



AMERICAN STANDARD SERIES

BETA-8CX

Recommended for professional audio mid-range reproduction in sealed enclosures. Also suitable for mid-bass or floor monitor applications in vented 2-way cabinets.



The data for this coaxial woofer was calculated with the ASD:1001 driver screwed into the woofer, but not active.

SPECIFICATION

Nominal Basket Diameter	8.0", 203 mm
Nominal Impedance*	8 Ω
Power Rating**	
Watts	250 W
Music Program	500 W
Resonance	62 Hz
Usable Frequency Range	95 Hz – 3.3 kHz
Sensitivity***	92.9 dB
Magnet Weight	38 oz.
Gap Height	.312", 7.9 mm
Voice Coil Diameter	2.0", 51 mm

THIELE & SMALL PARAMETERS*

Fs	62 Hz
Re	5.37 Ω
Le	0.67 mH
Qms	6.57
Qes	0.31
Qts	0.29
Vas	0.76 cu.ft., 21.43 liters
Vd	67.2 cc
Cms	0.35 mm/N
BL	11.21 T-M
Mms	19 grams
EBP	201
Xmax	3.20 mm
Sd	210.0 cm ²
Xlim	6.9 mm

MOUNTING INFORMATION

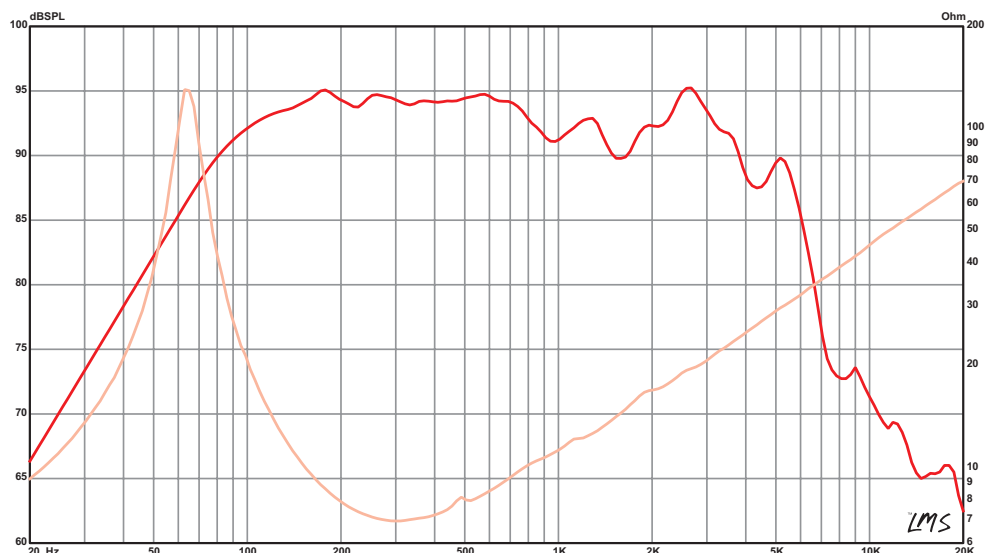
Recommended Enclosure Volume	
Sealed	3.40–9.91 liters, 0.12–0.35 cu.ft.
Vented	7.08–16.99 liters, 0.25–0.60 cu.ft.
Driver Volume Displaced	0.028 cu.ft., 0.79 liters
Overall Diameter	8.24", 209.3 mm
Baffle Hole Diameter	7.13", 181.1 mm
Front Sealing Gasket	Yes
Rear Sealing Gasket	Yes
Mounting Holes Diameter	0.22", 5.6 mm
Mounting Holes B.C.D.	7.75", 196.9 mm
Depth	3.50", 88.9 mm
Net Weight	6.80 lbs, 3.08 kg
Shipping Weight	7.50 lbs, 3.40 kg

MATERIALS OF CONSTRUCTION

- Copper voice coil
- Kapton former
- Ferrite magnet
- Tapered Coax
- Pressed steel basket
- Paper Cone
- Sealed cloth cone edge
- Zurette 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 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



Beta8CX Small Vented Cabinet

By Jerry McNutt, Eminence Speaker LLC

200 Watt Displacement Limit; Use above 100 Hz.

Small design that can handle a lot of power if used with a Subwoofer.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 0.25 cu.ft

V(total) = 0.3 cu.ft

Fb = 102 Hz

QL = 7

F3 = 102.8 Hz

Fill = minimal

--Vents--

No. of Vents = 1

Vent shape = round

Vent ends = one flush

Dv = 3 in

Lv = 4.618 in

Driver Properties

--Description--

Name: Beta-8CX - LF

Type: Two-way coaxial driver

Company: Eminence Speaker LLC

Comment: Revised OCT 2008

Piston: 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. Kapton former.

Magnet: 38 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 65.52 Hz

Qms = 8.82

Vas = 0.706 cu.ft

Xmax = 0.126 in

Sd = 32.55 sq.in

Qes = 0.34

Re = 5.58 ohms

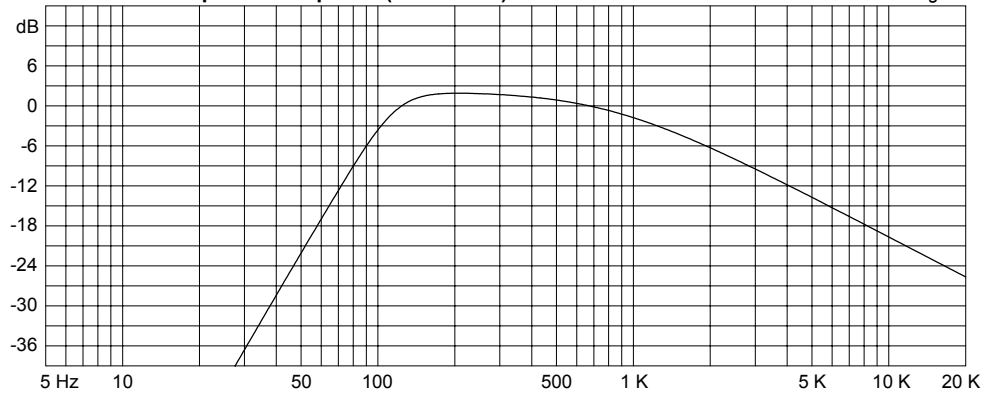
Le = 0.85 mH

Z = 8 ohms

Pe = 250 watts

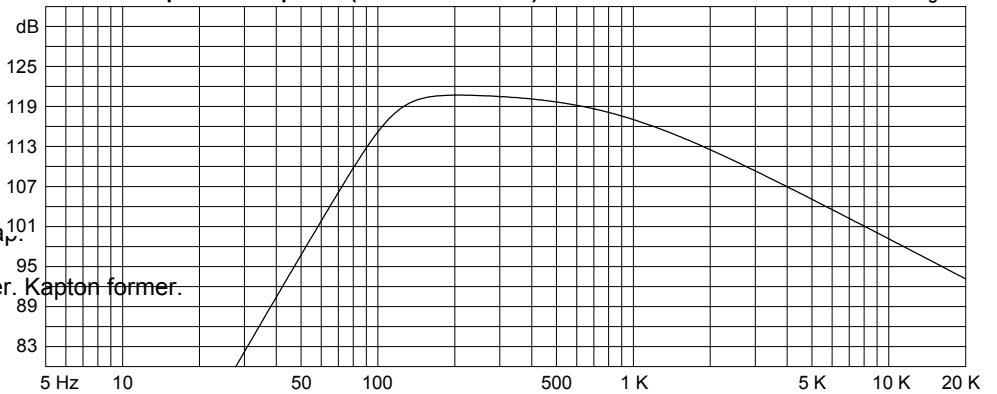
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



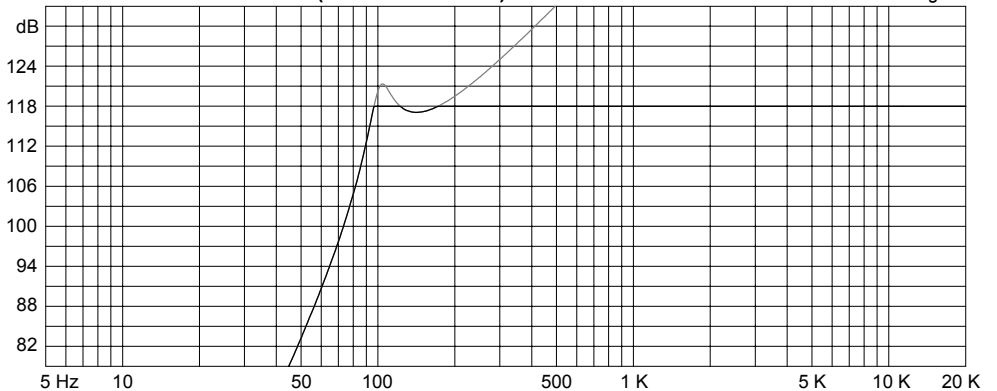
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 200 watts

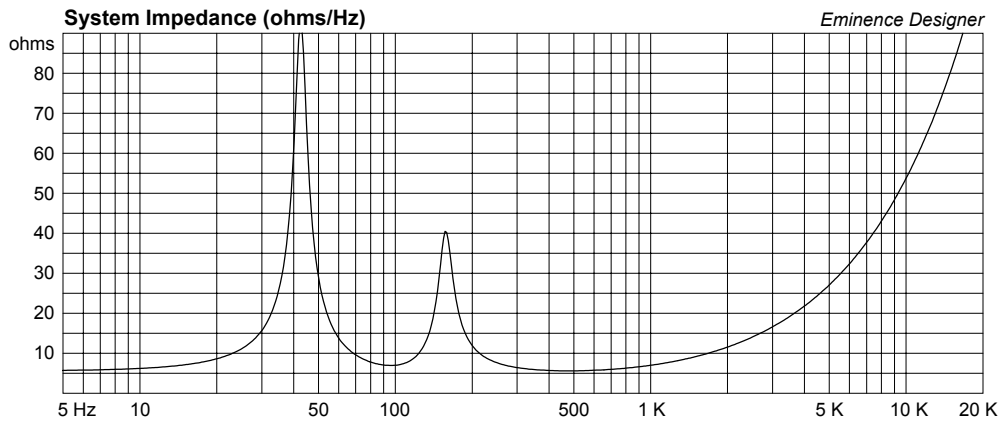
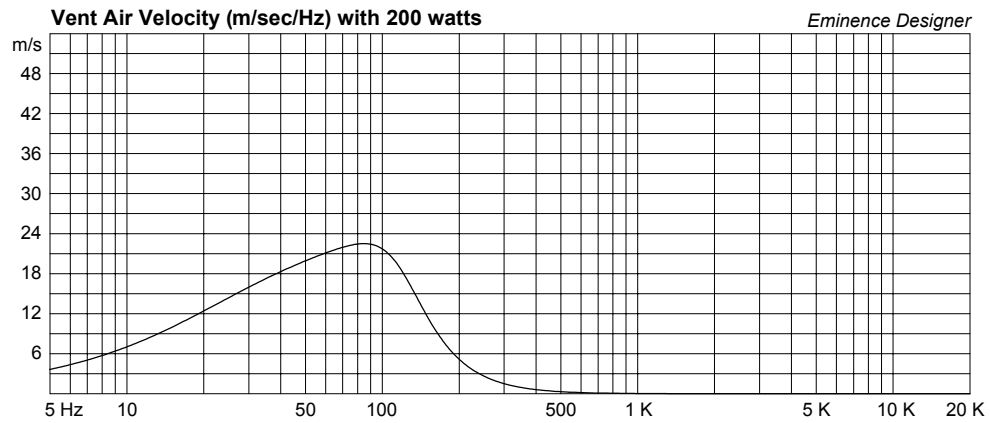
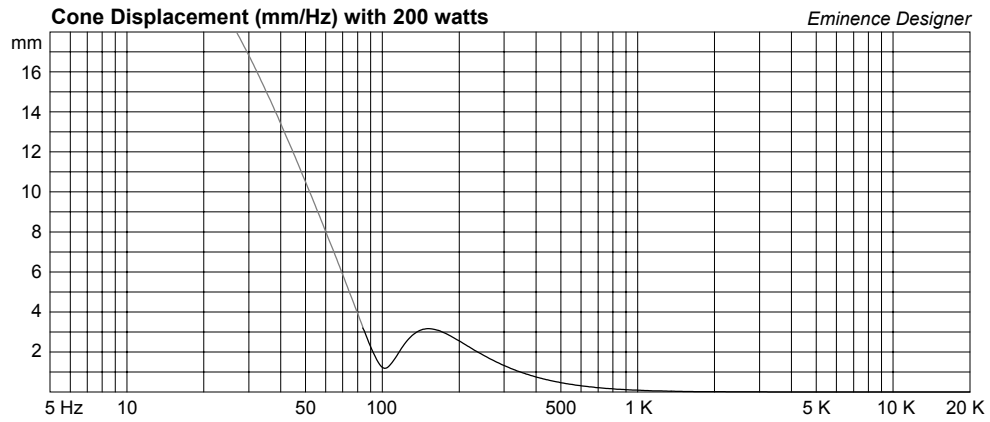
Eminence Designer



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

Eminence Designer





Beta8CX Medium Vented Cabinet

By Jerry McNutt, Eminence Speaker LLC
Displacement Limited to 100 Watts; F3 at 74 Hz.
Best used above 95 Hz. Compact two-way Sat.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 0.55 cu.ft

V(total) = 0.599 cu.ft

Fb = 70 Hz

QL = 7

F3 = 73.84 Hz

Fill = minimal

--Vents--

No. of Vents = 1

Vent shape = round

Vent ends = one flush

Dv = 3 in

Lv = 4.352 in

Driver Properties

--Description--

Name: Beta-8CX - LF

Type: Two-way coaxial driver

Company: Eminence Speaker LLC

Comment: Revised OCT 2008

Piston: 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. Kapton former.

Magnet: 38 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 65.52 Hz

Qms = 8.82

Vas = 0.706 cu.ft

Xmax = 0.126 in

Sd = 32.55 sq.in

Qes = 0.34

Re = 5.58 ohms

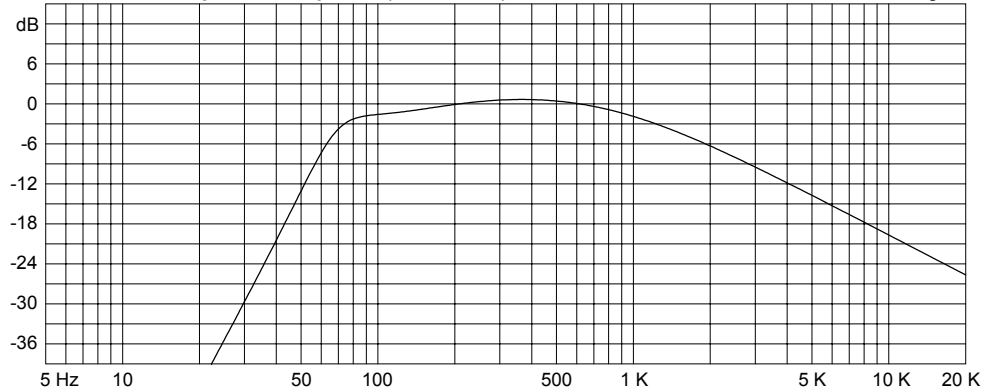
Le = 0.85 mH

Z = 8 ohms

Pe = 250 watts

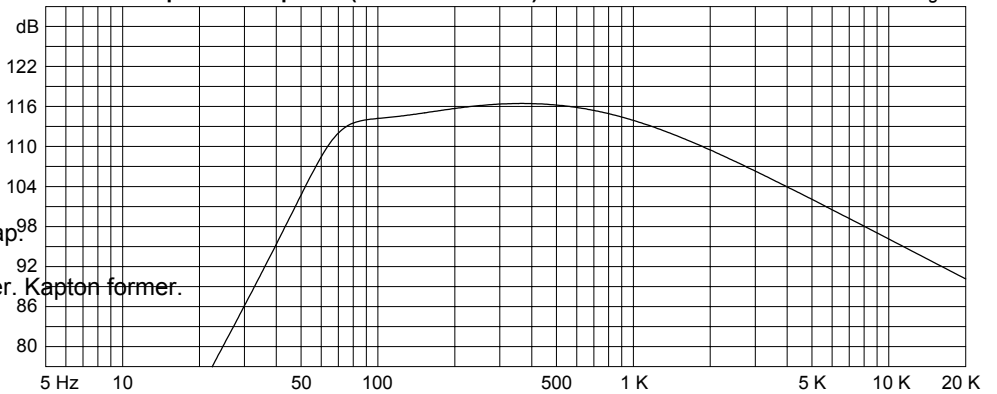
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



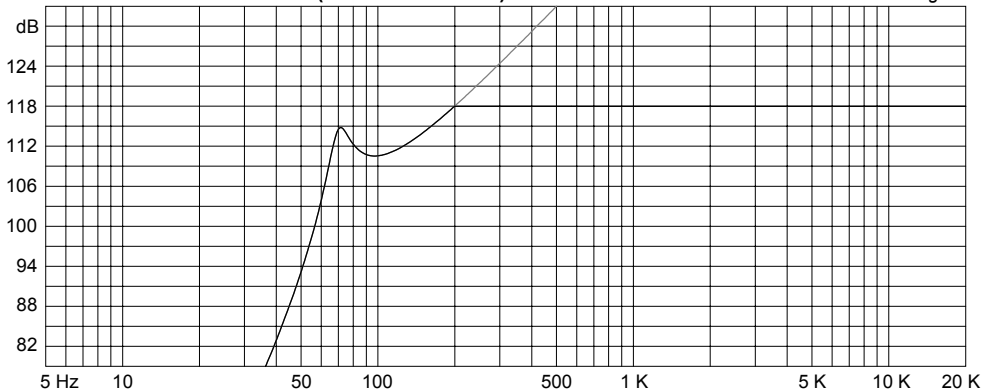
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 100 watts

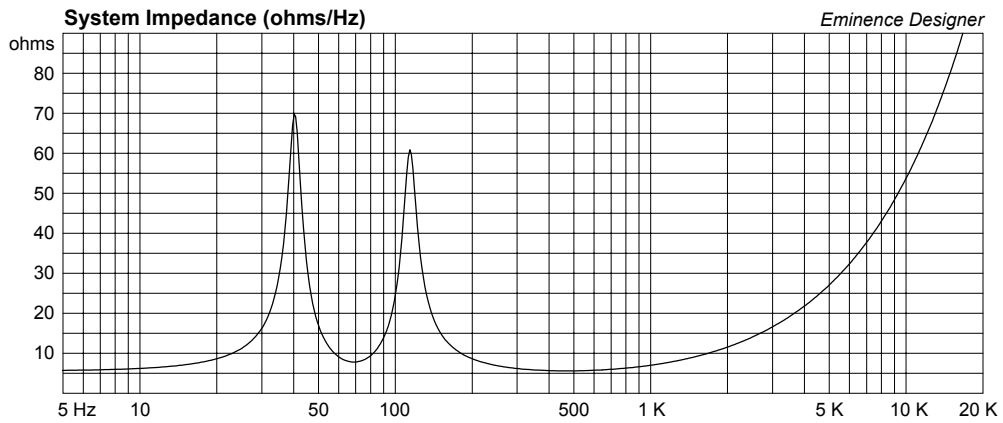
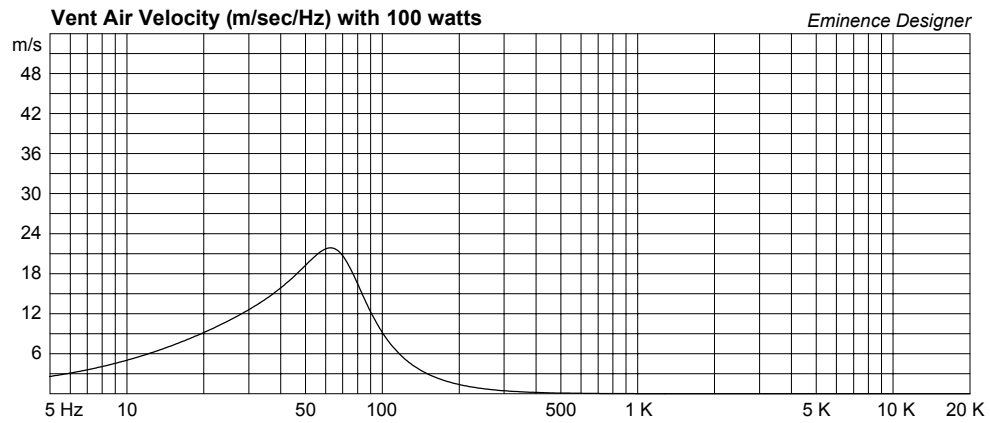
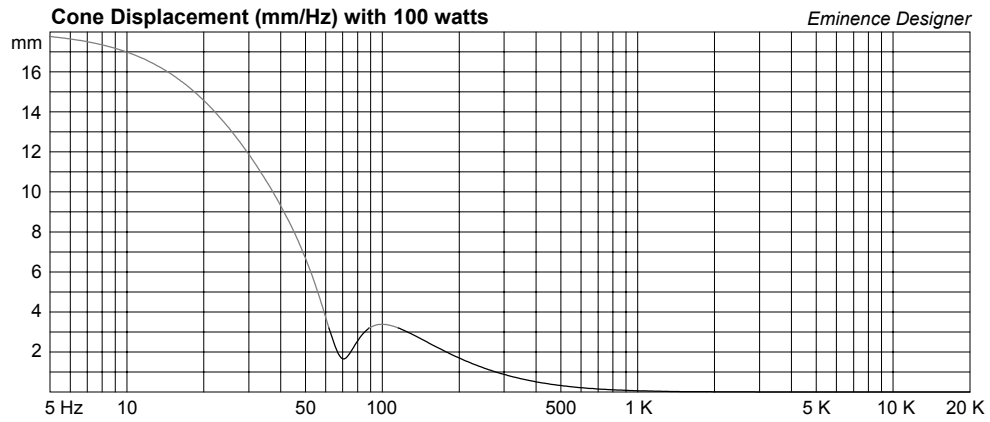
Eminence Designer



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

Eminence Designer





Beta8CX Sealed High Power Midrange Enclosure

By Jerry McNutt, Eminence Speaker LLC

Thermally Limited to 250 Watts; must use a steep high pass filter set to 200 hz or above.

Box Properties

--Description--

Name:

Type: Closed Box

Shape: Prism, square

--Box Parameters--

Vb = 0.0999 cu.ft

V(total) = 0.128 cu.ft

Qtc = 0.712

QL = 20

F3 = 172.7 Hz

Fill = heavy

Driver Properties

--Description--

Name: Beta-8CX - LF

Type: Two-way coaxial driver

Company: Eminence Speaker LLC

Comment: Revised Oct 2008

Piston: 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. Kapton former.

Magnet: 38 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 65.52 Hz

Qms = 8.82

Vas = 0.706 cu.ft

Xmax = 0.126 in

Sd = 32.55 sq.in

Qes = 0.34

Re = 5.58 ohms

Le = 0.85 mH

Z = 8 ohms

Pe = 250 watts

