

Less Attenuation at Higher Humidity

ABSORPTION OF SOUND IN AIR

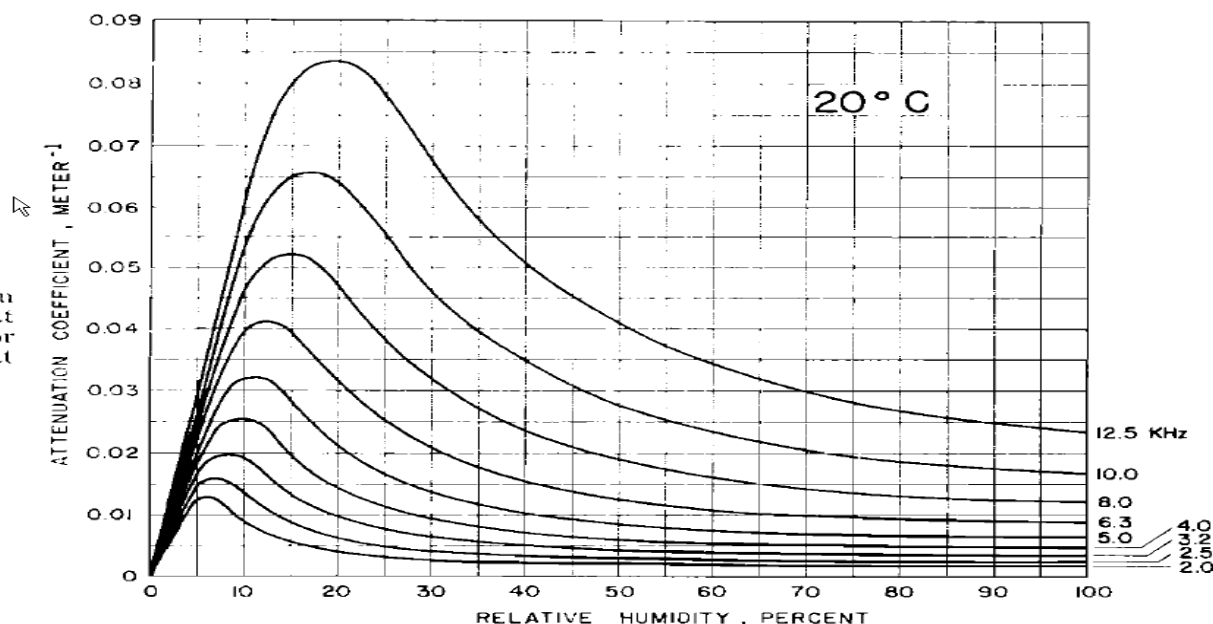


FIG. 5. Values of the total attenuation coefficient m versus percent R.H. for air at 20°C and normal atmospheric pressure for frequencies between 2.0 and 12.5 kHz at $\frac{1}{3}$ -oct intervals.

Table 4. Total sound absorption in dB/1000 ft (300 m) versus relative humidity as a function of frequency at 20°C (68°F).

Frequency (kHz)	Relative humidity (%)										
	0	10	20	30	40	50	60	70	80	90	100
2	1.26	11.7	5.31	3.33	2.54	2.18	2.00	1.92	1.89	1.89	1.92
4	2.70	31.0	19.0	11.9	8.52	6.75	5.71	5.06	4.63	4.34	4.14
6.3	4.54	47.1	41.2	27.6	20.0	15.6	13.0	11.2	9.98	9.10	8.45
10	8.01	61.6	79.7	62.5	47.4	37.5	31.0	26.6	23.5	21.1	19.4
12.5	10.9	68.1	103	89.7	70.9	57.0	47.5	40.8	35.9	32.3	29.5
16	15.9	76.2	130	129	108	89.6	75.5	65.2	57.6	51.8	47.2
20	23.0	85.6	156	172	155	133	114	99.4	88.1	79.4	72.5