

Engineering News



ALTEC Lansing Corporation
A SUBSIDIARY OF LING-TEMCO-VOUGHT, INC.

1515 S. Manchester Avenue, Anaheim, California

Technical Letter No. 123

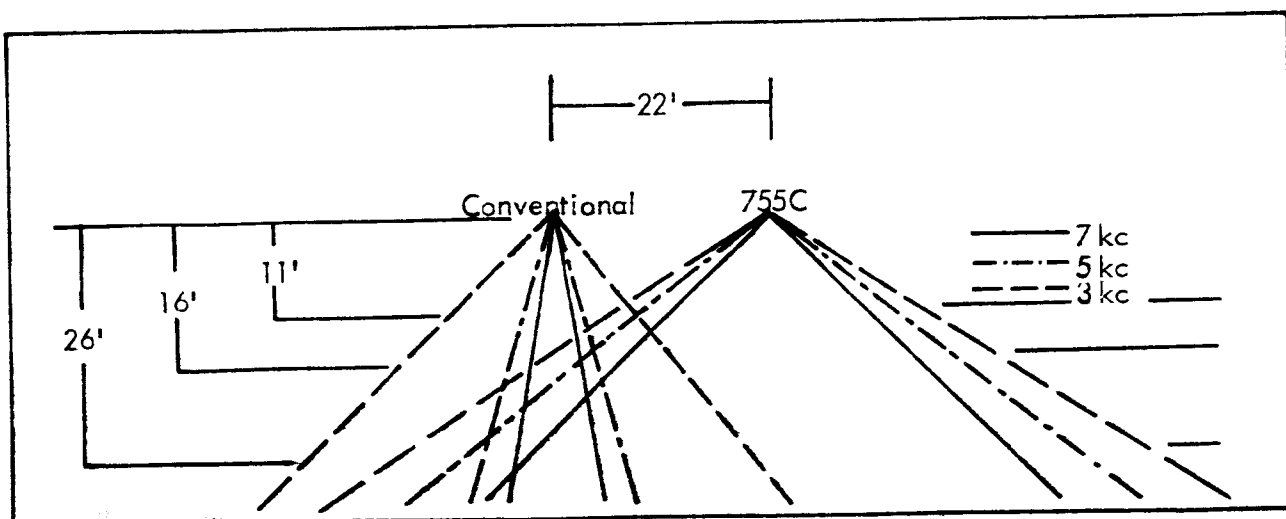
ALTEC 755C LOUDSPEAKER

The 755C represents the most advanced refinement in the design and manufacture of a high-quality, 8-inch loudspeaker. Since its initial development by the Bell Telephone Laboratories, the 755 has undergone continual improvement: the diaphragm suspension has been greatly improved, permitting extended low frequency response to 40 cycles; the high frequency response has been extended to 15,000 cycles, while maintaining the outstanding high frequency dispersion characteristics of the 755.

The chart below expresses measurements made on the 755C and on a loudspeaker offered by a competitor as 'equal.' The effective efficiency of the 755C at 4,000 cycles -- owing to the much greater area covered because of the increased HF dispersion -- is roughly 10 db (or 10 times) as great as that of this 'better' grade competitive unit. It is because of this added coverage area afforded by the 755C that approximately 1/8 to 1/3 as many 755C's need be employed in a given installation (dependent upon ceiling height and other considerations) in order to produce equal or better coverage than loudspeakers of other manufacture. This, in turn, results in savings based on speaker and amplifier cost, together with reduced installation expenses.

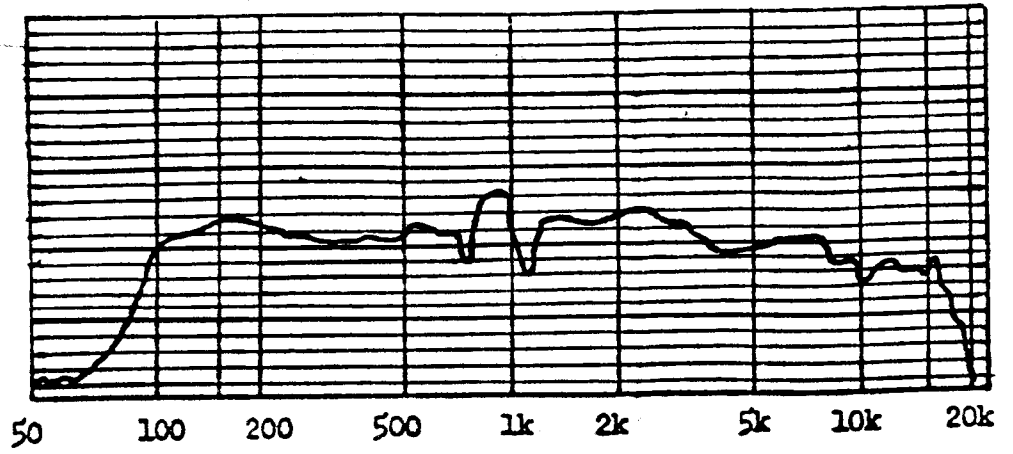
Because of the unique design, the 755C mounts easily in walls, ceilings, existing cabinetry -- wherever a fine loudspeaker is required for smooth, wide-range reproduction in public address, paging, and background music applications.

The frequency curves on the following pages may provide answers to some of the installation questions frequently encountered.

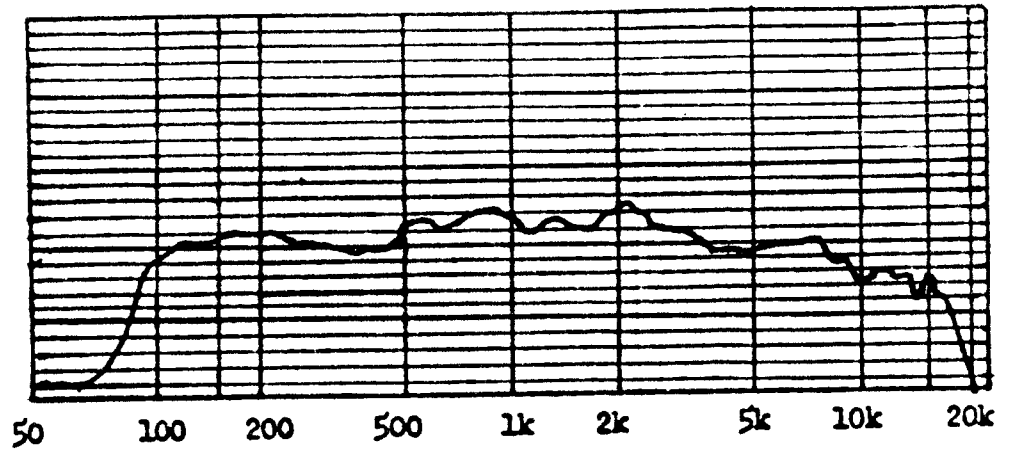


Angle of Coverage
(Frequency response vs. distribution angle)

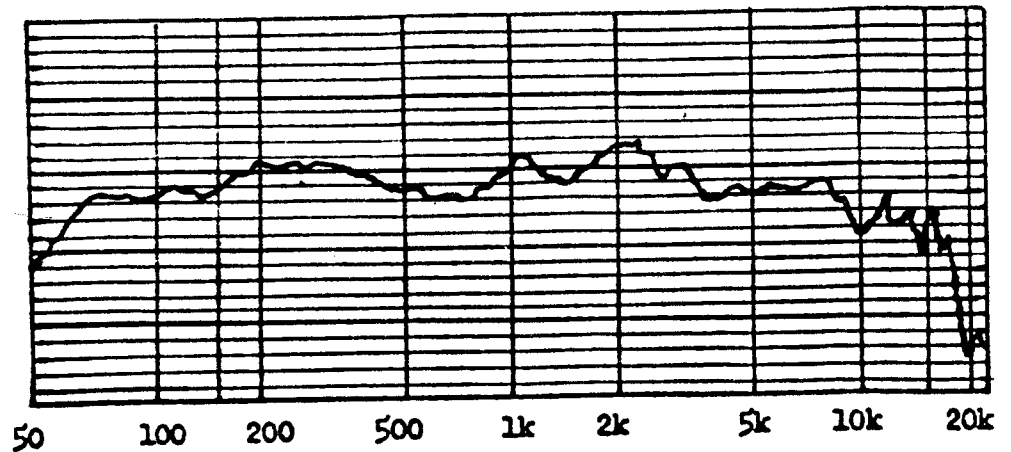
ALTEC 755C SPEAKER
IN 0.8 Cu. Ft. Enclosure
(No Fiberglass Used)



ALTEC 755C SPEAKER
IN 0.8 Cu. Ft. Enclosure
(Full Fiberglass Treatment)



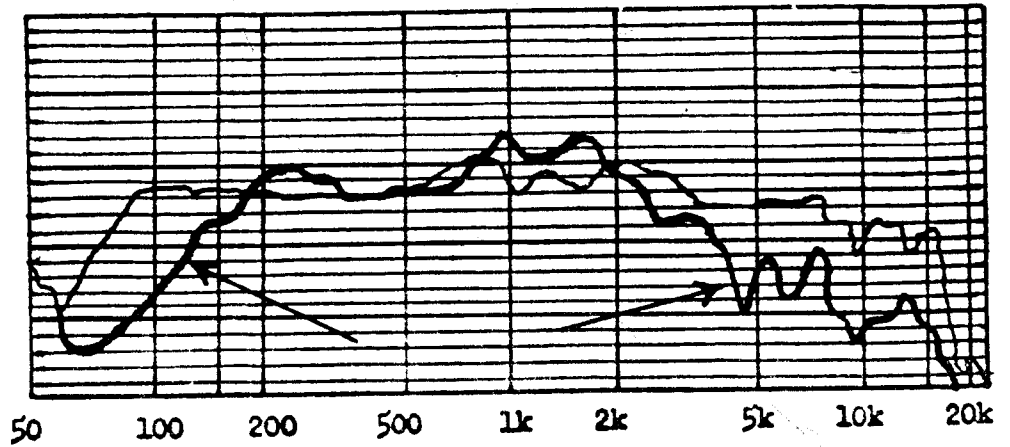
ALTEC 755C SPEAKER
IN 6 Cu. Ft. Enclosure
(Showing Optimum Response)



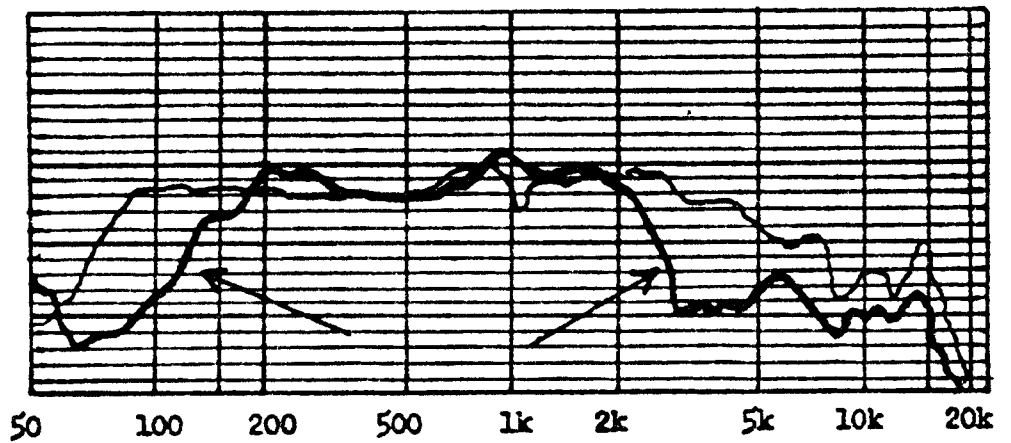
ALTEC 755C SPEAKER

Frequency curves showing relative response of 755C in Lowell AL8A Diffuser Baffle (indicated by arrows) and fiberglass-lined 0.8 cubic foot enclosure.

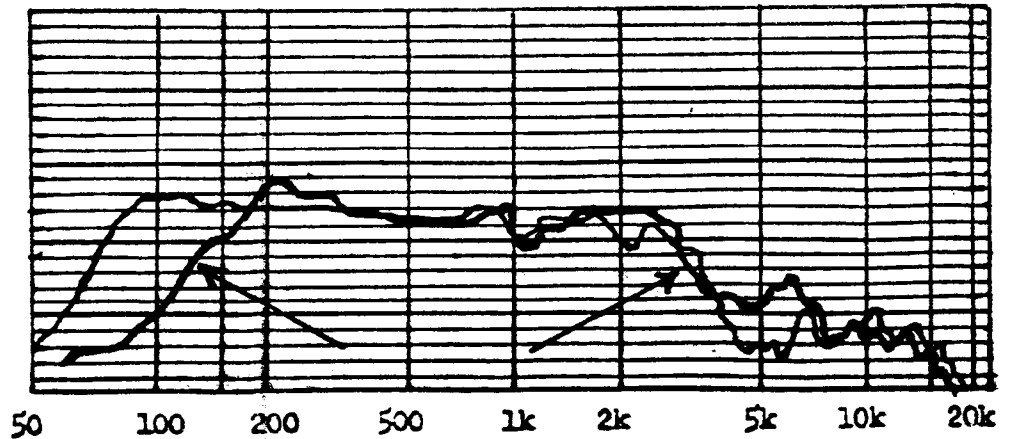
ON AXIS



30° OFF AXIS



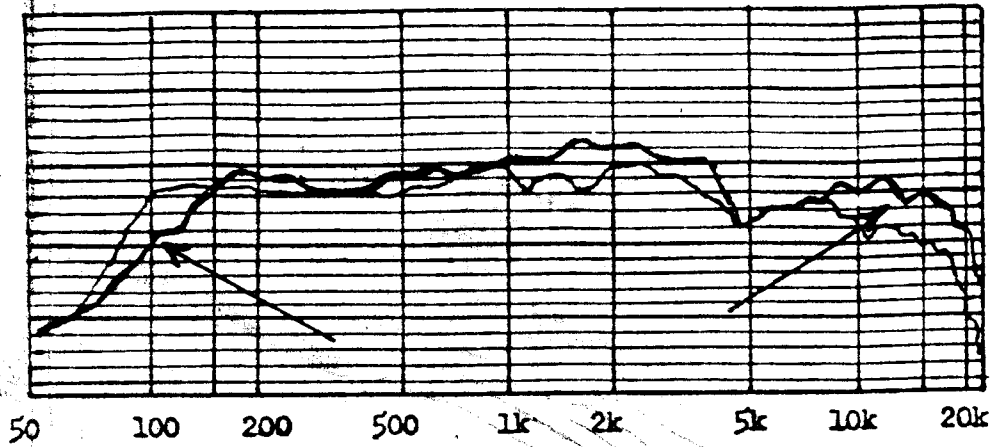
60° OFF AXIS



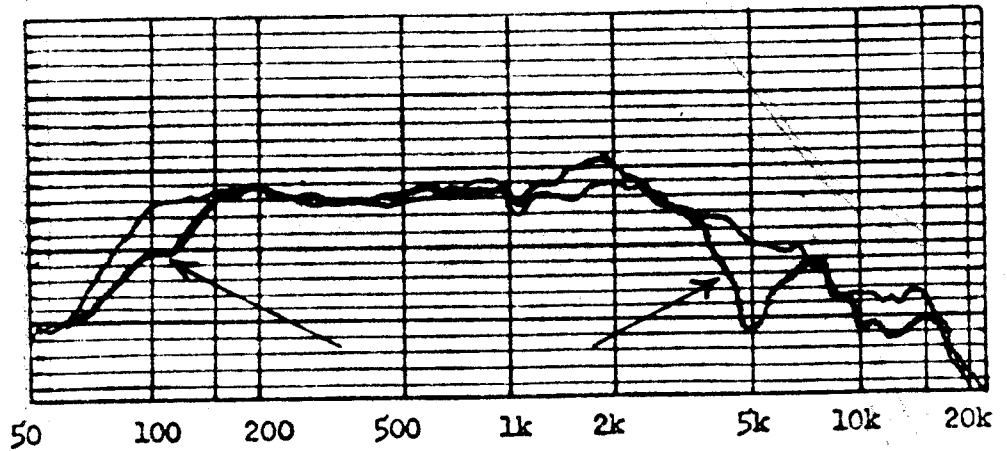
ALTEC 755C SPEAKER

Frequency curves showing relative response of 755C in Lowell STL8A Baffle (indicated by arrows) and fiberglass-lined 0.8 cubic foot enclosure.

ON AXIS



30° OFF AXIS



60° OFF AXIS

