

Affect of lower tower height and increased ERP on W45BT's coverage area:

F50/90 table calculations of the 41dbu contour for W45BT's average HAAT, the highest HAAT and the lowest HAAT show that the 41dbu contour moves closer to the transmitter site in all cases with the reduced antenna height and the increased ERP resulting from lowering the tower height.

Average HAAT 41dbu contour

6 kw at 172 m = 54.97 km

6.32 kw at 145 m = 53.17 km

Highest HAAT 41dbu contour

6 kw at 253 m = 59.95 km

6.32 kw at 226 m = 58.29 km

Lowest HAAT 41dbu contour

6 kw at 119 m = 51.38 km

6.32 kw at 92 m = 48.54 km

F50/10 table calculations of the 150 km contour for W45BT's average HAAT,

the highest HAAT and the lowest HAAT show that the signal strength moves

down in all cases with the lower tower height and the higher ERP.

Average HAAT 150 km contour

6 kw at 172 m = 26.61 dbu

6.32 kw at 145 m = 26.19 dbu

Highest HAAT 150 km contour

6 kw at 253 m = 28.22 dbu  
6.32 kw at 226 m = 27.91 dbu

Lowest HAAT 150 km contour  
6 kw at 119 m = 25.27 dbu  
6.32 kw at 92 m = 24.67 dbu

Calculations done with “TVFMDTV” calculation utility, version  
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