

LAB15 Large Sealed Box

By Jerry McNutt, Eminence Speaker LLC
Limit to 400 Watts; F3 at 65 Hz. Can be EQ'd much lower F3 point.
If used in a car, not much EQ will be needed.



Box Properties

--Description--

Name:

Type: Closed Box

Shape: Cube

--Box Parameters--

Vb = 3.6 cu.ft

V(total) = 3.6 cu.ft

Qtc = 0.425

QL = 18.75

F3 = 64.71 Hz

Fill = heavy

Driver Properties

--Description--

Name: LAB 15

Type: Standard one-way driver

Company: Eminence Speaker LLC

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 27.82 Hz

Qms = 5.36

Vas = 3.659 cu.ft

Xmax = 0.463 in

Sd = 127.7 sq.in

Qes = 0.37

Re = 4.91 ohms

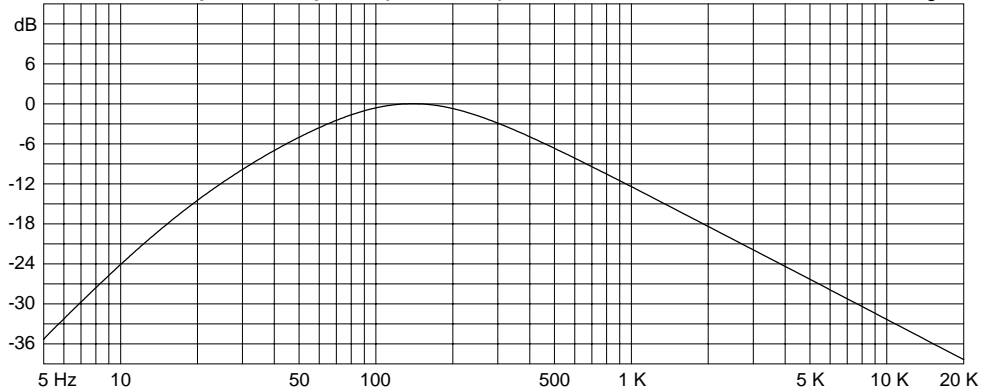
Le = 3.23 mH

Z = 6 ohms

Pe = 600 watts

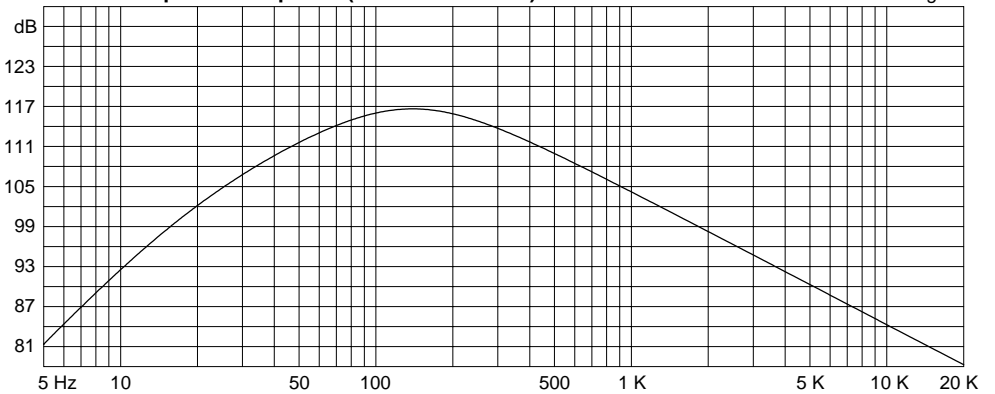
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



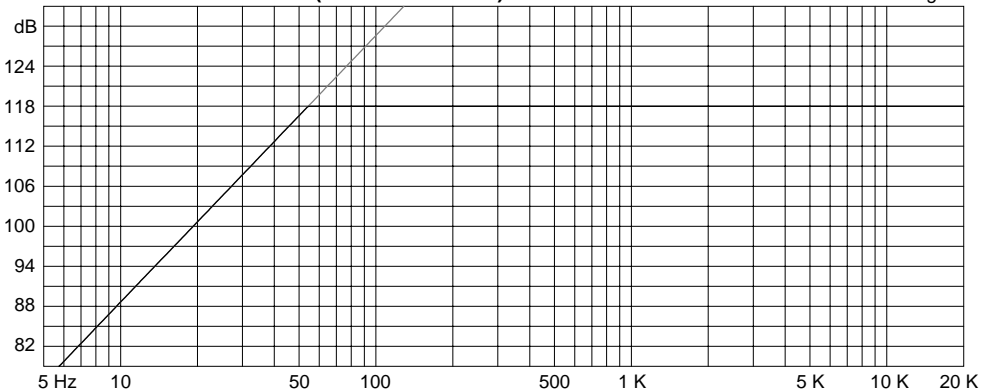
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 400 watts

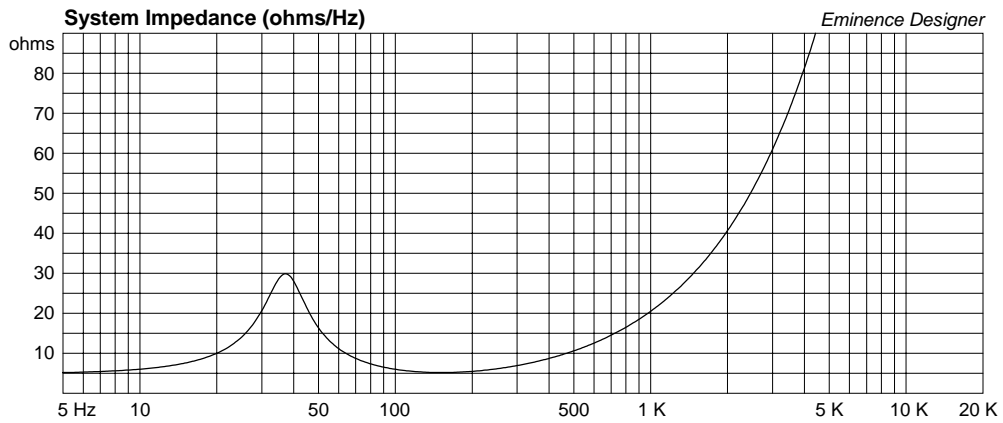
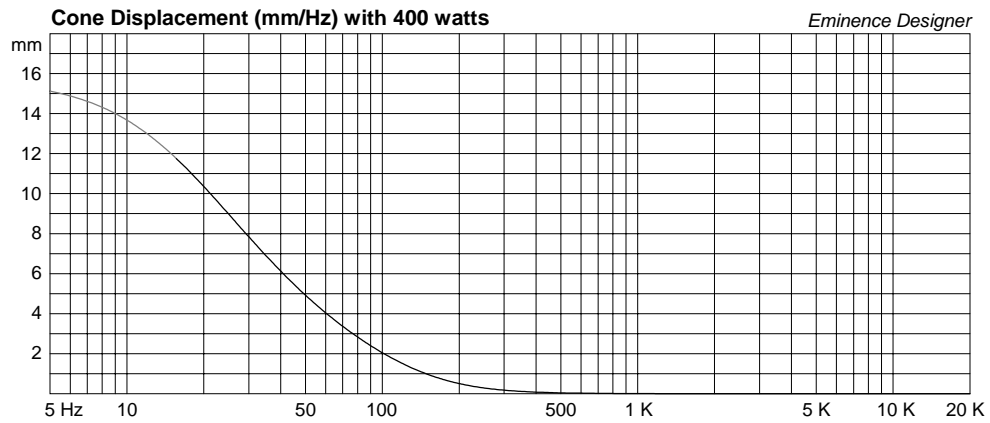
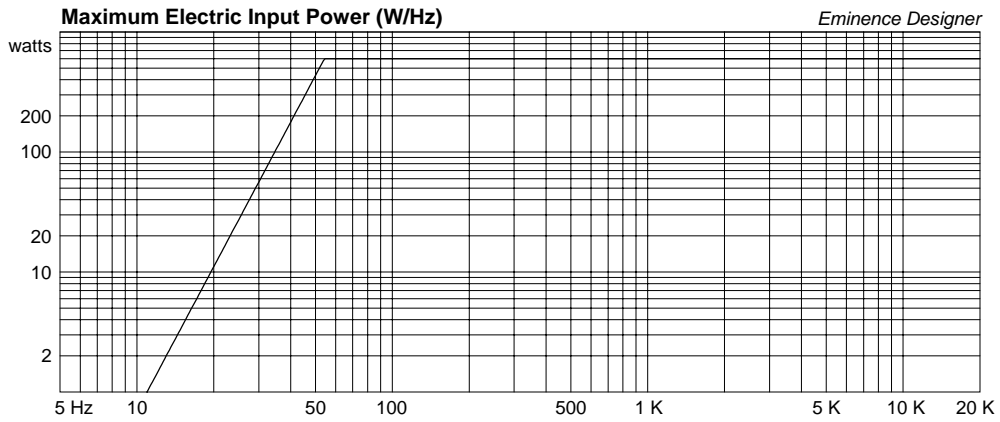
Eminence Designer

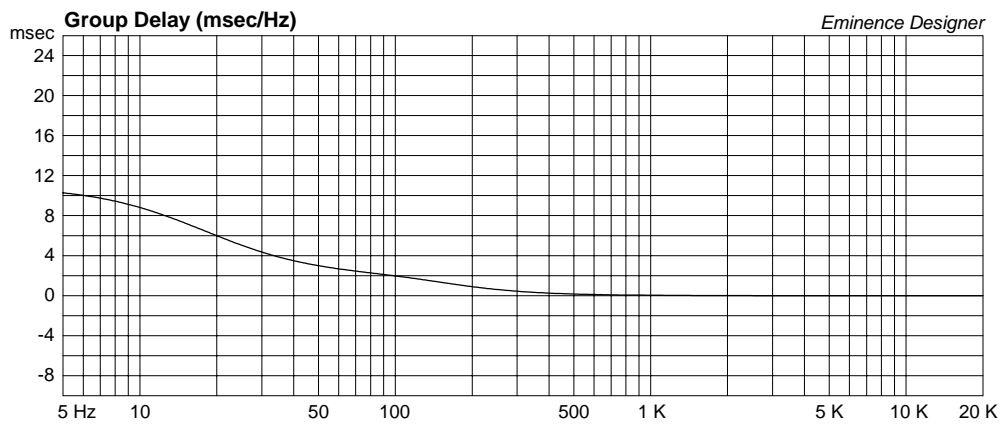
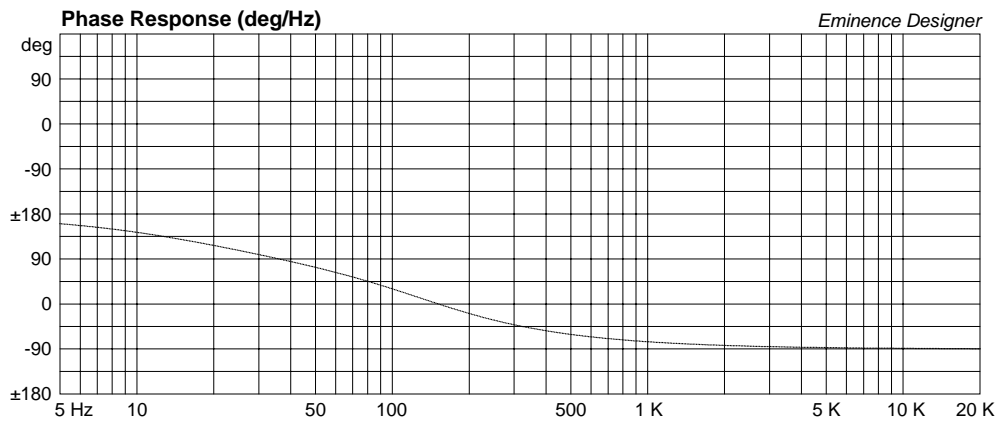


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







LAB15 Small Sealed Car Sub Design

By Jerry McNutt, Eminence Speaker LLC

Limit to 500 Watts; F3 of 61 Hz. F3 will be MUCH lower in a car.

If you use two woofers, double the box volume and use a divider.



Box Properties

--Description--

Name:

Type: Closed Box

Shape: Prism, square

--Box Parameters--

Vb = 1.252 cu.ft

V(total) = 1.469 cu.ft

Qtc = 0.612

QL = 20

F3 = 61.23 Hz

Fill = normal

Driver Properties

--Description--

Name: LAB 15

Type: Standard one-way driver

Company: Eminence Speaker LLC

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 27.82 Hz

Qms = 5.36

Vas = 3.659 cu.ft

Xmax = 0.463 in

Sd = 127.7 sq.in

Qes = 0.37

Re = 4.91 ohms

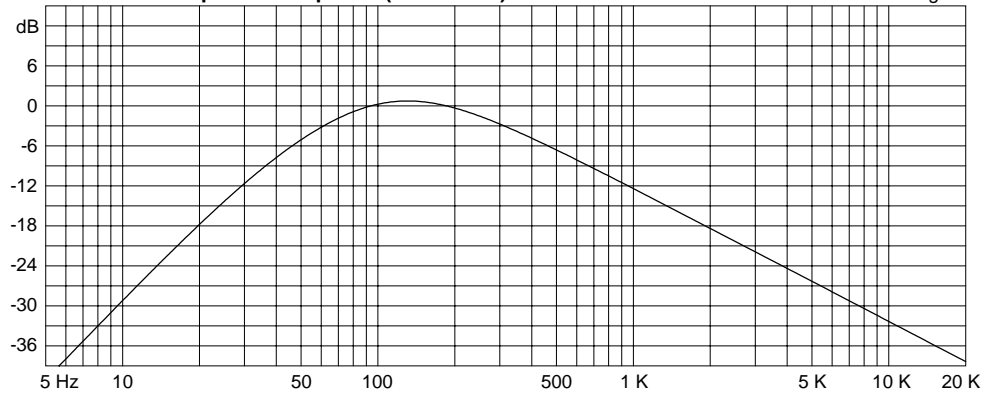
Le = 3.23 mH

Z = 6 ohms

Pe = 600 watts

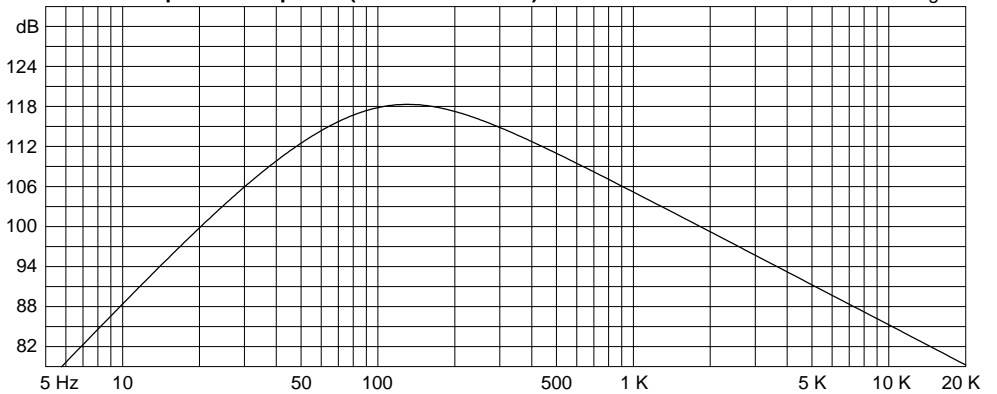
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



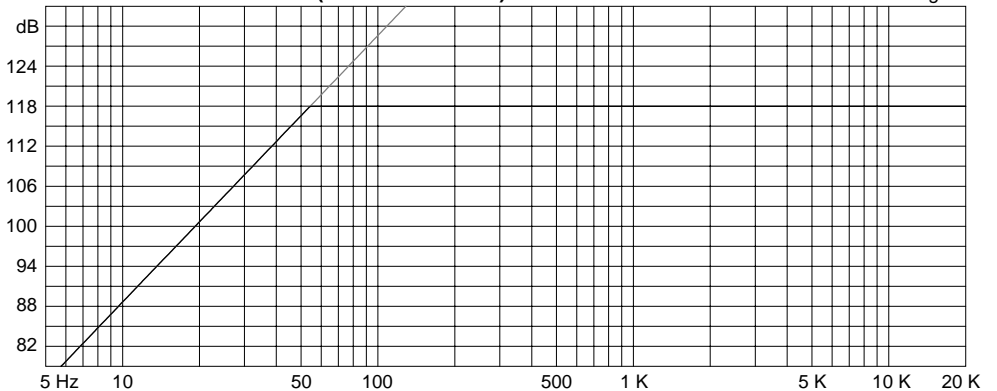
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 500 watts

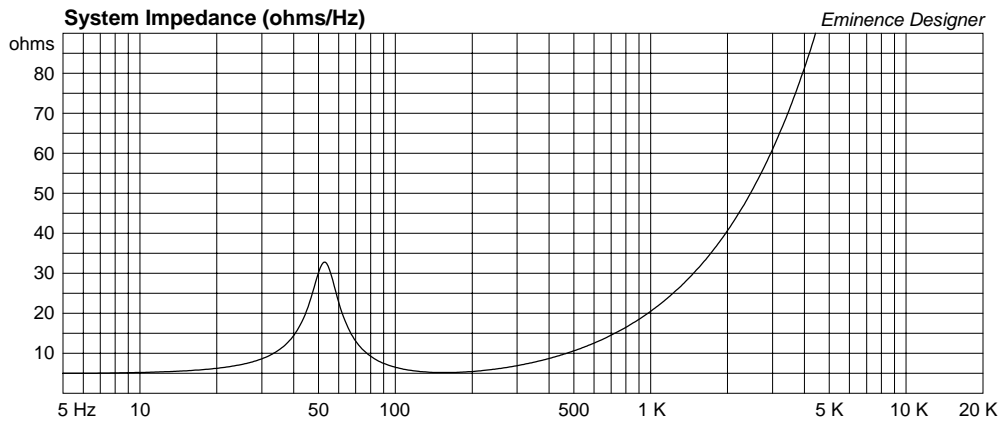
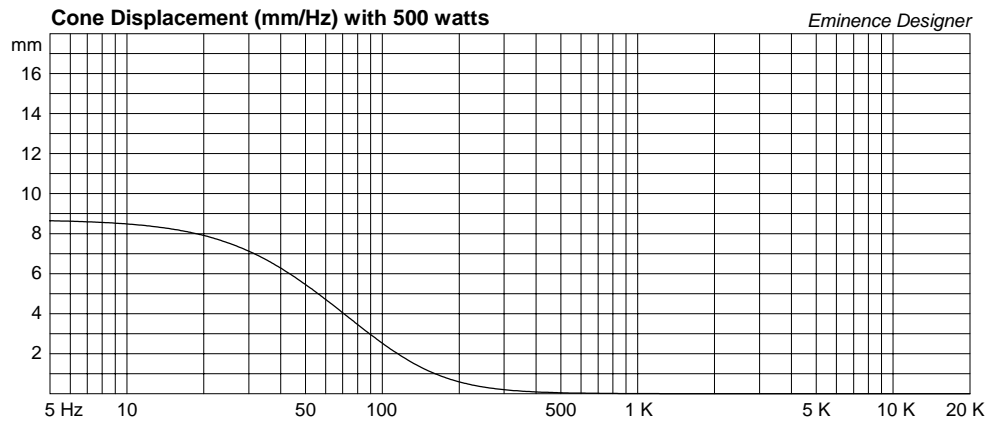
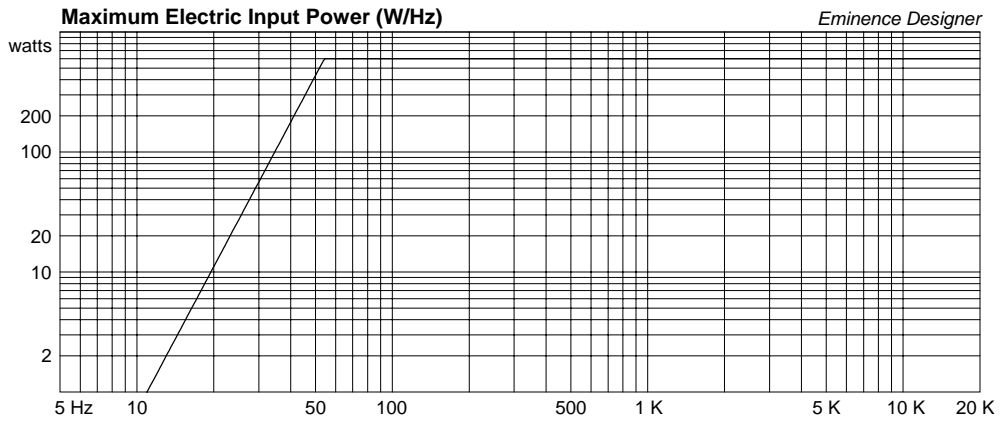
Eminence Designer

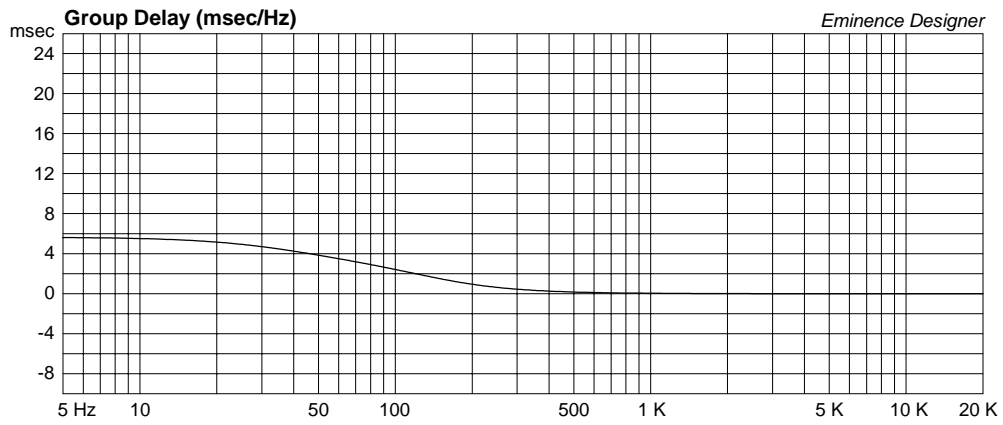
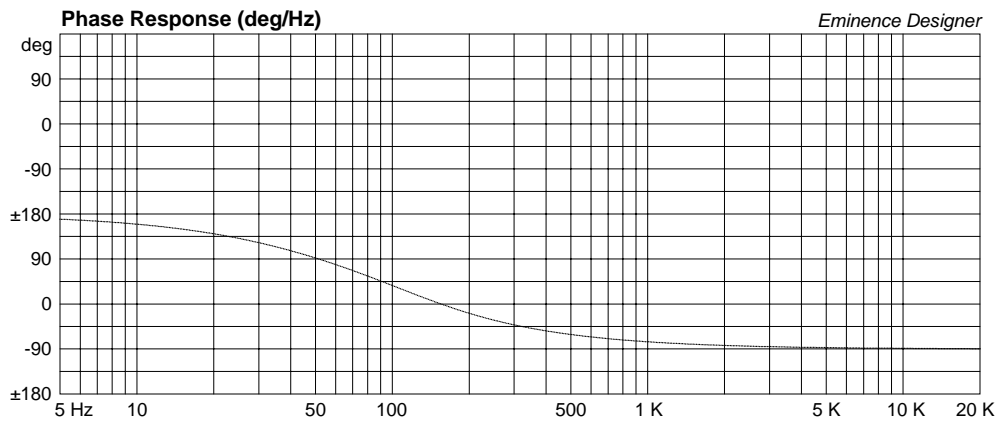


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







LAB15 Med Sized Vented Club Sub

By Jerry McNutt, Eminence Speaker LLC

Limit to 600 Watts; F3 of 27 Hz.

Use a steep High Pass filter at 25 Hz to protect your investment.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 4.5 cu.ft

V(total) = 5.294 cu.ft

Fb = 30 Hz

QL = 7

F3 = 27.27 Hz

Fill = minimal

--Vents--

No. of Vents = 1

Vent shape = rectangle

Vent ends = one flush

Hv = 6.5 in

Wv = 6.5 in

Lv = 21.9 in

Driver Properties

--Description--

Name: LAB 15

Type: Standard one-way driver

Company: Eminence Speaker LLC

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 27.82 Hz

Qms = 5.36

Vas = 3.659 cu.ft

Xmax = 0.463 in

Sd = 127.7 sq.in

Qes = 0.37

Re = 4.91 ohms

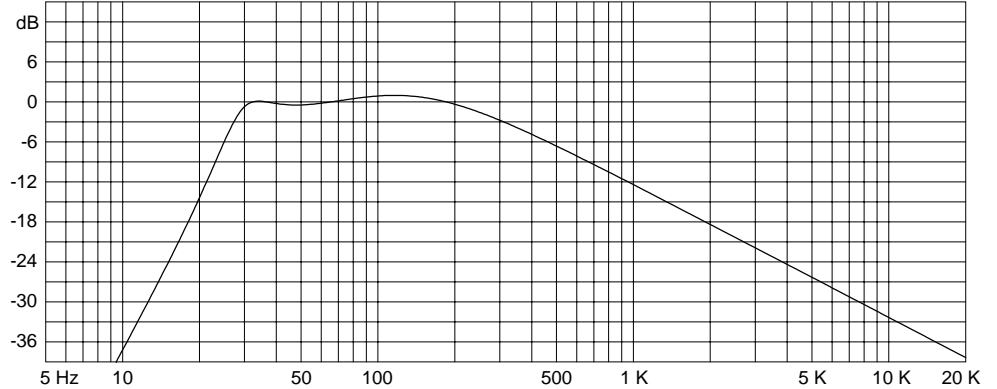
Le = 3.23 mH

Z = 6 ohms

Pe = 600 watts

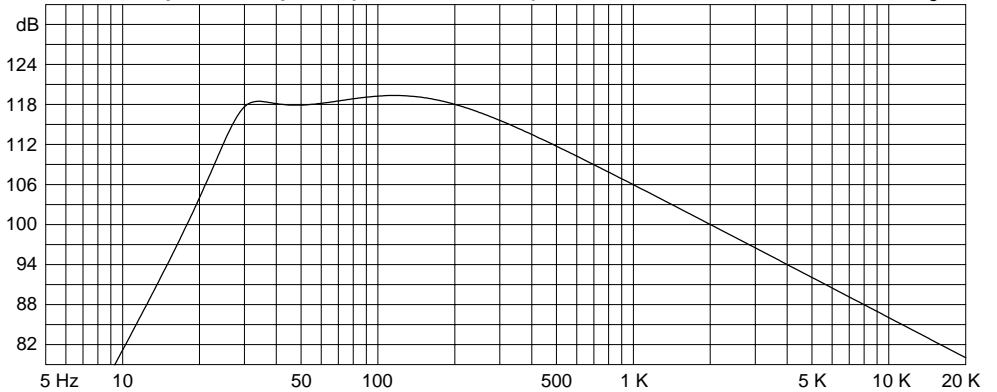
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



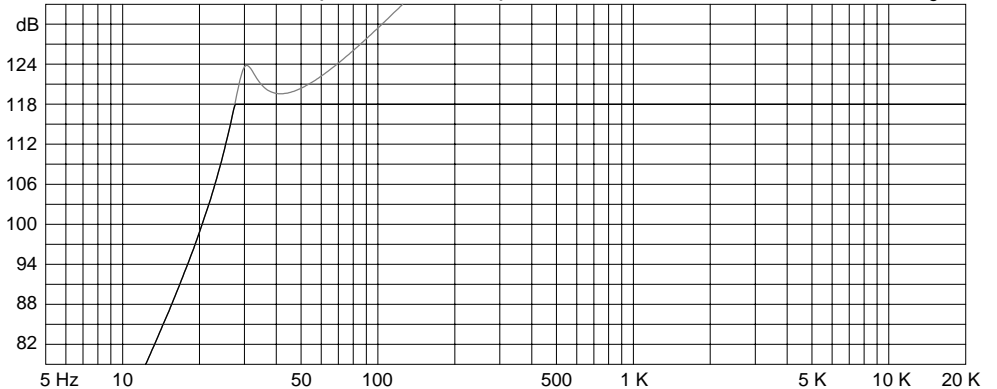
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 600 watts

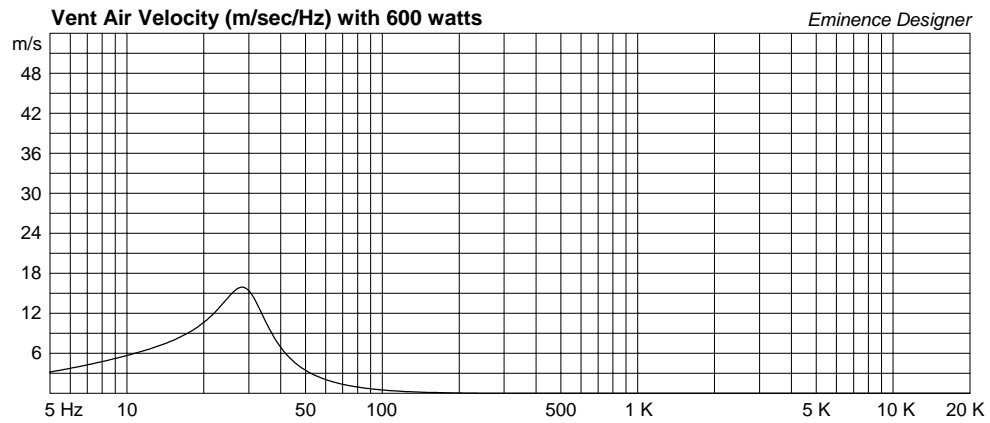
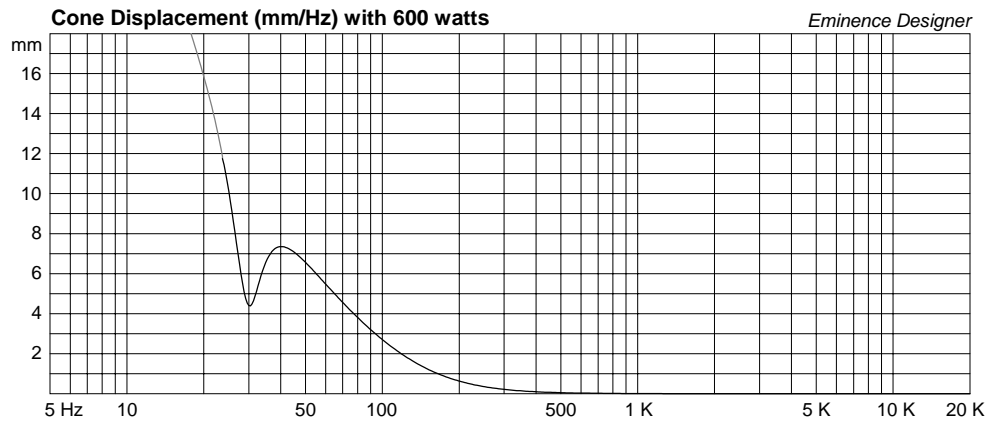
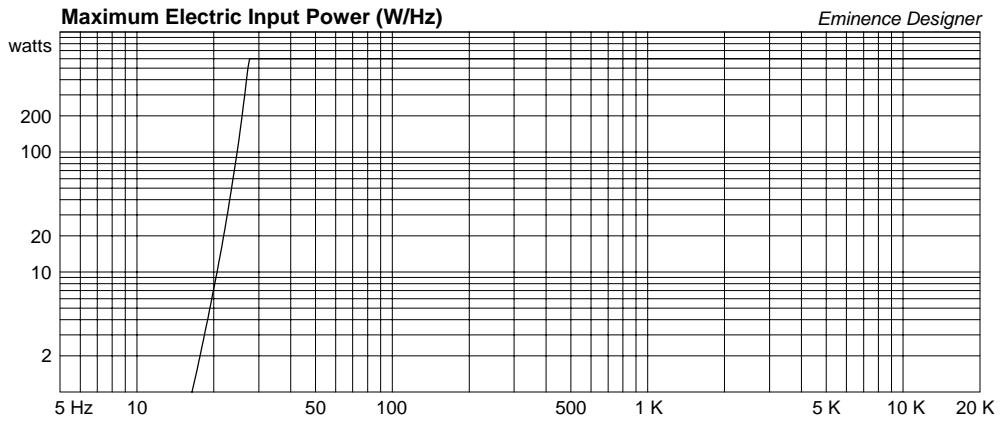
Eminence Designer

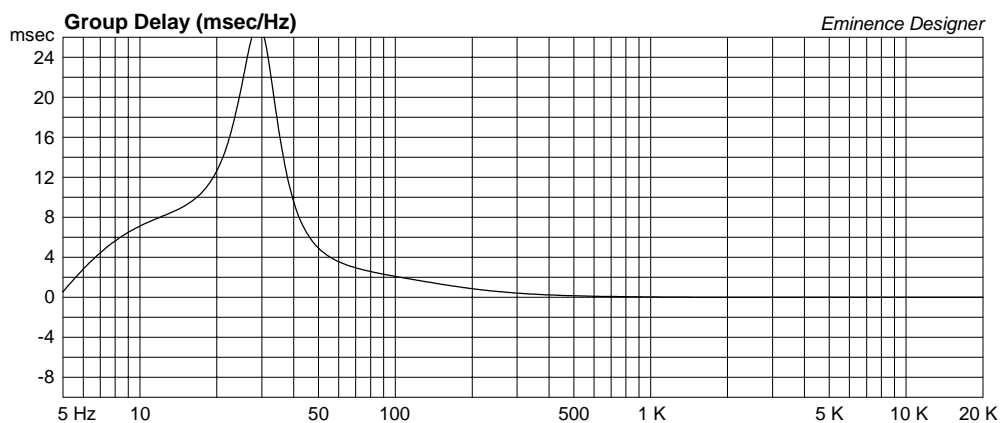
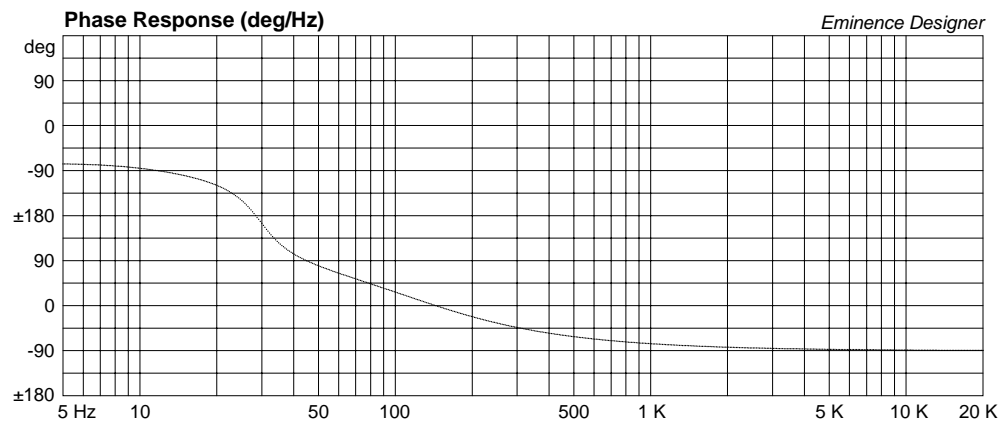
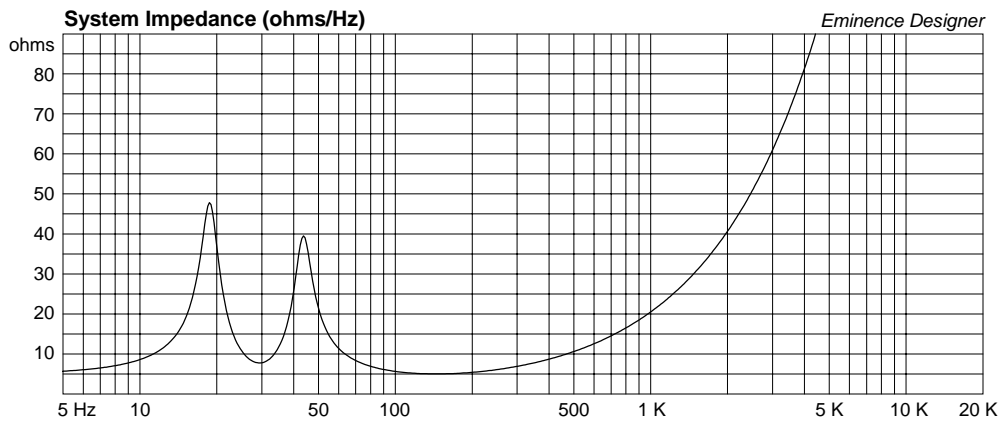


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







LAB15 Large Deep Bass Design

By Jerry McNutt, Eminence Speaker LLC
Thermally Limited to 600 Watts; F3 at 21Hz.
Use a steep high pass at 18 Hz to protect your investment.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 10 cu.ft

V(total) = 10.67 cu.ft

Fb = 22 Hz

QL = 7

F3 = 20.37 Hz

Fill = minimal

--Vents--

No. of Vents = 1

Vent shape = rectangle

Vent ends = one flush

Hv = 6.5 in

Wv = 6.5 in

Lv = 17.12 in

Driver Properties

--Description--

Name: LAB 15

Type: Standard one-way driver

Company: Eminence Speaker LLC

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 27.82 Hz

Qms = 5.36

Vas = 3.659 cu.ft

Xmax = 0.463 in

Sd = 127.7 sq.in

Qes = 0.37

Re = 4.91 ohms

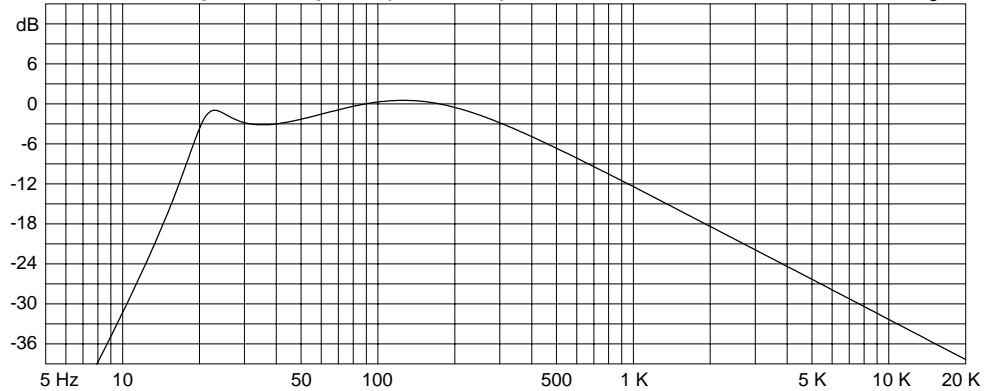
Le = 3.23 mH

Z = 6 ohms

Pe = 600 watts

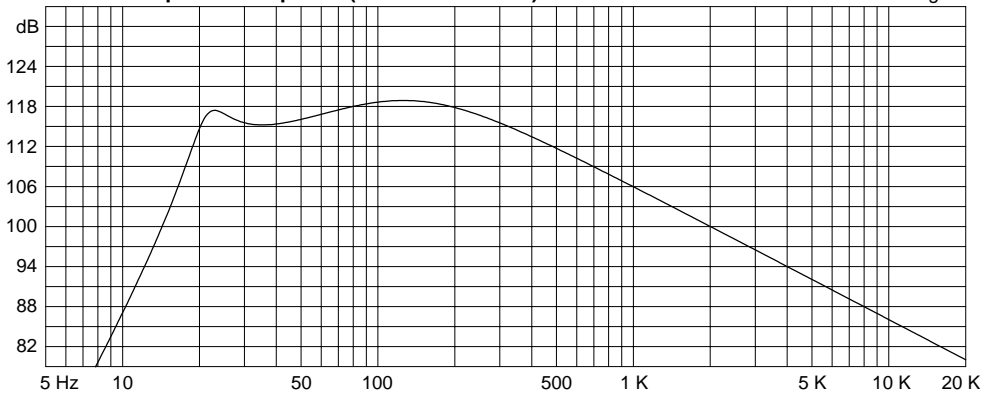
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



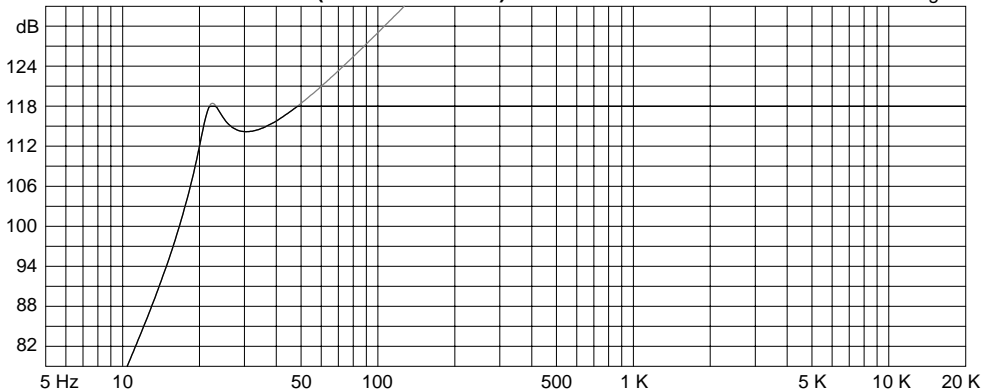
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 600 watts

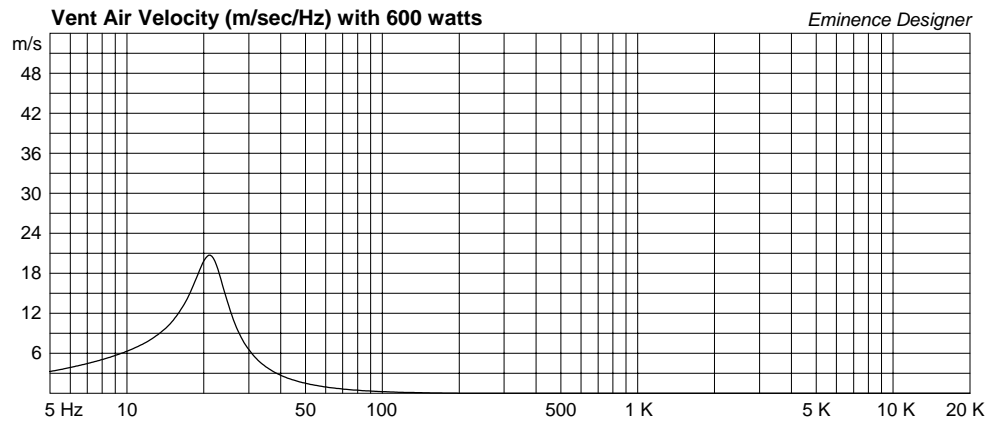
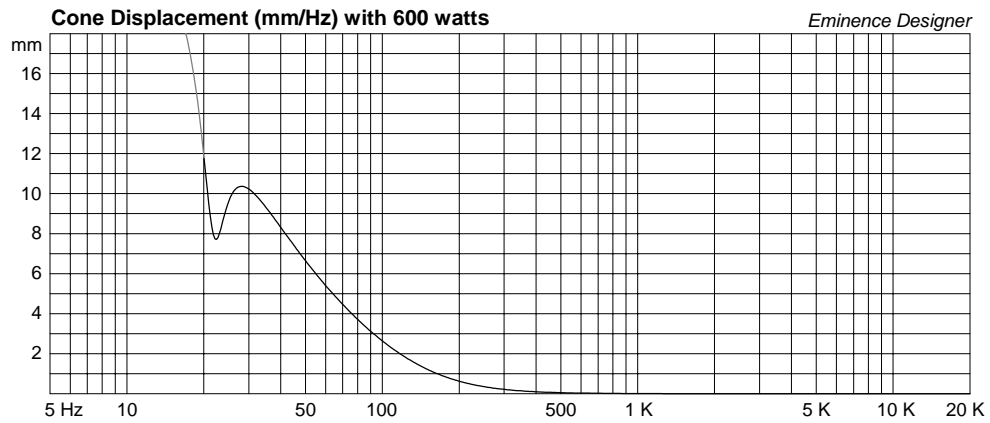
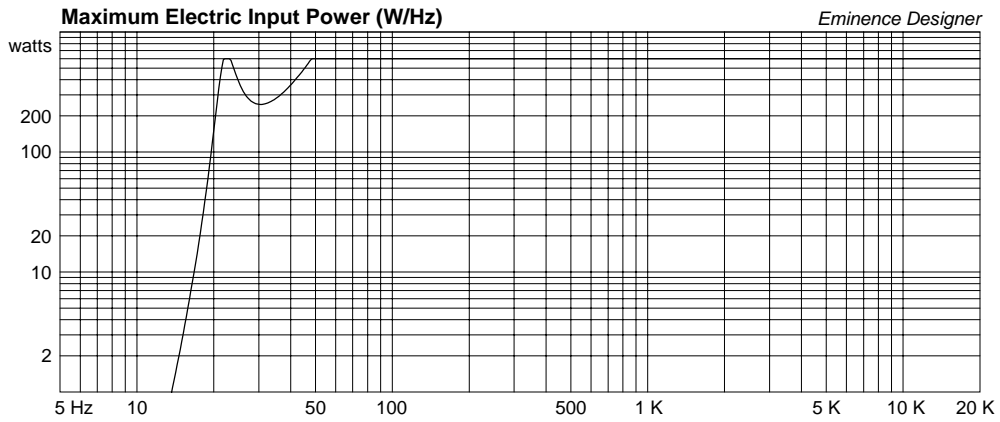
Eminence Designer

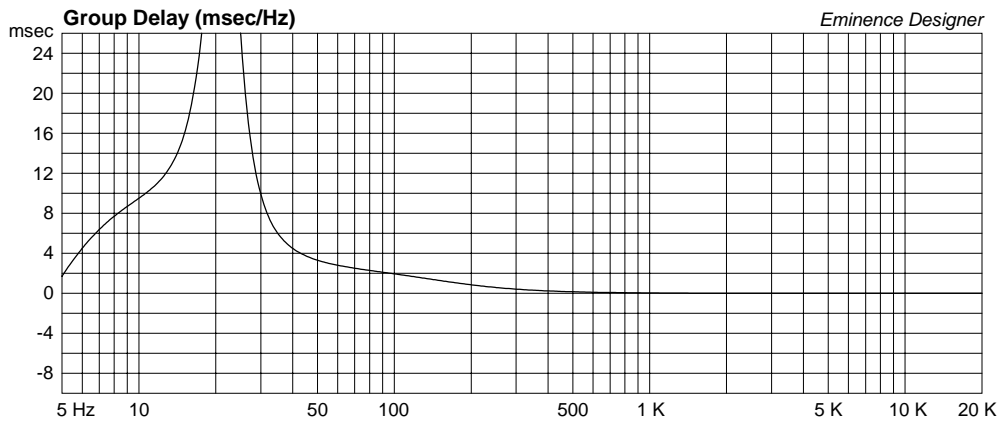
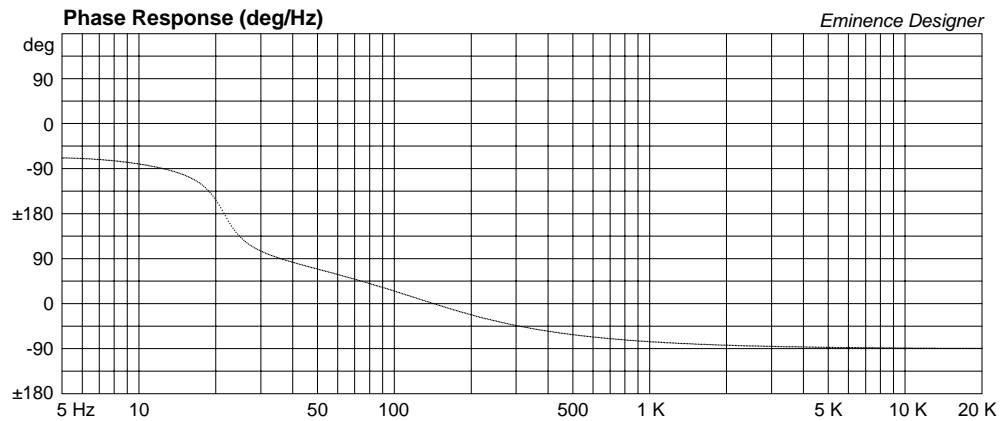
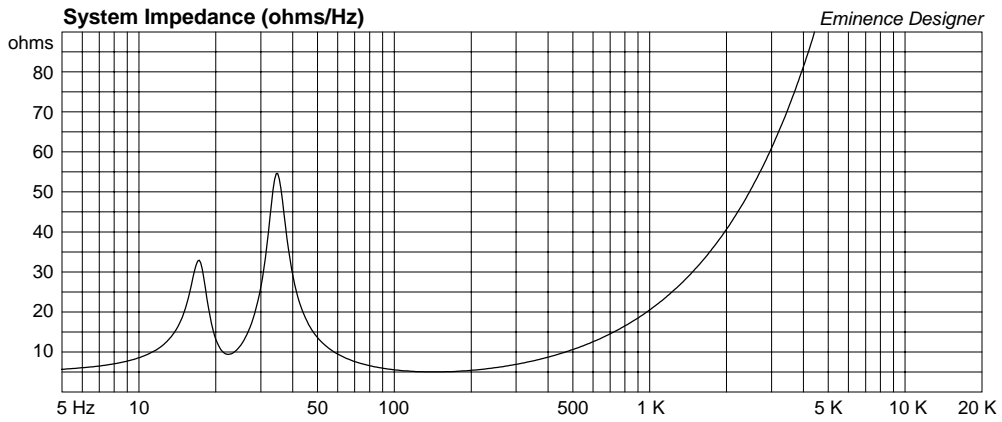


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







LAB15 Small Vented Sub Design

By Jerry McNutt, Eminence Speaker LLC

Limit to 600 Watts; F3 of 32 Hz.

Use a steep high pass filter set at 25 Hz to protect your investment.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 2.75 cu.ft

V(total) = 3.232 cu.ft

Fb = 35 Hz

QL = 7

F3 = 32.37 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 16.16 in

Driver Properties

--Description--

Name: LAB 15

Type: Standard one-way driver

Company: Eminence Speaker LLC

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 27.82 Hz

Qms = 5.36

Vas = 3.659 cu.ft

Xmax = 0.463 in

Sd = 127.7 sq.in

Qes = 0.37

Re = 4.91 ohms

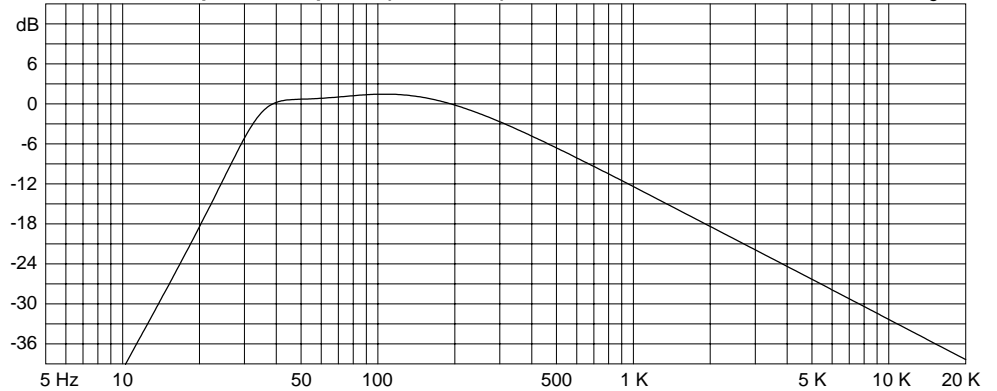
Le = 3.23 mH

Z = 6 ohms

Pe = 600 watts

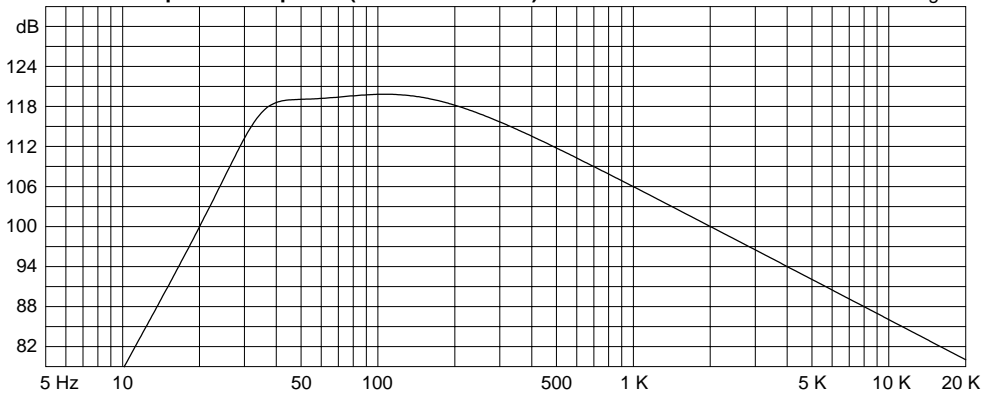
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 600 watts

Eminence Designer



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

Eminence Designer

