E.U.T:	USB/Bluetooth decoder
Model Number:	NEO iDSD 3
Trade Name:	ifi
Sample Number:	33000257010
Date of Receipt:	Nov 19, 2025
Date of Test:	Nov 20, 2025 ~ Dec. 29, 2025
FCC ID:	2A5QJ-NEOIDSD3
IC:	29493-NEOIDSD3

Note: The test data have all been compensated for cable loss, and when measuring the entire 2400-2500MHz, the maximum loss value 7.89 dB.and when measuring the entire 30MHz-25GHz, Input Compensation Coeffcient (dB) = Max Cable Loss (dB)

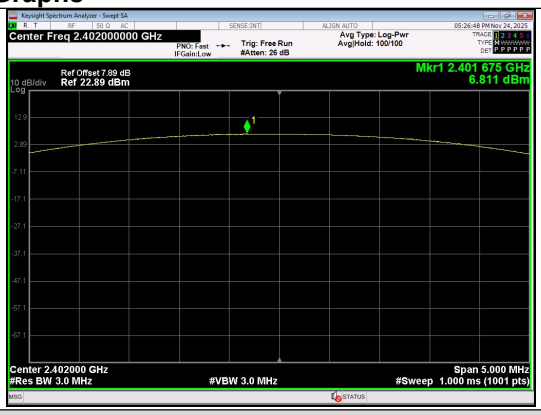
A.1 CONDUCTED OUTPUT POWER

Test Result

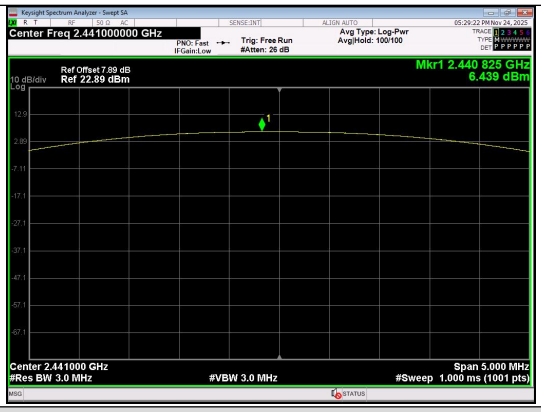
Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Power Limit (dBm)	Gain (dBm)	ISED EIRP (dBm)	ISED EIRP Limit (dBm)	Result
GFSK	DH1	0	6.81	≤30	2.00	8.81	≤36.02	PASS
		39	6.44	≤30	2.00	8.44	≤36.02	PASS
		78	7.01	≤30	2.00	9.01	≤36.02	PASS
π/4DQPSK	2-DH1	0	7.96	≤30	2.00	9.96	≤36.02	PASS
		39	7.62	≤30	2.00	9.62	≤36.02	PASS
		78	8.00	≤30	2.00	10.00	≤36.02	PASS
8DPSK	3-DH1	0	8.56	≤30	2.00	10.56	≤36.02	PASS
		39	8.25	≤30	2.00	10.25	≤36.02	PASS
		78	8.60	≤30	2.00	10.60	≤36.02	PASS

Note: ISED EIRP (dBm) =Peak Output Power (dBm) + Gain (dBi)

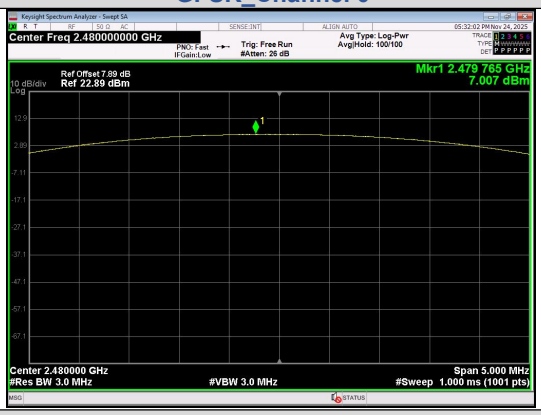
Test Graphs



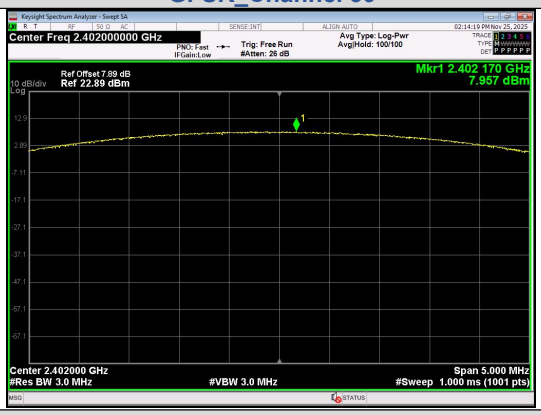
Peak Output Power
GFSK_Channel 0



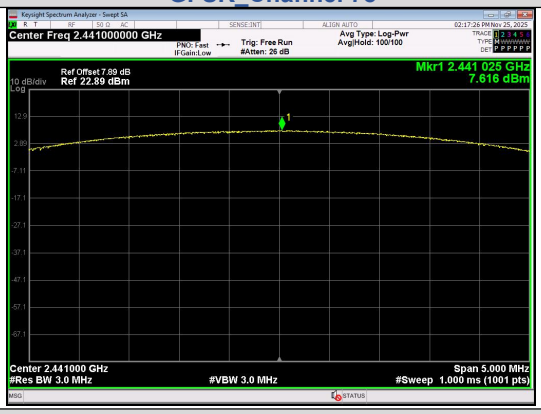
Peak Output Power
GFSK_Channel 39



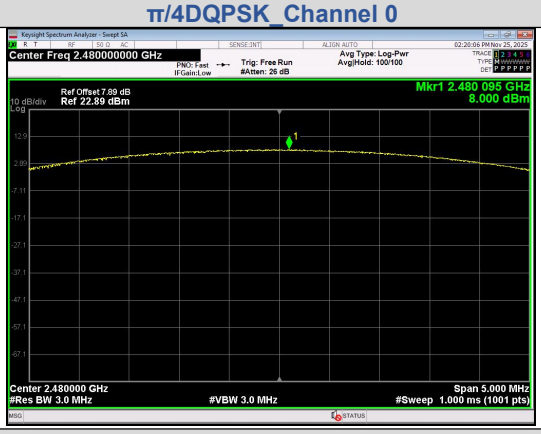
Peak Output Power
GFSK_Channel 78



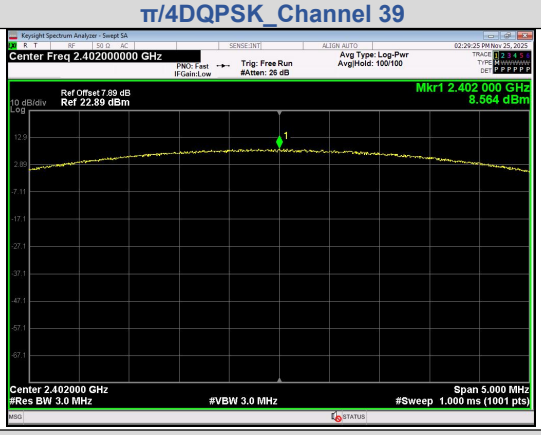
Peak Output Power
π/4DQPSK_Channel 0



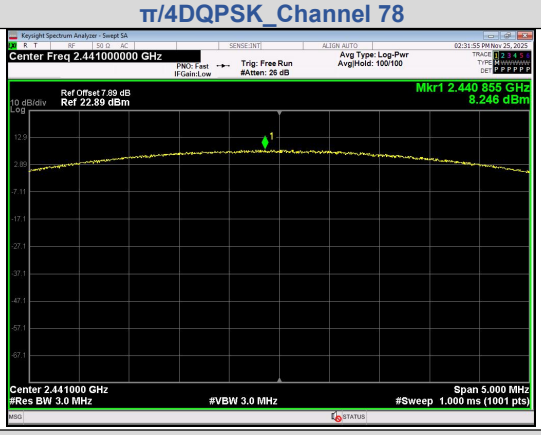
Peak Output Power
π/4DQPSK_Channel 39



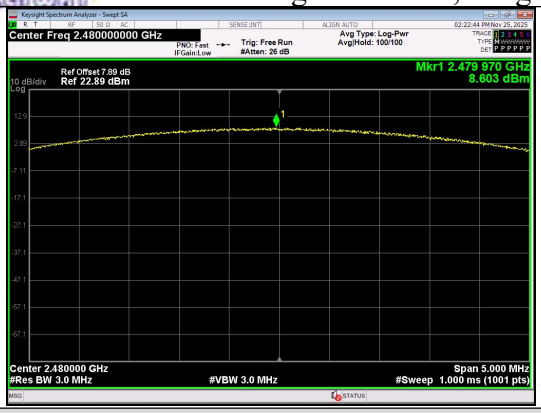
Peak Output Power
π/4DQPSK_Channel 78



Peak Output Power
8DPSK_Channel 0



Peak Output Power
8DPSK_Channel 39



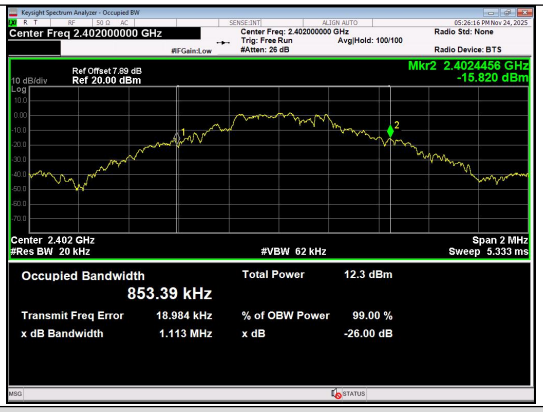
Peak Output Power
8DPSK_Channel 78

A.2 99% BANDWIDTH

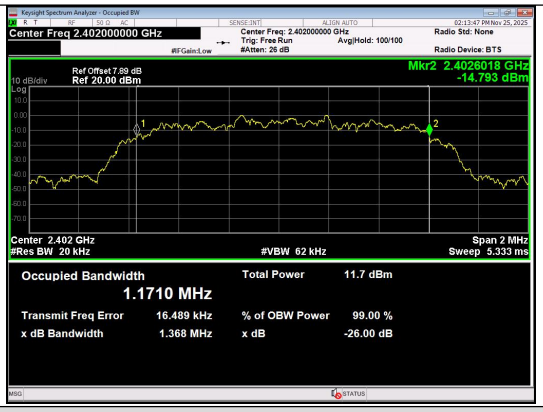
Test Result

Modulation	Channel	Center Frequency (MHz)	99% BW (MHz)
GFSK	0	2402	0.85339
	39	2441	0.84943
	78	2480	0.84795
π/4DQPSK	0	2402	1.1710
	39	2441	1.1698
	78	2480	1.1670
8DPSK	0	2402	1.1639
	39	2441	1.1662
	78	2480	1.1707

Test Graphs

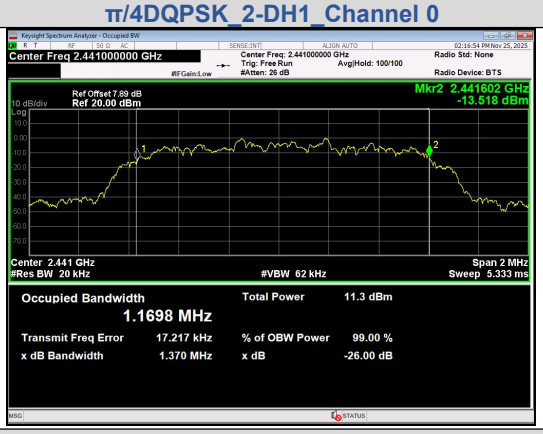


GFSK_DH1_Channel 0



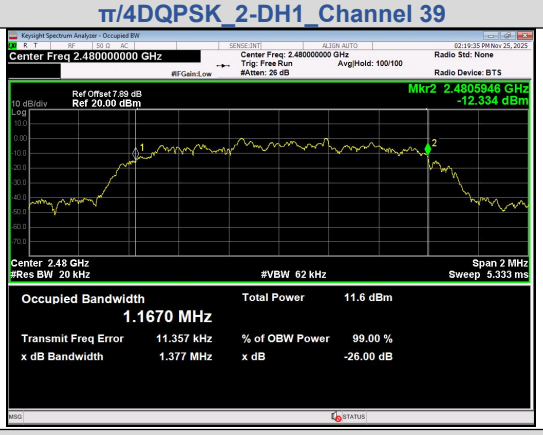
π/4DQPSK_2-DH1_Channel 0

GFSK_DH1_Channel 39

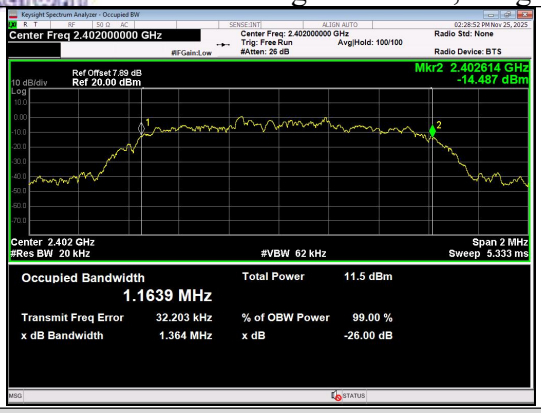


π/4DQPSK_2-DH1_Channel 39

GFSK_DH1_Channel 78

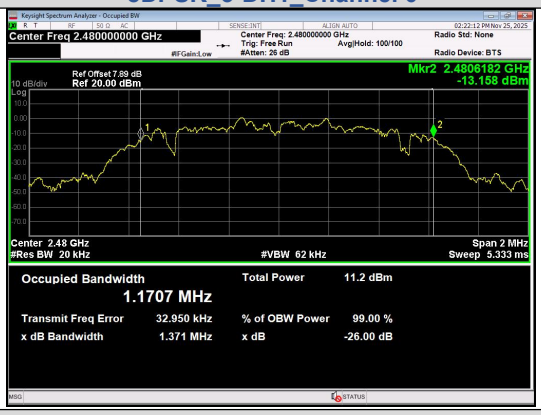


π/4DQPSK_2-DH1_Channel 78



8DPSK_3-DH1_Channel 0

8DPSK_3-DH1_Channel 39



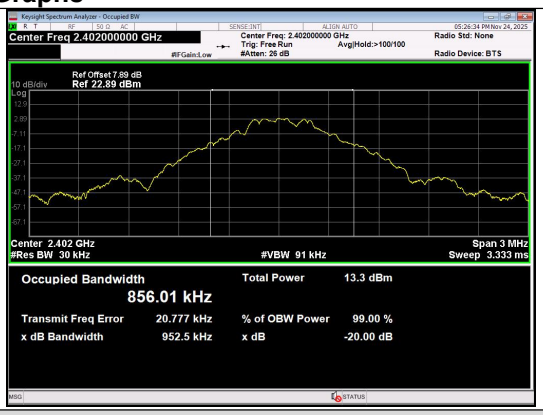
8DPSK_3-DH1_Channel 78

A.3 20DB BANDWIDTH

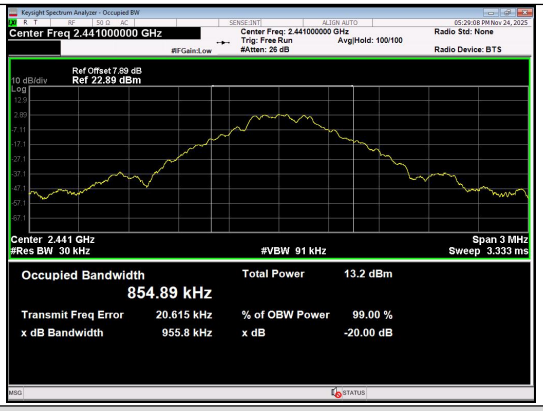
Test Result

Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.9525
	39	2441 MHz	0.9558
	78	2480 MHz	0.9526
π/4DQPSK	0	2402 MHz	1.346
	39	2441 MHz	1.346
	78	2480 MHz	1.347
8DPSK	0	2402 MHz	1.305
	39	2441 MHz	1.306
	78	2480 MHz	1.305

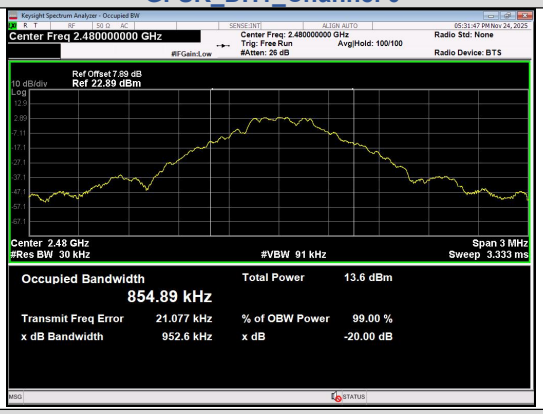
Test Graphs



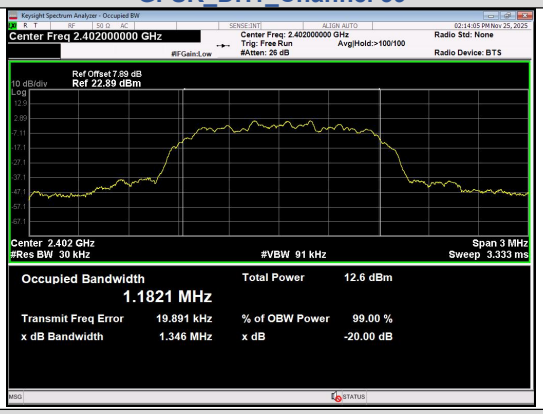
GFSK_DH1_Channel 0



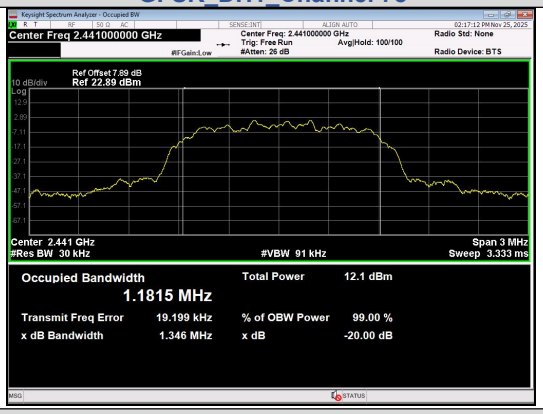
GFSK_DH1_Channel 39



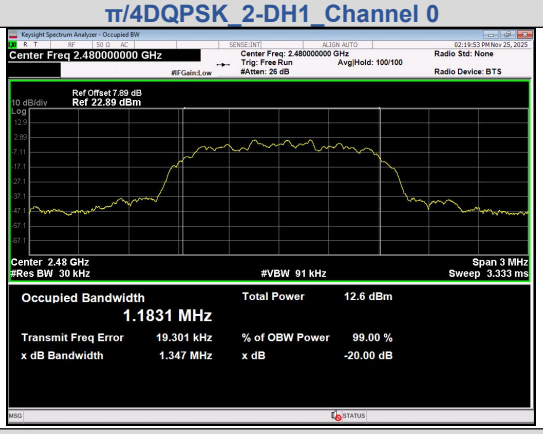
GFSK_DH1_Channel 78



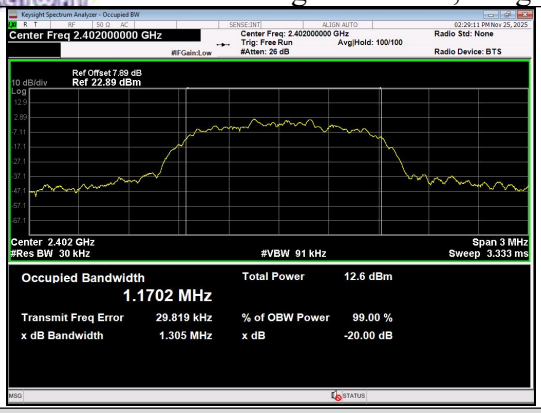
π/4DQPSK_2-DH1_Channel 0



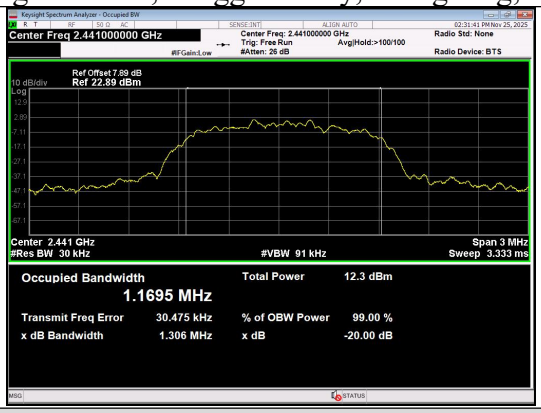
π/4DQPSK_2-DH1_Channel 39



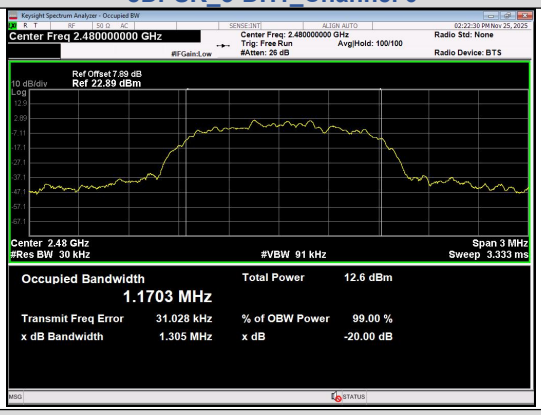
π/4DQPSK_2-DH1_Channel 78



8DPSK_3-DH1_Channel 0



8DPSK_3-DH1_Channel 39



8DPSK_3-DH1_Channel 78

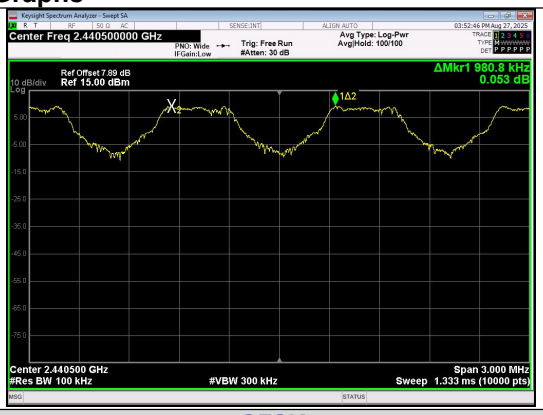
A.4 CARRIER FREQUENCIES SEPARATION

Test Result

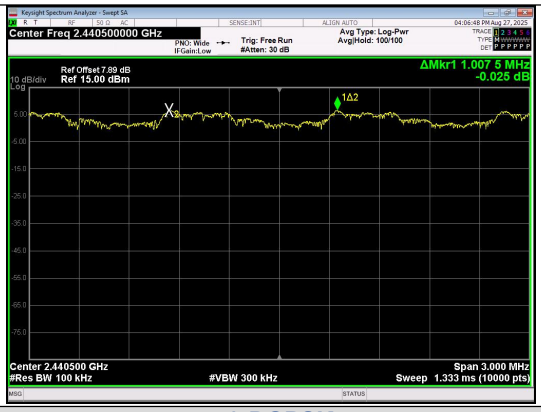
Modulation	Packet	Left Center frequency (MHz)	Right Center frequency (MHz)	Hopping Frequency Separation (MHz)	Limit (MHz)	Result
GFSK	DH1	2439.8554	2440.8608	1.0054	0.637	PASS
π/4DQPSK	2-DH1	2439.8608	2440.8479	0.9871	0.898	PASS
8DPSK	3-DH1	2439.8623	2440.8596	0.9973	0.871	PASS

Note: For conducted power less than 0.125 W(20.97 dBm), the limit can be set using hopping channel carrier frequencies that are separated by 25 kHz or two thirds of the 20 dB bandwidth of the hopping channel, whichever is greater.

Test Graphs



GFSK



π/4DQPSK

8DPSK

A.5 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	-46.393	-13.35	-33.043	PASS
			21200.7	-46.727	-13.35	-33.377	PASS
		39	21142.7	-46.242	-13.54	-32.702	PASS
		78	2483.50	-52.601	-12.98	-39.621	PASS
			21579.7	-46.765	-12.98	-33.785	PASS
π/4DQPSK	2-DH1	0	2400.00	-48.135	-14.53	-33.605	PASS
			21584.6	-46.822	-14.53	-32.292	PASS
		39	21153.3	-46.075	-14.87	-31.205	PASS
		78	2483.50	-53.860	-14.62	-39.240	PASS
			21562.2	-47.043	-14.62	-32.423	PASS
8DPSK	3-DH1	0	2400.00	-48.186	-14.43	-33.756	PASS
			21176.4	-45.374	-14.43	-30.944	PASS
		39	21580.9	-45.804	-14.78	-31.024	PASS
		78	2483.50	-52.222	-14.45	-37.772	PASS
			21575.9	-45.761	-14.45	-31.311	PASS

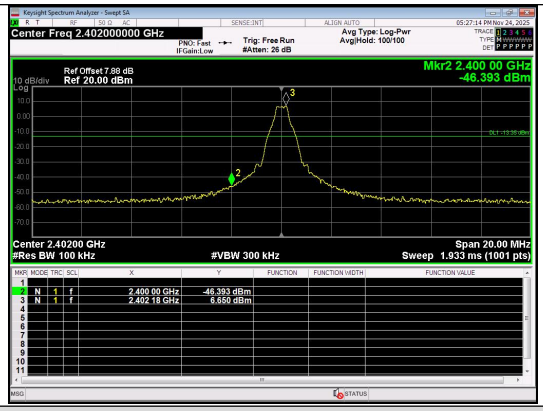
Note: input compensation coeffcient (dB)= Cable Loss (dB)

Hopping

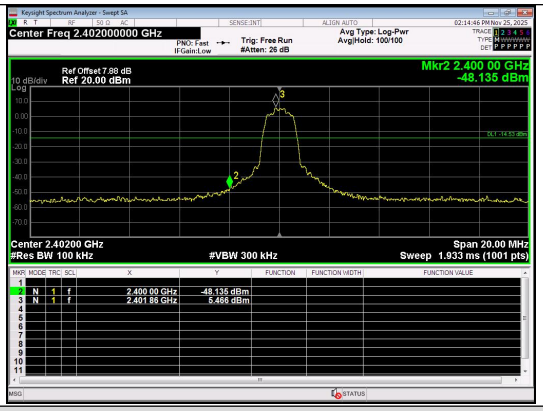
Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH1	Hopping	2400.00	-48.448	-12.87	-35.578	PASS
			2483.50	-54.461	-12.71	-41.751	PASS
π/4DQPSK	2-DH1		2400.00	-47.524	-14.54	-32.984	PASS
			2483.50	-50.967	-14.54	-36.427	PASS
8DPSK	3-DH1		2400.00	-54.250	-14.53	-39.720	PASS
			2483.50	-46.816	-14.55	-32.266	PASS

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

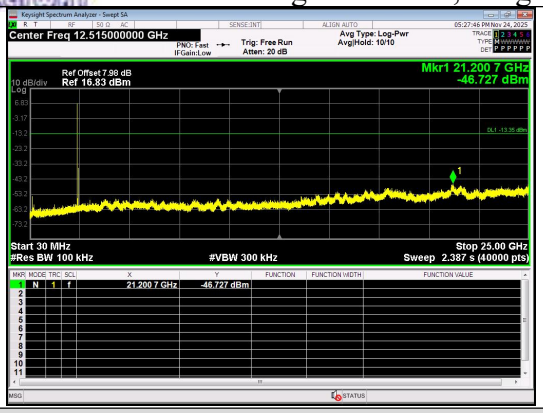
Test Graphs



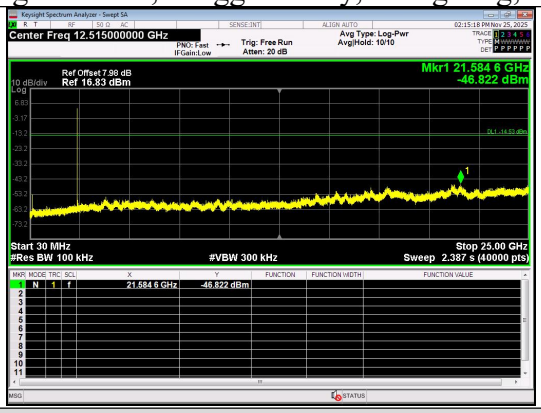
Out Of Band Emission
GFSK_DH1_Channel 0



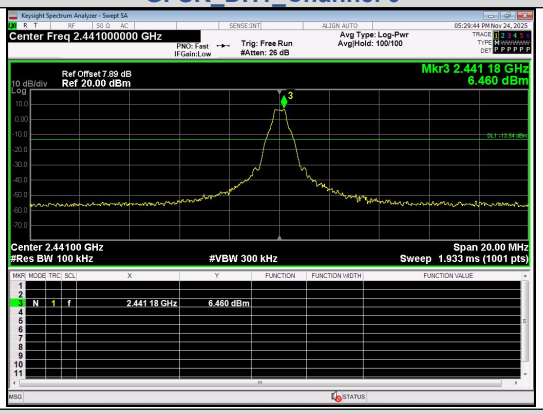
Out Of Band Emission
π/4DQPSK_2-DH1_Channel 0



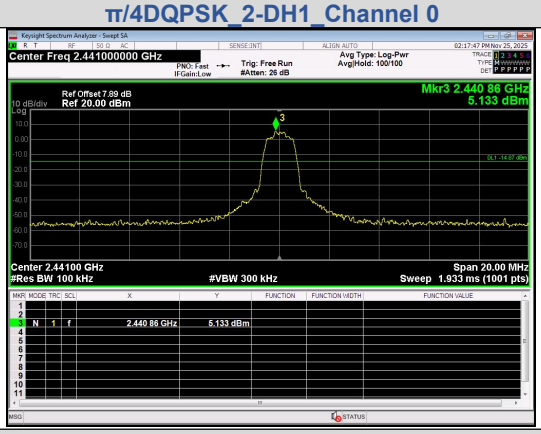
30.0 MHz - 25000.0 MHz
GFSK_DH1_Channel 0



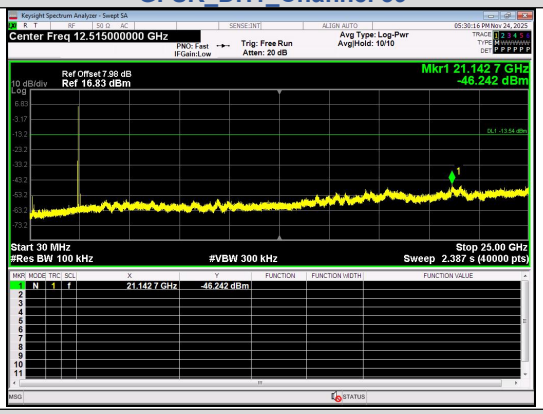
30.0 MHz - 25000.0 MHz
π/4DQPSK_2-DH1_Channel 0



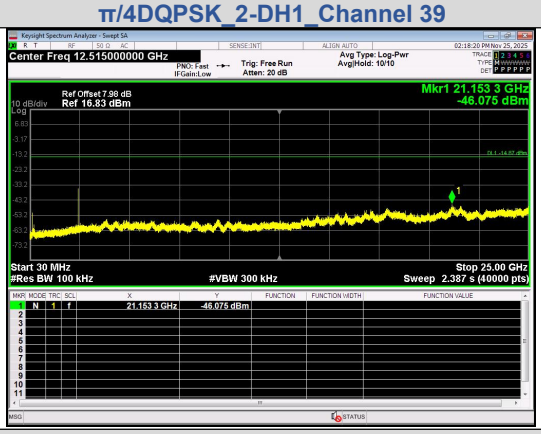
Out Of Band Emission
GFSK_DH1_Channel 39



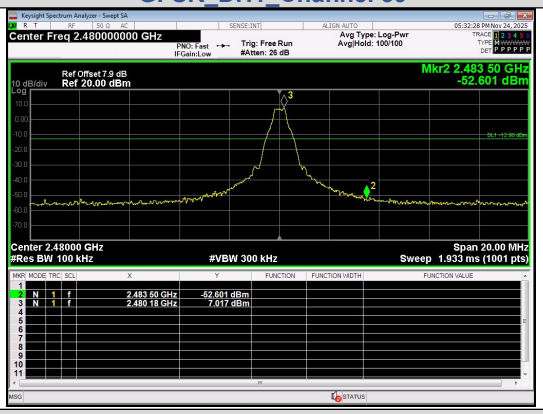
Out Of Band Emission
π/4DQPSK_2-DH1_Channel 39



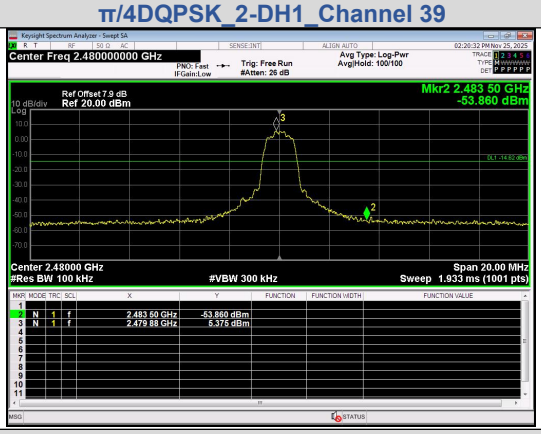
30.0 MHz - 25000.0 MHz
GFSK_DH1_Channel 39



30.0 MHz - 25000.0 MHz
π/4DQPSK_2-DH1_Channel 39



Out Of Band Emission
GFSK_DH1_Channel 78



Out Of Band Emission
π/4DQPSK_2-DH1_Channel 78