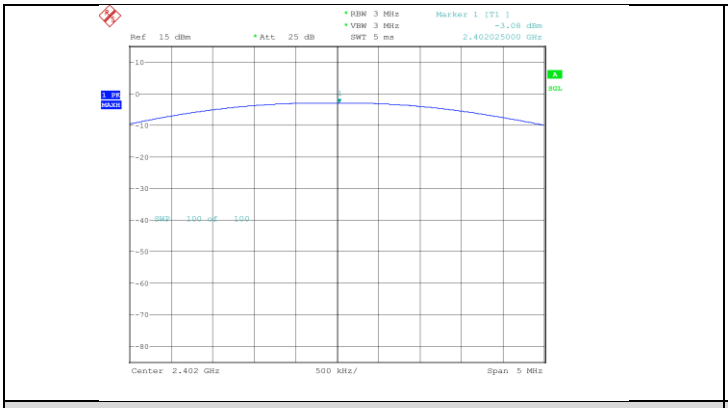
Conducted Output Power

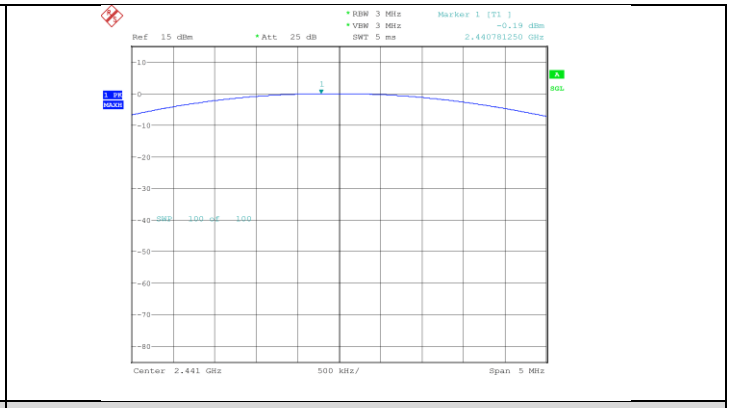
Test Result

Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Max. Avg. Power (dBm)	Limit (dBm)	Result
GFSK	DH5	0	-3.078	0.492	None	≤30	PASS
		39	-0.194	0.956	None		PASS
		78	0.244	1.058	None		PASS
π/4DQPSK	2-DH5	0	-1.199	0.759	None	≤20.97	PASS
		39	1.635	1.457	None		PASS
		78	2.085	1.616	None		PASS
8DPSK	3-DH5	0	-0.948	0.804	None		PASS
		39	1.819	1.520	None		PASS
		78	2.248	1.678	None		PASS

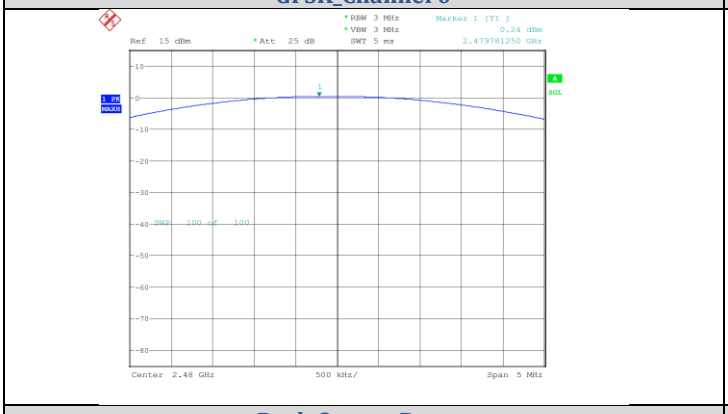
Test Graphs



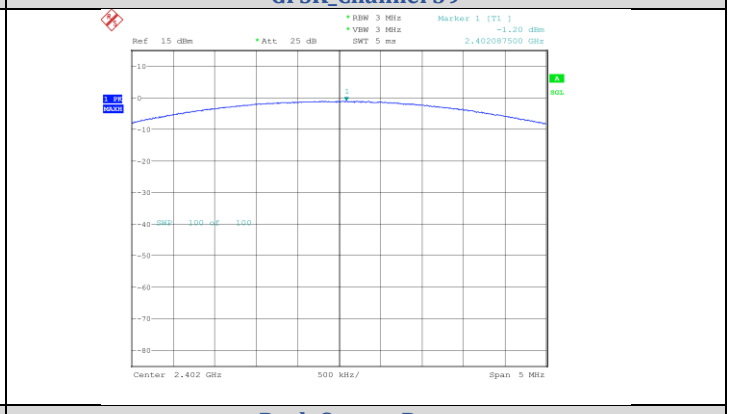
Peak Output Power
GFSK_Channel 0



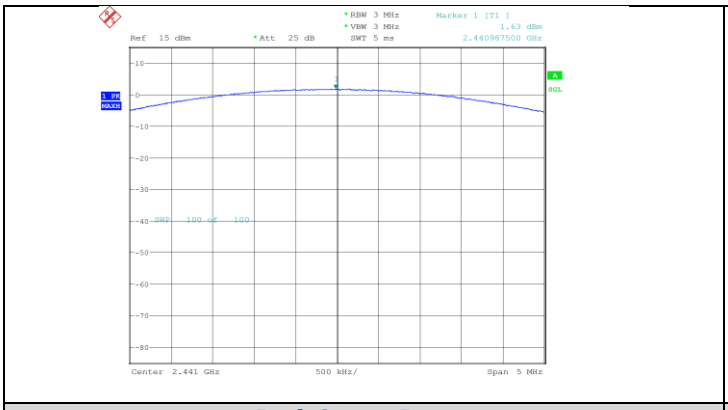
Peak Output Power
GFSK_Channel 39



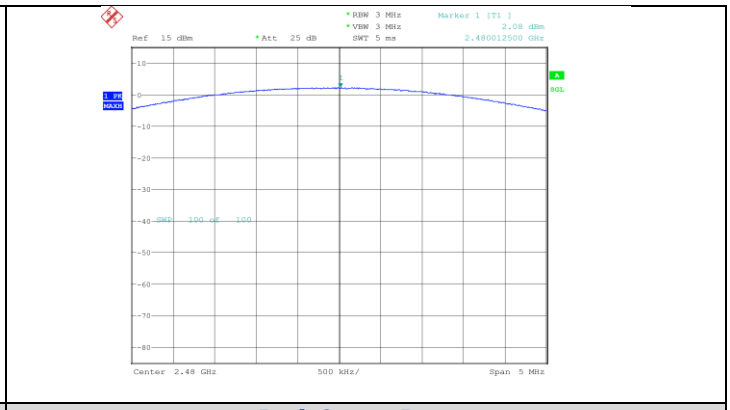
Peak Output Power
GFSK_Channel 78



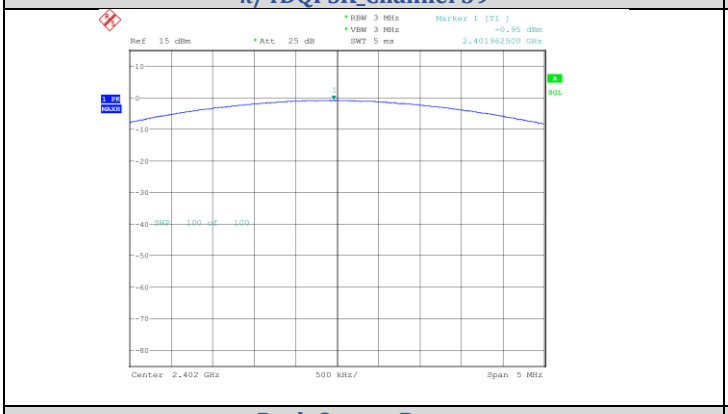
Peak Output Power
π/4DQPSK_Channel 0



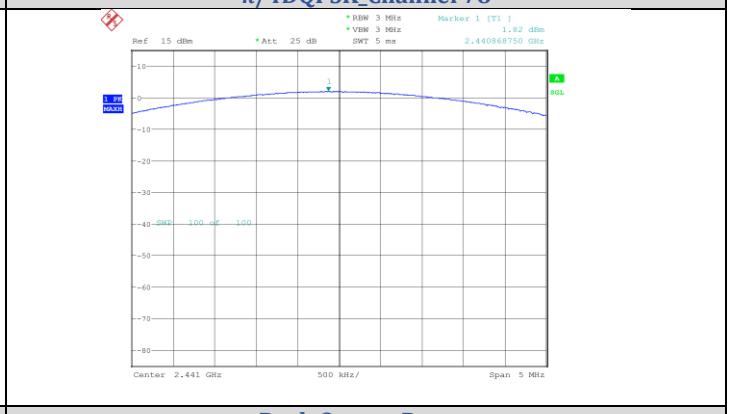
Peak Output Power
π/4DQPSK_Channel 39



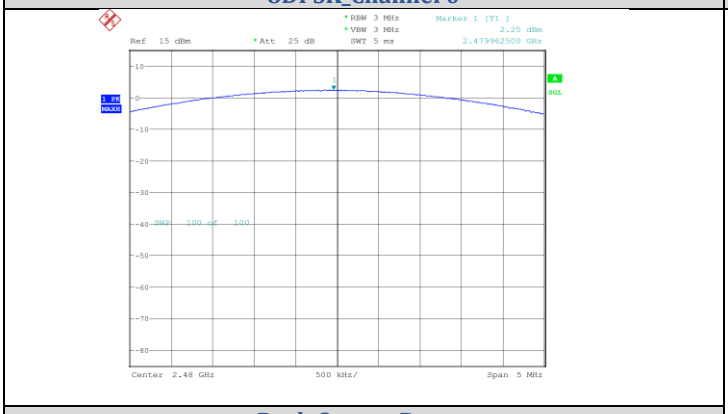
Peak Output Power
π/4DQPSK_Channel 78



Peak Output Power
8DPSK_Channel 0



Peak Output Power
8DPSK_Channel 39



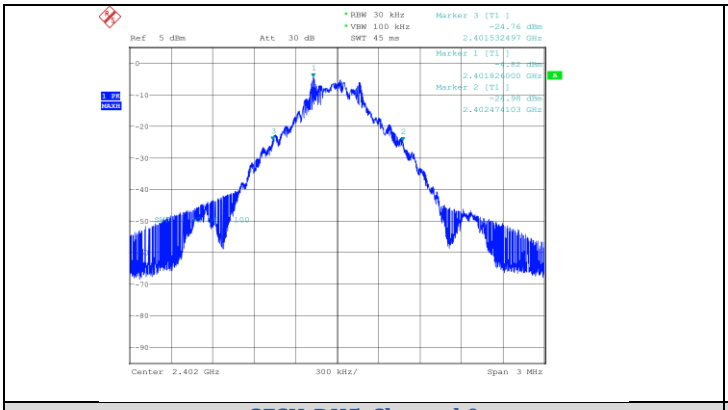
Peak Output Power
8DPSK_Channel 78

20dB Bandwidth

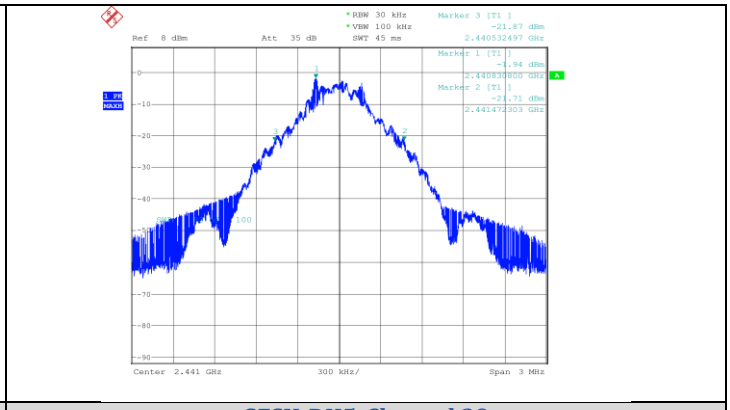
Test Result

Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.9400
	39	2441 MHz	0.9400
	78	2480 MHz	0.9400
π/4DQPSK	0	2402 MHz	1.290
	39	2441 MHz	1.290
	78	2480 MHz	1.290
8DPSK	0	2402 MHz	1.290
	39	2441 MHz	1.290
	78	2480 MHz	1.290

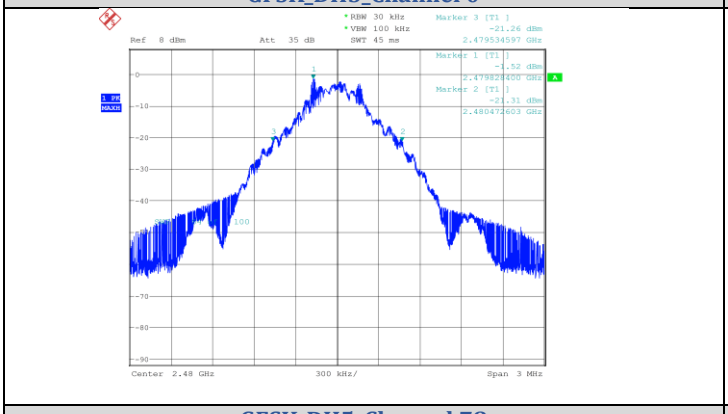
Test Graphs



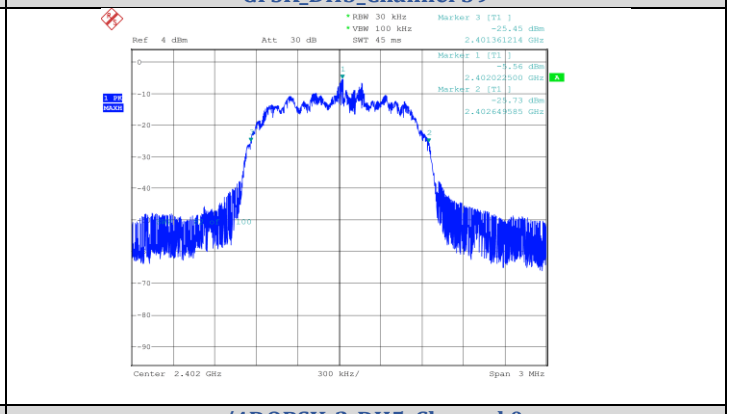
GFSK_DH5_Channel 0



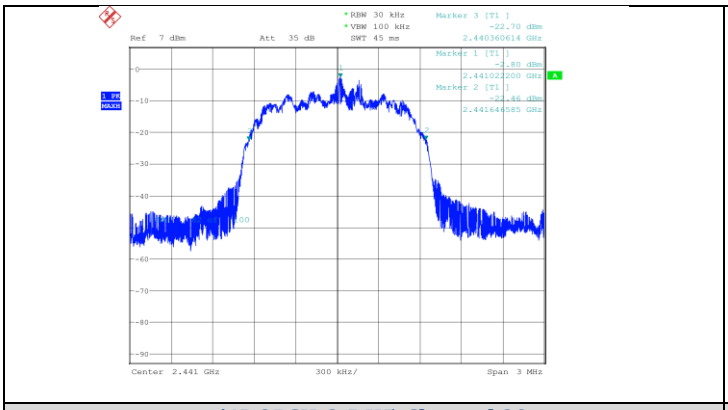
GFSK_DH5_Channel 39



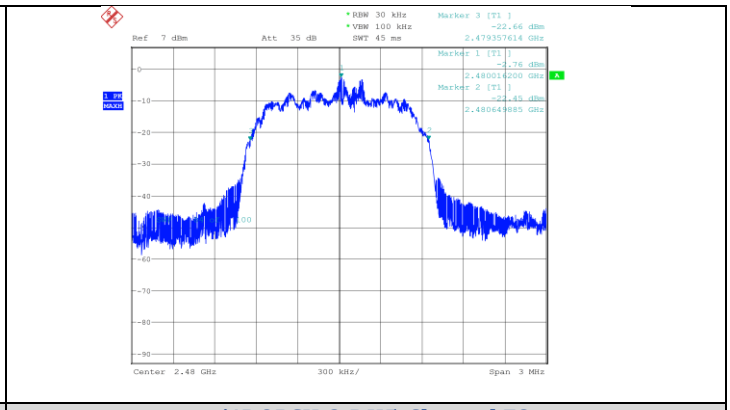
GFSK_DH5_Channel 78



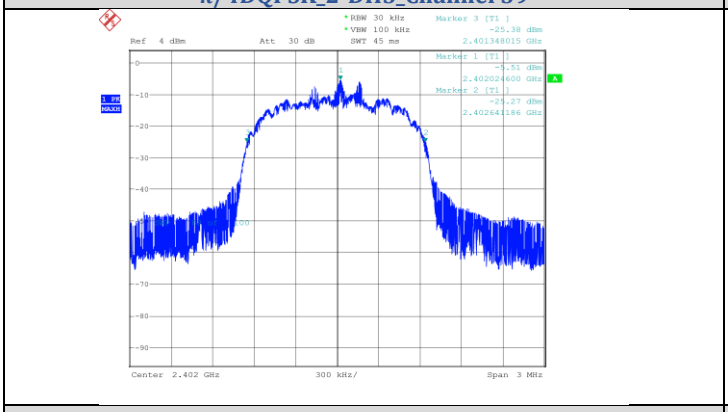
π/4DQPSK_2-DH5_Channel 0



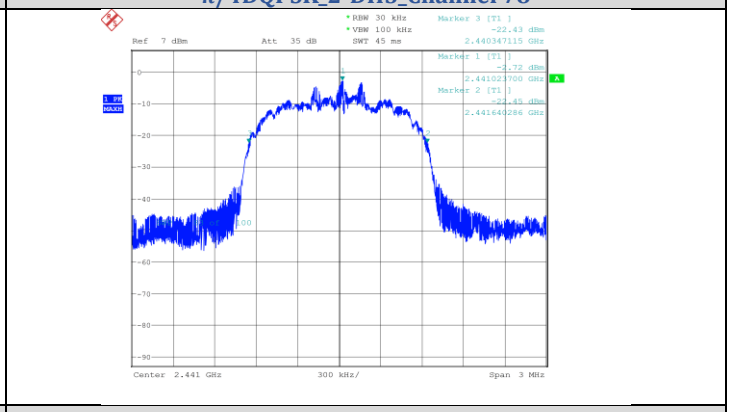
π/4DQPSK_2-DH5_Channel 39



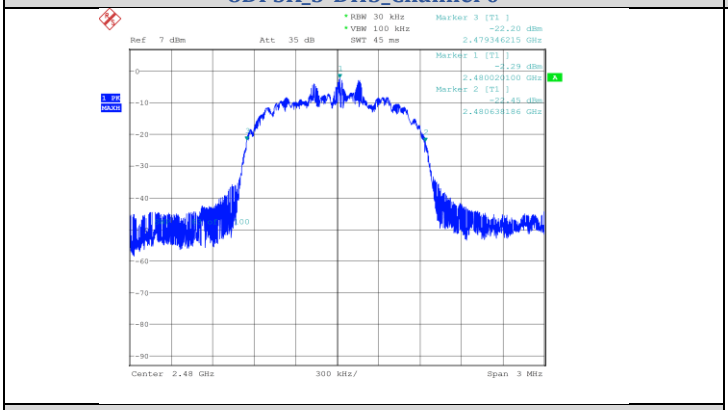
π/4DQPSK_2-DH5_Channel 78



8DPSK_3-DH5_Channel 0



8DPSK_3-DH5_Channel 39



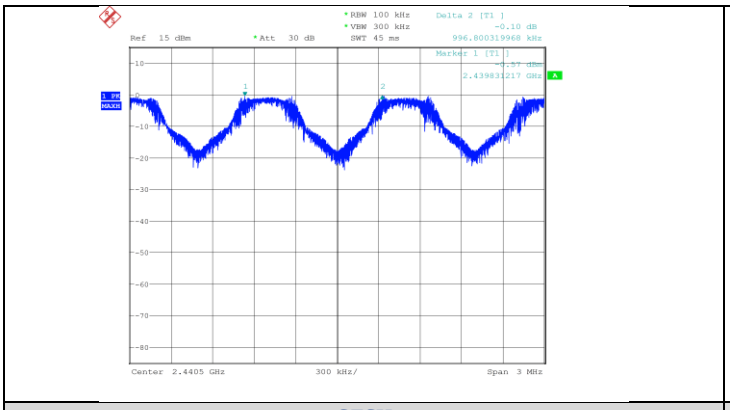
8DPSK_3-DH5_Channel 78

Carrier Frequencies Separation

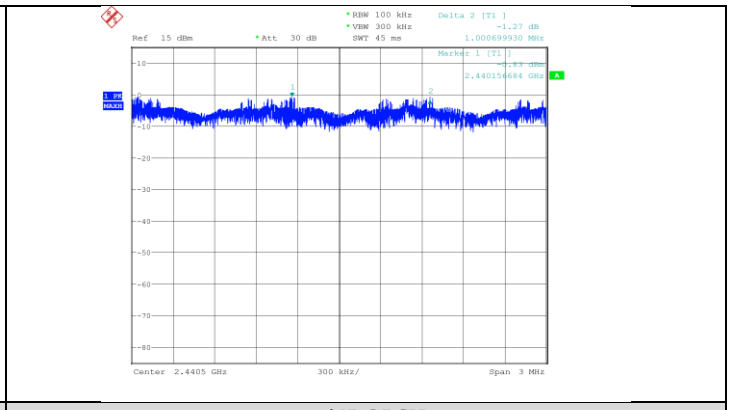
Test Result

Modulation	Packet	Left Center frequency (MHz)	Right Center frequency (MHz)	Hopping Frequency Separation (MHz)	Limit (MHz)	Result
GFSK	DH5	2439.8312	2440.828	0.9968	0.627	PASS
π/4DQPSK	2-DH5	2440.1567	2441.1574	1.0007	0.86	PASS
8DPSK	3-DH5	2439.8258	2440.8367	1.0109	0.86	PASS

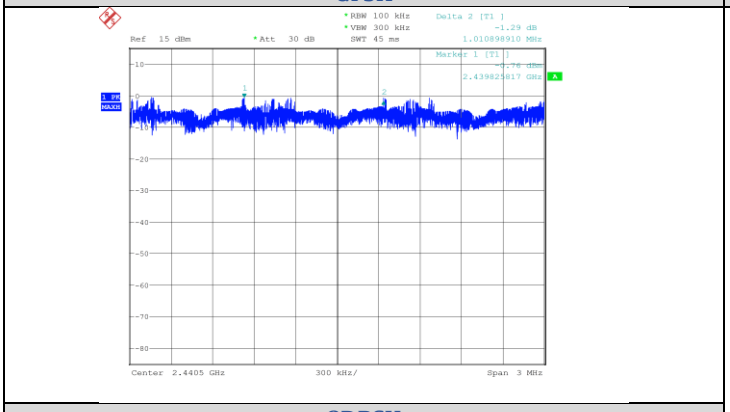
Test Graphs



GFSK



π/4DQPSK



8DPSK

Conducted Out Of Band Emission

Test Result

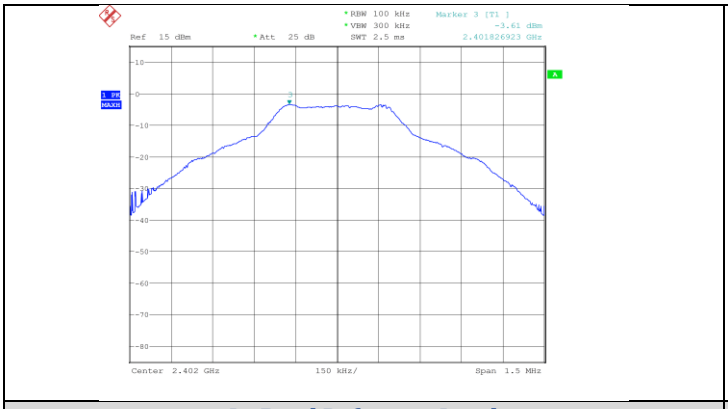
Non-Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	0	2398.20	-58.599	-23.61	-34.989	PASS
			2400.00	-60.151	-23.61	-36.541	PASS
			4803.30	-50.548	-23.61	-26.938	PASS
			7207.00	-49.880	-23.61	-26.270	PASS
			9607.30	-49.619	-23.61	-26.009	PASS
			24682.9	-41.915	-23.61	-18.305	PASS
		39	4882.34	-50.604	-20.65	-29.954	PASS
			7323.49	-48.420	-20.65	-27.770	PASS
			9764.65	-47.926	-20.65	-27.276	PASS
			24640.4	-42.578	-20.65	-21.928	PASS
		78	2483.50	-58.886	-20.2	-38.686	PASS
			4960.58	-50.321	-20.2	-30.121	PASS
			7439.18	-50.297	-20.2	-30.097	PASS
			9920.29	-48.929	-20.2	-28.729	PASS
			24710.4	-41.942	-20.2	-21.742	PASS
π/4DQPSK	2-DH5	0	2398.86	-58.502	-23.77	-34.732	PASS
			2400.00	-59.728	-23.77	-35.958	PASS
			4803.30	-49.851	-23.77	-26.081	PASS
			7206.10	-49.896	-23.77	-26.126	PASS
			9608.20	-49.629	-23.77	-25.859	PASS
			24758.6	-42.569	-23.77	-18.799	PASS
		39	4882.34	-50.832	-20.92	-29.912	PASS
			7322.66	-50.580	-20.92	-29.660	PASS
			9763.81	-47.440	-20.92	-26.520	PASS
			24589.7	-43.148	-20.92	-22.228	PASS
		78	2483.50	-60.969	-20.41	-40.559	PASS
			4960.58	-49.519	-20.41	-29.109	PASS
			7440.02	-50.890	-20.41	-30.480	PASS
			9920.29	-49.572	-20.41	-29.162	PASS
			24693.7	-43.129	-20.41	-22.719	PASS
8DPSK	3-DH5	0	2398.47	-57.662	-23.61	-34.052	PASS
			2400.00	-59.326	-23.61	-35.716	PASS
			4804.90	-50.601	-23.61	-26.991	PASS
			7207.00	-49.582	-23.61	-25.972	PASS
			9608.20	-49.663	-23.61	-26.053	PASS
			24606.3	-43.338	-23.61	-19.728	PASS
		39	4882.34	-51.601	-20.72	-30.881	PASS
			7322.66	-49.470	-20.72	-28.750	PASS
			9764.65	-50.314	-20.72	-29.594	PASS
			24753.6	-42.901	-20.72	-22.181	PASS
		78	2483.50	-59.192	-20.25	-38.942	PASS
			4960.58	-49.563	-20.25	-29.313	PASS
			7440.02	-49.084	-20.25	-28.834	PASS
			9920.29	-50.365	-20.25	-30.115	PASS
			24647.1	-42.417	-20.25	-22.167	PASS

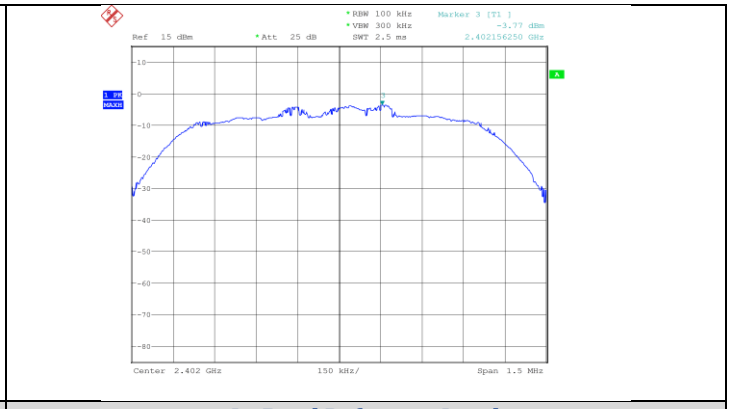
Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	Hopping	2398.87	-57.245	-23.61	-33.635	PASS
			2400.00	-59.297	-23.61	-35.687	PASS
			2483.50	-58.202	-20.15	-38.052	PASS
π/4DQPSK	2-DH5		2398.92	-57.229	-23.8	-33.429	PASS
			2400.00	-58.261	-23.8	-34.461	PASS
			2483.50	-59.354	-20.56	-38.794	PASS
8DPSK	3-DH5		2400.00	-59.758	-23.72	-36.038	PASS
			2483.50	-58.705	-20.25	-38.455	PASS

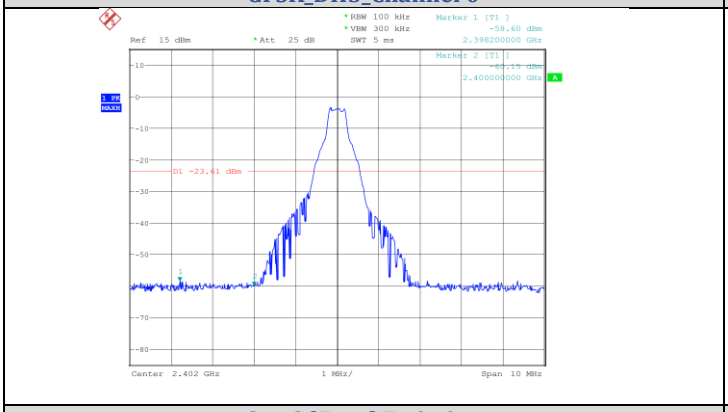
Test Graphs



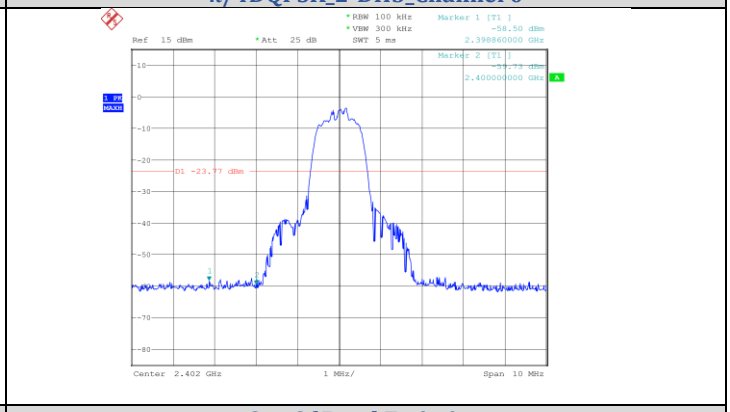
In-Band Reference Level
GFSK_DH5_Channel 0



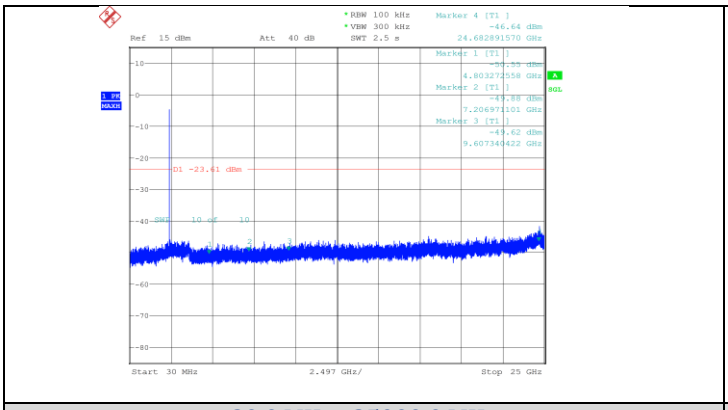
In-Band Reference Level
π/4DQPSK_2-DH5_Channel 0



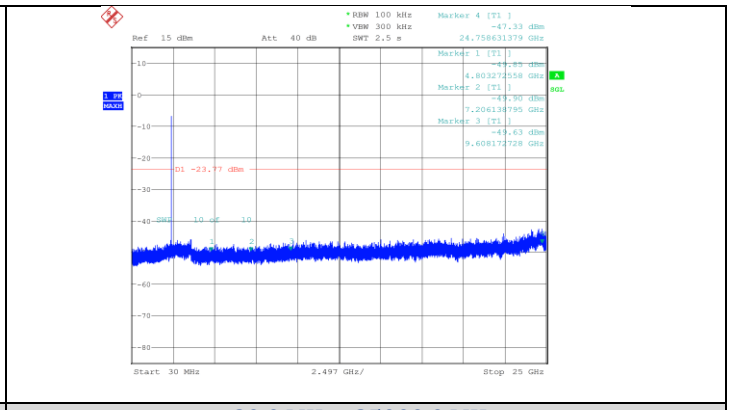
Out Of Band Emission
GFSK_DH5_Channel 0



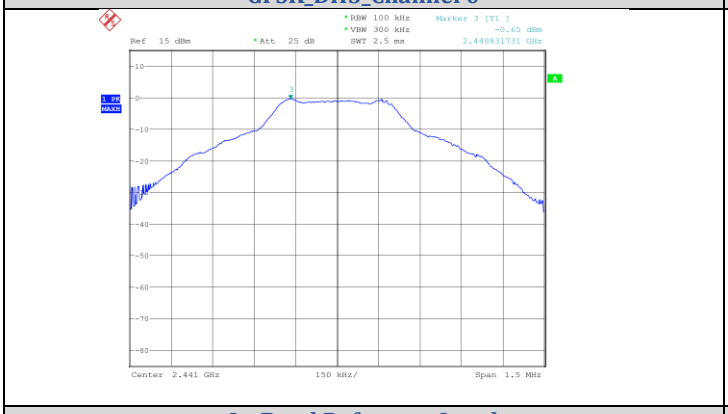
Out Of Band Emission
π/4DQPSK_2-DH5_Channel 0



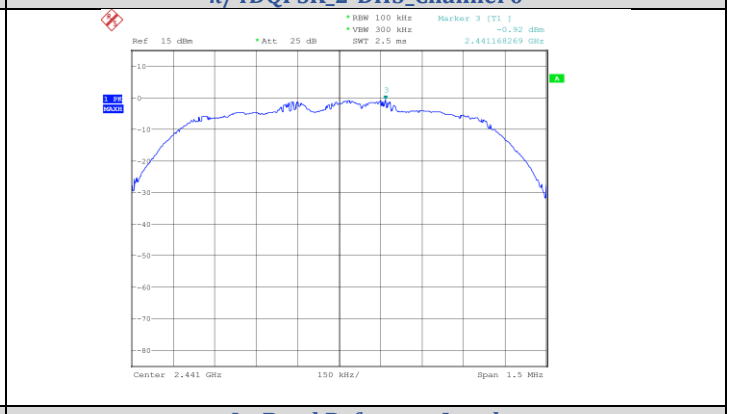
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 0



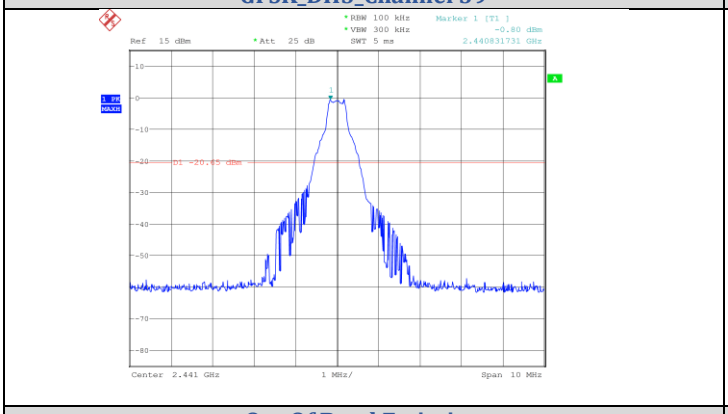
30.0 MHz - 25000.0 MHz
π/4DQPSK_2-DH5_Channel 0



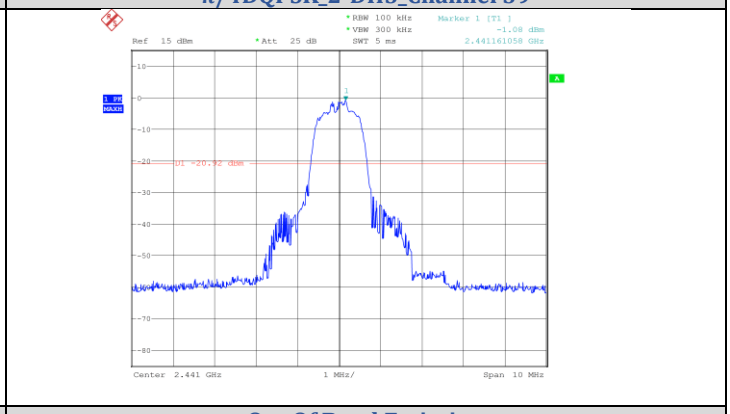
In-Band Reference Level
GFSK_DH5_Channel 39



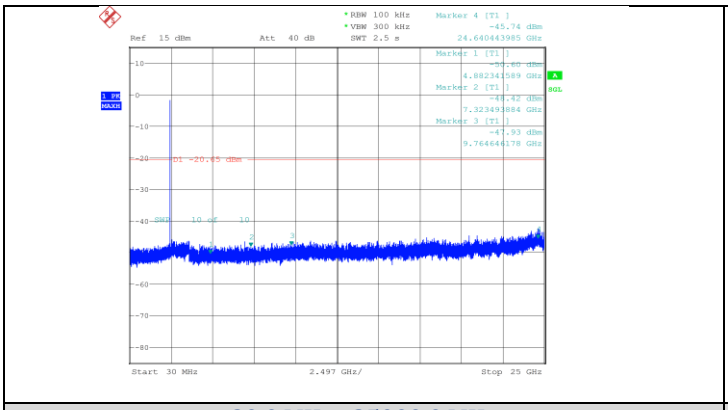
In-Band Reference Level
π/4DQPSK_2-DH5_Channel 39



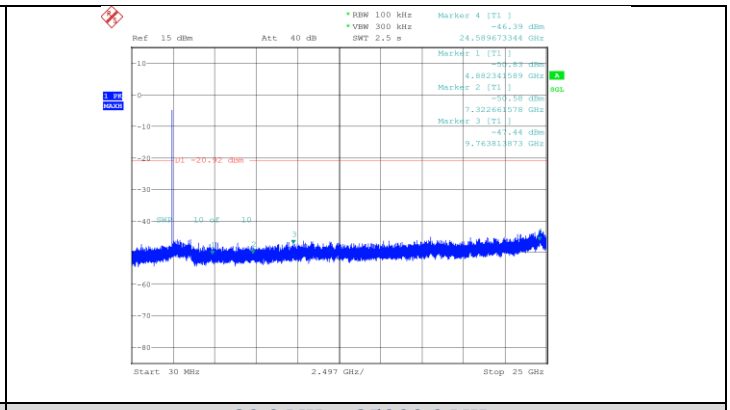
Out Of Band Emission
GFSK_DH5_Channel 39



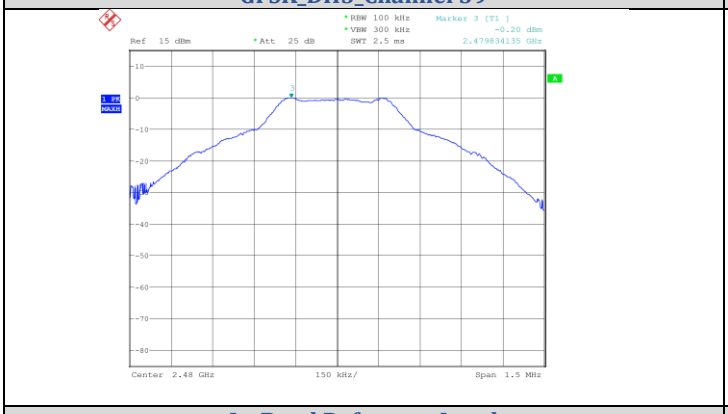
Out Of Band Emission
π/4DQPSK_2-DH5_Channel 39



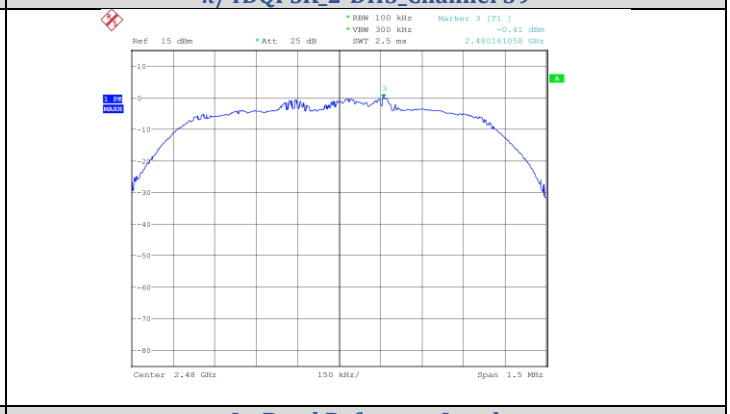
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 39



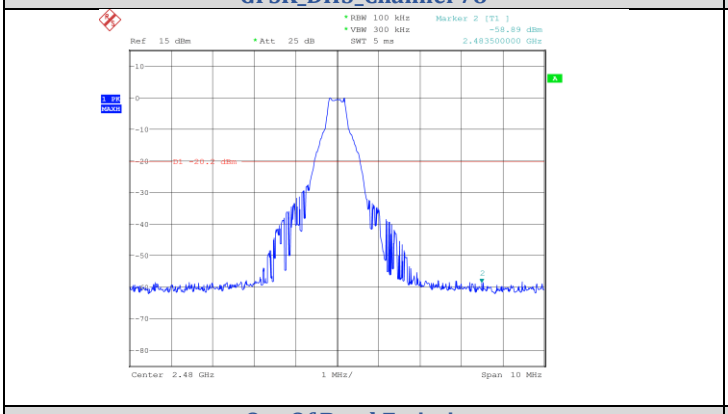
30.0 MHz - 25000.0 MHz
π/4DQPSK_2-DH5_Channel 39



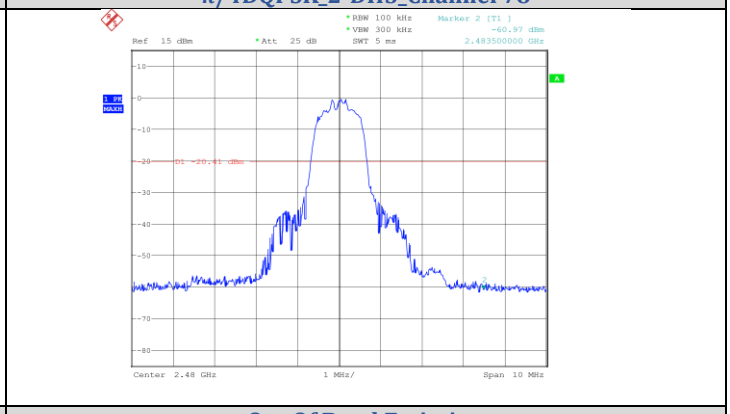
In-Band Reference Level
GFSK_DH5_Channel 78



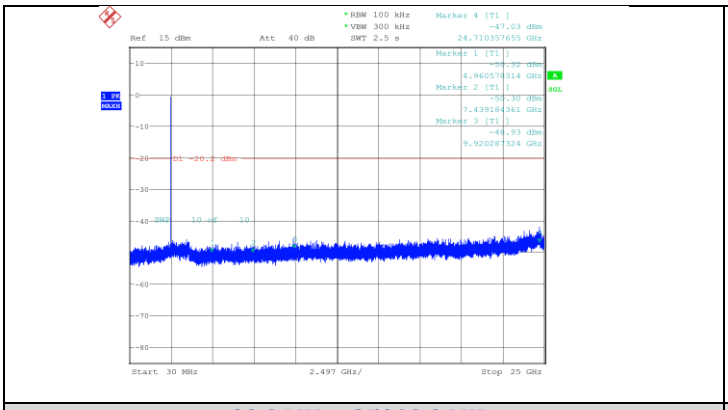
In-Band Reference Level
π/4DQPSK_2-DH5_Channel 78



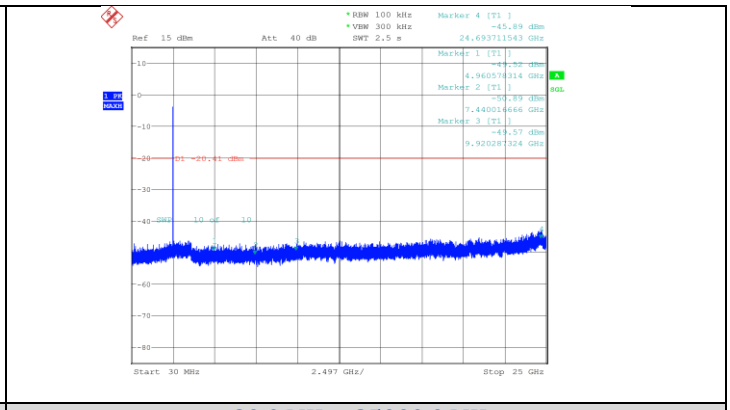
Out Of Band Emission
GFSK_DH5_Channel 78



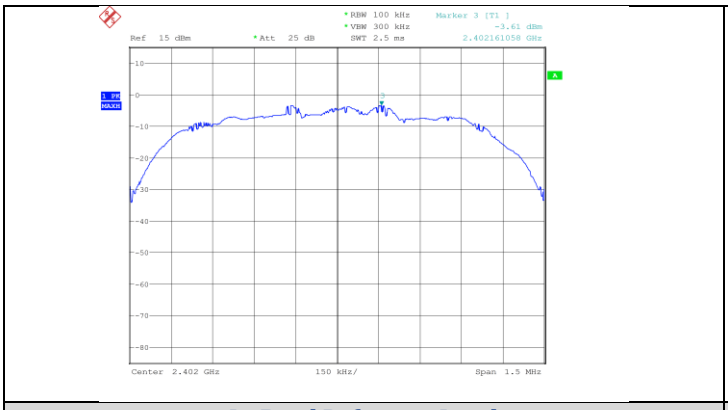
Out Of Band Emission
π/4DQPSK_2-DH5_Channel 78



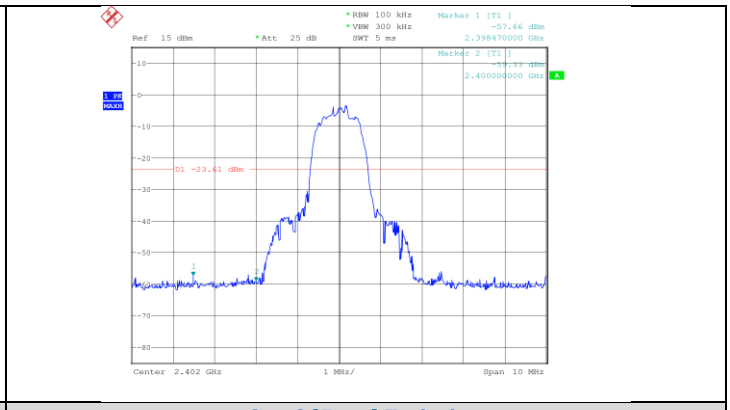
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 78



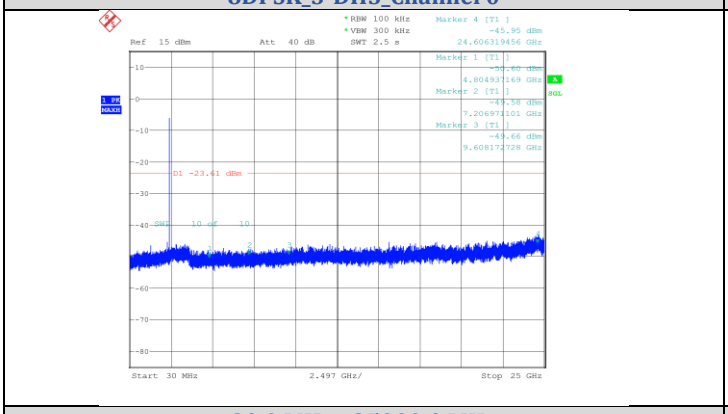
30.0 MHz - 25000.0 MHz
π/4DQPSK_2-DH5_Channel 78



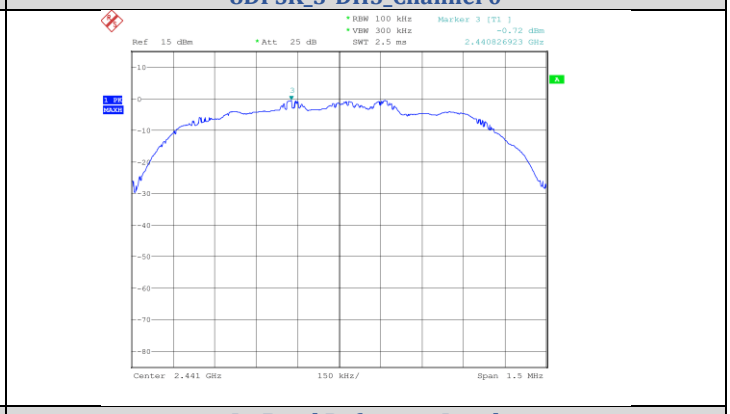
In-Band Reference Level
8DPSK_3-DH5_Channel 0



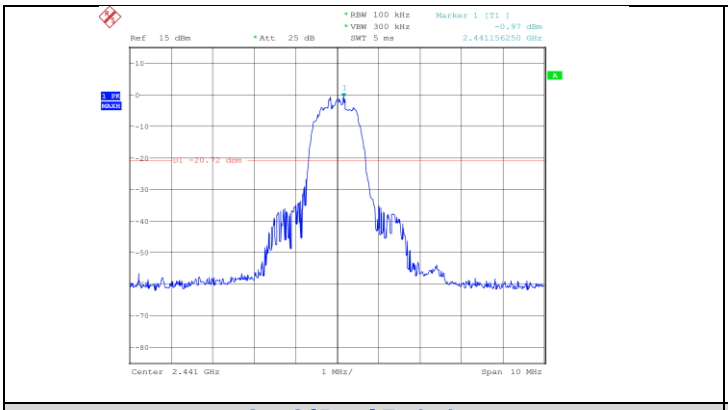
Out Of Band Emission
8DPSK_3-DH5_Channel 0



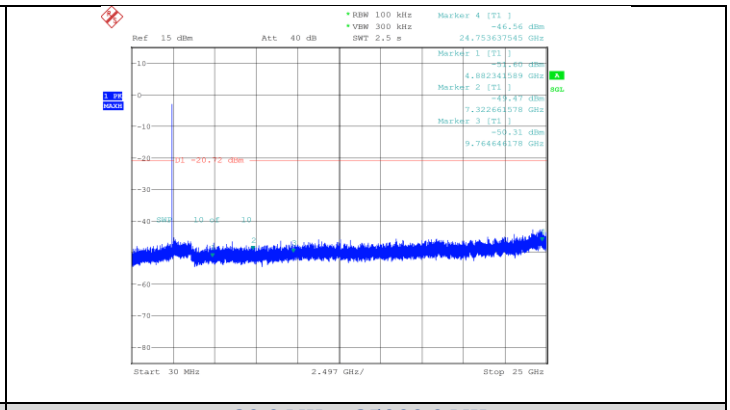
30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 0



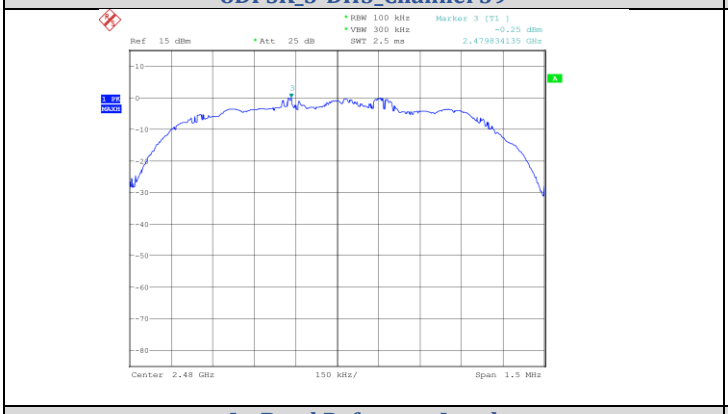
In-Band Reference Level
8DPSK_3-DH5_Channel 39



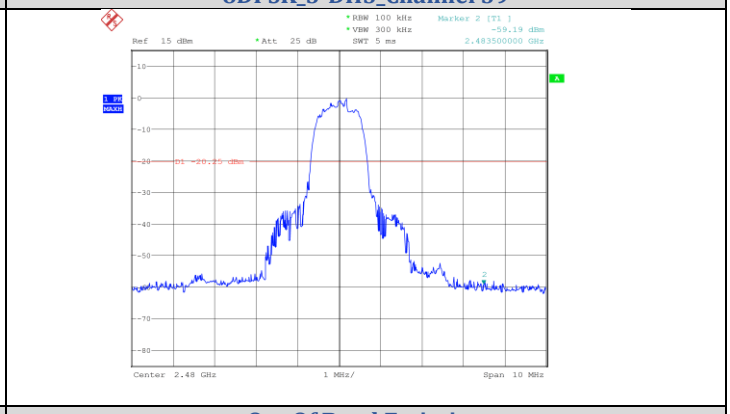
Out Of Band Emission
8DPSK_3-DH5_Channel 39



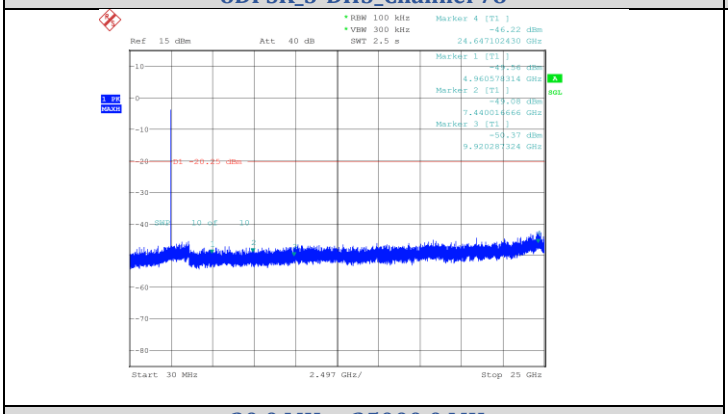
30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 39



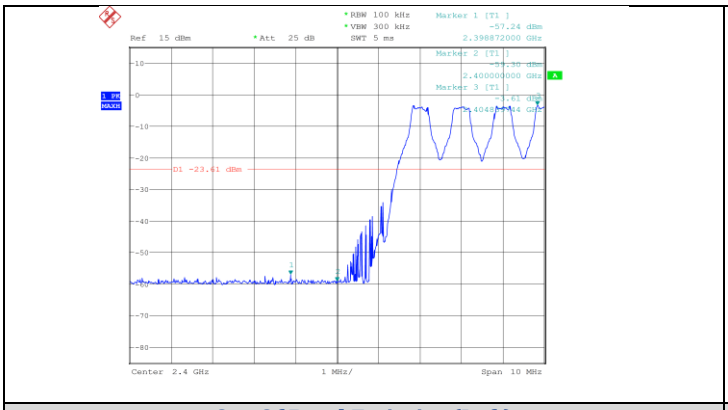
In-Band Reference Level
8DPSK_3-DH5_Channel 78



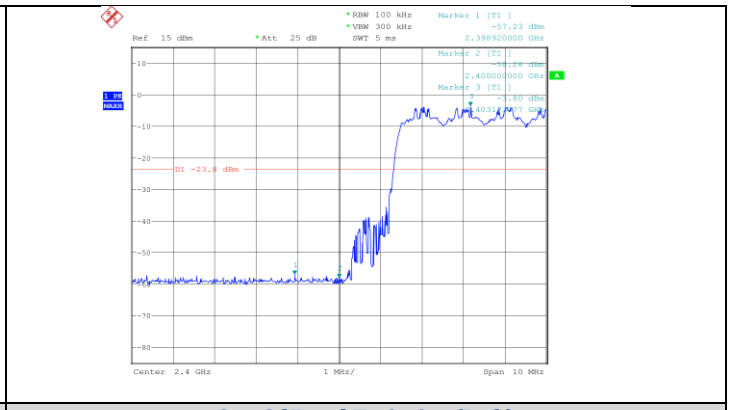
Out Of Band Emission
8DPSK_3-DH5_Channel 78



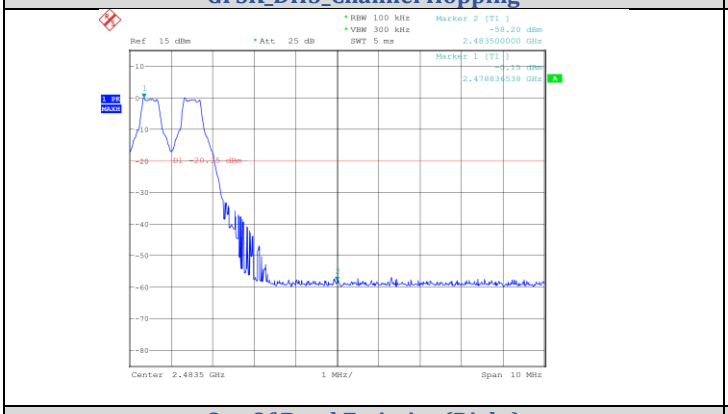
30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 78



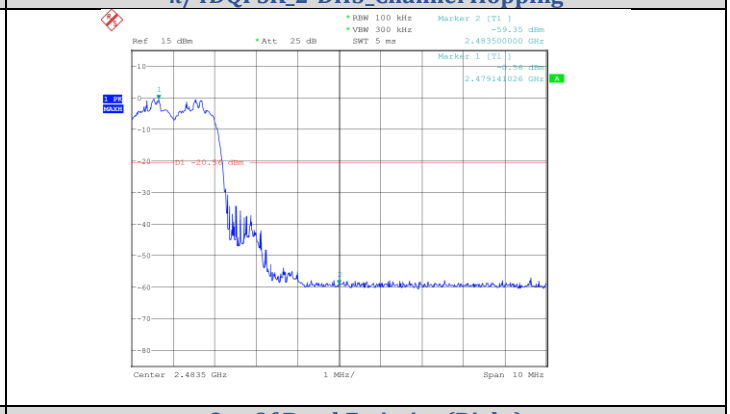
Out Of Band Emission(Left)
GFSK_DH5_Channel Hopping



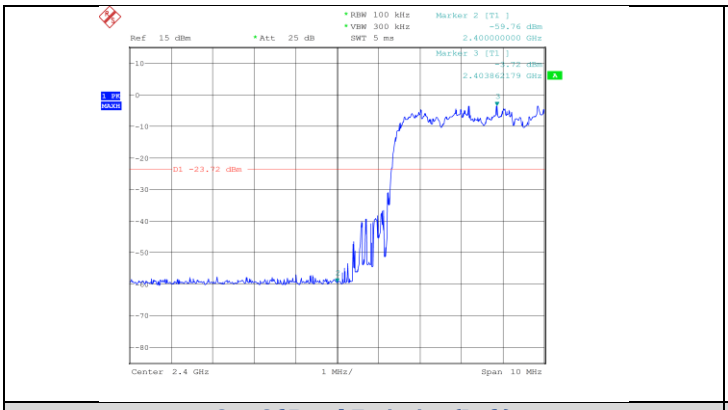
Out Of Band Emission(Left)
π/4DQPSK_2-DH5_Channel Hopping



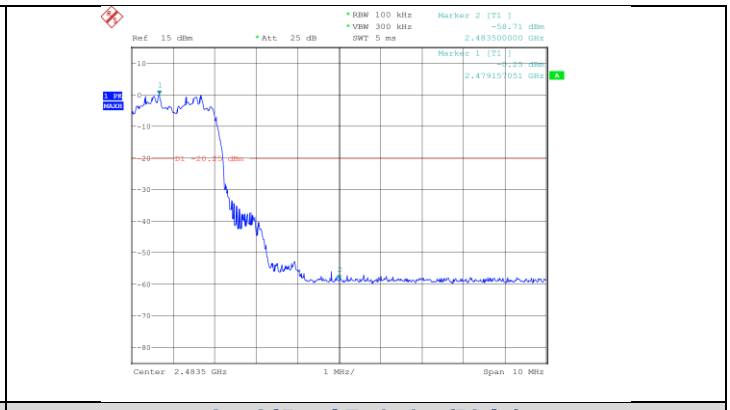
Out Of Band Emission(Right)
GFSK_DH5_Channel Hopping



Out Of Band Emission(Right)
π/4DQPSK_2-DH5_Channel Hopping



Out Of Band Emission(Left)
8DPSK_3-DH5_Channel Hopping



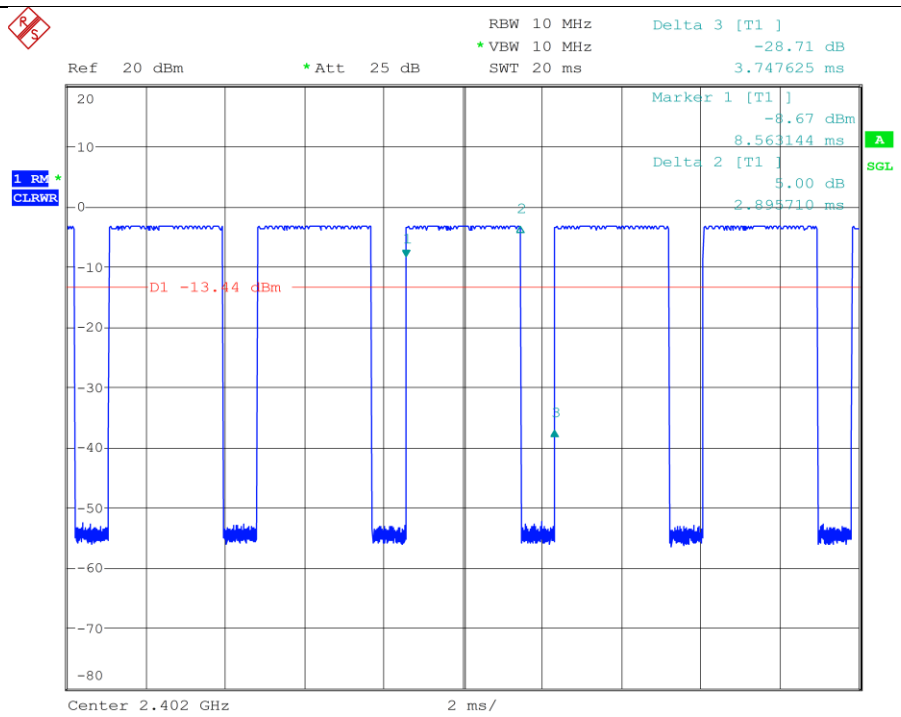
Out Of Band Emission(Right)
8DPSK_3-DH5_Channel Hopping

Duty Cycle

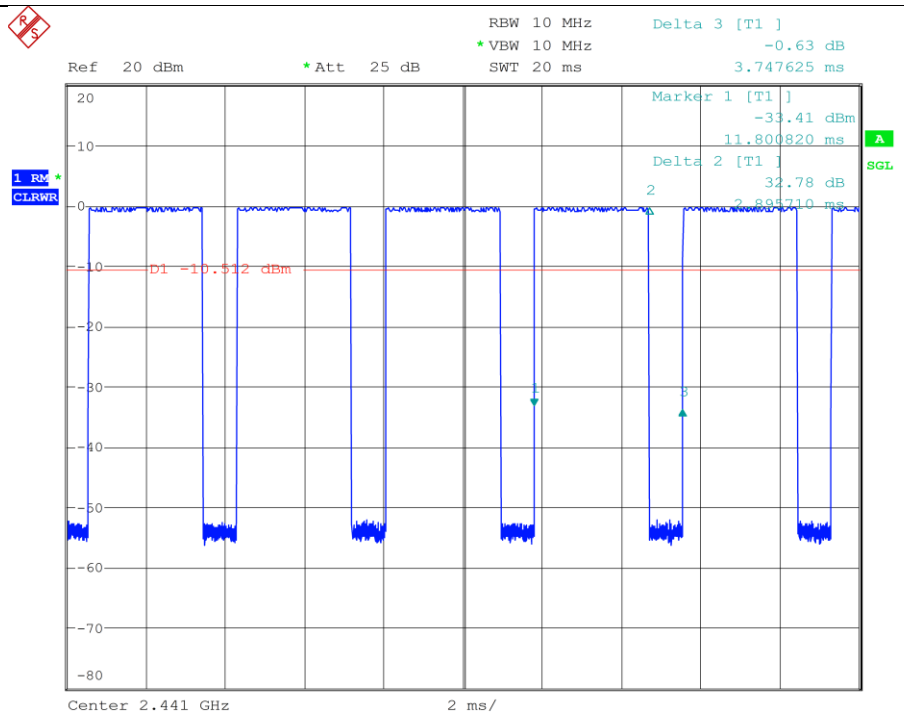
Test Result

Modulation	Packets	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)
GFSK	DH5	0	2.896	3.748	77.27	0.7727	1.1199
		39	2.896	3.748	77.27	0.7727	1.1199
		78	2.896	3.748	77.27	0.7727	1.1199
π/4DQPSK	2-DH5	0	2.884	3.748	76.95	0.7695	1.1379
		39	2.884	3.748	76.95	0.7695	1.1379
		78	2.884	3.748	76.95	0.7695	1.1379
8DPSK	3-DH5	0	2.882	3.748	76.89	0.7689	1.1413
		39	2.882	3.748	76.89	0.7689	1.1413
		78	2.884	3.748	76.95	0.7695	1.1379

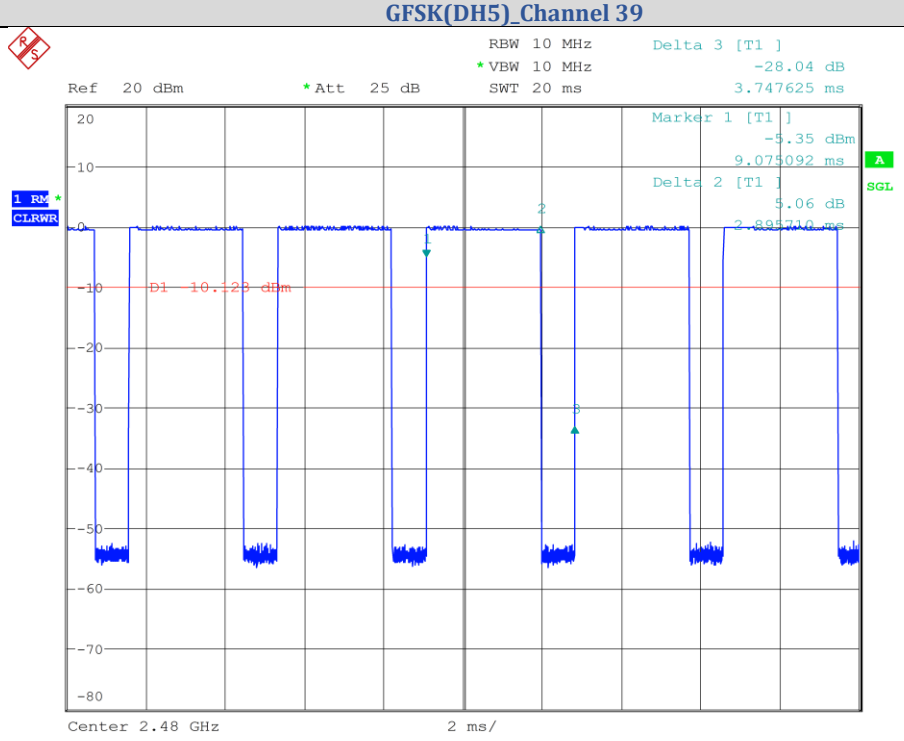
Test Graphs



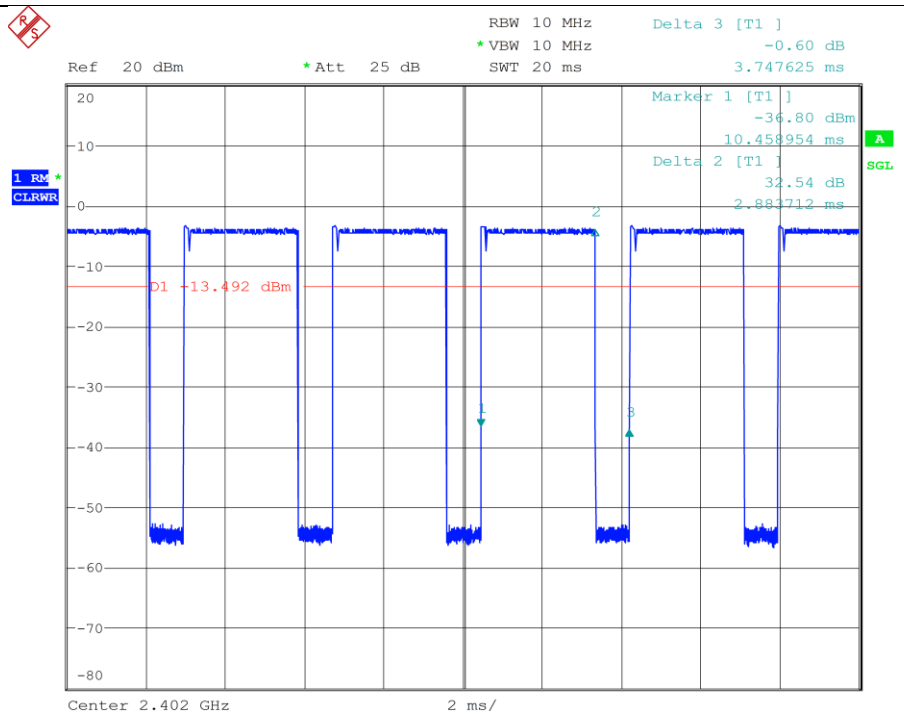
GFSK(DH5)_Channel 0



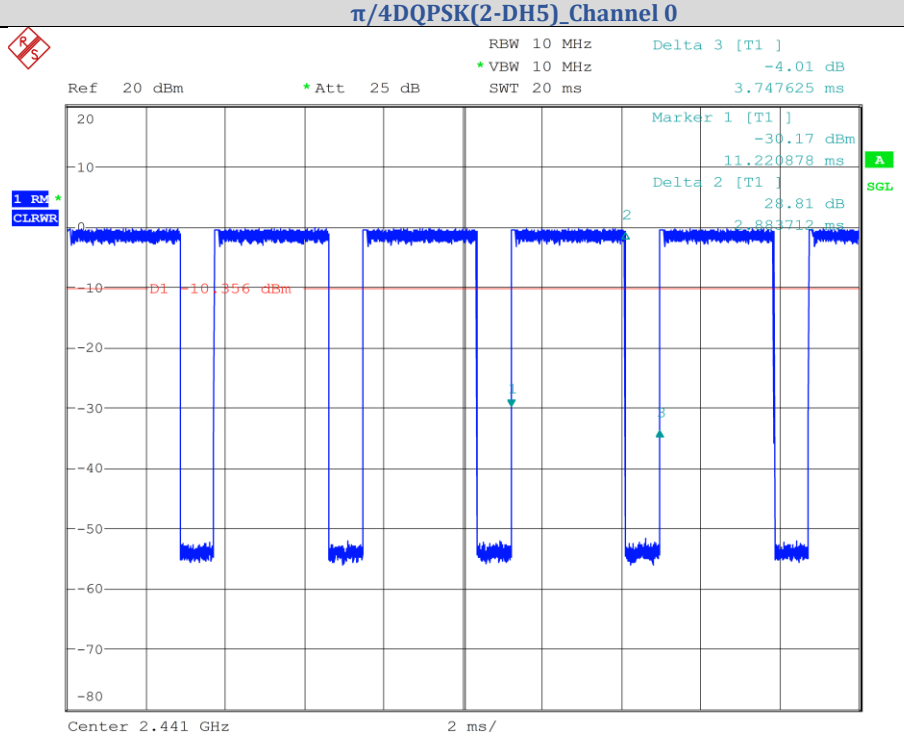
GFSK(DH5)_Channel 39



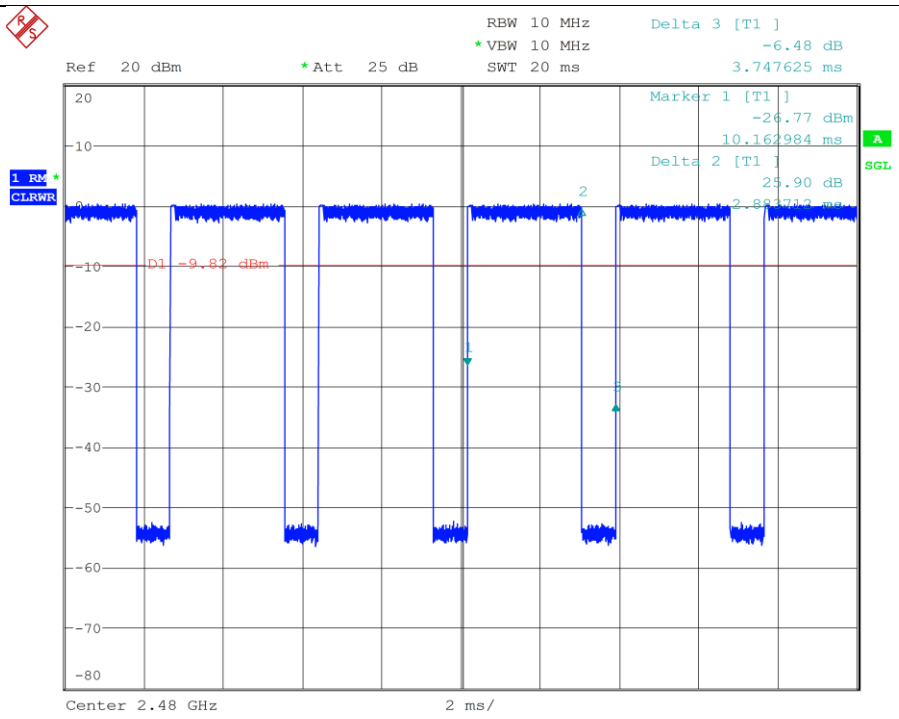
GFSK(DH5)_Channel 78



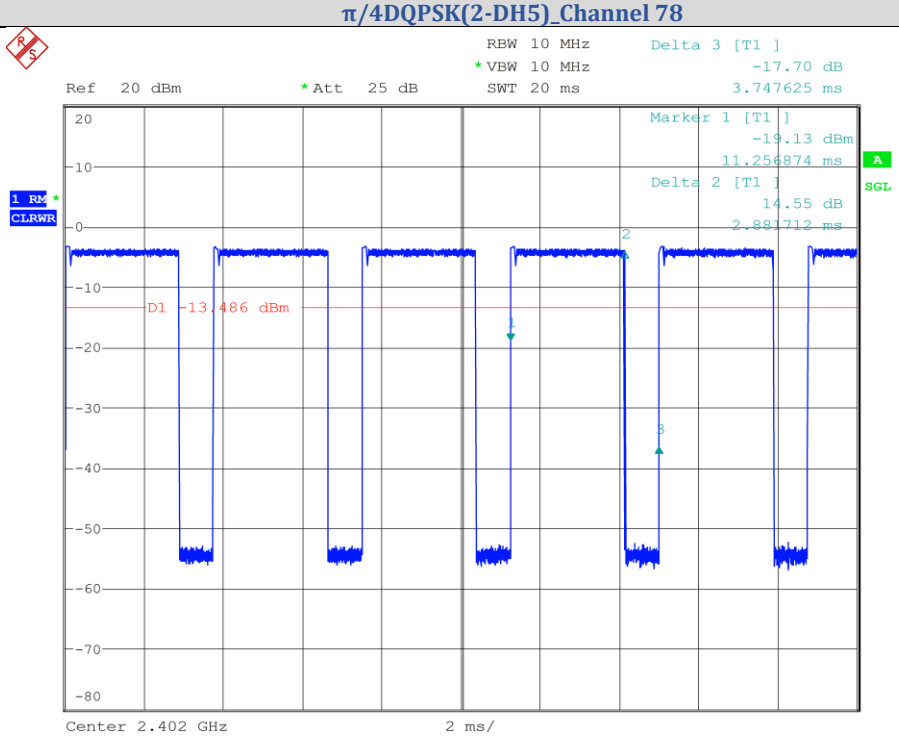
π/4DQPSK(2-DH5)_Channel 0



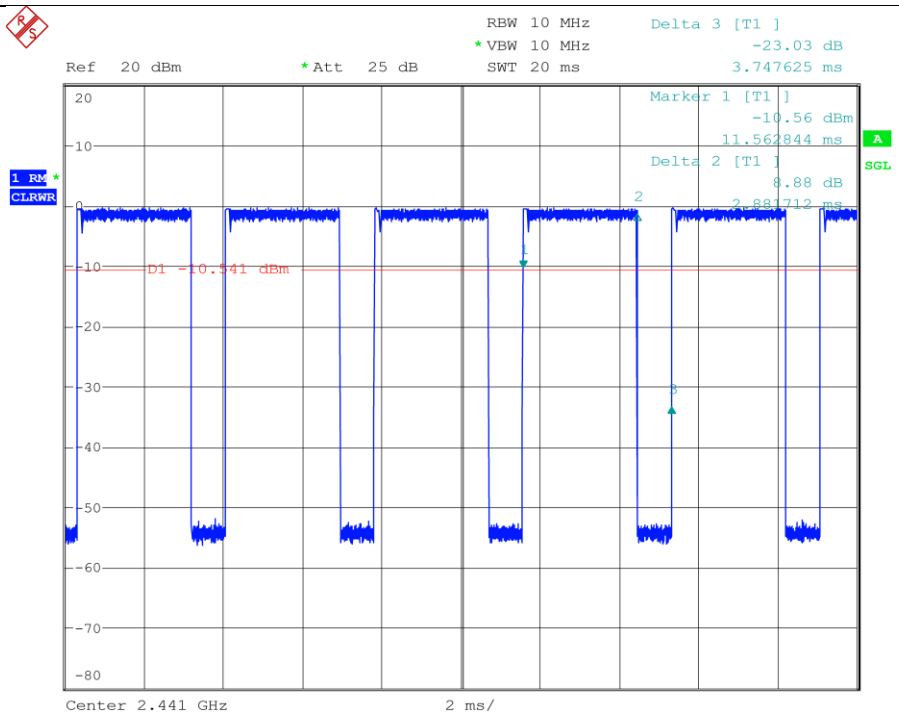
π/4DQPSK(2-DH5)_Channel 39



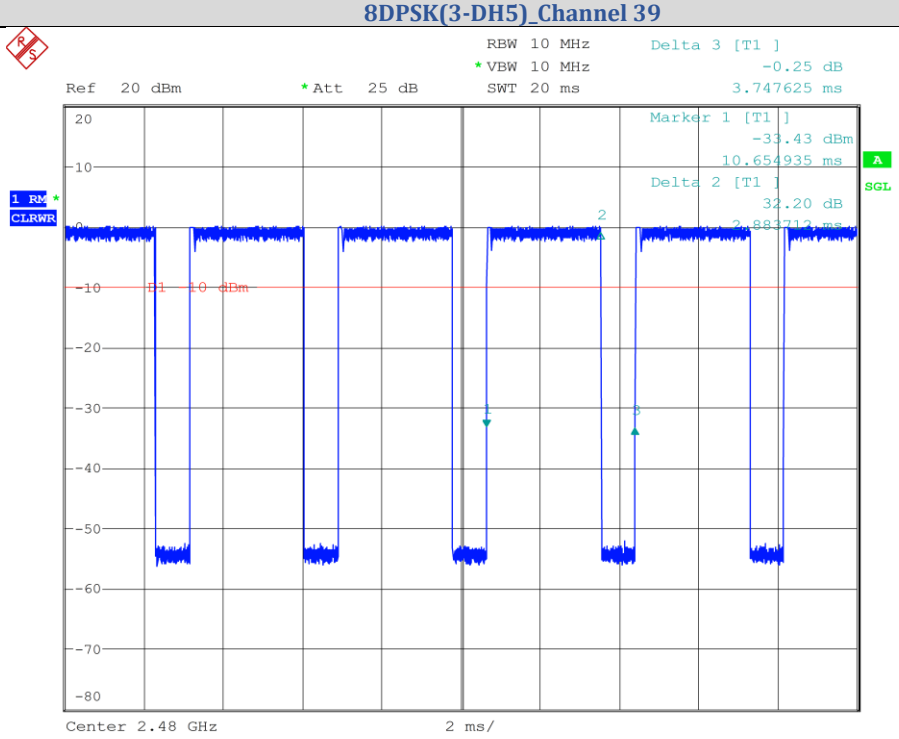
π/4DQPSK(2-DH5)_Channel 78



8DPSK(3-DH5)_Channel 0



8DPSK(3-DH5)_Channel 39



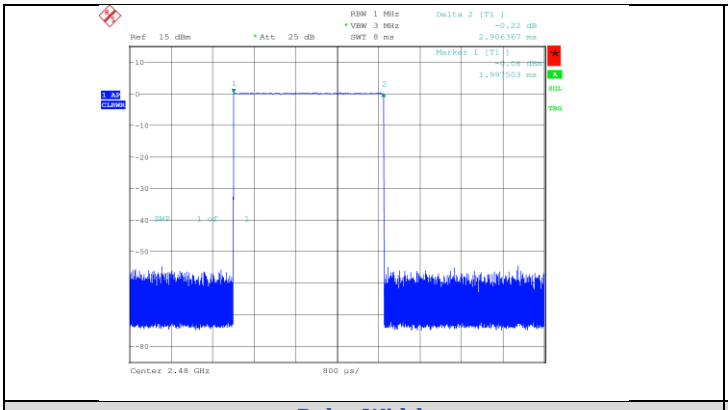
8DPSK(3-DH5)_Channel 78

Dwell Time

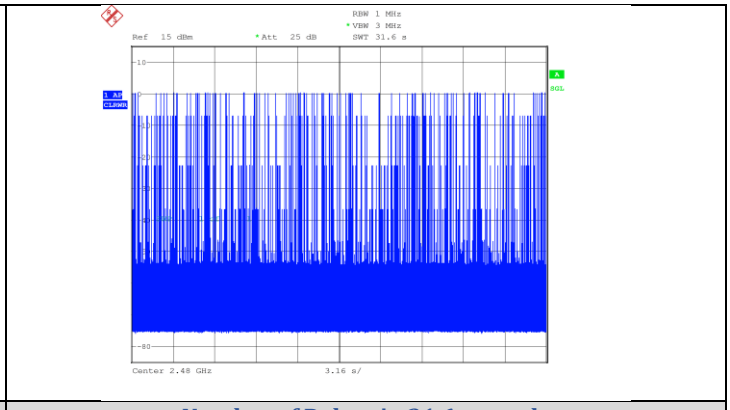
Test Result

Modulation	Packet	Channel	Pulse Width (ms)	Number of Pulses in 31.6 seconds	Dwell Time (ms)	Limit (ms)	Result
GFSK	DH5	CH78 (2480MHz)	2.906	104	302.26	< 400	PASS
π/4DQPSK	2-DH5		2.896	91	263.57		PASS
8DPSK	3-DH5		2.886	108	311.73		PASS

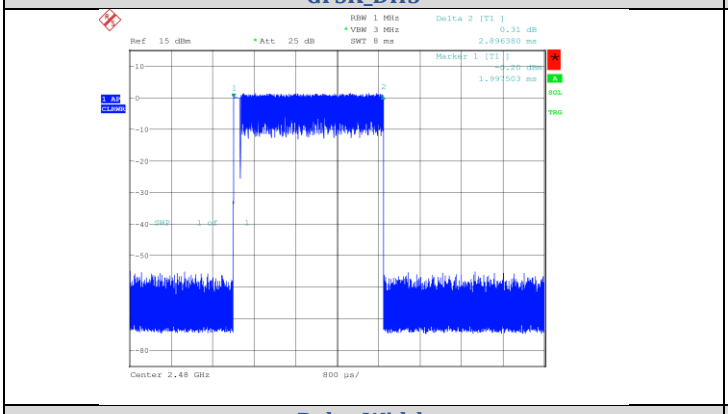
Test Graphs



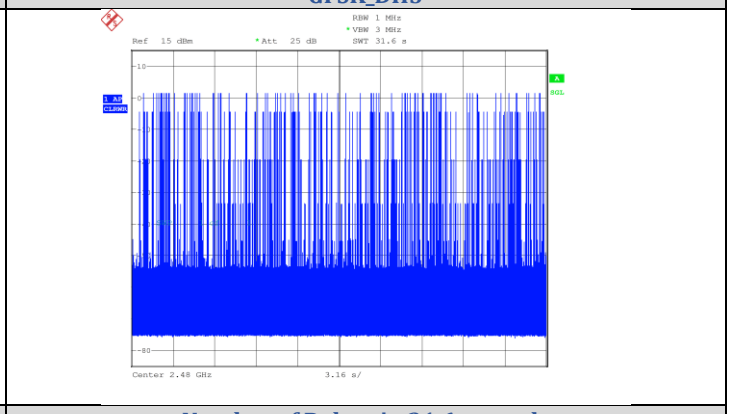
Pulse Width
GFSK_DH5



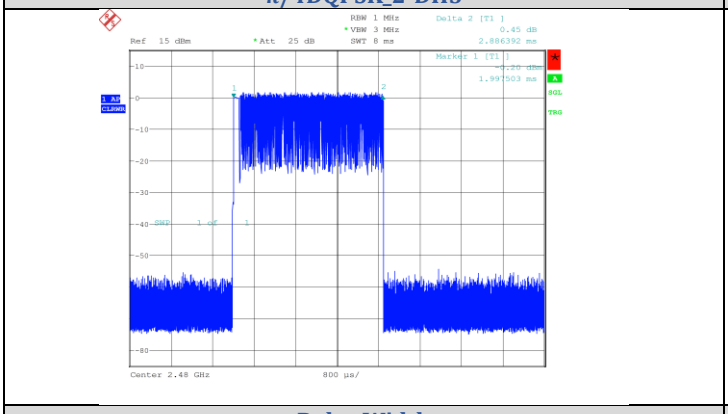
Number of Pulses in 31.6 seconds
GFSK_DH5



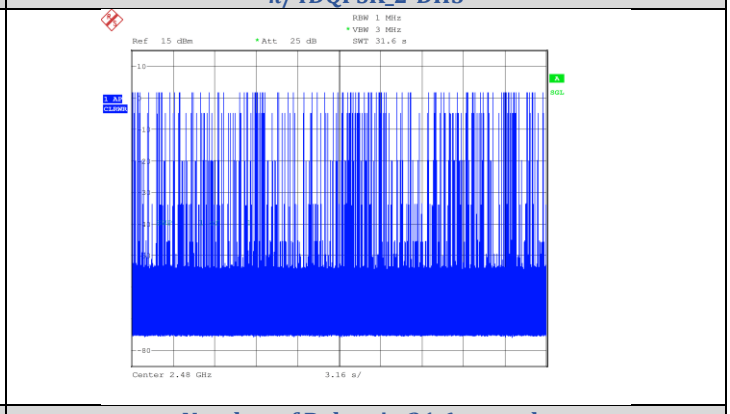
Pulse Width
π/4DQPSK_2-DH5



Number of Pulses in 31.6 seconds
π/4DQPSK_2-DH5



Pulse Width



Number of Pulses in 31.6 seconds

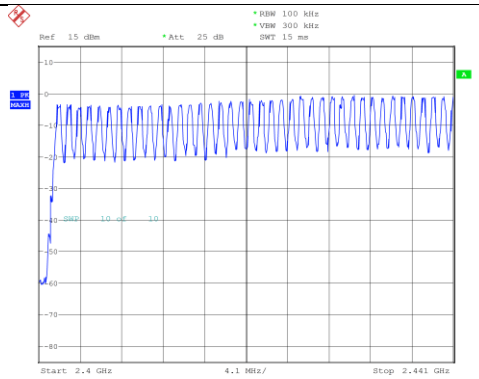
8DPSK_3-DH5	8DPSK_3-DH5

Number Of Hopping Channel

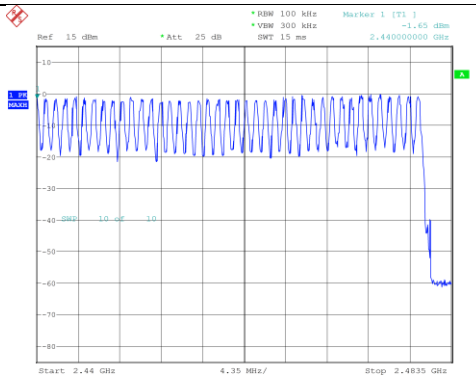
Test Result

Modulation	Packet	Number of Hopping Channel	Limit	Result
GFSK	DH5	79	15	PASS
π/4DQPSK	2-DH5	79	15	PASS
8DPSK	3-DH5	79	15	PASS

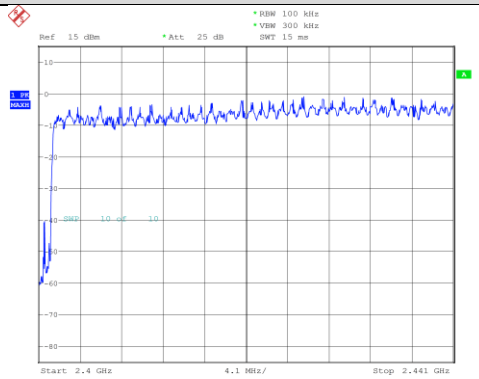
Test Graphs



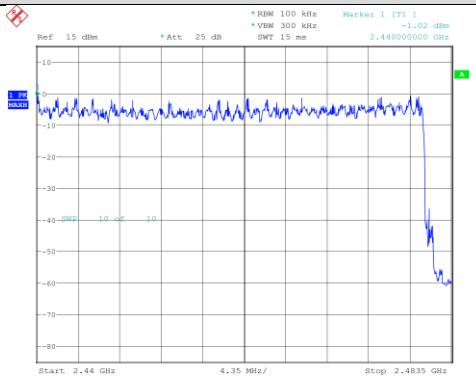
Low End Spectrum Channel Hopping Plot
GFSK



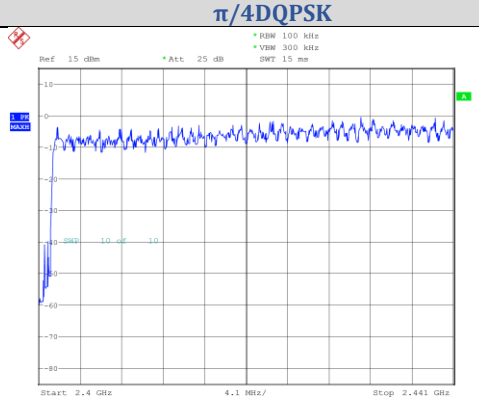
High End Spectrum Channel Hopping Plot
GFSK

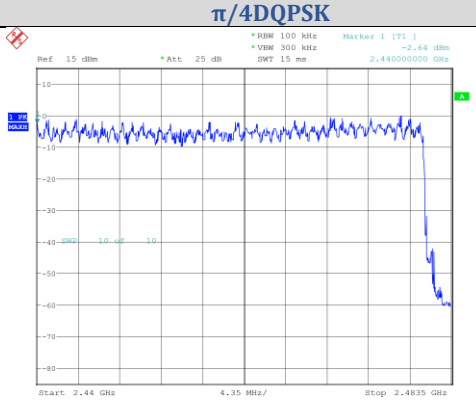


Low End Spectrum Channel Hopping Plot
π/4DQPSK



High End Spectrum Channel Hopping Plot
π/4DQPSK





Low End Spectrum Channel Hopping Plot 8DPSK	High End Spectrum Channel Hopping Plot 8DPSK