

Environmental Effects

Educational Media Foundation (“EMF”) certifies that WJKB complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments.

The RF worksheet in the Instructions to form 303-S was unusable to determine compliance for this facility due to the worst-case nature of the worksheet. Therefore, EMF did an on-site RF study to determine compliance for this site.

On June 12, 2021, Tommy Presite, Engineer for Educational Media Foundation, used EMF’s “shaped probe” Narda RFR measurement equipment¹ to evaluate radiofrequency exposure compliance at the WJKB transmitter site. WJKB was operating at its fully permitted effective radiated power of 6kw while these tests were made.

Measurements were taken at the base of the tower and at various points around the tower compound, terrain and obstacles permitting. The probe was slowly swept between 1-2 meters above the ground, as well as approximately 1 meter side-to-side, seeking, and noting, the highest overall readings. The highest overall instantaneous peak reading found during these measurements was 12.53% of the controlled/occupational limit which is 62.65% of the uncontrolled/public exposure limits of OET-65. This peak reading was at a distance of 10.7 meters from the base of the WJKB tower and is seen on the measurement map plot. The meter was also set to do time averaging readings which resulted in a peak average of 7.9% of the controlled/occupational limit which is 39.5% of the uncontrolled/public exposure limits of OET-65.

These values are below the FCC limits for uncontrolled human exposure to RF fields. Therefore, no fencing or warning signs are required.

Based on this evaluation, WJKB fully complies with the FCC’s maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments.

¹ Instrument: Narda NBM-550, Serial Number A-0227, Calibration date 05/01/2020
Probe: Narda EA5091, Serial Number 01018 Calibration date 05/01/2020