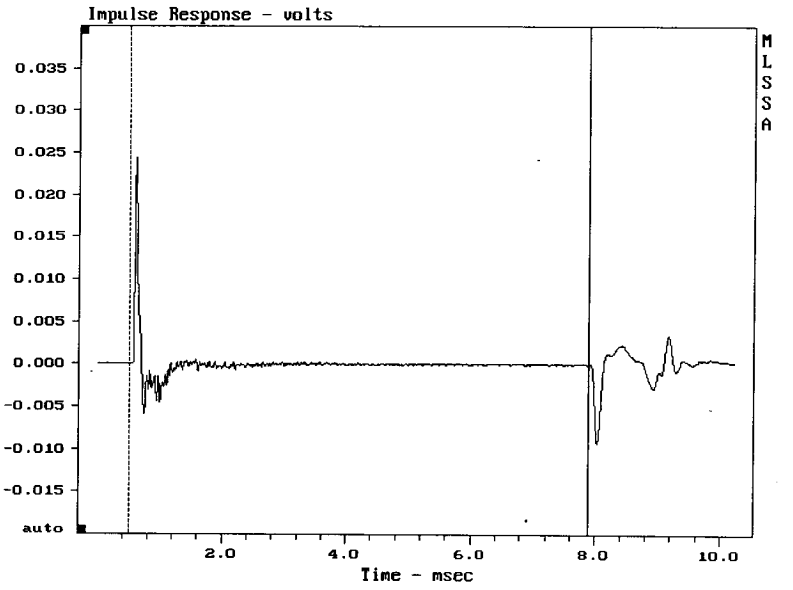

Fig. 3. Impulse response of 25.4-mm (1-in) driver in empty, open tube. Segment framed by marker and cursor, before first reflection, is anechoic part of impulse response.

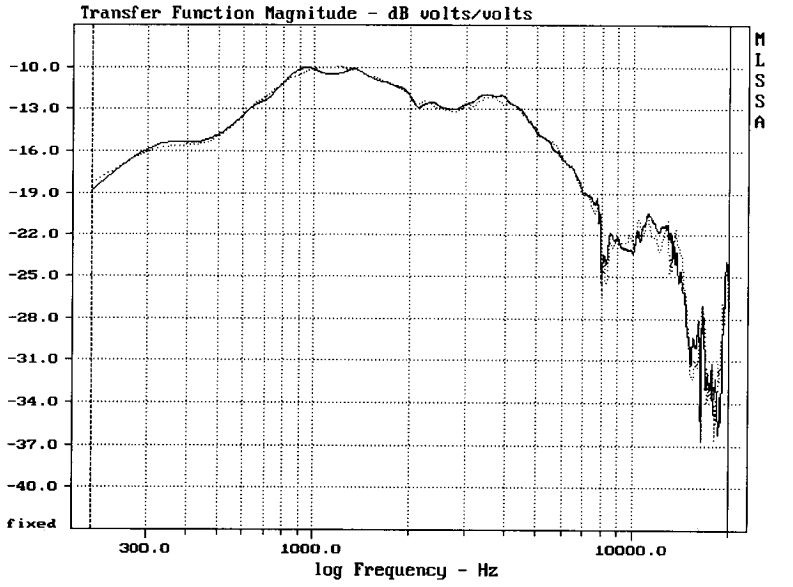

Fig. 4. Frequency response of same 25.4-mm (1-in) driver. ... on empty tube, anechoic part; — on plane-wave filled tube.

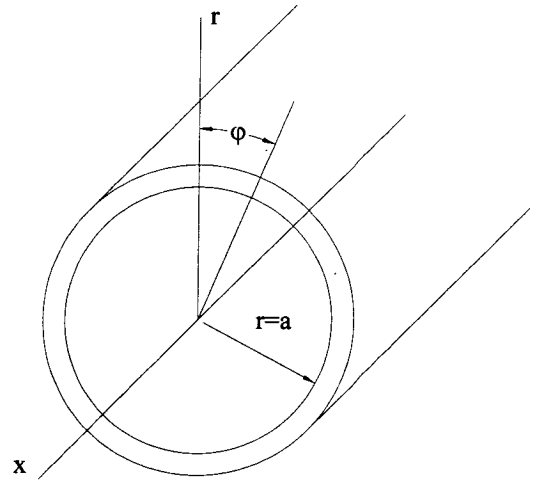

Fig. 5. Cylindrical coordinate system for Eq. (1).

Table 1. Transverse modes of vibration (m, n) in order of increasing cutoff frequencies.*

Mode	b_{mn}	f_c (kHz)
(1, 0)	1.841	7.936
(2, 0)	3.054	13.17
(0, 1)	3.832	16.52
(3, 0)	4.201	18.11
(4, 0)	5.318	22.93
(1, 1)	5.331	22.98

* m—number of nodal planes; n—number of nodal cylinders; b_{mn}—scale factor in Eqs. (1) and (3); f_c—cutoff frequency calculated from Eq. (3) for c = 344 m/s, a = 12.7 mm.