Engineering Statement
In Support of an Application for

Modification of a Construction Permit

WBLX-FM, Mobile, Alabama

Human Exposure To Radiofrequency Radiation Study

CALL	Service	Channel	Freq.	Polori-zation	Antenna Height* (AGL)	ERP (kW)	Relative Field Factor	Vertical Predicted Power Density ($mWcm^2$)	FCC Uncontrolled Limit (Wcm^2)	Percent of Uncontrolled Limit
WBLX-FM	FM	225	92.9	H&V	508.6	100.000	1.000	0.0260361	0.200	13.0181%
WJLQ	FM	264	100.7	H&V	508.6	100.000	1.000	0.0260361	0.200	13.0181%
WYOK	FM	281	104.1	H&V	508.6	100.000	1.000	0.0260361	0.200	13.0181%
WEAR-TV	TV	3	61	H	563.1	100.000	0.300	0.0053044	0.200	2.6522%
WEAR-TV	DTV	17	491	H	567.2	1000.000	0.300	0.0522772	0.327	15.9706%

Total Percentage of ANSI (uncontrolled) value = 57.677%

* The antenna height indicated above is 2 meters less than the actual antenna height so that the predicted power density consider the 2 meter human height allowance.

The center of radiation above ground level and the ERP of the proposed FM facilities contained in the study were used to determine the power density of each facility with the following formula:

$(33.41 * \text{Total ERP in kW})/(\text{COR in meters} - 2 \text{ meter})^2$

For the TV facilities, Equation (2), found on Page 30 of Supplement A to FCC OET Bulletin No. 65, detail the calculation technique for determining the power density levels at the base of the tower, assuming 100% downward radiation from the individual antennas.

As demonstrated, the total percentage of the ASNI values at the proposed site, considering the radiation of proposed facilities and the existing facilities is 57.677% of the limit for "uncontrolled" environments when using an EPA dipole antenna for study purposes. The total percentage for "controlled" environments is only 11.535%.