

FCC RF EXPOSURE REPORT

FCC ID: 2AC8BAMW-DBR1200AC

Equipment: Wireless AC1200 Dual-band Router

Model : AMW-DBR 1200AC Applicant : Atlas Media Co

Address : 1315 Walnut Street Suite 320 Philadelphia, PA

19107

According: : FCC Guidelines for Human Exposure IEEE

C95.1

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MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi r^2} = \frac{EIRP}{4\pi r^2}$$

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Table for Filed Antenna

2.4G

Ant.	Brand	Model Name	Antenna Type	Connecto r	Gain(dBi)
1	Tenda	Q5115	Internal	N/A	3.09
2	Tenda	Q5120	Internal	N/A	3.01

5G

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)
3	Tenda	Q5116	Internal	N/A	3.25
4 Tenda Q5118		Internal	N/A	3.15	



TEST RESULTS

2.4G

IFUI :	Wireless AC1200 Dual-band Router	Model Name :	AMW-DBR 1200AC
Temperature:	25 °C 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/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.09	2.0370	24.11	257.6321	0.10446008	1	Complies
3.09	2.0370	23.93	247.1724	0.10021907	1	Complies
3.09	2.0370	23.83	241.5461	0.09793781	1	Complies

HUI:	Wireless AC1200 Dual-band Router	Model Name :	AMW-DBR 1200AC				
Temperature:	25 ℃	Relative Humidity:	55 %				
Test Voltage:	AC 120V/60Hz	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/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.09	2.0370	21.18	131.2200	0.05320475	1	Complies
3.09	2.0370	23.45	221.3095	0.08973262	1	Complies
3.09	2.0370	21.32	135.5189	0.05494781	1	Complies



IFUI:	Wireless AC1200 Dual-band Router	Model Name :	AMW-DBR 1200AC		
Temperature:	25 ℃	Relative Humidity:	55 %		
Test Voltage:	AC 120V/60Hz				
Test Mode :	X 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/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.09	2.0370	22.99	199.0673	0.08071428	1	Complies
3.09	2.0370	25.54	358.0964	0.14519457	1	Complies
3.09	2.0370	24.04	253.5129	0.10278988	1	Complies

EUI:	Wireless AC1200 Dual-band Router	Model Name :	AMW-DBR 1200AC			
Temperature:	25 ℃	Relative Humidity:	55 %			
Test Voltage :	AC 120V/60Hz	.C 120V/60Hz				
Test Mode :	X 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/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.09	2.0370	21.52	141.9058	0.05753742	1	Complies
3.09	2.0370	25.47	352.3709	0.14287307	1	Complies
3.09	2.0370	22.83	191.8669	0.07779476	1	Complies



Band 1

IFUT:	Wireless AC1200 Dual-band Router	Model Name :	AMW-DBR 1200AC		
Temperature:	25 ℃	Relative Humidity:	55 %		
Test Voltage:	AC 120V/60Hz				
Test Mode :	X A MODE /CH36, CH40, CH48				

	Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
	3.25	2.1135	12.91	19.5434	0.00822149	1	Complies
	3.25	2.1135	15.80	38.0189	0.01599375	1	Complies
-	3.25	2.1135	15.66	36.8129	0.01548640	1	Complies

EUI:	Wireless AC1200 Dual-band Router	Model Name :	AMW-DBR 1200AC				
Temperature:	25 ℃	Relative Humidity:	55 %				
Test Voltage:	AC 120V/60Hz	AC 120V/60Hz					
Test Mode :	TX N-20M MODE_ Total / CH36.	X 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/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.25	2.1135	14.97	31.4051	0.01321145	1	Complies
3.25	2.1135	20.91	123.3105	0.05187408	1	Complies
3.25	2.1135	20.72	118.0321	0.04965356	1	Complies

IFUI :	Wireless AC1200 Dual-band Router	Model Name :	AMW-DBR 1200AC		
Temperature:	25 ℃	Relative Humidity:	55 %		
Test Voltage:	Test Voltage: AC 120V/60Hz				
Test Mode :	X N-40M MODE_ Total / CH38, CH46				

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.25	2.1135	12.81	19.0985	0.00803434	1	Complies
3.25	2.1135	12.67	18.4927	0.00777948	1	Complies



EUT:	Wireless AC1200 Dual-band Router	Model Name :	AMW-DBR 1200AC	
Temperature:	25 ℃	Relative Humidity:	55 %	
Test Voltage: AC 120V/60Hz				
Test Mode : TX AC20 MODE_ Total /CH36, CH40, CH48				

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.25	2.1135	13.83	24.1546	0.01016133	1	Complies
3.25	2.1135	20.70	117.4898	0.04942542	1	Complies
3.25	2.1135	20.55	113.5011	0.04774747	1	Complies

IEUT :	Wireless AC1200 Dual-band Router	Model Name :	AMW-DBR 1200AC		
Temperature:	25 ℃	Relative Humidity:	55 %		
Test Voltage:	AC 120V/60Hz				
Test Mode :	"X AC40 MODE_ Total / CH38, CH46				

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.25	2.1135	11.55	14.2889	0.00601105	1	Complies
3.25	2.1135	12.48	17.7011	0.00744647	1	Complies

IEUI.	Wireless AC1200 Dual-band Router	Model Name :	AMW-DBR 1200AC
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	TX AC80 MODE_ Total / CH42		

G	enna ain IBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.	.25	2.1135	12.09	16.1808	0.00680692	1	Complies



Band 4

IFUT:	Wireless AC1200 Dual-band Router	Model Name :	AMW-DBR 1200AC			
Temperature:	25 ℃	Relative Humidity:	55 %			
Test Voltage:	AC 120V/60Hz	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/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.25	2.1135	10.59	11.4551	0.00481893	1	Complies
3.25	2.1135	10.66	11.6413	0.00489723	1	Complies
3.25	2.1135	10.85	12.1619	0.00511623	1	Complies

IEUI.	Wireless AC1200 Dual-band Router	Model Name :	AMW-DBR 1200AC			
Temperature:	25 °C Relative Humidity:		55 %			
Test Voltage: AC 120V/60Hz						
Test Mode :	TX N-20M MODE_ Total / CH14	X 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/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.25	2.1135	14.20	26.3027	0.01106497	1	Complies
3.25	2.1135	13.80	23.9883	0.01009138	1	Complies
3.25	2.1135	13.10	20.4174	0.00858915	1	Complies

IFUI :	Wireless AC1200 Dual-band Router	Model Name :	AMW-DBR 1200AC	
Temperature: 25 °C		Relative Humidity:	55 %	
Test Voltage: AC 120V/60Hz				
Test Mode :	X N-40M MODE_ Total / CH151, CH159			

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.25	2.1135	11.94	15.6315	0.00657583	1	Complies
3.25	2.1135	12.76	18.8799	0.00794237	1	Complies



EUT:	Wireless AC1200 Dual-band Router	Model Name :	AMW-DBR 1200AC		
Temperature:	25 ℃	Relative Humidity:	55 %		
Test Voltage:	AC 120V/60Hz				
Test Mode :	TX AC20 MODE_ Total /CH149,	X AC20 MODE_ Total /CH149, CH157, CH165			

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.25	2.1135	14.04	25.3513	0.01066474	1	Complies
3.25	2.1135	13.66	23.2274	0.00977126	1	Complies
3.25	2.1135	12.90	19.4984	0.00820258	1	Complies

IEUI.	Wireless AC1200 Dual-band Router	Model Name :	AMW-DBR 1200AC	
Temperature:	25 ℃	Relative Humidity:	55 %	
Test Voltage:	AC 120V/60Hz			
Test Mode :	TX AC40 MODE_ Total / CH151, CH159			

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.25	2.1135	11.88	15.4170	0.00648560	1	Complies
3.25	2.1135	12.66	18.4502	0.00776158	1	Complies

IEUI.	Wireless AC1200 Dual-band Router	Model Name :	AMW-DBR 1200AC
Temperature:	25 ℃	Relative Humidity:	55 %
Test Voltage:	AC 120V/60Hz		
Test Mode :	TX AC80 MODE_ Total / CH155		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.25	2.1135	13.74	23.6592	0.00995292	1	Complies

Note: the calculated distance is 20 cm.