Specification

Nominal Basket Diameter	8”, 203.2mm
Nominal Impedance*	8 ohms
Power Rating**	
Watts	225W
Music Program	450W
Resonance	65Hz
Usable Frequency Range***	78Hz-4.5kHz
Sensitivity	95.1
Magnet Weight	34 oz
Gap Height	0.312”, 7.92mm
Voice Coil Diameter	2”, 50.8mm

Thiele & Small Parameters

Resonant Frequency (fs)	65Hz
DC Resistance (Re)	5.99
Coil Inductance (Le)	0.49mH
Mechanical Q (Qms)	4.95
Electromagnetic Q (Qes)	0.42
Total Q (Qts)	0.38
Compliance Equivalent Volume (Vas)	23.3 ltr/0.82 cu. ft.
Peak Diaphragm Displacement Volume (Vd)	63cc
Mechanical Compliance of Suspension (Cms)	0.37mm/N
BL Product (BL)	9.6 T-M
Diaphragm Mass inc. Airload (Mms)	16 grams
Efficiency Bandwidth Product (EBP)	156
Maximum Linear Excursion (Xmax)	3.0mm
Surface Area of Cone (Sd)	210.0cm^2
Maximum Mechanical Limit (Xlim)	7.4mm

Mounting Information

Recommended Enclosure Volume	
Sealed	5.7-9.9 ltr/0.2-0.35 cu. ft.
Vented	8.5-19 ltr/0.3-0.67 cu. ft.
Overall Diameter	8.24”, 209.2mm
Baffle Hole Diameter	7.13”, 181mm
Front Sealing Gasket	Fitted as Standard
Rear Sealing Gasket	Fitted as Standard
Mounting Holes Diameter	0.22”, 5.5mm
Mounting Holes B.C.D.	7.75”, 196.9mm
Depth	3.5”, 89mm
Net Weight	6.6 lbs, 3 kg
Shipping Weight	7.4 lbs, 3.4 kg

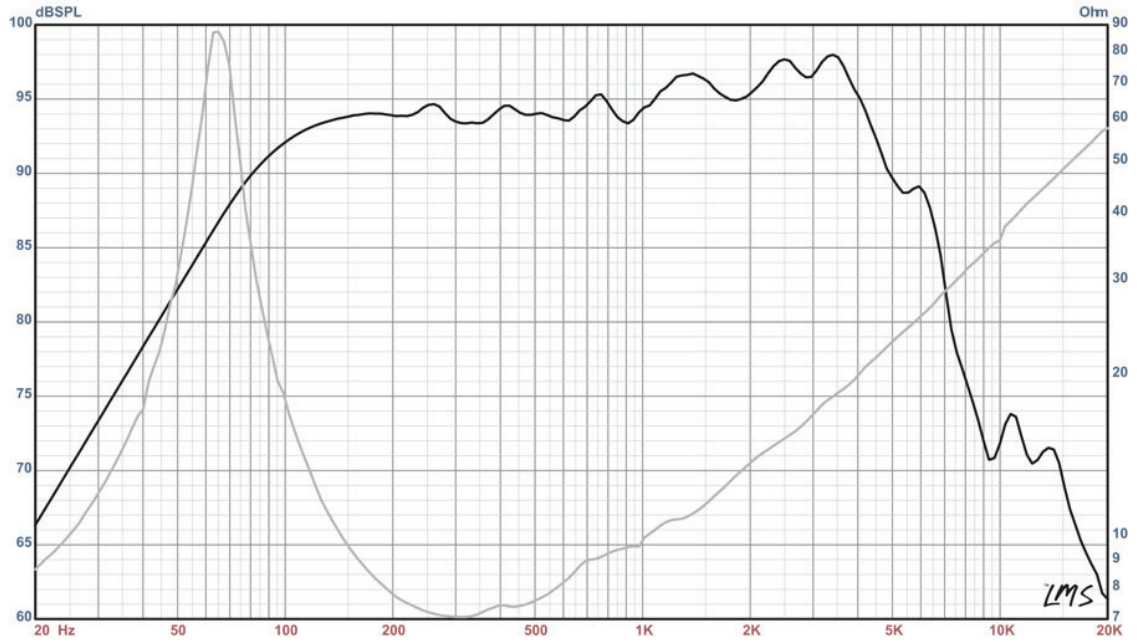
Materials of Construction

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 Paper

EMINENCE®
The Art and Science of Sound

BETA-8A American Standard Series

Recommended for professional audio mid-bass applications or as a woofer in vented enclosures.
Also suitable as a mid-bass speaker in sealed 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)

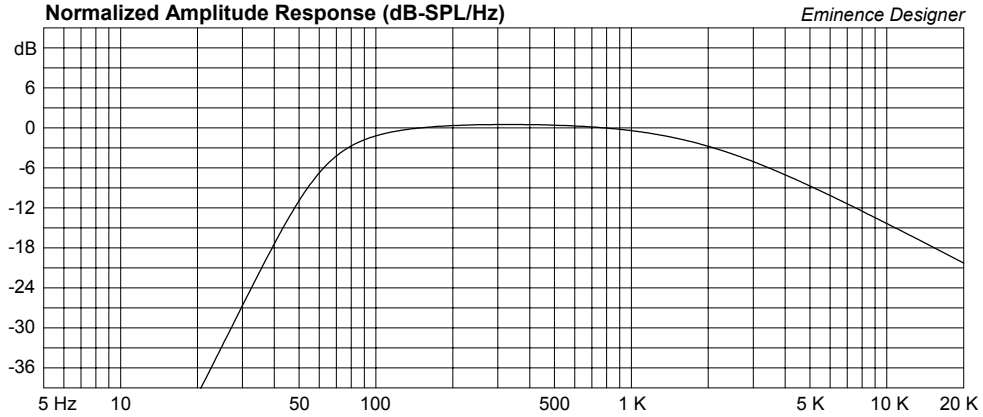
Beta8 Multi Purpose Med Vented Enclosure

By McJerry, Eminence Speaker LLC
Med Power Sat. use, 145 Watts Displacement Limit, use 150 Hz and up.
Low Power Semi-Full Range use, 75 Watt Displacement Limit, use 70 Hz and up.

Box Properties

--Description--
Name:
Type: Vented Box
Shape: Prism, square (optimum)
--Box Parameters--
Vb = 0.573 cu.ft
V(total) = 0.625 cu.ft
Fb = 64.8 Hz
QL = 7
F3 = 77.6 Hz
Fill = minimal
--Vents--
No. of Vents = 1
Vent shape = round
Vent ends = one flush
Dv = 3 in
Lv = 5.231 in

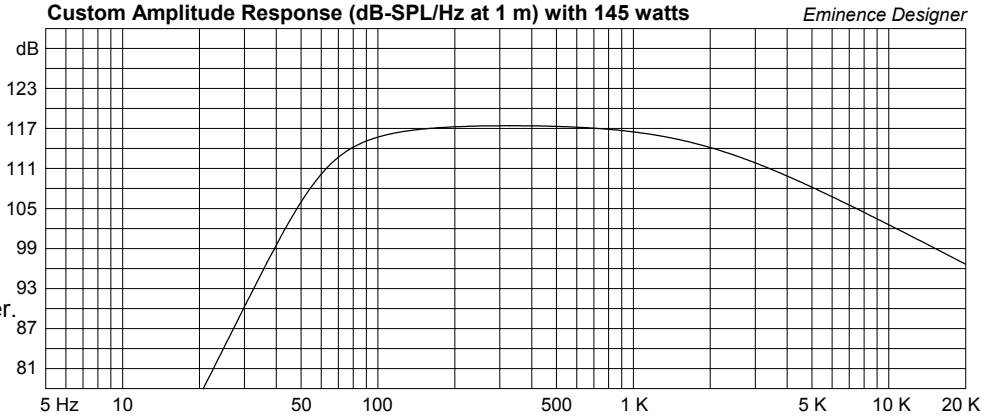
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*



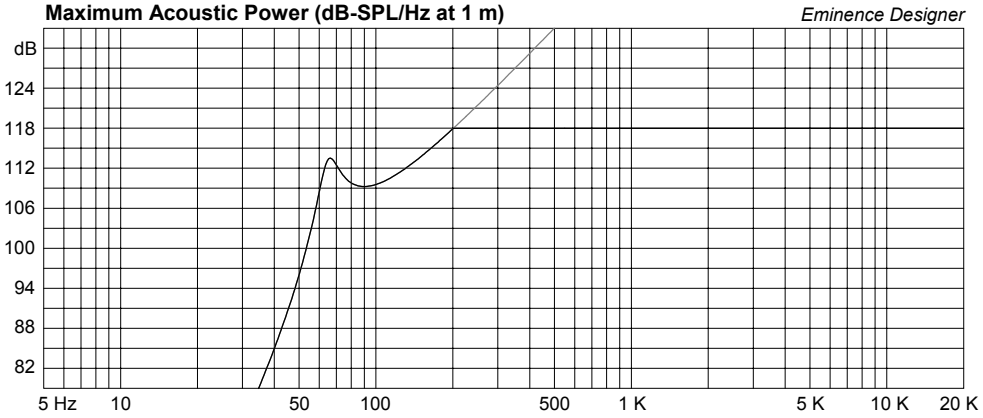
Driver Properties

--Description--
Name: Beta-8
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: Revised OCT 2005
Piston: 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: 34 oz ferrite magnet.
--Configuration--
No. of Drivers = 1
--Driver Parameters--
Fs = 65.1 Hz
Qms = 5
Vas = 24.29 liters
Xmax = 3 mm
Sd = 210 sq.cm
Qes = 0.42
Re = 6 ohms
Le = 0.49 mH
Z = 8 ohms
Pe = 225 watts

Custom Amplitude Response (dB-SPL/Hz at 1 m) with 145 watts *Eminence Designer*

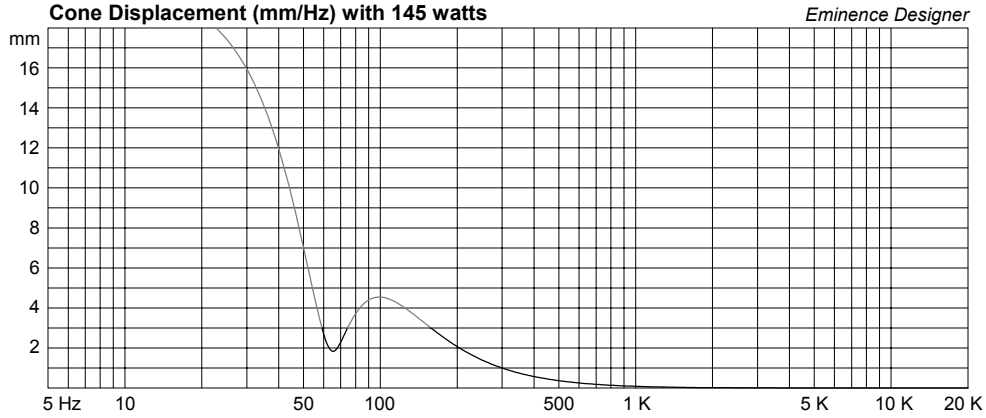


Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*



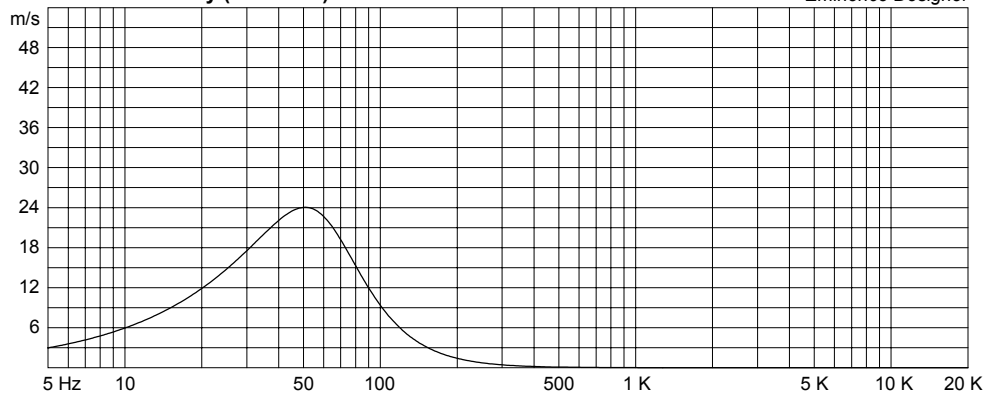
Cone Displacement (mm/Hz) with 145 watts

Eminence Designer



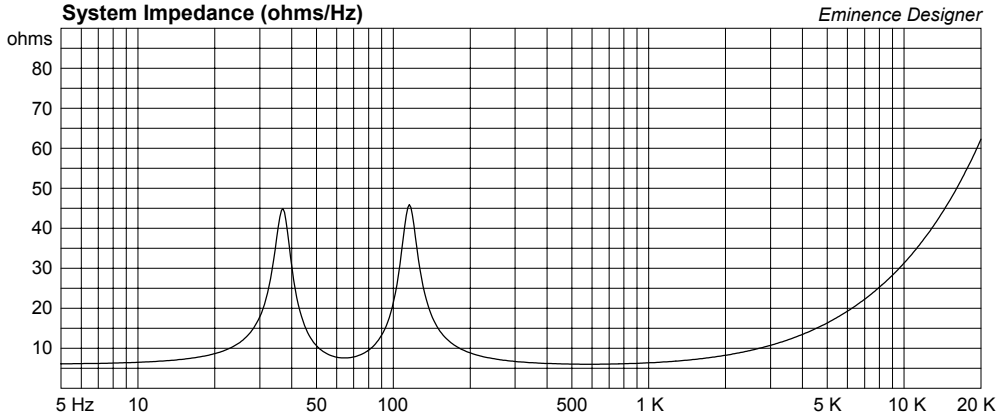
Vent Air Velocity (m/sec/Hz) with 145 watts

Eminence Designer



System Impedance (ohms/Hz)

Eminence Designer



Beta8 Sealed High Power Midrange Enclosure

By McJerry, Eminence Speaker LLC
Thermal Limit of 225 Watts; Use a steep High Pass filter set to 200 Hz or higher.

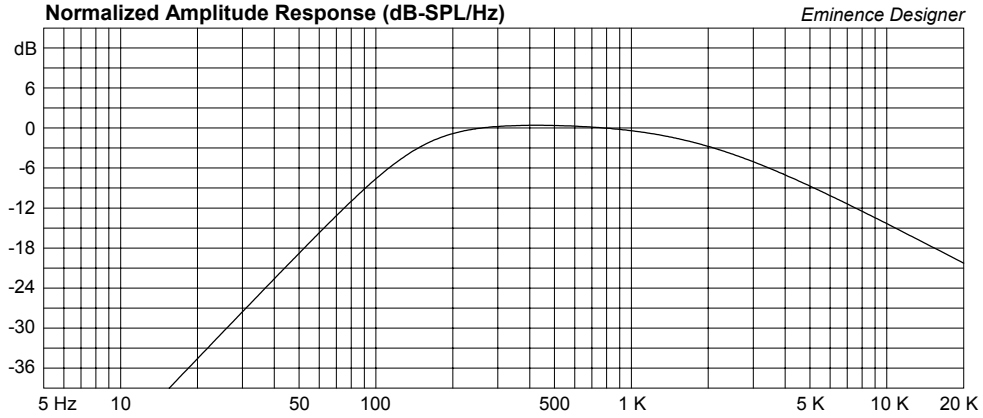
Box Properties

--Description--
Name:
Type: Closed Box
Shape: Prism, square
--Box Parameters--
Vb = 0.177 cu.ft
V(total) = 0.204 cu.ft
Qtc = 0.703
QL = 20
F3 = 146.2 Hz
Fill = heavy

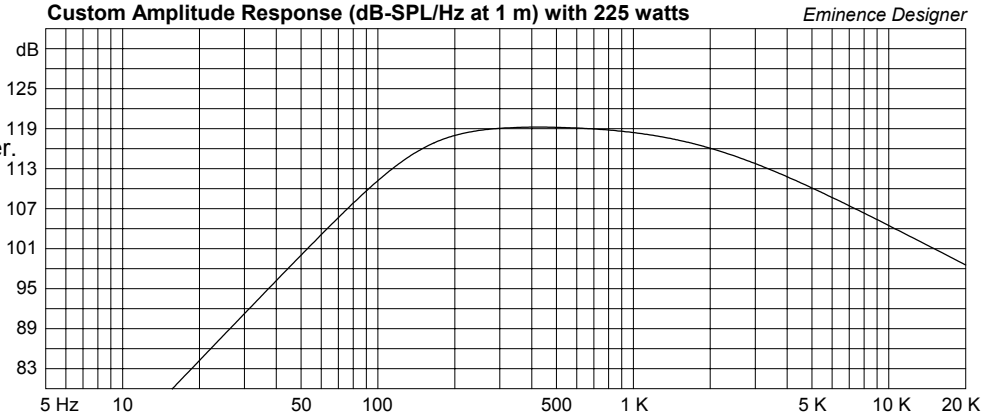
Driver Properties

--Description--
Name: Beta-8
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: Revised OCT 2005
Piston: 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: 34 oz ferrite magnet.
--Configuration--
No. of Drivers = 1
--Driver Parameters--
Fs = 65.1 Hz
Qms = 5
Vas = 24.29 liters
Xmax = 3 mm
Sd = 210 sq.cm
Qes = 0.42
Re = 6 ohms
Le = 0.49 mH
Z = 8 ohms
Pe = 225 watts

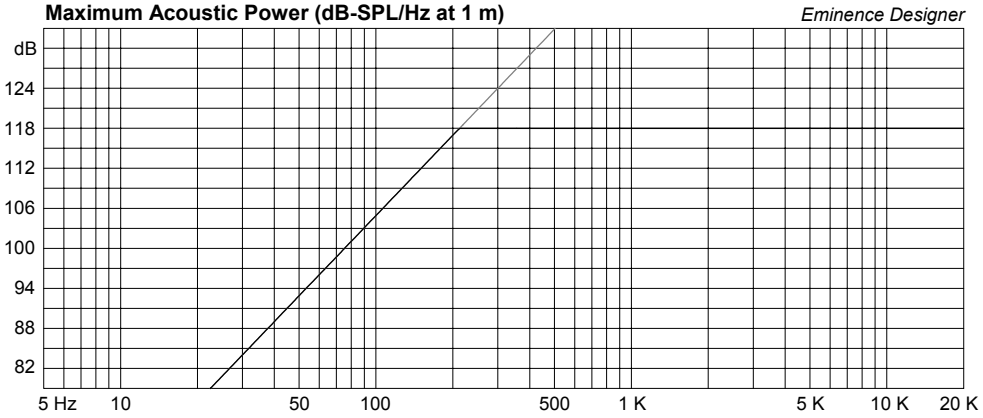
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 225 watts *Eminence Designer*

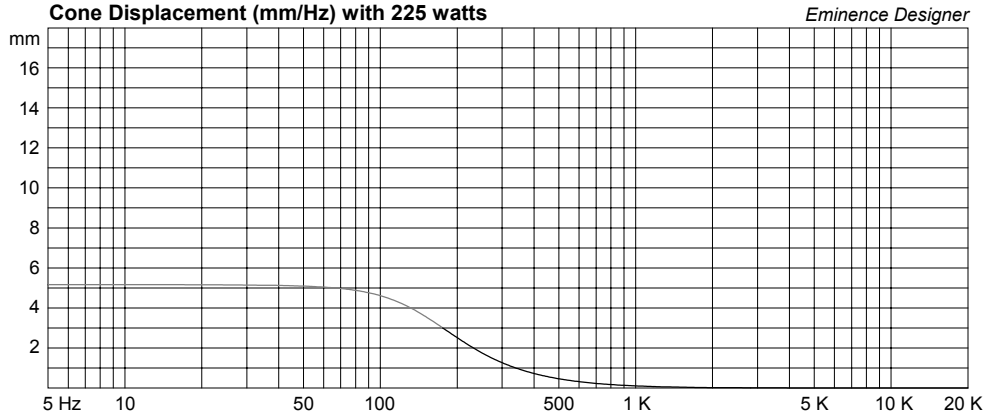


Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*



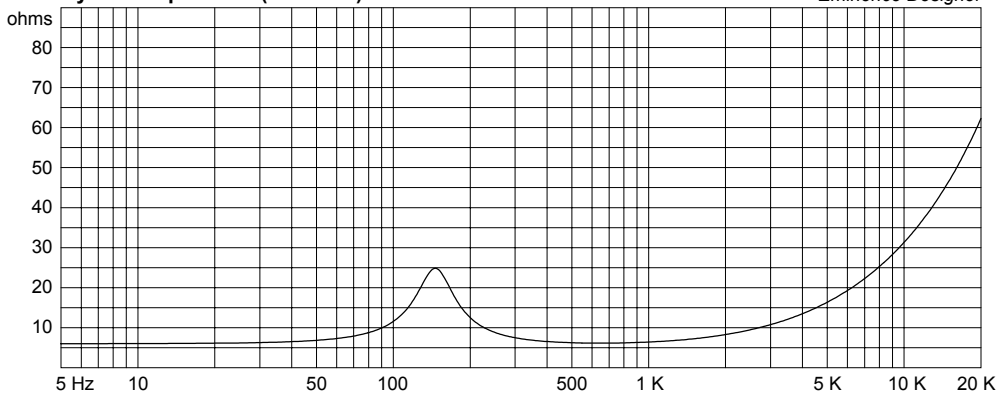
Cone Displacement (mm/Hz) with 225 watts

Eminence Designer



System Impedance (ohms/Hz)

Eminence Designer



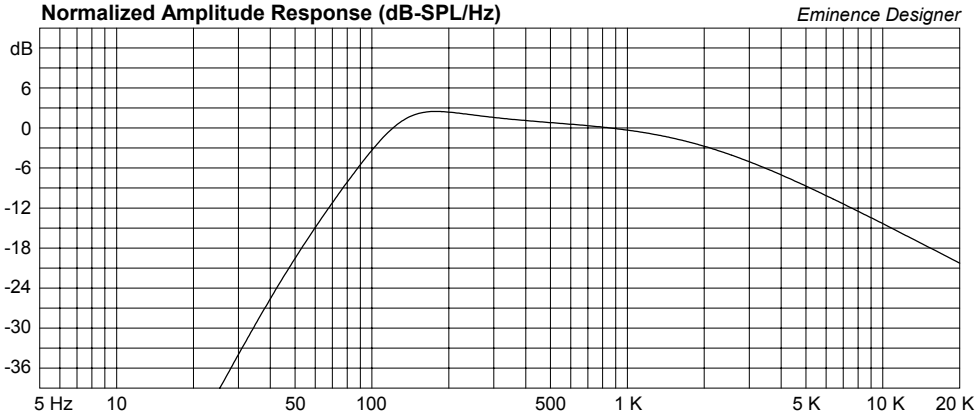
Beta8 Small Vented Mid Range Enclosure

By McJerry, Eminence Speaker LLC
Displacement Limited to 150 Watts; use a steep High Pass filter set to 130 Hz or higher.

Box Properties

--Description--
Name:
Type: Vented Box
Shape: Prism, square (optimum)
--Box Parameters--
Vb = 0.28 cu.ft
V(total) = 0.33 cu.ft
Fb = 95 Hz
QL = 7
F3 = 101.6 Hz
Fill = minimal
--Vents--
No. of Vents = 1
Vent shape = round
Vent ends = one flush
Dv = 3 in
Lv = 4.841 in

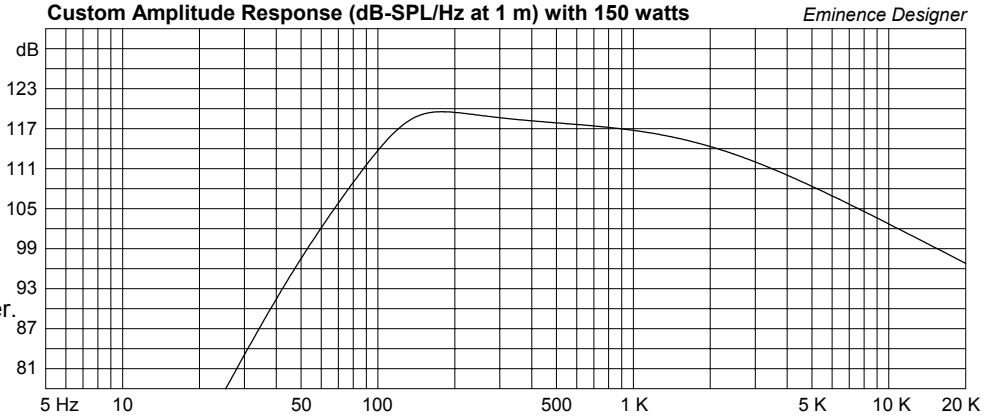
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*



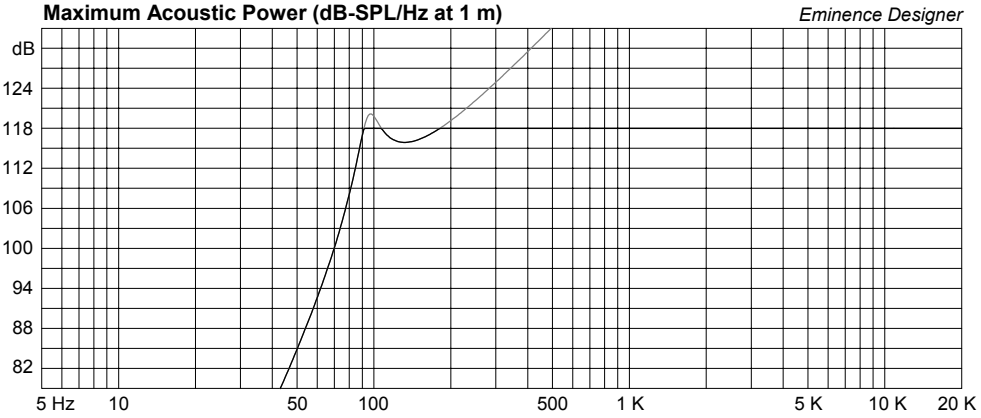
Driver Properties

--Description--
Name: Beta-8
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: Revised OCT 2005
Piston: 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: 34 oz ferrite magnet.
--Configuration--
No. of Drivers = 1
--Driver Parameters--
Fs = 65.1 Hz
Qms = 5
Vas = 24.29 liters
Xmax = 3 mm
Sd = 210 sq.cm
Qes = 0.42
Re = 6 ohms
Le = 0.49 mH
Z = 8 ohms
Pe = 225 watts

Custom Amplitude Response (dB-SPL/Hz at 1 m) with 150 watts *Eminence Designer*

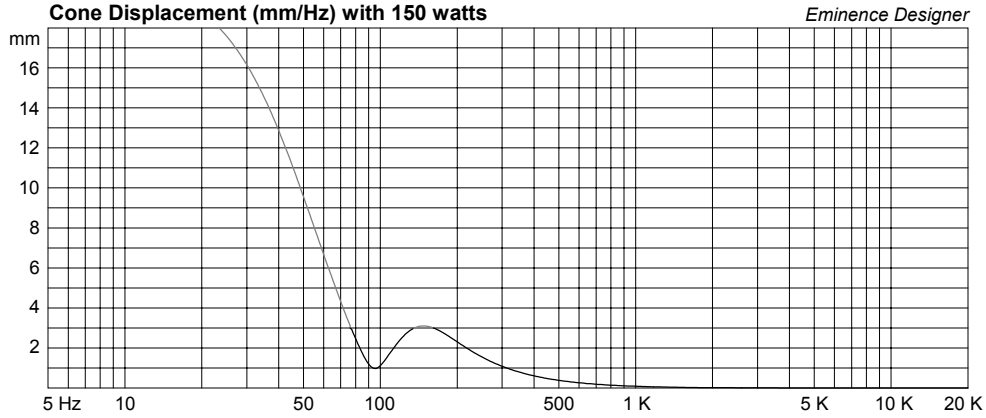


Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*



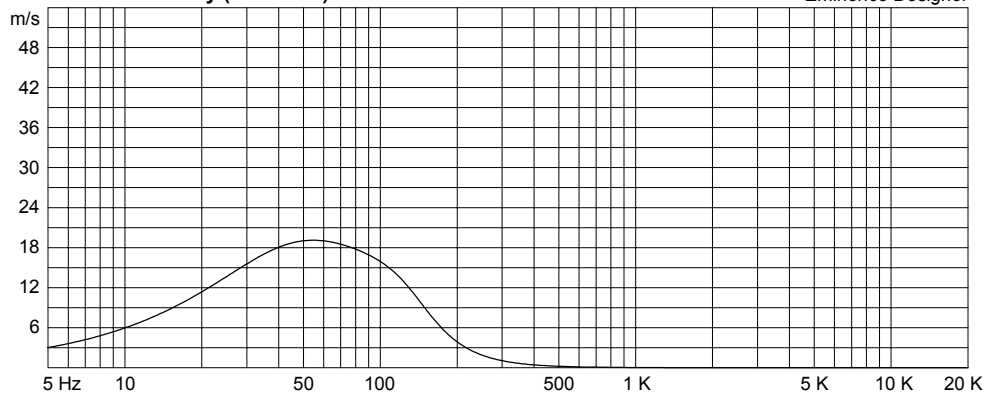
Cone Displacement (mm/Hz) with 150 watts

Eminence Designer



Vent Air Velocity (m/sec/Hz) with 150 watts

Eminence Designer



System Impedance (ohms/Hz)

Eminence Designer