

Appendix A. Test Data

11b mode

Peak Antenna Gain	3.70	dBi
Declaration Output Power	4.02	mW/MHz
Declaration Output Power	6.04	dBm/MHz
EIRP	9.74	dBm/MHz
Input Power Voltage	5	Vdc

Tested Circit Insertion Loss		10.8	dB
Burst	ON TIME	-Not applicable-	sec
	OFF TIME	-Not applicable-	sec
	Ratio	-Not applicable-	%
Packet Type (Mode)		1Mbps	mode

Frequency equal to the transmission rate
of the modulation signal (5.5 Mbps)

1.375 MHz

Test Category ; 2.4GHz Band Wideband Low-Power Data Communication System

TEST Results (Normal Voltage)

Measurement Frequency		MHz	2412	2442	2472	Result	Limit
Channel Number		Ch.	1	7	13	----	----
Reading Frequency (TX0)		MHz	2411.9883	2441.9883	2471.9880	----	----
Frequency Tolerance (TX0)		ppm	-4.85	-4.79	-4.85	PASS	$-50 \leq x \leq +50$
Occupied Bandwidth (TX0)		MHz	14.9130	14.9430	14.9300	PASS	≤ 26 MHz
Spread Bandwidth (TX0)		MHz	10.5720	10.5720	10.5690	PASS	≥ 0.5 MHz
Antenna Power (Density)(TX0)		mW/MHz	4.02	3.86	3.86	PASS	≤ 10 mW/MHz
Antenna Power Tolerance(TX0)		%	0.00	-3.98	-3.98	PASS	$-80 \leq x \leq +20$
E.I.R.P (Density)(TX0)		dBm/MHz	9.74	9.57	9.56	PASS	≤ 12.14 dBm/MHz
Real Total Output Power (TX0)		dBm	15.54	15.33	15.26	----	----
Unwanted Emission Strength (TX0)	Under 2387MHz	μ W/MHz	0.04	0.03	0.03	PASS	$\leq 2.5\mu$ W/MHz
		MHz	2346.90	2382.30	2252.70	----	----
	2387-2400MHz	μ W/MHz	0.36	0.03	0.03	PASS	$\leq 25\mu$ W/MHz
		MHz	2397.11	2398.39	2390.76	----	----
	2483.5-2496.5MHz	μ W/MHz	0.02	0.02	0.23	PASS	$\leq 25\mu$ W/MHz
		MHz	2490.36	2491.25	2485.11	----	----
	2496.5 - 12.5GHz	μ W/MHz	0.02	0.03	0.03	PASS	$\leq 2.5\mu$ W/MHz
		MHz	12230.00	12190.00	2496.50	----	----
Secondarily Emittted Radio Wave Strength (RX Spurious) (RX0)	Under 1GHz	nW	0.011	0.009	0.010	PASS	≤ 4 nW
		MHz	93.050	979.630	273.470	----	----
	1 - 12.5GHz	nW	0.289	0.378	0.324	PASS	≤ 20 nW
		MHz	6428.000	1955.000	6428.000	----	----
Spread Factor		MHz	7.69	7.69	7.69	PASS	≥ 5
Interference Prevention Function		----	good			PASS	----

11g mode

Peak Antenna Gain	3.70	dBi
Declaration Output Power	2.06	mW/MHz
Declaration Output Power	3.13	dBm/MHz
EIRP	6.83	dBm/MHz
Input Power Voltage	5	Vdc

Tested Circit Insertion Loss		10.8	dB
Burst	ON TIME	-Not applicable-	sec
	OFF TIME	-Not applicable-	sec
	Ratio	-Not applicable-	%
Packet Type (Mode)		6Mbps	mode

Test Category ; 2.4GHz Band Wideband Low-Power Data Communication System

TEST Results (Normal Voltage)

Measurement Frequency		MHz	2412	2442	2472	Result	Limit
Channel Number		Ch.	1	7	13	----	----
Reading Frequency (TX0)		MHz	2411.9883	2441.9883	2471.9880	----	----
Frequency Tolerance (TX0)		ppm	-4.85	-4.79	-4.85	PASS	-50≤x≤+50
Occupied Bandwidth (TX0)		MHz	16.3900	16.3850	16.3900	PASS	≤26 MHz
Antenna Power (Density)(TX0)		mW/MHz	1.99	2.06	1.95	PASS	≤10 mW/MHz
Antenna Power Tolerance(TX0+1)		%	-3.40	0.00	-5.34	PASS	-80≤x≤+20
E.I.R.P (Density)		dBm/MHz	6.69	6.83	6.59	PASS	≤12.14 dBm/MHz
Real Total Output Power (TX0)		dBm	14.67	14.76	14.58	----	----
Unwanted Emission Strength (TX0)	Under 2387MHz	μW/MHz	0.04	0.03	0.03	PASS	≤2.5μW/MHz
		MHz	2387.00	2306.90	2365.80	----	----
	2387-2400MHz	μW/MHz	0.16	0.06	0.03	PASS	≤25μW/MHz
		MHz	2399.06	2399.39	2398.92	----	----
	2483.5-2496.5MHz	μW/MHz	0.02	0.04	0.41	PASS	≤25μW/MHz
		MHz	2493.73	2485.35	2484.51	----	----
	2496.5 - 12.5GHz	μW/MHz	0.02	0.02	0.08	PASS	≤2.5μW/MHz
		MHz	12290.00	5888.00	2496.50	----	----
Secondarily Emitted Radio Wave Strength (RX Spurious) (RX0)	Under 1GHz	nW	0.010	0.010	0.009	PASS	≤4 nW
		MHz	797.270	983.510	535.370	----	----
	1 - 12.5GHz	nW	0.282	0.314	0.308	PASS	≤20 nW
		MHz	6428.000	6428.000	1955.000	----	----
Interference Prevention Function		----	good			PASS	----

11ax20 mode

Peak Antenna Gain	3.70	dBi
Declaration Output Power	1.84	mW/MHz
Declaration Output Power	2.66	dBm/MHz
EIRP	6.36	dBm/MHz
Input Power Voltage	5	Vdc

Tested Circit Insertion Loss		10.8	dB
Burst	ON TIME	-Not applicable-	sec
	OFF TIME	-Not applicable-	sec
	Ratio	-Not applicable-	%
Packet Type (Mode)		MCS 0	mode

Test Category ; 2.4GHz Band Wideband Low-Power Data Communication System

TEST Results (Normal Voltage)

Measurement Frequency		MHz	2412	2442	2472	Result	Limit
Channel Number		Ch.	1	7	13	----	----
Reading Frequency (TX0)		MHz	2411.9883	2441.9883	2471.9880	----	----
Frequency Tolerance (TX0)		ppm	-4.85	-4.79	-4.85	PASS	-50≤x≤+50
Occupied Bandwidth (TX0)		MHz	18.9290	18.9250	18.9250	PASS	≤26 MHz
Antenna Power (Density)(TX0)		mW/MHz	1.84	1.82	1.79	PASS	≤10 mW/MHz
Antenna Power Tolerance(TX0)		%	0.00	-1.09	-2.72	PASS	-80≤x≤+20
E.I.R.P (Density)		dBm/MHz	6.36	6.30	6.22	PASS	≤12.14 dBm/MHz
Real Total Output Power (TX0)		dBm	14.57	14.59	14.43	----	----
Unwanted Emission Strength (TX0)	Under 2387MHz	μW/MHz	0.07	0.04	0.03	PASS	≤2.5uW/MHz
		MHz	2387.00	2351.60	2346.90	----	----
	2387-2400MHz	μW/MHz	0.23	0.04	0.03	PASS	≤25uW/MHz
		MHz	2399.14	2395.28	2396.95	----	----
	2483.5-2496.5MHz	μW/MHz	0.02	0.06	1.50	PASS	≤25uW/MHz
		MHz	2490.85	2485.63	2484.80	----	----
	2496.5 - 12.5GHz	μW/MHz	0.02	0.10	0.35	PASS	≤2.5uW/MHz
		MHz	12220.00	7318.00	2496.50	----	----
Secondarily Emitted Radio Wave Strength (RX Spurious) (RX0)	Under 1GHz	nW	0.010	0.010	0.010	PASS	≤4 nW
		MHz	866.140	930.160	901.060	----	----
	1 - 12.5GHz	nW	0.286	0.259	0.517	PASS	≤20 nW
		MHz	6428.000	6428.000	2415.000	----	----
Interference Prevention Function		----	good			PASS	----

11ax40 mode

Peak Antenna Gain	3.70	dBi
Declaration Output Power	0.99	mW/MHz
Declaration Output Power	-0.06	dBm/MHz
EIRP	3.64	dBm/MHz
Input Power Voltage	5	Vdc

Tested Circit Insertion Loss		10.8	dB
Burst	ON TIME	-Not applicable-	sec
	OFF TIME	-Not applicable-	sec
	Ratio	-Not applicable-	%
Packet Type (Mode)		MCS0	mode

Test Category ; 2.4GHz Band Wideband Low-Power Data Communication System

TEST Results (Normal Voltage)

Measurement Frequency		MHz	2422	2442	2462	Result	LIMIT
Channel Number		Ch.	3	7	11	----	----
Reading Frequency (TX0)		MHz	2421.9883	2441.9883	2461.9880	----	----
Frequency Tolerance (TX0)		ppm	-4.83	-4.79	-4.87	PASS	-50 ≤ x ≤ +50
Occupied Bandwidth (TX0)		MHz	37.7690	37.7600	37.7500	PASS	≤ 40 MHz
Antenna Power (Density)(TX0)		mW/MHz	0.98	0.99	0.94	PASS	≤ 5 mW/MHz
Antenna Power Tolerance(TX0)		%	-1.01	0.00	-5.05	PASS	-80 ≤ x ≤ +20
E.I.R.P (Density)		dBm/MHz	3.60	3.64	3.43	PASS	≤9.13 dBm/MHz
Real Total Output Power (TX0)		dBm	14.93	14.92	14.67	----	----
Unwanted Emission Strength (TX0)	Under 2387MHz	μW/MHz	0.09	0.05	0.04	PASS	≤ 2.5uW/MHz
		MHz	2387.00	2382.30	2368.10	----	
	2387-2400MHz	μW/MHz	0.66	0.17	0.09	PASS	≤ 25uW/MHz
		MHz	2399.08	2400.00	2395.94	----	
	2483.5-2496.5MHz	μW/MHz	0.02	0.17	0.36	PASS	≤ 25uW/MHz
		MHz	2485.27	2485.57	2486.92	----	
	2496.5 - 12.5GHz	μW/MHz	0.03	0.06	0.16	PASS	≤ 2.5uW/MHz
		MHz	10579.00	2496.50	2496.50	----	
Secondarily Emittted Radio Wave Strength (RX Spurious) (RX0)	Under 1GHz	nW	0.010	0.010	0.010	PASS	≤ 4 nW
		MHz	799.210	273.470	209.450	----	----
	1 - 12.5GHz	nW	0.430	0.272	0.327	PASS	≤ 20 nW
		MHz	5784.000	6428.000	6428.000	----	----
Carrier Sensing Function		----	good	good	good	PASS	----
Interference Prevention Function		----	good			PASS	----