FCC RF EXPOSURE REPORT

FCC ID: V7TFH1202

Project No.	:	**1406C024**
Equipment	:	**High Power Wireless AC1200 Dual-band Router**
Model	:	**FH1202**
Applicant	:	**SHENZHEN TENDA TECHNOLOGY CO.,LTD**
Address	:	**6-8 Floor, Tower E3, No. 1001, Zhongshanyuan Road, Nanshan District, Shenzhen, China. 518052**
According:	:	**FCC Guidelines for Human Exposure IEEE C95.1**

BTL Inc.

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Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)	Note
1	Tenda	Q5121	Dipole	N/A	4.74	TX
2	Tenda	Q5117	Dipole	N/A	4.85	TX
3	Tenda	Q5123	Dipole	N/A	4.74	RX
4	Tenda	Q5117	Dipole	N/A	4.85	TX
5	Tenda	Q5124	Dipole	N/A	4.64	TX

Note:
(1) ANT 2 and ANT 4 is used for 5G; ANT 1 and ANT 5 is used for 2.4G.
(2) The EUT incorporates a MIMO function. Physically, the EUT provides two completed two transmitters and two receivers (2T2R); all transmit signals are completely uncorrelated, then, Direction gain = GANT, that is Directional gain=4.85 for 5G, 4.74 for 2.4G.

Operating Mode / TX Mode	1TX	2TX
802.11b	V (ANT 1 or ANT 5)	-
802.11g	V (ANT 1 or ANT 5)	-
802.11n(20MHz)	-	V (ANT 1 + ANT 5)
802.11n(40MHz)	-	V (ANT 1 + ANT 5)

Operating Mode / TX Mode	1TX	2TX
802.11a	V (ANT 2 or ANT 4)	-
802.11n(20MHz)	-	V (ANT 2 + ANT 4)
802.11n(40MHz)	-	V (ANT 2 + ANT 4)
802.11ac(20MHz)	-	V (ANT 2 + ANT 4)
802.11ac(40MHz)	-	V (ANT 2 + ANT 4)
802.11ac(80MHz)	-	V (ANT 2 + ANT 4)

TEST RESULTS

2.4G

EUT：	High Power Wireless AC1200 Dual-band Router	Model Name :	FH1202
Temperature：	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode ：	TX B MODE /CH01, CH06, CH11		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.74	2.9785	18.54	71.4496	0.04235946	1	Complies
4.74	2.9785	18.41	69.3426	0.04111027	1	Complies
4.74	2.9785	18.07	64.1210	0.03801460	1	Complies

EUT：	High Power Wireless AC1200 Dual-band Router	Model Name :	FH1202
Temperature：	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode ：	TX G MODE /CH01, CH06, CH11		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.74	2.9785	23.97	249.4595	0.14789394	1	Complies
4.74	2.9785	24.04	253.5129	0.15029702	1	Complies
4.74	2.9785	23.84	242.1029	0.14353254	1	Complies

EUT：	High Power Wireless AC1200 Dual-band Router	Model Name :	FH1202
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX N-20M MODE_ Total /CH01, CH06, CH11		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.74	2.9785	26.55	451.8559	0.26788622	1	Complies
4.74	2.9785	26.23	419.7590	0.24885729	1	Complies
4.74	2.9785	26.74	472.0630	0.27986615	1	Complies

EUT：	High Power Wireless AC1200 Dual-band Router	Model Name :	FH1202
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX N-40M MODE_Total /CH03, CH06, CH09		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.74	2.9785	24.23	264.8500	0.15701834	1	Complies
4.74	2.9785	26.19	415.9106	0.24657575	1	Complies
4.74	2.9785	24.67	293.0893	0.17376022	1	Complies

BAND 1

EUT：	High Power Wireless AC1200 Dual-band Router	Model Name :	FH1202
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX A MODE / CH36, CH40, CH48		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.85	3.0549	16.87	48.6407	0.02957674	1	Complies
4.85	3.0549	15.91	38.9942	0.02371103	1	Complies
4.85	3.0549	17.10	51.2861	0.03118533	1	Complies

EUT：	High Power Wireless AC1200 Dual-band Router	Model Name :	FH1202
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX N-20M MODE_Total / CH36, CH40, CH48		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.85	3.0549	15.45	35.0752	0.02132801	1	Complies
4.85	3.0549	15.32	34.0408	0.02069905	1	Complies
4.85	3.0549	15.42	34.8337	0.02118119	1	Complies

EUT：	High Power Wireless AC1200 Dual-band Router	Model Name :	FH1202
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX N40 MODE_ Total /CH38, CH46		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.85	3.0549	14.77	29.9916	0.01823687	1	Complies
4.85	3.0549	14.71	29.5801	0.01798665	1	Complies

EUT：	High Power Wireless AC1200 Dual-band Router	Model Name :	FH1202
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX AC-20M MODE_Total /CH36, CH40, CH48		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.85	3.0549	15.21	33.1894	0.02018136	1	Complies
4.85	3.0549	15.32	34.0408	0.02069905	1	Complies
4.85	3.0549	15.59	36.2243	0.02202675	1	Complies

EUT：	High Power Wireless AC1200 Dual-band Router	Model Name :	FH1202
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX AC-40M MODE_ Total /CH38, CH46		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.85	3.0549	15.92	39.0841	0.02376569	1	Complies
4.85	3.0549	14.18	26.1818	0.01592027	1	Complies

EUT：	High Power Wireless AC1200 Dual-band Router	Model Name :	FH1202
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX AC-80M MODE_Total /CH44		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.85	3.0549	13.11	20.4644	0.01244372	1	Complies

BAND 4

EUT：	High Power Wireless AC1200 Dual-band Router	Model Name :	FH1202
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX A MODE / CH149, CH157, CH165		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.85	3.0549	13.37	21.7270	0.01321145	1	Complies
4.85	3.0549	13.41	21.9280	0.01333369	1	Complies
4.85	3.0549	12.02	15.9221	0.00968167	1	Complies

EUT：	High Power Wireless AC1200 Dual-band Router	Model Name :	FH1202
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX N-20M MODE_Total / CH149, CH157, CH165		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.85	3.0549	14.56	28.5759	0.01737602	1	Complies
4.85	3.0549	14.13	25.8821	0.01573803	1	Complies
4.85	3.0549	13.31	21.4289	0.01303018	1	Complies

EUT：	High Power Wireless AC1200 Dual-band Router	Model Name :	FH1202
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX N40 MODE_ Total /CH151, CH159		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.85	3.0549	12.05	16.0325	0.00974878	1	Complies
4.85	3.0549	11.98	15.7761	0.00959291	1	Complies

EUT：	High Power Wireless AC1200 Dual-band Router	Model Name :	FH1202
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX AC-N20 MODE / CH149, CH157, CH165		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.85	3.0549	15.36	34.3558	0.02089057	1	Complies
4.85	3.0549	15.47	35.2371	0.02142646	1	Complies
4.85	3.0549	15.26	33.5738	0.02041505	1	Complies

EUT：	High Power Wireless AC1200 Dual-band Router	Model Name :	FH1202
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX AC-40M MODE_Total / CH151, CH159		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.85	3.0549	15.38	34.5144	0.02098700	1	Complies
4.85	3.0549	15.35	34.2768	0.02084253	1	Complies

EUT：	High Power Wireless AC1200 Dual-band Router	Model Name :	FH1202
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX AC-80M MODE_ Total /CH155		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm^2)	Limit of Power Density (S) (mW/cm^2)	Test Result
4.85	3.0549	14.27	26.7301	0.01625363	1	Complies

Note: the calculated distance is 20 cm.