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August 2, 2012

Subject: RF MPE EXPOSURE

Re: FCC ID: PWO272570

To Whom It May Concern:

The MPE calculations for model 272570 signal booster were done for each frequency band: 700 MHz. For each band two calculations were done; these included the different possibilities of antennas that may be connected to this signal booster: fixed outside and inside antennas. The order of the attached calculations is as follows:

700 MHz band:

1. Fixed Outside Antenna
2. Inside Antenna

The results of these calculations determine the safe distances and gains for antennas that may be connected to this signal booster as summarized below:

	Fixed Outside Antenna	Inside Antenna
Maximum Gain less Cable Loss (dBi)	15	8.4
Minimum Distance from All People (inches/centimeters)	27/68	8/21

Sincerely,

A handwritten signature in black ink, appearing to read 'Patrick L. Cook', written over a light blue horizontal line.

Patrick L. Cook

Senior Research and Development Engineer



Minimum Safe Distance From Antennas

Based upon FCC OET Bulletin 65 and other FCC Sources

INPUT DATA

Frequency MHz	698
Pout Watts	0.85100
Duty Cycle Percent	100.0%
Ant. Gain dBi	15.00
Coax Loss dB	0.00
Distance From Antenna In cm	67.9

RESULTS OF CALCULATIONS

Ant. Gain less Coax Loss dBi	15.00
Distance From Antenna In Inches	26.73
ERP (Watts)	16.4091
EIRP (Watts)	26.9110
FCC Power Density Limit (mw/cm ²)	0.47
Calculated Power Density (mw/cm ²)	0.46

REFERENCE DATA

Pout dBm	29.30
Antenna Gain (non-log)	31.62
Coax loss (non-log)	1.00
General FCC Limit (mw/cm ²)	f/1500



Minimum Safe Distance From Antennas

Based upon FCC OET Bulletin 65 and other FCC Sources

INPUT DATA

Frequency MHz	728
Pout Watts	0.35500
Duty Cycle Percent	100.0%
Ant. Gain dBi	8.40
Coax Loss dB	0.00
Distance From Antenna In cm	20.1

RESULTS OF CALCULATIONS

Ant. Gain less Coax Loss dBi	8.40
Distance From Antenna In Inches	7.91
ERP (Watts)	1.4976
EIRP (Watts)	2.4560
FCC Power Density Limit (mw/cm ²)	0.49
Calculated Power Density (mw/cm ²)	0.48

REFERENCE DATA

Pout dBm	25.50
Antenna Gain (non-log)	6.92
Coax loss (non-log)	1.00
General FCC Limit (mw/cm ²)	f/1500