

LA12850 Larger Vented Design

By Jerry McNutt, Eminence Speaker LLC

Limit to 300 W; F3 at 63 Hz. Use a steep high pass filter at 50 Hz or higher.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 2.5 cu.ft

V(total) = 2.626 cu.ft

Fb = 52 Hz

QL = 7

F3 = 62.49 Hz

Fill = minimal

--Vents--

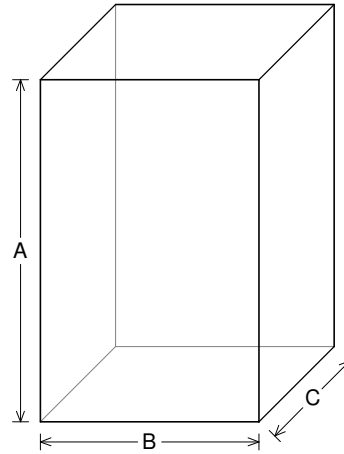
No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 3 in

Lv = 2.294 in



--External Dimensions--

A = 28.29 in

B = 18.06 in

C = 11.73 in

--Internal Dimensions--

A = 26.79 in

B = 16.56 in

C = 10.23 in

--Wall Thickness--

Front = 0.75 in

Side = 0.75 in

Driver Properties

--Description--

Name: LA12850

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Shallow 12" High Power Woofer

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 46.05 Hz

Qms = 12.73

Vas = 66.07 liters

Cms = 0.16 mm/N

Mms = 72.8 g

Rms = 1.65 kg/s

Xmax = 5 mm

Xmech = 14 mm

P-Dia = 262 mm

Sd = 545.4 sq.cm

P-Vd = 0.27 liters

--Electrical Parameters--

Qes = 0.32

Re = 5.87 ohms

Le = 0.96 mH

Z = 8 ohms

BL = 19.51 Tm

Pe = 800 watts

--Electromech. Parameters--

Qts = 0.312

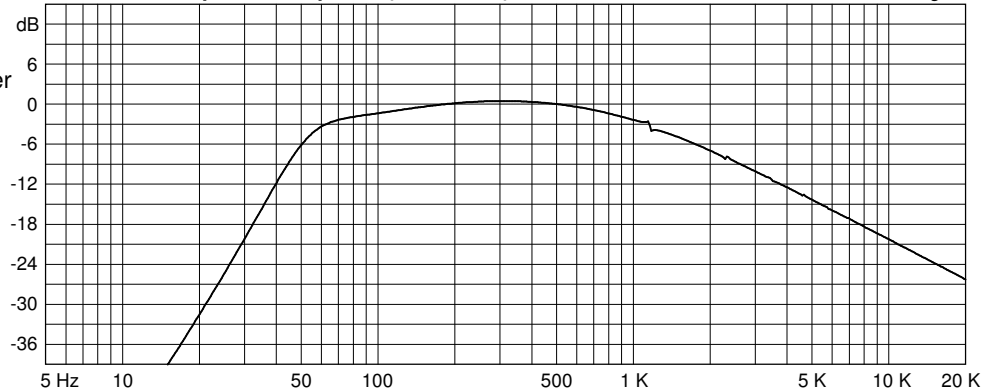
no = 1.944 %

1-W SPL = 95.03 dB

2.83-V SPL = 96.38 dB

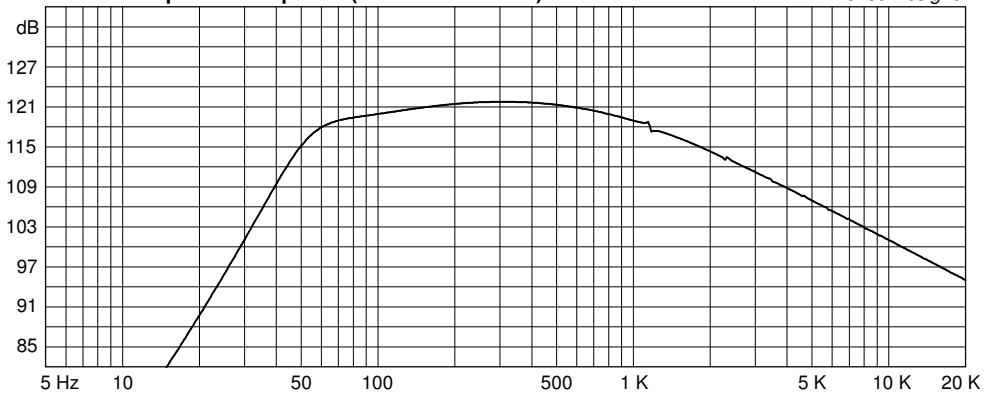
Normalized Amplitude Response (dB-SPL/Hz)

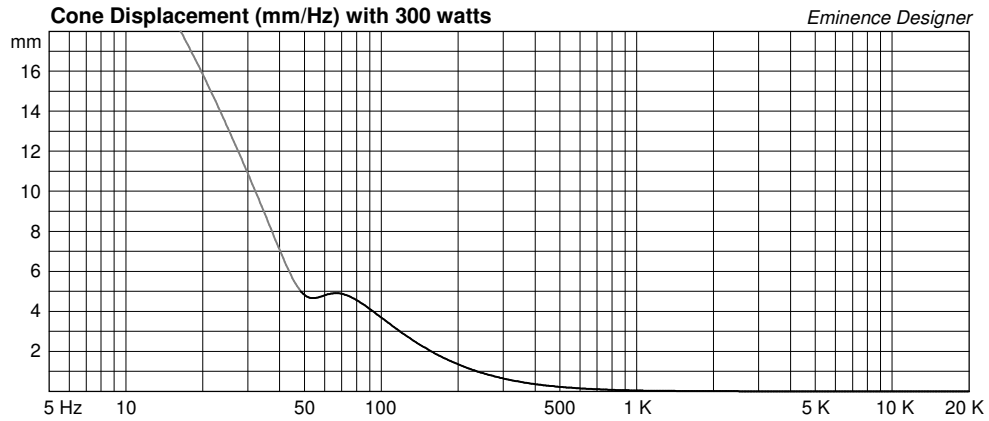
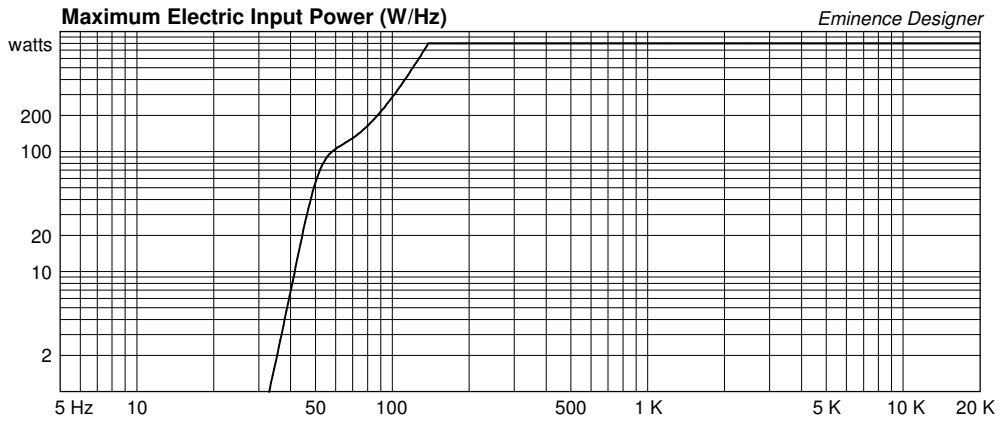
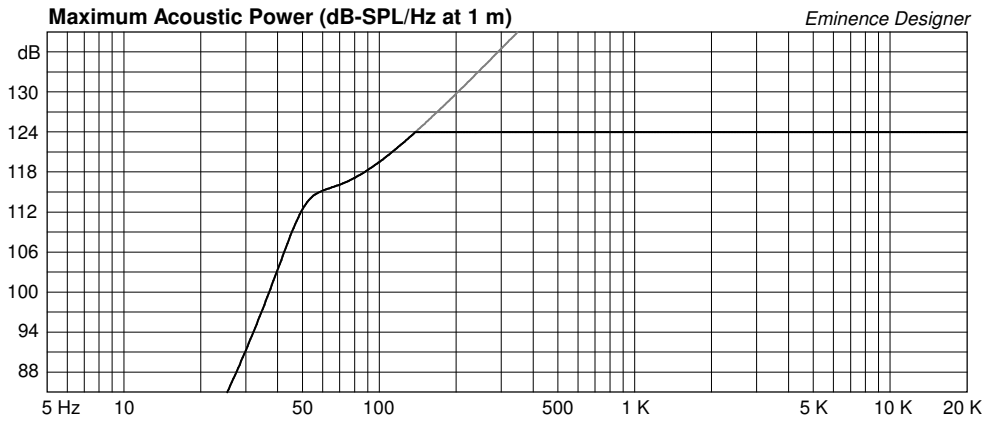
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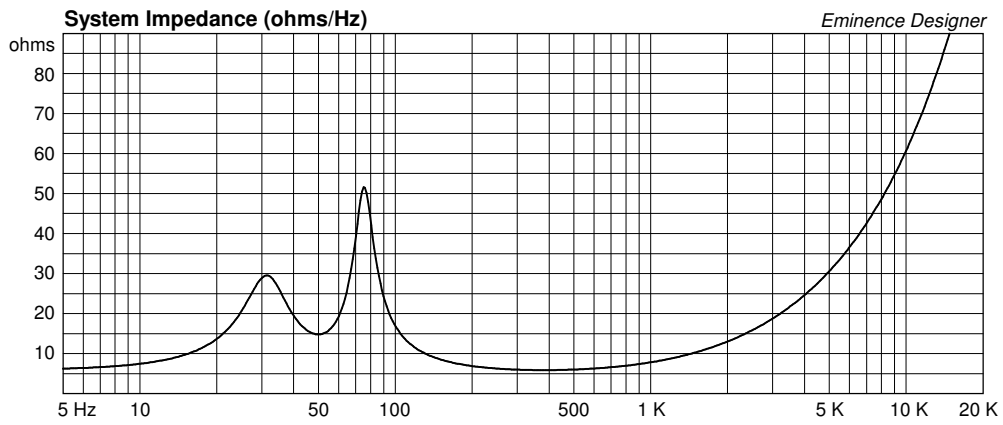
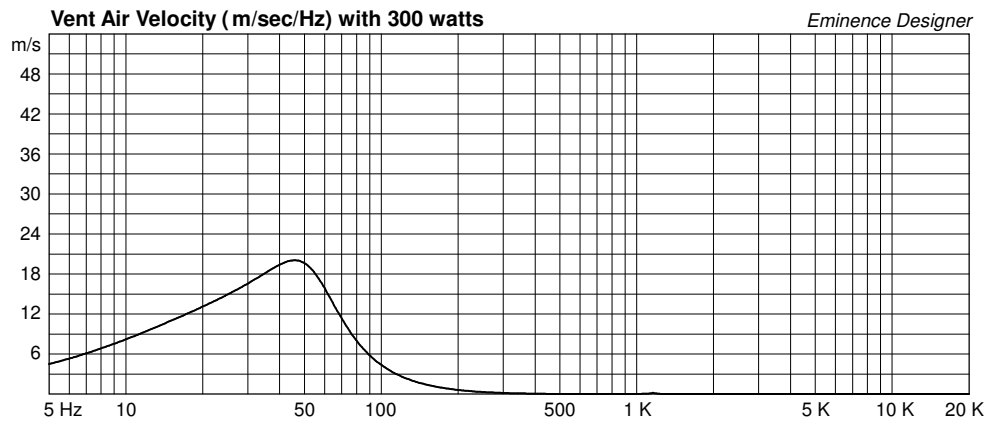


Custom Amplitude Response (dB-SPL/Hz at 1 m) with 300 watts

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LA12850 Medium Vented Design

By Jerry McNutt, Eminence Speaker LLC

Limit to 475 W; F3 at 66 Hz. Use a steep high pass filter at 50 Hz or higher.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 1.85 cu.ft

V(total) = 1.969 cu.ft

Fb = 65 Hz

QL = 7

F3 = 66.4 Hz

Fill = minimal

--Vents--

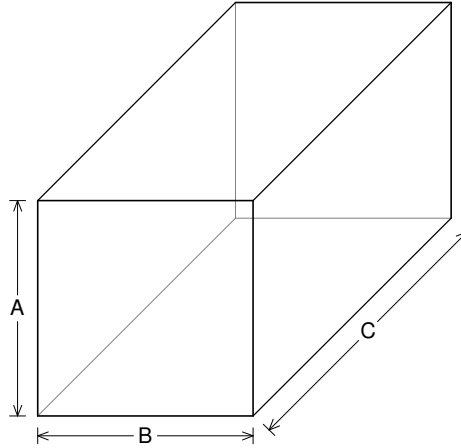
No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 3 in

Lv = 1.502 in



--External Dimensions--

A = 13.82 in

B = 13.82 in

C = 23.93 in

--Internal Dimensions--

A = 12.32 in

B = 12.32 in

C = 22.43 in

--Wall Thickness--

Front = 0.75 in

Side = 0.75 in

Driver Properties

--Description--

Name: LA12850

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Shallow 12" High Power Woofer

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 46.05 Hz

Qms = 12.73

Vas = 66.07 liters

Cms = 0.16 mm/N

Mms = 72.8 g

Rms = 1.65 kg/s

Xmax = 5 mm

Xmech = 14 mm

P-Dia = 262 mm

Sd = 545.4 sq.cm

P-Vd = 0.27 liters

--Electrical Parameters--

Qes = 0.32

Re = 5.87 ohms

Le = 0.96 mH

Z = 8 ohms

BL = 19.51 Tm

Pe = 800 watts

--Electromech. Parameters--

Qts = 0.312

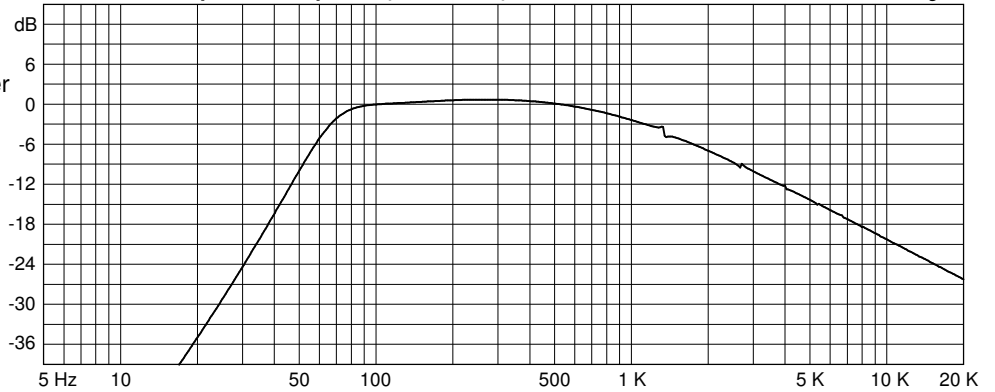
no = 1.944 %

1-W SPL = 95.03 dB

2.83-V SPL = 96.38 dB

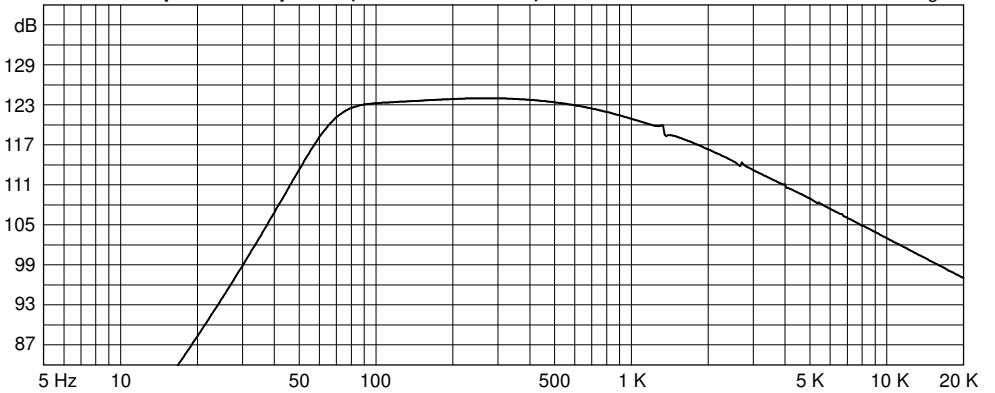
Normalized Amplitude Response (dB-SPL/Hz)

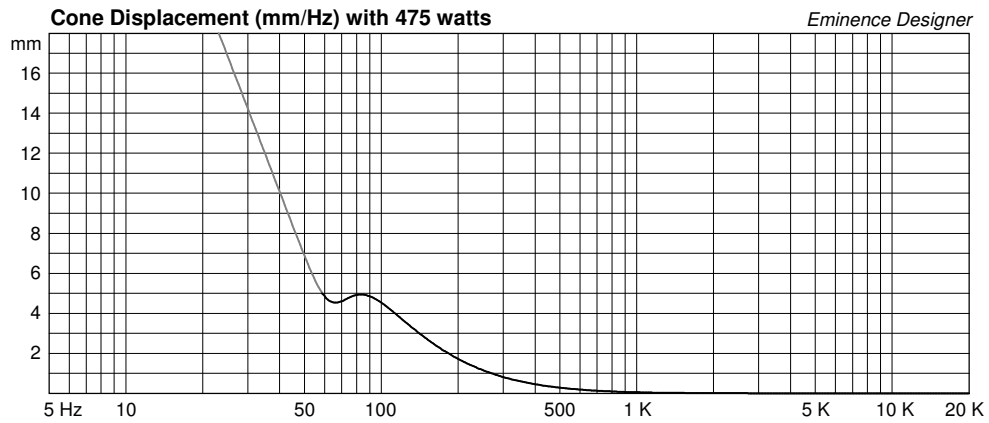
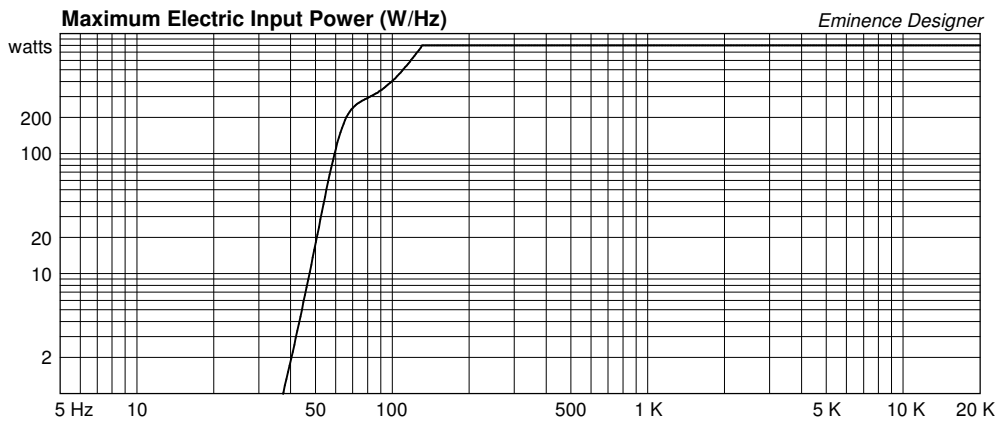
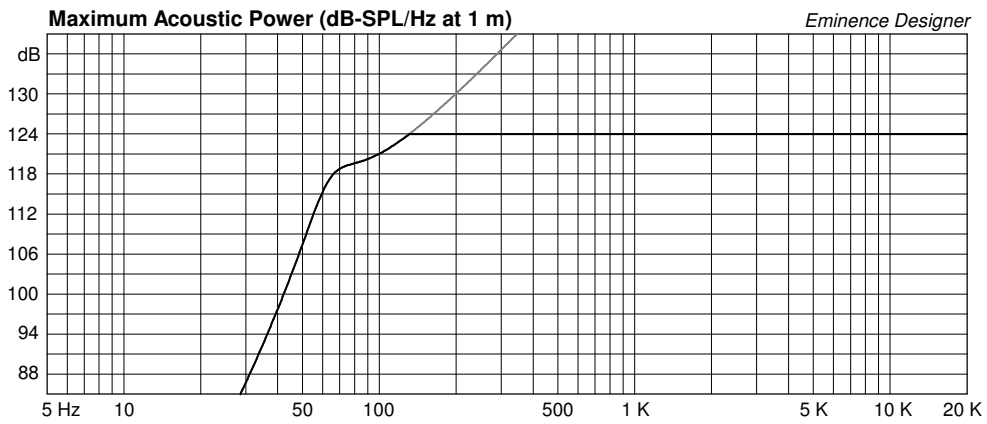
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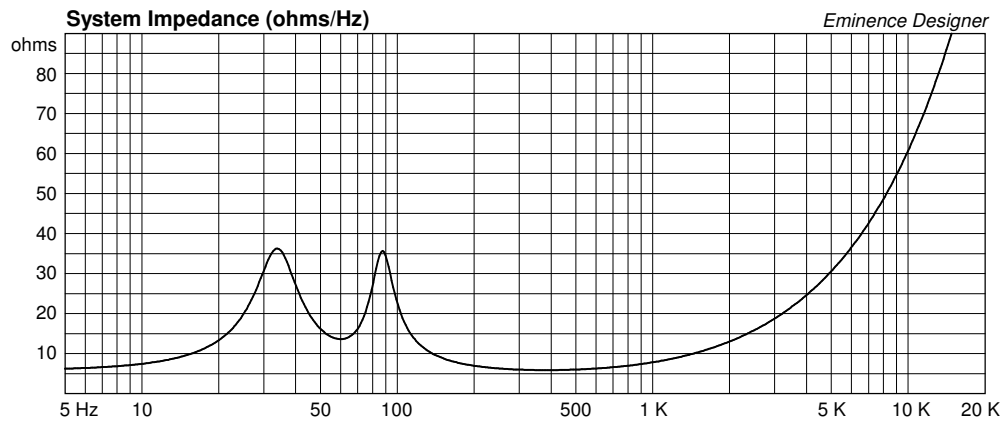
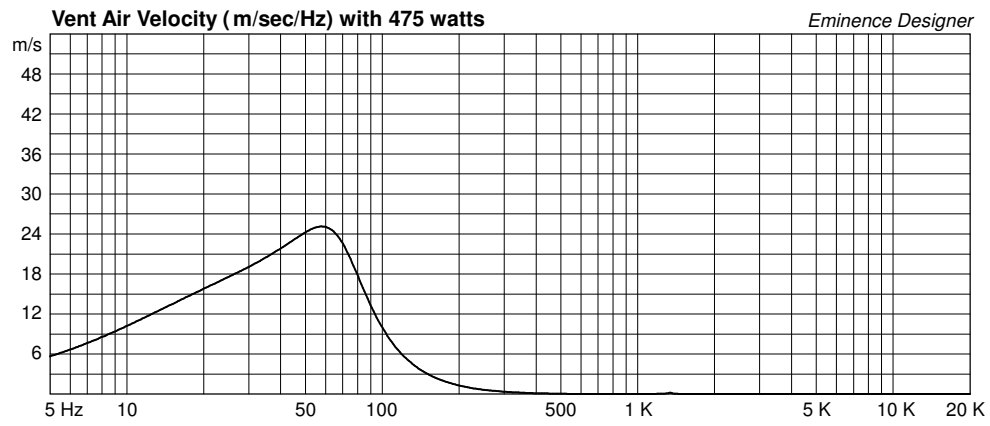


Custom Amplitude Response (dB-SPL/Hz at 1 m) with 475 watts

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LA12850 Small Vented Design

By Jerry McNutt, Eminence Speaker LLC

Limit to 750 Watts; F3 at 74 Hz. Use a steep high pass filter at 60 Hz or higher.

Great for a high power top box or floor wedge. Best used above 100 Hz.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 1.1 cu.ft

V(total) = 1.266 cu.ft

Fb = 80 Hz

QL = 7

F3 = 74.03 Hz

Fill = minimal

--Vents--

No. of Vents = 1

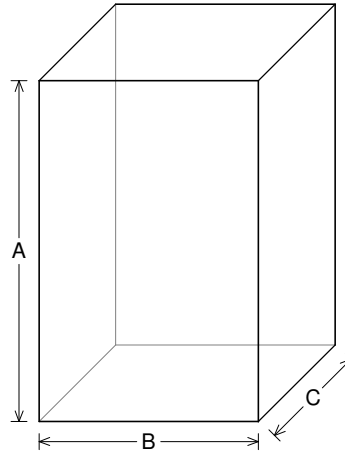
Vent shape = rectangle

Vent ends = one flush

Hv = 1.5 in

Wv = 12.97 in

Lv = 4.84 in



--External Dimensions--

A = 22.51 in

B = 14.48 in

C = 9.524 in

--Internal Dimensions--

A = 21.01 in

B = 12.98 in

C = 8.024 in

--Wall Thickness--

Front = 0.75 in

Side = 0.75 in

Driver Properties

--Description--

Name: LA12850

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: Shallow 12" High Power Woofer

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 46.05 Hz

Qms = 12.73

Vas = 66.07 liters

Cms = 0.16 mm/N

Mms = 72.8 g

Rms = 1.65 kg/s

Xmax = 5 mm

Xmech = 14 mm

P-Dia = 262 mm

Sd = 545.4 sq.cm

P-Vd = 0.27 liters

--Electrical Parameters--

Qes = 0.32

Re = 5.87 ohms

Le = 0.96 mH

Z = 8 ohms

BL = 19.51 Tm

Pe = 800 watts

--Electromech. Parameters--

Qts = 0.312

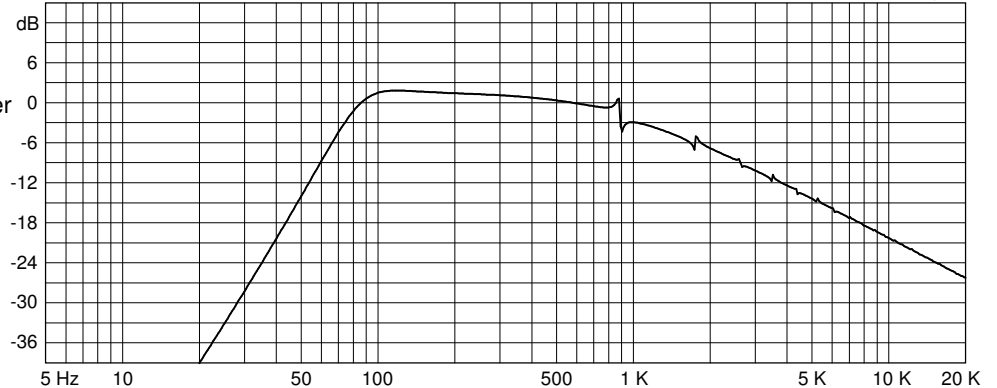
no = 1.944 %

1-W SPL = 95.03 dB

2.83-V SPL = 96.38 dB

Normalized Amplitude Response (dB-SPL/Hz)

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Custom Amplitude Response (dB-SPL/Hz at 1 m) with 750 watts

Eminence Designer

