

# **RF Radiation Compliance Measurements**

## **WWBB Providence, RI**

### **Facility ID# 54568**

These measurements were made to comply with Special Conditions 4, 5 and 6 of Construction permit BPH-20140804ADC.

#### **Facilities:**

WWBB is authorized by Construction Permit BPH-20140804ADC for an ERP of 6.0KW (H & V) and utilizes a one bay ERI model SHP-1AE-DA antenna. The antenna is side mounted on a 7.3 meter self supported pole structure atop a high rise building with its center of radiation located at 6.4 meters above the main roof level. Access to the roof is restricted by locked doors accessed from the 29<sup>th</sup> and 30<sup>th</sup> mechanical floors which are restricted from the general public.

#### **Measurements:**

On November 14, 2014 while operating into the antenna at authorized power, measurements were made in all generally accessible areas on the upper floors of the building and within the 29<sup>th</sup> and 30<sup>th</sup> floor mechanical rooms immediately below the roof, and in the elevator rooms, and on all roof levels. Due to the low levels measured on the 29th floor, testing the floors below would be a needless disturbance of tenants. Measurements were made 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 an A8742D Shaped E Field Probe was used to make the measurements. The A8742D is a shaped probe providing a reading of the electric field component in percentage of the plane wave equivalent power density corresponding to the 1997 FCC Occupational 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. In areas where the indicated RF exposure levels approached or exceeded 100%, spatially averaged measurements were made utilizing the spatial averaging functionality built into the NARDA 8718B.

#### **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 boiler room on the 29<sup>th</sup> floor in the south corner of the building, and is 4.37% of the Occupational limit, which is also 21.9% of the 1997 FCC General Population / Uncontrolled Exposure limit. All other areas inside the building are below this level.

#### **Occupational / Controlled Exposure:**

In none of the areas on the 30<sup>th</sup> floor chiller pit roof did the RF exposure levels exceed the 1997 FCC Occupational Exposure limit. The maximum electric field observed is 57% of the Occupational limit.

Levels on the main (upper) roof near the antenna support area exceed the Occupational Exposure limit and therefore the main roof level is designated a controlled area. Access to the roof is restricted by locked doors and appropriate warning signs are posted at the roof entry points, and on the roof itself 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 from RF exposure in excess of FCC guidelines.