

RF Conducted Test

E.U.T:	Wireless Portable Speaker
Model Number:	NAVA100-BK, NAVA100-WH
Sample ID:	250822012 003
Sample(s) Status:	Engineer sample
Date of Receipt:	Oct. 09, 2025
Date of Test:	Oct. 09, 2025 to Jan. 08, 2025
FCC ID:	2A7OW-NAVA100
IC:	28740-NAVA100

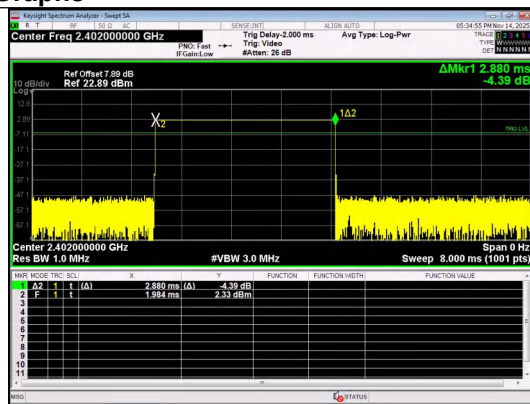
A.1 DWELL TIME

Test Result

Modulation	Packet	Channel	Pulse Width (ms)	Number of Pulses in 31.6 seconds	Dwell Time (ms)	Limit (ms)	Result
GFSK	DH5	Hopping	2.880	104	299.52	< 400	PASS
	DH5		2.888	103	297.46		PASS
	DH5		2.880	114	328.32		PASS
π/4DQPSK	2-DH5		2.880	105	302.4		PASS
	2-DH5		2.896	116	335.94		PASS
	2-DH5		2.896	104	301.18		PASS
8DPSK	3-DH5		2.896	114	330.14		PASS
	3-DH5		2.880	90	259.2		PASS
	3-DH5		2.896	115	333.04		PASS

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

Test Graphs



Pulse Width
GFSK_DH5



Number of Pulses in 31.6 seconds
GFSK_DH5



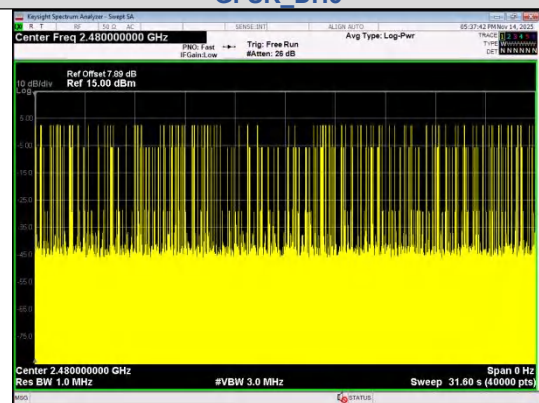
Pulse Width
GFSK_DH5



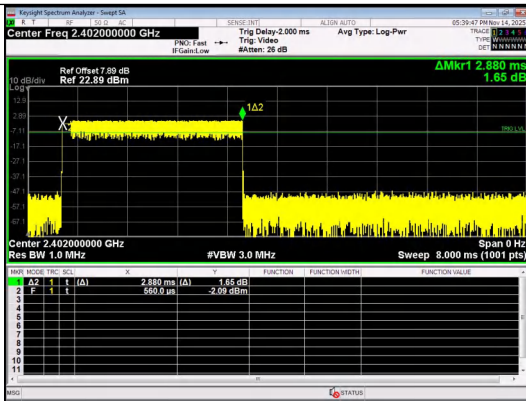
Number of Pulses in 31.6 seconds
GFSK_DH5



Pulse Width
GFSK_DH5



Number of Pulses in 31.6 seconds
GFSK_DH5



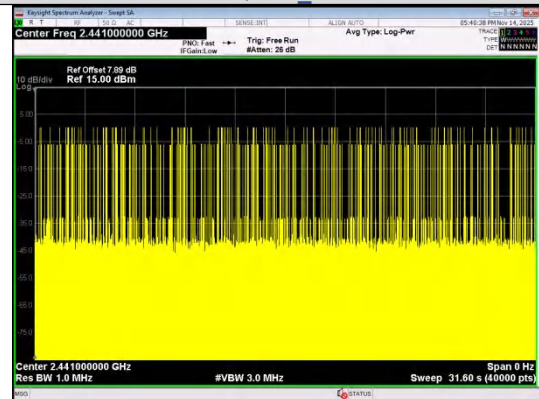
Pulse Width
 $\pi/4$ DQPSK_2-DH5



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



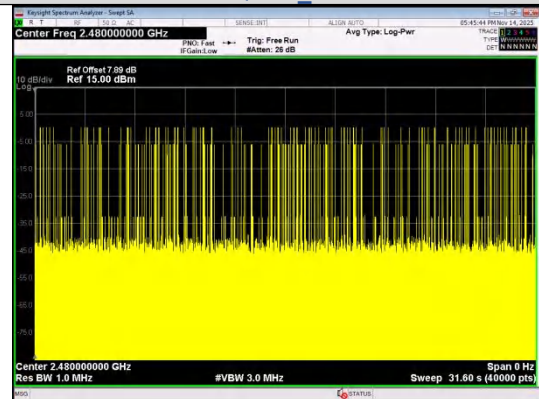
Pulse Width
 $\pi/4$ DQPSK_2-DH5



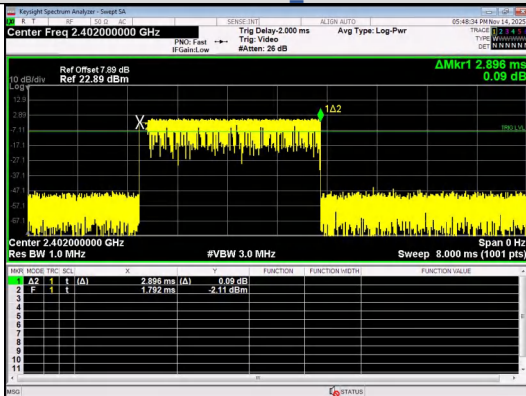
Number of Pulses in 31.6 seconds
 $\pi/4$ DQPSK_2-DH5



Pulse Width
 $\pi/4$ DQPSK_2-DH5



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



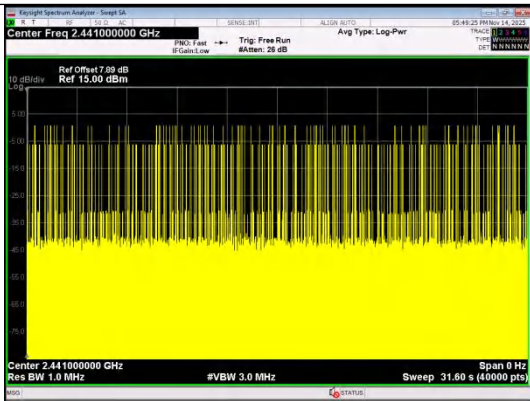
Pulse Width
8DPSK_3-DH5



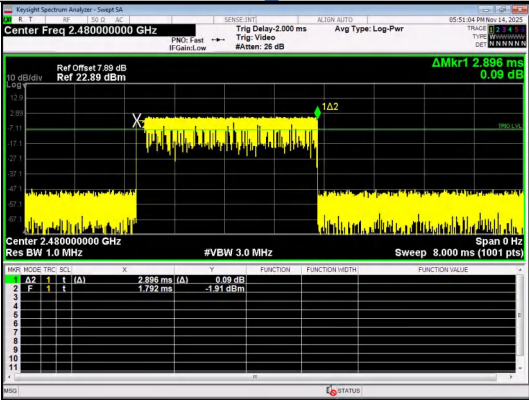
Number of Pulses in 31.6 seconds
8DPSK_3-DH5



Pulse Width
8DPSK_3-DH5



Number of Pulses in 31.6 seconds
8DPSK_3-DH5



Pulse Width
8DPSK_3-DH5



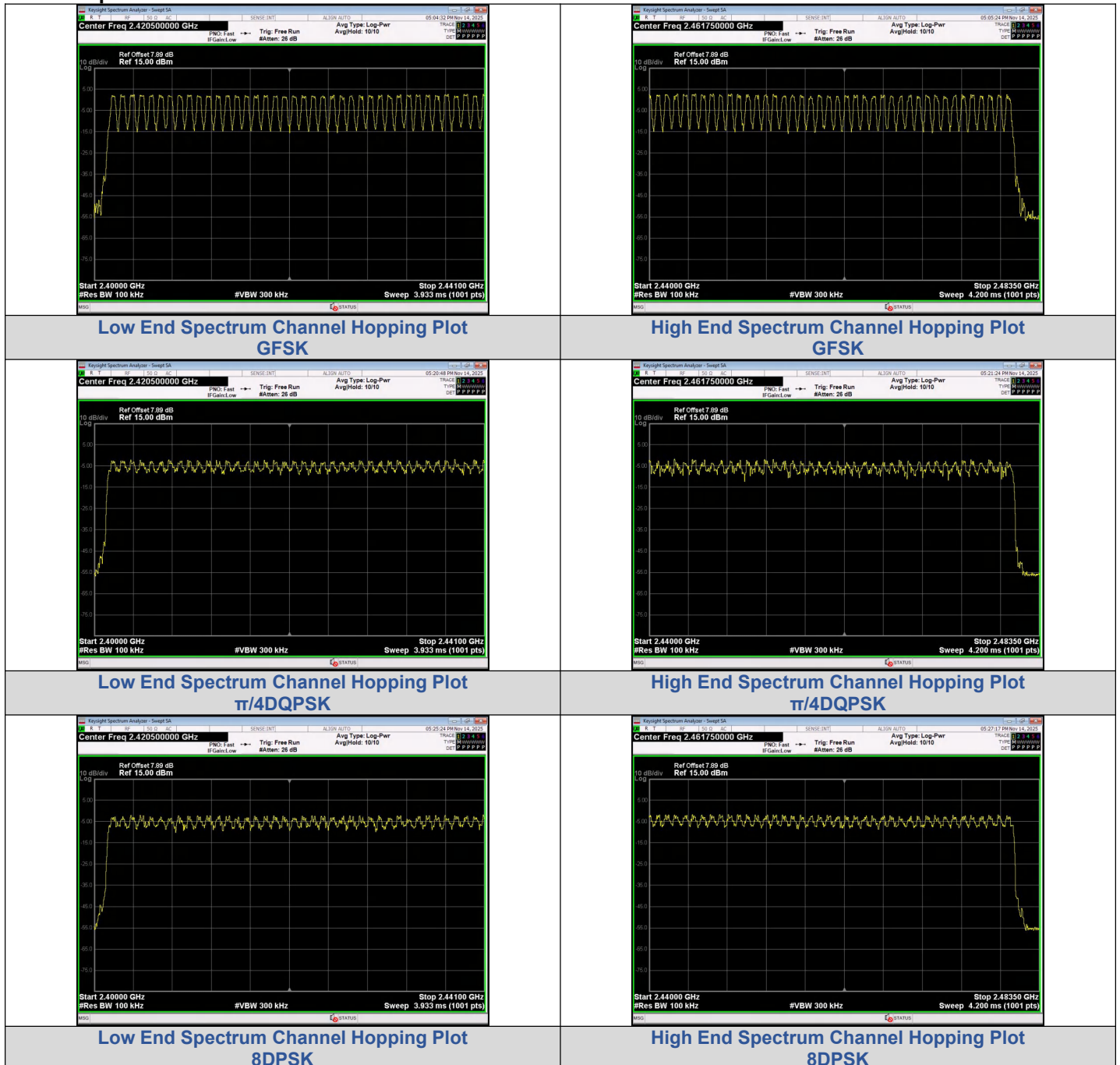
Number of Pulses in 31.6 seconds
8DPSK_3-DH5

A.2 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.3 CONDUCTED PEAK OUTPUT POWER

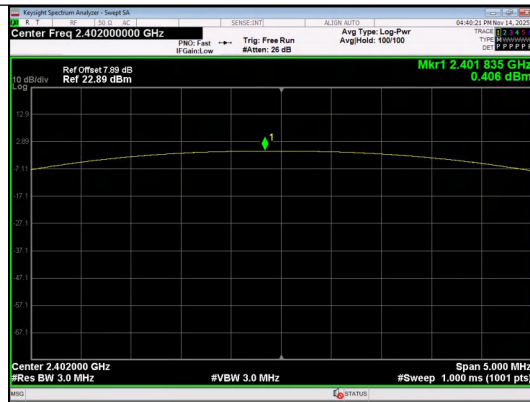
Test Result

Modulation	Packet Type	Channel	Peak Output Power (dBm)	Limit (dBm)	Result
GFSK	DH1	0	0.41	≤30	PASS
		39	0.75		PASS
		78	0.56		PASS
π/4DQPSK	2-DH1	0	0.50		PASS
		39	0.73		PASS
		78	0.69		PASS
8DPSK	3-DH1	0	0.11		PASS
		39	0.33		PASS
		78	0.27		PASS

Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Power Limit (dBm)	ISED EIRP (dBm)	ISED EIRP Limit (dBm)	Max. Avg. Power (dBm)	Result
GFSK	DH1	0	0.41	≤30	3.79	≤36.02	None	PASS
		39	0.75	≤30	4.13	≤36.02	None	PASS
		78	0.56	≤30	3.94	≤36.02	None	PASS
π/4DQPSK	2-DH1	0	0.50	≤30	3.88	≤36.02	None	PASS
		39	0.73	≤30	4.11	≤36.02	None	PASS
		78	0.69	≤30	4.07	≤36.02	None	PASS
8DPSK	3-DH1	0	0.11	≤30	3.49	≤36.02	None	PASS
		39	0.33	≤30	3.71	≤36.02	None	PASS
		78	0.27	≤30	3.65	≤36.02	None	PASS

Note:Antenna Gian:3.38dBi

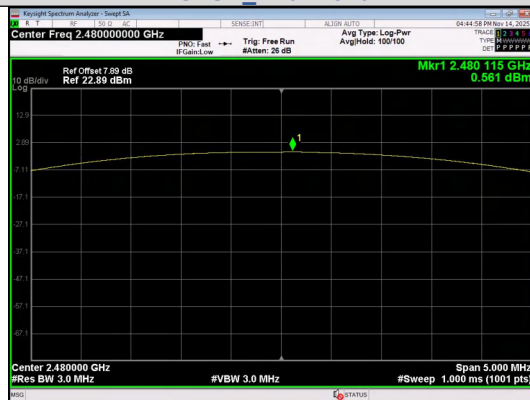
EIRP=Peak Output Power+Antenna Gian



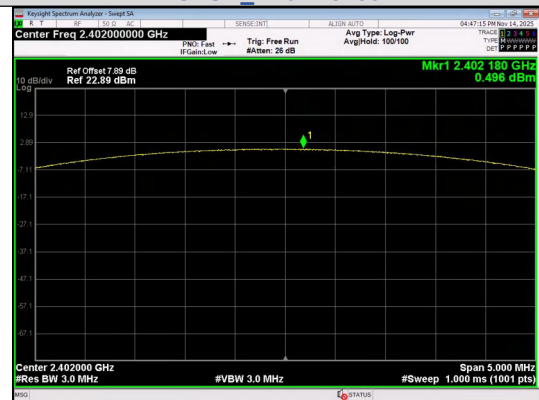
Peak Output Power
GFSK_Channel 0



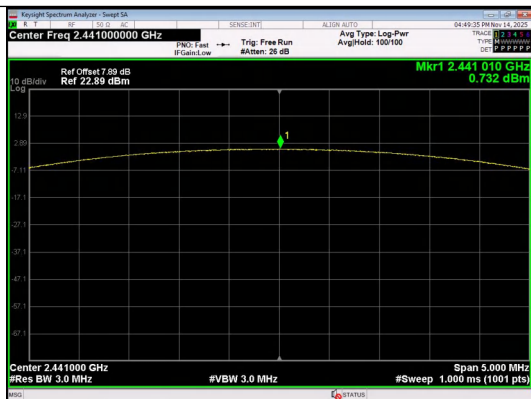
Peak Output Power
GFSK_Channel 39



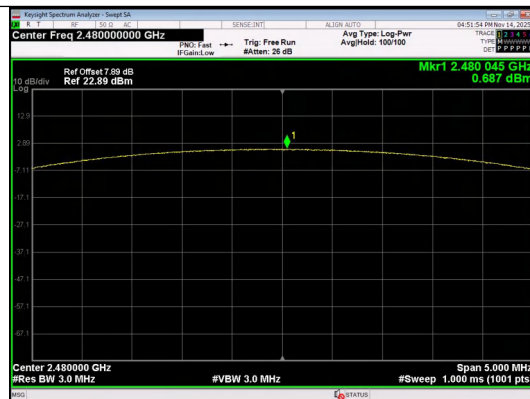
Peak Output Power
GFSK_Channel 78



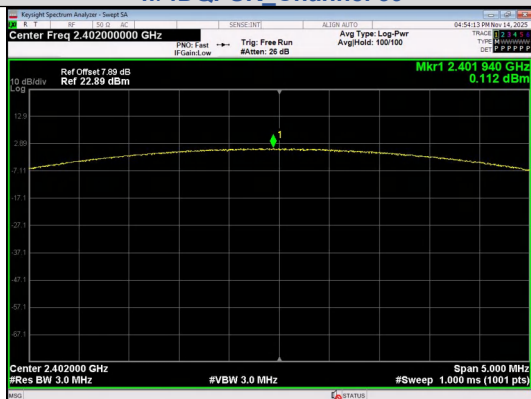
Peak Output Power
π/4DQPSK_Channel 0



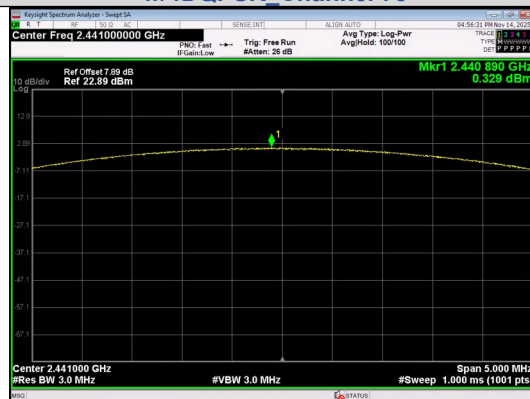
**Peak Output Power
 $\pi/4$ DQPSK_Channel 39**



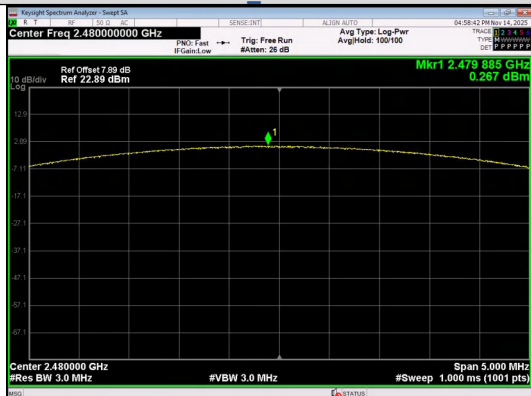
**Peak Output Power
 $\pi/4$ DQPSK_Channel 78**



**Peak Output Power
8DPSK_Channel 0**



**Peak Output Power
8DPSK_Channel 78**



**Peak Output Power
8DPSK_Channel 78**

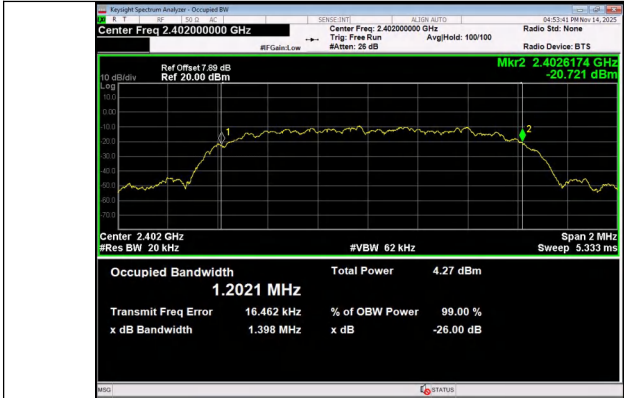
A.4 99% BANDWIDTH

Test Result

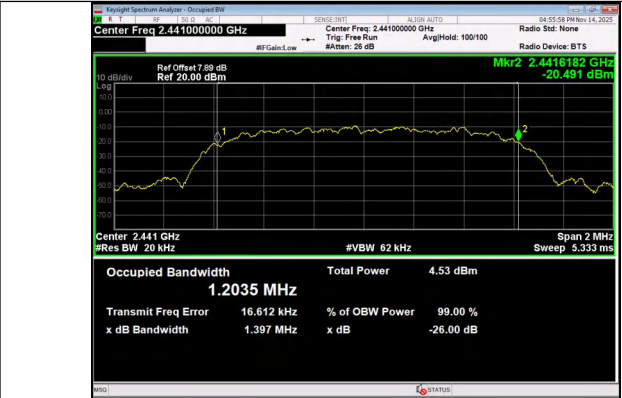
Modulation	Channel	Center Frequency (MHz)	99% BW (MHz)
GFSK	0	2402	0.88715
	39	2441	0.88638
	78	2480	0.88123
$\pi/4$ DQPSK	0	2402	1.2006
	39	2441	1.2006
	78	2480	1.2021
8DPSK	0	2402	1.2021
	39	2441	1.2035
	78	2480	1.2012

Test Graphs

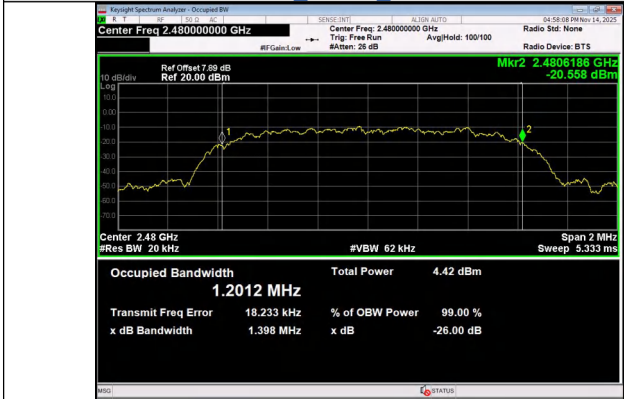




8DPSK_3-DH1_Channel 0



8DPSK_3-DH1_Channel 39



8DPSK_3-DH1_Channel 78

A.5 20DB BANDWIDTH

Test Result

Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.9635
	39	2441 MHz	0.9620
	78	2480 MHz	0.9586
π /4DQPSK	0	2402 MHz	1.367
	39	2441 MHz	1.366
	78	2480 MHz	1.366
8DPSK	0	2402 MHz	1.350
	39	2441 MHz	1.353
	78	2480 MHz	1.349

Test Graphs

