DYNAUDIO®
AUTHENTIC TECHNOLOGY

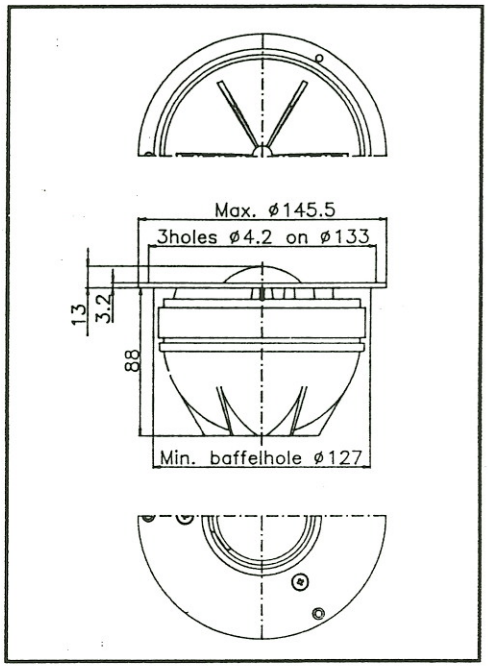
Soft Dome Midrange D-54 AF

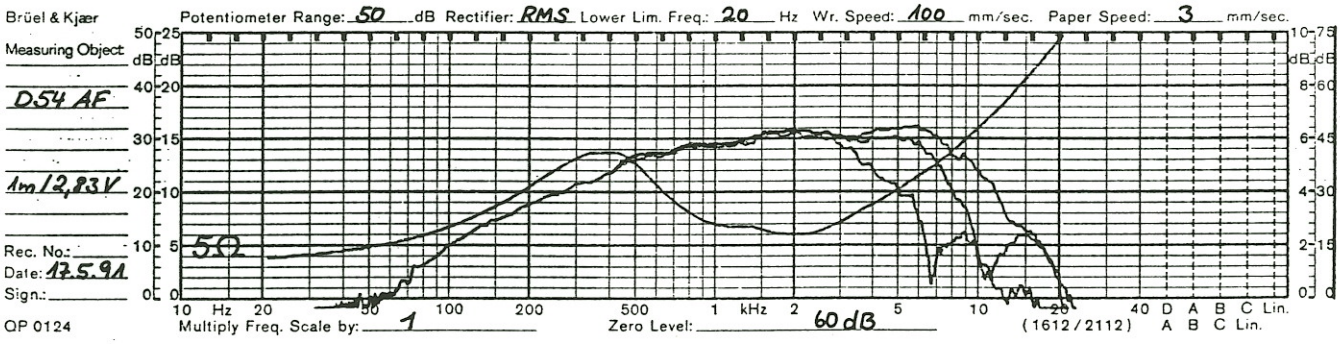
The soft dome midrange construction utilizes a rather heavy magnet assembly. Together with very low production tolerances this results in high efficiency as shown with the curve.

The D-54 AF is designed for efficient 3- and more way systems where high SPL without ringing, overshoot or compression is demanded.

The dome material is doped fabric with well controlled internal damping. The soft roll-off suspension as well as the very rigid, fluid cooled and damped voice coil are DYNAUDIO specialities. Ideal heat dissipation allows very high power handling. The pole piece is large-scale vented and the air flow works aperiodically damped into the defined fiber fill of the rear chamber.

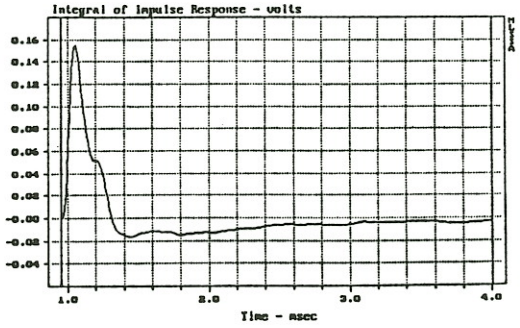
Wide dispersion, excellent transient response and ideal phase will give very good results as to resolution and imaging.



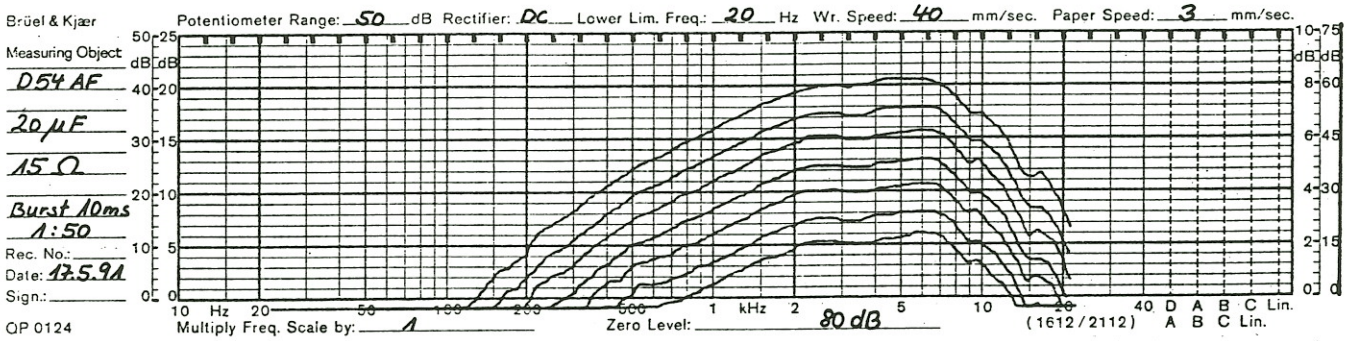


Frequency response and impedance curve of the D-54 AF, distance: 1 m, on-axis, 30° and 60°.

The MLSSA measurements show the pulse response of the D-54 AF.



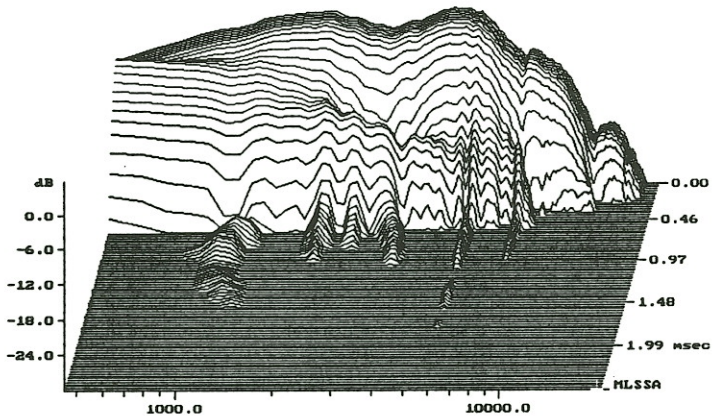
Dynamic Measurements



Levels of 1, 3, 10, 30, 100, 300 and 1,000 watts were applied while recording the curves. The parallel arrangement of the curves indicates that even fast 1,000 W peaks do not produce any compression. Signal: Tone-Burst 10 ms, Signal-Pause 1:50.

MLSSA Waterfall Plot

The MLSSA cumulative spectral decay (waterfall) plot shows the energy/time response of the D-54 AF. These unique results clearly show that delayed reflections have been reduced to a minimum.



Specifications D-54 AF

Thiele-Small Parameter:

Q, mechanical	Q_{ms}	0.8
Q, electrical	Q_{es}	0.4
Q, total	Q_{ts}	0.3
Resonance free air	f_s	325 Hz
force factor	**BxL**	8.1 Tm
eff. cone area	S_D	28 cm²
moving mass	M_{ms}	3 g
lin. excursion (p-p)	X_{max}	2 mm
max. excursion (p-p)		5 mm

Power handling,
depending on crossover:

nominal (long term)	IEC	>100 W
transient	10ms	>1,000 W

Voice coil:

diameter	**d**	54 mm
length	**h**	7 mm
layers	**n**	2
inductance(10 KHz)	L_e	0.2
nom. impedance	Z_{vc}	8 ohms
DC resistance	R_e	4.5 ohms

Sensitivity	2.83 V	see curve
Net weight		1900 g
Overall dimensions		Ø 145 x 100 mm

All specifications subject to change without notice.