

TECHNICAL EXHIBIT
APPLICATION FOR LICENSE
STATION WATL-DT (FACILITY ID 22819)
ATLANTA, GEORGIA
CH 25 500 KW 332 M

Technical Narrative

This Technical Exhibit was prepared on behalf of Television Station WATL-DT on Channel 25 assigned to Atlanta, Georgia in support of its application for license. The station is authorized for a non-directional effective radiated power of 500 kilowatts and an antenna height above average terrain of 332 meters on Channel 45.¹ The construction permit (CP) specifies a Dielectric TUC-O5-14/70H-1-T non-directional antenna with 0.75 degree of electrical beam-tilt. By means of this license application, the permittee proposes to install an RFS RD-28 non-directional antenna (with 0.5 degree of electrical beam tilt) instead. The antenna radiation center and overall height will not change by implementation of the newly proposed antenna. No other technical changes from the CP are hereby proposed by WATL-DT.

Radiofrequency Electromagnetic Field Exposure

The proposed WATL-DT facilities (with the new RFS antenna) were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna is located 351 meters above ground level. The DTV ERP is 500 kW. A conservative relative field of 0.2 was used for the calculation (see attached elevation pattern). Therefore, the “worst-case” calculated power density at a point 2 meters (6.6 feet) above ground level is 0.0055 mW/cm². This is 1.5% of the FCC's recommended limit of 0.36 mW/cm² for channel 25 for an “uncontrolled” environment.

Access to the transmitting site will be restricted and appropriately marked with warning signs. As this is a multi-user site an agreement will control access. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down. The proposed WATL-DT operation appears to be otherwise categorically excluded from environmental processing.



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¹ See FCC Construction Permit File Number: BMPCDT-19991008ABB

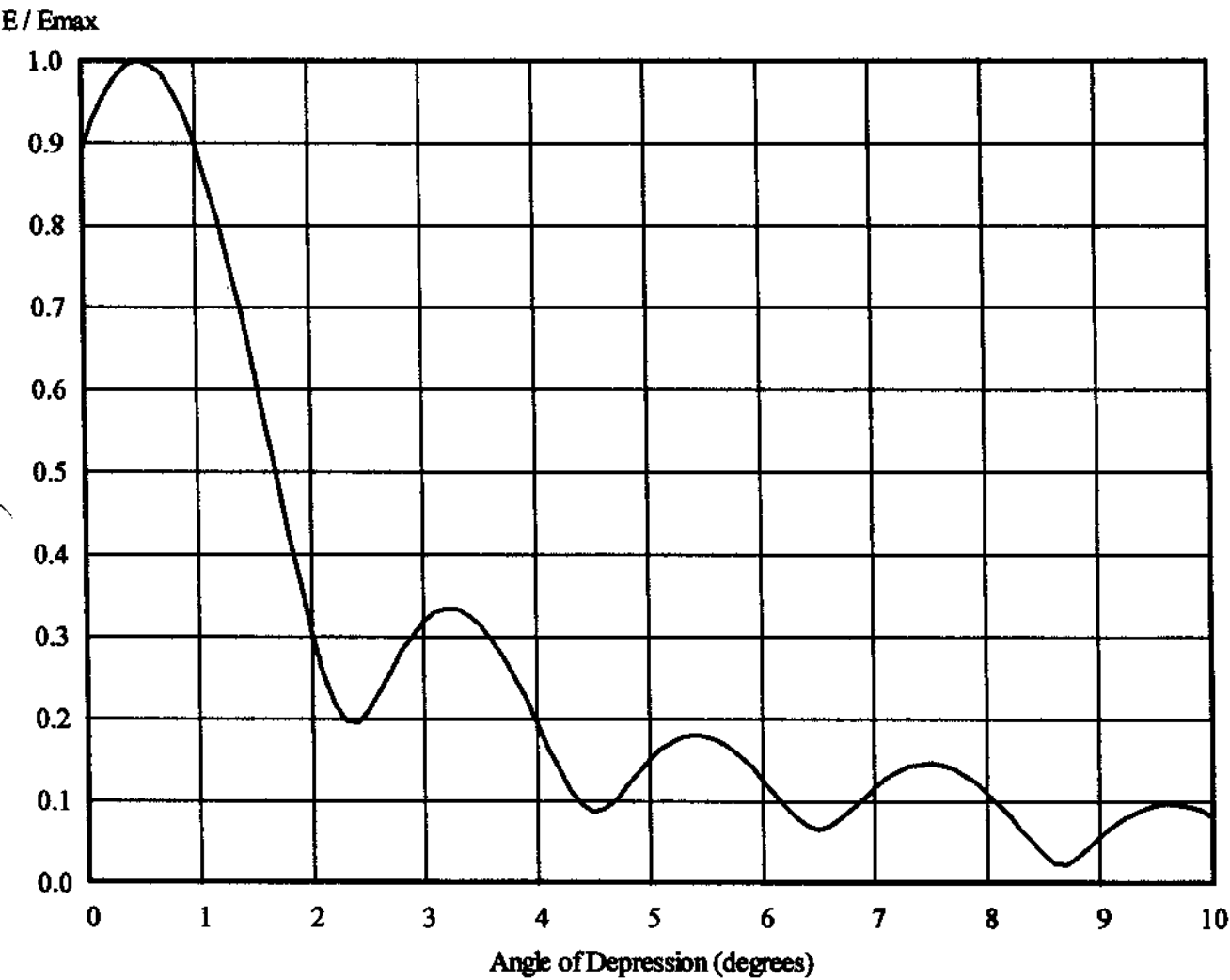


Figure B-6
Vertical Radiation Pattern
Channel 25, 536-542 MHz