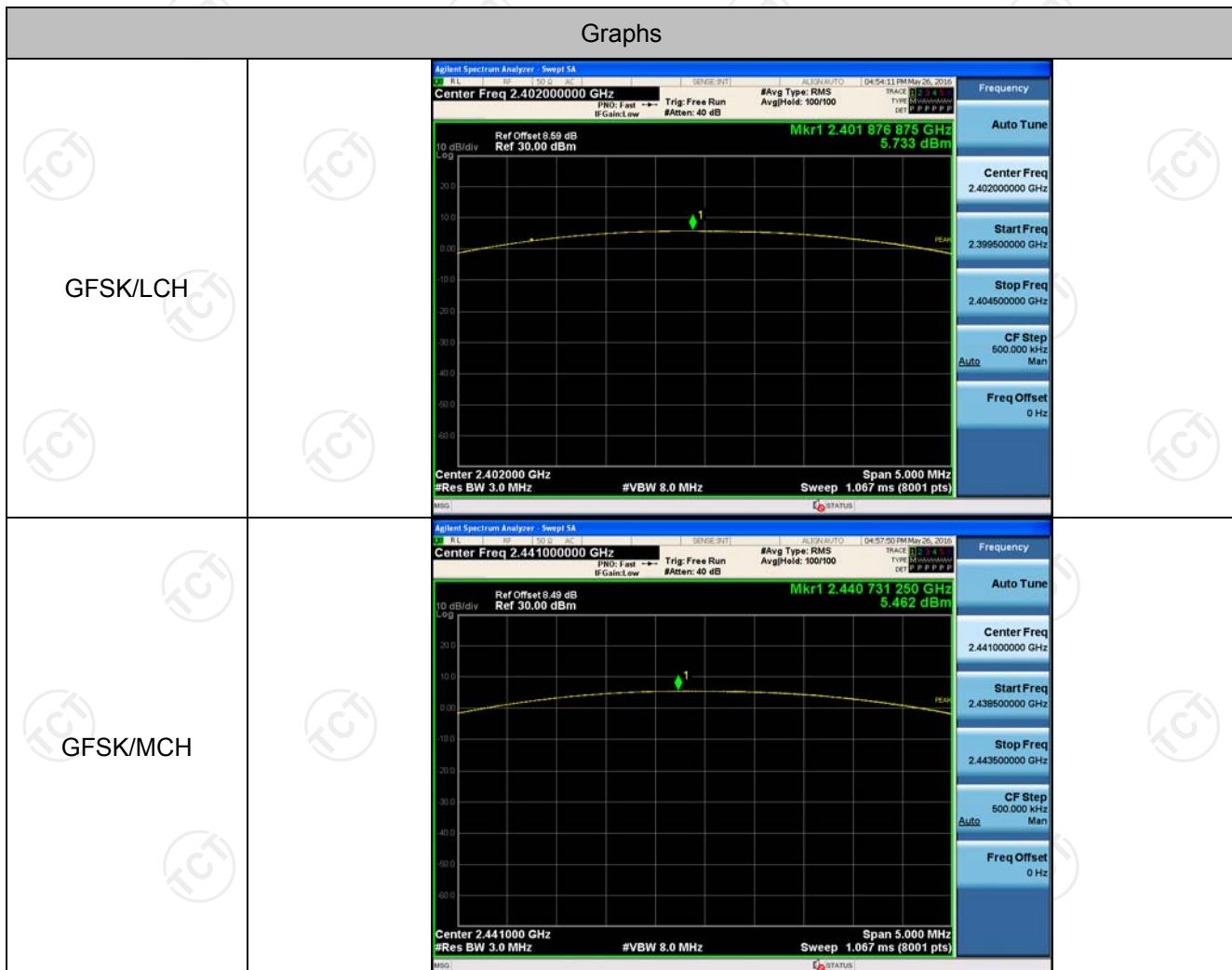


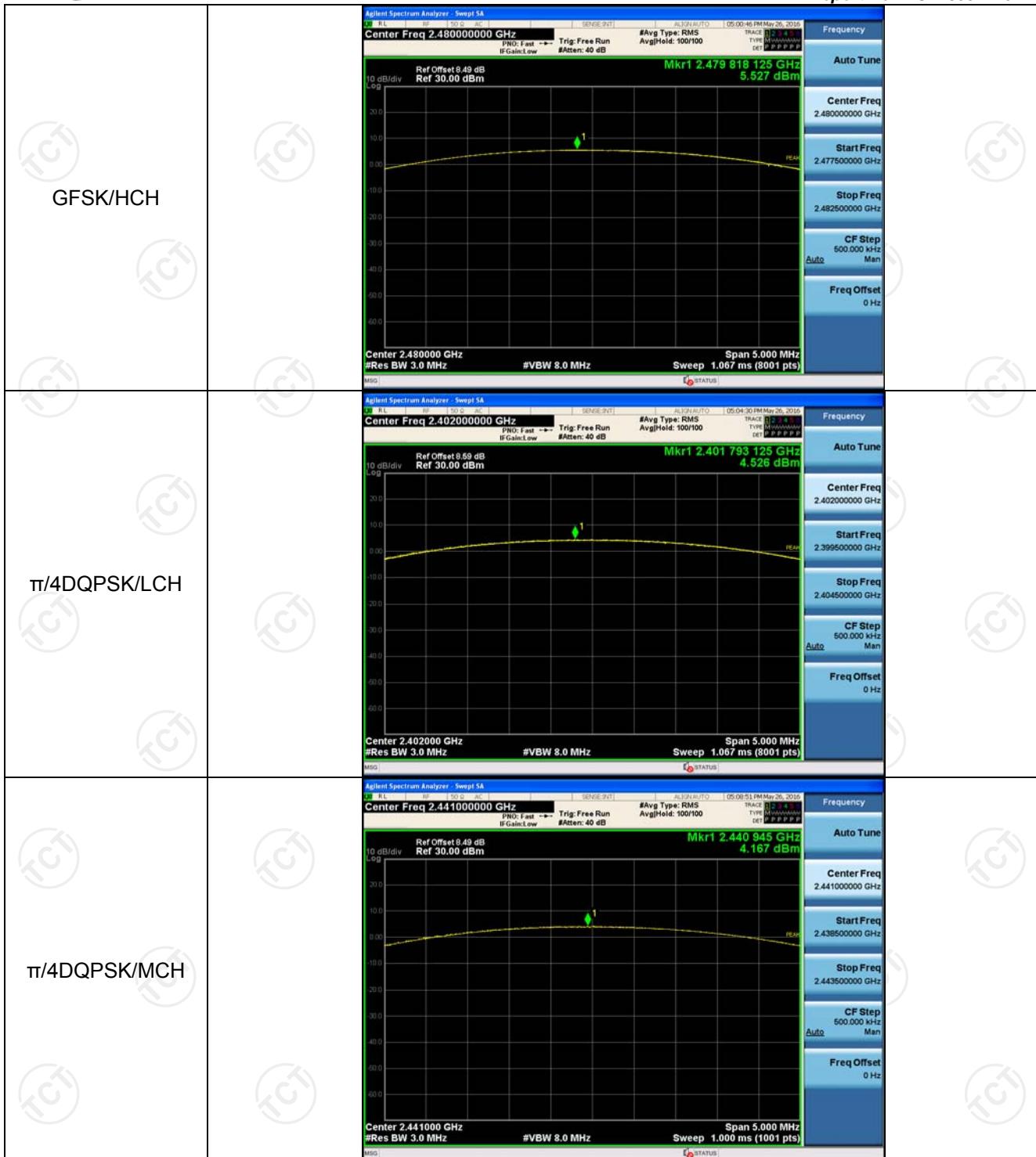
## Conducted Peak Output Power

### Result Table

Mode	Channel.	Maximum Peak Output Power [dBm]	Verdict
GFSK	LCH	5.733	PASS
GFSK	MCH	5.462	PASS
GFSK	HCH	5.527	PASS
π/4DQPSK	LCH	4.526	PASS
π/4DQPSK	MCH	4.167	PASS
π/4DQPSK	HCH	4.089	PASS
8DPSK	LCH	4.521	PASS
8DPSK	MCH	4.175	PASS
8DPSK	HCH	4.068	PASS

### Test Graph







8DPSK/HCH

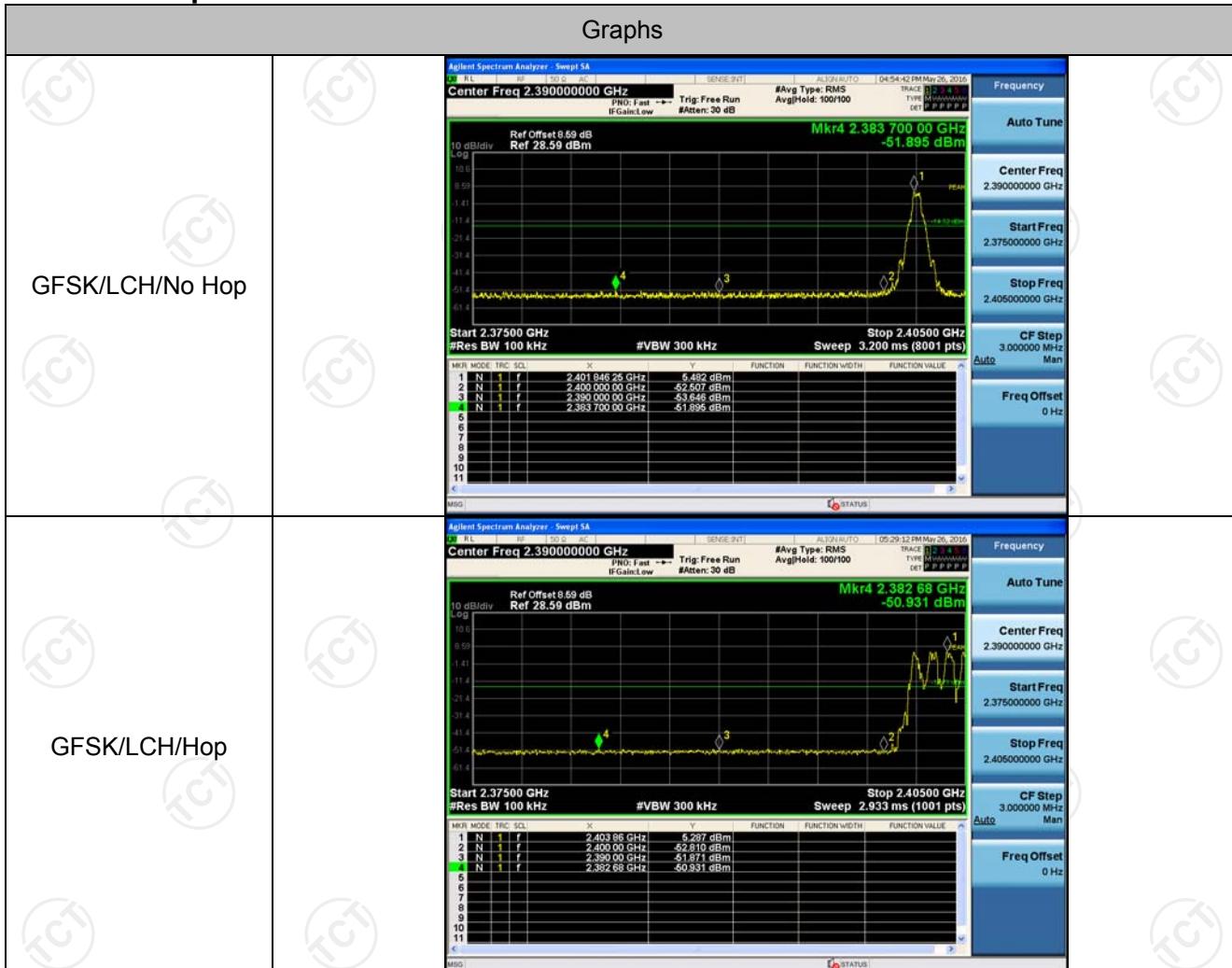


## Band-edge for RF Conducted Emissions

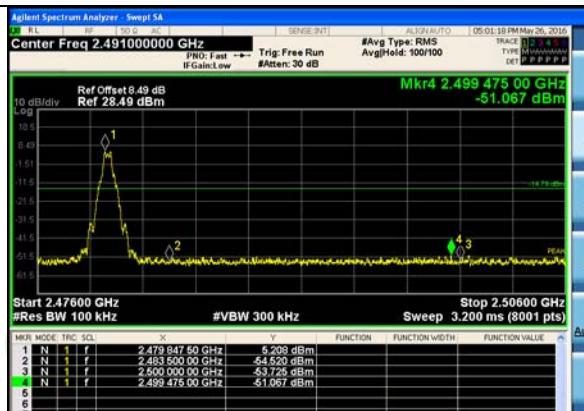
Result Table

Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	5.482	Off	-51.895	-14.52	PASS
			5.287	On	-50.931	-14.71	PASS
GFSK	HCH	2480	5.208	Off	-51.067	-14.79	PASS
			5.011	On	-51.342	-14.99	PASS
$\pi/4$ DQPSK	LCH	2402	3.494	Off	-50.776	-16.51	PASS
			3.177	On	-50.892	-16.82	PASS
$\pi/4$ DQPSK	HCH	2480	3.451	Off	-50.976	-16.55	PASS
			3.196	On	-49.973	-16.8	PASS
8DPSK	LCH	2402	3.834	Off	-51.313	-16.17	PASS
			3.624	On	-50.534	-16.38	PASS
8DPSK	HCH	2480	2.363	Off	-51.405	-17.64	PASS
			2.636	On	-50.550	-17.36	PASS

Test Graph

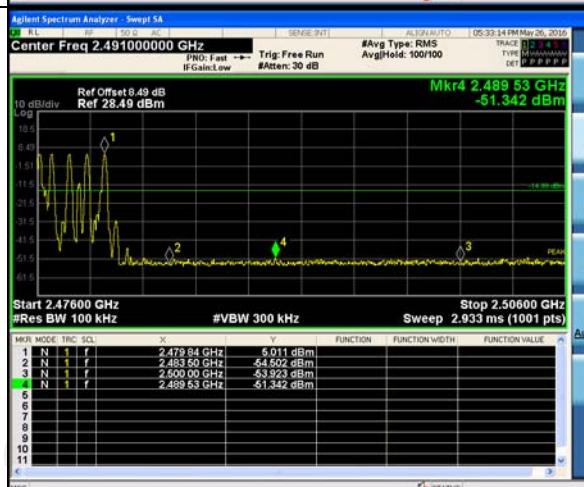


GFSK/HCH/No Hop



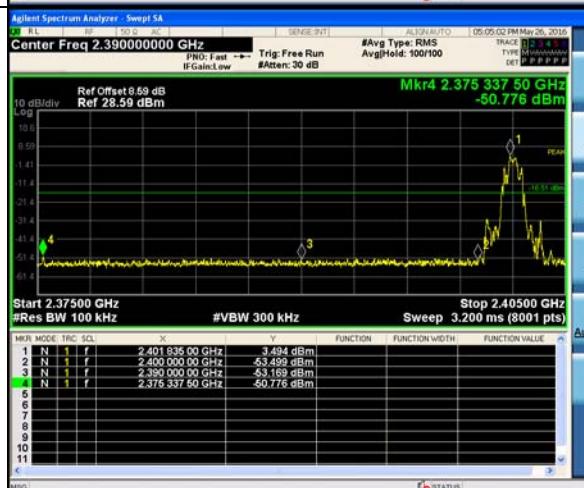
Frequency
Auto Tune
Center Freq
2.491000000 GHz
Start Freq
2.476000000 GHz
Stop Freq
2.506000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

GFSK/HCH/Hop



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

π/4DQPSK/LCH/No Hop

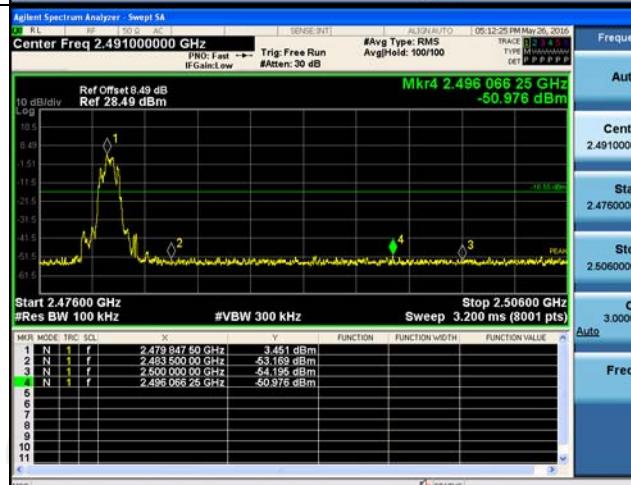


Frequency
Auto Tune
Center Freq
2.390000000 GHz
Start Freq
2.375000000 GHz
Stop Freq
2.405000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

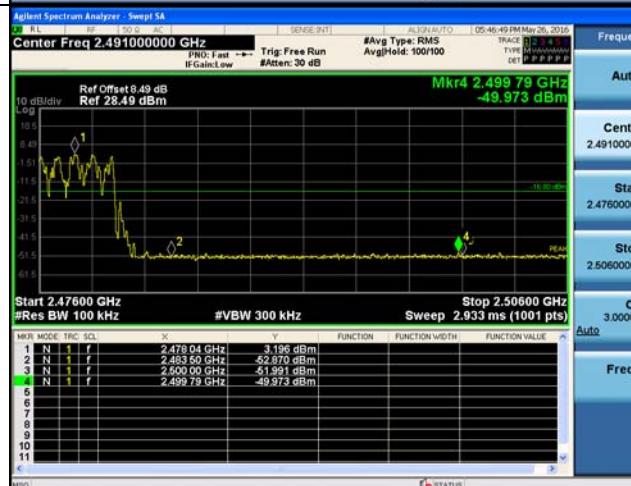
$\pi/4$ DQPSK/LCH/Hop



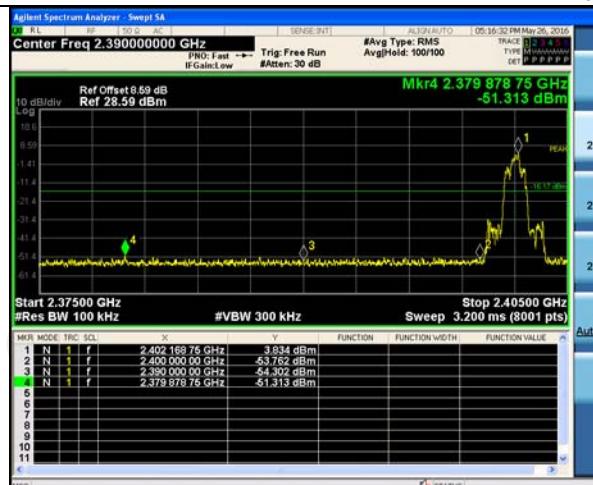
$\pi/4$ DQPSK/HCH/No Hop



$\pi/4$ DQPSK/HCH/Hop

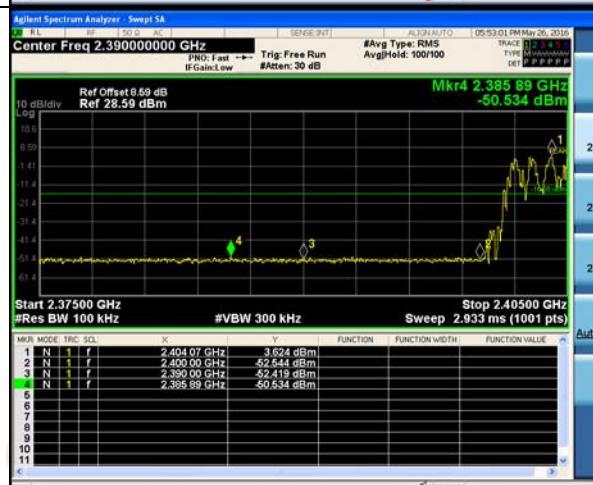


8DPSK/LCH/No Hop



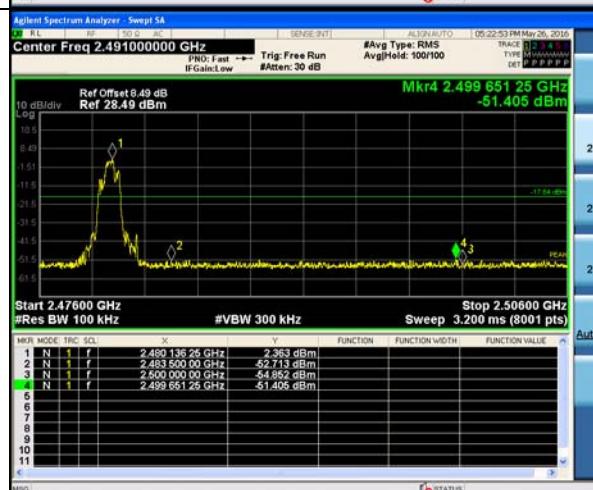
Frequency
Auto Tune
Center Freq
2.390000000 GHz
Start Freq
2.375000000 GHz
Stop Freq
2.405000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

8DPSK/LCH/Hop

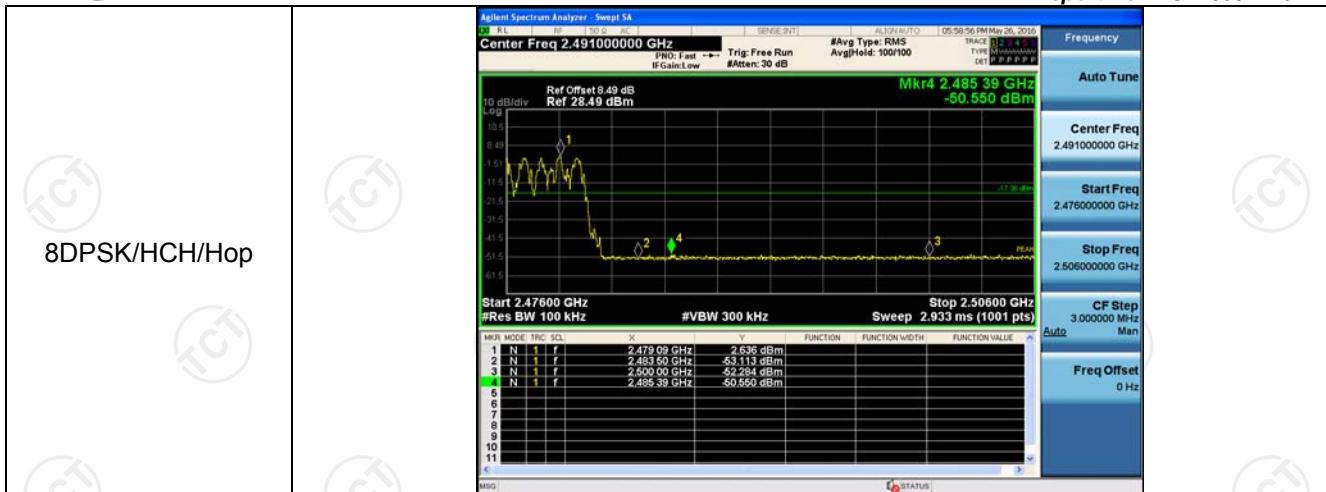


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Auto Tune
Center Freq
2.390000000 GHz
Start Freq
2.375000000 GHz
Stop Freq
2.405000000 GHz
CF Step
3.000000 MHz
Auto
Man
Freq Offset
0 Hz

8DPSK/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



## RF Conducted Spurious Emissions

### Result Table

Mode	Channel	Pref [dBm]	Puw[dBm]	Verdict
GFSK	LCH	5.509	<Limit	PASS
GFSK	MCH	5.217	<Limit	PASS
GFSK	HCH	5.243	<Limit	PASS
$\pi/4$ DQPSK	LCH	3.883	<Limit	PASS
$\pi/4$ DQPSK	MCH	3.552	<Limit	PASS
$\pi/4$ DQPSK	HCH	3.427	<Limit	PASS
8DPSK	LCH	3.907	<Limit	PASS
8DPSK	MCH	3.573	<Limit	PASS
8DPSK	HCH	2.754	<Limit	PASS

### Test Graph

