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TPO Calculations:

ERP = 4W

TPO = 1.87W

Givens:

Losses:

Line Length = 280'

Line Efficiency = 68.4%

Line loss = -0.52W

Jumpers Losses = -0.55dB = -0.22W

Gain:

Antenna type: Samco Model 159FM (x2) opposed azimuths

Ant Gain = 3.548 (+5.5dB)

Antenna input power to achieve 4W = 1.13W

Calculation:

$1.87 - 0.22 = 1.64\text{W}$

$1.64 - 0.52 = 1.13\text{W}$

$1.13 \times 3.548 = 4.00\text{W}$