



SOMA Networks, Inc.

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August 13, 2004

ATTN:Reviewing Engineer
Federal Communications Commission
7435 Oakland Mills Road
Columbia, MD 21046

RE: MPE Calculation for SOMAport3, Model # CPE-300-200, FCC ID:
POZCPEPCS004886C

To Whom It May Concern:

The RF exposure limits for radio transmitters are given in 47 CFR 1.1310. The EUT operates at 1850-1910 MHz and is intended for home use. Therefore the applicable exposure limits are in Table 1, section B (for General Population/Uncontrolled Exposure). The applicable Power Density limit for 1500-100,000 MHz from Table 1 is:

1 mW/cm²

The CPE-300-200 is intended for use at distances of >20cm from the user, and this safety requirement is explicitly stated in the user manual. The CPE-300-200 has the following transmitter operating parameters in the maximal case:

Maximum Transmitter Power (P): +27 dBm
Maximum Numerical Antenna Gain (G): +5 dBi

As per FCC Bulletin 65, the formula used to calculate the exposure level, S (in mW/cm²) at a distance R=20 cm is:

$$S = \frac{PG}{4\pi R^2} = \frac{501mW \times 3.16}{5026cm^2} = 0.315mW/cm^2$$

Thus the CPE-300-200 is below the MPE limit of 1 mW/cm² at a distance of 20 cm.

Sincerely,

Robin Grindley
Chief Scientist – Hardware Systems
SOMA Networks, Inc.