



AMERICAN STANDARD SERIES

DELTA-15LF-4

Low frequency woofer for pro audio as a midbass or floor monitor in a sealed enclosure. Also suitable as a woofer in vented, bass guitar or PA enclosures.



- | | | | |
|---|---|--|--|
| <input type="checkbox"/> Midrange | <input checked="" type="checkbox"/> Woofer | <input checked="" type="checkbox"/> Sealed Box | <input type="checkbox"/> Scoop Loading |
| <input checked="" type="checkbox"/> Midbass | <input checked="" type="checkbox"/> Subwoofer | <input checked="" type="checkbox"/> Vented Box | <input type="checkbox"/> Horn Loading |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> Bass Guitar | <input type="checkbox"/> | <input type="checkbox"/> |

SPECIFICATION

Nominal Basket Diameter	15", 381 mm
Nominal Impedance*	4 Ω
Power Rating**	
Watts	600 W
Music Program	1200 W
Resonance	40 Hz
Usable Frequency Range	40 Hz – 2.2 kHz
Sensitivity***	95 dB
Magnet Weight	56 oz.
Gap Height	0.375", 9.5 mm
Voice Coil Diameter	2.5", 64 mm

THIELE & SMALL PARAMETERS*

Fs	40 Hz
Re	3.37 Ω
Le	0.76 mH
Qms	6.22
Qes	0.53
Qts	0.49
Vas	8.97 cu.ft., 253.93 liters
Vd	419 cc
Cms	0.24 mm/N
BL	10.32 T-M
Mms	66 grams
EBP	76
Xmax	6 mm
Sd	873 cm ²
Xlim	16.5 mm

MOUNTING INFORMATION

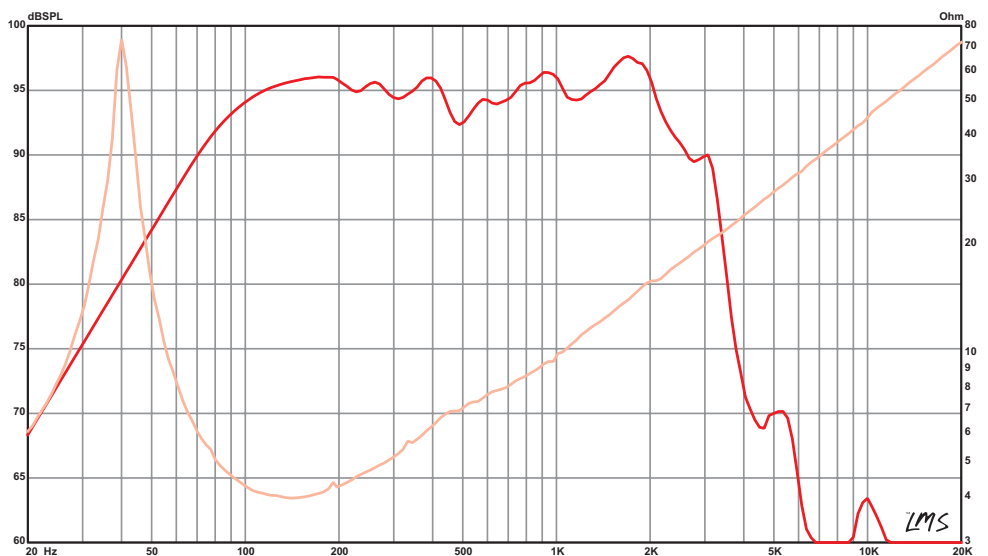
Recommended Enclosure Volume	
Sealed	52.95–97.69 liters, 1.87–3.45 cu.ft.
Vented	75.04–154.33 liters, 2.65–5.45 cu.ft.
Driver Volume Displaced	0.128 cu.ft., 3.62 liters
Overall Diameter	15.15", 384.8 mm
Baffle Hole Diameter	13.87", 352.3 mm
Front Sealing Gasket	Yes
Rear Sealing Gasket	Yes
Mounting Holes Diameter	0.25", 6.4 mm
Mounting Holes B.C.D.	14.56", 369.8 mm
Depth	6.3", 160 mm
Net Weight	12.8 lbs, 5.81 kg
Shipping Weight	14.8 lbs, 6.71 kg

MATERIALS OF CONSTRUCTION

- _____ Copper voice coil
- _____ Polyimide former
- _____ Ferrite magnet
- _____ Vented and extended core
- _____ Pressed steel basket
- _____ Paper cone
- _____ Cloth cone edge
- _____ Solid composition paper dust cap



FREQUENCY RESPONSE & IMPEDANCE CURVE*



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From design and manufacturing to the stage or studio. Once you've experienced the performance of Eminence, you'll never accept anything else.

MISSION STATEMENT

Eminence is dedicated to providing the best Quality, Value and Service to meet our customers' needs.

FOOTNOTES

- * Please consult www.eminence.com for specifications of models with alternative impedances.
- ** Multiple units exceed published ratings evaluated under EIA 426A specification while tested in a free-air, non-temperature-controlled environment.
- *** The average output across the usable frequency range when applying 1W/1m into the nominal impedance. i.e: 2.83V/8Ω, 4V/16Ω. 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 | Carver PM-120 amplifier | 2700 cu. ft. chamber with fiberglass on all six surfaces (three with custom-made wedges).
- **** BETA 8CX, 10CX, and 12CX are coaxial speakers with tweeter sold separately. Published usable frequency response contingent upon use of ASD:1001 HF Driver.
- ***** Multiple units exceeded published ratings evaluated under EIA-426A or AES specification while mounted on Eminence's H290, H290S, or H2EA horn in a non-temperature-controlled environment.
- *****The average on axis output across the entire usable frequency range when applying 1W/1m into the nominal impedance, i.e. 2.83V/8Ω, 4V/16Ω. 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 horn front mounted | Carver PM-120 amplifier | 2700 cu.ft. chamber with fiberglass on all six surfaces (three with custom-made wedges).

Prices, specifications and product cosmetics are subject to change without notice.

EMINENCE SPEAKER LLC

838 Mulberry Pike, Eminence, KY 40019



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Delta-15LF-4 Small Sealed Design

By Jerry McNutt, Eminence Speaker LLC

Limit to 300 Watts; F3 of 80 Hz.

Good for a Sealed Mid/bass or a small sealed Floor Wedge



Box Properties

--Description--

Name:

Type: Closed Box

Shape: Prism, square

--Box Parameters--

Vb = 1.671 cu.ft

V(total) = 1.868 cu.ft

Qtc = 0.891

QL = 20

F3 = 80.35 Hz

Fill = heavy

Driver Properties

--Description--

Name: Delta-15LF-4

Type: Standard one-way driver

Company: Eminence Speaker USA

Comment: Four Ohm

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 40.43 Hz

Qms = 6.22

Vas = 253.9 liters

Cms = 0.24 mm/N

Mms = 65.8 g

Rms = 2.69 kg/s

Xmax = 4.8 mm

Xmech = 16.5 mm

P-Dia = 331.5 mm

Sd = 873 sq.cm

P-Vd = 0.414 liters

--Electrical Parameters--

Qes = 0.53

Re = 3.37 ohms

Le = 0.76 mH

Z = 4 ohms

BL = 10.32 Tm

Pe = 600 watts

--Electromech. Parameters--

Qts = 0.49

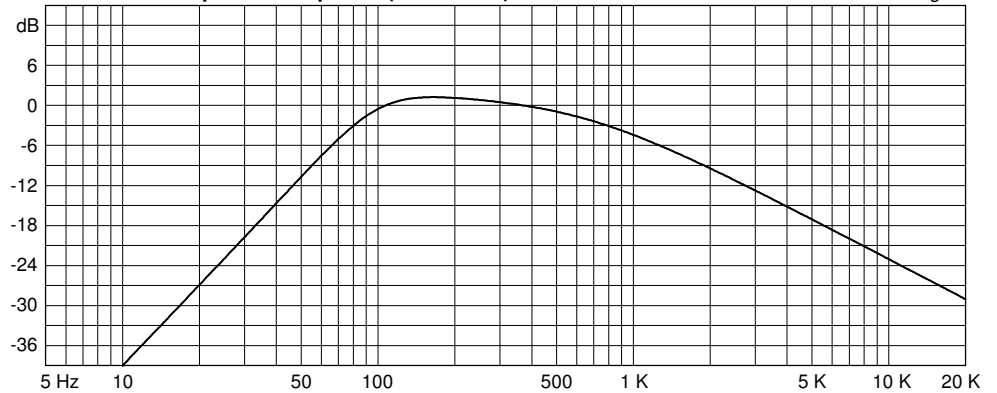
no = 3.053 %

1-W SPL = 96.99 dB

2.83-V SPL = 100.7 dB

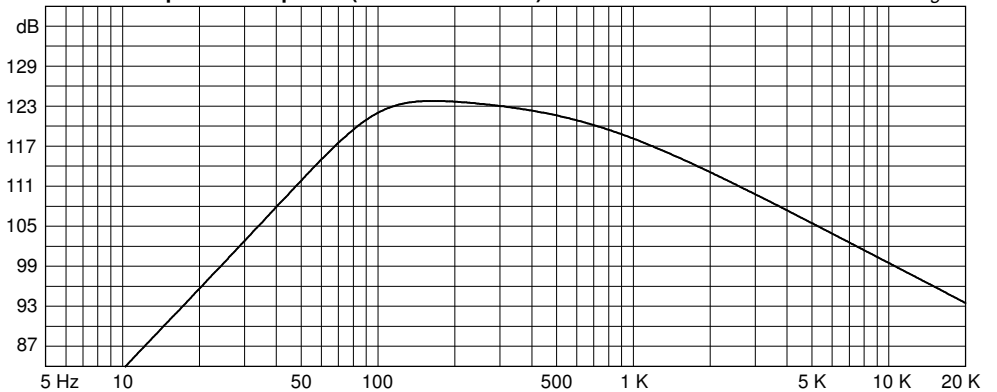
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



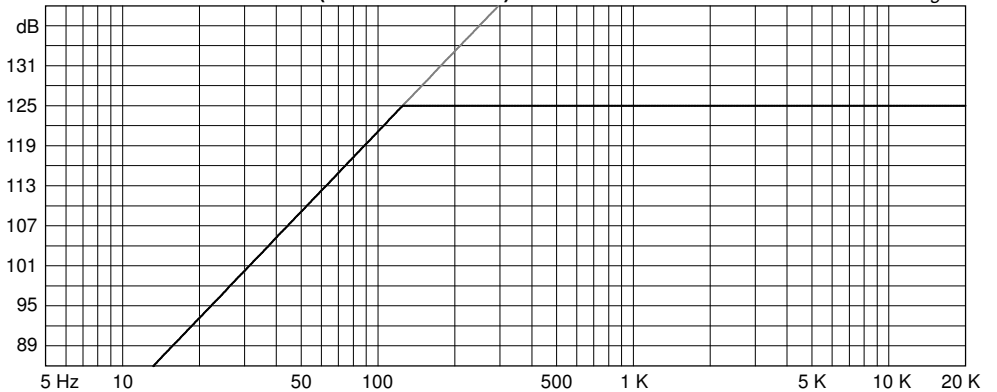
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 300 watts

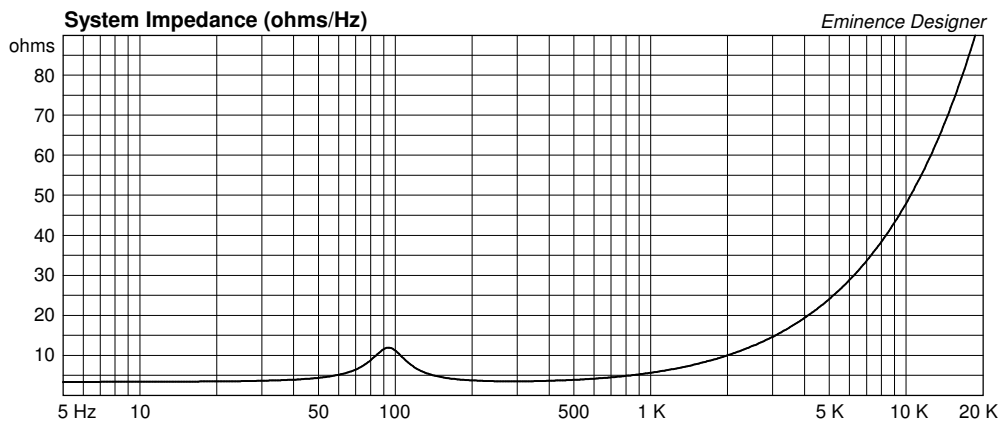
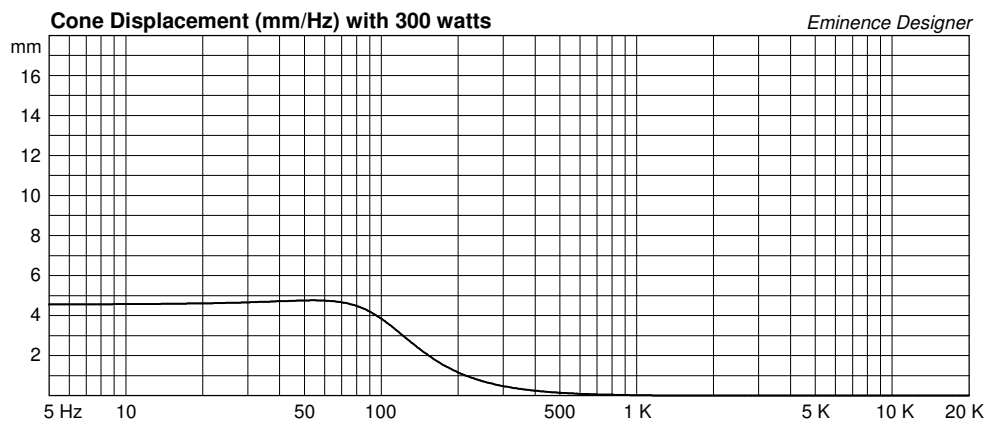
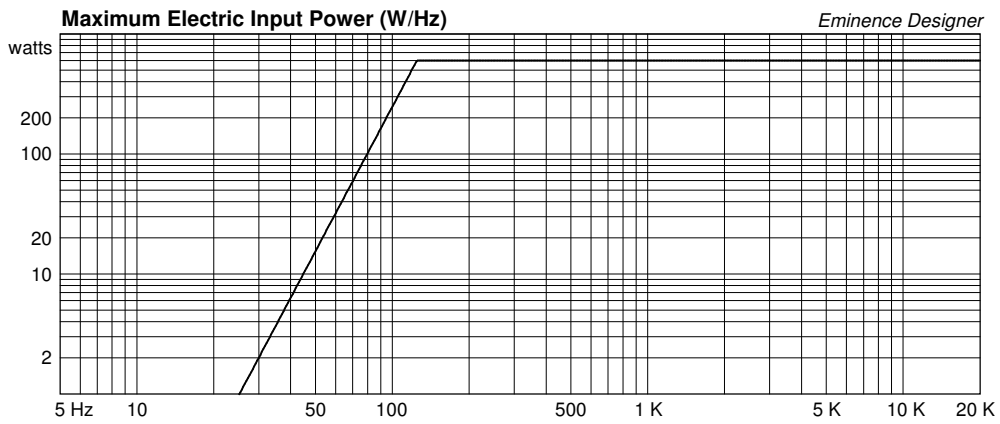
Eminence Designer



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

Eminence Designer





Delta-15LF-4 Small Vented Design

By Jerry McNutt, Eminence Speaker LLC

Limit to 350Watts; F3 of 65 Hz. Use a Steep High Pass Filter at 45 Hz.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 2.65 cu.ft

V(total) = 2.878 cu.ft

Fb = 60 Hz

QL = 7

F3 = 64.64 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 2.628 in

Driver Properties

--Description--

Name: Delta-15LF-4

Type: Standard one-way driver

Company: Eminence Speaker USA

Comment: Four Ohm

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 40.43 Hz

Qms = 6.22

Vas = 253.9 liters

Cms = 0.24 mm/N

Mms = 65.8 g

Rms = 2.69 kg/s

Xmax = 4.8 mm

Xmech = 16.5 mm

P-Dia = 331.5 mm

Sd = 873 sq.cm

P-Vd = 0.414 liters

--Electrical Parameters--

Qes = 0.53

Re = 3.37 ohms

Le = 0.76 mH

Z = 4 ohms

BL = 10.32 Tm

Pe = 600 watts

--Electromech. Parameters--

Qts = 0.49

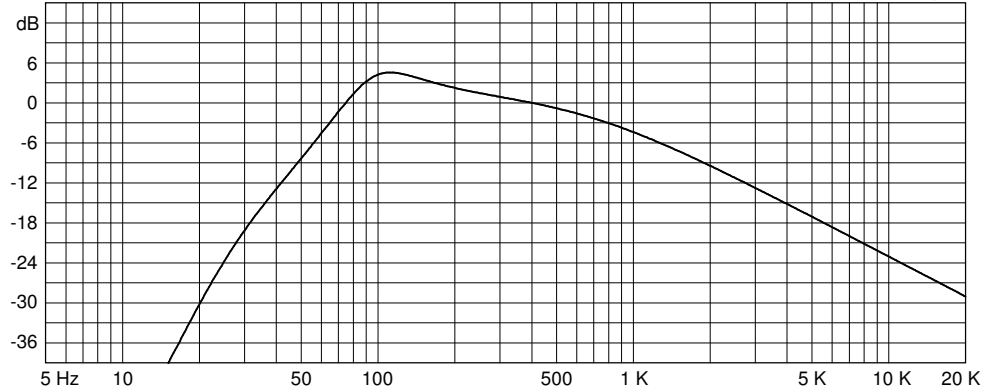
no = 3.053 %

1-W SPL = 96.99 dB

2.83-V SPL = 100.7 dB

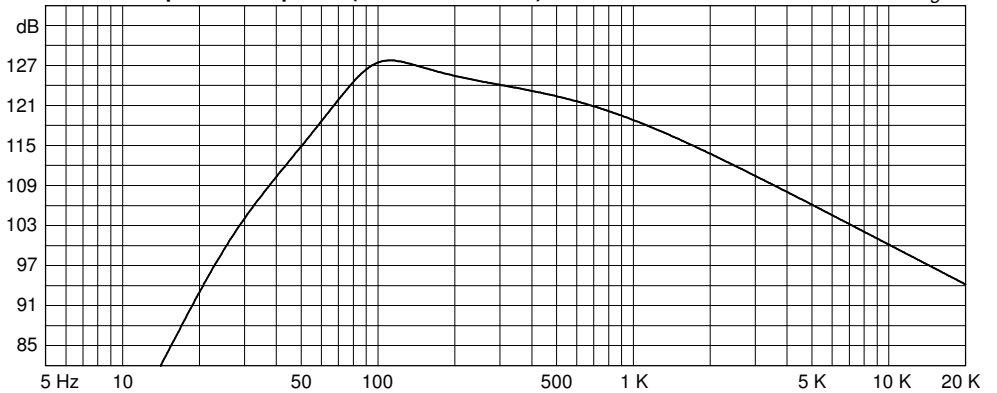
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



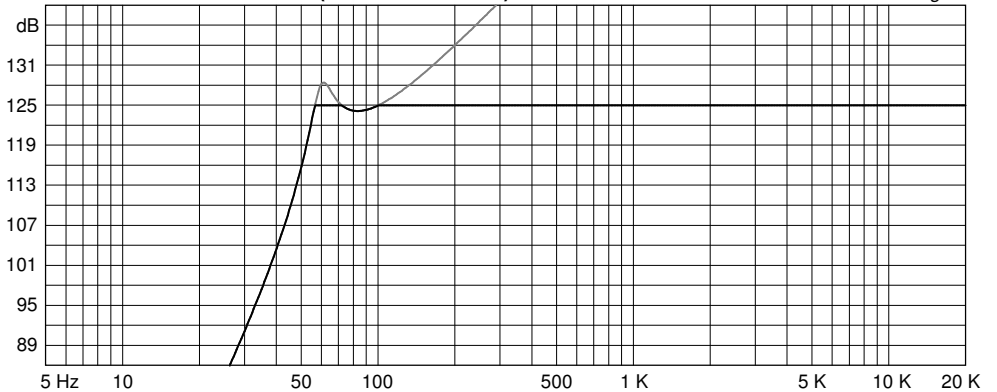
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 350 watts

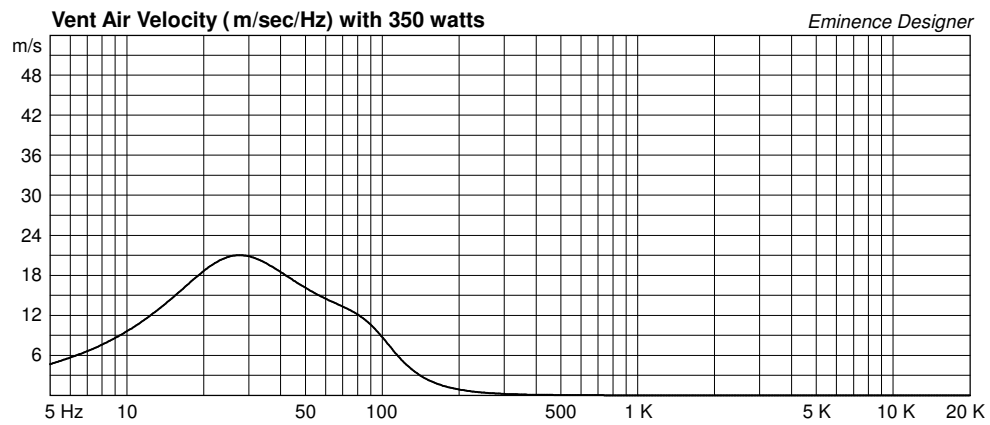
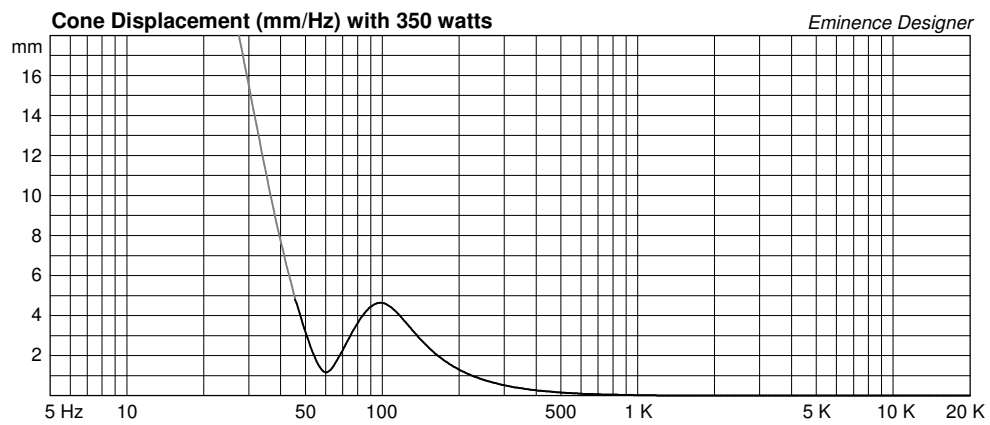
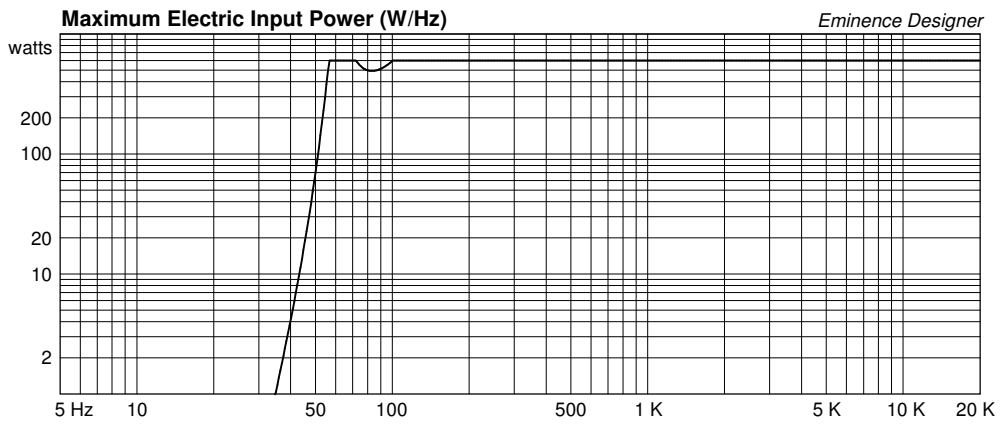
Eminence Designer

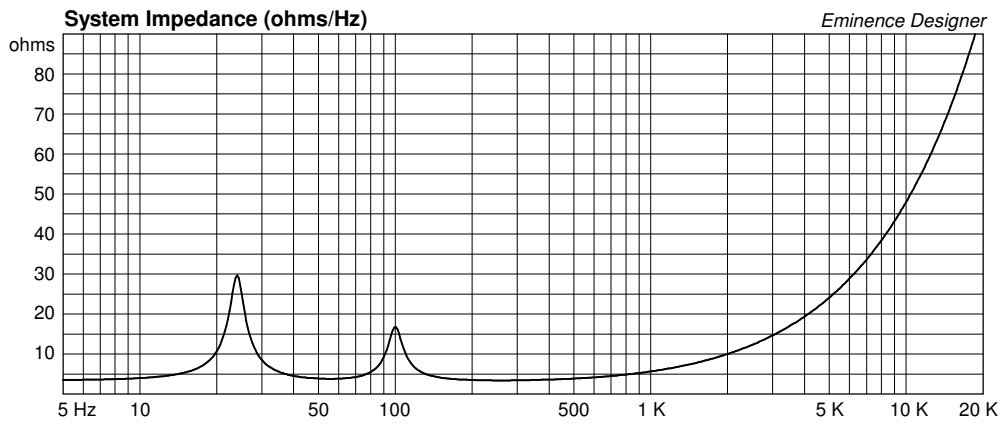


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







Delta-15LF-4 Medium Vented Design

By Jerry McNutt, Eminence Speaker LLC

Limit to 250 Watts; F3 of 55 Hz. Use a Steep Highpass filter at 40 Hz.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 3.85 cu.ft

V(total) = 4.077 cu.ft

Fb = 50 Hz

QL = 7

F3 = 54.74 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 2.562 in

Driver Properties

--Description--

Name: Delta-15LF-4

Type: Standard one-way driver

Company: Eminence Speaker USA

Comment: Four Ohm

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 40.43 Hz

Qms = 6.22

Vas = 253.9 liters

Cms = 0.24 mm/N

Mms = 65.8 g

Rms = 2.69 kg/s

Xmax = 4.8 mm

Xmech = 16.5 mm

P-Dia = 331.5 mm

Sd = 873 sq.cm

P-Vd = 0.414 liters

--Electrical Parameters--

Qes = 0.53

Re = 3.37 ohms

Le = 0.76 mH

Z = 4 ohms

BL = 10.32 Tm

Pe = 600 watts

--Electromech. Parameters--

Qts = 0.49

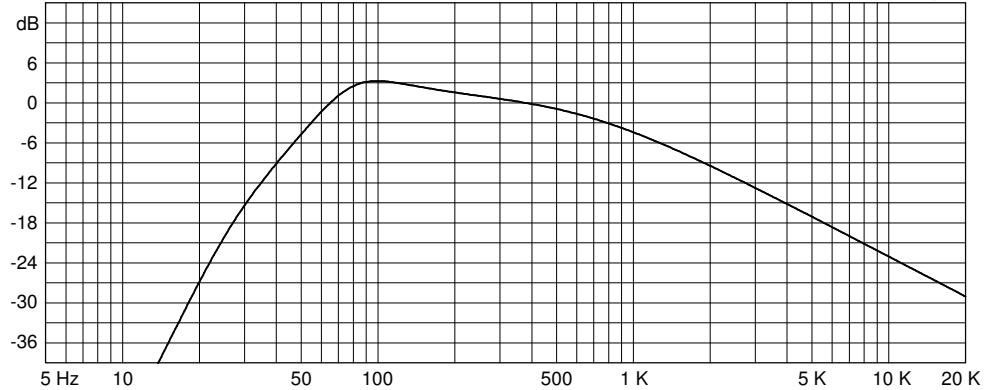
no = 3.053 %

1-W SPL = 96.99 dB

2.83-V SPL = 100.7 dB

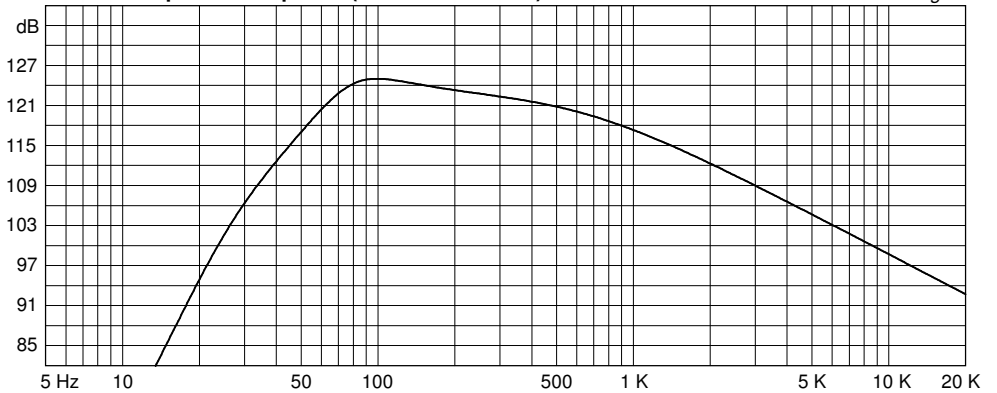
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



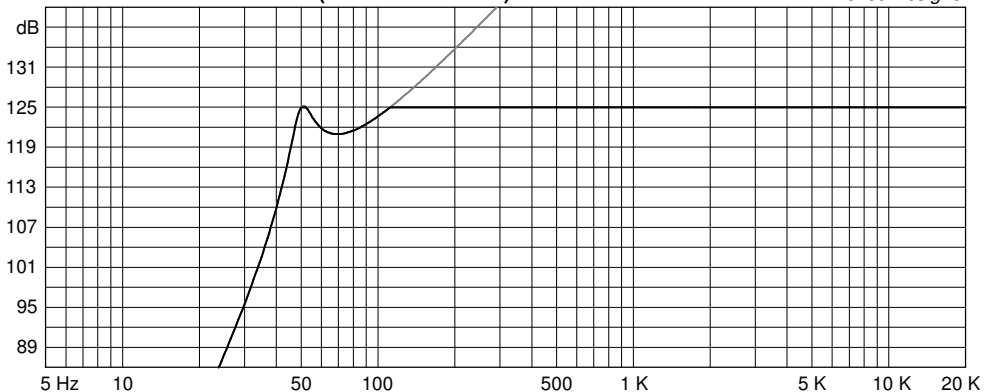
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 250 watts

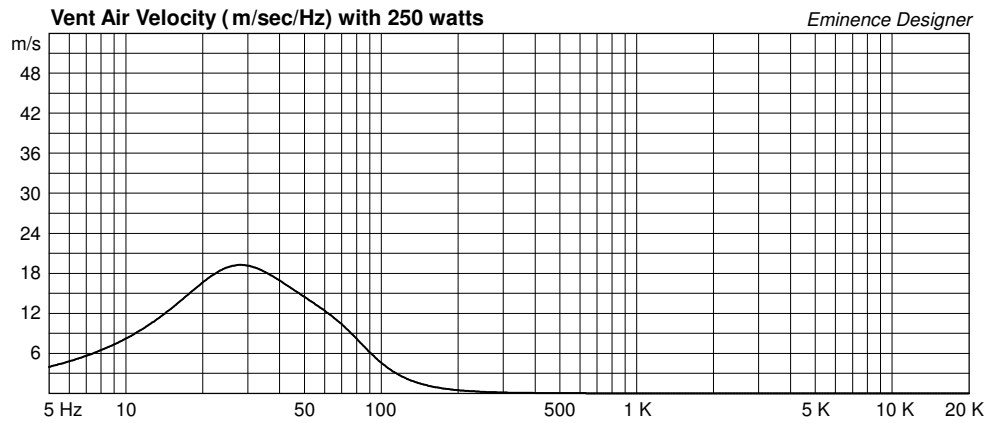
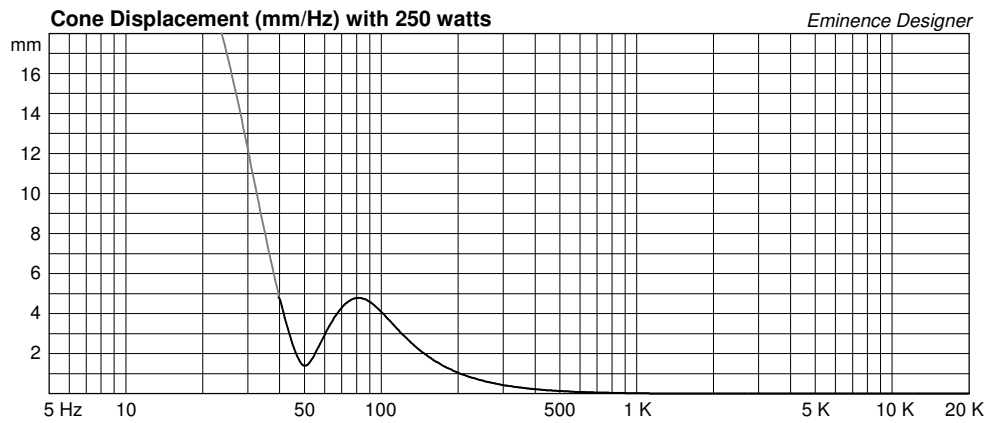
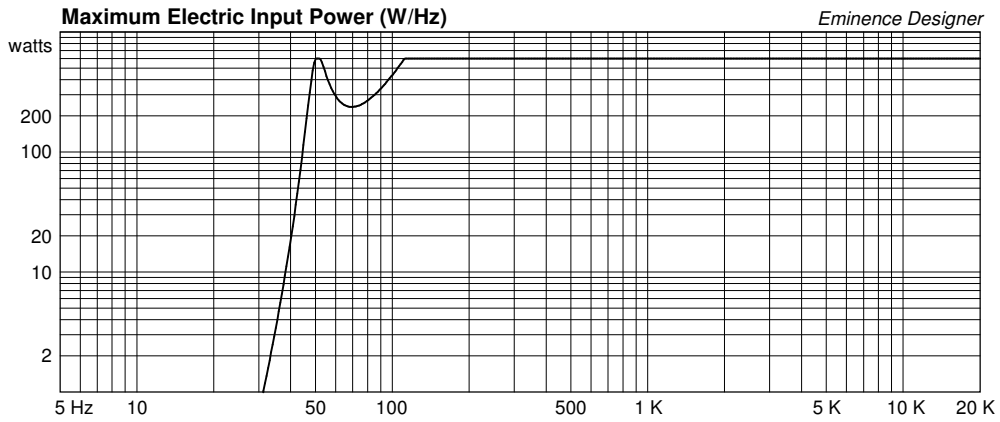
Eminence Designer

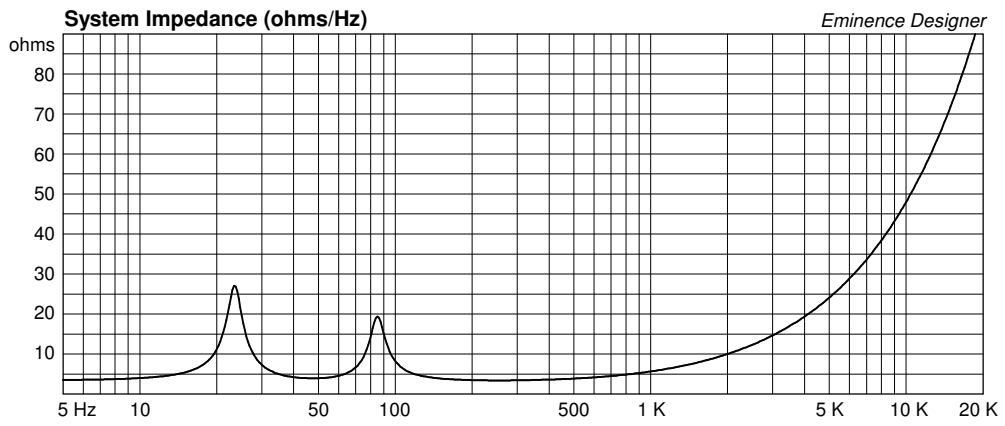


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







Delta-15LF-4 Large Sealed Design

By Jerry McNutt, Eminence Speaker LLC

Limit to 200 Watts; F3 of 72 Hz.

Good for a Sealed Mid/bass or a sealed Floor Wedge



Box Properties

--Description--

Name:

Type: Closed Box

Shape: Prism, square

--Box Parameters--

Vb = 3.25 cu.ft

V(total) = 3.447 cu.ft

Qtc = 0.728

QL = 20

F3 = 71.93 Hz

Fill = heavy

Driver Properties

--Description--

Name: Delta-15LF-4

Type: Standard one-way driver

Company: Eminence Speaker USA

Comment: Four Ohm

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 40.43 Hz

Qms = 6.22

Vas = 253.9 liters

Cms = 0.24 mm/N

Mms = 65.8 g

Rms = 2.69 kg/s

Xmax = 4.8 mm

Xmech = 16.5 mm

P-Dia = 331.5 mm

Sd = 873 sq.cm

P-Vd = 0.414 liters

--Electrical Parameters--

Qes = 0.53

Re = 3.37 ohms

Le = 0.76 mH

Z = 4 ohms

BL = 10.32 Tm

Pe = 600 watts

--Electromech. Parameters--

Qts = 0.49

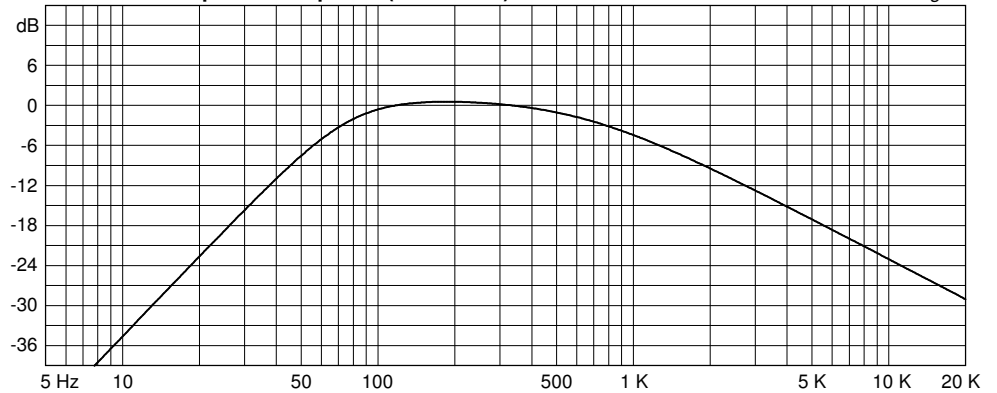
no = 3.053 %

1-W SPL = 96.99 dB

2.83-V SPL = 100.7 dB

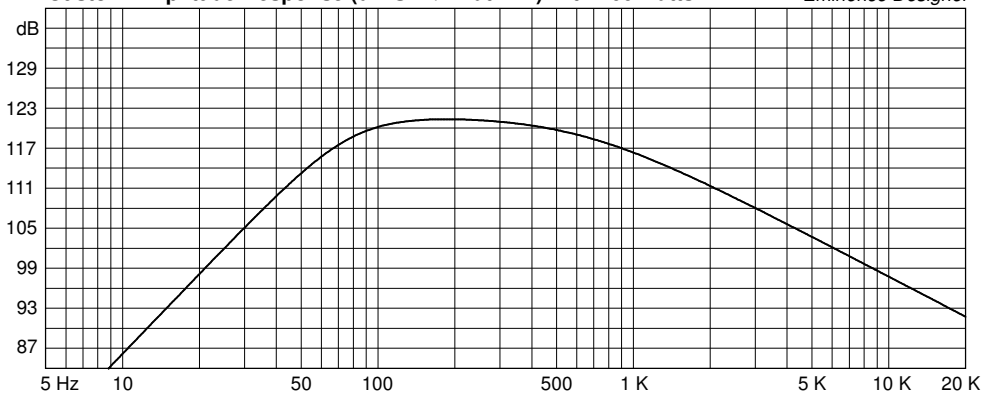
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



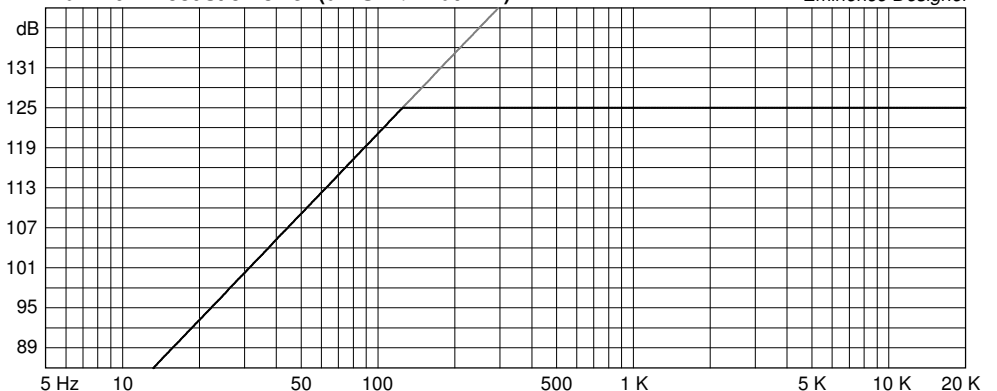
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 200 watts

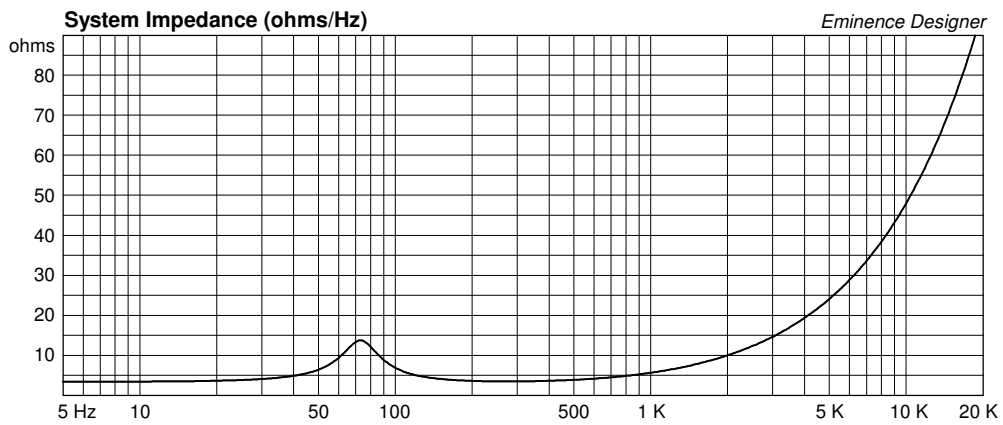
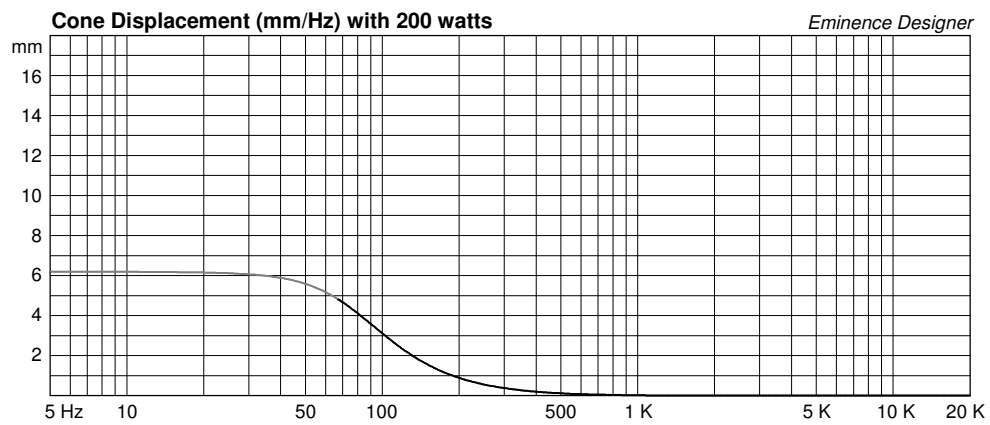
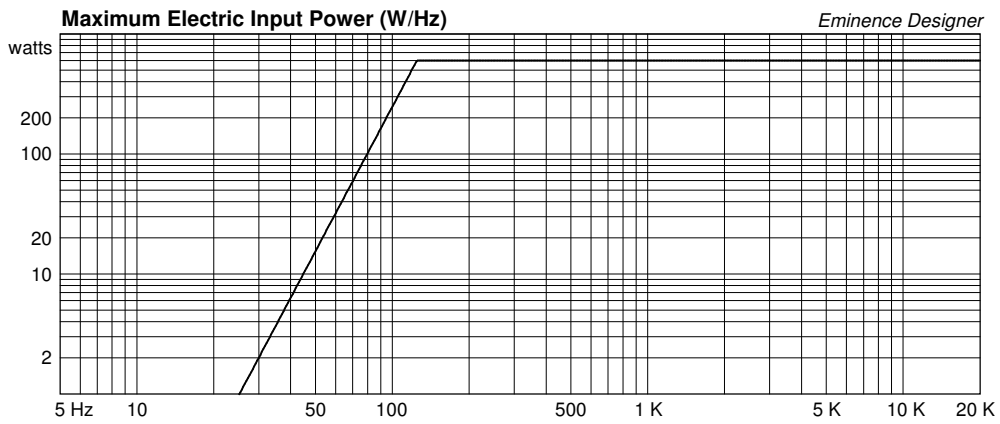
Eminence Designer



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

Eminence Designer





Delta-15LF-4 Large Vented Design

By Jerry McNutt, Eminence Speaker LLC

Limit to 200 Watts; F3 of 48 Hz. Use a Steep Highpass filter at 35 Hz.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 5.25 cu.ft

V(total) = 5.452 cu.ft

Fb = 48 Hz

QL = 7

F3 = 48.35 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 1.067 in

Driver Properties

--Description--

Name: Delta-15LF-4

Type: Standard one-way driver

Company: Eminence Speaker USA

Comment: Four Ohm

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 40.43 Hz

Qms = 6.22

Vas = 253.9 liters

Cms = 0.24 mm/N

Mms = 65.8 g

Rms = 2.69 kg/s

Xmax = 4.8 mm

Xmech = 16.5 mm

P-Dia = 331.5 mm

Sd = 873 sq.cm

P-Vd = 0.414 liters

--Electrical Parameters--

Qes = 0.53

Re = 3.37 ohms

Le = 0.76 mH

Z = 4 ohms

BL = 10.32 Tm

Pe = 600 watts

--Electromech. Parameters--

Qts = 0.49

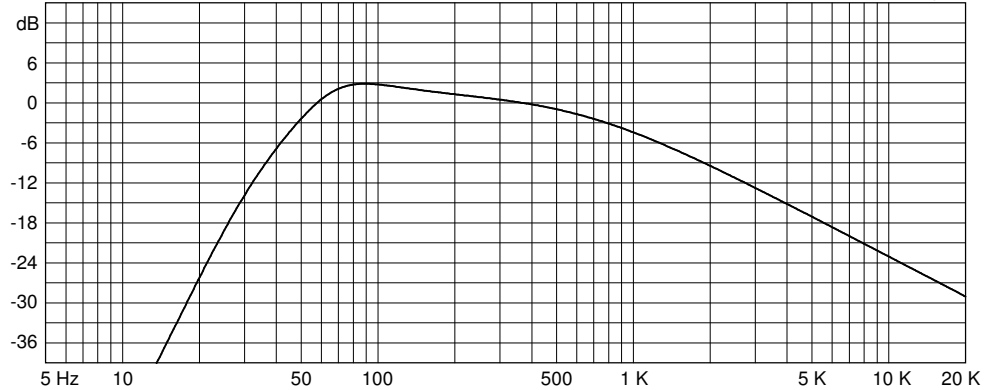
no = 3.053 %

1-W SPL = 96.99 dB

2.83-V SPL = 100.7 dB

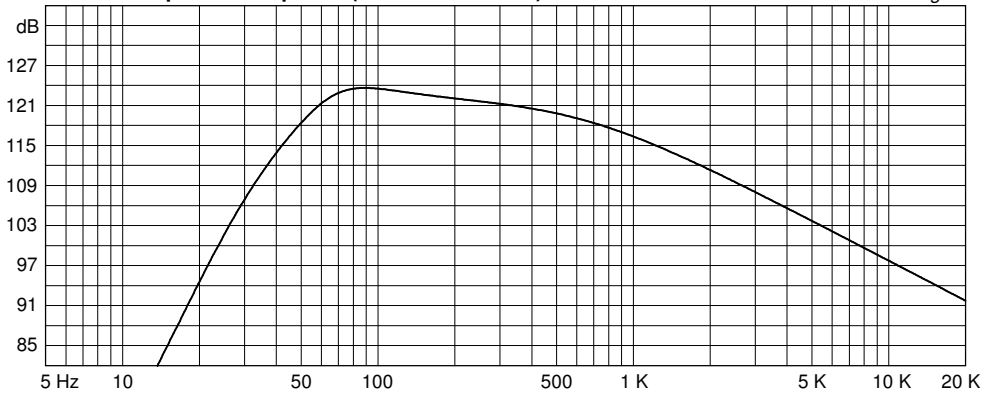
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 200 watts

Eminence Designer



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

Eminence Designer

