ACOUSTIC REPORT

Electronic sirens eRotor

Components for large area warning purposes



30 m

Measured sound pressure level — measuring distance

13 × 24

siren types × L pAeq [dB] values every 15°

01 **Siren types review and configuration**

02 **Acoustical characteristics**

Mast and horn drawings are available on request.

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SIREN TYPES REVIEW AND CONFIGURATION

eRotor siren types review and configuration

Siren type	Power [W]	Nominal sound pressure level at 30 m [dB]	Number of horns	Number and type of batteries	Mast length [mm]	Weight of siren horns [kg]
E250S*)	250	111	2	2 × 28 Ah	1120	42
E250AS	250	114	2	2 × 28 Ah	1120	42
E500D*)	500	113	4	2 × 42 Ah	1120	80
E500S	500	116	4	2 × 42 Ah	1620	84
E500AS	500	118	4	2 × 42 Ah	1620	84
E750S*)	750	118	6	2 × 42 Ah	2120	135
E750AS	750	120	6	2 × 42 Ah	2120	135
E1000D*)	1000	120	8	2 × 65 Ah	1980	180
E1000S	1000	121	8	2 × 65 Ah	2620	180
E1000AS	1000	122	8	2 × 65 Ah	2620	180
E1500D*)	1500	122	12	2 × 65 Ah	2700	260
E1500S	1500	123	12	2 × 65 Ah	3920	265
E1500AS	1500	124	12	2 × 65 Ah	3920	265

*) These siren configurations are preferred due to better static load values.



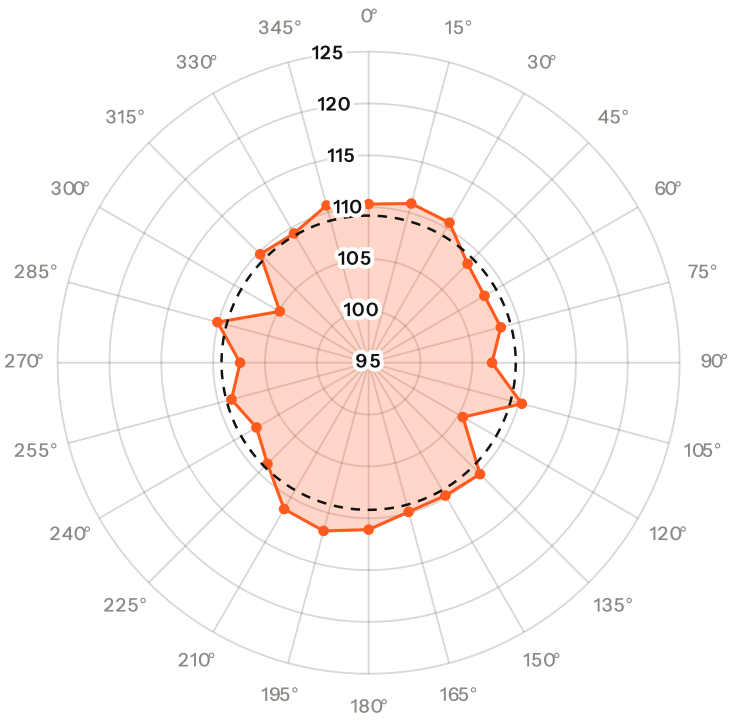
ACOUSTICAL CHARACTERISTICS

eRotor E250S

Basic data and direction chart

250	111	2	2 × 28 Ah	1120	42
Power [W]	Nominal sound pressure level at 30 m [dB]	Number of horns	Number and type of batteries	Mast length [mm]	Weight of siren horns [kg]

Direction pattern expressed as horizontal chart of sound pressure level



Basic statistic data of sound pressure level

median	109.80
arithmetic average	109.19
maximum value	111.80
minimum value	104.90

sound pressure level [dBA]

average 109.19

Rings every 5 dB from 95 (centre) to 125 dB, 0° at the top. Measured sound pressure level at 30 m.

Measured sound pressure level

angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]
0°	110.3	90°	106.9	180°	111.1	270°	107.4
15°	110.9	105°	110.3	195°	111.8	285°	110.1
30°	110.6	120°	105.5	210°	111.3	300°	104.9
45°	108.5	135°	110.2	225°	108.8	315°	109.8
60°	107.9	150°	109.8	240°	107.5	330°	109.4
75°	108.2	165°	109.9	255°	108.7	345°	110.7

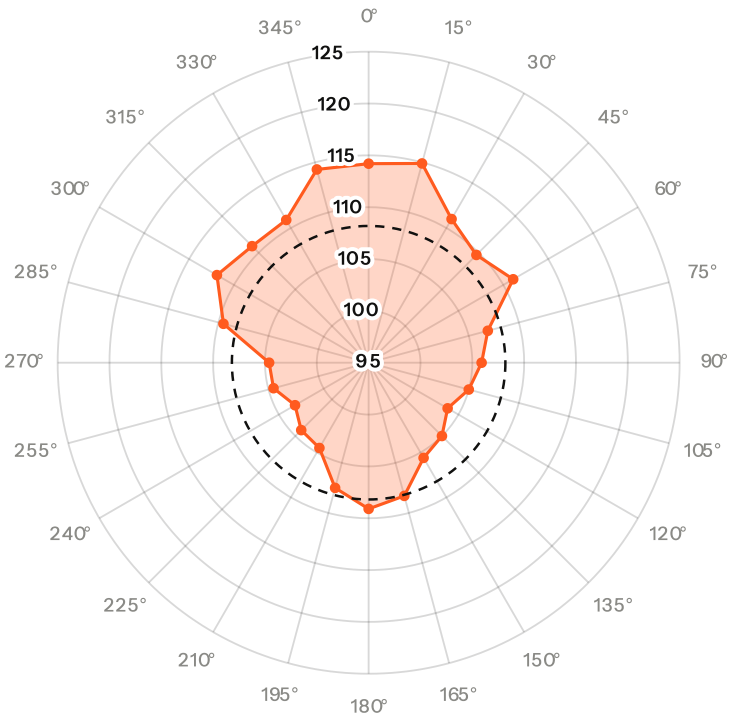
ACOUSTICAL CHARACTERISTICS

eRotor E250AS

Basic data and direction chart

250	114	2	2 × 28 Ah	1120	42
Power [W]	Nominal sound pressure level at 30 m [dB]	Number of horns	Number and type of batteries	Mast length [mm]	Weight of siren horns [kg]

Direction pattern expressed as horizontal chart of sound pressure level



Basic statistic data of sound pressure level

median	107.90
arithmetic average	108.19
maximum value	114.90
minimum value	103.20

sound pressure level [dBA]

average 108.19

Rings every 5 dB from 95 (centre) to 125 dB, 0° at the top. Measured sound pressure level at 30 m.

Measured sound pressure level

angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]
0°	114.2	90°	105.9	180°	109.1	270°	104.6
15°	114.9	105°	105.0	195°	107.5	285°	109.5
30°	111.0	120°	103.8	210°	104.5	300°	111.9
45°	109.7	135°	105.0	225°	104.2	315°	110.9
60°	111.1	150°	105.6	240°	103.2	330°	110.9
75°	106.9	165°	108.3	255°	104.5	345°	114.3

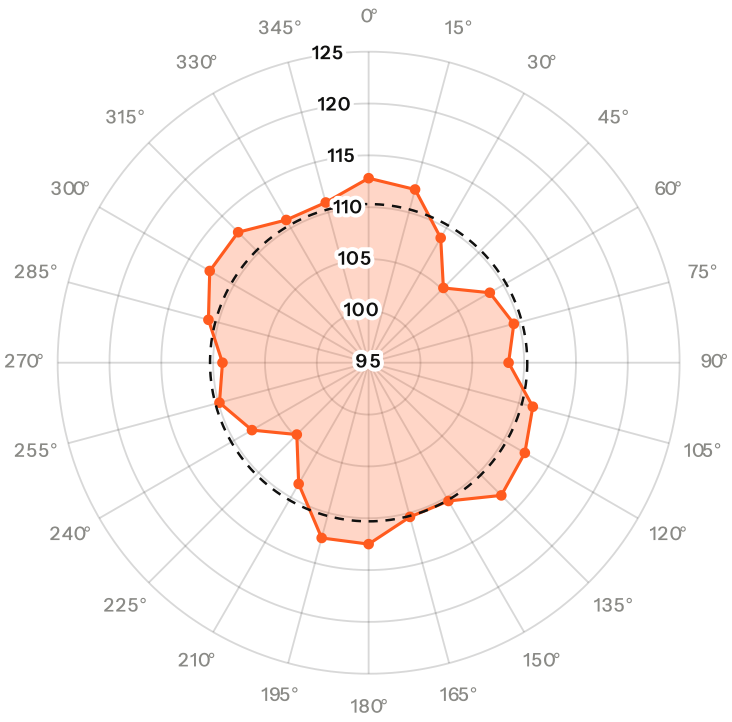
ACOUSTICAL CHARACTERISTICS

eRotor E500D

Basic data and direction chart

500	113	4	2 × 42 Ah	1120	80
Power [W]	Nominal sound pressure level at 30 m [dB]	Number of horns	Number and type of batteries	Mast length [mm]	Weight of siren horns [kg]

Direction pattern expressed as horizontal chart of sound pressure level



Basic statistic data of sound pressure level

median	110.65
arithmetic average	110.30
maximum value	113.10
minimum value	104.80

sound pressure level [dBA]

average 110.30

Rings every 5 dB from 95 (centre) to 125 dB, 0° at the top. Measured sound pressure level at 30 m.

Measured sound pressure level

angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]
0°	112.8	90°	108.5	180°	112.5	270°	109.1
15°	112.3	105°	111.4	195°	112.5	285°	111.0
30°	108.9	120°	112.4	210°	108.5	300°	112.7
45°	105.2	135°	113.1	225°	104.8	315°	112.8
60°	108.5	150°	110.4	240°	108.0	330°	110.9
75°	109.5	165°	110.4	255°	109.9	345°	111.0

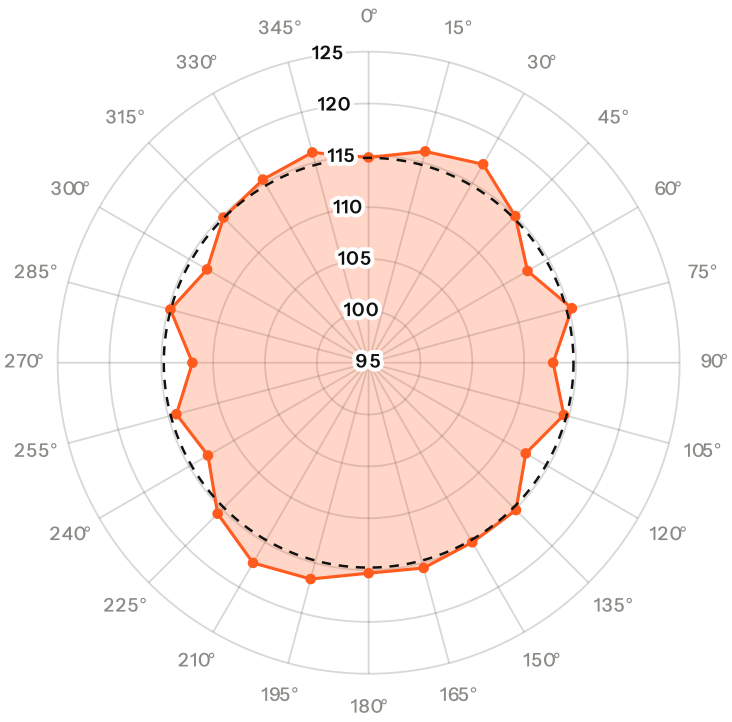
ACOUSTICAL CHARACTERISTICS

eRotor E500S

Basic data and direction chart

500	116	4	2 × 42 Ah	1620	84
Power [W]	Nominal sound pressure level at 30 m [dB]	Number of horns	Number and type of batteries	Mast length [mm]	Weight of siren horns [kg]

Direction pattern expressed as horizontal chart of sound pressure level



Basic statistic data of sound pressure level

median	115.00
arithmetic average	114.76
maximum value	117.30
minimum value	112.00

sound pressure level [dBA]

average 114.76

Rings every 5 dB from 95 (centre) to 125 dB, 0° at the top. Measured sound pressure level at 30 m.

Measured sound pressure level

angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]
0°	114.8	90°	112.8	180°	115.3	270°	112.0
15°	116.1	105°	114.5	195°	116.6	285°	114.8
30°	117.1	120°	112.5	210°	117.3	300°	113.0
45°	115.0	135°	115.1	225°	115.6	315°	114.8
60°	112.7	150°	115.0	240°	112.9	330°	115.4
75°	115.3	165°	115.5	255°	114.2	345°	116.0

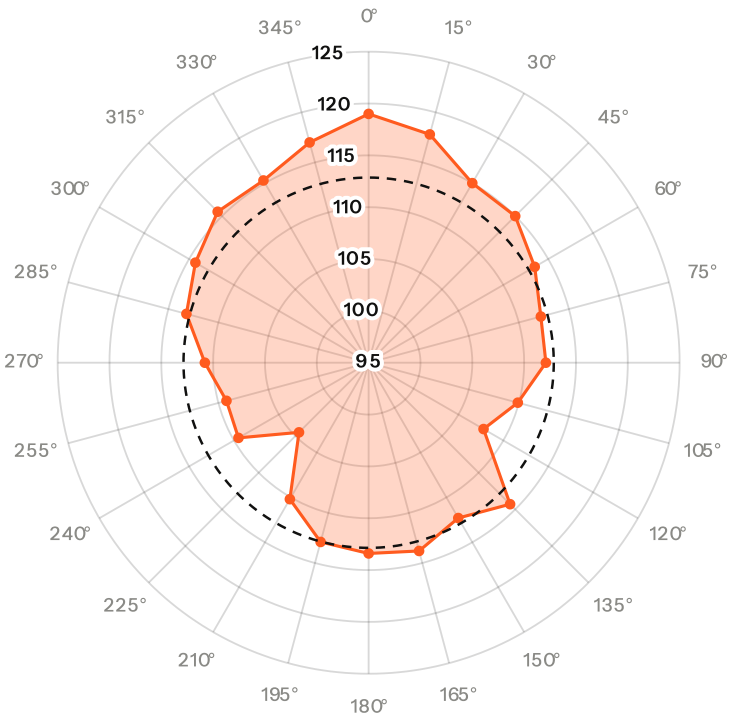
ACOUSTICAL CHARACTERISTICS

eRotor E500AS

Basic data and direction chart

500	118	4	2 × 42 Ah	1620	84
Power [W]	Nominal sound pressure level at 30 m [dB]	Number of horns	Number and type of batteries	Mast length [mm]	Weight of siren horns [kg]

Direction pattern expressed as horizontal chart of sound pressure level



Basic statistic data of sound pressure level

median	113.30
arithmetic average	112.86
maximum value	119.00
minimum value	104.50

sound pressure level [dBA]

average 112.86

Rings every 5 dB from 95 (centre) to 125 dB, 0° at the top. Measured sound pressure level at 30 m.

Measured sound pressure level

angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]
0°	119.0	90°	112.1	180°	113.4	270°	110.8
15°	117.8	105°	109.9	195°	112.9	285°	113.2
30°	115.0	120°	107.8	210°	110.2	300°	114.3
45°	115.0	135°	114.3	225°	104.5	315°	115.6
60°	113.5	150°	112.3	240°	109.5	330°	115.3
75°	112.2	165°	113.8	255°	109.2	345°	117.0

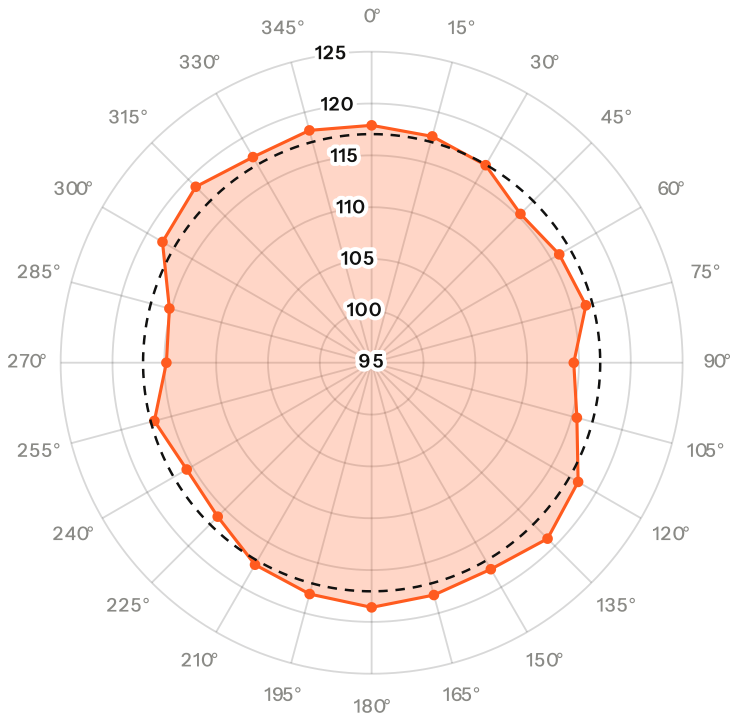
ACOUSTICAL CHARACTERISTICS

eRotor E750S

Basic data and direction chart

750	118	6	2 × 42 Ah	2120	135
Power [W]	Nominal sound pressure level at 30 m [dB]	Number of horns	Number and type of batteries	Mast length [mm]	Weight of siren horns [kg]

Direction pattern expressed as horizontal chart of sound pressure level



Basic statistic data of sound pressure level

median	117.55
arithmetic average	117.05
maximum value	119.00
minimum value	114.50

sound pressure level [dBA]

average 117.05

Rings every 5 dB from 95 (centre) to 125 dB, 0° at the top. Measured sound pressure level at 30 m.

Measured sound pressure level

angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]
0°	117.9	90°	114.5	180°	118.6	270°	114.8
15°	117.6	105°	115.5	195°	118.1	285°	115.2
30°	117.0	120°	118.0	210°	117.5	300°	118.3
45°	115.3	135°	119.0	225°	116.0	315°	119.0
60°	115.9	150°	118.0	240°	115.6	330°	117.9
75°	116.4	165°	118.2	255°	116.7	345°	118.2

ACOUSTICAL CHARACTERISTICS

eRotor E750AS

Basic data and direction chart

750	120	6	2 × 42 Ah	2120	135
Power [W]	Nominal sound pressure level at 30 m [dB]	Number of horns	Number and type of batteries	Mast length [mm]	Weight of siren horns [kg]

Basic statistic data of sound pressure level

median	113.30
arithmetic average	117.51
maximum value	121.60
minimum value	114.60

Direction pattern expressed as horizontal chart of sound pressure level

Direction chart for this type is not reproduced; see the overview table.

Measured sound pressure level at 30 m.



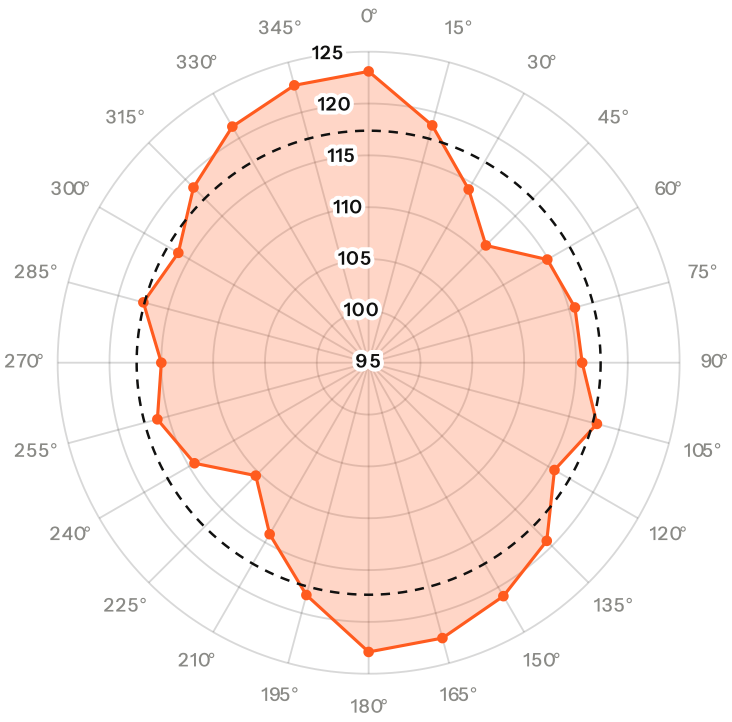
ACOUSTICAL CHARACTERISTICS

eRotor E1000D

Basic data and direction chart

1000	120	8	2 × 65 Ah	1980	180
Power [W]	Nominal sound pressure level at 30 m [dB]	Number of horns	Number and type of batteries	Mast length [mm]	Weight of siren horns [kg]

Direction pattern expressed as horizontal chart of sound pressure level



Basic statistic data of sound pressure level

median	116.85
arithmetic average	117.38
maximum value	123.10
minimum value	110.40

sound pressure level [dBA]

average 117.38

Rings every 5 dB from 95 (centre) to 125 dB, 0° at the top. Measured sound pressure level at 30 m.

Measured sound pressure level

angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]
0°	123.1	90°	115.6	180°	122.9	270°	115.0
15°	118.7	105°	117.8	195°	118.2	285°	117.5
30°	114.3	120°	115.7	210°	114.1	300°	116.2
45°	111.0	135°	119.3	225°	110.4	315°	118.9
60°	114.9	150°	121.0	240°	114.4	330°	121.3
75°	115.6	165°	122.5	255°	116.1	345°	122.7

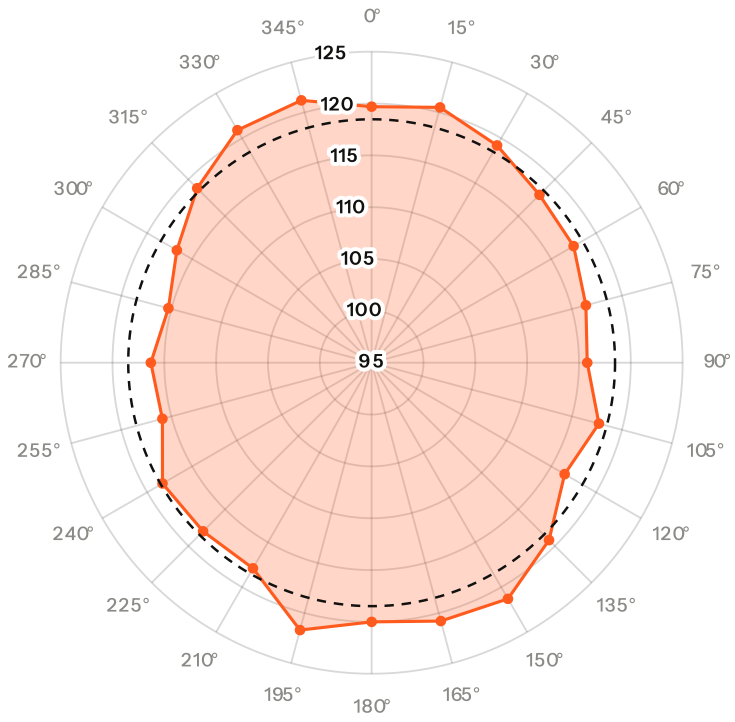
ACOUSTICAL CHARACTERISTICS

eRotor E1000S

Basic data and direction chart

1000	121	8	2 × 65 Ah	2620	180
Power [W]	Nominal sound pressure level at 30 m [dB]	Number of horns	Number and type of batteries	Mast length [mm]	Weight of siren horns [kg]

Direction pattern expressed as horizontal chart of sound pressure level



Basic statistic data of sound pressure level

median	118.15
arithmetic average	118.48
maximum value	121.70
minimum value	115.30

sound pressure level [dBA]

average 118.48

Rings every 5 dB from 95 (centre) to 125 dB, 0° at the top. Measured sound pressure level at 30 m.

Measured sound pressure level

angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]
0°	119.7	90°	115.8	180°	120.0	270°	116.3
15°	120.5	105°	117.7	195°	121.7	285°	115.3
30°	119.2	120°	116.5	210°	117.9	300°	116.7
45°	117.9	135°	119.2	225°	118.0	315°	118.8
60°	117.5	150°	121.3	240°	118.3	330°	120.9
75°	116.4	165°	120.8	255°	115.9	345°	121.2

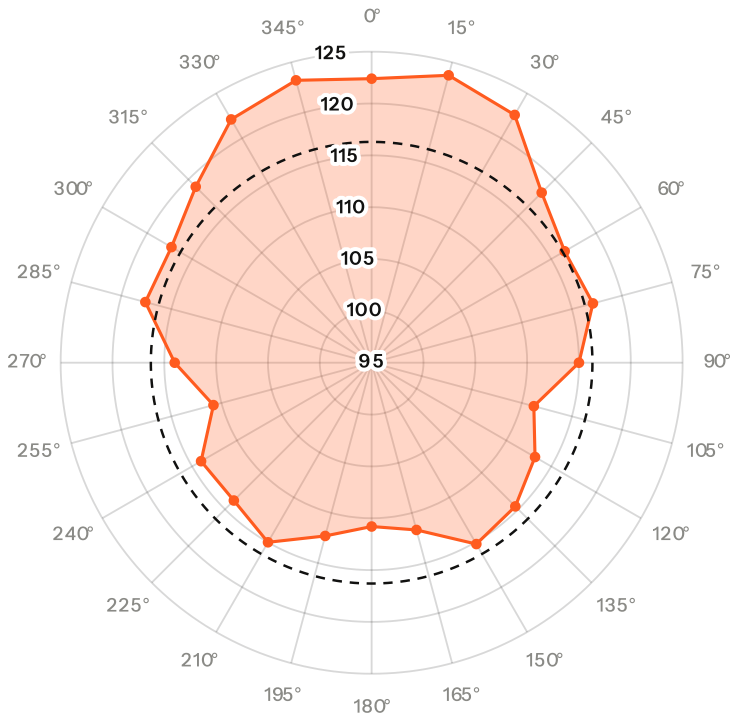
ACOUSTICAL CHARACTERISTICS

eRotor E1000AS

Basic data and direction chart

1000	122	8	2 × 65 Ah	2620	180
Power [W]	Nominal sound pressure level at 30 m [dB]	Number of horns	Number and type of batteries	Mast length [mm]	Weight of siren horns [kg]

Direction pattern expressed as horizontal chart of sound pressure level



Basic statistic data of sound pressure level

median	115.10
arithmetic average	116.30
maximum value	123.70
minimum value	110.80

sound pressure level [dBA]

average 116.30

Rings every 5 dB from 95 (centre) to 125 dB, 0° at the top. Measured sound pressure level at 30 m.

Measured sound pressure level

angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]
0°	122.4	90°	115.0	180°	110.8	270°	114.0
15°	123.7	105°	111.2	195°	112.3	285°	117.6
30°	122.6	120°	113.2	210°	115.0	300°	117.3
45°	118.2	135°	114.6	225°	113.8	315°	119.0
60°	116.5	150°	115.2	240°	114.0	330°	122.1
75°	117.1	165°	111.7	255°	110.8	345°	123.2

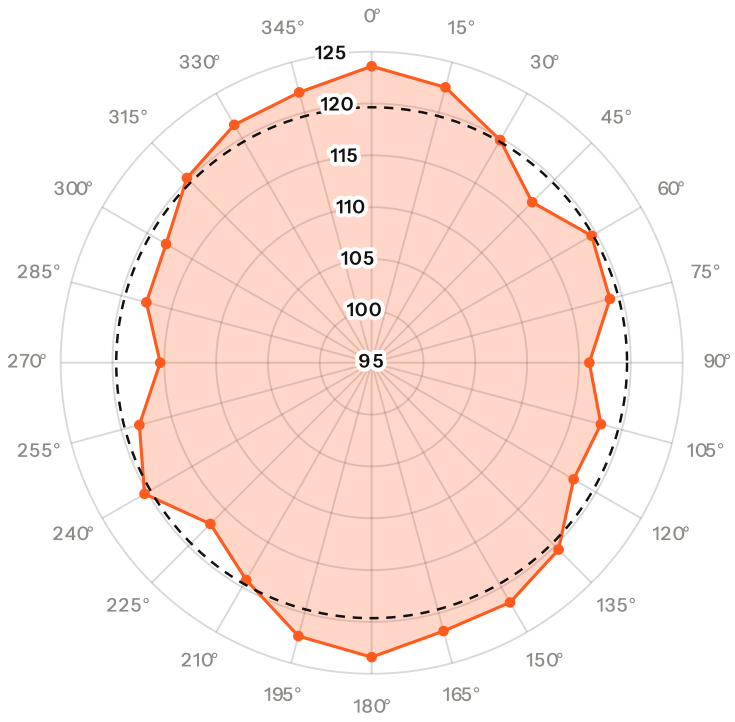
ACOUSTICAL CHARACTERISTICS

eRotor E1500D

Basic data and direction chart

1500	122	12	2 × 65 Ah	2700	260
Power [W]	Nominal sound pressure level at 30 m [dB]	Number of horns	Number and type of batteries	Mast length [mm]	Weight of siren horns [kg]

Direction pattern expressed as horizontal chart of sound pressure level



Basic statistic data of sound pressure level

median	119.65
arithmetic average	119.64
maximum value	123.60
minimum value	115.40

sound pressure level [dBA]

average 119.64

Rings every 5 dB from 95 (centre) to 125 dB, 0° at the top. Measured sound pressure level at 30 m.

Measured sound pressure level

angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]
0°	123.6	90°	116.0	180°	123.4	270°	115.4
15°	122.5	105°	117.9	195°	122.3	285°	117.5
30°	119.8	120°	117.5	210°	119.2	300°	117.9
45°	116.9	135°	120.5	225°	117.0	315°	120.2
60°	119.5	150°	121.7	240°	120.3	330°	121.5
75°	118.8	165°	121.8	255°	118.2	345°	122.0

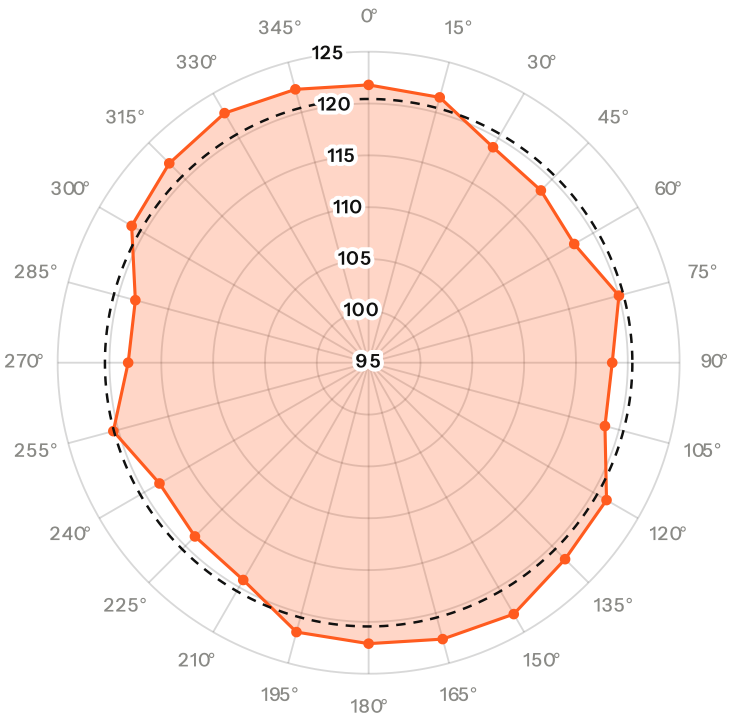
ACOUSTICAL CHARACTERISTICS

eRotor E1500S

Basic data and direction chart

1500	123	12	2 × 65 Ah	3920	265
Power [W]	Nominal sound pressure level at 30 m [dB]	Number of horns	Number and type of batteries	Mast length [mm]	Weight of siren horns [kg]

Direction pattern expressed as horizontal chart of sound pressure level



Basic statistic data of sound pressure level

median	120.95
arithmetic average	120.44
maximum value	123.00
minimum value	117.90

sound pressure level [dBA]

average 120.44

Rings every 5 dB from 95 (centre) to 125 dB, 0° at the top. Measured sound pressure level at 30 m.

Measured sound pressure level

angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]
0°	121.8	90°	118.5	180°	122.1	270°	118.2
15°	121.5	105°	118.6	195°	121.9	285°	118.3
30°	119.0	120°	121.5	210°	119.2	300°	121.4
45°	118.5	135°	121.8	225°	118.7	315°	122.2
60°	117.9	150°	123.0	240°	118.3	330°	122.8
75°	120.0	165°	122.6	255°	120.5	345°	122.3

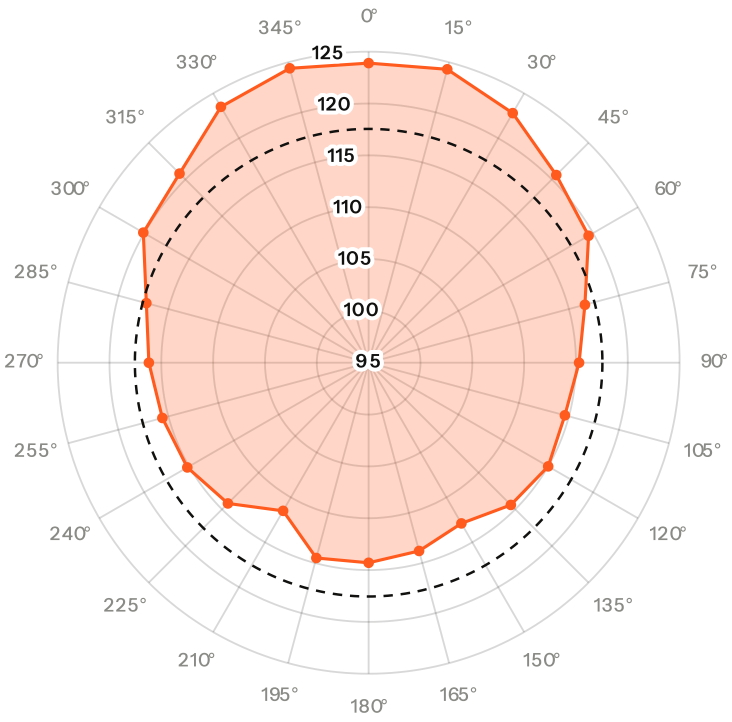
ACOUSTICAL CHARACTERISTICS

eRotor E1500AS

Basic data and direction chart

1500	124	12	2 × 65 Ah	3920	265
Power [W]	Nominal sound pressure level at 30 m [dB]	Number of horns	Number and type of batteries	Mast length [mm]	Weight of siren horns [kg]

Direction pattern expressed as horizontal chart of sound pressure level



Basic statistic data of sound pressure level

median	115.90
arithmetic average	117.55
maximum value	124.40
minimum value	111.50

sound pressure level [dBA]

average 117.55

Rings every 5 dB from 95 (centre) to 125 dB, 0° at the top. Measured sound pressure level at 30 m.

Measured sound pressure level

angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]	angle	L pAeq [dB]
0°	123.9	90°	115.3	180°	114.3	270°	116.2
15°	124.3	105°	114.6	195°	114.5	285°	117.2
30°	122.8	120°	115.0	210°	111.5	300°	120.1
45°	120.6	135°	114.4	225°	114.2	315°	120.8
60°	119.5	150°	112.9	240°	115.2	330°	123.5
75°	116.6	165°	113.8	255°	115.6	345°	124.4