KPC650 MPE Distance Calculations

1 General Information

FCC ID:	OVFKWC-KPC650	IC:	3572A-KPC650
Applicant:	Kyocera Wireless Corporation 10300 Campus Point Drive San Diego, CA 92121-1522		
Original Grant Date:	September 29, 2004		

2 MPE Equation and Limits

Limits for General Population/Uncontrolled Exposure:

Frequency Range (MHz)	Electric Field Strength, E (V/m)	Magnetic Field Strength, H (A/m)	Power Density, S (mW/cm^2)	Averaging Time $|E|^2$, $|H|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f^2)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

f = frequency in MHz   *Plane-wave equivalent power density

MPE power density level can be calculated by the following equation (1):

$$P_d = \frac{P_t G_t}{4\pi R^2} \qquad (1)$$

Where P_d = Power Density in appropriate units, e.g.mW/cm^2
$P_t G_t$ = EIRP in Watts
R   = distance from antenna to body in meter (= 0.2 for mobile application)

3 KPC650 MPE Calculations

Based on the FCC OET Bulletin 65 Supplement C and 47 CFR §2.1091, it has been calculated that the KPC650 will comply with the FCC rules on RF exposure for mobile devices when used with an antenna system gain (antenna gain + connecting cable loss) not to exceed 6.0 dBi in both the cellular and PCS bands.

Frequency (MHz)	Pt (mW)	Gt (dBi)	R (cm)	Pd	MPE Limit	Result
824.70	261.22	6.0	20.0	0.312	0.550	Pass
836.52	264.24	6.0	20.0	0.315	0.558	Pass
848.31	258.23	6.0	20.0	0.308	0.566	Pass
1851.25	250.03	6.0	20.0	0.298	1.000	Pass
1880.00	255.86	6.0	20.0	0.305	1.000	Pass
1908.75	239.88	6.0	20.0	0.286	1.000	Pass