The Illuminator midranges and midwoofers are in every aspect unusual designs with the open construction, the extremely long linear excursion and patented under-hung SD-3 (Symmetrical Drive) neodymium motor system, which due to copper caps and its construction ensures very low distortion, adding the unique patented cones, low-loss linear suspension the result is: "The Very Best Money Can Buy!"

**KEY FEATURES:**

- Under-Hung Neodymium Motor Design
- One Piece Cone-Dust Cap
- Very Wide Frequency Response 100-10KHz
- Patented Symmetrical Drive (SD-3)
- Low-Loss Linear Suspension
- High Output 90dB @ 2,83V

**T-S Parameters**

- Resonance frequency [fs] 64 Hz
- Mechanical Q factor [Qms] 3.64
- Electrical Q factor [Qes] 0.26
- Total Q factor [Qts] 0.24
- Force factor [Bl] 5.1 Tm
- Mechanical resistance [Rms] 0.60 kg/s
- Moving mass [Mms] 5.4 g
- Compliance [Cms] 1.15 mm/N
- Effective diaph. diameter [D] 86 mm
- Effective piston area [Sd] 58 cm²
- Equivalent volume [Vas] 5.4 l
- Sensitivity (2.83V/1m) 90 dB
- Ratio Bl/VRe 2.92 N/V/W
- Ratio fs/Qts 264 Hz

**Electrical Data**

- Nominal impedance [Zn] 4 Ω
- Minimum impedance [Zmin] 4.3 Ω
- Maximum impedance [Zo] 46.5 Ω
- DC resistance [Re] 3.1 Ω
- Voice coil inductance [Le] 0.11 mH

**Power Handling**

- 100h RMS noise test (IEC 17.1)* 80 W
- Long-term max power (IEC 17.3)* 150 W

*Filter: 2. order HP Butterworth, 200 Hz

**Voice Coil & Magnet Data**

- Voice coil diameter 32 mm
- Voice coil height 6 mm
- Voice coil layers 4
- Height of gap 13 mm
- Linear excursion ± 3.5 mm
- Max mech. excursion ± 10 mm
- Unit weight 0.8 kg

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All Scan-Speak products are RoHS compliant.

Data are subject to change without notice.

Advanced Parameters (Preliminary)

**Electrical data**
- Resistance \([Re']\) 3.20 \(\Omega\)
- Free inductance \([Le_b]\) 0.042 mH
- Bound inductance \([Le]\) 1.40 mH
- Semi-inductance \([Ke]\) 0.059 SH
- Shunt resistance \([Rss]\) 3 \(\Omega\)

**Mechanical Data**
- Force Factor \([Bl]\) 5.03 Tm
- Moving mass \([Mms]\) 5.9 g
- Compliance \([Cms]\) 0.74 mm/N
- Mechanical resistance \([Rms]\) 0.69 kg/s
- Admittance \([Ams]\) 0.10 mm/N

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N.C. Madsensvej 1 · 6920 Videbæk · Denmark · Phone: +45 6040 5200 · www.scan-speak.dk