

Specifications – Bamberg Series 5 MTM Loudspeaker

Transducers

18cm woofer (2)	SEAS W18ex-001
25mm tweeter	SEAS Millennium
Drone (2 optional)	SEAS 18cm

Impedance *(graph)*

Nominal	4 ohm
Minimum (@160 / 3100 Hz)	3.7 / 2.7 ohm
Phase (@2000, 100k Hz)	-35 / +25 degrees

Amplitude response *(graph)*

To 16kHz	+2.0 / -3.0 dB
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Dispersion *(see graph)*

Sensitivity

2.83V@1-Meter full space	89 dB
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Bass alignment

Vented or Drone	EBS4 -3dB@49Hz, -6dB@36Hz
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Inter-driver Phase response

100Hz to 8kHz	Less than 35° phase difference
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Maximum linear output

106 dB	80W	HPF2 @80Hz, all frequencies, no compression
103 dB	40W	no HPF, all frequencies, no compression

Crossover

Alignment	Linkwitz-Riley 4th @ 2.05 kHz
Elements	19, 4 of which are in the series signal paths
Phase compensation	5 elements / 3 circuits

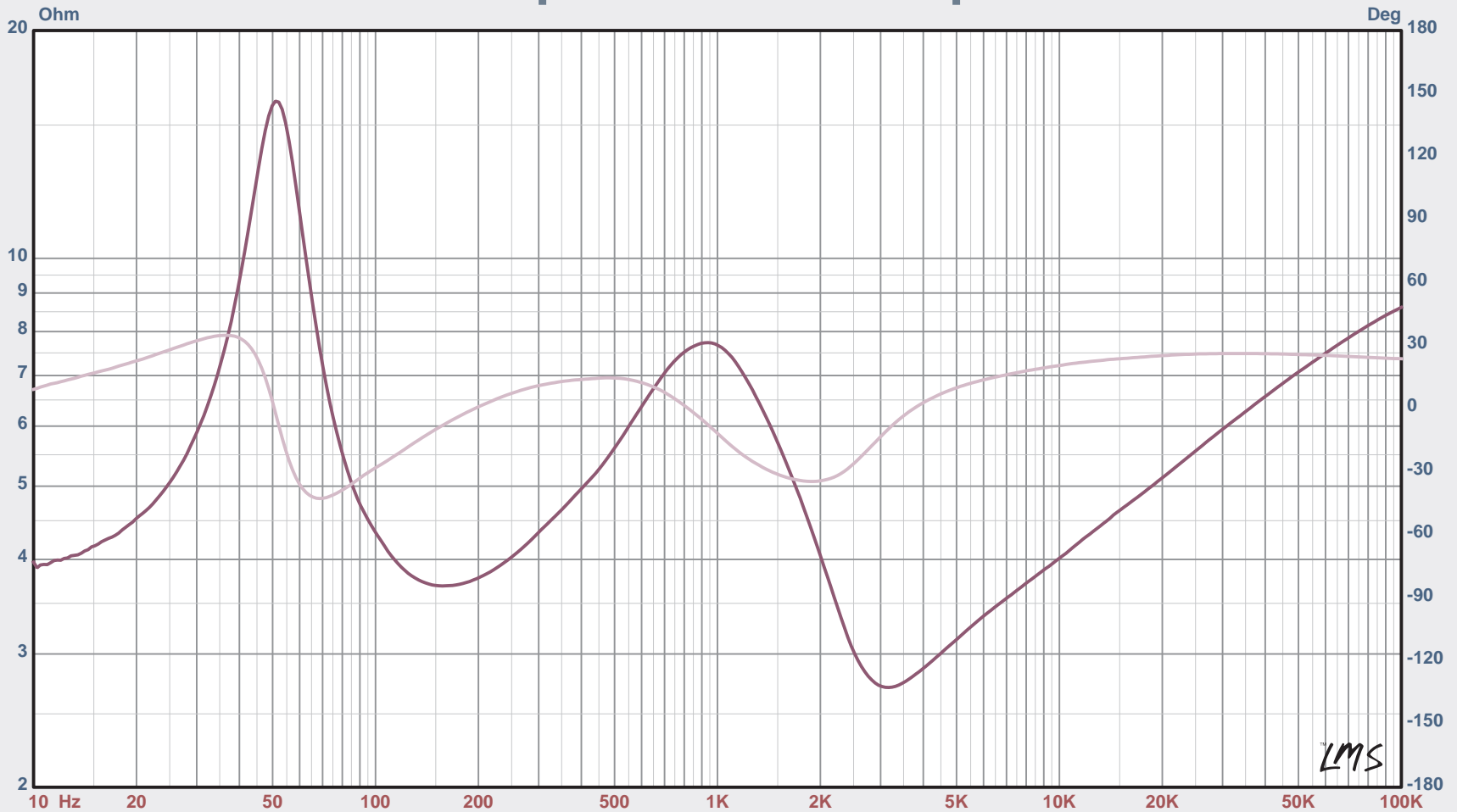
Dimensions (with Base); Weight (Net)

42.6" [108cm] H x 10.8"[27cm] W x 16.1" [41cm] D, 63 lb. [29kg]

Dimensions; Weight (Ship)

tba

Impedance vs Freq



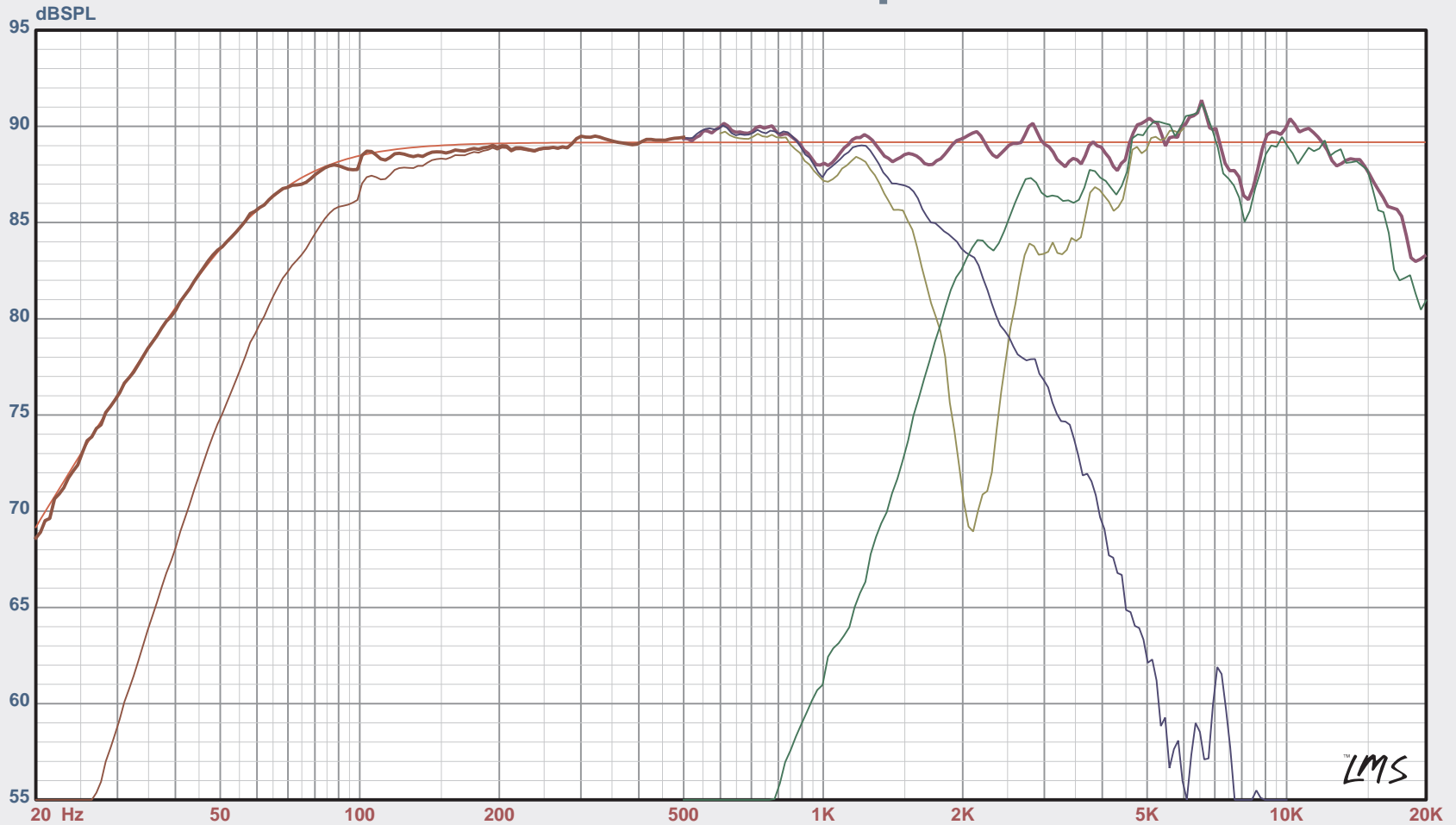
LMS

Map

11: Z 1.4v

Notes

SPL vs Freq



Map

- 1: 89.2dB TARGET: HPF2@63Hz 0.7Q
- 2: 2Mgp 5.6V 10H Mid-High Sum
- 3: 2Mgp 5.6V 10H Mid-High Difference
- 4: 2Mgp 5.6V 10H Woofer
- 5: 1/2Mgp 1.4V 00V Woofer Low
- 6: 1/2Mgp 1.4V 00V Woofer Low with HPF2@80
- 7: 2Mgp 5.6V 10H Tweeter

Notes

All curves scaled -6dB for reference to full space.

Speaker at 10degrees off horizontal axis; on vertical reference axis.

100 points per decade, no smoothing.

Data Measured: May 24, 2004 Mon 2:45 pm

LMS

4.5.0.342
May/19/2004

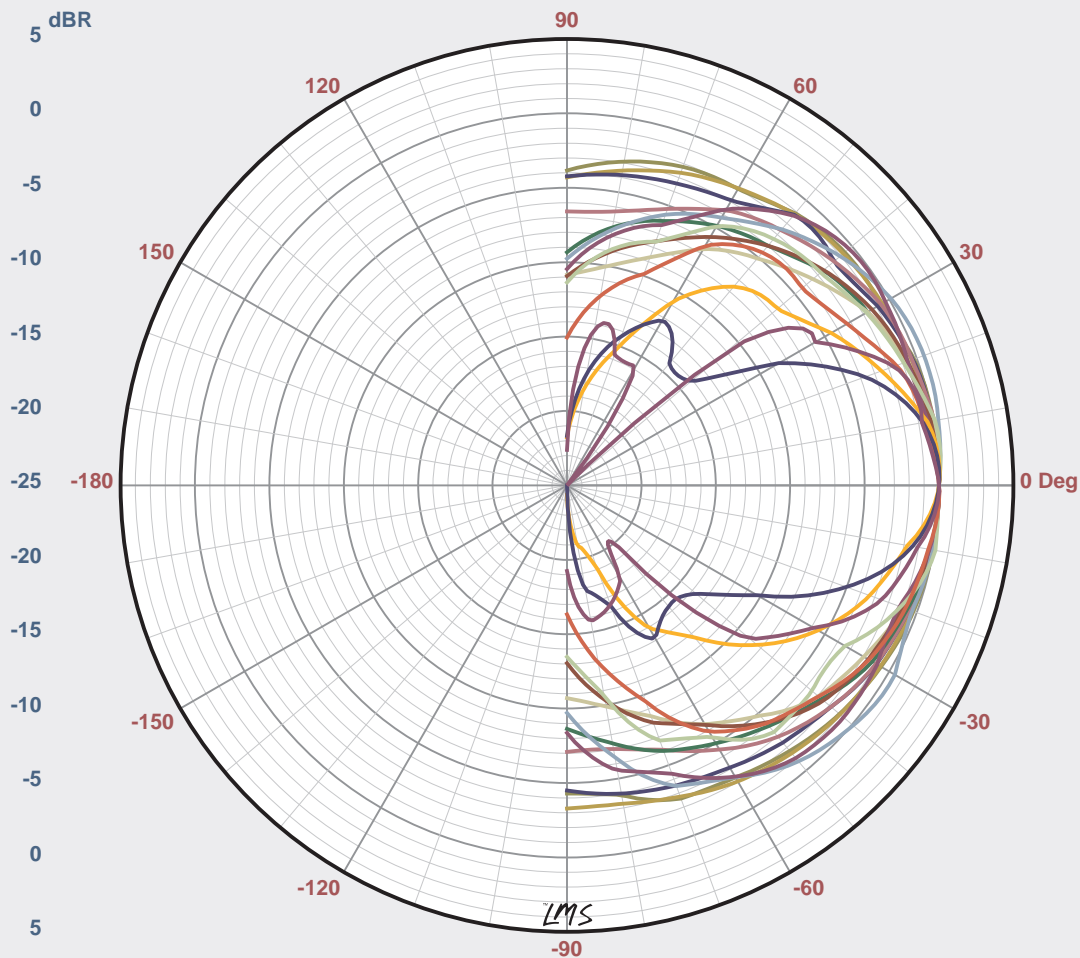
Person: PEB
Company: BESL

Project: S5-mtm Passive
File: S5-mtm Passive Final.lib

Jun 25, 2004
Fri 1:28 pm

LINEAR X
S Y S T E M S

Ratio vs Angle



Curve	Freq	BW	Q	DI
1	220.00	180	2.0	3.0
2	311.00	180	2.0	3.0
3	440.00	180	2.0	3.0
4	625.00	144	2.5	4.0
5	880.00	138	2.6	4.2
6	1.25K	113	3.2	5.0
7	1.77K	118	3.0	4.8
8	2.50K	149	2.4	3.8
9	3.54K	149	2.4	3.8
10	5.00K	125	2.9	4.6
11	7.07K	116	3.1	4.9
12	10.00K	67	5.4	7.3
13	14.14K	45	7.9	9.0
14	20.00K	64	5.7	7.5

Map

1: PolarConv F= 220.0000	4: PolarConv F= 625.0000	7: PolarConv F= 1.7700K	10: PolarConv F= 5.0000K	13: PolarConv F= 14.1400K
2: PolarConv F= 311.0000	5: PolarConv F= 880.0000	8: PolarConv F= 2.5000K	11: PolarConv F= 7.0700K	14: PolarConv F= 20.0000K
3: PolarConv F= 440.0000	6: PolarConv F= 1.2500K	9: PolarConv F= 3.5400K	12: PolarConv F= 10.0000K	

Notes

HORIZONTAL POLAR RESPONSE

Normalized to 0dB on Reference Axis.

Tweeter offset 3/4" from baffle midline in +X direction.

May 3, 2004 Mon 8:10 am

LMS

4.5.0.340
May/30/2003

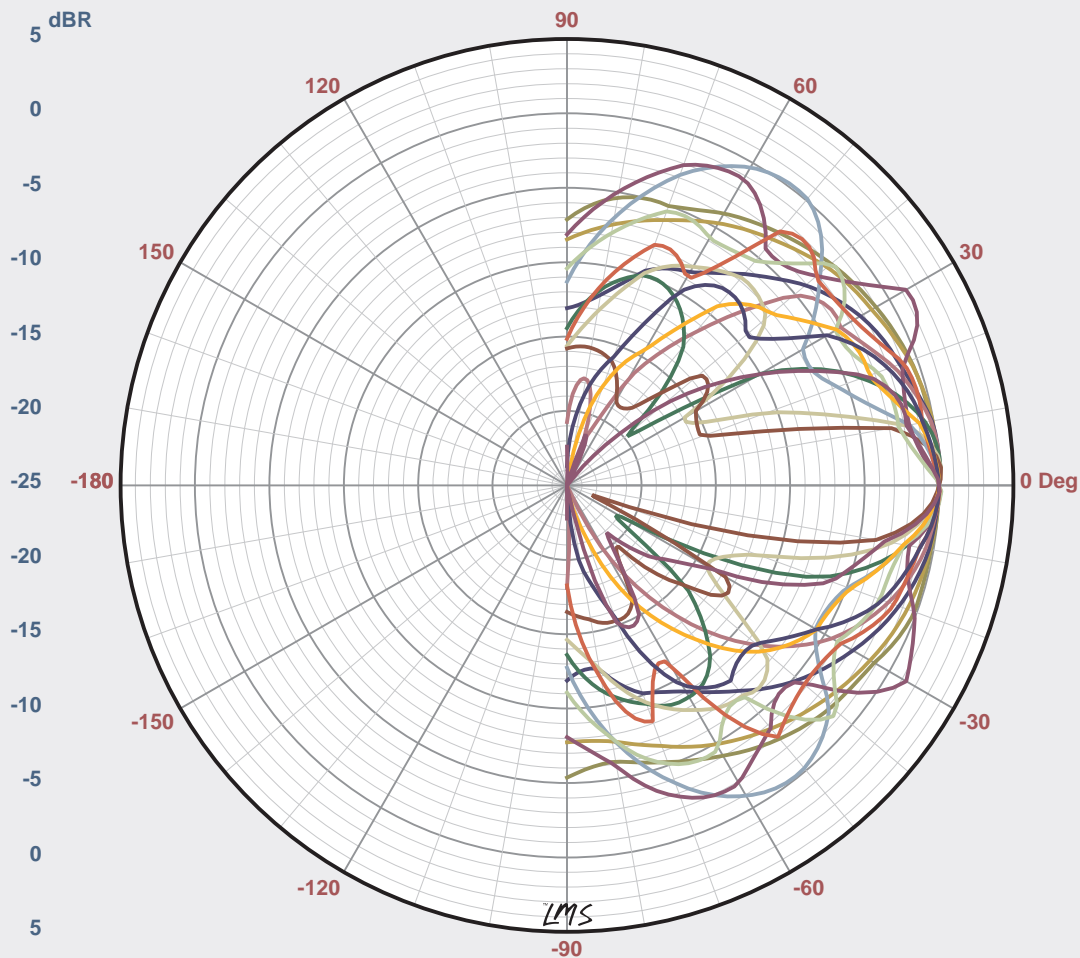
Person: PEB
Company: BESL

Project: Series 5 MTM
File: S5-mtm Passive Polar H.lib

May 3, 2004
Mon 9:44 am

LINEAR X
S Y S T E M S

Ratio vs Angle



Curve	Freq	BW	Q	DI
1	220.00	162	2.2	3.5
2	311.00	136	2.6	4.2
3	440.00	91	4.0	6.0
4	625.00	75	4.8	6.8
5	880.00	40	9.0	9.5
6	1.25K	27	13.2	11.2
7	1.77K	22	16.5	12.2
8	2.50K	96	3.7	5.7
9	3.54K	162	2.2	3.5
10	5.00K	120	3.0	4.8
11	7.07K	107	3.4	5.3
12	10.00K	67	5.4	7.3
13	14.14K	60	6.0	7.8
14	20.00K	42	8.6	9.3

Map

1: PolarConv F= 220.0000	4: PolarConv F= 625.0000	7: PolarConv F= 1.7700K	10: PolarConv F= 5.0000K	13: PolarConv F= 14.1400K
2: PolarConv F= 311.0000	5: PolarConv F= 880.0000	8: PolarConv F= 2.5000K	11: PolarConv F= 7.0700K	14: PolarConv F= 20.0000K
3: PolarConv F= 440.0000	6: PolarConv F= 1.2500K	9: PolarConv F= 3.5400K	12: PolarConv F= 10.0000K	

Notes

VERTICAL POLAR RESPONSE

Normalized to 0dB on Reference Axis.

Tweeter offset 3/4" from baffle midline in +X direction.

Apr 28, 2004 Wed 1:20 pm

LMS

4.5.0.340
May/30/2003

Person: PEB
Company: BESL

Project: Series 5 MTM
File: S5-mtm Passive Polar V.lib

May 3, 2004
Mon 9:46 am

LINEAR X
S Y S T E M S