

Appendix A. Test Data

Maximum Conducted Output Power Measurement									
Test Mode	Frequency (MHz)	Packet Type	Average Power		Peak Power		Power Limit	RF Power setting in Test Software	Test Software Version
			dBm	W	dBm	W			
BT_GFSK	2402	DH1	4.72	0.0030	5.07	0.00321	<0.125	0x40	AX Series MP Toolkit_v2.0.41 / RTLBAPP_v5.2 .4.2
		DH3	4.74	0.0030	5.11	0.00324	<0.125	0x40	
		DH5	4.76	0.0030	5.16	0.00328	<0.125	0x40	
	2441	DH1	4.50	0.0028	4.90	0.00309	<0.125	0x40	
		DH3	4.51	0.0028	4.89	0.00308	<0.125	0x40	
		DH5	4.97	0.0031	5.37	0.00344	<0.125	0x40	
	2480	DH1	4.59	0.0029	4.98	0.00315	<0.125	0x40	
		DH3	4.60	0.0029	4.97	0.00314	<0.125	0x40	
		DH5	4.62	0.0029	5.00	0.00316	<0.125	0x40	
BT_π/4-DQPSK	2402	2DH1	4.07	0.0026	6.80	0.00479	<0.125	0x41	
		2DH3	4.12	0.0026	6.81	0.00480	<0.125	0x41	
		2DH5	4.14	0.0026	6.86	0.00485	<0.125	0x41	
	2441	2DH1	3.90	0.0025	6.58	0.00455	<0.125	0x41	
		2DH3	3.89	0.0024	6.61	0.00458	<0.125	0x41	
		2DH5	3.91	0.0025	6.62	0.00459	<0.125	0x41	
	2480	2DH1	3.98	0.0025	6.66	0.00463	<0.125	0x41	
		2DH3	3.97	0.0025	6.72	0.00470	<0.125	0x41	
		2DH5	4.00	0.0025	6.75	0.00473	<0.125	0x41	
BT_8DPSK	2402	3DH1	4.11	0.0026	7.41	0.00551	<0.125	0x41	
		3DH3	4.14	0.0026	7.40	0.00550	<0.125	0x41	
		3DH5	4.18	0.0026	7.44	0.00555	<0.125	0x41	
	2441	3DH1	3.92	0.0025	7.15	0.00519	<0.125	0x41	
		3DH3	3.96	0.0025	7.20	0.00525	<0.125	0x41	
		3DH5	3.98	0.0025	7.25	0.00531	<0.125	0x41	
	2480	3DH1	4.05	0.0025	7.38	0.00547	<0.125	0x41	
		3DH3	4.07	0.0026	7.40	0.00550	<0.125	0x41	
		3DH5	4.08	0.0026	7.42	0.00552	<0.125	0x41	

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	0.961	0.904
	2441	0.962	0.904
	2480	0.961	0.904
BT_8DPSK	2402	1.350	1.205
	2441	1.351	1.205
	2480	1.351	1.204

Carrier Frequency Separation Measurement			
Test Mode	Frequency (MHz)	Measurement (MHz)	Limit (MHz)
BT_GFSK	2402	1.338	≥ 0.641
	2441	1.000	≥ 0.641
	2480	1.334	≥ 0.641
BT_8DPSK	2402	1.312	≥ 0.900
	2441	1.318	≥ 0.901
	2480	0.986	≥ 0.900

Time of Occupancy (Dwell Time) Measurement		
Test Mode	Average Time of Occupancy (Dwell Time) Measurement	
	DH1	
BT_GFSK	Cycle Calculate	$79CH * 0.4 = 31.6 \text{ (sec)}$
	The EUT Hopping Number per Sec	1600 times/sec
	Each Channel Dwell Times per Sec	$800/79CH = 10.13 \text{ (times/sec)}$
	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
	DH3	
	Cycle Calculate	$79CH * 0.4 = 31.6 \text{ (sec)}$
	The EUT Hopping Number per Sec	1600 times/sec
	Each Channel Dwell Times per Sec	$400/79CH = 5.06 \text{ (times/sec)}$
	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	$79CH * 0.4 = 31.6 \text{ (sec)}$
	The EUT Hopping Number per Sec	1600 times/sec
	Each Channel Dwell Times per Sec	$266.7/79CH = 3.38 \text{ (times/sec)}$
	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

Test Mode	Average Time of Occupancy (Dwell Time) Measurement	
	3DH1	
BT_8DPSK	Cycle Calculate	$79CH * 0.4 = 31.6 \text{ (sec)}$
	The EUT Hopping Number per Sec	1600 times/sec
	Each Channel Dwell Times per Sec	$800/79CH = 10.13 \text{ (times/sec)}$
	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
	3DH3	
	Cycle Calculate	$79CH * 0.4 = 31.6 \text{ (sec)}$
	The EUT Hopping Number per Sec	1600 times/sec
	Each Channel Dwell Times per Sec	$400/79CH = 5.06 \text{ (times/sec)}$
	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
	3DH5	
	Cycle Calculate	$79CH * 0.4 = 31.6 \text{ (sec)}$
	The EUT Hopping Number per Sec	1600 times/sec
	Each Channel Dwell Times per Sec	$266.7/79CH = 3.38 \text{ (times/sec)}$
	Each Channel Dwell Times on Cycle(1)	$31.6 * 3.38 = 106.808 \text{ (times)}$
	Each Channel Dwell Times (2)	2.940 ms
	Dwell Times on Cycle (1) * (2)	314.016 ms
	Limit (msec)	≤ 400