

Specification

Nominal Basket Diameter	15", 381mm
Nominal Impedance*	8 ohms
Power Rating**	
Watts	800W
Music Program	1600W
Resonance	33Hz
Usable Frequency Range***	51Hz-1.7kHz
Sensitivity	97.3
Magnet Weight	109 oz
Gap Height	0.375", 9.53mm
Voice Coil Diameter	4", 101.6mm

Thiele & Small Parameters

Resonant Frequency (fs)	33Hz
DC Resistance (Re)	5.28
Coil Inductance (Le)	1.04mH
Mechanical Q (Qms)	5.69
Electromagnetic Q (Qes)	0.33
Total Q (Qts)	0.32
Compliance Equivalent Volume (Vas)	258.5 ltr/9.1 cu. ft.
Peak Diaphragm Displacement Volume (Vd)	411cc
Mechanical Compliance of Suspension (Cms)	0.25mm/N
BL Product (BL)	17.5 T-M
Diaphragm Mass inc. Airlod (Mms)	94 grams
Efficiency Bandwidth Product (EBP)	99
Maximum Linear Excursion (Xmax)	4.8mm
Surface Area of Cone (Sd)	856.3cm ²
Maximum Mechanical Limit (Xlim)	12.2mm

Mounting Information

Recommended Enclosure Volume	
Sealed	N/A
Vented	57-108 ltr/2-3.8 cu. ft.
Overall Diameter	15.21", 386.4mm
Baffle Hole Diameter	14.0", 355.6mm
Front Sealing Gasket	Fitted as Standard
Rear Sealing Gasket	Fitted as Standard
Mounting Holes Diameter	0.28", 7.1mm
Mounting Holes B.C.D.	14.56", 369.9mm
Depth	6.35", 161mm
Net Weight	22.7 lbs, 10.3 kg
Shipping Weight	25.2 lbs, 11.4 kg

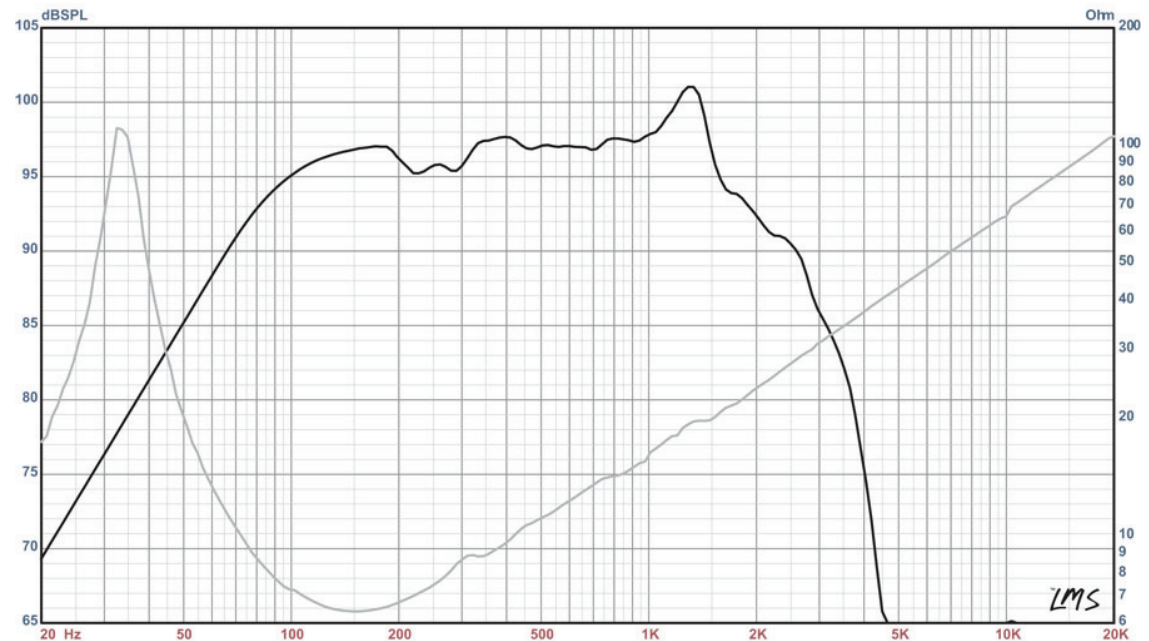
Materials of Construction

Coil Construction	Copper
Coil	Polymide
Magnet Composition	Ferrite
Core Details	Vented And Extended
Basket Materials	Die-Cast Aluminum
Cone Composition	Paper
Cone Edge Composition	Cloth
Dust Cap Composition	Solid Composition Paper



OMEGA PRO-15A Professional Series

Recommended for professional audio as a woofer in vented enclosures. Also good for horn loading and scoops.



* 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. I.e: 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)

OmegaPro15A Larger Woofer Cabinet

By McJerry, Eminence Speaker LLC

Displacement Limited to 250 Watts; F3 of 51 Hz. Good for full range PA if used with a steep 40 Hz high pass filter.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 3.279 cu.ft

V(total) = 3.551 cu.ft

Fb = 48 Hz

QL = 7

F3 = 50.75 Hz

Fill = minimal

--Vents--

No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 3 in

Lv = 6.248 in

Driver Properties

--Description--

Name: Omega Pro-15

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Ribbed paper cone.

Suspension: Rolled cone edge surround.

Dust Cap: Solid paper dust cap.

Frame: Diecast aluminum basket.

Voice Coil: 4 inch (101.6 mm) copper.

Magnet: 109 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 32.96 Hz

Qms = 5.69

Vas = 258.5 liters

Xmax = 4.8 mm

Sd = 856.3 sq.cm

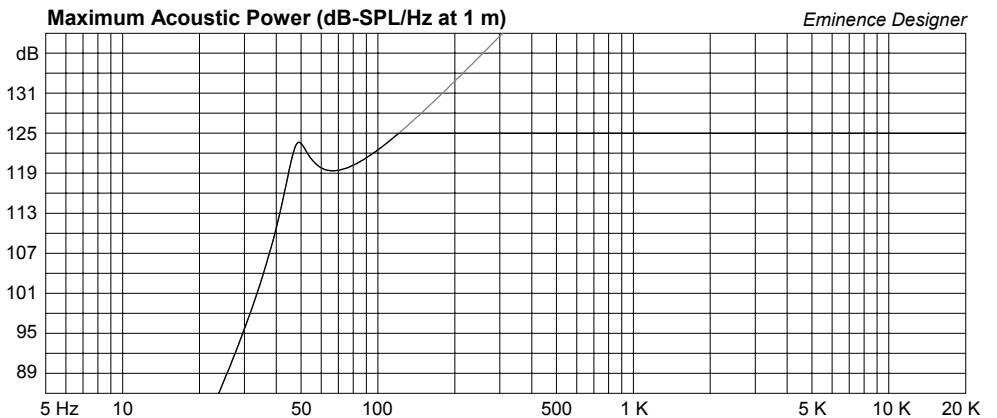
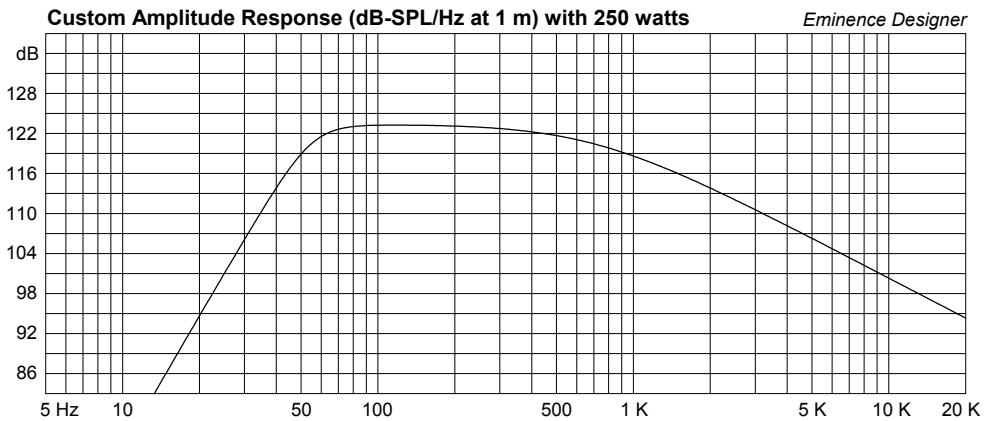
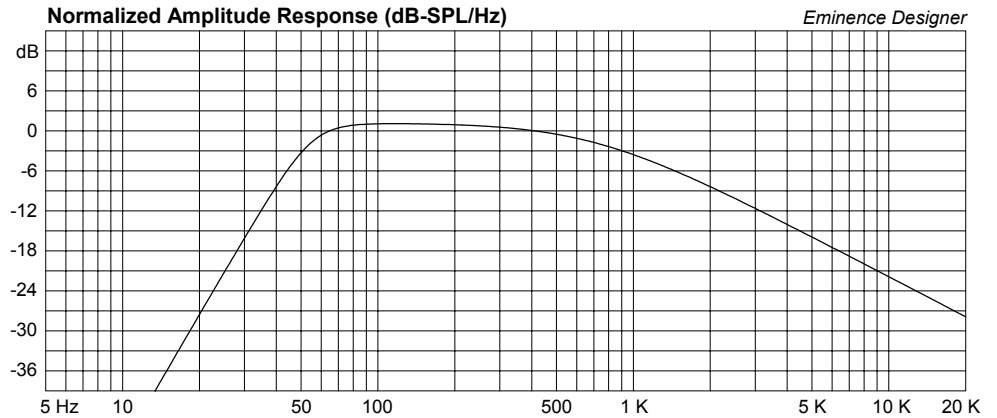
Qes = 0.33

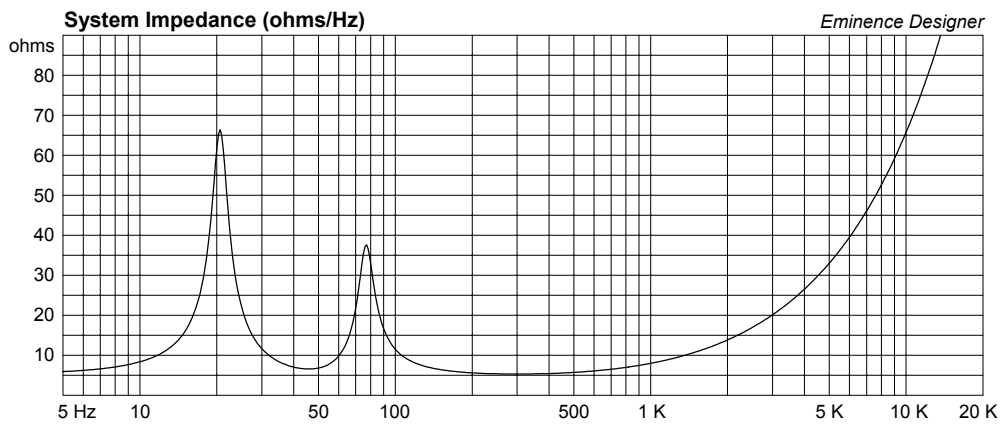
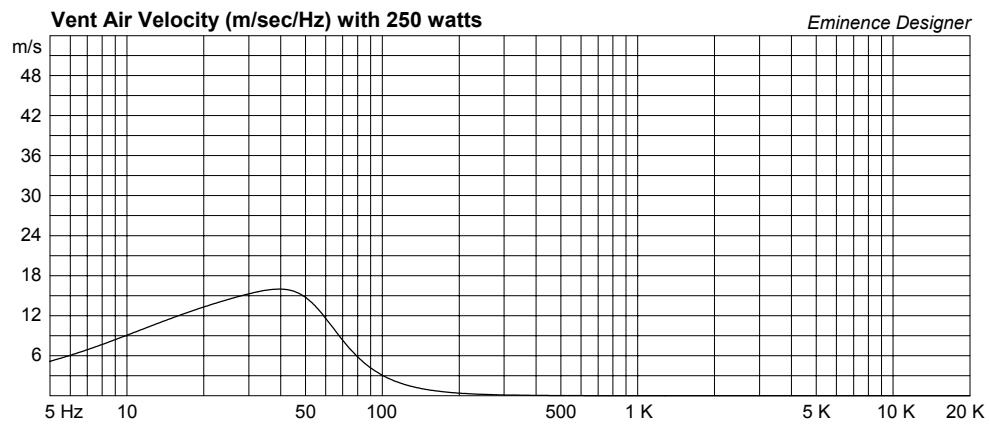
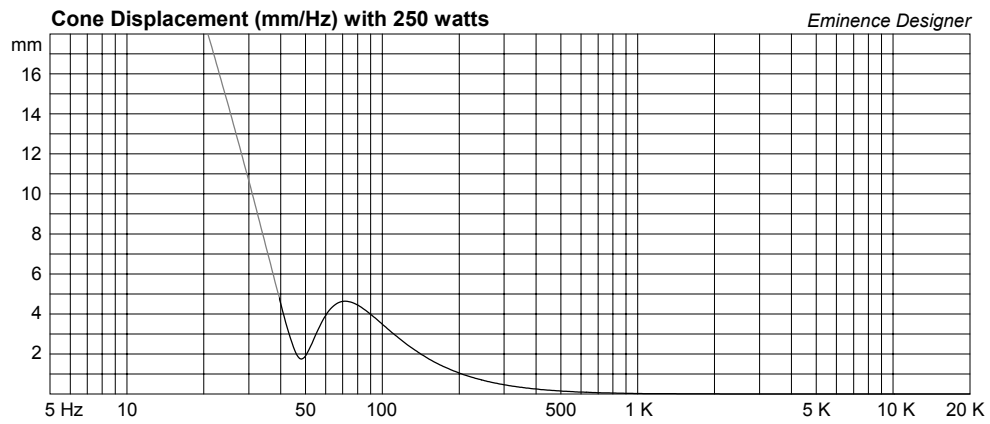
Re = 5.28 ohms

Le = 1.04 mH

Z = 8 ohms

Pe = 800 watts





OmegaPro15A Med Vented Woofer Cabinet

By McJerry, Eminence Speaker LLC

Displacement Limited to 450 Watts; F3 of 59 Hz. Good for full range PA when used with a high pass filter set to 50 Hz to protect woofer from overexcursion.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 2.75 cu.ft

V(total) = 2.952 cu.ft

Fb = 65 Hz

QL = 7

F3 = 59.36 Hz

Fill = minimal

--Vents--

No. of Vents = 4

Vent shape = round

Vent ends = one flush

Dv = 3 in

Lv = 2.579 in

Driver Properties

--Description--

Name: Omega Pro-15

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Ribbed paper cone.

Suspension: Rolled cone edge surround.

Dust Cap: Solid paper dust cap.

Frame: Diecast aluminum basket.

Voice Coil: 4 inch (101.6 mm) copper.

Magnet: 109 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 32.96 Hz

Qms = 5.69

Vas = 258.5 liters

Xmax = 4.8 mm

Sd = 856.3 sq.cm

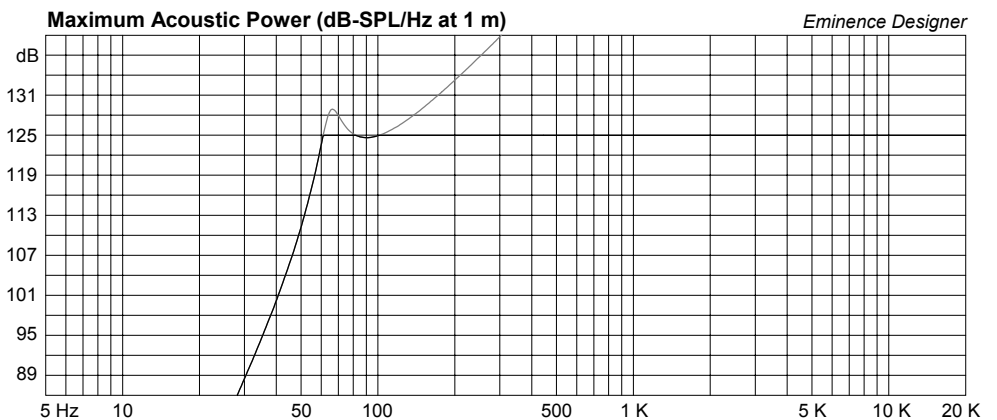
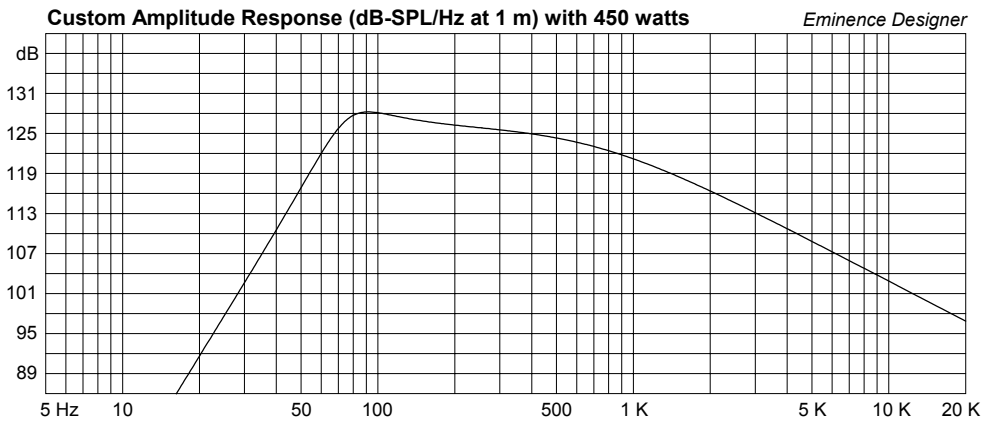
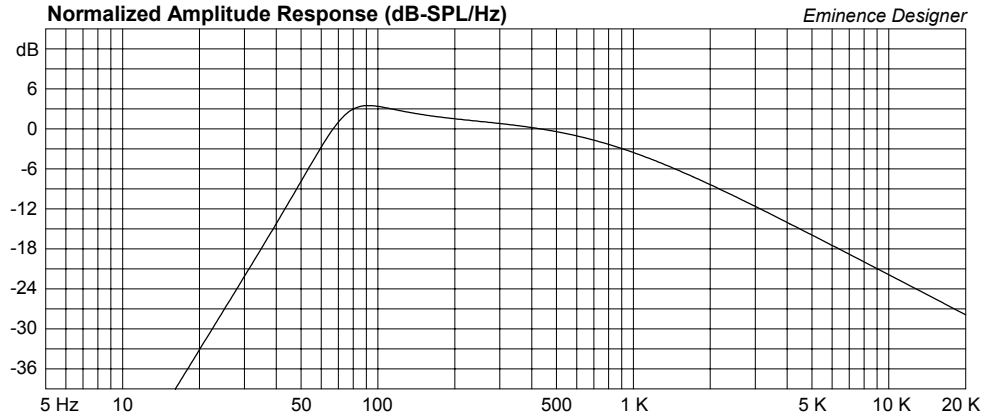
Qes = 0.33

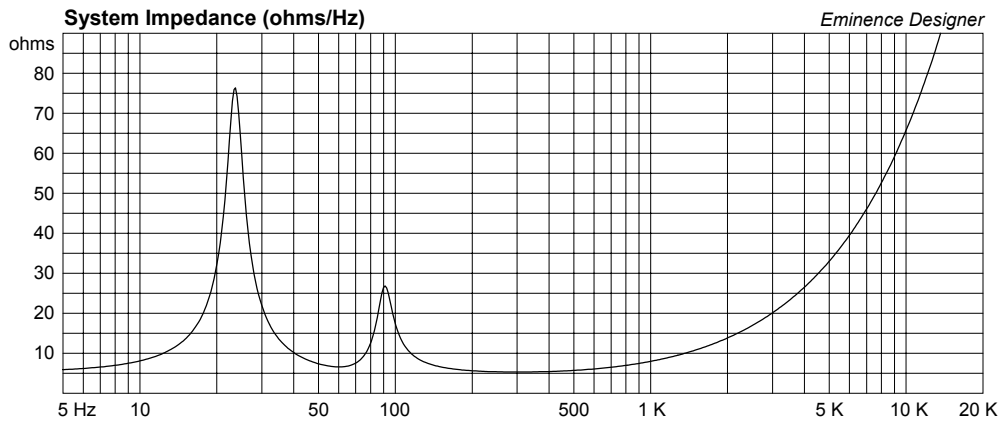
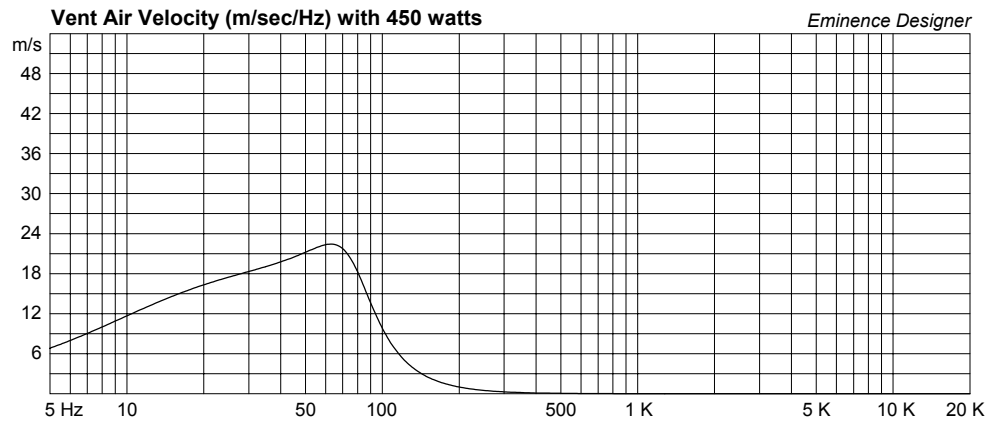
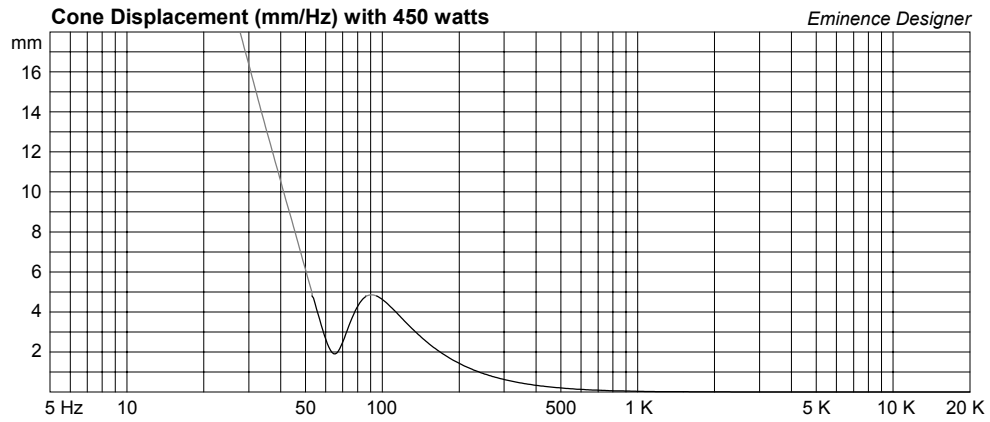
Re = 5.28 ohms

Le = 1.04 mH

Z = 8 ohms

Pe = 800 watts





OmegaPro15A Small Vented Hi Pwr Woofer Cabinet

By McJerry, Eminence Speaker LLC

Thermally Limited to 800 Watts; F3 of 76 Hz. Will need some EQ.

Use a 60 Hz high pass filter to protect woofer from overexcursion.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 1.7 cu.ft

V(total) = 2.057 cu.ft

Fb = 85 Hz

QL = 7

F3 = 75.67 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 6 in

Lv = 5.77 in

Driver Properties

--Description--

Name: Omega Pro-15

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Ribbed paper cone.

Suspension: Rolled cone edge surround.

Dust Cap: Solid paper dust cap.

Frame: Diecast aluminum basket.

Voice Coil: 4 inch (101.6 mm) copper.

Magnet: 109 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 32.96 Hz

Qms = 5.69

Vas = 258.5 liters

Xmax = 4.8 mm

Sd = 856.3 sq.cm

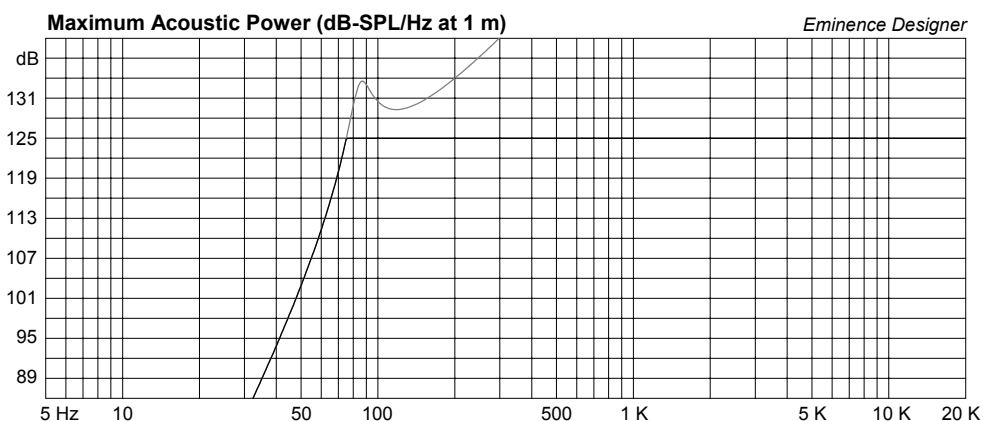
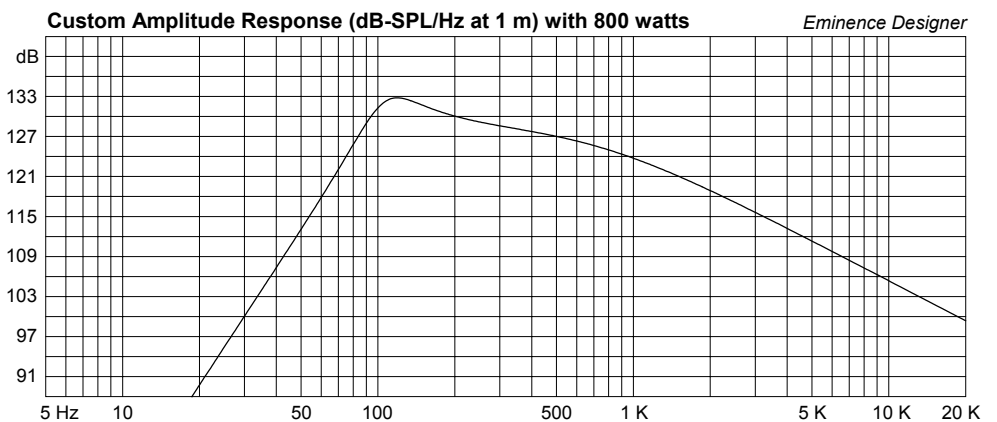
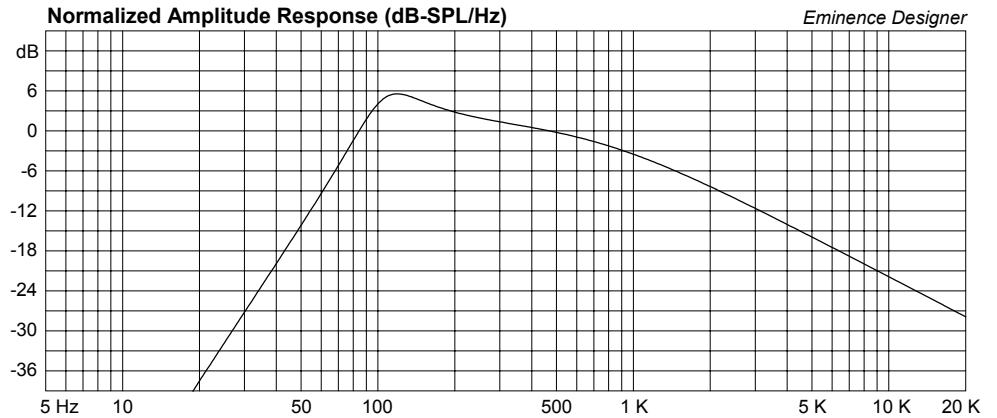
Qes = 0.33

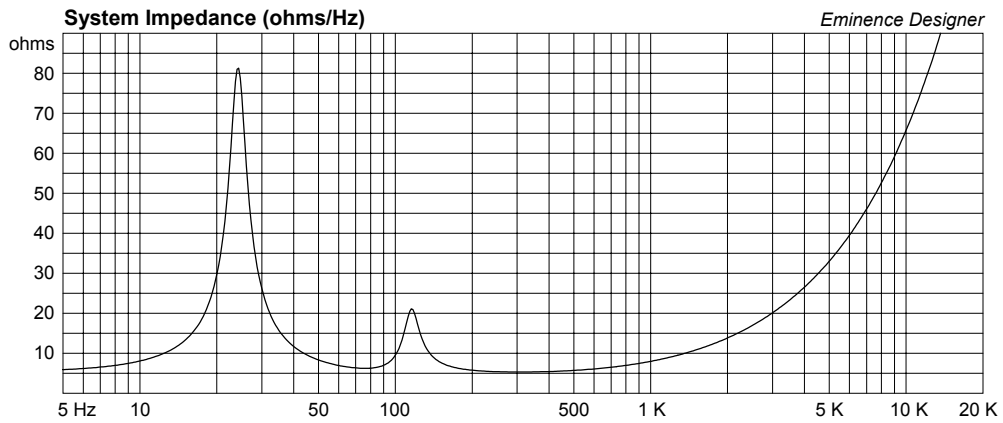
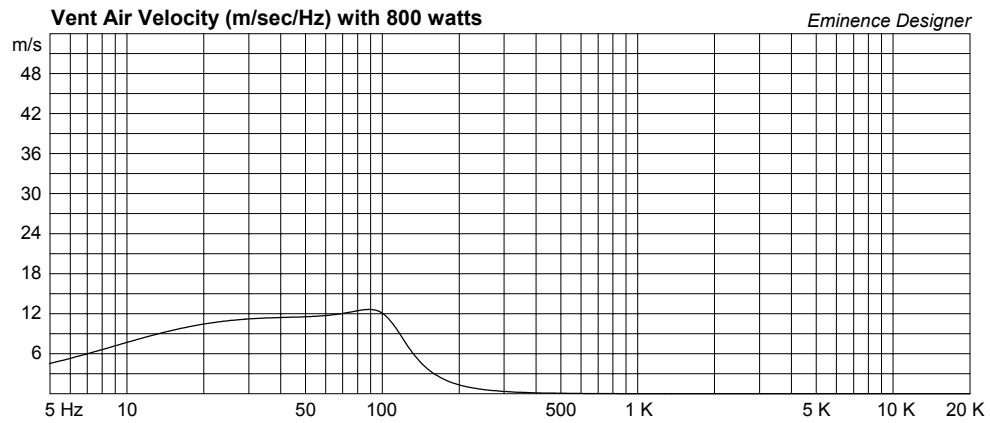
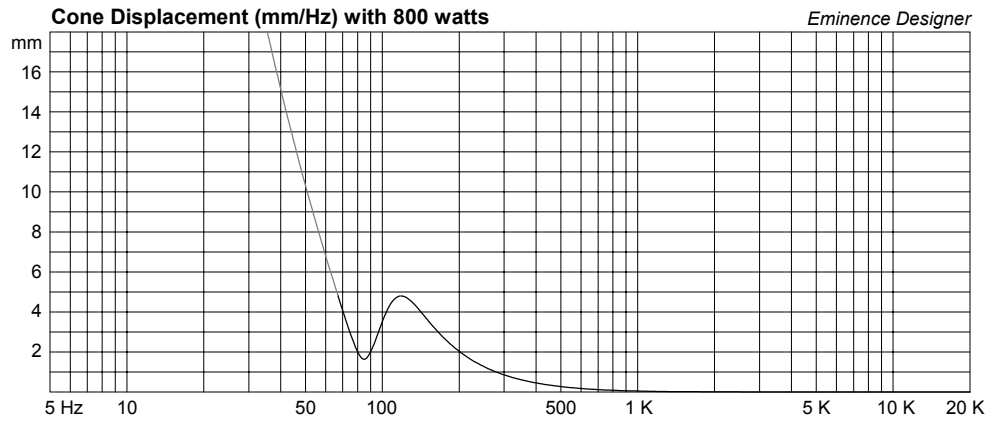
Re = 5.28 ohms

Le = 1.04 mH

Z = 8 ohms

Pe = 800 watts





Dual OmegaPro15A Med Vented Woofer Cabinet

By McJerry, Eminence Speaker LLC

Displacement Limited to 850 Watts; F3 of 59 Hz. Good for full range PA when used with a high pass filter set to 50 Hz to protect woofer from overexcursion.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 5.25 cu.ft

V(total) = 5.878 cu.ft

Fb = 62 Hz

QL = 7

F3 = 58.73 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = rectangle

Vent ends = one flush

Hv = 16.5 in

Wv = 2.5 in

Lv = 6.074 in

Driver Properties

--Description--

Name: Omega Pro-15

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Ribbed paper cone.

Suspension: Rolled cone edge surround.

Dust Cap: Solid paper dust cap.

Frame: Diecast aluminum basket.

Voice Coil: 4 inch (101.6 mm) copper.

Magnet: 109 oz ferrite magnet.

--Configuration--

No. of Drivers = 2

Mounting = Standard

Wiring = Parallel

Drivers sum coherently = Yes

--Driver Parameters--

Fs = 32.96 Hz

Qms = 5.69

Vas = 258.5 liters [516.9]

Xmax = 4.8 mm

Sd = 856.3 sq.cm [1713]

Qes = 0.33

Re = 5.28 ohms [2.64]

Le = 1.04 mH [0.52]

Z = 8 ohms [4]

Pe = 800 watts [1600]

