

RF Conducted Test -

appendix III Bluetooth_(Class Bluetooth)_Test data.

E.U.T:	Turntable Hi-Fi System with Speakers
Model Number:	AH X200
Sample ID	33000269597
Sample(s) Status:	Engineer sample
Date of Receipt:	2026.05.10
Date of Test:	2026.05.11 ~ 2026.05.12
FCC ID:	2BFHV-H2502
Report No.	2026052158926864-00
Tester	Hugh Zhang

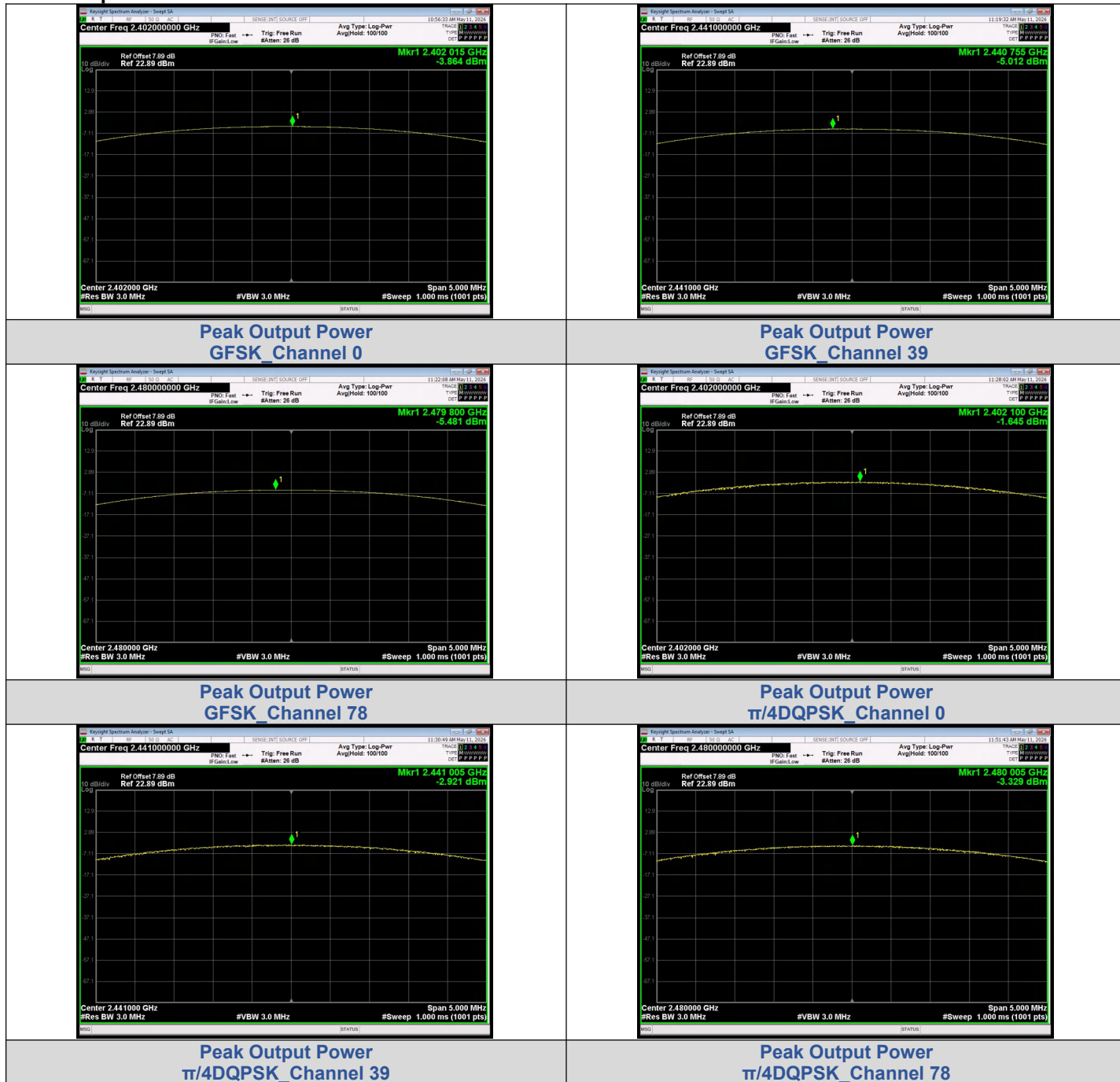
A.1 CONDUCTED OUTPUT POWER

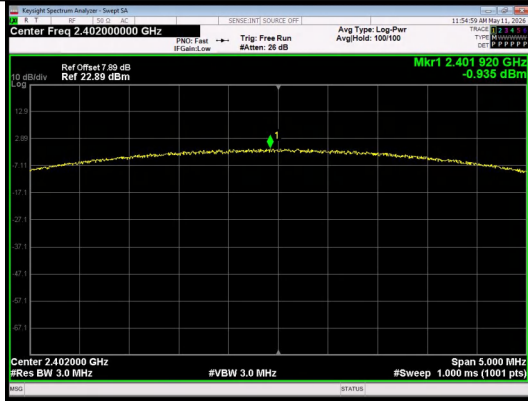
Test Result

Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Max. Avg. Power (dBm)	Limit (dBm)	Result
GFSK	DH1	0	-3.86	0.41	None	≤30	PASS
		39	-5.01	0.32	None		PASS
		78	-5.48	0.28	None		PASS
$\pi/4$ DQPSK	2-DH1	0	-1.65	0.68	None		PASS
		39	-2.92	0.51	None		PASS
		78	-3.33	0.46	None		PASS
8DPSK	3-DH1	0	-0.94	0.81	None		PASS
		39	-2.15	0.61	None		PASS
		78	-2.65	0.54	None		PASS

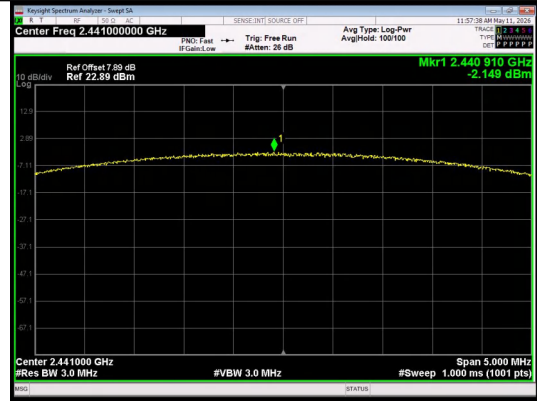
Note: input compensation coefficient (dB)= Cable Loss (dB)

Test Graphs

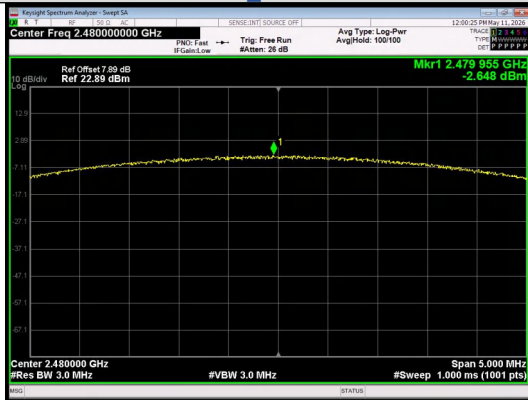




**Peak Output Power
8DPSK_Channel 0**



**Peak Output Power
8DPSK_Channel 39**



**Peak Output Power
8DPSK_Channel 78**

A.2 99% BANDWIDTH

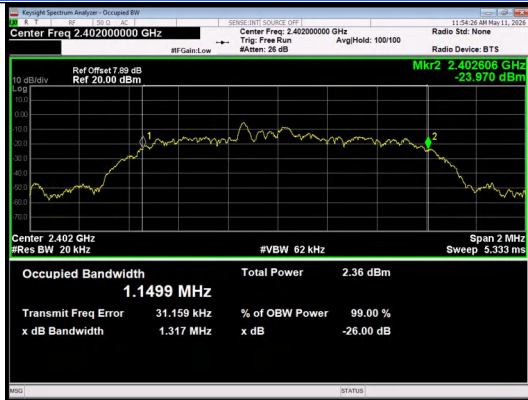
Test Result

Modulation	Channel	Center Frequency (MHz)	99% BW (MHz)
GFSK	0	2402	0.80200
	39	2441	0.79950
	78	2480	0.80212
π /4DQPSK	0	2402	1.1546
	39	2441	1.1583
	78	2480	1.1467
8DPSK	0	2402	1.1499
	39	2441	1.1499
	78	2480	1.1406

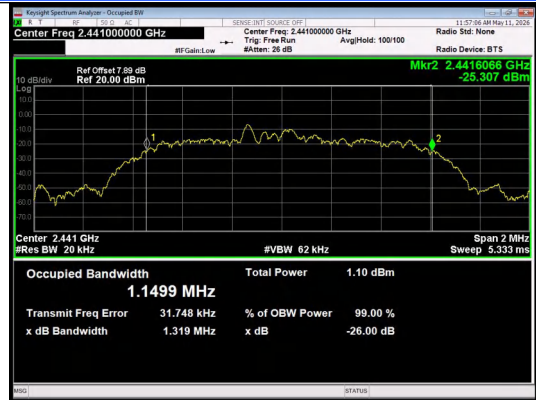
Note: input compensation coefficient (dB)= Cable Loss (dB)

Test Graphs

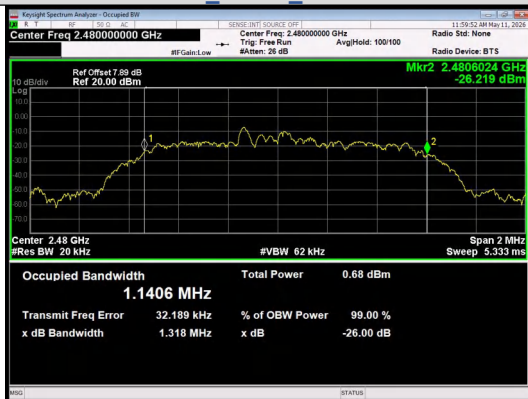




8DPSK_3-DH1_Channel 0



8DPSK_3-DH1_Channel 39



8DPSK_3-DH1_Channel 78

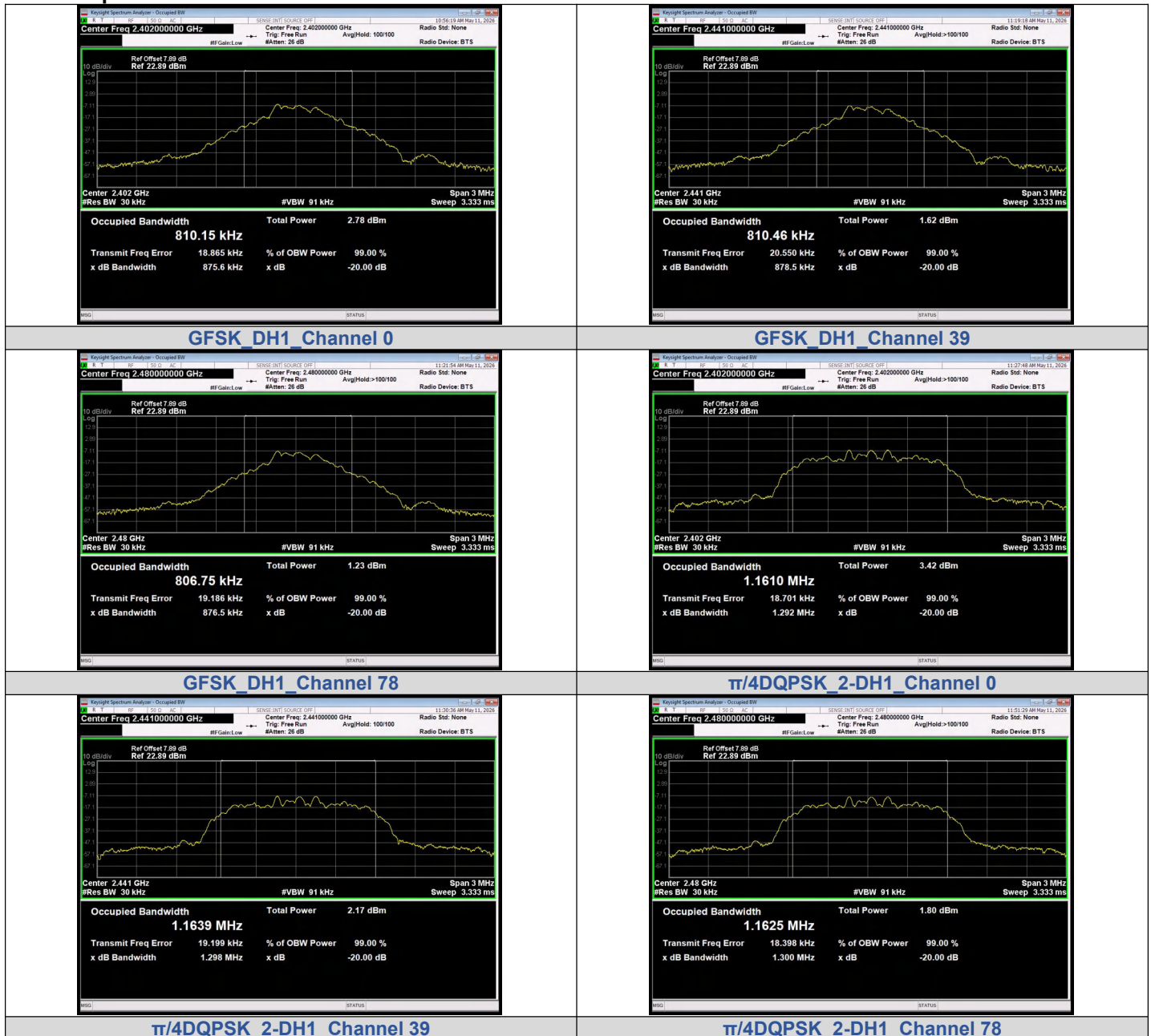
A.3 20DB BANDWIDTH

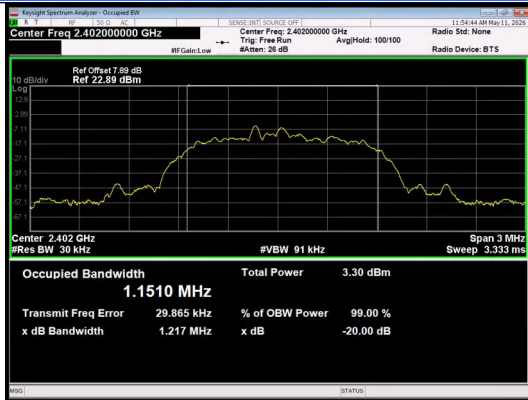
Test Result

Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.8756
	39	2441 MHz	0.8785
	78	2480 MHz	0.8765
π /4DQPSK	0	2402 MHz	1.292
	39	2441 MHz	1.298
	78	2480 MHz	1.300
8DPSK	0	2402 MHz	1.217
	39	2441 MHz	1.215
	78	2480 MHz	1.217

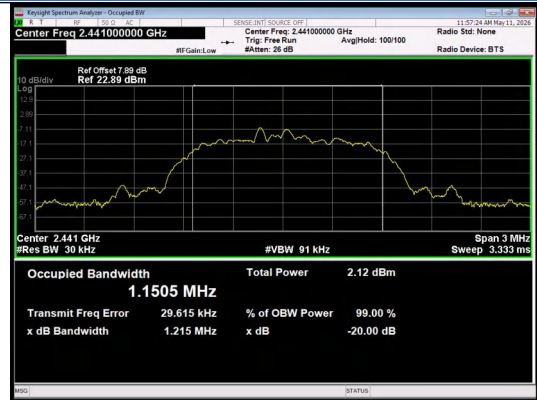
Note: input compensation coefficient (dB)= Cable Loss (dB)

Test Graphs

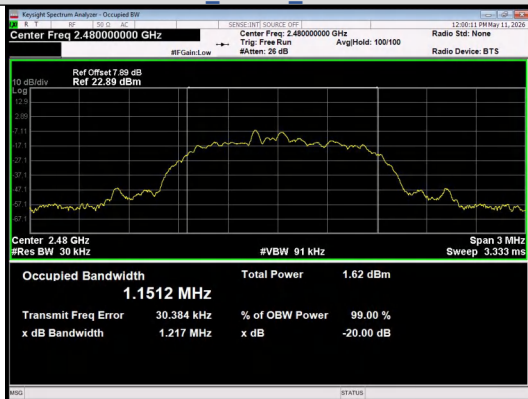




8DPSK_3-DH1_Channel 0



8DPSK_3-DH1_Channel 39



8DPSK_3-DH1_Channel 78

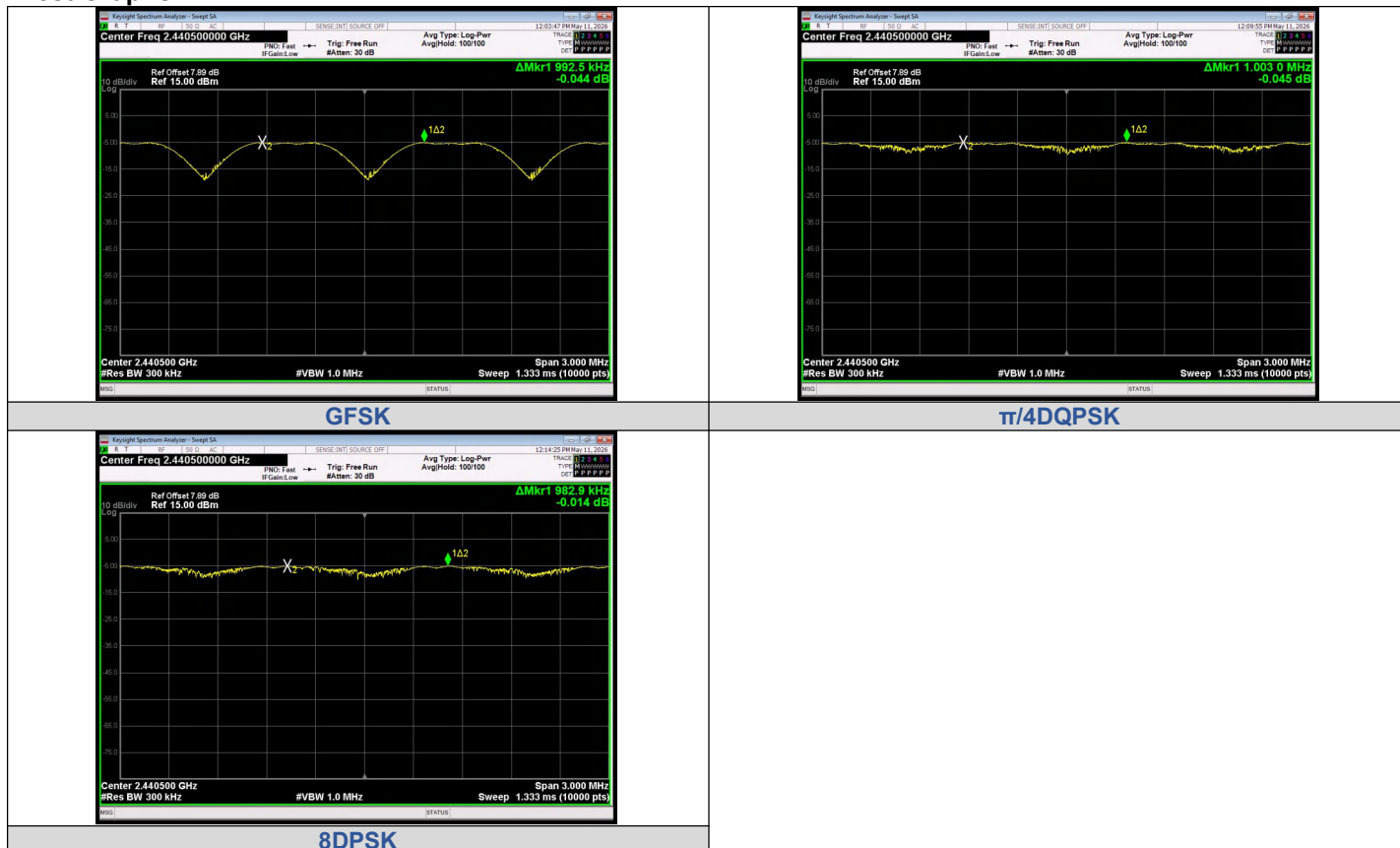
A.4 CARRIER FREQUENCIES SEPARATION

Test Result

Modulation	Packet	Left Center frequency (MHz)	Right Center frequency (MHz)	Hopping Frequency Separation (MHz)	Minimum Limit (MHz)	Result
GFSK	DH1	2439.8719	2440.8644	0.9925	0.878	PASS
$\pi/4$ DQPSK	2-DH1	2439.8662	2440.8692	1.0030	0.867	PASS
8DPSK	3-DH1	2440.0264	2441.0093	0.9829	0.811	PASS

Note: input compensation coefficient (dB)= Cable Loss (dB)

Test Graphs



A.5 CONDUCTED SPURIOUS & BAND EDGE EMISSION

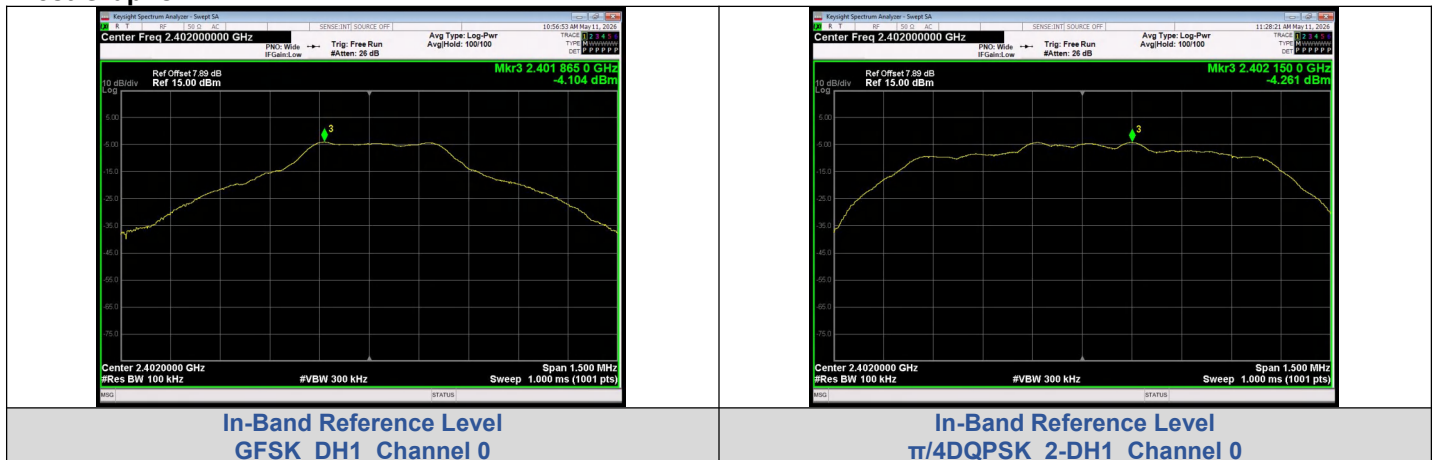
Test Result

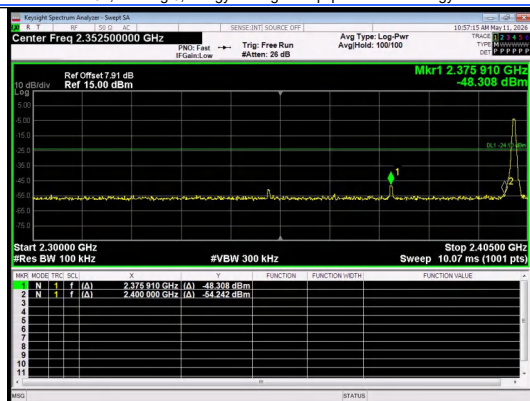
Non-Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH1	0	2375.91	-48.308	-24.1	-24.208	PASS
			2400.00	-54.242	-24.1	-30.142	PASS
			4803.60	-48.085	-24.1	-23.985	PASS
			7206.40	-59.926	-24.1	-35.826	PASS
		39	9607.90	-56.963	-24.1	-32.863	PASS
			4881.67	-50.504	-25.27	-25.234	PASS
			7323.11	-58.137	-25.27	-32.867	PASS
			9763.93	-56.957	-25.27	-31.687	PASS
		78	2483.50	-56.518	-25.7	-30.818	PASS
			4960.33	-53.810	-25.7	-28.110	PASS
			7439.85	-59.932	-25.7	-34.232	PASS
			9612.24	-53.095	-25.7	-27.395	PASS
$\pi/4$ DQPSK	2-DH1	0	9919.99	-53.127	-25.7	-27.427	PASS
			2400.00	-47.309	-24.26	-23.049	PASS
			4804.26	-45.964	-24.26	-21.704	PASS
			7206.38	-56.426	-24.26	-32.166	PASS
		39	9607.87	-52.678	-24.26	-28.418	PASS
			4882.30	-47.804	-25.52	-22.284	PASS
			7323.11	-60.417	-25.52	-34.897	PASS
			9763.93	-55.185	-25.52	-29.665	PASS
		78	2483.50	-54.569	-25.91	-28.659	PASS
			4960.33	-51.276	-25.91	-25.366	PASS
			7439.85	-61.135	-25.91	-35.225	PASS
			9919.99	-53.071	-25.91	-27.161	PASS
8DPSK	3-DH1	0	2375.81	-47.477	-23.96	-23.517	PASS
			2400.00	-51.954	-23.96	-27.994	PASS
			4803.60	-46.941	-23.96	-22.980	PASS
			7206.40	-57.017	-23.96	-33.057	PASS
		39	9607.90	-58.627	-23.96	-34.667	PASS
			4881.67	-50.921	-25.17	-25.751	PASS
			7323.11	-61.776	-25.17	-36.606	PASS
			9763.93	-56.186	-25.17	-31.016	PASS
		78	2483.50	-56.688	-25.64	-31.048	PASS
			4959.70	-49.654	-25.64	-24.014	PASS
			7439.85	-62.689	-25.64	-37.049	PASS
			9919.99	-53.377	-25.64	-27.737	PASS

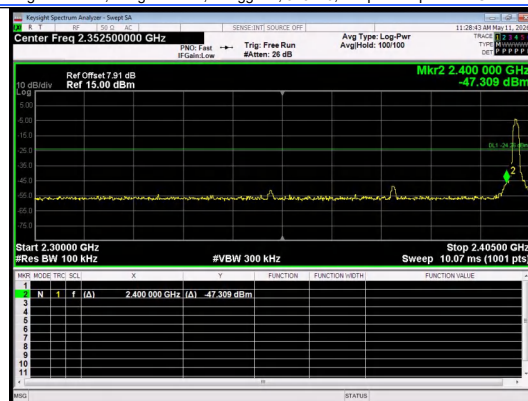
Note: input compensation coefficient (dB)= Cable Loss (dB)

Test Graphs

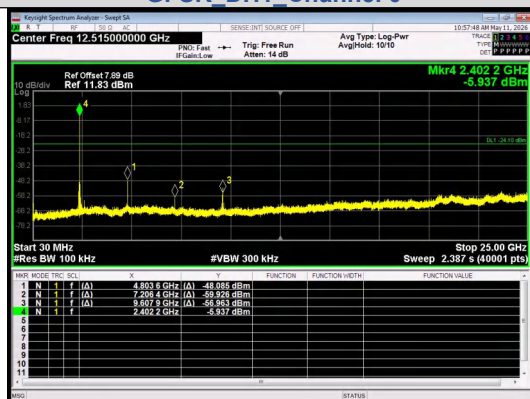




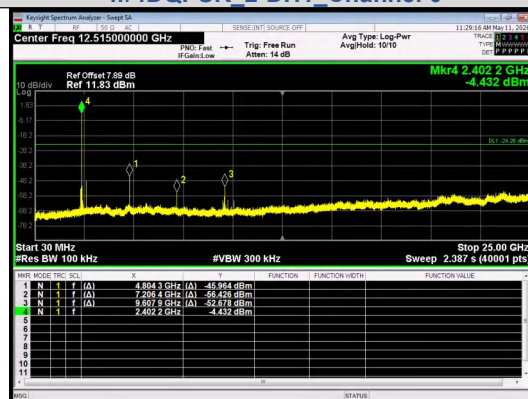
**Out Of Band Emission
GFSK_DH1_Channel 0**



**Out Of Band Emission
 $\pi/4$ DQPSK_2-DH1_Channel 0**



**30.0 MHz - 25000.0 MHz
GFSK_DH1_Channel 0**



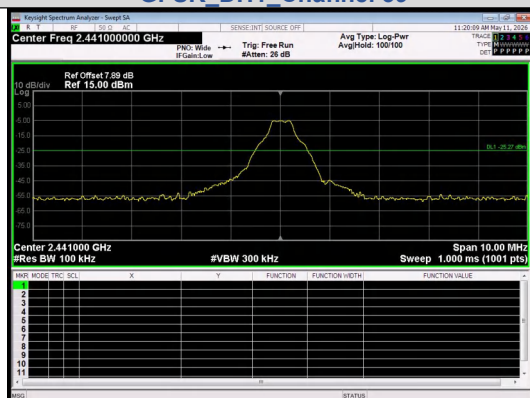
**30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH1_Channel 0**



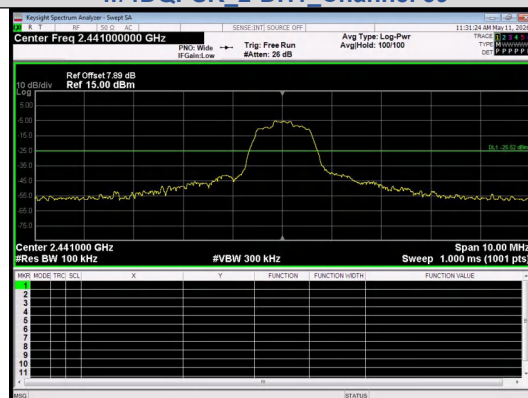
**In-Band Reference Level
GFSK_DH1_Channel 39**



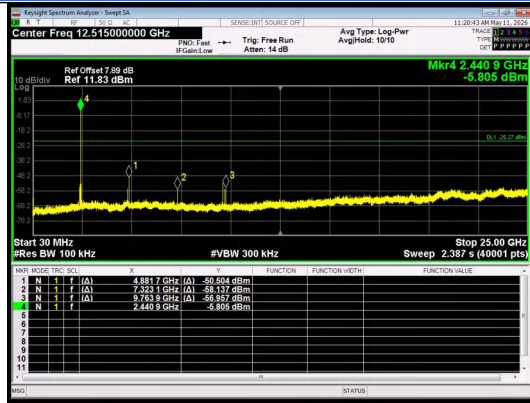
**In-Band Reference Level
 $\pi/4$ DQPSK_2-DH1_Channel 39**



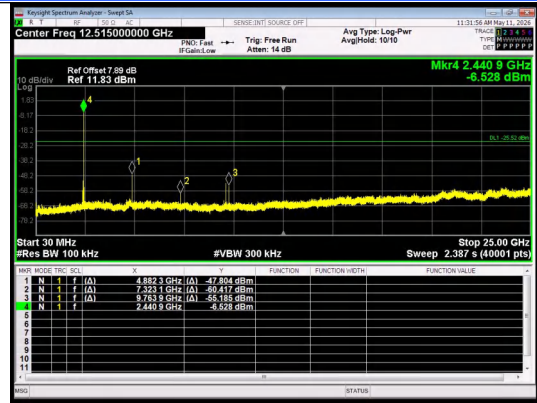
**Out Of Band Emission
GFSK_DH1_Channel 39**



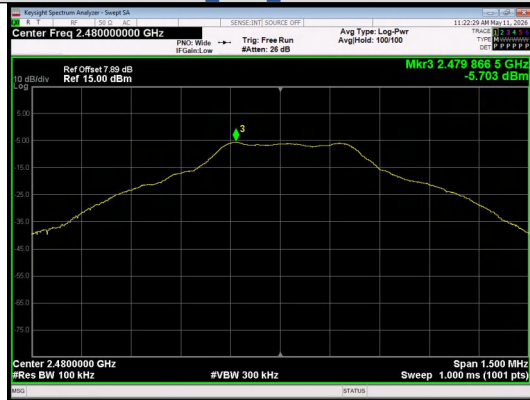
**Out Of Band Emission
 $\pi/4$ DQPSK_2-DH1_Channel 39**



30.0 MHz - 25000.0 MHz
GFSK_DH1_Channel 39



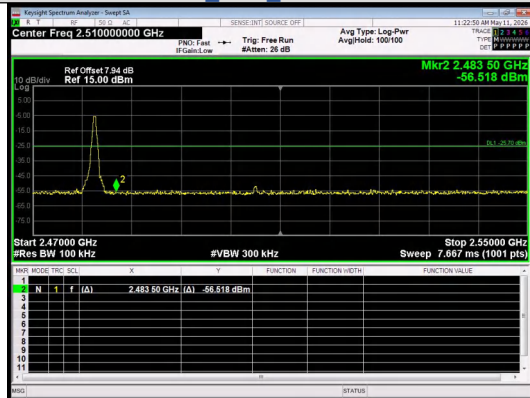
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH1_Channel 39



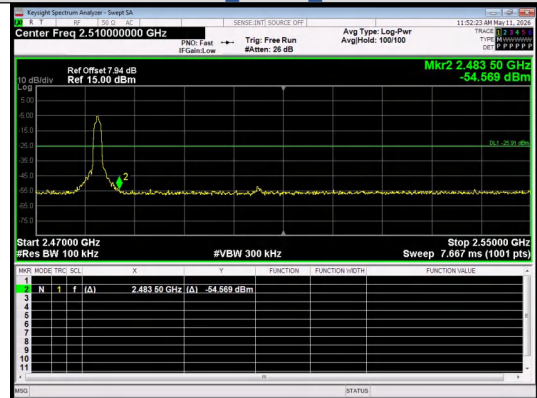
In-Band Reference Level
GFSK_DH1_Channel 78



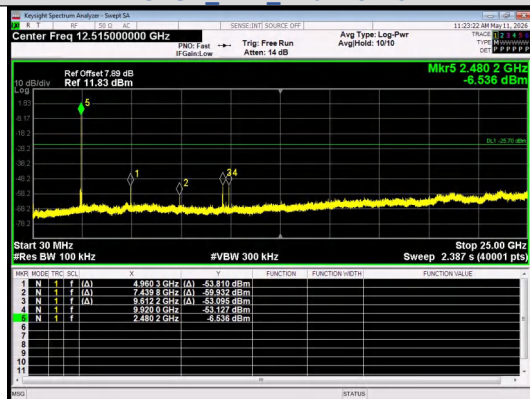
In-Band Reference Level
 $\pi/4$ DQPSK_2-DH1_Channel 78



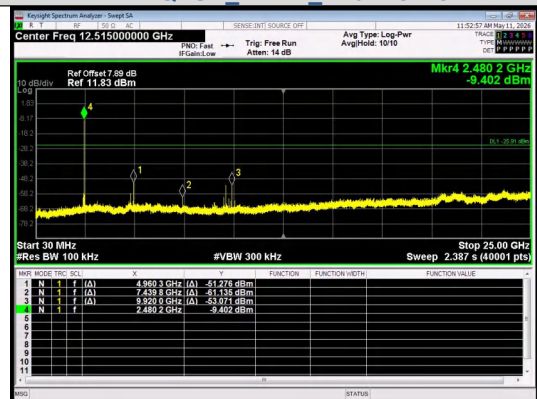
Out Of Band Emission
GFSK_DH1_Channel 78



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



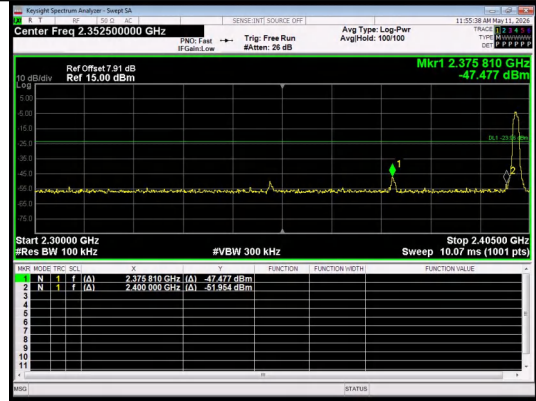
30.0 MHz - 25000.0 MHz
GFSK_DH1_Channel 78



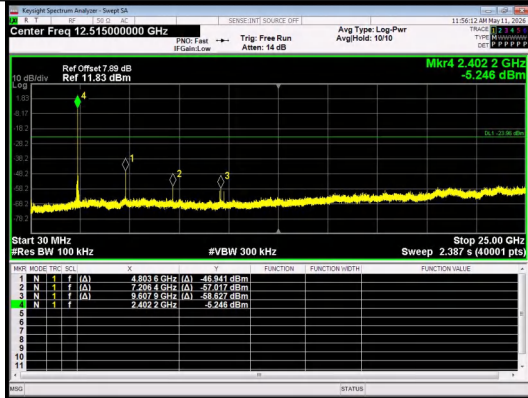
30.0 MHz - 25000.0 MHz
 $\pi/4$ DQPSK_2-DH1_Channel 78



**In-Band Reference Level
8DPSK_3-DH1_Channel 0**



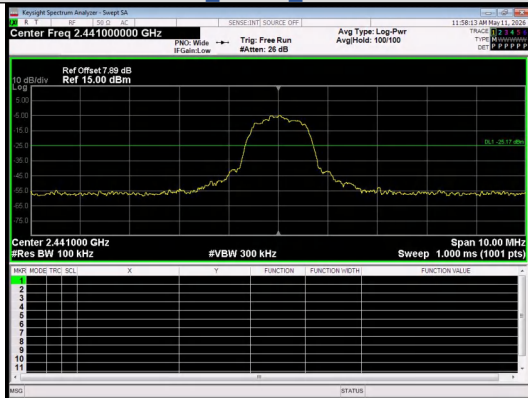
**Out Of Band Emission
8DPSK_3-DH1_Channel 0**



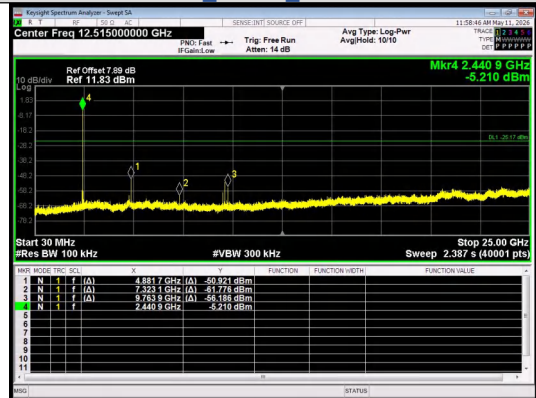
**30.0 MHz - 25000.0 MHz
8DPSK_3-DH1_Channel 0**



**In-Band Reference Level
8DPSK_3-DH1_Channel 39**



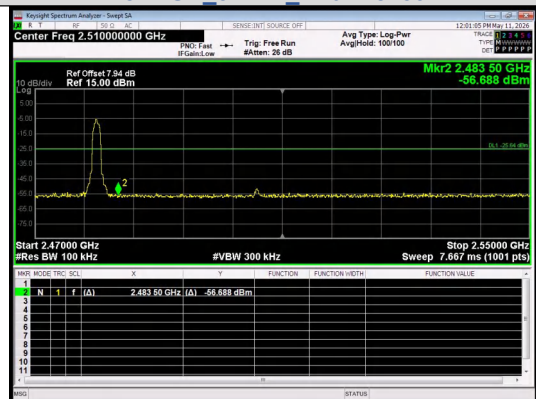
**Out Of Band Emission
8DPSK_3-DH1_Channel 39**



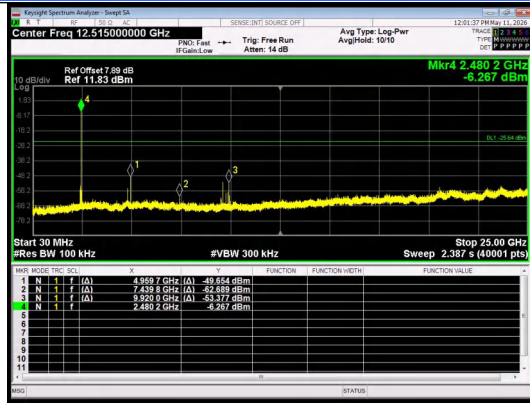
**30.0 MHz - 25000.0 MHz
8DPSK_3-DH1_Channel 39**



**In-Band Reference Level
8DPSK_3-DH1_Channel 78**



**Out Of Band Emission
8DPSK_3-DH1_Channel 78**



30.0 MHz - 25000.0 MHz
8DPSK_3-DH1_Channel 78

A.6 DUTY CYCLE

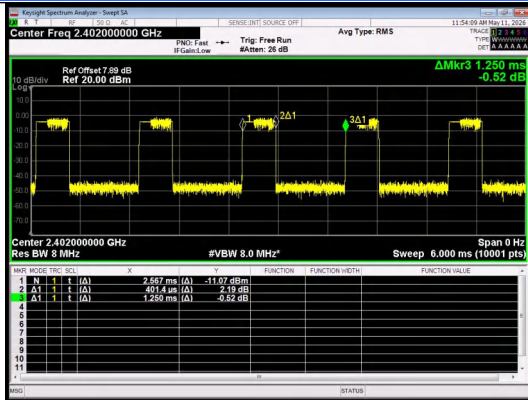
Test Result

Modulation	Packets	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
GFSK	DH1	0	0.391	1.249	31.27	0.3127	5.0487	2.5575
		39	0.391	1.249	31.27	0.3127	5.0487	2.5575
		78	0.391	1.250	31.25	0.3125	5.0515	2.5575
π /4DQPSK	2-DH1	0	0.400	1.250	31.97	0.3197	4.9526	2.5000
		39	0.399	1.249	31.94	0.3194	4.9567	2.5063
		78	0.399	1.249	31.94	0.3194	4.9567	2.5063
8DPSK	3-DH1	0	0.401	1.250	32.12	0.3212	4.9322	2.4938
		39	0.401	1.249	32.08	0.3208	4.9377	2.4938
		78	0.401	1.250	32.12	0.3212	4.9322	2.4938

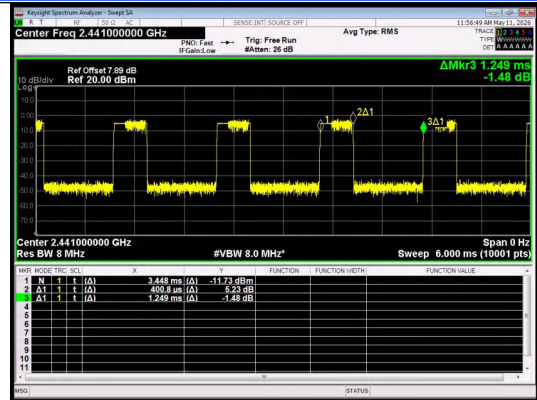
Note: input compensation coefficient (dB)= Cable Loss (dB)

Test Graphs





8DPSK(3-DH1)_Channel 0



8DPSK(3-DH1)_Channel 39



8DPSK(3-DH1)_Channel 78

A.7 DWELL TIME

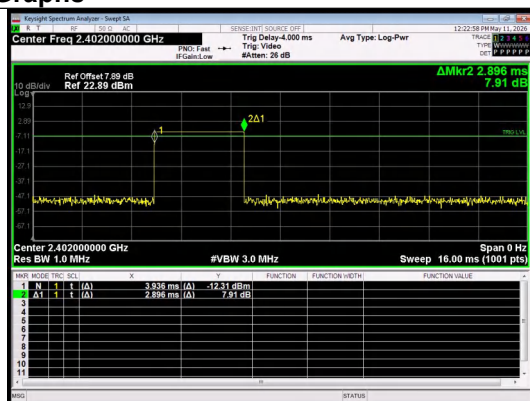
Test Result

Modulation	Packet	Channel	Pulse Width (ms)	Number of Pulses in 31.6 seconds	Dwell Time (ms)	Limit (ms)	Result
GFSK	DH5	Hopping	2.896	114	330.14	< 400	PASS
	DH5		2.912	90	262.08		PASS
	DH5		2.912	93	270.82		PASS
π/4DQPSK	2-DH5		2.912	106	308.67		PASS
	2-DH5		2.912	109	317.41		PASS
	2-DH5		2.912	103	299.94		PASS
8DPSK	3-DH5		2.912	98	285.38		PASS
	3-DH5		2.912	111	323.23		PASS
	3-DH5		2.912	104	302.85		PASS

Note: Dwell time=Pulse time(ms)*Number of Pulses in 31.6 seconds

Note: input compensation coefficient (dB)= Cable Loss (dB)

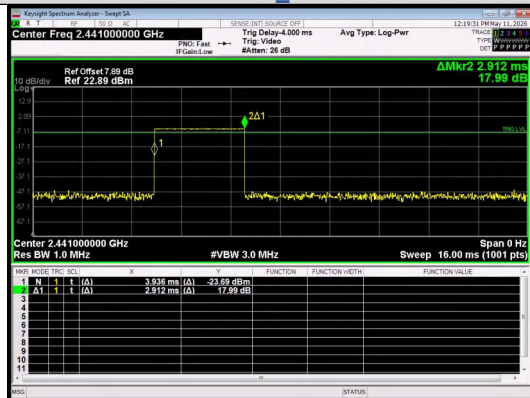
Test Graphs



Pulse Width
GFSK_DH5



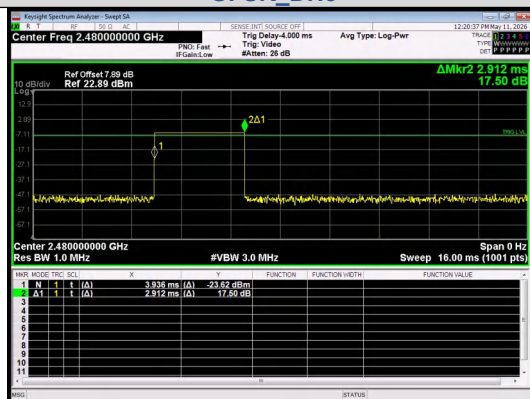
Number of Pulses in 31.6 seconds
GFSK_DH5



Pulse Width
GFSK_DH5



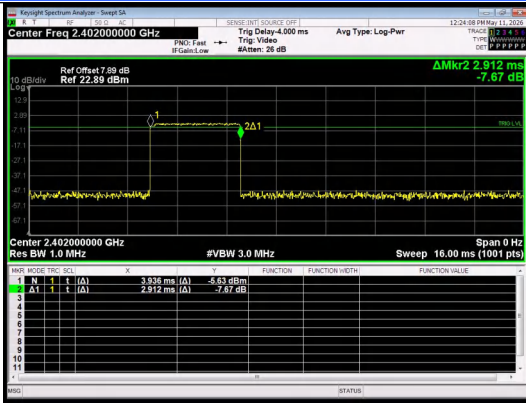
Number of Pulses in 31.6 seconds
GFSK_DH5



Pulse Width
GFSK_DH5



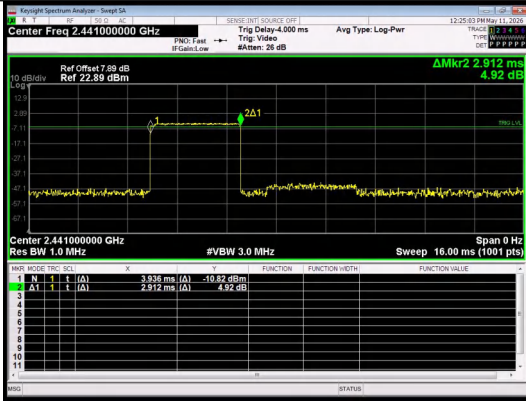
Number of Pulses in 31.6 seconds
GFSK_DH5



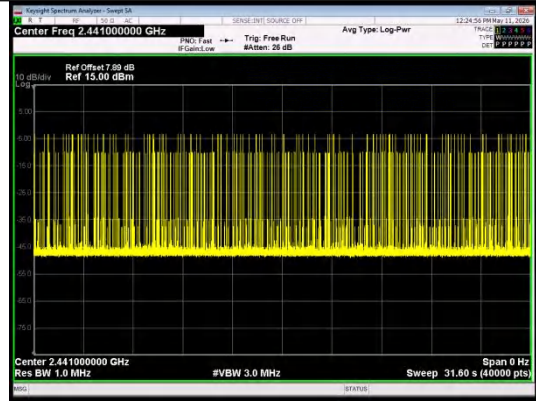
Pulse Width
 $\pi/4$ DQPSK_2-DH5



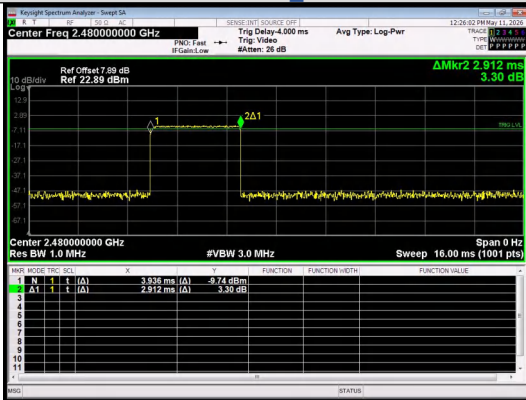
Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK_2-DH5



Pulse Width
 $\pi/4$ DQPSK_2-DH5



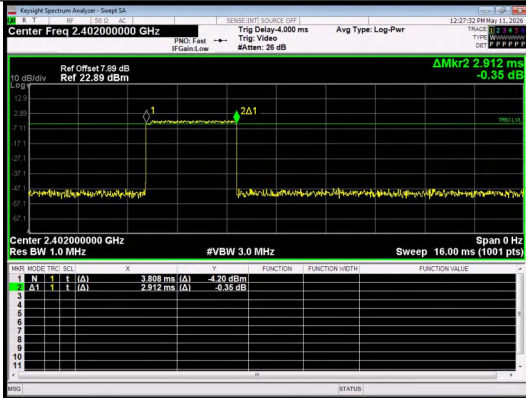
Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK_2-DH5



Pulse Width
 $\pi/4$ DQPSK_2-DH5



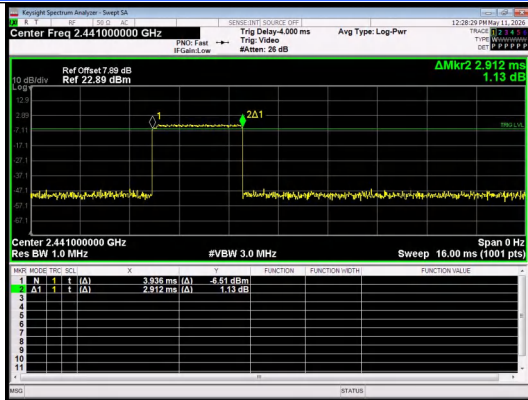
Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK_2-DH5



Pulse Width
8DPSK_3-DH5



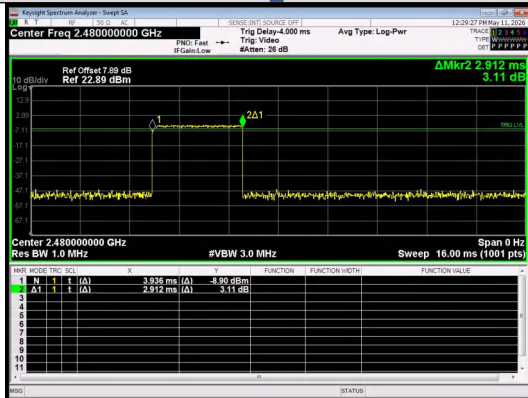
Number of Pulses in 31.6 seconds
8DPSK_3-DH5



**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.8 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

Note: input compensation coefficient (dB)= Cable Loss (dB)

Test Graphs

