

Appendix A. Test Data

Maximum Conducted Output Power Measurement													
Test Mode	Frequency (MHz)	Packet Type	Average Power		Peak Power		Power Limit	Gain	EIRP Power		EIRP Power Limit	RF Power setting in Test Software	Test Software Version
			dBm	W	dBm	W	W	dBi	dBm	W	W		
BT_GFSK	2402	DH1	14.43	0.0277	14.58	0.02871	<0.125	1.2	15.78	0.03784	4.00	61.00	Airoha Tool Kit V3.9.0.8
		DH3	14.46	0.0279	14.61	0.02891	<0.125	1.2	15.81	0.03811	4.00	61.00	
		DH5	14.48	0.0281	14.63	0.02904	<0.125	1.2	15.83	0.03828	4.00	61.00	
	2441	DH1	14.19	0.0262	14.37	0.02735	<0.125	1.2	15.57	0.03606	4.00	61.00	
		DH3	14.22	0.0264	14.40	0.02754	<0.125	1.2	15.60	0.03631	4.00	61.00	
		DH5	14.26	0.0267	14.43	0.02773	<0.125	1.2	15.63	0.03656	4.00	61.00	
	2480	DH1	14.12	0.0258	14.30	0.02692	<0.125	1.2	15.50	0.03548	4.00	61.00	
		DH3	14.15	0.0260	14.32	0.02704	<0.125	1.2	15.52	0.03565	4.00	61.00	
		DH5	14.18	0.0262	14.35	0.02723	<0.125	1.2	15.55	0.03589	4.00	61.00	
BT_π/4-DQPSK	2402	2DH1	9.64	0.0092	12.15	0.01641	<0.125	1.2	13.35	0.02163	4.00	58.00	
		2DH3	9.72	0.0094	12.22	0.01667	<0.125	1.2	13.42	0.02198	4.00	58.00	
		2DH5	9.80	0.0095	12.31	0.01702	<0.125	1.2	13.51	0.02244	4.00	58.00	
	2441	2DH1	9.61	0.0091	12.08	0.01614	<0.125	1.2	13.28	0.02128	4.00	58.00	
		2DH3	9.68	0.0093	12.17	0.01648	<0.125	1.2	13.37	0.02173	4.00	58.00	
		2DH5	9.77	0.0095	12.25	0.01679	<0.125	1.2	13.45	0.02213	4.00	58.00	
	2480	2DH1	9.42	0.0087	11.67	0.01469	<0.125	1.2	12.87	0.01936	4.00	58.00	
		2DH3	9.44	0.0088	11.75	0.01496	<0.125	1.2	12.95	0.01972	4.00	58.00	
		2DH5	9.56	0.0090	11.86	0.01535	<0.125	1.2	13.06	0.02023	4.00	58.00	
BT_8DPSK	2402	3DH1	9.67	0.0093	12.29	0.01694	<0.125	1.2	13.49	0.02234	4.00	58.00	
		3DH3	9.74	0.0094	12.37	0.01726	<0.125	1.2	13.57	0.02275	4.00	58.00	
		3DH5	9.81	0.0096	12.46	0.01762	<0.125	1.2	13.66	0.02323	4.00	58.00	
	2441	3DH1	9.46	0.0088	12.16	0.01644	<0.125	1.2	13.36	0.02168	4.00	58.00	
		3DH3	9.52	0.0090	12.22	0.01667	<0.125	1.2	13.42	0.02198	4.00	58.00	
		3DH5	9.59	0.0091	12.30	0.01698	<0.125	1.2	13.50	0.02239	4.00	58.00	
	2480	3DH1	9.07	0.0081	11.95	0.01567	<0.125	1.2	13.15	0.02065	4.00	58.00	
		3DH3	9.13	0.0082	12.02	0.01592	<0.125	1.2	13.22	0.02099	4.00	58.00	
		3DH5	9.20	0.0083	12.08	0.01614	<0.125	1.2	13.28	0.02128	4.00	58.00	

Note: The relevant measured result has the offset with cable loss already.

20 dB Emission Bandwidth and 99 % Occupied Bandwidth Measurement			
Test Mode	Frequency (MHz)	20 dB RF Bandwidth (MHz)	99 % Occupied Bandwidth (MHz)
BT_GFSK	2402	0.970	0.888
	2441	0.970	0.889
	2480	0.969	0.889
BT_8DPSK	2402	1.278	1.159
	2441	1.278	1.158
	2480	1.279	1.158

Carrier Frequency Separation Measurement			
Test Mode	Frequency (MHz)	Measurement (MHz)	Limit (MHz)
BT_GFSK	2402	1.316	≥ 0.647
	2441	1.000	≥ 0.647
	2480	0.998	≥ 0.646
BT_8DPSK	2402	0.990	≥ 0.852
	2441	0.998	≥ 0.852
	2480	1.008	≥ 0.853

Time of Occupancy (Dwell Time) Measurement		
Test Mode	Average Time of Occupancy (Dwell Time) Measurement	
	DH1	
BT_GFSK	Cycle Calculate	$79\text{CH} * 0.4 = 31.6 \text{ (sec)}$
	The EUT Hopping Number per Sec	1600 times/sec
	Each Channel Dwell Times per Sec	$800/79\text{CH} = 10.13 \text{ (times/sec)}$
	Each Channel Dwell Times on Cycle(1)	$31.6 * 10.13 = 320.108 \text{ (times)}$
	Each Channel Dwell Times (2)	0.410 ms
	Dwell Times on Cycle (1) * (2)	131.244 ms
	Limit (msec)	≤ 400
	DH3	
	Cycle Calculate	$79\text{CH} * 0.4 = 31.6 \text{ (sec)}$
	The EUT Hopping Number per Sec	1600 times/sec
	Each Channel Dwell Times per Sec	$400/79\text{CH} = 5.06 \text{ (times/sec)}$
	Each Channel Dwell Times on Cycle(1)	$31.6 * 5.06 = 159.896 \text{ (times)}$
	Each Channel Dwell Times (2)	1.670 ms
	Dwell Times on Cycle (1) * (2)	267.026 ms
	Limit (msec)	≤ 400
	DH5	
	Cycle Calculate	$79\text{CH} * 0.4 = 31.6 \text{ (sec)}$
	The EUT Hopping Number per Sec	1600 times/sec
	Each Channel Dwell Times per Sec	$266.7/79\text{CH} = 3.38 \text{ (times/sec)}$
	Each Channel Dwell Times on Cycle(1)	$31.6 * 3.38 = 106.808 \text{ (times)}$
	Each Channel Dwell Times (2)	2.910 ms
	Dwell Times on Cycle (1) * (2)	310.811 ms
	Limit (msec)	≤ 400

Test Mode	Average Time of Occupancy (Dwell Time) Measurement	
	3DH1	
BT_8DPSK	Cycle Calculate	$79\text{CH} * 0.4 = 31.6 \text{ (sec)}$
	The EUT Hopping Number per Sec	1600 times/sec
	Each Channel Dwell Times per Sec	$800/79\text{CH} = 10.13 \text{ (times/sec)}$
	Each Channel Dwell Times on Cycle(1)	$31.6 * 10.13 = 320.108 \text{ (times)}$
	Each Channel Dwell Times (2)	0.400 ms
	Dwell Times on Cycle (1) * (2)	128.043 ms
	Limit (msec)	≤ 400
	3DH3	
	Cycle Calculate	$79\text{CH} * 0.4 = 31.6 \text{ (sec)}$
	The EUT Hopping Number per Sec	1600 times/sec
	Each Channel Dwell Times per Sec	$400/79\text{CH} = 5.06 \text{ (times/sec)}$
	Each Channel Dwell Times on Cycle(1)	$31.6 * 5.06 = 159.896 \text{ (times)}$
	Each Channel Dwell Times (2)	1.660 ms
	Dwell Times on Cycle (1) * (2)	265.427 ms
	Limit (msec)	≤ 400
	3DH5	
	Cycle Calculate	$79\text{CH} * 0.4 = 31.6 \text{ (sec)}$
	The EUT Hopping Number per Sec	1600 times/sec
	Each Channel Dwell Times per Sec	$266.7/79\text{CH} = 3.38 \text{ (times/sec)}$
	Each Channel Dwell Times on Cycle(1)	$31.6 * 3.38 = 106.808 \text{ (times)}$
	Each Channel Dwell Times (2)	2.925 ms
	Dwell Times on Cycle (1) * (2)	312.413 ms
	Limit (msec)	≤ 400