

Specification

Nominal Basket Diameter	10", 254mm
Nominal Impedance*	32 ohms
Power Rating**	
Watts	150W
Music Program	300W
Resonance	52Hz
Usable Frequency Range***	49Hz-5.1kHz
Sensitivity	92.7
Magnet Weight	30 oz.
Gap Height	0.312", 7.94mm
Voice Coil Diameter	2", 50.8mm

Thiele & Small Parameters

Resonant Frequency (fs)	52.07Hz
DC Resistance (Re)	27.5
Coil Inductance (Le)	2.72mH
Mechanical Q (Qms)	13.91
Electromagnetic Q (Qes)	0.68
Total Q (Qts)	0.65
Compliance Equivalent Volume (Vas)	66.4 liters / 2.34 cu.ft.
Peak Diaphragm Displacement Volume (Vd)	165.2cc
Mechanical Compliance of Suspension (Cms)	0.39mm/N
BL Product (BL)	17.8 T-M
Diaphragm Mass inc. Airload (Mms)	23.8 grams
Efficiency Bandwidth Product (EBP)	76.8
Maximum Linear Excursion (Xmax)	4.7mm
Surface Area of Cone (Sd)	350.1 cm ²
Maximum Mechanical Limit (Xlim)	9.5mm

Mounting Information

Recommended Enclosure Volume	
Sealed	14-35 liters / 0.5-1.3 cu.ft.
Vented	45.76 liters / 1.6-2.7 cu.ft.
Driver Volume Displaced	66.9 cu.in. / 1.1 liters
Overall Diameter	10.11", 256.8mm
Baffle Hole Diameter	9.13", 231.9mm
Front Sealing Gasket	Fitted as standard
Rear Sealing Gasket	Fitted as standard
Mounting Holes Diameter	0.23", 5.7mm
Mounting Holes B.C.D.	9.60", 243.8mm
Depth	4.08", 103.6mm
Net Weight	6.7 lbs, 3.04 kg
Shipping Weight	7.9 lbs, 3.6 kg

Materials of Construction

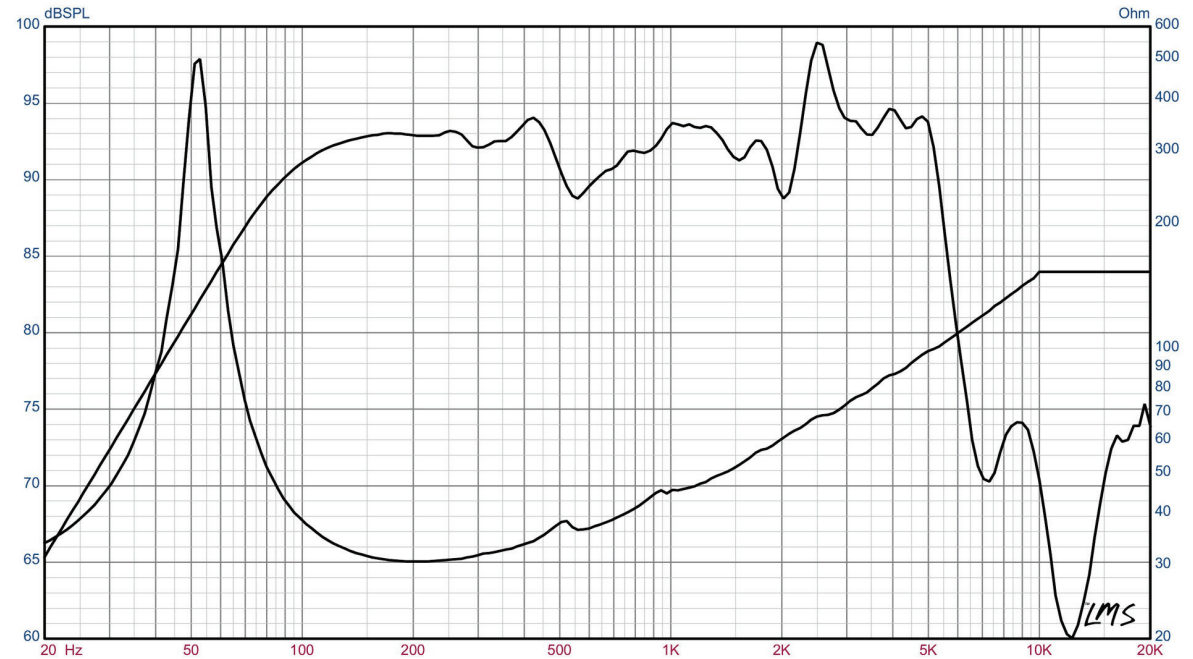
Copper voice coil
 Kapton
 Ferrite magnet
 Bumped
 Pressed steel basket
 Paper Cone
 Cloth cone edge
 Zurette dust cap


EMINENCE®
 The Art and Science of Sound



LEGEND B810 Bass Guitar Speaker

Bass Guitar! Small Sealed enclosures. Use in multiples



* Please inquire about alternative impedances.

** Multiple units exceed published rating evaluated under EIA 426A noise source and test standard while in a free-air, non-temperature controlled environment.

*** The average output across the usable frequency range when applying 1W/1M into the nominal impedance. Ie: 2.83V/8ohms, 4V/16ohms.

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 | 2ft. X 2ft. 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)

Legend B810 Single Large Sealed

By Jerry McNutt, Eminence Speaker LLC

Limit to 100 watts per driver. F3 at 77 Hz.

Double volume for two; 4 times for 4 drivers; 8 times for 8 drivers!



Box Properties

--Description--

Name:

Type: Closed Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 0.899 cu.ft

V(total) = 0.899 cu.ft

Qtc = 0.997

QL = 14.73

F3 = 76.95 Hz

Fill = normal

Driver Properties

--Description--

Name: Legend B810

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 32 Ohm Bass Guitar Driver

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 52.07 Hz

Qms = 13.91

Vas = 2.343 cu.ft

Xmax = 0.186 in

Sd = 54.27 sq.in

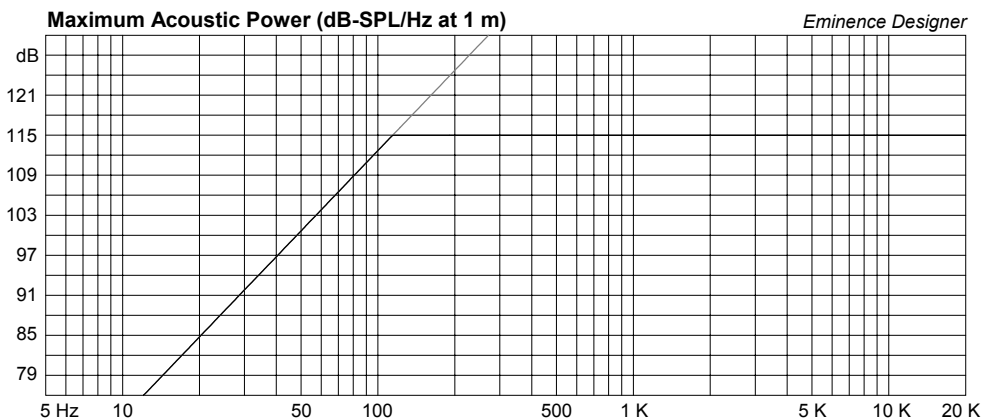
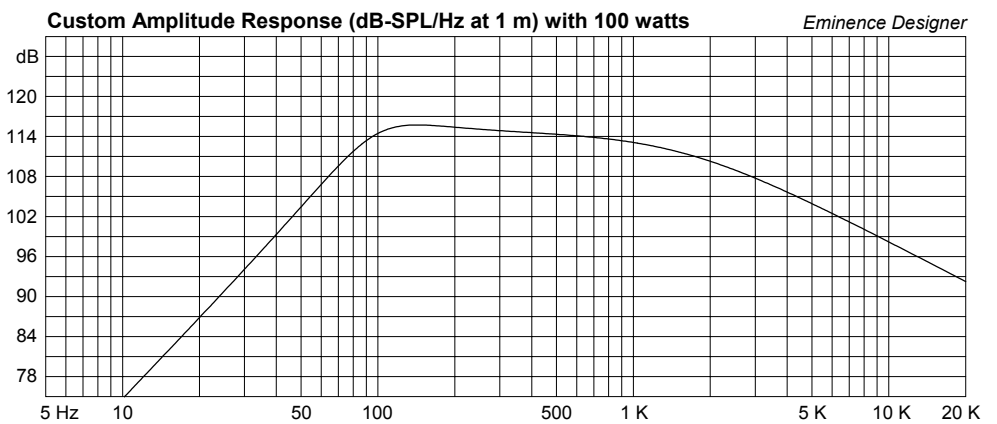
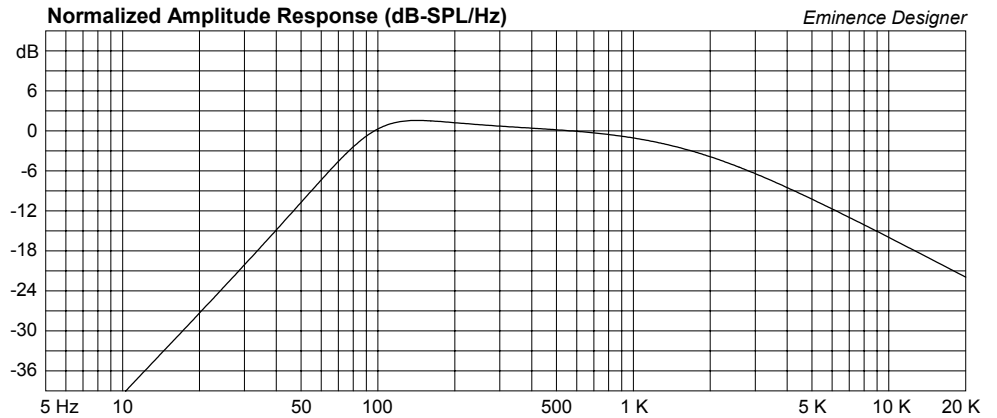
Qes = 0.68

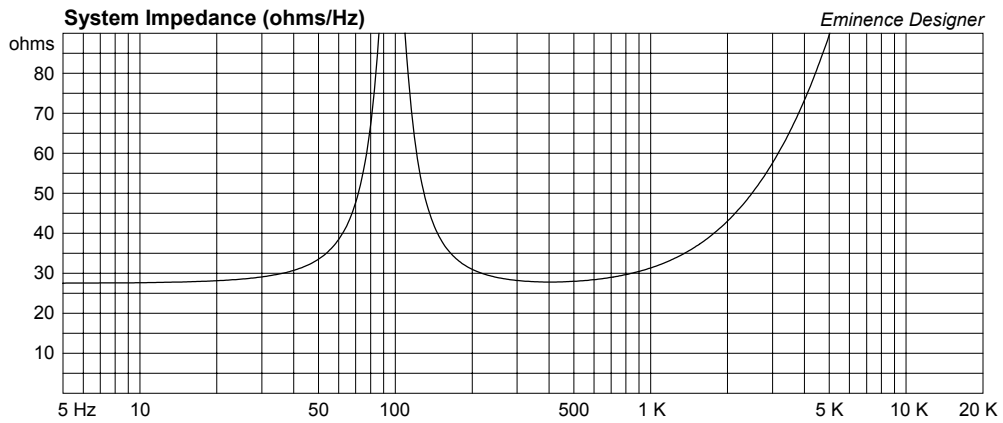
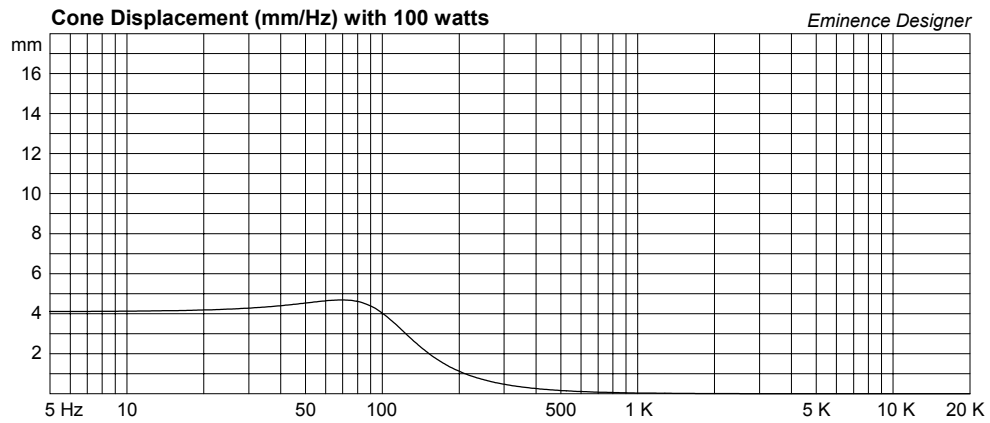
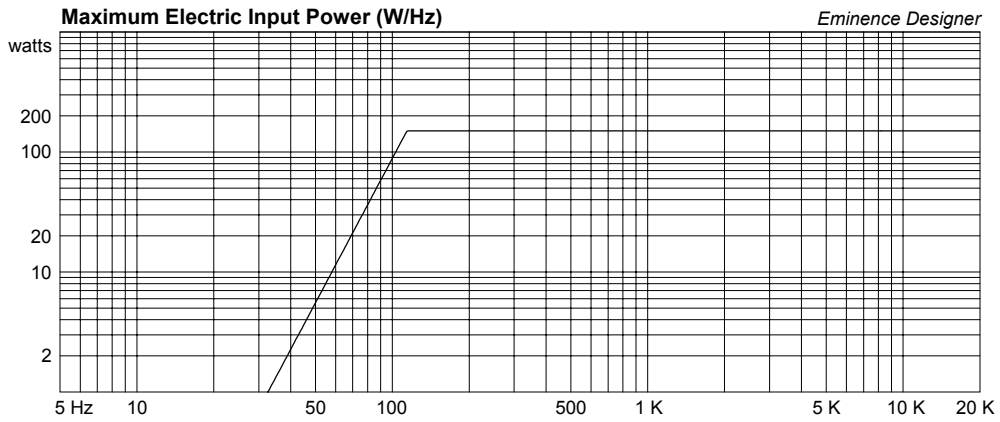
Re = 27.51 ohms

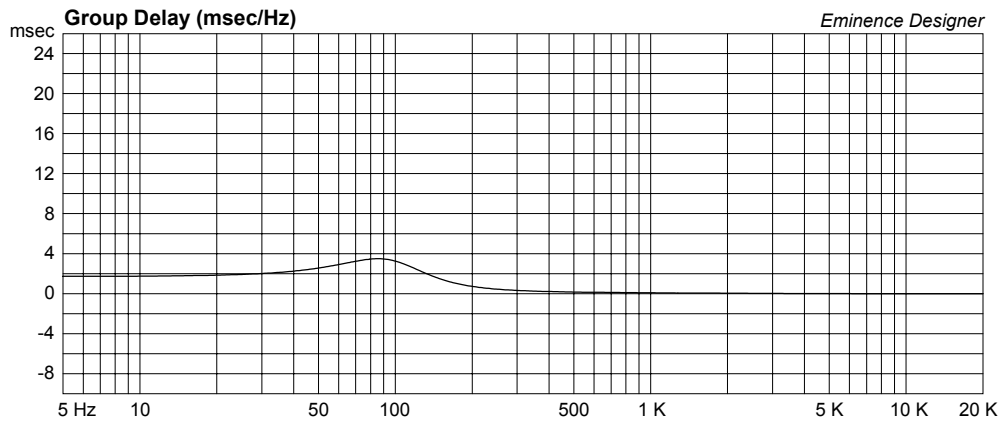
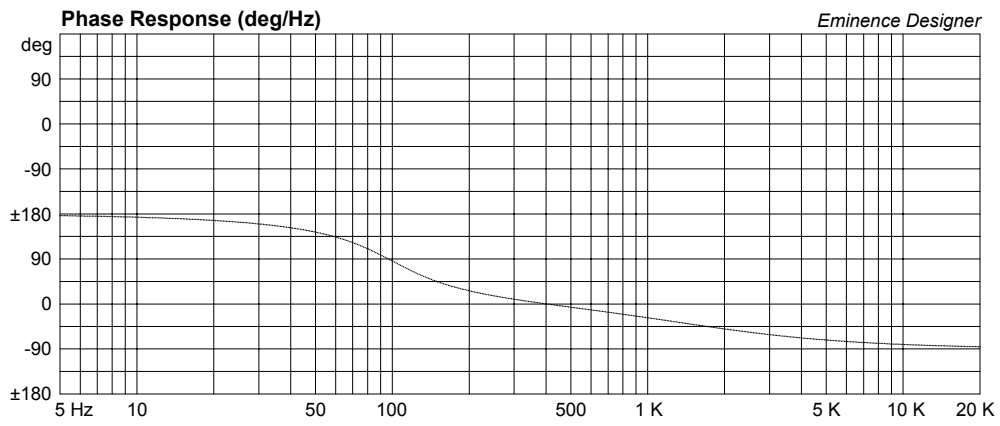
Le = 2.72 mH

Z = 32 ohms

Pe = 150 watts







Legend B810 Single Small Sealed Box

By Jerry McNutt, Eminence Speaker LLC
Limit to 150 Watts per driver. F3 at 90 Hz.
Double volume for two drivers; 4 times for 4 drivers.



Box Properties

--Description--

Name:

Type: Closed Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 0.499 cu.ft

V(total) = 0.499 cu.ft

Qtc = 1.197

QL = 14.73

F3 = 90.36 Hz

Fill = normal

Driver Properties

--Description--

Name: Legend B810

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 32 Ohm Bass Guitar Driver

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 52.07 Hz

Qms = 13.91

Vas = 2.343 cu.ft

Xmax = 0.186 in

Sd = 54.27 sq.in

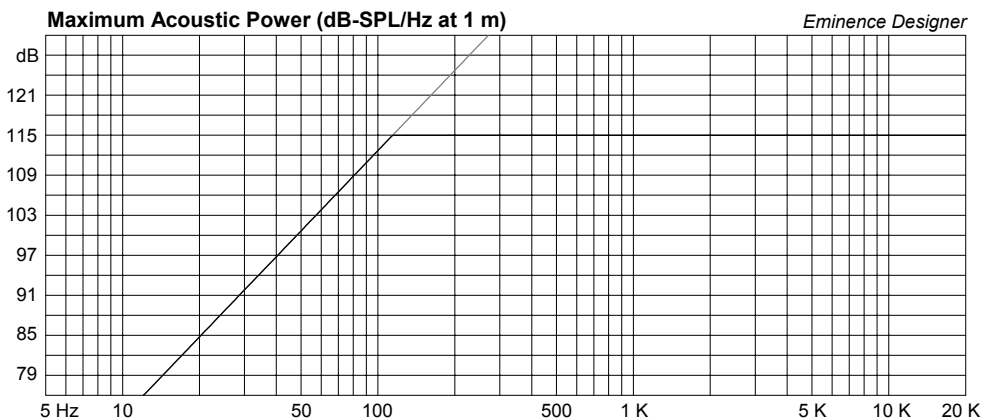
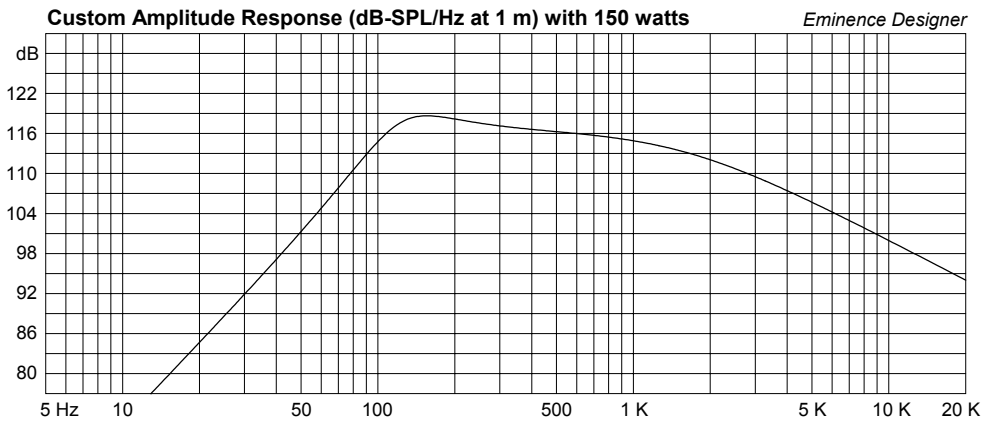
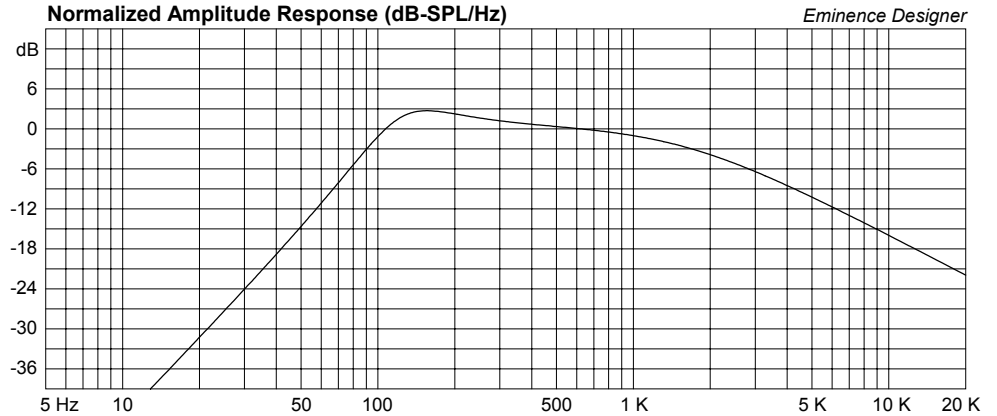
Qes = 0.68

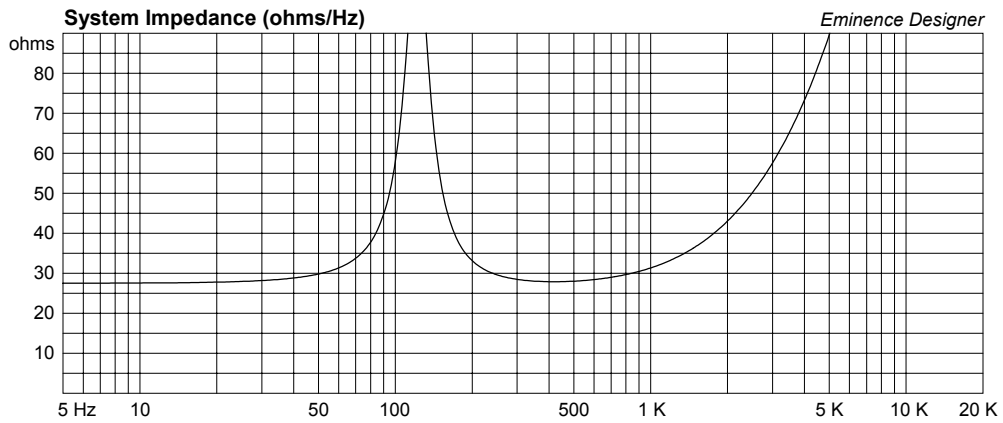
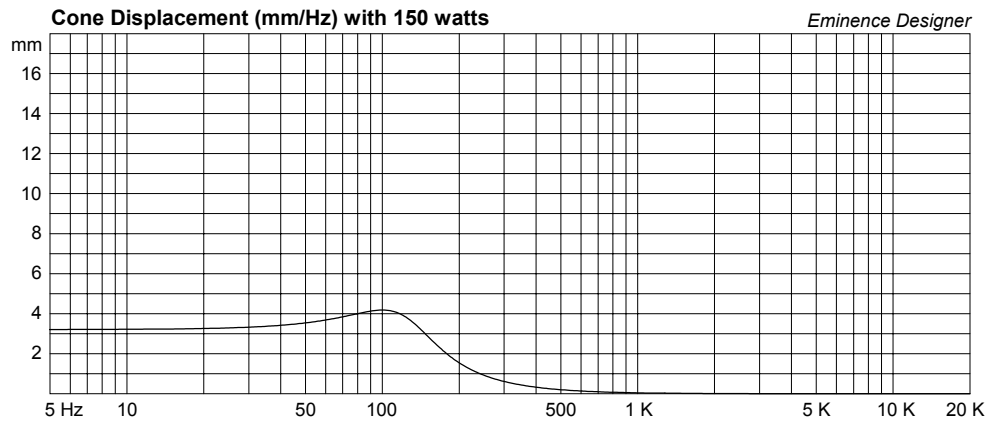
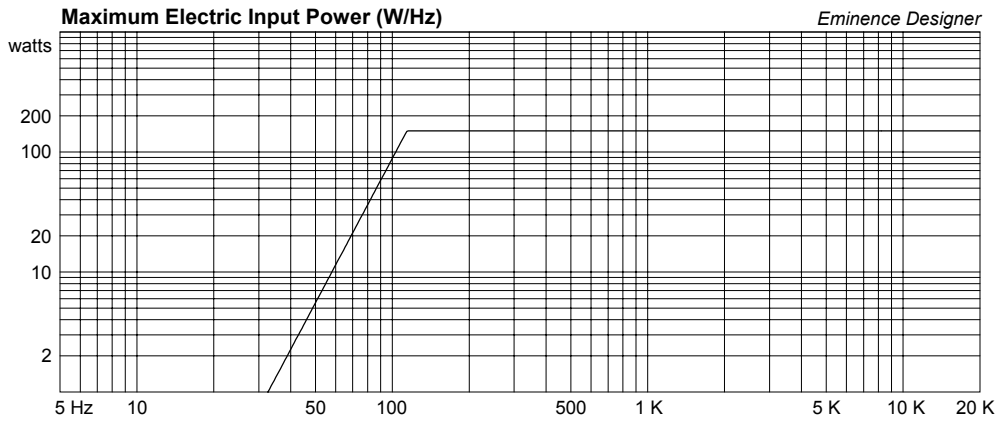
Re = 27.51 ohms

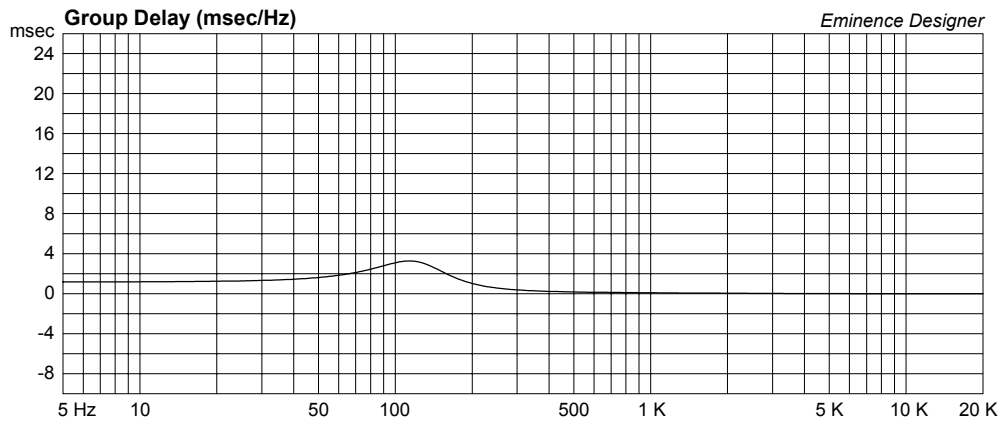
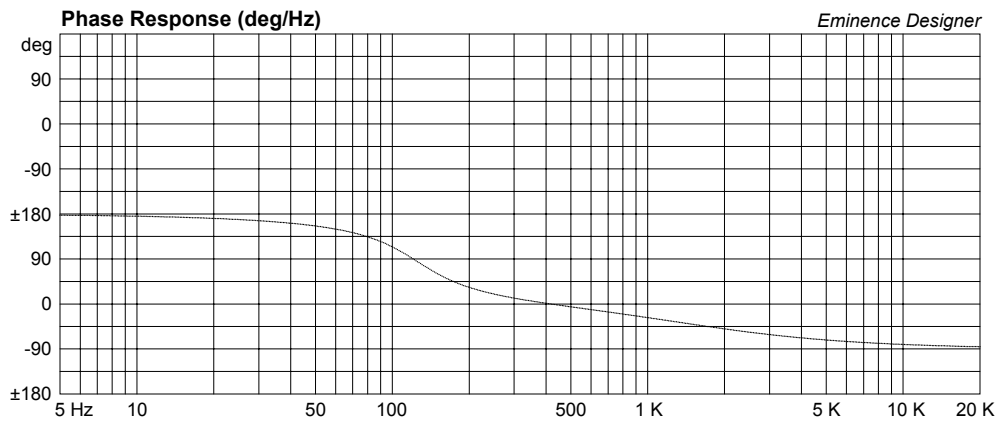
Le = 2.72 mH

Z = 32 ohms

Pe = 150 watts







Legend B810 Large Vented Cabinet

By Jerry McNutt, Eminence Speaker LLC

Limit to 85 watts per driver. F3 at 50 Hz.

Double volume for two; 4 times for 4 drivers; 8 times for 8 drivers!



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 2.5 cu.ft

V(total) = 2.586 cu.ft

Fb = 55.73 Hz

QL = 7

F3 = 49.6 Hz

Fill = normal

--Vents--

No. of Vents = 1

Vent shape = round

Vent ends = one flush

Dv = 4.301 in

Lv = 0.75 in

Driver Properties

--Description--

Name: Legend B810

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 32 Ohm Bass Guitar Driver

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 52.07 Hz

Qms = 13.91

Vas = 2.343 cu.ft

Xmax = 0.186 in

Sd = 54.27 sq.in

Qes = 0.68

Re = 27.51 ohms

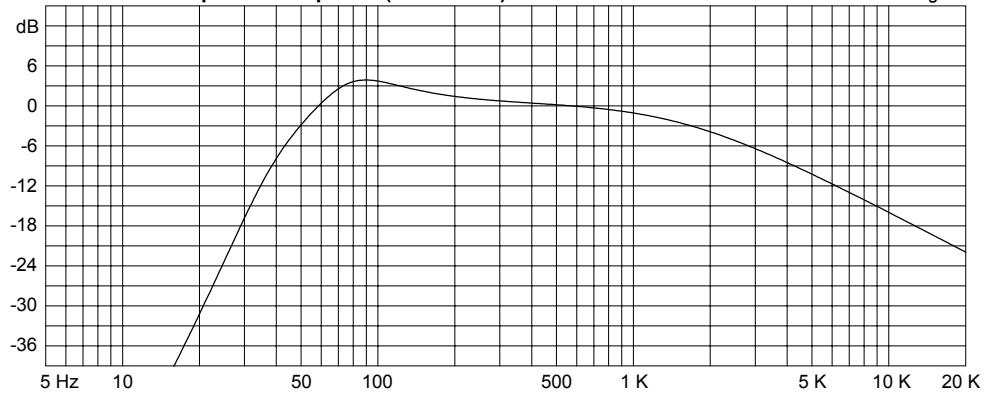
Le = 2.72 mH

Z = 32 ohms

Pe = 150 watts

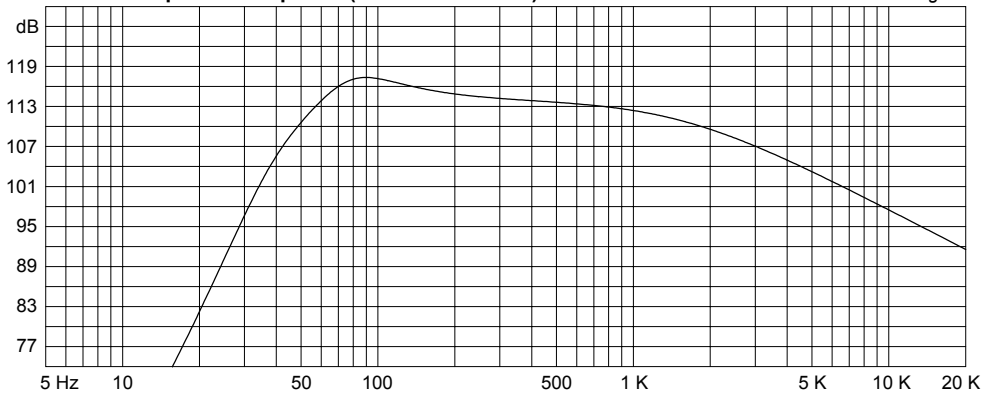
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



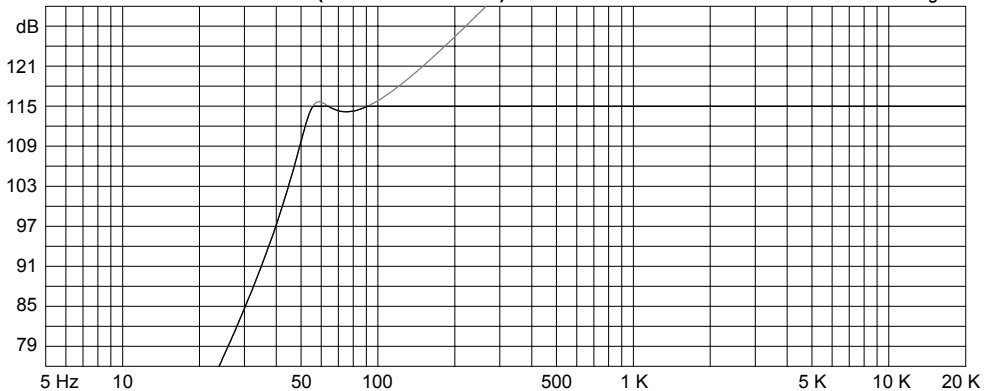
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 85 watts

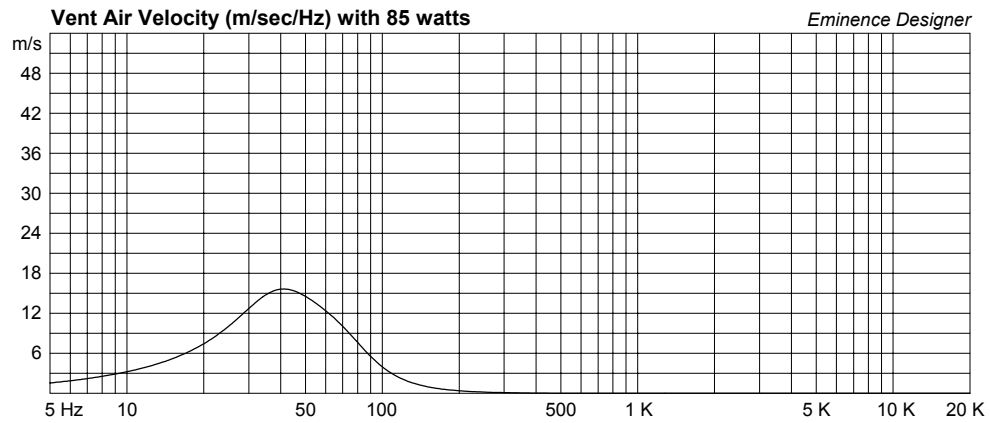
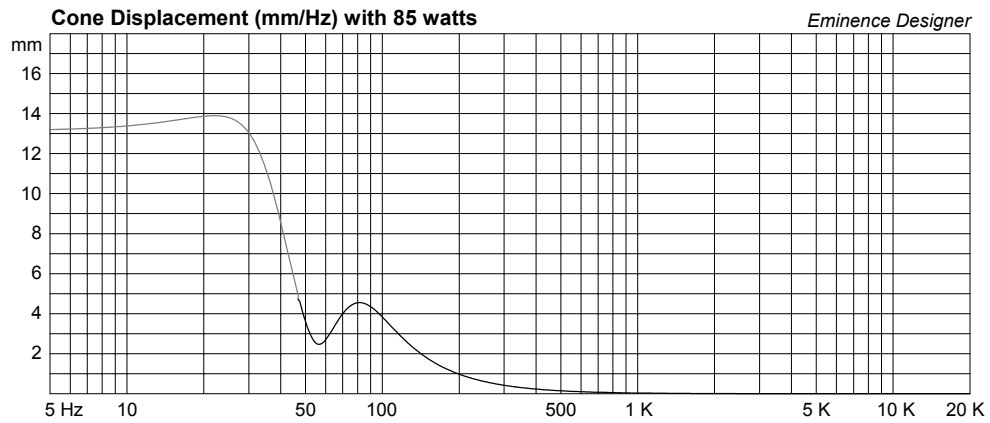
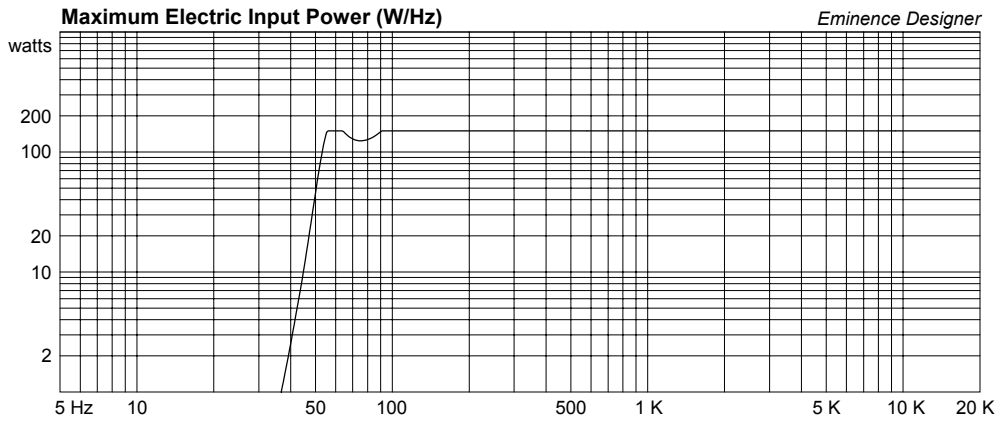
Eminence Designer

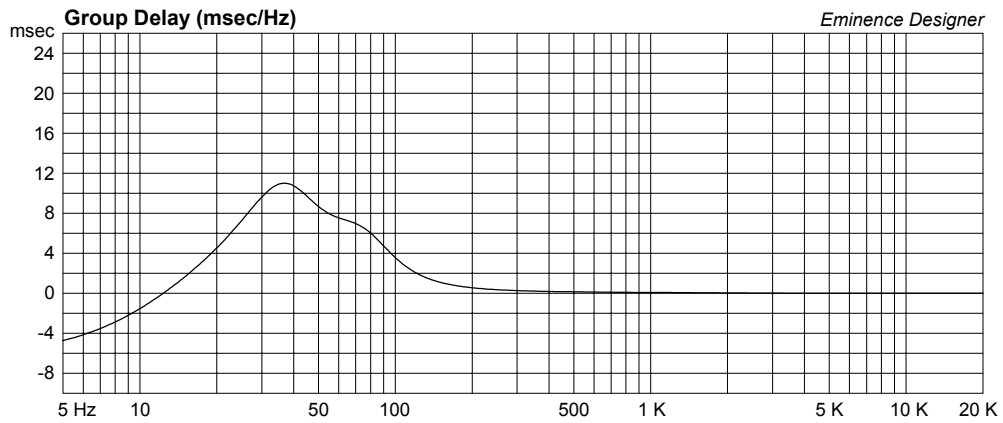
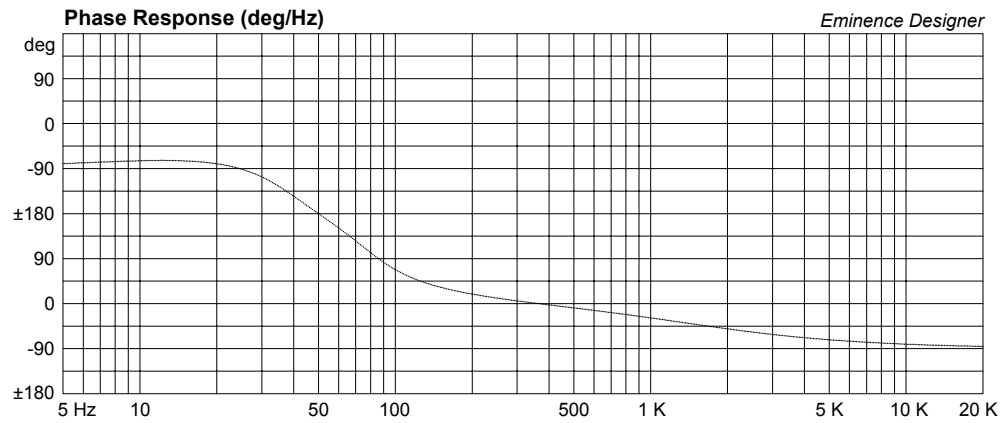
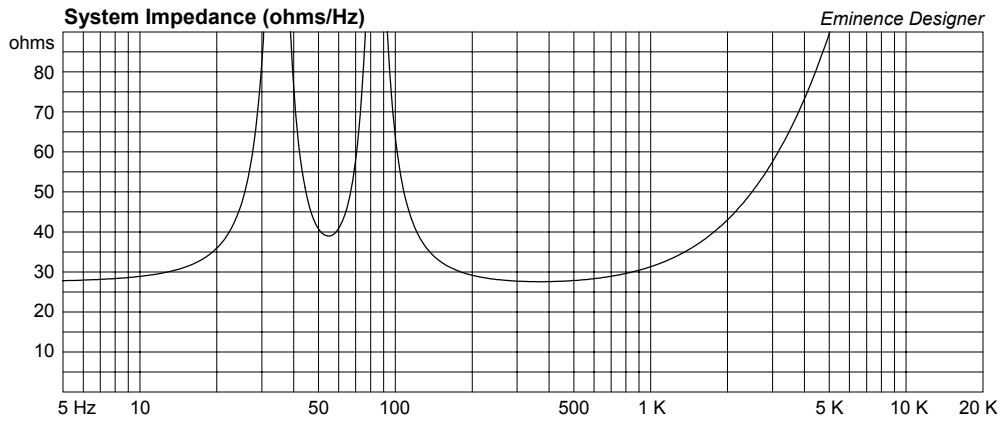


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







Legend B810 Small Vented Cabinet

By Jerry McNutt, Eminence Speaker LLC

Limit to 100 watts per driver. F3 at 57 Hz.

Double volume for two; 4 times for 4 drivers; 8 times for 8 drivers!



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 1.65 cu.ft

V(total) = 1.751 cu.ft

Fb = 55 Hz

QL = 7

F3 = 57.16 Hz

Fill = normal

--Vents--

No. of Vents = 1

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 2.796 in

Driver Properties

--Description--

Name: Legend B810

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 32 Ohm Bass Guitar Driver

--Configuration--

No. of Drivers = 1

--Driver Parameters--

Fs = 52.07 Hz

Qms = 13.91

Vas = 2.343 cu.ft

Xmax = 0.186 in

Sd = 54.27 sq.in

Qes = 0.68

Re = 27.51 ohms

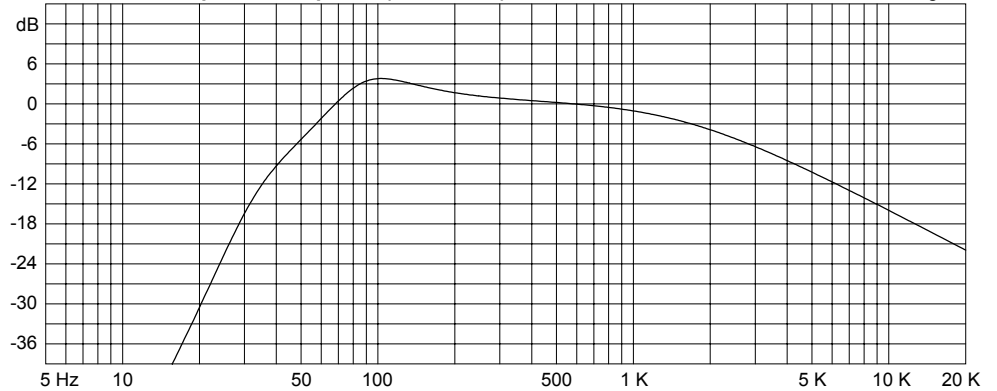
Le = 2.72 mH

Z = 32 ohms

Pe = 150 watts

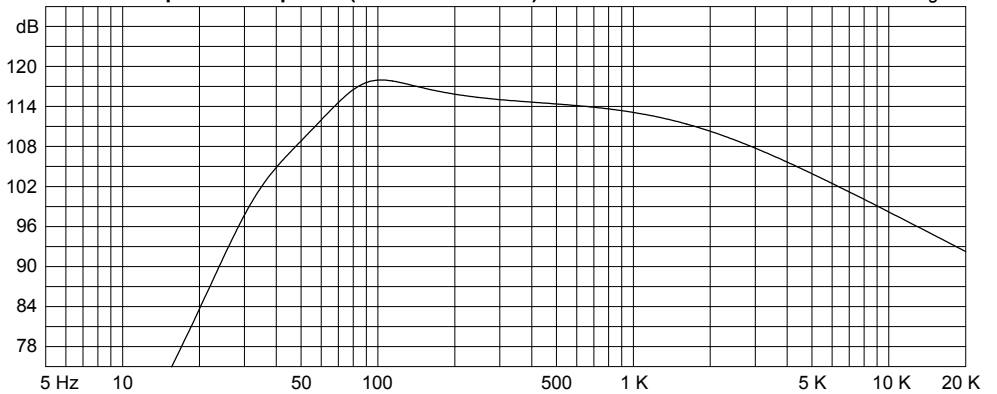
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 100 watts

Eminence Designer



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

Eminence Designer

