

ENGINEERING STATEMENT of LANCE HARPER

The RF power density of KPCC-FM3 at the highest accessible point of the rooftop, (10' bellow the antenna) is 219 uw/cm² or 20% of MPE for occupational areas at the edge of the tower structure.

The calculated density was confirmed physically using a handheld RF Density monitor where I measured a maximum of 225 uw/cm².

The buildings to the east and west of the broadcast location are 4 stories or approximately 40' lower in height would have exposure at the most 9 uw/cm²

Calculation Results

Average Power at the Antenna	100 watts
Antenna Gain in dBi	0 dBi
Distance to the Area of Interest	10 feet 3.048 meters
Frequency of Operation	89.3 MHz
Are Ground Reflections Calculated?	Yes
Estimated RF Power Density	0.2193 mW/cm ²

	Controlled Environment	Uncontrolled Environment
Maximum Permissible Exposure (MPE)	1.005 mW/cm ²	0.205 mW/cm ²
Distance to Compliance from Centre of Antenna	4.7327 feet 1.4425 meters	10.5209 feet 3.2068 meters
Does the Area of Interest Appear to be in Compliance?	yes	no

The site is deemed to be a controlled site. The rooftop at 16 stores high is controlled by a locked door at the top of an alarmed stairwell. Access is strictly controlled by building security and is limited to the building chief engineer, and the mechanical engineer.