

Compliance with Special Operating Condition #11

The referenced KLUU 103.5 MHz Construction Permit requires that the field strength produced by the KLUU facility shall not exceed 27 mV/m as measured at the FCC's Waipahu, Hawaii monitoring station.

On Friday, July 10, 2015, between 1500 and 1700 local time, Educational Media Foundation ("EMF") Engineer Steve Wilde and Professional Engineer Eric R Wandel, performed a signal strength reading of KLUU at the Waipahu monitoring station. Measurements were taken using EMF's Potomac Instruments FIM71, serial number 846 along with the ANT-71 dipole. All calibrations, equipment setup and measurements were conducted according to Instruction Manual Section 3, "FIM-71 Operating Instructions".

The ANT-71 dipole antenna was adjusted for calibrated operation at 103.5 MHz using a 69 cm (27-1/8-inch) length as measured from the center of the balun to the tip of each telescoping element according to Figure 3-3 of the FIM-71 instruction manual. A 34-ft coaxial cable was used along with a mast to support the ANT-71 dipole in a horizontal polarization for measurements at a 30-ft height. The FIM-71 gain was adjusted to compensate for the 1.72 dB cable loss.

At the time of measurements, KLUU was operating at the authorized ERP of 100 kW. Measurements were made at a cluster of points located approximately 20-ft beyond the parking area closest to the FCC monitoring station equipment building. Five points were marked with a center point and four additional radial points at a radius of 10-ft, equally spaced around the center point.

The frequency setting was first maximized to tune the FIM-71 to 103.5 MHz. Then, for each measurement point, the horizontally oriented ANT-71 was rotated through 360 degrees on a vertical axis while the maximum indication of field strength was noted.

For all readings, a maximum meter reading of 4.3 mV was recorded. For the measurements made at a 30-ft elevation, an antenna factor of approximately 2.8 (volts/meter) must be applied to the recorded measurement (Figure 3-2 of the FIM-71 Instruction Manual) for an adjusted field strength value of **12.04 mV/m**.

Therefore, the measurements taken at the FCC's Waipahu, Hawaii monitoring station indicate that KLUU is well below the 27 mV/m threshold, and is in compliance with the Special Operating Condition requirement.