

FCC ID: NZLUAHL5K

RF Exposure/ SAR Statement

Gentex Corporation

Model: UAHL5K

The following information provides the minimum separation distance for the antenna as part of the design as calculated from the FCC OET Bulletin 65, Appendix A, Table (B) Limits for General Population/Uncontrolled Exposure. This calculation is based on the highest EIRP possible from the system, considering maximum power and antenna gain, and considering an f/1500mW/cm² (0.601mW/cm²) uncontrolled exposure limit. The power density formula used was:

$$S = (P \cdot G) / (4 \cdot \pi \cdot r^2)$$

Where

P= -0.05 dBm (Maximum DSC Output Power in dBm)
G= 0 dBi (Numerical Antenna Gain)
R= 20 cm

P+G -0.05 dBm + 1dB (max tune-up tolerance) = 0.95 dBm
Converting 0.95 dBm to mW 1.244515 mW

$$4 \cdot \pi \cdot 20^2 = 5026.55$$

$$\text{The Power Density } S = \frac{1.244515 \text{ mW}}{(P \cdot G)} \cdot \frac{1}{5026.55} = 0.000248 \text{ mW/cm}^2$$

This is less than the above limit as well as the RSS-102 limit in section 2.5 Table 1 for a separation distance of 20mm of 30mW.