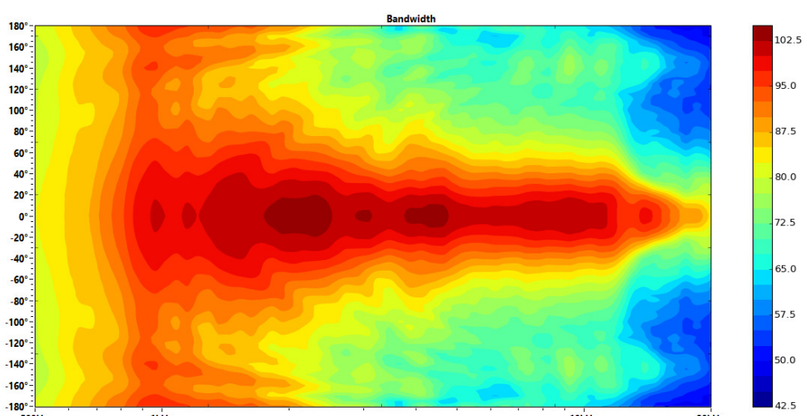
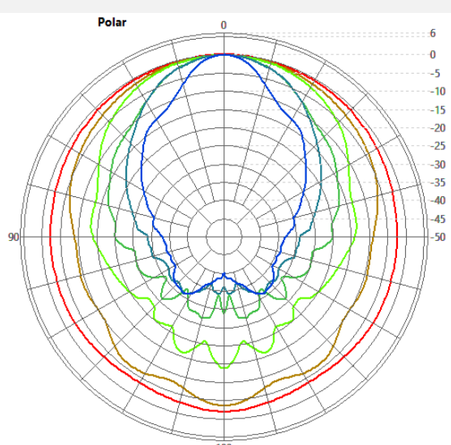
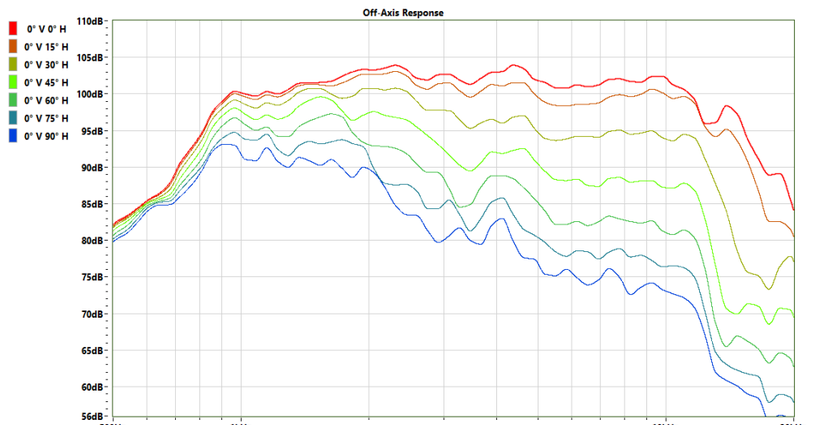


Nota de Aplicação AN-0012.
Analise de resposta fora do eixo, Driver Oversound DTi-4630, com corneta Ludovico LC-14.50.
https://www.ludovico.com.br/308/cornetas/corneta-lc-1450-preta
http://oversound.com.br/novo/index.php?route=product/product&product_id=91
Condições:
Ruído Rosa, 2.83V rms, 1m, medição 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.

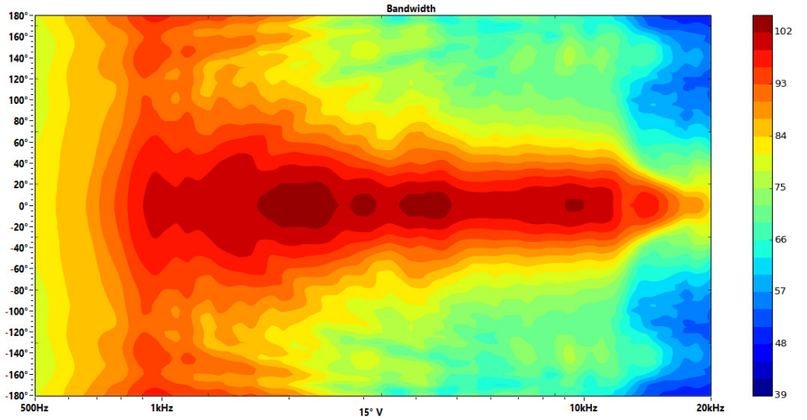


Ang	Freq	Cov	Q	Di
0° V	507Hz	300°	1,24	0,94dB
0° V	1023Hz	148°	1,76	2,46dB
0° V	2054Hz	92°	2,98	4,74dB
0° V	4120Hz	54°	4,51	6,54dB
0° V	8248Hz	54°	5,28	7,22dB
0° V	18527Hz	28°	7,73	8,88dB

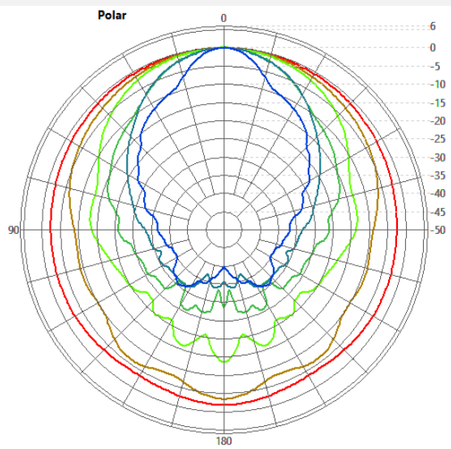


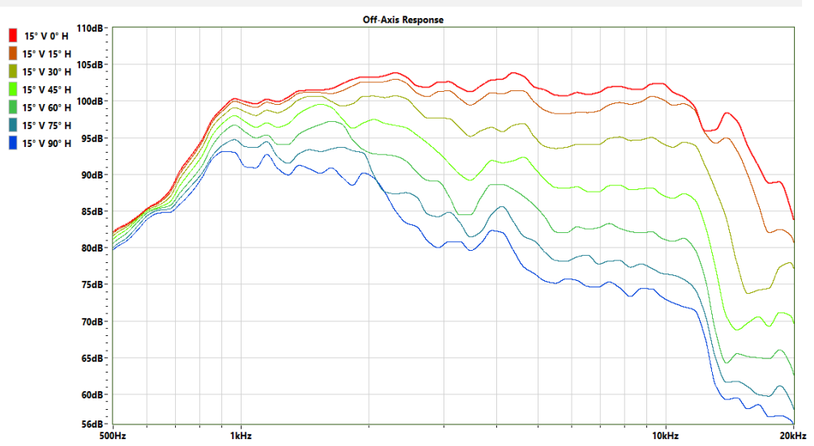


0° Vertical

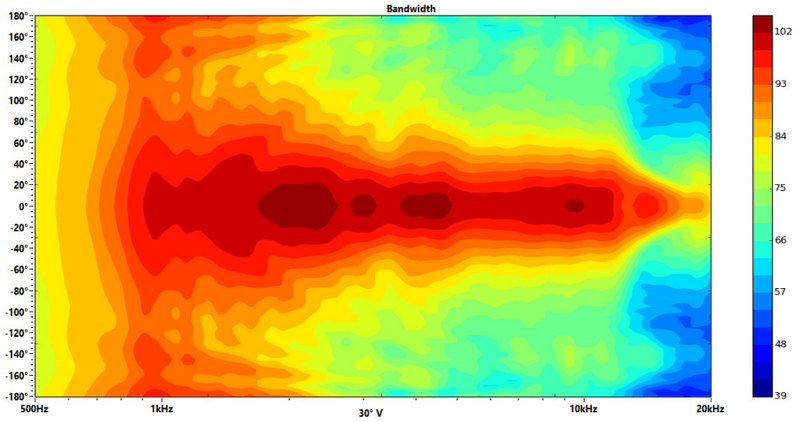


Ang	Freq	Cov	Q	Di
15° V	507Hz	290°	1,25	0,95dB
15° V	1023Hz	148°	1,75	2,43dB
15° V	2054Hz	92°	2,98	4,74dB
15° V	4120Hz	54°	4,53	6,56dB
15° V	8248Hz	54°	5,28	7,22dB
15° V	18527Hz	28°	7,40	8,69dB

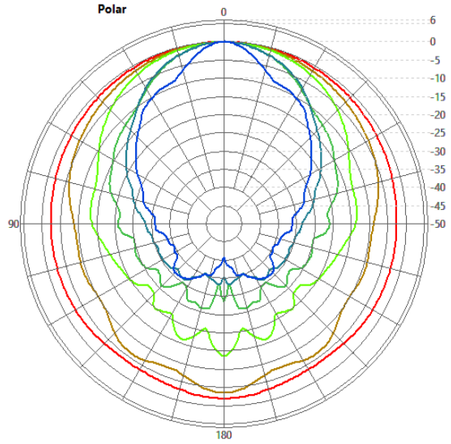


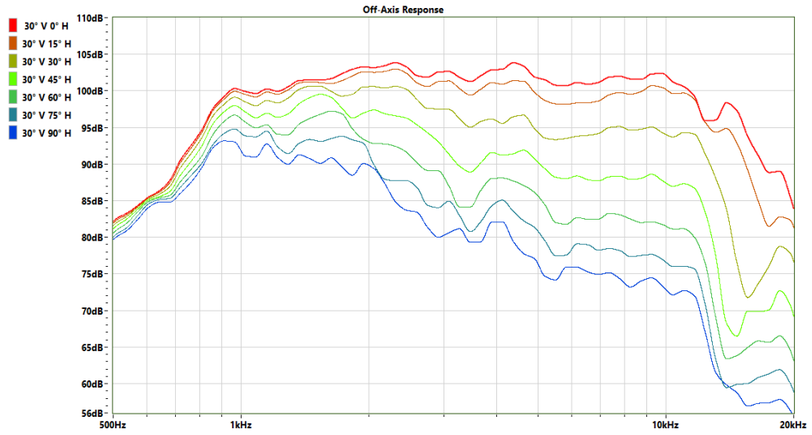


15° Vertical

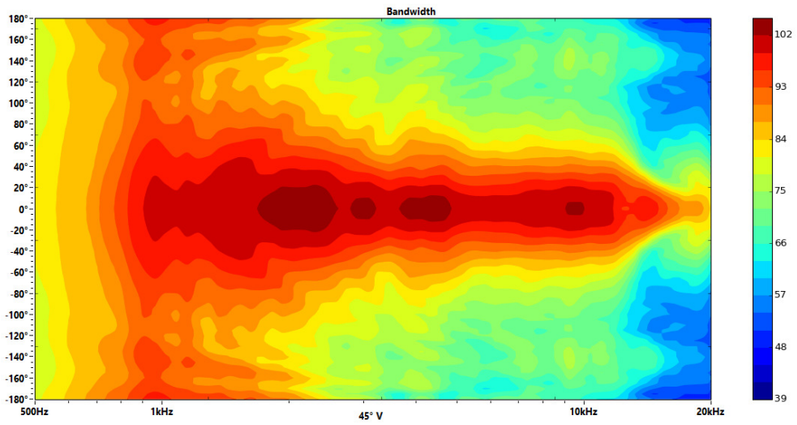


Ang	Freq	Cov	Q	Di
30° V	507Hz	300°	1,25	0,98dB
30° V	1023Hz	336°	1,76	2,45dB
30° V	2054Hz	92°	2,98	4,74dB
30° V	4120Hz	52°	4,60	6,62dB
30° V	8248Hz	56°	5,26	7,21dB
30° V	18527Hz	30°	7,10	8,51dB

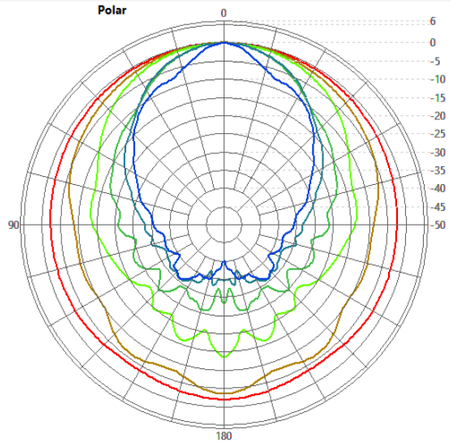


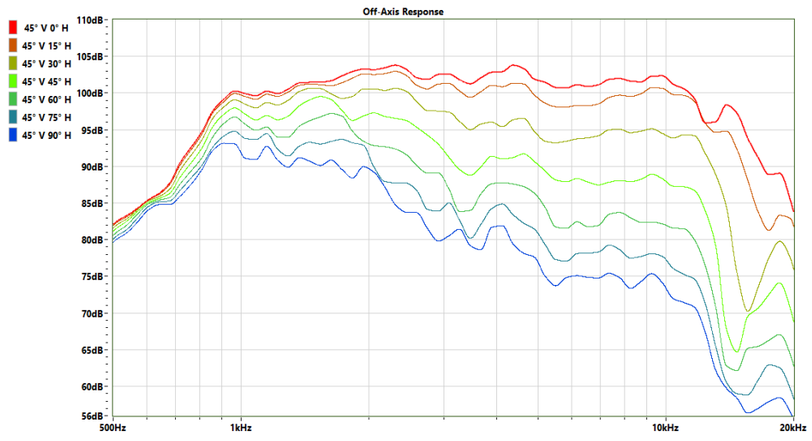


30° Vertical

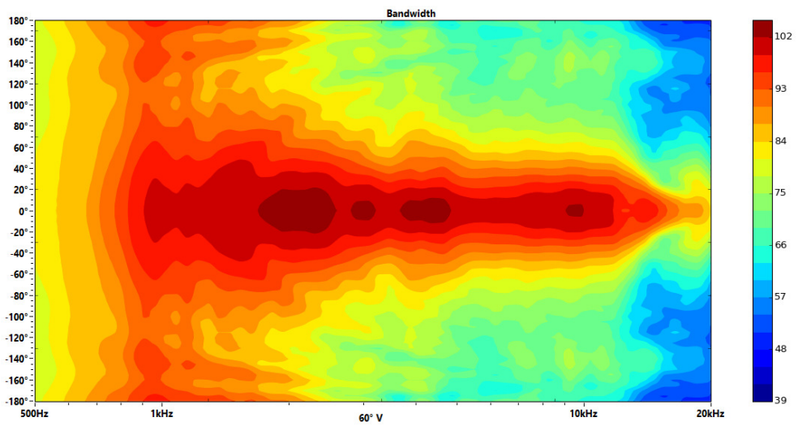


Ang	Freq	Cov	Q	Di
45° V	507Hz	290°	1,25	0,96dB
45° V	1023Hz	336°	1,76	2,45dB
45° V	2054Hz	90°	2,99	4,76dB
45° V	4120Hz	52°	4,62	6,64dB
45° V	8248Hz	56°	5,24	7,20dB
45° V	18527Hz	32°	6,72	8,27dB

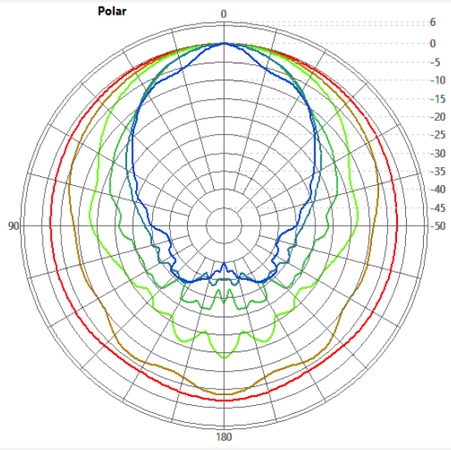


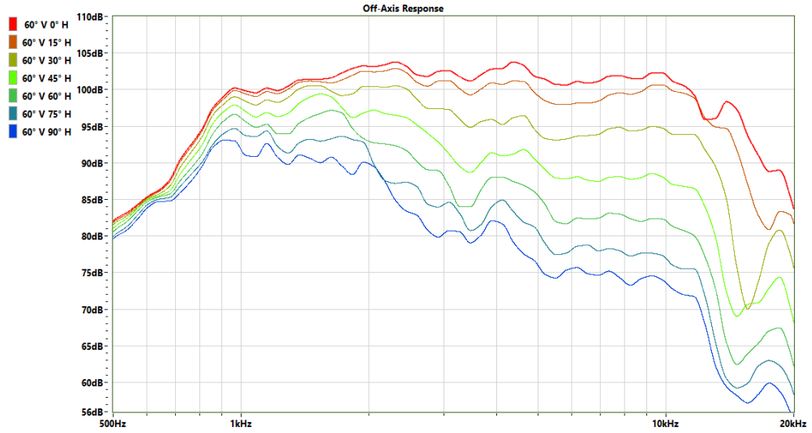


45° Vertical

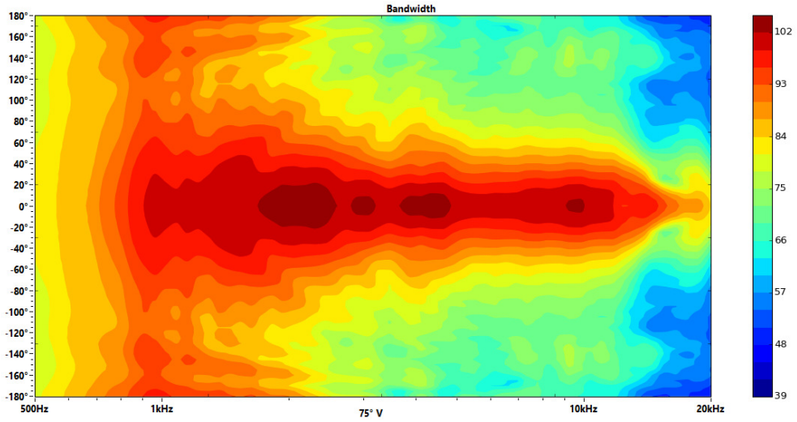


Ang	Freq	Cov	Q	Di
60° V	507Hz	300°	1,25	0,96dB
60° V	1023Hz	336°	1,75	2,44dB
60° V	2054Hz	90°	3,01	4,78dB
60° V	4120Hz	52°	4,66	6,68dB
60° V	8248Hz	54°	5,31	7,25dB
60° V	18527Hz	34°	6,42	8,07dB

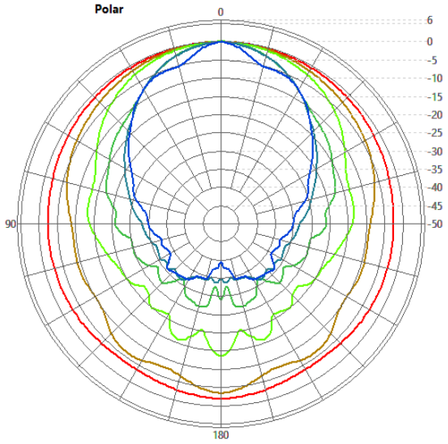


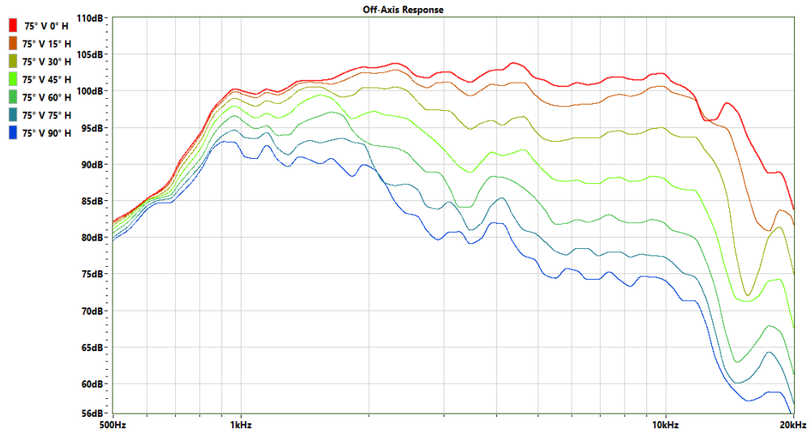


60° Vertical

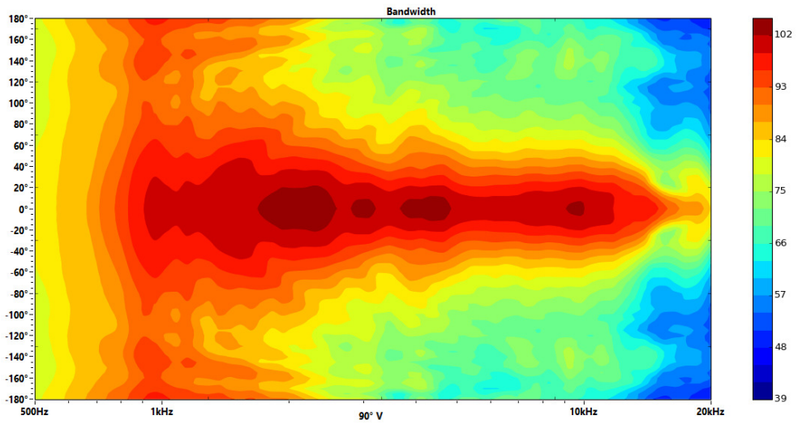


Ang	Freq	Cov	Q	Di
75° V	507Hz	290°	1,25	0,98dB
75° V	1023Hz	336°	1,76	2,45dB
75° V	2054Hz	90°	3,01	4,78dB
75° V	4120Hz	52°	4,65	6,68dB
75° V	8248Hz	52°	5,38	7,31dB
75° V	18527Hz	50°	6,17	7,91dB

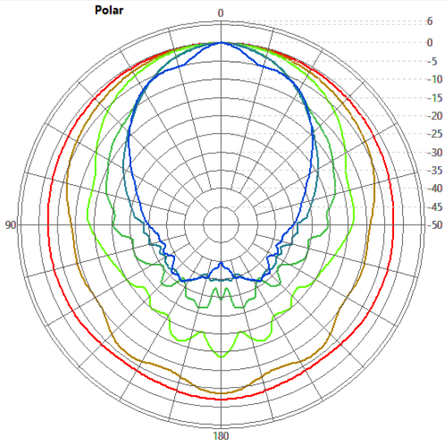


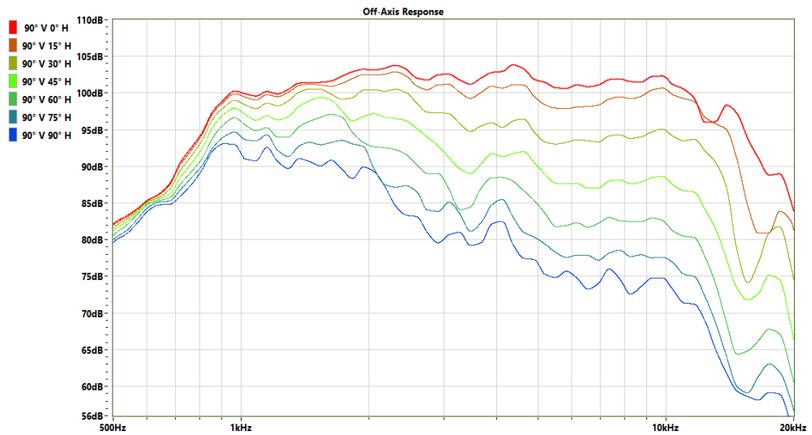


75° Vertical

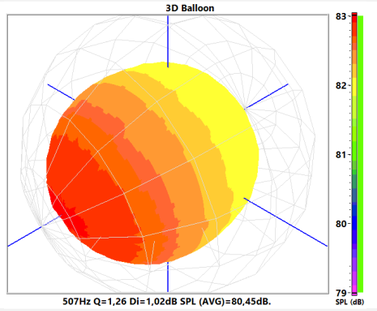


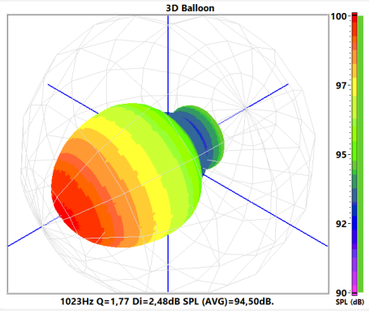
Ang	Freq	Cov	Q	Di
90° V	507Hz	290°	1,25	0,98dB
90° V	1023Hz	336°	1,76	2,47dB
90° V	2054Hz	90°	3,00	4,77dB
90° V	4120Hz	52°	4,66	6,69dB
90° V	8248Hz	52°	5,43	7,35dB
90° V	18527Hz	52°	6,18	7,91dB

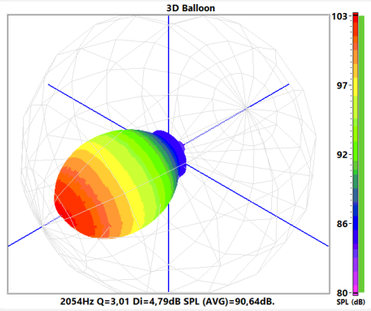


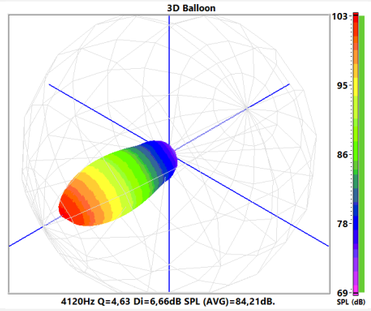


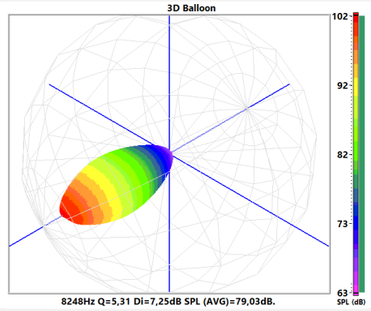
90° Vertical

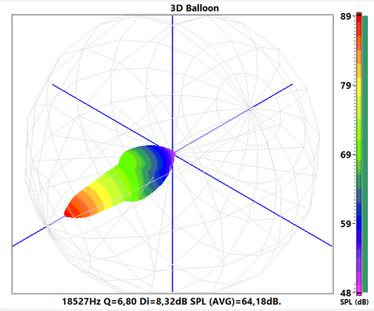






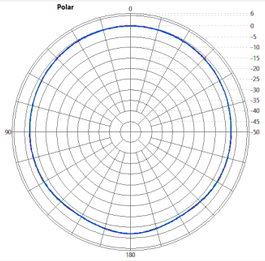




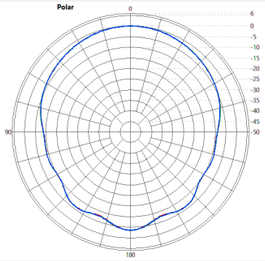


3D Balloon

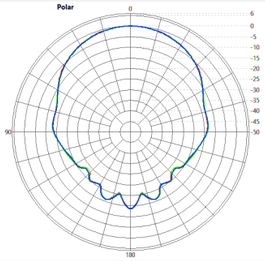
Ang	Freq	Cov	Q	Di
0° V	507Hz	300°	1,24	0,94dB
15° V	507Hz	290°	1,25	0,95dB
30° V	507Hz	300°	1,25	0,98dB
45° V	507Hz	290°	1,25	0,96dB
60° V	507Hz	300°	1,25	0,96dB
75° V	507Hz	290°	1,25	0,98dB
90° V	507Hz	290°	1,25	0,98dB



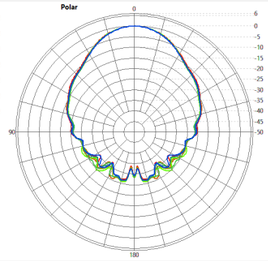
Ang	Freq	Cov	Q	Di
0° V	1023Hz	148°	1,76	2,46dB
15° V	1023Hz	148°	1,75	2,43dB
30° V	1023Hz	336°	1,76	2,45dB
45° V	1023Hz	336°	1,75	2,44dB
60° V	1023Hz	336°	1,76	2,45dB
75° V	1023Hz	336°	1,76	2,45dB
90° V	1023Hz	336°	1,76	2,47dB



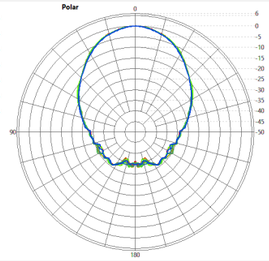
Ang	Freq	Cov	Q	Di
0° V	2054Hz	92°	2,98	4,74dB
15° V	2054Hz	92°	2,98	4,74dB
30° V	2054Hz	92°	2,98	4,74dB
45° V	2054Hz	90°	2,99	4,76dB
60° V	2054Hz	90°	3,01	4,78dB
75° V	2054Hz	90°	3,01	4,78dB
90° V	2054Hz	90°	3,00	4,77dB



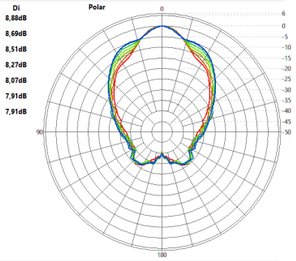
Ang	Freq	Cov	Q	Di
0° V	4120Hz	54°	4,51	6,54dB
15° V	4120Hz	54°	4,53	6,56dB
30° V	4120Hz	52°	4,60	6,62dB
45° V	4120Hz	52°	4,62	6,64dB
60° V	4120Hz	52°	4,66	6,68dB
75° V	4120Hz	52°	4,65	6,68dB
90° V	4120Hz	52°	4,66	6,69dB



Ang	Freq	Cov	Q	Di
0° V	8248Hz	54°	5,28	7,22dB
15° V	8248Hz	54°	5,28	7,22dB
30° V	8248Hz	56°	5,26	7,21dB
45° V	8248Hz	56°	5,24	7,20dB
60° V	8248Hz	54°	5,31	7,25dB
75° V	8248Hz	52°	5,38	7,31dB
90° V	8248Hz	52°	5,43	7,35dB



Ang	Freq	Cov	Q	Di
0° V	18527Hz	28°	7,73	8,88dB
15° V	18527Hz	28°	7,40	8,69dB
30° V	18527Hz	30°	7,10	8,51dB
45° V	18527Hz	32°	6,72	8,27dB
60° V	18527Hz	34°	6,42	8,07dB
75° V	18527Hz	50°	6,17	7,91dB
90° V	18527Hz	52°	6,18	7,91dB

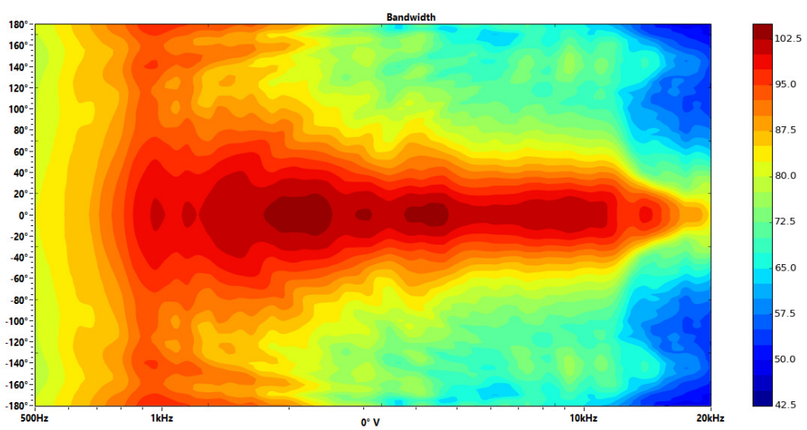


Polar Comparativa Vertical

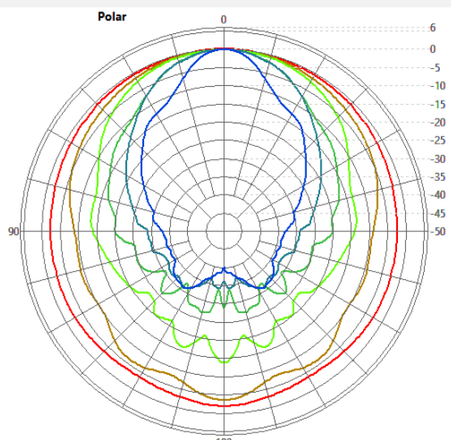


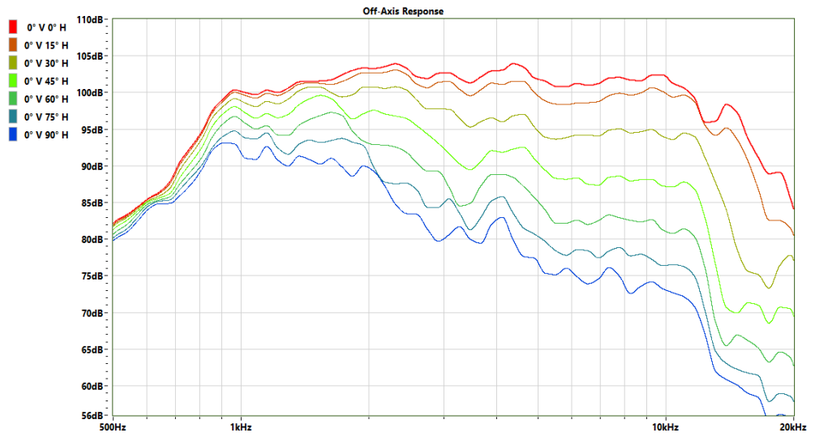


Application Note AN-0012.
Off-axis response analysis, Driver Oversound DTi-4630, with Ludovico LC-14.50 horn.
https://www.ludovico.com.br/308/cornetas/corneta-lc-1450-preta
http://oversound.com.br/novo/index.php?route=product/product&product_id=91
Conditions:
Pink noise, 2.83V rms, 1m, automated measurement 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.

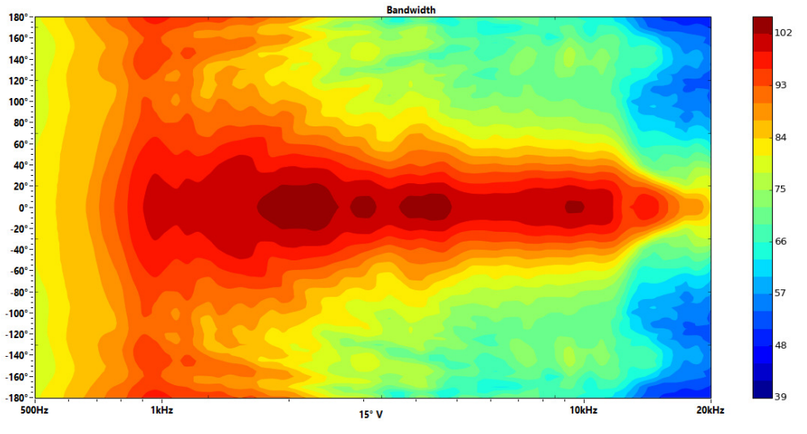


Ang	Freq	Cov	Q	Di
0° V	507Hz	300°	1,24	0,94dB
0° V	1023Hz	148°	1,76	2,46dB
0° V	2054Hz	92°	2,98	4,74dB
0° V	4120Hz	54°	4,51	6,54dB
0° V	8248Hz	54°	5,28	7,22dB
0° V	18527Hz	28°	7,73	8,88dB

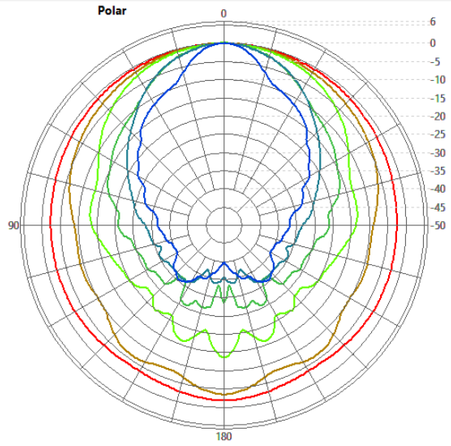


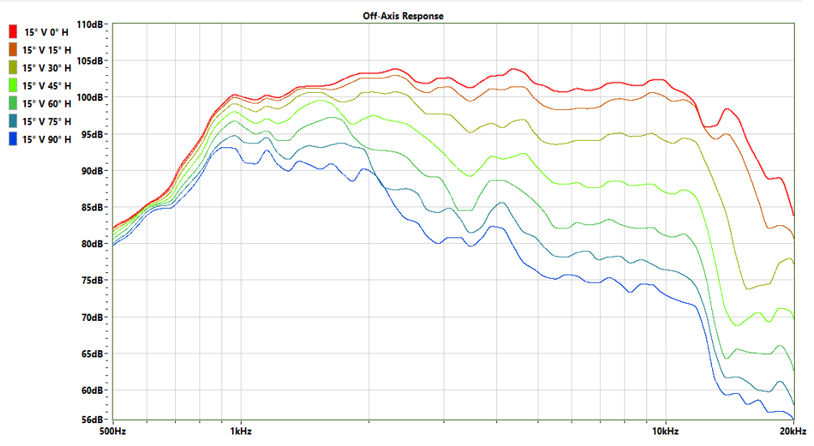


0° Vertical

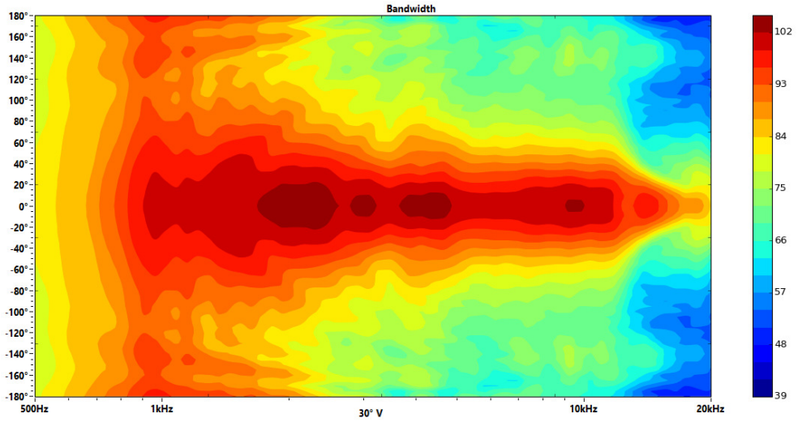


Ang	Freq	Cov	Q	Di
15° V	507Hz	290°	1,25	0,95dB
15° V	1023Hz	148°	1,75	2,43dB
15° V	2054Hz	92°	2,98	4,74dB
15° V	4120Hz	54°	4,53	6,56dB
15° V	8248Hz	54°	5,28	7,22dB
15° V	18527Hz	28°	7,40	8,69dB

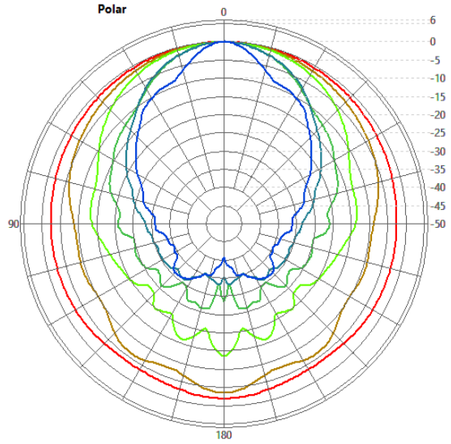


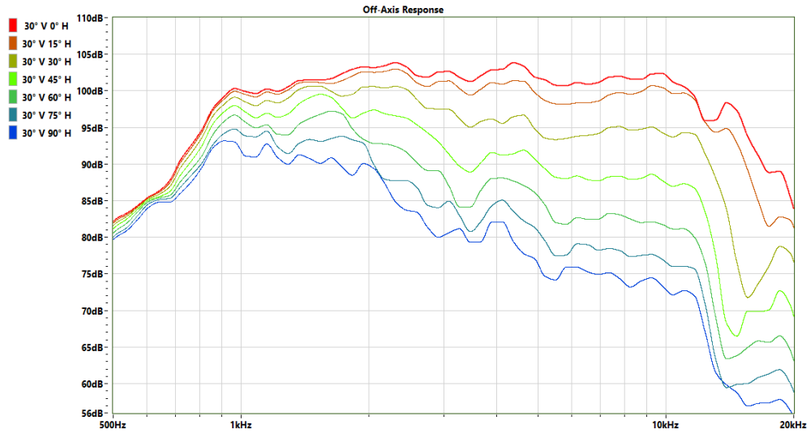


15° Vertical

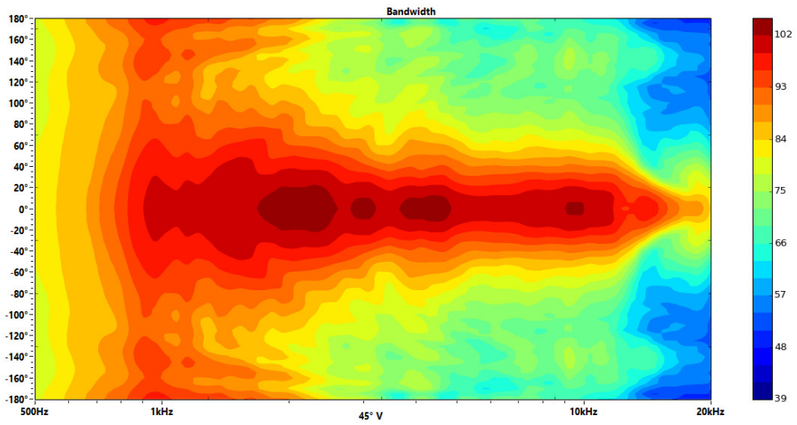


Ang	Freq	Cov	Q	Di
30° V	507Hz	300°	1,25	0,98dB
30° V	1023Hz	336°	1,76	2,45dB
30° V	2054Hz	92°	2,98	4,74dB
30° V	4120Hz	52°	4,60	6,62dB
30° V	8248Hz	56°	5,26	7,21dB
30° V	18527Hz	30°	7,10	8,51dB

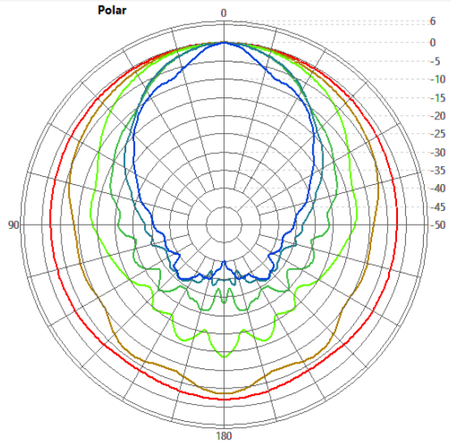


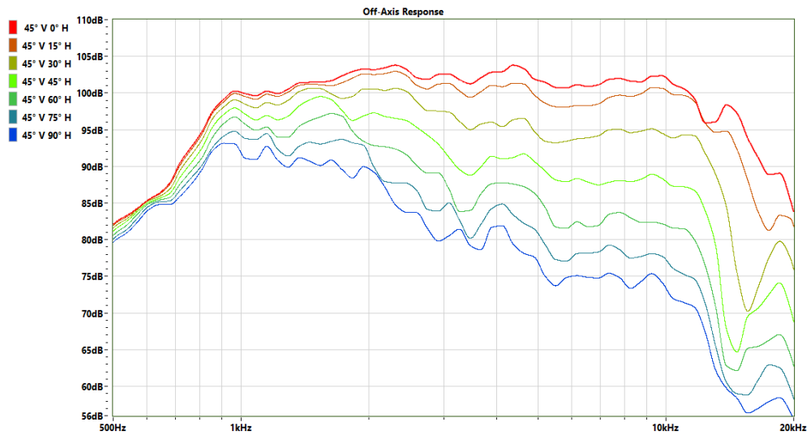


30° Vertical

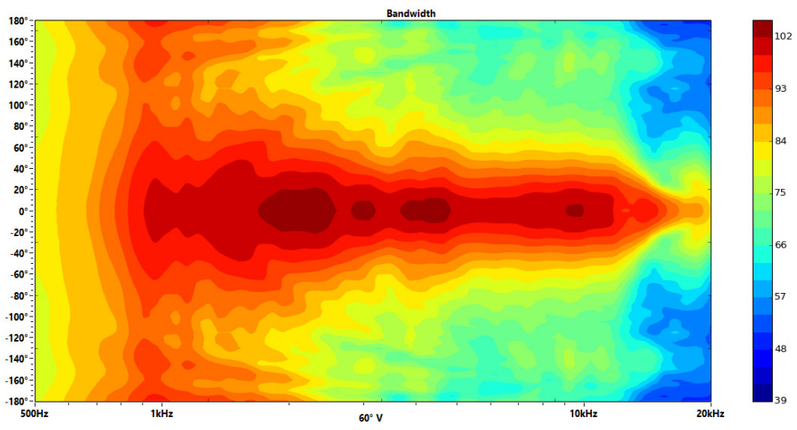


Ang	Freq	Cov	Q	Di
45° V	507Hz	290°	1,25	0,96dB
45° V	1023Hz	336°	1,76	2,45dB
45° V	2054Hz	90°	2,99	4,76dB
45° V	4120Hz	52°	4,62	6,64dB
45° V	8248Hz	56°	5,24	7,20dB
45° V	18527Hz	32°	6,72	8,27dB

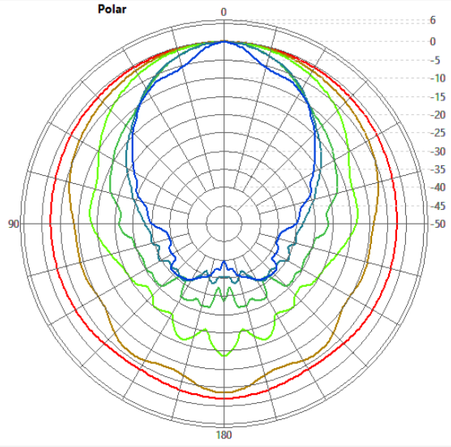


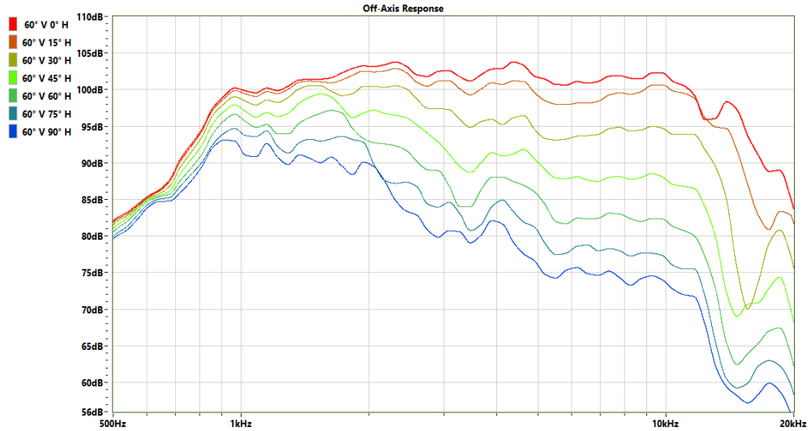


45° Vertical

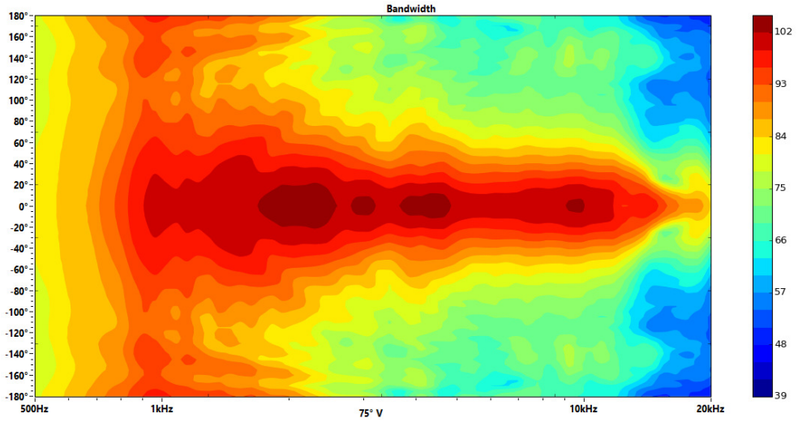


Ang	Freq	Cov	Q	Di
60° V	507Hz	300°	1,25	0,96dB
60° V	1023Hz	336°	1,75	2,44dB
60° V	2054Hz	90°	3,01	4,78dB
60° V	4120Hz	52°	4,66	6,68dB
60° V	8248Hz	54°	5,31	7,25dB
60° V	18527Hz	34°	6,42	8,07dB

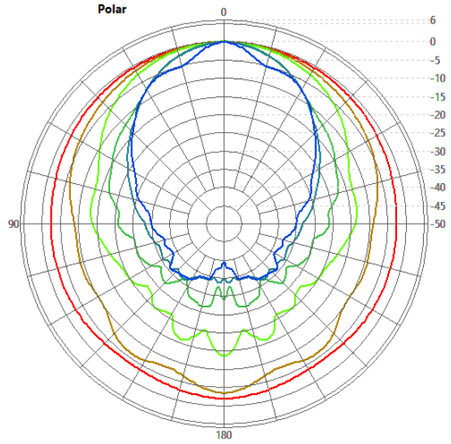


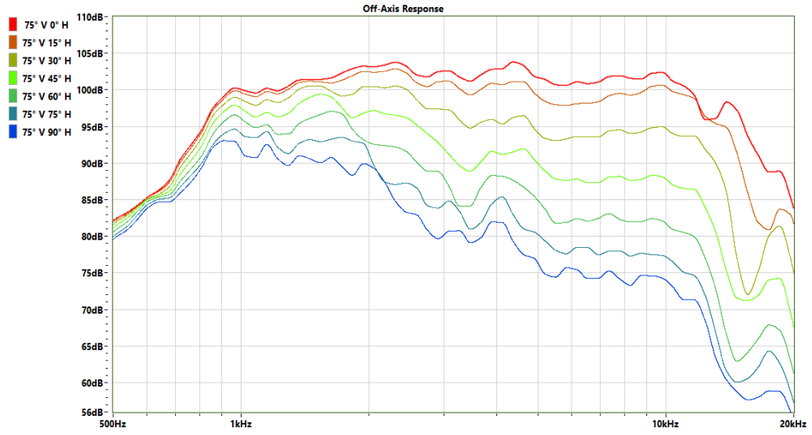


60° Vertical

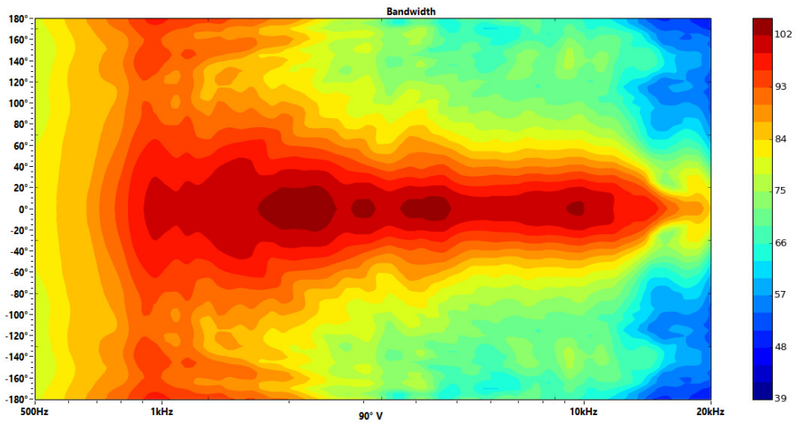


Ang	Freq	Cov	Q	Di
75° V	507Hz	290°	1,25	0,98dB
75° V	1023Hz	336°	1,76	2,45dB
75° V	2054Hz	90°	3,01	4,78dB
75° V	4120Hz	52°	4,65	6,68dB
75° V	8248Hz	52°	5,38	7,31dB
75° V	18527Hz	50°	6,17	7,91dB

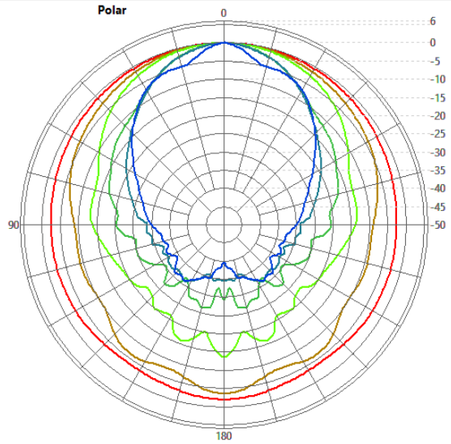


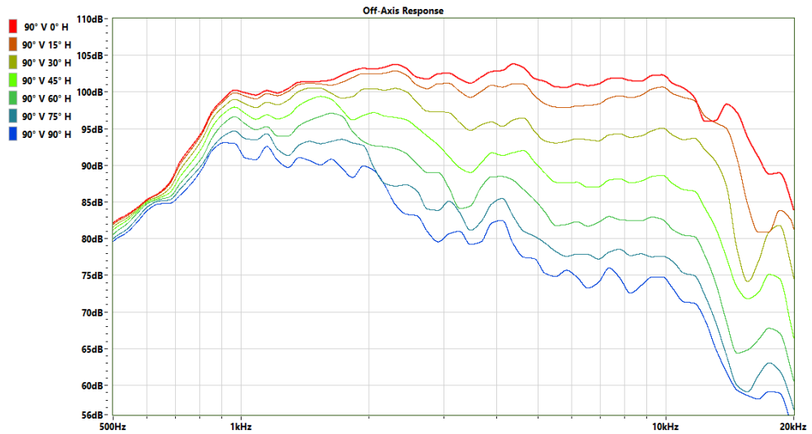


75° Vertical

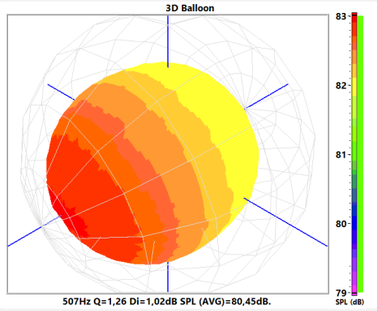


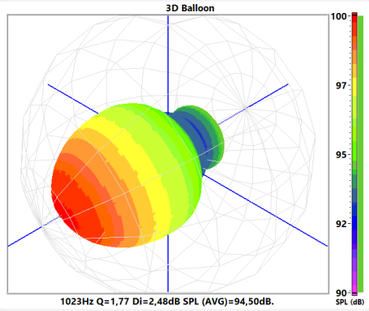
Ang	Freq	Cov	Q	Di
90° V	507Hz	290°	1,25	0,98dB
90° V	1023Hz	336°	1,76	2,47dB
90° V	2054Hz	90°	3,00	4,77dB
90° V	4120Hz	52°	4,66	6,69dB
90° V	8248Hz	52°	5,43	7,35dB
90° V	18527Hz	52°	6,18	7,91dB

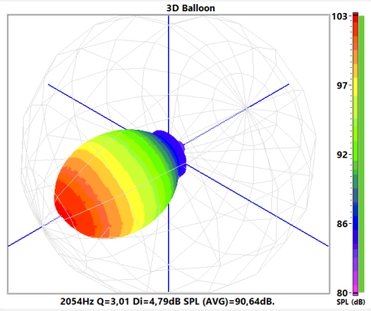


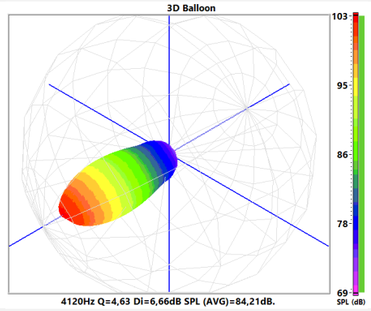


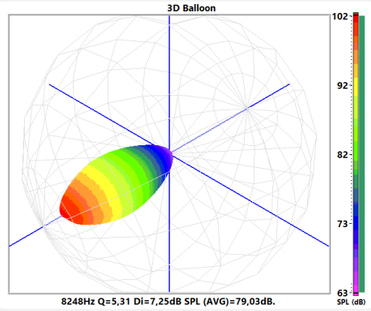
90° Vertical

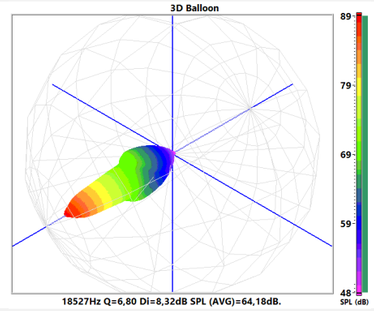






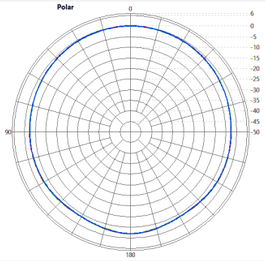




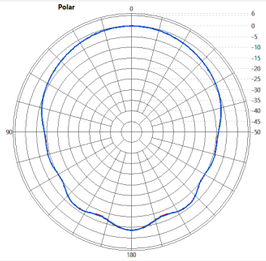


3D Balloon

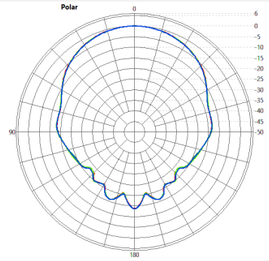
Ang	Freq	Cov	Q	Di
0° V	507Hz	300°	1,24	0,94dB
15° V	507Hz	290°	1,25	0,95dB
30° V	507Hz	300°	1,25	0,98dB
45° V	507Hz	290°	1,25	0,96dB
60° V	507Hz	300°	1,25	0,96dB
75° V	507Hz	290°	1,25	0,98dB
90° V	507Hz	290°	1,25	0,98dB



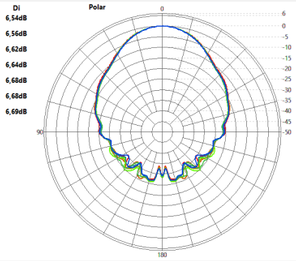
Ang	Freq	Cov	Q	Di
0° V	1023Hz	148°	1,76	2,46dB
15° V	1023Hz	148°	1,75	2,43dB
30° V	1023Hz	336°	1,76	2,45dB
45° V	1023Hz	336°	1,75	2,44dB
60° V	1023Hz	336°	1,76	2,45dB
75° V	1023Hz	336°	1,76	2,45dB
90° V	1023Hz	336°	1,76	2,47dB



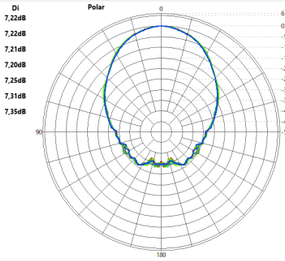
Ang	Freq	Cov	Q	Di
0° V	2054Hz	92°	2,98	4,74dB
15° V	2054Hz	92°	2,98	4,74dB
30° V	2054Hz	92°	2,98	4,74dB
45° V	2054Hz	90°	2,99	4,76dB
60° V	2054Hz	90°	3,01	4,78dB
75° V	2054Hz	90°	3,01	4,78dB
90° V	2054Hz	90°	3,00	4,77dB



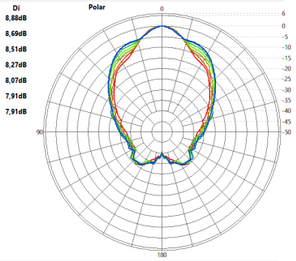
Ang	Freq	Cov	Q	Di
0° V	4120Hz	54°	4,51	6,54dB
15° V	4120Hz	54°	4,53	6,56dB
30° V	4120Hz	52°	4,60	6,62dB
45° V	4120Hz	52°	4,62	6,64dB
60° V	4120Hz	52°	4,66	6,68dB
75° V	4120Hz	52°	4,65	6,68dB
90° V	4120Hz	52°	4,66	6,69dB



Ang	Freq	Cov	Q	Di
0° V	8248Hz	54°	5,28	7,22dB
15° V	8248Hz	54°	5,28	7,22dB
30° V	8248Hz	56°	5,26	7,21dB
45° V	8248Hz	56°	5,24	7,20dB
60° V	8248Hz	54°	5,31	7,25dB
75° V	8248Hz	52°	5,38	7,31dB
90° V	8248Hz	52°	5,43	7,35dB



Ang	Freq	Cov	Q	Di
0° V	18527Hz	28°	7,73	8,88dB
15° V	18527Hz	28°	7,40	8,69dB
30° V	18527Hz	30°	7,10	8,51dB
45° V	18527Hz	32°	6,72	8,27dB
60° V	18527Hz	34°	6,42	8,07dB
75° V	18527Hz	50°	6,17	7,91dB
90° V	18527Hz	52°	6,18	7,91dB



Polar Vertical Comparative