

EXHIBIT 1. EXPOSURE OF HUMANS TO RF FIELD [FCC SECTIONS 1.1310 & 2.1091]

1.1. Requirements

The criteria listed in the following tables shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation.

FCC 47 CFR 1.1310(e) Table 1 - Limits for Maximum Permissible Exposure (MPE)

| Frequency range (MHz) | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density (mW/cm ²) | Averaging time (minutes) |
|--|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| (A) Limits for Occupational/Controlled Exposures | | | | |
| 0.3-3.0 | 614 | 1.63 | *(100) | 6 |
| 3.0-30 | 1842/f | 4.89/f | *(900/f ²) | 6 |
| 30-300 | 61.4 | 0.163 | 1.0 | 6 |
| 300-1500 | | | f/300 | 6 |
| 1500-100,000 | | | 5 | 6 |
| (B) Limits for General Population/Uncontrolled Exposure | | | | |
| 0.3-1.34 | 614 | 1.63 | *(100) | 30 |
| 1.34-30 | 824/f | 2.19/f | *(180/f ²) | 30 |
| 30-300 | 27.5 | 0.073 | 0.2 | 30 |
| 300-1500 | | | f/1500 | 30 |
| 1500-100,000 | | | 1.0 | 30 |

f = frequency in MHz

* = Plane-wave equivalent power density

1.2. Method of Measurements

Calculation Method of Power Density:

$$S = \frac{PG}{4\pi \cdot r^2} = \frac{EIRP}{4\pi \cdot r^2}$$

Where,

P: power input to the antenna in mW
EIRP: Equivalent (effective) isotropic radiated power.
S: power density mW/cm²
G: numeric gain of antenna relative to isotropic radiator
r: distance to centre of radiation in cm

1.3. MPE Evaluation for Co-location

Pursuant to KDB 447498 D01 General RF Exposure Guidance v06, Section 7.2:

Simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneously transmitting antennas incorporated in a host device is ≤ 1.0 , according to calculated/estimated, numerically modeled, or measured field strengths or power density.

The following table addresses the co-location of the EUT with PCS/LTE Module at the minimum 31 cm evaluation separation distance required by the operating configurations and exposure conditions of the host device. A PCS/LTE module with operating conditions specified in the following table can be co-located with the EUT.

| EUT Co-located with PCS/LTE Module | | | | | | | | | |
|--|----------------------|-----------------|---------------------------|----------------------------|-----------------------------|--------------------------|-------------------------------------|---|-------------------------|
| Cellular Bands | Frequency Band (MHz) | Frequency (MHz) | Max Conducted Power (dBm) | Maximum Antenna Gain (dBi) | Peak/Average Max. EIRP (mW) | Evaluation Distance (cm) | Power Density (mW/cm ²) | Power Density Limit (mW/cm ²) | Power Density MPE Ratio |
| LTE-B2 | 1850-1910 | 1850 | 23.5 | 9.5 | 1995.26 | 31 | 0.165 | 1.000 | 0.165 |
| LTE-B4 | 1710-1755 | 1710 | 23.5 | 6.5 | 1000.00 | 31 | 0.083 | 1.000 | 0.083 |
| LTE-B5 | 824-849 | 824 | 24.0 | 6.63 | 1156.11 | 31 | 0.096 | 0.549 | 0.174 |
| LTE-B12 | 698-716 | 698 | 24.0 | 10.1 | 2570.40 | 31 | 0.213 | 0.465 | 0.457 |
| LTE-B13 | 777-787 | 777 | 24.0 | 6.95 | 1244.51 | 31 | 0.103 | 0.518 | 0.199 |
| LTE-B17 | 704-716 | 704 | 24.0 | 10.1 | 2570.40 | 31 | 0.213 | 0.469 | 0.454 |
| | | | | | | | | | |
| 3G-B2 | 1850-1910 | 1850 | 24.5 | 8.51 | 1999.86 | 31 | 0.166 | 1.000 | 0.166 |
| 3G-B5 | 824-849 | 824 | 24.5 | 6.63 | 1297.18 | 31 | 0.107 | 0.549 | 0.196 |
| | | | | | | | | | |
| | 902.2-927.8 (EUT) | 902.2 | 30.0 | 5.46 | 3515.60 | 31 | 0.291 | 0.601 | 0.484 |
| | | | | | | | | | |
| Worst case sum of the MPE ratios for all simultaneously transmitting antennas: | | | | | | | | 0.941 | |