

RF Radiation Compliance Measurements

WPKF Windsor Locks, CT

Facility ID# 46965

These measurements were made to comply with Special Conditions 6 and 7 of Construction permit BPH-20110104AAE.

Facilities:

WPKF is authorized by Construction Permit BPH-20110104AAE for an ERP of 3.4KW (H & V) and utilizes a two bay half wave spaced ERI LP-2E-DA-HW antenna. The antenna is side mounted on a 7.6 meter self supported tower structure atop a high rise building with its center of radiation located at 5.2 meters above the upper roof level. Access to the roof is restricted by a locked roof hatch accessed from the 39th floor mechanical room, which is restricted from the general public.

Measurements:

On January 21, 2012 while operating into the antenna at authorized power, measurements were made in all generally accessible areas in the upper floors of the building and within the 39th floor mechanical room immediately below the upper roof, and on the 39th floor perimeter roof, (together comprising the entire 39th floor level, all restricted from public access), and on the upper roof level where the antenna is located, in accordance with guidelines provided in OET Bulletin 65 Edition 97-01 with regard to General Population / Uncontrolled Exposure and Occupational / Controlled Exposure limits. A NARDA 8718B EM Survey meter utilizing a B8742D Shaped E Field Probe was used to make the measurements. The B8742D is a shaped probe with usable response from 300 kHz – 3 GHz providing a reading of the electric field component in percentage of the plane wave equivalent power density corresponding to the 1997 FCC General Population/Public Standard. Measurements were made using the "Max Hold" function of the NARDA 8718B meter while slowly walking a survey grid around the site sweeping the meter probe up and down in an oscillatory fashion covering as much volume of space as practical. Spatial averaging was not needed or utilized.

General Population / Uncontrolled Exposure:

In none of the accessible areas within the building did the RF exposure levels exceed the 1997 FCC General Population / Uncontrolled Exposure limit. The maximum electric field observed within the building itself is in the mechanical room on an elevated platform below the roof hatch and is 5.2% of the 1997 FCC General Population / Uncontrolled Exposure limit. The maximum electric field observed on the 39th floor perimeter roof is 31.9% of the 1997 FCC General Population / Uncontrolled Exposure limit at the northwest corner of the building. Thus, WPKF complies with OET Bulletin 65 Edition 97-01 with regard to the General Population / Uncontrolled Exposure at all accessible points within the building and on the lower building roof.

Occupational / Controlled Exposure:

Levels on the upper roof near the tower exceed the General Population / Uncontrolled Exposure limits and therefore the upper roof is designated a controlled area. The maximum electric field observed is 112% of the 1997 FCC Occupational / Controlled Exposure limit. Access to the roof is restricted by a locked hatch and appropriate warning signs are posted on the ladder leading to the roof hatch, and on the roof marking the hazardous areas.

The licensee along with other users of the site will reduce power or cease operating as necessary to protect workers on the upper roof or tower from RF exposure in excess of FCC guidelines.