

NECESSARY BANDWIDTH DESCRIPTION FREQUENCY EMISSIONS REGISTRATION

Necessary Bandwidth Calculation Exhibit – L-3 VHF Radio

The following is the requested exhibit describing how the necessary bandwidth is calculated:

Emissions: F1D

Modulating Signal: FSK $\pm$ 3KHz

Deviation: D = 3.0KHz

Data Rate: R = 1200bps

$$2D/R = (2 \times 3000)/1200 = 5$$

$$\text{Necessary Bandwidth} = 2.4D + 1.0R = (2.4 \times 3000) + (1.0 \times 1200) = 8.4\text{KHz}$$