

KappaPro10LF Small EQ'd Subwoofer, Advanced Des

By Jerry McNutt, Eminence Speaker LLC

Limit to 175 Watts; F3 at 47 Hz. Must use a special high pass at 48 Hz.

For advanced builders only. Micro Subwoofer, use below 200 Hz.



Box Properties

--Description--

Name:

Type: Vented Box w/ Active HP Filter

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 1.5 cu.ft

V(total) = 1.836 cu.ft

Fb = 48 Hz

QL = 7

F3 = 47.12 Hz

Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 15.63 in

--Active 12 dB/oct. HP Filter--

Fx = 48 Hz

Qx = 1.2

Driver Properties

--Description--

Name: KappaPro10LF

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 10" Cast Frame High Power Woofer

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 38.57 Hz

Qms = 8.97

Vas = 72.97 liters

Cms = 0.37 mm/N

Mms = 46.03 g

Rms = 1.24 kg/s

Xmax = 7.2 mm

Xmech = 16 mm

P-Dia = 217.8 mm

Sd = 376.9 sq.cm

P-Vd = 0.268 liters

--Electrical Parameters--

Qes = 0.29

Re = 5.48 ohms

Le = 0.97 mH

Z = 8 ohms

BL = 14.46 Tm

Pe = 600 watts

--Electromech. Parameters--

Qts = 0.28

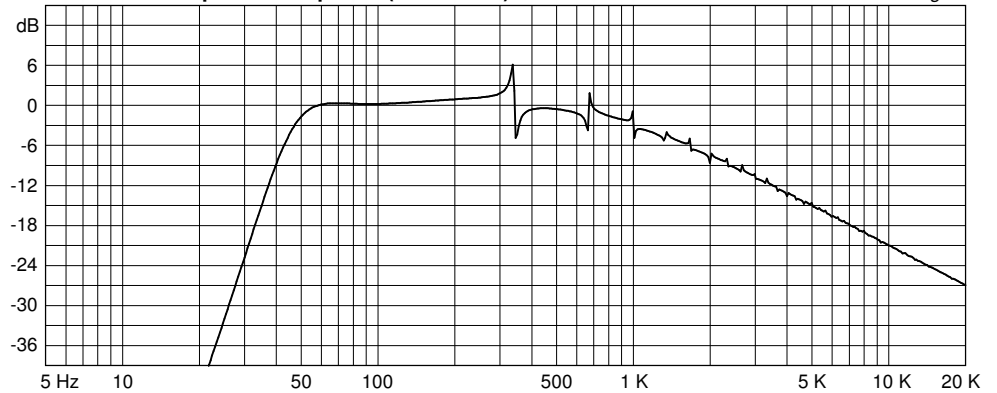
no = 1.392 %

1-W SPL = 93.58 dB

2.83-V SPL = 95.23 dB

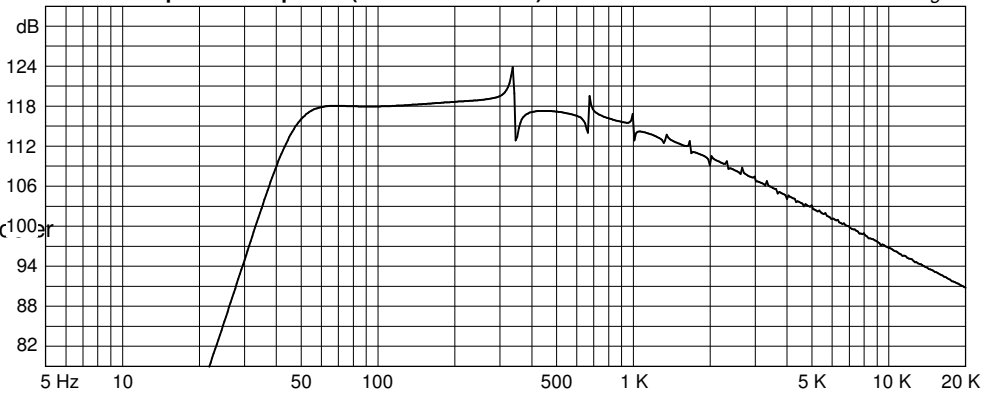
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



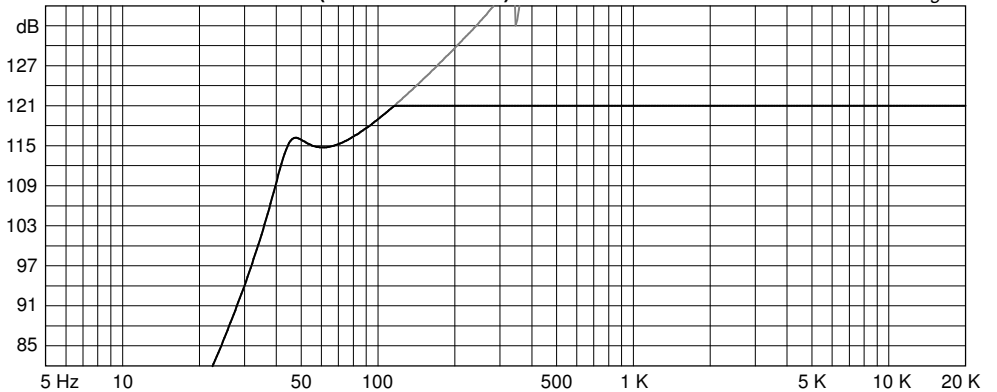
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 175 watts

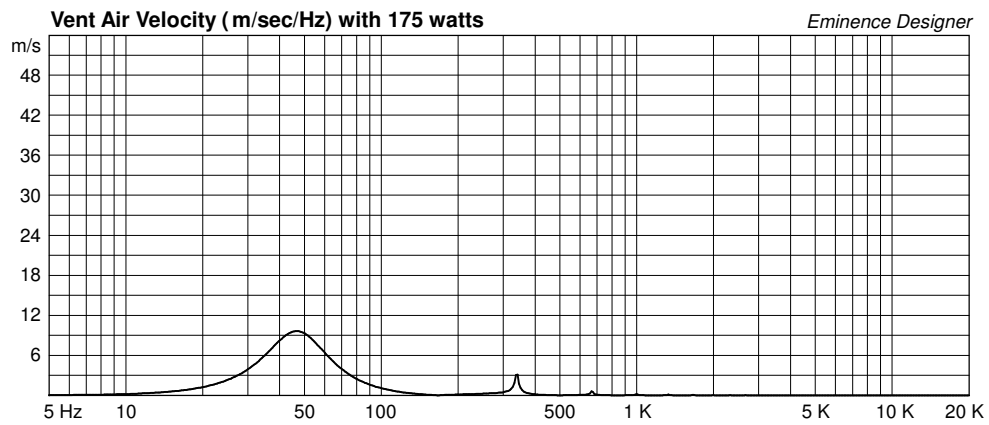
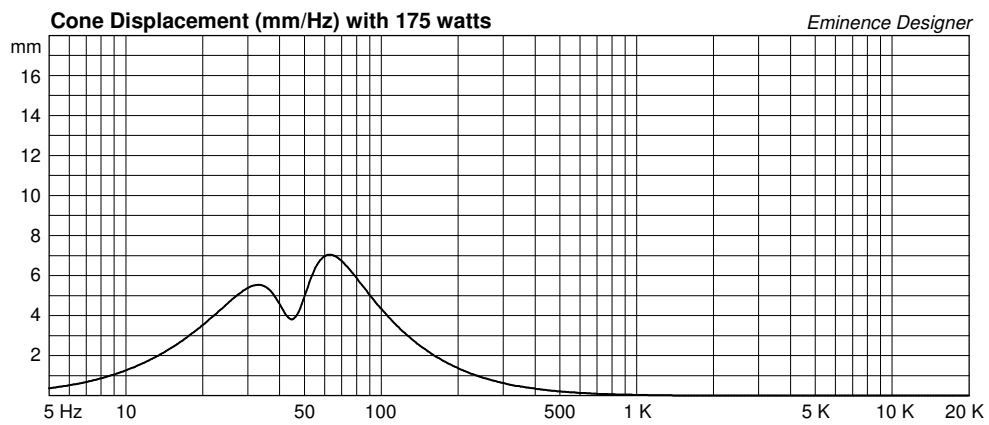
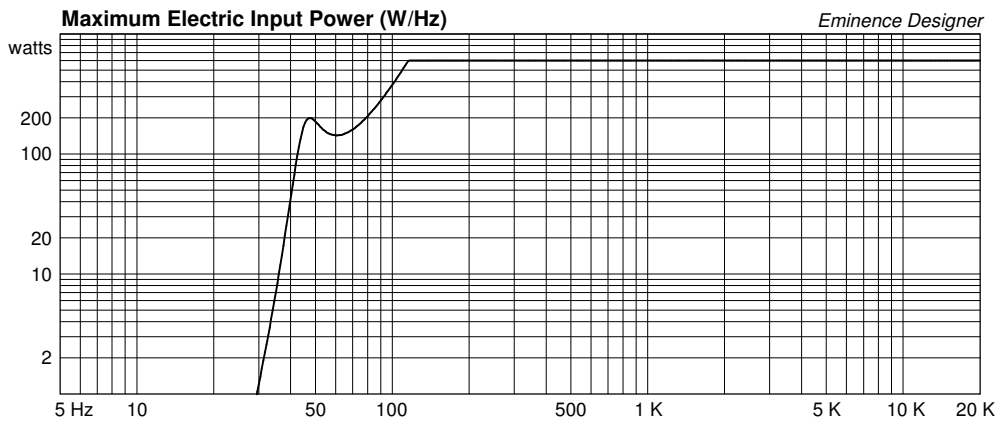
Eminence Designer

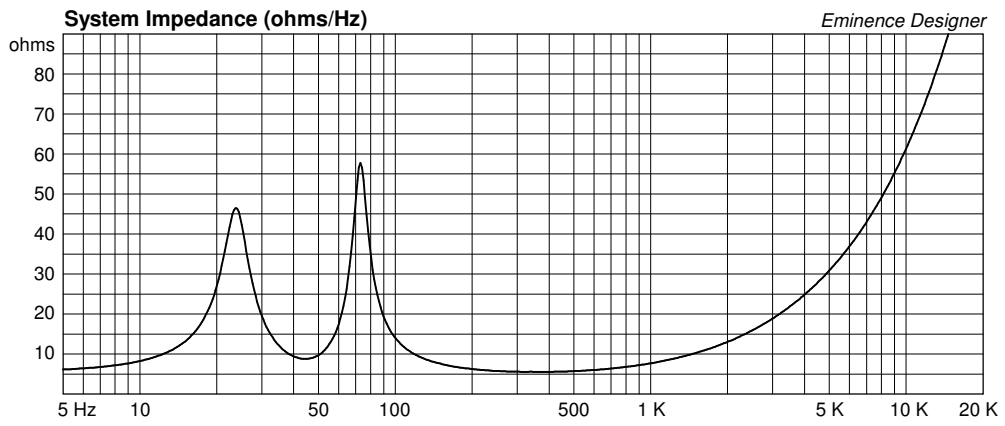


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







KappaPro10LF Larger Vented Design

By Jerry McNutt, Eminence Speaker LLC
300 Watts; F3 at 60 Hz. Use a steep high pass filter at 45 Hz or higher.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 1.436 cu.ft

V(total) = 1.549 cu.ft

Fb = 55 Hz

QL = 7

F3 = 59.36 Hz

Fill = minimal

--Vents--

No. of Vents = 1

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 4.109 in

Driver Properties

--Description--

Name: KappaPro10LF

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 10" Cast Frame High Power Woofer

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 38.57 Hz

Qms = 8.97

Vas = 72.97 liters

Cms = 0.37 mm/N

Mms = 46.03 g

Rms = 1.24 kg/s

Xmax = 7.2 mm

Xmech = 16 mm

P-Dia = 217.8 mm

Sd = 376.9 sq.cm

P-Vd = 0.268 liters

--Electrical Parameters--

Qes = 0.29

Re = 5.48 ohms

Le = 0.97 mH

Z = 8 ohms

BL = 14.46 Tm

Pe = 600 watts

--Electromech. Parameters--

Qts = 0.28

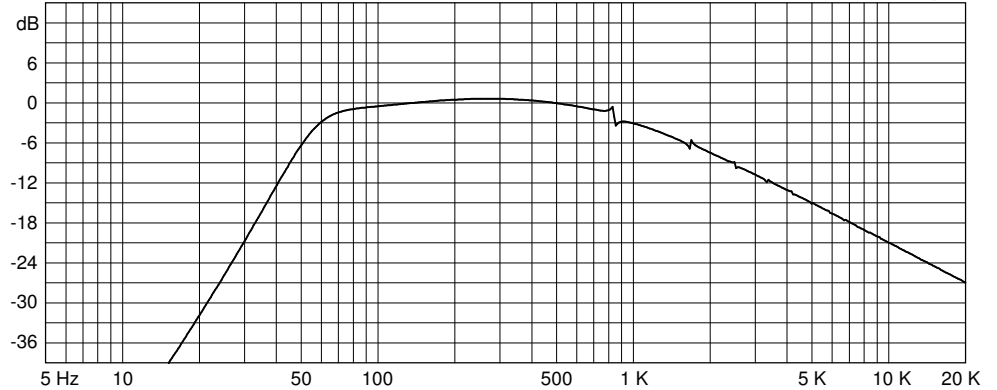
no = 1.392 %

1-W SPL = 93.58 dB

2.83-V SPL = 95.23 dB

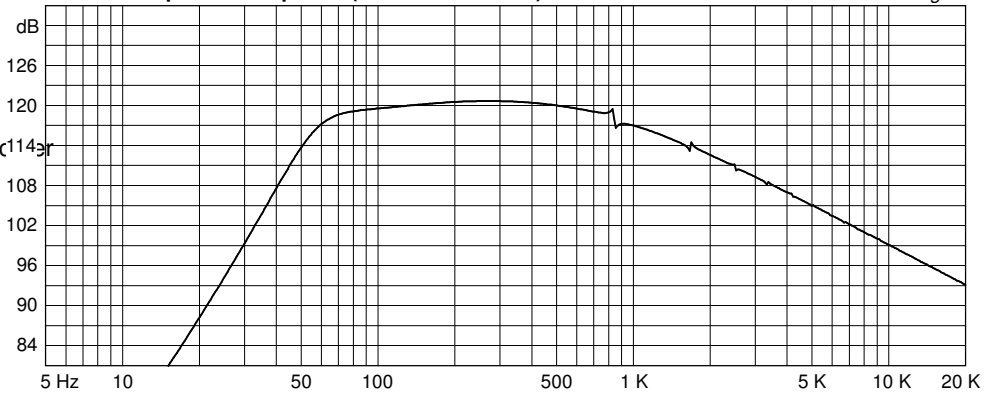
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



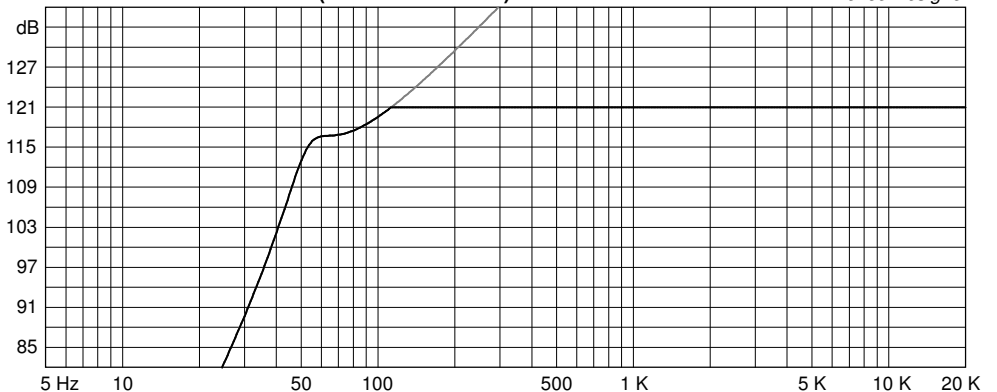
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 300 watts

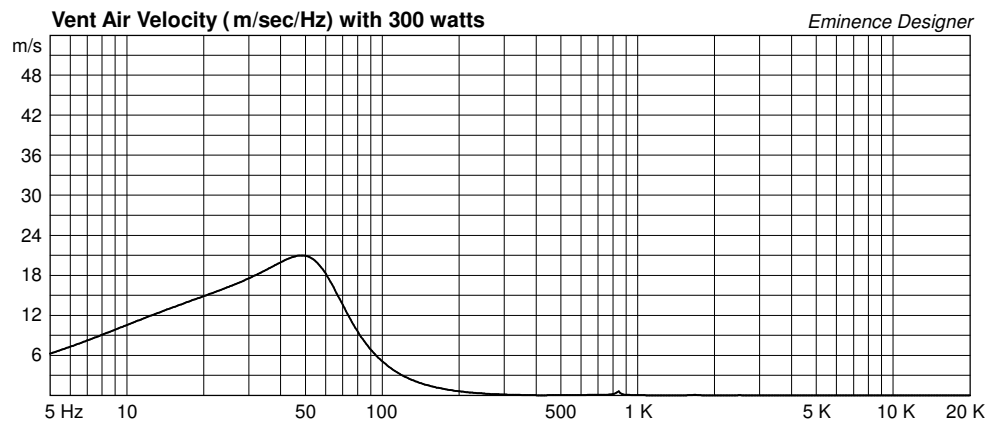
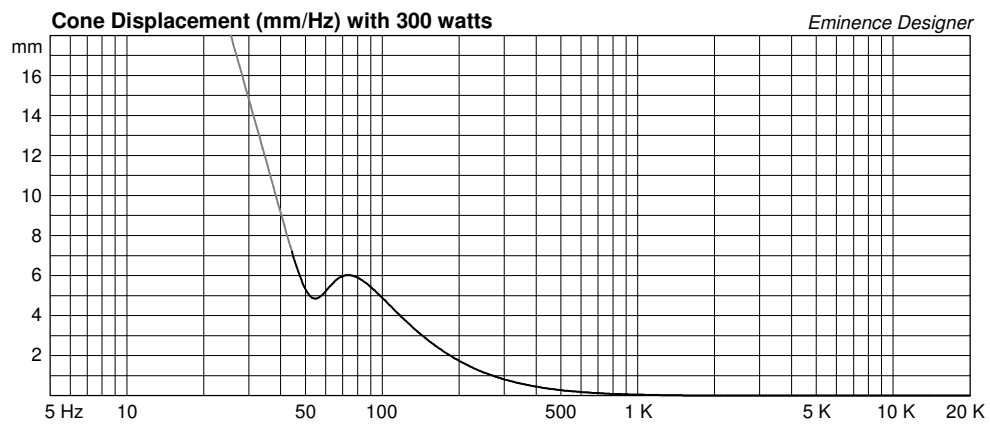
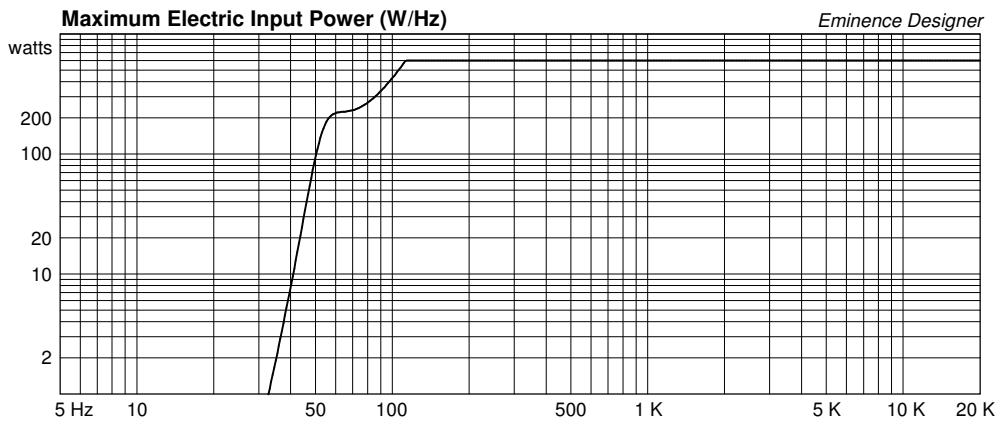
Eminence Designer

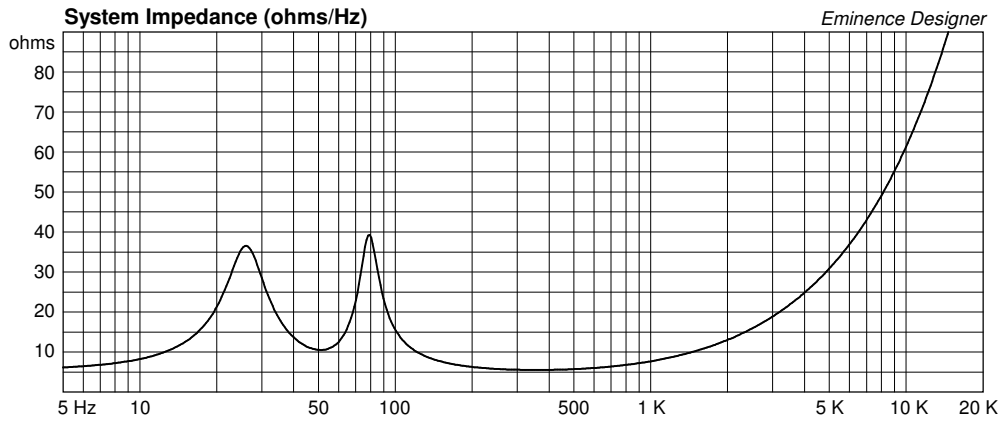


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







KappaPro10LF Medium Vented Design

By Jerry McNutt, Eminence Speaker LLC
450 Watts; F3 at 64 Hz. Use a steep high pass filter at 45 Hz or higher.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 1 cu.ft

V(total) = 1.142 cu.ft

Fb = 55 Hz

QL = 7

F3 = 63.57 Hz

Fill = minimal

--Vents--

No. of Vents = 1

Vent shape = round

Vent ends = one flush

Dv = 4 in

Lv = 7.644 in

Driver Properties

--Description--

Name: KappaPro10LF

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 10" Cast Frame High Power Woofer

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 38.57 Hz

Qms = 8.97

Vas = 72.97 liters

Cms = 0.37 mm/N

Mms = 46.03 g

Rms = 1.24 kg/s

Xmax = 7.2 mm

Xmech = 16 mm

P-Dia = 217.8 mm

Sd = 376.9 sq.cm

P-Vd = 0.268 liters

--Electrical Parameters--

Qes = 0.29

Re = 5.48 ohms

Le = 0.97 mH

Z = 8 ohms

BL = 14.46 Tm

Pe = 600 watts

--Electromech. Parameters--

Qts = 0.28

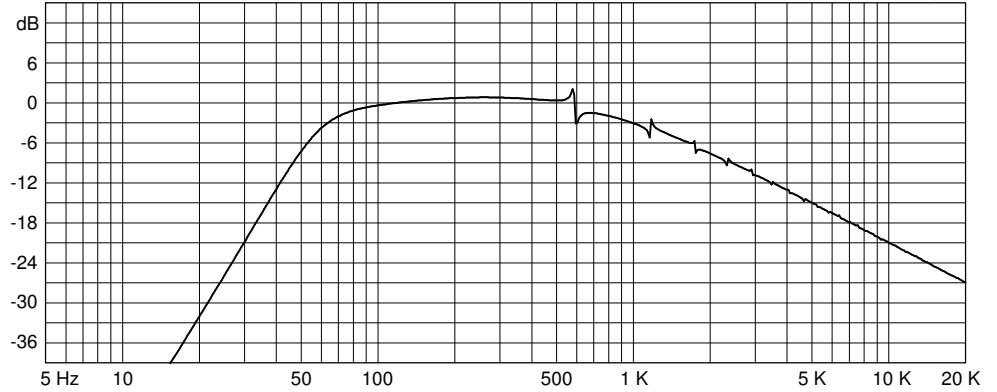
no = 1.392 %

1-W SPL = 93.58 dB

2.83-V SPL = 95.23 dB

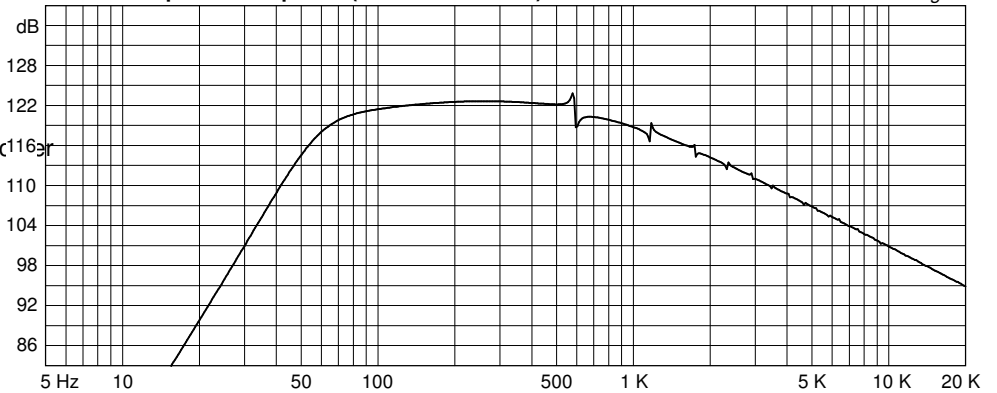
Normalized Amplitude Response (dB-SPL/Hz)

Eminence Designer



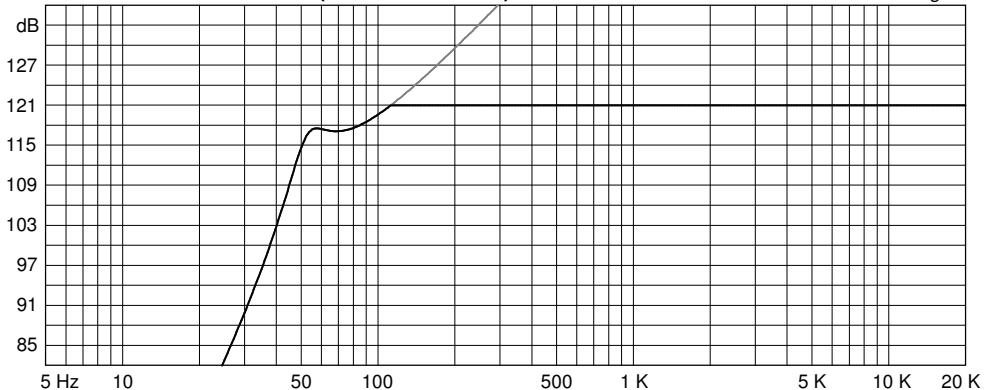
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 450 watts

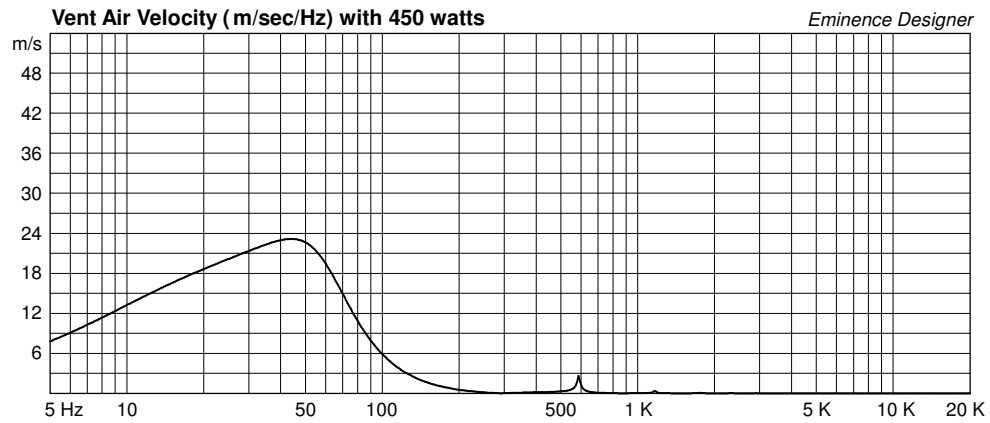
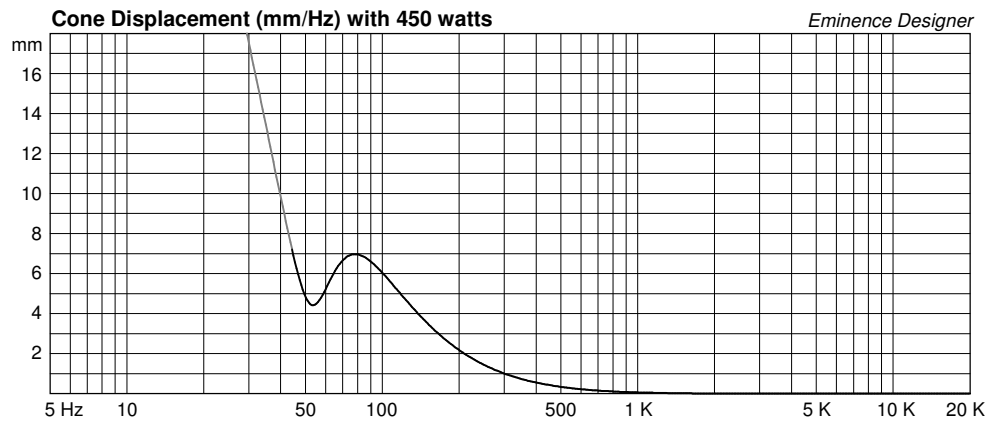
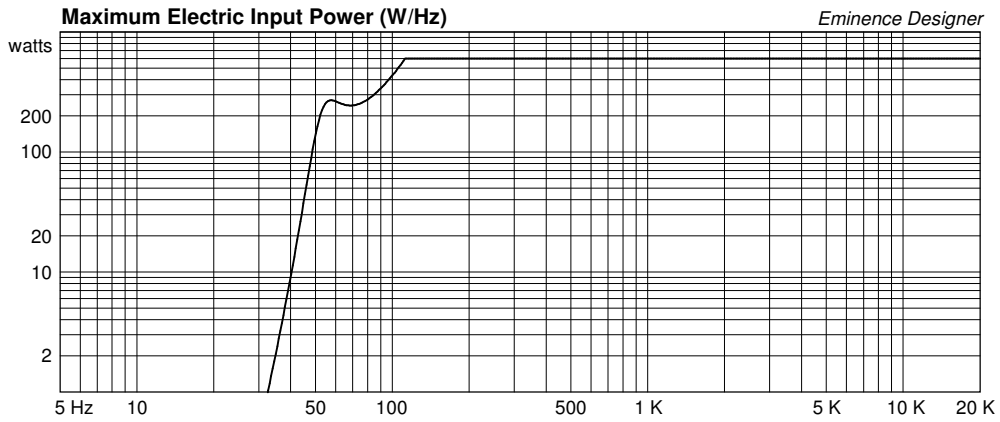
Eminence Designer

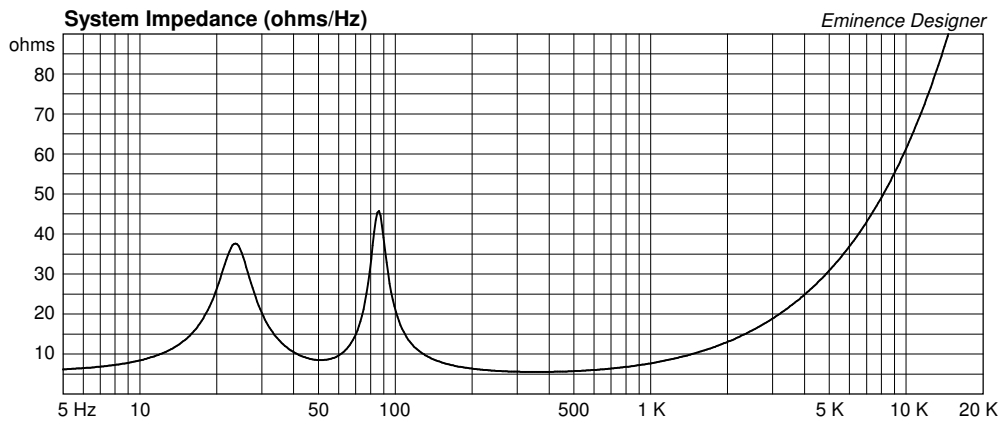


Maximum Acoustic Power (dB-SPL/Hz at 1 m)

Eminence Designer







KappaPro10LF Small Vented Design

By Jerry McNutt, Eminence Speaker LLC

600 Watts; F3 at 69 Hz. Use a steep high pass filter at 50 Hz or higher.

Great for a small high power Satellite or top box.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 0.75 cu.ft

V(total) = 0.906 cu.ft

Fb = 60 Hz

QL = 7

F3 = 68.81 Hz

Fill = minimal

--Vents--

No. of Vents = 1

Vent shape = rectangle

Vent ends = one flush

Hv = 2 in

Wv = 6 in

Lv = 9.484 in

Driver Properties

--Description--

Name: KappaPro10LF

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 10" Cast Frame High Power Woofer

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 38.57 Hz

Qms = 8.97

Vas = 72.97 liters

Cms = 0.37 mm/N

Mms = 46.03 g

Rms = 1.24 kg/s

Xmax = 7.2 mm

Xmech = 16 mm

P-Dia = 217.8 mm

Sd = 376.9 sq.cm

P-Vd = 0.268 liters

--Electrical Parameters--

Qes = 0.29

Re = 5.48 ohms

Le = 0.97 mH

Z = 8 ohms

BL = 14.46 Tm

Pe = 600 watts

--Electromech. Parameters--

Qts = 0.28

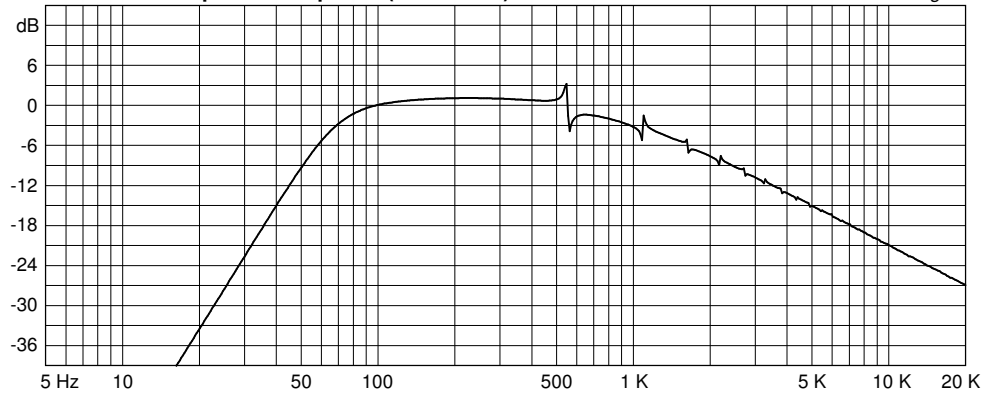
no = 1.392 %

1-W SPL = 93.58 dB

2.83-V SPL = 95.23 dB

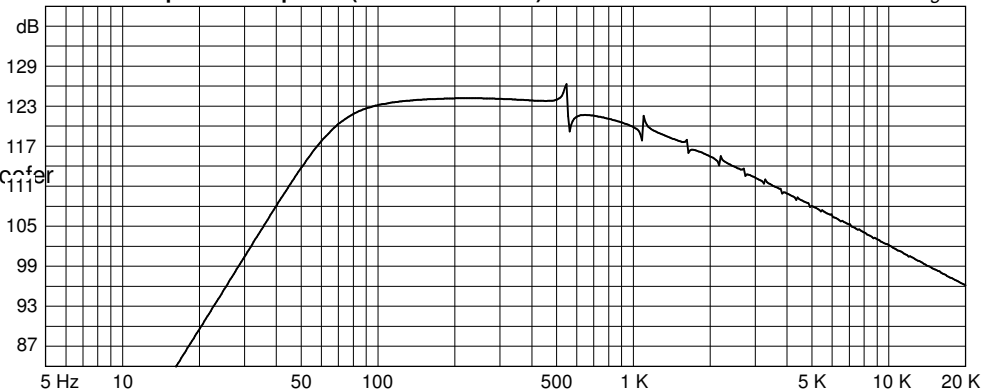
Normalized Amplitude Response (dB-SPL/Hz)

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

