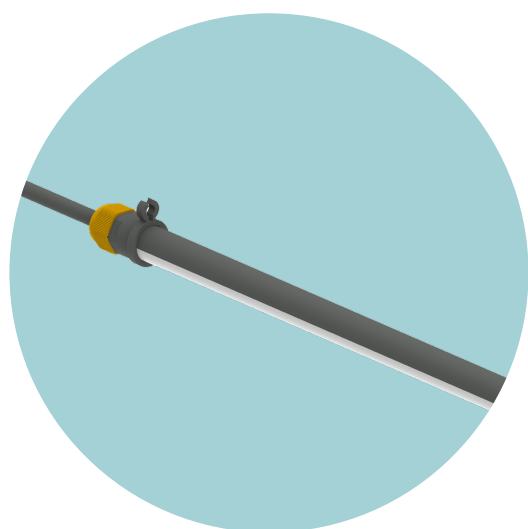


BUBO

48VDC

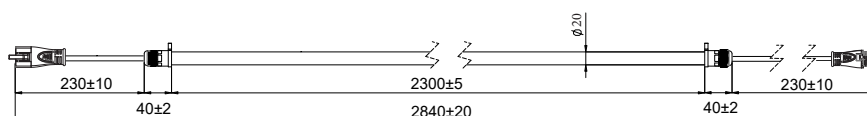
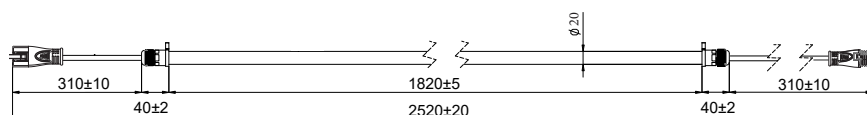
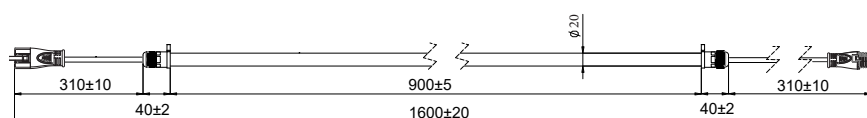
The BUBO: the BUBO was designed especially for in- and below system applications. It improves poultry sight, behaviour, well-being and overall performance.



Specifications

Operating voltage:	48VDC
Power consumption:	See table below
Light output:	See table below
Connection:	Plug & Play
Light source:	LED
Light colour:	See table below
Dimmer type:	HATO 48VDC power supply
Dim range:	0 - 100%
Flicker-free:	yes
Expected average lifetime:	50,000h (L80B10)
Operating temp.:	-10°C (14°F) < Ta < +40°C (104°F)
IP rating:	IP67
Energy label:	A (white versions)
Warranty:	2 Years
Application:	Poultry

Dimensions



Product overview table

	Power Consumption	Light output	Light colour	Maximum number of tubes in series	No of clips needed	Tube length	Light spread
LTL-0.9M-W-0.31_0.31- 2.16W-48V-TL-PC	2.2W	220lm	3000K	92	2	90cm	(1)
LTL-0.9M-W-0.31_0.31- 2.16W-48V-TL-WI	2.2W	220lm	3000K	92	2	90cm	(2)
LTL-0.9M-A-0.31_0.31- 1.44W-48V-TL-PC	1.4W	60lm	594nm	138	2	90cm	(1)
LTL-1.82M-W-0.31_0.31- 4.32W-48V-TL-PC	4.3W	430lm	3000K	46	4	182cm	(1)
LTL-1.82M-W-0.31_0.31- 4.32W-48V-TL-WI	4.3W	430lm	3000K	46	4	182cm	(2)
LTL-1.82M-A-0.31_0.31- 2.88W-48V-TL-PC	2.9W	120lm	594nm	69	4	182cm	(1)
LTL-2.3M-W-0.23_0.23- 5.28W-48V-TL-PC	5.3W	530lm	3000K	37	6	230cm	(1)
LTL-2.3M-W-0.23_0.23- 5.28W-48V-TL-WI	5.3W	530lm	3000K	37	6	230cm	(2)

Product overview table

Article code	Description
LAC-20-PVC	PVC mounting clip
BUBO-1.5m-CC-3p	Connection cable 3p, 1.5m, one female connector
BUBO-3m-CC-3p	Connection cable 3p, 3m, one female connector
BUBO-4m-CC-3p	Connection cable 3p, 4m, one female connector
BUBO-5m-CC-3p	Connection cable 3p, 5m, one female connector
BUBO-6m-CC-3p	Connection cable 3p, 6m, one female connector
BUBO-end-cap-3p	End cap for last BUBO in line to maintain IP
HATO PACK HLG 248D	Dual dimmable power supply box with secondary fuses (2x320W load)
HATO PACK HLG 148D	Single dimmable power supply box with secondary fuses (1x320W load)

BUBO

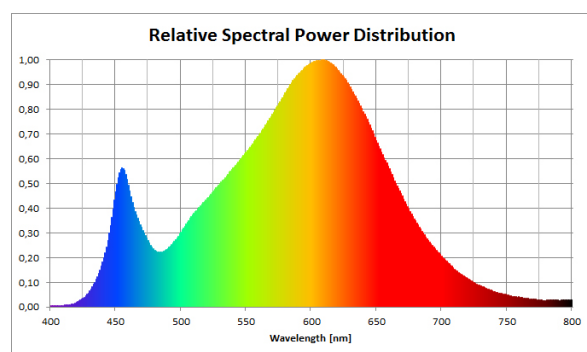


BUBO Amber

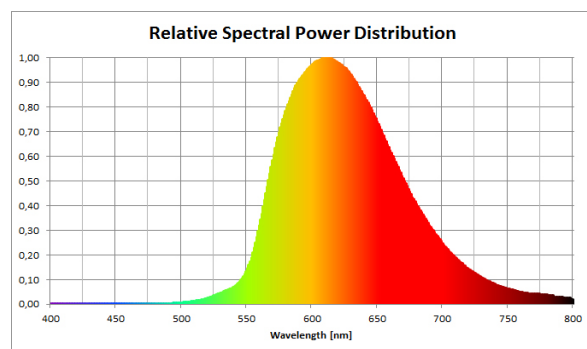


BUBO White

Light distribution



Warm white

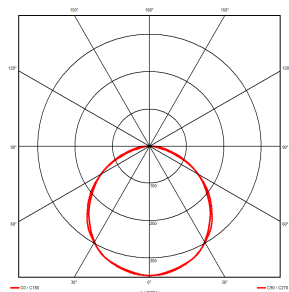


Amber

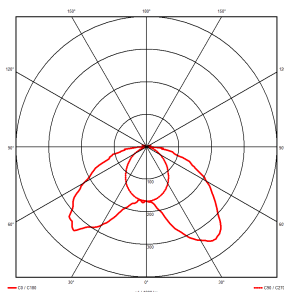
Warm white = 3000K

Amber = 594nm

Light distribution



(1)



(2)

Markings



IP67



E114269

Notes

Always place a fuse between 48VDC output and LED tube series.
This can be a fast fuse with voltage rating of at least 60VDC.

For installations in North America use only 48V NEC class 2 power supplies.
For example HATO PACK HLG with UL fuses.