

TPO Calculation WYPW-LP (ERP of 23 watts)

TRANSMISSION EFFICIENCY

ANTENNA GAIN: .959

LOSS PER CONNECTOR: .15DB x 8 = 1.2

LOSS IN POWER DIVIDER: .62DB

LINE LOSS: 1.0

POLYPHASER: .2

TOTAL DB LOSS 3.02 db

THE FOLLOWING CALCULATION WAS USED IN DETERMINING TOTAL TPO

$(3.02\text{DB}/10 = .302)$

$(\text{INVERSE LOG OF } .302 = 2.004)$

$\text{ERP} = 23 \text{ WATTS} / (\text{ANTENNA GAIN } (.959) = 23.98 \text{ WATTS} * 2.004) = 48.06 \text{ WATTS}$

TPO ROUNDED OFF TO 48 WATTS