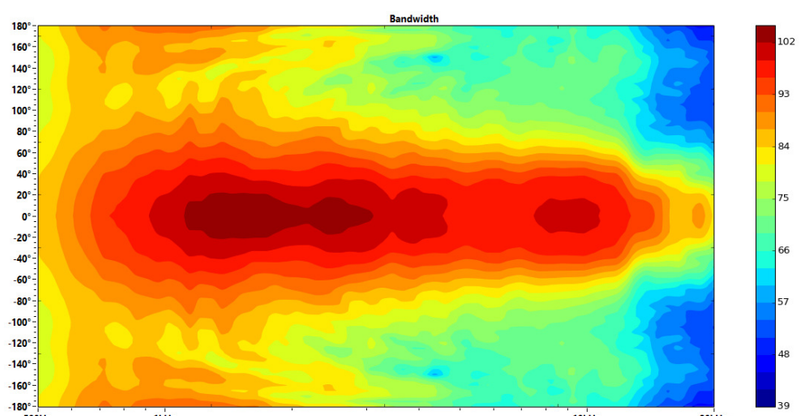
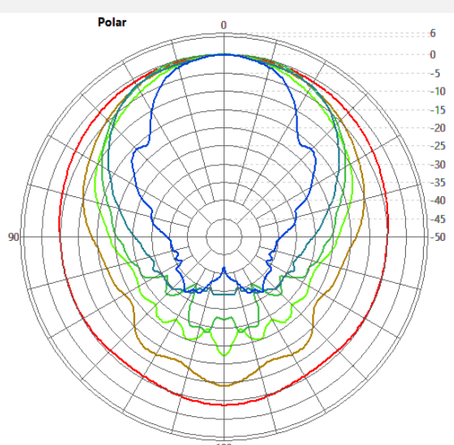


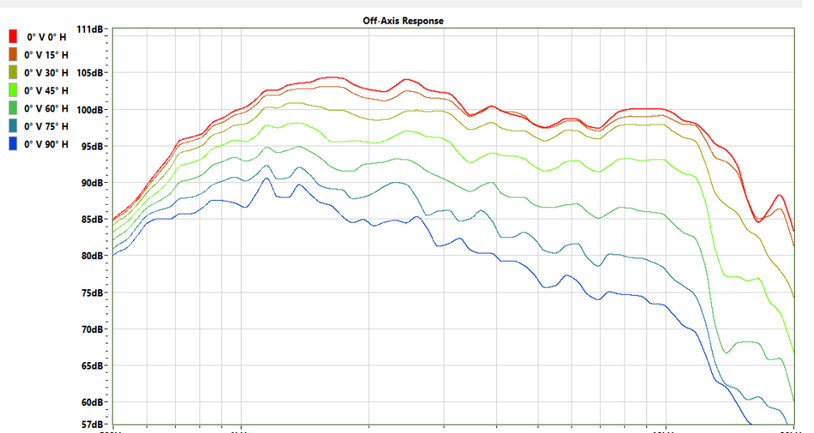


Nota de Aplicação AN-0006.
Analise de resposta fora do eixo, Driver Oversound DTi-4630, com corneta Ludovico LC-06.
https://www.ludovico.com.br/273/cornetas/corneta-lc-06-preta
http://oversound.com.br/novo/index.php?route=product/product&product_id=91
Condições:
Ruído Rosa, 2.83V rms, 1m, medição automatizada em câmara anecóica no laboratório da:
OVERSOUND ALTO-FALANTES INDÚSTRIA E COMÉRCIO ELETRO ACÚSTICO.
Horizontal: Quadrante 1 e 2, simetricamente espelhados para quadrantes 3 e 4.
Vertical: Quadrante 1, simetricamente espelhado para quadrantes 2, 3 e 4.
Todas as características dimensionais originais dos e entre componentes foram mantidas, nenhum tipo de modificação visando melhora de desempenho foi efetuada.
Responsável:
Eng. Francisco Monteiro, CREA: 260400014-8.
30/10/2020.

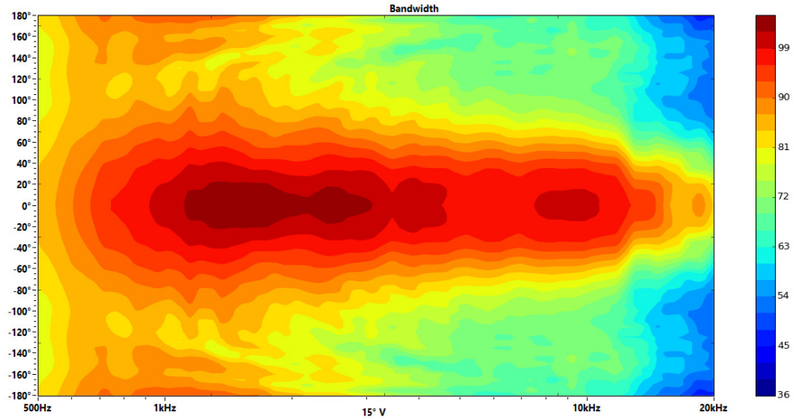


Ang	Freq	Cov	Q	Di
0° V	507Hz	280°	1,47	1,69dB
0° V	1023Hz	104°	2,50	3,98dB
0° V	2054Hz	78°	3,43	5,35dB
0° V	4120Hz	90°	3,41	5,32dB
0° V	8248Hz	86°	3,82	5,82dB
0° V	18527Hz	48°	6,06	7,83dB

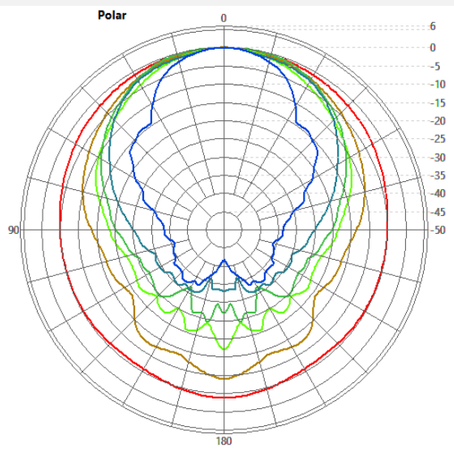


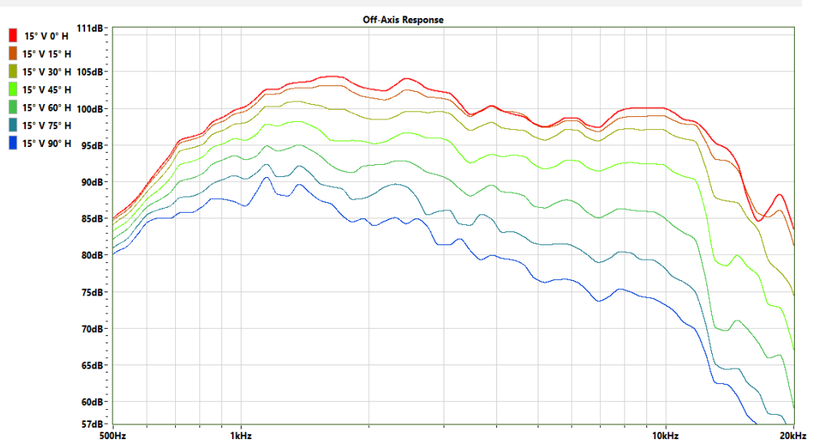


0° Vertical

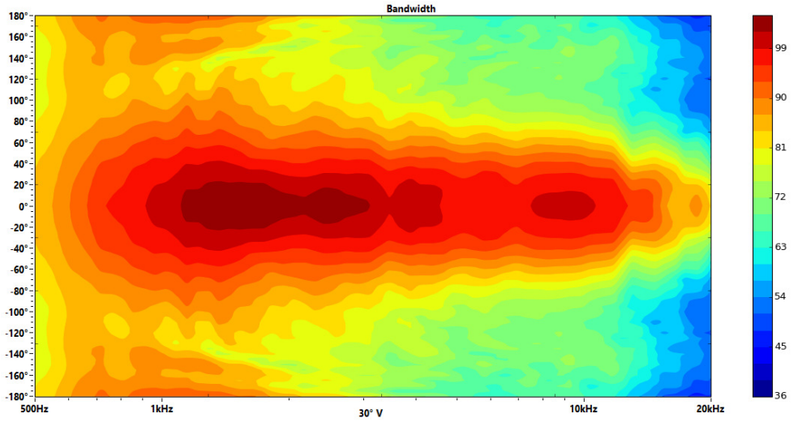


Ang	Freq	Cov	Q	Di
15° V	507Hz	290°	1,48	1,71dB
15° V	1023Hz	106°	2,48	3,94dB
15° V	2054Hz	78°	3,46	5,39dB
15° V	4120Hz	88°	3,39	5,30dB
15° V	8248Hz	82°	3,95	5,96dB
15° V	18527Hz	48°	6,08	7,84dB

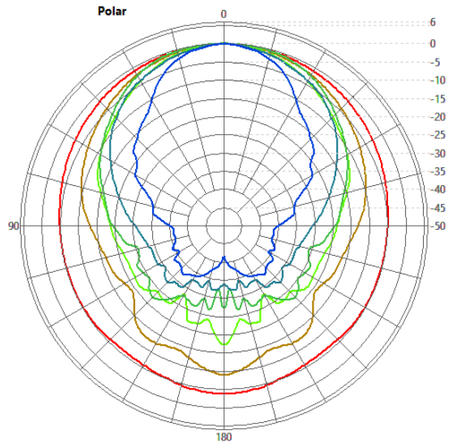


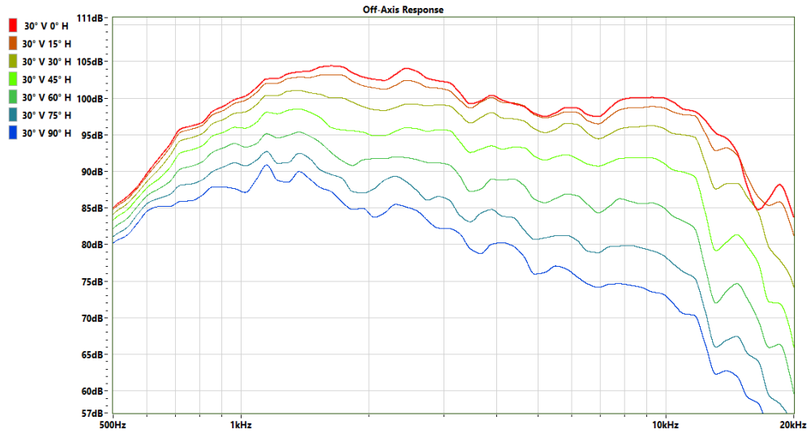


15° Vertical

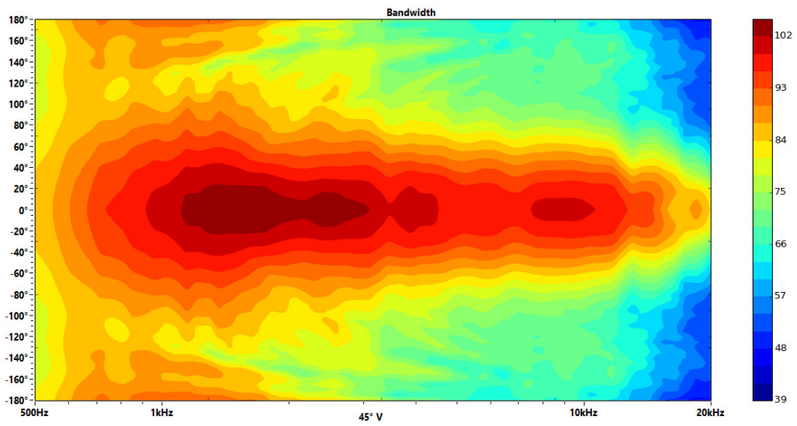


Ang	Freq	Cov	Q	Di
30° V	507Hz	280°	1,48	1,69dB
30° V	1023Hz	110°	2,45	3,89dB
30° V	2054Hz	76°	3,53	5,47dB
30° V	4120Hz	86°	3,40	5,31dB
30° V	8248Hz	78°	4,16	6,19dB
30° V	18527Hz	46°	6,18	7,91dB

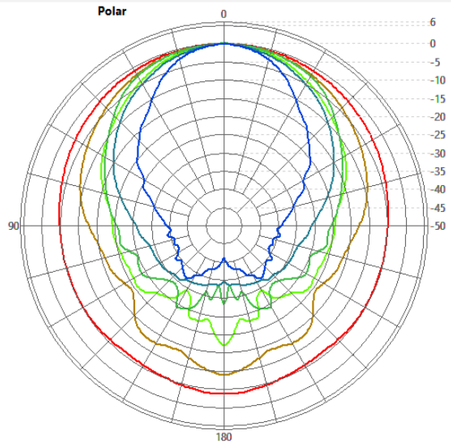


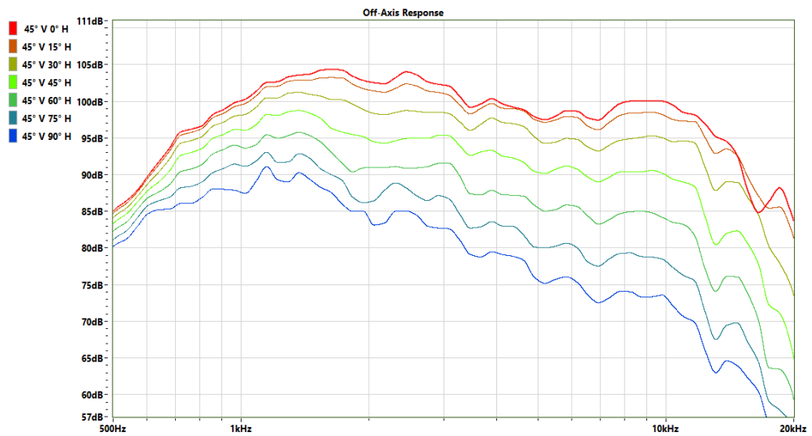


30° Vertical

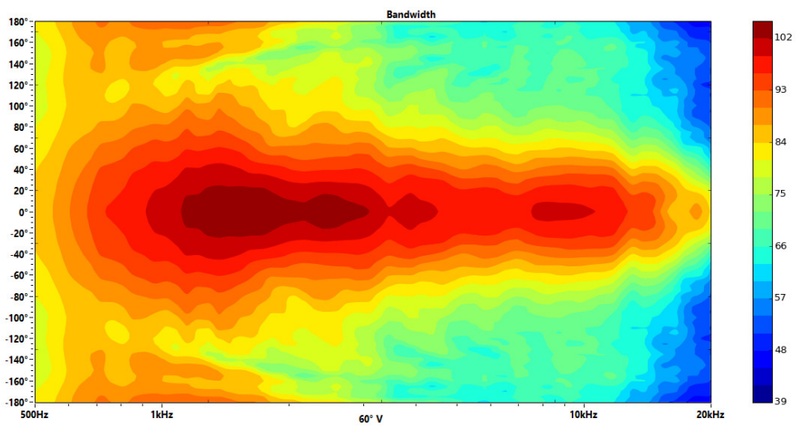


Ang	Freq	Cov	Q	Di
45° V	507Hz	290°	1,47	1,68dB
45° V	1023Hz	112°	2,41	3,83dB
45° V	2054Hz	74°	3,61	5,57dB
45° V	4120Hz	84°	3,56	5,52dB
45° V	8248Hz	66°	4,47	6,50dB
45° V	18527Hz	44°	6,38	8,05dB

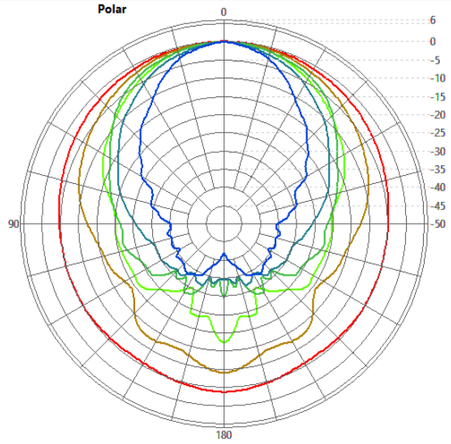


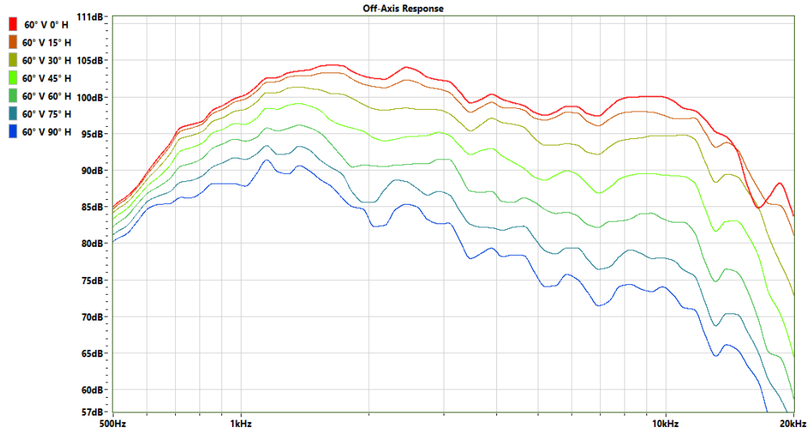


45° Vertical

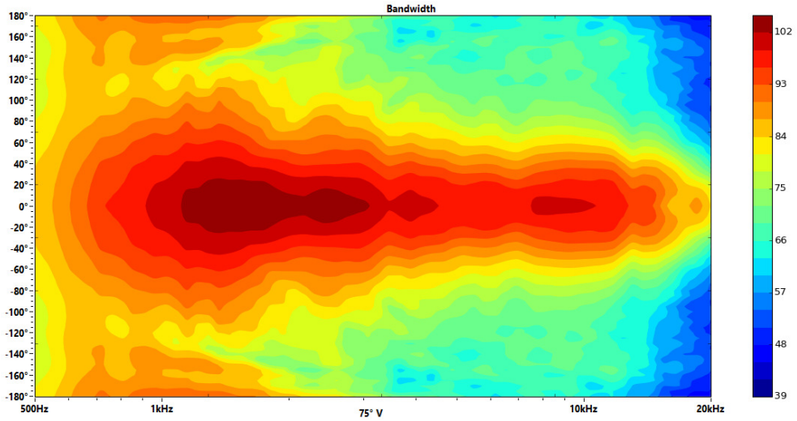


Ang	Freq	Cov	Q	Di
60° V	507Hz	290°	1,47	1,66dB
60° V	1023Hz	116°	2,38	3,76dB
60° V	2054Hz	74°	3,67	5,64dB
60° V	4120Hz	80°	3,84	5,85dB
60° V	8248Hz	62°	4,74	6,76dB
60° V	18527Hz	44°	6,61	8,20dB

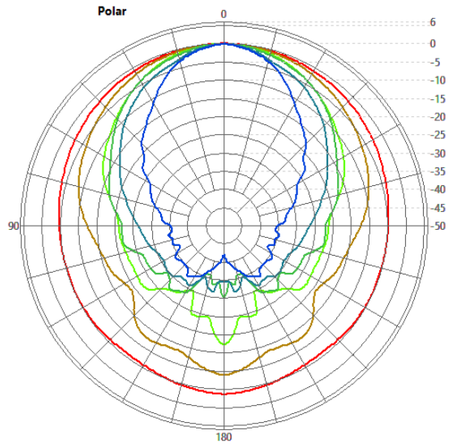


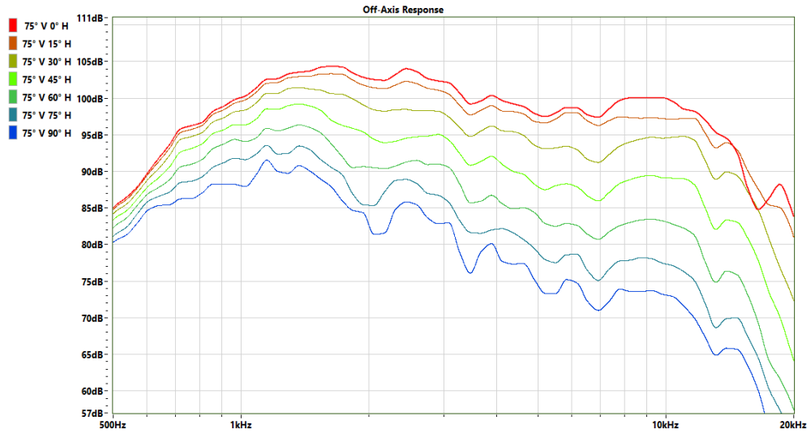


60° Vertical

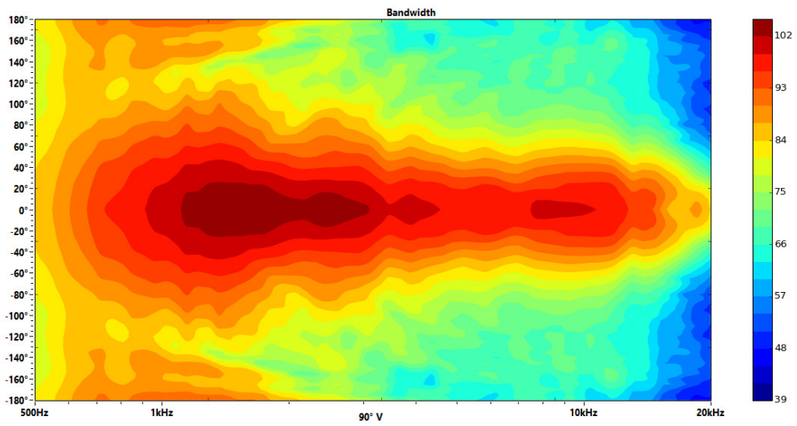


Ang	Freq	Cov	Q	Di
75° V	507Hz	290°	1,47	1,67dB
75° V	1023Hz	118°	2,37	3,74dB
75° V	2054Hz	74°	3,71	5,70dB
75° V	4120Hz	74°	4,06	6,09dB
75° V	8248Hz	60°	4,93	6,93dB
75° V	18527Hz	42°	6,81	8,33dB

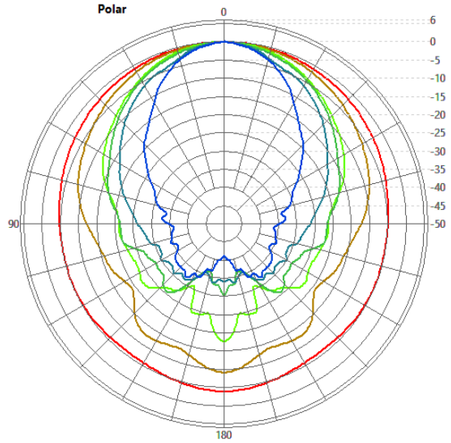


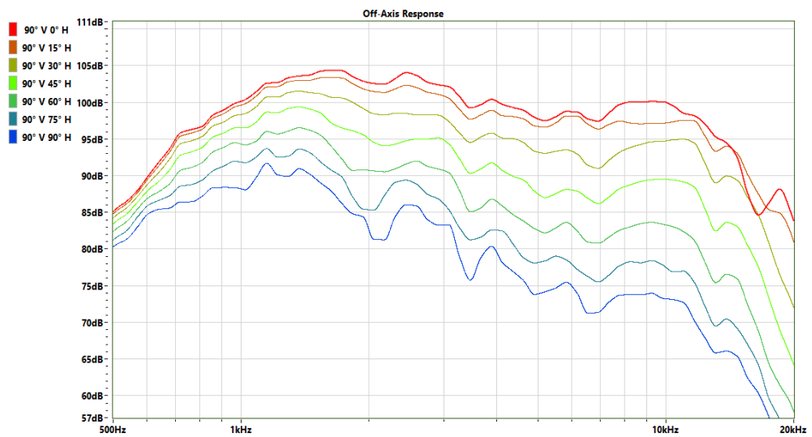


75° Vertical

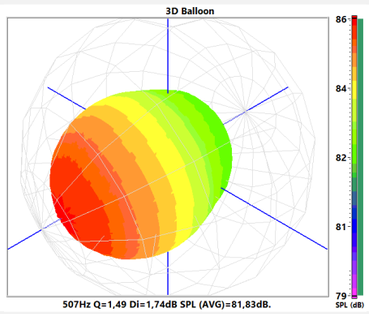


Ang	Freq	Cov	Q	Di
90° V	507Hz	290°	1,47	1,69dB
90° V	1023Hz	118°	2,37	3,74dB
90° V	2054Hz	74°	3,72	5,70dB
90° V	4120Hz	70°	4,12	6,15dB
90° V	8248Hz	58°	5,02	7,00dB
90° V	18527Hz	42°	6,93	8,41dB

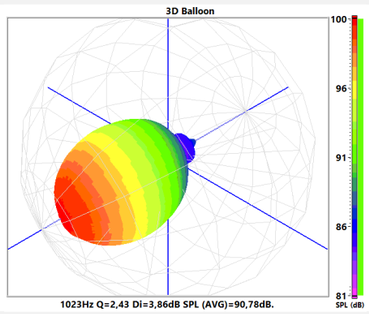




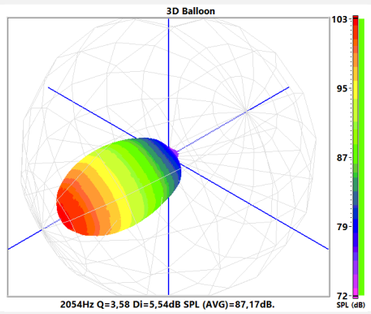
90° Vertical



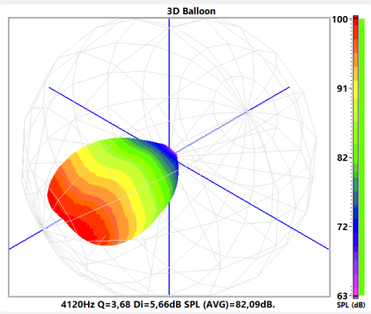
507Hz Q=1,49 Di=1,74dB SPL (AVG)=81,83dB.



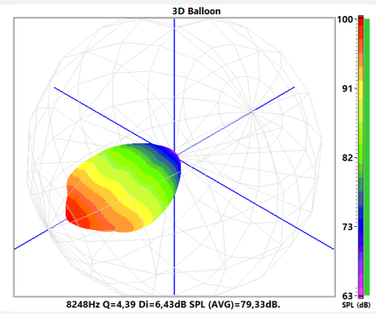
1023Hz Q=2,43 Di=3,86dB SPL (AVG)=90,78dB.



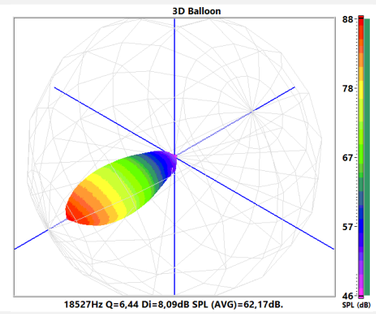
2054Hz Q=3,58 Di=5,54dB SPL (AVG)=87,17dB.



4120Hz Q=3,68 Di=5,66dB SPL (AVG)=82,09dB.



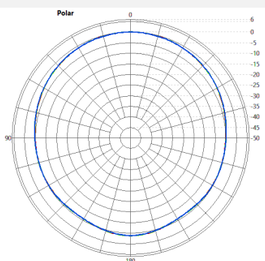
8248Hz Q=4,39 Di=6,43dB SPL (AVG)=79,33dB.



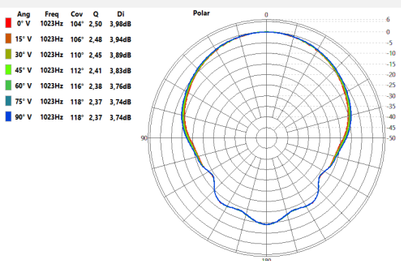
18527Hz Q=6,44 Di=8,09dB SPL (AVG)=62,17dB.

3D Balloon

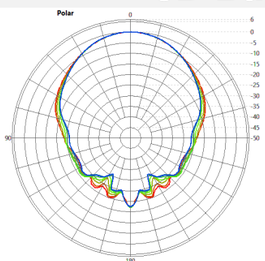
Ang	Freq	Cov	Q	Di
0° V	507Hz	280°	1,47	1,69dB
15° V	507Hz	290°	1,48	1,71dB
30° V	507Hz	280°	1,48	1,69dB
45° V	507Hz	290°	1,47	1,68dB
60° V	507Hz	290°	1,47	1,66dB
75° V	507Hz	290°	1,47	1,67dB
90° V	507Hz	290°	1,47	1,69dB



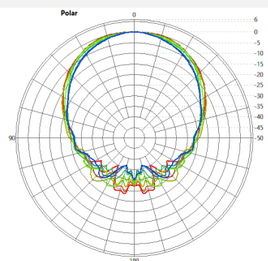
Ang	Freq	Cov	Q	Di
0° V	1023Hz	104°	2,50	3,98dB
15° V	1023Hz	106°	2,48	3,94dB
30° V	1023Hz	110°	2,45	3,89dB
45° V	1023Hz	112°	2,41	3,83dB
60° V	1023Hz	116°	2,38	3,76dB
75° V	1023Hz	118°	2,37	3,74dB
90° V	1023Hz	118°	2,37	3,74dB



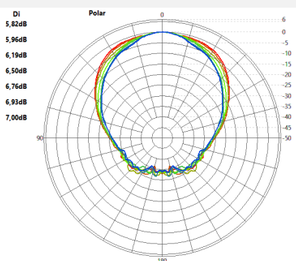
Ang	Freq	Cov	Q	Di
0° V	2054Hz	78°	3,43	5,35dB
15° V	2054Hz	78°	3,46	5,39dB
30° V	2054Hz	76°	3,53	5,47dB
45° V	2054Hz	74°	3,61	5,57dB
60° V	2054Hz	74°	3,67	5,64dB
75° V	2054Hz	74°	3,71	5,70dB
90° V	2054Hz	74°	3,72	5,70dB



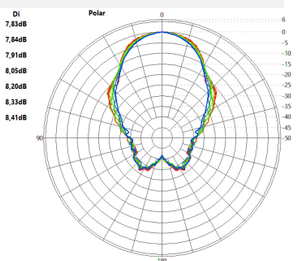
Ang	Freq	Cov	Q	Di
0° V	4120Hz	90°	3,41	5,32dB
15° V	4120Hz	88°	3,39	5,30dB
30° V	4120Hz	86°	3,40	5,31dB
45° V	4120Hz	84°	3,56	5,52dB
60° V	4120Hz	80°	3,84	5,85dB
75° V	4120Hz	74°	4,06	6,09dB
90° V	4120Hz	70°	4,12	6,15dB



Ang	Freq	Cov	Q	Di
0° V	8248Hz	86°	3,82	5,82dB
15° V	8248Hz	82°	3,95	5,96dB
30° V	8248Hz	78°	4,16	6,19dB
45° V	8248Hz	66°	4,47	6,50dB
60° V	8248Hz	62°	4,74	6,76dB
75° V	8248Hz	60°	4,93	6,93dB
90° V	8248Hz	58°	5,02	7,00dB



Ang	Freq	Cov	Q	Di
0° V	18527Hz	86°	6,06	7,83dB
15° V	18527Hz	48°	6,08	7,84dB
30° V	18527Hz	46°	6,18	7,91dB
45° V	18527Hz	44°	6,38	8,05dB
60° V	18527Hz	44°	6,61	8,20dB
75° V	18527Hz	42°	6,81	8,33dB
90° V	18527Hz	42°	6,93	8,41dB

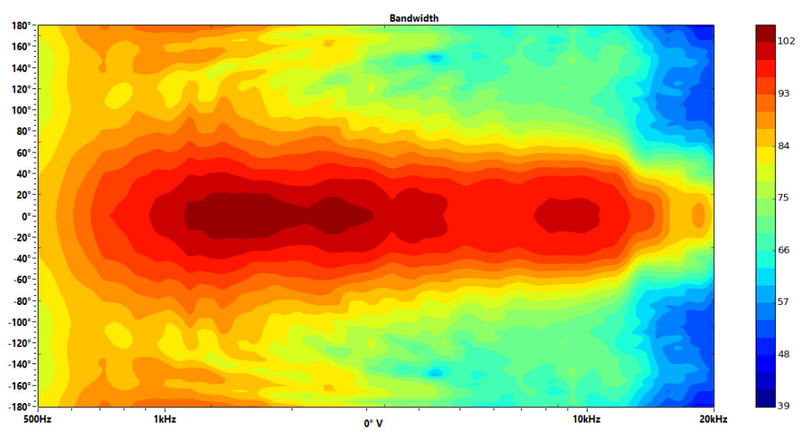


Polar Comparativa Vertical





Application Note AN-0006.
Off-axis response analysis, Driver Oversound DTi-4630, with Ludovico LC-06 horn.
https://www.ludovico.com.br/273/cornetas/corneta-lc-06-preta
http://oversound.com.br/novo/index.php?route=product/product&product_id=91
Conditions:
Pink noise, 2.83V rms, 1m, automated measurement in an anechoic chamber at:
OVERSOUND SPEAKERS AND ELECTRO-ACOUSTIC INDUSTRY.
Horizontal: Quadrant 1 and 2, symmetrically mirrored for quadrants 3 and 4.
Vertical: Quadrant 1, symmetrically mirrored for quadrants 2, 3 and 4.
All original dimensional characteristics of and between components were maintained, no modifications were made to improve performance.
Developer:
Eng. Francisco Monteiro, CREA: 260400014-8.
3/11/2020.



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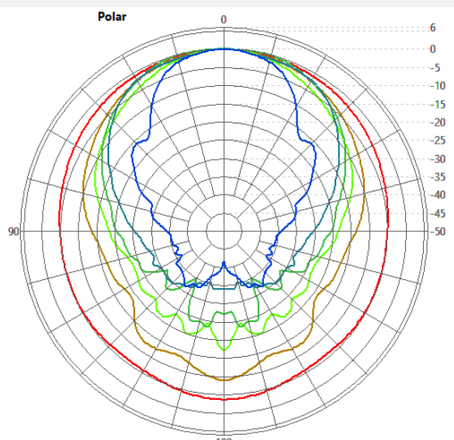
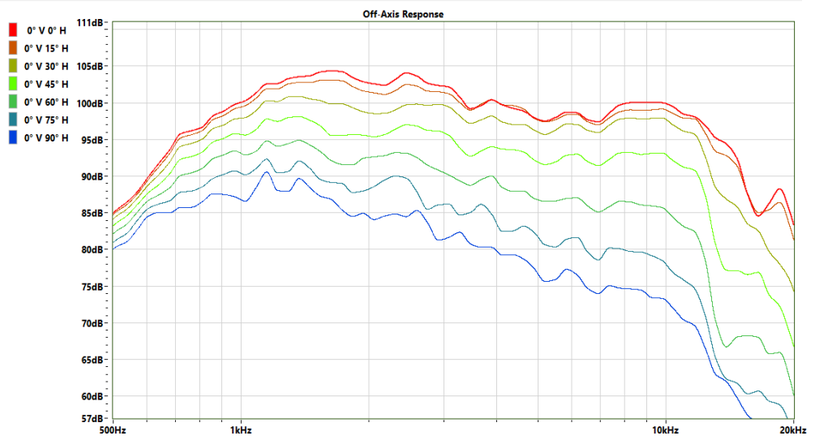
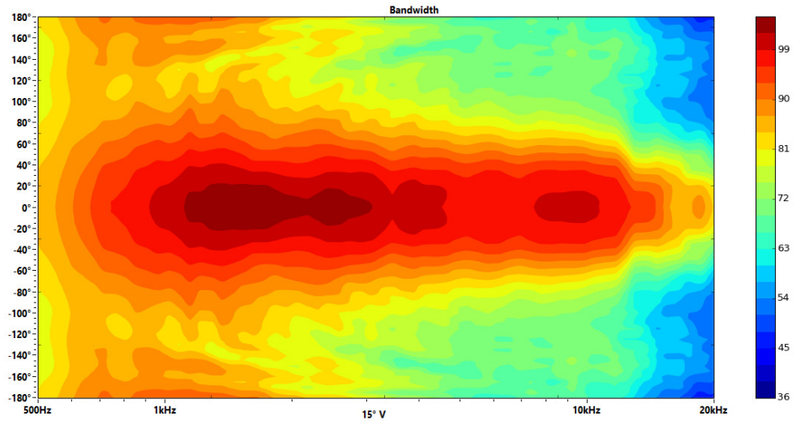




0° Vertical



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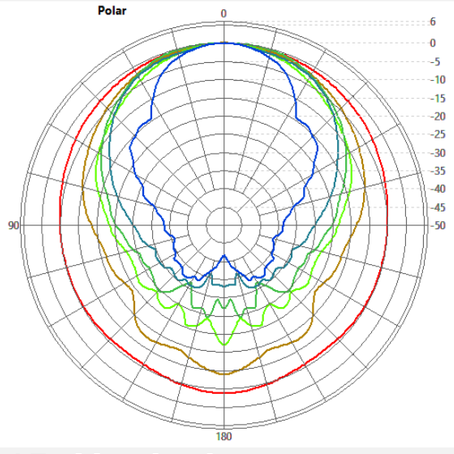
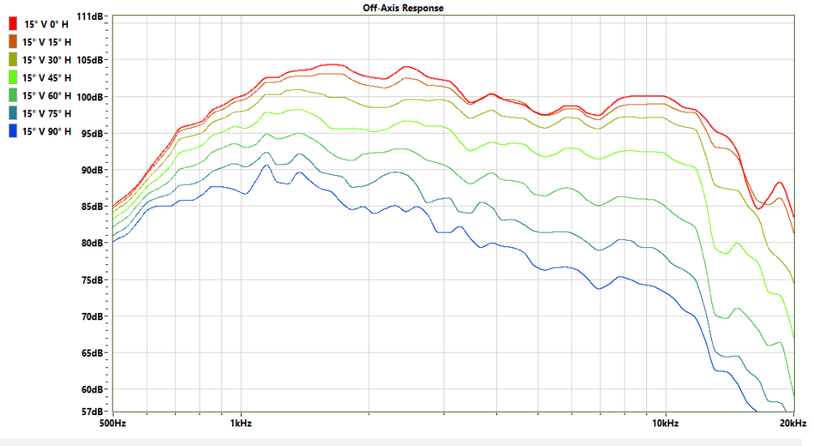
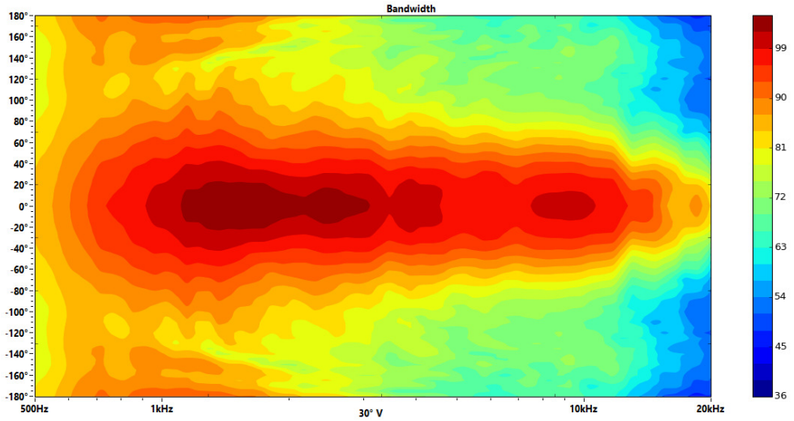
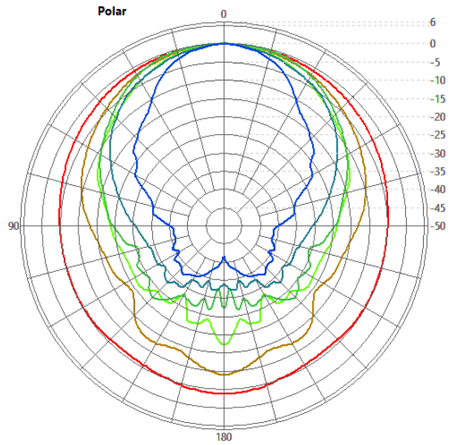


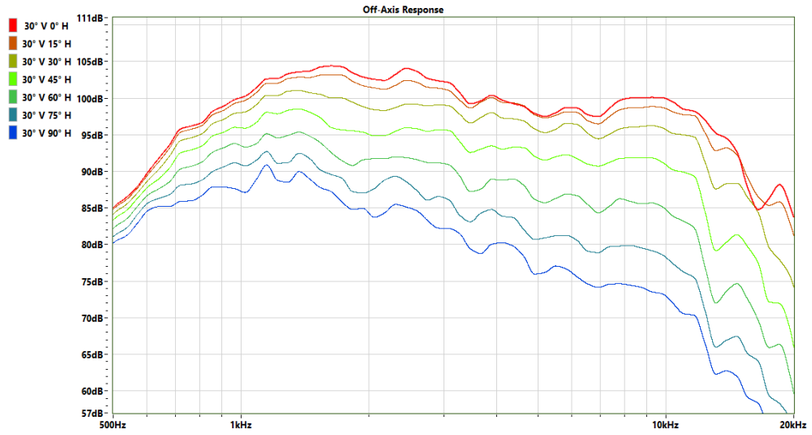


15° Vertical

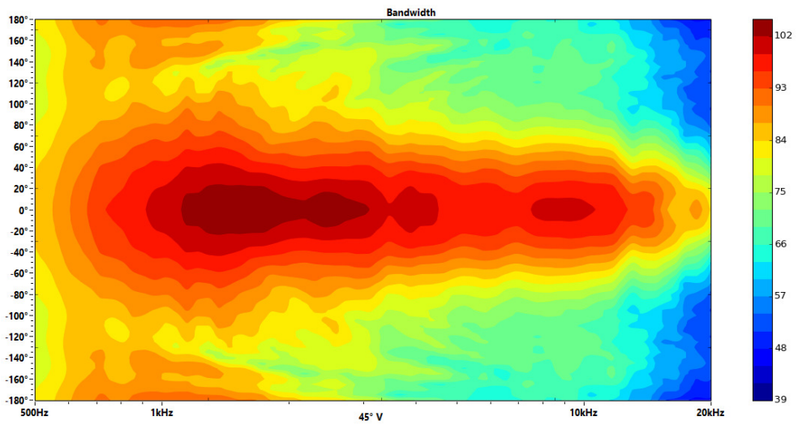


Ang	Freq	Cov	Q	Di
30° V	507Hz	280°	1,48	1,69dB
30° V	1023Hz	110°	2,45	3,89dB
30° V	2054Hz	76°	3,53	5,47dB
30° V	4120Hz	86°	3,40	5,31dB
30° V	8248Hz	78°	4,16	6,19dB
30° V	18527Hz	46°	6,18	7,91dB

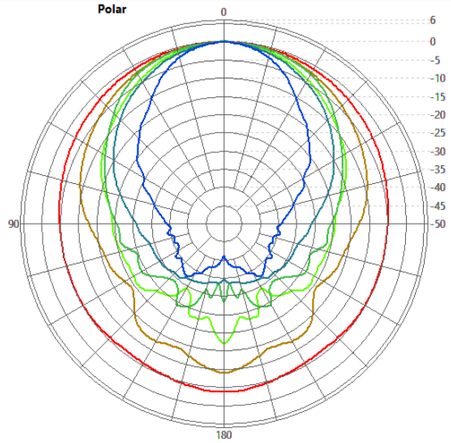


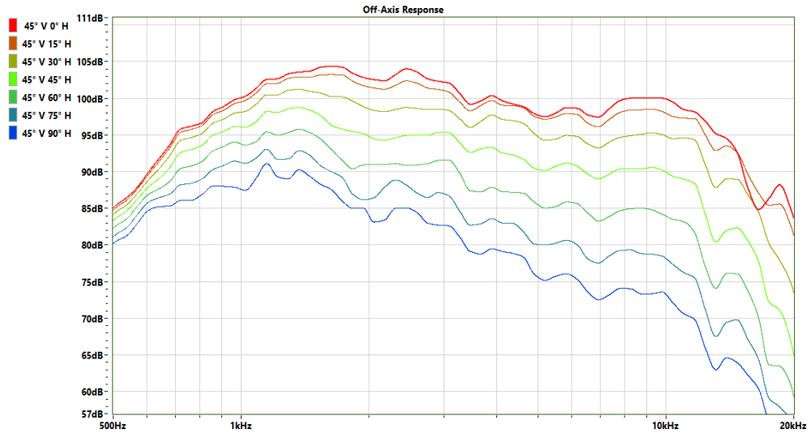


30° Vertical

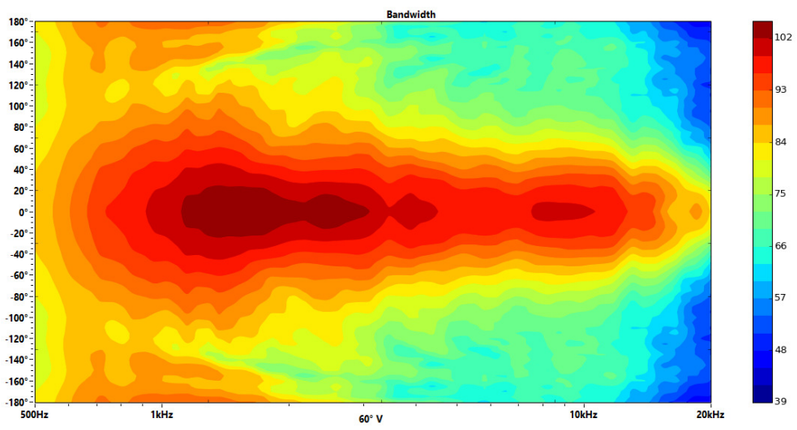


Ang	Freq	Cov	Q	Di
45° V	507Hz	290°	1,47	1,68dB
45° V	1023Hz	112°	2,41	3,83dB
45° V	2054Hz	74°	3,61	5,57dB
45° V	4120Hz	84°	3,56	5,52dB
45° V	8248Hz	66°	4,47	6,50dB
45° V	18527Hz	44°	6,38	8,05dB

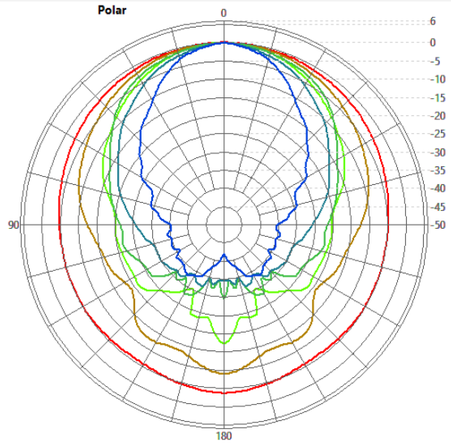


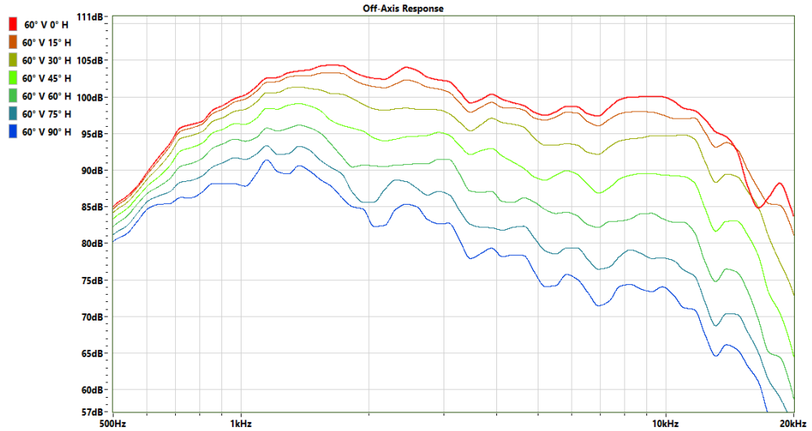


45° Vertical

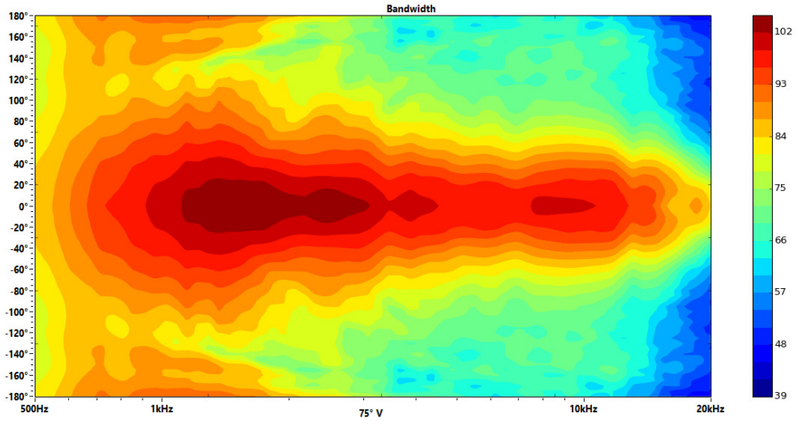


Ang	Freq	Cov	Q	Di
60° V	507Hz	290°	1,47	1,66dB
60° V	1023Hz	116°	2,38	3,76dB
60° V	2054Hz	74°	3,67	5,64dB
60° V	4120Hz	80°	3,84	5,85dB
60° V	8248Hz	62°	4,74	6,76dB
60° V	18527Hz	44°	6,61	8,20dB

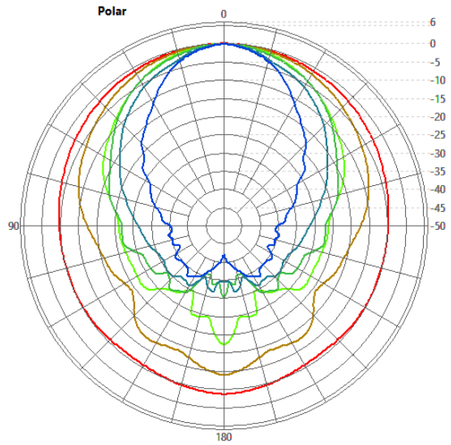


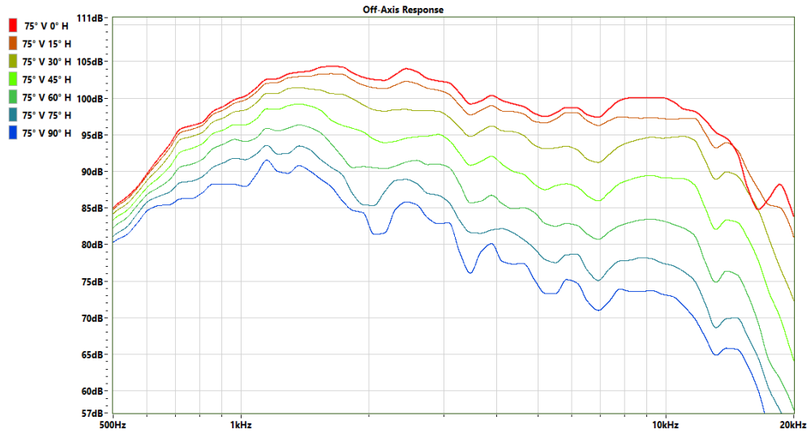


60° Vertical

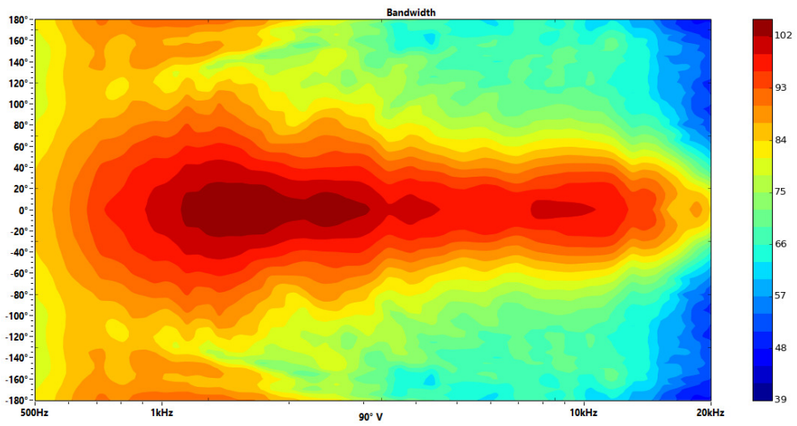


Ang	Freq	Cov	Q	Di
75° V	507Hz	290°	1,47	1,67dB
75° V	1023Hz	118°	2,37	3,74dB
75° V	2054Hz	74°	3,71	5,70dB
75° V	4120Hz	74°	4,06	6,09dB
75° V	8248Hz	60°	4,93	6,93dB
75° V	18527Hz	42°	6,81	8,33dB

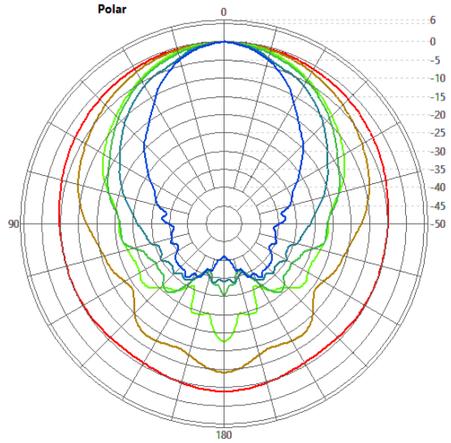


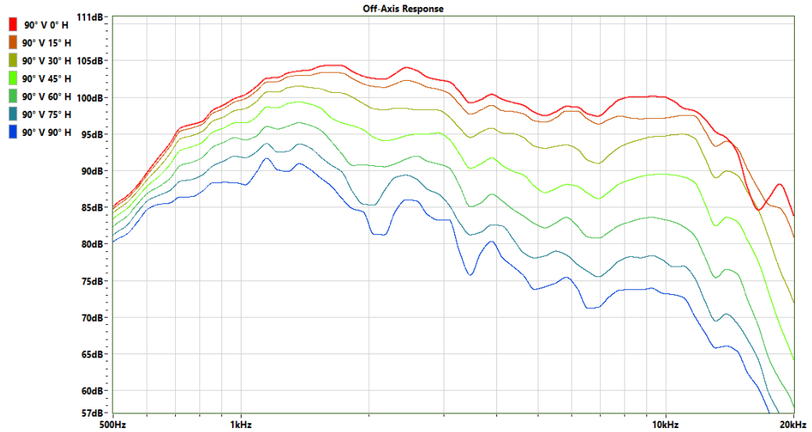


75° Vertical

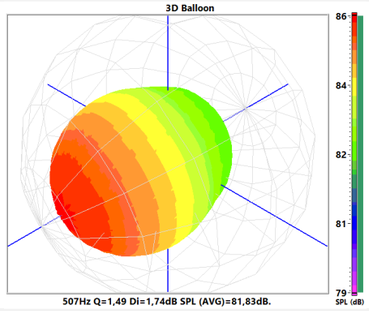


Ang	Freq	Cov	Q	Di
90° V	507Hz	290°	1,47	1,69dB
90° V	1023Hz	118°	2,37	3,74dB
90° V	2054Hz	74°	3,72	5,70dB
90° V	4120Hz	70°	4,12	6,15dB
90° V	8248Hz	58°	5,02	7,00dB
90° V	18527Hz	42°	6,93	8,41dB

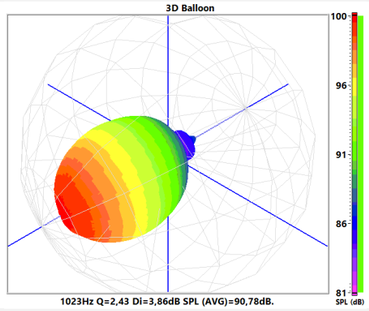




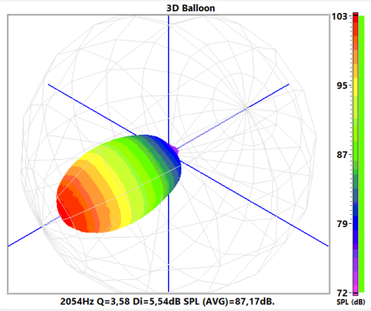
90° Vertical



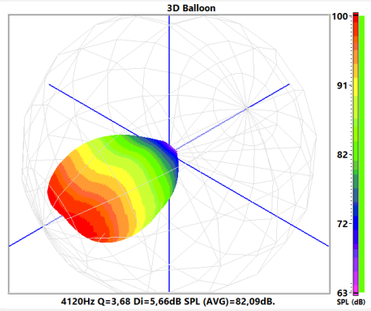
507Hz Q=1,49 Di=1,74dB SPL (AVG)=81,83dB.



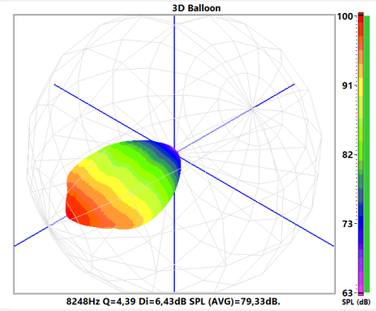
1023Hz Q=2,43 Di=3,86dB SPL (AVG)=90,78dB.



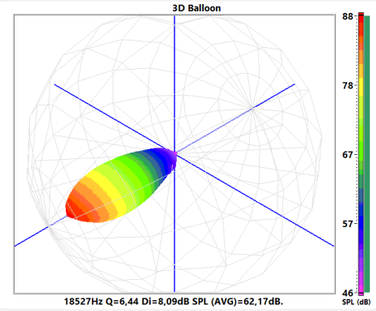
2054Hz Q=3,58 Di=5,54dB SPL (AVG)=87,17dB.



4120Hz Q=3,68 Di=5,66dB SPL (AVG)=82,09dB.



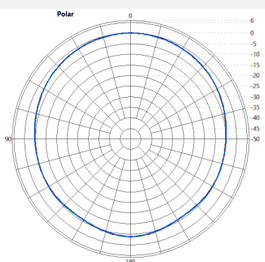
8248Hz Q=4,39 Di=6,43dB SPL (AVG)=79,33dB.



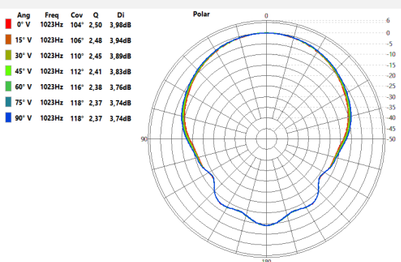
18527Hz Q=6,44 Di=8,09dB SPL (AVG)=62,17dB.

3D Balloon

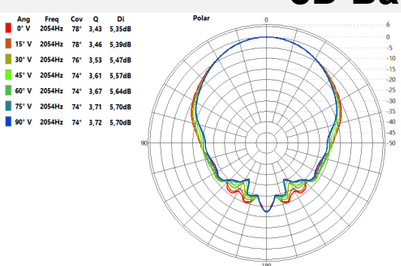
Ang	Freq	Cov	Q	Di
0° V	507Hz	280°	1,47	1,69dB
15° V	507Hz	290°	1,48	1,71dB
30° V	507Hz	280°	1,48	1,69dB
45° V	507Hz	290°	1,47	1,68dB
60° V	507Hz	290°	1,47	1,66dB
75° V	507Hz	290°	1,47	1,67dB
90° V	507Hz	290°	1,47	1,69dB



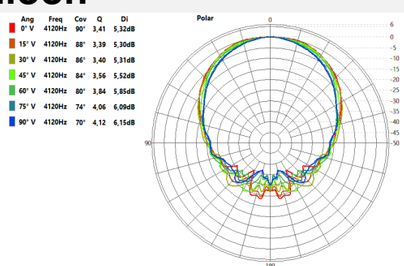
Ang	Freq	Cov	Q	Di
0° V	1023Hz	104°	2,50	3,98dB
15° V	1023Hz	106°	2,48	3,94dB
30° V	1023Hz	110°	2,45	3,89dB
45° V	1023Hz	112°	2,41	3,83dB
60° V	1023Hz	116°	2,38	3,76dB
75° V	1023Hz	118°	2,37	3,74dB
90° V	1023Hz	118°	2,37	3,74dB



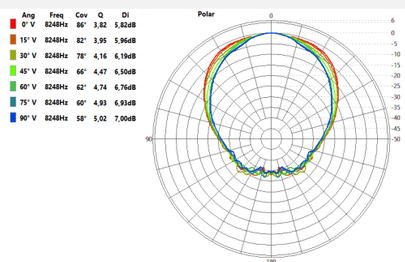
Ang	Freq	Cov	Q	Di
0° V	2054Hz	78°	3,43	5,35dB
15° V	2054Hz	78°	3,46	5,39dB
30° V	2054Hz	76°	3,53	5,47dB
45° V	2054Hz	74°	3,61	5,57dB
60° V	2054Hz	74°	3,67	5,64dB
75° V	2054Hz	74°	3,71	5,70dB
90° V	2054Hz	74°	3,72	5,70dB



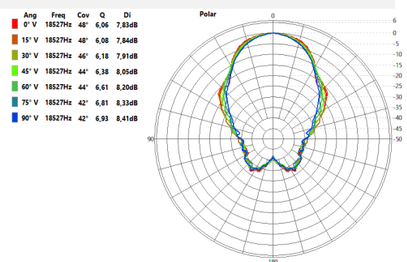
Ang	Freq	Cov	Q	Di
0° V	4120Hz	90°	3,41	5,32dB
15° V	4120Hz	88°	3,39	5,30dB
30° V	4120Hz	86°	3,40	5,31dB
45° V	4120Hz	84°	3,56	5,52dB
60° V	4120Hz	80°	3,84	5,85dB
75° V	4120Hz	74°	4,06	6,09dB
90° V	4120Hz	70°	4,12	6,15dB



Ang	Freq	Cov	Q	Di
0° V	8248Hz	86°	3,82	5,82dB
15° V	8248Hz	82°	3,95	5,96dB
30° V	8248Hz	78°	4,16	6,19dB
45° V	8248Hz	66°	4,47	6,50dB
60° V	8248Hz	62°	4,74	6,76dB
75° V	8248Hz	60°	4,93	6,93dB
90° V	8248Hz	58°	5,02	7,00dB



Ang	Freq	Cov	Q	Di
0° V	18527Hz	86°	6,06	7,83dB
15° V	18527Hz	48°	6,08	7,84dB
30° V	18527Hz	46°	6,18	7,91dB
45° V	18527Hz	44°	6,38	8,05dB
60° V	18527Hz	44°	6,61	8,20dB
75° V	18527Hz	42°	6,81	8,33dB
90° V	18527Hz	42°	6,93	8,41dB



Polar Vertical Comparative