

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:	WHDI GRAPHIC CARD	Model Name :	G45W
Temperature:	23 °C	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX MODE / CH01,CH02,CH03 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
1.99	1.5812	12.65	18.4077	0.00579362	1	Complies
1.99	1.5812	12.87	19.3642	0.00609467	1	Complies
1.99	1.5812	13.52	22.4905	0.00707865	1	Complies

EUT:	WHDI GRAPHIC CARD	Model Name :	G45W
Temperature:	23 °C	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX MODE / CH01,CH02,CH03 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
1.99	1.5812	12.52	17.8649	0.00562277	1	Complies
1.99	1.5812	12.98	19.8609	0.00625101	1	Complies
1.99	1.5812	13.66	23.2274	0.00731056	1	Complies

EUT:	WHDI GRAPHIC CARD	Model Name :	G45W
Temperature:	23 °C	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX MODE / CH01,CH02,CH03 ANT 3		

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
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1.99	1.5812	12.52	17.8649	0.00562277	1	Complies
1.99	1.5812	12.87	19.3642	0.00609467	1	Complies
1.99	1.5812	13.59	22.8560	0.00719367	1	Complies

EUT:	WHDI GRAPHIC CARD	Model Name :	G45W
Temperature:	23 °C	Relative Humidity:	51 %
Pressure:	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX MODE / CH01,CH02,CH03 ANT 4		

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
1.99	1.5812	12.47	17.6604	0.00555841	1	Complies
1.99	1.5812	12.62	18.2810	0.00575374	1	Complies
1.99	1.5812	13.33	21.5278	0.00677564	1	Complies

EUT :	WHDI GRAPHIC CARD	Model Name :	G45W
Temperature :	23 °C	Relative Humidity :	51 %
Pressure :	1010 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX MODE /CH01, CH02, CH03 -Total (ANT 1+ANT 2+ANT 3+ ANT 4)		

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
1.99	1.5812	18.56	71.7794	0.02259178	1	Complies
1.99	1.5812	18.86	76.9130	0.02420752	1	Complies
1.99	1.5812	19.55	90.1571	0.02837595	1	Complies

Note:

The product has four antennas, it is the MIMO.