



Keyway Testing Technology (Guangdong) Co., Ltd
Room 2102,Building 6,Dongyi Intelligent Equipment New Energy Vehicle Park,N.30
of Tangxia District,Dongshen Road,Tangxia Town,Dongguan City,Guangdong,China

E.U.T:	OWS Bluetooth Headphones
Model Number:	MLF-M007
Trade Name:	MLF
Date of Receipt:	Aug 26, 2025
Date of Test:	Aug 26 ~ Sep 25, 2025
FCC ID:	2BRZO-MLF-M007



A.1 DUTY CYCLE

Test Result

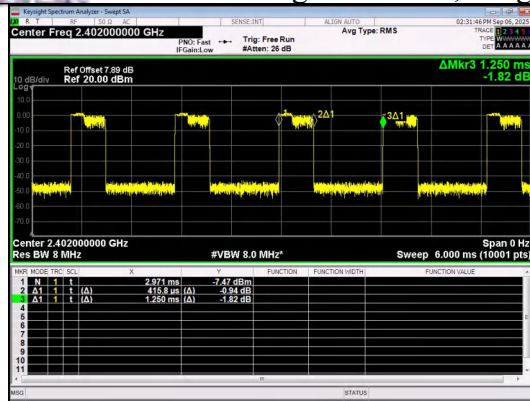
Modulation	Packets	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
GFSK	DH1	0	0.406	1.250	32.45	0.3245	4.8879	2.4631
		39	0.406	1.249	32.47	0.3247	4.8852	2.4631
		78	0.406	1.249	32.47	0.3247	4.8852	2.4631
π /4DQPSK	2-DH1	0	0.415	1.249	33.24	0.3324	4.7834	2.4096
		39	0.415	1.250	33.22	0.3322	4.786	2.4096
		78	0.416	1.250	33.27	0.3327	4.7795	2.4038
8DPSK	3-DH1	0	0.416	1.250	33.27	0.3327	4.7795	2.4038
		39	0.416	1.250	33.27	0.3327	4.7795	2.4038
		78	0.416	1.250	33.27	0.3327	4.7795	2.4038

Test Graphs

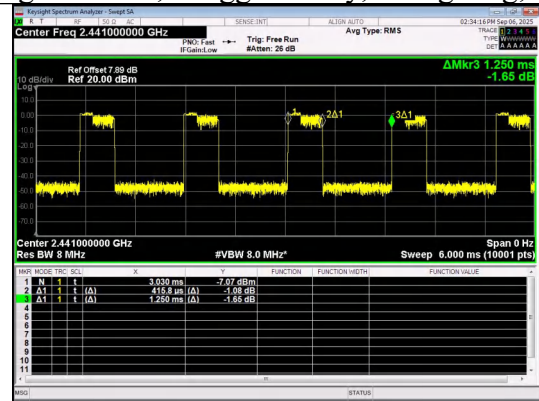




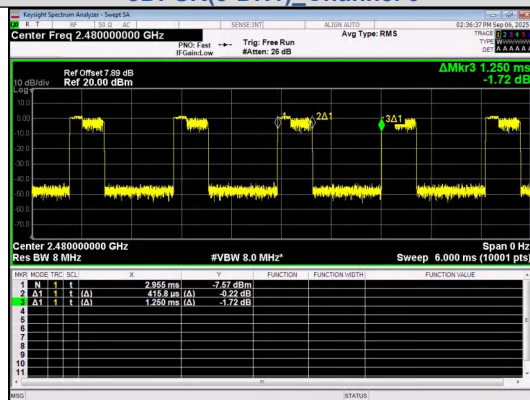
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8DPSK(3-DH1)_Channel 0



8DPSK(3-DH1)_Channel 39



8DPSK(3-DH1)_Channel 78



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A.2 DWELL TIME

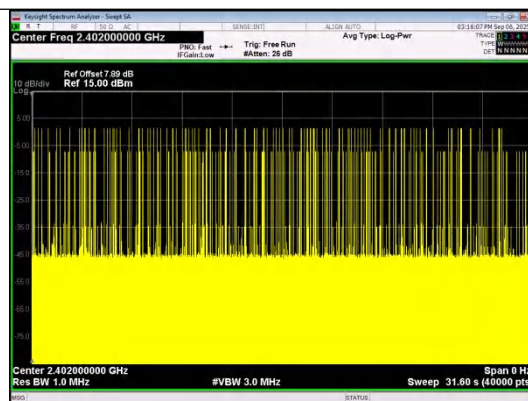
Test Result

Modulation	Packet	Channel	Pulse Width (ms)	Number of Pulses in 31.6 seconds	Dwell Time (ms)	Limit (ms)	Result
GFSK	DH5	Hopping	2.896	115	333.04	< 400	PASS
	DH5		2.912	111	323.23		PASS
	DH5		2.896	107	309.87		PASS
$\pi/4$ DQPSK	2-DH5		2.912	102	297.02		PASS
	2-DH5		2.912	114	331.97		PASS
	2-DH5		2.912	122	355.26		PASS
8DPSK	3-DH5		2.904	95	275.88		PASS
	3-DH5		2.904	100	290.4		PASS
	3-DH5		2.928	102	298.66		PASS

Test Graphs



Pulse Width
GFSK_DH5



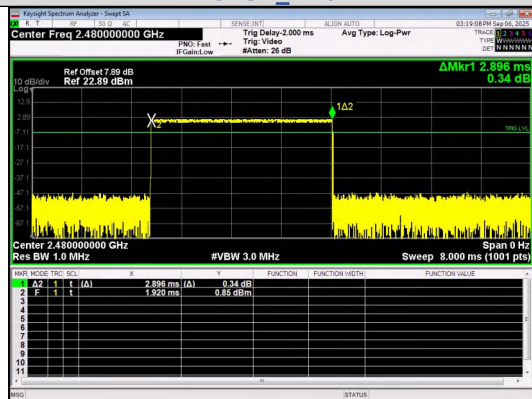
Number of Pulses in 31.6 seconds
GFSK_DH5



Pulse Width
GFSK_DH5



Number of Pulses in 31.6 seconds
GFSK_DH5



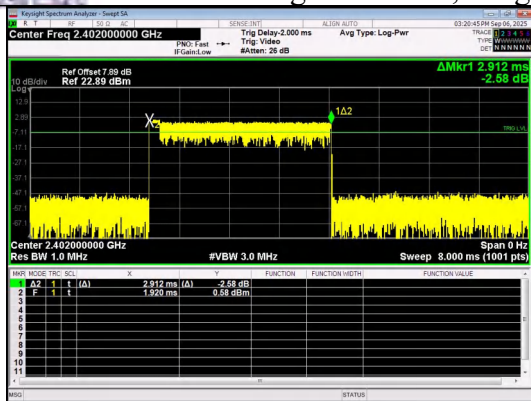
Pulse Width
GFSK_DH5



Number of Pulses in 31.6 seconds
GFSK_DH5



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Pulse Width
 $\pi/4$ DQPSK_2-DH5



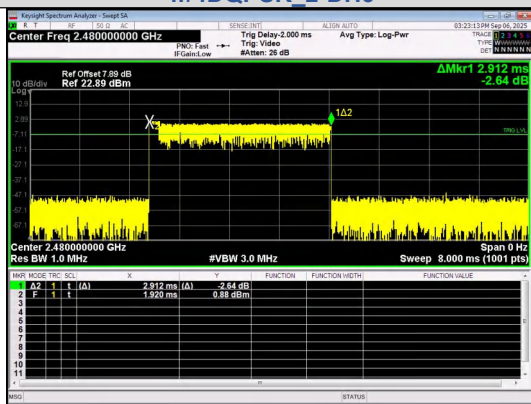
Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK_2-DH5



Pulse Width
 $\pi/4$ DQPSK_2-DH5



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



Pulse Width
 $\pi/4$ DQPSK_2-DH5



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



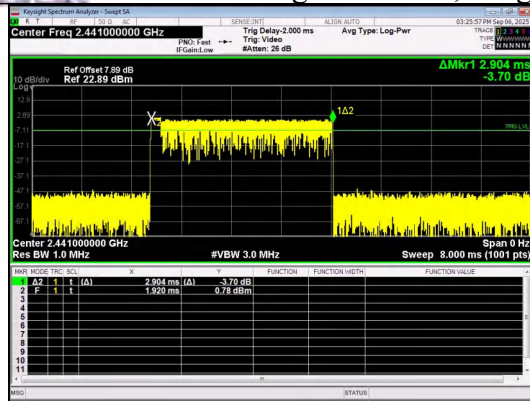
Pulse Width
8DPSK_3-DH5



Number of Pulses in 31.6 seconds
8DPSK_3-DH5



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Pulse Width
8DPSK_3-DH5



Number of Pulses in 31.6 seconds
8DPSK_3-DH5



Pulse Width
8DPSK_3-DH5



Number of Pulses in 31.6 seconds
8DPSK_3-DH5

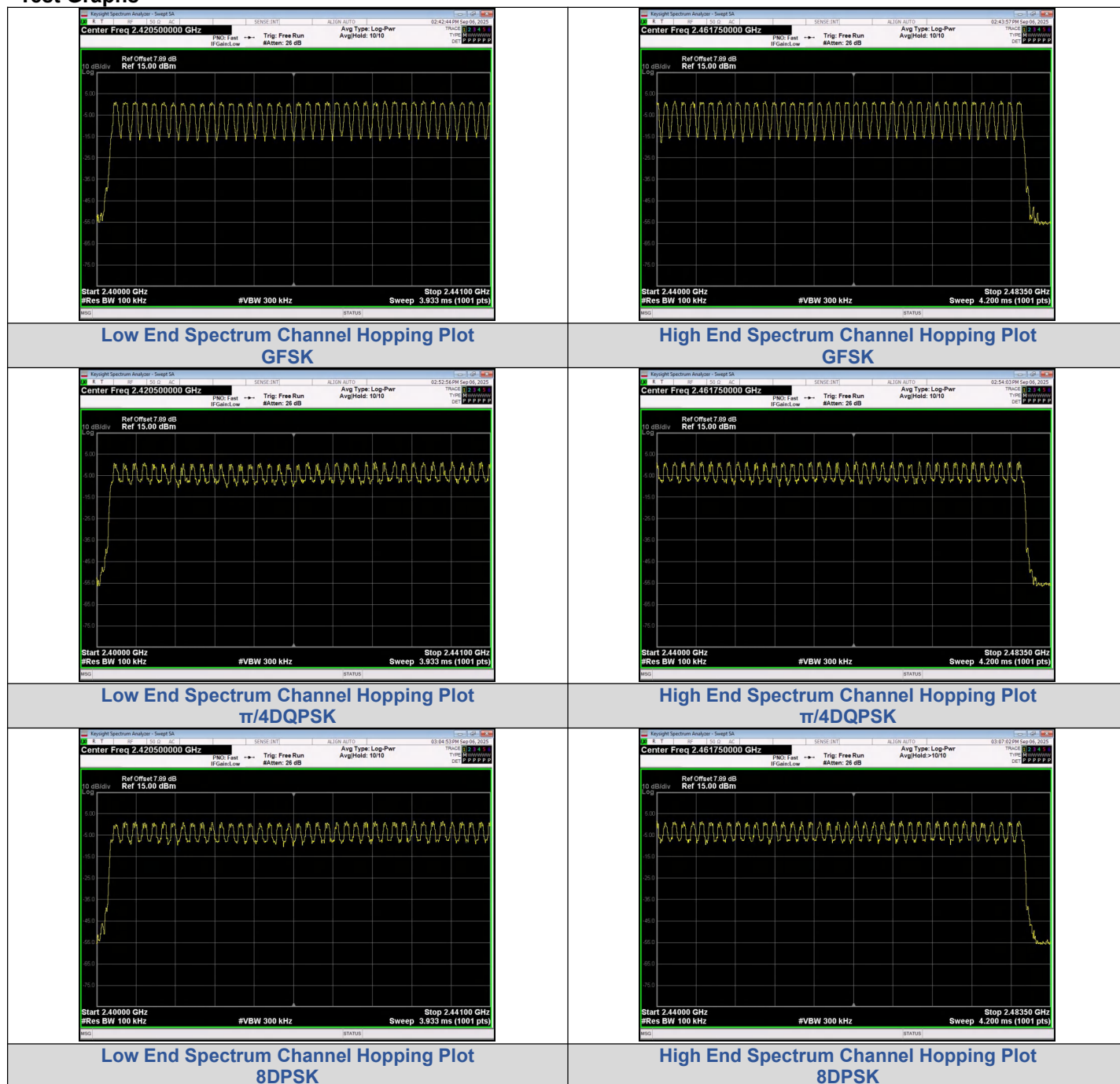


A.3 NUMBER OF HOPPING CHANNEL

Test Result

Modulation	Packet	Number of Hopping Channel	Limit	Result
GFSK	DH1	79	15	PASS
$\pi/4$ DQPSK	2-DH1	79	15	PASS
8DPSK	3-DH1	79	15	PASS

Test Graphs



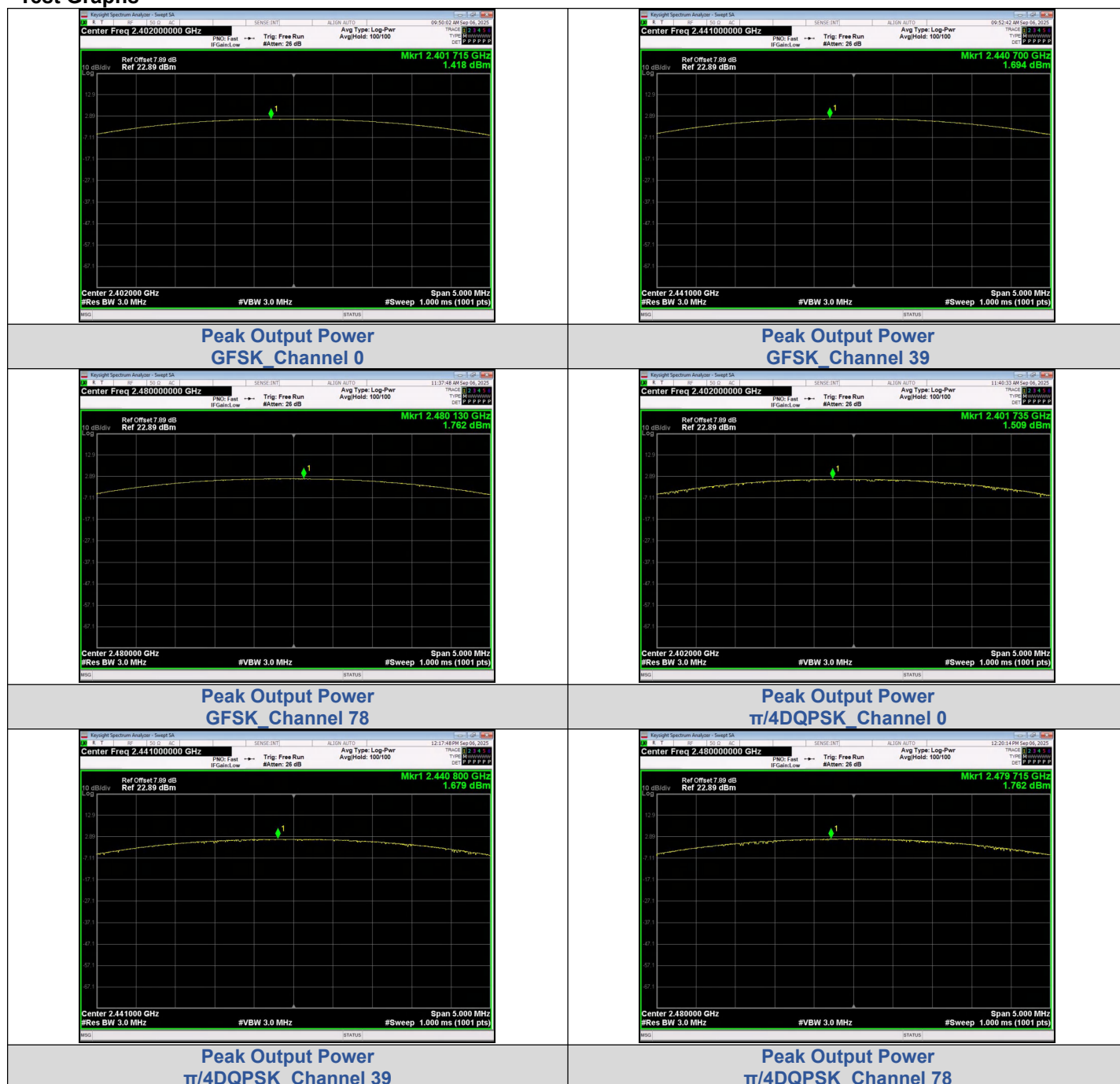


A.4 CONDUCTED PEAK OUTPUT POWER

Test Result

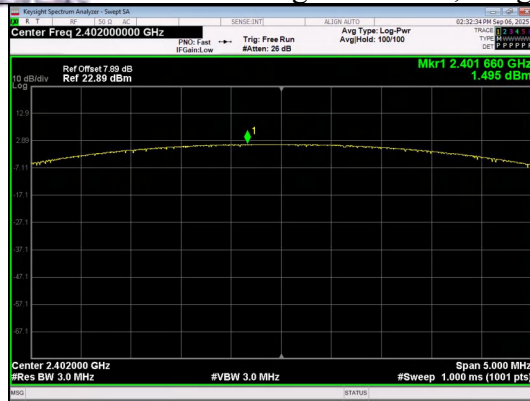
Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Max. Avg. Power (dBm)	Limit (dBm)	Result
GFSK	DH1	0	1.42	1.39	None	≤20.97	PASS
		39	1.69	1.48	None		PASS
		78	1.76	1.50	None		PASS
$\pi/4$ DQPSK	2-DH1	0	1.51	1.42	None		PASS
		39	1.68	1.47	None		PASS
		78	1.76	1.50	None		PASS
8DPSK	3-DH1	0	1.50	1.41	None		PASS
		39	1.64	1.46	None		PASS
		78	1.73	1.49	None		PASS

Test Graphs

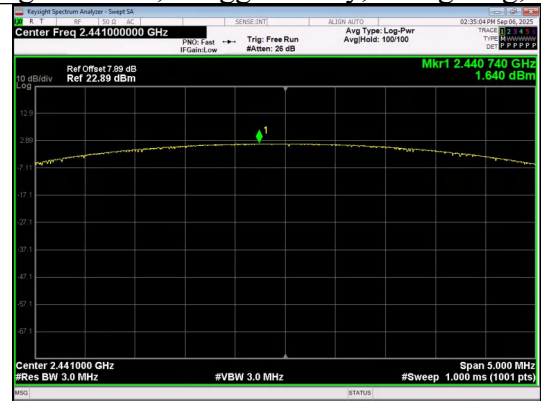




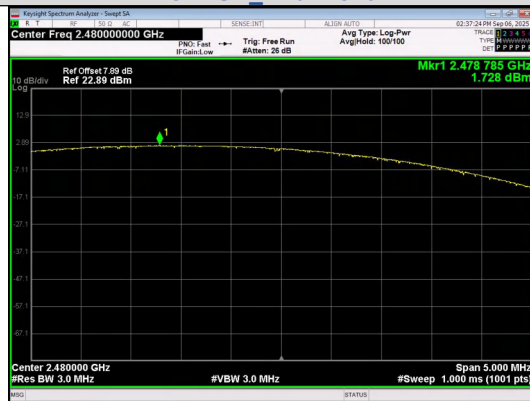
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Peak Output Power
8DPSK_Channel 0



Peak Output Power
8DPSK_Channel 39



Peak Output Power
8DPSK_Channel 78



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A.5 99% BANDWIDTH

Test Result

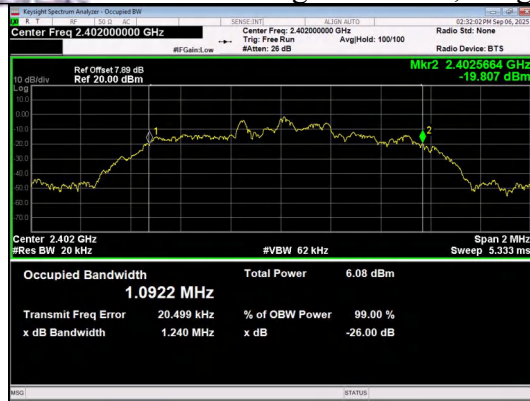
Modulation	Channel	Center Frequency (MHz)	99% BW (MHz)
GFSK	0	2402	0.80985
	39	2441	0.80711
	78	2480	0.82989
π /4DQPSK	0	2402	1.1202
	39	2441	1.1203
	78	2480	1.1067
8DPSK	0	2402	1.0922
	39	2441	1.0968
	78	2480	0.59745

Test Graphs

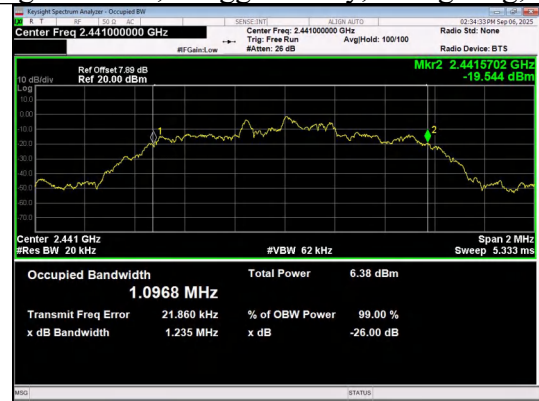




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8DPSK_3-DH1_Channel 0



8DPSK_3-DH1_Channel 39



8DPSK_3-DH1_Channel 78



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A.6 20DB BANDWIDTH

Test Result

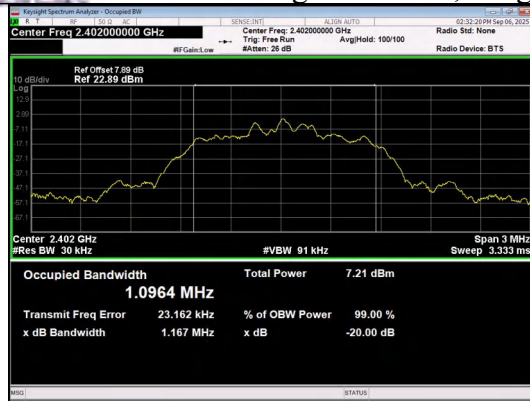
Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.8600
	39	2441 MHz	0.8700
	78	2480 MHz	0.8700
π /4DQPSK	0	2402 MHz	1.180
	39	2441 MHz	1.180
	78	2480 MHz	1.180
8DPSK	0	2402 MHz	1.170
	39	2441 MHz	1.170
	78	2480 MHz	1.120

Test Graphs

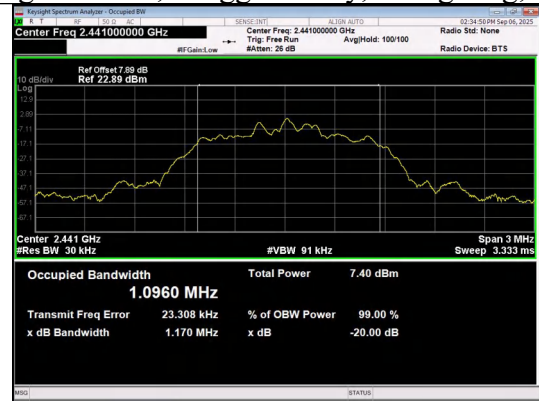




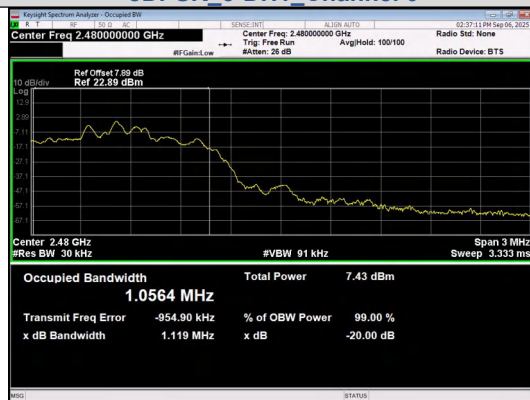
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8DPSK_3-DH1_Channel 0



8DPSK_3-DH1_Channel 39



8DPSK_3-DH1_Channel 78



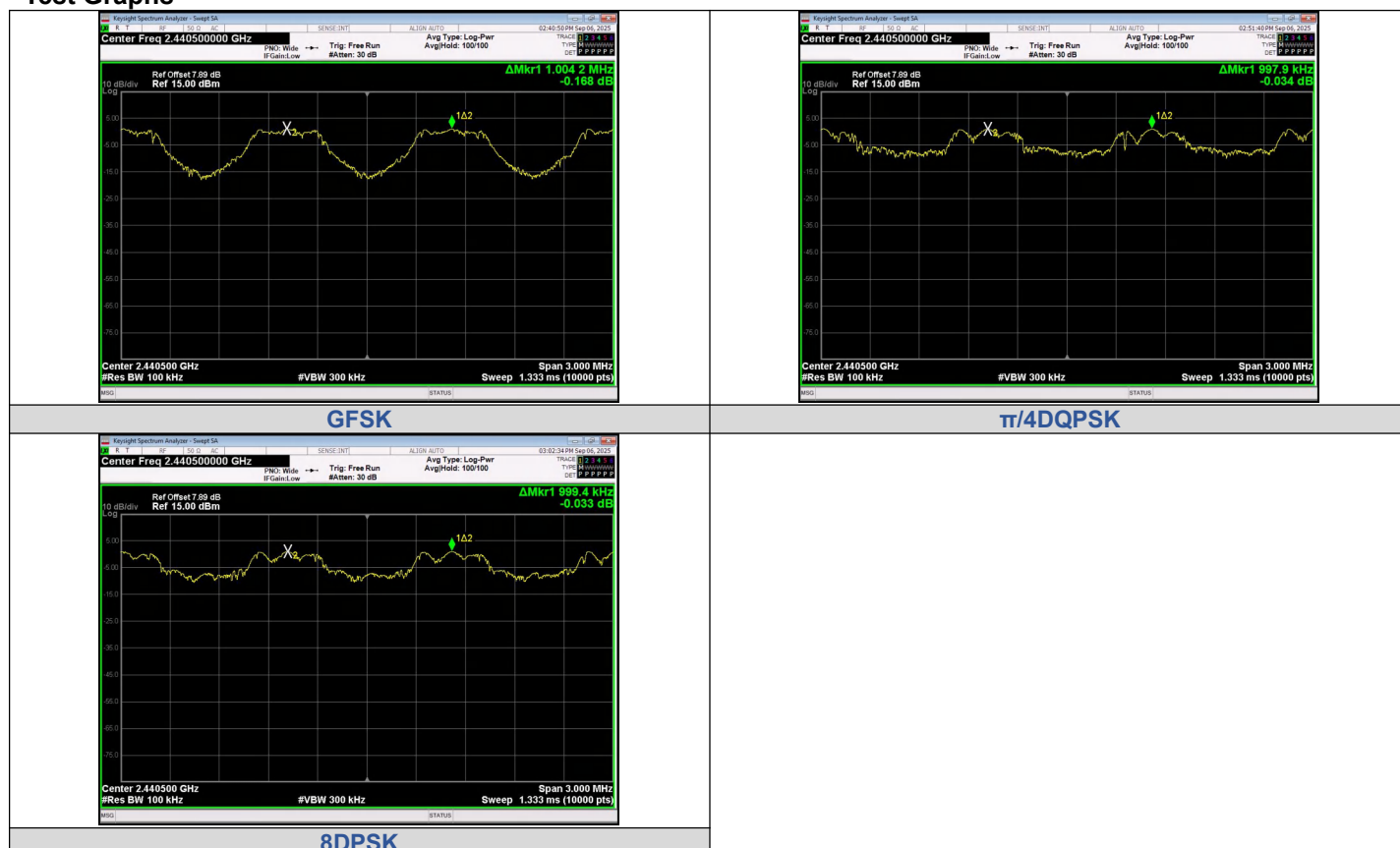
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A.7 CARRIER FREQUENCIES SEPARATION

Test Result

Modulation	Packet	Left Center frequency (MHz)	Right Center frequency (MHz)	Hopping Frequency Separation (MHz)	Limit (MHz)	Result
GFSK	DH1	2440.0123	2441.0165	1.0042	0.58	PASS
$\pi/4$ DQPSK	2-DH1	2440.018	2441.0159	0.9979	0.787	PASS
8DPSK	3-DH1	2440.0174	2441.0168	0.9994	0.78	PASS

Test Graphs





A.8 CONDUCTED OUT OF BAND EMISSION

Test Result

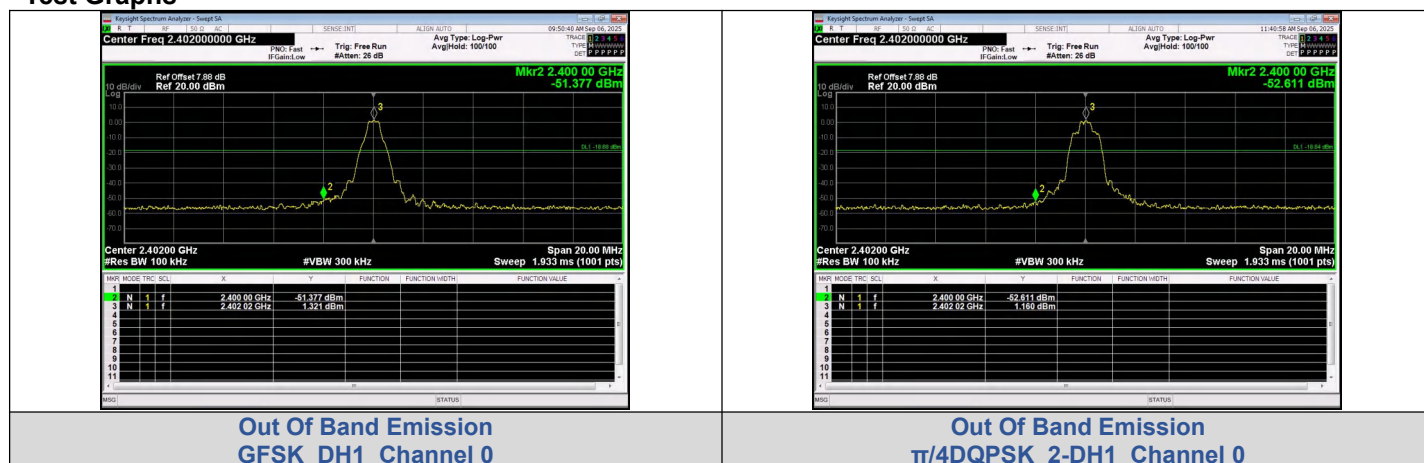
Non-Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH1	0	2400.00	-51.380	-18.68	-32.700	PASS
			4804.38	-37.539	-18.68	-18.859	PASS
		39	4881.79	-35.840	-18.76	-17.080	PASS
			2483.50	-56.020	-18.47	-37.550	PASS
			4959.83	-33.762	-18.47	-15.292	PASS
$\pi/4$ DQPSK	2-DH1	0	2400.00	-52.610	-18.84	-33.770	PASS
			4804.38	-41.045	-18.84	-22.205	PASS
		39	4881.79	-37.813	-18.7	-19.113	PASS
			2483.50	-56.810	-18.52	-38.290	PASS
			4959.83	-33.680	-18.52	-15.160	PASS
8DPSK	3-DH1	0	2400.00	-54.790	-18.86	-35.930	PASS
			4803.76	-34.903	-18.86	-16.043	PASS
		39	4882.42	-36.382	-18.66	-17.722	PASS
			2483.50	-53.590	-18.57	-35.020	PASS
			4957.95	-32.826	-18.57	-14.256	PASS

Hopping

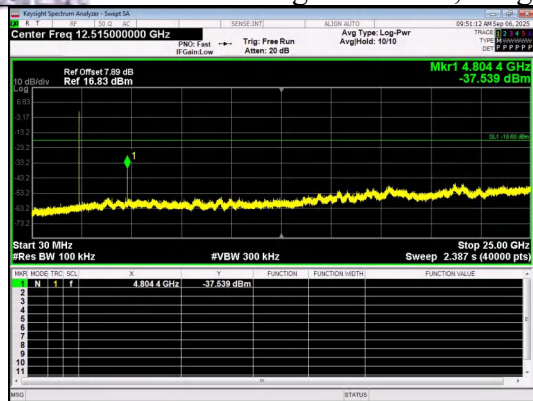
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH1	Hopping	2400.00	-51.500	-18.95	-32.550	PASS
			2483.50	-55.200	-18.53	-36.670	PASS
π/4DQPSK	2-DH1		2390.24	-53.762	-18.96	-34.802	PASS
			2400.00	-55.780	-18.96	-36.820	PASS
8DPSK	3-DH1		2483.50	-55.300	-18.56	-36.740	PASS
			2398.26	-53.701	-18.93	-34.771	PASS
			2400.00	-54.480	-18.93	-35.550	PASS
			2483.50	-54.540	-18.55	-35.990	PASS

Test Graphs

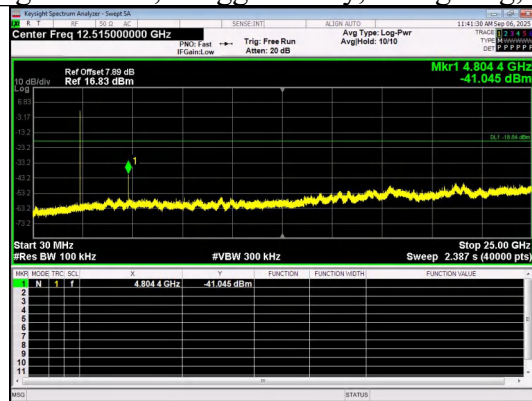




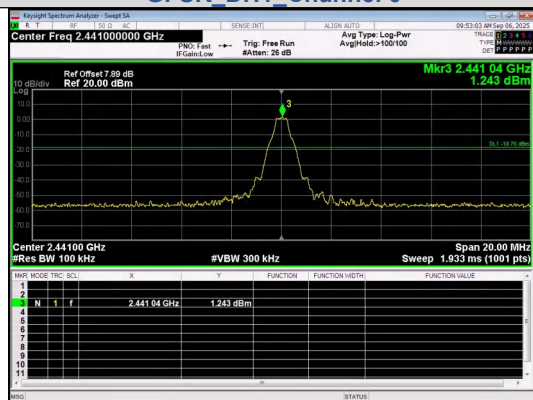
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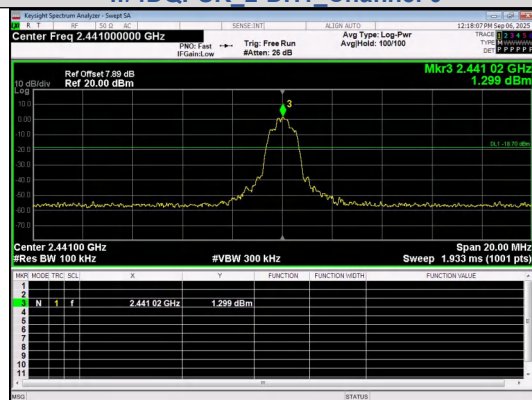
30.0 MHz - 25000.0 MHz
GFSK_DH1_Channel 0



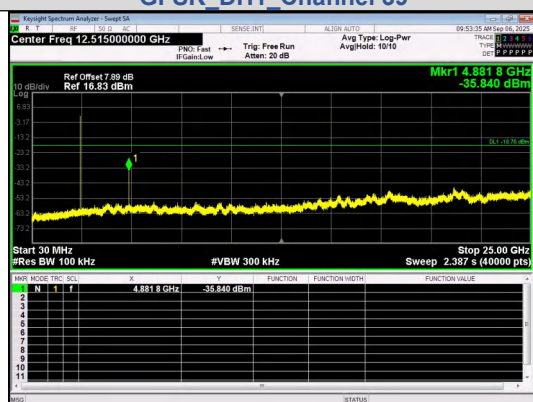
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH1_Channel 0



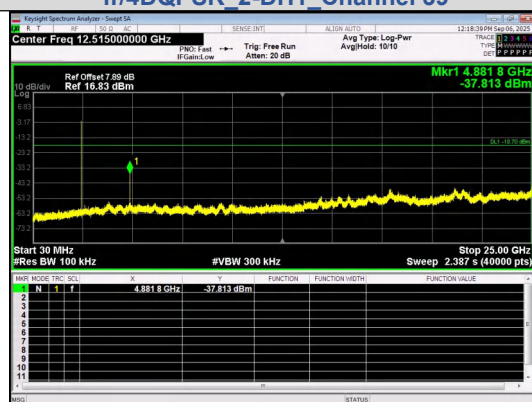
Out Of Band Emission
GFSK_DH1_Channel 39



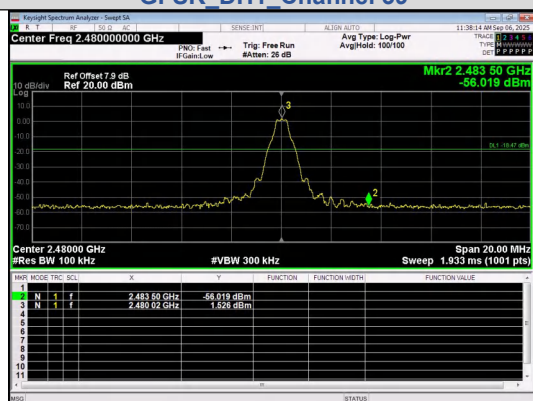
Out Of Band Emission
 $\pi/4$ DQPSK_2-DH1_Channel 39



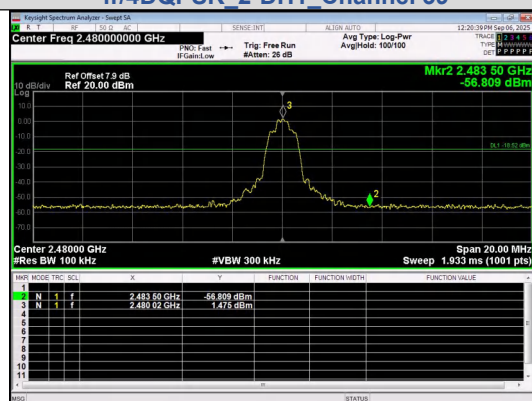
30.0 MHz - 25000.0 MHz
GFSK_DH1_Channel 39



30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH1_Channel 39



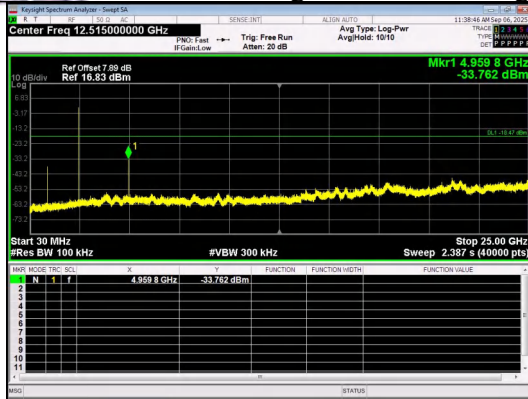
Out Of Band Emission
GFSK_DH1_Channel 78



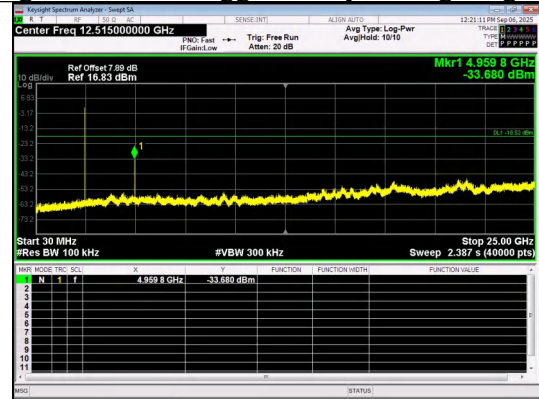
Out Of Band Emission
 $\pi/4$ DQPSK_2-DH1_Channel 78



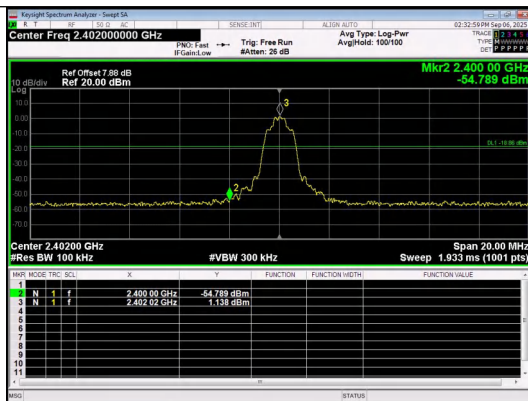
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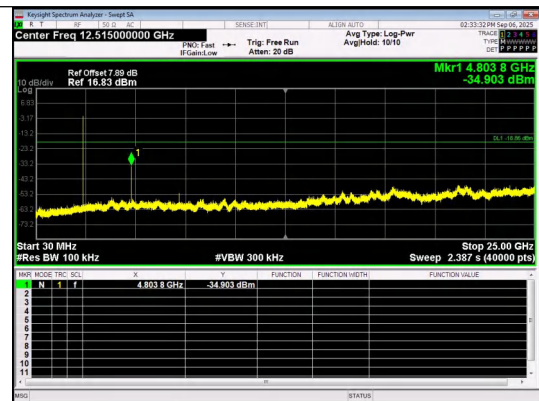
30.0 MHz - 25000.0 MHz
GFSK_DH1_Channel 78



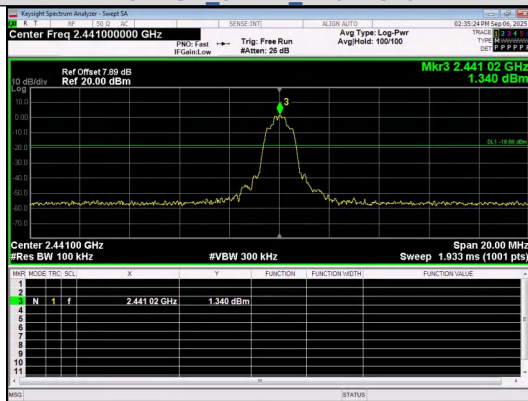
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH1_Channel 78



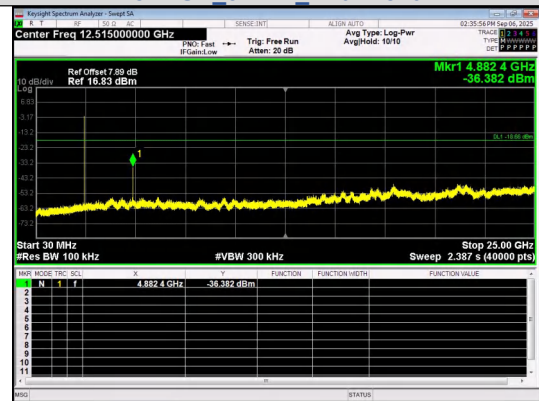
Out Of Band Emission
8DPSK_3-DH1_Channel 0



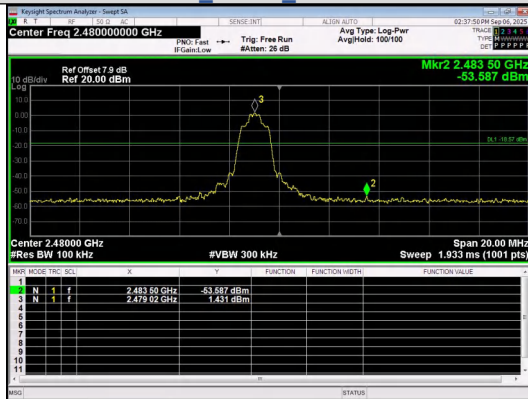
30.0 MHz - 25000.0 MHz
8DPSK_3-DH1_Channel 0



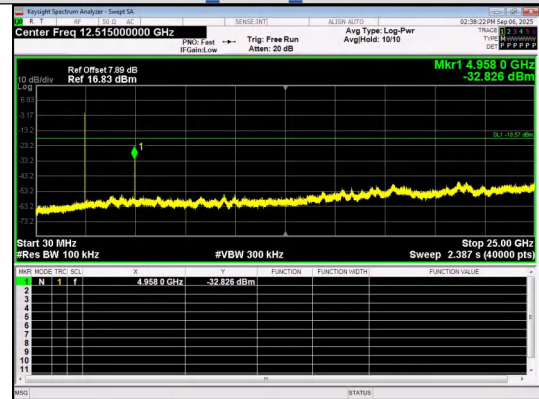
Out Of Band Emission
8DPSK_3-DH1_Channel 39



30.0 MHz - 25000.0 MHz
8DPSK_3-DH1_Channel 39



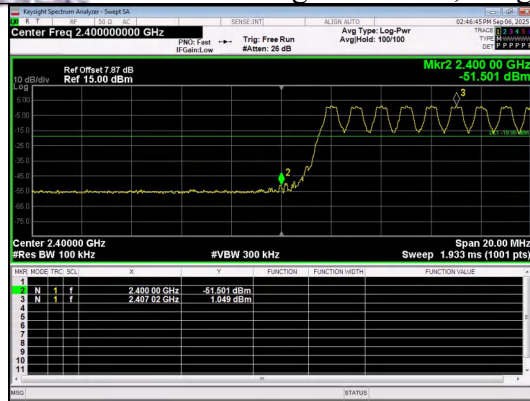
Out Of Band Emission
8DPSK_3-DH1_Channel 78



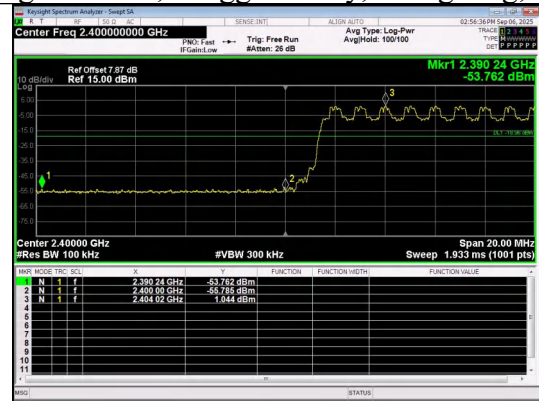
30.0 MHz - 25000.0 MHz
8DPSK_3-DH1_Channel 78



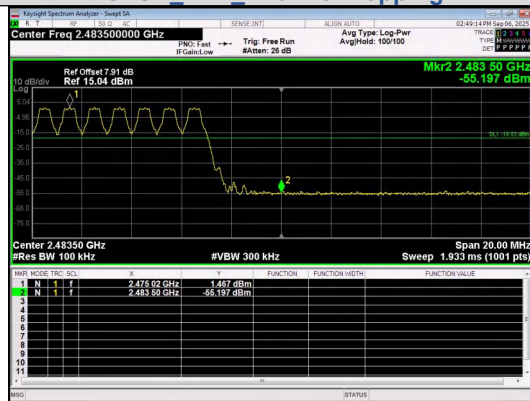
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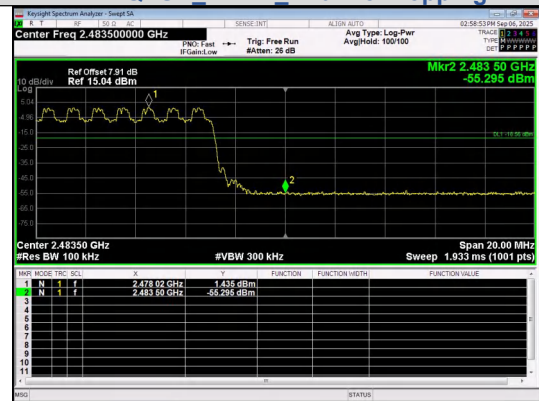
Out Of Band Emission(Left)
GFSK_DH1_Channel Hopping



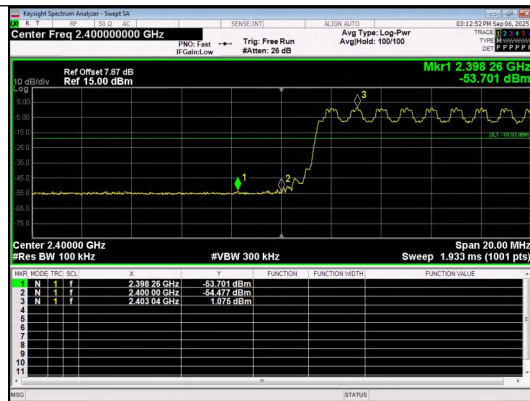
Out Of Band Emission(Left)
 $\pi/4$ DQPSK_2-DH1_Channel Hopping



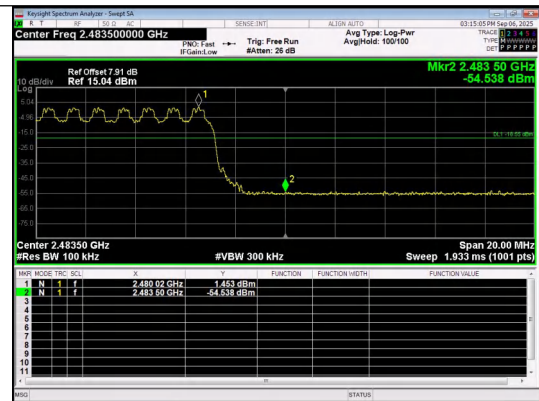
Out Of Band Emission(Right)
GFSK_DH1_Channel Hopping



Out Of Band Emission(Right)
 $\pi/4$ DQPSK_2-DH1_Channel Hopping



Out Of Band Emission(Left)
8DPSK_3-DH1_Channel Hopping



Out Of Band Emission(Right)
8DPSK_3-DH1_Channel Hopping