

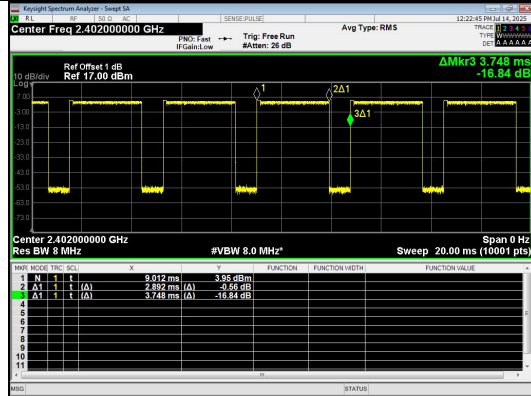
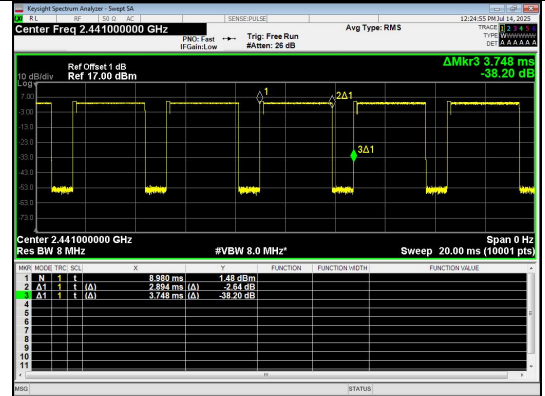
Appendix RF test data for BT

Duty Cycle Test Result

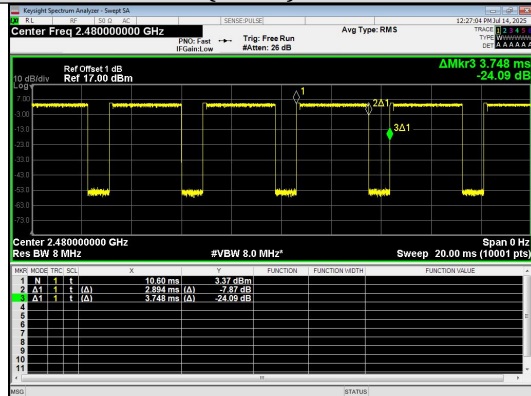
Modulation	Packets	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
GFSK	DH5	0	2.886	3.748	77.00	0.7700	1.1351	0.3465
		39	2.886	3.748	77.00	0.7700	1.1351	0.3465
		78	2.886	3.748	77.00	0.7700	1.1351	0.3465
$\pi/4$ DQPSK	2-DH5	0	2.892	3.748	77.16	0.7716	1.1261	0.3458
		39	2.892	3.748	77.16	0.7716	1.1261	0.3458
		78	2.892	3.748	77.16	0.7716	1.1261	0.3458
8DPSK	3-DH5	0	2.892	3.748	77.16	0.7716	1.1261	0.3458
		39	2.894	3.748	77.21	0.7721	1.1233	0.3455
		78	2.894	3.748	77.21	0.7721	1.1233	0.3455

Test Graphs



 $\pi/4$ DQPSK(2-DH5)_Channel 39 $\pi/4$ DQPSK(2-DH5)_Channel 78

8DPSK(3-DH5)_Channel 0



8DPSK(3-DH5)_Channel 39

8DPSK(3-DH5)_Channel 78

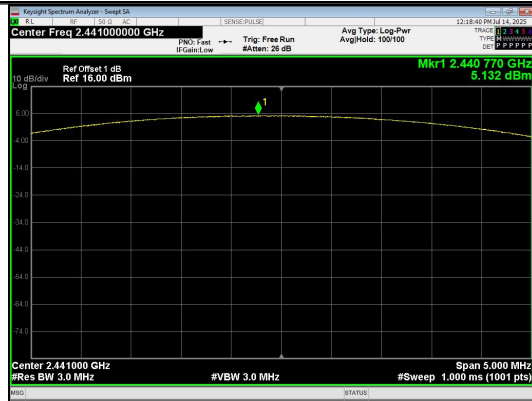
Conducted Output Power

Test Result

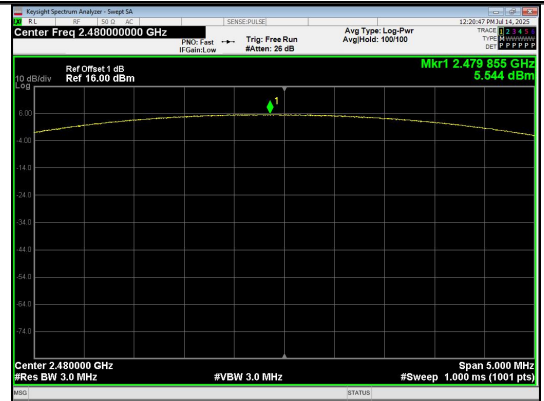
Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
GFSK	DH5	0	4.82	3.03	≤30	PASS
		39	4.51	2.82		PASS
		78	4.79	3.01		PASS
$\pi/4$ DQPSK	2-DH5	0	5.68	3.70	≤20.97	PASS
		39	5.13	3.26		PASS
		78	5.54	3.58		PASS
8DPSK	3-DH5	0	5.76	3.77	≤20.97	PASS
		39	5.49	3.54		PASS
		78	5.93	3.92		PASS

Test Graphs

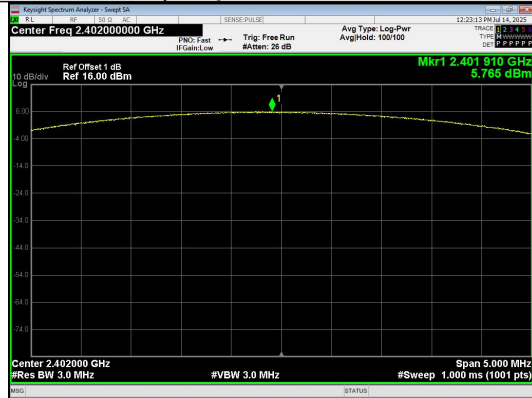




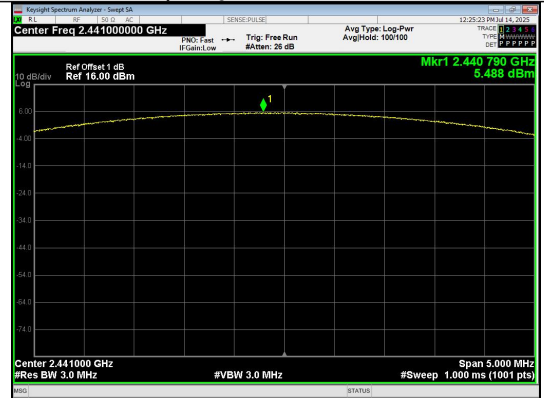
Peak Output Power
 $\pi/4$ DQPSK_Channel 39



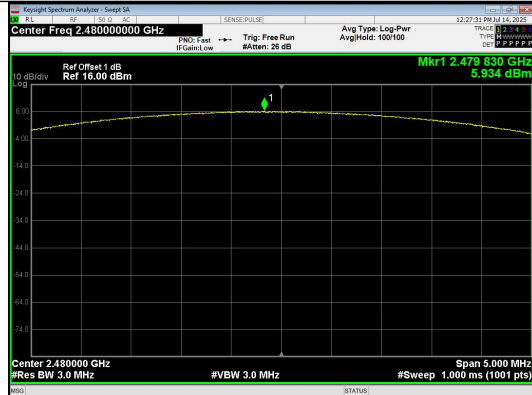
Peak Output Power
 $\pi/4$ DQPSK_Channel 78



Peak Output Power
8DPSK_Channel 0



Peak Output Power
8DPSK_Channel 39



Peak Output Power
8DPSK_Channel 78



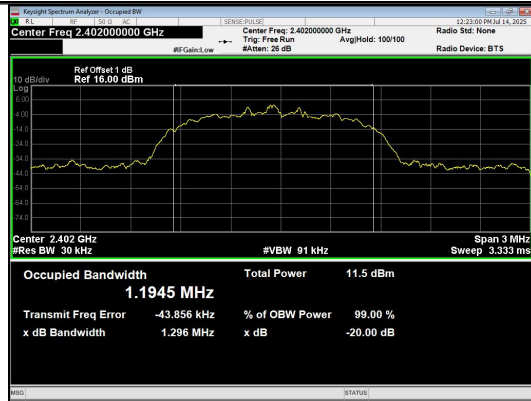
20dB Bandwidth

Test Result

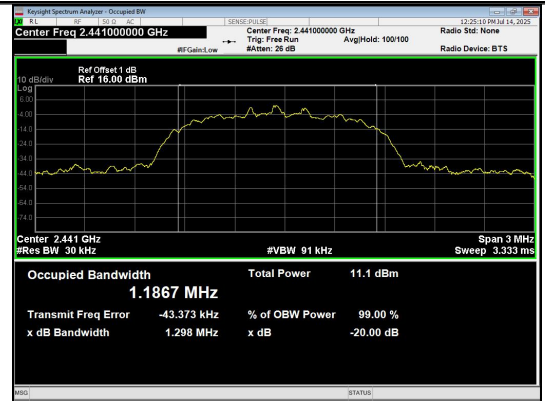
Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.9500
	39	2441 MHz	0.9500
	78	2480 MHz	0.9500
$\pi/4$ DQPSK	0	2402 MHz	1.280
	39	2441 MHz	1.280
	78	2480 MHz	1.270
8DPSK	0	2402 MHz	1.300
	39	2441 MHz	1.300
	78	2480 MHz	1.290

Test Graphs

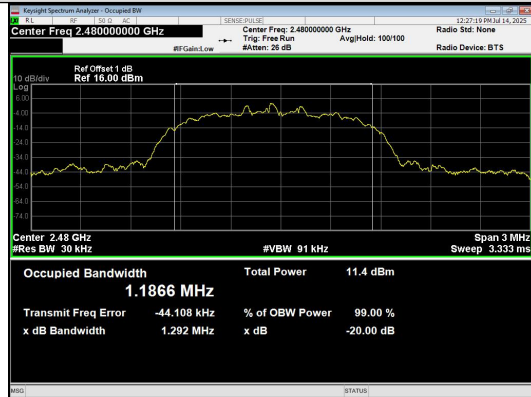




8DPSK_3-DH5_Channel 0



8DPSK_3-DH5_Channel 39



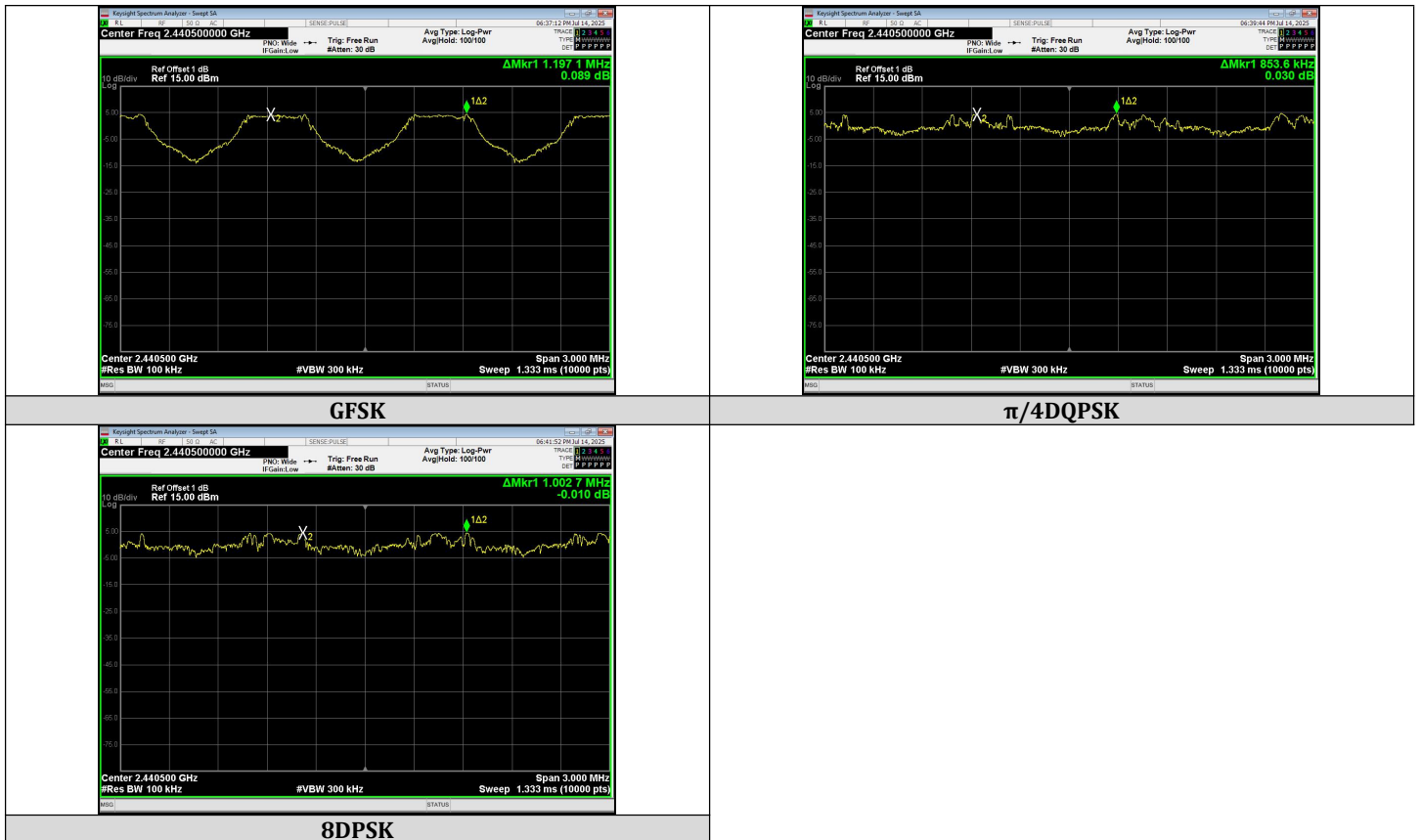
8DPSK_3-DH5_Channel 78

Carrier Frequencies Separation

Test Result

Modulation	Packet	Left Center frequency (MHz)	Right Center frequency (MHz)	Hopping Frequency Separation (MHz)	Limit (MHz)	Result
GFSK	DH5	2439.9226	2441.1197	1.1971	0.633	PASS
$\pi/4$ DQPSK	2-DH5	2439.934	2440.7876	0.8536	0.853	PASS
8DPSK	3-DH5	2440.1194	2441.1221	1.0027	0.867	PASS

Test Graphs





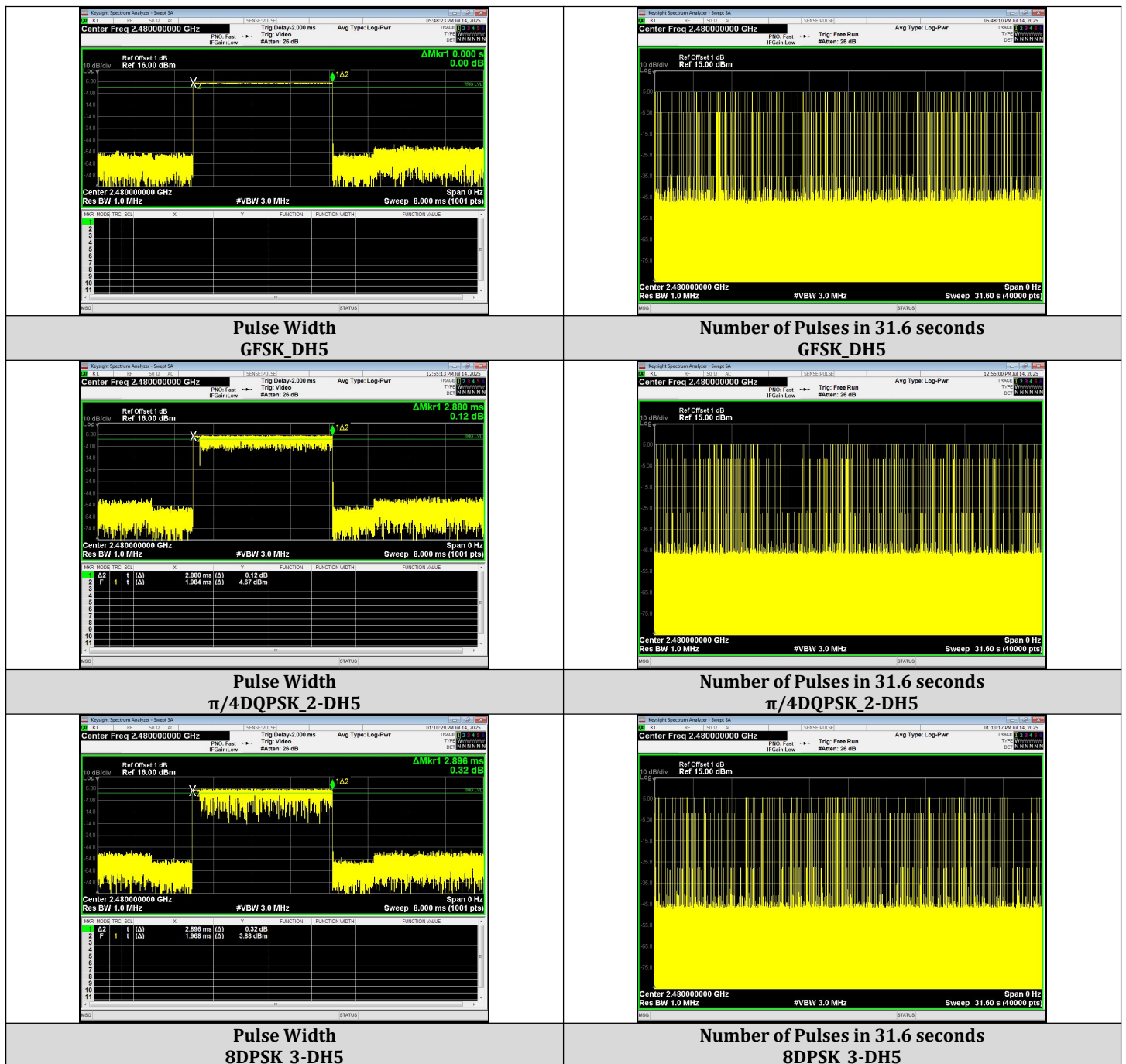
Number Of Hopping Channel

Test Result

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

Test Graphs





Conducted Out Of Band Emission

Test Result

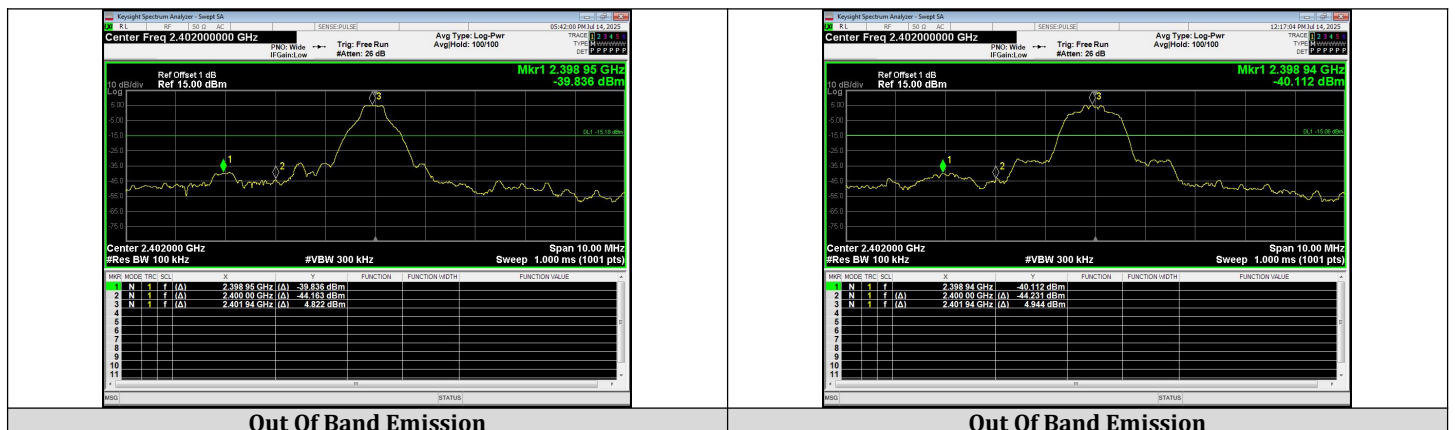
Non-Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	0	2398.95	-39.836	-15.18	-24.656	PASS
			2400.00	-44.160	-15.18	-28.980	PASS
			9601.90	-33.875	-15.18	-18.695	PASS
		39	9757.93	-34.154	-15.52	-18.634	PASS
		78	2483.50	-49.540	-15.22	-34.320	PASS
			9914.00	-36.743	-15.22	-21.523	PASS
$\pi/4$ DQPSK	2-DH5	0	2398.94	-40.112	-15.06	-25.052	PASS
			2400.00	-44.230	-15.06	-29.170	PASS
			9601.90	-34.045	-15.06	-18.985	PASS
		39	9757.93	-34.154	-15.75	-18.404	PASS
		78	2483.50	-49.670	-15.31	-34.360	PASS
			9914.00	-36.295	-15.31	-20.985	PASS
8DPSK	3-DH5	0	2398.95	-39.860	-15.21	-24.650	PASS
			2400.00	-45.760	-15.21	-30.550	PASS
			9601.90	-34.024	-15.21	-18.814	PASS
		39	9757.93	-34.279	-15.81	-18.469	PASS
		78	2483.50	-50.880	-15.29	-35.590	PASS
			9914.00	-36.433	-15.29	-21.143	PASS

Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	Hopping	2400.00	-39.810	-15.29	-24.520	PASS
π/4DQPSK	2-DH5		2483.50	-51.080	-15.24	-35.840	PASS
			2398.81	-40.819	-15.18	-25.639	PASS
			2400.00	-41.160	-15.18	-25.980	PASS
			2483.50	-51.630	-15.26	-36.370	PASS
8DPSK	3-DH5		2400.00	-40.970	-15.33	-25.640	PASS
			2483.50	-53.710	-15.33	-38.380	PASS

Test Graphs



Out Of Band Emission

Out Of Band Emission