Maximum Permissible Exposure (MPE)

The modular use shall be at least 20cm distance away from human body .

MPE Calculation Method

$$E\ (V/m) = \frac{\sqrt{30*P*G}}{d} \qquad \text{Power Density} = Pd\ (W/m^2) = \frac{E^2}{377}$$

Combine these two formulas can be changed to

$$Pd = \frac{30*P*G}{377*d^2}$$

Note:

1. "E" means Electric field (V/m)
2. "P" means Peak RF output power (W)
3. "G" means EUT Antenna numeric gain (numeric)
4. "d" means the minimum mobile separation distance is 0.2m between radiator and human body.

Calculated Result and Limit

IEEE802.11b

Channel	A.P.	Antenna Gain (numeric)	Peak Output Power (mW)	Power Density (mW / cm^2)	Limit of Power Density (mW / cm^2)	Test Result
1	H	1.58	8.206	0.00258	<1	PASS
	V		8.858	0.00278		
6	H	1.58	3.700	0.00116	<1	PASS
	V		3.716	0.00117		
11	H	1.58	2.643	0.000831	<1	PASS
	V		1.125	0.000354		

IEEE802.11g

Channel	A.P.	Antenna Gain (numeric)	Peak Output Power (mW)	Power Density (mW / cm^2)	Limit of Power Density (mW / cm^2)	Test Result
1	H	1.58	7.663	0.00241	<1	PASS
	V		8.018	0.00252		
6	H	1.58	3.298	0.00104	<1	PASS
	V		3.419	0.00107		
11	H	1.58	2.428	0.000763	<1	PASS
	V		1.011	0.000318		