

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	☐
MPE calculation as below	☒

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 internal / external antennas used for this mobile transmitter must provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

A safety statement concerning minimum separation distances from enclosure of the device will be integrated in the user's manual to provide end-users with transmitter operating conditions for satisfying RFE exposure compliance.

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]	20.93
EIRP	Radiated Power [mW]	123.88
R	Distance [cm]	20
S	Power Density [mW/cm ²]	0.025

Result:

The EUT complies with the radio frequency radiation exposure requirement.

Comment: For radiated power test results see Appendix J.