Exhibit I: MPE Estimates

FCC ID: HN2SB555

APPLICANT: SIERRA WIRELESS
FCC ID: N7NSB555

MPE CALCULATION FOR MAXIMUM ANTENNA GAIN

Formula used in the MPE Calculations:

E^2/3770 = S, mW/cm2
Pwatts*Ggain = 10^(PdBm-30+GdBi)/10)
E, V/m = (Pwatts*Ggain*30)^.5/d, meters
d, m = ((Pwatts*G*30)/3770*S))^0.5 --------- (A)
GdBi = 10 lg (d^2*S*3770/30*Pwatts) -------- (B)

1) 800 MHz
   Since

S (mW/cm2)	=	0.50	from 1.1310 Table 1
P (dBm)	=	23.50	EUT output power
MPE safe distance d (cm) =		19.99	

   Substitute these parameters into the A above, we have

G (dBi)	=	10.50	EUT antenna gain

   To maintain MPE safe distance d < 20 cm, the maximum Antenna gain can be up to 10.50 dBi**.**

2) 1900 MHz
   Since

S (mW/cm2)	=	1.00	from 1.1310 Table 1
P (dBm)	=	23.50	EUT output power
MPE safe distance d (cm) =		19.99	

   Substitute these parameters into the A above, we have

G (dBi)	=	13.51	EUT antenna gain

   To maintain MPE safe distance d < 20 cm, the maximum Antenna gain can be up to 13.51 dBi.

To maintain MPE safe distance d < 20 cm, the maximum Antenna gain can be up to 10.50 dBi.