

Specification

Nominal Basket Diameter	12", 304.8mm
Nominal Impedance*	8 ohms
Power Rating**	
Watts	400W
Music Program	800W
Resonance	51Hz
Usable Frequency Range***	52Hz-4.5kHz
Sensitivity	99.2
Magnet Weight	80 oz
Gap Height	0.375", 9.53mm
Voice Coil Diameter	2.5", 63.5mm

Thiele & Small Parameters

Resonant Frequency (fs)	51Hz
DC Resistance (Re)	5.71
Coil Inductance (Le)	0.84mH
Mechanical Q (Qms)	7.56
Electromagnetic Q (Qes)	0.37
Total Q (Qts)	0.35
Compliance Equivalent Volume (Vas)	81.7 ltr/2.9 cu. ft.
Peak Diaphragm Displacement Volume (Vd)	242cc
Mechanical Compliance of Suspension (Cms)	0.21mm/N
BL Product (BL)	15.3 T-M
Diaphragm Mass inc. Airload (Mms)	48 grams
Efficiency Bandwidth Product (EBP)	138
Maximum Linear Excursion (Xmax)	4.6mm
Surface Area of Cone (Sd)	532.4cm ²
Maximum Mechanical Limit (Xlim)	13.7mm

Mounting Information

Recommended Enclosure Volume	
Sealed	28-35 ltr/1-1.25 cu. ft.
Vented	31-91 ltr/1.1-3.2 cu. ft.
Overall Diameter	12.38", 314.5mm
Baffle Hole Diameter	11.07", 281mm
Front Sealing Gasket	Fitted as Standard
Rear Sealing Gasket	Fitted as Standard
Mounting Holes Diameter	0.27", 6.9mm
Mounting Holes B.C.D.	11.57", 293.8mm
Depth	6.22", 158mm
Net Weight	16.3 lbs, 7.4 kg
Shipping Weight	18 lbs, 8.2 kg

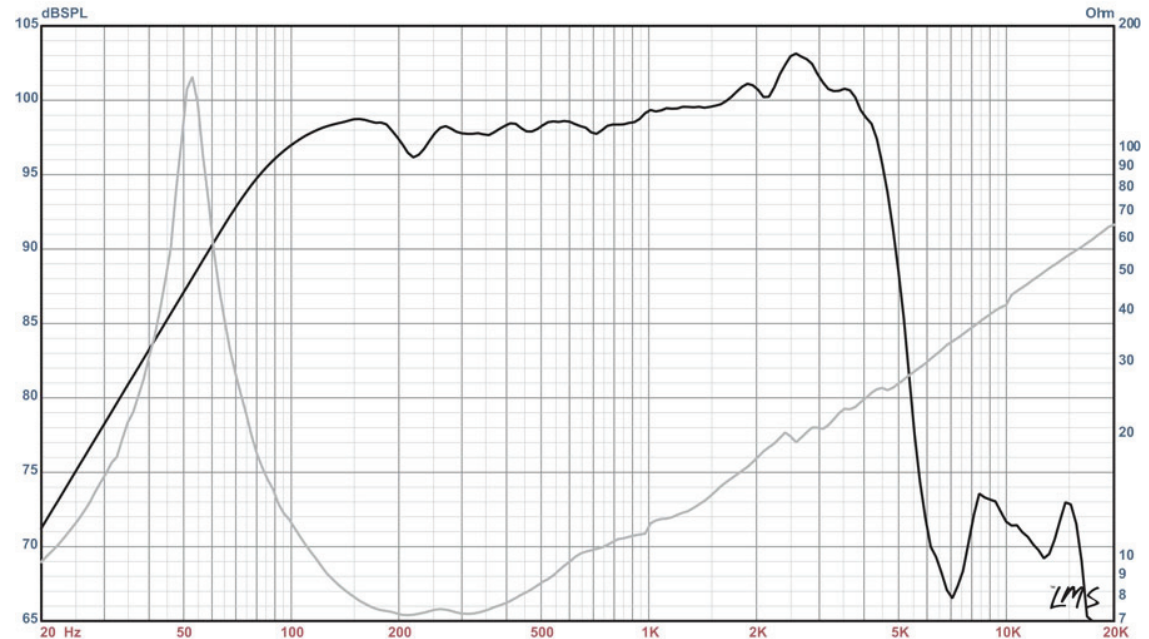
Materials of Construction

Coil Construction	Aluminum
Coil	Polyimide
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



DELTA PRO-12A Professional Series

Recommended for professional audio in both sealed and vented enclosures. Ideal for full-range, mid/hi, and monitor wedges.



* 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)

DeltaPro12 Small Mid/Hi Sat Box or Hi Pwr Floor Wedge

By McJerry, Eminence Speaker LLC

Displacement and thermally limited to 400 watts. Must use a 24 dB per octave high pass filter set to 100 Hz or higher to protect woofer from overexcursion. Great for a 12" Two-way mid/high or a hi-power floor monitor.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 1 cu.ft

V(total) = 1.096 cu.ft

Fb = 95 Hz

QL = 7

F3 = 86.52 Hz

Fill = minimal

--Vents--

No. of Vents = 3

Vent shape = round

Vent ends = one flush

Dv = 2.253 in

Lv = 0.75 in

Driver Properties

--Description--

Name: Delta Pro-12

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: Cloth surround.

Dust Cap: Solid composition paper dust cap.

Frame: Diecast aluminum basket.

Voice Coil: 2.5 inch (63.5 mm) AL Wire. Kapton former.

Magnet: 80 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 51 Hz

Qms = 7.56

Vas = 81.7 liters

Cms = 0.21 mm/N

Mms = 48 g

Rms = 2.02 kg/s

Xmax = 4.55 mm

Xmech = 13.65 mm

P-Dia = 258.1 mm

Sd = 532.4 sq.cm

P-Vd = 0.238 liters

--Electrical Parameters--

Qes = 0.37

Re = 5.71 ohms

Le = 0.84 mH

Z = 8 ohms

BL = 15.3 Tm

Pe = 400 watts

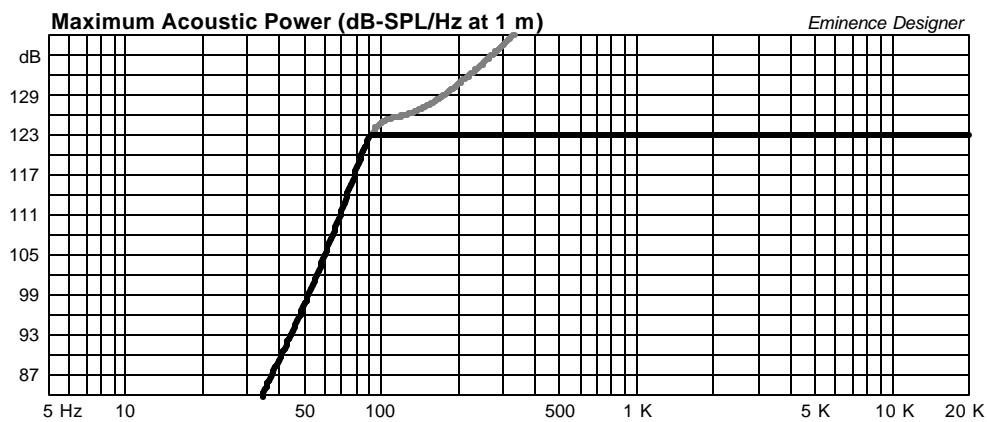
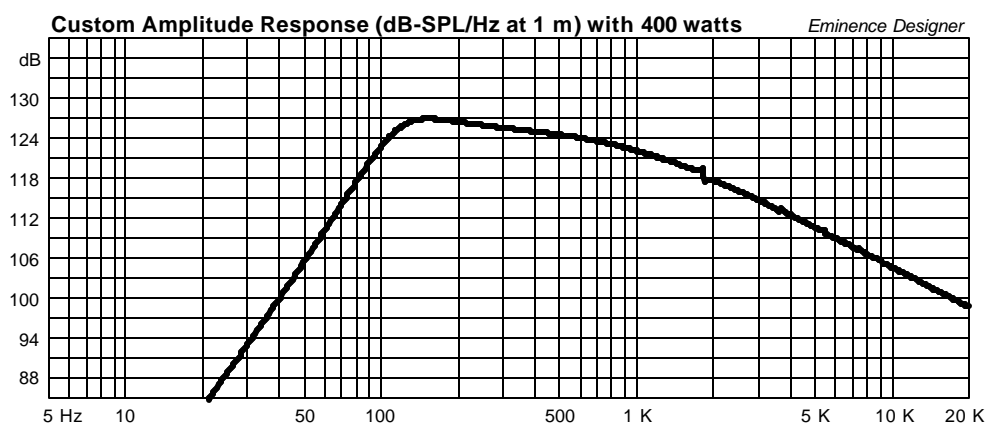
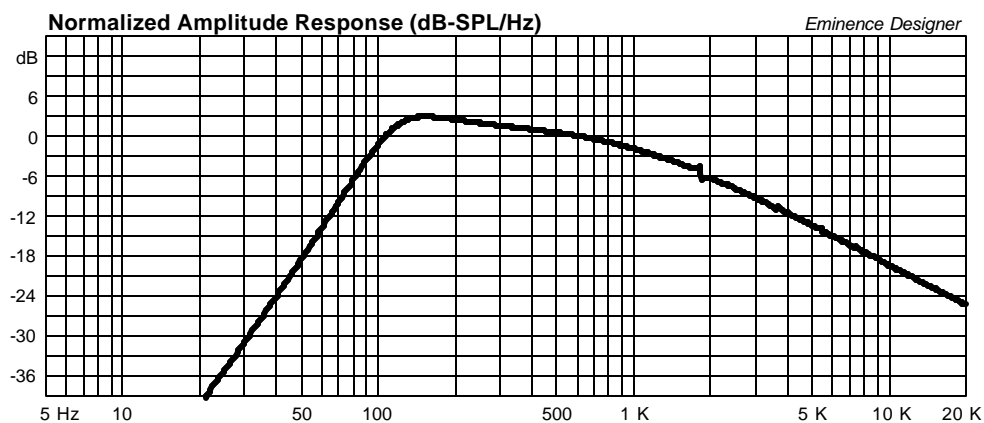
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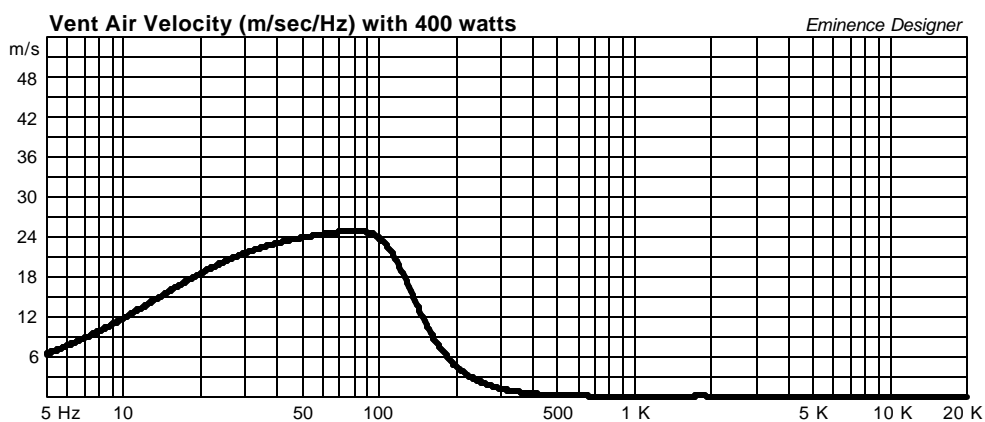
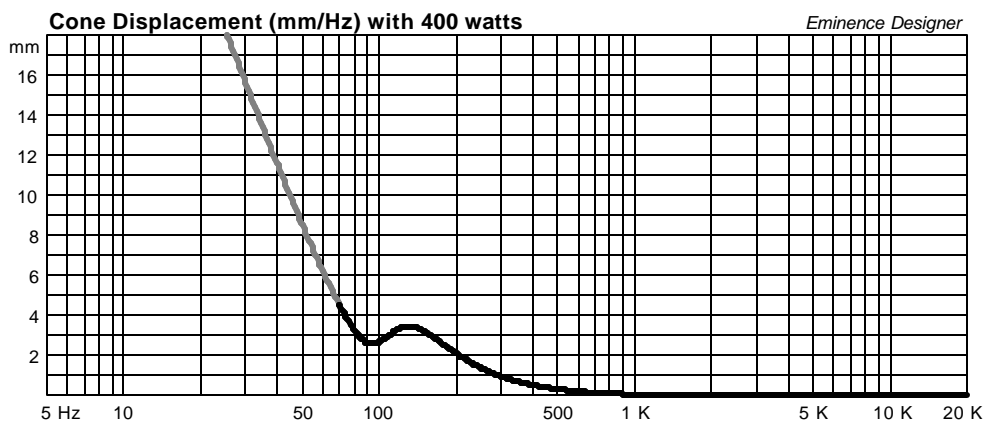
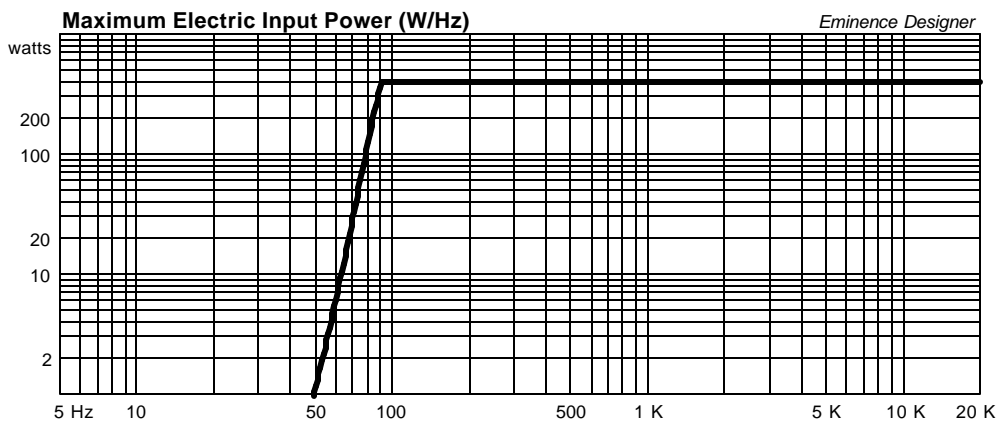
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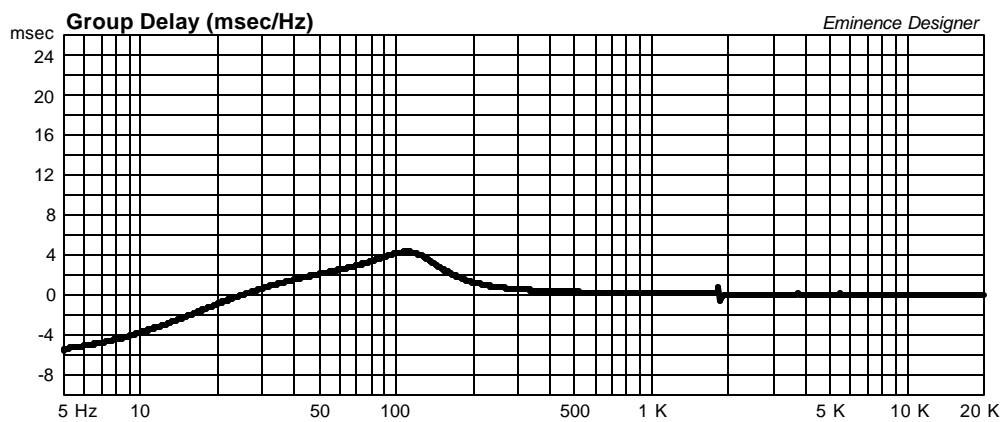
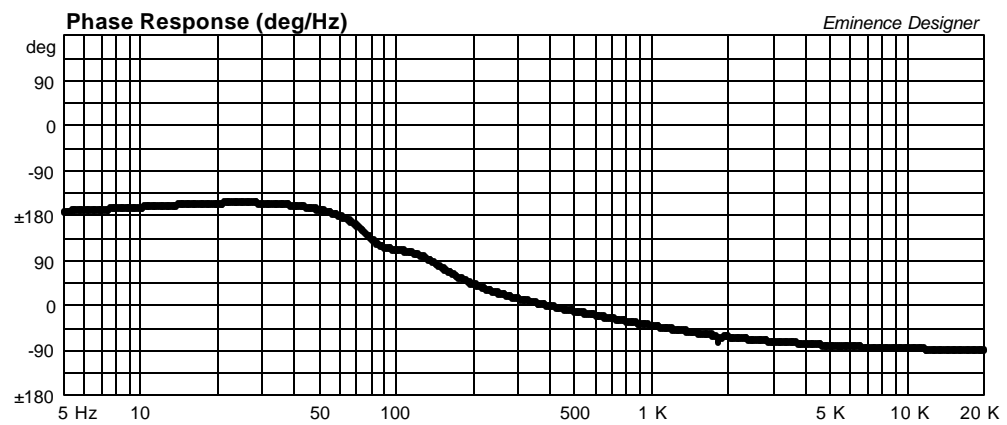
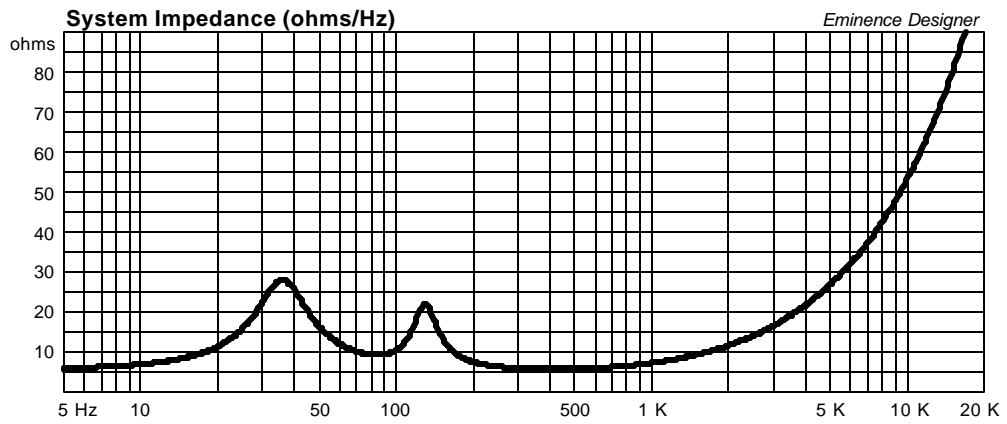
no = 2.824 %

1-W SPL = 96.66 dB

2.83-V SPL = 98.12 dB







DeltaPro12 Med Vented Cab.; Mid/High or Floor Monitor

By McJerry, Eminence Speaker LLC

Displacement limited to 350 watts. Must use a 24 dB per octave high pass filter set to 70 Hz or higher to protect woofer from overexcursion.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 2 cu.ft

V(total) = 2.1 cu.ft

Fb = 75 Hz

QL = 7

F3 = 72.38 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 3.575 in

Lv = 0.75 in

Driver Properties

--Description--

Name: Delta Pro-12

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: Cloth surround.

Dust Cap: Solid composition paper dust cap.

Frame: Diecast aluminum basket.

Voice Coil: 2.5 inch (63.5 mm) AL Wire. Kapton former.

Magnet: 80 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 51 Hz

Qms = 7.56

Vas = 81.7 liters

Cms = 0.21 mm/N

Mms = 48 g

Rms = 2.02 kg/s

Xmax = 4.55 mm

Xmech = 13.65 mm

P-Dia = 258.1 mm

Sd = 532.4 sq.cm

P-Vd = 0.238 liters

--Electrical Parameters--

Qes = 0.37

Re = 5.71 ohms

Le = 0.84 mH

Z = 8 ohms

BL = 15.3 Tm

Pe = 400 watts

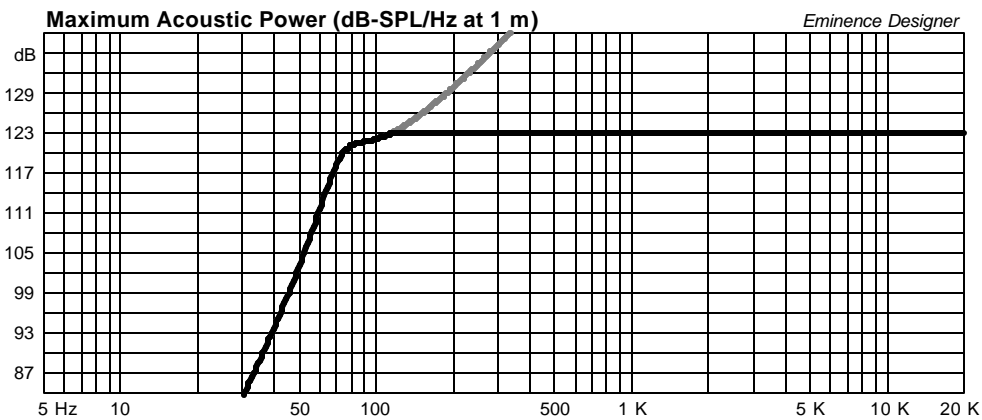
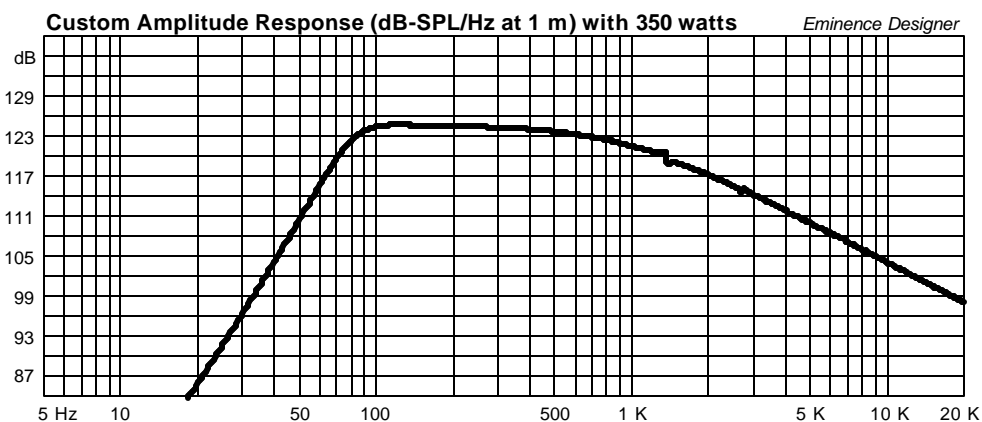
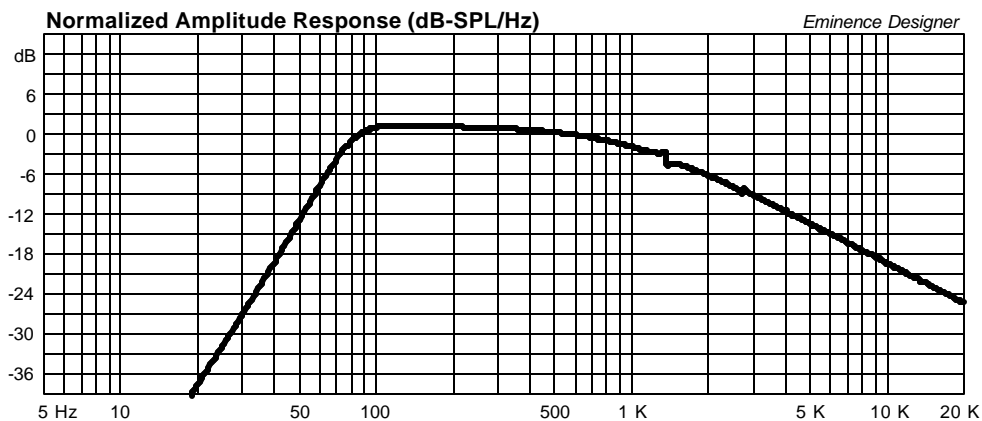
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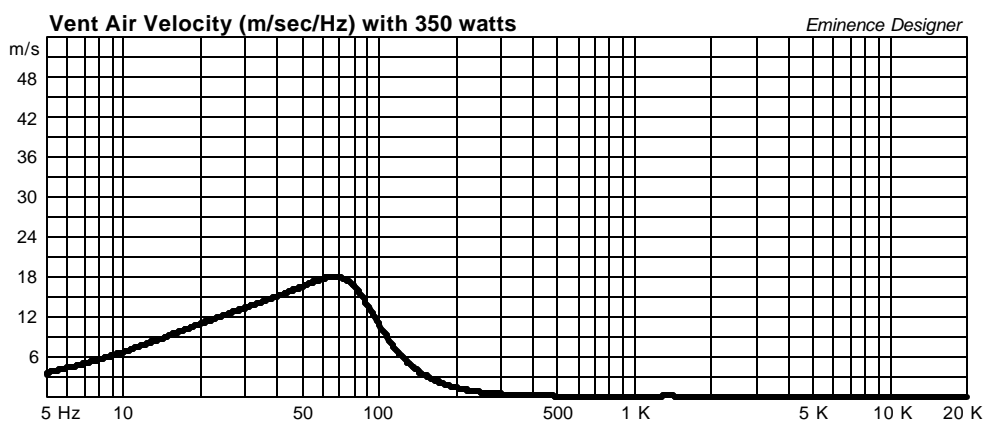
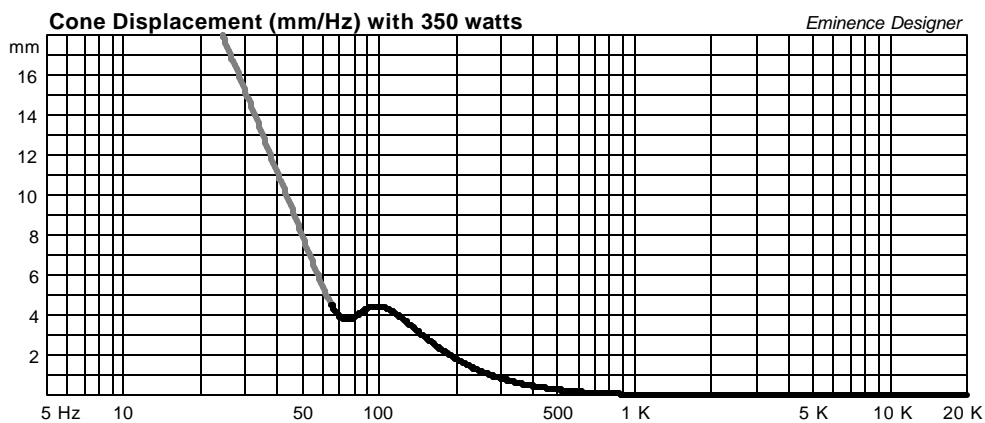
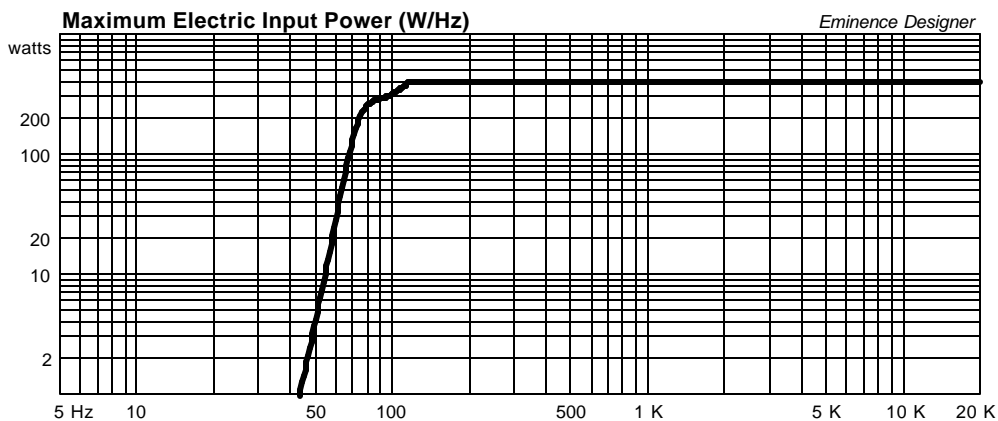
Qts = 0.35

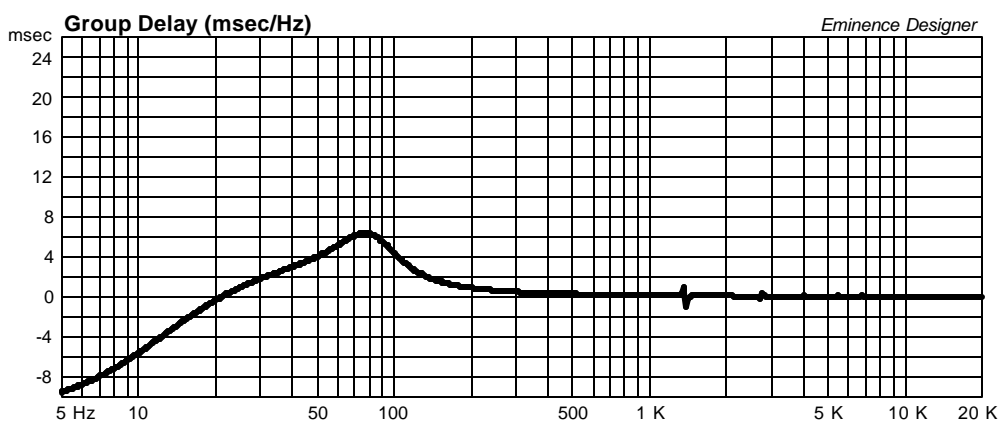
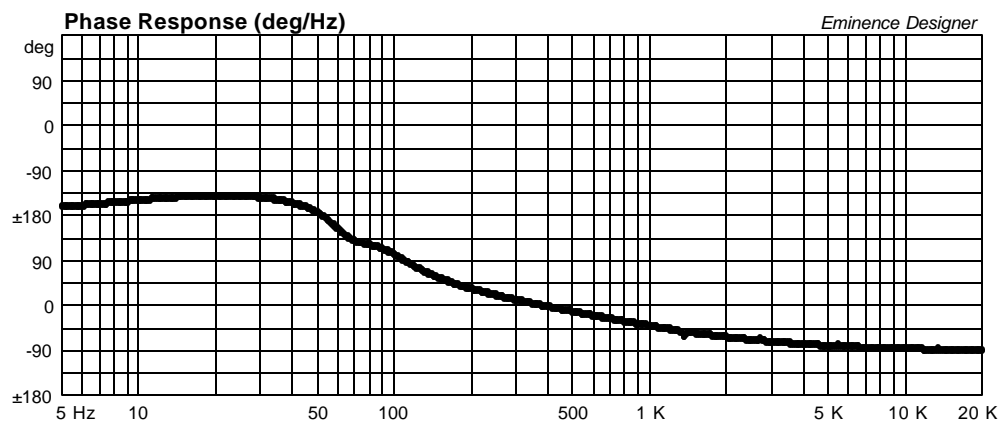
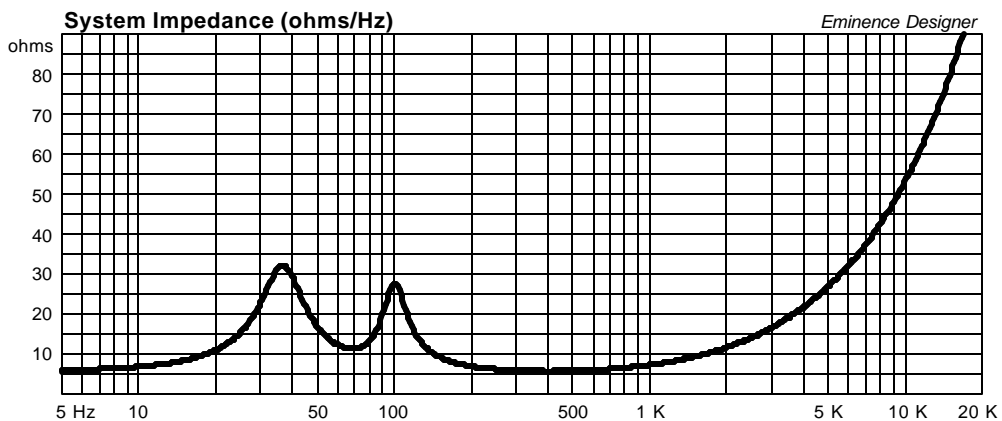
no = 2.824 %

1-W SPL = 96.66 dB

2.83-V SPL = 98.12 dB







DeltaPro12 Larger Vented Cab.; Med Pwr Full Range Use.

By McJerry, Eminence Speaker LLC

Displacement limited to 150 watts. Must use a 24 dB per octave high pass filter set to 50 Hz or higher to protect woofer from overexcursion. Very flat response.

Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 3 cu.ft

V(total) = 3.139 cu.ft

Fb = 55 Hz

QL = 7

F3 = 60.03 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 3.006 in

Driver Properties

--Description--

Name: Delta Pro-12

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: Cloth surround.

Dust Cap: Solid composition paper dust cap.

Frame: Diecast aluminum basket.

Voice Coil: 2.5 inch (63.5 mm) AL wire. Kapton former.

Magnet: 80 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 51 Hz

Qms = 7.56

Vas = 81.7 liters

Cms = 0.21 mm/N

Mms = 48 g

Rms = 2.02 kg/s

Xmax = 4.55 mm

Xmech = 13.65 mm

P-Dia = 258.1 mm

Sd = 532.4 sq.cm

P-Vd = 0.238 liters

--Electrical Parameters--

Qes = 0.37

Re = 5.71 ohms

Le = 0.84 mH

Z = 8 ohms

BL = 15.3 Tm

Pe = 400 watts

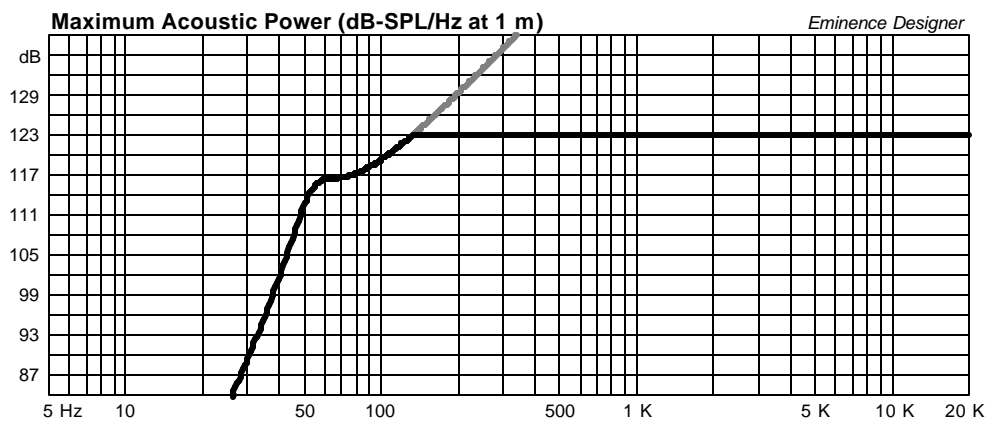
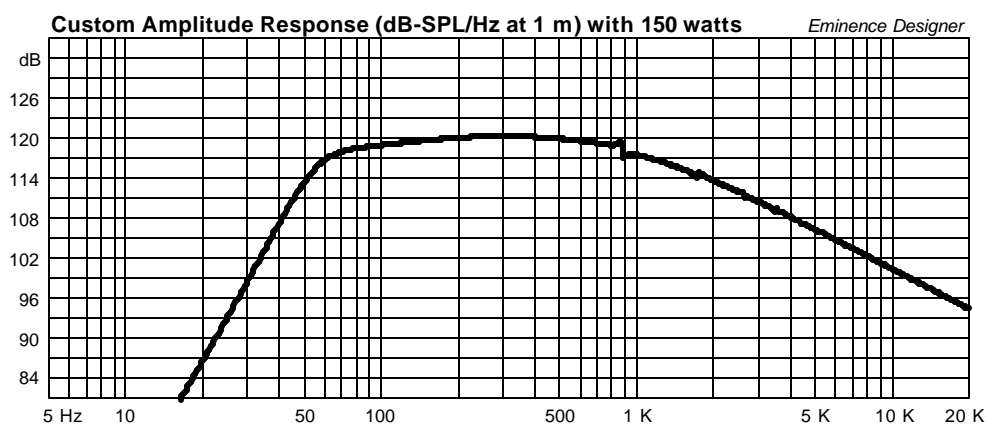
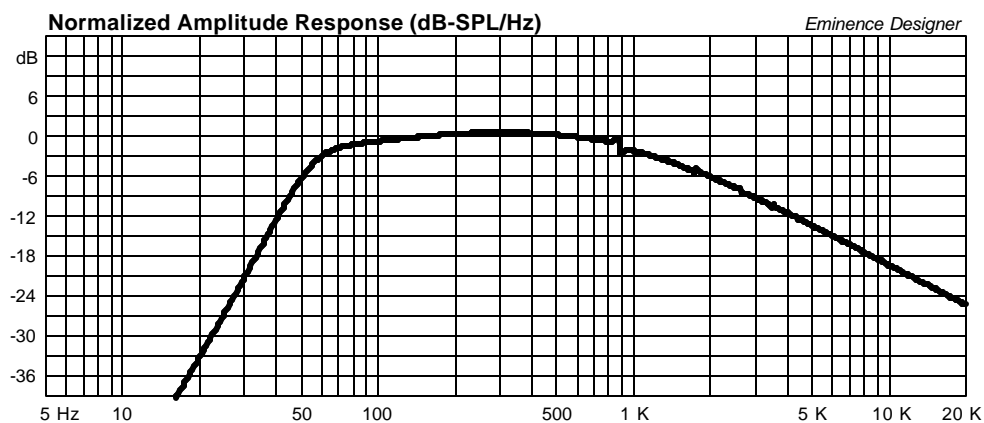
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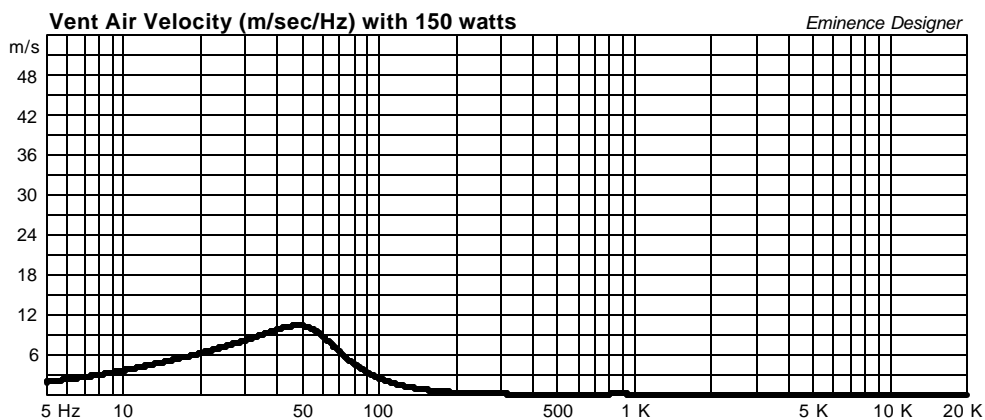
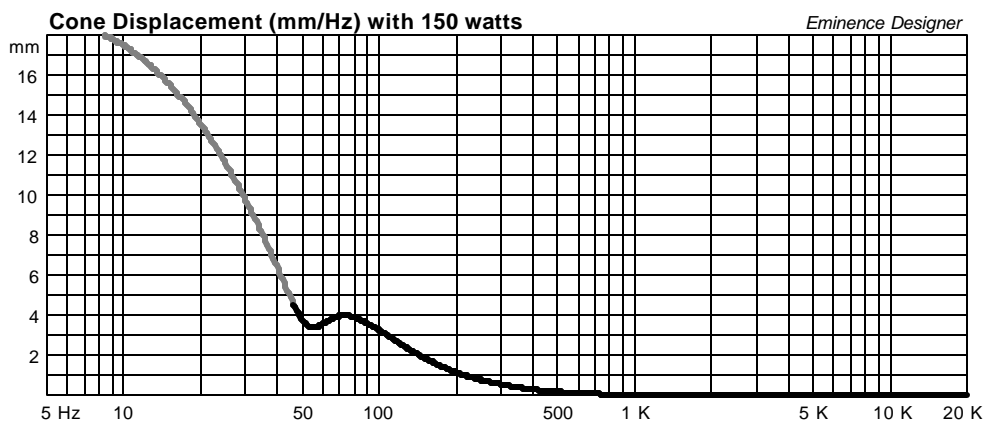
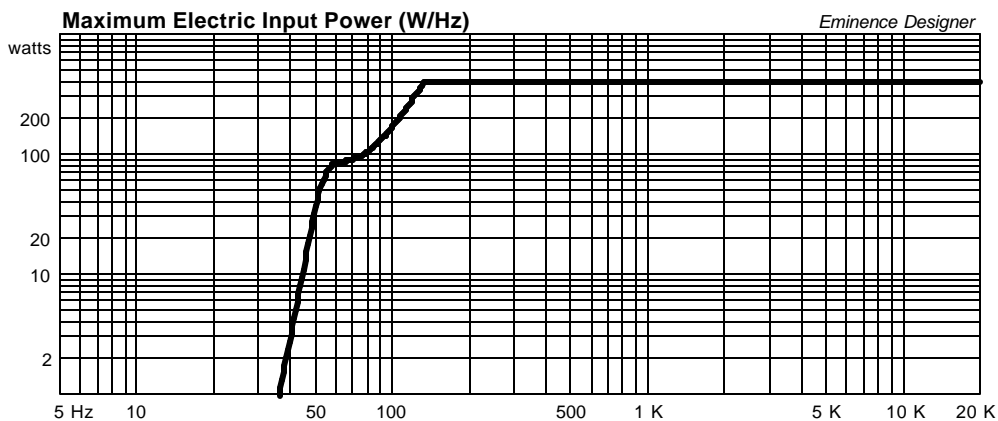
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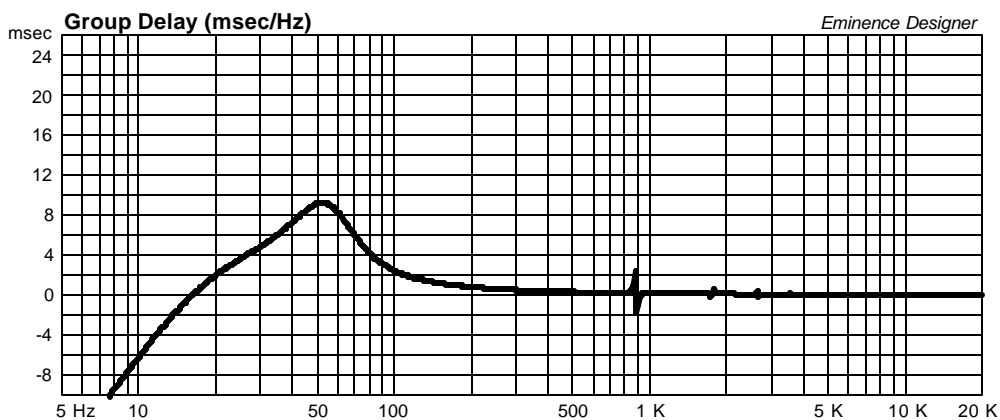
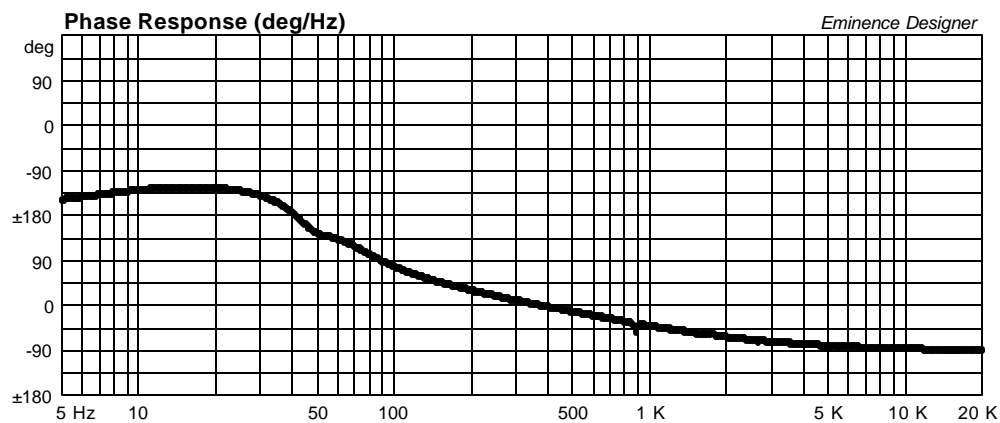
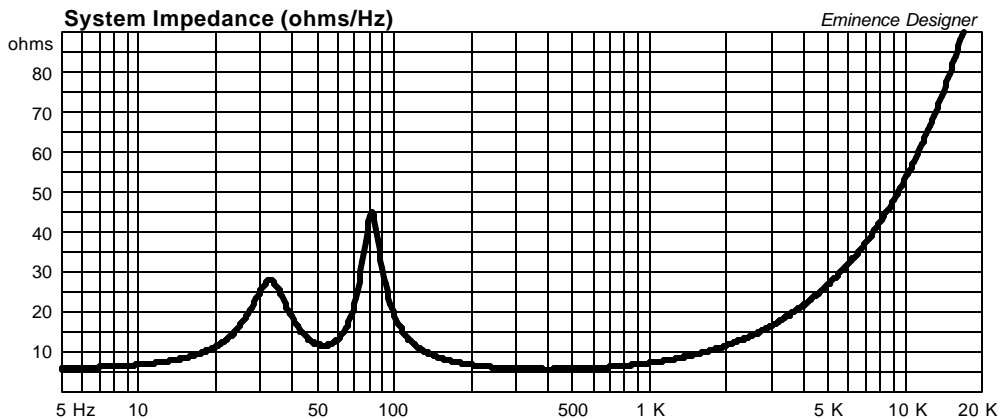
no = 2.824 %

1-W SPL = 96.66 dB

2.83-V SPL = 98.12 dB







DeltaPro12 Small Sealed Cab.; Hi Pwr Midrange or Vocal Wedge

By McJerry, Eminence Speaker LLC

Limited to 300 Watts; use a steep high pass filter set to 150 Hz or higher.

Box Properties

--Description--

Name:

Type: Closed Box

Shape: Prism, square

--Box Parameters--

Vb = 1 cu.ft

V(total) = 1.09 cu.ft

Qtc = 0.556

QL = 20

F3 = 119.2 Hz

Fill = heavy

Driver Properties

--Description--

Name: Delta Pro-12

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Revised NOV 2005

Piston: Paper cone.

Suspension: Cloth surround.

Dust Cap: Solid composition paper dust cap.

Frame: Diecast aluminum basket.

Voice Coil: 2.5 inch (63.5 mm) AL Wire. Kapton former.

Magnet: 80 oz ferrite magnet.

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 51 Hz

Qms = 7.56

Vas = 81.7 liters

Cms = 0.21 mm/N

Mms = 48 g

Rms = 2.02 kg/s

Xmax = 4.55 mm

Xmech = 13.65 mm

P-Dia = 258.1 mm

Sd = 532.4 sq.cm

P-Vd = 0.238 liters

--Electrical Parameters--

Qes = 0.37

Re = 5.71 ohms

Le = 0.84 mH

Z = 8 ohms

BL = 15.3 Tm

Pe = 400 watts

--Electromech. Parameters--

Qts = 0.35

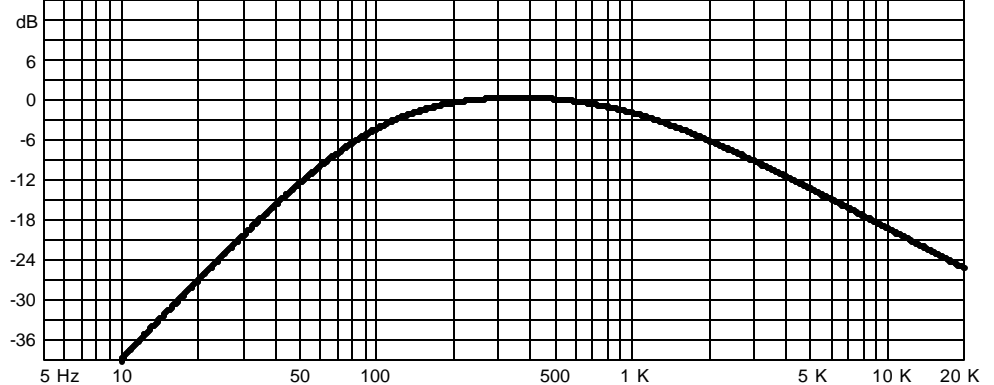
no = 2.824 %

1-W SPL = 96.66 dB

2.83-V SPL = 98.12 dB

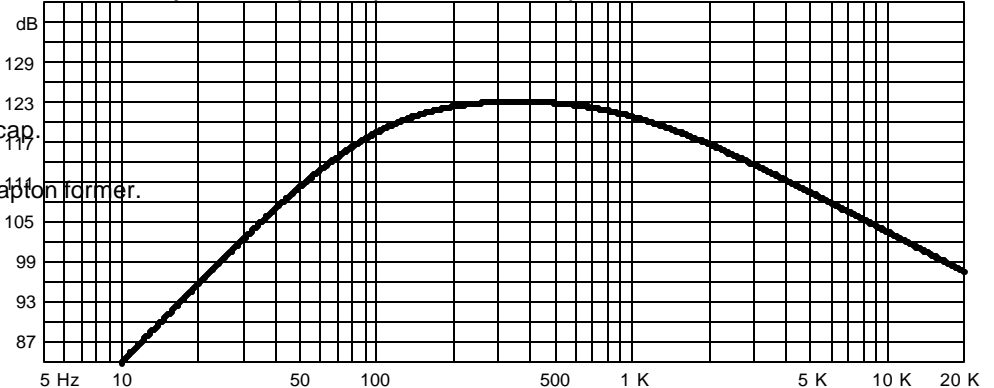
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 300 watts

Eminence Designer



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

Eminence Designer

