

3.10 Directional gain of the antenna, FCC 15.319 (e)

Directional gain of antennas influences the limit of peak transmit power if the maximum directional gain exceeds 3 dBi.

Max antenna gain [dBi]	Exceeds 3 dBi by amount [dB]
6	3

The antenna gain value is derived from:

Manufacturer declaration	<input checked="" type="checkbox"/>
Antenna diagram	<input type="checkbox"/>
Measured gain of complete system	<input type="checkbox"/>

Comment: Manufacturer declaration documents or Antenna diagrams will be considered in course of certification by responsible authority.

3.12 Radio frequency radiation exposure; FCC 15.319(i)

Consideration of radio frequency radiation exposure for EUT is done as

SAR test acc. IEEE 1528	<input type="checkbox"/>
MPE calculation as below	<input checked="" type="checkbox"/>

SAR test results: not applicable

MPE calculation:

Please find radiated power test results in Appendix J.

The EUT is considered as a mobile device according to OET Bulletin 65, Edition – 97 – 01. Therefore distance to human body of min. 20 cm is determined.

The limit of Power density for General Population / Uncontrolled Exposure is 1.0 mW/cm².

Formula:

$$S = \text{EIRP} / 4\pi R^2$$

Calculation:

EIRP	Radiated Power [dBm]	18.87
EIRP	Radiated Power [mW]	77.1
R	Distance [cm]	20
S	Power Density [mW/cm ²]	0.015

Result:

The EUT complies with the radio frequency radiation exposure requirement.

Comment: For radiated power test results see Appendix J.