Specification

Nominal Basket Diameter	8”, 203.2mm
Nominal Impedance*	8 ohms
Power Rating**	
Watts	200W
Music Program	N/A
Resonance	57Hz
Usable Frequency Range***	60Hz-3.5kHz
Sensitivity	90.8
Magnet Weight	38 oz
Gap Height	0.312”, 7.92mm
Voice Coil Diameter	2”, 50.8mm

Thiele & Small Parameters

Resonant Frequency (fs)	57Hz
DC Resistance (Re)	5.4
Coil Inductance (Le)	0.62mH
Mechanical Q (Qms)	9.8
Electromagnetic Q (Qes)	0.40
Total Q (Qts)	0.39
Compliance Equivalent Volume (Vas)	21.5 ltr/0.76 cu. ft.
Peak Diaphragm Displacement Volume (Vd)	64cc
Mechanical Compliance of Suspension (Cms)	0.33mm/N
BL Product (BL)	10.7 T-M
Diaphragm Mass inc. Airload (Mms)	24 grams
Efficiency Bandwidth Product (EBP)	143
Maximum Linear Excursion (Xmax)	3.0mm
Surface Area of Cone (Sd)	214.1cm^2
Maximum Mechanical Limit (Xlim)	6.0mm

Mounting Information

Recommended Enclosure Volume	
Sealed	11-14 ltr/0.38-0.48 cu. ft.
Vented	11-31 ltr/0.4-1.1 cu. ft.
Overall Diameter	8.24”, 209.2mm
Baffle Hole Diameter	7.13”, 181mm
Front Sealing Gasket	Fitted as Standard
Rear Sealing Gasket	N/A
Mounting Holes Diameter	0.22”, 5.5mm
Mounting Holes B.C.D.	7.75”, 196.9mm
Depth	3.6”, 92mm
Net Weight	6.7 lbs, 3 kg
Shipping Weight	7.4 lbs, 3.4 kg

Materials of Construction

Coil Construction	Copper
Coil	Polyimide
Magnet Composition	Ferrite
Core Details	Tapered Coax
Basket Materials	Pressed Steel
Cone Composition	Polypropylene
Cone Edge Composition	Rubber
Dust Cap Composition	Zurette

EMINENCE®

The Art and Science of Sound

ACOUSTINATOR™ CX2008

Recommended for full-range, acoustic Instruments in both sealed and vented enclosures. Co-axial for extended HF.

* 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)

AcoustinatorCX2008, Small Vented Cabinet

By Jerry McNutt, Eminence Speaker LLC
100 Watt Displacement Limit; F3 of 76 Hz, fast roll-off.

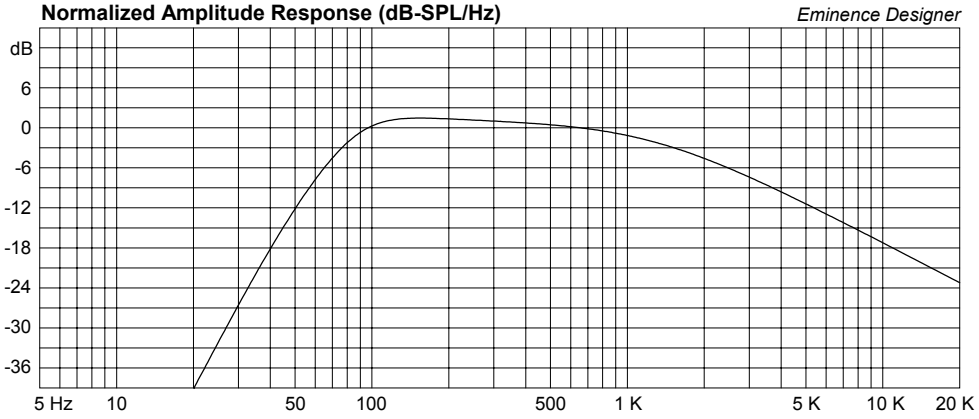
Box Properties

--Description--
Name:
Type: Vented Box
Shape: Prism, square
--Box Parameters--
Vb = 0.35 cu.ft
V(total) = 0.425 cu.ft
Fb = 70 Hz
QL = 7
F3 = 76.14 Hz
Fill = minimal
--Vents--
No. of Vents = 1
Vent shape = round
Vent ends = one flush
Dv = 2.75 in
Lv = 6.958 in

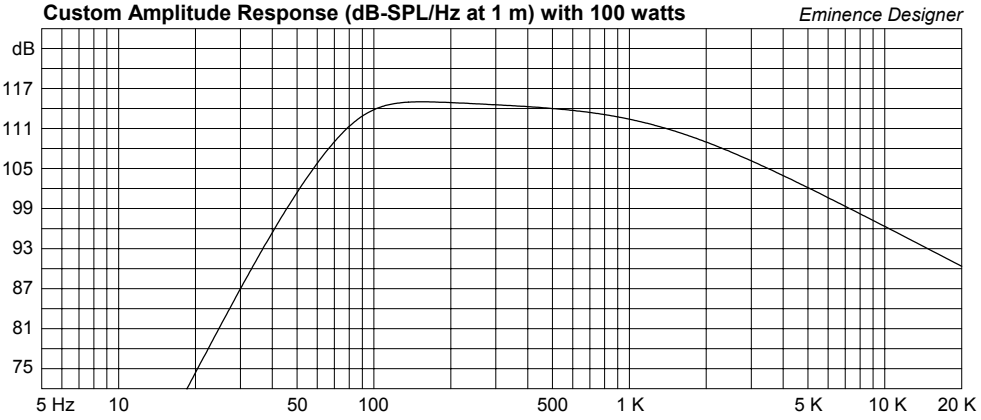
Driver Properties

--Description--
Name:
Type: Standard one-way driver
--Configuration--
No. of Drivers = 1
--Driver Parameters--
Fs = 56.8 Hz
Qms = 9.8
Vas = 21.5 liters
Xmax = 3 mm
Sd = 214.1 sq.cm
Qes = 0.4
Re = 5.4 ohms
Le = 0.62 mH
Z = 8 ohms
Pe = 200 watts

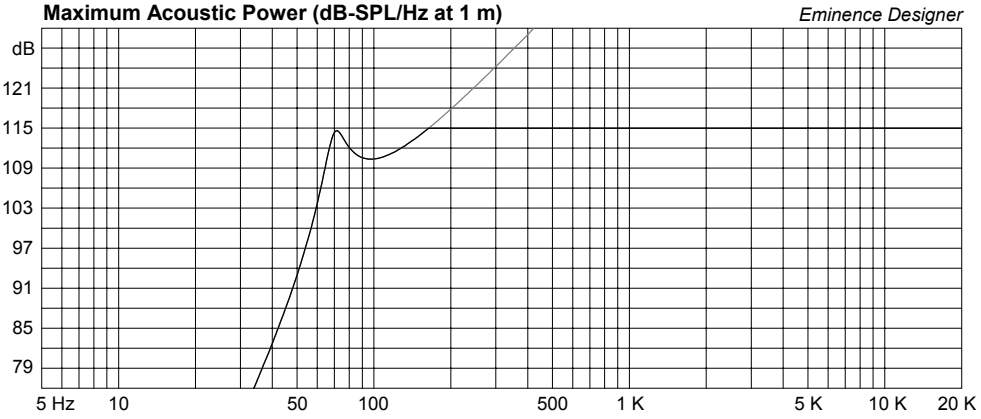
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*



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

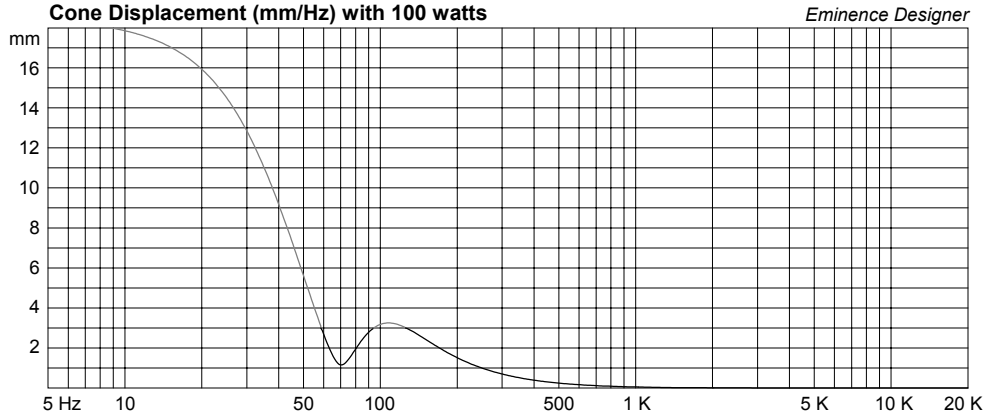


Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*



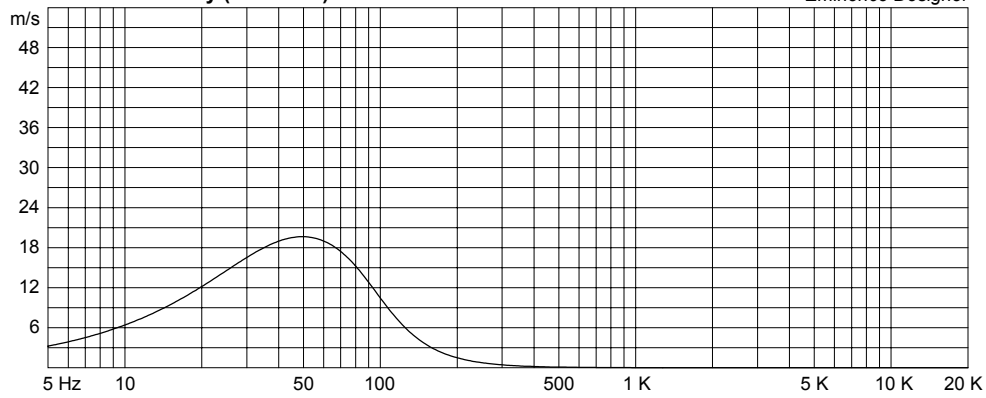
Cone Displacement (mm/Hz) with 100 watts

Eminence Designer



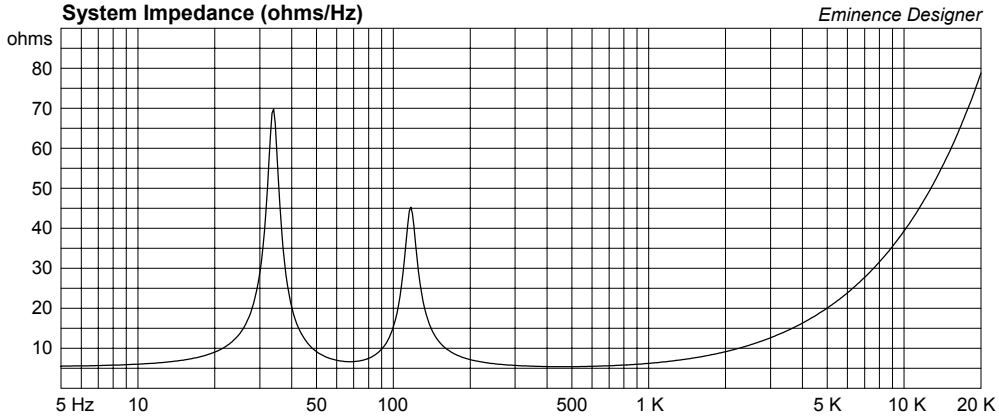
Vent Air Velocity (m/sec/Hz) with 100 watts

Eminence Designer



System Impedance (ohms/Hz)

Eminence Designer



AcoustinatorCX2008, Small Sealed Cabinet

By Jerry McNutt, Eminence Speaker LLC
200 Watt Thermal Limit; F3 of 123 Hz, slow roll-off. For low power use, bass boost can be used. For high power use, use a high pass filter set to 150 Hz or higher.

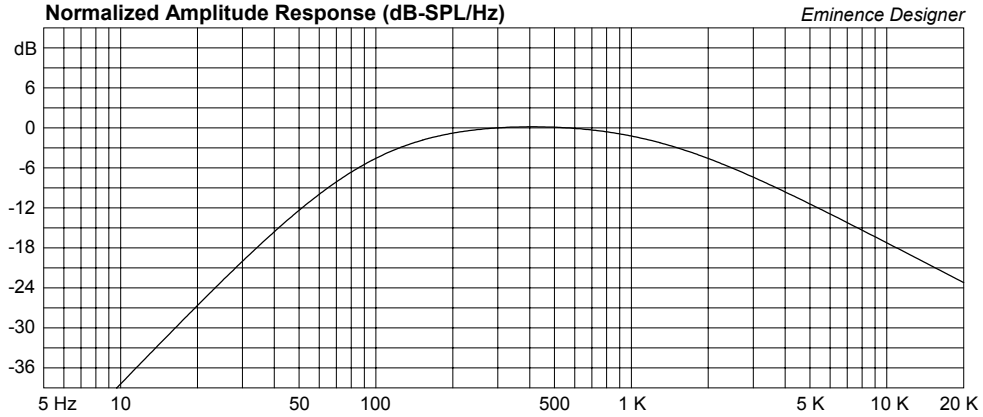
Box Properties

--Description--
Name:
Type: Closed Box
Shape: Prism, square
--Box Parameters--
Vb = 0.4 cu.ft
V(total) = 0.4 cu.ft
Qtc = 0.542
QL = 20
F3 = 123.4 Hz
Fill = heavy

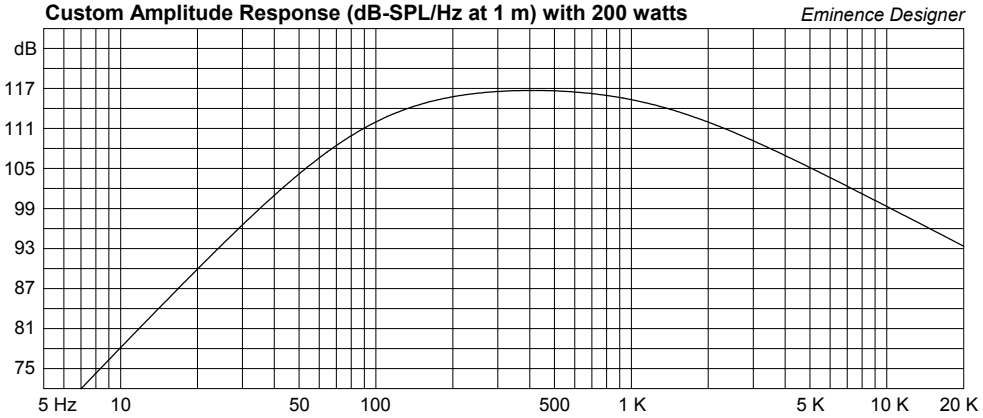
Driver Properties

--Description--
Name:
Type: Standard one-way driver
--Configuration--
No. of Drivers = 1
--Driver Parameters--
Fs = 56.8 Hz
Qms = 9.8
Vas = 21.5 liters
Xmax = 3 mm
Sd = 214.1 sq.cm
Qes = 0.4
Re = 5.4 ohms
Le = 0.62 mH
Z = 8 ohms
Pe = 200 watts

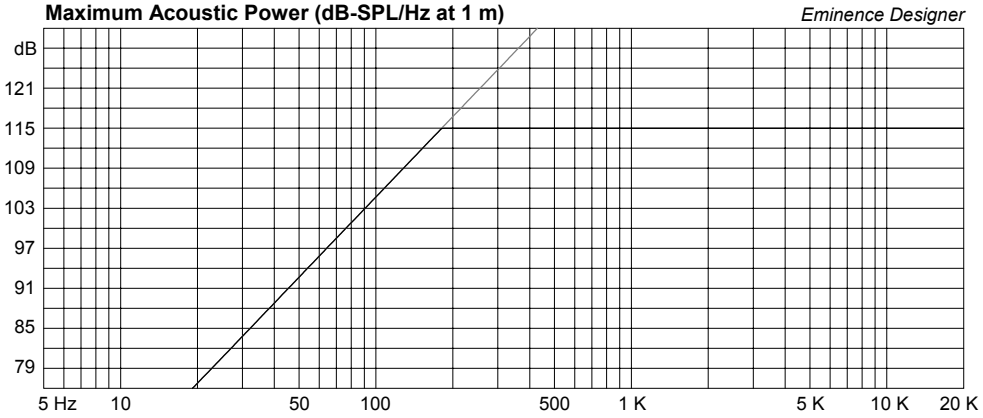
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*



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



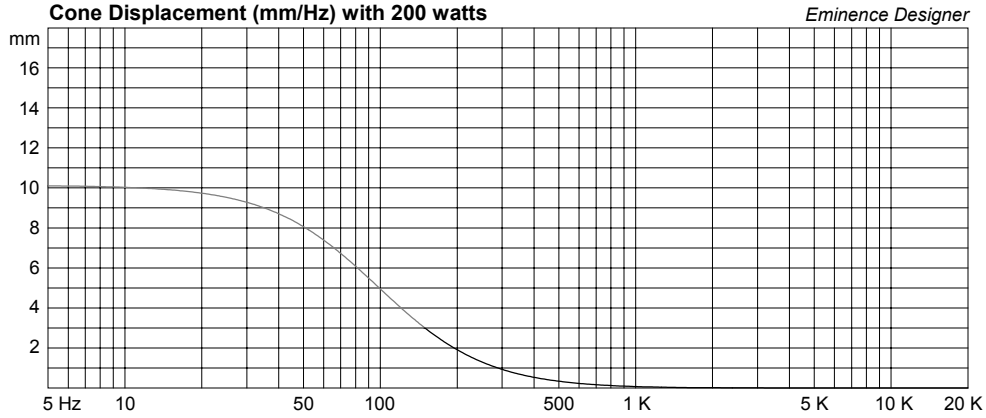
Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*



File: AcoustinatorCX2008Sealed.bb6

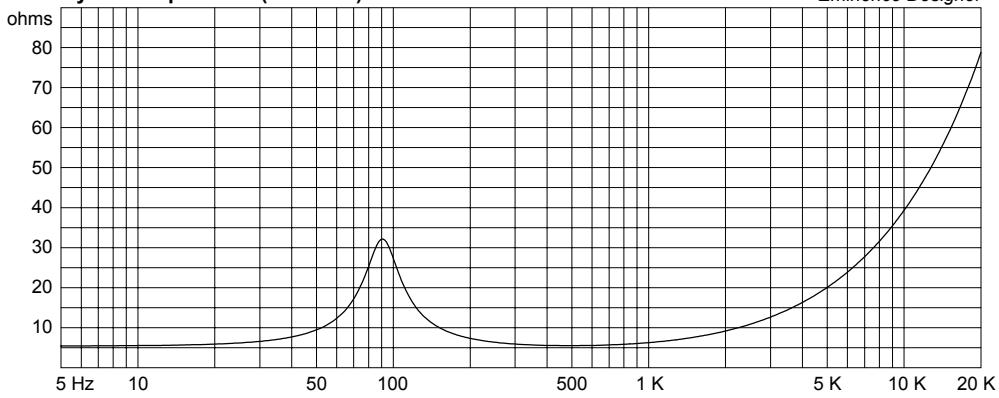
Cone Displacement (mm/Hz) with 200 watts

Eminence Designer



System Impedance (ohms/Hz)

Eminence Designer



AcoustinatorCX2008, Med Vented Cabinet

By Jerry McNutt, Eminence Speaker LLC
55 Watt Displacement Limit; F3 of 64 Hz, fast roll-off.

EMINENCE

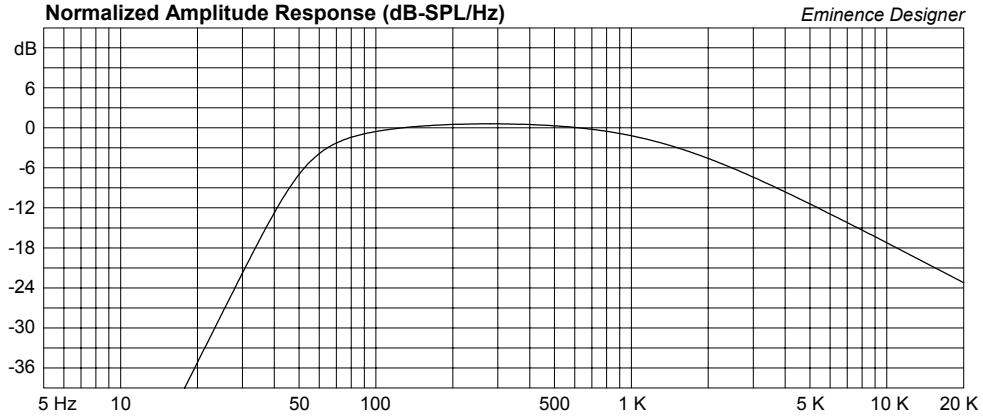
Box Properties

--Description--
Name:
Type: Vented Box
Shape: Prism, square
--Box Parameters--
Vb = 0.554 cu.ft
V(total) = 0.641 cu.ft
Fb = 55.84 Hz
QL = 7
F3 = 64.5 Hz
Fill = minimal
--Vents--
No. of Vents = 1
Vent shape = round
Vent ends = one flush
Dv = 3 in
Lv = 8.476 in

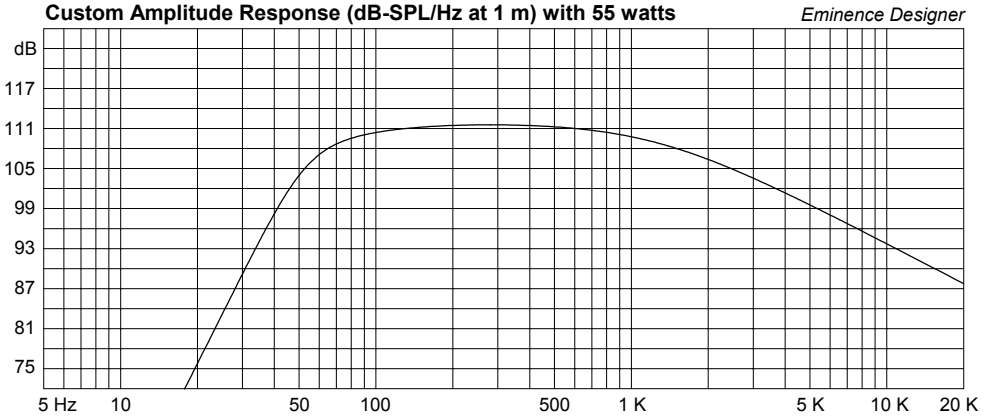
Driver Properties

--Description--
Name:
Type: Standard one-way driver
--Configuration--
No. of Drivers = 1
--Driver Parameters--
Fs = 56.8 Hz
Qms = 9.8
Vas = 21.5 liters
Xmax = 3 mm
Sd = 214.1 sq.cm
Qes = 0.4
Re = 5.4 ohms
Le = 0.62 mH
Z = 8 ohms
Pe = 200 watts

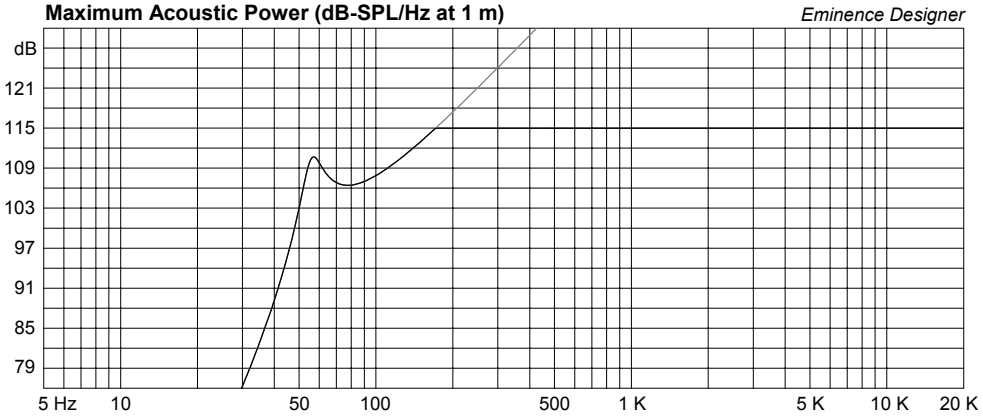
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 55 watts *Eminence Designer*

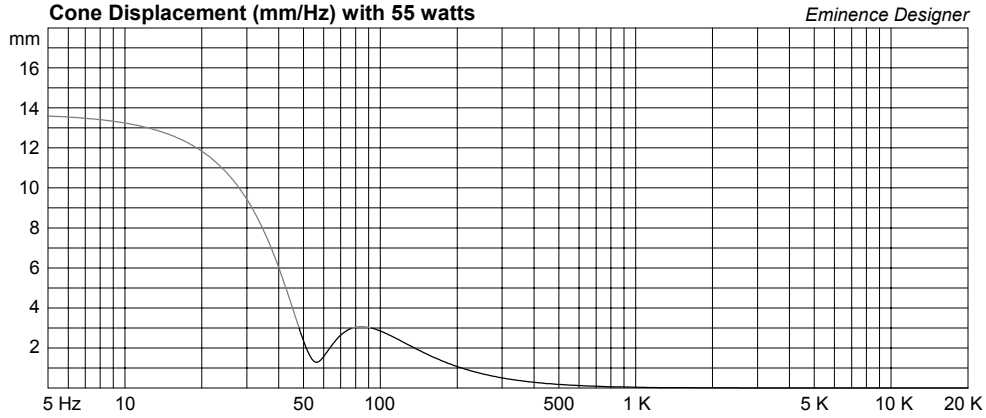


Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*



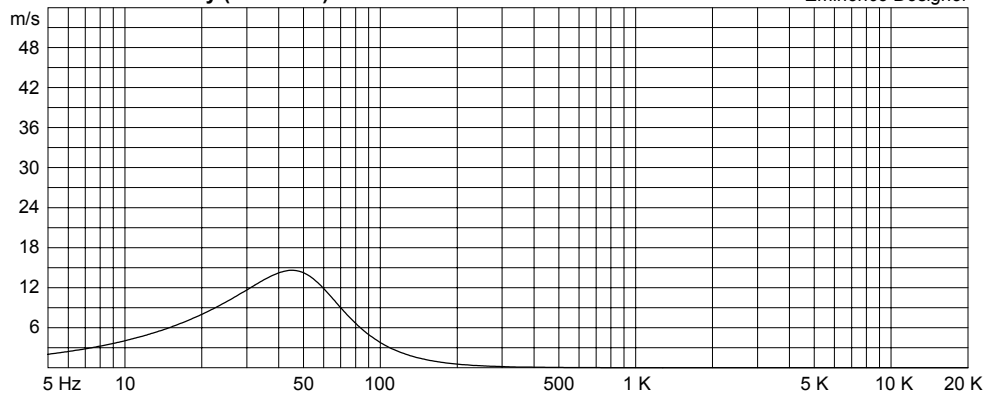
Cone Displacement (mm/Hz) with 55 watts

Eminence Designer



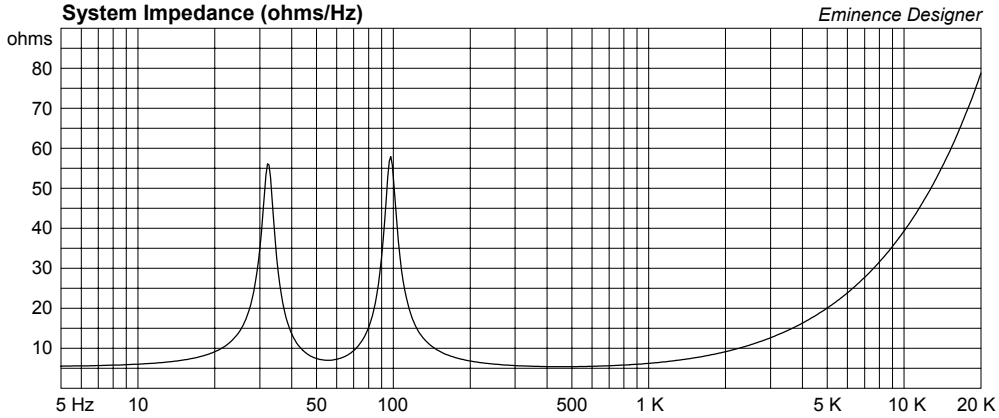
Vent Air Velocity (m/sec/Hz) with 55 watts

Eminence Designer



System Impedance (ohms/Hz)

Eminence Designer



AcoustinatorCX2008, Larger Vented Cabinet

By Jerry McNutt, Eminence Speaker LLC
40 Watts Displacement Limit; F3 of 52 Hz, slow roll-off.

EMINENCE

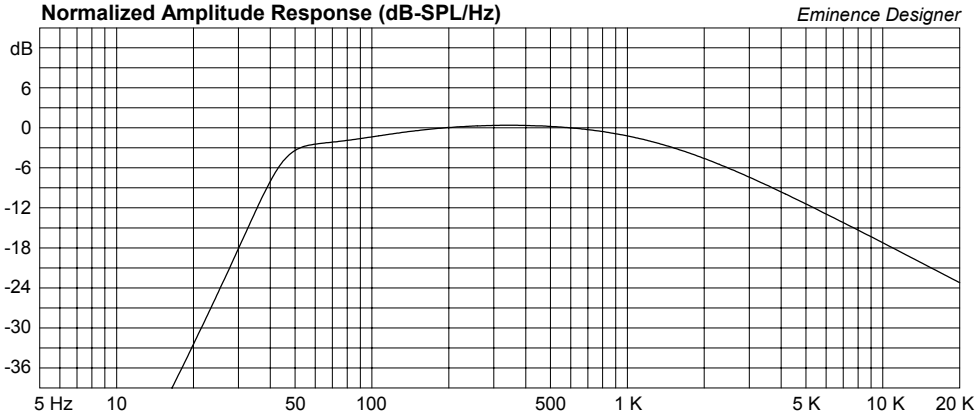
Box Properties

--Description--
Name:
Type: Vented Box
Shape: Prism, square
--Box Parameters--
Vb = 0.937 cu.ft
V(total) = 1.014 cu.ft
Fb = 48.03 Hz
QL = 7
F3 = 52.26 Hz
Fill = minimal
--Vents--
No. of Vents = 1
Vent shape = round
Vent ends = one flush
Dv = 3 in
Lv = 6.164 in

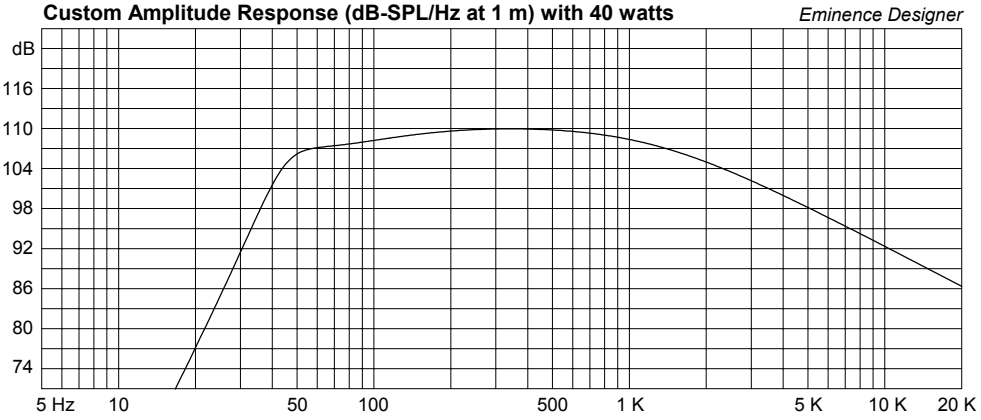
Driver Properties

--Description--
Name:
Type: Standard one-way driver
--Configuration--
No. of Drivers = 1
--Driver Parameters--
Fs = 56.8 Hz
Qms = 9.8
Vas = 21.5 liters
Xmax = 3 mm
Sd = 214.1 sq.cm
Qes = 0.4
Re = 5.4 ohms
Le = 0.62 mH
Z = 8 ohms
Pe = 200 watts

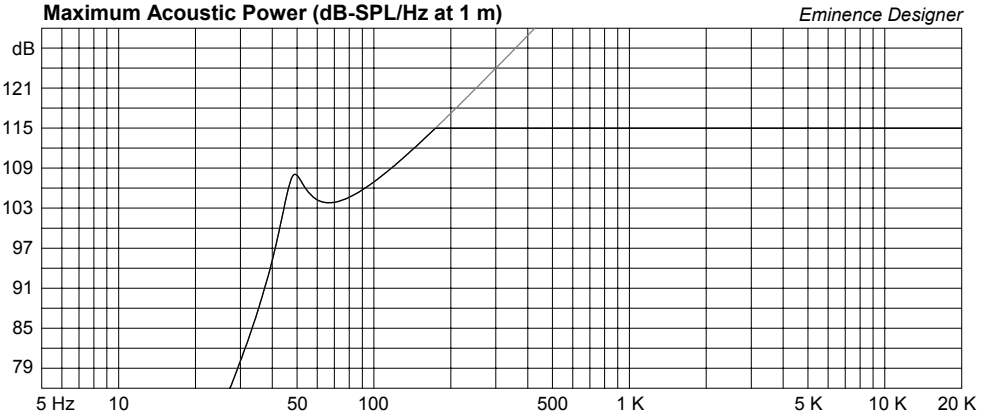
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 40 watts *Eminence Designer*

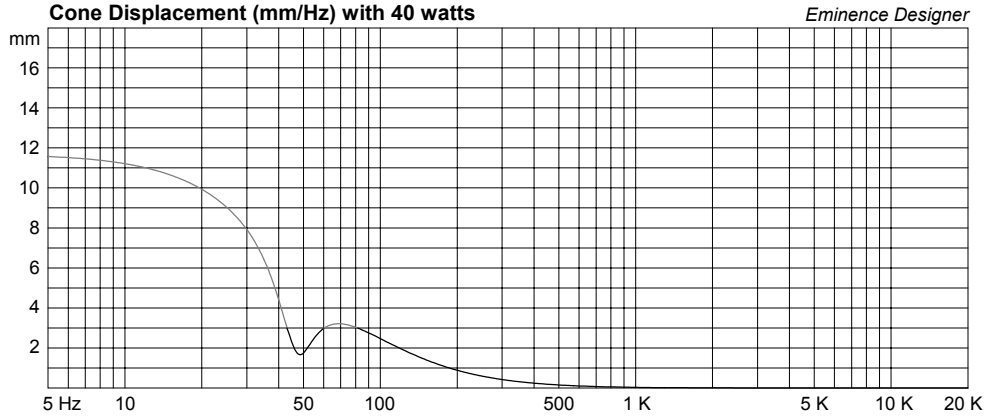


Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*



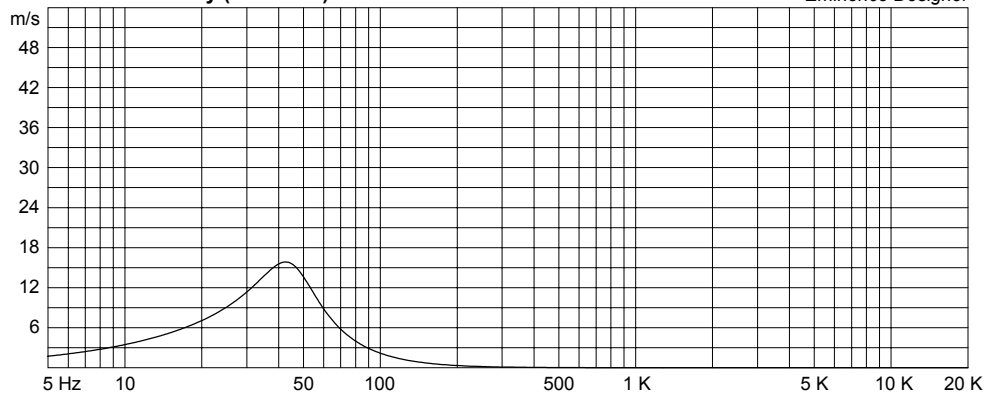
Cone Displacement (mm/Hz) with 40 watts

Eminence Designer



Vent Air Velocity (m/sec/Hz) with 40 watts

Eminence Designer



System Impedance (ohms/Hz)

Eminence Designer