

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	-1.116	Off	-47.827	-21.12	PASS
			-1.315	On	-47.666	-21.32	PASS
GFSK	HCH	2480	-2.286	Off	-45.587	-22.29	PASS
			-2.423	On	-48.384	-22.42	PASS
$\pi/4$ DQPSK	LCH	2402	-6.280	Off	-47.373	-26.28	PASS
			-6.501	On	-49.176	-26.5	PASS
$\pi/4$ DQPSK	HCH	2480	-7.872	Off	-37.507	-27.87	PASS
			-7.765	On	-45.142	-27.77	PASS

Test Graph

Graphs

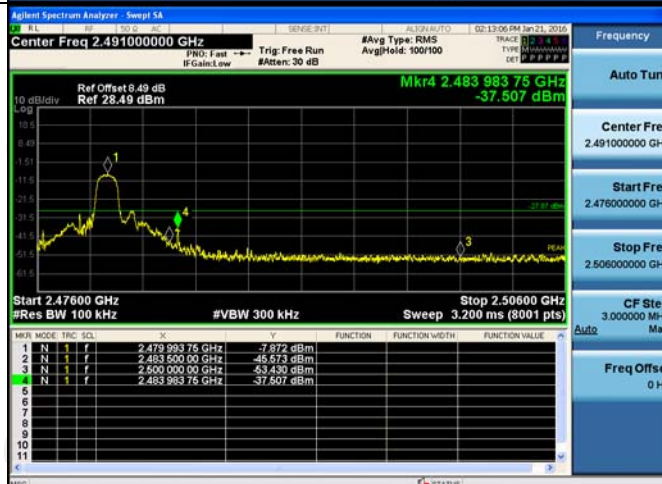


GFSK/HCH/No Hop	Agilent Spectrum Analyzer - Sweep SA Center Freq 2.491000000 GHz Ref Offset 8.49 dB Ref 28.49 dBm Mkr4 2.483 886 25 GHz -45.587 dBm Start 2.47600 GHz #Res BW 100 kHz #VBW 300 kHz Stop 2.50600 GHz Sweep 3.200 ms (8001 pts) <table><thead><tr><th>MNR</th><th>MODE</th><th>TRC</th><th>SCL</th><th>F</th><th>X</th><th>Y</th><th>FUNCTION</th><th>FUNCTION WIDTH</th><th>FUNCTION VALUE</th></tr></thead><tbody><tr><td>1</td><td>N</td><td>1</td><td>f</td><td></td><td>2.479 978 76 GHz</td><td>-2.296 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>1</td><td>f</td><td></td><td>2.483 500 00 GHz</td><td>-46.110 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>N</td><td>1</td><td>f</td><td></td><td>2.490 000 00 GHz</td><td>-52.135 dBm</td><td></td><td></td><td></td></tr><tr><td>4</td><td>N</td><td>1</td><td>f</td><td></td><td>2.483 886 25 GHz</td><td>-45.587 dBm</td><td></td><td></td><td></td></tr></tbody></table> 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	MNR	MODE	TRC	SCL	F	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f		2.479 978 76 GHz	-2.296 dBm				2	N	1	f		2.483 500 00 GHz	-46.110 dBm				3	N	1	f		2.490 000 00 GHz	-52.135 dBm				4	N	1	f		2.483 886 25 GHz	-45.587 dBm			
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GFSK/HCH/Hop	Agilent Spectrum Analyzer - Sweep SA Center Freq 2.491000000 GHz Ref Offset 8.49 dB Ref 28.49 dBm Mkr4 2.484 49 GHz -48.384 dBm Start 2.47600 GHz #Res BW 100 kHz #VBW 300 kHz Stop 2.50600 GHz Sweep 2.933 ms (1001 pts) <table><thead><tr><th>MNR</th><th>MODE</th><th>TRC</th><th>SCL</th><th>F</th><th>X</th><th>Y</th><th>FUNCTION</th><th>FUNCTION WIDTH</th><th>FUNCTION VALUE</th></tr></thead><tbody><tr><td>1</td><td>N</td><td>1</td><td>f</td><td></td><td>2.477 95 GHz</td><td>-2.423 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>1</td><td>f</td><td></td><td>2.483 50 GHz</td><td>-52.264 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>N</td><td>1</td><td>f</td><td></td><td>2.500 00 GHz</td><td>-53.749 dBm</td><td></td><td></td><td></td></tr><tr><td>4</td><td>N</td><td>1</td><td>f</td><td></td><td>2.484 49 GHz</td><td>-48.384 dBm</td><td></td><td></td><td></td></tr></tbody></table> 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	MNR	MODE	TRC	SCL	F	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f		2.477 95 GHz	-2.423 dBm				2	N	1	f		2.483 50 GHz	-52.264 dBm				3	N	1	f		2.500 00 GHz	-53.749 dBm				4	N	1	f		2.484 49 GHz	-48.384 dBm			
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$\pi/4$ DQPSK/LCH/No Hop	Agilent Spectrum Analyzer - Sweep SA Center Freq 2.390000000 GHz Ref Offset 8.59 dB Ref 28.59 dBm Mkr4 2.388 331 25 GHz -47.373 dBm Start 2.37500 GHz #Res BW 100 kHz #VBW 300 kHz Stop 2.40500 GHz Sweep 3.200 ms (8001 pts) <table><thead><tr><th>MNR</th><th>MODE</th><th>TRC</th><th>SCL</th><th>F</th><th>X</th><th>Y</th><th>FUNCTION</th><th>FUNCTION WIDTH</th><th>FUNCTION VALUE</th></tr></thead><tbody><tr><td>1</td><td>N</td><td>1</td><td>f</td><td></td><td>2.401 881 25 GHz</td><td>-6.289 dBm</td><td></td><td></td><td></td></tr><tr><td>2</td><td>N</td><td>1</td><td>f</td><td></td><td>2.400 000 00 GHz</td><td>-34.085 dBm</td><td></td><td></td><td></td></tr><tr><td>3</td><td>N</td><td>1</td><td>f</td><td></td><td>2.390 000 00 GHz</td><td>-52.517 dBm</td><td></td><td></td><td></td></tr><tr><td>4</td><td>N</td><td>1</td><td>f</td><td></td><td>2.388 331 25 GHz</td><td>-47.373 dBm</td><td></td><td></td><td></td></tr></tbody></table> 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	MNR	MODE	TRC	SCL	F	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE	1	N	1	f		2.401 881 25 GHz	-6.289 dBm				2	N	1	f		2.400 000 00 GHz	-34.085 dBm				3	N	1	f		2.390 000 00 GHz	-52.517 dBm				4	N	1	f		2.388 331 25 GHz	-47.373 dBm			
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$\pi/4$ DQPSK/LCH/Hop



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



$\pi/4$ DQPSK/HCH/Hop

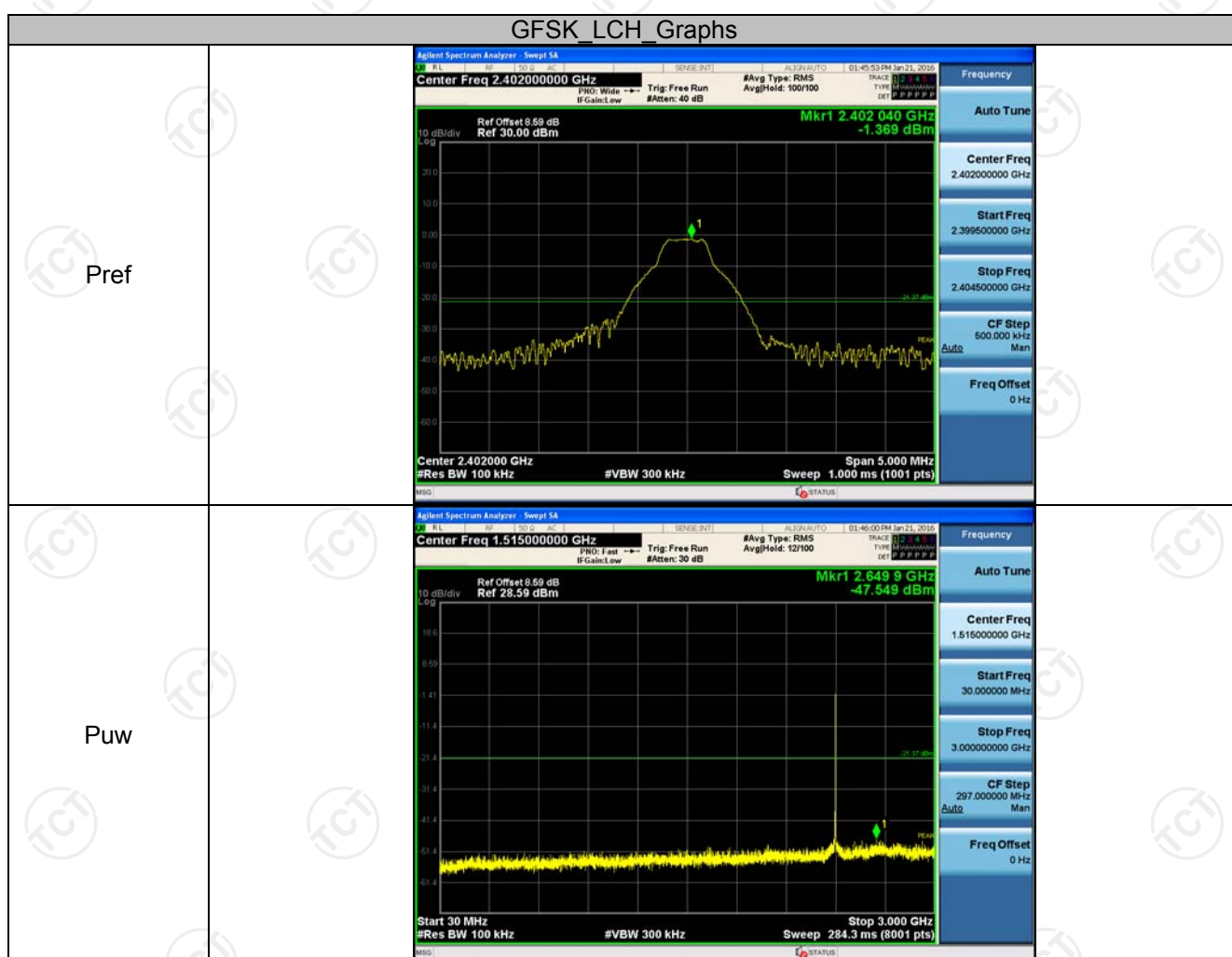


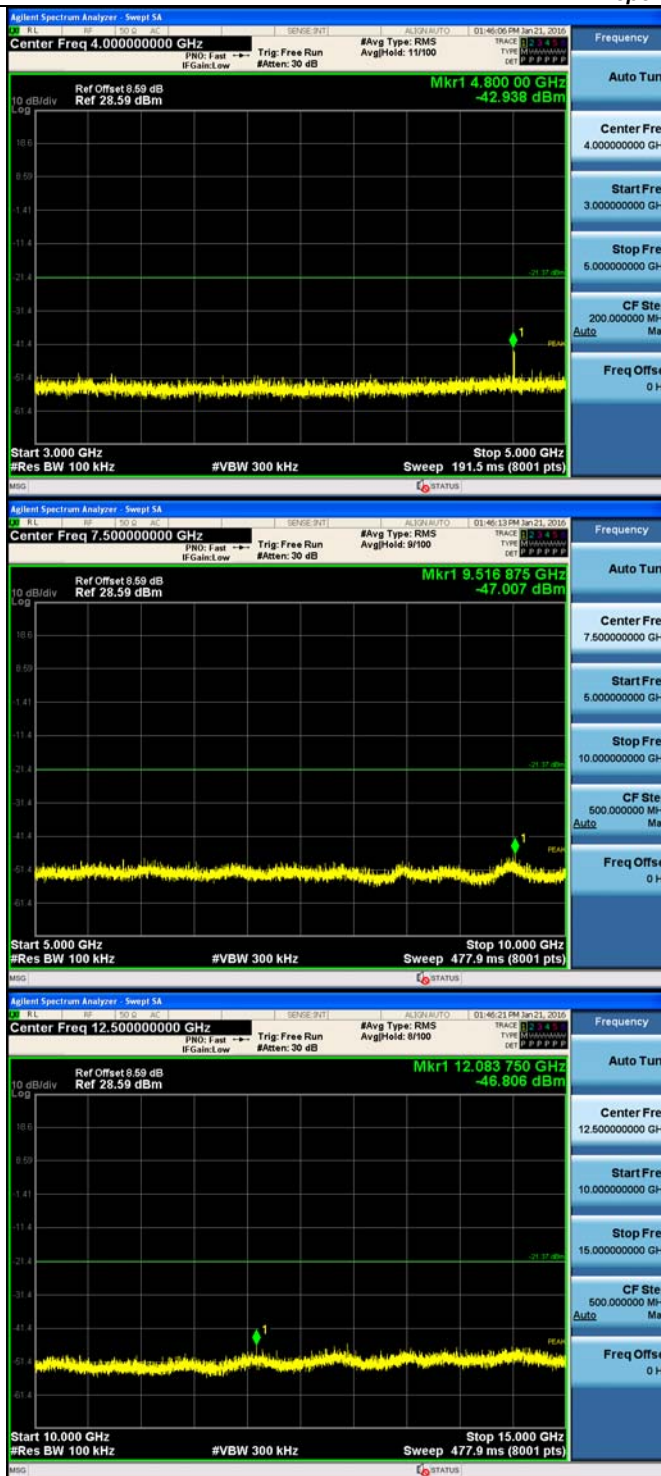
RF Conducted Spurious Emissions

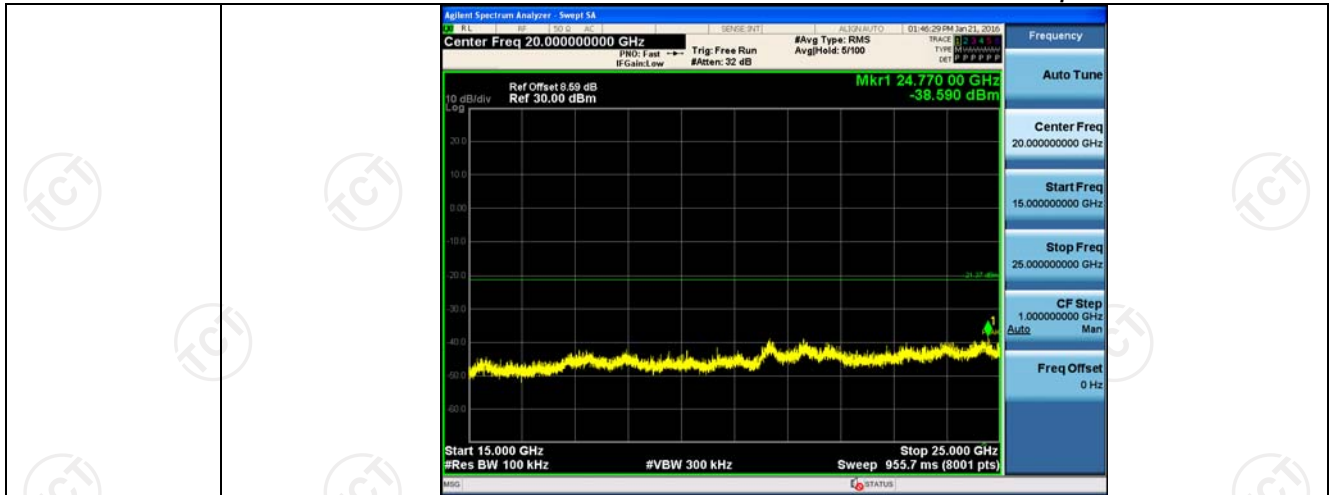
Result Table

Mode	Channel	Pref [dBm]	Puw[dBm]	Verdict
GFSK	LCH	-1.369	<Limit	PASS
GFSK	MCH	-2.054	<Limit	PASS
GFSK	HCH	-2.509	<Limit	PASS
$\pi/4$ DQPSK	LCH	-2.846	<Limit	PASS
$\pi/4$ DQPSK	MCH	-4.219	<Limit	PASS
$\pi/4$ DQPSK	HCH	-4.517	<Limit	PASS

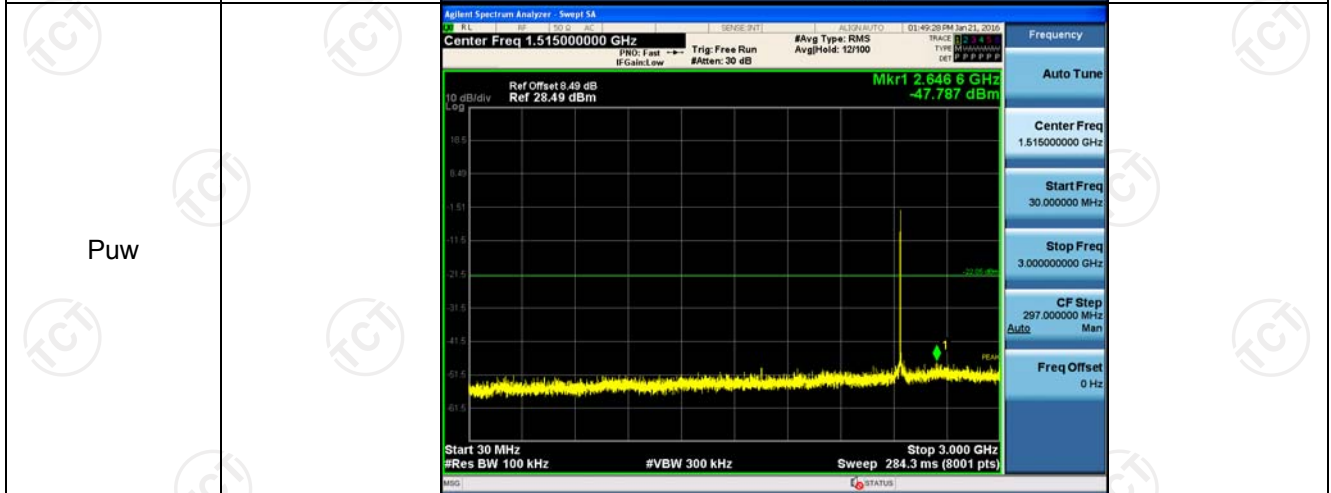
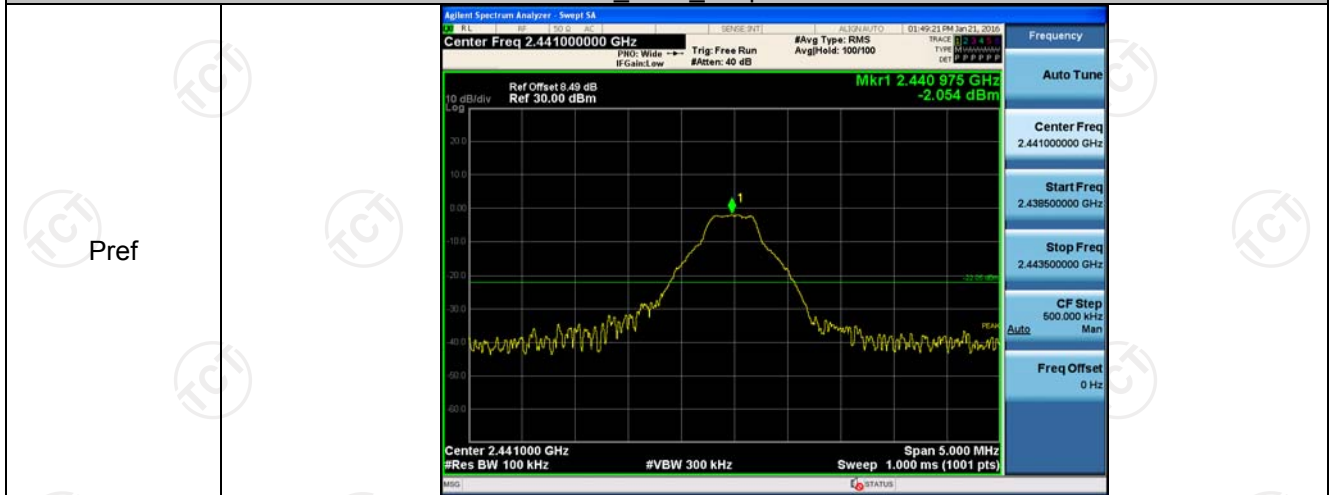
Test Graph

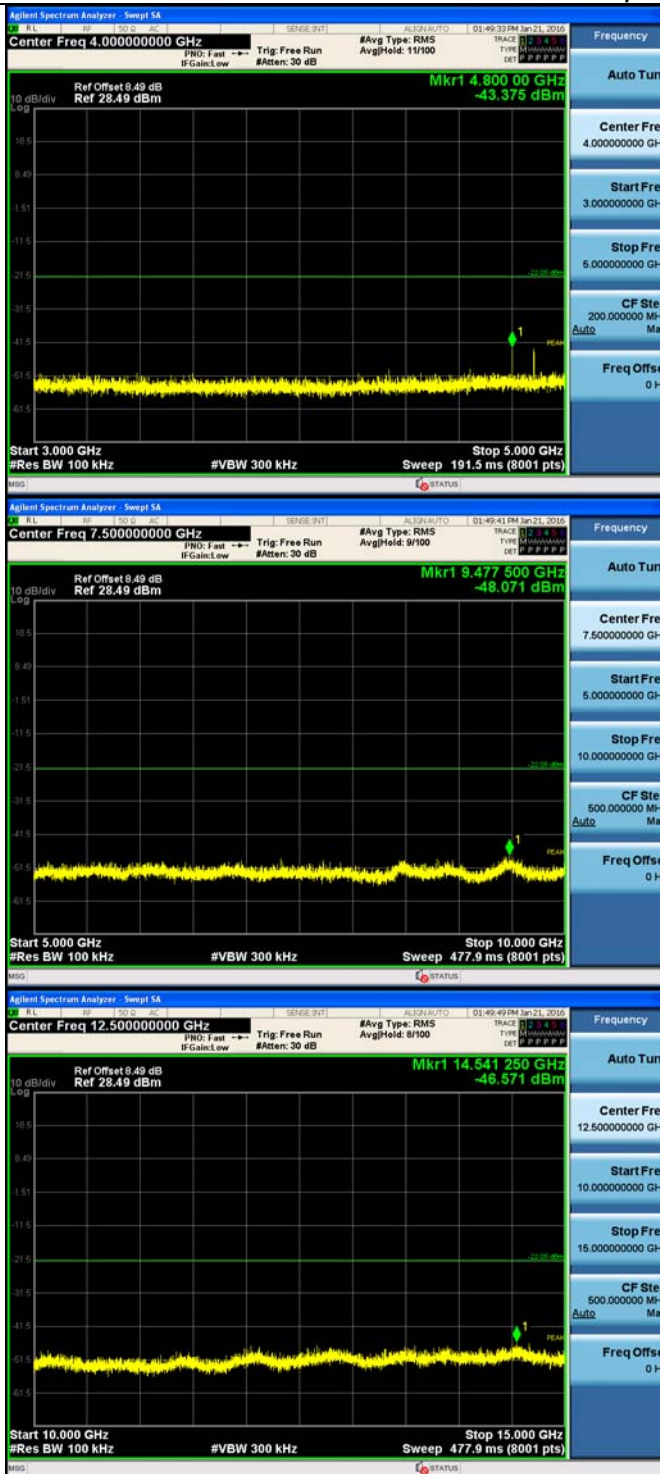


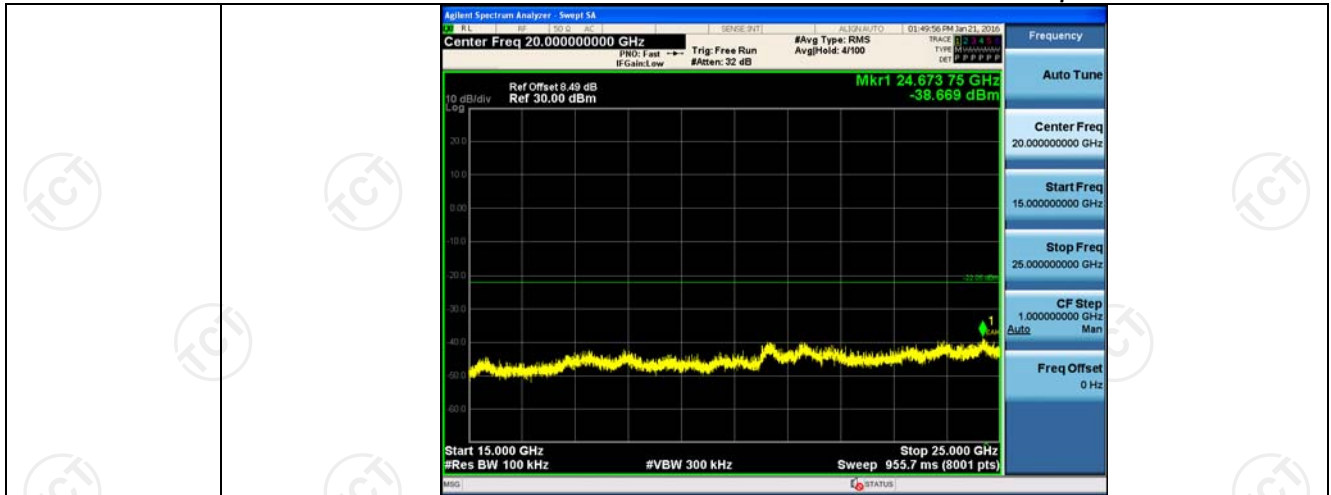




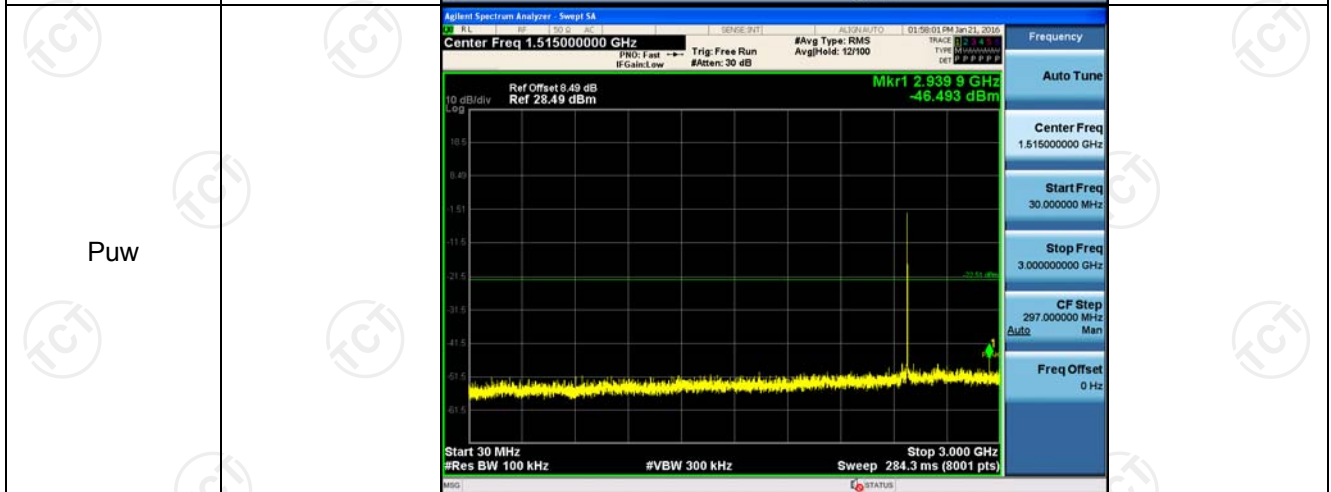
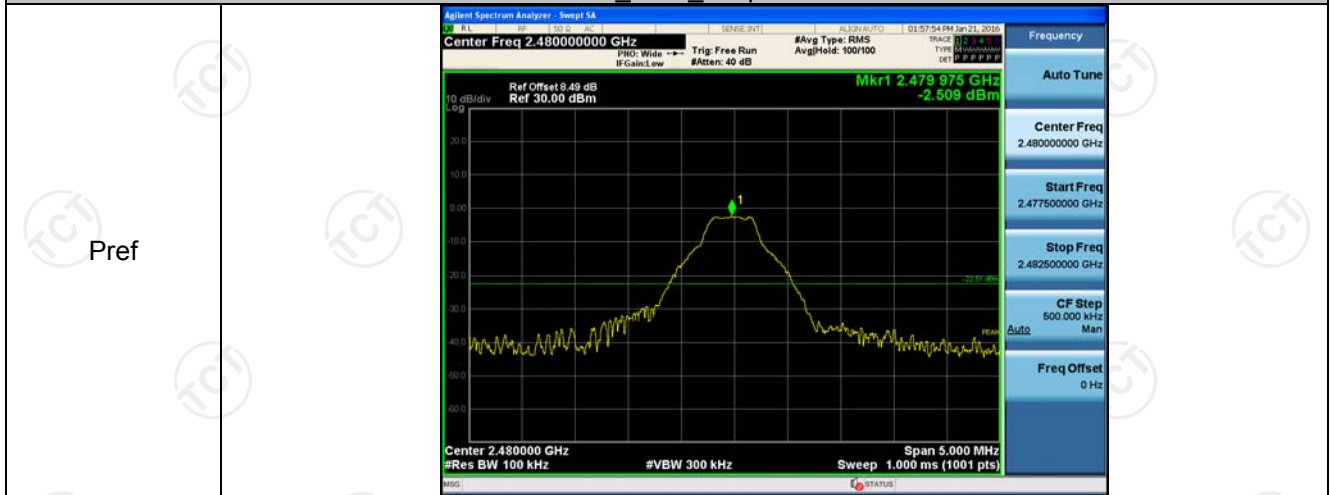
GFSK_MCH_Graphs

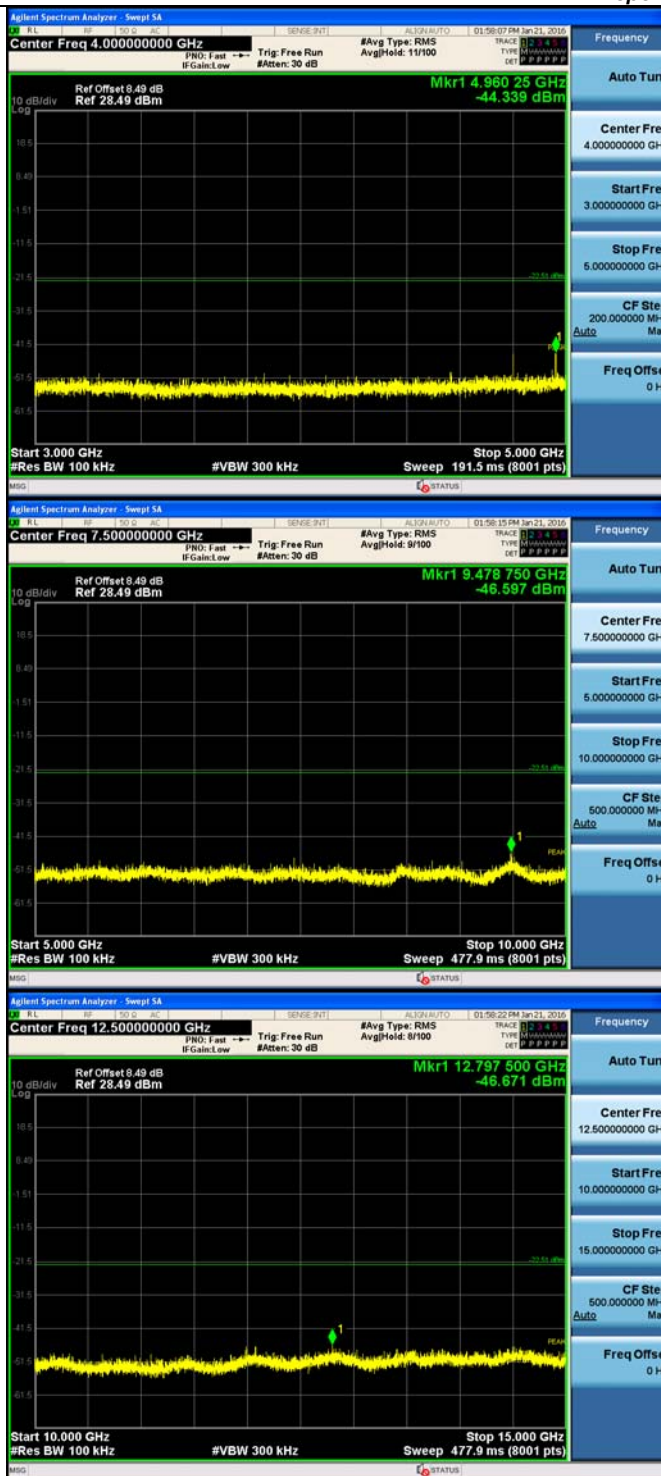


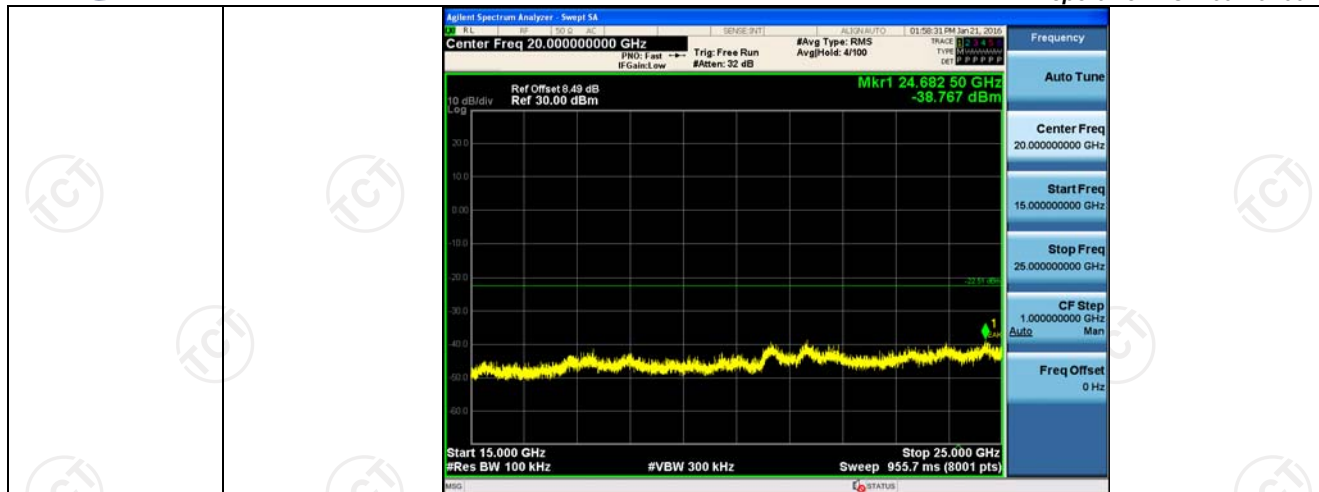




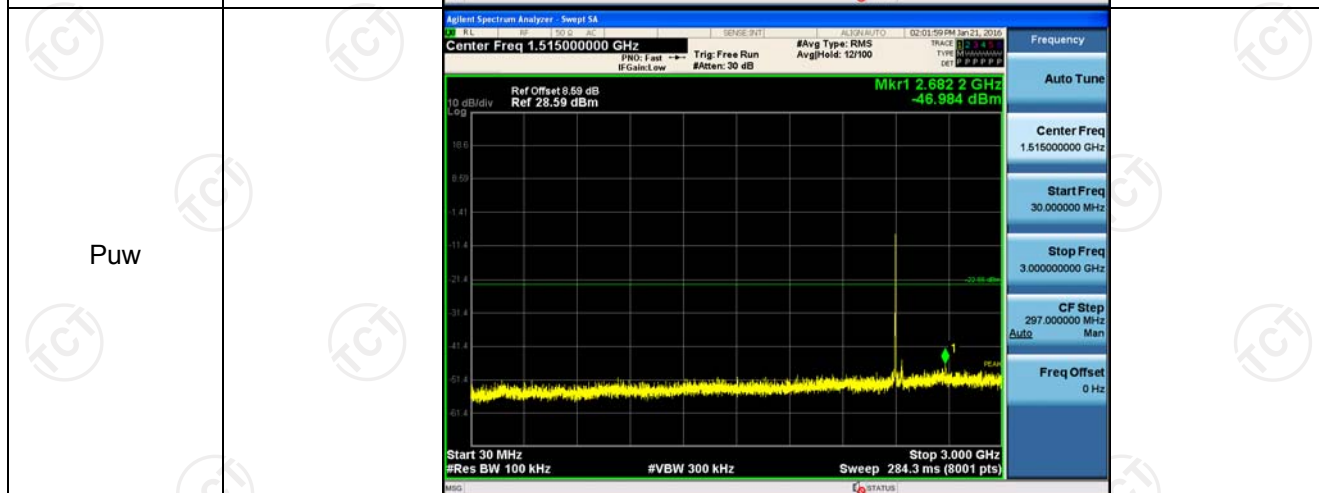
GFSK HCH_Graphs

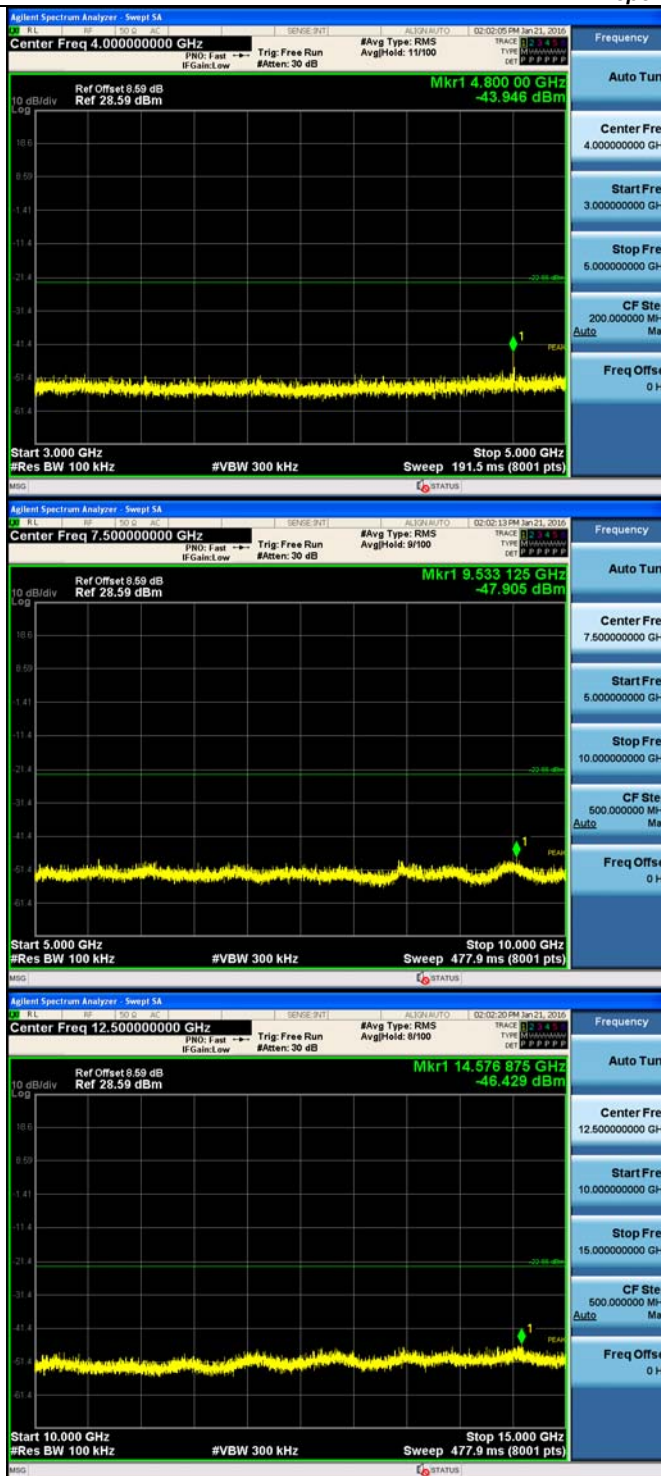


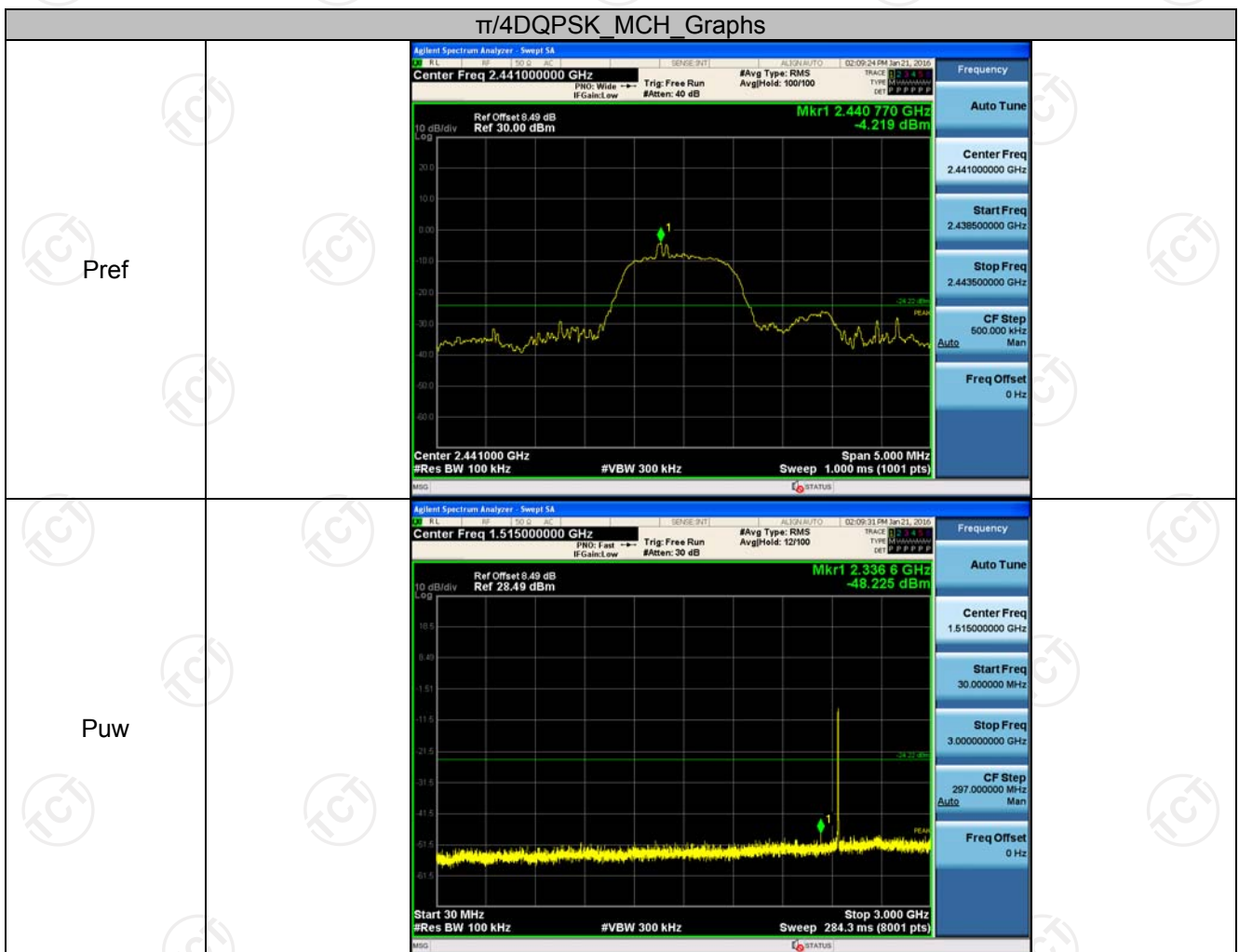
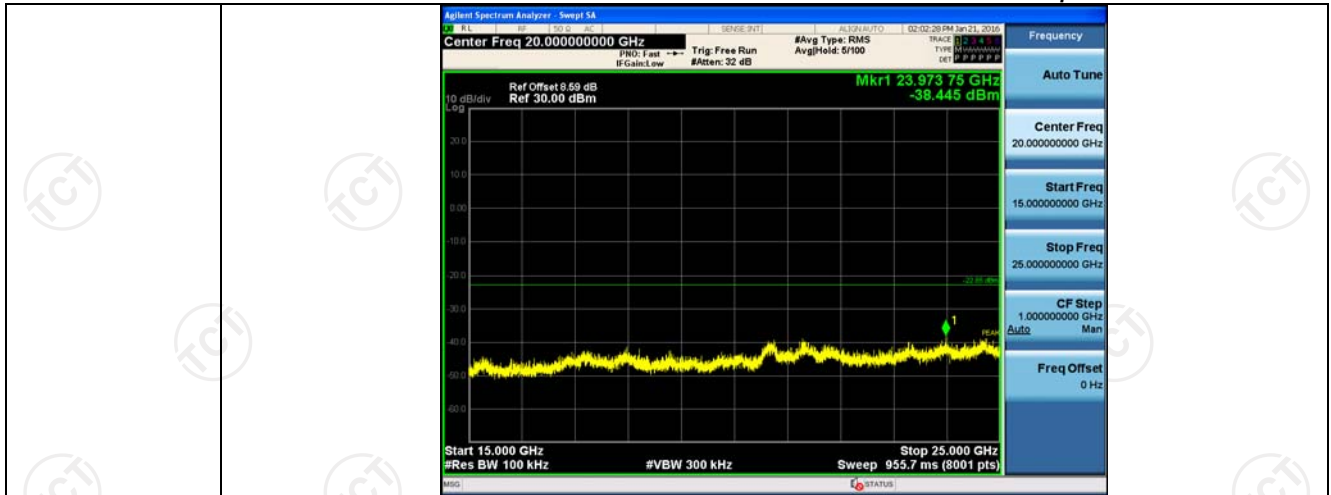


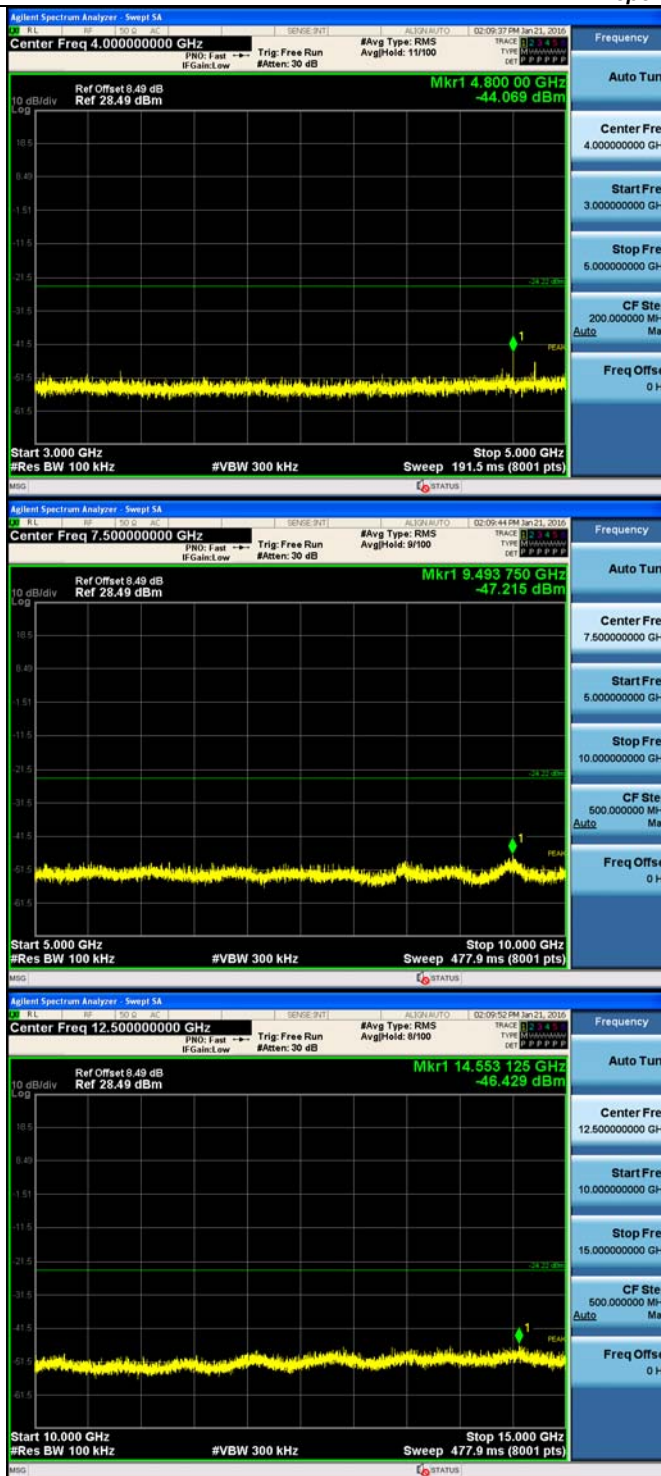


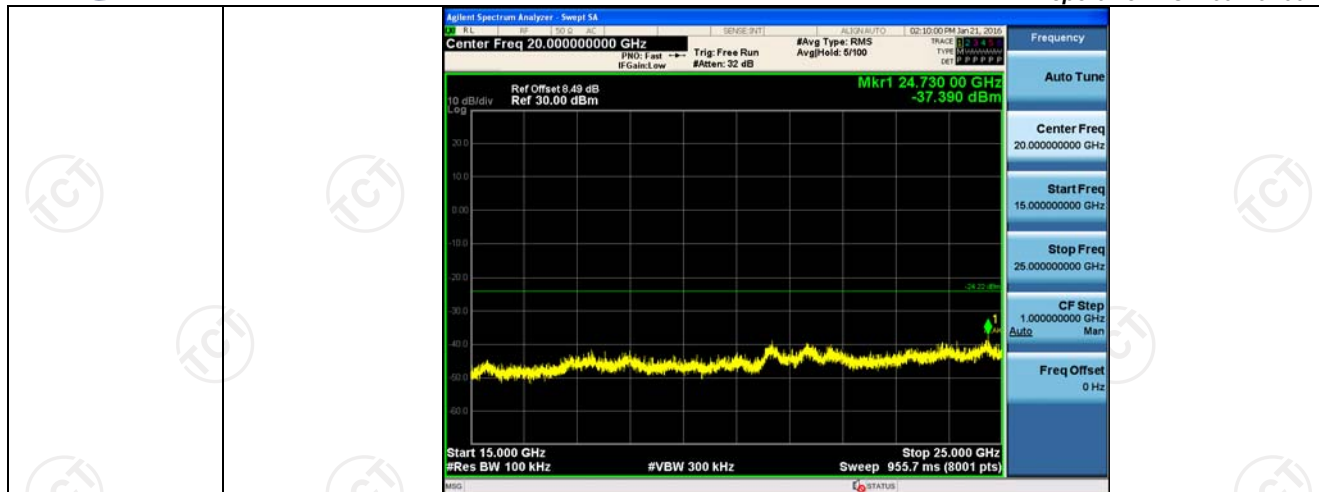
$\pi/4$ DQPSK LCH_Graphs



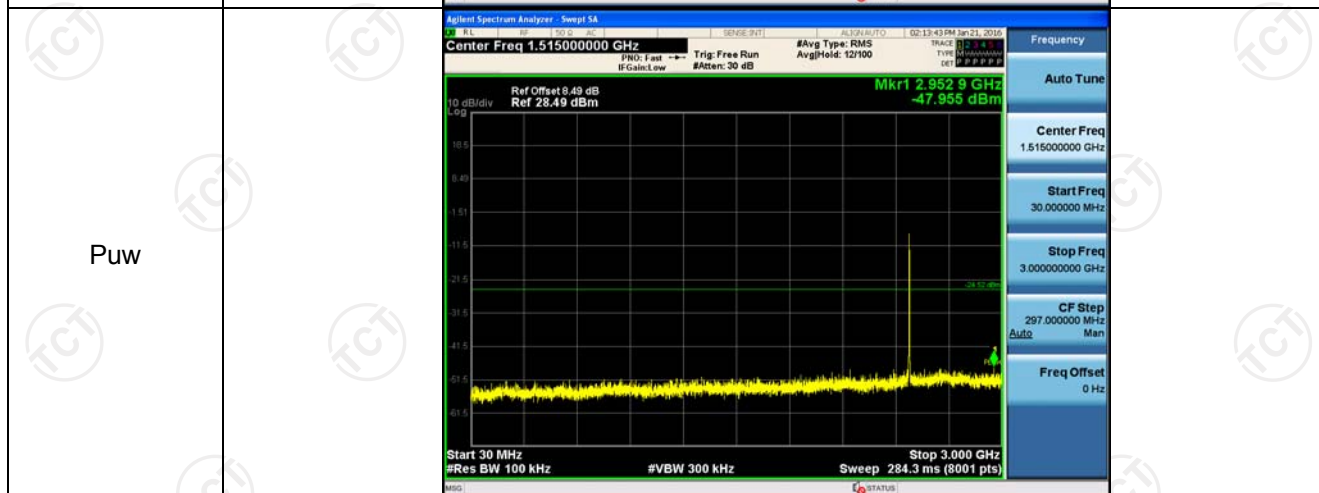


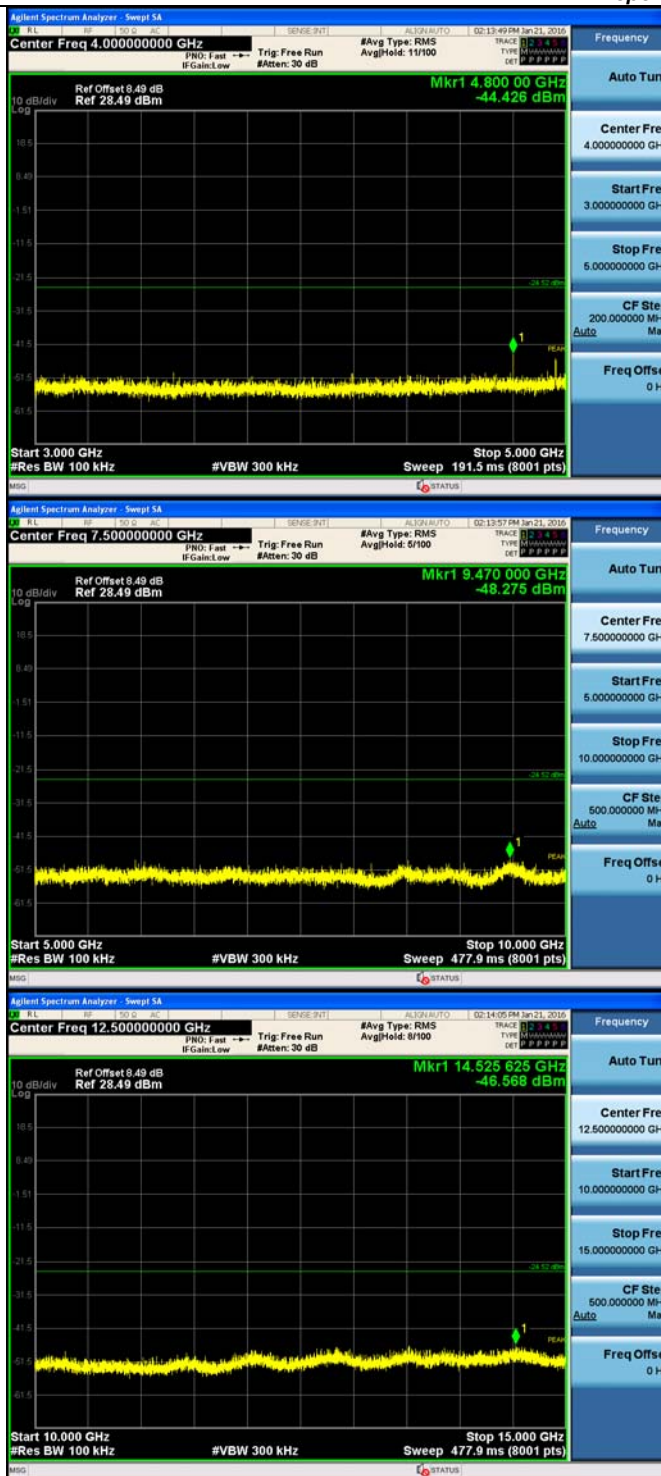


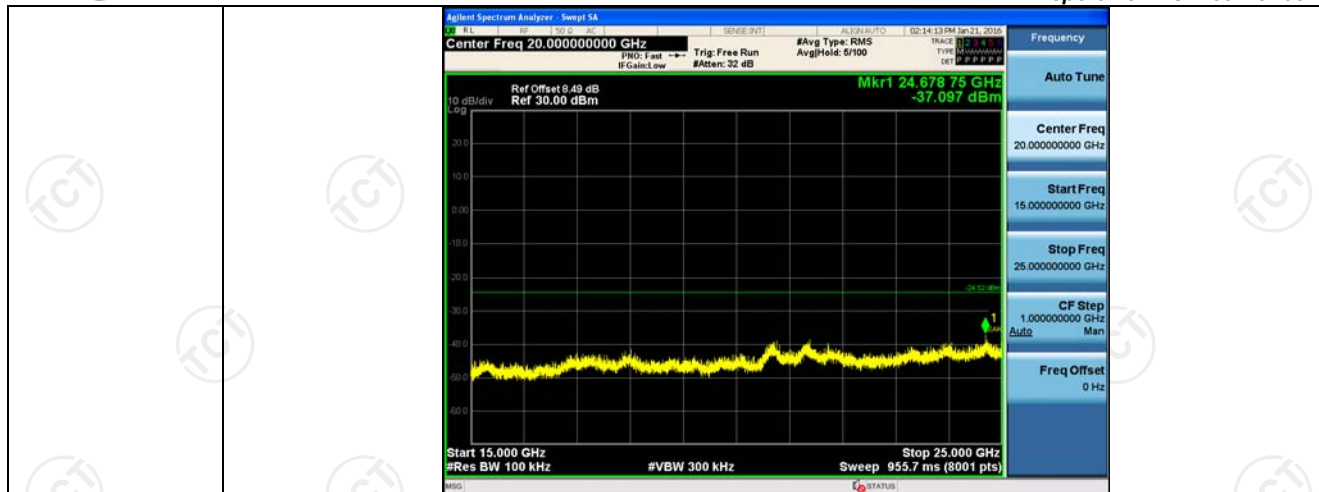




$\pi/4$ DQPSK_HCH_Graphs



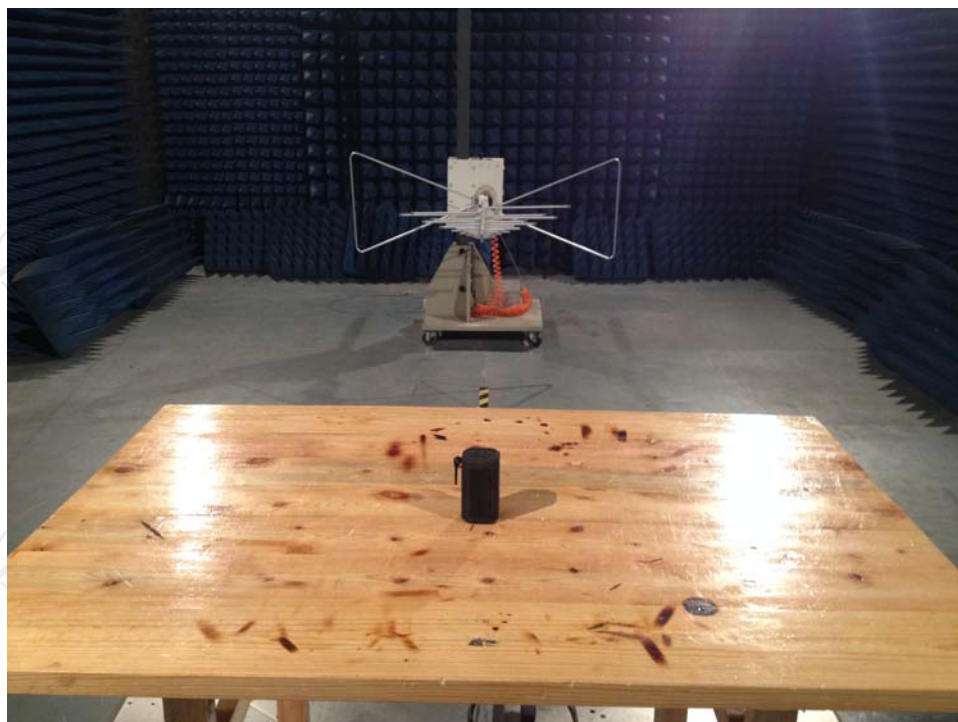




*****END OF REPORT*****

Appendix B: Photographs of Test Setup

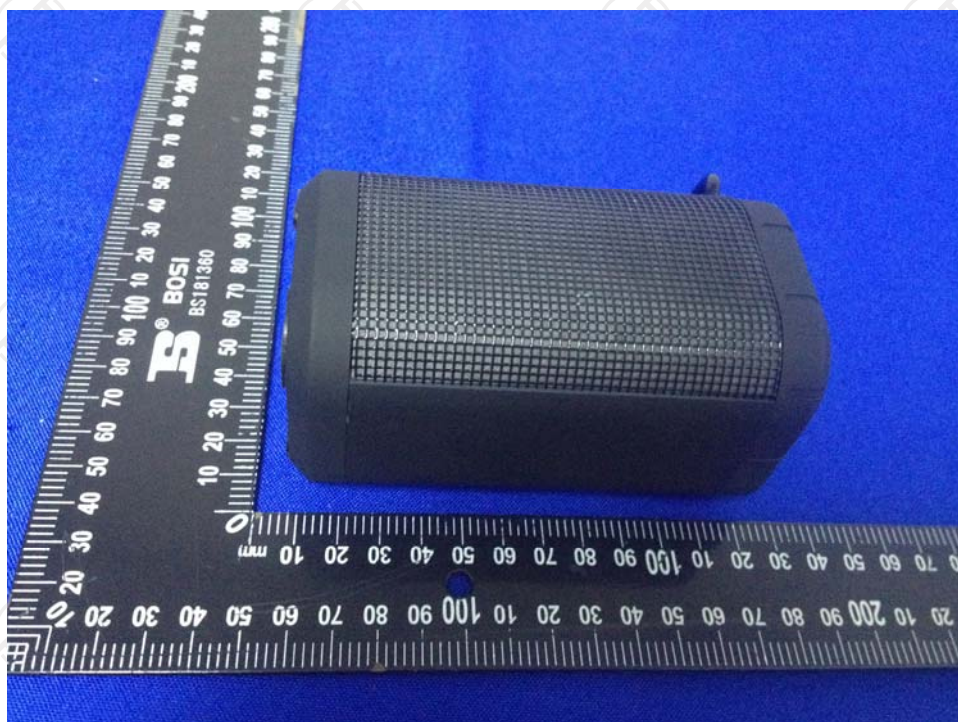
Radiated Emission

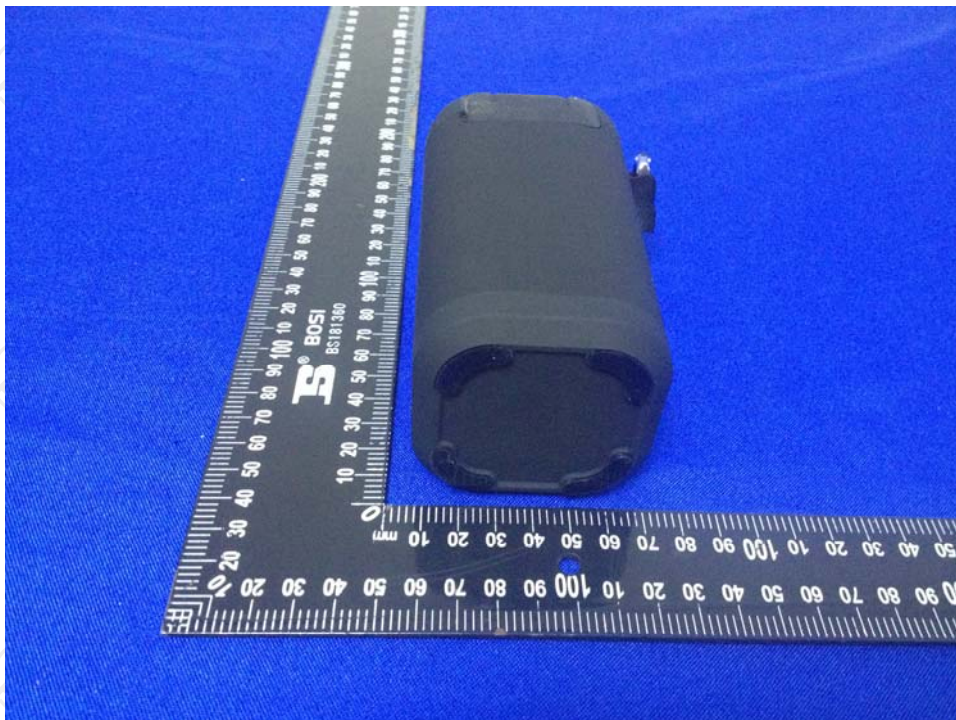


CE



Appendix C: Photographs of EUT
Model: CQL1528-B
External Photos







Model: CQL1528-B
Internal Photos



