EMINENCE®

NEODYMIUM SERIES

KAPPALITE™ 3012HO

Recommended for vented professional audio enclosures for full-range or as mids.



SPECIFICATION

Nominal Basket Diameter	12.0", 305 mm
Nominal Impedance*	8 Ω
Power Rating**	
Watts	400 W
Music Program	800 W
Resonance	52 Hz
Usable Frequency Range	51 Hz – 3.5 kHz
Sensitivity***	100.5 dB
Magnet Weight	11 oz.
Gap Height	.365", 9.3 mm
Voice Coil Diameter	3.0", 76 mm

THIELE & SMALL PARAMETERS*

Fs	52 Hz
Re	5.50 Ω
Le	0.57 mH
Qms	8.39
Qes	0.33
Qts	0.32
Vas	2.86 cu.ft., 81.10 liters
Vd	330.0 cc
Cms	0.20 mm/N
BL	15.90 T-M
Mms	47 grams
EBP	157
Xmax	6.20 mm
Sd	532.4 cm2
Xlim	12.5 mm

MOUNTING INFORMATION

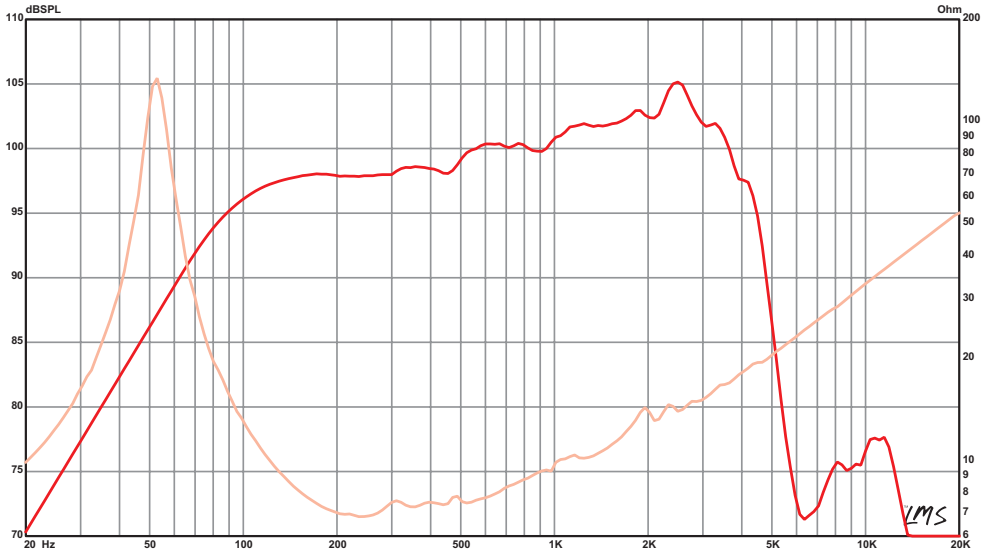
Recommended Enclosure Volume	
Sealed	28.00–76.00 liters, 1.00–2.70 cu.ft.
Vented	41.00–110.00 liters, 1.50–3.90 cu.ft.
Driver Volume Displaced	0.054 cu.ft., 1.53 liters
Overall Diameter	12.38", 314.5 mm
Baffle Hole Diameter	11.06", 280.9 mm
Front Sealing Gasket	Yes
Rear Sealing Gasket	Yes
Mounting Holes Diameter	0.28", 7.1 mm
Mounting Holes B.C.D.	11.62", 295.2 mm
Depth	5.63", 143.0 mm
Net Weight	7.10 lbs , 3.22 kg
Shipping Weight	8.70 lbs , 3.95 kg

MATERIALS OF CONSTRUCTION

- Aluminum voice coil
- Kapton former
- Neodymium magnet
- Vented core
- Die-cast aluminum basket
- Treated paper cone
- Sealed cloth surround
- Treated paper dust cap



FREQUENCY RESPONSE & IMPEDANCE CURVE*



LEARN MORE AT EMINENCE.COM

EMINENCE®

The Art and Science of Sound

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

DESIGNED AND ASSEMBLED IN THE USA

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KappaLite 3012HO Large Sealed Midbass Cabinet

By Jerry McNutt, Eminence Speaker LLC
Limit to 325 Watts; F3 of 144 Hz. High pass at 120 Hz minimum.

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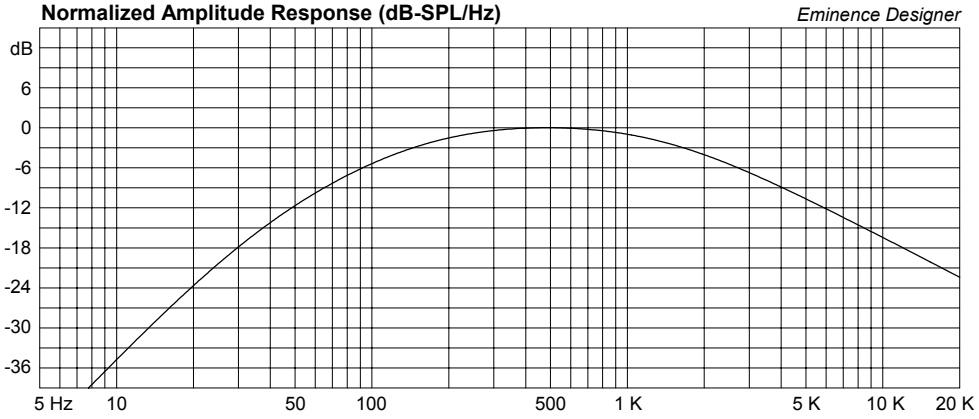
Box Properties

--Description--
Name:
Type: Closed Box
Shape: Prism, square
--Box Parameters--
Vb = 2.511 cu.ft
V(total) = 2.621 cu.ft
Qtc = 0.402
QL = 19.98
F3 = 144.2 Hz
Fill = heavy

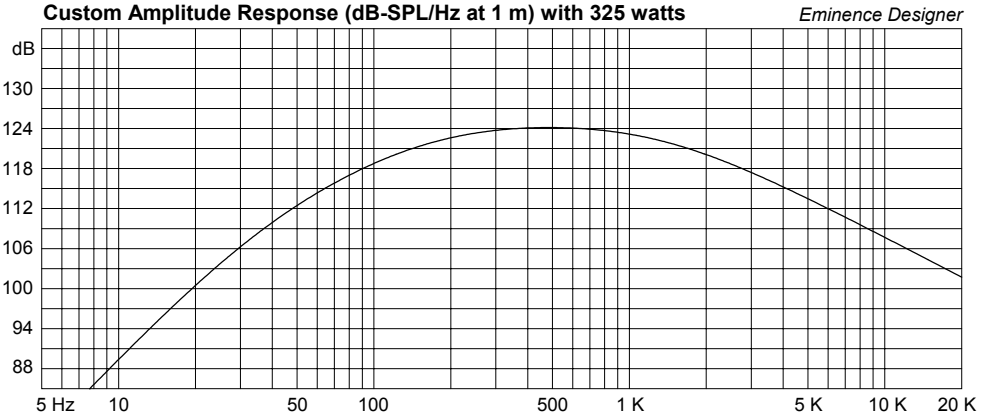
Driver Properties

--Description--
Name: KappaLite3012HO
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: High Power Neo Woofer
--Configuration--
No. of Drivers = 1
--Driver Parameters--
Fs = 51.5 Hz
Qms = 8.39
Vas = 2.864 cu.ft
Xmax = 0.244 in
Sd = 82.52 sq.in
Qes = 0.33
Re = 5.45 ohms
Le = 0.57 mH
Z = 8 ohms
Pe = 400 watts

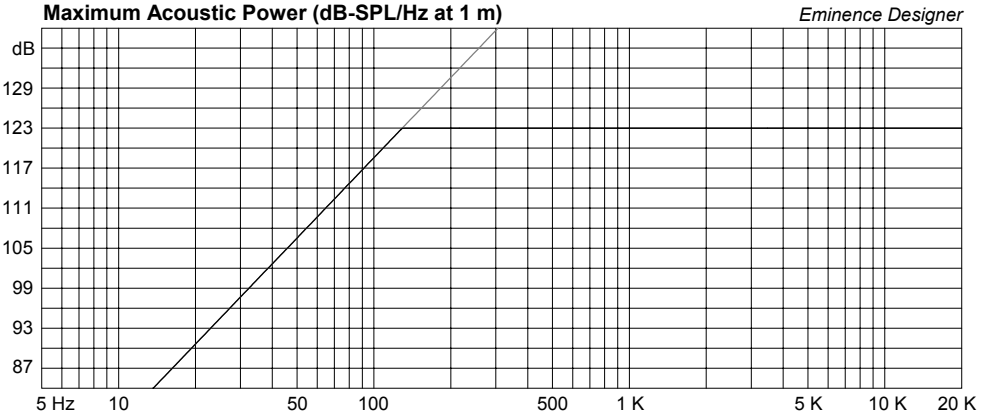
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 325 watts *Eminence Designer*

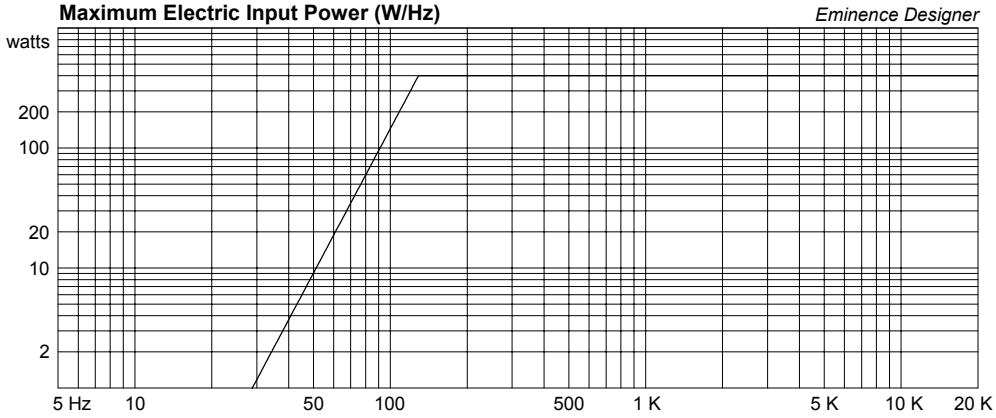


Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*



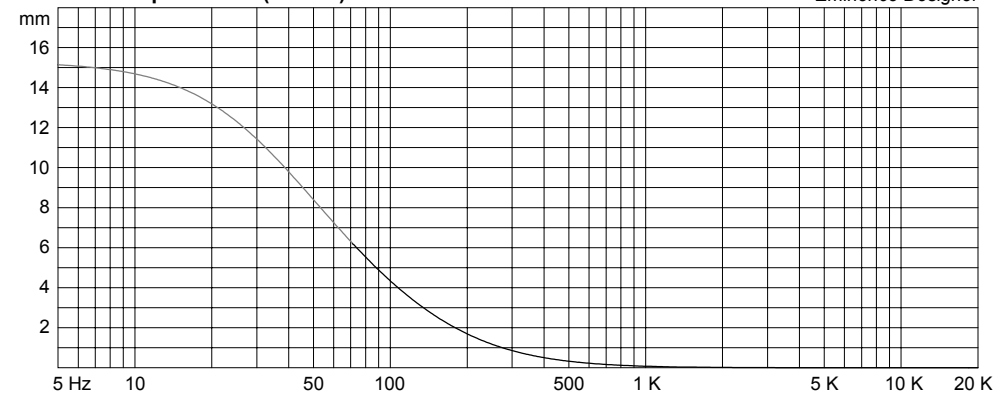
Maximum Electric Input Power (W/Hz)

Eminence Designer



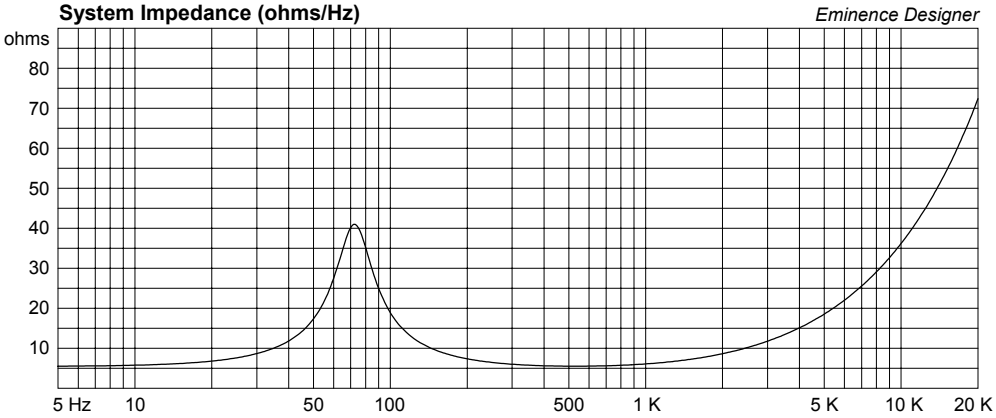
Cone Displacement (mm/Hz) with 325 watts

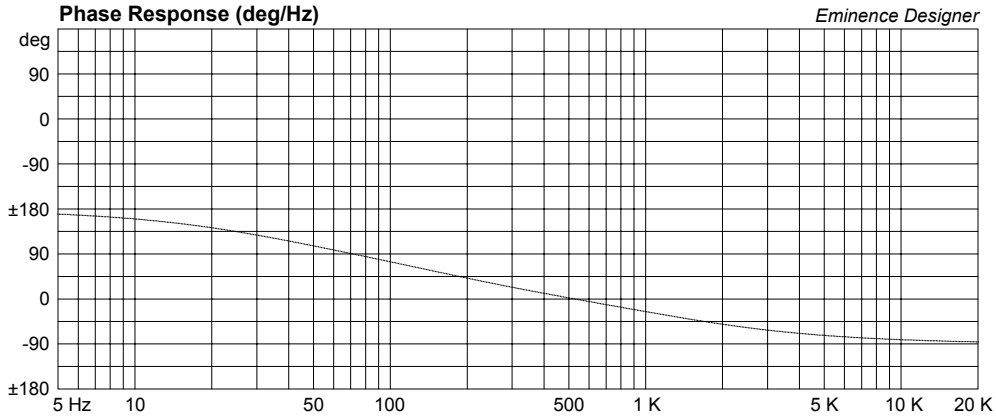
Eminence Designer

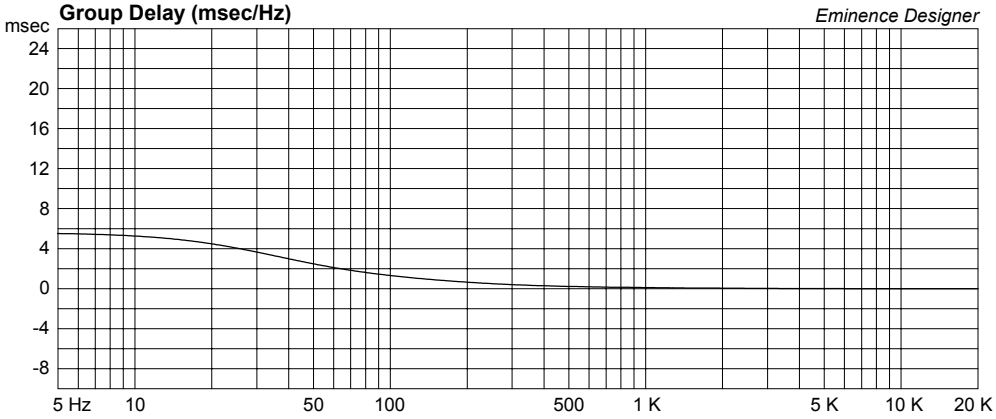


System Impedance (ohms/Hz)

Eminence Designer




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

KappaLite 3012HO Small Vented Cabinet

By Jerry McNutt, Eminence Speaker LLC
400 Watt Thermal Limit; F3 at 88 Hz. High Pass at 70 Hz.
Great for small Sat or high power Floor Wedge.

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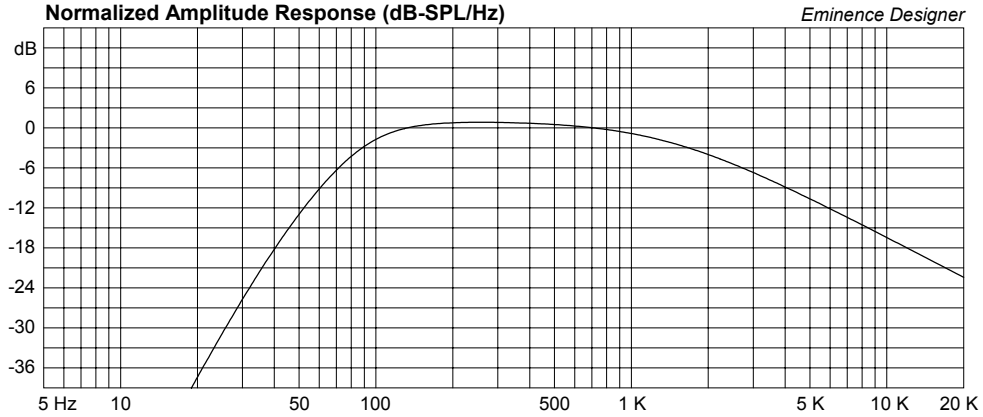
Box Properties

--Description--
Name:
Type: Vented Box
Shape: Prism, square
--Box Parameters--
Vb = 0.858 cu.ft
V(total) = 1.035 cu.ft
Fb = 63.93 Hz
QL = 7
F3 = 88.28 Hz
Fill = minimal
--Vents--
No. of Vents = 2
Vent shape = round
Vent ends = one flush
Dv = 3 in
Lv = 7.732 in

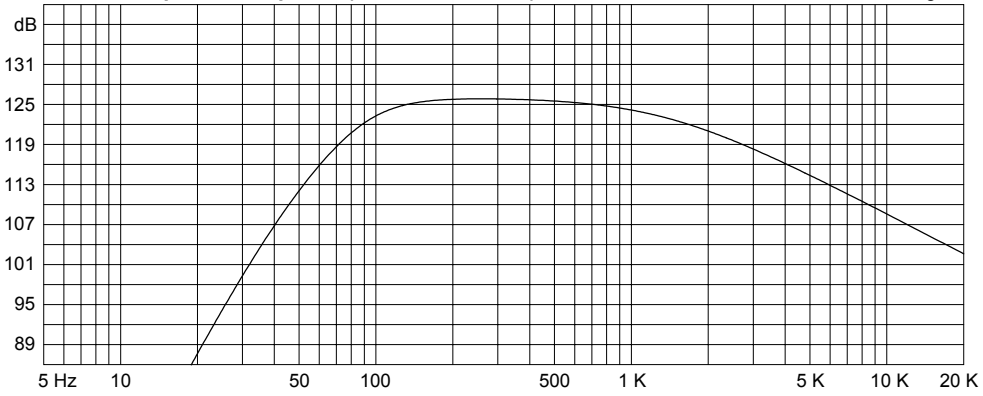
Driver Properties

--Description--
Name: KappaLite3012HO
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: High Power Neo Woofer
--Configuration--
No. of Drivers = 1
--Driver Parameters--
Fs = 51.5 Hz
Qms = 8.39
Vas = 2.864 cu.ft
Xmax = 0.244 in
Sd = 82.52 sq.in
Qes = 0.33
Re = 5.45 ohms
Le = 0.57 mH
Z = 8 ohms
Pe = 400 watts

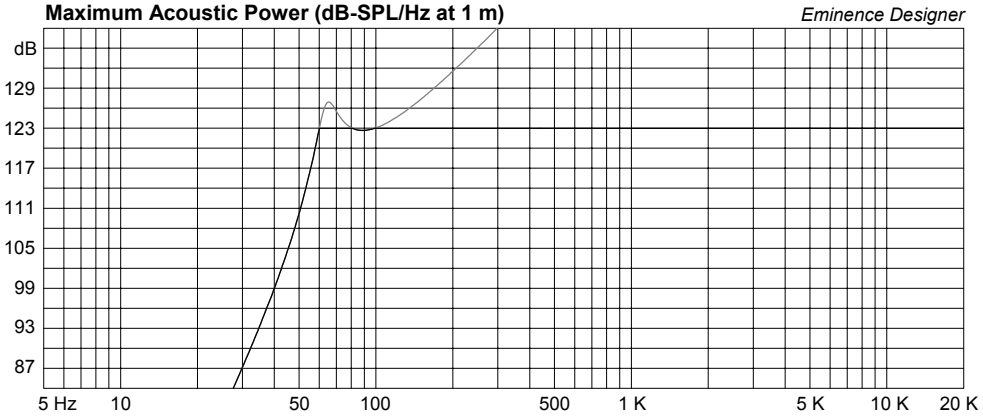
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 400 watts *Eminence Designer*

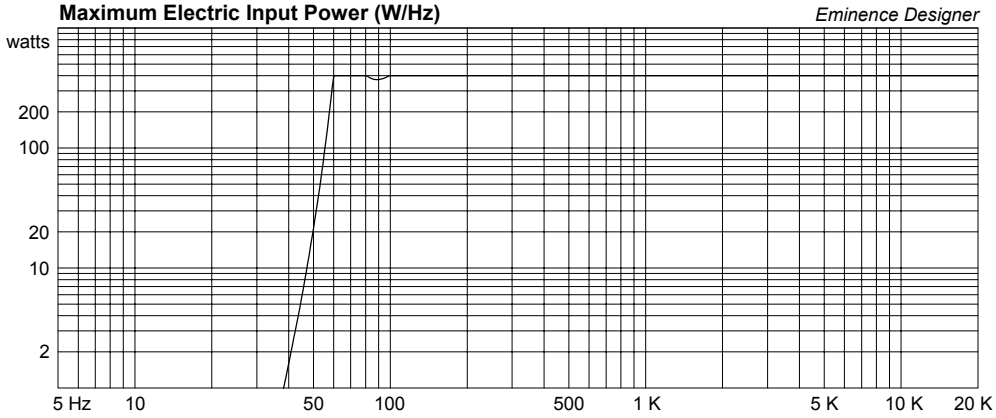


Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*



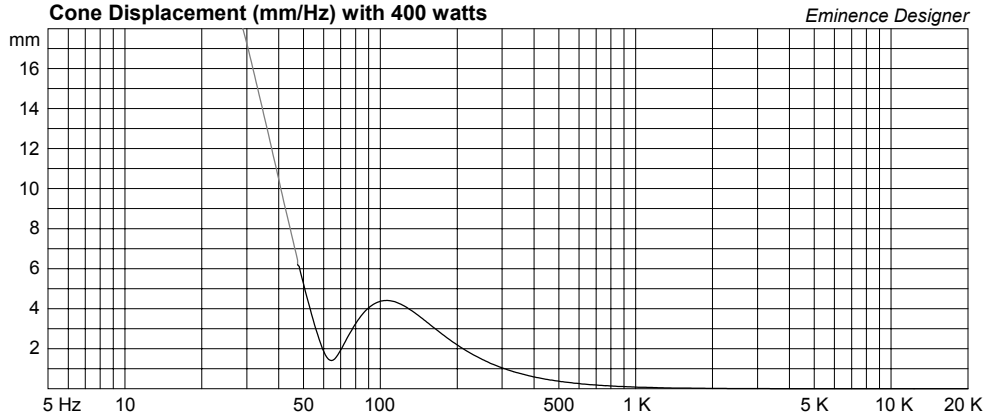
Maximum Electric Input Power (W/Hz)

Eminence Designer



Cone Displacement (mm/Hz) with 400 watts

Eminence Designer



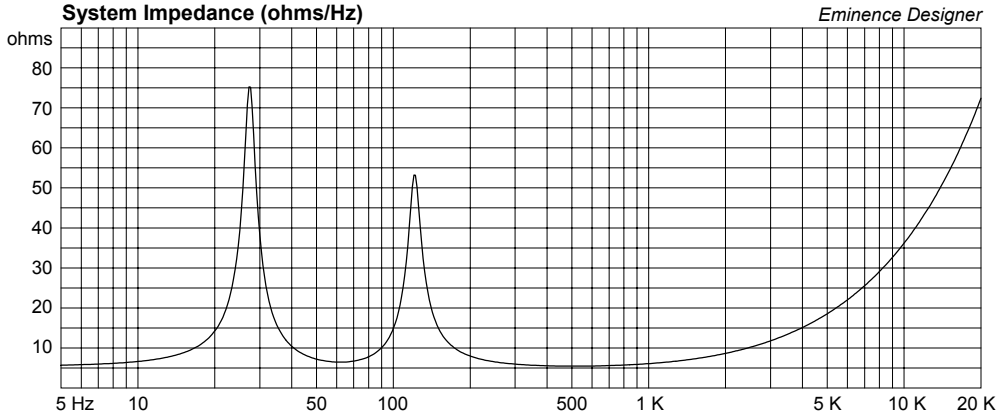
Vent Air Velocity (m/sec/Hz) with 400 watts

Eminence Designer



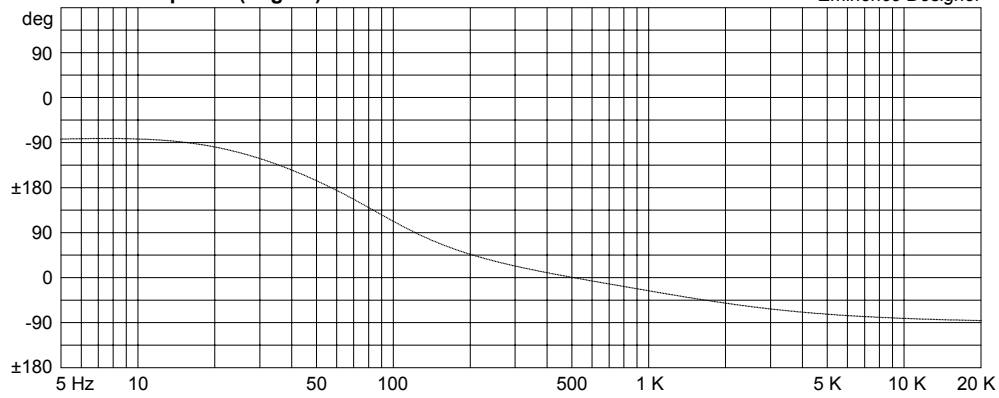
System Impedance (ohms/Hz)

Eminence Designer



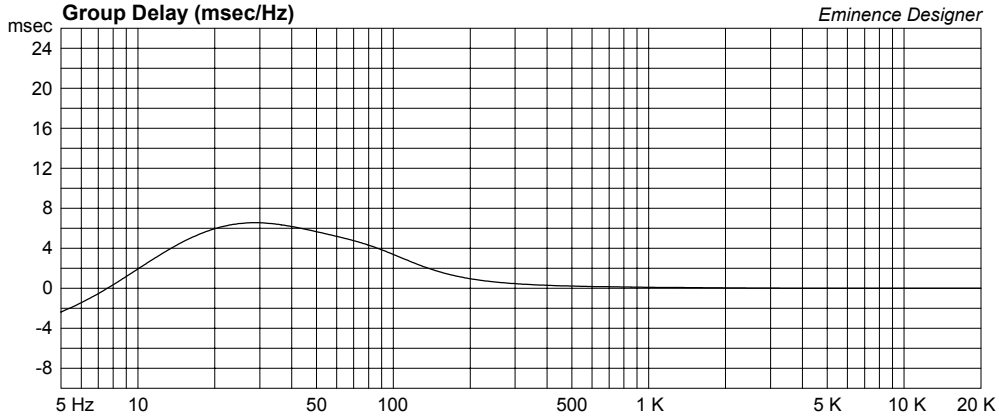
Phase Response (deg/Hz)

Eminence Designer



Group Delay (msec/Hz)

Eminence Designer



KappaLite 3012HO Small Sealed MidBass Cabinet

By Jerry McNutt, Eminence Speaker LLC
Limit to 325 Watts; F3 of 138. High pass at 110 Hz minimum.

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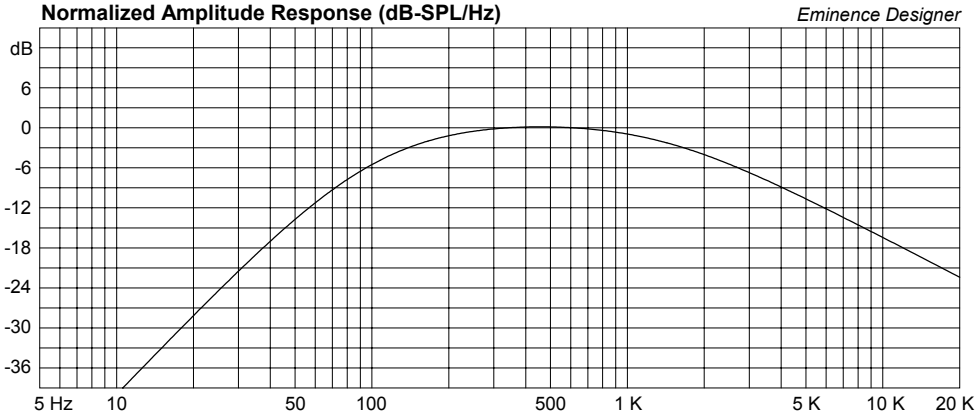
Box Properties

--Description--
Name:
Type: Closed Box
Shape: Prism, square
--Box Parameters--
Vb = 0.892 cu.ft
V(total) = 1.002 cu.ft
Qtc = 0.532
QL = 19.98
F3 = 138.1 Hz
Fill = heavy

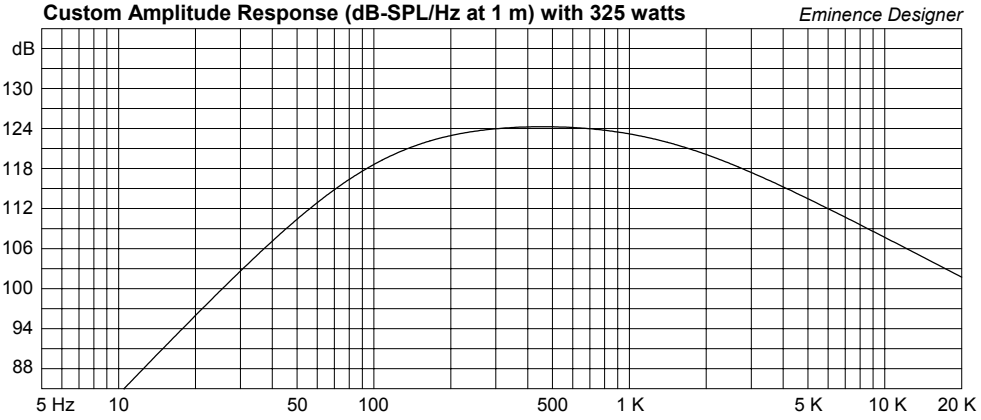
Driver Properties

--Description--
Name: KappaLite3012HO
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: High Power Neo Woofer
--Configuration--
No. of Drivers = 1
--Driver Parameters--
Fs = 51.5 Hz
Qms = 8.39
Vas = 2.864 cu.ft
Xmax = 0.244 in
Sd = 82.52 sq.in
Qes = 0.33
Re = 5.45 ohms
Le = 0.57 mH
Z = 8 ohms
Pe = 400 watts

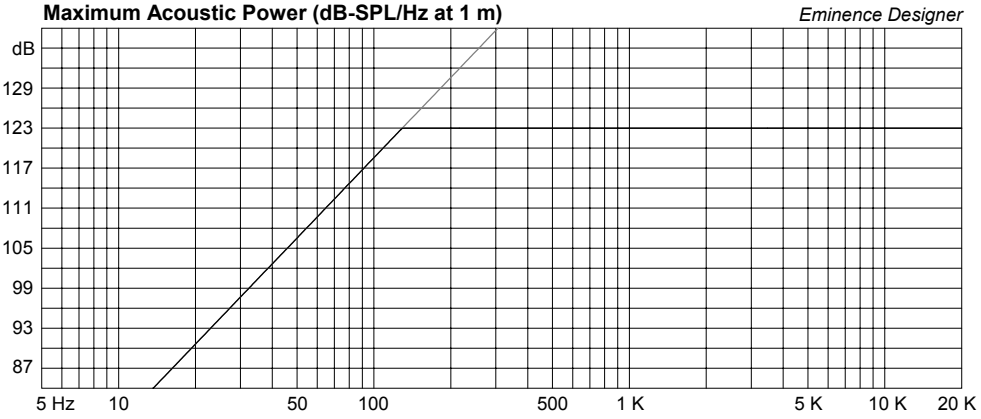
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 325 watts *Eminence Designer*

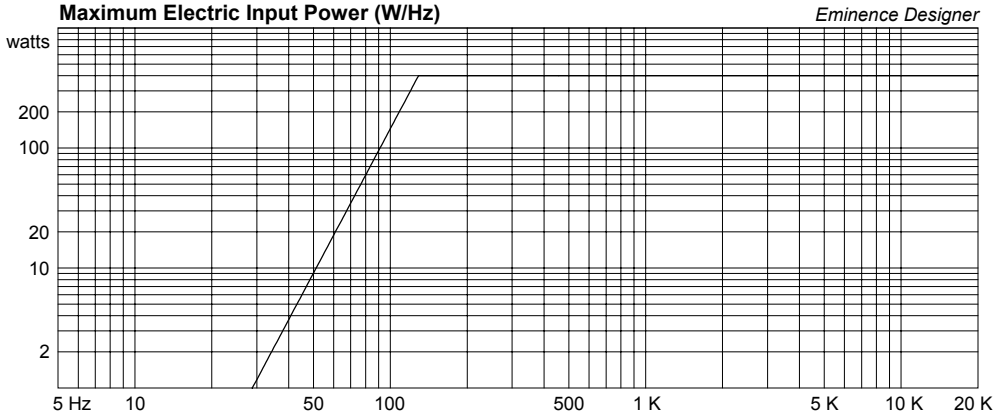


Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*



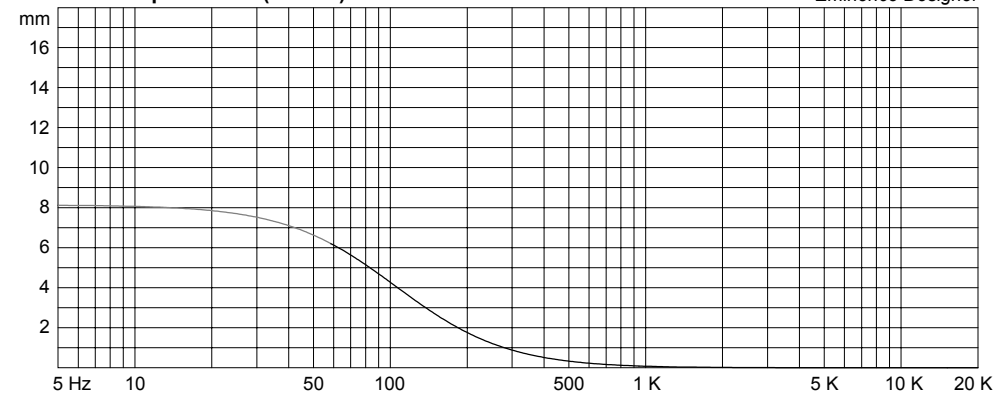
Maximum Electric Input Power (W/Hz)

Eminence Designer



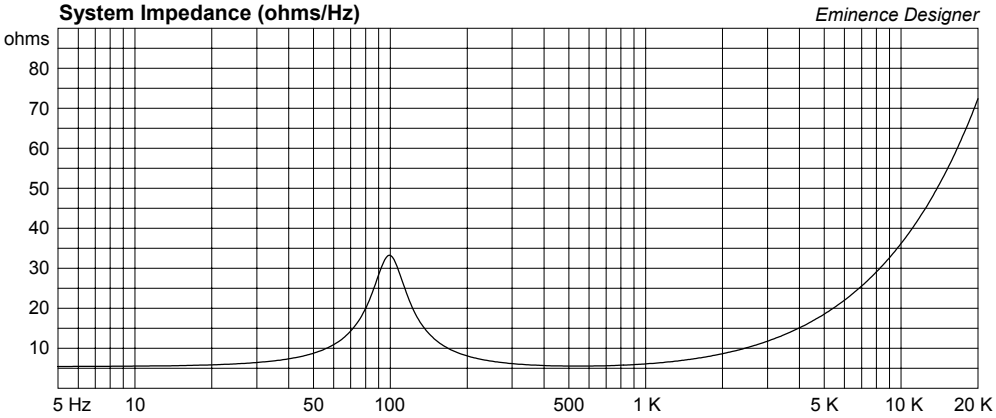
Cone Displacement (mm/Hz) with 325 watts

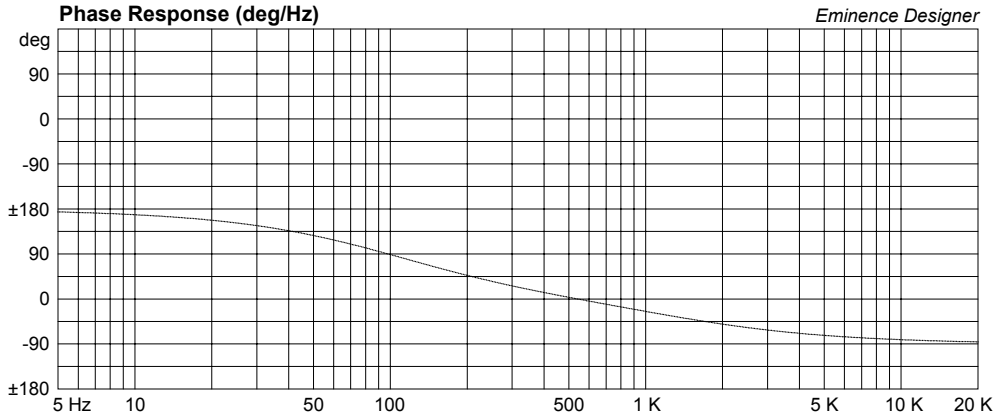
Eminence Designer

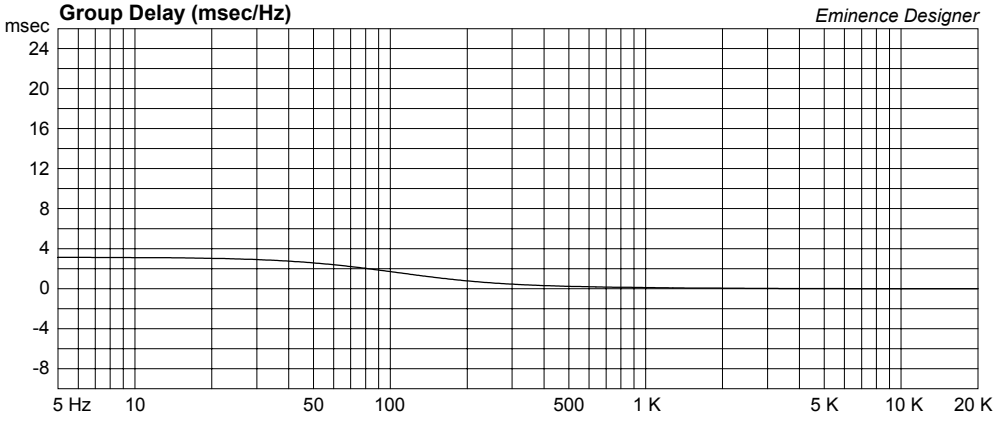


System Impedance (ohms/Hz)

Eminence Designer




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

KappaLite 3012HO Med Vented Cabinet

By Jerry McNutt, Eminence Speaker LLC
400 Watt Thermal Limit; F3 at 74Hz. High Pass at 50 Hz.
Great for High Power PA Sat or high power Floor Wedge.

EMINENCE

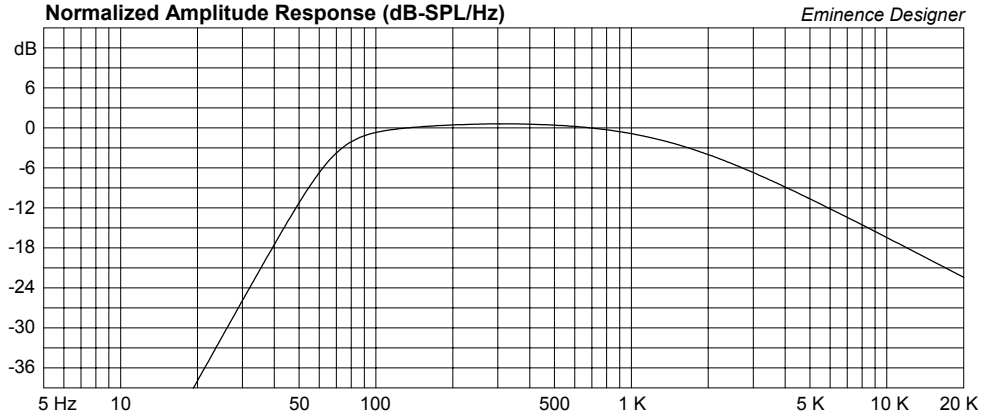
Box Properties

--Description--
Name:
Type: Vented Box
Shape: Prism, square
--Box Parameters--
Vb = 1.25 cu.ft
V(total) = 1.489 cu.ft
Fb = 65 Hz
QL = 7
F3 = 73.77 Hz
Fill = minimal
--Vents--
No. of Vents = 2
Vent shape = round
Vent ends = one flush
Dv = 4 in
Lv = 8.582 in

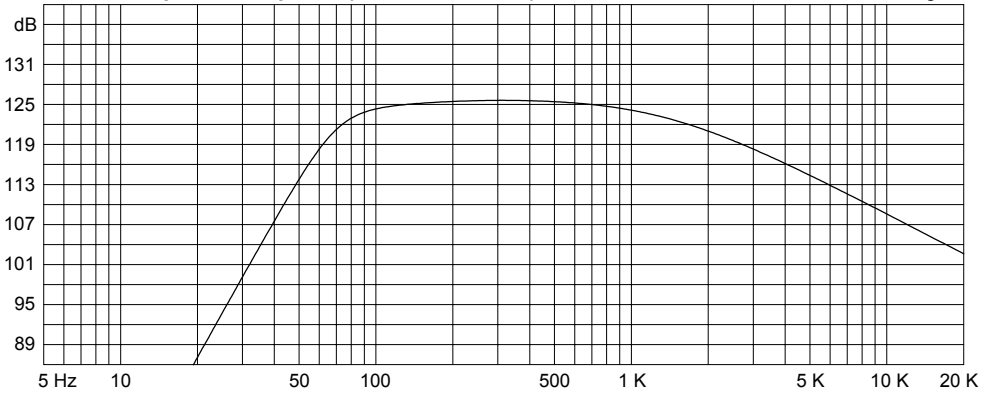
Driver Properties

--Description--
Name: KappaLite3012HO
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: High Power Neo Woofer
--Configuration--
No. of Drivers = 1
--Driver Parameters--
Fs = 51.5 Hz
Qms = 8.39
Vas = 2.864 cu.ft
Xmax = 0.244 in
Sd = 82.52 sq.in
Qes = 0.33
Re = 5.45 ohms
Le = 0.57 mH
Z = 8 ohms
Pe = 400 watts

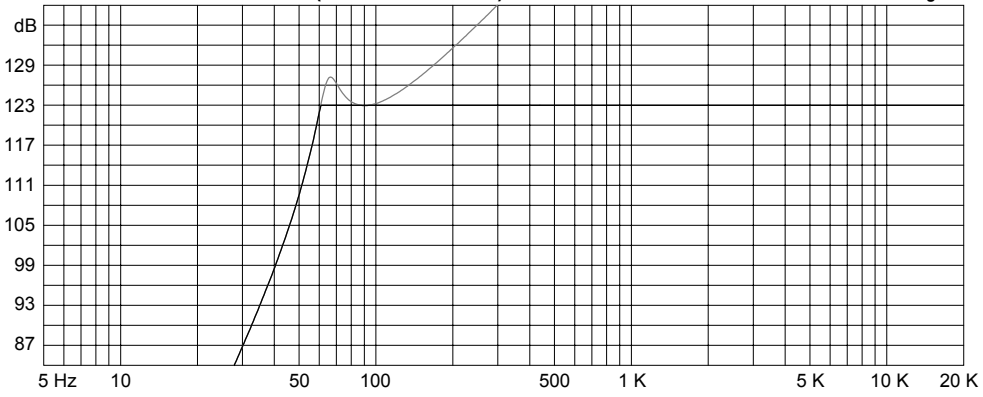
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*



Custom Amplitude Response (dB-SPL/Hz at 1 m) with 400 watts *Eminence Designer*

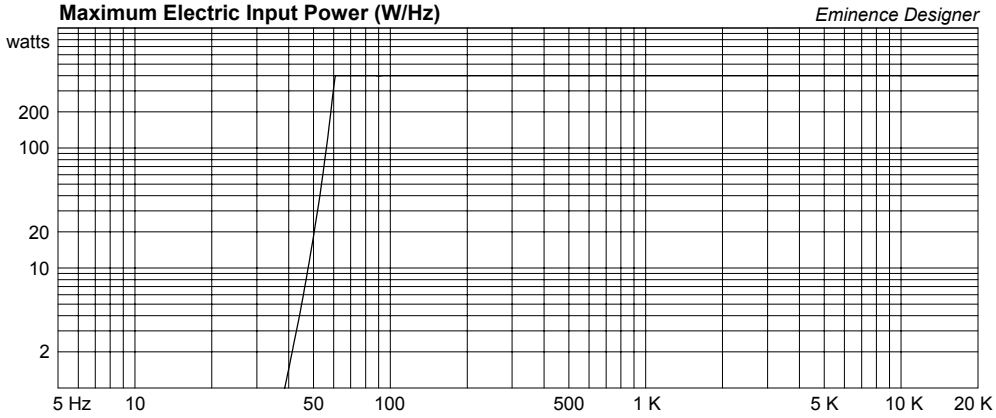


Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*



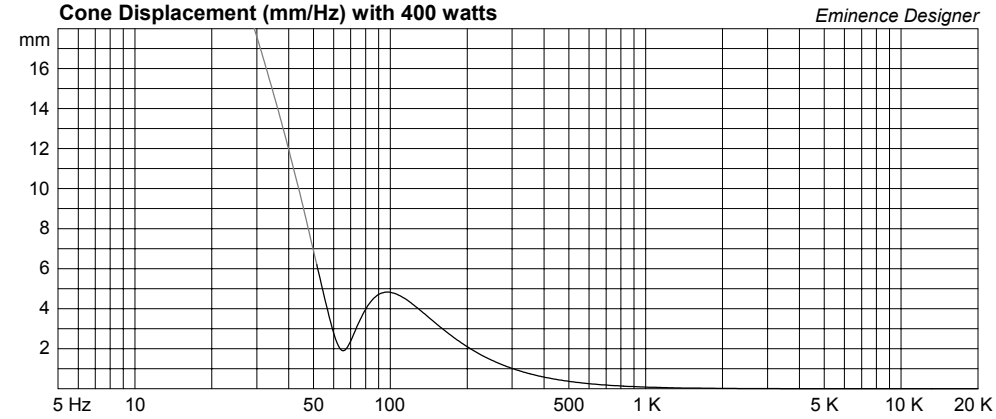
Maximum Electric Input Power (W/Hz)

Eminence Designer



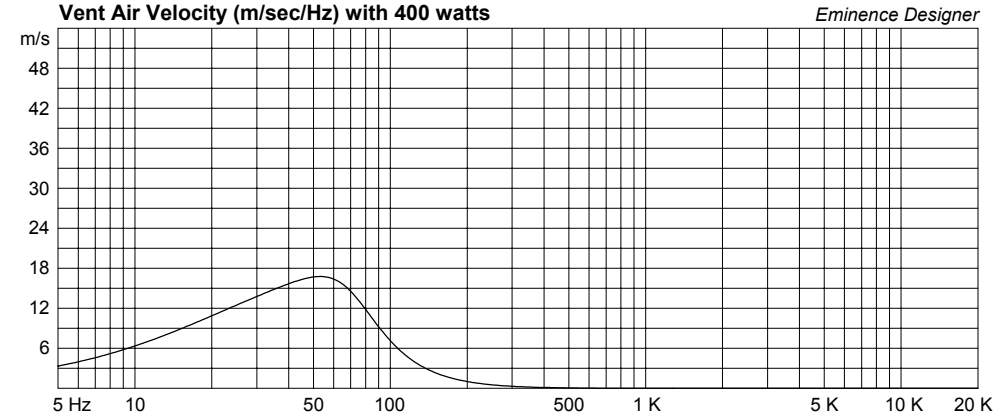
Cone Displacement (mm/Hz) with 400 watts

Eminence Designer



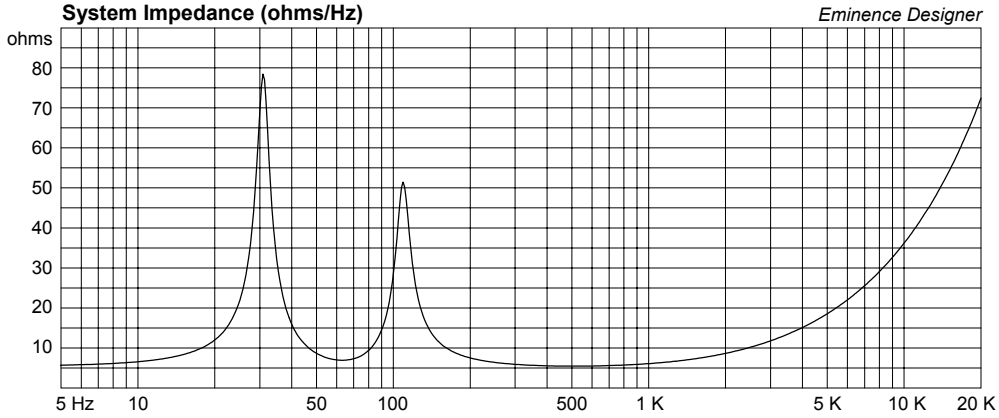
Vent Air Velocity (m/sec/Hz) with 400 watts

Eminence Designer



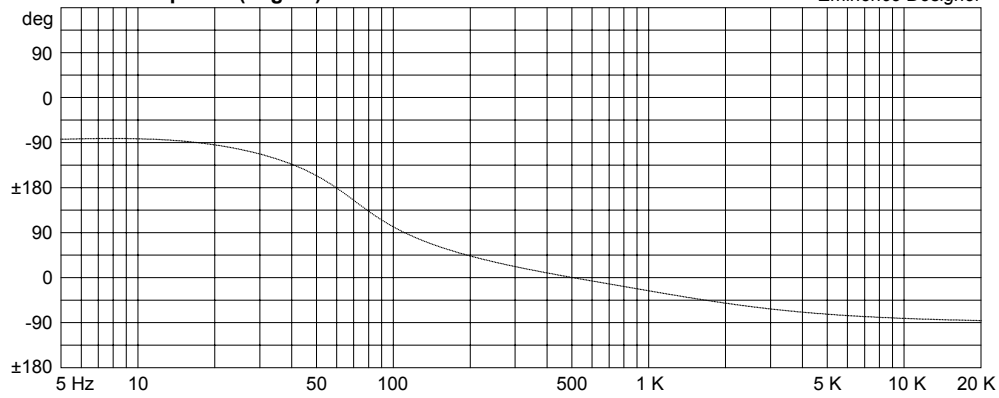
System Impedance (ohms/Hz)

Eminence Designer



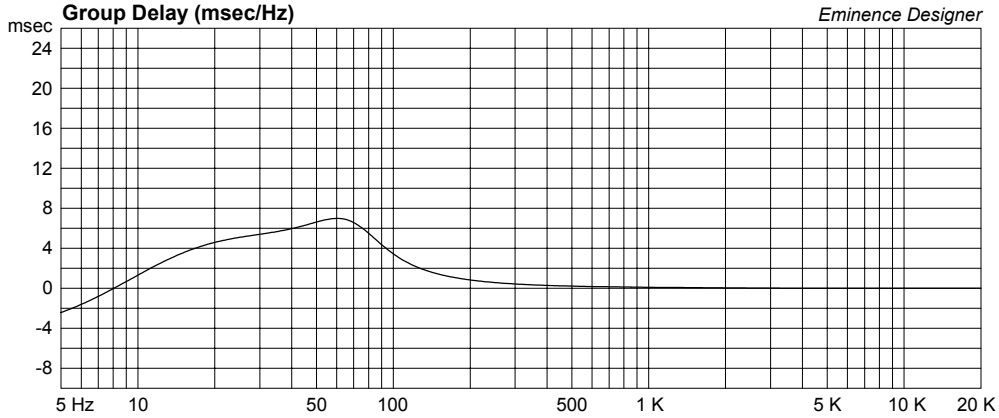
Phase Response (deg/Hz)

Eminence Designer



Group Delay (msec/Hz)

Eminence Designer



KappaLite 3012HO Large Vented Cabinet

By Jerry McNutt, Eminence Speaker LLC
300 Watt Limit; F3 at 51 Hz. High Pass at 40 Hz.
Great for Med Power Full Range PA.

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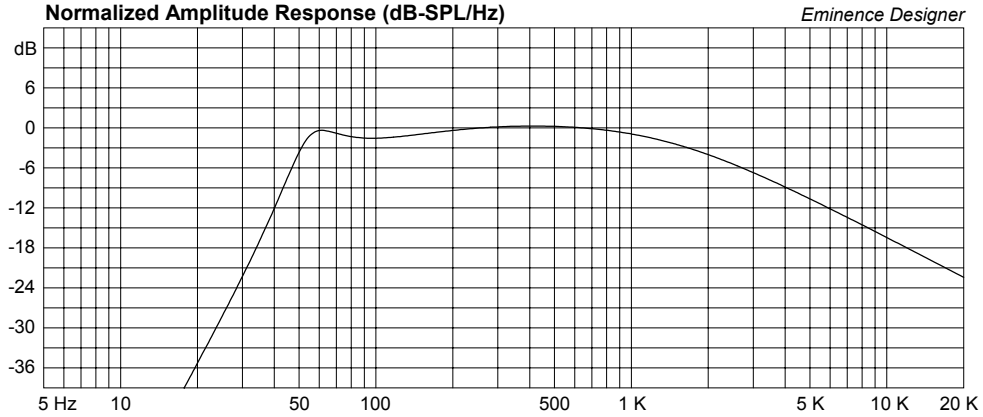
Box Properties

--Description--
Name:
Type: Vented Box
Shape: Prism, square
--Box Parameters--
Vb = 3.6 cu.ft
V(total) = 3.801 cu.ft
Fb = 55 Hz
QL = 7
F3 = 51.04 Hz
Fill = minimal
--Vents--
No. of Vents = 3
Vent shape = round
Vent ends = one flush
Dv = 4 in
Lv = 4.439 in

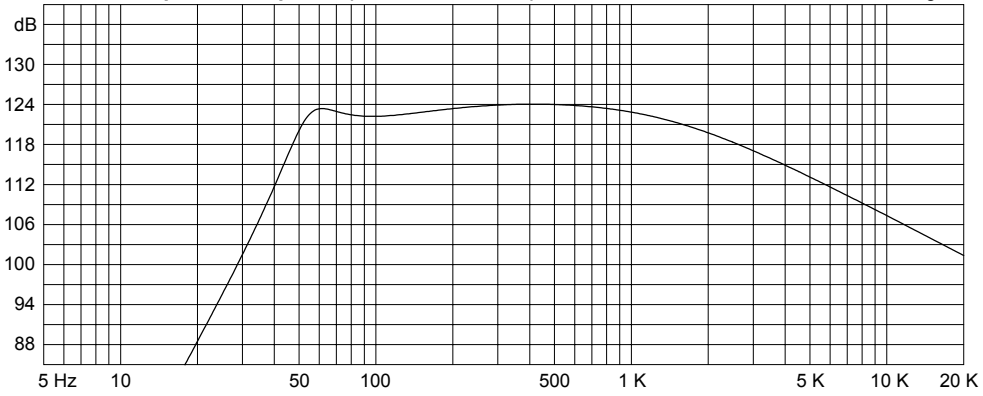
Driver Properties

--Description--
Name: KappaLite3012HO
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: High Power Neo Woofer
--Configuration--
No. of Drivers = 1
--Driver Parameters--
Fs = 51.5 Hz
Qms = 8.39
Vas = 2.864 cu.ft
Xmax = 0.244 in
Sd = 82.52 sq.in
Qes = 0.33
Re = 5.45 ohms
Le = 0.57 mH
Z = 8 ohms
Pe = 400 watts

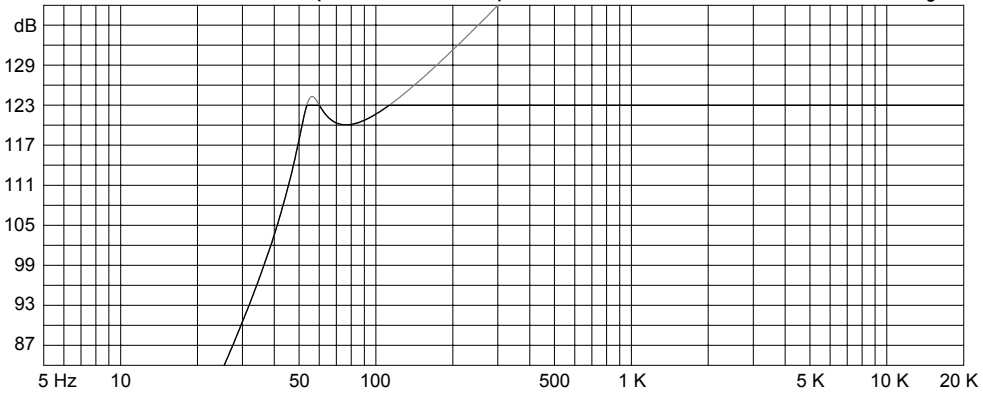
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*



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

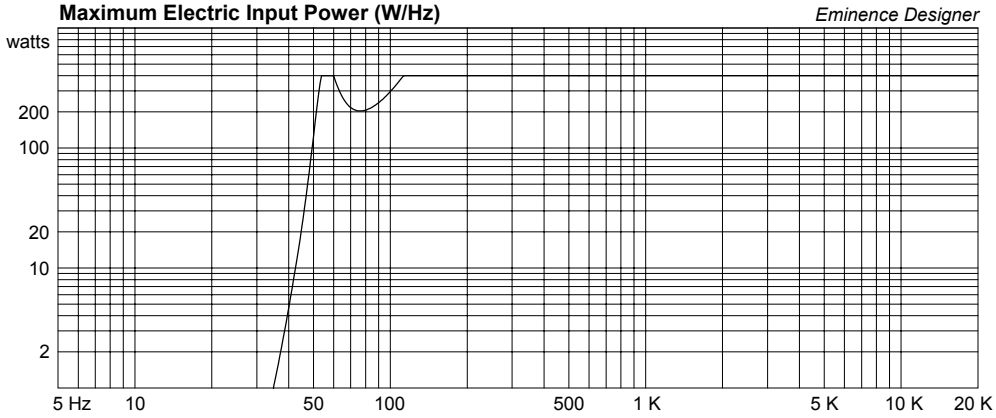


Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*



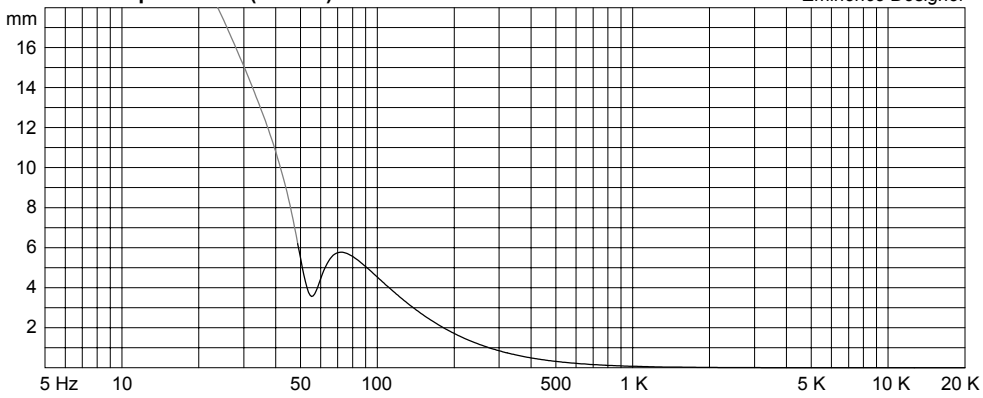
Maximum Electric Input Power (W/Hz)

Eminence Designer



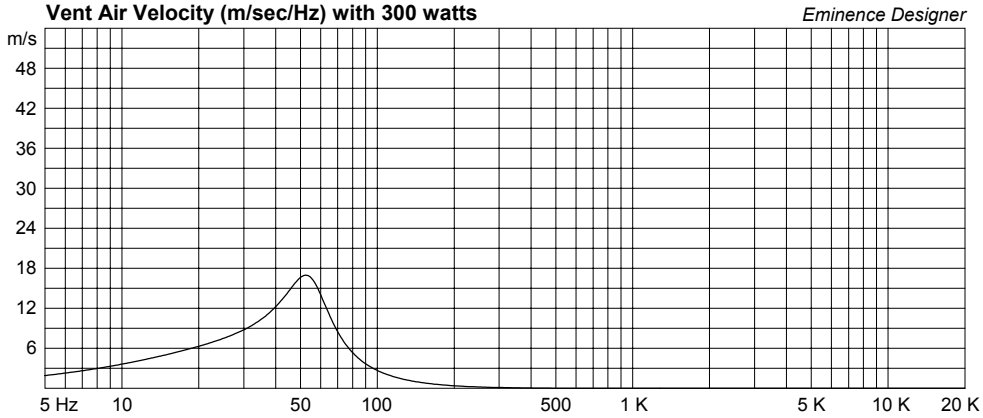
Cone Displacement (mm/Hz) with 300 watts

Eminence Designer



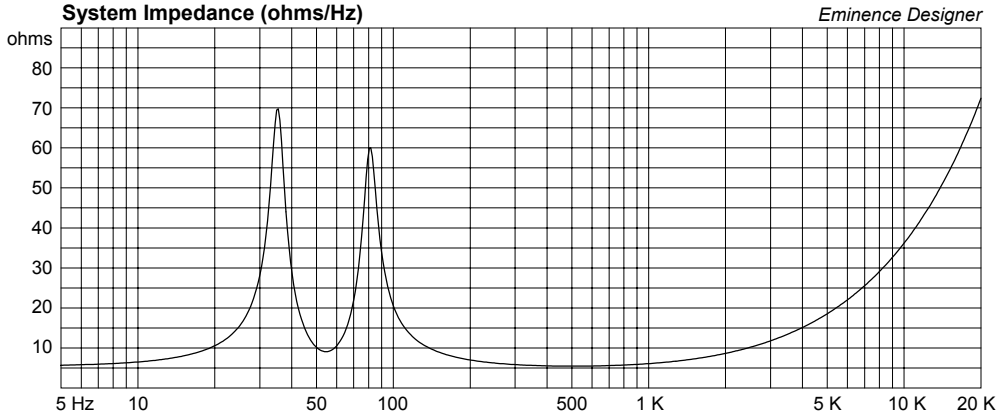
Vent Air Velocity (m/sec/Hz) with 300 watts

Eminence Designer



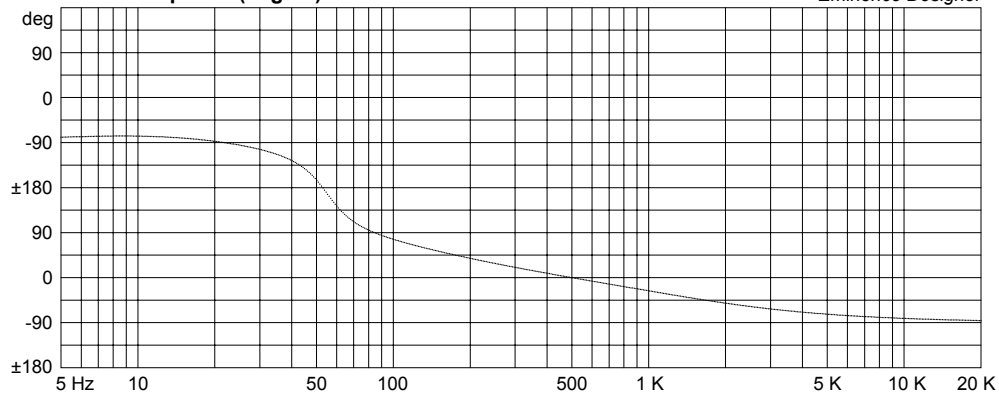
System Impedance (ohms/Hz)

Eminence Designer



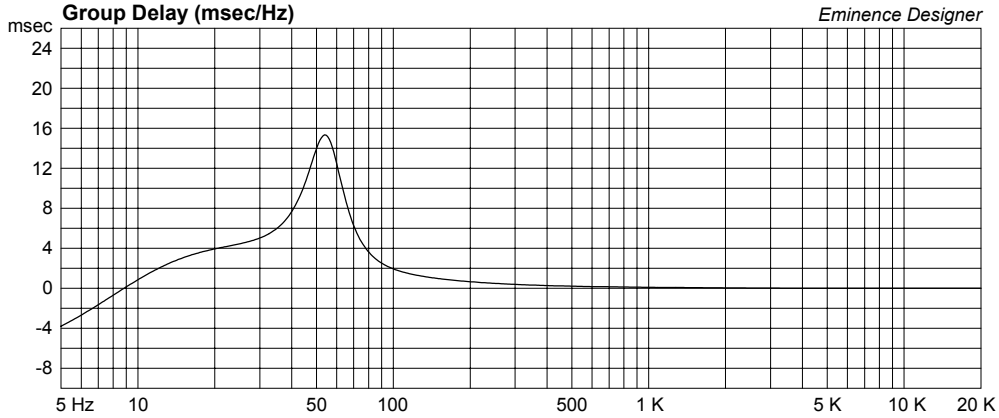
Phase Response (deg/Hz)

Eminence Designer



Group Delay (msec/Hz)

Eminence Designer



KappaLite 3012HO Twin Hi-Pwr FOH Main Cabinet

By Jerry McNutt, Eminence Speaker LLC
800 Watt Thermal Limit; F3 at 80 Hz. High Pass 90-125 Hz.
Place slot ports at top and bottom of cabinet to promote air flow.

EMINENCE

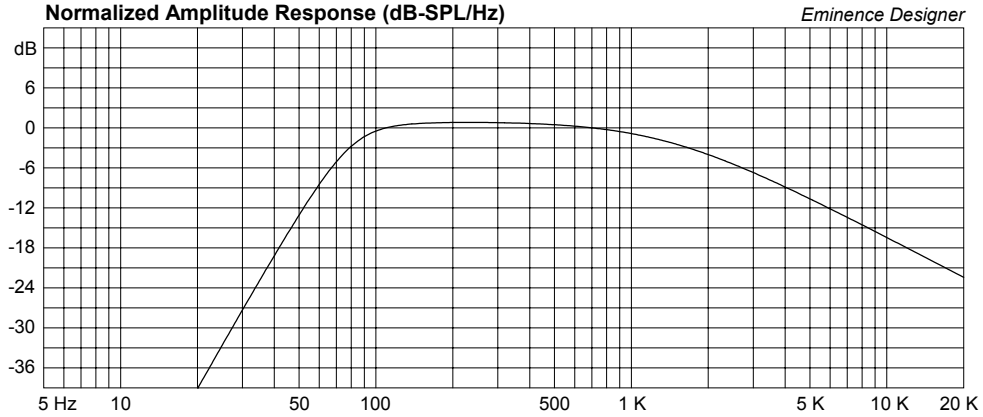
Box Properties

--Description--
Name:
Type: Vented Box
Shape: Prism, square
--Box Parameters--
Vb = 2.1 cu.ft
V(total) = 2.444 cu.ft
Fb = 70 Hz
QL = 7
F3 = 78.73 Hz
Fill = minimal
--Vents--
No. of Vents = 2
Vent shape = rectangle
Vent ends = one flush
Hv = 2 in
Wv = 9 in
Lv = 5.892 in

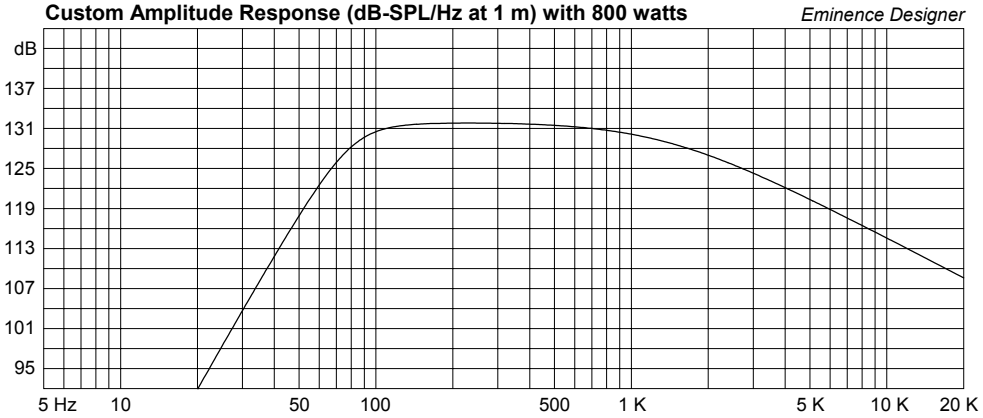
Driver Properties

--Description--
Name: KappaLite3012HO
Type: Standard one-way driver
Company: Eminence Speaker LLC
Comment: High Power Neo Woofer
--Configuration--
No. of Drivers = 2
Mounting = Standard
Wiring = Parallel
Drivers sum coherently = Yes
--Driver Parameters--
Fs = 51.5 Hz
Qms = 8.39
Vas = 2.864 cu.ft [5.728]
Xmax = 0.244 in
Sd = 82.52 sq.in [165]
Qes = 0.33
Re = 5.45 ohms [2.725]
Le = 0.57 mH [0.285]
Z = 8 ohms [4]
Pe = 400 watts [800]

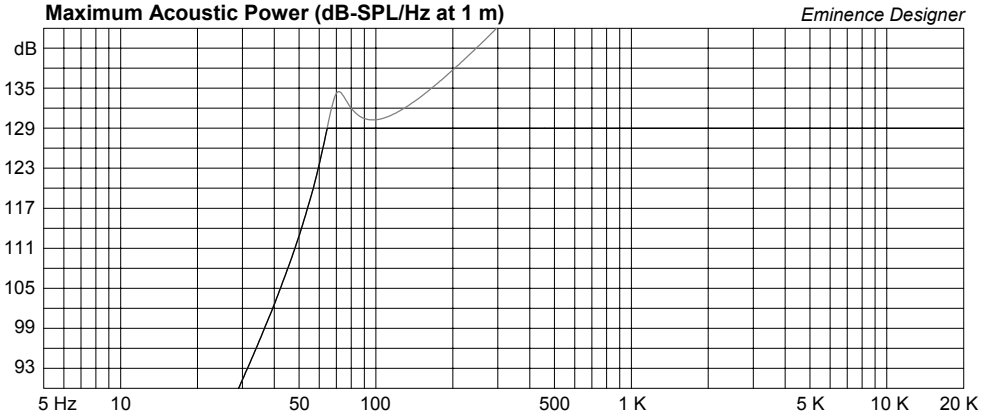
Normalized Amplitude Response (dB-SPL/Hz) *Eminence Designer*



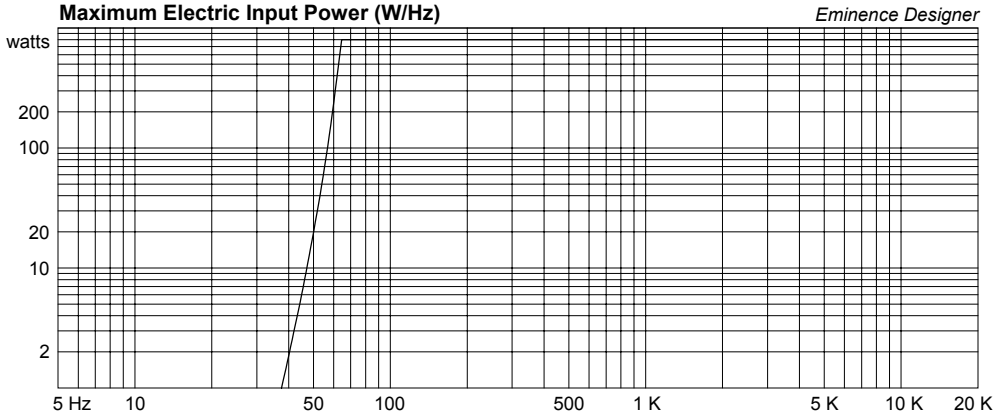
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 800 watts *Eminence Designer*



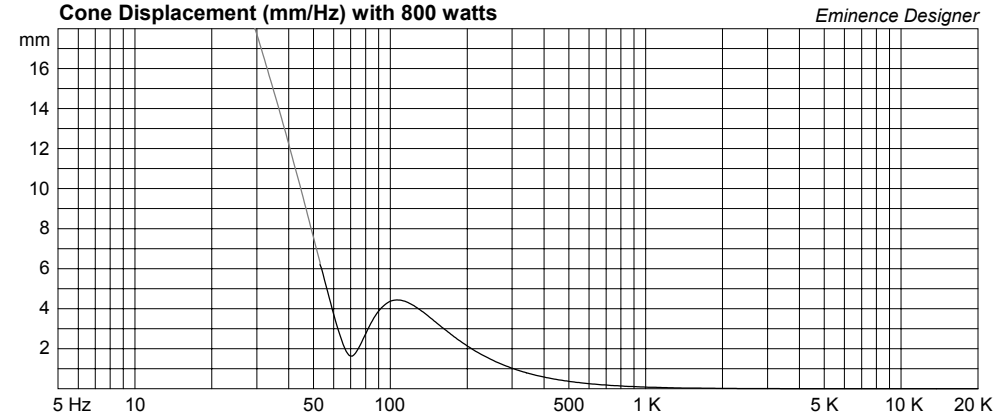
Maximum Acoustic Power (dB-SPL/Hz at 1 m) *Eminence Designer*



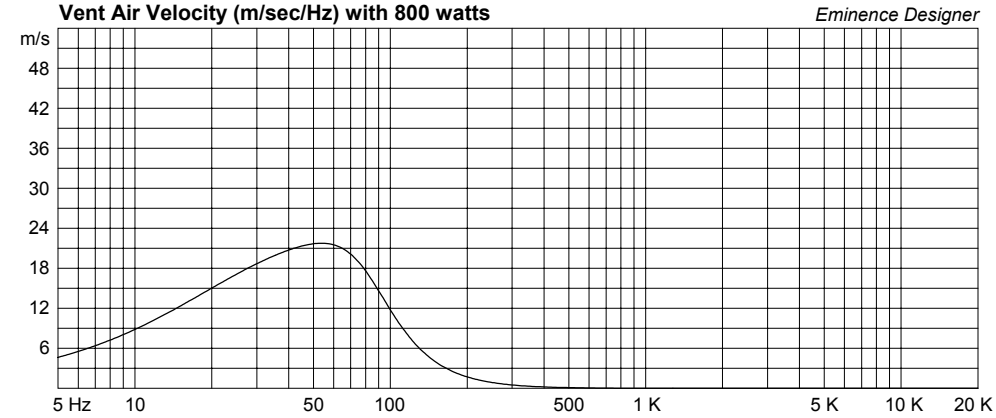
Maximum Electric Input Power (W/Hz) *Eminence Designer*



Cone Displacement (mm/Hz) with 800 watts *Eminence Designer*

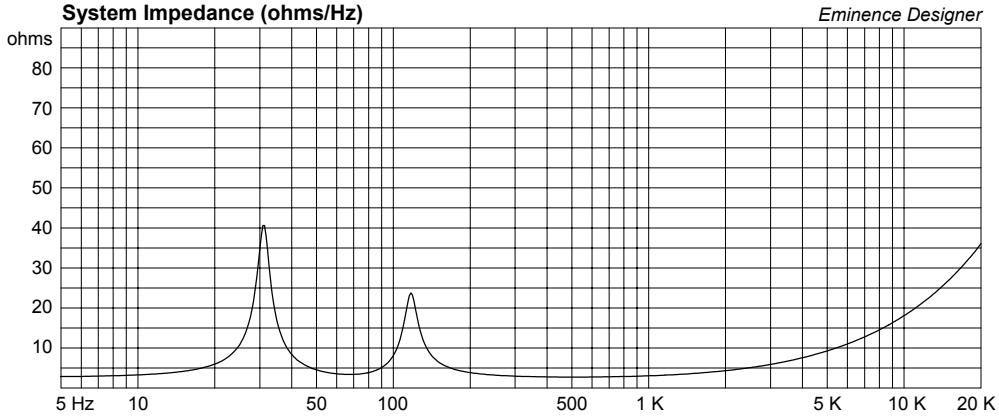


Vent Air Velocity (m/sec/Hz) with 800 watts *Eminence Designer*



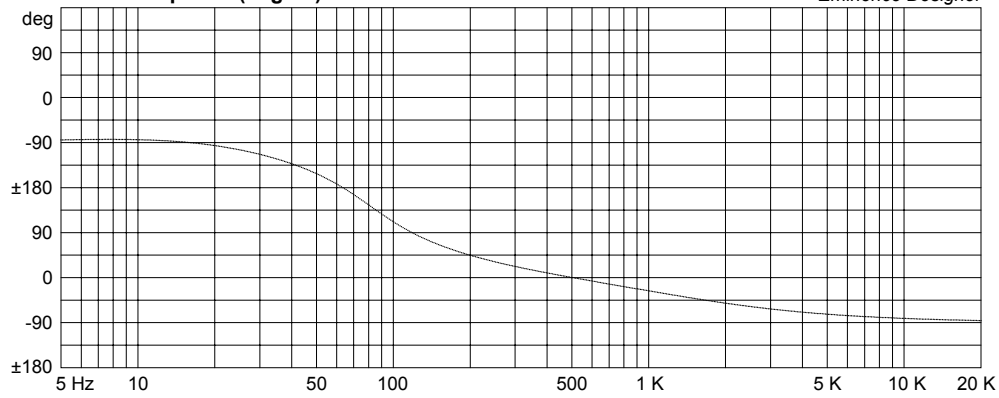
System Impedance (ohms/Hz)

Eminence Designer



Phase Response (deg/Hz)

Eminence Designer



Group Delay (msec/Hz)

Eminence Designer

