Tracker: AXXC20-U4 2x2

Maximum Permissible Exposure
FCC, Part 27

Calculations for Maximum Permissible Exposure Levels
Power Density = Pd (mW/cm2) = EIRP/($4\pi d^2$)
EIRP = P * G
P = Peak output power (mW)
G = Antenna numeric gain (numeric)
d = Separation distance (cm)
Numeric Gain = 10 ^ (G (dBi)/10)

The Axxcelera Broadband Wireless AxxceLTE (AEN-114100-01) has 2 antenna ports and calculations are based on a worst case scenario. The AxxceLTE is a professionally installed device.

Maximum Antenna Gain = 18.0 dBi (Numeric 63.1)
Maximum Conducted Power Measured (15 MHz, Channel 2593 MHz) = +36.89 dBm
$\sum$ (2 Chains) dBm = 39.89 dBm

The EUT belongs to the Controlled Exposure the limit of power density is 5.0 mW/cm$^2$

| | | | | | Distance (cm) | |
|---|---|---|---|---|---|---|
| **Freq. Band (MHz)** | **Antenna Gain (dBi)** | **Effective Numeric Gain (numeric)** | **Max Peak Output Power (dBm)** | **Peak Output Power (mW/EIRP)** | **Calculated Safe Distance @ 5mW/cm$^2$ Limit(cm)** | **Minimum Separation Distance (cm)** |
| 2593.0 | 18 | 63.1 | 39.89 | 615218.5 | 98.95 | 98.95 |

Note: for mobile or fixed location transmitters the minimum separation distance is 20cm, even if calculations indicate the MPE distance to be less.

**Specification**
Maximum Permissible Exposure Limits

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| Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency levels in excess of the Commission's guidelines. See §1.1310 of this chapter.<br><br>Limit = 5 mW / cm$^2$ from 1.310 Table 1, (A) Limits for Occupational/Controlled Exposure |

Laboratory Measurement Uncertainty for Power Measurements

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|---|---|
| Measurement uncertainty | ±1.33dB |