

MERP Calculation
Note the use of 03 second terrain data.

Call Letters: W219DT - Prop
File Number: BLFT20180620AAP
Latitude: 45-18-32 N
Longitude: 092-59-07 W
ERP: 0.25 kW
EIRP: 0.41 kW
Channel: 219
Frequency: 91.7 MHz
AMSL Height: 304.0 m
Elevation: 277.0 m
HAAT: 25.69 m
Horiz. Antenna Pattern: Omni
Vert. Elevation Pattern: No

Type of contour: FCC
Location Variability: 50.0 %
Time Variability: 50.0 %
of Radials Calculated: 360
FCC Matching HAAT Calculation Used
Field Strength: 60.00 dBuV/m

Primary Terrain: V-Soft 3 Second US Terrain
Secondary Terrain: FCC 30 Second US Database

Bearing (deg)	Distance (km)	HAAT (m)
0.0	7.28	31.9 <--
30.0	7.14	30.5
60.0	7.09	27.5
90.0	7.09	18.8
120.0	7.09	8.6
150.0	7.09	14.3
180.0	7.09	23.3
210.0	7.22	31.3
240.0	7.09	28.8
270.0	7.09	27.0
300.0	7.09	26.2
330.0	7.15	30.6

§ 74.1235 Power limitations and antenna systems.

(1) For FM translators located east of the Mississippi River or in Zone I-A as described in § 73.205(b) of this chapter:

Radial HAAT (meters)	Maximum ERP (MERP in watts)
Less than or equal to 32	250
33 to 39	170
40 to 47	120
48 to 57	80
58 to 68	55
69 to 82	38
83 to 96	27
97 to 115	19
116 to 140	13
Greater than or equal to 141	10

Note that the largest radial HAAT, 31.9 km, is less than 32.0 km. So an ERP of 250 Watts is indicated.