

Specification

Nominal Basket Diameter	12", 304.8mm
Nominal Impedance*	16 ohms
Power Rating**	
Watts	400W
Music Program	800W
Resonance	55Hz
Usable Frequency Range***	54Hz-5kHz
Sensitivity	98.3
Magnet Weight	56 oz
Gap Height	0.375", 9.53mm
Voice Coil Diameter	2.5", 63.5mm

Thiele & Small Parameters

Resonant Frequency (fs)	55Hz
DC Resistance (Re)	6.3
Coil Inductance (Le)	0.74mH
Mechanical Q (Qms)	5.27
Electromagnetic Q (Qes)	0.46
Total Q (Qts)	0.43
Compliance Equivalent Volume (Vas)	81.3 ltr/2.9 cu. ft.
Peak Diaphragm Displacement Volume (Vd)	125cc
Mechanical Compliance of Suspension (Cms)	0.21mm/N
BL Product (BL)	13.5 T-M
Diaphragm Mass inc. Airload (Mms)	39 grams
Efficiency Bandwidth Product (EBP)	120
Maximum Linear Excursion (Xmax)	2.4mm
Surface Area of Cone (Sd)	519.5cm ²
Maximum Mechanical Limit (Xlim)	9.9mm

Mounting Information

Recommended Enclosure Volume	
Sealed	N/A
Vented	25.5-85 ltr/0.9-3 cu. ft.
Overall Diameter	12.03", 305.5mm
Baffle Hole Diameter	10.95", 278.1mm
Front Sealing Gasket	Fitted as Standard
Rear Sealing Gasket	Fitted as Standard
Mounting Holes Diameter	0.25", 6.4mm
Mounting Holes B.C.D.	11.59", 294.3mm
Depth	5.35", 136mm
Net Weight	11.4 lbs, 5.2 kg
Shipping Weight	13.5 lbs, 6.1 kg

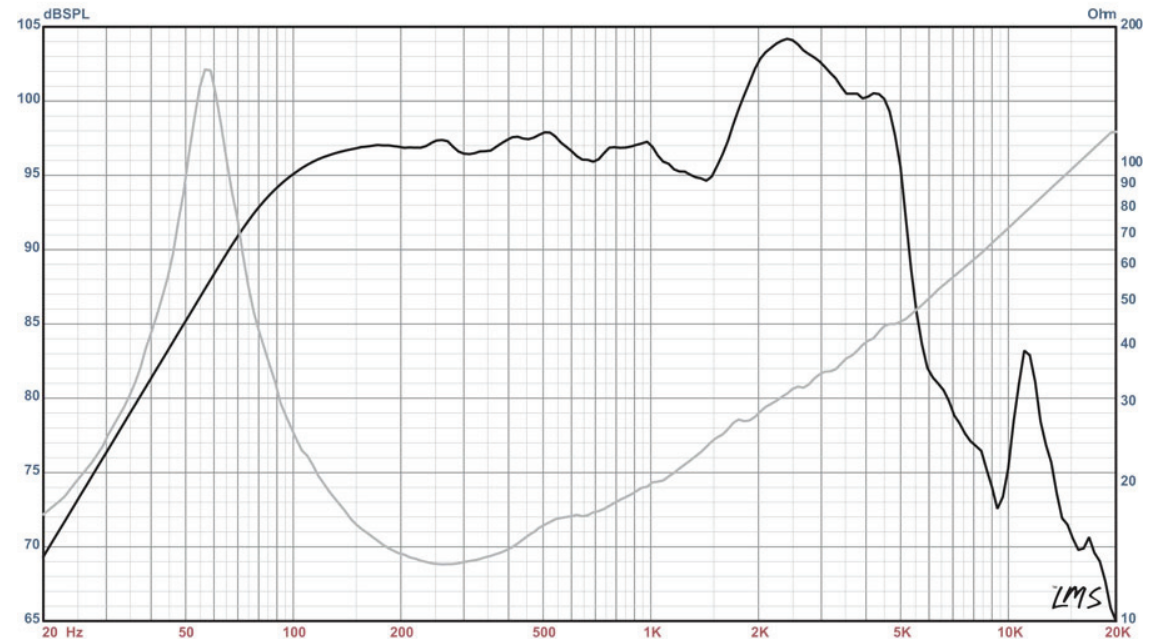
Materials of Construction

Coil Construction	Aluminum
Coil	Polyimide
Magnet Composition	Ferrite
Core Details	Vented
Basket Materials	Pressed Steel
Cone Composition	Paper
Cone Edge Composition	Cloth
Dust Cap Composition	Solid Composition Felt



DELTA-12B American Standard Series

Recommended for professional audio as a mid-bass or woofer (with high-pass filter) in vented enclosures.



* Please inquire about alternative impedances.

** Multiple units exceed published rating evaluated under EIA 426A noise source and test standard while in a free-air, nontemperature-controlled environment.

*** The average output across the usable frequency range when applying 1W/1m into the nominal impedance. ie: 2.83 V/8 ohms, 4 V/16 ohms.

Eminence response curves are measured under the following conditions: All speakers are tested at 1W/1m using a variety of test set-ups for the appropriate impedance | LMS using 0.25" supplied microphone (software calibrated) mounted 1m from wall/baffle | 2 ft. X 2 ft. baffle is built into the wall with the speaker mounted flush against a steel ring for minimum diffraction | Hafler P1500 Trans-Nova amplifier | 2700 cu.ft. chamber with fiberglass on all six surfaces (three with custom-made wedges)

Delta12B Large Vented Cabinet

By McJerry, Eminence Speaker LLC

Displacement Limited to 60 Watts; F3 of 65 Hz. Use a high pass filter set to 50 Hz. Ok for Low Pwr FR PA.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 2.2 cu.ft

V(total) = 2.361 cu.ft

Fb = 57.32 Hz

QL = 7

F3 = 64.53 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 4.99 in

Driver Properties

--Description--

Name: Delta-12 (16 ohm)

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: Cloth surround.

Dust Cap: Solid paper dust cap.

Frame: Pressed steel basket.

Voice Coil: 2.5 inch (63.5 mm) copper.

Magnet: 56 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 58 Hz

Qms = 7.04

Vas = 87 liters

Xmax = 2.7 mm

Sd = 519.5 sq.cm

Qes = 0.52

Re = 11.4 ohms

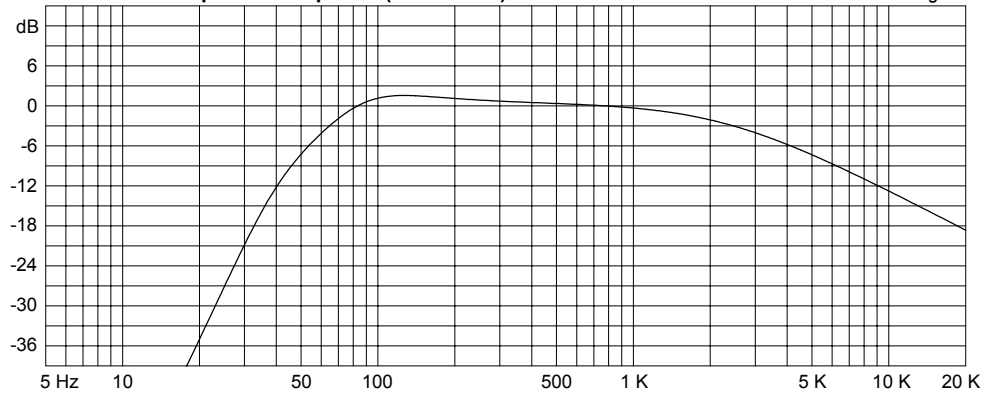
Le = 0.77 mH

Z = 16 ohms

Pe = 400 watts

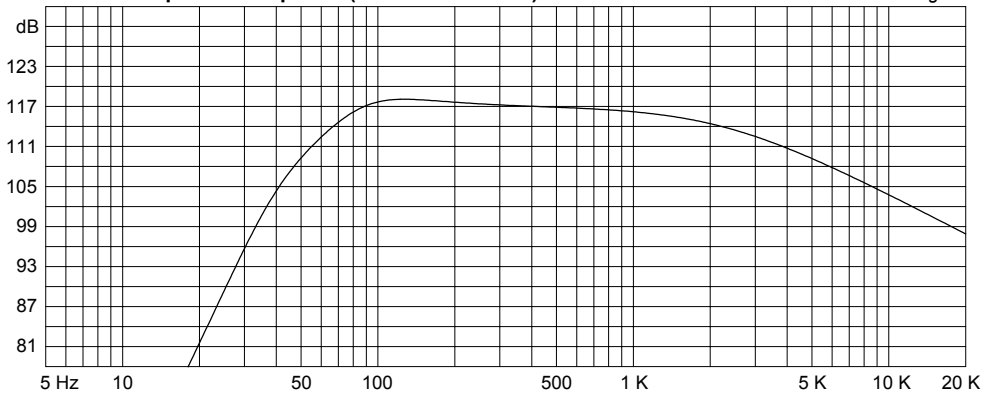
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



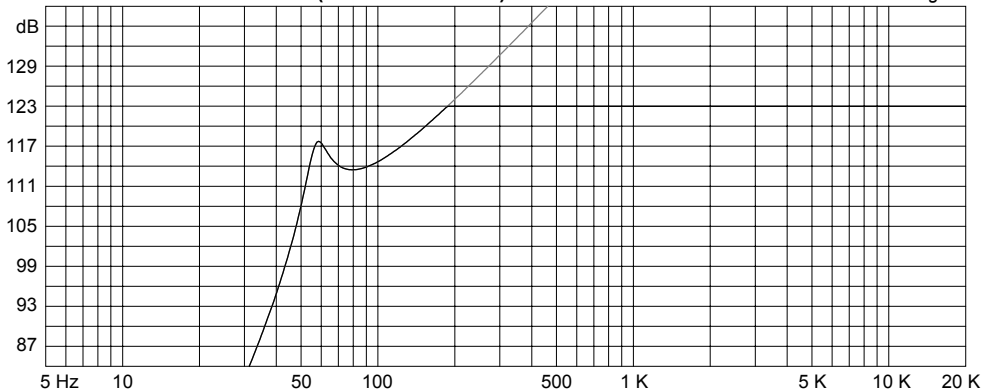
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 60 watts

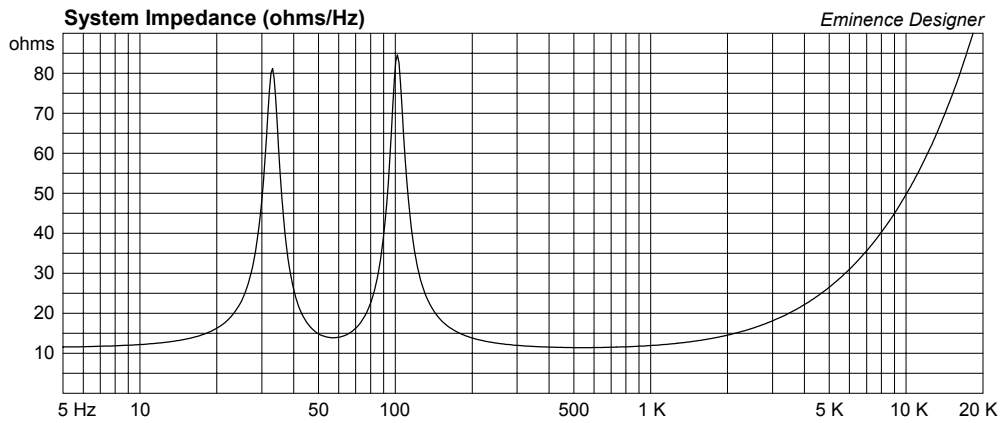
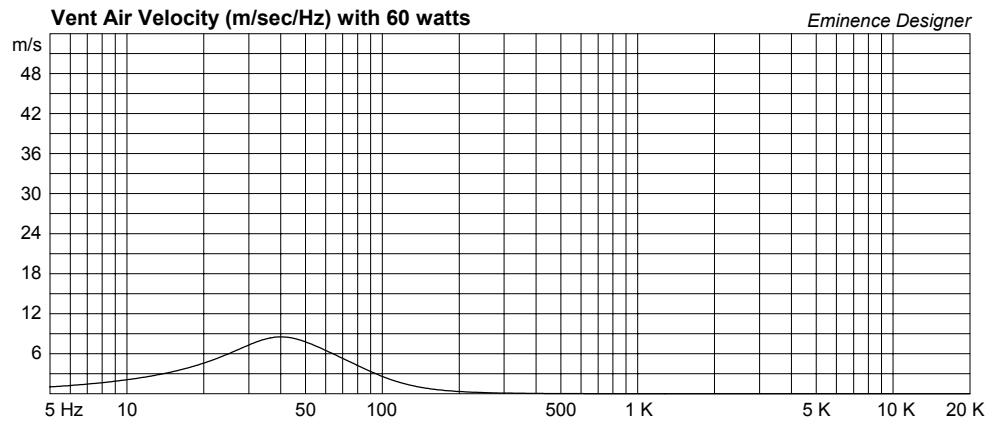
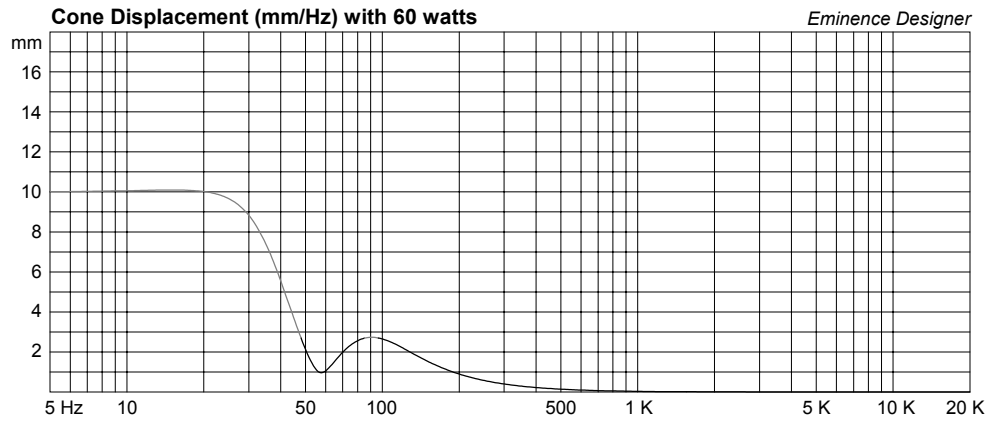
Eminence Designer



Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer





Delta12B Med Vented Cabinet

By McJerry, Eminence Speaker LLC

Displacement Limited to 100 Watts; F3 of 75 Hz. Use a steep High Pass filter set to 50 Hz. Ok for Low Pwr FR, PA use if high passed at 50 Hz.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 1.5 cu.ft

V(total) = 1.684 cu.ft

Fb = 65 Hz

QL = 7

F3 = 75.18 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 6.359 in

Driver Properties

--Description--

Name: Delta-12 (16 ohm)

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: Cloth surround.

Dust Cap: Solid paper dust cap.

Frame: Pressed steel basket.

Voice Coil: 2.5 inch (63.5 mm) copper.

Magnet: 56 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 58 Hz

Qms = 7.04

Vas = 87 liters

Xmax = 2.7 mm

Sd = 519.5 sq.cm

Qes = 0.52

Re = 11.4 ohms

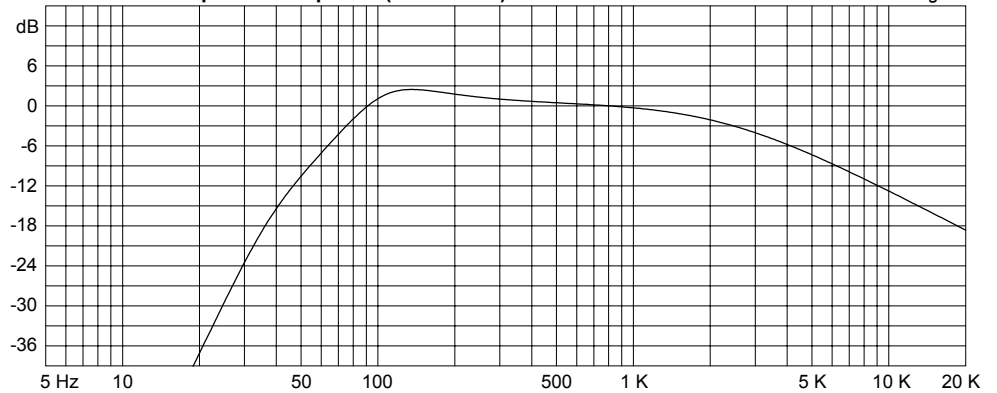
Le = 0.77 mH

Z = 16 ohms

Pe = 400 watts

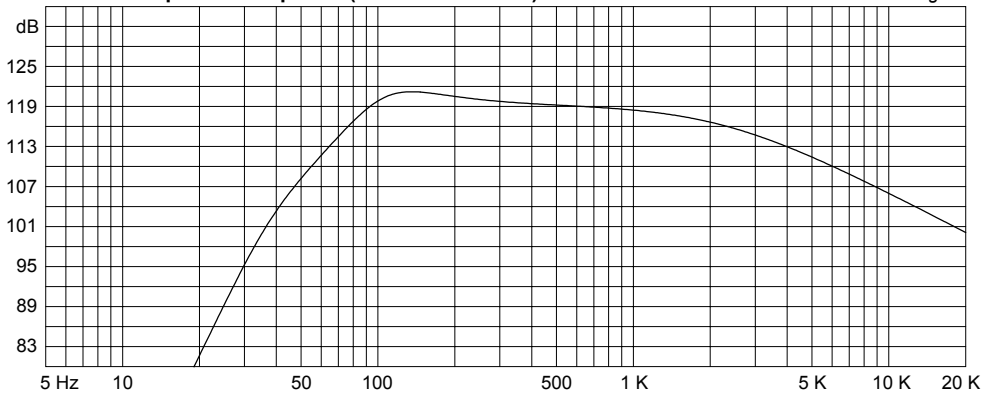
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



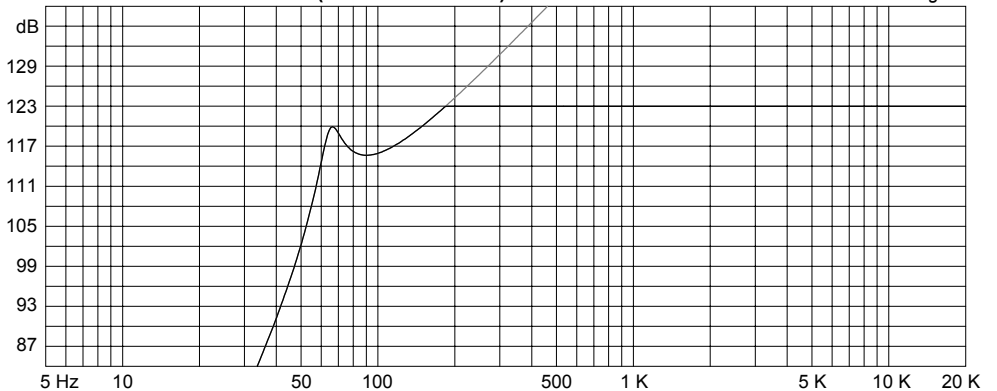
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 100 watts

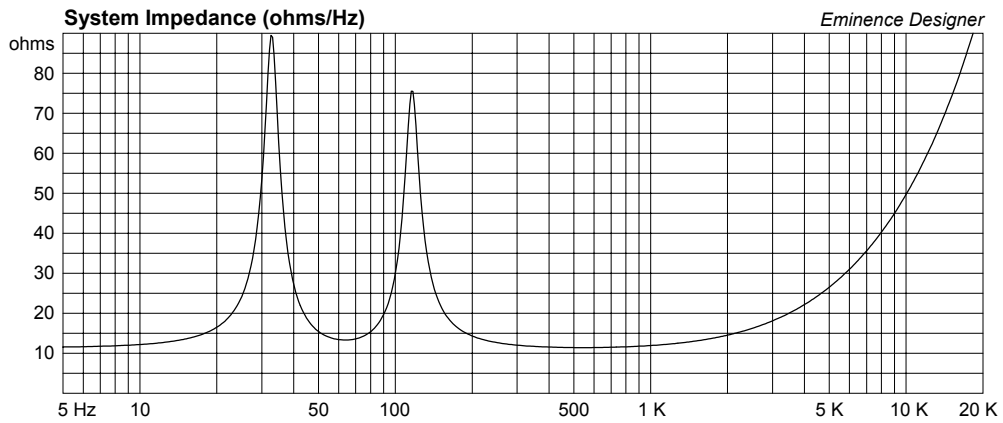
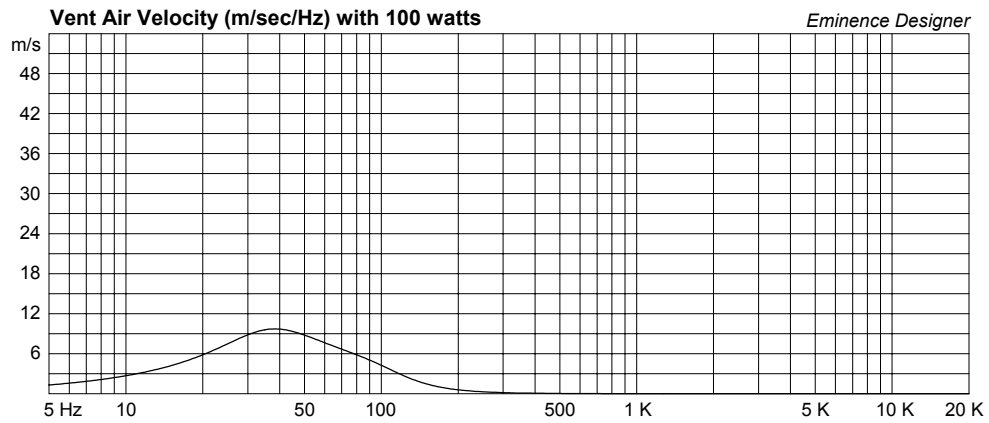
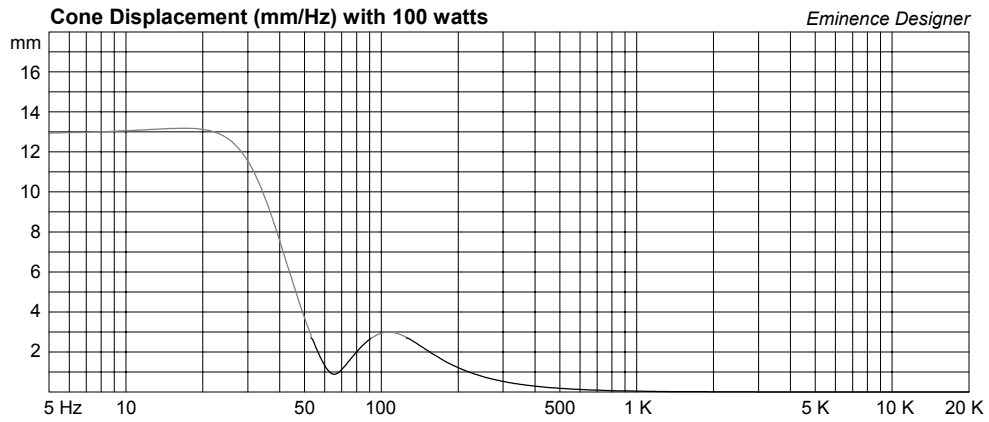
Eminence Designer



Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer





Delta12B Small Sealed Midrange Cabinet

By McJerry, Eminence Speaker LLC

Limited to 300 Watts. Not for FR use. Use only above 200 Hz; use a steep high pass filter set to 200 Hz.

Box Properties

--Description--

Name:

Type: Closed Box

Shape: Prism, square

--Box Parameters--

Vb = 0.486 cu.ft

V(total) = 0.566 cu.ft

Qtc = 0.924

QL = 20

F3 = 120.2 Hz

Fill = heavy

Driver Properties

--Description--

Name: Delta-12 (16 ohm)

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: Cloth surround.

Dust Cap: Solid paper dust cap.

Frame: Pressed steel basket.

Voice Coil: 2.5 inch (63.5 mm) copper.

Magnet: 56 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 58 Hz

Qms = 7.04

Vas = 87 liters

Xmax = 2.7 mm

Sd = 519.5 sq.cm

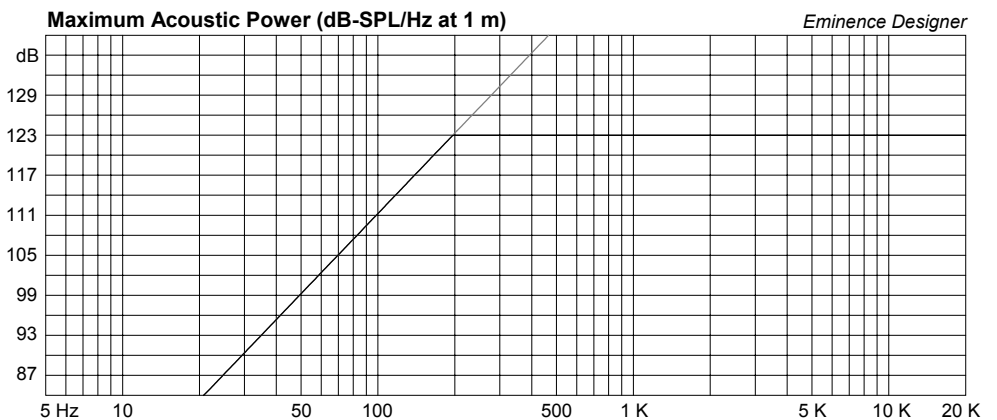
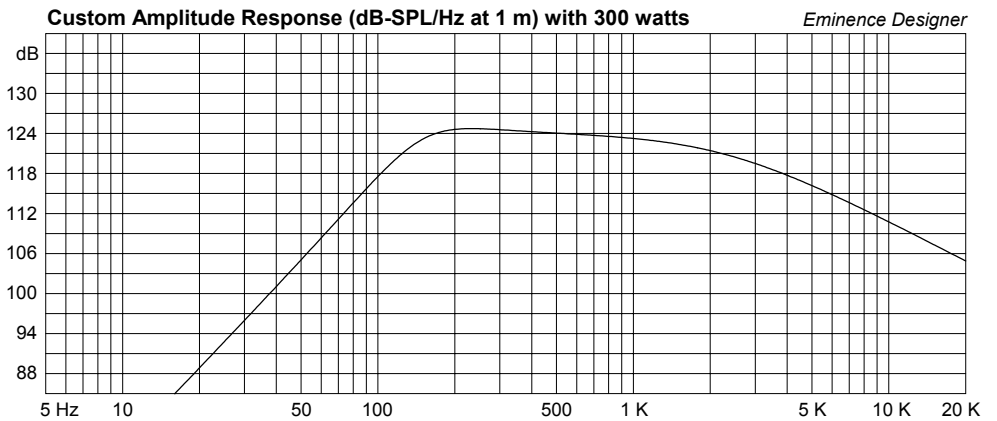
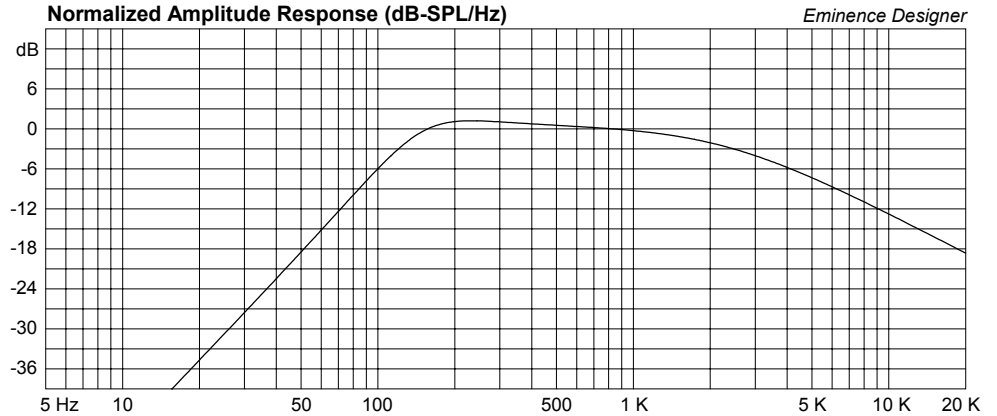
Qes = 0.52

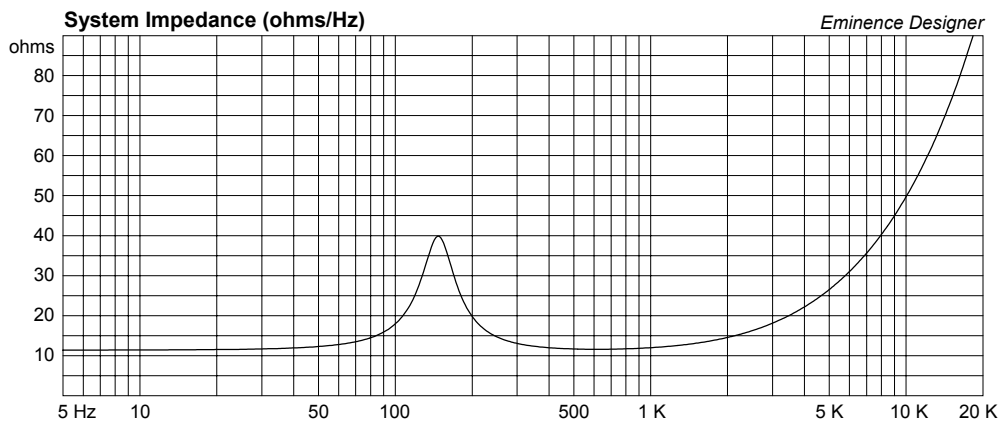
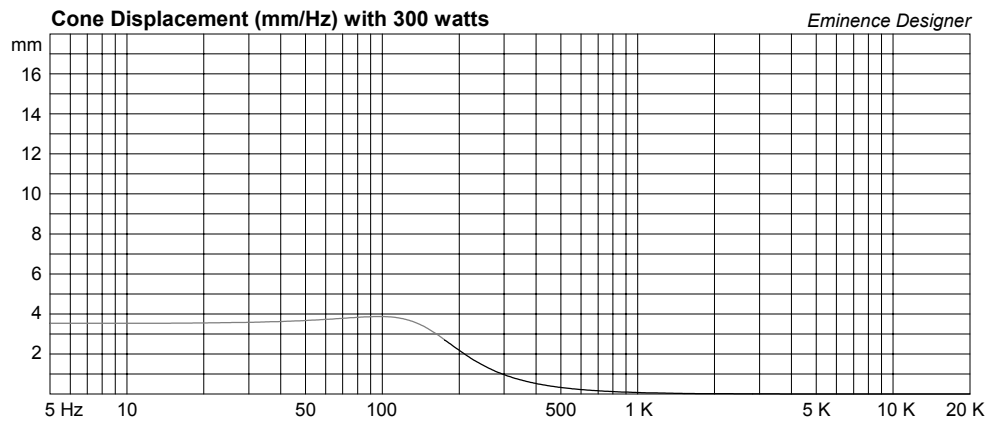
Re = 11.4 ohms

Le = 0.77 mH

Z = 16 ohms

Pe = 400 watts





Delta12B Small Sealed Midrange Cabinet

By McJerry, Eminence Speaker LLC

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QL = 20

F3 = 120.2 Hz

Fill = heavy

Driver Properties

--Description--

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Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: Cloth surround.

Dust Cap: Solid paper dust cap.

Frame: Pressed steel basket.

Voice Coil: 2.5 inch (63.5 mm) copper.

Magnet: 56 oz ferrite magnet.

--Configuration--

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--Driver Parameters--

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