

FCC ID: NZLAECHL5

RF Exposure/ S A R Statement

Applicant: Gentex Corporation

Model: AECHL5

Calculations:

The following information provides the minimum separation distance for the antenna as part of the design for the “AECHL5” 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 a $f/1500\text{mW/cm}^2$ (0.601mW/cm^2) uncontrolled exposure limit. The power density formula used was:

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

Where

P = 12.1dBm (Maximum Power Output Power)

G = 6.02dB (Numerical Antenna Gain, 7.8dBi)

R = 20.0cm

$$(P \cdot G) = 18.12\text{dBm}$$

Converting 18.12dBm to mW = 64.8mW

The Power Density $S = 0.0129\text{mW/cm}^2$

This is less than the above limit.