



## AMERICAN STANDARD SERIES

# DELTA-15LFA

Low frequency woofer for pro audio as a mid-bass or floor monitor in a sealed enclosure. Also suitable as a woofer in vented, bass guitar or PA enclosures.



### SPECIFICATION

Nominal Basket Diameter	15.0", 381 mm
Nominal Impedance*	8 Ω
Power Rating**	
Watts	500 W
Music Program	1000 W
Resonance	39 Hz
Usable Frequency Range	42 Hz – 3.2 kHz
Sensitivity***	96.0 dB
Magnet Weight	56 oz.
Gap Height	.375", 9.5 mm
Voice Coil Diameter	2.5", 64 mm

### THIELE & SMALL PARAMETERS\*

Fs	39 Hz
Re	6.11 Ω
Le	1.37 mH
Qms	6.30
Qes	0.52
Qts	0.48
Vas	8.51 cu.ft., 241.00 liters
Vd	419.0 cc
Cms	0.23 mm/N
BL	14.60 T-M
Mms	75 grams
EBP	75
Xmax	4.80 mm
Sd	873.0 cm <sup>2</sup>
Xlim	16.5 mm

### MOUNTING INFORMATION

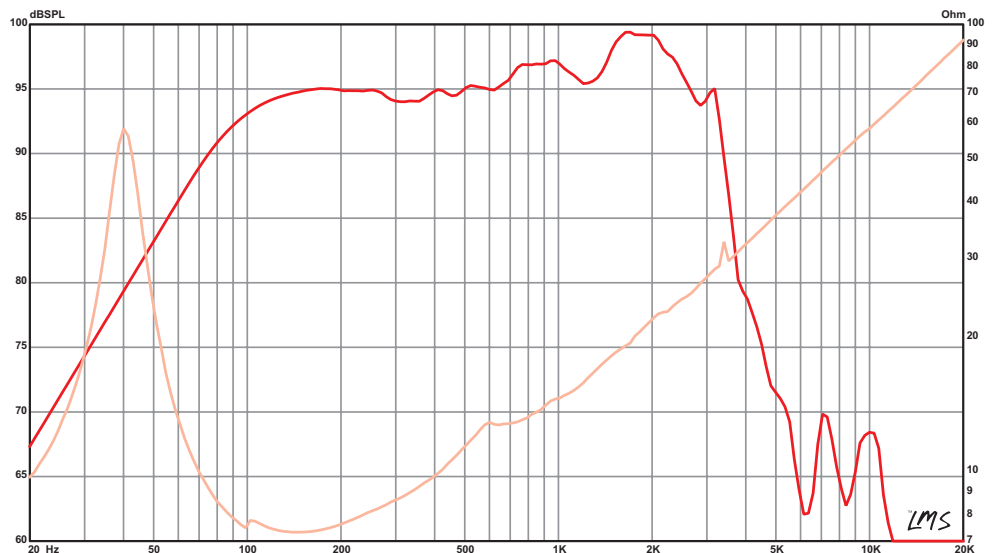
Recommended Enclosure Volume	
Sealed	36.80–42.50 liters, 1.30–1.50 cu.ft.
Vented	85.00–167.00 liters, 3.00–5.90 cu.ft.
Driver Volume Displaced	0.128 cu.ft., 3.62 liters
Overall Diameter	15.15", 384.8 mm
Baffle Hole Diameter	13.87", 352.3 mm
Front Sealing Gasket	Yes
Rear Sealing Gasket	Yes
Mounting Holes Diameter	0.25", 6.4 mm
Mounting Holes B.C.D.	14.56", 369.8 mm
Depth	6.30", 160.0 mm
Net Weight	12.80 lbs , 5.81 kg
Shipping Weight	14.80 lbs , 6.71 kg

### MATERIALS OF CONSTRUCTION

- \_\_\_\_\_ Copper voice coil
- \_\_\_\_\_ Polyimide former
- \_\_\_\_\_ Ferrite magnet
- \_\_\_\_\_ Vented and extended core
- \_\_\_\_\_ Pressed steel basket
- \_\_\_\_\_ Paper cone
- \_\_\_\_\_ Cloth cone edge
- \_\_\_\_\_ Solid composition paper dust cap



### FREQUENCY RESPONSE & IMPEDANCE CURVE\*



LEARN MORE AT [EMINENCE.COM](http://EMINENCE.COM)



*From design and manufacturing to the stage or studio. Once you've experienced the performance of Eminence, you'll never accept anything else.*

## MISSION STATEMENT

*Eminence is dedicated to providing the best Quality, Value and Service to meet our customers' needs.*

## FOOTNOTES

- \* Please consult [www.eminence.com](http://www.eminence.com) for specifications of models with alternative impedances.
- \*\* Multiple units exceed published ratings evaluated under EIA 426A specification while tested in a free-air, non-temperature-controlled environment.
- \*\*\* The average output across the usable frequency range when applying 1W/1m into the nominal impedance. i.e: 2.83V/8Ω, 4V/16Ω. 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 | Carver PM-120 amplifier | 2700 cu. ft. chamber with fiberglass on all six surfaces (three with custom-made wedges).
- \*\*\*\* BETA 8CX, 10CX, and 12CX are coaxial speakers with tweeter sold separately. Published usable frequency response contingent upon use of ASD:1001 HF Driver.
- \*\*\*\*\* Multiple units exceeded published ratings evaluated under EIA-426A or AES specification while mounted on Eminence's H290, H290S, or H2EA horn in a non-temperature-controlled environment.
- \*\*\*\*\*The average on axis output across the entire usable frequency range when applying 1W/1m into the nominal impedance, i.e. 2.83V/8Ω, 4V/16Ω. 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 | 2ft x 2ft baffle is built into the wall with horn front mounted | Carver PM-120 amplifier | 2700 cu.ft. chamber with fiberglass on all six surfaces (three with custom-made wedges).

Prices, specifications and product cosmetics are subject to change without notice.

**EMINENCE SPEAKER LLC**

838 Mulberry Pike, Eminence, KY 40019



# Delta15LFA Larger Vented Cabinet

By McJerry, Eminence Speaker LLC

Displacement Limited to 175 Watts; F3 of 42 Hz. Use a steep High Pass filter at 35 Hz to protect woofer from overexcursion.

## Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 5.5 cu.ft

V(total) = 5.84 cu.ft

Fb = 45.97 Hz

QL = 7

F3 = 42.29 Hz

Fill = minimal

--Vents--

No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 6.465 in

## Driver Properties

--Description--

Name: Delta-15LF (8 ohm)

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: M-roll 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 = 41 Hz

Qms = 6.65

Vas = 186.1 liters

Xmax = 4.8 mm

Sd = 856.3 sq.cm

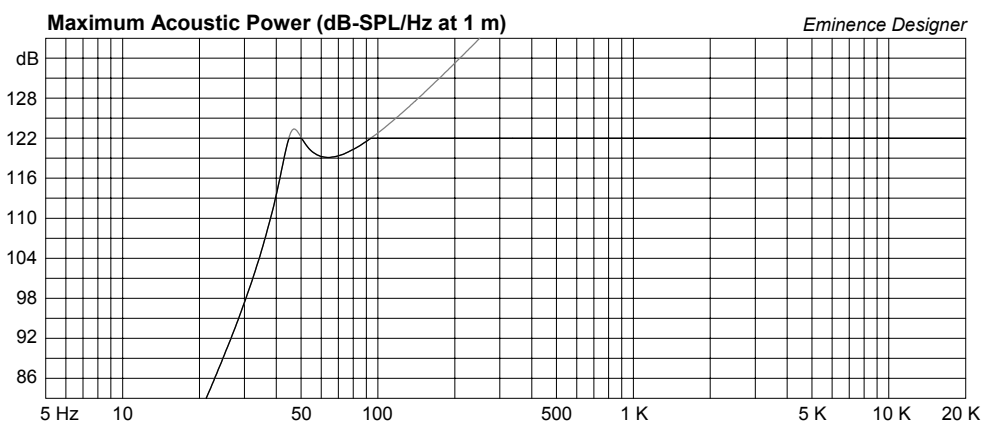
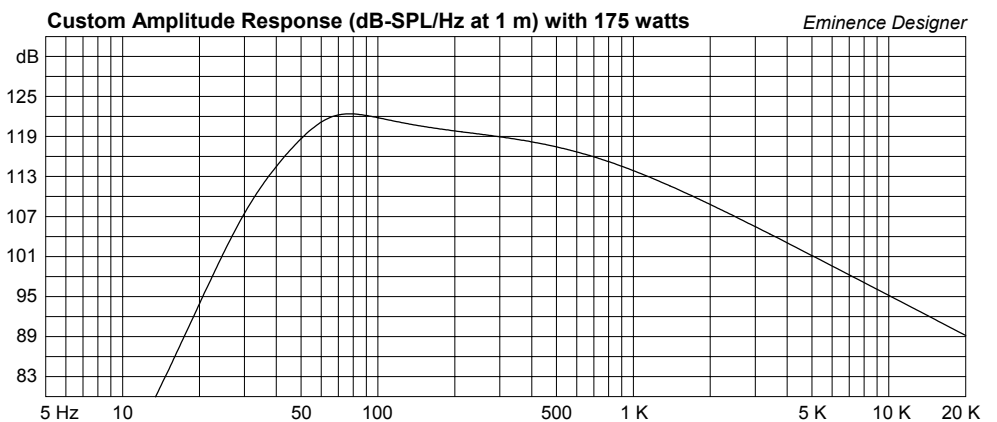
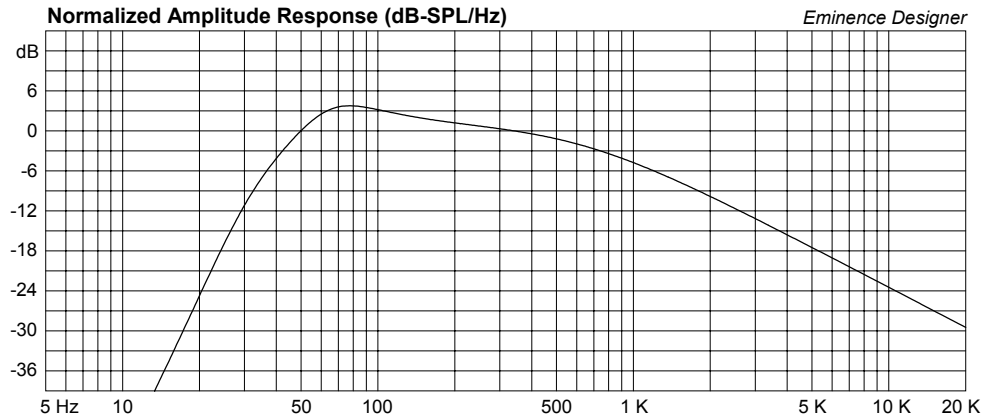
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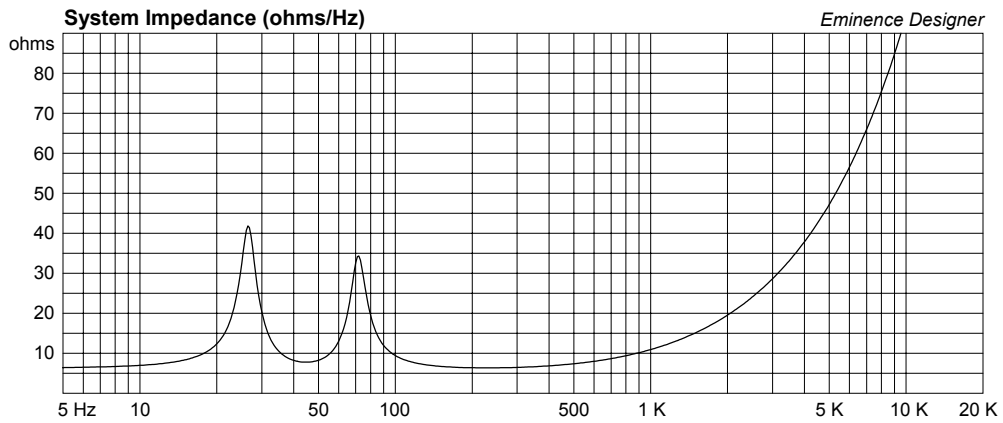
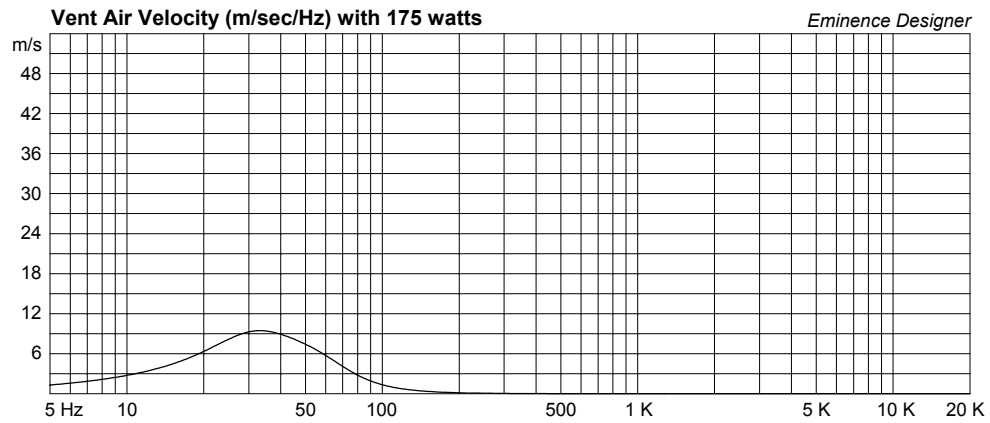
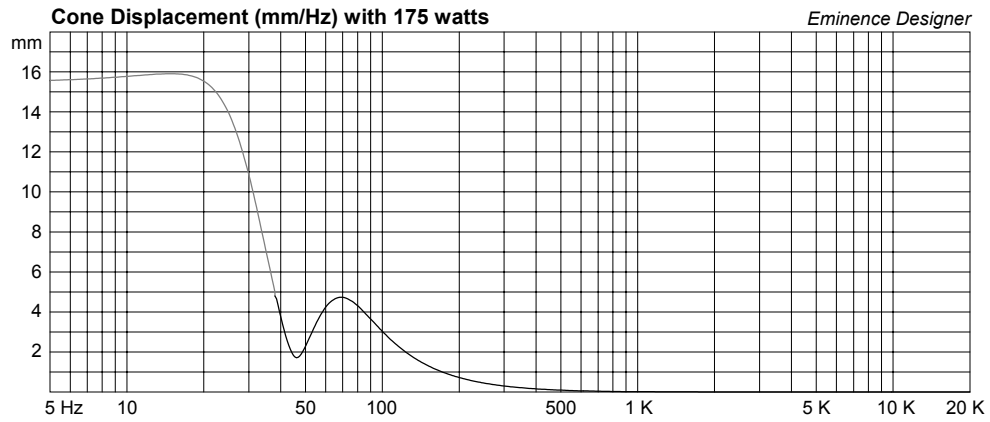
Re = 6.3 ohms

Le = 1.49 mH

Z = 8 ohms

Pe = 500 watts





# Delta15LFA Med Vented Cabinet

By McJerry, Eminence Speaker LLC

Displacement Limited to 250 Watts; F3 of 49 Hz. Use a 40 Hz High Pass Filter.

## Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 4.25 cu.ft

V(total) = 4.612 cu.ft

Fb = 50.89 Hz

QL = 5

F3 = 48.57 Hz

Fill = minimal

--Vents--

No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 7.145 in

## Driver Properties

--Description--

Name: Delta-15LF (8 ohm)

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: M-roll 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 = 41 Hz

Qms = 6.65

Vas = 186.1 liters

Xmax = 4.8 mm

Sd = 856.3 sq.cm

Qes = 0.64

Re = 6.3 ohms

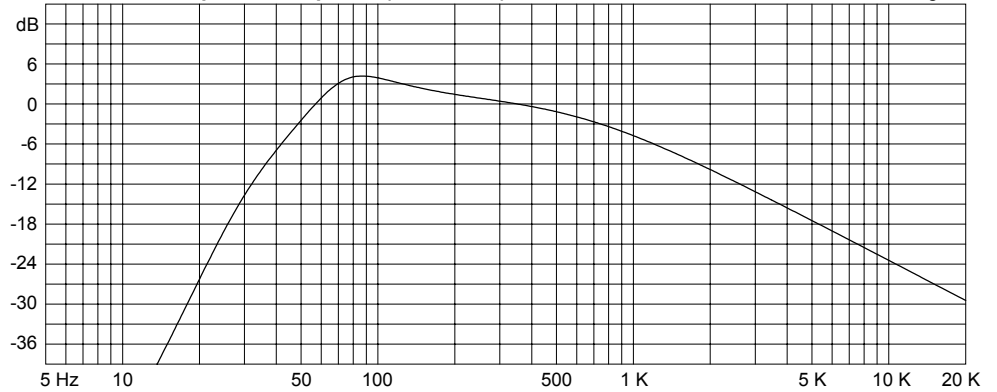
Le = 1.49 mH

Z = 8 ohms

Pe = 500 watts

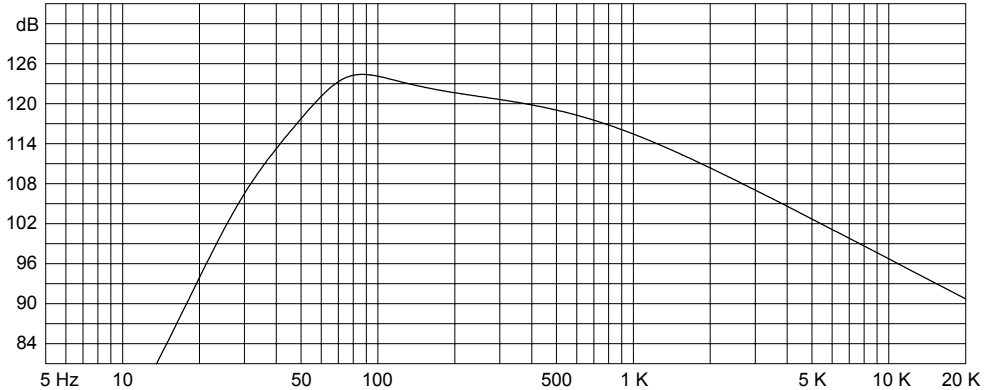
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



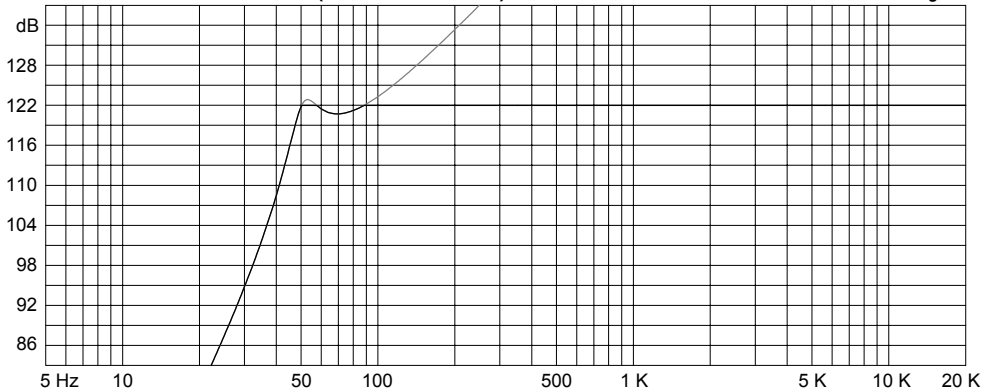
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 250 watts

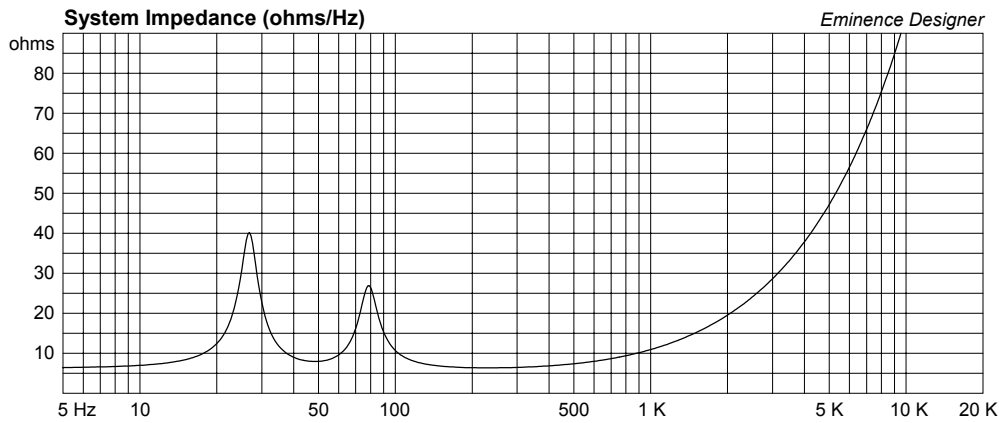
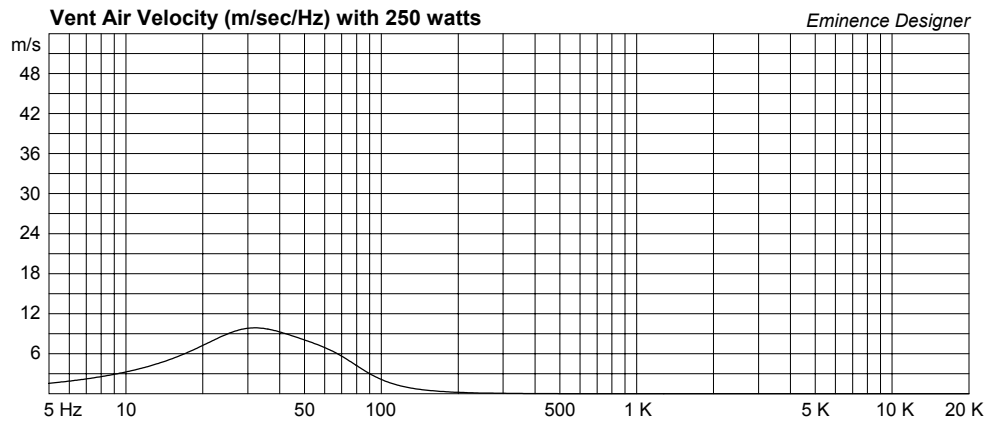
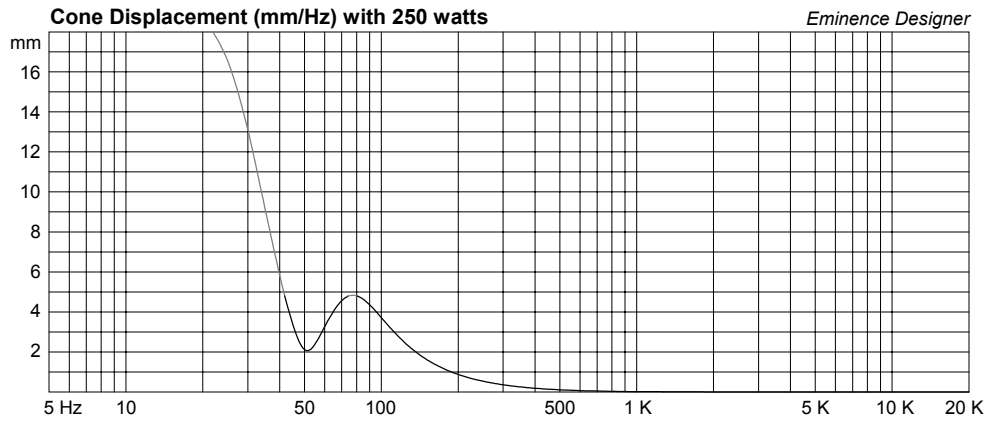
Eminence Designer



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

Eminence Designer





# Delta15LFA Small Sealed Mid/Hi Sat or Floor Monitor

By McJerry, Eminence Speaker LLC

Displacement Limited to 350 Watts. Use a steep High Pass filter set to 100 Hz or higher. Not for Full Range Use.

## Box Properties

--Description--

Name:

Type: Closed Box

Shape: Prism, square

--Box Parameters--

Vb = 1.25 cu.ft

V(total) = 1.378 cu.ft

Qtc = 1.007

QL = 19.9

F3 = 76.54 Hz

Fill = heavy

## Driver Properties

--Description--

Name: Delta-15LF (8 ohm)

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: M-roll 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 = 41 Hz

Qms = 6.65

Vas = 186.1 liters

Xmax = 4.8 mm

Sd = 856.3 sq.cm

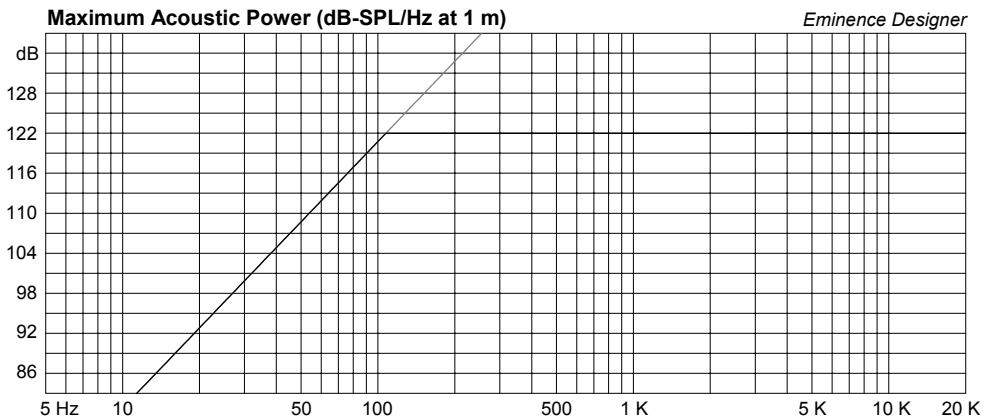
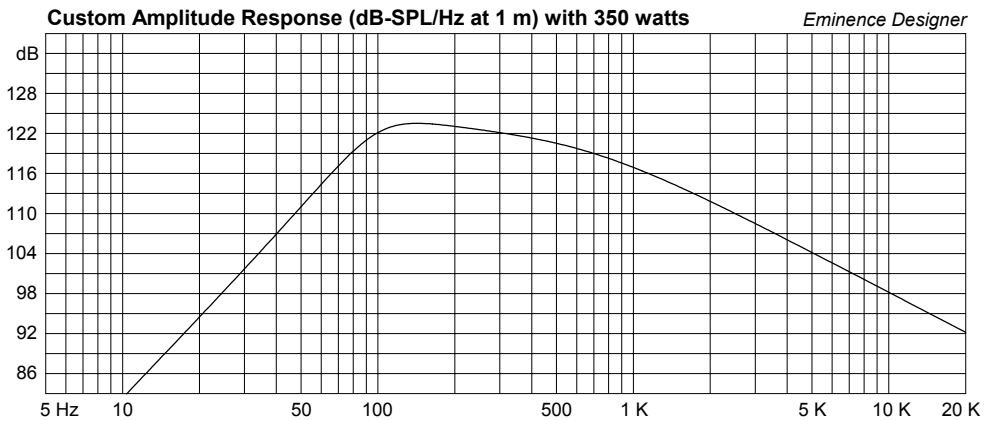
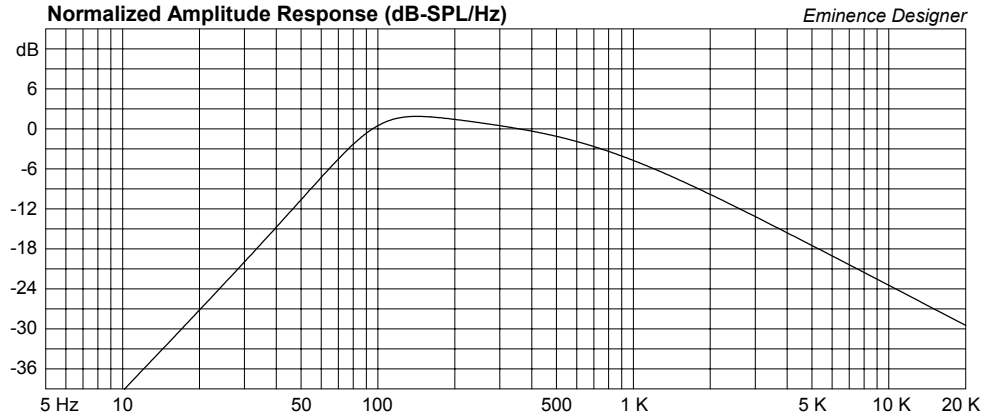
Qes = 0.64

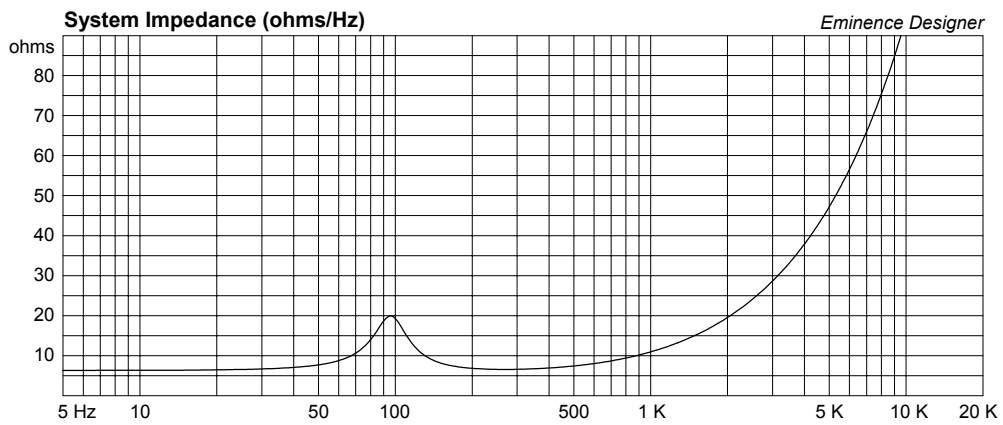
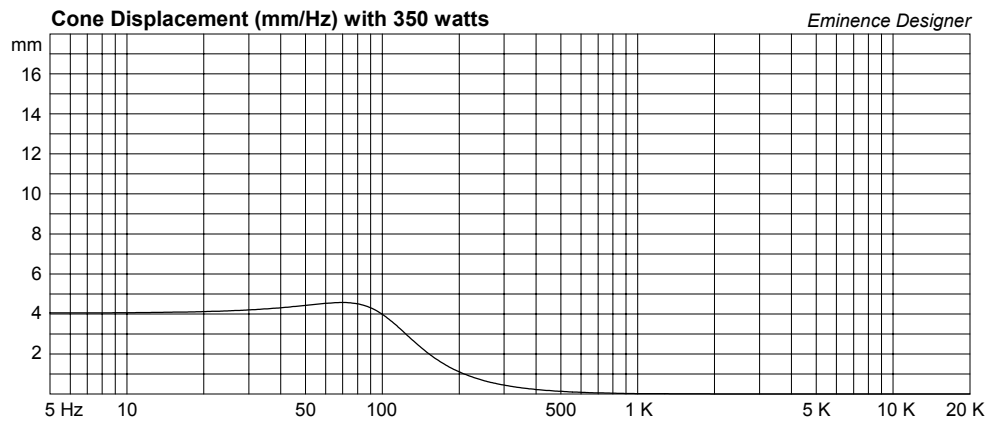
Re = 6.3 ohms

Le = 1.49 mH

Z = 8 ohms

Pe = 500 watts







# Delta15LFA Small Vented Cabinet

By McJerry, Eminence Speaker LLC

Displacement Limited to 325 Watts; F3 of 56 Hz. Use a steep High Pass filter set to 50 Hz.

## Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 2.95 cu.ft

V(total) = 3.146 cu.ft

Fb = 58.77 Hz

QL = 7

F3 = 56.09 Hz

Fill = minimal

--Vents--

No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 3 in

Lv = 3.536 in

## Driver Properties

--Description--

Name: Delta-15LF (8 ohm)

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: M-roll 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 = 41 Hz

Qms = 6.65

Vas = 186.1 liters

Xmax = 4.8 mm

Sd = 856.3 sq.cm

Qes = 0.64

Re = 6.3 ohms

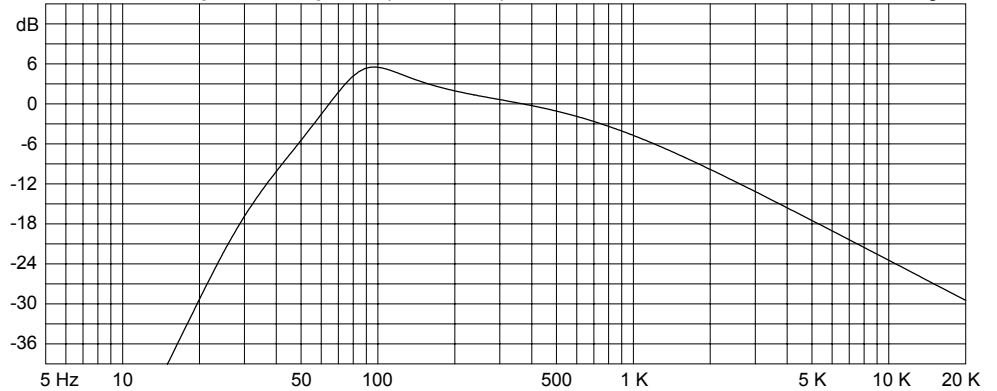
Le = 1.49 mH

Z = 8 ohms

Pe = 500 watts

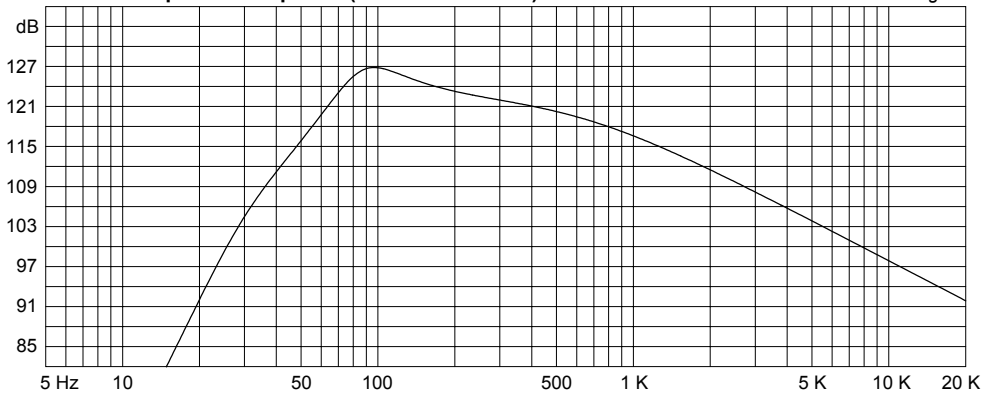
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 325 watts

Eminence Designer



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

Eminence Designer

