

Impero 12A Small Vented Enclosure Design

By Jerry McNutt, Eminence Speaker LLC

850 Watt Design, F3 at 68 Hz. Use a steep High Pass Filter at 55Hz.

Great for a small high power two-way or floor wedge.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 1.2 cu.ft

V(total) = 1.373 cu.ft

Fb = 65 Hz

QL = 7

F3 = 68.05 Hz

Fill = normal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 3 in

Lv = 3.959 in

Driver Properties

--Description--

Name: Impero 12A

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: High Power Pro Sound Driver

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 42.75 Hz

Qms = 13.84

Vas = 70.2 liters

Cms = 0.17 mm/N

Mms = 83.47 g

Rms = 1.62 kg/s

Xmax = 6.22 mm

Xmech = 12.5 mm

P-Dia = 262 mm

Sd = 545.4 sq.cm

P-Vd = 0.335 liters

--Electrical Parameters--

Qes = 0.33

Re = 5.58 ohms

Le = 1.46 mH

Z = 8 ohms

BL = 19.49 Tm

Pe = 1100 watts

--Electromech. Parameters--

Qts = 0.32

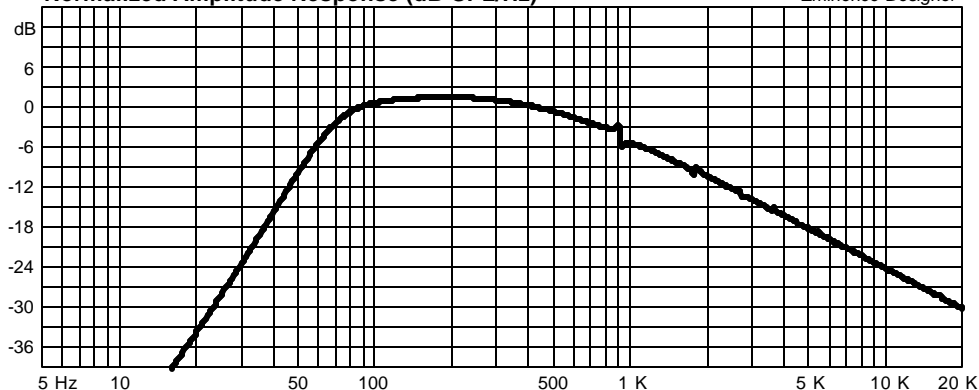
no = 1.602 %

1-W SPL = 94.19 dB

2.83-V SPL = 95.76 dB

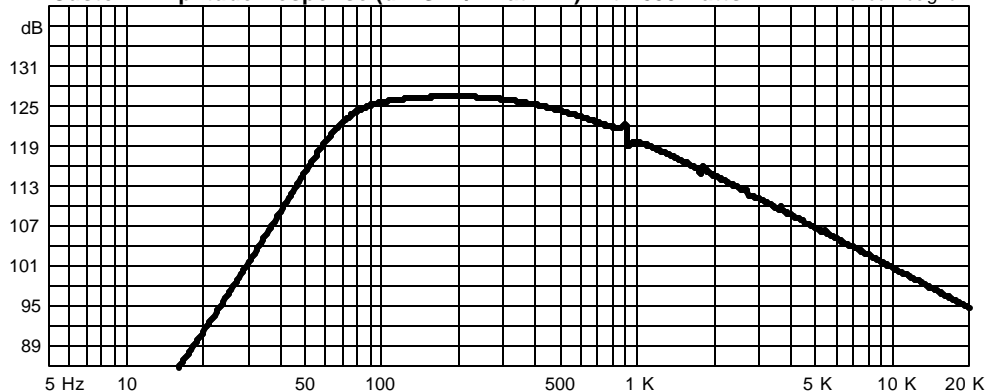
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



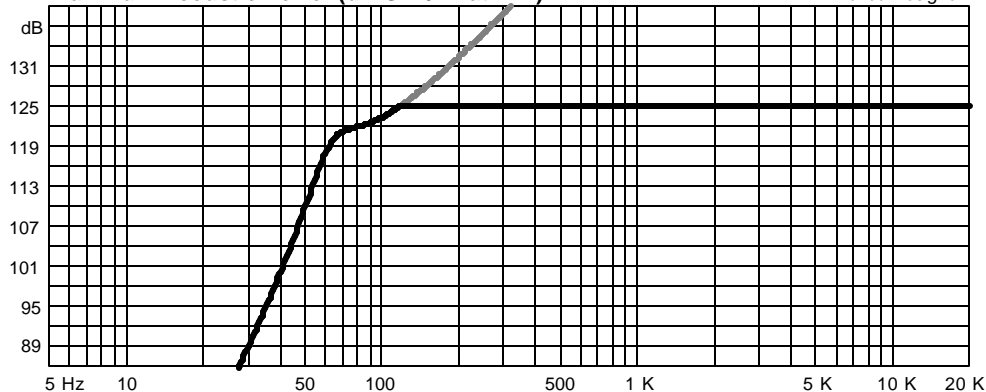
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 850 watts

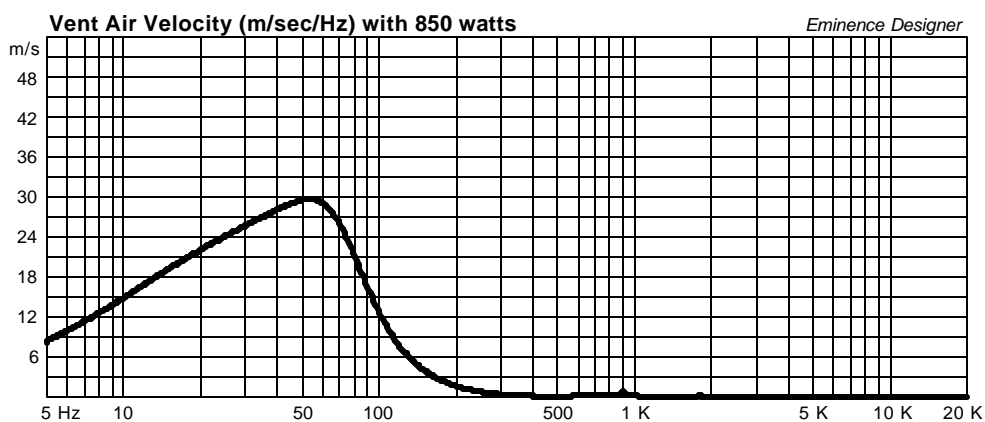
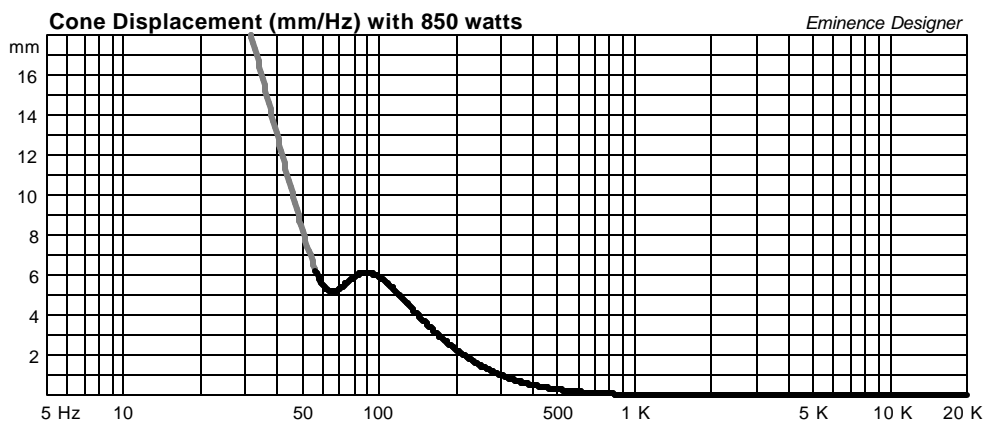
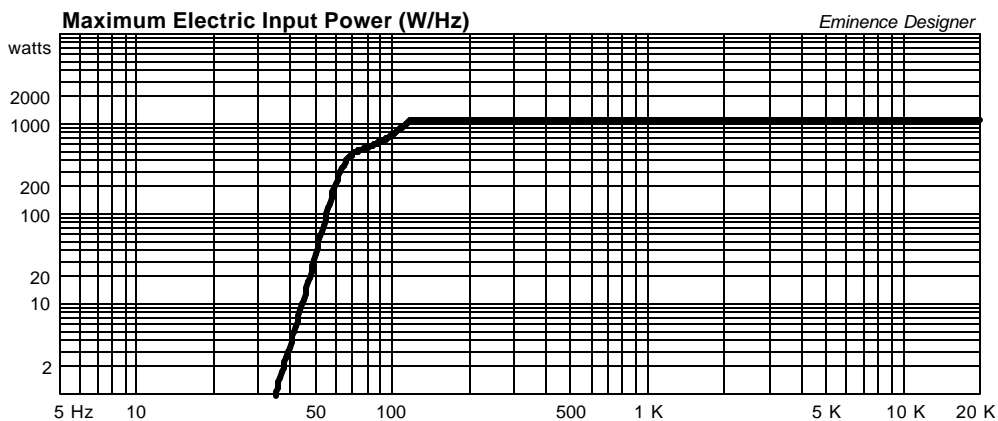
Eminence Designer

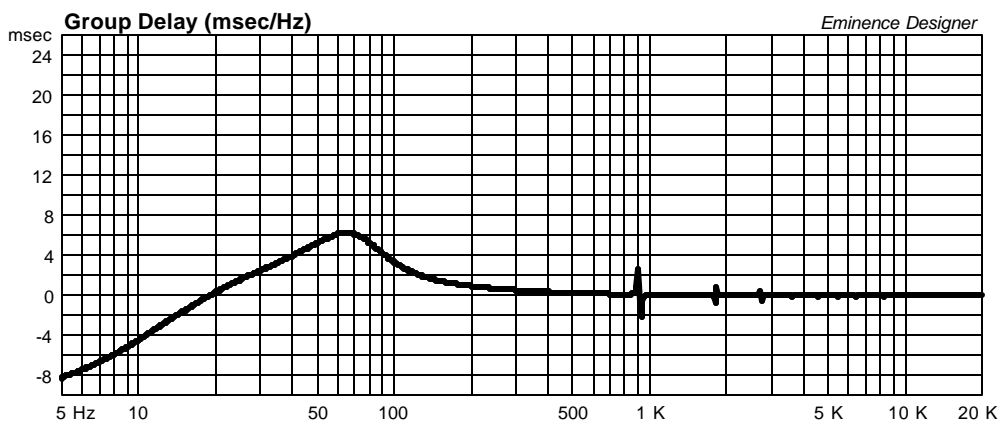
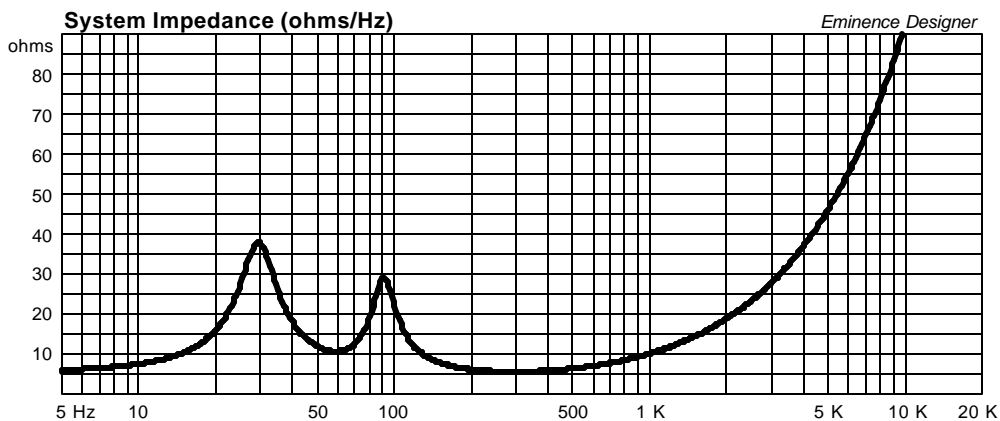


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







Impero 12 A Extreme High Power Mid/Bass Design

By Jerry McNutt, Eminence Speaker LLC

1100 Watt Design, F3 at 80 Hz. For high power use, High Pass at 100 Hz.

Small high power design for two way top box, use with a subwoofer.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 1.1 cu.ft

V(total) = 1.244 cu.ft

Fb = 90 Hz

QL = 7

F3 = 79.25 Hz

Fill = normal

--Vents--

No. of Vents = 1

Vent shape = round

Vent ends = one flush

Dv = 4.853 in

Lv = 0.75 in

Driver Properties

--Description--

Name: Impero 12A

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: High Power Pro Sound Driver

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 42.75 Hz

Qms = 13.84

Vas = 70.2 liters

Cms = 0.17 mm/N

Mms = 83.47 g

Rms = 1.62 kg/s

Xmax = 6.22 mm

Xmech = 12.5 mm

P-Dia = 262 mm

Sd = 545.4 sq.cm

P-Vd = 0.335 liters

--Electrical Parameters--

Qes = 0.33

Re = 5.58 ohms

Le = 1.46 mH

Z = 8 ohms

BL = 19.49 Tm

Pe = 1100 watts

--Electromech. Parameters--

Qts = 0.32

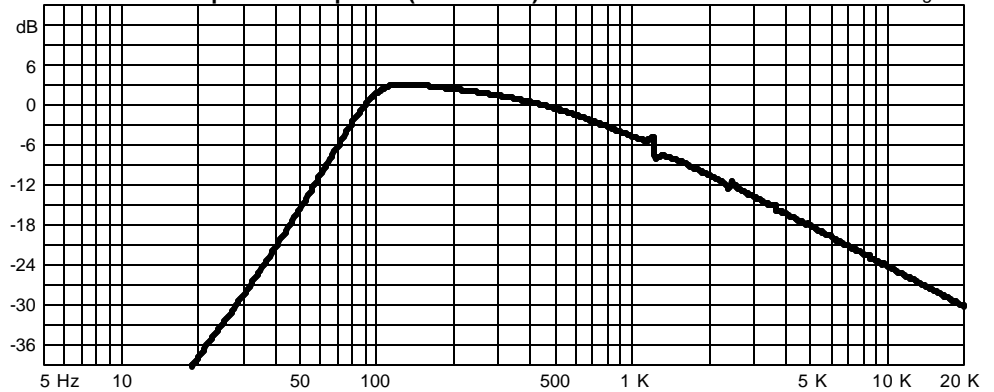
no = 1.602 %

1-W SPL = 94.19 dB

2.83-V SPL = 95.76 dB

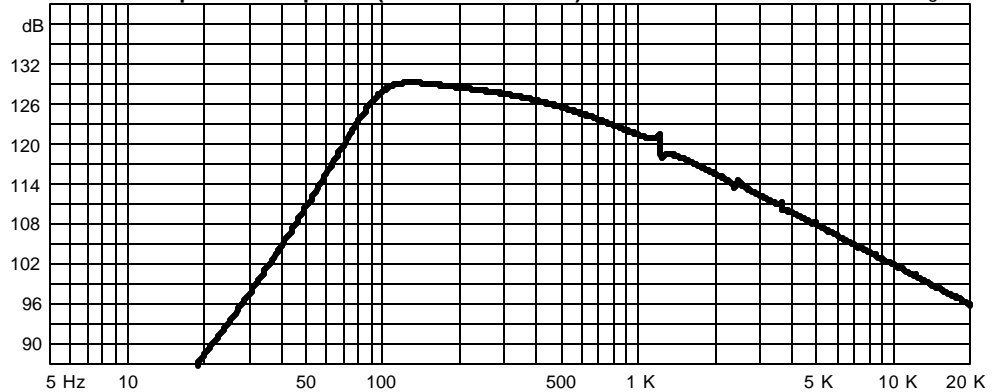
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



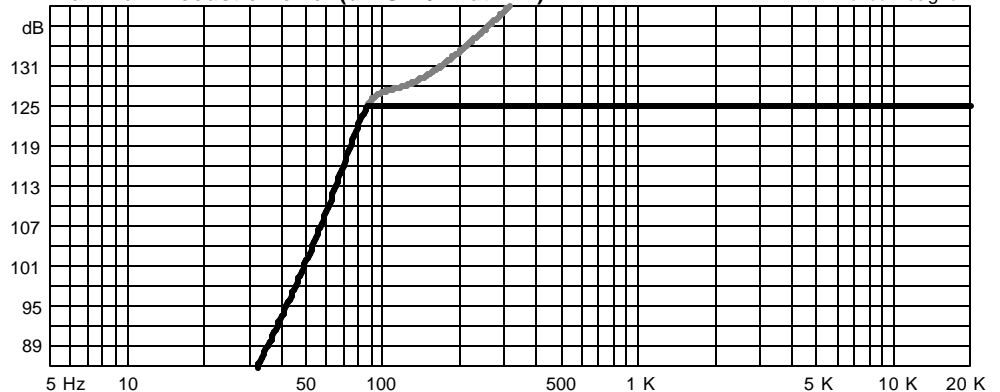
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 1100 watts

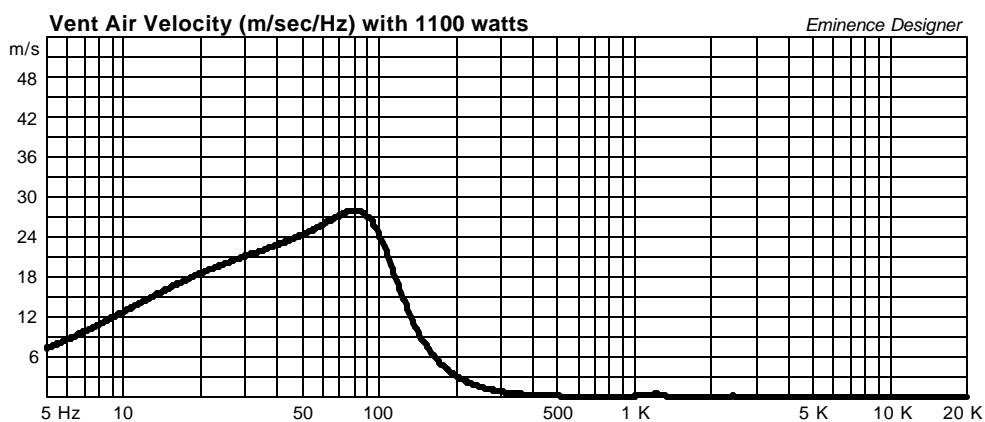
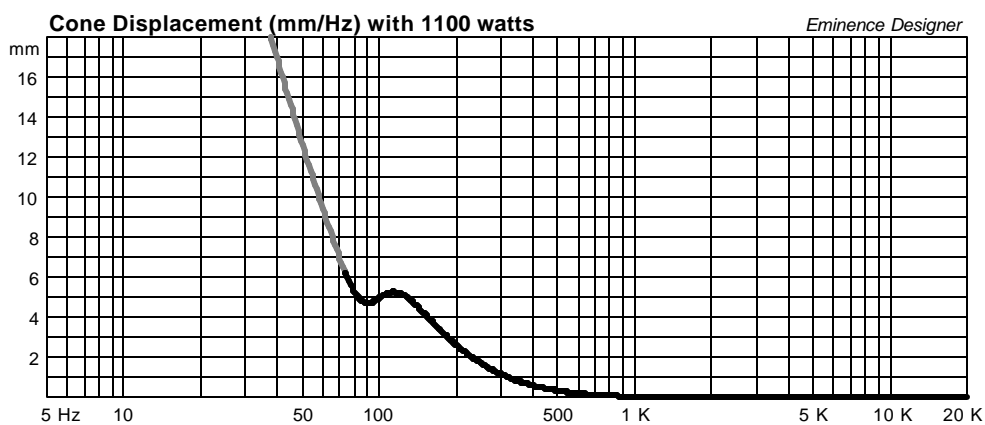
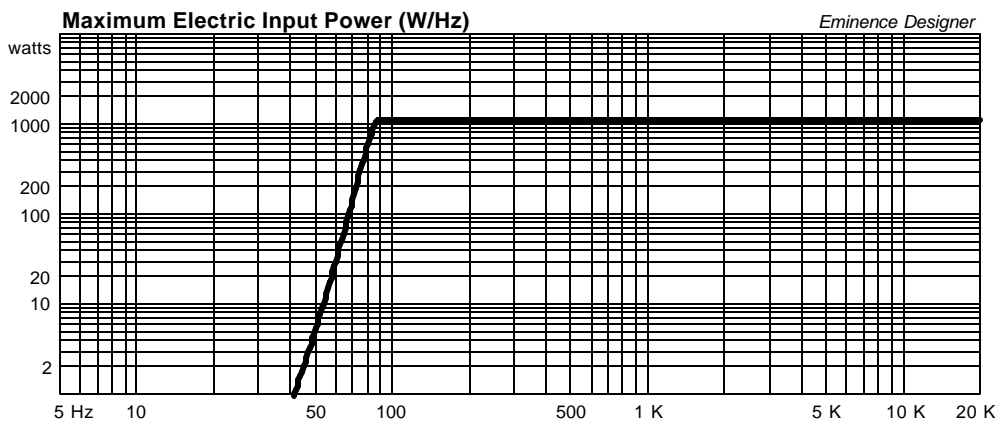
Eminence Designer

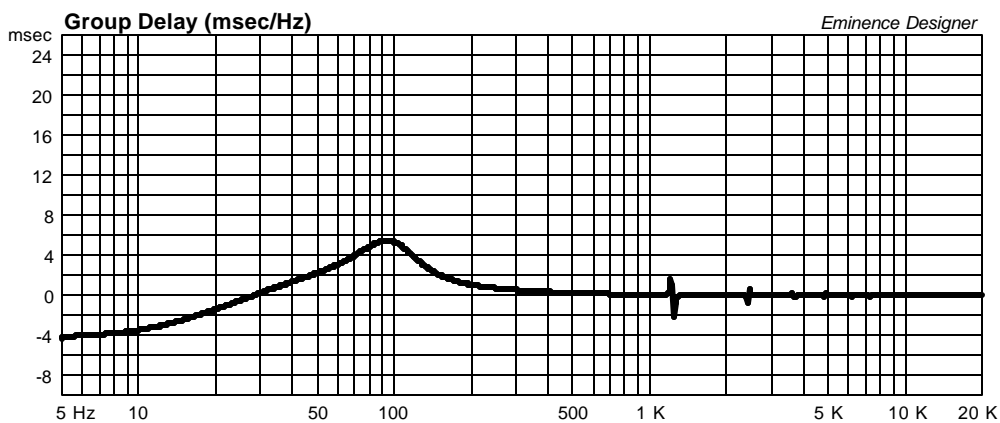
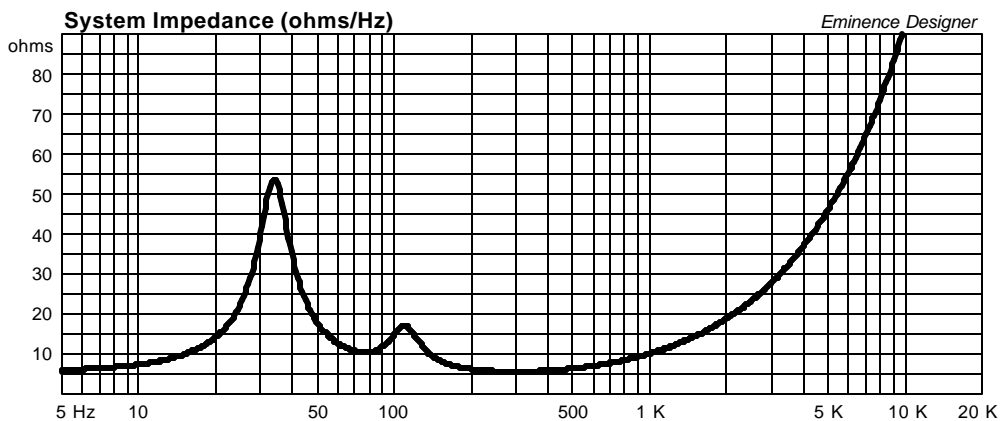


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







Impero 12A Medium Vented Enclosure Design

By Jerry McNutt, Eminence Speaker LLC

450 Watt Design, F3 at 56 Hz. Use a steep High Pass Filter at 45 Hz.

Great for medium power two-way, bass guitar, or floor wedge.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 2.55 cu.ft

V(total) = 2.751 cu.ft

Fb = 55 Hz

QL = 7

F3 = 55.64 Hz

Fill = normal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 4.038 in

Driver Properties

--Description--

Name: Impero 12A

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: High Power Pro Sound Driver

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 42.75 Hz

Qms = 13.84

Vas = 70.2 liters

Cms = 0.17 mm/N

Mms = 83.47 g

Rms = 1.62 kg/s

Xmax = 6.22 mm

Xmech = 12.5 mm

P-Dia = 262 mm

Sd = 545.4 sq.cm

P-Vd = 0.335 liters

--Electrical Parameters--

Qes = 0.33

Re = 5.58 ohms

Le = 1.46 mH

Z = 8 ohms

BL = 19.49 Tm

Pe = 1100 watts

--Electromech. Parameters--

Qts = 0.32

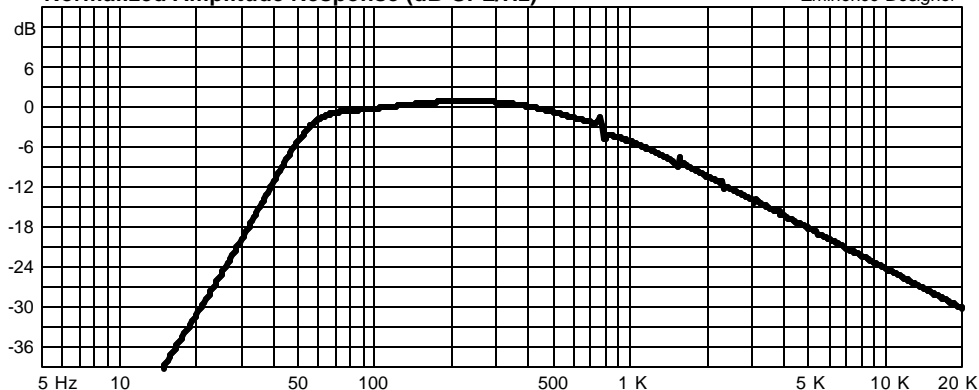
no = 1.602 %

1-W SPL = 94.19 dB

2.83-V SPL = 95.76 dB

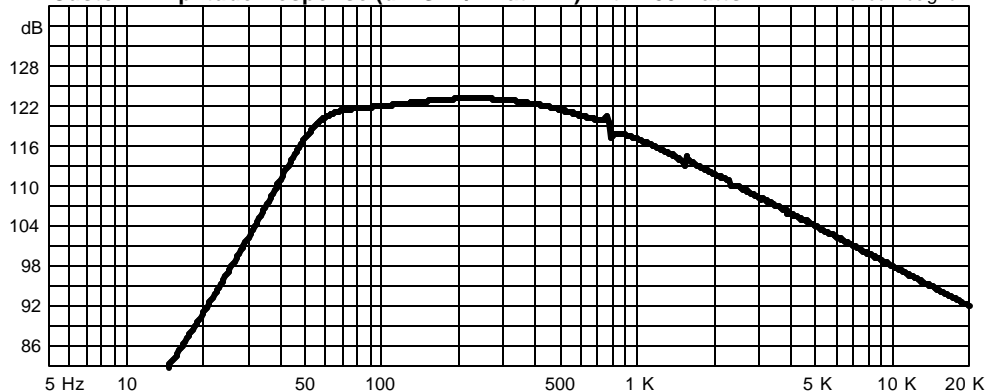
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



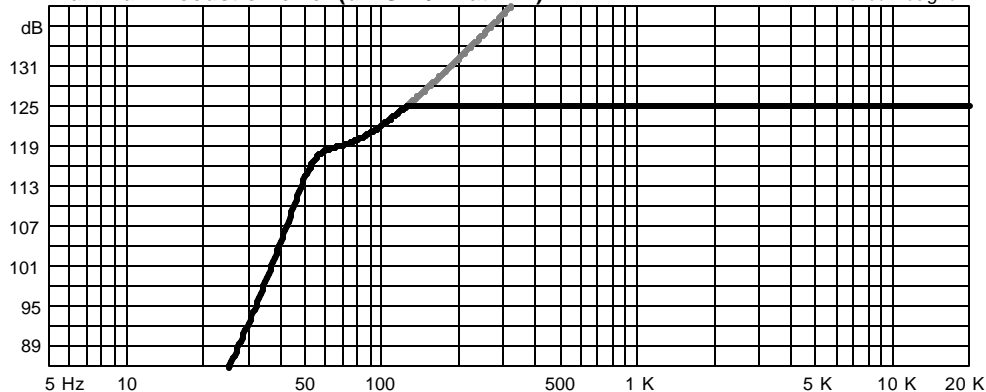
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 450 watts

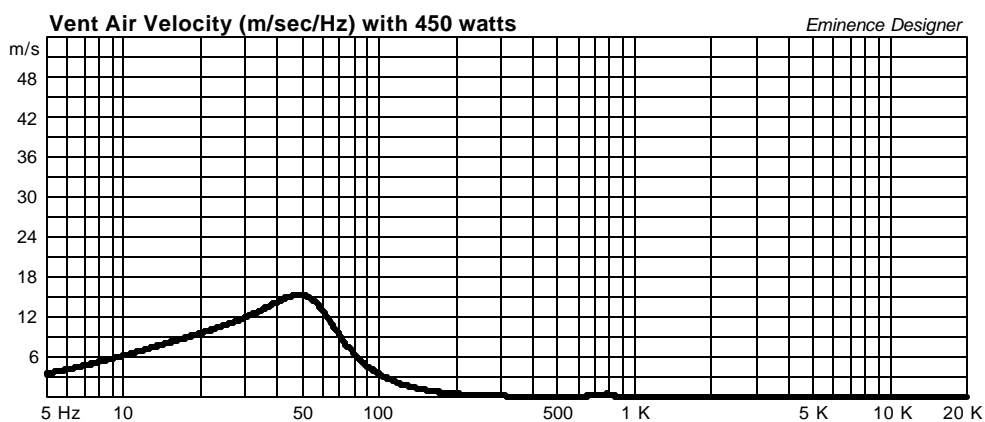
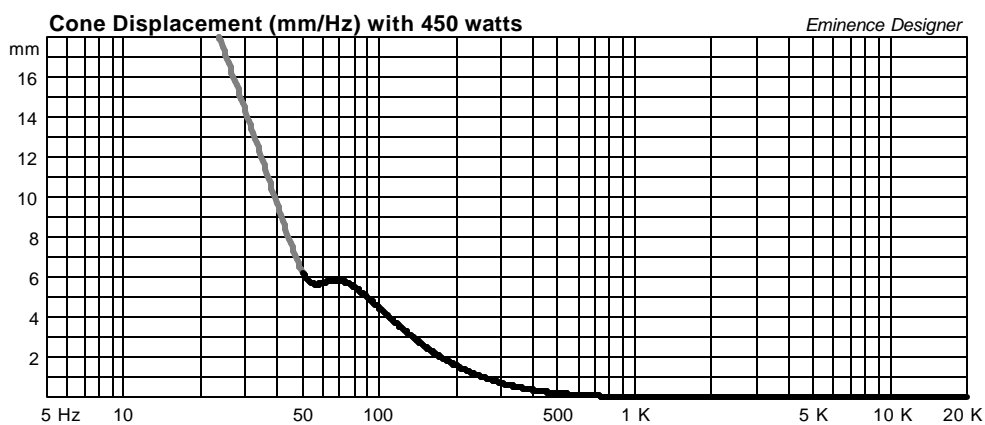
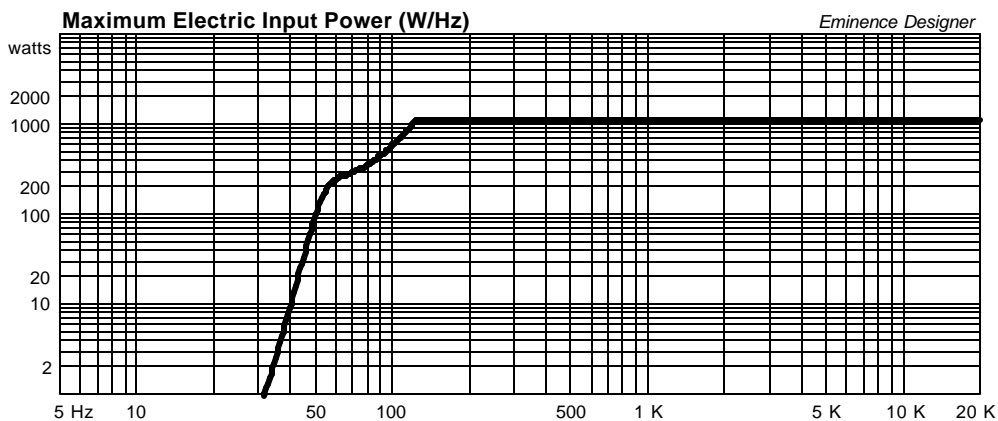
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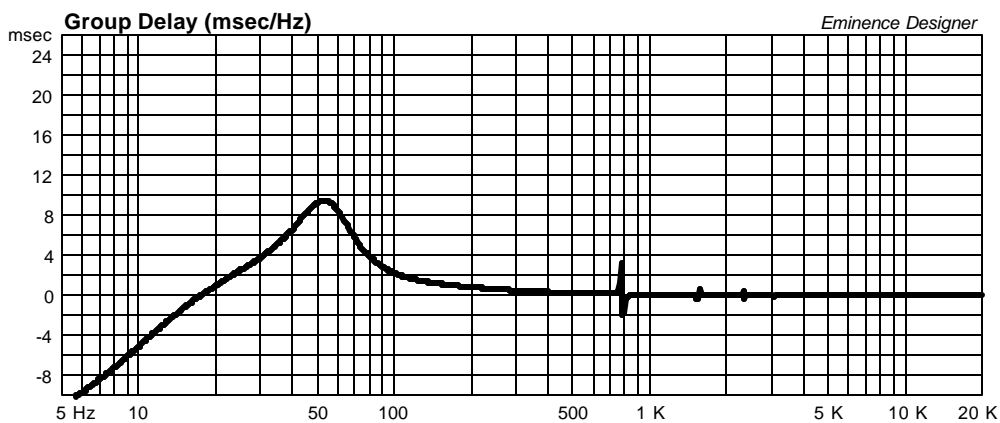
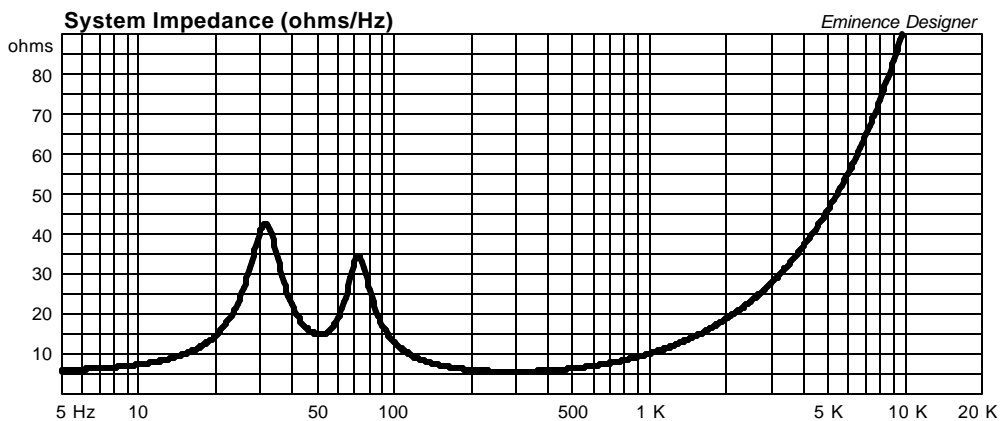


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







Impero 12A Large Vented Design

By Jerry McNutt, Eminence Speaker LLC

300 Watt Design, F3 at 53 Hz. Use a steep High Pass Filter at 45 Hz.

Great for full range Medium power two-way, bass guitar, or floor wedge.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 4 cu.ft

V(total) = 4.148 cu.ft

Fb = 56 Hz

QL = 7

F3 = 56.49 Hz

Fill = normal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 4.064 in

Lv = 0.75 in

Driver Properties

--Description--

Name: Impero 12A

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: High Power Pro Sound Driver

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 42.75 Hz

Qms = 13.84

Vas = 70.2 liters

Cms = 0.17 mm/N

Mms = 83.47 g

Rms = 1.62 kg/s

Xmax = 6.22 mm

Xmech = 12.5 mm

P-Dia = 262 mm

Sd = 545.4 sq.cm

P-Vd = 0.335 liters

--Electrical Parameters--

Qes = 0.33

Re = 5.58 ohms

Le = 1.46 mH

Z = 8 ohms

BL = 19.49 Tm

Pe = 1100 watts

--Electromech. Parameters--

Qts = 0.32

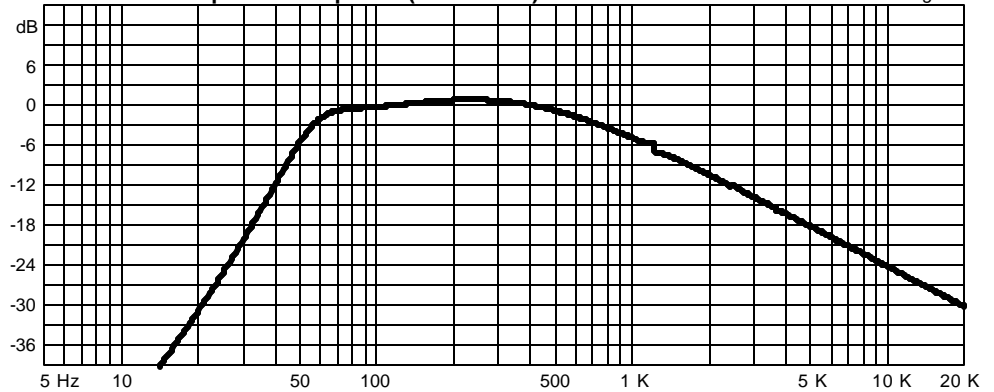
no = 1.602 %

1-W SPL = 94.19 dB

2.83-V SPL = 95.76 dB

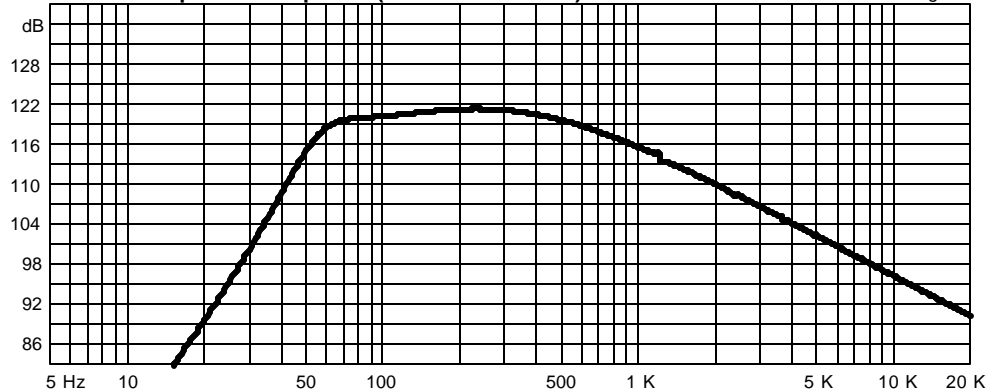
Normalized Amplitude Response (dB-SPL/Hz)

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

