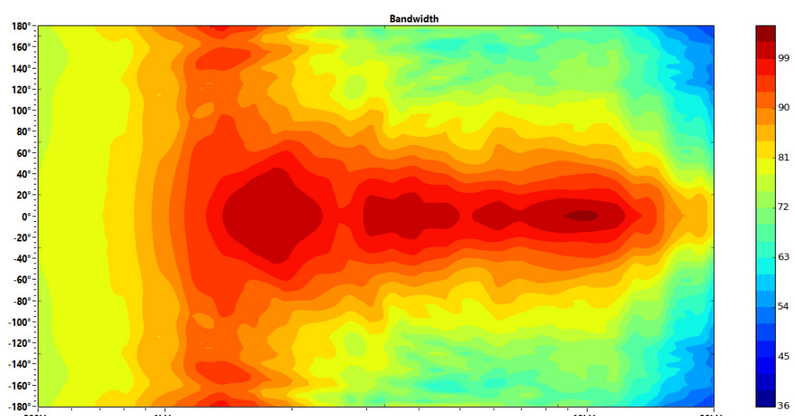
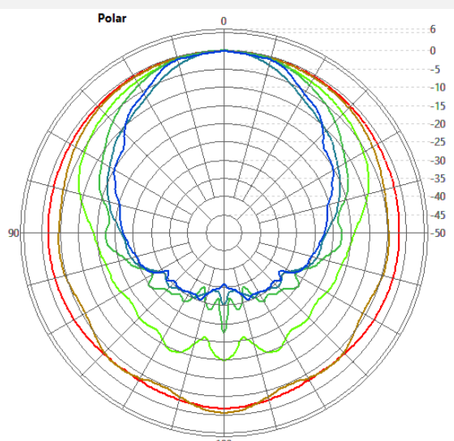


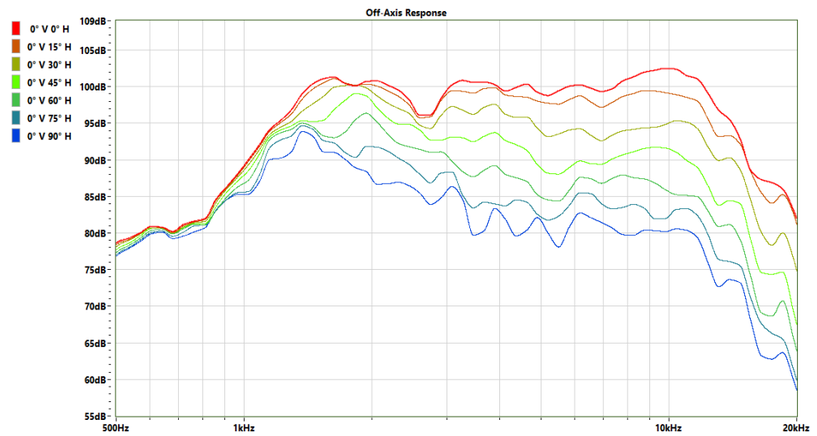


Nota de Aplicação AN-0017.
Analise de resposta fora do eixo, Driver Oversound DTi-4630, com corneta Ludovico LC-150.
https://www.ludovico.com.br/310/cornetas/corneta-lc-150-preta
http://oversound.com.br/novo/index.php?route=product/product&product_id=91
Condições:
Ruído Rosa, 2.83V rms, 1m, medição automatizada 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.
3/11/2020.

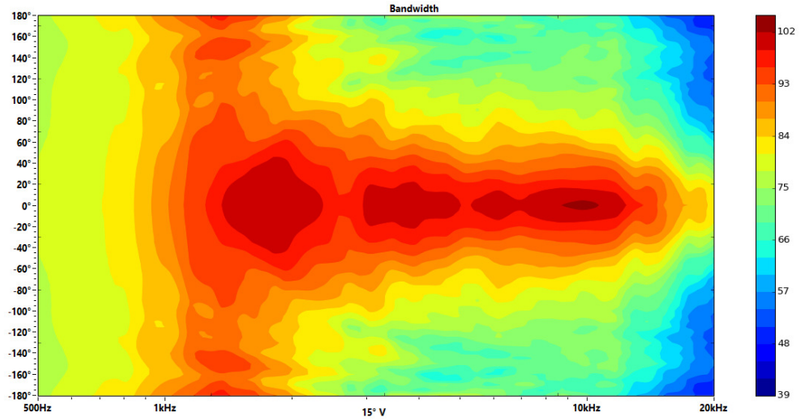


Ang	Freq	Cov	Q	Di
0° V	507Hz	290°	1,21	0,82dB
0° V	1023Hz	240°	1,38	1,41dB
0° V	2054Hz	124°	2,53	4,04dB
0° V	4120Hz	84°	3,51	5,46dB
0° V	8248Hz	52°	4,53	6,56dB
0° V	18527Hz	60°	4,44	6,47dB

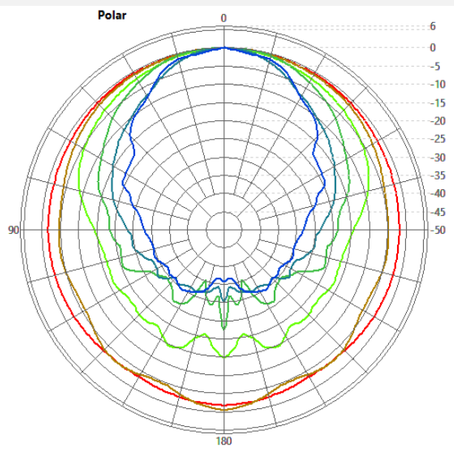


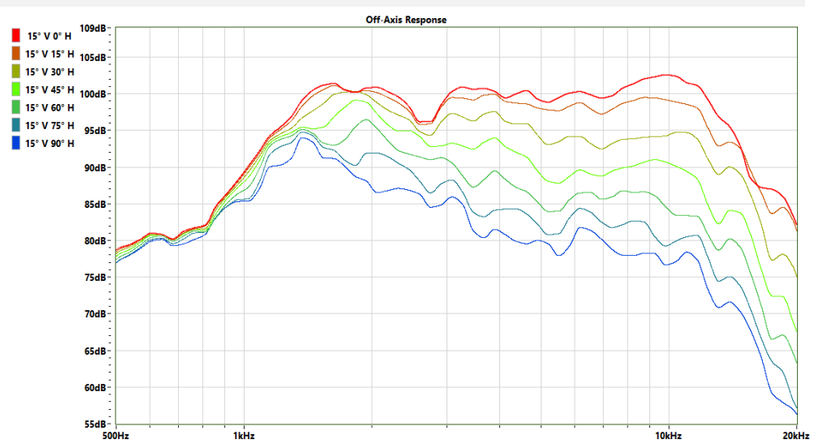


0° Vertical

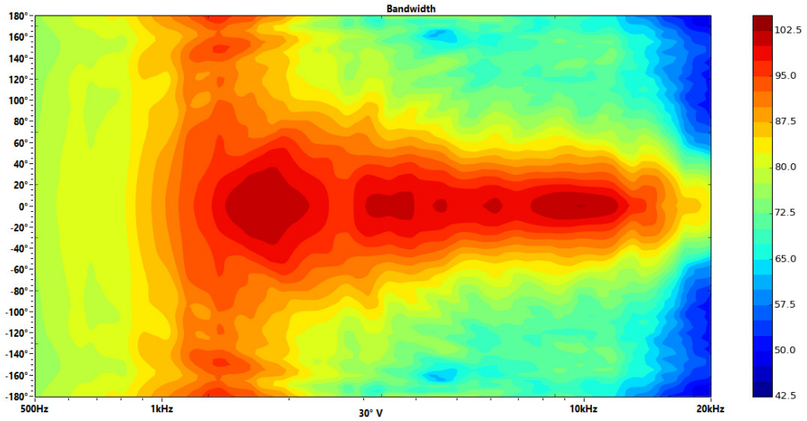


Ang	Freq	Cov	Q	Di
15° V	507Hz	300°	1,21	0,82dB
15° V	1023Hz	242°	1,39	1,44dB
15° V	2054Hz	124°	2,55	4,06dB
15° V	4120Hz	86°	3,50	5,44dB
15° V	8248Hz	52°	4,77	6,79dB
15° V	18527Hz	52°	5,28	7,23dB

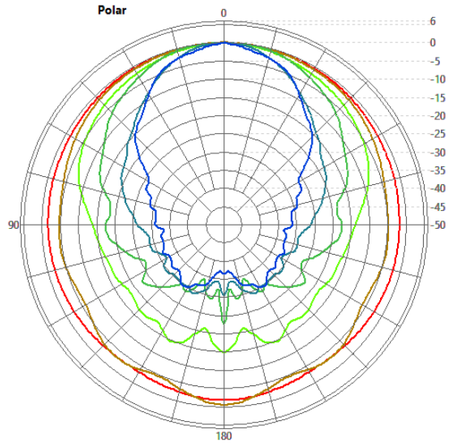


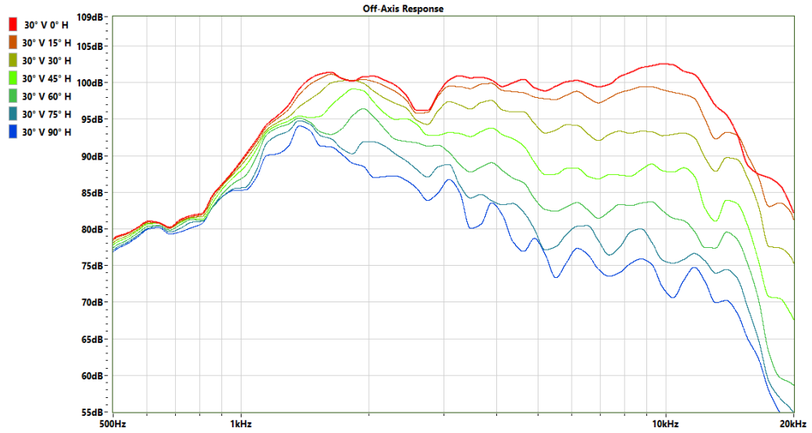


15° Vertical

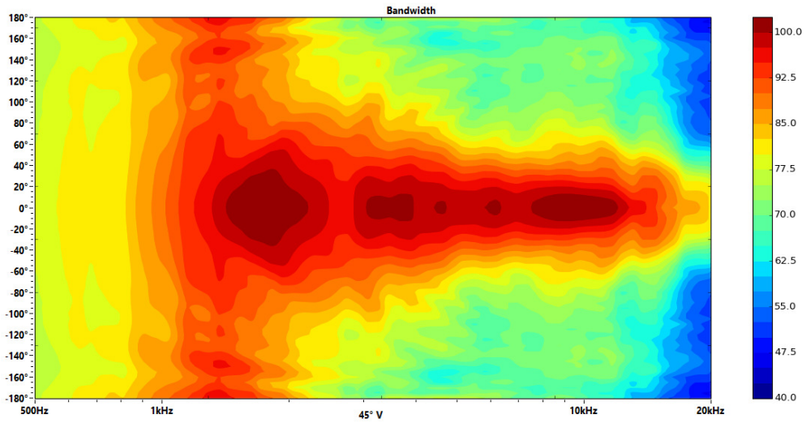


Ang	Freq	Cov	Q	Di
30° V	507Hz	290°	1,20	0,80dB
30° V	1023Hz	242°	1,39	1,43dB
30° V	2054Hz	126°	2,54	4,04dB
30° V	4120Hz	86°	3,50	5,44dB
30° V	8248Hz	50°	5,30	7,24dB
30° V	18527Hz	52°	6,00	7,78dB

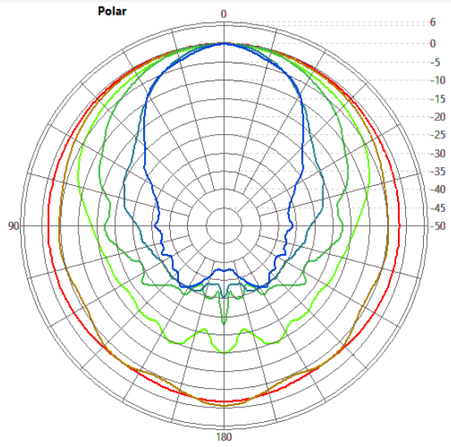


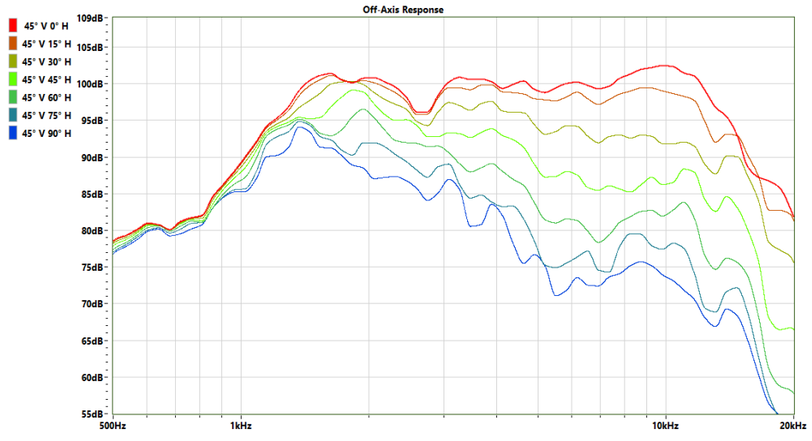


30° Vertical

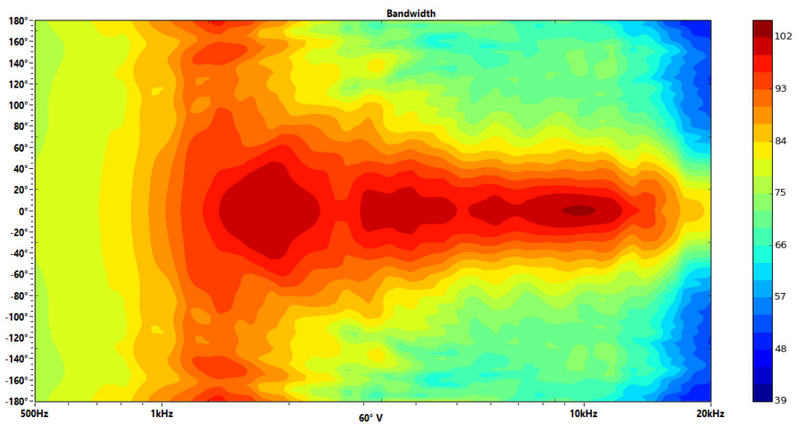


Ang	Freq	Cov	Q	Di
45° V	507Hz	290°	1,20	0,78dB
45° V	1023Hz	230°	1,39	1,42dB
45° V	2054Hz	126°	2,52	4,02dB
45° V	4120Hz	86°	3,47	5,40dB
45° V	8248Hz	50°	5,44	7,36dB
45° V	18527Hz	50°	6,30	7,99dB

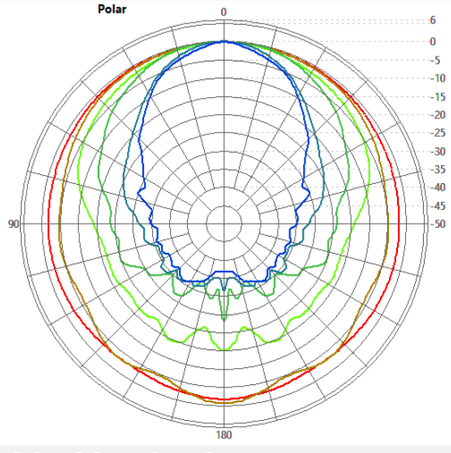


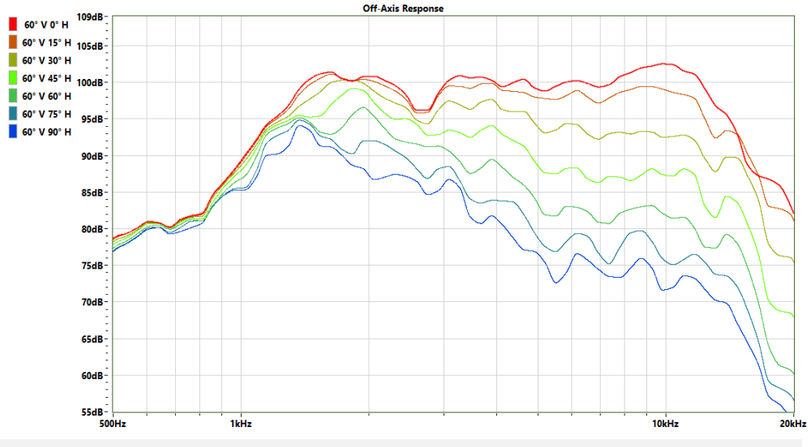


45° Vertical

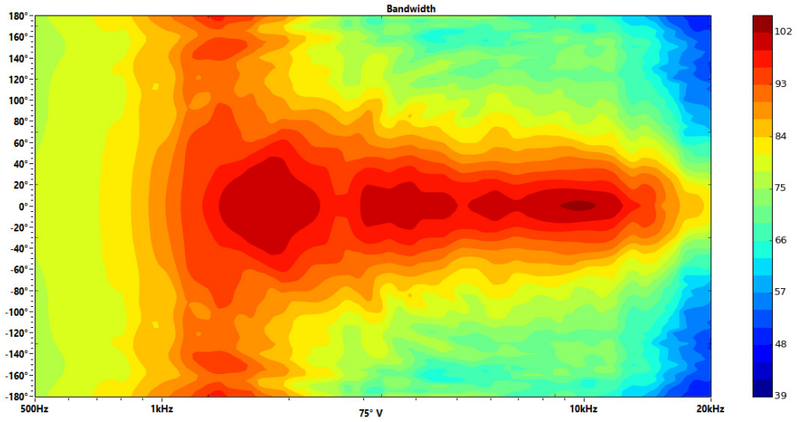


Ang	Freq	Cov	Q	Di
60° V	507Hz	290°	1,21	0,82dB
60° V	1023Hz	240°	1,39	1,44dB
60° V	2054Hz	126°	2,53	4,03dB
60° V	4120Hz	86°	3,48	5,42dB
60° V	8248Hz	50°	5,36	7,29dB
60° V	18527Hz	46°	6,29	7,99dB

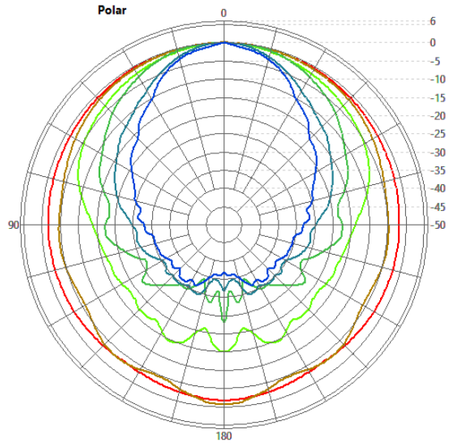


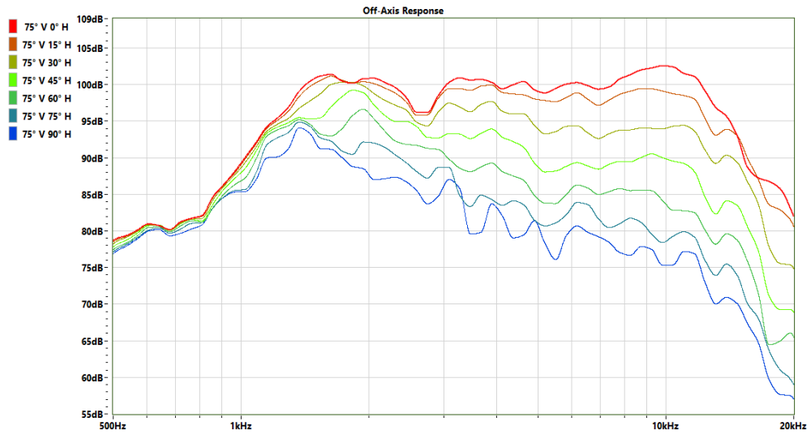


60° Vertical

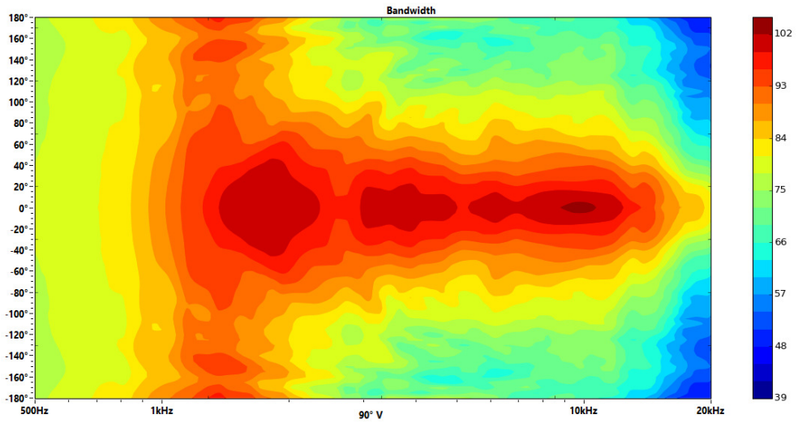


Ang	Freq	Cov	Q	Di
75° V	507Hz	290°	1,21	0,81dB
75° V	1023Hz	240°	1,39	1,42dB
75° V	2054Hz	126°	2,54	4,05dB
75° V	4120Hz	86°	3,49	5,43dB
75° V	8248Hz	52°	4,89	6,89dB
75° V	18527Hz	46°	6,03	7,80dB

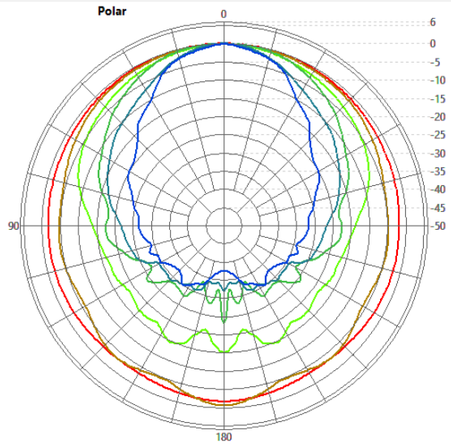


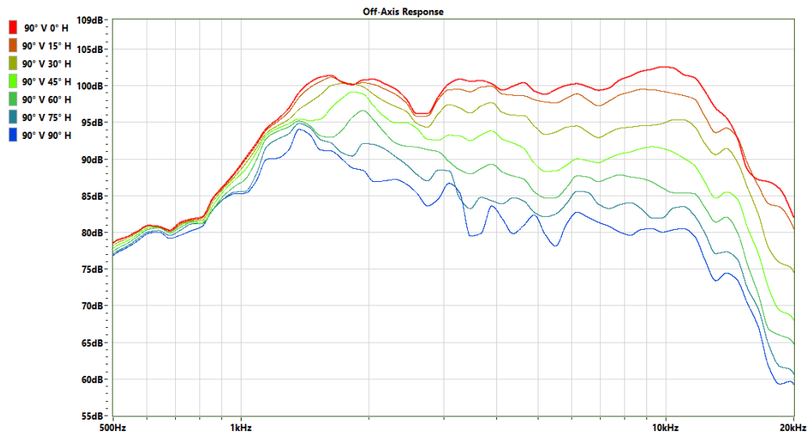


75° Vertical

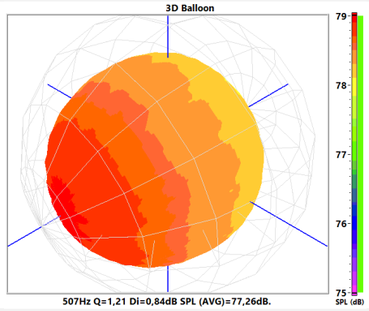


Ang	Freq	Cov	Q	Di
90° V	507Hz	290°	1,20	0,80dB
90° V	1023Hz	236°	1,40	1,45dB
90° V	2054Hz	126°	2,55	4,06dB
90° V	4120Hz	84°	3,48	5,42dB
90° V	8248Hz	54°	4,51	6,54dB
90° V	18527Hz	48°	5,82	7,65dB

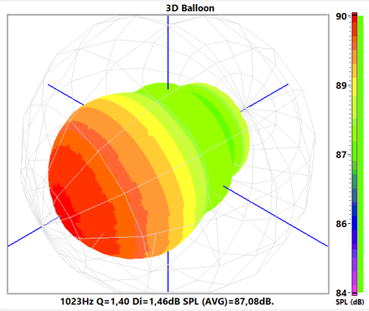




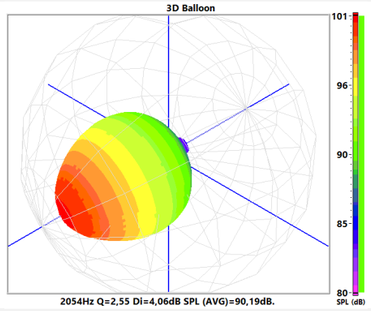
90° Vertical



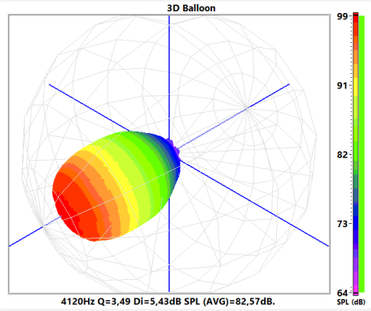
507Hz Q=1,21 Di=0,84dB SPL (AVG)=77,26dB.



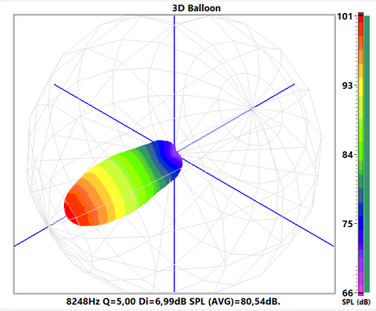
1023Hz Q=1,40 Di=1,46dB SPL (AVG)=87,08dB.



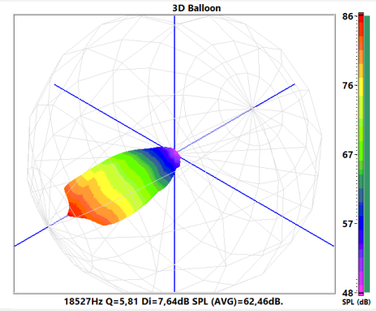
2054Hz Q=2,55 Di=4,06dB SPL (AVG)=90,19dB.



4120Hz Q=3,49 Di=5,43dB SPL (AVG)=82,57dB.



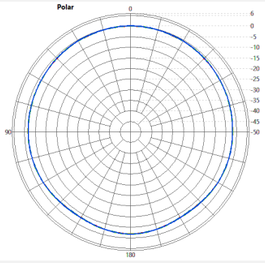
8248Hz Q=5,00 Di=6,99dB SPL (AVG)=80,54dB.



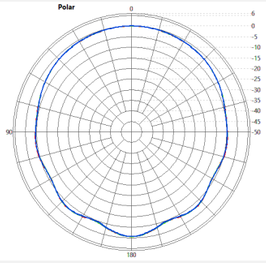
18527Hz Q=5,81 Di=7,64dB SPL (AVG)=62,46dB.

3D Balloon

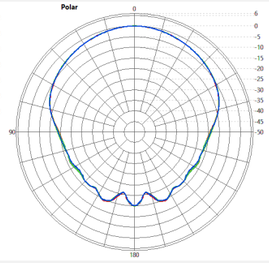
Ang	Freq	Cov	Q	Di
0° V	507Hz	290°	1,21	0,82dB
15° V	507Hz	300°	1,21	0,82dB
30° V	507Hz	290°	1,20	0,80dB
45° V	507Hz	290°	1,20	0,78dB
60° V	507Hz	290°	1,21	0,82dB
75° V	507Hz	290°	1,21	0,81dB
90° V	507Hz	290°	1,20	0,80dB



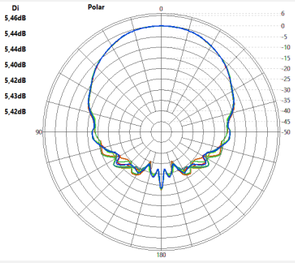
Ang	Freq	Cov	Q	Di
0° V	1023Hz	240°	1,38	1,41dB
15° V	1023Hz	242°	1,39	1,44dB
30° V	1023Hz	242°	1,39	1,43dB
45° V	1023Hz	230°	1,39	1,42dB
60° V	1023Hz	240°	1,39	1,44dB
75° V	1023Hz	240°	1,39	1,42dB
90° V	1023Hz	236°	1,40	1,45dB



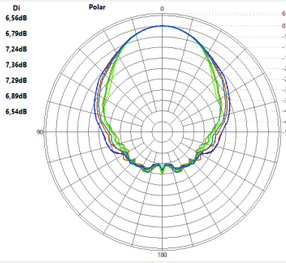
Ang	Freq	Cov	Q	Di
0° V	2054Hz	124°	2,53	4,04dB
15° V	2054Hz	124°	2,55	4,06dB
30° V	2054Hz	126°	2,54	4,04dB
45° V	2054Hz	126°	2,52	4,02dB
60° V	2054Hz	126°	2,53	4,03dB
75° V	2054Hz	126°	2,54	4,05dB
90° V	2054Hz	126°	2,55	4,06dB



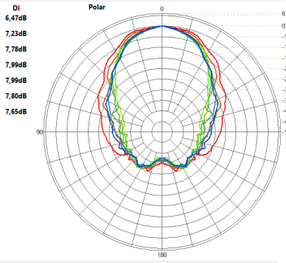
Ang	Freq	Cov	Q	Di
0° V	4120Hz	84°	3,51	5,46dB
15° V	4120Hz	86°	3,50	5,44dB
30° V	4120Hz	86°	3,50	5,44dB
45° V	4120Hz	86°	3,47	5,40dB
60° V	4120Hz	86°	3,48	5,42dB
75° V	4120Hz	86°	3,49	5,43dB
90° V	4120Hz	84°	3,48	5,42dB



Ang	Freq	Cov	Q	Di
0° V	8248Hz	52°	4,53	6,56dB
15° V	8248Hz	52°	4,77	6,79dB
30° V	8248Hz	50°	5,30	7,24dB
45° V	8248Hz	50°	5,44	7,36dB
60° V	8248Hz	50°	5,36	7,29dB
75° V	8248Hz	52°	4,89	6,89dB
90° V	8248Hz	54°	4,51	6,54dB



Ang	Freq	Cov	Q	Di
0° V	18527Hz	60°	4,44	6,47dB
15° V	18527Hz	52°	5,28	7,23dB
30° V	18527Hz	52°	6,00	7,78dB
45° V	18527Hz	50°	6,30	7,99dB
60° V	18527Hz	46°	6,29	7,99dB
75° V	18527Hz	46°	6,03	7,80dB
90° V	18527Hz	48°	5,82	7,65dB

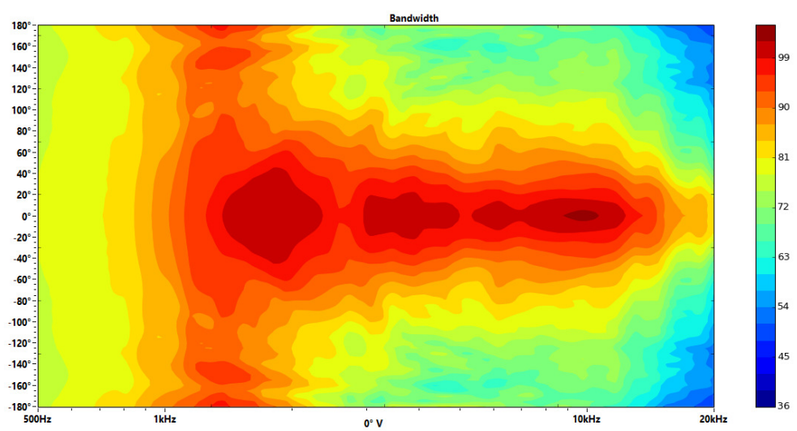


Polar Comparativa Vertical





Application Note AN-0017.
Off-axis response analysis, Driver Oversound DTi-4630, with Ludovico LC-150 horn.
https://www.ludovico.com.br/310/cornetas/corneta-lc-150-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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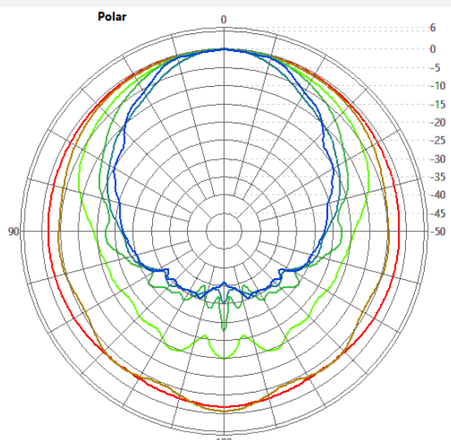
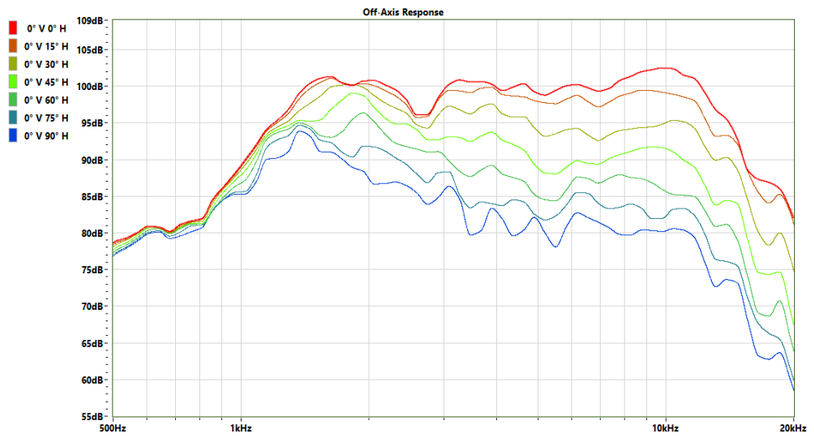
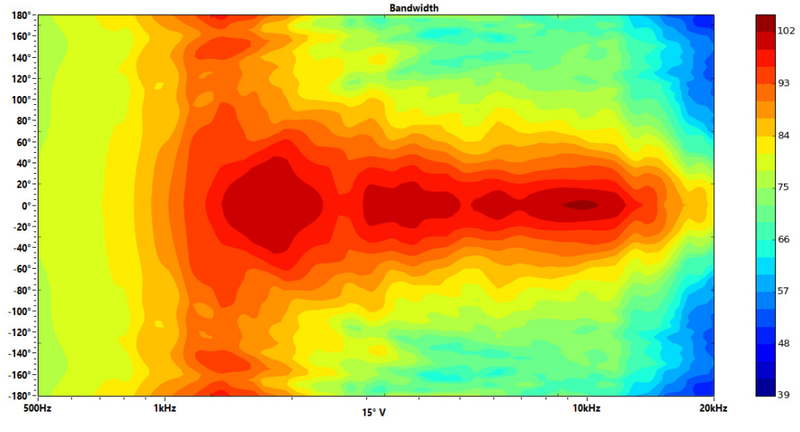




0° Vertical



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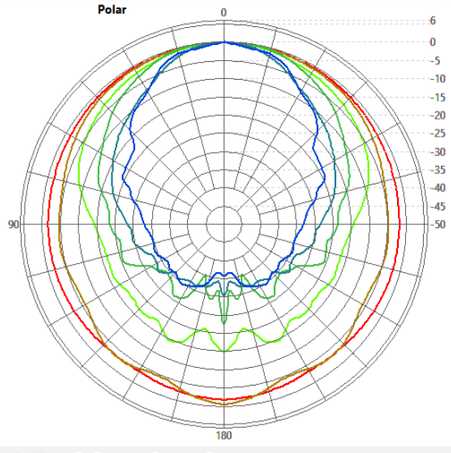
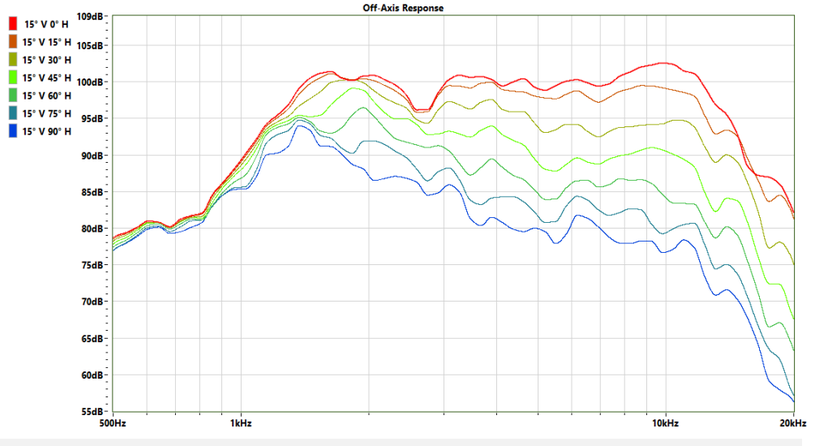
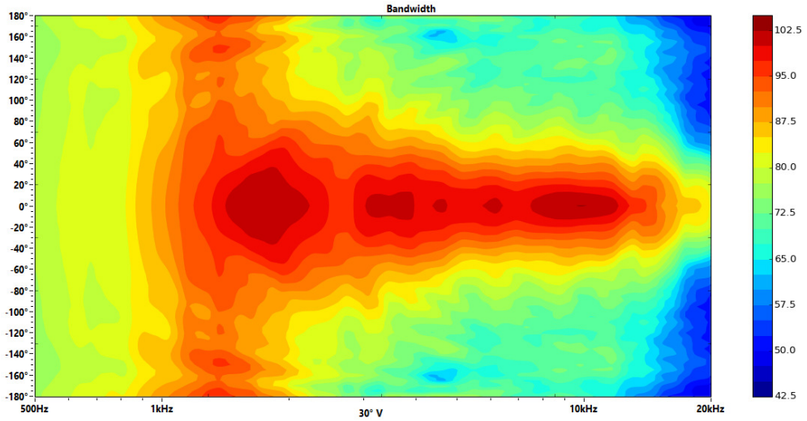
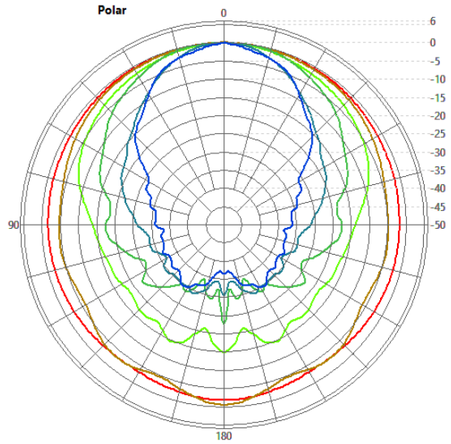


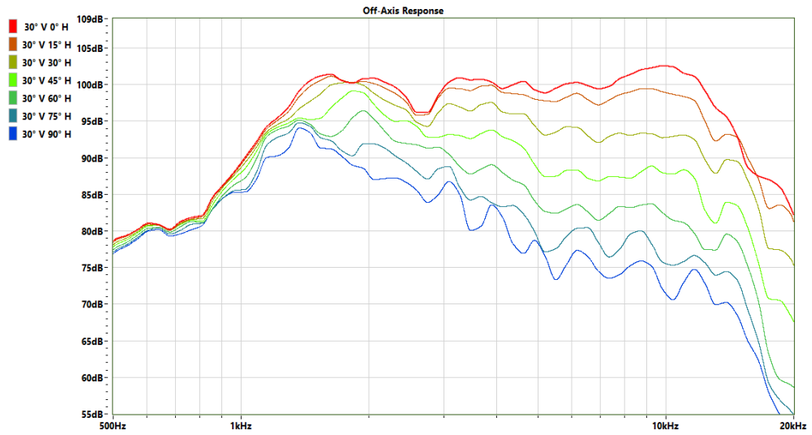


15° Vertical

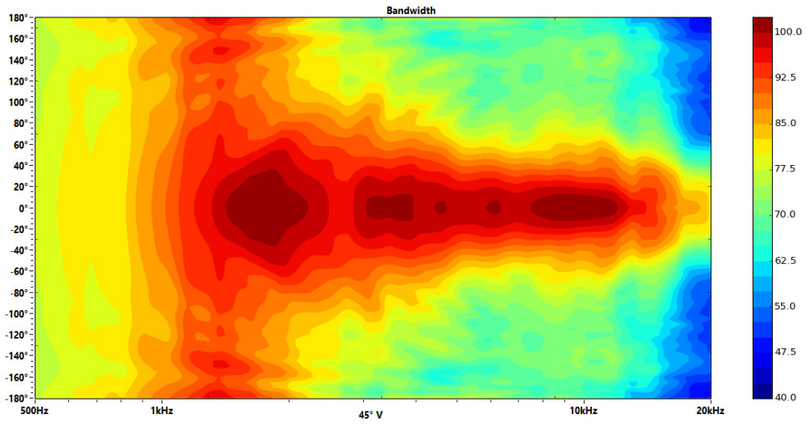


Ang	Freq	Cov	Q	Di
30° V	507Hz	290°	1,20	0,80dB
30° V	1023Hz	242°	1,39	1,43dB
30° V	2054Hz	126°	2,54	4,04dB
30° V	4120Hz	86°	3,50	5,44dB
30° V	8248Hz	50°	5,30	7,24dB
30° V	18527Hz	52°	6,00	7,78dB

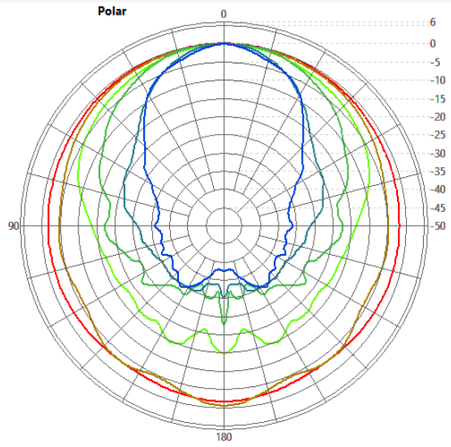


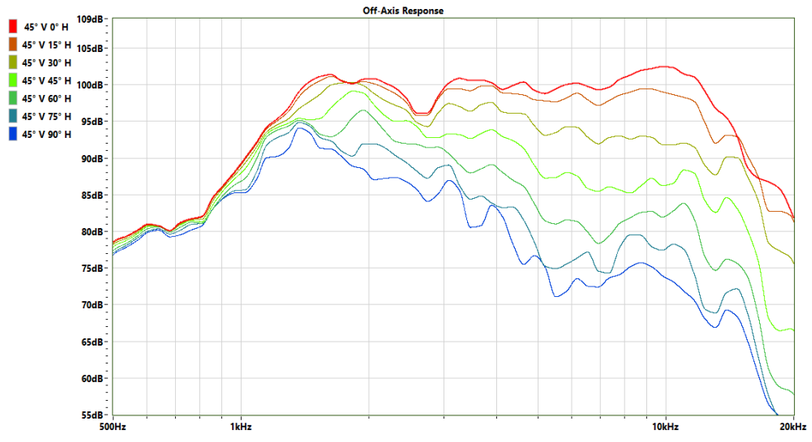


30° Vertical

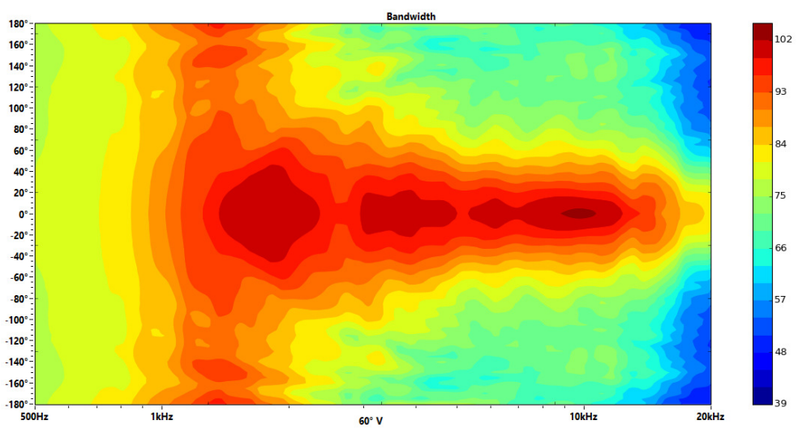


Ang	Freq	Cov	Q	Di
45° V	507Hz	290°	1,20	0,78dB
45° V	1023Hz	230°	1,39	1,42dB
45° V	2054Hz	126°	2,52	4,02dB
45° V	4120Hz	86°	3,47	5,40dB
45° V	8248Hz	50°	5,44	7,36dB
45° V	18527Hz	50°	6,30	7,99dB

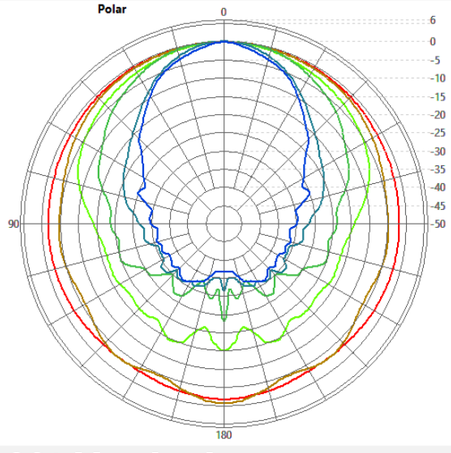


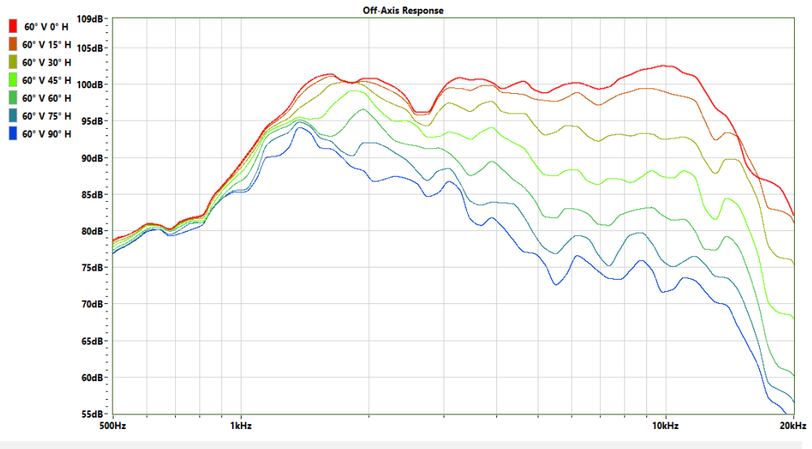


45° Vertical

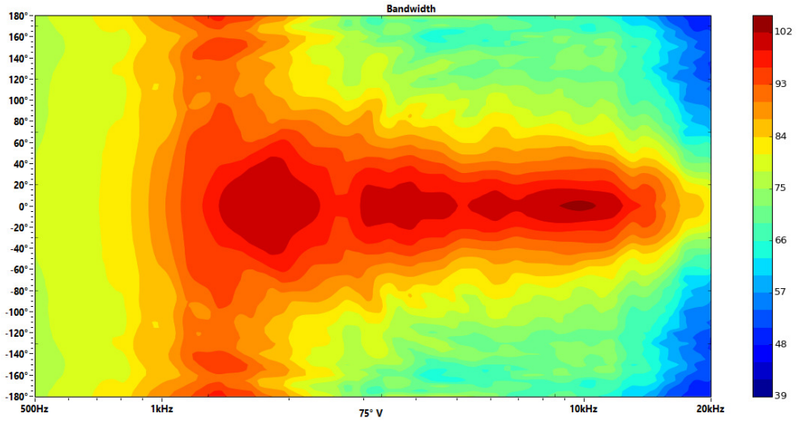


Ang	Freq	Cov	Q	Di
60° V	507Hz	290°	1,21	0,82dB
60° V	1023Hz	240°	1,39	1,44dB
60° V	2054Hz	126°	2,53	4,03dB
60° V	4120Hz	86°	3,48	5,42dB
60° V	8248Hz	50°	5,36	7,29dB
60° V	18527Hz	46°	6,29	7,99dB

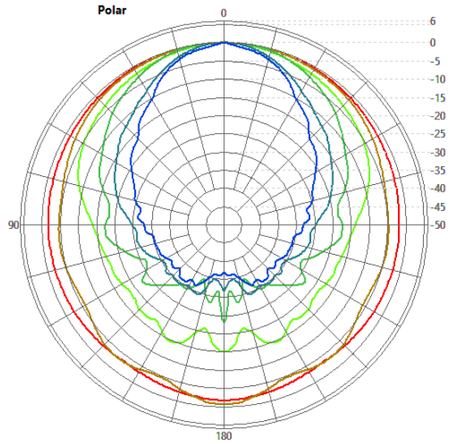




60° Vertical

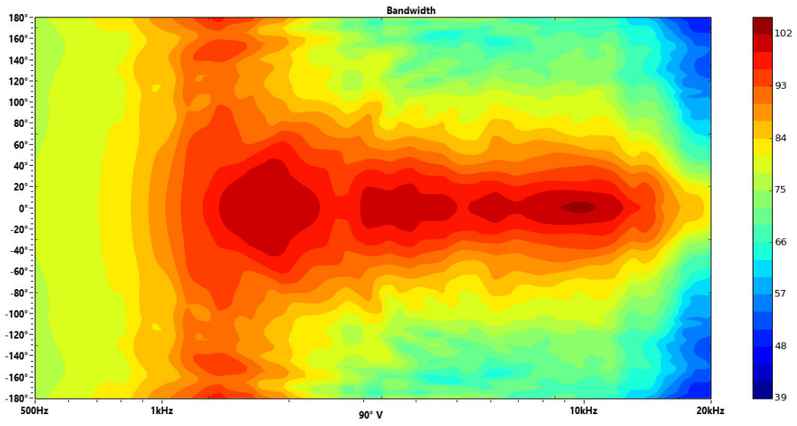


Ang	Freq	Cov	Q	Di
75° V	507Hz	290°	1,21	0,81dB
75° V	1023Hz	240°	1,39	1,42dB
75° V	2054Hz	126°	2,54	4,05dB
75° V	4120Hz	86°	3,49	5,43dB
75° V	8248Hz	52°	4,89	6,89dB
75° V	18527Hz	46°	6,03	7,80dB

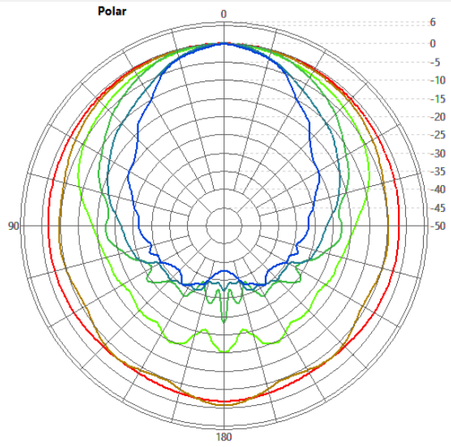


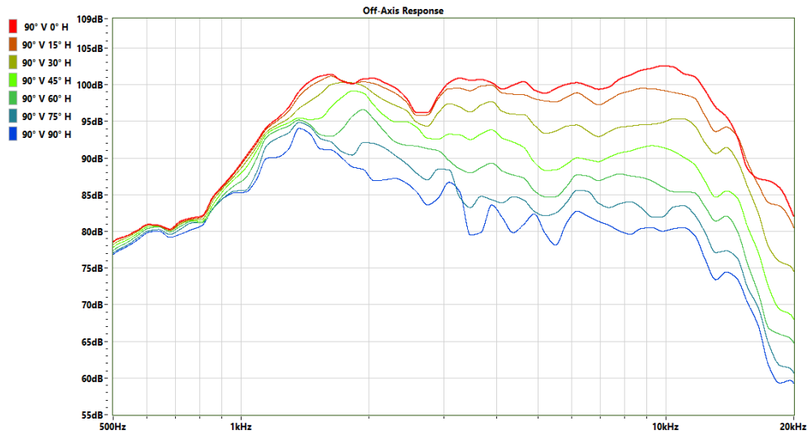


75° Vertical

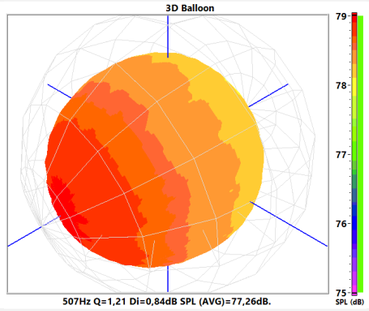


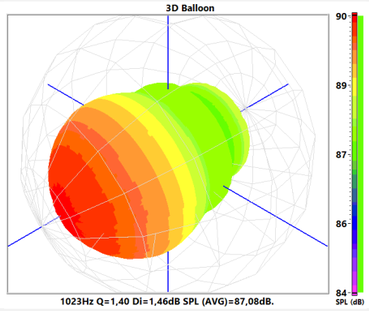
Ang	Freq	Cov	Q	Di
90° V	507Hz	290°	1,20	0,80dB
90° V	1023Hz	236°	1,40	1,45dB
90° V	2054Hz	126°	2,55	4,06dB
90° V	4120Hz	84°	3,48	5,42dB
90° V	8248Hz	54°	4,51	6,54dB
90° V	18527Hz	48°	5,82	7,65dB

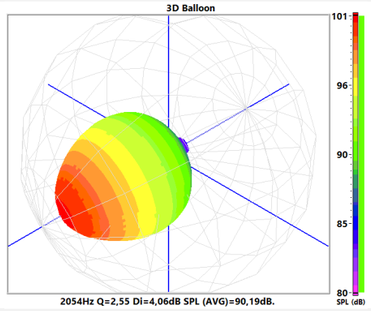


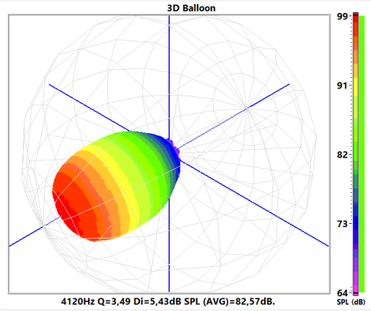


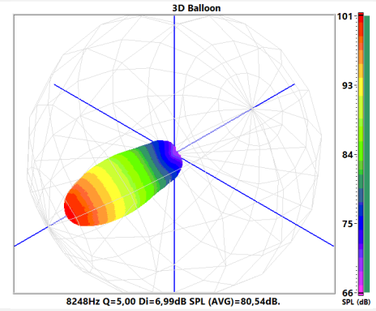
90° Vertical

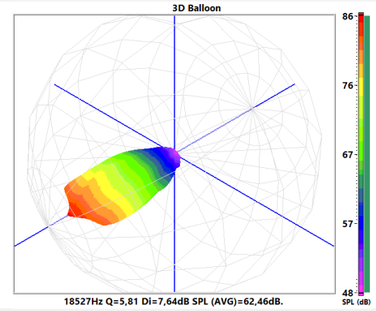




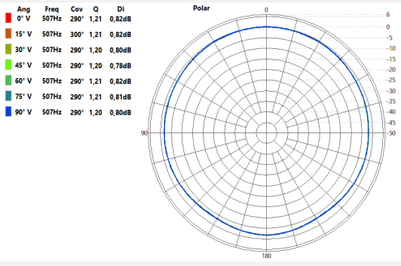


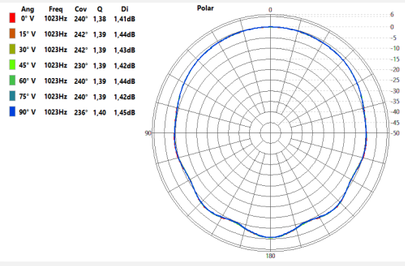


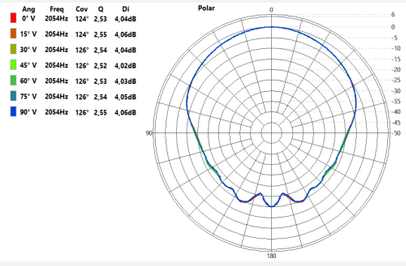


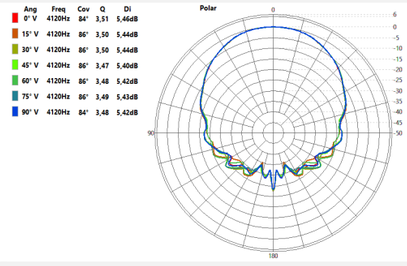


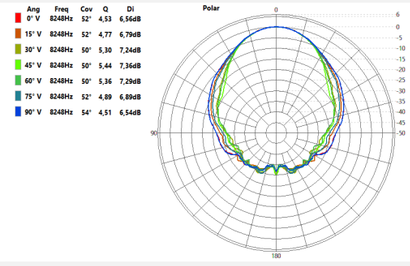
3D Balloon

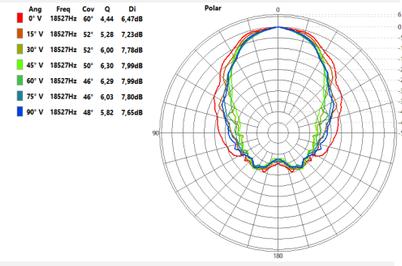












Polar Vertical Comparative