

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	2.890	3.748	77.11	0.7711	1.1289	0.3460
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	2.892	3.748	77.16	0.7716	1.1261	0.3458

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

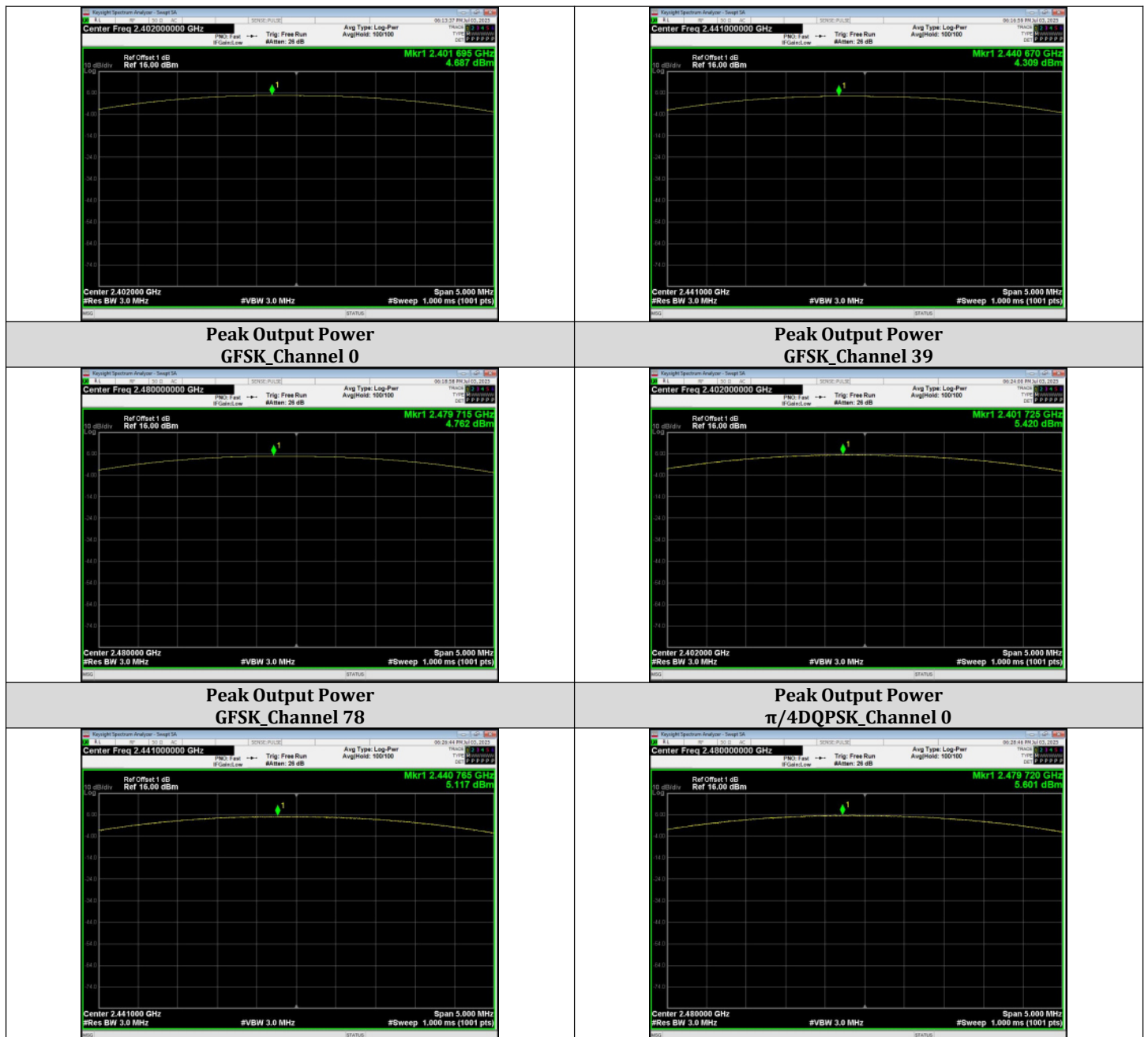
8DPSK(3-DH5)_Channel 78

Conducted Output Power

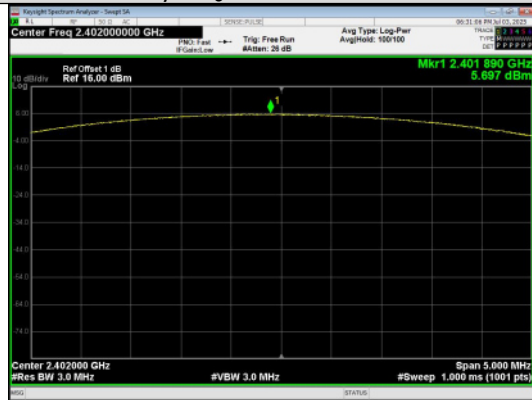
Test Result

Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Max. Avg. Power (dBm)	Limit (dBm)	Result
GFSK	DH5	0	4.69	2.94	4.69	≤30	PASS
		39	4.31	2.70	4.13		PASS
		78	4.76	2.99	4.57		PASS
$\pi/4$ DQPSK	2-DH5	0	5.42	3.48	3.01	≤20.97	PASS
		39	5.12	3.25	2.61		PASS
		78	5.60	3.63	3.03		PASS
8DPSK	3-DH5	0	5.70	3.71	3.06		PASS
		39	5.47	3.53	2.55		PASS
		78	6.02	4.00	3.01		PASS

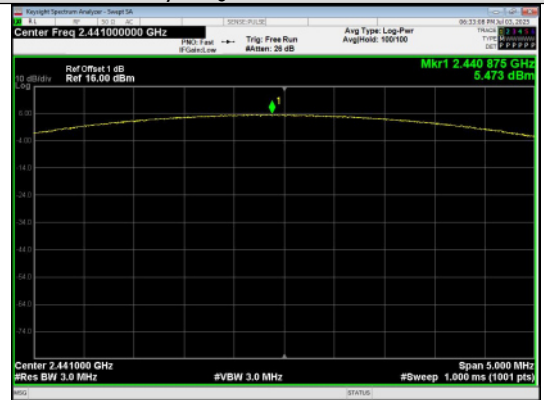
Test Graphs



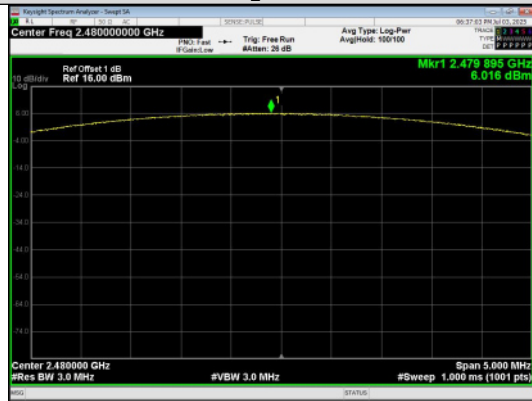
Peak Output Power $\pi/4$ DQPSK_Channel 39



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

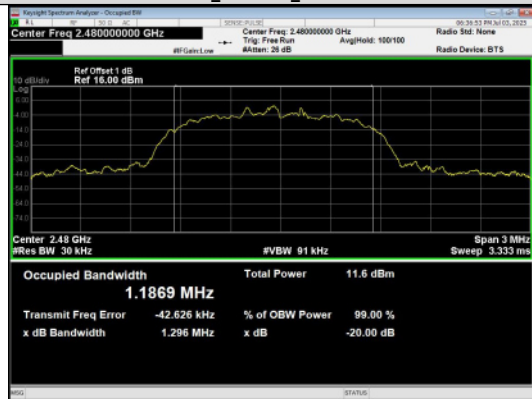
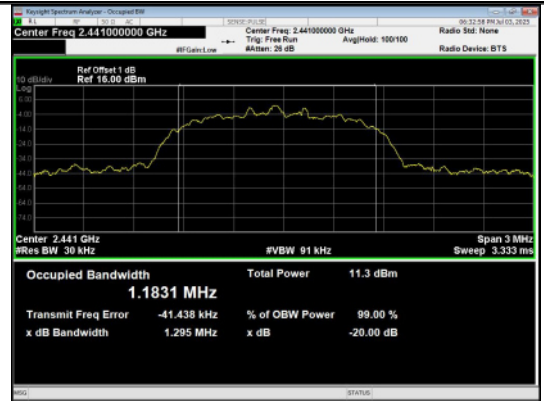
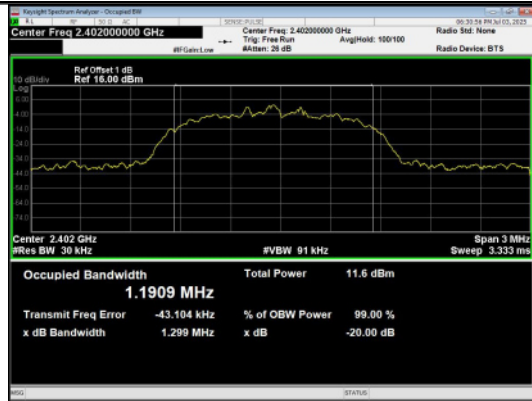
20dB Bandwidth

Test Result

Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.9536
	39	2441 MHz	0.9500
	78	2480 MHz	0.9488
$\pi/4$ DQPSK	0	2402 MHz	1.305
	39	2441 MHz	1.308
	78	2480 MHz	1.278
8DPSK	0	2402 MHz	1.299
	39	2441 MHz	1.295
	78	2480 MHz	1.296

Test Graphs



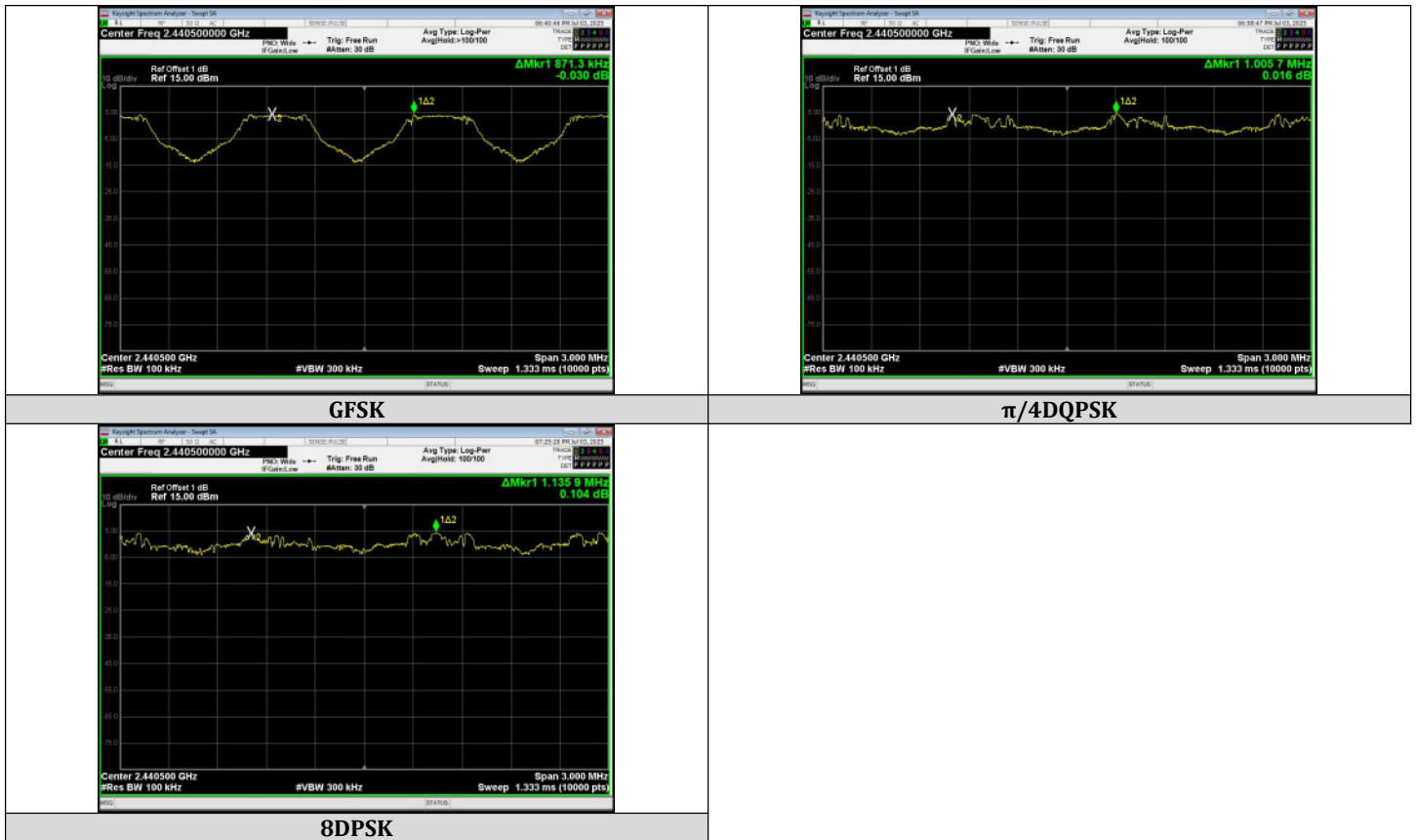


Carrier Frequencies Separation

Test Result

Modulation	Packet	Left Center frequency (MHz)	Right Center frequency (MHz)	Hopping Frequency Separation (MHz)	Limit (MHz)	Result
GFSK	DH5	2439.9334	2440.8047	0.8713	0.636	PASS
$\pi/4$ DQPSK	2-DH5	2439.796	2440.8017	1.0057	0.872	PASS
8DPSK	3-DH5	2439.8044	2440.9403	1.1359	0.866	PASS

Test Graphs

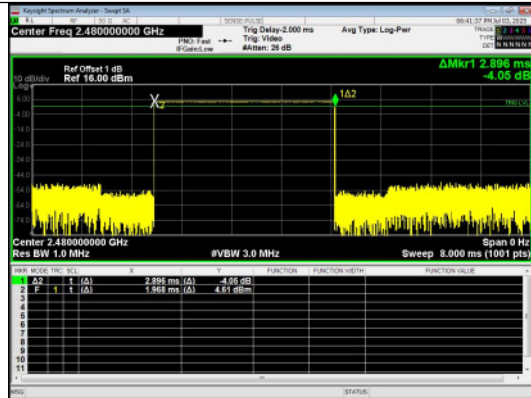


Dwell Time

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)	2.896	107	309.87	< 400	PASS
$\pi/4$ DQPSK	2-DH5		2.896	121	350.42		PASS
8DPSK	3-DH5		2.880	99	285.12		PASS

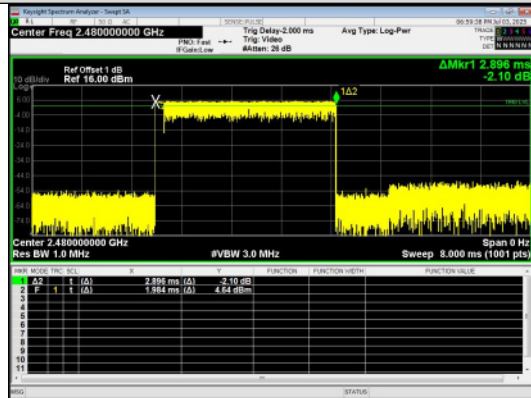
Test Graphs



Pulse Width
GFSK_DH5



Number of Pulses in 31.6 seconds
GFSK_DH5



Pulse Width
 $\pi/4$ DQPSK_2-DH5



Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK_2-DH5



Pulse Width
8DPSK_3-DH5



Number of Pulses in 31.6 seconds
8DPSK_3-DH5

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	2398.96	-39.631	-15.38	-24.251	PASS
			2400.00	-45.759	-15.38	-30.379	PASS
			9601.90	-33.742	-15.38	-18.362	PASS
		39	9757.93	-34.203	-15.69	-18.513	PASS
		78	2483.50	-48.593	-15.31	-33.283	PASS
			9914.00	-36.384	-15.31	-21.074	PASS
$\pi/4$ DQPSK	2-DH5	0	2398.94	-40.507	-15.26	-25.247	PASS
			2400.00	-45.479	-15.26	-30.219	PASS
			9601.90	-33.523	-15.26	-18.263	PASS
		39	9757.93	-33.969	-15.66	-18.309	PASS
		78	2483.50	-49.879	-15.33	-34.549	PASS
			9914.00	-36.388	-15.33	-21.058	PASS
8DPSK	3-DH5	0	2398.94	-40.050	-15.32	-24.730	PASS
			2400.00	-45.056	-15.32	-29.736	PASS
			9601.90	-33.469	-15.32	-18.149	PASS
		39	9757.93	-34.026	-15.64	-18.386	PASS
		78	2483.50	-49.220	-15.17	-34.050	PASS
			9914.00	-36.412	-15.17	-21.242	PASS

Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH5	Hopping	2398.97	-39.893	-15.4	-24.493	PASS
			2400.00	-40.028	-15.4	-24.628	PASS
			2483.50	-49.725	-15.47	-34.255	PASS
$\pi/4$ DQPSK	2-DH5		2398.80	-40.703	-15.33	-25.373	PASS
			2400.00	-41.844	-15.33	-26.514	PASS
			2483.50	-49.877	-15.24	-34.637	PASS
8DPSK	3-DH5		2398.81	-40.236	-15.39	-24.846	PASS
			2400.00	-42.161	-15.39	-26.771	PASS
			2483.50	-50.090	-15.39	-34.700	PASS

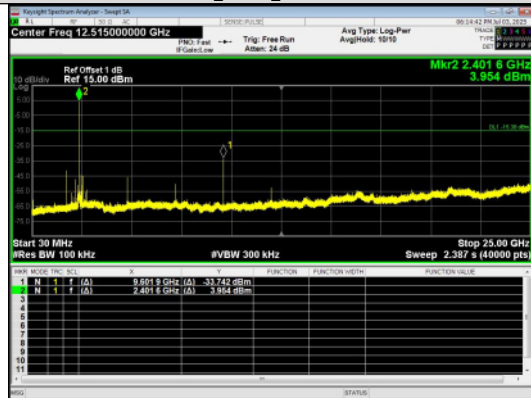
Test Graphs



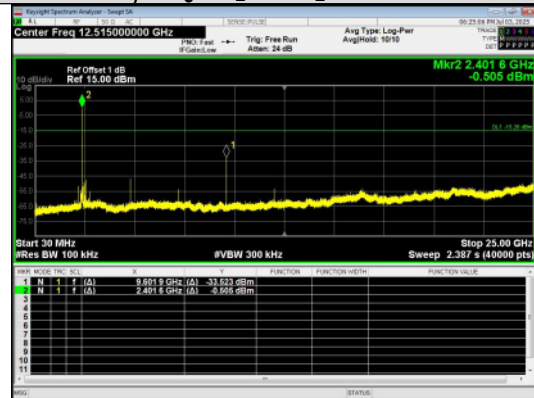
Out Of Band Emission
GFSK_DH5_Channel 0



Out Of Band Emission
 $\pi/4$ DQPSK_2-DH5_Channel 0



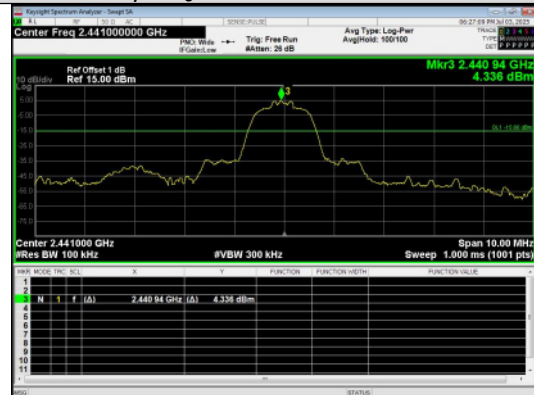
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 0



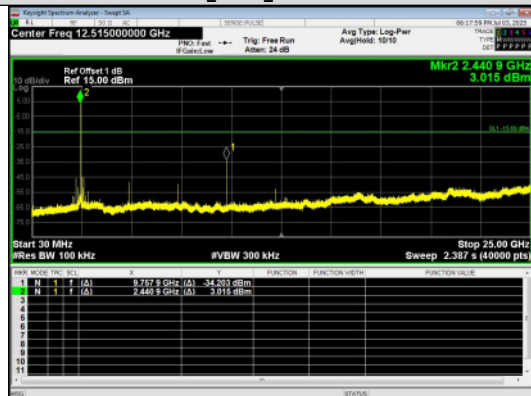
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 0



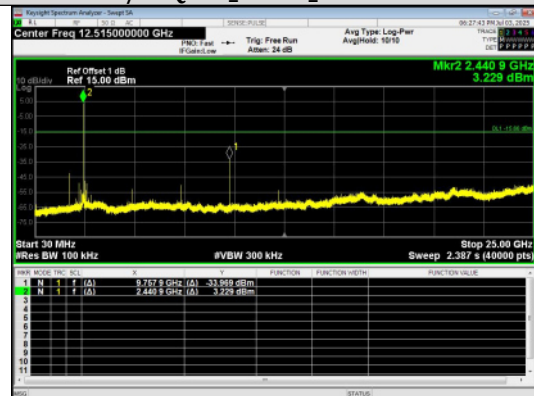
Out Of Band Emission
GFSK_DH5_Channel 39



Out Of Band Emission
 $\pi/4$ DQPSK_2-DH5_Channel 39



30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 39



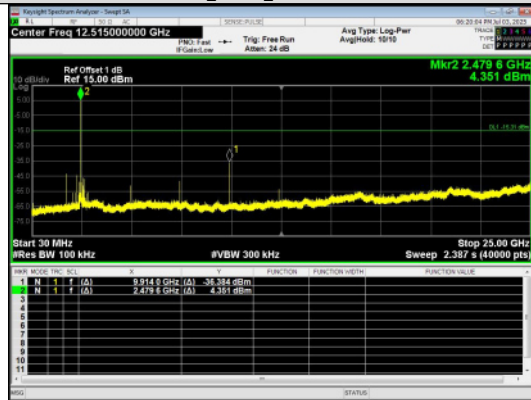
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 39



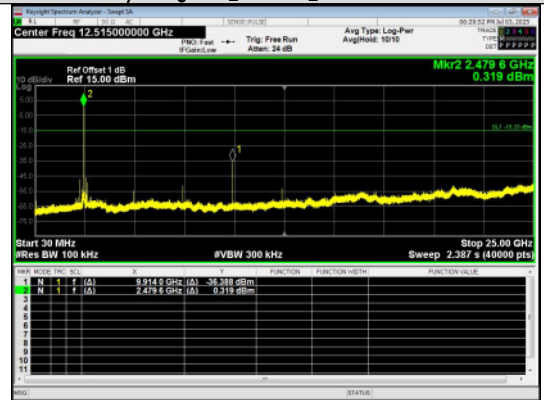
Out Of Band Emission
GFSK_DH5_Channel 78



Out Of Band Emission
 $\pi/4$ DQPSK_2-DH5_Channel 78



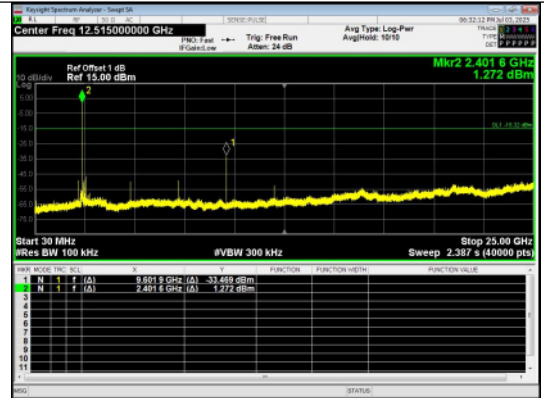
30.0 MHz - 25000.0 MHz
GFSK_DH5_Channel 78



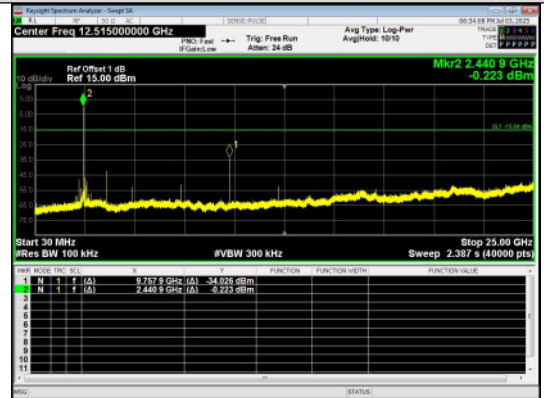
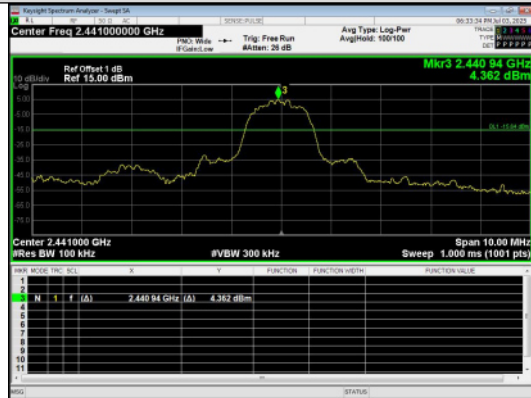
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH5_Channel 78



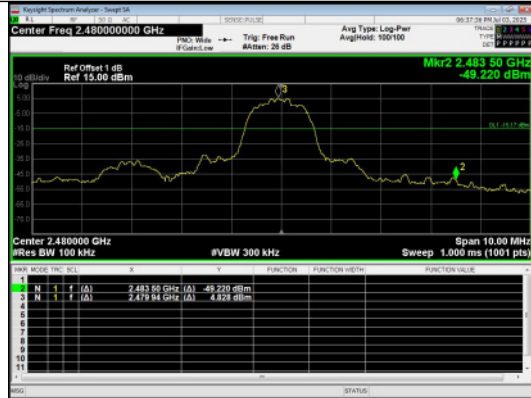
Out Of Band Emission
8DPSK_3-DH5_Channel 0



30.0 MHz - 25000.0 MHz
8DPSK_3-DH5_Channel 0

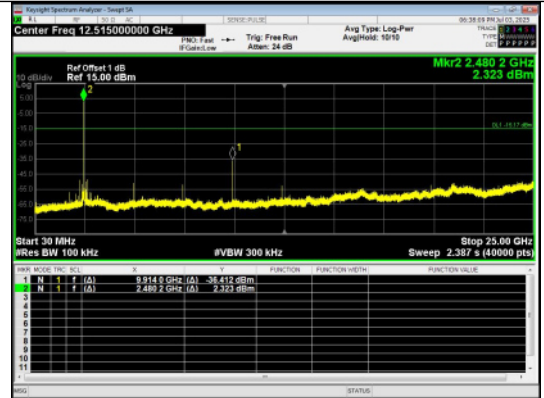


Out Of Band Emission 8DPSK_3-DH5_Channel 39

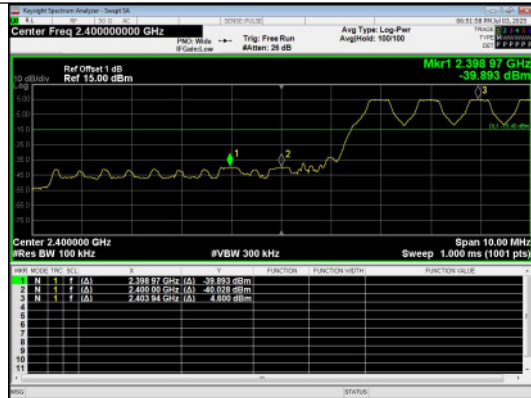


Out Of Band Emission 8DPSK_3-DH5_Channel 78

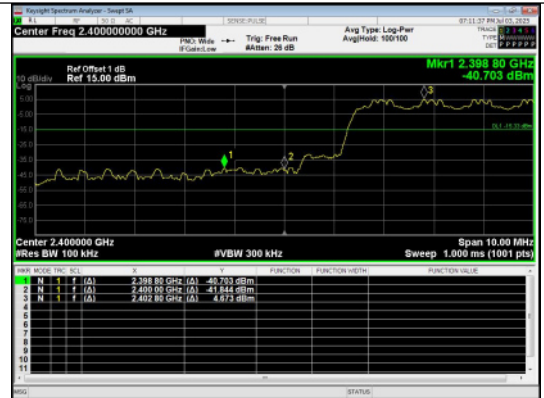
30.0 MHz - 25000.0 MHz 8DPSK_3-DH5_Channel 39



30.0 MHz - 25000.0 MHz 8DPSK_3-DH5_Channel 78



Out Of Band Emission(Left) GFSK_DH5_Channel Hopping



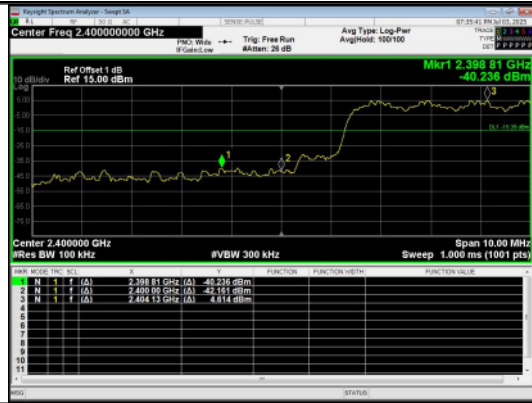
Out Of Band Emission(Left) $\pi/4$ DQPSK_2-DH5_Channel Hopping



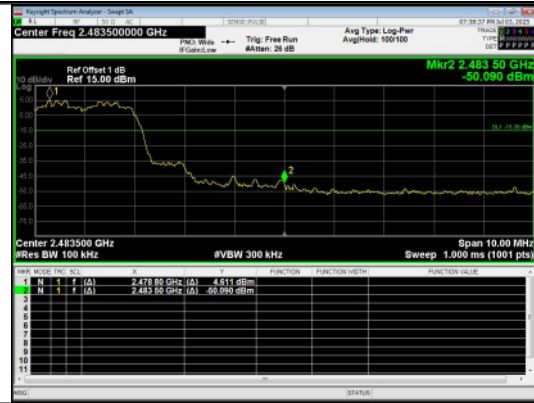
Out Of Band Emission(Right) GFSK_DH5_Channel Hopping



Out Of Band Emission(Right) $\pi/4$ DQPSK_2-DH5_Channel Hopping



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



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

***** End of Report *****