

SPECIFICATION

Nominal Basket Diameter	10.00", 254.00mm
Nominal Impedance*	8 ohms
Power Rating**	
Watts	450W
Music Program	900W
Resonance	38.67Hz
Usable Frequency Range***	42.00Hz-1.60kHz
Sensitivity	92.70
Magnet Weight	11.00 oz.
Gap Height	0.36", 9.27mm
Voice Coil Diameter	3.00", 76.20mm

THIELE & SMALL PARAMETERS

Resonant Frequency (fs)	38.67Hz
DC Resistance (Re)	7.20
Coil Inductance (Le)	1.13mH
Mechanical Q (Qms)	11.75
Electromagnetic Q (Qes)	0.28
Total Q (Qts)	0.27
Compliance Equivalent Volume (Vas)	62.41 liters / 2.20 cu.ft.
Peak Diaphragm Displacement Volume (Vd)	305.40cc
Mechanical Compliance of Suspension (Cms)	0.35mm/N
BL Product (BL)	17.45 T-M
Diaphragm Mass inc. Airlod (Mms)	48.72 grams
Efficiency Bandwidth Product (EBP)	138.17
Maximum Linear Excursion (Xmax)	8.52mm
Surface Area of Cone (Sd)	358.40 cm ²
Maximum Mechanical Limit (Xlim)	15.70mm

MOUNTING INFORMATION

Recommended Enclosure Volume	
Sealed	N/A
Vented	19.82-84.95 liters/0.70-3.00 cu.ft.
Driver Volume Displaced	64.73 cu.in.-1.06 liters
Overall Diameter	11.18", 283.87mm
Baffle Hole Diameter	9.12", 231.65mm
Front Sealing Gasket	Fitted as standard
Rear Sealing Gasket	Fitted as standard
Mounting Holes Diameter	0.29", 7.37mm
Mounting Holes B.C.D.	10.49", 266.45mm
Depth	5.00", 127.00mm
Net Weight	7.60 lbs., 3.45 kg
Shipping Weight	9.20 lbs., 4.17 kg

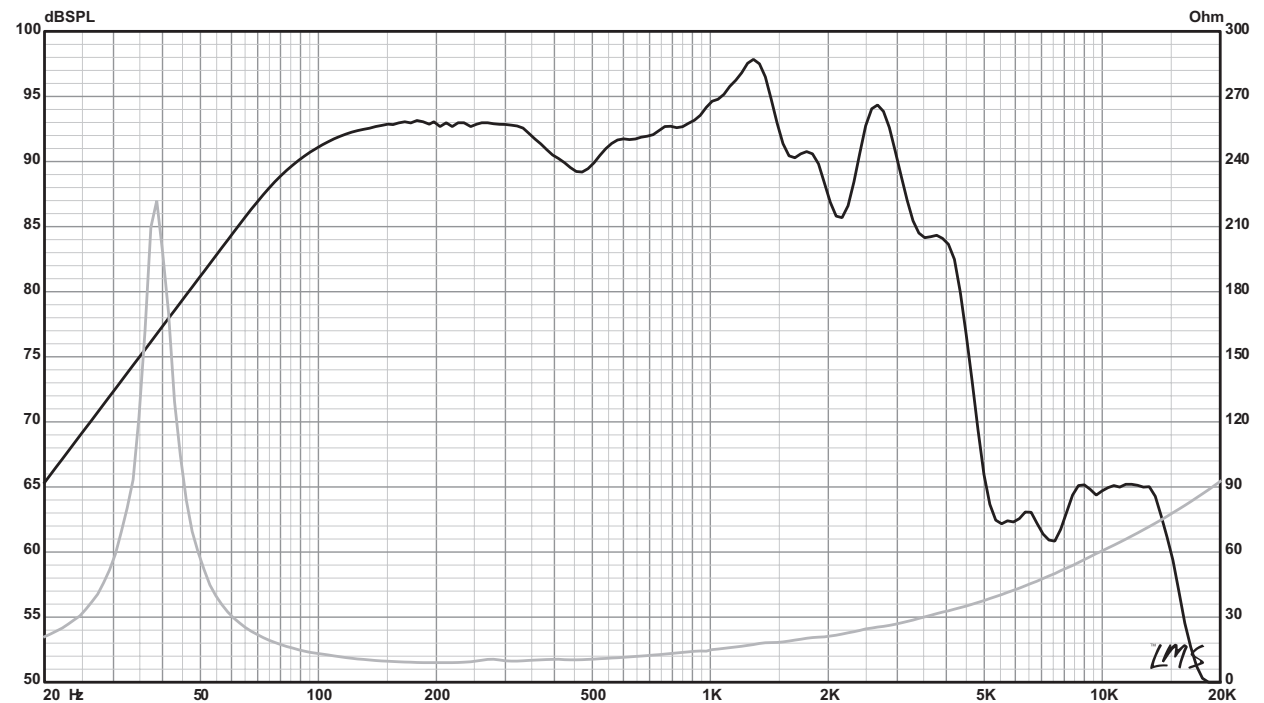
MATERIALS OF CONSTRUCTION

Copper Voice coil
 Polyimide former
 Neodymium magnet
 Vented core
 Die-cast aluminum basket
 Treated Paper Cone
 Sealed Cloth Edge
 Treated paper dust cap



KAPPALITE™ 30 10LF NEODYMIUM SERIES

High power subwoofer recommended for vented and horn loaded enclosures.



* Please inquire about alternative impedances.

** Multiple units exceed published rating evaluated under EIA 426A noise source and test standard while in a free-air, non-temperature controlled environment.

*** The average output across the usable frequency range when applying 1W/1M into the nominal impedance. ie: 2.83V/8ohms, 4V/16ohms.

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 the speaker mounted flush against a steel ring for minimum diffraction | Hafler P1500 Trans-Nova amplifier | 2700 cu.ft. chamber with fiberglass on all six surfaces (three with custom-made wedges)

KappaLite 3010LF Small Vented Floor Wedge Or Sat

By Jerry McNutt, Eminence Speaker LLC
 450 Watts Power Handling, F3 of 72 Hz, High Pass Suggested at 60 Hz.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, truncated edge

--Box Parameters--

Vb = 0.65 cu.ft

V(total) = 0.746 cu.ft

Fb = 70 Hz

QL = 7

F3 = 71.81 Hz

Fill = minimal

--Vents--

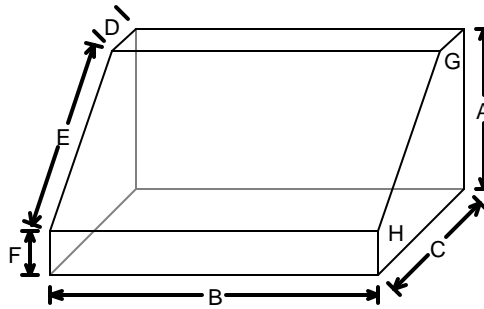
No. of Vents = 2

Vent shape = round

Vent ends = one flush

Dv = 2.5 in

Lv = 5.667 in



--External Dimensions--

A = 11 in

B = 22.41 in

C = 11 in

D = 3 in

E = 11.31 in

F = 3 in

--Internal Dimensions--

A = 9.5 in

B = 20.91 in

C = 9.5 in

D = 1.939 in

E = 10.69 in

F = 1.939 in

--Wall Thickness--

Wall = 0.75 in

--Angles--

G = 135°

H = 135°

Driver Properties

--Description--

Name: KappaLite 3010LF

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 10" Cast Neo Subwoofer

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 38.67 Hz

Qms = 11.75

Vas = 62.41 liters

Cms = 0.35 mm/N

Mms = 48.72 g

Rms = 1.01 kg/s

Xmax = 8.52 mm

Xmech = 15.7 mm

P-Dia = 212.4 mm

Sd = 358.4 sq.cm

P-Vd = 0.302 liters

--Electrical Parameters--

Qes = 0.28

Re = 7.2 ohms

Le = 1.13 mH

Z = 8 ohms

BL = 17.45 Tm

Pe = 450 watts

--Electromech. Parameters--

Qts = 0.273

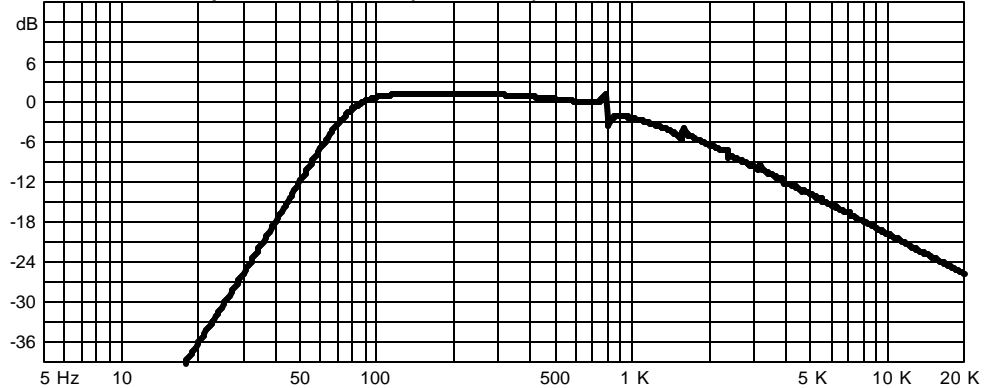
no = 1.243 %

1-W SPL = 93.09 dB

2.83-V SPL = 93.55 dB

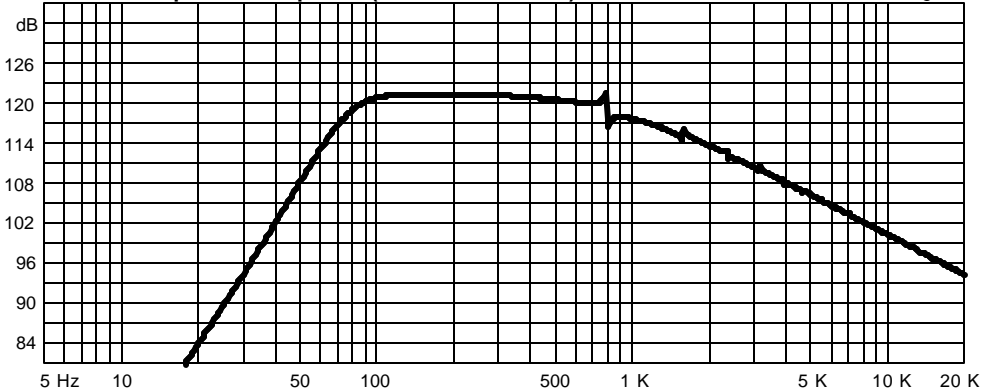
Normalized Amplitude Response (dB-SPL/Hz)

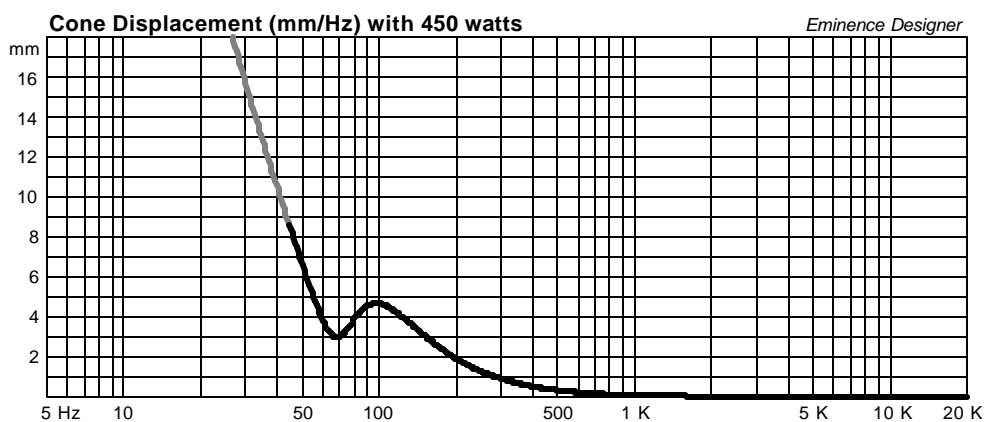
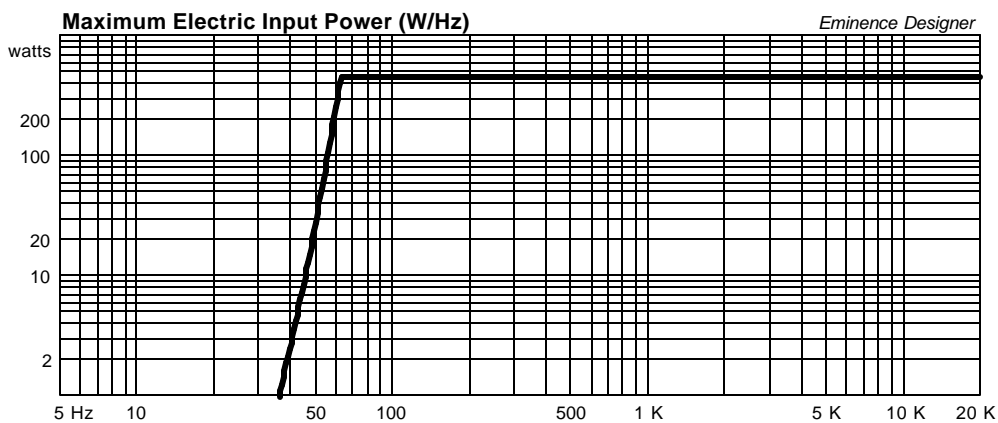
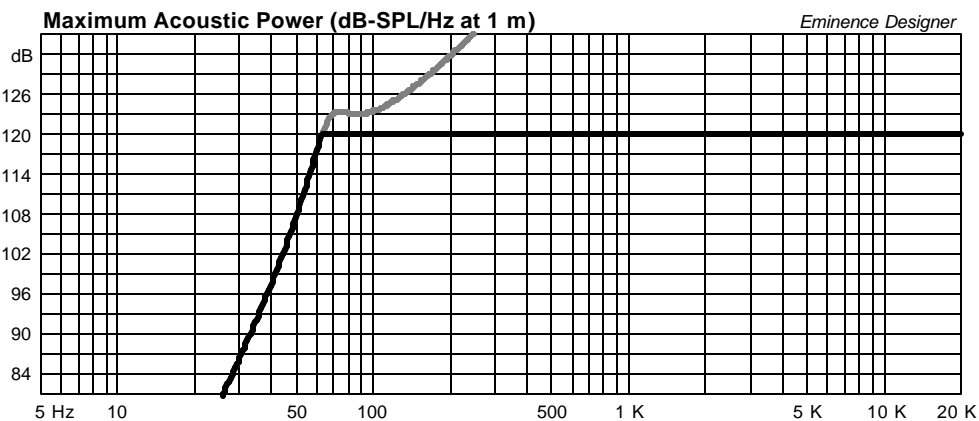
Eminence Designer

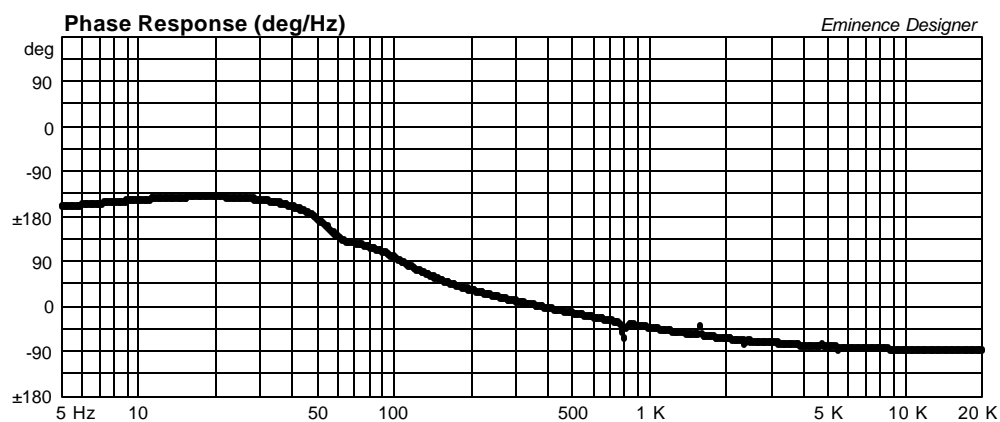
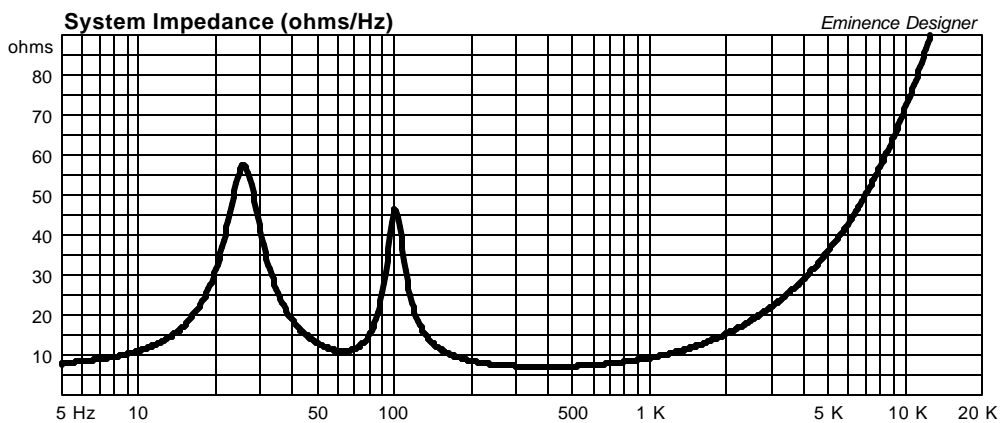
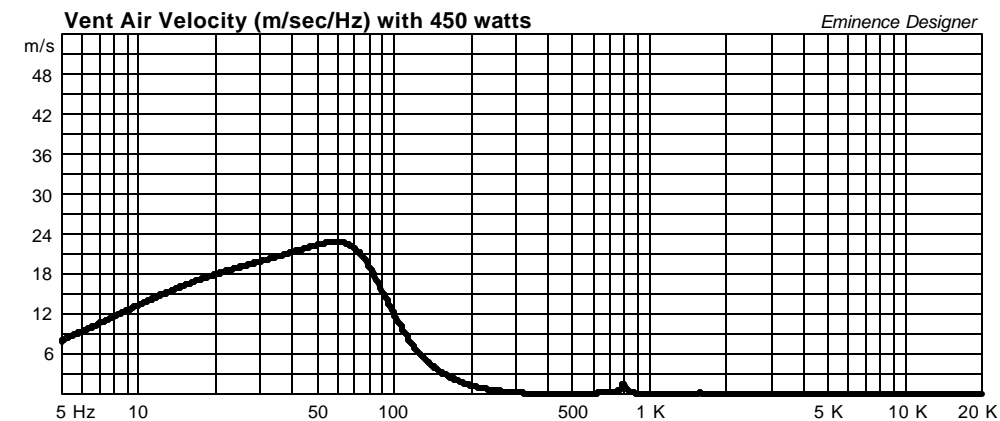


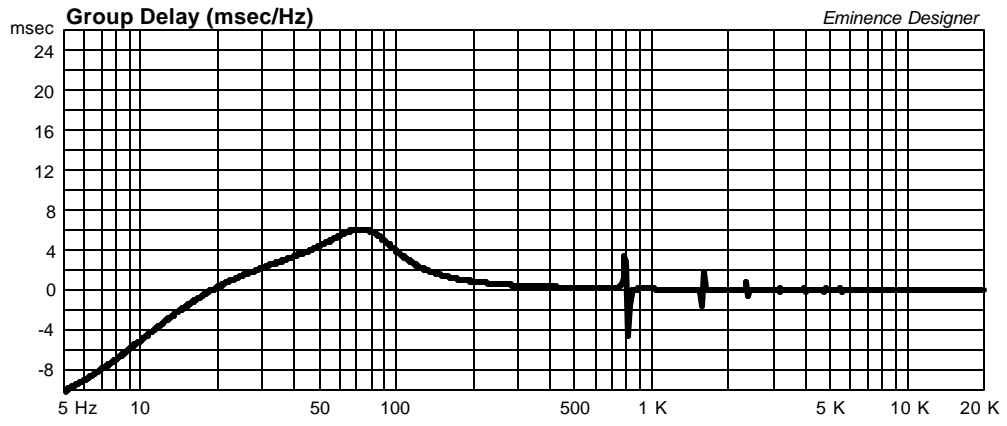
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 450 watts

Eminence Designer









KappaLite 3010LF Med Vented Box, Bass Guitar

By Jerry McNutt, Eminence Speaker LLC
 450 Watts Power Handling, F3 of 52Hz, High Pass Suggested at 40 Hz.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 1.2 cu.ft

V(total) = 1.361 cu.ft

Fb = 52 Hz

QL = 7

F3 = 57.45 Hz

Fill = minimal

--Vents--

No. of Vents = 1

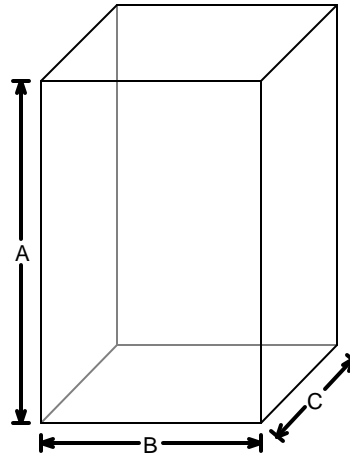
Vent shape = rectangle

Vent ends = one flush

Hv = 1.1 in

Wv = 13.14 in

Lv = 10.18 in



--External Dimensions--

A = 23.02 in

B = 14.8 in

C = 9.719 in

--Internal Dimensions--

A = 21.52 in

B = 13.3 in

C = 8.219 in

--Wall Thickness--

Front = 0.75 in

Side = 0.75 in

Driver Properties

--Description--

Name: KappaLite 3010LF

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 10" Cast Neo Subwoofer

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

Fs = 38.67 Hz

Qms = 11.75

Vas = 62.41 liters

Cms = 0.35 mm/N

Mms = 48.72 g

Rms = 1.01 kg/s

Xmax = 8.52 mm

Xmech = 15.7 mm

P-Dia = 212.4 mm

Sd = 358.4 sq.cm

P-Vd = 0.302 liters

--Electrical Parameters--

Qes = 0.28

Re = 7.2 ohms

Le = 1.13 mH

Z = 8 ohms

BL = 17.45 Tm

Pe = 450 watts

--Electromech. Parameters--

Qts = 0.273

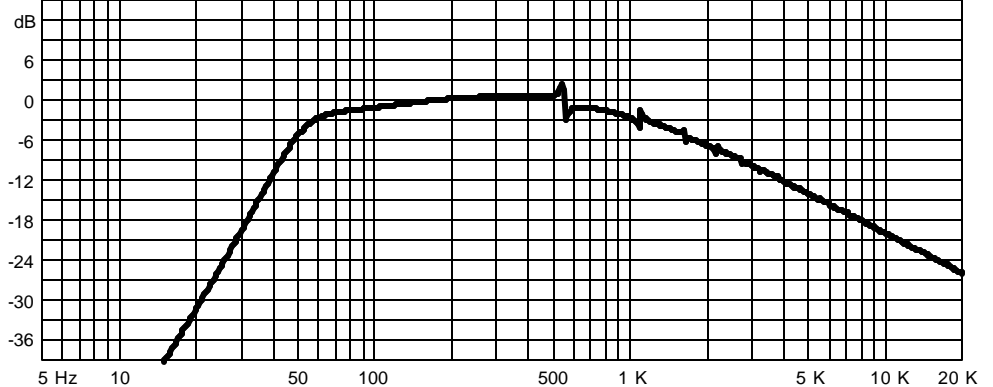
no = 1.243 %

1-W SPL = 93.09 dB

2.83-V SPL = 93.55 dB

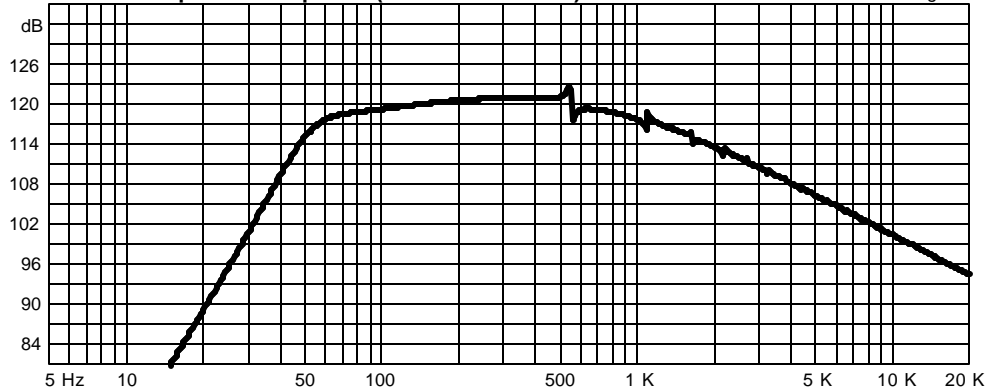
Normalized Amplitude Response (dB-SPL/Hz)

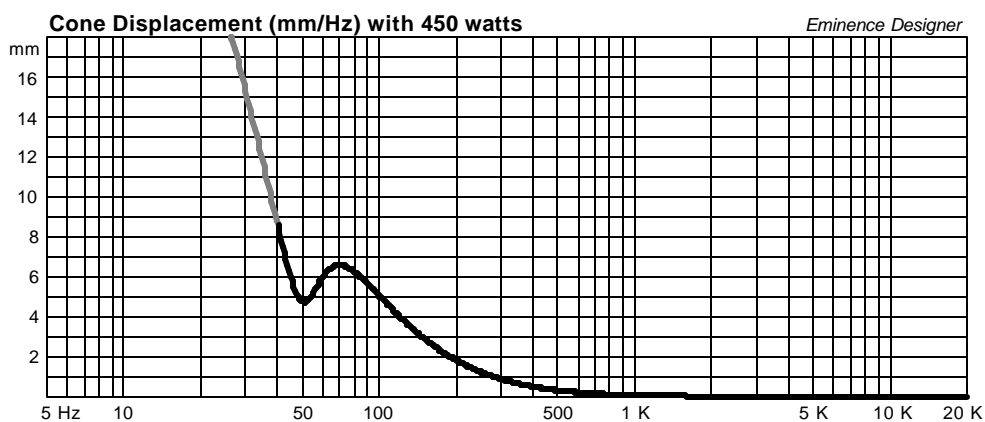
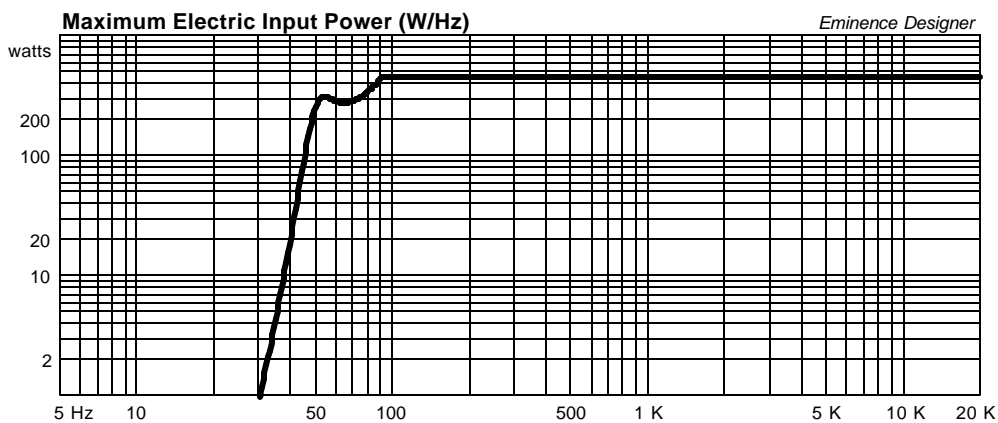
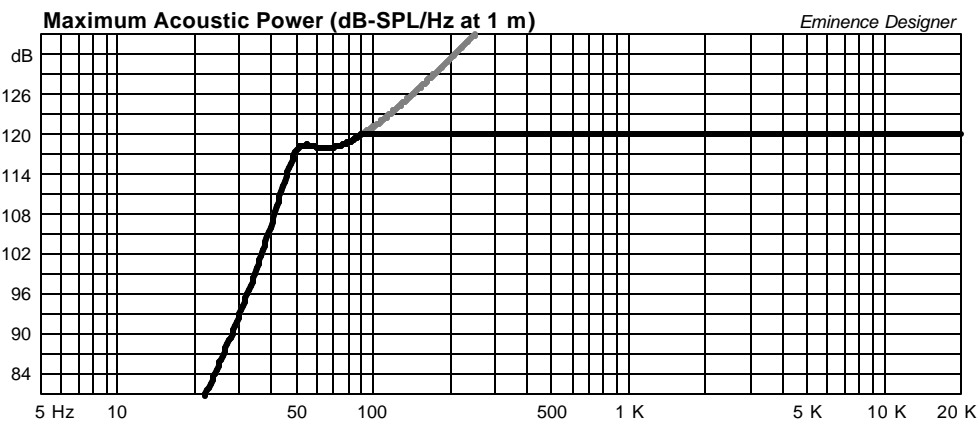
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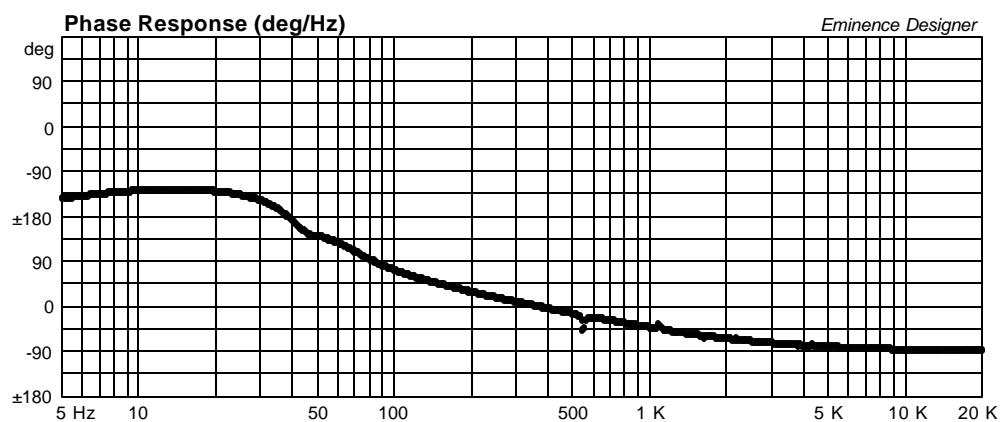
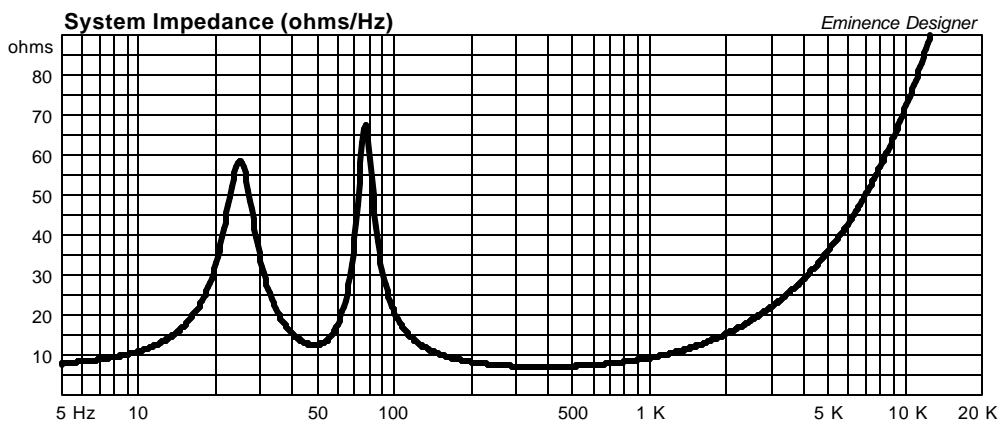
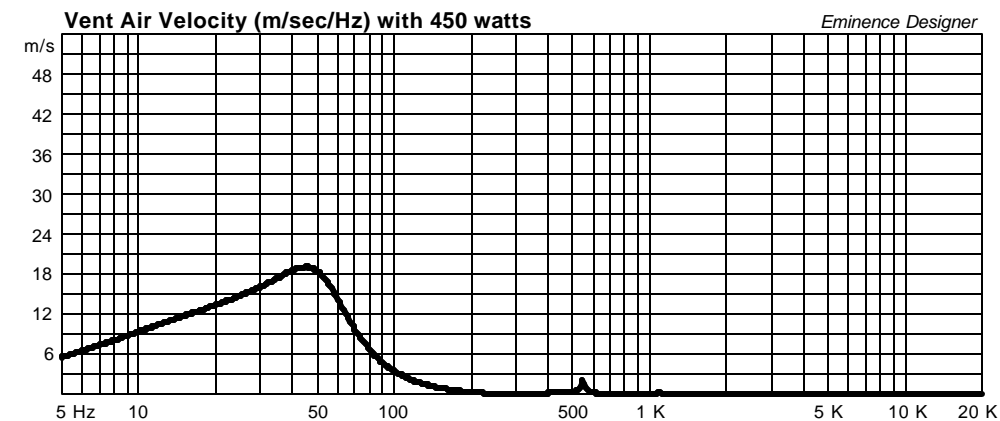


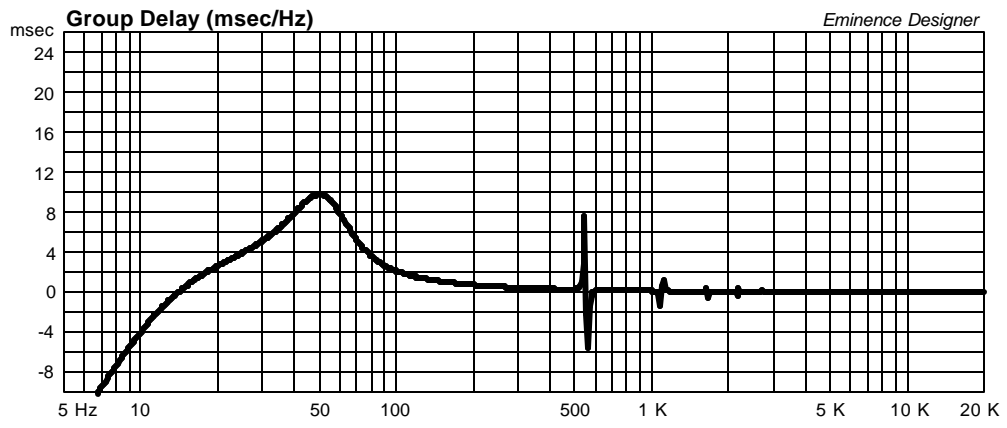
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 450 watts

Eminence Designer









KappaLite 3010LF Large Vented Box Design

By Jerry McNutt, Eminence Speaker LLC
450 Watts Power Handling, F3 of 44 Hz, High Pass Suggested at 38 Hz.



Box Properties

--Description--

Name:

Type: Vented Box

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 2.66 cu.ft
V(total) = 2.821 cu.ft
Fb = 48 Hz
QL = 20
F3 = 43.85 Hz
Fill = minimal

--Vents--

No. of Vents = 2
Vent shape = round
Vent ends = one flush
Dv = 4 in
Lv = 6.738 in

Driver Properties

--Description--

Name: KappaLite 3010LF

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 10" Cast Neo Subwoofer

--Configuration--

No. of Drivers = 1

--Mechanical Parameters--

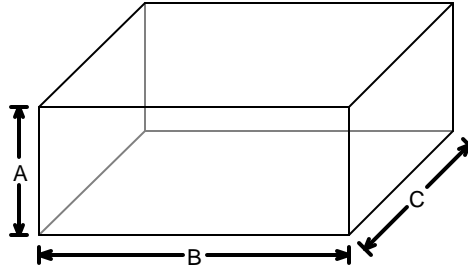
Fs = 38.67 Hz
Qms = 11.75
Vas = 62.41 liters
Cms = 0.35 mm/N
Mms = 48.72 g
Rms = 1.01 kg/s
Xmax = 8.52 mm
Xmech = 15.7 mm
P-Dia = 212.4 mm
Sd = 358.4 sq.cm
P-Vd = 0.302 liters

--Electrical Parameters--

Qes = 0.28
Re = 7.2 ohms
Le = 1.13 mH
Z = 8 ohms
BL = 17.45 Tm
Pe = 450 watts

--Electromech. Parameters--

Qts = 0.273
no = 1.243 %
1-W SPL = 93.09 dB
2.83-V SPL = 93.55 dB



--External Dimensions--

A = 11.98 in

B = 28.93 in

C = 18.46 in

--Internal Dimensions--

A = 10.48 in

B = 27.43 in

C = 16.96 in

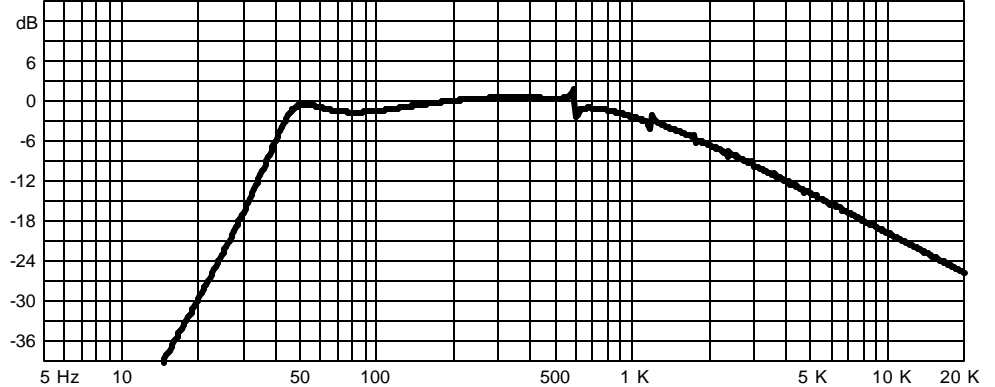
--Wall Thickness--

Front = 0.75 in

Side = 0.75 in

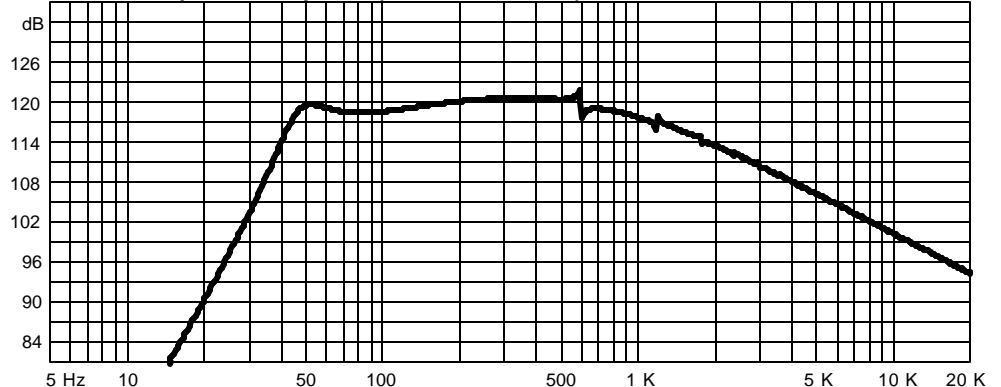
Normalized Amplitude Response (dB-SPL/Hz)

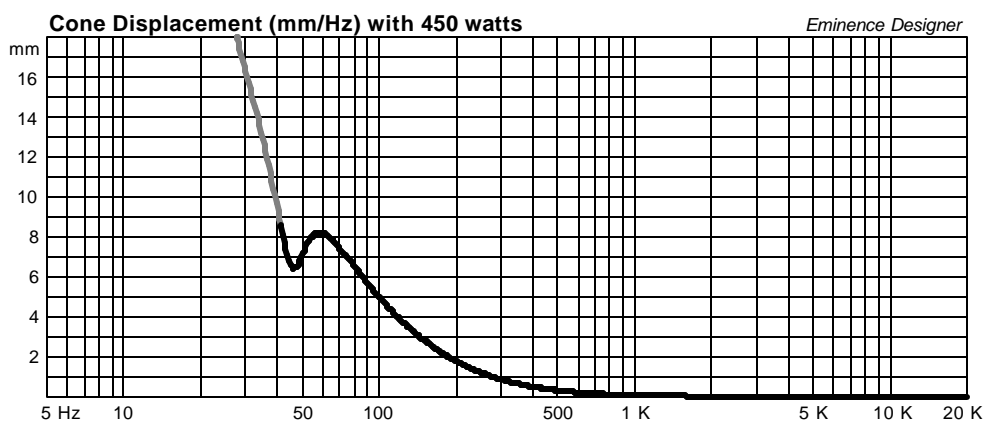
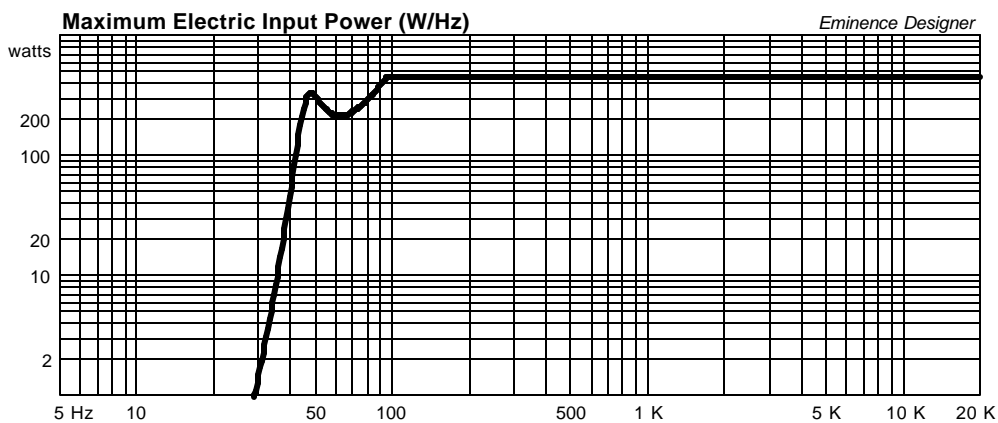
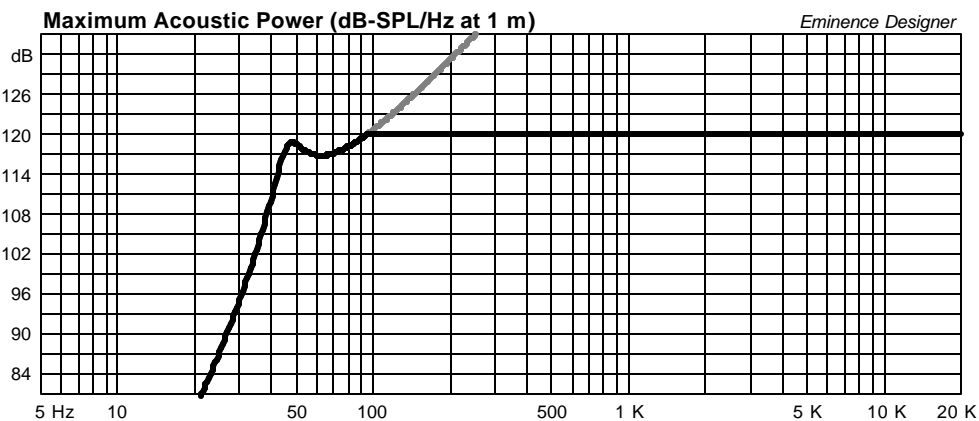
Eminence Designer

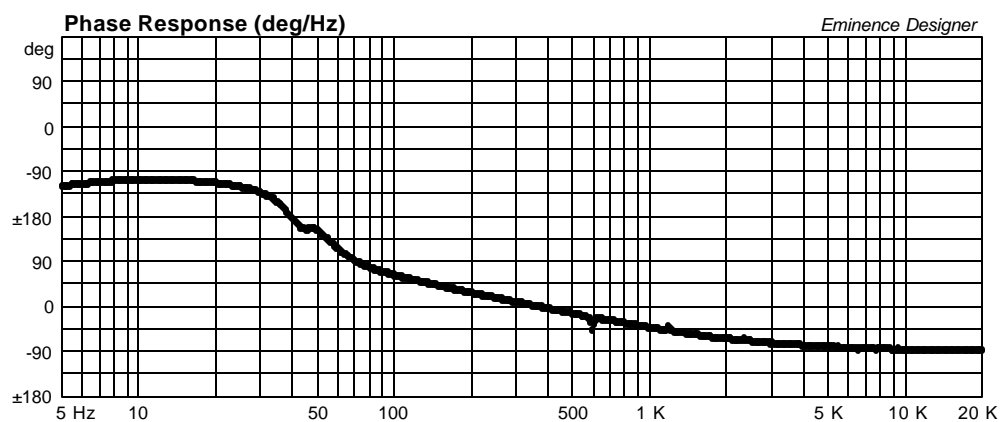
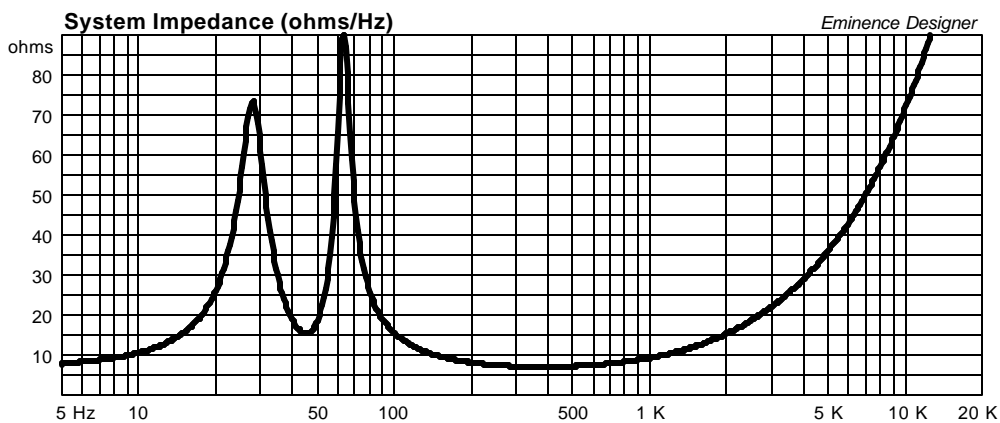
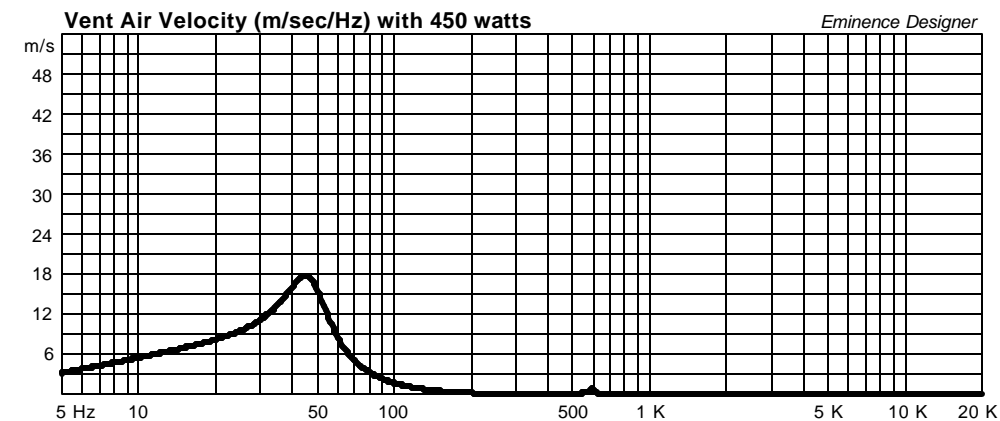


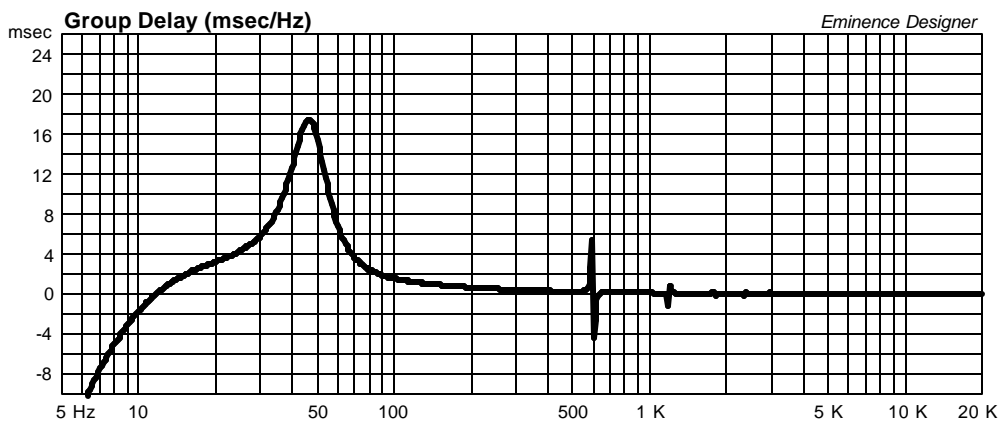
Custom Amplitude Response (dB-SPL/Hz at 1 m) with 450 watts

Eminence Designer









KappaLite 3010LF x2, MicroSub, Advanced Design

By Jerry McNutt, Eminence Speaker LLC
600 Watts Power Handling, F3 of 47 Hz. Not For First Time Builders.
Fx at 48 Hz and Qx at 1.4 or other types of EQ to play this low.



Box Properties

--Description--

Name:

Type: Vented Box w/ Active HP Filter

Shape: Prism, square (optimum)

--Box Parameters--

Vb = 2.8 cu.ft
V(total) = 3.019 cu.ft
Fb = 48 Hz
QL = 7
F3 = 46.93 Hz
Fill = minimal

--Vents--

No. of Vents = 2

Vent shape = round

Vent ends = one flush

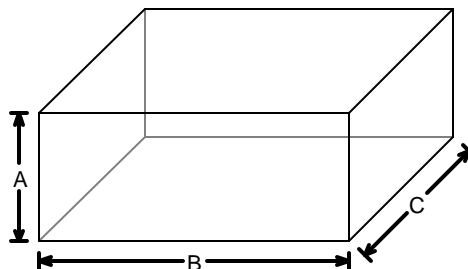
Dv = 4 in

Lv = 6.163 in

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

Fx = 48 Hz

Qx = 1.4



--External Dimensions--

A = 12.22 in

B = 29.56 in

C = 18.84 in

--Internal Dimensions--

A = 10.72 in

B = 28.06 in

C = 17.34 in

--Wall Thickness--

Front = 0.75 in

Side = 0.75 in

Driver Properties

--Description--

Name: KappaLite 3010LF

Type: Standard one-way driver

Company: Eminence Speaker LLC

Comment: 10" Cast Neo Subwoofer

--Configuration--

No. of Drivers = 2

Mounting = Standard

Wiring = Parallel

Drivers sum coherently = Yes

--Mechanical Parameters--

Fs = 38.67 Hz
Qms = 11.75
Vas = 62.41 liters [124.8]
Cms = 0.35 mm/N [0.175]
Mms = 48.72 g [97.44]
Rms = 1.01 kg/s [2.02]
Xmax = 8.52 mm
Xmech = 15.7 mm
P-Dia = 212.4 mm [300.4]
Sd = 358.4 sq.cm [716.8]
P-Vd = 0.302 liters [0.604]

--Electrical Parameters--

Qes = 0.28
Re = 7.2 ohms [3.6]
Le = 1.13 mH [0.565]
Z = 8 ohms [4]
BL = 17.45 Tm [17.45]
Pe = 450 watts [900]

--Electromech. Parameters--

Qts = 0.273
no = 1.243 % [2.485]
1-W SPL = 93.09 dB [96.1]
2.83-V SPL = 93.55 dB [99.57]

