Kappa12A Med Vented Cab.; Hi Pwr Sat or Med Pwr Semi FR

By McJerry, Eminence Speaker LLC
Displacement limited to 150 watts if used with a 60 Hz high pass filter.
Displacement and thermally limited to 450 watts if used with a 200 Hz 24 dB per octave high pass filter; use with a Sub.

Box Properties

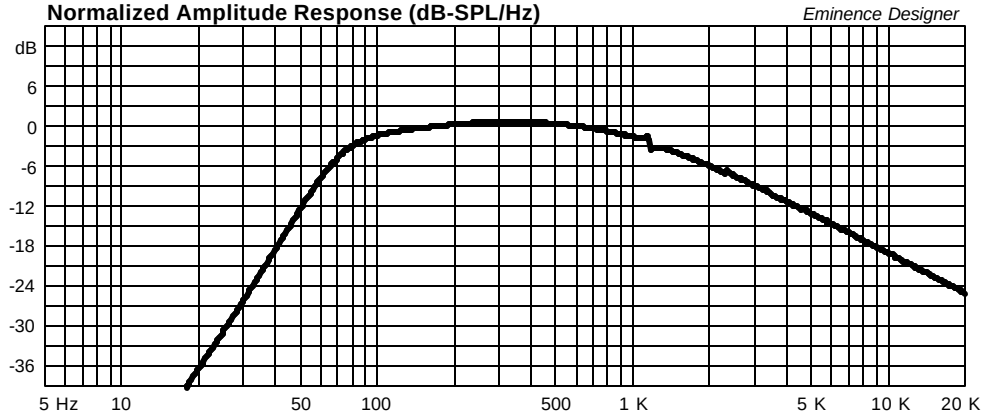
--Description--
Name:
Type: Vented Box
Shape: Prism, square (optimum)
--Box Parameters--
Vb = 1.6 cu.ft
V(total) = 1.712 cu.ft
Fb = 65 Hz
QL = 7
F3 = 73.73 Hz
Fill = minimal
--Vents--
No. of Vents = 2
Vent shape = round
Vent ends = one flush
Dv = 3 in
Lv = 2.294 in

Driver Properties

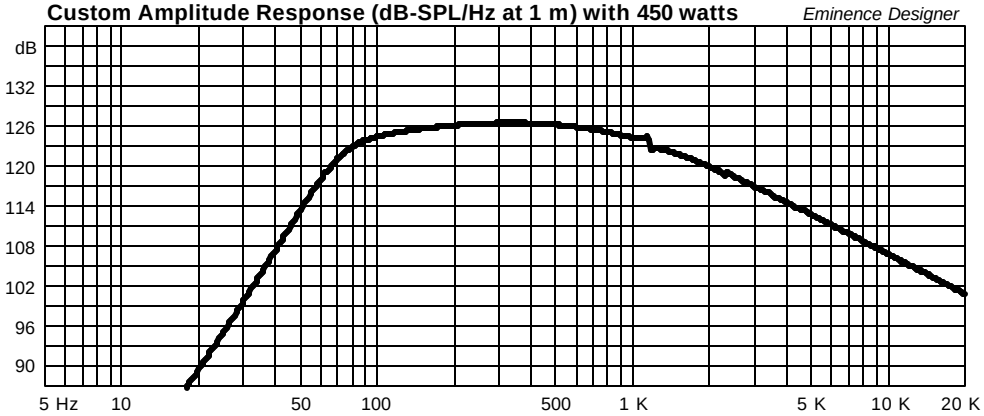
--Description--
Name: Kappa-12
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: Revised NOV 2005
Piston: Paper cone.
Suspension: Cloth surround.
Dust Cap: Solid composition paper dust cap.
Frame: Pressed steel basket.
Voice Coil: 3 inch (76.2 mm) AL Wire. Kapton former.
Magnet: 80 oz ferrite magnet.
--Configuration--
No. of Drivers = 1

--Mechanical Parameters--		*--Electrical Parameters--*	
Fs =	45 Hz	Qes =	0.28
Qms =	7.76	Re =	5.41 ohms
Vas =	112.1 liters	Le =	0.77 mH
Cms =	0.3 mm/N	Z =	8 ohms
Mms =	42 g	BL =	15.2 Tm
Rms =	1.53 kg/s	Pe =	450 watts
Xmax =	3.2 mm	*--Electromech. Parameters--*	
Xmech =	11.5 mm	Qts =	0.27
P-Dia =	255.6 mm	no =	3.518 %
Sd =	519.5 sq.cm	1-W SPL =	97.61 dB
P-Vd =	0.165 liters	2.83-V SPL =	99.31 dB

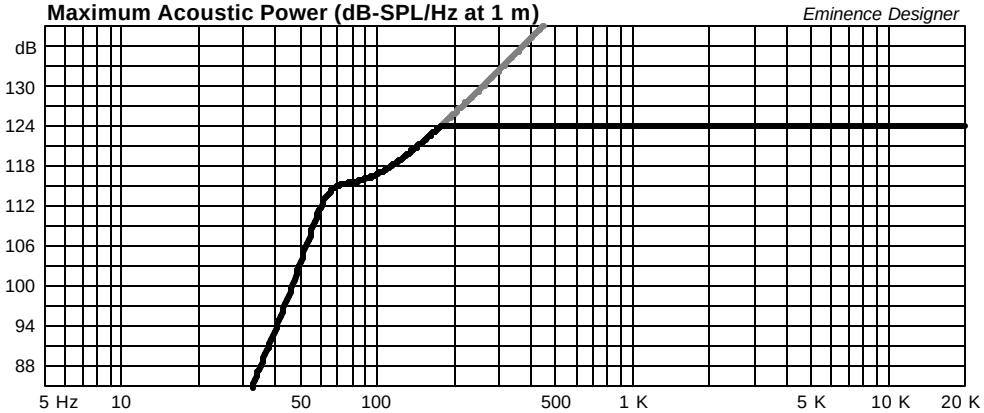
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*

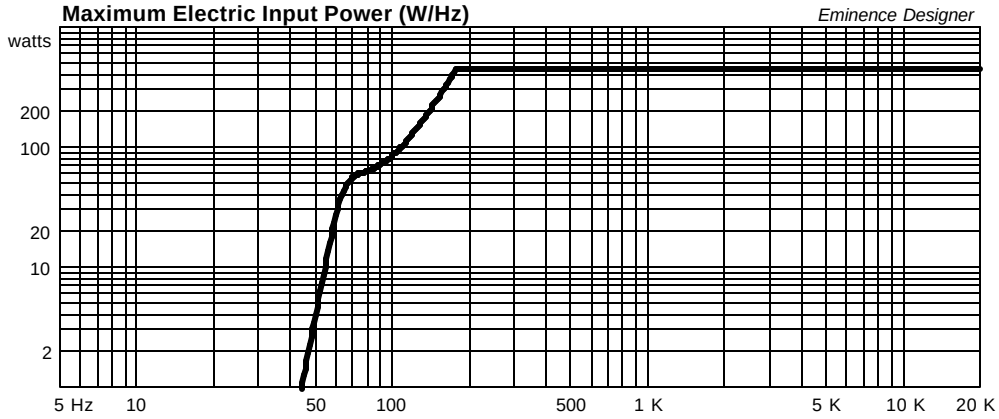


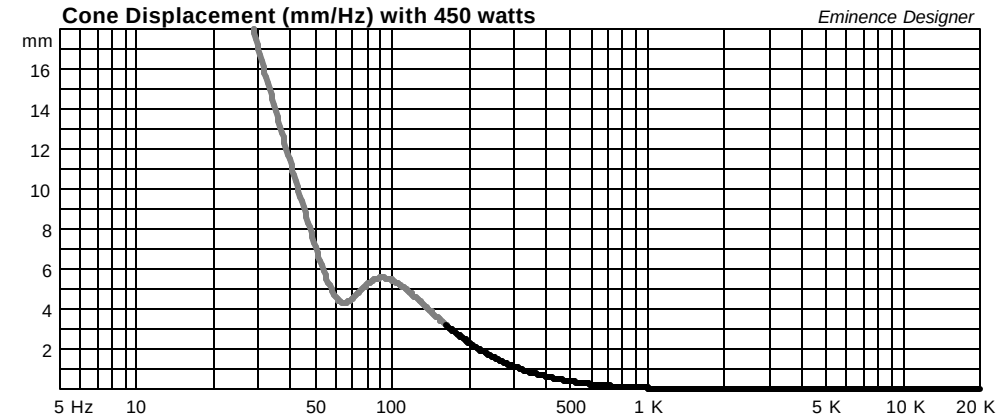
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 450 watts *Eminence Designer*

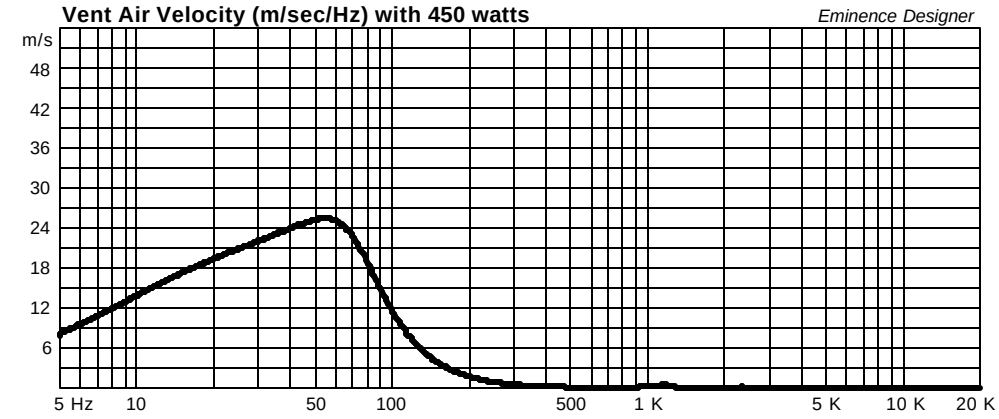


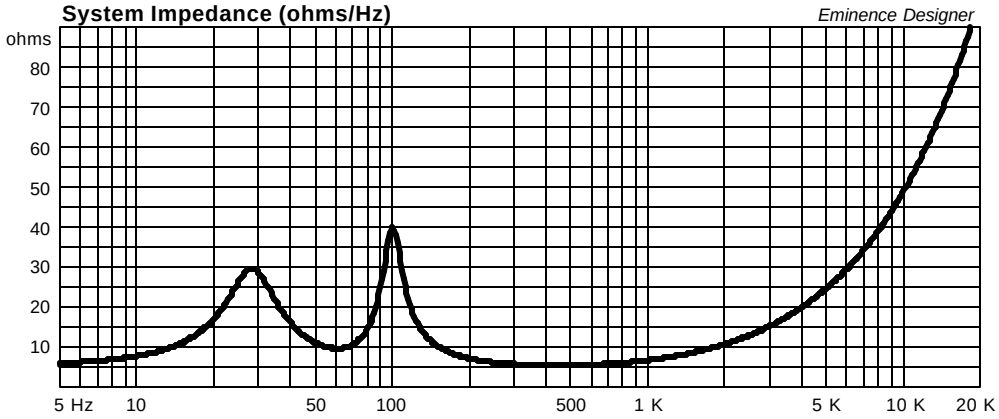
Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*

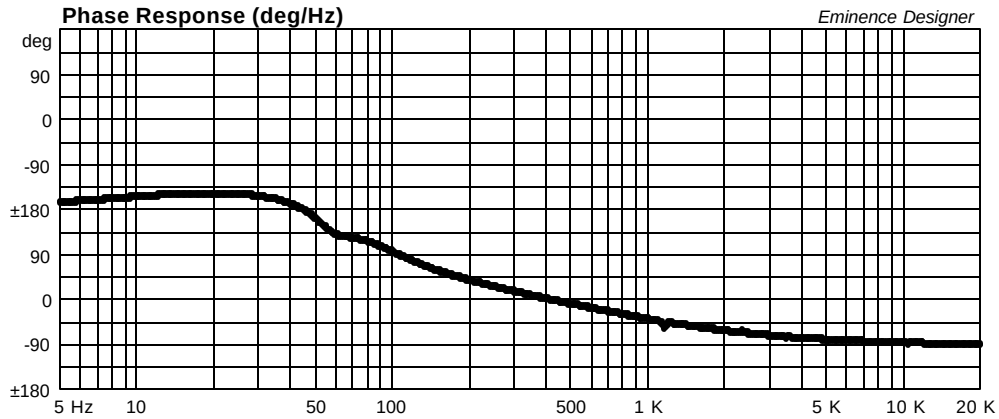


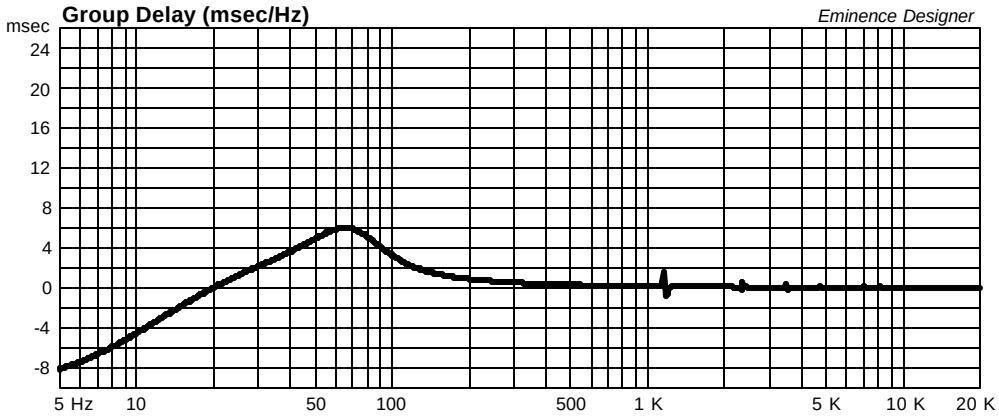

Maximum Electric Input Power (W/Hz)
Eminence Designer
watts
200
100
20
10
2
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K


Cone Displacement (mm/Hz) with 450 watts
Eminence Designer
mm
16
14
12
10
8
6
4
2
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K


Vent Air Velocity (m/sec/Hz) with 450 watts
Eminence Designer
m/s
48
42
36
30
24
18
12
6
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K


System Impedance (ohms/Hz)
Eminence Designer
ohms
80
70
60
50
40
30
20
10
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K


Phase Response (deg/Hz)
Eminence Designer
deg
90
0
-90
±180
90
0
-90
±180
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K


Group Delay (msec/Hz)
Eminence Designer
msec
24
20
16
12
8
4
0
-4
-8
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K

Kappa12 High Power Mid/High box, Hi-F3. Must use with a Sub-woofer.

By McJerry, Eminence Speaker LLC

Displacement and thermally limited to 450 watts. Must use a 24 dB per octave high pass filter set to 180 Hz or higher. Great for a super high SPL mid/high box. Must be used with a sub-woofer system.

Box Properties

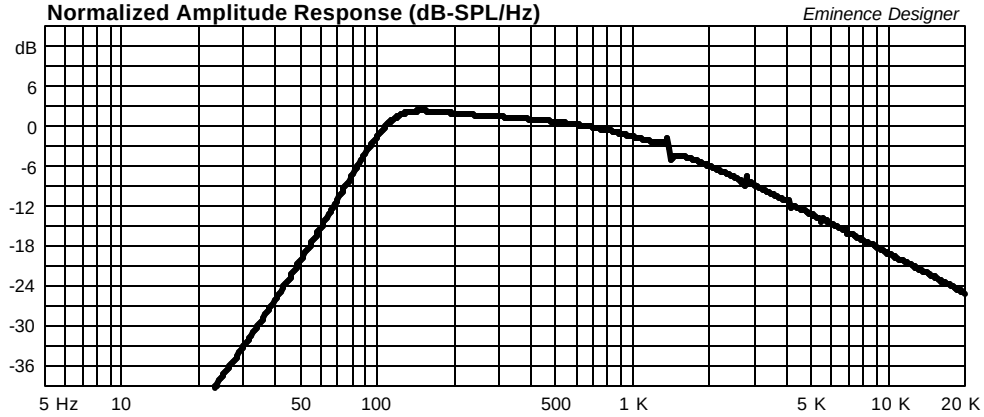
--Description--
Name:
Type: Vented Box
Shape: Prism, square (optimum)
--Box Parameters--
Vb = 1.1 cu.ft
V(total) = 1.2 cu.ft
Fb = 100 Hz
QL = 7
F3 = 93.8 Hz
Fill = minimal
--Vents--
No. of Vents = 2
Vent shape = round
Vent ends = one flush
Dv = 3.506 in
Lv = 0.75 in

Driver Properties

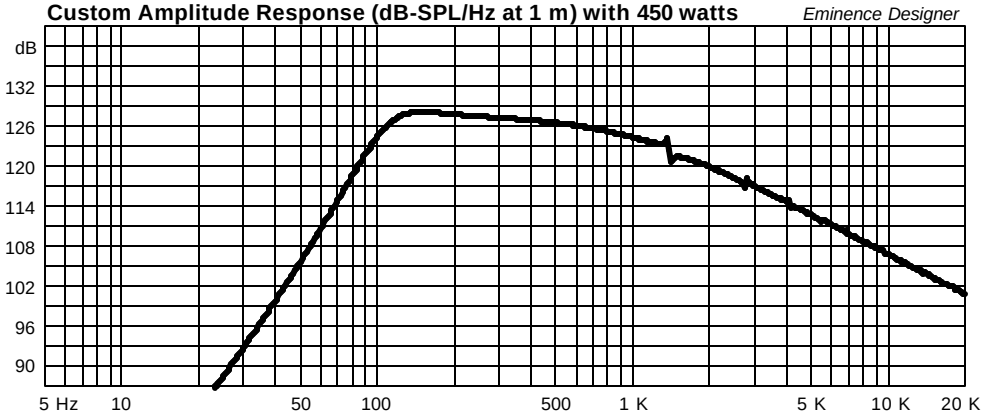
--Description--
Name: Kappa-12
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: Revised NOV 2005
Piston: Paper cone.
Suspension: Cloth surround.
Dust Cap: Solid composition paper dust cap.
Frame: Pressed steel basket.
Voice Coil: 3 inch (76.2 mm) AL Wire. Kapton former.
Magnet: 80 oz ferrite magnet.
--Configuration--
No. of Drivers = 1

--Mechanical Parameters--		*--Electrical Parameters--*	
Fs =	45 Hz	Qes =	0.28
Qms =	7.76	Re =	5.41 ohms
Vas =	112.1 liters	Le =	0.77 mH
Cms =	0.3 mm/N	Z =	8 ohms
Mms =	42 g	BL =	15.2 Tm
Rms =	1.53 kg/s	Pe =	450 watts
Xmax =	3.2 mm	*--Electromech. Parameters--*	
Xmech =	11.5 mm	Qts =	0.27
P-Dia =	255.6 mm	no =	3.518 %
Sd =	519.5 sq.cm	1-W SPL =	97.61 dB
P-Vd =	0.165 liters	2.83-V SPL =	99.31 dB

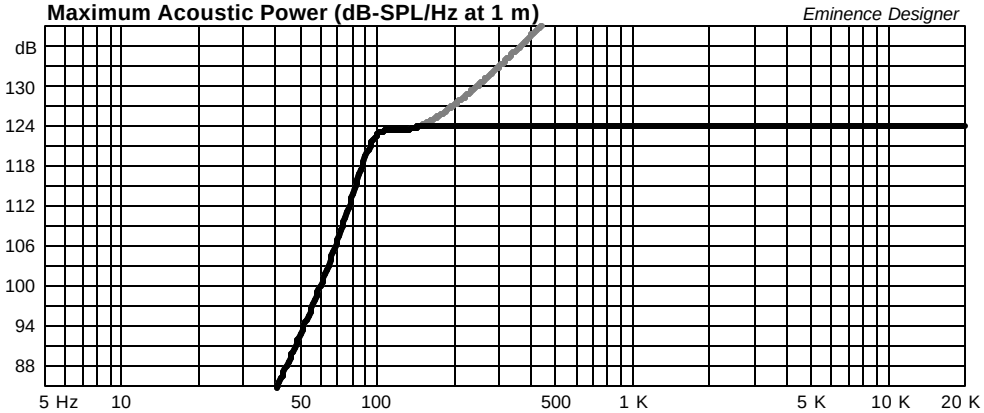
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*

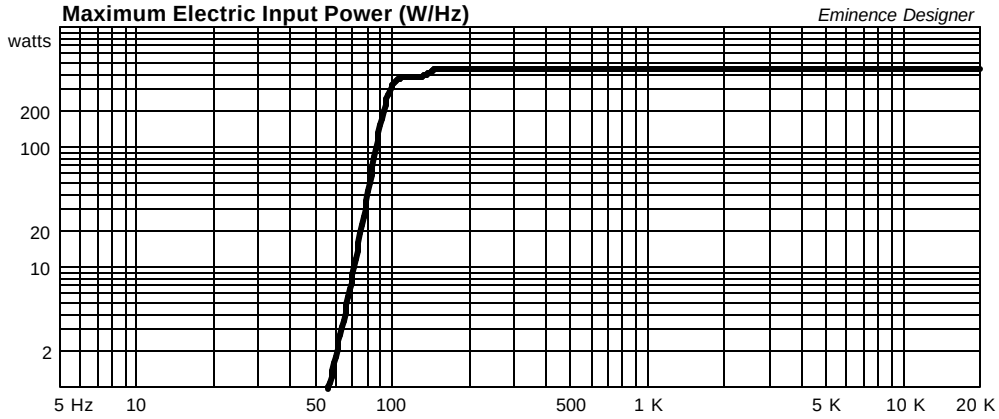


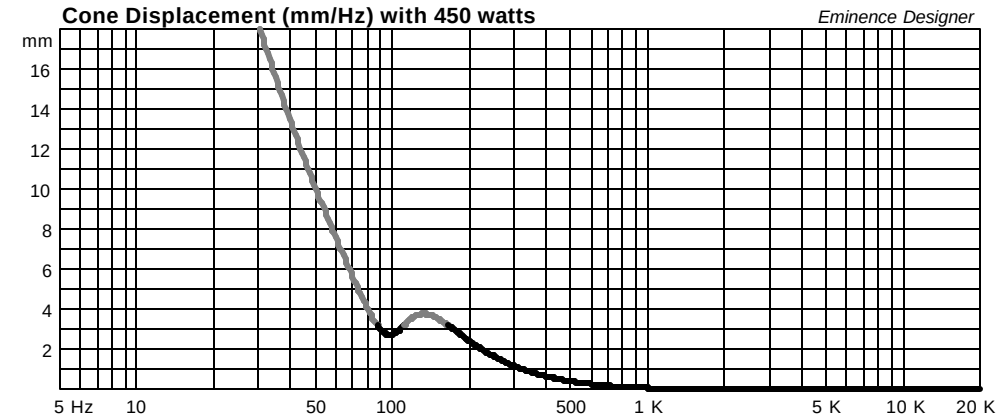
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 450 watts *Eminence Designer*

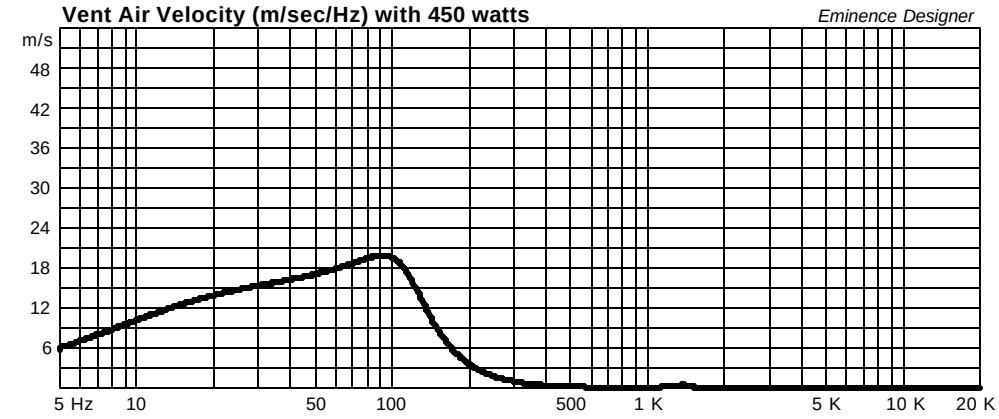


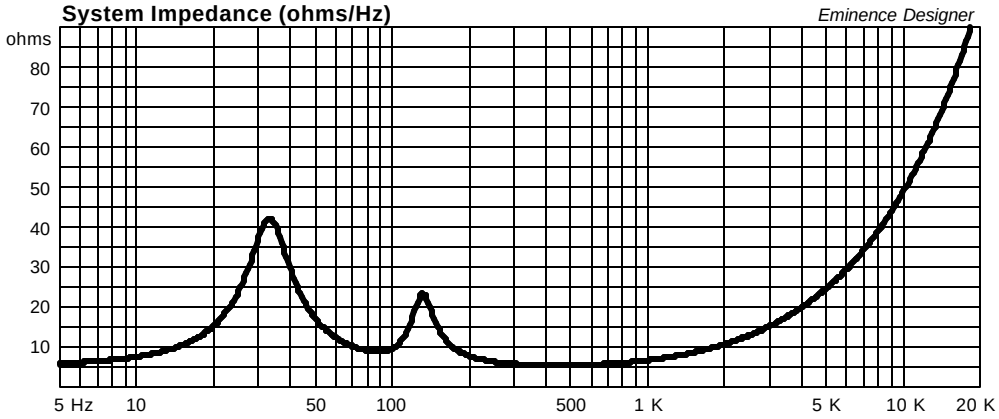
Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*

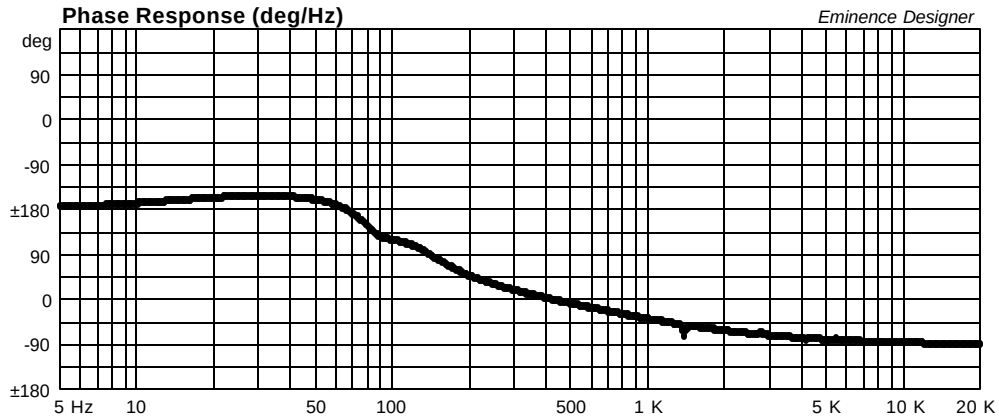


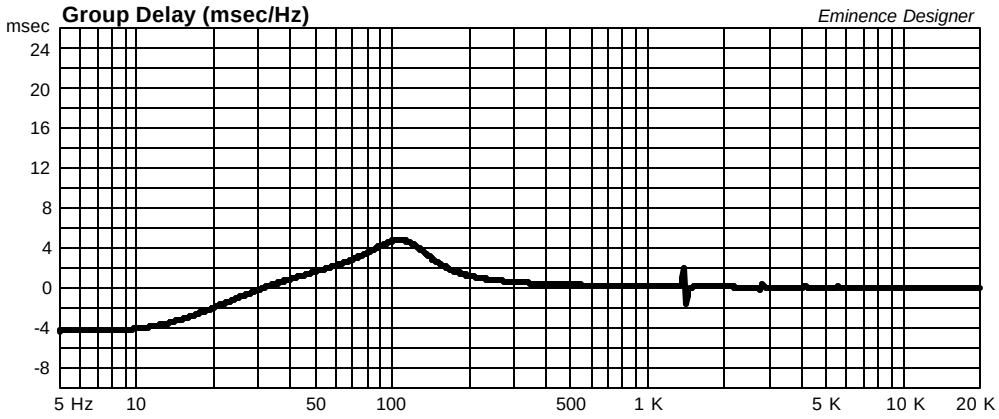

Maximum Electric Input Power (W/Hz)
Eminence Designer
watts
200
100
20
10
2
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K


Cone Displacement (mm/Hz) with 450 watts
Eminence Designer
mm
16
14
12
10
8
6
4
2
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K


Vent Air Velocity (m/sec/Hz) with 450 watts
Eminence Designer
m/s
48
42
36
30
24
18
12
6
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K


System Impedance (ohms/Hz)
Eminence Designer
ohms
80
70
60
50
40
30
20
10
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K


Phase Response (deg/Hz)
Eminence Designer
deg
90
0
-90
±180
90
0
-90
±180
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K


Group Delay (msec/Hz)
Eminence Designer
msec
24
20
16
12
8
4
0
-4
-8
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K

Kappa12A Larger Vented Cab.; Hi Pwr Sat Or Low Pwr FR

By McJerry, Eminence Speaker LLC
Displacement limited to 125 watts if used with a 60 Hz High pass filter.
Displacement limited to 300 watts if used with a 200 Hz High pass filter; use with a Sub-woofer.

Box Properties

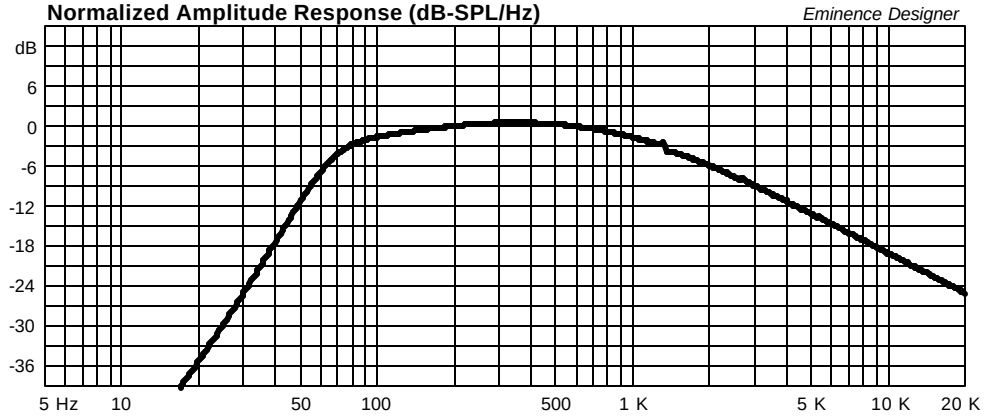
--Description--
Name:
Type: Vented Box
Shape: Prism, square (optimum)
--Box Parameters--
Vb = 2.022 cu.ft
V(total) = 2.126 cu.ft
Fb = 62 Hz
QL = 7
F3 = 77.71 Hz
Fill = minimal
--Vents--
No. of Vents = 2
Vent shape = round
Vent ends = one flush
Dv = 3 in
Lv = 1.532 in

Driver Properties

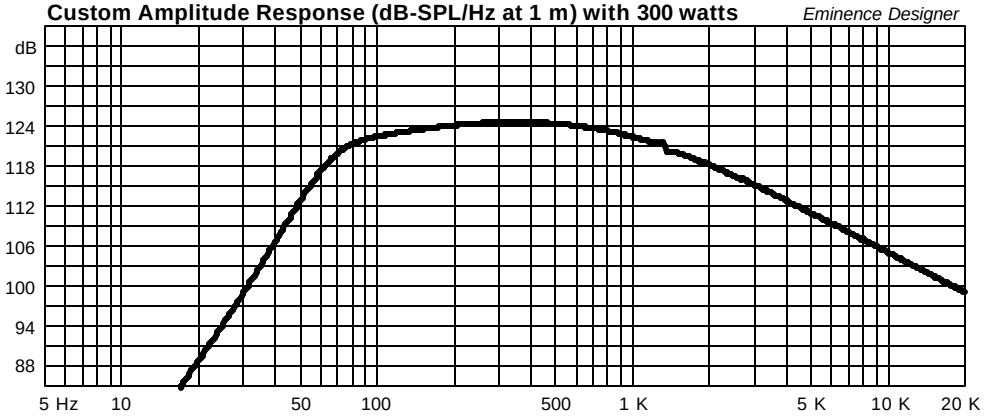
--Description--
Name: Kappa-12
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: Revised NOV 2005
Piston: Paper cone.
Suspension: Cloth surround.
Dust Cap: Solid composition paper dust cap.
Frame: Pressed steel basket.
Voice Coil: 3 inch (76.2 mm) AL Wire. Kapton former.
Magnet: 80 oz ferrite magnet.
--Configuration--
No. of Drivers = 1

--Mechanical Parameters--		*--Electrical Parameters--*	
Fs =	45 Hz	Qes =	0.28
Qms =	7.76	Re =	5.41 ohms
Vas =	112.1 liters	Le =	0.77 mH
Cms =	0.3 mm/N	Z =	8 ohms
Mms =	42 g	BL =	15.2 Tm
Rms =	1.53 kg/s	Pe =	450 watts
Xmax =	3.2 mm	*--Electromech. Parameters--*	
Xmech =	11.5 mm	Qts =	0.27
P-Dia =	255.6 mm	no =	3.518 %
Sd =	519.5 sq.cm	1-W SPL =	97.61 dB
P-Vd =	0.165 liters	2.83-V SPL =	99.31 dB

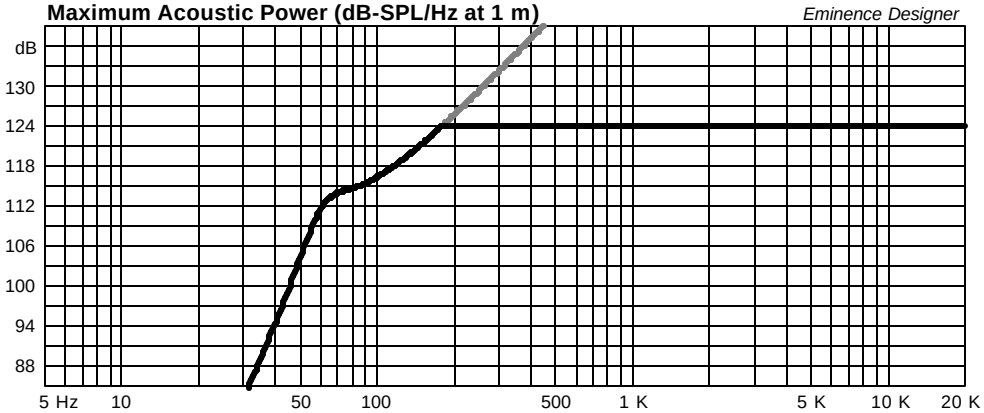
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*

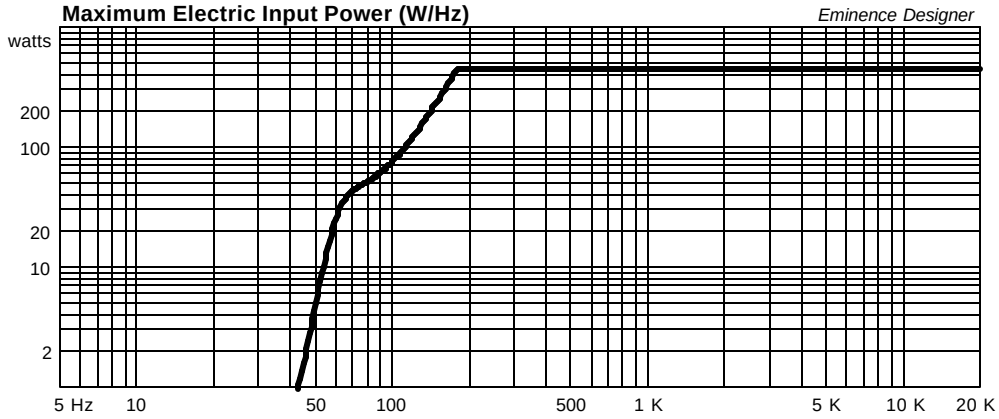


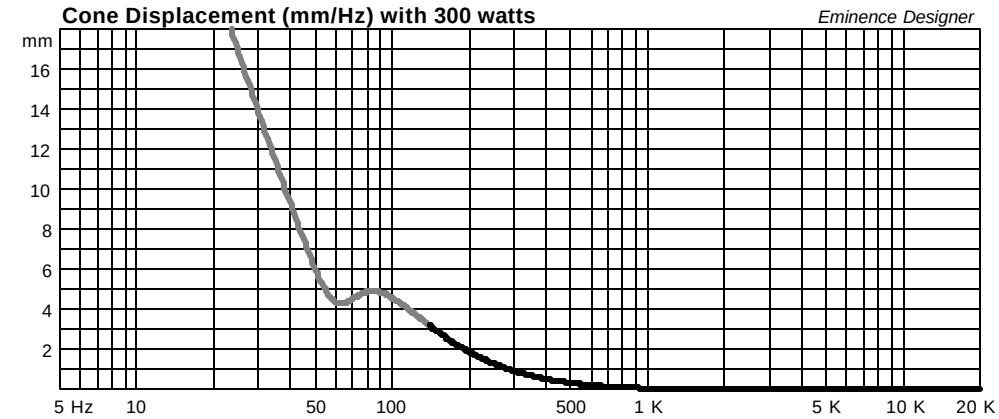
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 300 watts *Eminence Designer*

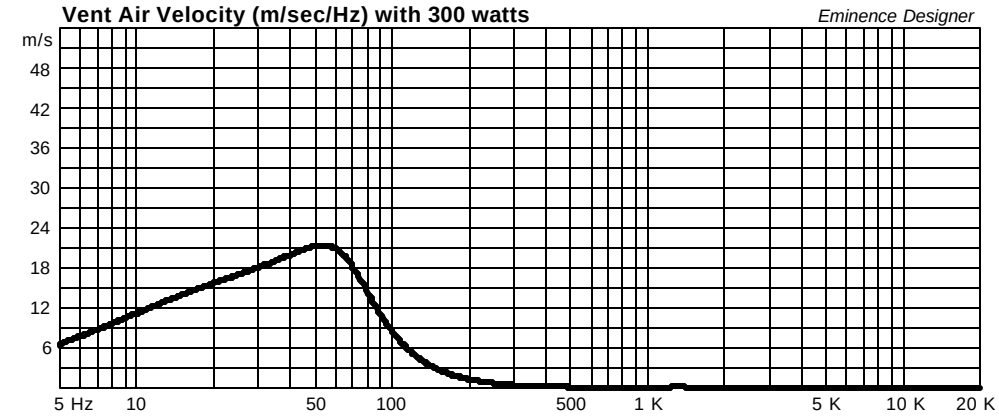


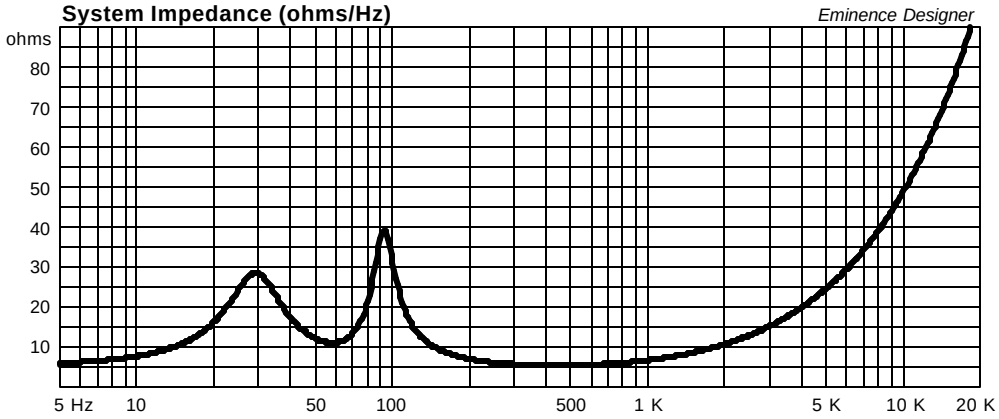
Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*

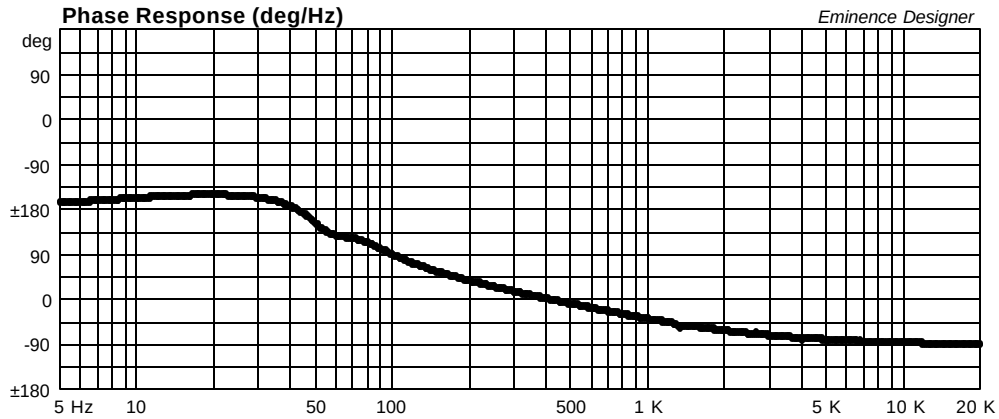


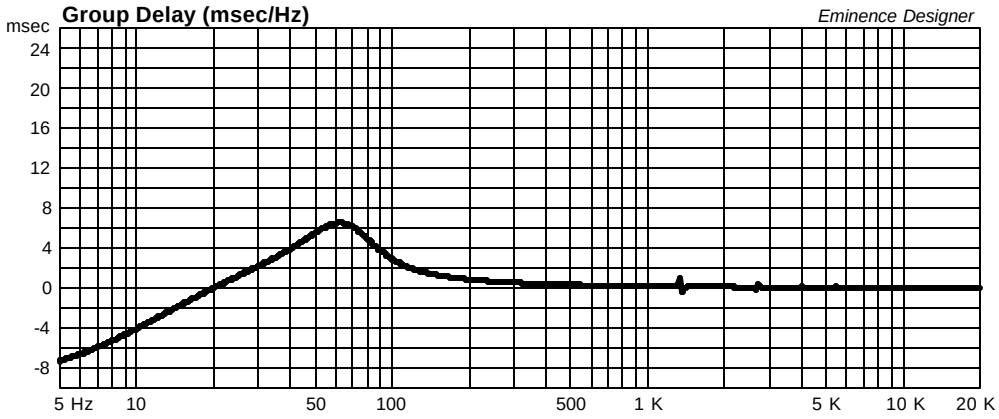

Maximum Electric Input Power (W/Hz)
Eminence Designer
watts
200
100
20
10
2
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K


Cone Displacement (mm/Hz) with 300 watts
Eminence Designer
mm
16
14
12
10
8
6
4
2
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K


Vent Air Velocity (m/sec/Hz) with 300 watts
Eminence Designer
m/s
48
42
36
30
24
18
12
6
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K


System Impedance (ohms/Hz)
Eminence Designer
ohms
80
70
60
50
40
30
20
10
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K


Phase Response (deg/Hz)
Eminence Designer
deg
90
0
-90
±180
90
0
-90
±180
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K


Group Delay (msec/Hz)
Eminence Designer
msec
24
20
16
12
8
4
0
-4
-8
5 Hz
10
50
100
500
1 K
5 K
10 K
20 K