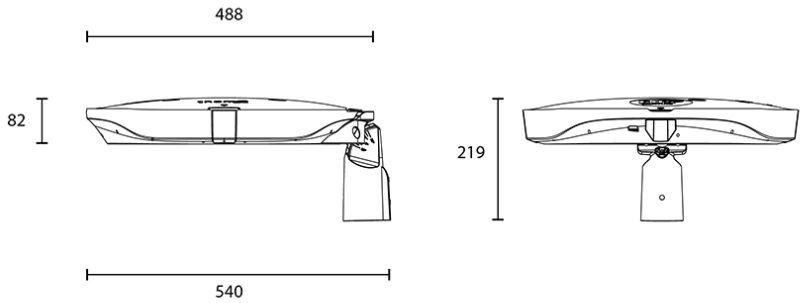
Product Data Sheet

Street lighting



IP66 IK08 CE

THEMIS L GENERAL CHARACTERISTICS	
Applications	Street lighting
Optics	**N:** Narrow V14; **R:** Regular R-V25; **A:** Regular Comfort A-V05; **W:** Wide W-V07; **B:** Wide B-V08; **D:** Extra Wide V20; **F:** Front-Back V10; **E:** Forward Wide E-L01;
Colour temperature	**1:** Cool White 5,500K; **2:** Warm White 3,000K; **8:** Neutral White 4,000K;
CRI and color tolerance (SDCM)	Minimum 70, on request 80 Colour tolerance between several luminaires typical 4 MacAdam steps
Photobiological safety class	Exempt Group
Insulation class	Class II , Class I upon request
Degree of protection	IK09
IP Grade	IP66
Wiring	Internal connections
Dimensions	diam 540 x 219 mm
Weight	10 kg
ELECTRICAL CHARACTERISTICS	
Power supply	220-240 V 50/60 Hz; 120-270 V su richiesta
Power factor	> 0,97 (at full load)
Control system	Automatic "virtual midnight" dimming system with up to 3 steps and CLO function; DALI; remote control based on lumawise system
Overvoltage protection	12kV differential mode, 12kV common mode, SPD 5kA on request
Operating temperature	-20°C +40°C
Optical unit life (Ta from -10°C to 45°C)	L90 B10 > 100.000 hr
MATERIALS	
Fixing	Post top mounting Suitable for 40 to 76 mm diameter poles
Heatsink	Die-cast aluminium
Frame	Die-cast aluminium; painted "Dark Coal"
Optics	Multi-layer PMMA lenses
Screen	4 mm thick toughened flat glass resistant to thermal shock and impact

The characteristics of the product are subject to change and will be confirmed when the order is placed.
The values indicated are to be considered with a tolerance of +/- 5%.

POWER AND OPTICAL FLUX | N
(T_{amb}=25°C)

		4000K			3000K	
CODE	Power (W)	Flux (lm)	Efficiency	Power (W)	Flux (lm)	Efficiency
THLB_ _012_ _	12,9	1.964	152	12,9	1.886	146
THLB_ _022_ _	15,4	2.384	155	15,4	2.288	149
THLB_ _032_ _	17,6	2.714	154	17,6	2.606	148
THLB_ _042_ _	20,6	3.257	158	20,6	3.023	147
THLB_ _052_ _	23,8	3.775	159	23,8	3.518	148
THLB_ _062_ _	27,4	4.345	159	27,4	4.049	148
THLB_ _072_ _	31,7	5.006	158	31,7	4.629	146
THLB_ _082_ _	35,4	5.567	157	35,4	5.188	147
THLB_ _092_ _	39,4	6.123	155	39,4	5.707	145
THLB_ _102_ _	44,8	6.922	155	44,8	6.451	144
THLB_ _112_ _	53,6	8.198	153	53,6	7.747	145
THLB_ _122_ _	61,8	9.458	153	61,8	9.087	147
THLB_ _132_ _	68,2	10.068	148	68,2	9.673	142
THLB_ _142_ _	75,9	11.098	146	75,9	10.662	140
THLB_ _152_ _	82,4	11.938	145	82,4	11.470	139
THLB_ _162_ _	92,1	13.141	143	92,1	12.625	137

POWER AND OPTICAL FLUX | R
(T_{amb}=25°C)

		4000K			3000K	
CODE	Power (W)	Flux (lm)	Efficiency	Power (W)	Flux (lm)	Efficiency
THLB_ _012_ _	12,9	1.958	152	12,9	1.881	146
THLB_ _022_ _	15,4	2.377	154	15,4	2.281	148
THLB_ _032_ _	17,6	2.706	154	17,6	2.599	148
THLB_ _042_ _	20,6	3.228	157	20,6	3.006	146
THLB_ _052_ _	23,8	3.741	157	23,8	3.499	147
THLB_ _062_ _	27,4	4.305	157	27,4	4.027	147
THLB_ _072_ _	31,7	4.961	156	31,7	4.604	145
THLB_ _082_ _	35,4	5.517	156	35,4	5.160	146
THLB_ _092_ _	39,4	6.068	154	39,4	5.676	144
THLB_ _102_ _	44,8	6.859	153	44,8	6.416	143
THLB_ _112_ _	53,6	8.124	152	53,6	7.705	144
THLB_ _122_ _	61,8	9.531	154	61,8	9.154	148
THLB_ _132_ _	68,2	10.146	149	68,2	9.743	143
THLB_ _142_ _	75,9	11.183	147	75,9	10.740	142
THLB_ _152_ _	82,4	12.030	146	82,4	11.553	140
THLB_ _162_ _	92,1	13.242	144	92,1	12.717	138

** Flux tolerance +/- 5%.
Other powers and flows on request.
External connections on request.

POWER AND OPTICAL FLUX I A (T_{amb}=25°C)

		4000K			3000K	
CODE	Power (W)	Flux (lm)	Efficiency	Power (W)	Flux (lm)	Efficiency
THLB_ _012_ _	12,9	2.004	155	12,9	1.925	149
THLB_ _022_ _	15,4	2.432	158	15,4	2.335	152
THLB_ _032_ _	17,6	2.770	157	17,6	2.660	151
THLB_ _042_ _	20,6	3.303	160	20,6	3.075	149
THLB_ _052_ _	23,8	3.828	161	23,8	3.579	150
THLB_ _062_ _	27,4	4.406	161	27,4	4.119	150
THLB_ _072_ _	31,7	5.077	160	31,7	4.710	149
THLB_ _082_ _	35,4	5.646	159	35,4	5.279	149
THLB_ _092_ _	39,4	6.209	158	39,4	5.806	147
THLB_ _102_ _	44,8	7.019	157	44,8	6.563	146
THLB_ _112_ _	53,6	8.313	155	53,6	7.882	147
THLB_ _122_ _	61,8	9.491	154	61,8	9.109	147
THLB_ _132_ _	68,2	10.102	148	68,2	9.696	142
THLB_ _142_ _	75,9	11.136	147	75,9	10.688	141
THLB_ _152_ _	82,4	11.979	145	82,4	11.498	140
THLB_ _162_ _	92,1	13.186	143	92,1	12.656	137

POWER AND OPTICAL FLUX I W (T_{amb}=25°C)

		4000K			3000K	
CODE	Power (W)	Flux (lm)	Efficiency	Power (W)	Flux (lm)	Efficiency
THLB_ _012_ _	12,9	1.990	154	12,9	1.912	148
THLB_ _022_ _	15,4	2.416	157	15,4	2.319	151
THLB_ _032_ _	17,6	2.750	156	17,6	2.642	150
THLB_ _042_ _	20,6	3.268	159	20,6	3.045	148
THLB_ _052_ _	23,8	3.787	159	23,8	3.545	149
THLB_ _062_ _	27,4	4.359	159	27,4	4.080	149
THLB_ _072_ _	31,7	5.024	158	31,7	4.665	147
THLB_ _082_ _	35,4	5.586	158	35,4	5.229	148
THLB_ _092_ _	39,4	6.143	156	39,4	5.751	146
THLB_ _102_ _	44,8	6.945	155	44,8	6.501	145
THLB_ _112_ _	53,6	8.225	153	53,6	7.807	146
THLB_ _122_ _	61,8	9.543	154	61,8	9.149	148
THLB_ _132_ _	68,2	10.158	149	68,2	9.739	143
THLB_ _142_ _	75,9	11.197	148	75,9	10.735	141
THLB_ _152_ _	82,4	12.045	146	82,4	11.548	140
THLB_ _162_ _	92,1	13.258	144	92,1	12.711	138

** Flux tolerance +/- 5%.
Other powers and flows on request.
External connections on request.

POWER AND OPTICAL FLUX | B
(T_{amb}=25°C)

		4000K			3000K	
CODE	Power (W)	Flux (lm)	Efficiency	Power (W)	Flux (lm)	Efficiency
THLB_ _012_ _	12,9	1.957	152	12,9	1.880	146
THLB_ _022_ _	15,4	2.376	154	15,4	2.279	148
THLB_ _032_ _	17,6	2.704	154	17,6	2.597	148
THLB_ _042_ _	20,6	3.226	157	20,6	3.004	146
THLB_ _052_ _	23,8	3.739	157	23,8	3.497	147
THLB_ _062_ _	27,4	4.302	157	27,4	4.025	147
THLB_ _072_ _	31,7	4.958	156	31,7	4.601	145
THLB_ _082_ _	35,4	5.514	156	35,4	5.157	146
THLB_ _092_ _	39,4	6.064	154	39,4	5.673	144
THLB_ _102_ _	44,8	6.855	153	44,8	6.412	143
THLB_ _112_ _	53,6	8.119	151	53,6	7.700	144
THLB_ _122_ _	61,8	9.531	154	61,8	9.154	148
THLB_ _132_ _	68,2	10.146	149	68,2	9.743	143
THLB_ _142_ _	75,9	11.183	147	75,9	10.740	142
THLB_ _152_ _	82,4	12.030	146	82,4	11.553	140
THLB_ _162_ _	92,1	13.242	144	92,1	12.717	138

POWER AND OPTICAL FLUX | D
(T_{amb}=25°C)

		4000K			3000K	
CODE	Power (W)	Flux (lm)	Efficiency	Power (W)	Flux (lm)	Efficiency
THLB_ _012_ _	12,9	1.985	154	12,9	1.908	148
THLB_ _022_ _	15,4	2.410	156	15,4	2.312	150
THLB_ _032_ _	17,6	2.744	156	17,6	2.635	150
THLB_ _042_ _	20,6	3.263	158	20,6	3.035	147
THLB_ _052_ _	23,8	3.781	159	23,8	3.532	148
THLB_ _062_ _	27,4	4.352	159	27,4	4.066	148
THLB_ _072_ _	31,7	5.015	158	31,7	4.648	147
THLB_ _082_ _	35,4	5.577	158	35,4	5.210	147
THLB_ _092_ _	39,4	6.133	156	39,4	5.730	145
THLB_ _102_ _	44,8	6.933	155	44,8	6.477	145
THLB_ _112_ _	53,6	8.211	153	53,6	7.780	145
THLB_ _122_ _	61,8	9.488	154	61,8	9.090	147
THLB_ _132_ _	68,2	10.099	148	68,2	9.675	142
THLB_ _142_ _	75,9	11.132	147	75,9	10.665	141
THLB_ _152_ _	82,4	11.975	145	82,4	11.472	139
THLB_ _162_ _	92,1	13.182	143	92,1	12.628	137

** Flux tolerance +/- 5%.
Other powers and flows on request.
External connections on request.

POWER AND OPTICAL FLUX I F (T_{amb}=25°C)

		4000K			3000K	
CODE	Power (W)	Flux (lm)	Efficiency	Power (W)	Flux (lm)	Efficiency
THLB_ _012_ _	12,9	1.982	154	12,9	1.905	148
THLB_ _022_ _	15,4	2.407	156	15,4	2.309	150
THLB_ _032_ _	17,6	2.740	156	17,6	2.631	149
THLB_ _042_ _	20,6	3.223	156	20,6	3.040	148
THLB_ _052_ _	23,8	3.734	157	23,8	3.538	149
THLB_ _062_ _	27,4	4.298	157	27,4	4.073	149
THLB_ _072_ _	31,7	4.953	156	31,7	4.656	147
THLB_ _082_ _	35,4	5.508	156	35,4	5.219	147
THLB_ _092_ _	39,4	6.058	154	39,4	5.740	146
THLB_ _102_ _	44,8	6.848	153	44,8	6.488	145
THLB_ _112_ _	53,6	8.111	151	53,6	7.793	145
THLB_ _122_ _	61,8	9.543	154	61,8	9.165	148
THLB_ _132_ _	68,2	10.158	149	68,2	9.755	143
THLB_ _142_ _	75,9	11.197	148	75,9	10.753	142
THLB_ _152_ _	82,4	12.045	146	82,4	11.567	140
THLB_ _162_ _	92,1	13.258	144	92,1	12.732	138

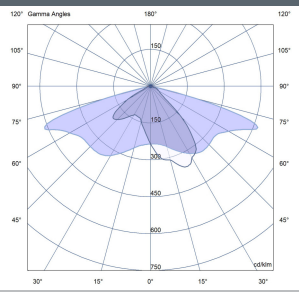
POWER AND OPTICAL FLUX I E (T_{amb}=25°C)

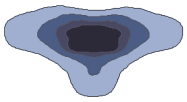
		4000K			3000K	
CODE	Power (W)	Flux (lm)	Efficiency	Power (W)	Flux (lm)	Efficiency
THLB_ _012_ _	12,9	1.909	148	12,9	1.834	142
THLB_ _022_ _	15,4	2.318	151	15,4	2.224	144
THLB_ _032_ _	17,6	2.638	150	17,6	2.534	144
THLB_ _042_ _	20,6	3.147	153	20,6	2.930	142
THLB_ _052_ _	23,8	3.647	153	23,8	3.412	143
THLB_ _062_ _	27,4	4.197	153	27,4	3.926	143
THLB_ _072_ _	31,7	4.837	153	31,7	4.489	142
THLB_ _082_ _	35,4	5.379	152	35,4	5.031	142
THLB_ _092_ _	39,4	5.916	150	39,4	5.534	140
THLB_ _102_ _	44,8	6.688	149	44,8	6.256	140
THLB_ _112_ _	53,6	7.921	148	53,6	7.512	140
THLB_ _122_ _	61,8	9.293	150	61,8	8.925	144
THLB_ _132_ _	68,2	9.892	145	68,2	9.500	139
THLB_ _142_ _	75,9	10.904	144	75,9	10.472	138
THLB_ _152_ _	82,4	11.729	142	82,4	11.265	137
THLB_ _162_ _	92,1	12.911	140	92,1	12.399	135

** Flux tolerance +/- 5%.
Other powers and flows on request.
External connections on request.

OPTICS

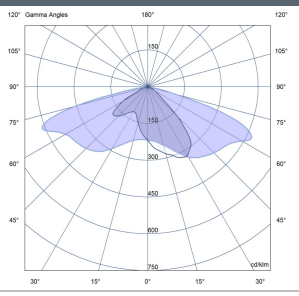
Narrow V14

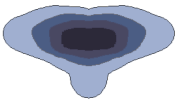




Asymmetrical street optics - Narrow beam
L / H = 0,5 ÷ 0,9

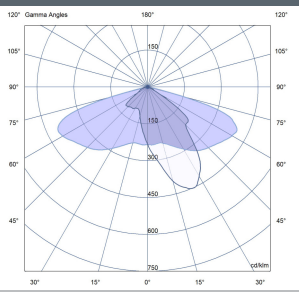
Regular R-V25

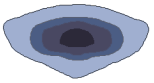




Asymmetrical street optics - Medium beam
L / H = 0,9 ÷ 1,1

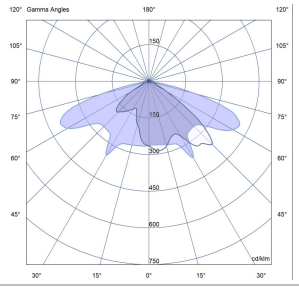
Regular Comfort A-V05

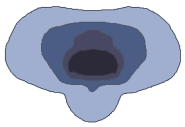




Asymmetrical Optics - Comfort
L / H = 1,0

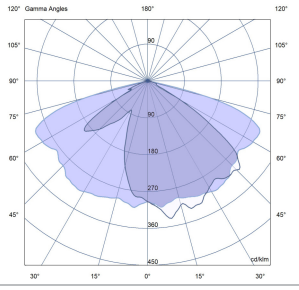
Wide W-V07





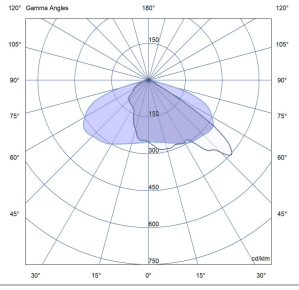
Asymmetrical street optics - Wide beam
L / H = 1,1 ÷ 1,3

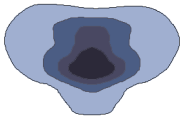
Wide B-V08



Asymmetrical street optics - Wide beam
L / H = 1,2 ÷ 1,5

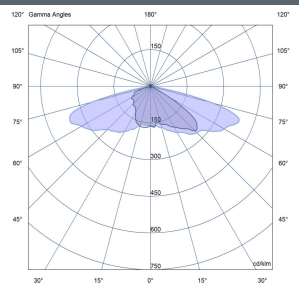
Extra Wide V20

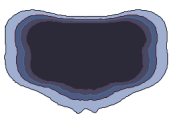




Asymmetrical optics - Very wide beam
L / H = 1,3 ÷ 1,6

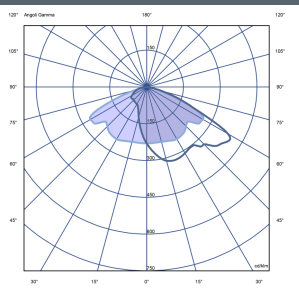
Front-Back V10

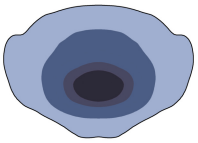




Asymmetrical Street Optics - Front-Back
L / H = 1,2 ÷ 1,5

Forward Wide E-L01



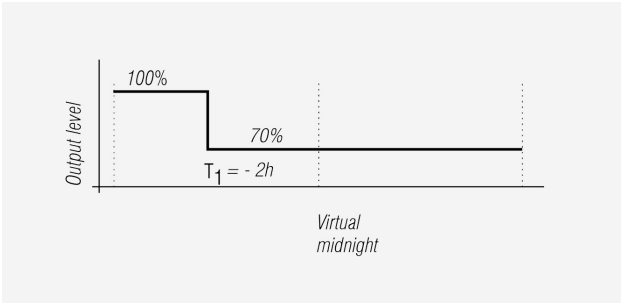


Asymmetrical optics - Very wide beam
L / H = 1,5-2,0

** Flux tolerance +/- 5%.
Other powers and flows on request.
External connections on request.

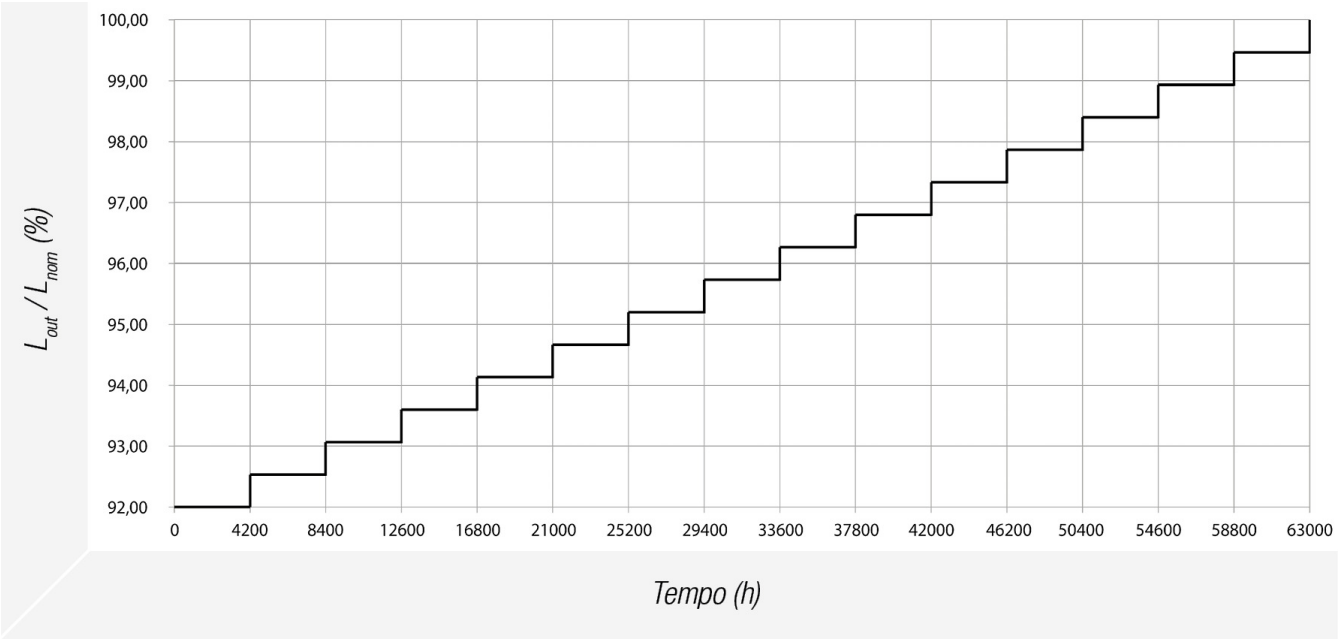
DIMMING

STANDARD VIRTUAL MIDNIGHT PROFILE



For other profiles please
contact the sales department.

STANDARD CLO PROFILE



** Flux tolerance +/- 5%.
Other powers and flows on request.
External connections on request.

Product Data Sheet

Street lighting

CODING

	Optics	LED Color Temperature	Power *	Insulation Class (Input Range)	Dimming	Various
THLB	R	8	XX	2	N	A
	N Narrow V14	**1** Cool White 5,500K	**01** 12.9	**2** Class II (220-240V)	**N** No Dimming	**L** Standard
	R Regular R-V25	**2** Warm White 3,000K	**02** 15.4	Versions available on request	**M** Virtual Midnight**	
	A Regular Comfort A-V05	**8** Neutral White 4,000K	**03** 17.6	**1** Class I (120-270V)	**Z** Virtual Midnight** + CLO	
	W Wide W-V07	Versions available on request	**04** 20.6		**L** Zhaga 18 + Virtual Midnight**	
	B Wide B-V08	**5** Warm White 2,700K	**05** 23.8		**Y** Zhaga 18 + Virtual Midnight** + CLO	
	D Extra Wide V20	**9** Extra Warm White 2,200K	**06** 27.4			
	F Front-Back V10		**07** 31.7			
	E Forward Wide E-L01		**08** 35.4			
			09 39.4			
			10 44.8			
			11 53.6			
			12 61.8			
			13 68.2			
			14 75.9			
			15 82.4			
			16 92.1			

** Flux tolerance +/- 5%.
Other powers and flows on request.
External connections on request.