

FCC ID: NZLMAHL5B

RF Exposure/ S A R Statement

Applicant: Gentex Corporation

Model: MAHL5B

Calculations:

The following information provides the minimum separation distance for the antenna as part of the design for the "MAHL5B" 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 $f/1500\text{mW}/\text{cm}^2$ ($0.601\text{mW}/\text{cm}^2$) uncontrolled exposure limit. The power density formula used was:

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

Where

P = 4.51 dBm (Maximum Power Output Power)

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

R = 20.0cm

(P+G) = 12.31dBm + 1dB (for maximum tolerance adjustment)

Converting 13.31dBm to mW = 21.43mW

The Power Density $S = 0.004\text{mW}/\text{cm}^2$

This is less than the above limit.