



## AMERICAN STANDARD SERIES

# BETA-15A

Recommended for professional audio as a woofer in sealed and vented enclosures.



### SPECIFICATION

Nominal Basket Diameter	15.0", 381 mm
Nominal Impedance*	8 $\Omega$
Power Rating**	
Watts	300 W
Music Program	600 W
Resonance	35 Hz
Usable Frequency Range	45 Hz – 3.7 kHz
Sensitivity***	98.2 dB
Magnet Weight	34 oz.
Gap Height	.312", 7.9 mm
Voice Coil Diameter	2.0", 51 mm

### THIELE & SMALL PARAMETERS\*

Fs	35 Hz
Re	6.32 $\Omega$
Le	1.10 mH
Qms	8.10
Qes	0.63
Qts	0.58
Vas	11.82 cu.ft., 334.60 liters
Vd	330.0 cc
Cms	0.35 mm/N
BL	11.50 T-M
Mms	60 grams
EBP	56
Xmax	4.00 mm
Sd	823.7 cm <sup>2</sup>
Xlim	11.6 mm

### MOUNTING INFORMATION

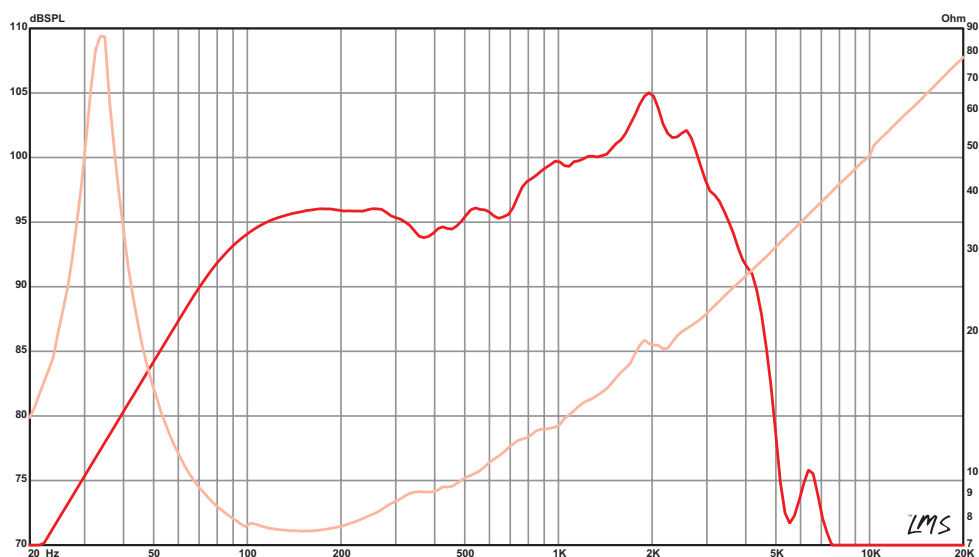
Recommended Enclosure Volume	
Sealed	45.00–62.00 liters, 1.60–2.20 cu.ft.
Vented	99.00–175.60 liters, 3.50–6.20 cu.ft.
Driver Volume Displaced	0.118 cu.ft., 3.33 liters
Overall Diameter	15.15", 384.8 mm
Baffle Hole Diameter	13.87", 352.3 mm
Front Sealing Gasket	Yes
Rear Sealing Gasket	Yes
Mounting Holes Diameter	0.25", 6.4 mm
Mounting Holes B.C.D.	14.56", 369.8 mm
Depth	6.05", 153.7 mm
Net Weight	8.80 lbs, 3.99 kg
Shipping Weight	10.80 lbs, 4.90 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\*



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*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**

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# Beta15A Large Vented Woofer Enclosure

By McJerry, Eminence Speaker LLC

Displacement Limited to 100 Watts; use above 40 Hz.

Will require EQ for flat playback.

## Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 6 cu.ft

V(total) = 6.133 cu.ft

Fb = 47.79 Hz

QL = 7

F3 = 44.78 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 4.25 in

Lv = 0.75 in

## Driver Properties

--Description--

Name: Beta-15

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised OCT 2005

Piston: Ribbed paper cone.

Suspension: Cloth surround.

Dust Cap: Solid composition paper dust cap.

Frame: Pressed steel basket.

Voice Coil: 2 inch (50.8 mm) coated copper.

Magnet: 38 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 35 Hz

Qms = 8.1

Vas = 334.6 liters

Xmax = 4 mm

Sd = 823.7 sq.cm

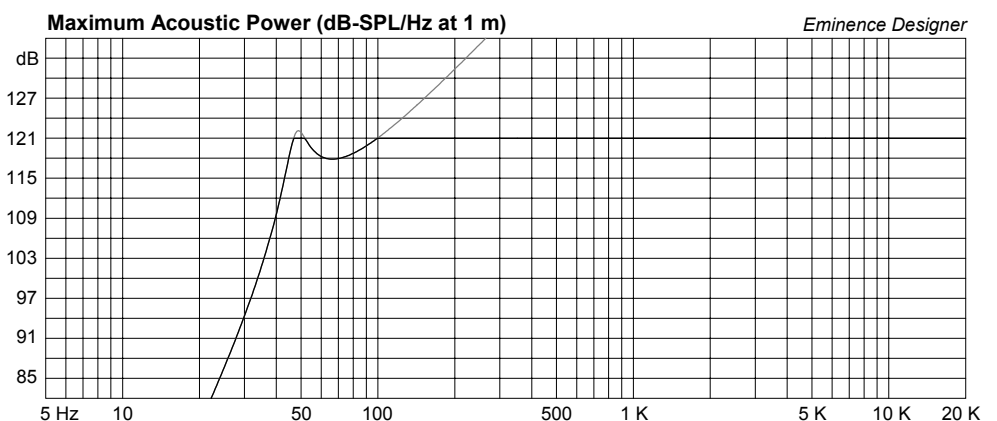
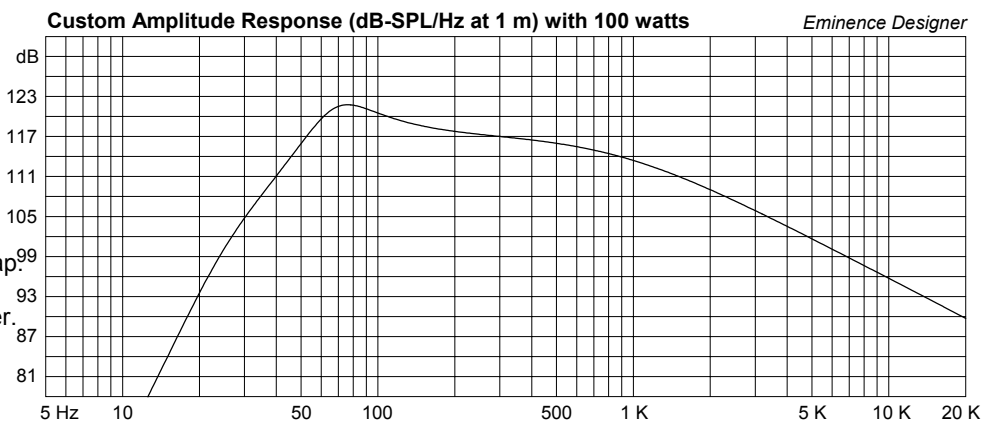
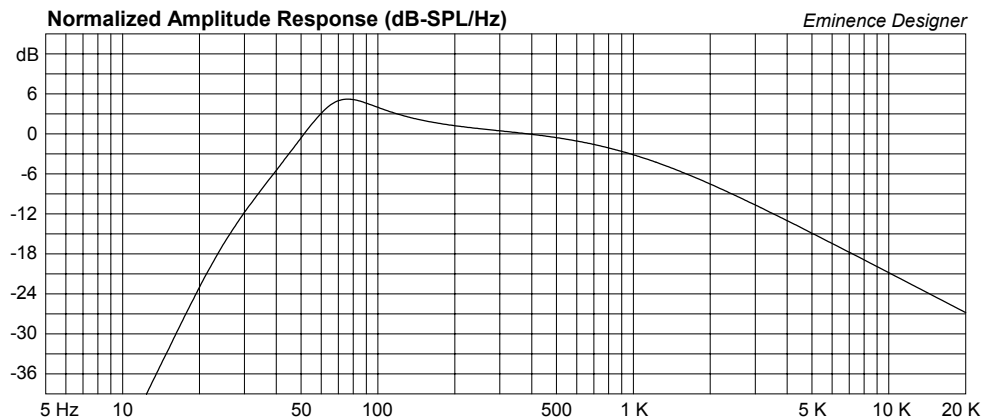
Qes = 0.63

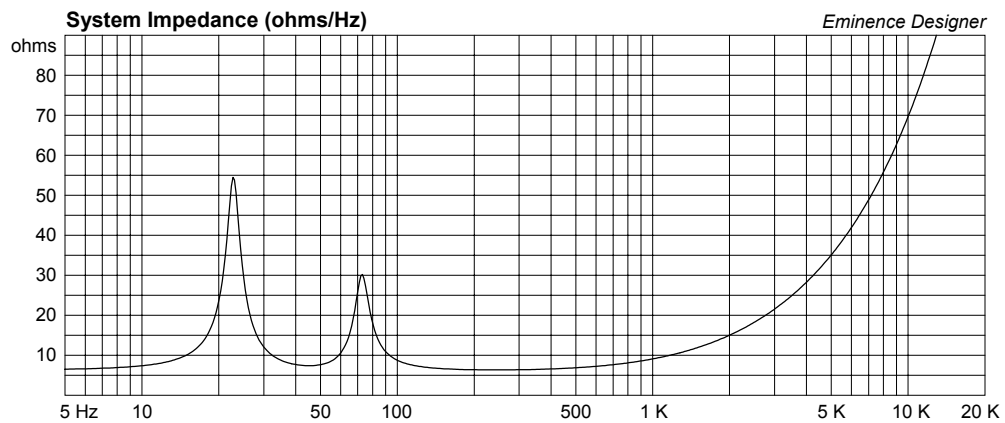
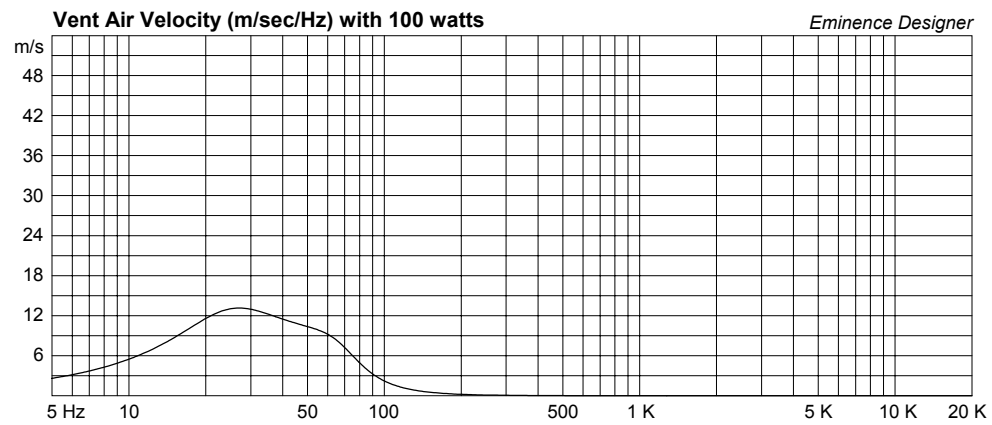
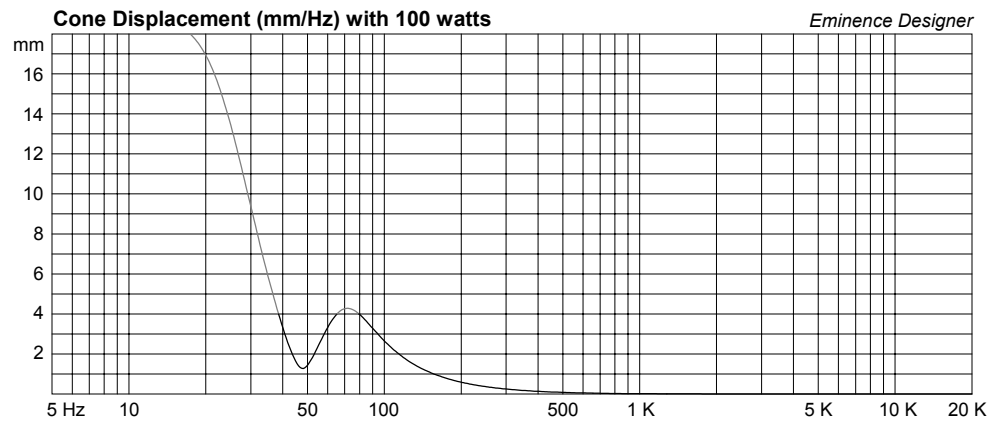
Re = 6.32 ohms

Le = 1.1 mH

Z = 8 ohms

Pe = 350 watts





# Beta15A Sealed Semi-Full Range Enclosure

By McJerry, Eminence Speaker LLC

Displacement Limited to 175 Watts; use above 70 Hz.

Good Floor Monitor or as a general voice PA cabinet.

## Box Properties

--Description--

Name:

Type: Closed Box

Shape: Prism, square

--Box Parameters--

Vb = 1.75 cu.ft

V(total) = 1.869 cu.ft

Qtc = 1.018

QL = 8.85

F3 = 70.73 Hz

Fill = heavy

## Driver Properties

--Description--

Name: Beta-15

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised OCT 2005

Piston: Ribbed paper cone.

Suspension: Cloth surround.

Dust Cap: Solid paper dust cap.

Frame: Pressed steel basket.

Voice Coil: 2 inch (50.8 mm) coated copper.

Magnet: 38 oz ferrite magnet.

--Configuration--

**No. of Drivers = 1**

--Driver Parameters--

Fs = 35 Hz

Qms = 8.1

Vas = 334.6 liters

Xmax = 4 mm

Sd = 823.7 sq.cm

Qes = 0.63

Re = 6.32 ohms

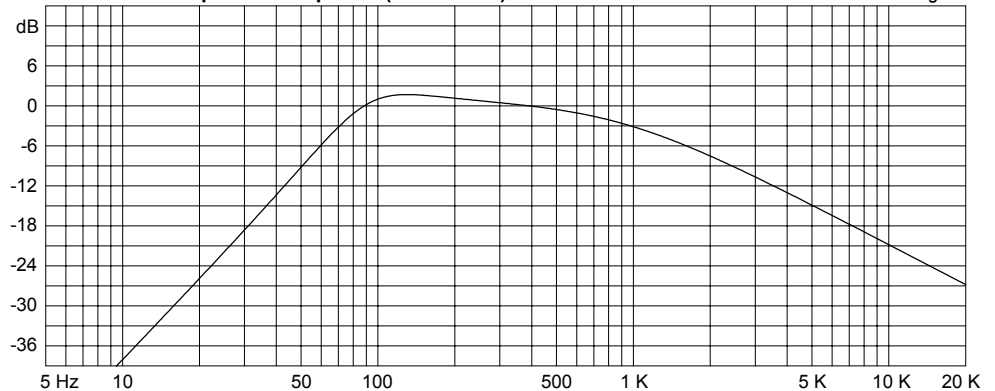
Le = 1.1 mH

Z = 8 ohms

Pe = 350 watts

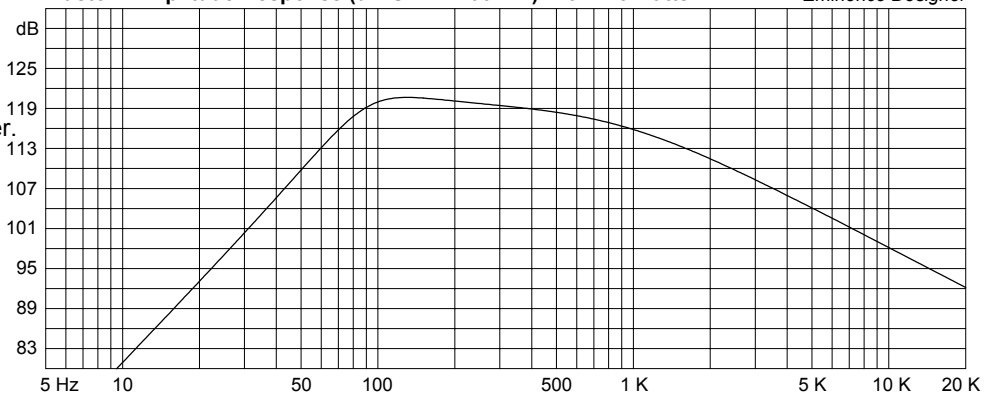
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



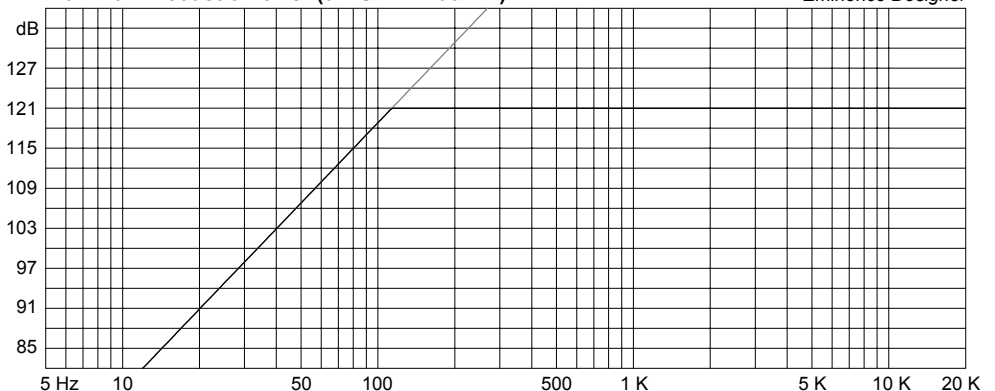
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 175 watts

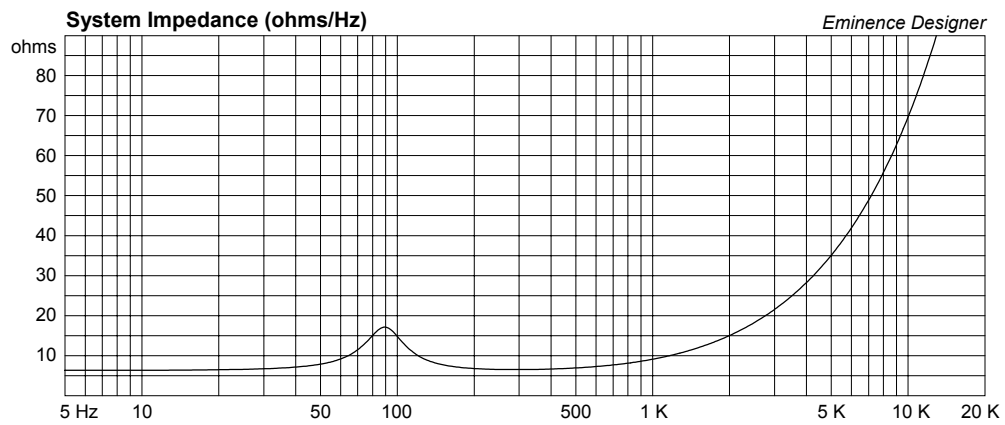
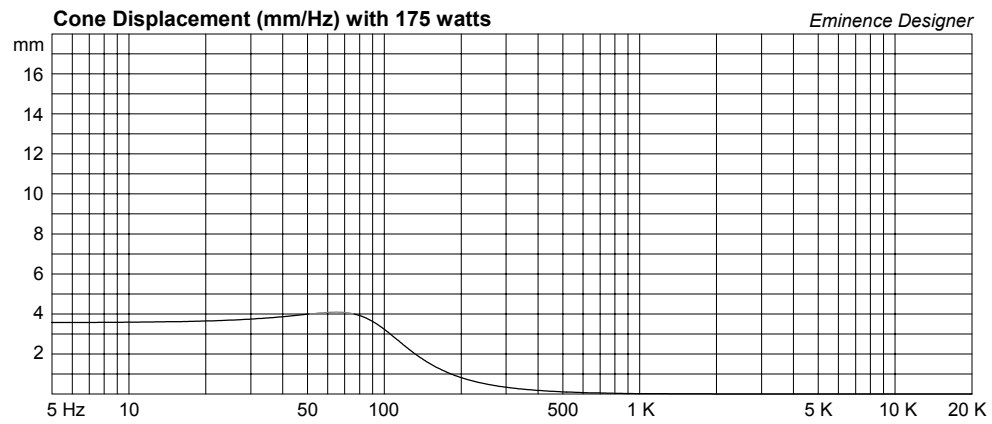
Eminence Designer



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

Eminence Designer





# Beta15A Med Vented Woofer Enclosure

By McJerry, Eminence Speaker LLC

Displacement Limited to 200 Watts; use above 60 Hz.

Will require EQ for flat playback.

## Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 3.58 cu.ft

V(total) = 3.715 cu.ft

Fb = 65 Hz

QL = 7

F3 = 58.83 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 4.64 in

Lv = 0.75 in

## Driver Properties

--Description--

Name: Beta-15

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised OCT 2005

Piston: Ribbed paper cone.

Suspension: Cloth surround.

Dust Cap: Solid paper dust cap.

Frame: Pressed steel basket.

Voice Coil: 2 inch (50.8 mm) coated copper.

Magnet: 38 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 35 Hz

Qms = 8.1

Vas = 334.6 liters

Xmax = 4 mm

Sd = 823.7 sq.cm

Qes = 0.63

Re = 6.32 ohms

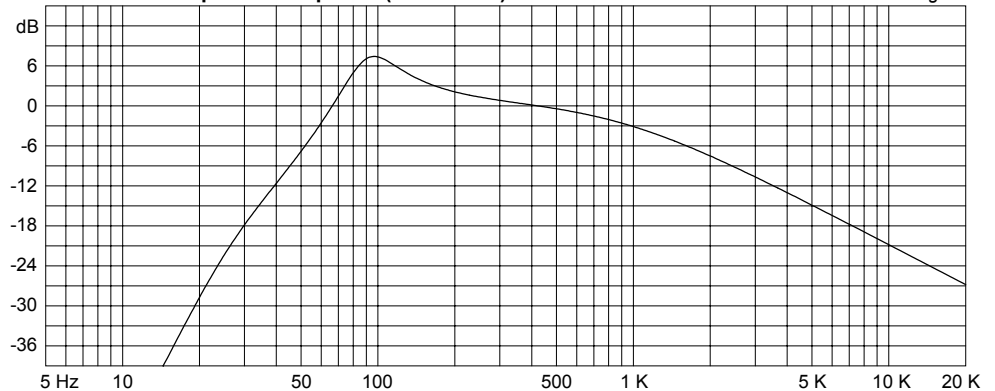
Le = 1.1 mH

Z = 8 ohms

Pe = 350 watts

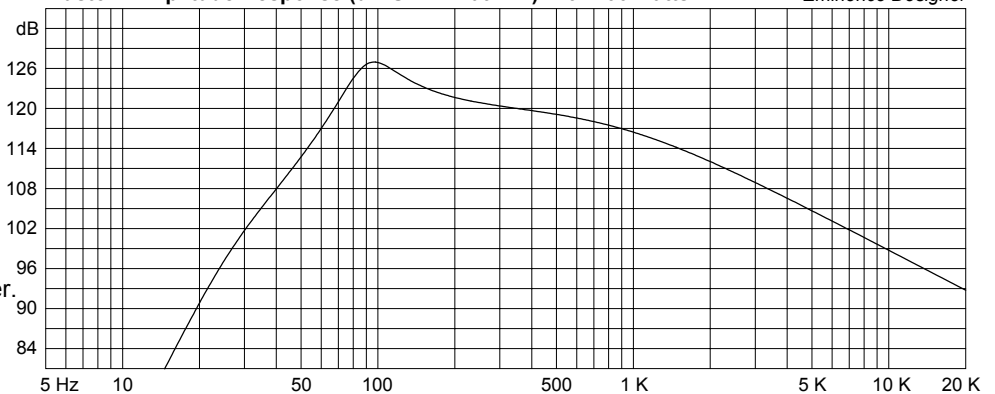
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 200 watts

Eminence Designer



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

Eminence Designer

