

Specification

Nominal Basket Diameter	15", 381mm
Nominal Impedance*	8 ohms
Power Rating**	
Watts	200W
Music Program	400W
Resonance	41Hz
Usable Frequency Range***	46Hz-3.5kHz
Sensitivity	97
Magnet Weight	25 oz
Gap Height	0.25", 6.35mm
Voice Coil Diameter	1.5", 38.1mm

Thiele & Small Parameters

Resonant Frequency (fs)	41Hz
DC Resistance (Re)	5.88
Coil Inductance (Le)	0.84mH
Mechanical Q (Qms)	7.23
Electromagnetic Q (Qes)	1.53
Total Q (Qts)	1.26
Compliance Equivalent Volume (Vas)	260.0 ltr/9.2 cu. ft.
Peak Diaphragm Displacement Volume (Vd)	325cc
Mechanical Compliance of Suspension (Cms)	0.25mm/N
BL Product (BL)	7.7 T-M
Diaphragm Mass inc. Airload (Mms)	59 grams
Efficiency Bandwidth Product (EBP)	27
Maximum Linear Excursion (Xmax)	3.8mm
Surface Area of Cone (Sd)	856.3cm ²
Maximum Mechanical Limit (Xlim)	8.4mm

Mounting Information

Recommended Enclosure Volume	
Sealed	71-85 ltr/2.5-3 cu. ft.
Vented	106-177 ltr/3.75-6.25 cu. ft.
Overall Diameter	15.15", 384.8mm
Baffle Hole Diameter	13.77", 349.6mm
Front Sealing Gasket	Fitted as Standard
Rear Sealing Gasket	Fitted as Standard
Mounting Holes Diameter	0.25", 6.4mm
Mounting Holes B.C.D.	14.56", 369.9mm
Depth	5.83", 148mm
Net Weight	6.7 lbs, 3 kg
Shipping Weight	8.8 lbs, 4 kg

Materials of Construction

Coil Construction	Copper
Coil	Polyimide
Magnet Composition	Ferrite
Core Details	Vented And Extended
Basket Materials	Pressed Steel
Cone Composition	Paper
Cone Edge Composition	Cloth
Dust Cap Composition	Solid Composition Paper

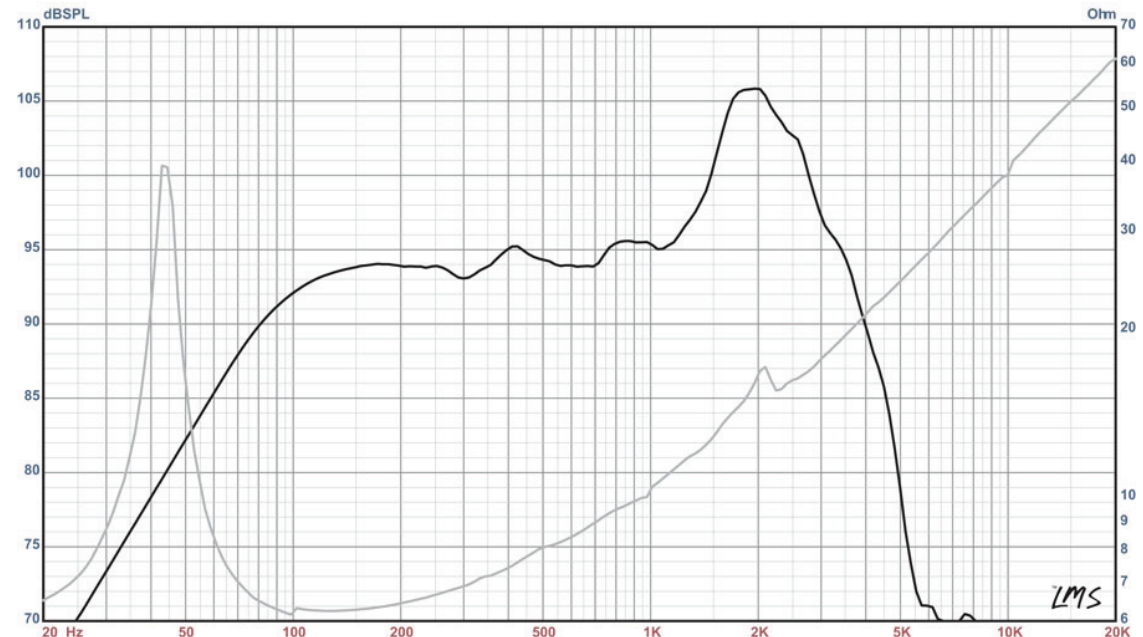




EMINENCE®
 The Art and Science of Sound

ALPHA-15A American Standard Series

Recommended for professional audio and bass guitar applications as a woofer in a vented or sealed enclosure.



* 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)

Alpha15A Large Vented Enclosure

By Jerry McNutt, Eminence Speaker LLC
100 Watt Displacement Limited; F3 46 Hz
Will Require EQ to Flatten out.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 6 cu.ft

V(total) = 6.136 cu.ft

Fb = 55 Hz

QL = 7

F3 = 45.9 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 5.468 in

Lv = 0.75 in

Driver Properties

--Description--

Name: Alpha-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: 1.5 inch (38.1 mm) copper.

Magnet: 25 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 41 Hz

Qms = 7.23

Vas = 260 liters

Xmax = 3.8 mm

Sd = 856.3 sq.cm

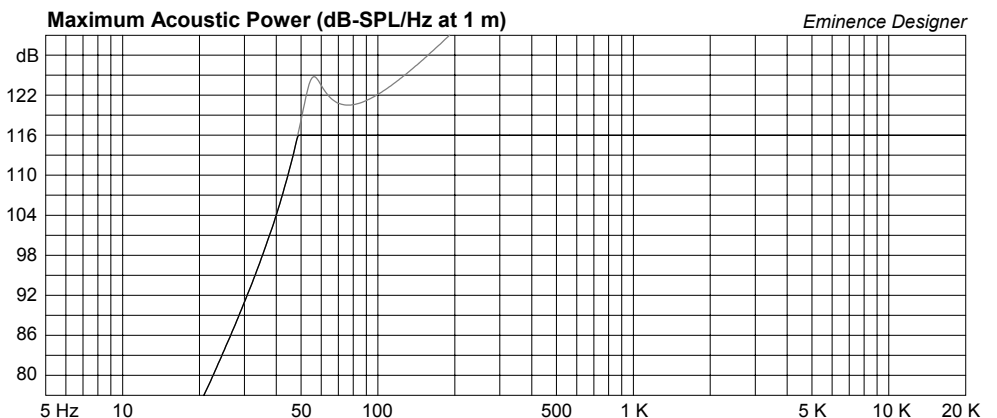
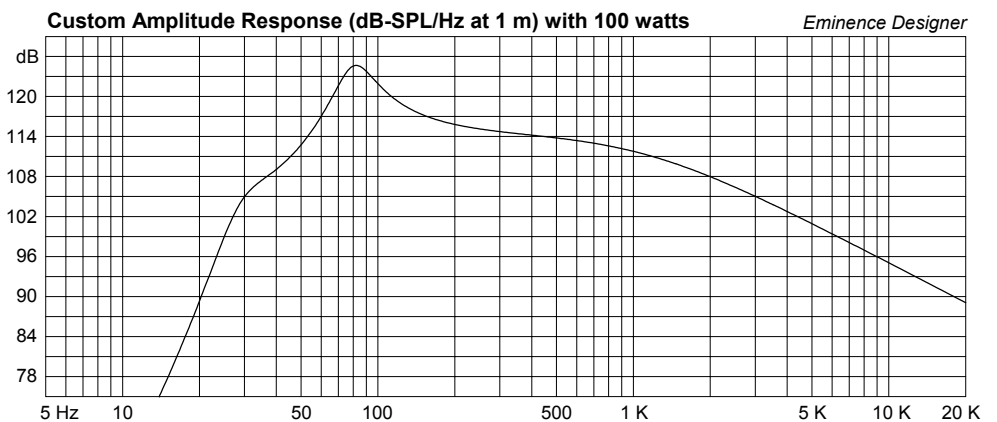
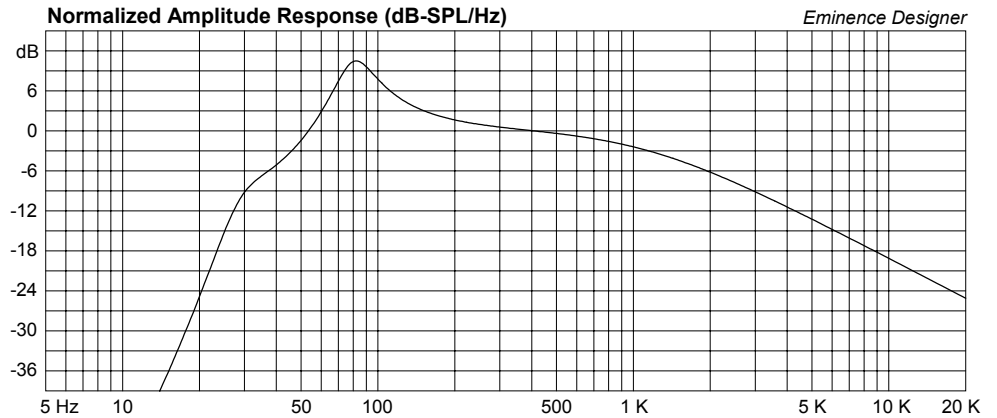
Qes = 1.53

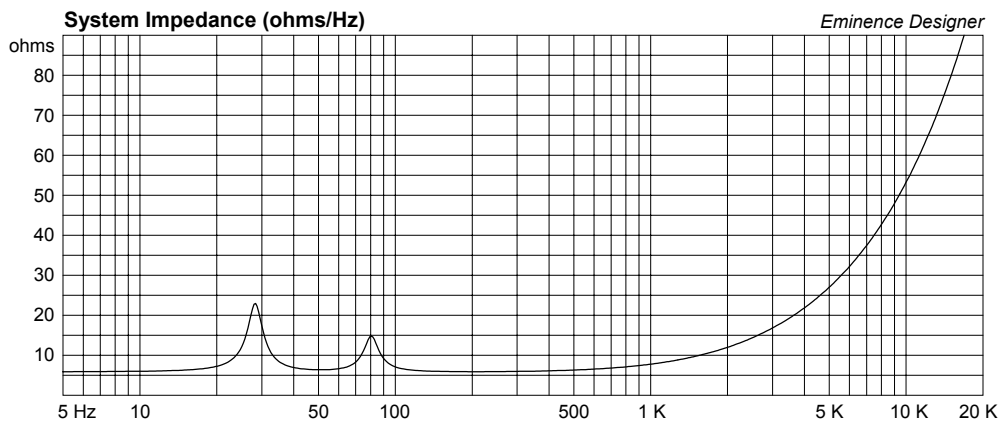
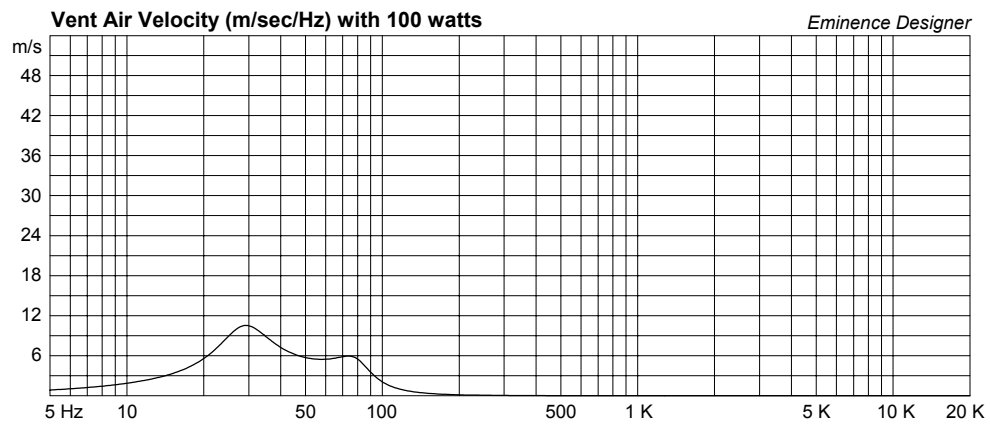
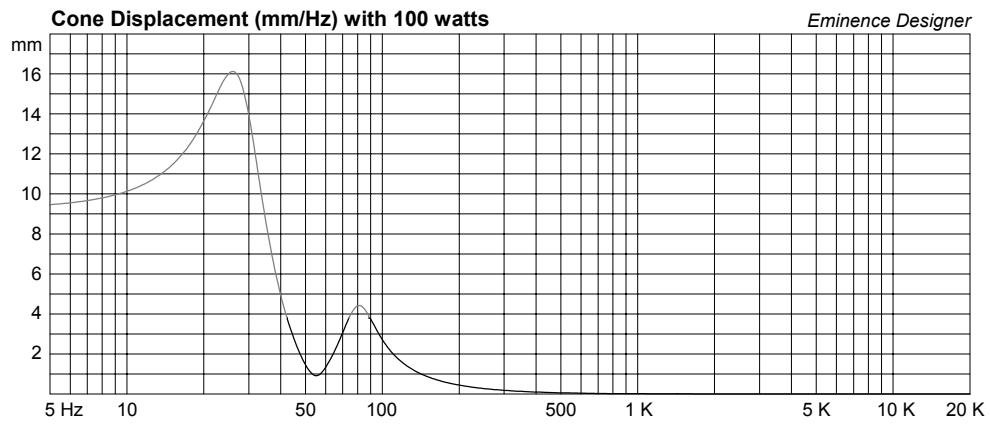
Re = 5.88 ohms

Le = 0.84 mH

Z = 8 ohms

Pe = 200 watts





Alpha15A Med Vented Enclosure

By Jerry McNutt, Eminence Speaker LLC

100 Watt Displacement Limit; F3 55 Hz. Will Require EQ to Flatten Out.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 3.75 cu.ft

V(total) = 3.876 cu.ft

Fb = 55 Hz

QL = 7

F3 = 55.12 Hz

Fill = minimal

--Vents--

No. of Vents = 1

Vent shape = round

Vent ends = one flush

Dv = 5.817 in

Lv = 0.75 in

Driver Properties

--Description--

Name: Alpha-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: 1.5 inch (38.1 mm) copper.

Magnet: 25 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 41 Hz

Qms = 7.23

Vas = 260 liters

Xmax = 3.8 mm

Sd = 856.3 sq.cm

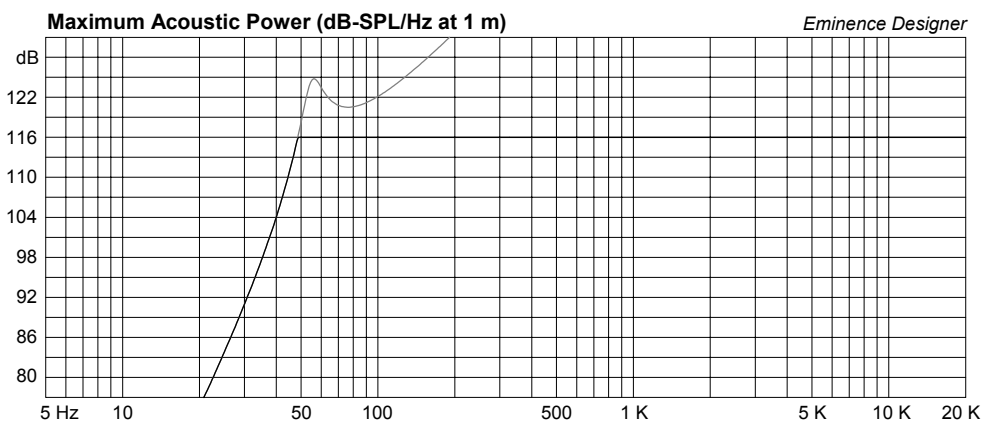
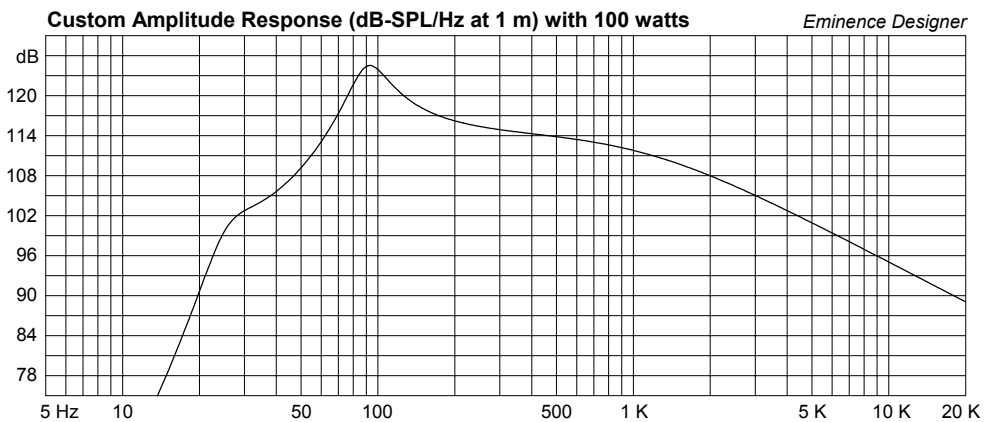
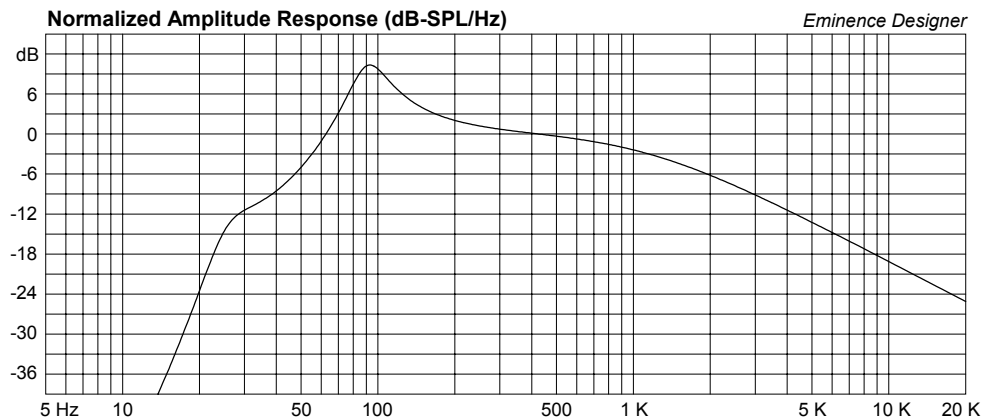
Qes = 1.53

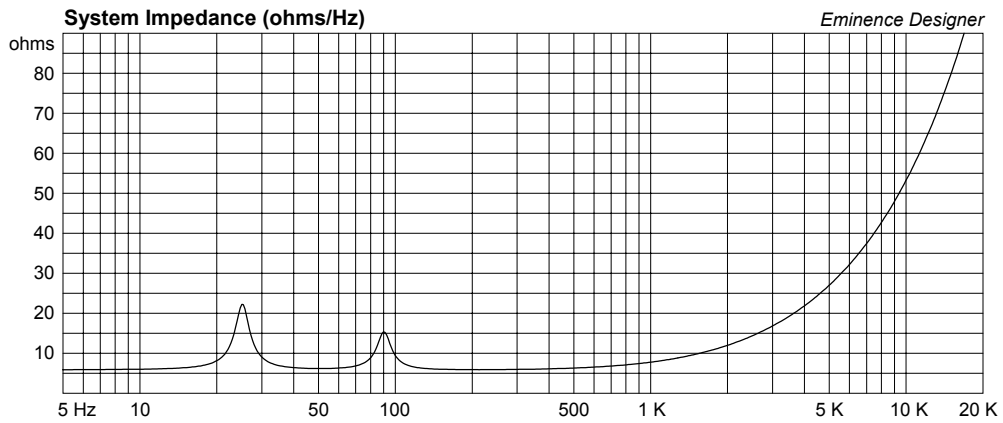
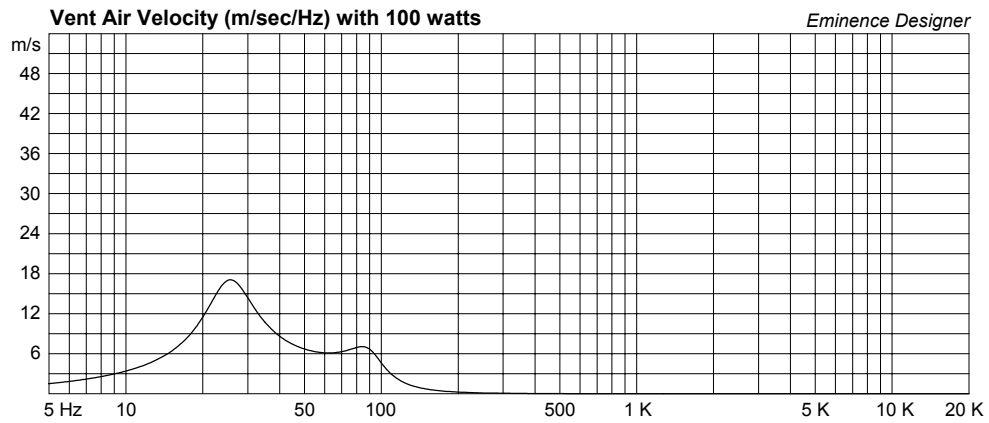
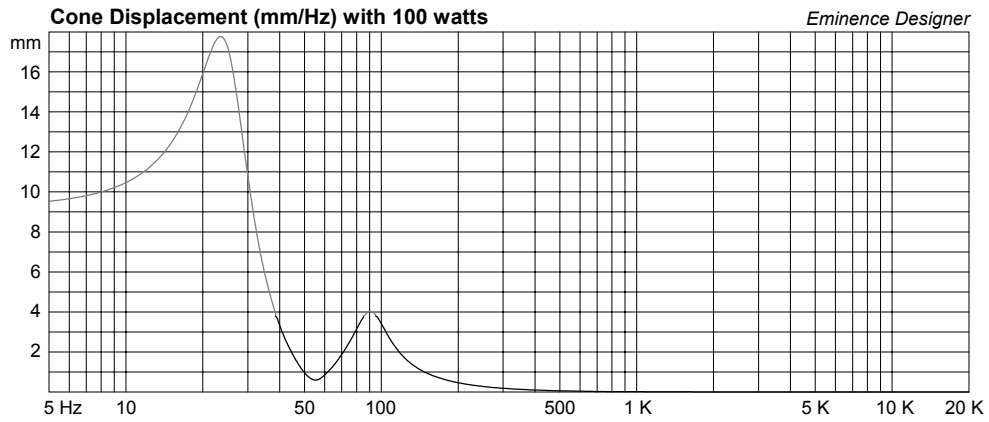
Re = 5.88 ohms

Le = 0.84 mH

Z = 8 ohms

Pe = 200 watts





Alpha15A Sealed Bass Guitar/ FR Enclosure

By Jerry McNutt, Eminence Speaker LLC

100 Watt Displacement Limit; F3 57 Hz. Will Require EQ to Flatten out.

Box Properties

--Description--

Name:

Type: Closed Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 2.716 cu.ft

V(total) = 2.829 cu.ft

Qtc = 1.5

QL = 16.54

F3 = 56.93 Hz

Fill = heavy

Driver Properties

--Description--

Name: Alpha-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: 1.5 inch (38.1 mm) copper.

Magnet: 25 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 41 Hz

Qms = 7.23

Vas = 260 liters

Xmax = 3.8 mm

Sd = 856.3 sq.cm

Qes = 1.53

Re = 5.88 ohms

Le = 0.84 mH

Z = 8 ohms

Pe = 200 watts

