

INSERTION LOSS OF OFFICE CABLE 0.5 TO 3.5 kHz

1. GENERAL

1.01 This section presents the insertion loss of several types of office cable, simulated by an R-C lattice network of the appropriate length, as measured between 600-ohm and 900-ohm terminations. The losses are given as loss-frequency curves for three types of cable: that used in electromechanical offices, ESS offices, and a new low-capacitance type.

1.02 In electromechanical offices, typical office cable consists of 22- or 24-gauge wire with either plastic (coded in the A series) or textile (coded in the CL and M series) insulation. The nominal capacitance for both is $.025\mu\text{F}$ per kilofoot.

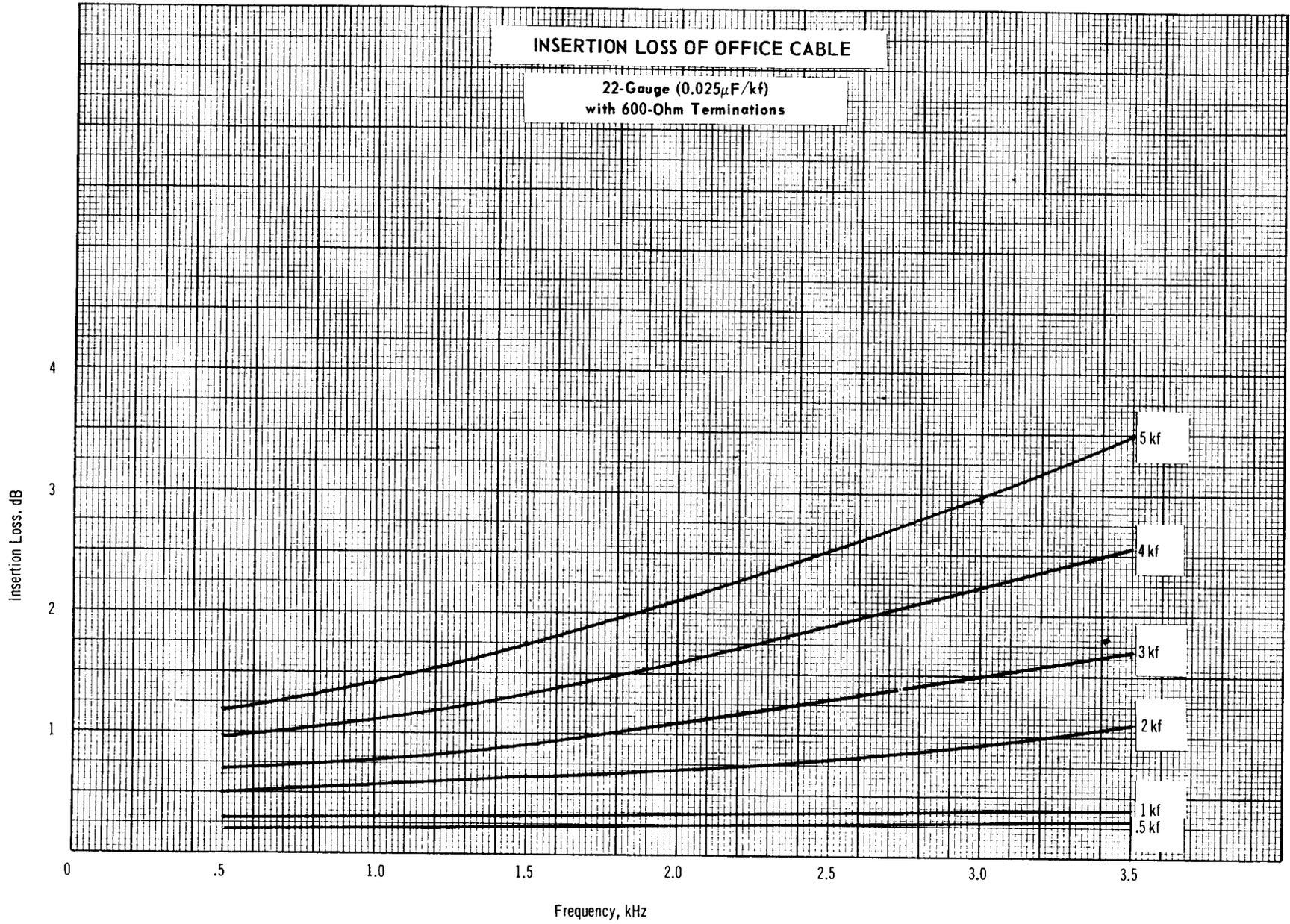
1.03 ESS offices are designed to use 26-gauge cable with plastic insulation, and coded in

the 800A series. Its nominal capacitance is $.020\mu\text{F}$ per kilofoot.

1.04 A cable with a new type of plastic insulation is being developed with the objective of reducing the capacitance to $.016\mu\text{F}$ per kilofoot to match the capacitance of outside plant.

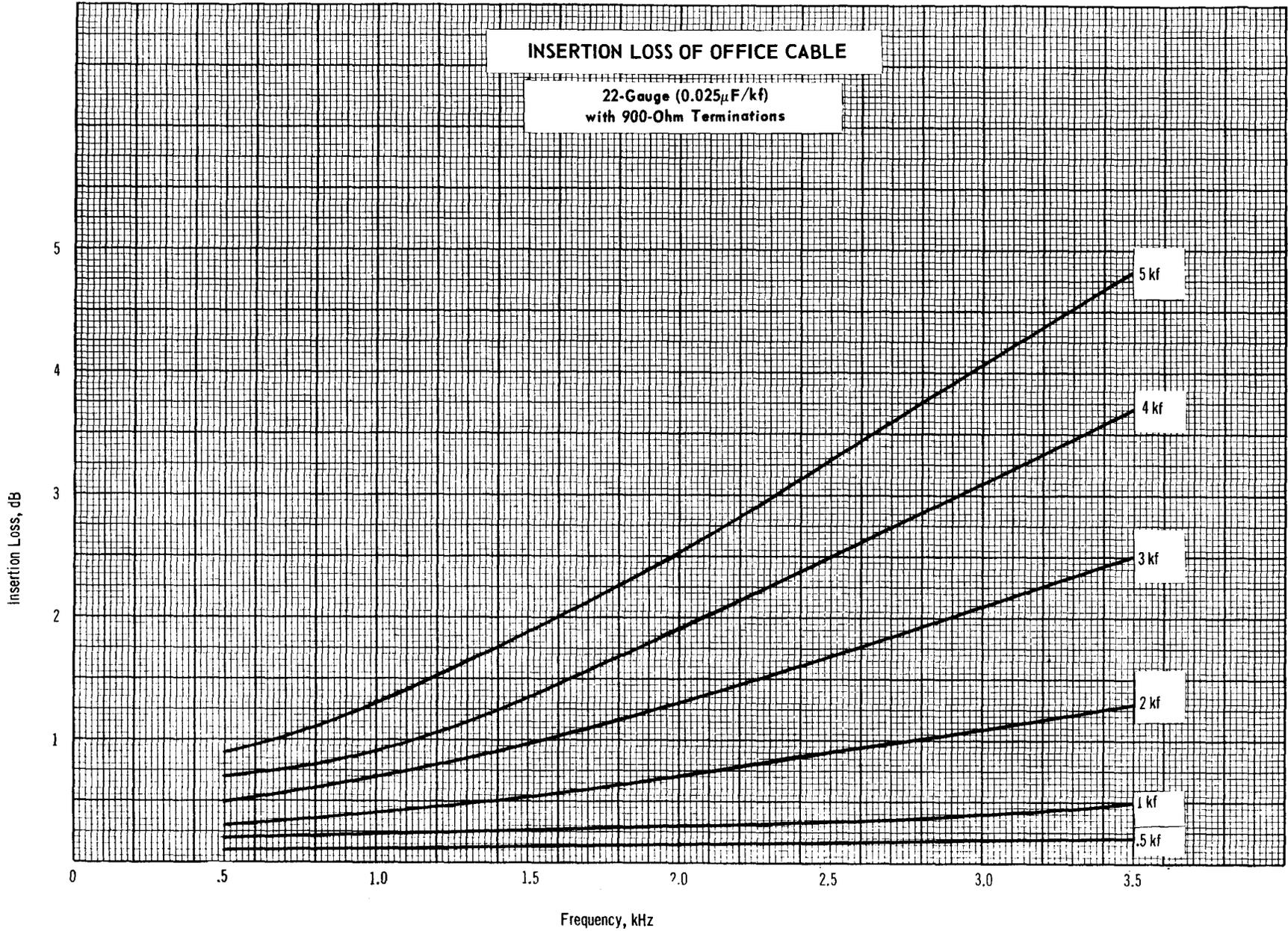
2. INDEX OF CHARTS

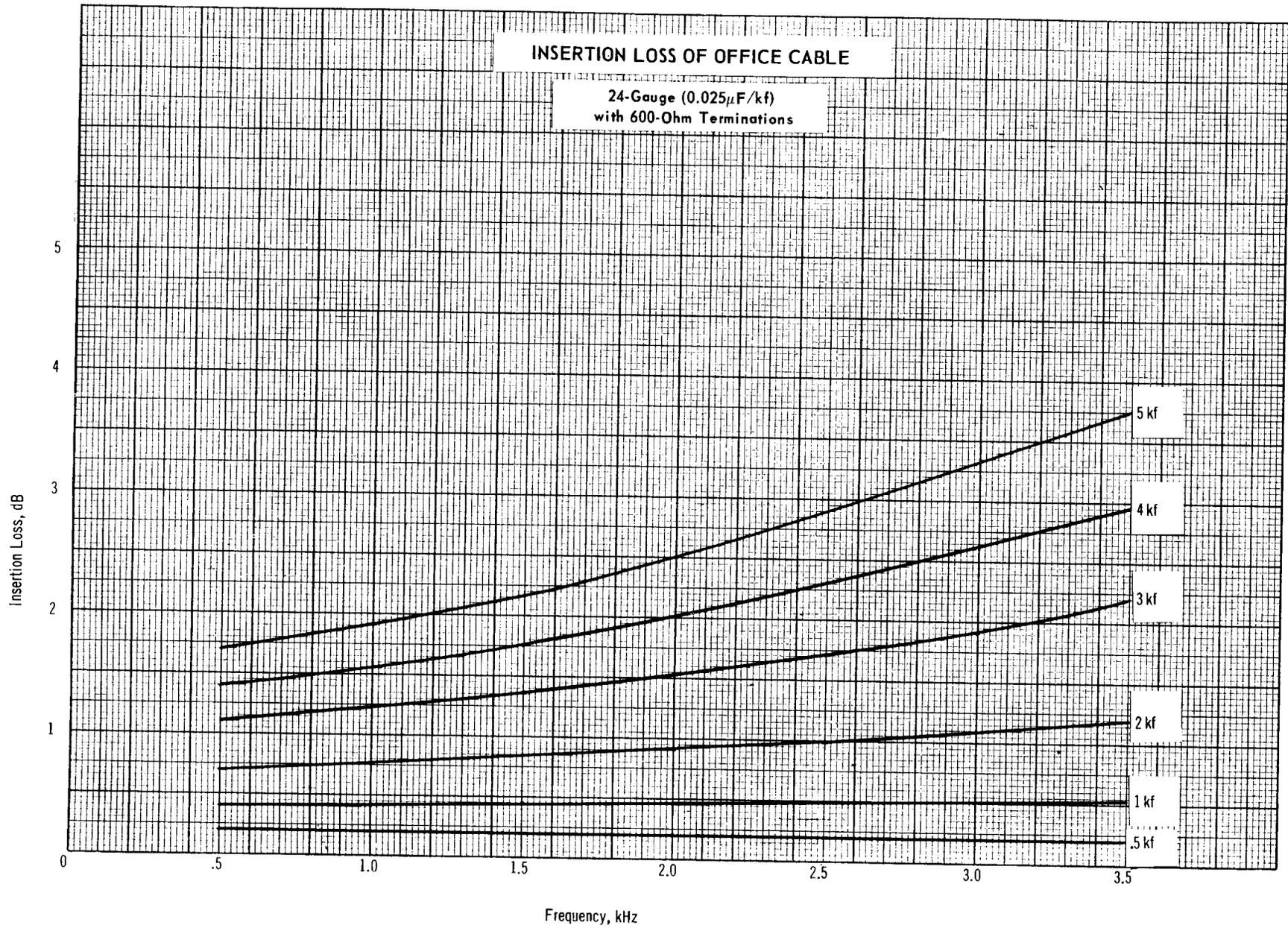
| GAUGE → TERMINATIONS → | 22 | | 24 | | 26 | |
|---------------------------------|-----------------|------|------|------|------|------|
| | 600Ω | 900Ω | 600Ω | 900Ω | 600Ω | 900Ω |
| CABLE CAPACITANCE μF per Kf. | <u>PAGE NO.</u> | | | | | |
| .025 | 2 | 3 | 4 | 5 | - | - |
| .020 | - | - | - | - | 6 | 7 |
| .016 | 8 | 9 | 10 | 11 | 12 | 13 |



INSERTION LOSS OF OFFICE CABLE

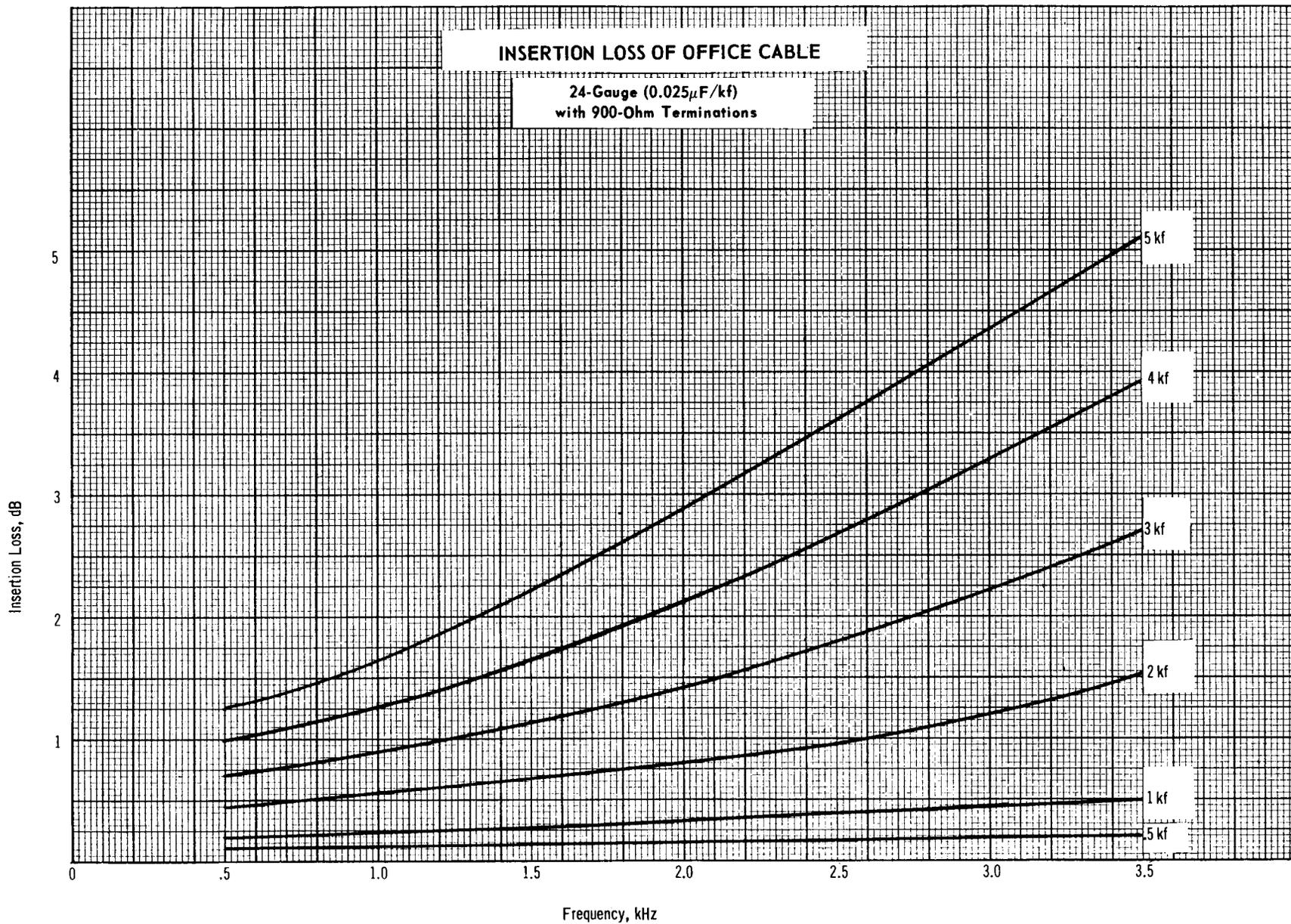
**22-Gauge (0.025 μ F/kf)
with 900-Ohm Terminations**

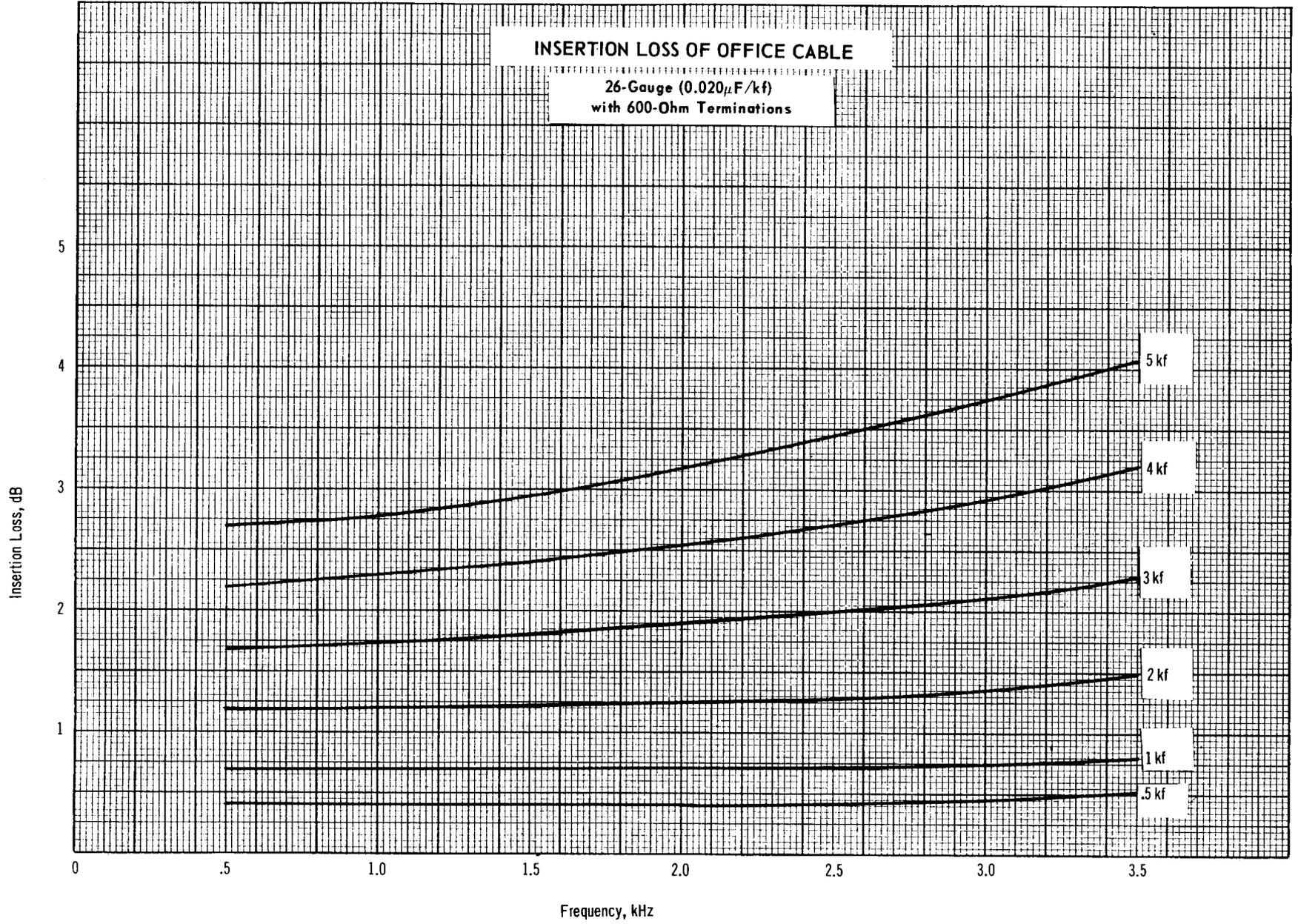




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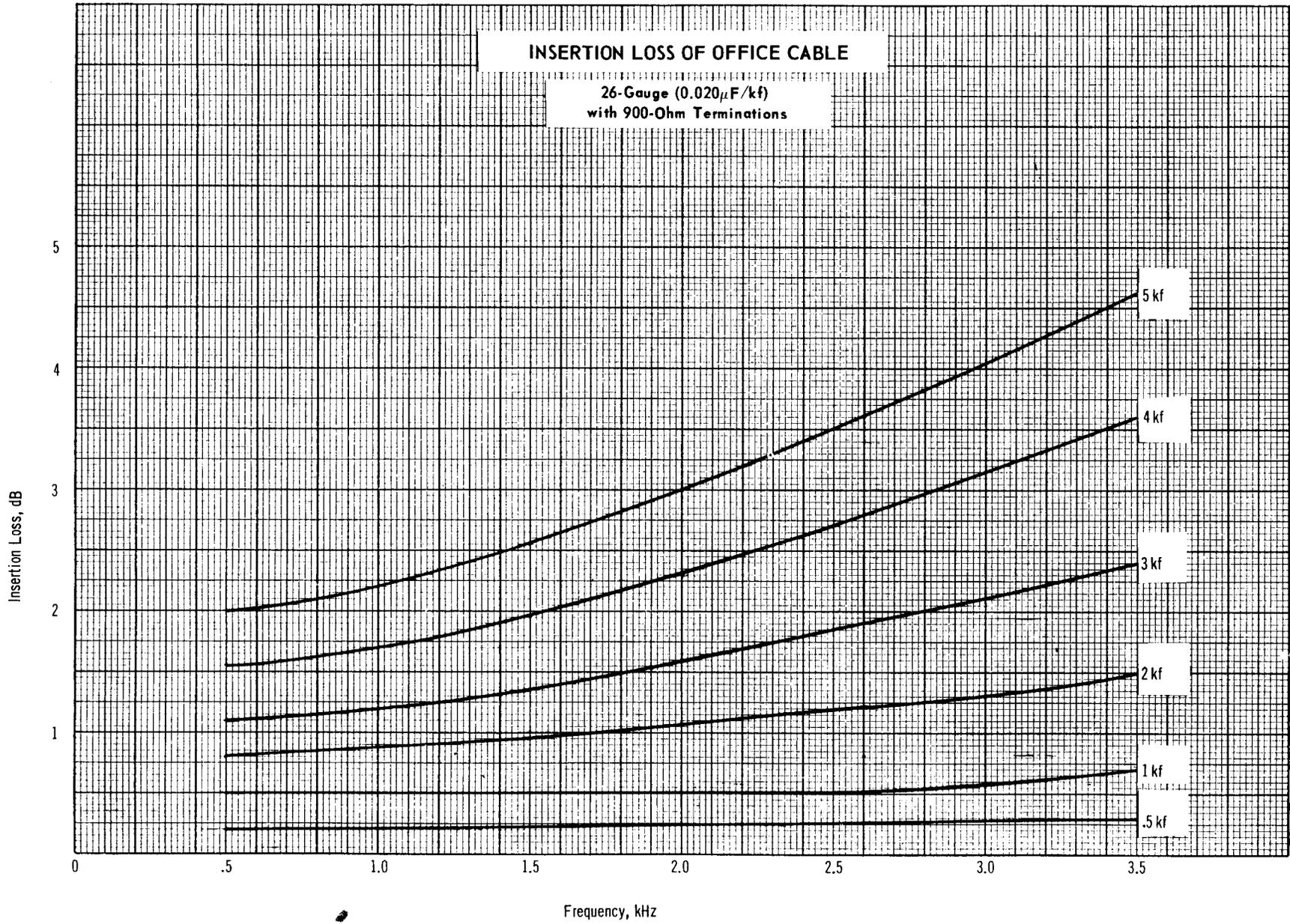
24-Gauge ($0.025\mu\text{F}/\text{kf}$)
with 900-Ohm Terminations

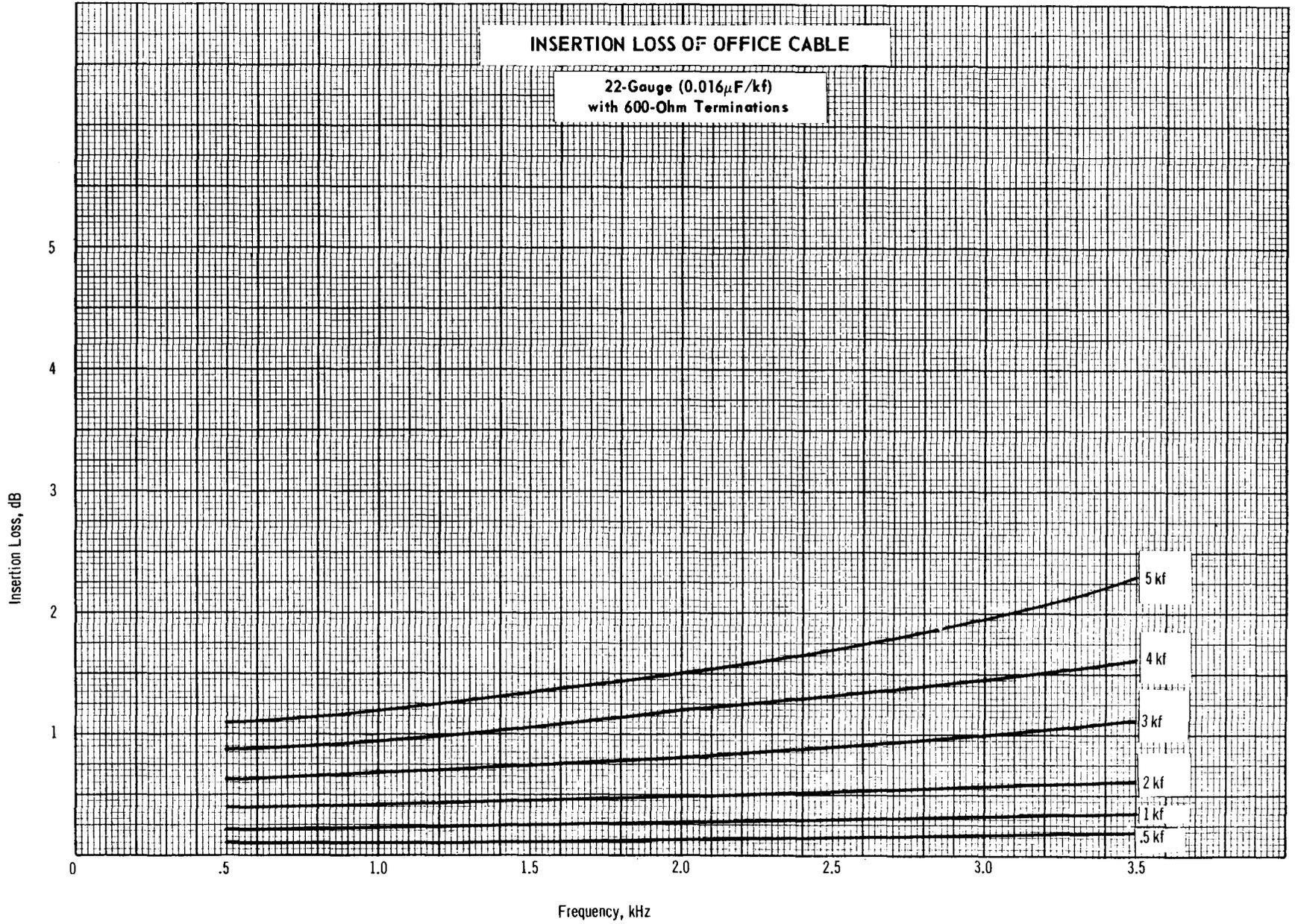




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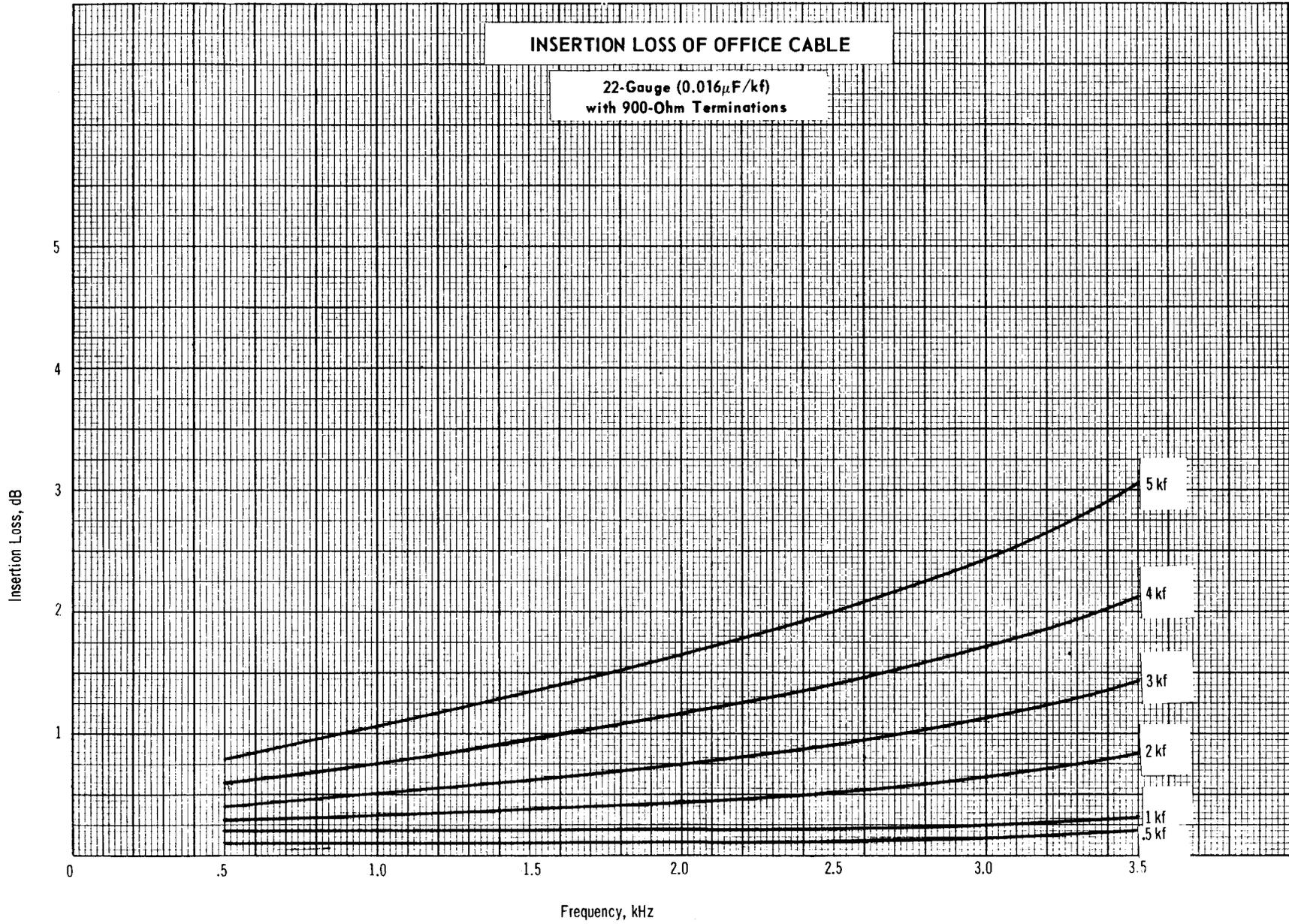
26-Gauge ($0.020\mu\text{F}/\text{kf}$)
with 900-Ohm Terminations

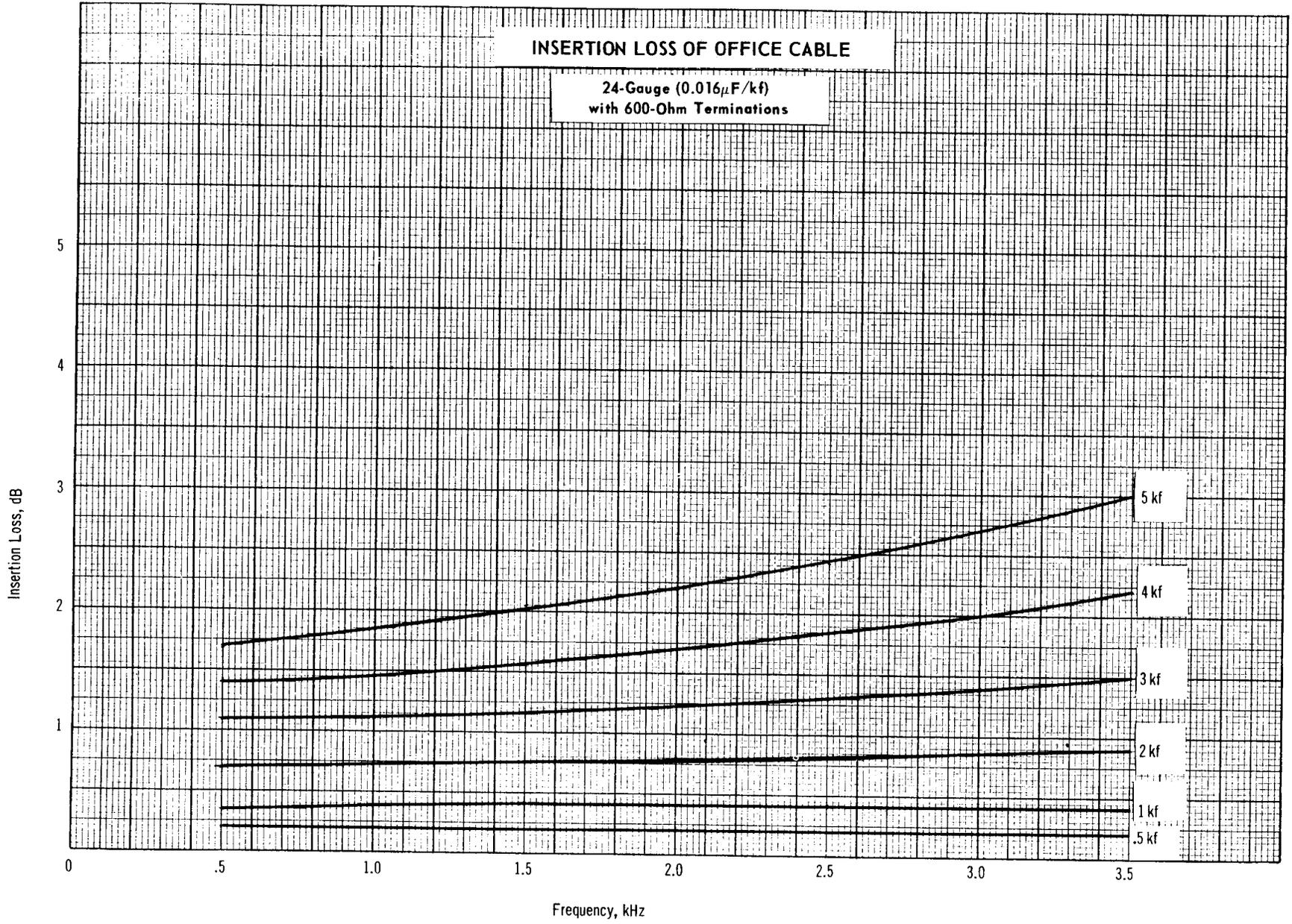




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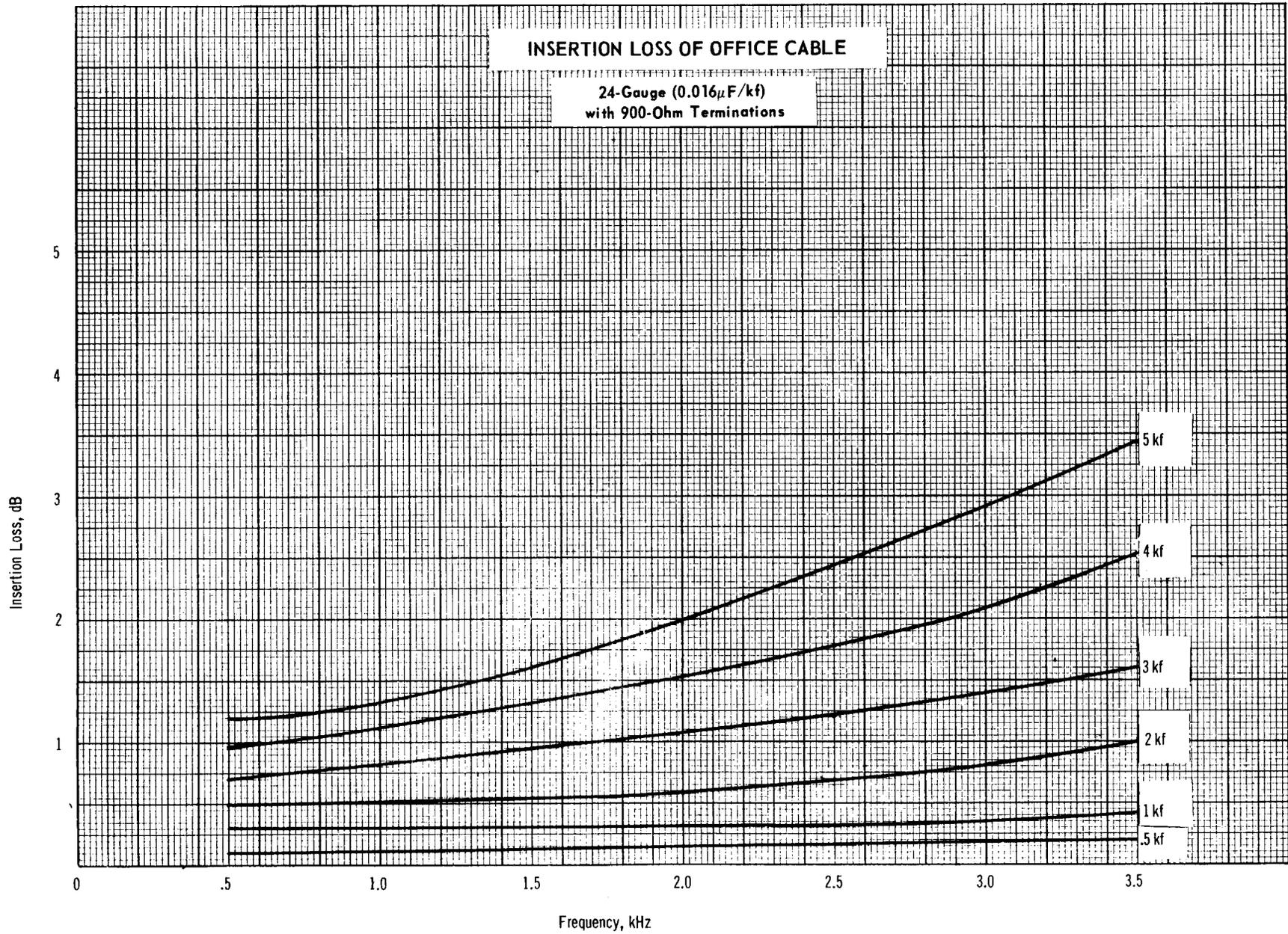
22-Gauge ($0.016\mu\text{F}/\text{kf}$)
with 900-Ohm Terminations

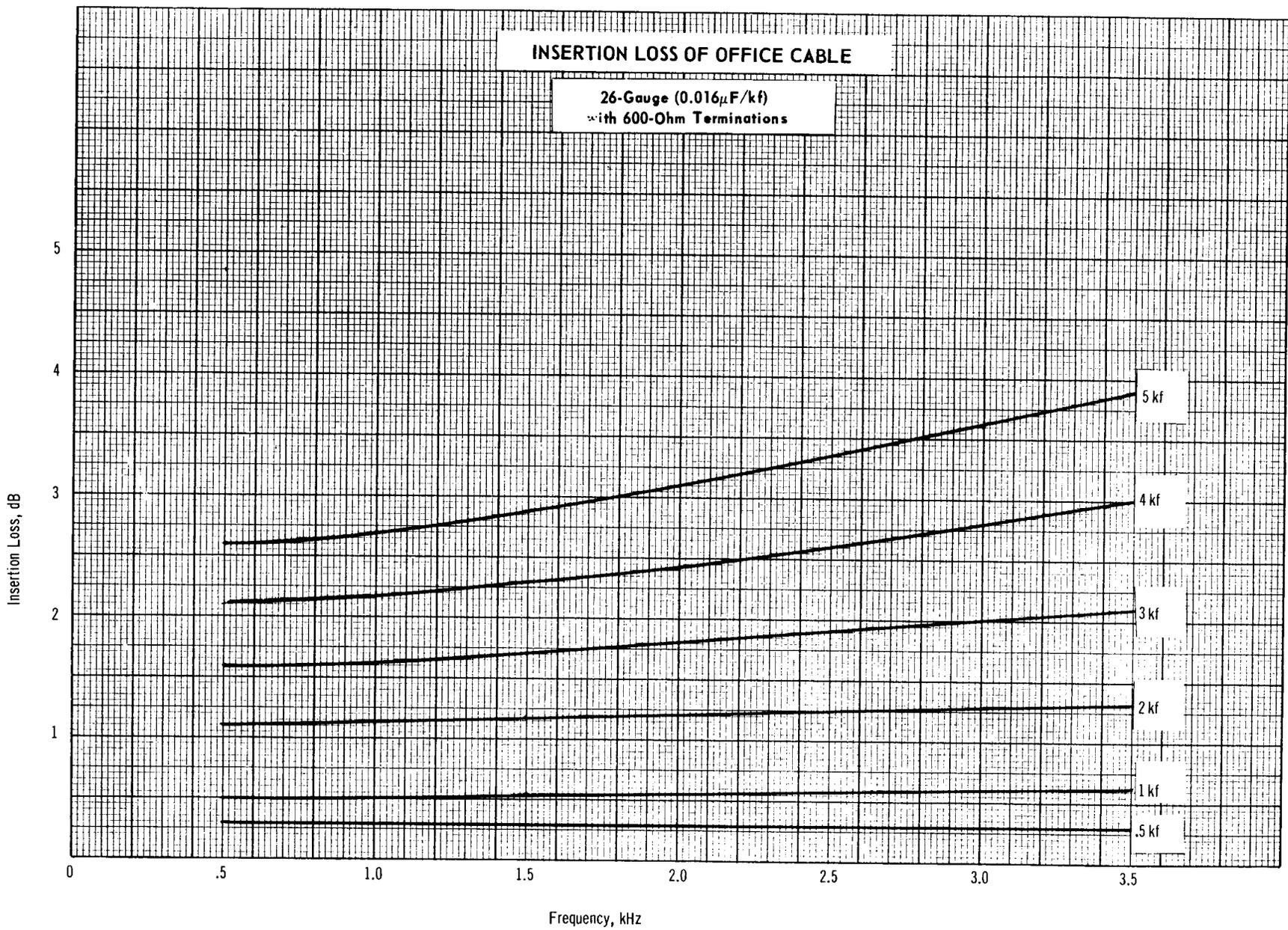




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