



Table 1.2.2 Maximum peak output power test results

Carrier frequency, MHz	Measured peak output power, dBm	Peak output power limit, dBm	Antenna gain, dBi	EIRP, dBm	EIRP limit, dBm	Result
2412	23.85	28	8 (external)	31.85	36	Pass
2412	19.65	20	16 (integral)	35.65	36	Pass
2412	11.75	12	24 (external)	35.75	36	Pass
2437	23.36	28	8 (external)	31.36	36	Pass
2437	19.86	20	16 (integral)	35.86	36	Pass
2437	11.86	12	24 (external)	35.86	36	Pass
2462	23.66	28	8 (external)	31.66	36	Pass
2462	19.96	20	16 (integral)	35.96	36	Pass
2462	11.96	12	24 (external)	35.96	36	Pass

## 1.2.3 Exposure limit according to part 1, §1.1310

Limit for power density for general population/uncontrolled exposure is 1 mW/cm<sup>2</sup>.

The power density  $P$  (mW/cm<sup>2</sup>) =  $P_T / 4\pi r^2$ , where

$P_T$  - the transmitted power, which is equal to the transmitter output plus antenna gain.

Maximal  $P_T$  @ **antenna gain 16 dBi** is equal to 19.96 dBm + 16 dBi = 35.96 dBm = 3944.57 mW

$$1(\text{mW}/\text{cm}^2) = 3944.57 \text{ mW} / 4\pi r^2$$

The minimum allowed distance "r", where RF exposure limits may not be exceeded, is 17.72 cm.

$$r = \text{sqrt} ( P_T / 4\pi ) = \text{sqrt}( 3944.57 / ( 4 \times 3.14 ) ) = 17.72 \text{ (cm)}.$$

The same limit is obtained at **antenna gain 24 dBi** (Maximal  $P_T$  = 11.96 dBm + 24 dBi = 35.96 dBm).

At **antenna gain 8 dBi** maximal  $P_T$  is equal to 23.85 dBm + 8 dBi = 31.85 dBm and the minimum allowed distance is 11.04 cm.

The EUT is an outdoor mounted unit, therefore the public cannot be exposed to dangerous RF level.