



Keyway Testing Technology (Guangdong) Co., Ltd
Room 2102, Building 6, Dongyi Intelligent Equipment New Energy Vehicle Park,
No.30 of Tangxia District, Dongshen Road, Tangxia Town, Dongguan, 523710,
People's Republic of China

E.U.T:	Hi-Res Bluetooth Transmitter and Receiver
Model Number:	UP TRAVEL
Trade Name:	ifi
Sample Number:	33000248657
Date of Receipt:	Jun. 26, 2025
Date of Test:	Jun. 26 ~ Sep. 16, 2025
FCC ID:	2A5QJ-IFIUPTRAVEL

A.1 CONDUCTED OUTPUT POWER

Test Result

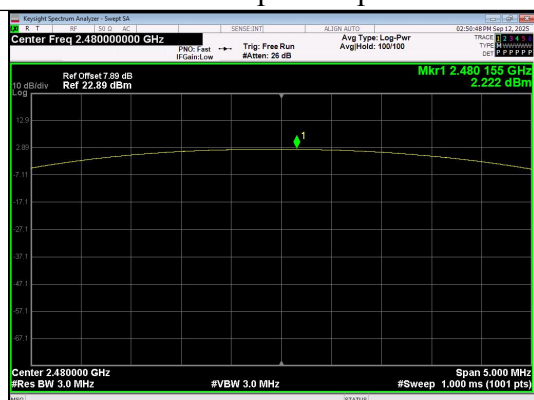
Modulation	Packet Type	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Max. Avg. Power (dBm)	Limit (dBm)	Result
GFSK	DH1	0	1.75	1.50	None	≤30	PASS
		39	2.26	1.68	None		PASS
		78	2.22	1.67	None		PASS
π/4DQPSK	2-DH1	0	-0.14	0.97	None	≤20.97	PASS
		39	0.38	1.09	None		PASS
		78	0.33	1.08	None		PASS
8DPSK	3-DH1	0	-0.58	0.87	None		PASS
		39	0.91	1.23	None		PASS
		78	0.93	1.24	None		PASS

Test Graphs

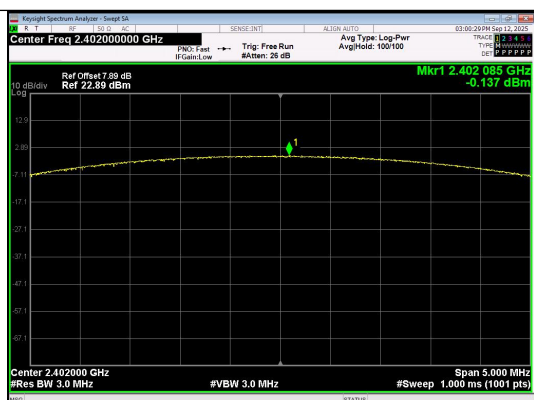




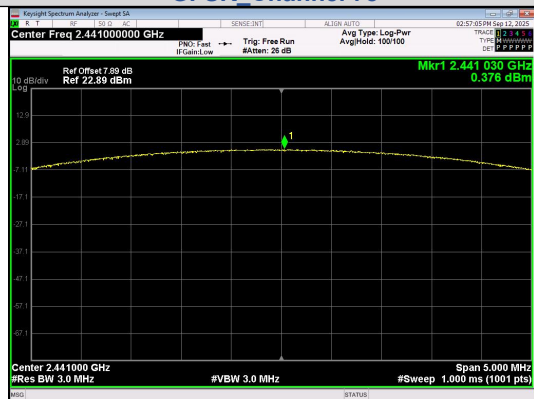
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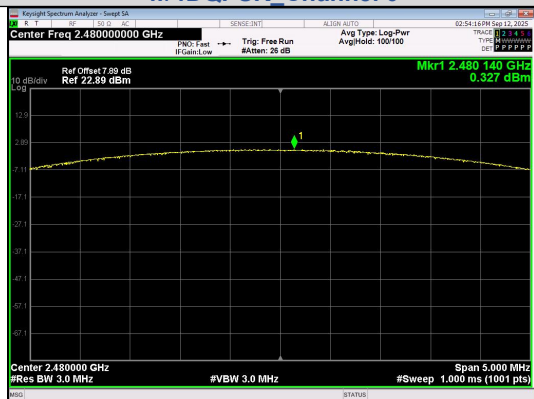
Peak Output Power
GFSK_Channel 78



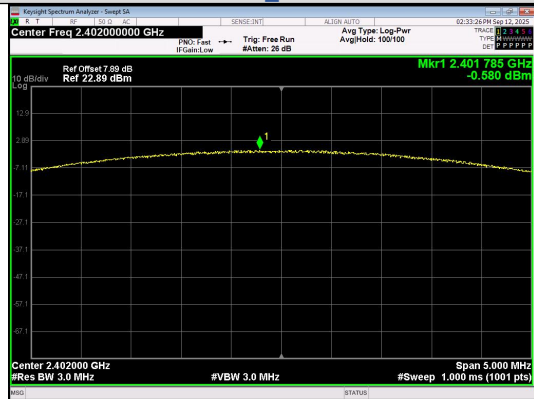
Peak Output Power
 $\pi/4$ QPSK_Channel 0



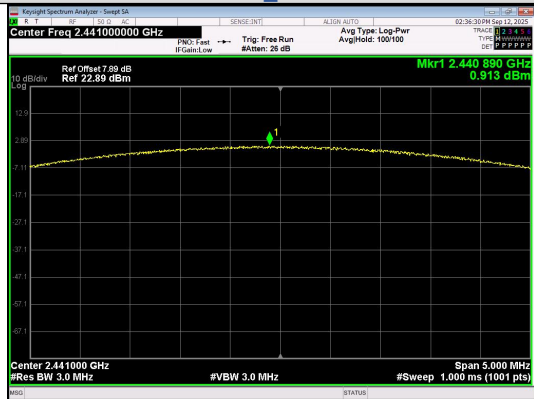
Peak Output Power
 $\pi/4$ QPSK_Channel 39



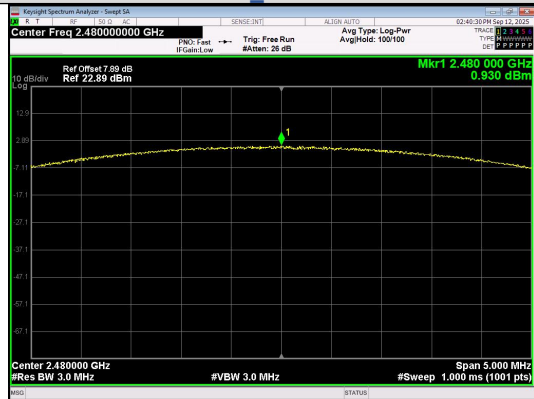
Peak Output Power
 $\pi/4$ QPSK_Channel 78



Peak Output Power
8DPSK_Channel 0



Peak Output Power
8DPSK_Channel 39



Peak Output Power
8DPSK_Channel 78



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A.2 99% BANDWIDTH

Test Result

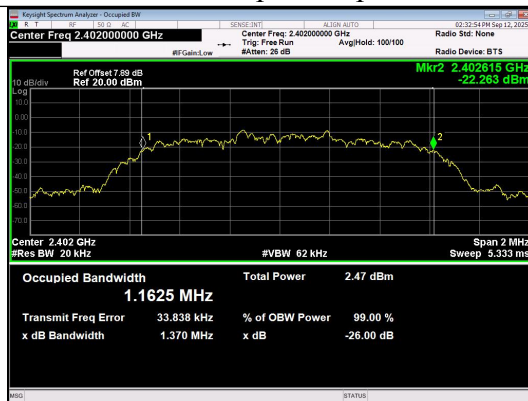
Modulation	Channel	Center Frequency (MHz)	99% BW (MHz)
GFSK	0	2402	0.85695
	39	2441	0.84560
	78	2480	0.83905
π /4DQPSK	0	2402	1.1752
	39	2441	1.1761
	78	2480	1.1759
8DPSK	0	2402	1.1625
	39	2441	1.1640
	78	2480	1.1632

Test Graphs

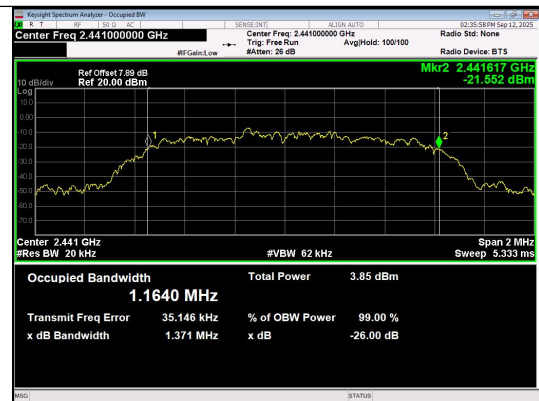




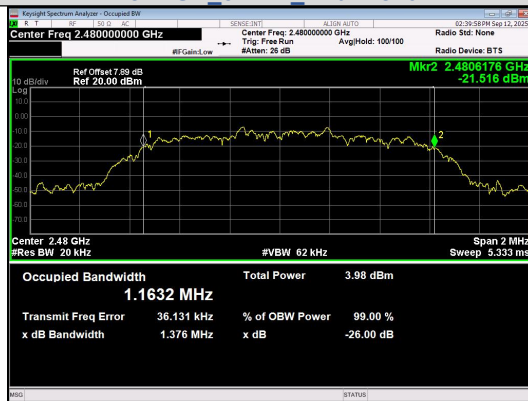
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8DPSK_3-DH1_Channel 0



8DPSK_3-DH1_Channel 39



8DPSK_3-DH1_Channel 78



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A.3 20DB BANDWIDTH

Test Result

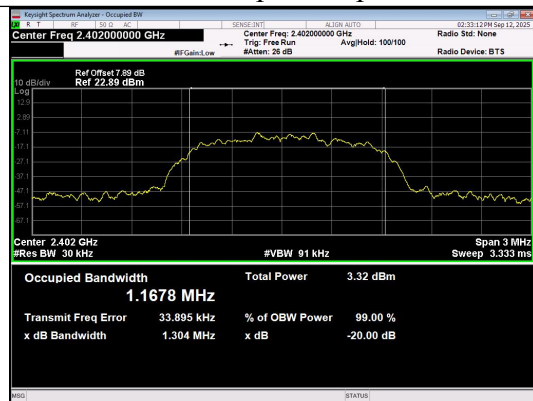
Modulation	Channel	Center Frequency (MHz)	20 dB Bandwidth (MHz)
GFSK	0	2402 MHz	0.9500
	39	2441 MHz	0.9500
	78	2480 MHz	0.9500
$\pi/4$ DQPSK	0	2402 MHz	1.340
	39	2441 MHz	1.340
	78	2480 MHz	1.350
8DPSK	0	2402 MHz	1.300
	39	2441 MHz	1.310
	78	2480 MHz	1.310

Test Graphs

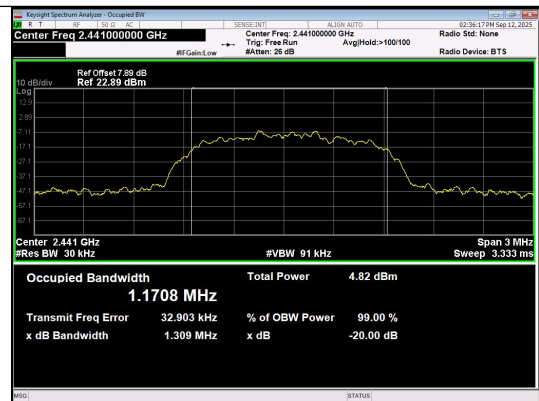




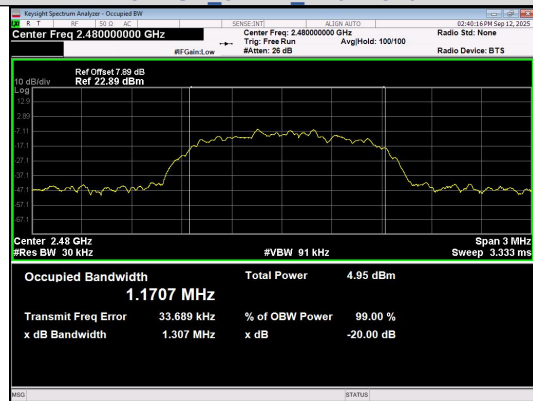
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8DPSK 3-DH1_Channel 0



8DPSK 3-DH1_Channel 39



8DPSK 3-DH1_Channel 78



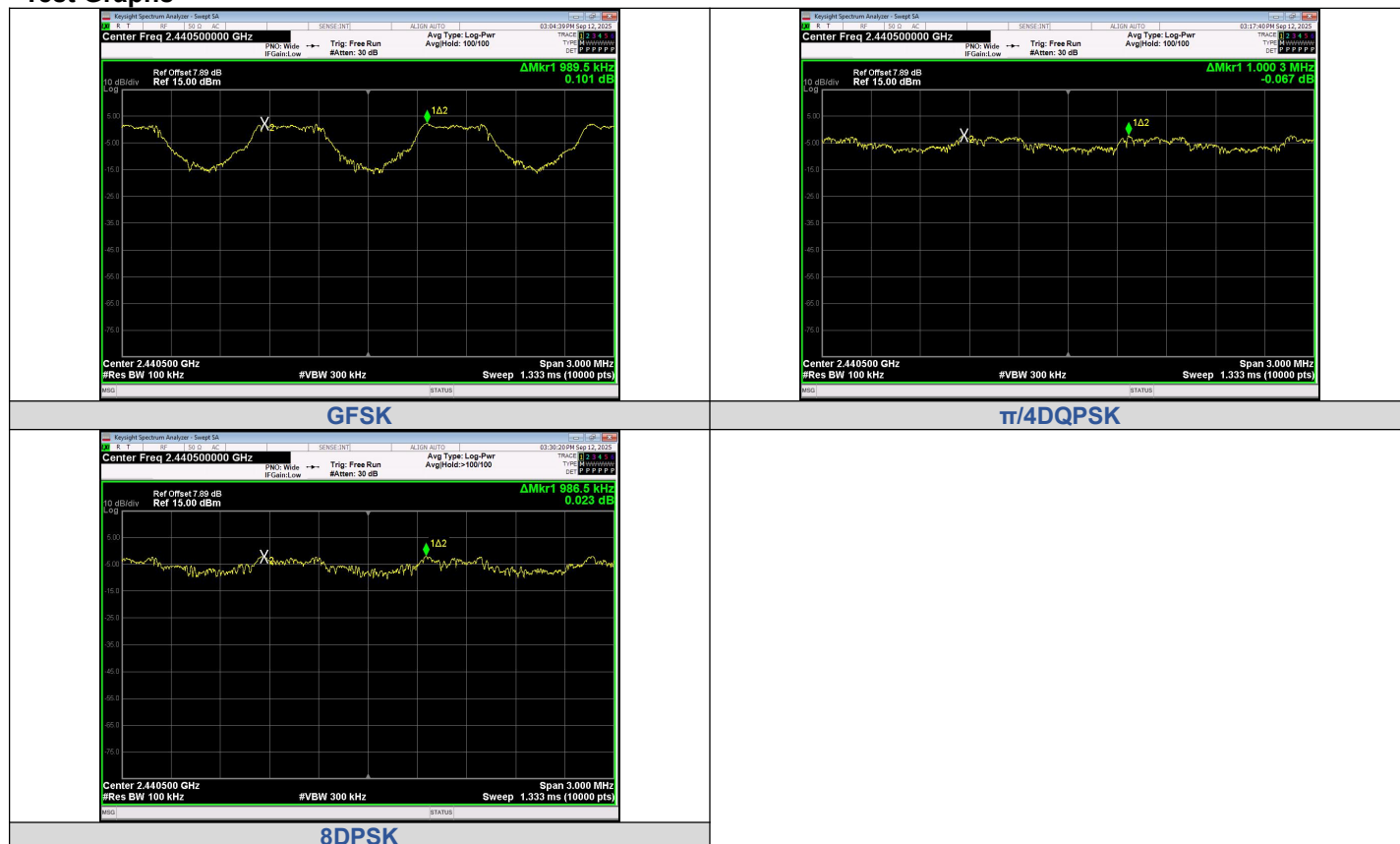
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A.4 CARRIER FREQUENCIES SEPARATION

Test Result

Modulation	Packet	Left Center frequency (MHz)	Right Center frequency (MHz)	Hopping Frequency Separation (MHz)	Limit (MHz)	Result
GFSK	DH1	2439.8692	2440.8587	0.9895	0.950	PASS
$\pi/4$ DQPSK	2-DH1	2439.8677	2440.868	1.0003	0.9	PASS
8DPSK	3-DH1	2439.8674	2440.8539	0.9865	0.873	PASS

Test Graphs





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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	-50.110	-18.2	-31.910	PASS
			21596.6	-52.751	-18.2	-34.551	PASS
		39	21147.8	-52.638	-17.83	-34.808	PASS
		78	2483.50	-53.870	-17.77	-36.100	PASS
			21598.5	-50.886	-17.77	-33.116	PASS
π/4DQPSK	2-DH1	0	2387.15	-53.686	-22.64	-31.046	PASS
			2400.00	-54.350	-22.64	-31.710	PASS
			21580.4	-52.505	-22.64	-29.865	PASS
		39	21529.8	-52.041	-22.17	-29.871	PASS
		78	2483.50	-55.810	-22.11	-33.700	PASS
			21574.1	-51.458	-22.11	-29.348	PASS
8DPSK	3-DH1	0	2379.07	-54.378	-23.59	-30.788	PASS
			2400.00	-54.880	-23.59	-31.290	PASS
			21592.2	-53.102	-23.59	-29.512	PASS
		39	21529.8	-51.885	-22.15	-29.735	PASS
		78	831.54	-50.115	-22.07	-28.045	PASS
			2483.50	-56.440	-22.07	-34.370	PASS

Hopping

Modulation	Packet	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
GFSK	DH1	Hopping	2400.00	-52.890	-18.17	-34.720	PASS
			2483.50	-55.910	-17.7	-38.210	PASS
π/4DQPSK	2-DH1		2319.11	-53.334	-22.6	-30.734	PASS
			2400.00	-54.570	-22.6	-31.970	PASS
			2483.50	-55.280	-22.1	-33.180	PASS
8DPSK	3-DH1		2360.90	-53.493	-22.59	-30.903	PASS
			2400.00	-54.010	-22.59	-31.420	PASS
			2483.50	-55.330	-22.03	-33.300	PASS

Test Graphs

