

Appendix

BT Test Data

Conducted Test Data

Conducted Output Power

Test Result

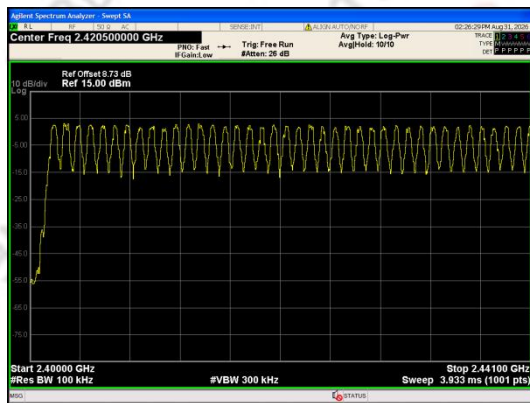
Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Verdict
GFSK	DH5	0	3.064	2.02	30	PASS
		39	2.606	1.82		PASS
		78	3.402	2.19		PASS
$\pi/4$ DQPSK	2-DH5	0	5.516	3.56		PASS
		39	4.929	3.11		PASS
		78	5.853	3.85		PASS
8DPSK	3-DH5	0	6.158	4.13		PASS
		39	5.481	3.53		PASS
		78	6.361	4.33		PASS

Number of Hopping Frequencies

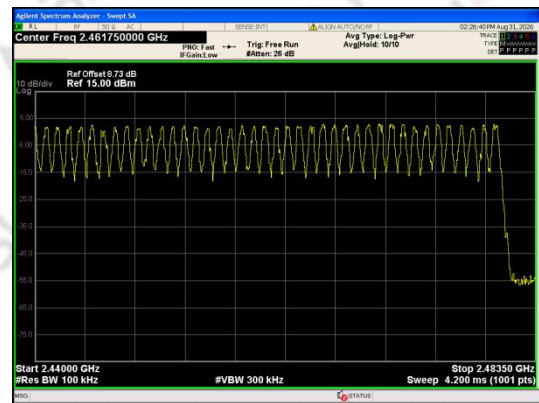
Test Result

Modulation	Packet	Number of Hopping Channel	Limit	Verdict
GFSK	DH5	79	15	PASS
$\pi/4$ DQPSK	2-DH5	79	15	PASS
8DPSK	3-DH5	79	15	PASS

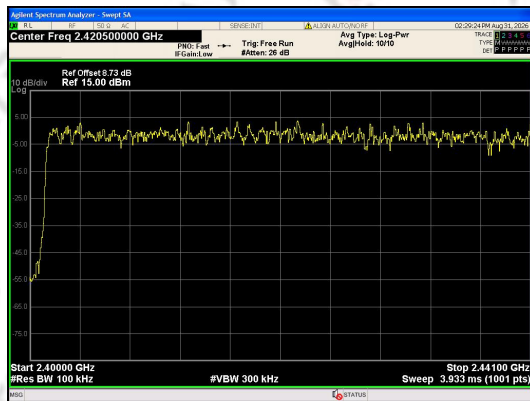
Test Graphs



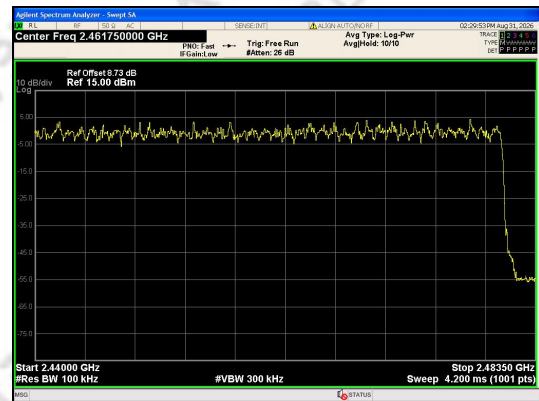
Low End Spectrum Channel Hopping Plot
GFSK



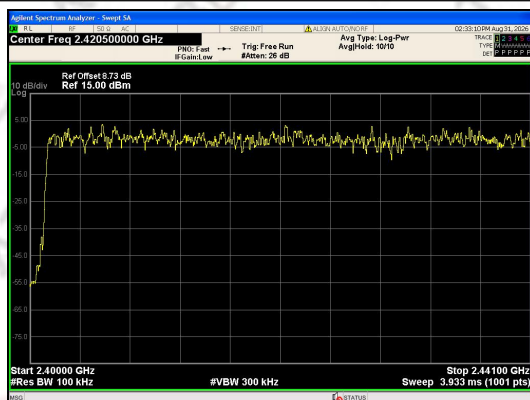
High End Spectrum Channel Hopping Plot
GFSK



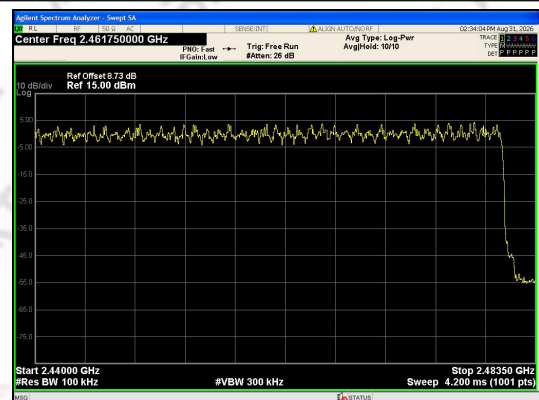
Low End Spectrum Channel Hopping Plot
 $\pi/4$ DQPSK



High End Spectrum Channel Hopping Plot
 $\pi/4$ DQPSK



Low End Spectrum Channel Hopping Plot
8DPSK



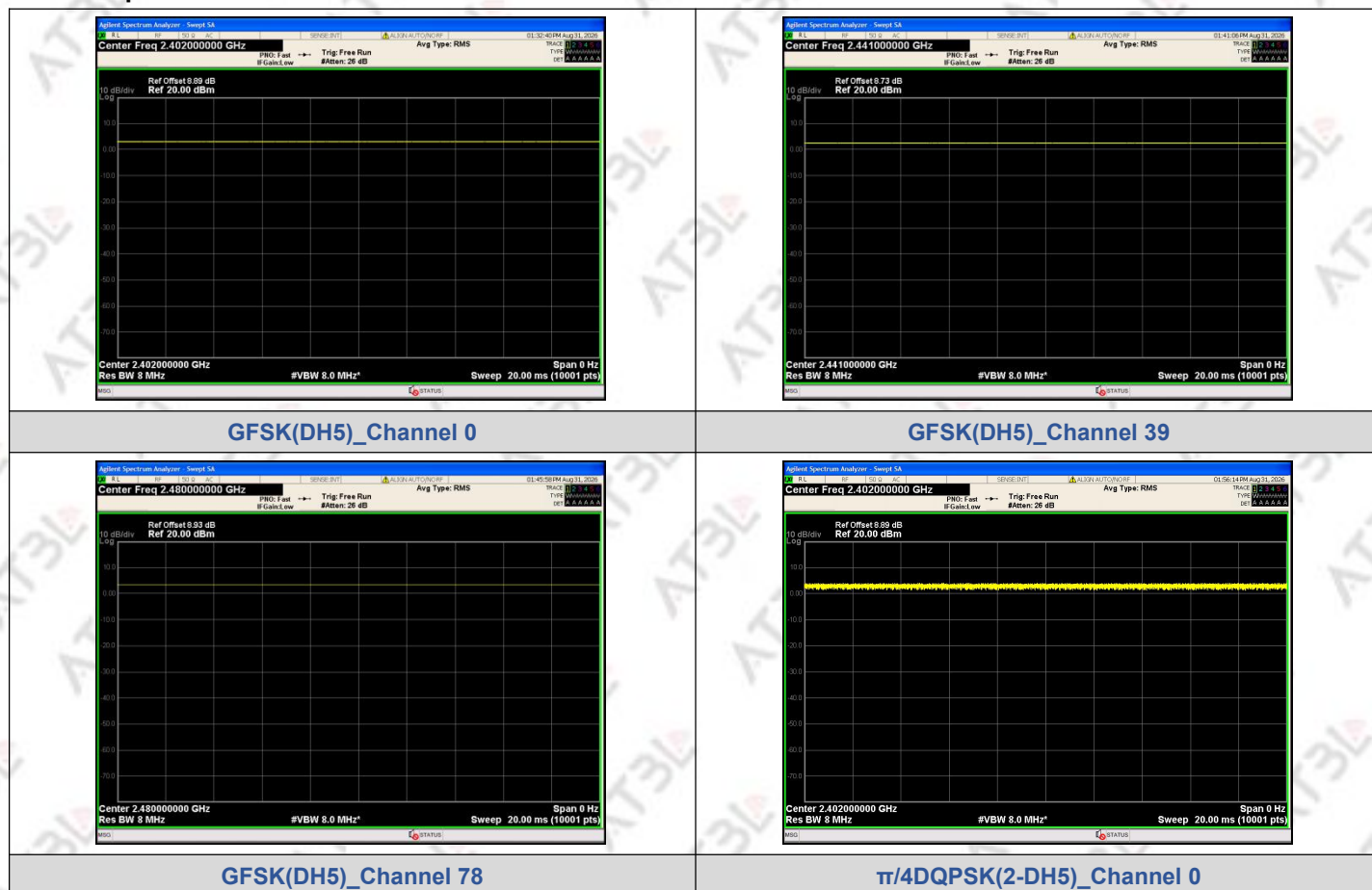
High End Spectrum Channel Hopping Plot
8DPSK

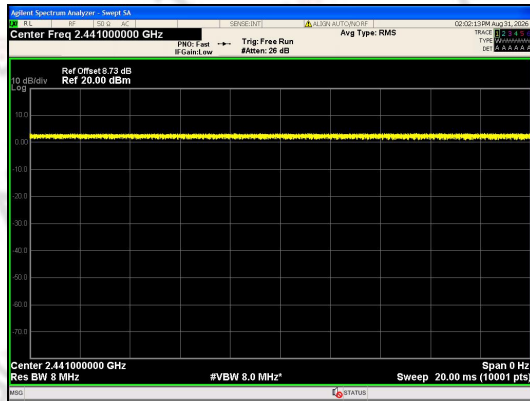
Duty Cycle

Test Result

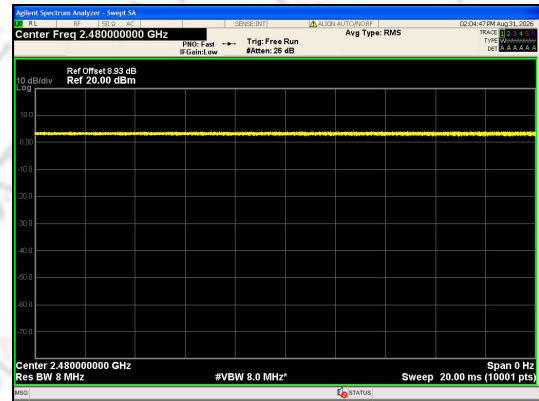
Modulation	Packets	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
GFSK	DH5	0	20.0000	20.000	100	1	0.0000	0.0500
		39	20.0000	20.000	100	1	0.0000	0.0500
		78	20.0000	20.000	100	1	0.0000	0.0500
$\pi/4$ DQPSK	2-DH5	0	20.0000	20.000	100	1	0.0000	0.0500
		39	20.0000	20.000	100	1	0.0000	0.0500
		78	20.0000	20.000	100	1	0.0000	0.0500
8DPSK	3-DH5	0	20.0000	20.000	100	1	0.0000	0.0500
		39	20.0000	20.000	100	1	0.0000	0.0500
		78	20.0000	20.000	100	1	0.0000	0.0500

Test Graphs

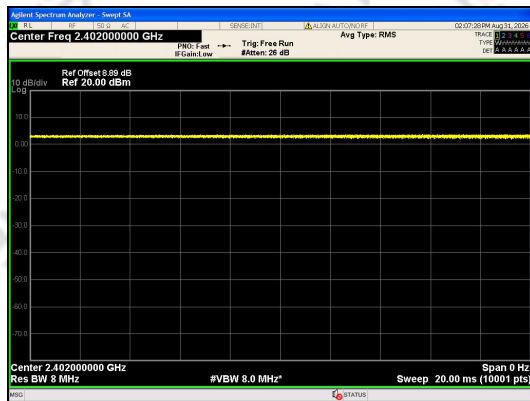




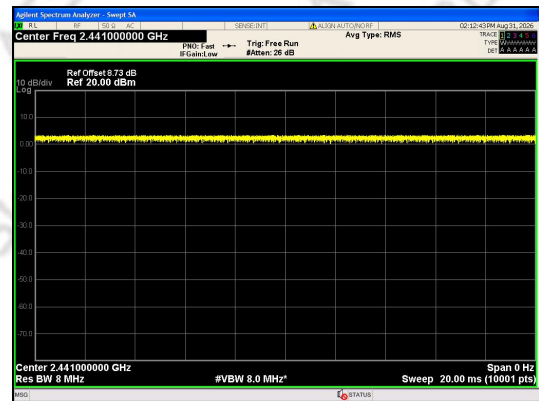
$\pi/4$ DQPSK(2-DH5)_Channel 39



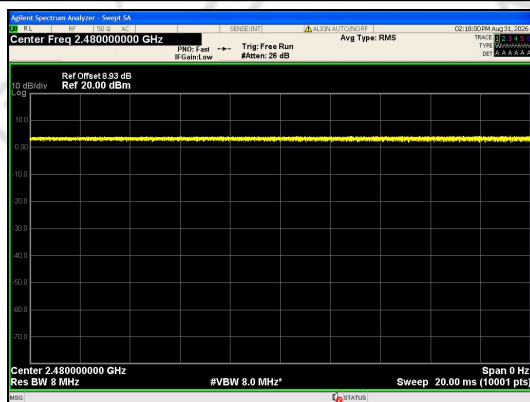
$\pi/4$ DQPSK(2-DH5)_Channel 78



8DPSK(3-DH5)_Channel 0



8DPSK(3-DH5)_Channel 39



8DPSK(3-DH5)_Channel 78

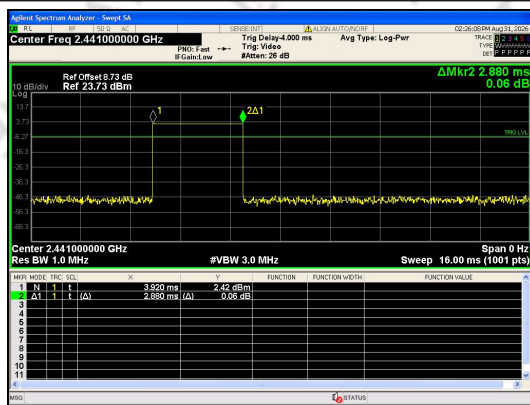
Dwell Time

Test Result

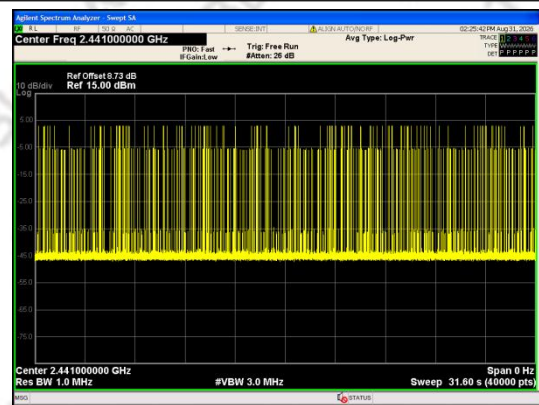
Modulation	Packet	Channel	Pulse Width (ms)	Number of Pulses in 31.6 seconds	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	DH5	Hopping	2.8800	109	313.92	< 400	PASS
$\pi/4$ DQPSK	2-DH5		2.8960	119	344.62		PASS
8DPSK	3-DH5		2.8960	118	341.73		PASS

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

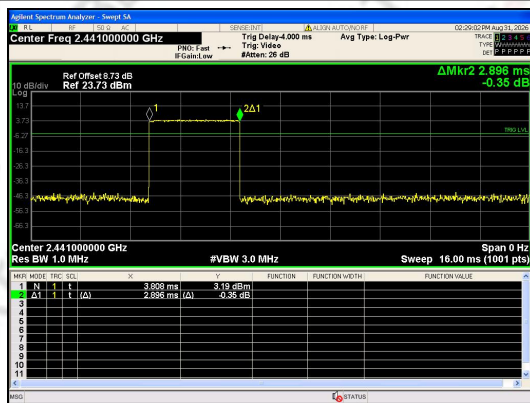
Test Graphs



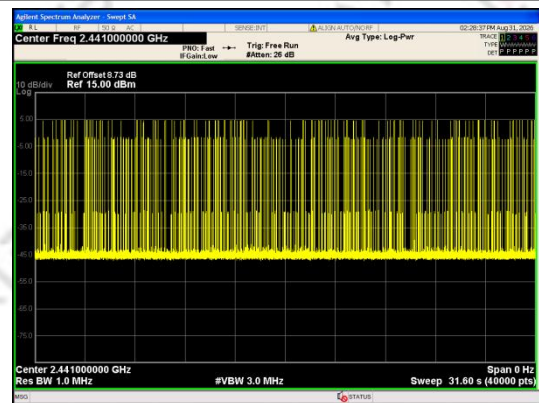
Pulse Width
GFSK_DH5



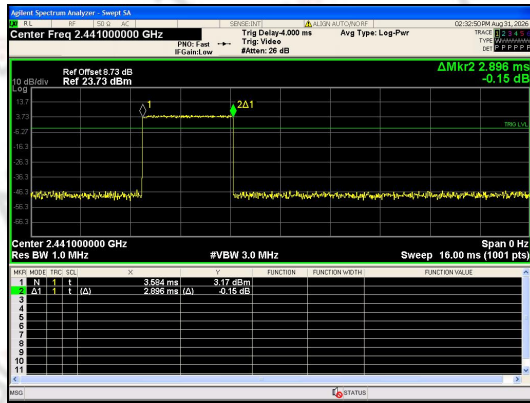
Number of Pulses in 31.6 seconds
GFSK_DH5



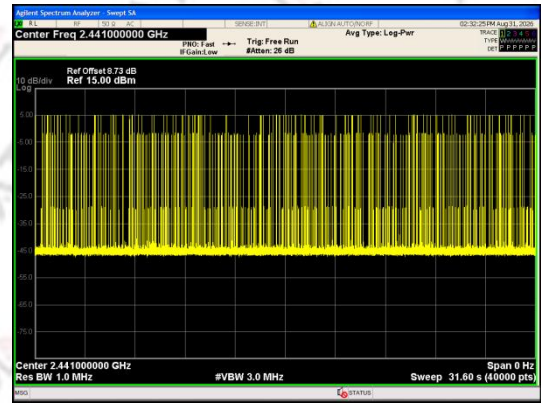
Pulse Width
 $\pi/4$ DQPSK_2-DH5



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



Pulse Width
8DPSK_3-DH5



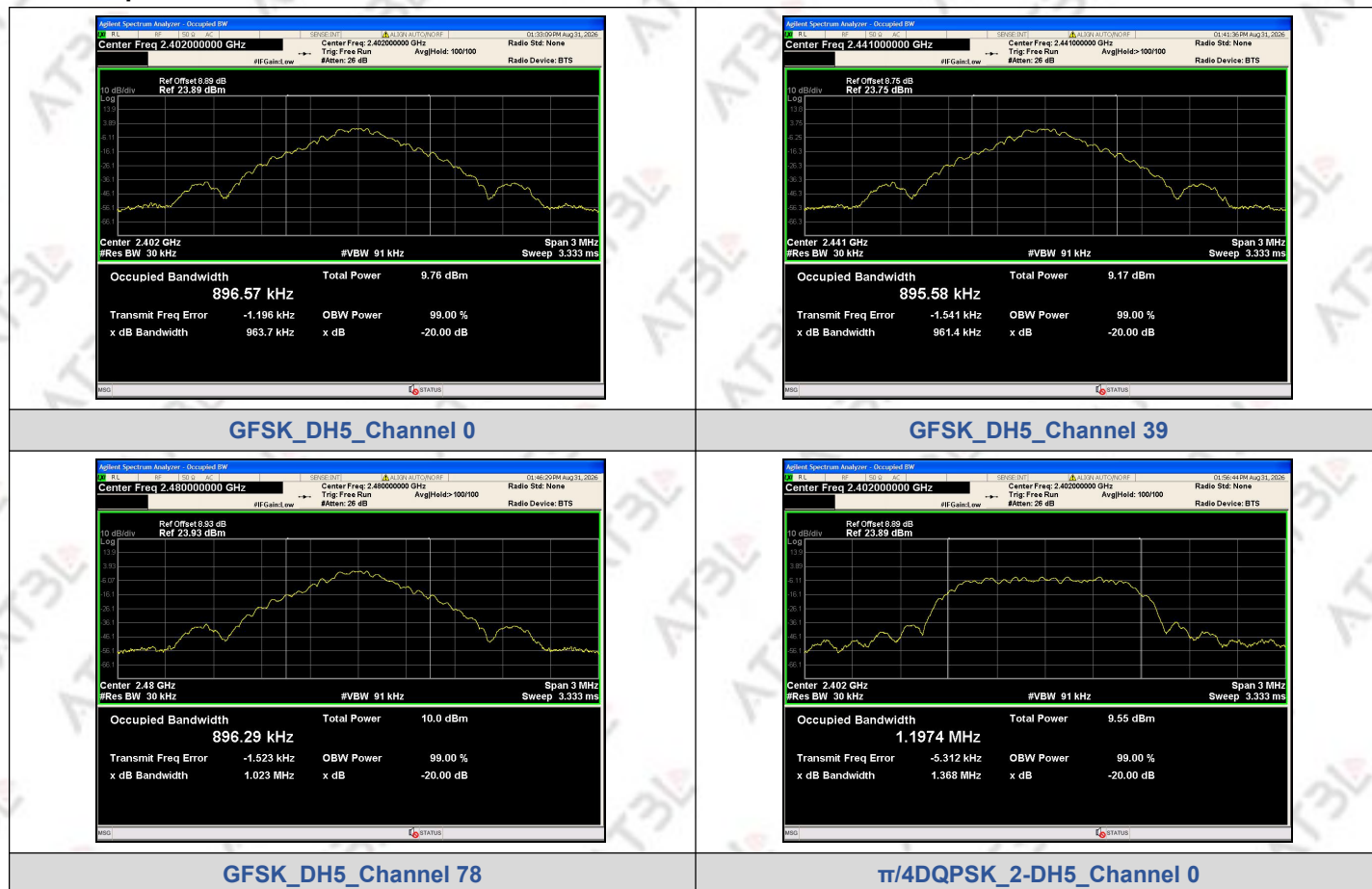
Number of Pulses in 31.6 seconds
8DPSK_3-DH5

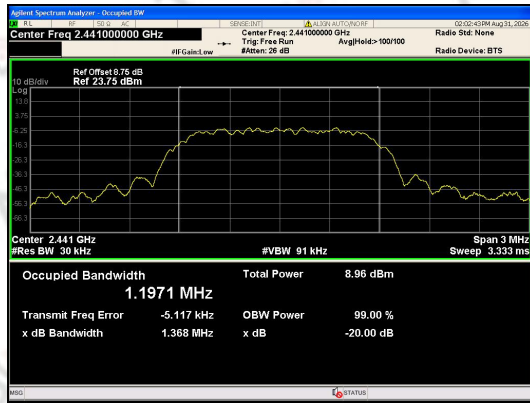
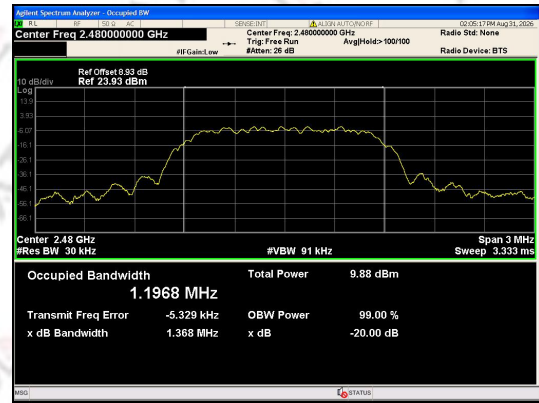
20dB Bandwidth

Test Result

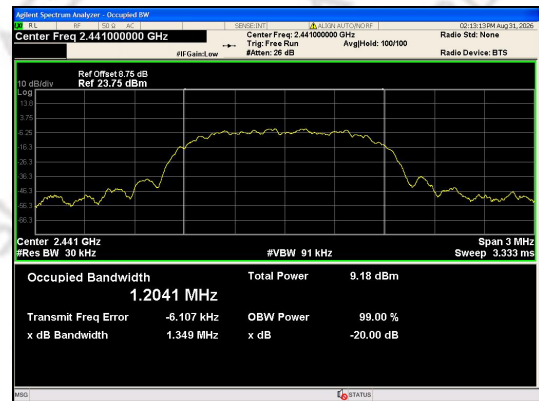
Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.9637
	39	2441 MHz	0.9614
	78	2480 MHz	1.023
$\pi/4$ DQPSK	0	2402 MHz	1.368
	39	2441 MHz	1.368
	78	2480 MHz	1.368
8DPSK	0	2402 MHz	1.349
	39	2441 MHz	1.349
	78	2480 MHz	1.350

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

Carrier Frequency Separation

Test Result

Modulation	Packet	Left Center frequency (MHz)	Right Center frequency (MHz)	Hopping Frequency Separation (MHz)	Minimum Limit (MHz)	Verdict
GFSK	DH5	2439.8329	2441.0111	1.1782	0.682	PASS
$\pi/4$ DQPSK	2-DH5	2439.976	2441.0375	1.0615	0.912	PASS
8DPSK	3-DH5	2439.859	2440.9517	1.0927	0.9	PASS

Test Graphs

