

February 13, 2001

FCC Application Processing Branch

Regarding: FCC ID MKRS556-EP
Form 731 Confirmation Number EA99662
Correspondence Reference Number 18069

1. The Necessary Bandwidth as defined in CFR 47 part 2.202 (c) (4) is 714 kHz. This value was submitted in the Test Data Report (section 4). The modulation was expressed incompletely as K1D, the more accurate expression, in accordance with CFR 47 parts 2.201 and 2.202 (b) would be 714KK1D.
2. The MPE in the uncontrolled case is 1 mw/cm^2 (OET Bulletin 65 Appendix A). The gain of the antenna that is sold with this system is 8 dBi. Rewriting equation (3) from OET Bulletin 65 Section 2,

$$R = \frac{1}{2} * \text{sqrt} ((P * G) / (\pi * S)).$$

$$P = 5000 \text{ mW}$$

$$G = 6.3 \text{ numeric (8dBi)}$$

$$S = 1 \text{ mW/ cm}^2$$

Solving, the range at which the field intensity falls below the MPE is 50.1 cm, or 19.7 inches. We added a 10% “fudge factor” in our expression of 22 inches as the uncontrolled range in our User’s Manual.

Regards,

Gary Bann