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July 16, 2012

Subject: RF MPE EXPOSURE
Re: FCC ID: PWO272770

To Whom It May Concern:

The MPE calculations for model 272770 signal booster were done for each frequency band: 2100 MHz, 800 MHz, and 1900 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:

2100 MHz band:
1. Fixed Outside Antenna
2. Inside Antenna

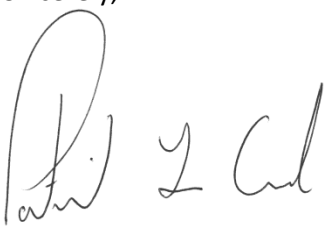
800 MHz band:
3. Fixed Outside Antenna
4. Inside Antenna

1900 MHz band:
5. Fixed Outside Antenna
6. 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)	-0.46	10.1
Minimum Distance from All People (inches/cm)	41/104	8/20

Sincerely,



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	1710
Pout Watts	1.11000
Duty Cycle Percent	100.0%
Ant. Gain dBi	-0.46
Coax Loss dB	0.00
Evaluation Distance From Antenna In cm	20.0

RESULTS OF CALCULATIONS

Ant. Gain less Coax Loss dBi	-0.46
Evaluation Distance From Antenna In Inches	7.87
ERP (Watts)	0.6088
EIRP (Watts)	0.9984
FCC Limit at Above Frequency (mw/cm^2)	1.00
Calculated Power Density With Above Input Data (mw/cm^2)	0.20

REFERENCE DATA

Pout dBm	30.45
Antenna Gain (non-log)	0.90
Coax loss (non-log)	1.00
General FCC Limit (mw/cm^2)	1.00

Minimum Safe Distance From Antennas

Based upon FCC OET Bulletin 65 and other FCC Sources

INPUT DATA

Frequency MHz	2110
Pout Watts	0.13380
Duty Cycle Percent	100.0%
Ant. Gain dBi	15.00
Coax Loss dB	0.00
Evaluation Distance From Antenna In cm	20.0

RESULTS OF CALCULATIONS

Ant. Gain less Coax Loss dBi	15.00
Evaluation Distance From Antenna In Inches	7.87
ERP (Watts)	2.5800
EIRP (Watts)	4.2311
FCC Limit at Above Frequency (mw/cm^2)	1.00
Calculated Power Density With Above Input Data (mw/cm^2)	0.84

REFERENCE DATA

Pout dBm	21.26
Antenna Gain (non-log)	31.62
Coax loss (non-log)	1.00
General FCC Limit (mw/cm^2)	1.00

Minimum Safe Distance From Antennas

Based upon FCC OET Bulletin 65 and other FCC Sources

INPUT DATA

Frequency MHz	824
Pout Watts	2.32000
Duty Cycle Percent	100.0%
Ant. Gain dBi	15.00
Coax Loss dB	0.00
Evaluation Distance From Antenna In cm	104.0

RESULTS OF CALCULATIONS

Ant. Gain less Coax Loss dBi	15.00
Evaluation Distance From Antenna In Inches	40.94
ERP (Watts)	44.7347
EIRP (Watts)	73.3648
FCC Limit at Above Frequency (mw/cm^2)	0.55
Calculated Power Density With Above Input Data (mw/cm^2)	0.54

REFERENCE DATA

Pout dBm	33.65
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	869
Pout Watts	0.23750
Duty Cycle Percent	100.0%
Ant. Gain dBi	10.10
Coax Loss dB	0.00
Evaluation Distance From Antenna In cm	20.0

RESULTS OF CALCULATIONS

Ant. Gain less Coax Loss dBi	10.10
Evaluation Distance From Antenna In Inches	7.87
ERP (Watts)	1.4819
EIRP (Watts)	2.4303
FCC Limit at Above Frequency (mw/cm^2)	0.58
Calculated Power Density With Above Input Data (mw/cm^2)	0.48

REFERENCE DATA

Pout dBm	23.76
Antenna Gain (non-log)	10.23
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	1850
Pout Watts	1.13300
Duty Cycle Percent	100.0%
Ant. Gain dBi	15.00
Coax Loss dB	0.00
Evaluation Distance From Antenna In cm	53.6

RESULTS OF CALCULATIONS

Ant. Gain less Coax Loss dBi	15.00
Evaluation Distance From Antenna In Inches	21.10
ERP (Watts)	21.8467
EIRP (Watts)	35.8286
FCC Limit at Above Frequency (mw/cm^2)	1.00
Calculated Power Density With Above Input Data (mw/cm^2)	0.99

REFERENCE DATA

Pout dBm	30.54
Antenna Gain (non-log)	31.62
Coax loss (non-log)	1.00
General FCC Limit (mw/cm^2)	1.00

Minimum Safe Distance From Antennas

Based upon FCC OET Bulletin 65 and other FCC Sources

INPUT DATA

Frequency MHz	1930
Pout Watts	0.11680
Duty Cycle Percent	100.0%
Ant. Gain dBi	15.00
Coax Loss dB	0.00
Evaluation Distance From Antenna In cm	20.0

RESULTS OF CALCULATIONS

Ant. Gain less Coax Loss dBi	15.00
Evaluation Distance From Antenna In Inches	7.87
ERP (Watts)	2.2522
EIRP (Watts)	3.6935
FCC Limit at Above Frequency (mw/cm^2)	1.00
Calculated Power Density With Above Input Data (mw/cm^2)	0.73

REFERENCE DATA

Pout dBm	20.67
Antenna Gain (non-log)	31.62
Coax loss (non-log)	1.00
General FCC Limit (mw/cm^2)	1.00