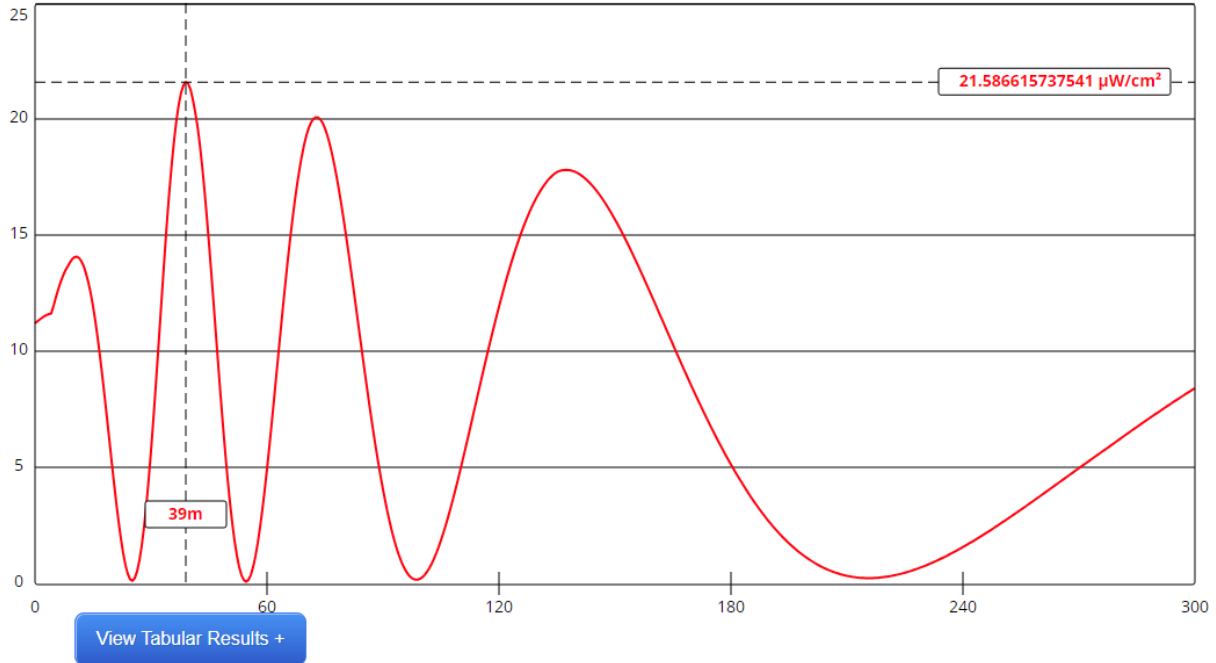


Power Density VS Distance
KALN, Dexter, NM FAC# 164178 & KPQN-FM, Roswell, NM FAC# 191515
November 18, 2023



Channel Selection	Channel 273 (102.5 MHz) ▼		
Antenna Type +	EPA Type 2: Opposed V Dipole ▼		
Height (m)	51	Distance (m)	300
ERP-H (W)	100000	ERP-V (W)	100000
Num of Elements	6	λ	.75
Num of Points	500	Apply	

KALN IS TO BE COMBINED WITH KPQN ON THE SAME ANTENNA SYSTEM. THIS RF ANALYSIS WAS CALCULATED WITH AN ERP OF 100 KW WHICH REPRESENTS THE COMBINED ERP OF BOTH STATIONS.

USING A SIX ELEMENT, OMB SGP-WB6, EPA TYPE 2 ANTENNA, AT 3/4 WAVE SPACING, FM MODEL PREDICTS A MAXIMUM POWER DENSITY OF 21.6 MICROWATTS PER SQUARE CENTIMETER AT A DISTANCE OF 39 METERS FROM THE TOWER. THIS REPRESENTS 10.8% OF THE 200 MICROWATS PER SQUARE CM LIMIT FOR GENERAL POPULATION EXPOSURE; HENCE, THIS APPLICATION IS COMPLIANT WITH THE GUIDELINES FOR HUMAN EXPOSURE AS SPECIFIED IN OET BULLETIN NO. 65, EDITION 97-01, AUGUST 1997. PLEASE REFER TO THE ATTACHED POWER DENSITY VS DISTANCE GRAPH.