

MPE

1 PREDICTION OF MPE LIMIT AT A GIVEN DISTANCE EQUATION FROM PAGE 18 OF OET BULLETIN 65, EDITION 97-01

2 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

3 TEST RESULTS

EUT:	300Mbps Wireless-N Broadband Router	Model Name :	WF-2404
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE ANT 1		

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
3.00	1.9553	17.01	50.2343	0.01995034	1	Complies
3.00	1.9553	16.84	48.3059	0.01918449	1	Complies
3.00	1.9553	16.93	49.3174	0.01958621	1	Complies

EUT:	300Mbps Wireless-N Broadband Router	Model Name :	WF-2404
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE ANT 1		

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
3.00	1.9553	20.10	102.3293	0.04063969	1	Complies
3.00	1.9553	20.36	108.6426	0.04314698	1	Complies
3.00	1.9553	20.47	111.4295	0.04425378	1	Complies

EUT:	300Mbps Wireless-N Broadband Router	Model Name :	WF-2404
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE -20MHz ANT 1		

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
3.00	1.9553	16.35	43.1519	0.01713761	1	Complies
3.00	1.9553	16.85	48.4172	0.01922872	1	Complies
3.00	1.9553	16.89	48.8652	0.01940664	1	Complies

EUT:	300Mbps Wireless-N Broadband Router	Model Name :	WF-2404
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE -20MHz ANT 2		

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
3.00	1.9553	16.03	40.0867	0.01592027	1	Complies
3.00	1.9553	15.71	37.2392	0.01478939	1	Complies
3.00	1.9553	15.48	35.3183	0.01402653	1	Complies

EUT:	300Mbps Wireless-N Broadband Router	Model Name :	WF-2404
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE -20MHz ANT 1+ANT 2		

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
6.00	3.9811	19.35	86.0994	0.06822607	1	Complies
6.00	3.9811	19.85	96.6051	0.07655091	1	Complies
6.00	3.9811	19.89	97.4990	0.07725923	1	Complies

EUT:	300Mbps Wireless-N Broadband Router	Model Name :	WF-2404
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE -40MHz ANT 1		

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
3.00	1.9553	15.46	35.1560	0.01396209	1	Complies
3.00	1.9553	15.72	37.3250	0.01482349	1	Complies
3.00	1.9553	15.62	36.4754	0.01448606	1	Complies

EUT:	300Mbps Wireless-N Broadband Router	Model Name :	WF-2404
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE -40MHz ANT 2		

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
3.00	1.9553	15.78	37.8443	0.01502970	1	Complies
3.00	1.9553	15.35	34.2768	0.01361289	1	Complies
3.00	1.9553	15.5	35.4813	0.01409128	1	Complies

EUT:	300Mbps Wireless-N Broadband Router	Model Name :	WF-2404
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N MODE -40MHz ANT 1 +ANT 2		

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
6.00	3.9811	18.78	75.5092	0.05983432	1	Complies
6.00	3.9811	18.72	74.4732	0.05901336	1	Complies
6.00	3.9811	18.62	72.7780	0.05767006	1	Complies