

Appendix : Designation of Emission

Necessary Bandwidth calculation

Description of Emission : Sound broad casting

$$\begin{aligned}\text{Formula : } B_n &= 2M + 2DK , \\ &= (2 \times 40000) + (2 \times 15000 \times 1) \\ &= 110000\end{aligned}$$

K = 1 (typically)

M = Maximum modulation frequency = 40kHz

D = Peak frequency deviation = 15kHz

Therefore,

Bandwidth = 110kHz ,

Designation of emission = 110KF3E