

Engineering Exhibit
RF Radiation Compliance
CAPSTAR TX LIMITED PARTNERSHIP
WLYT FM FM, Hickory NC
(FID#68211)

Reference:
WLYT FM FM Antenna replacement

RF Radiation Compliance

This report is to demonstrate that both the licensed and proposed transmission facilities of WLYT FM comply with the FCC established guidelines regarding exposure to RF electromagnetic fields as described in OET Bulletin 65 Edition 97-01.

Facilities:

WLYT FM utilizes a 4 section Dielectric/SPX DCRM antenna mounted with a center of radiation 450 meters AGL on a guyed tower, WLYT FM is licensed for an ERP (H & V) of 31 Kw.

Prediction Method:

The FCC's version of the FM computer model (version 2.1) as referenced in "Supplement A Edition 97-01 to OET Bulletin 65 Edition 97-01" was used to determine the RF power density at various distances from the tower. A total of 500 data points were used over a total distance of 500 meters from the tower. This distance was deemed sufficient since the power density from the station decays to extremely small levels beyond this distance.

A maximum value of 1.14 $\mu\text{W}/\text{cm}^2$ is predicted at a distance of 189 meters from tower base. This value is under 1.0 % of the Occupational/Controlled Exposure limit of 1.0 mW/cm^2 and Under 1.0 % of the General Population/Uncontrolled Exposure limit of 200 $\mu\text{W}/\text{cm}^2$. Based upon the predictions contained herein, the proposed facilities of WLYT comply with OET Bulletin 65 Edition 97-01 with regard to both General Population/Uncontrolled and Occupational/Controlled Exposure to RF Radiation.

A 3-meter high security fence surrounds the common tower, the gate to which is securely locked and signs warning of the potential RF hazard are conspicuously posted on the gate and at appropriate intervals along the tower fence. WLYT in coordination with other users of the site, reduce power or cease operations as necessary to protect persons having access to the site, tower or antenna from RF Exposure in excess of FCC guidelines.