



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  $P \text{ (mW/cm}^2\text{)} = P_T / 4\pi r^2$ , 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

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

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

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

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.