



402 Tenth Avenue • PO Box 367 • Haddon Heights, NJ 08035

Engineering Report
Transmitter Power Calculation (Amended)
W221EQ Front Royal, VA
July 2023

Effective Radiated Power	250 Watts
Antenna Type	Radiotech Bext LogR-FM -1 Array 1 Bay
Antenna Gain	1.94 X
Antenna Input Power	128.27 Watts
Transmission Line	LMR-600 @ -2.39 db/100 m
Length	15.3 m
Efficiency	91.9%
Power at line input	139.58 Watts
Transmission Line	LMR-400 @ -0.17 db/100 m
Length	4.5 m
Efficiency	96.2%
Transmitter Power Input Required	145.09 Watts
For Rated ERP (Rounded Per 73.212)	145.0 Watts