

## 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:	wireless high-definition transmitter	Model Name :	CB6608
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1016 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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
-3.0	0.5012	17.20	52.4807	0.00523541	1	Complies
<b>-3.0</b>	<b>0.5012</b>	<b>18.31</b>	<b>67.7642</b>	<b>0.00676006</b>	<b>1</b>	<b>Complies</b>
-3.0	0.5012	17.87	61.2350	0.00610872	1	Complies

EUT:	wireless high-definition transmitter	Model Name :	CB6608
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1016 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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
-3.0	0.5012	17.40	54.9541	0.00548214	1	Complies
<b>-3.0</b>	<b>0.5012</b>	<b>18.12</b>	<b>64.8634</b>	<b>0.00647069</b>	<b>1</b>	<b>Complies</b>
-3.0	0.5012	17.98	62.8058	0.00626542	1	Complies

EUT:	wireless high-definition transmitter	Model Name :	CB6608
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1016 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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
-3.0	0.5012	17.43	55.3350	0.00552014	1	Complies
<b>-3.0</b>	<b>0.5012</b>	<b>18.10</b>	<b>64.5654</b>	<b>0.00644096</b>	<b>1</b>	<b>Complies</b>
-3.0	0.5012	17.75	59.5662	0.00594224	1	Complies

EUT:	wireless high-definition transmitter	Model Name :	CB6608
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1016 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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
-3.0	0.5012	17.65	58.2103	0.00580698	1	Complies
<b>-3.0</b>	<b>0.5012</b>	<b>18.18</b>	<b>65.7658</b>	<b>0.00656070</b>	<b>1</b>	<b>Complies</b>
-3.0	0.5012	17.98	62.8058	0.00626542	1	Complies

EUT :	wireless high-definition transmitter	Model Name :	CB6608
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
-3.0	0.5012	23.4400	220.8005	0.02202675	1	Complies
<b>-3.0</b>	<b>0.5012</b>	<b>24.2000</b>	<b>263.0268</b>	<b>0.02623919</b>	<b>1</b>	<b>Complies</b>
-3.0	0.5012	23.9200	246.6039	0.02460086	1	Complies

**Note:**

**The product has four antennas, it is the MIMO.**