

**APPLICATION FOR STATION LICENSE**

**MTD, INC.**

**KWMW (FM) RADIO STATION**

**CH 286C1 - 105.1 MHZ - 100 KW**

**MALJAMAR, NEW MEXICO**

**April 2016**

**EXHIBIT A**

**KWMW (FM) Transmission System Calculations:**

Effective Radiated Power: 100 Kilowatt (Horizontal and Vertical)

Antenna: PSI  
PSI FHR-12C  
12 bay - 1.0 Wavelength Antenna  
Gain: 8.26 dB / 6.699 Power Ratio

FM Combiner: -0.318 dB Insertion Loss  
92.939 % Efficiency

Transmission Line: RFS HCA400-50J  
-0.8094 dB  
82.997 % Efficiency

Required Transmitter Power Output  
To Reach Effective Radiated Power: 19.3 Kilowatts

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Channel: 286C1 - 105.1 MHZ

Effective Radiated Power: 100 Kilowatts (Horizontal & Vertical)

Geographic Coordinates: North Latitude 32° 52' 49"  
West Longitude 103° 41' 05"

Antenna Center of Radiation: AGL 209.0 meters  
AMSL 1,496.0 meters  
HAAT 233.0 meters

Antenna Structure Registration Number: 1019030