

**Engineering Statement
In Support of an
Application for a Construction Permit
WDZZ-FM, Flint, MI**

Human Exposure To Radiofrequency Radiation Study

<u>CALL</u>	<u>Service</u>	<u>Channel</u>	<u>Frequency</u>	<u>Polarization</u>	<u>Antenna Height* (AGL)</u>	<u>ERP (kW)</u>	<u>Vertical Relative Field Factor</u>	<u>Predicted Power Density (mW/cm²)</u>	<u>FCC Uncontrolled Limit (mW/cm²)</u>	<u>Percent of Uncontrolled Limit</u>
WWCK	FM	288	105.5	H&V	107	25.000	1.000	0.0900000	0.200	45.00%
WDZZ-FM	FM	224	92.7	H&V	95	6.000	1.000	0.0280000	0.200	14.00%
Total Percentage of ANSI value =										69.00%

* 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.

For study purposes, a Ring Stub or Dipole (EPA) antenna of the FM Model for Windows was used for each facility. For the WWCK a 4 element, full wave length spacing was used. For the proposed WDZZ-FM facility, a 2 element, full wave length was used. The exact antenna for the proposed will be determined at the time of construction.

As demonstrated, the total percentage of the ANSI values at the proposed site, considering the radiation of proposed facilities and the existing facilities is 69.00% of the limit for “uncontrolled” environments when using an EPA dipole antenna for study purposes. The total percentage for “controlled” environments is only 13.80%.