

presents products from



Unique Excellence



LEDTRON Beleuchtung & Tankstellentechnik St. Oswald 34 9184 St. Jakob/Rosental Austria phone: +43 (0)664 322 51 30 fax: +43 (0)4253 38629 e-mail: ibounig@ledtron.at web: www.ledtron.at



Outdoor lighting expert

Product Catalog 2014-2015

About Arrlux



ARRLUX OPTOELECTRONIC CO., LTD as a subsidiary of TTC Investment Co., Ltd has been dedicated to LED lighting luminaires for professionals since 2009 when the R & D team was organized, and accumulated abundant experience in professional LED lighting luminaire R & D, manufacturing, and application. The professional LED lighting luminaires e.g. roadway/street/area light, industrial lighting products, sports venue lighting products, and special purpose lighting products have been satisfying and guiding worldwide market needs, acquired very positive comments from the end users and our business partners.

ARRLUX STRENGTH:

Strength A - Financing and facility

1. 2000+ employees, and 500+ million USD yearly turnover for TTC group companies incl. Arrlux LED lighting business.

2. 30,000 sq.m. industrial park worth USD 20 million, and in possession of 12,000 sq.m. hotel style dormitory.

3. 800 sq.m. optoelectronic test lab worth USD 2 million, which has been accredited by UL and ENEC with witness data program since 2013. This Lab has been one of the few accredited labs awarded witness data program by UL and ENEC, is one of even fewer labs affiliated to the manufacturer rather than an independent institution.

4. In possession of advanced metal punching, precision plastic injection workshops equipped with high precision processing machines, which guarantees the material supply for big production capacity need.

5. SAP-ERP enterprise resources planning system is utilized in the group companies.

Strength B - Product portfolio, and its R & D

1. 1.Arrlux focuses on led lighting luminaires for professionals, and is the owner of 80+ patents obtained or under application, 10+ PCT protected patents (applications were submitted).

2. Worldwide top led luminaire R & D team. The LED lights developed by this team have been installed globally, which is worth USD 300+ million.

- 3. Most rapid response capability worldwide to product development requests.
- 4. Globally leading smart motion sensing dimming system, applicable for our professional led lighting luminaires for further energy savings, the patent applications to American and German authorities have been submitted.

5. Most abundant optical lenses in LED lighting industry, strong optics solutions R & D as well.

Strength C - Production capacity and quality management

1. ISO9001 certified

2. Higher in quality criteria than that of international premium lighting brands. 8 quality management processes for the whole portfolio of products ranging from raw material to finished product delivery.

3. One and only product identification number for each product, which enables Arrlux to trace any process of manufacturing.

4. 10 years limited warranty for the whole product portfolio.

5. 500k units yearly production capacity

Strength D - Market network and services

1. Subsidiary company Arrlux Inc. is operating in California USA, providing north American regions with technical support and door-to-door services.

Subsidiaries in Canada, south America, Australia, and Germany are to be established, so as to provide the clients in the regions with high efficient and quality technical services.

2. Capable to assist clients in efficient technical proposals and rapid product development, also able to assist clients to win the award of project contracts for the whole course.

3. Top assured after sales services, e.g. 10 years limited warranty, and other quality commitments.

4. Diversified cooperation models with clients/partners, e.g. optional dealership, entrusted mode, joint venture model, and local assembly facility.

Directory





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GAMA (Mounting Type: D) **P**15-17

GAMA (Mounting Type: E)





FIND Series 5-300F **P**28-31

AURORA Series







BRIGHT Series



VENUS Series Appendix 0 0 Microwave Motion sensor Photocell STILL BERTHE 8 4 Si-Fe Battery Module Appendix Surge Protection Device **P**47-49 BRIGHT(BLB) P41-43 BRIGHT(BLC) P44-46 VENUS(BLD) **P**50-53



Dimensional Drawing



Features & Benefits

- 1) Based on the most successful product development, manufacturing and application expertise and experience.
- 2) Powered by the worldwide best LED, LED drivers, and other key components.
- 3) cULus, DLC listed, and certified as per CE (lvd, emc, RoHs, Erp directives), CB, ENEC standards.
- 4) Sufficient optics solutions at option to meet almost all roadway/street and area lighting application standards.
- 5) Modular mechanical construction, and the most thoughtful design, make the product the most user friendly and easiest for assembly, maintenance and installation.
- 6) The most competitive in cost performance, and one of the best ownership costs. 10 years limited warranty, free from maintenance for 10 years at least, the most competitive in operating cost, soonest in return on investment (ROI) or payback.
- 7) Environmentally friendly packaging materials (EPE).

Applications

Municipal and rural street, roadway, or area lighting.

Ordering Information

Example 1: SLA-30-T3L-50K-GR-00 Example 3: SLC-80-T3L-50K-GR-00

Example 2: SLB-40-T3L-50K-GR-00 Example 4: SLD-40-T3L-50K-GR-00

Product ID	Power (W)	or	Product ID	Power (W)	or	Product ID	Power (W)	or	Product ID	Power (W)	Optic Lens	CCT* (ANSI)	Housing Color**	Lighting Control
SLA₅	30 1		SLB 6	40 ₃		SLC 7	80		SLD₅	20	T1M	30K	GR	00
	30W			40W			80W			20W	T2M	3045	Grey	Not
	60 ₂			80₄	1		120			30	тзм	±175K	(RAL:7004)	required
	60W			80W			120W			30W	T3L	40K	вк	01
	90			120			160			40	T4S	3985	Black	Photocell
	90W			120W			160W			40W	T5U	±275K	(RAL:9011)	02
	120			160			200			60	T5V	50K	wн	Motion
	120W			160W			200W			60W	T5W	5028	White	Sensor
	150			200			240			80	T5S	±283K	(RAL:9010)	03
	150W			200W			240W			80W	T5M	57K	BZ	Photocell+
	180			240			280			90	T5L	5665	Bronze	Motion
	180W			240W			280W			90W	T5D	±355K	(RAL:8017)	Sensor
	210			280			320			120		1		04 DALI
	210W			280W			320W			120W				05
	240			320				l			1			1-10V
	240W			320W										dimming
	270				J									
	270W													
	300													
	000													

Footnotes:

300W

• сст*:

1. LEDs at 5000k CCT are always in stock largely to support prompt delivery of finished products.

LEDs at 3000k, 4000k, 5700k CCT are in stock as well, but the quantity is small to meet small needs, and the shipment for the finished products with these LEDs cannot be made sooner than those with LEDs at 5000k CCT.
 LEDs at CCT or wavelength (unit nm) which is not in stock are available upon request, but the lead time for the finished products with these types of LEDs cannot be soon, also the unit price is higher.

• Housing Color**:

GR (Grey) housings are always in stock largely to support prompt delivery of finished products.
 BK (Black), WH (White), BZ (Bronze) housing are available too, and the unit price of the finished product with these types of housings may be different from that with grey housing, but the lead time is longer relatively.
 Other housing colors which are not mentioned can be customized, but the unit price is higher, the lead time is much longer.

• Optic Lens Options:

 T1M:Type I Medium T2M: Type II Medium 	7) T5V: 25° 8) T5W: 40°
 T3M: Type III Medium T3L: Type III Long T4S: Type IV Short 	9) T5S: 60° 10) T5M: 90° 11) T5L: 120°
6) T5U: 10°	12) T5D: Glare resistant diffuser.

1, 2, 3, 4, 7, 8: DALI control is not available.

7,8: motion sensing is not available.

Photocell is available based on customization request.

8: 1-10V dimming and motion sensing are not available.

BRIEF SPECIFICATIONS

Model No.	SLA30	SLA60	SLA90	SLA120	9	SLA150	SLA180		SLA210	SLA	240	SLA270	SLA300
No. of LEDs	18	36	54	72		90	108		126	14	14	162	180
Nominal Power	30W	60W	90W	120W		150W	180W		210W	240	w	270W	300W
Net Weight	6.46kg	7.09kg	8.22kg	8.88kg		9.47kg	10.83kg		11.47kg	12.4	9kg	13.12kg	g 13.88kg
EPA (1 Fixture at 0 $^\circ$ mount)	0.46sq. ft.	0.5sq. ft.	0.54sq. ft	0.59sq. f	t. 0.	.63sq. ft.	0.67sq. ft.		0.72sq. ft.	0.76s	q.ft.	0.8sq. ft	t. 0.84sq.ft.
Gross Weight	7.46kg	8.16kg	9.35kg	10.05kg	1	L0.73kg	12.15kg		12.84kg	13.9	1kg	14.64kg	g 15.44kg
Dimensions (L x W x H)	463 x 345 x 116(mm)	523 x 345 x 116(mm)	583 x 345 x 116(mm			03 x 345 116(mm)	763 x 345 x 116(mm)		823 x 345 x 116(mm)	883 x x 116		943 x 34 x 116(mr	
Carton Dimensions (L x W x H)	535 x 425 x 160(mm)	595 x 425 x 160(mm)	655 x 425 x 160(mm			75 x 425 160(mm)	835 x 425 x 160(mm)		895 x 425 x 160(mm)	955 x x 160		1015 x 42 x 160(mr	
Input			120V-2	77V AC 50/60H	z or 220)-240V AC 5	50/60Hz						
Model No.	SLB40	SLB8	0	SLB120	SL	B160	SLB200)	SLB24	10	S	LB280	SLB320
No. of LEDs	18	36		54		72	90		108			126	144
Nominal Power	40W	80W	/	120W	1	60W	200W		2400	V	:	280W	320W
Net Weight	6.46kg	7.09	g	8.22kg	8.	.88kg	10kg		10.83	kg	1	1.47kg	12.49kg
EPA (1 Fixture at 0 $^\circ$ mount)	0.46sq. ft.	0.5sq.	ft.	0.54sq. ft.	0.5	9sq.ft.	0.63sq.1	ft.	0.67sq	. ft.	0.7	72sq.ft.	0.76sq. ft.
Gross Weight	7.46kg	8.16	g	9.35kg	10	.05kg	11kg		12.15	kg	1	2.84kg	13.91kg
Dimensions (L x W x H)	463 x 345 x 116(mm)	523 x 3 x 116(r		583 x 345 x 116(mm)		3 x 345 .6(mm)	703 x 34 x 116(mr		763 x 3 x 116(n			23 x 345 16(mm)	883 x 345 x 116(mm)
Carton Dimensions (L x W x H)	535 x 425 x 160(mm)	595 x 4 x 160(r		655 x 425 x 160(mm)		5 x 425 60(mm)	775 x 42 x 160(mr		835 x 4 x 160(n			95 x 425 60(mm)	955 x 425 x 160(mm)
Input				120V-277V AC	50/60H	lz or 220-24	40V AC 50/60	Hz					1
MadalNa	SLC80	51	.C120	SLC160		510	200		SLC240		SLC28	20	SLC320
Model No.	36	31	54	72			10		108		126		144
Nominal Power	80W	1	.20W	160W			ow		240W	_	280V		320W
Net Weight	7.09kg		.22kg	8.88kg)kg		10.83kg	_	11.47		12.49kg
EPA (1 Fixture at 0° mount)	0.5sq. ft.		4sq. ft.	0.59sq. f			sq. ft.		.67sq. ft.		0.72sq	<u> </u>	0.76sq. ft.
Gross Weight	8.16kg		.35kg	10.05kg			.kg		12.15kg		12.84		13.91kg
Dimensions (L x W x H)	523 x 345	58	3 x 345	643 x 34 x 116(mr	5	703	x 345 (mm)	7	'63 x 345 116(mm)		823 x 3 x 116(n	345	883 x 345 x 116(mm)
Carton Dimensions (L x W x H)	imensions 595 x 425 655 x 42		5 x 425	715 x 42 x 160(mr	5	775	x 425)(mm)	8	35 x 425 160(mm)		895 x 4 x 160(n	125	955 x 425 x 160(mm)
Input		I		347-48	0V AC 50	0/60Hz	I						
Drive current: SLA:530r	nA SLB:700n	nA SLC:700	nA										
Model No.	SLD20	S	LD30	SLD40		SLD	060		SLD80		SLD9	0	SLD120
inductivo.				1 10		510							

Model No.	SLD20	SLD30	SLD40	SLD60	SLD80	SLD90	SLD120
No. of LEDs		18		3	6	5	4
Nominal Power	20W	30W	40W	60W	80W	90W	120W
Net Weight		5.95Kg		6.58	3Kg	7.40	ЭКg
EPA (1 Fixture at 0 $^\circ$ mount)		0.46sq.ft.		0.550	q. ft.	0.54s	q.ft.
Gross Weight		6.95kg		7.6	5kg	8.53	3kg
Dimensions (L x W x H)		463 x 345 x 116mm		523 x x 11	x 345 6mm	583 x x 116	
Carton Dimensions (L x W x H)		535 x 425 x 160mm		595 x x 16	x 425 Omm	655 x x 160	
Input			9-18V DC	or 18-32V DC			
Drive current:	350mA	500mA	700mA	500mA	700mA	500mA	700mA

General specifications for all the above models.

Electrical: 1. Power Factor: >0.95 at full load.

2. Total Harmonic Distortion: <20% at full load.

Materials:

7. LED option: CREE or PHILIPS Lumileds.
8. LED Driver Origin: PHILIPS or MEANWELL.

9. Optional NEMA photocell with its receptacle, or shorting cap with its receptacle.

Optional motion sensing dimmer for future energy saving and intelligent lighting control.
 Optional bird spike to avoid bird waste pollution

Optional bird spike to avoid bird waste pollution
 Worldwide top brand quick connector for tool-free wiring, and terminal block for easiest wiring, two axis T-shaped bubble level for ease of leveling and tilting angle setup as well.
 Die cast aluminium LED driver compartment, spigot, and led light bar end cap with corrosion resistant powder coating. Extruded aluminium alloy heat sink with anodized finish. 304 graded stainless steel protective cover to protect UV resistant polycarbonate lenses.

Photometrics

Optic Lens code: T1M IES Classification: IES Type I Medium







E 4 2 2 1 8 House Side

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Optic Lens code: T2M IES Classification: IES Type II Medium

Optic Lens code:T3M IES Classification:IESTypeIII Medium





There is a second secon

Optic Lens code: T3L IES Classification: IES Type III Long







Texture (FM2)

Optic Lens code: T4S IES Classification: IES Type IV Short

Mounting and Optional Accessories





I Optional Field-installed Accessory: Bird Spikes for LED Light Bars.





Simulation Calculation Summary Reference



Area = Pole Spacing x Road Width (unit: m) Lav* (cd/sq.m.) and Eav* (lux) are the values based on Dialux simulation calculations for one typical section of street.

Mod	el No.	SL	A30	S	LA60	SI	_A90	SL	• A120	SL	A150	SL	A180	SL	A210	SL	A240	SL	A270	SI	_A300
T2N	lens	Lav*		Lav*		Lav*		Lav*		Lav*		Lav*		Lav*		Lav*		Lav*		Lav*	
MH	Area	cd/m2	Eav*/lx	cd/m2	Eav*/lx	cd/m2	Eav*/lx	cd/m2	Eav*/lx	cd/m2	Eav*/lx	cd/m2	Eav*/lx	cd/m2	Eav*/lx	cd/m2	Eav*/lx	cd/m2	Eav*/lx	cd/m2	Eav*/lx
8	35 x 7	0.57	8.03	1.14	16	1.74	24	2.33	33	2.89	41	3.46	49	4.03	57	4.64	65	5.21	73	5.78	81
10	40 x 10.5	0.35	5.02	0.7	10	1.07	15	1.43	20	1.78	25	2.13	30	2.47	35	2.85	41	3.2	46	3.55	51
12	45 x 10.5	0.28	4.01	0.55	7.99	0.84	12	1.12	16	1.4	20	1.67	24	1.94	28	2.24	33	2.51	37	2.79	41
	el No.	SL	A30	S	LA60	SI	_A90	SL	A120	SL	A150	SL	A180	SL	A210	SL	A240	SL	A270	SI	_A300
T3N	lens	Lav*	F * /1	Lav*	F */	Lav*	F */I	Lav*	F */1	Lav*	F */1	Lav*	F */I	Lav*	F */1	Lav*	5 */1	Lav*	F */I	Lav*	F */1
MH	Area	cd/m2	Eav*/lx	cd/m2	Eav*/lx	cd/m2	Eav*/lx	cd/m2	Eav*/lx	cd/m2	Eav*/lx	cd/m2	Eav*/lx	cd/m2	Eav*/lx	cd/m2	Eav*/lx	cd/m2	Eav*/lx	cd/m2	Eav*/lx
8	35 x 10.5	0.43	6.53	0.86	13	1.33	20	1.75	26	2.2	33	2.61	39	3.06	46	3.5	53	3.95	60	4.39	66
10	40 x 10.5	0.34	4.74	0.67	9.44	1.03	15	1.36	19	1.71	24	2.03	29	2.38	34	2.72	38	3.08	43	3.42	48
12	45 x 14	0.24	3.57	0.48	7.12	0.74	11	0.98	14	1.23	18	1.46	22	1.71	25	1.95	29	2.21	33	2.45	36
	el No.	SL	A30	S	LA60	SI	_A90	SL	A120	SL	A150	SL	A180	SL	A210	SL	A240	SL	A270	SI	_A300
T3L MH	ens Area	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx
8	35 x 10.5	0.46	6.02	0.91	12	1.4	18	1.85	24	2.33	31	2.76	36	3.23	43	3.7	49	4.18	55	4.65	61
10	40 x 10.5	0.33	4.15	0.65	8.27	1	13	1.32	17	1.66	21	1.97	25	2.31	29	2.64	34	2.99	38	3.32	42
12	50 x 14	0.22	2.96	0.43	5.9	0.66	9	0.88	12	1.1	15	1.3	18	1.53	21	1.75	24	1.98	27	2.2	30
Mod	el No.	E	SLB40		SLI	380		SLB120		SLB	160	5	SLB200		SLB	240	S	SLB280		SLB	320
T2N	lens	Lav*			Lav*		Lav*			Lav*		Lav*			Lav*		Lav*			Lav*	
MH	Area	cd/m2	Eav*/I	x	cd/m2	Eav*/lx	cd/m2	Eav*/I	X C	d/m2	av*/lx	cd/m2	Eav*/I	x	cd/m2	Eav*/lx	cd/m2	Eav*/I	x	cd/m2	Eav*/lx
8	35 x 7	0.68	9.47		1.35	19	2.02	28		2.66	37	3.36	47		4.01	56	4.65	65		5.34	75
10	40 x 10.5	0.41	5.92		0.83	12	1.24	18		1.63	23	2.06	29		2.47	35	2.86	41		3.28	47
12	45 x 10.5	0.33	4.73		0.65	9.46	0.98	14		1.28	19	1.62	24		1.94	28	2.25	33		2.58	37
	el No.	5	SLB40		SLI	380	5	SLB120		SLB	160	5	SLB200		SLB	240	S	SLB280		SLB	320
	lens	Lav*	Eav*/I	x	Lav*	Eav*/lx	Lav*	Eav*/I	v	Lav*	av*/lx	Lav*	Eav*/I	x	Lav*	Eav*/lx	Lav*	Eav*/I	x	Lav*	Eav*/lx
MH	Area	cd/m2			cd/m2		cd/m2	_		:d/m2		cd/m2			cd/m2	47	cd/m2			cd/m2	62
8	35 x 10.5	0.52	7.83		1.04	16	1.56	24		2.09	32	2.56	39		3.09	47	3.6	54			
10	40 x 10.5	0.4	5.68		0.81	11	1.21	17		1.63	23	1.99	28		2.41	34	2.8	39		3.21 2.30	45 34
12	45 x 14	0.29	4.29		0.58	8.65	0.87	13		1.17	17	1.43	21		1.73	26	2.01	30			
Mod T3L	el No.	5	SLB40		SLI	380	5	SLB120		SLB	160	5	SLB200		SLB	240	S	SLB280		SLB	320
MH	Area	Lav* cd/m2	Eav*/I	×	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/I	v	Lav* :d/m2	av*/lx	Lav* cd/m2	Eav*/I	x	Lav* cd/m2	Eav*/Ix	Lav* cd/m2	Eav*/I	x	Lav* cd/m2	Eav*/lx
8	35 x 10.5	0.55	7.22		1.11	15	1.65	22		2.21	29	2.71	36		3.27	43	3.81	73		4.36	57
10	45 x 10.5	0.39	4.98		0.79	10	1.18	15		1.58	20	1.93	25		2.34	30	2.72	49		3.11	40
12	50 x 14	0.26	3.55		0.52	7.17	0.78	11		1.05	14	1.28	18		1.55	21	1.80	41		2.06	28

Simulation Calculation Summary Reference



Area = Pole Spacing x Road Width (unit: m)

Lav* (cd/sq.m.) and Eav* (lux) are the values based on Dialux simulation calculations for one typical section of street.

	el No.	SI	LA30	S	LA60	SI	_A90	SL	A120	SL	A150	SL	A180	SL	A210	SL	A240	SL	A270	S	_A300
MH	Area	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx
8	35 x 14	0.63	9.03	1.26	18	1.92	27	2.57	37	3.2	46	3.83	55	4.45	64	5.13	73	5.76	82	6.39	91
10	40 x 21	0.42	6.02	0.84	12	1.28	18	1.71	24	2.13	30	2.55	36	2.97	42	3.42	49	3.84	55	4.26	61
12	45 x 21	0.37	5.02	0.73	10	1.12	15	1.49	20	1.85	25	2.22	30	2.58	35	2.97	41	3.34	46	3.7	51
	el No.	SI	LA30	S	LA60	SI	_A90	SL	A120	SL	A150	SL	A180	SL	A210	SL	A240	SL	A270	S	A300
тзм МН	Area	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/Ix	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/Ix	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/Ix	Lav* cd/m2	Eav*/lx
8	35 x 21	0.51	7.53	1.02	15	1.57	23	2.08	31	2.61	38	3.09	46	3.63	53	4.15	61	4.69	69	5.21	77
10	40 x 21	0.43	6.02	0.85	12	1.31	18	1.73	24	2.17	31	2.58	36	3.02	43	3.46	49	3.91	55	4.34	61
12	45 x 28	0.31	4.21	0.61	8.23	0.94	13	1.24	17	1.56	21	1.85	25	2.17	30	2.48	34	2.8	39	3.11	43
Mod	el No.	SI	LA30	S	LA60	SI	_A90	SL	A120	SL	A150	SL	A180	SL	.A210	SL	A240	SL	.A270	S	_A300
T3LI MH	ens Area	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx
8	35 x 21	0.5	7.03	1	14	1.54	22	2.04	29	2.56	36	3.03	42	3.55	50	4.07	57	4.6	64	5.11	71
10	45 x 21	0.36	4.98	0.72	9.92	1.11	15	1.47	20	1.84	25	2.18	30	2.56	35	2.93	40	3.31	46	3.68	51
12	50 x 28	0.26	3.59	0.52	7.16	0.8	11	1.06	15	1.33	18	1.58	22	1.85	25	2.11	29	2.39	33	2.65	37
Mod	el No.		SLB40		SLE	B80	6	SLB120		SLB	160	5	SLB200		SLB	240	S	LB280		SLB	320
T2M	lens	Lav*			Lav*		Lav*			Lav*		Lav*			Lav*		Lav*			Lav*	
			- +/1				Lav					Lav					LdV	F */1		LdV	- */I
MH	Area	cd/m2	2 Eav*/I	×	cd/m2	Eav*/lx	cd/m2	Eav*/I	¥	d/m2	Eav*/Ix	cd/m2	Eav*/I	×	cd/m2	Eav*/lx	cd/m2	Eav*/I	×	cd/m2	Eav*/Ix
MH 8	Area 35 x 14		2 Eav*/I 11	x		Eav*/lx 21		Eav*/I	× c	2.94	Eav*/Ix 42		Eav*/l:	× (Eav*/lx 63		Eav*/I	x	cd/m2 5.91	84
8 10	35 x 14 40 x 21	cd/m2 0.75 0.5	11 7.11	x	cd/m2 1.49 0.99	21 14	cd/m2 2.24 1.49	32	× c	2.94 1.96	42 28	cd/m2	53		2.96	63 42	cd/m2 5.14 3.43		×	5.91 3.94	84 56
8	35 x 14	cd/m2 0.75 0.5 0.43	2 11 7.11 5.92	x	cd/m2 1.49 0.99 0.86	21 14 12	cd/m2 2.24 1.49 1.3	32 21 18	× c	2.94 1.96 1.7	42 28 23	cd/m2 3.71 2.48 2.15	53 35 2		4.44	63	cd/m2 5.14	73	x	5.91 3.94 3.42	84 56 47
8 10 12 Mod	35 x 14 40 x 21 45 x 21 el No.	cd/m2 0.75 0.5 0.43	11 7.11	x	cd/m2 1.49 0.99 0.86	21 14	cd/m2 2.24 1.49 1.3	32	× c	2.94 1.96	42 28 23	cd/m2 3.71 2.48 2.15	53		2.96	63 42 35	cd/m2 5.14 3.43 2.98	73	x	5.91 3.94	84 56 47
8 10 12 Mod	35 x 14 40 x 21 45 x 21	cd/m2 0.75 0.5 0.43	2 11 7.11 5.92 SLB40		cd/m2 1.49 0.99 0.86 SLE	21 14 12	cd/m2 2.24 1.49 1.3	32 21 18 SLB120	× (2.94 1.96 1.7 SLB ⁷	42 28 23	cd/m2 3.71 2.48 2.15	53 35 2 SLB200		cd/m2 4.44 2.96 2.57 SLB Lav*	63 42 35	cd/m2 5.14 3.43 2.98	73 49 41 LB280		cd/m2 5.91 3.94 3.42 SLB	84 56 47
8 10 12 Mod T3M	35 x 14 40 x 21 45 x 21 el No. lens	cd/m2 0.75 0.5 0.43 Lav*	2 11 7.11 5.92 SLB40		cd/m2 1.49 0.99 0.86 SLE Lav*	21 14 12 B80	cd/m2 2.24 1.49 1.3 5 Lav*	32 21 18 SLB120	x c	2.94 1.96 1.7 Lav*	42 28 23 160	cd/m2 3.71 2.48 2.15 S Lav*	53 35 2 SLB200		cd/m2 4.44 2.96 2.57 SLB Lav*	63 42 35 240	cd/m2 5.14 3.43 2.98 S Lav*	73 49 41 LB280		cd/m2 5.91 3.94 3.42 SLB Lav*	84 56 47 320
8 10 12 ^{Mod} T3M MH	35 x 14 40 x 21 45 x 21 el No. lens Area	cd/m2 0.75 0.5 0.43 Lav* cd/m2	2 11 7.11 5.92 SLB40 2 Eav*/I		cd/m2 1.49 0.99 0.86 SLE Lav* cd/m2	21 14 12 B80 Eav*/lx	cd/m2 2.24 1.49 1.3 6 Lav* cd/m2	32 21 18 SLB120 Eav*/l	x c	2.94 2.94 1.96 1.7 SLB ⁻ Lav* cd/m2	42 28 23 160 Eav*/lx	cd/m2 3.71 2.48 2.15 S Lav* cd/m2	53 35 2 SLB200 Eav*/I:		cd/m2 4.44 2.96 2.57 SLB Lav* cd/m2	63 42 35 240 Eav*/lx	cd/m2 5.14 3.43 2.98 S Lav* cd/m2	73 49 41 LB280 Eav*/l		cd/m2 5.91 3.94 3.42 SLB Lav* cd/m2	84 56 47 320 Eav*/lx
8 10 12 Mod T3M MH 8	35 x 14 40 x 21 45 x 21 el No. lens Area 35 x 21	cd/m2 0.75 0.5 0.43 Lav* cd/m2	2 11 7.11 5.92 SLB40 2 Eav*/l 9.03		cd/m2 1.49 0.99 0.86 Lav* cd/m2 1.24	21 14 12 B80 Eav*/lx 18	cd/m2 2.24 1.49 1.3 & Lav* cd/m2 1.85	32 21 18 SLB120 Eav*/I 27	x c	2.94 2.94 1.96 1.7 SLB [*] Lav* cd/m2 2.48	42 28 23 160 Eav*/lx 36	cd/m2 3.71 2.48 2.15 S Lav* cd/m2 3.04	53 35 2 SLB200 Eav*/l: 45	x	cd/m2 4.44 2.96 2.57 SLB Lav* cd/m2 3.67	63 42 35 240 Eav*/Ix 54	cd/m2 5.14 3.43 2.98 S Lav* cd/m2 4.27	73 49 41 LB280 Eav*/l 63		cd/m2 5.91 3.94 3.42 SLB Lav* cd/m2 4.88	84 56 47 320 Eav*/lx 72
8 10 12 Mod T3M MH 8 10 12 Mod	35 x 14 40 x 21 45 x 21 el No. lens Area 35 x 21 40 x 21 45 x 28 el No.	cd/m2 0.75 0.5 0.43 Lav* cd/m2 0.61 0.51 0.37	2 11 7.11 5.92 SLB40 2 Eav*/l 9.03 7.22		cd/m2 1.49 0.99 0.86 SLE Lav* cd/m2 1.24 1.03 0.74	21 14 12 B80 Eav*/lx 18 15	cd/m2 2.24 1.49 1.3 5 Lav* cd/m2 1.85 1.54 1.11	32 21 18 SLB120 Eav*/l 27 22	x c	2.94 1.96 1.7 SLB ⁻ Lav* cd/m2 2.48 2.07	42 28 23 160 Eav*/Ix 36 29 20	cd/m2 3.71 2.48 2.15 5 Lav* cd/m2 3.04 2.53 1.82	53 35 2 SLB200 Eav*//! 45 36	x	cd/m2 4.44 2.96 2.57 SLB Lav* cd/m2 3.67 3.06	63 42 35 240 Eav*/Ix 54 43 30	cd/m2 5.14 3.43 2.98 S Lav* cd/m2 4.27 3.56 2.55	73 49 41 LB280 Eav*/l 63 50		cd/m2 5.91 3.94 3.42 SLB Lav* cd/m2 4.88 4.07	84 56 47 320 Eav*/lx 72 57 40
8 10 12 ^{Mod} T3M MH 8 10 12	35 x 14 40 x 21 45 x 21 el No. lens Area 35 x 21 40 x 21 45 x 28 el No.	cd/m2 0.75 0.5 0.43 Lav* cd/m2 0.61 0.51 0.37	2 11 7.11 5.92 SLB40 9.03 7.22 5.04 SLB40 Eav*/l SLB40 Eav*/l	x	cd/m2 1.49 0.99 0.86 SLE Lav* cd/m2 1.24 1.03 0.74 SLE Lav*	21 14 12 B80 Eav*/lx 18 15 10	cd/m2 2.24 1.49 1.3 5 Lav* cd/m2 1.85 1.54 1.11	32 21 18 3LB120 Eav*/l 27 22 15 SLB120 Eav*/l	x c	2.94 1.96 1.7 SLB ⁻ Lav* cd/m2 2.48 2.07 1.48 SLB ⁻ Lav*	42 28 23 160 Eav*/Ix 36 29 20	cd/m2 3.71 2.48 2.15 5 Lav* cd/m2 3.04 2.53 1.82	53 35 2 SLB200 Eav*/l: 45 36 25 SLB200 Eav*/l	x	:d/m2	63 42 35 240 Eav*/Ix 54 43 30	cd/m2 5.14 3.43 2.98 S Lav* cd/m2 4.27 3.56 2.55	73 49 41 LB280 Eav*/l 63 50 35	x	cd/m2 5.91 3.94 3.42 SLB Lav* cd/m2 4.88 4.07 2.92 SLB	84 56 47 320 Eav*/lx 72 57 40
8 10 12 Mod T3M MH 8 10 12 Mod T3L1	35 x 14 40 x 21 45 x 21 el No. lens Area 35 x 21 40 x 21 45 x 28 el No. ens	cd/m2 0.75 0.5 0.43 Lav* cd/m2 0.61 0.51 0.37 Lav*	2 11 7.11 5.92 SLB40 9.03 7.22 5.04 SLB40 Eav*/l SLB40 Eav*/l	x	cd/m2 1.49 0.99 0.86 SLE Lav* cd/m2 1.24 1.03 0.74 SLE Lav*	21 14 12 B80 Eav*/lx 18 15 10 B80	cd/m2 2.24 1.49 1.3 5 Lav* cd/m2 1.85 1.54 1.11 5 Lav*	32 21 18 3LB120 Eav*/l 27 22 15 SLB120 Eav*/l	x c	2.94 1.96 1.7 SLB Lav* cd/m2 2.48 2.07 1.48 SLB Lav* F	42 28 23 160 Eav*/lx 36 29 20 160	cd/m2 3.71 2.48 2.15 5 Lav* cd/m2 3.04 2.53 1.82 5 Lav*	53 35 2 SLB200 Eav*/l: 45 36 25 SLB200 Eav*/l	x	cd/m2 4.44 2.96 2.57 SLB Lav* 3.67 3.06 2.19 SLB Lav*	63 42 35 240 Eav*/Ix 54 43 30 240	cd/m2 5.14 3.43 2.98 S Lav* cd/m2 4.27 3.56 2.55 S Lav*	73 49 41 LB280 Eav*/I 63 50 35 LB280	x	Cd/m2 5.91 3.94 3.42 SLB Lav* 4.88 4.07 2.92 SLB Lav*	84 56 47 320 Eav*/lx 72 57 40 320
8 10 12 Mod T3M H 8 10 12 Mod T3L1 MH	35 x 14 40 x 21 45 x 21 el No. lens Area 35 x 21 40 x 21 45 x 28 el No. ens Area	cd/m2 0.75 0.5 0.43 Lav* cd/m2 0.61 0.51 0.37 Lav* cd/m2	2 11 7.11 5.92 SLB40 2 Eav*/l 9.03 7.22 5.04 SLB40 2 Eav*/l	x	cd/m2 1.49 0.99 0.86 CLav* cd/m2 1.24 1.03 0.74 Lav* Cd/m2 Lav* cd/m2	21 14 12 B80 Eav*/lx 18 15 10 B80 Eav*/lx	cd/m2 2.24 1.49 1.3 5 Lav* cd/m2 1.85 1.54 1.11 5 Lav* cd/m2	32 21 18 3LB120 Eav*/I 27 22 15 5LB120 Eav*/I Eav*/I	x c	2.94 1.96 1.7 SLB ⁻ Lav* 2.48 2.07 1.48 SLB ⁻ 4.48 2.07 1.48 .07 1.48 .07 1.48	42 28 23 160 Eav*/lx 36 29 20 160 Eav*/lx	cd/m2 3.71 2.48 2.15 5 Lav* cd/m2 3.04 2.53 1.82 5 Lav* cd/m2	53 35 2 SLB200 Eav*/I: 45 36 25 SLB200 Eav*/I:	x	cd/m2 4.44 2.96 2.57 SLB Lav* 3.67 3.06 2.19 SLB Lav* cd/m2	63 42 35 240 Eav*/lx 54 43 30 240 Eav*/lx	cd/m2 5.14 3.43 2.98 S Lav* cd/m2 4.27 3.56 2.55 S Lav* cd/m2	73 49 41 LB280 Eav*/I 63 50 35 LB280 Eav*/I Eav*/I	x	cd/m2 5.91 3.94 3.42 SLB Lav* cd/m2 4.88 4.07 2.92 SLB Lav* cd/m2	84 56 47 320 Eav*/lx 72 57 40 320 Eav*/lx

Simulation Calculation Summary Reference



Pole Arrangement: Median

MH=Mounting Height (unit: m)

Area = Pole Spacing x Road Width (unit: m)

Lav* (cd/sq.m.) and Eav* (lux) are the values based on Dialux simulation calculations for one typical section of street.

	lel No.	SL	A30	5	SLA60	SI	A90	SL	A120	SI	A150	SL	A180	S	LA210	SL	A240	SL	A270	S	LA300
MH	Area	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/Ix	Lav* cd/m2	Eav*/Ix	Lav* cd/m2	Eav*/Ix	Lav* cd/m2	Eav*/lx
8	35 x 14	0.73	9.54	1.46	19	2.32	29	2.98	39	3.7	48	4.44	58	5.16	67	5.95	77	6.67	87	7.4	96
10	40 x 21	0.4	5.52	0.79	11	1.21	17	1.61	22	2	28	2.4	33	2.79	39	3.22	45	3.61	50	4.01	56
12	45 x 21	0.38	5.01	0.75	9.98	1.15	15	1.53	20	1.9	25	2.28	30	2.65	35	3.06	40	3.43	46	3.8	51
	lel No.	SL	A30	S	SLA60	SI	_A90	SL	A120	SI	A150	SL	A180	SI	LA210	SL	A240	SL	A270	S	LA300
MH	Area	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx
8	35 x 21	0.48	7.03	0.95	14	1.46	22	1.93	29	2.43	36	2.88	42	3.38	50	3.86	57	4.37	64	4.85	71
10	40 x 21	0.43	6.02	0.85	12	1.31	18	1.73	24	2.17	31	2.58	36	3.02	43	3.46	49	3.91	55	4.34	61
12	45 x 28	0.25	3.87	0.49	7.7	0.76	12	1	16	1.25	20	1.49	23	1.74	27	1.99	31	2.25	35	2.5	39
Mod	lel No.	SL	A30	S	SLA60	SI	_A90	SL	A120	SI	_A150	SL	A180	SI	LA210	SL	A240	SL	A270	S	LA300
T3L MH	Area	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/Ix	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/Ix	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/lx
8	35 x 21	0.43	6.53	0.85	13	1.31	20	1.73	26	2.17	33	2.58	39	3.02	46	3.46	53	3.91	60	4.34	66
10	45 x 21	0.34	4.91	0.67	9.78	1.03	15	1.36	20	1.71	25	2.03	30	2.38	35	2.72	40	3.08	45	3.42	50
12	50 x 28	0.19	3.08	0.38	6.14	0.59	9.46	0.77	13	0.97	16	1.15	19	1.35	22	1.54	25	1.75	28	1.94	31
	lel No.	:	SLB40		SL	B80	5	SLB120		SLB	160		SLB200		SLB	3240	S	SLB280		SLE	320
MH	Area	Lav* cd/m2	Eav*/I	ĸ	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/I	v	Lav* cd/m2	Eav*/Ix	Lav* cd/m2	Eav*/I	x	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/I	x	Lav* cd/m2	Eav*/lx
8	35 x 14	0.86	11		1.73	22	2.59	34		3.41	44	4.3	56		5.14	67	5.96	78		6.84	89
10	40 x 14	0.47	6.51		0.94	13	1.4	20		1.85	26	2.33	32		2.78	39	3.23	45		3.7	52
12	45 x 22.5	0.44	5.91		0.89	12	1.33	18		1.75	23	2.21	29		2.64	35	3.06	41		3.52	47
	lel No.		SLB40		SL	B80		SLB120		SLB	160	5	SLB200		SLB	3240	S	SLB280		SLE	320
MH	Area	Lav* cd/m2	Eav*/l	ĸ	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/I	Y I	Lav* :d/m2	Eav*/Ix	Lav* cd/m2	Eav*/I	x	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/I	x	Lav* cd/m2	Eav*/lx
8	35 x 21	0.57	8.43		1.15	17	1.72	25		2.31	34	2.83	42		3.42	50	3.97	59		4.55	67
10	40 x 21	0.51	7.22		1.03	15	1.54	22		2.07	29	2.53	36		3.06	43	3.56	50		4.07	57
12	45 x 28	0.29	4.64		0.6	9.35	0.89	14		1.19	19	1.46	23		1.76	28	2.05	32		2.35	37
	lel No.		SLB40		SL	B80		SLB120		SLB	160		SLB200		SLB	240	S	SLB280		SLE	320
MH	Area	Lav* cd/m2	Eav*/I	ĸ	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/I	v	Lav* :d/m2	Eav*/lx	Lav* cd/m2	Eav*/I	x	Lav* cd/m2	Eav*/lx	Lav* cd/m2	Eav*/I	x	Lav* cd/m2	Eav*/lx
8	35 x 10.5	0.51	7.83		1.03	16	1.54	24		2.07	32	2.53	39		3.06	47	3.56	54		4.07	62
10	45 x 10.5	0.4	5.89		0.81	12	1.21	18		1.63	24	1.99	29		2.41	35	2.8	41		3.21	47
12	50 x 14	0.23	3.7		0.46	7.46	0.69	11		0.92	15	1.13	18		1.37	22	1.59	26		1.82	29

LED Floodlight (Mounting bracket code: U)





lighting

cULus and DLC QPL listed. facts (UL File No.: E467349)



Certified by TUV-sud according to the following standards: IEC/EN 60598-1: 2008 IEC/EN 60598-2-3/A1: 2011 EN 62493:2010 IEC62471: 2008 IFC62471-2.2009 EN 55015: 2013 EN61547:2009 EN61000-3-2/A2:2009 EN 61000-3-3:2013 (EU) 1194/2012:2012-12-12 (EC) 244/2009:2009-03-18 ENEC: No.: U6140888771008(FLA Models)

CB:No.: SG-LE-00945(FLA Models) Ik08 rating, 1000 hours salt mist test reports are furnished upon request.

Dimensional Drawing



Features & Benefits

- 1) Based on the most successful product development, manufacturing and application expertise and experience.
- 2) Powered by the worldwide best LED, LED drivers, and other key components.
- 3) Meet all the major product qualifications.
- 4) Sufficient optics solutions at option to meet almost all lighting standards.
- 5) Modular mechanical construction, and the most thoughtful design, make the product the most user friendly and easiest for assembly, maintenance and installation.
- 6) The most competitive in cost performance, and one of the best ownership costs. 10 years limited warranty, free from maintenance for 10 years at least, the most competitive in operating cost, soonest in return on investment (ROI) or payback.
- 7) Environmentally friendly packaging materials (EPE).

Applications

Commercial and industrial lighting

LED Floodlight (Mounting bracket code: U)

Ordering Information

Example 1: FLA-60-U-T5M-50K-BK-00 Example 2: FLB-200-U-T5L-50K-BK-00 Example 3: FLC-80-U-T5L-50K-GR-00

Product ID	Power (W)	or	Product ID	Power (W)	or	Product ID	Power (W)	Mounting	Optic Lens	CCT* (ANSI)	Housing Color**	Lighting Control
FLA ₃	60 1	Γ	FLB 4	80 ₂		FLC 5	80	U	T1M	30K	вк	00
	60W			80W			80W		T2M	3045	Black	Not
	90	1		120	1		120		тзм	±175K	(RAL:9011)	required
	90W			120W			120W		T3L	40K	GR	01
	120	1		160	1		160		T4S	3985	Grey	Photocell
	120W			160W			160W		T5U	±275K	(RAL:7004)	02
	150	1		200	1		200		T5V	50K	wн	Motion
	150W			200W			200W		T5W	5028	White	Sensor
	180	1		240	1		240		T5S	±283K	(RAL:9010)	03
	180W			240W			240W		T5M	57K	BZ	Photocell+
	210			280	1		280		T5L	5665	Bronze	Motion
	210 210W			280W			280W		T5D	±355K	(RAL:8017)	Sensor
	240	1		320	1		320		L		(1012100177)	04
	240W			320W			320W					DALI 05
	270	1		L	-			1				05 1-10V
	270 270W											dimming
		-										
	300 300W											
	300W											

Footnotes:

• CCT*:

LEDs at 5000k CCT are always in stock largely to support prompt delivery of finished products.
 LEDs at 3000k, 4000k, 5700k CCT are in stock as well, but the quantity is small to meet small needs, and the shipment for the finished products with these LEDs cannot be made sooner than those with LEDs at 5000k CCT.
 LEDs at CCT or wavelength (unit nm) which is not in stock are available upon request, but the lead time for the finished products with these types of LEDs cannot be soon, also the unit price is higher.

• Housing Color**:

BK (Black) housings are always in stock largely to support prompt delivery of finished products.
 GR (Grey), WH (White), BZ (Bronze) housing are available too, and the unit price of the finished product with these types of housings may be different from that with black housing, but the lead time is longer relatively.
 Other housing colors which are not mentioned can be customized, but the unit price is higher, the lead time is much longer.

Optic Lens Options:

1) T1M:Type I Medium	7) T5V: 25°
T2M: Type II Medium	8) T5W: 40°
T3M: Type III Medium	9) T5S: 60°
T3L: Type III Long	10) T5M: 90°
5) T4S: Type IV Short	11) T5L: 120°
6) T5U:10°	12) T5D: (frosted front cover, glare resistant)

1, 2, 5: DALI control is not available.

3, 4: Photocell and motion sensing are available based on customization request.

5: Photocell is available based on customization request.

LED Floodlight (Mounting bracket code: U)

BRIEF SPECIFICATIONS

Model No.	FLA60-U	FLA90-U	FLA120	0-U	FLA150-U	FLA180-U	FLA210-U	FLA	240-U	FLA270-I	U	FLA300-U
No. of LEDs	36	54	72		90	108	126	:	144	162		180
Power	60W	90W	120V	N	150W	180W	210W	2	40W	270W		300W
Net Weight	4.97kg	6.10kg	7.01	kg	7.74kg	10.13kg	10.96kg	12	.23kg	12.98kg	5	13.68kg
Gross Weight	5.62kg	6.85kg	7.89	kg	8.71kg	11.21kg	12.09kg	13	.40kg	14.20kg	5	14.96kg
Dimensions (L x W x H)	210 x 330 110mm	270 x 330 x 100mm	330 x 3 110m		390 x 330 x 100mm	510 x 330 x 110mm	570 x 330 x 110mm		0 x 330 10mm	690 x 33 x 110mn		750 x 330 x 110mm
Carton Dimensions (L x W x H)	315 x 425 x 160mm			425 nm	495 x 425 160mm	615 x 425 x 160mm	675 x 425 x 160mm		5 x 425 60mm	795 x 42 x 160mn		855 x 425 x 160mm
Input					120-277V A	C or 220-240V AC 50	/60Hz					
Model No.	FLB80-U	FLB12	20-U	FL	.B160-U	FLB200-U	FLB240-	U	FLE	3280-U		FLB320-U
No. of LEDs	36	54	1		72	90	108			126		144
Power	80W	120	W		160W	200W	240W		2	80W		320W
Net Weight	4.97kg	6.10)kg		7.01kg	8.80kg	10.13k	3	10).96kg		12.23kg
Gross Weight	5.62kg	6.85	ikg		7.89kg	9.77kg	11.21k	3	12	.09kg		13.40kg
Dimensions (L x Wx H)	210 x 330 x 110mm	270 x x 110			30 x 330 110mm	450 x 330 x 110mm	510 x 33 x 110m			0 x 330 10mm		630 x 330 x 110mm
Carton Dimensions (L x W x H)	315 x 425 x 160mm	375 x x 160			35 x 425 160mm	555 x 425 x 160mm	615 x 42 x 160m			5 x 425 60mm		735 x 425 x 160mm
Input		1			120-277V A	C or 220-240V AC 50	/60Hz					
Model No.	FLC80-U	FLC1	20-U	FI	LC160-U	FLC200-U	FLC240-	U	FLC	280-U		FLC320-U
No. of LEDs	36		4		72	90	108			126		144

Model No.	FLC80-U	FLC120-U	FLC160-U	FLC200-U	FLC240-U	FLC280-U	FLC320-U
No. of LEDs	36	54	72	90	108	126	144
Power	80W	120W	160W	200W	240W	280W	320W
Net Weight	4.97kg	6.10kg	7.01kg	8.80kg	10.13kg	10.96kg	12.23kg
Gross Weight	5.62kg	6.85kg	7.89kg	9.77kg	11.21kg	12.09kg	13.40kg
Dimensions (L x Wx H)	210 x 330 x 110mm	270 x 330 x 110mm	330 x 330 x 110mm	450 x 330 x 110mm	510 x 330 x 110mm	570 x 330 x 110mm	630 x 330 x 110mm
Carton Dimensions (L x W x H)	315 x 425 x 160mm	375 x 425 x 160mm	435 x 425 x 160mm	555 x 425 x 160mm	615 x 425 x 160mm	675 x 425 x 160mm	735 x 425 x 160mm
Input			347-480V A	C 50/60Hz			

Drive current

1. FLA*U: 530mA 2. FLB*U: 700mA 3. FLC*U: 700mA

General specifications for all the above items:

Electrical: 1. Power Factor: >0.95 at full load. 2. Total Harmonic Distortion: <20% at full load.

Lifetime per TM21 and working temperature: 3. Reported L70 Lifetime: >60,000 hours . Calculated L70 Lifetime: >100,000 hours.

4. Ambient Temperature (Ta): -40 to 50 degrees celcius (-40 to 122 degrees Fahrenheit).

Typical Luminous Efficacy: 5. Typical Luminous Efficacy (FLA models): 110 lm/w (5000K CCT, Ra>70).

Typical Luminous Efficacy (FLR Index): 110 lm/w (500K CCT, Ra>70).
 System Efficacy and power are customized, e.g. 130 lm/W.

Materials:

8. LED option: CREE or PHILIPS Lumileds.
9. LED Driver Origin: PHILIPS or MEANWELL.
10. Worldwide top brand quick connector for tool-free wiring, and terminal block for easiest wiring.

11. Extruded aluminium LED driver compartment with die cast aluminium end cap, and led light handled finish. 304 graded stainless steel protective cover to protect UV resistant polycarbonate lenses.

GAMA Series

LED Flood/ Projection Light (Mounting bracket code: UR)





lk08 rating, 1000 hours salt mist test reports are furnished upon request.

Dimensional Drawing



Features & Benefits

- 1) Based on the most successful product development, manufacturing and application expertise and experience.
- 2) Powered by the worldwide best LED, LED drivers, and other key components.
- 3) Meet all the major product qualifications.
- 4) Sufficient optics solutions at option to meet almost all lighting standards.
- 5) Modular mechanical construction, and the most thoughtful design, make the product the most user friendly and easiest for assembly, maintenance and installation.
- 6) The most competitive in cost performance, and one of the best ownership costs. 10 years limited warranty, free from maintenance for 10 years at least, the most competitive in operating cost, soonest in return on investment (ROI) or payback.
- 7) Environmentally friendly packaging materials (EPE).

Applications

Commercial and industrial lighting

LED Flood/ Projection Light (Mounting bracket code: UR)

Ordering Information

Example 1: FLA-30-UR-T5S-50K-BK-00 Example 2: FLB-120-UR-T4S-50K-BK-00 Example 3: FLC-80-UR-T5M-50K-BK-00

Product ID	Power (W)	or	Product ID	Power (W)	or	Product ID	Power (W)	Mounting	Optic Lens	CCT* (ANSI)	Housing Color**	Lighting Control
FLA 5	30 ₁		FLB 6	40 ₃		FLC 7	80	UR	T1M	30K	ВК	00
	30W			40W			80W		T2M	3045	Black	Not
	60 ₂	1		80,			120		T3M	±175K	(RAL:9011)	required
	60W			80W			120W		T3L	40K	GR	04
	90]		120			160		T4S	3985	Grey	DALI
	90W			120W			160W		T5U	±275K	(RAL:7004)	05
	120	1		160			200		T5V	50K	WH	1-10V dimming
	120W			160W			200W		T5W	5028	White	unning
	150	1		200			240		T5S	±283K	(RAL:9010)	
	150W			200W			240W		T5M	57K	BZ	
	180			240			L	1	T5L	5665	Bronze	
	180W			240W					T5D	±355K	(RAL:8017)	

Footnotes:

• cct*:

LEDs at 5000k CCT are always in stock largely to support prompt delivery of finished products.
 LEDs at 3000k, 4000k, 5700k CCT are in stock as well, but the quantity is small to meet small needs, and the shipment for the finished products with these LEDs cannot be made sooner than those with LEDs at 5000k CCT.
 LEDs at CCT or wavelength (unit nm) which is not in stock are available upon request, but the lead time for the finished products with these types of LEDs cannot be soon, also the unit price is higher.

• Housing Color**:

1. BK (Black) housings are always in stock largely to support prompt delivery of finished products.

GR (Grey), WH (White), BZ (Bronze) housing are available too, and the unit price of the finished product with these types of housings may be different from that with black housing, but the lead time is longer relatively.
 Other housing colors which are not mentioned can be customized, but the unit price is higher, the lead time is much longer.

Optic Lens Options:

1) T1M:Type I Medium	7) T5V: 25°
T2M: Type II Medium	8) T5W:40°
T3M: Type III Medium	9) T5S: 60°
T3L: Type III Long	10) T5M: 90°
T4S: Type IV Short	11) T5L: 120°
6) T5U:10°	12) T5D: (frosted front cover, glare resistant)

1, 2, 3, 4, 7: DALI control is not available.

5, 6: Photocell and motion sensing are available based on customization request.7: Photocell is available based on customization request.



BRIEF SPECIFICATIONS

Model No.	FLA30-UR	FLA60-UR	FLA90-UR	FLA120-UR	FLA150-UR	FLA180-UR			
No. of LEDs	18	36	54	72	90	108			
Power	30W	60W	90W	120W	150W	180W			
Net Weight	5.06kg	5.69kg	6.35kg	7.01kg	7.67kg	9.69kg			
Gross Weight	5.71kg	6.34kg	7kg	7.89kg	8.78kg	10.86kg			
Dimensions (L x W x H)	150 x 345 x 110mm	310 x 345 x 110mm	270 x 345 x 110mm	330 x 345 x 110mm	390 x 345 x 110mm	510 x 345 x 110mm			
Carton Dimensions (L x W x H)	315 x 425 x 160mm	315 x 425 x 160mm	375 x 425 x 160mm	435 x 425 x 160mm	495 x 425 x 160mm	615 x 425 x 160mm			
Input		120-277V AC or 220-240V AC 50/60Hz							

Model No.	FLB40-UR	FLB80-UR	FLB120-UR	FLB160-UR	FLB200-UR	FLB240-UR			
No. of LEDs	18	36	54	72	90	108			
Power	40W	80W	120W	160W	200W	240W			
Net Weight	5.06kg	5.69kg	6.35kg	7.01kg	8.30kg	9.69kg			
Gross Weight	5.71kg	6.34kg	7kg	7.89kg	9.41kg	10.86kg			
Dimensions (L x W x H)	150 x 345 x 110mm	310 x 345 x 110mm	270 x 345 x 110mm	330 x 345 x 110mm	450 x 345 x 110mm	510 x 345 x 110mm			
Carton Dimensions (L xW x H)	315 x 425 x 160mm	315 x 425 x 160mm	375 x 425 x 160mm	435 x 425 x 160mm	555 x 425 x 160mm	615 x 425 x 160mm			
Input	120-277V AC or 220-240V AC 50/60Hz								

L20-277V AC o	r 220-240V AC 50/60Hz	

Model No.	FLC80-UR	FLC120-UR	FLC160-UR	FLC200-UR	FLC240-UR				
No. of LEDs	36	54	72	90	108				
Power	80W	120W	160W	200W	240W				
Net Weight	5.69kg	5.69kg 6.35kg		8.30kg	9.69kg				
Gross Weight	6.34kg	7kg	7.89kg	9.41kg	10.86kg				
Dimensions (L x W x H)	310 x 345 x 110mm	270 x 345 x 110mm	330 x 345 x 110mm	450 x 345 x 110mm	510 x 345 x 110mm				
Carton Dimensions (L x W x H)	315 x 425 x 160mm	375 x 425 x 160mm	435 x 425 x 160mm	555 x 425 x 160mm	615 x 425 x 160mm				
Input	347-480V AC 50/60Hz								

Drive current

1. FLA*UR: 530mA 2. FLB*UR: 700mA 3. FLC*UR: 700mA

General specifications for all the above items:

Electrical: 1. Power Factor: >0.95 at full load. 2. Total Harmonic Distortion: <20% at full load.

Lifetime per TM21 and working temperature:

Reported L70 Lifetime: >60,000 hours. Calculated L70 Lifetime: >100,000 hours.
 Ambient Temperature (Ta): -40 to 50 degrees celcius (-40 to 122 degrees Fahrenheit).

Typical Luminous Efficacy:

- 5. Typical Luminous Efficacy (FLA models): 110 lm/w (5000K CCT, Ra>70).
 6. Typical Luminous Efficacy (FLB, FLC models): 100 lm/w (5000K CCT, Ra>70).
 7. System Efficacy and power are customized, e.g. 130 lm/W.

Materials:

8. LED option: CREE or PHILIPS Lumileds.
 9. LED Driver Origin: PHILIPS or MEANWELL.

 Worldwide top brand quick connector for tool-free wiring, and terminal block for easiest wiring.
 Extruded aluminium LED driver compartment with die cast aluminium end cap, and led light bar end caps with corrosion resistant powder coating. Extruded aluminium alloy heat sink with anodized finish. 304 graded stainless steel protective cover to protect UV resistant polycarbonate lenses.

LED low bay / high bay light (Mounting bracket code: D)





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CB:No.: SG-LE-00945 (FLA Models) Ik08 rating, 1000 hours salt mist test reports are furnished upon request.

ENEC: No.: U6140888771008 (FLA Models)

Dimensional Drawing



Features & Benefits

- 1) Based on the most successful product development, manufacturing and application expertise and experience.
- 2) Powered by the worldwide best LED, LED drivers, and other key components.
- 3) Meet all the major product qualifications.
- 4) Sufficient optics solutions at option to meet almost all lighting standards.
- 5) Modular mechanical construction, and the most thoughtful design, make the product the most user friendly and easiest for assembly, maintenance and installation.
- 6) The most competitive in cost performance, and one of the best ownership costs. 10 years limited warranty, free from maintenance for 10 years at least, the most competitive in operating cost, soonest in return on investment (ROI) or payback.
- 7) Environmentally friendly packaging materials (EPE).

Applications

Commercial and industrial low bay / high bay lighting.

LED low bay / high bay light (Mounting bracket code: D)

Ordering Information

Example 1: FLA-30-D-T5M-50K-BK-00 Example 2: FLB-200-D-T5L-50K-BK-00 Example 3: FLC-80-D-T5L-50K-GR-00

Product ID	Power (W)	or	Product ID	Power (W)	or	Product ID	Power (W)	Mounting	Optic Lens	CCT* (ANSI)	Housing Color**	Lighting Control
FLA 5	30 ₁		FLB 6	40 ₃		FLC 7	80	D	T1M	30K	вк	00
	30W			40W			80W		T2M	3045	Black	Not
	60 ₂	1		804	1		120		тзм	±175K	(RAL:9011)	required
	60W			80W			120W		T3L	40K	GR	01
	90	1		120	1		160		T4S	3985	Grey	DALI
	90W			120W			160W		T5U	±275K	(RAL:7004)	02
	120	1		160	1		200		T5V	50K	WH	1-10V dimming
	120W			160W			200W		T5W	5028	White	uning
	150	1		200	1		240		T5S	±283K	(RAL:9010)	
	150W			200W			240W		T5M	57K	BZ	
	180			240			280		T5L	5665	Bronze	
	180W			240W			280W		T5D	±355K	(RAL:8017)	
	210	1		280	1		320		L	4	(]
	210W			280W			320W					
	240	1		320	1		L	1				
	240W			320W								
	270			L]							

Footnotes:

270W **300** 300W

• cct*:

1. LEDs at 5000k CCT are always in stock largely to support prompt delivery of finished products.

2. LEDs at 3000k, 4000k, 5700k CCT are in stock as well, but the quantity is small to meet small needs, and the shipment for

the finished products with these LEDs cannot be made sooner than those with LEDs at 5000k CCT.

3. LEDs at CCT or wavelength (unit nm) which is not in stock are available upon request, but the lead time for

the finished products with these types of LEDs cannot be soon, also the unit price is higher.

• Housing Color**:

1. BK (Black) housings are always in stock largely to support prompt delivery of finished products.

2. GR (Grey), WH (White), BZ (Bronze) housing are available too, and the unit price of the finished product

with these types of housings may be different from that with black housing, but the lead time is longer relatively. 3. Other housing colors which are not mentioned can be customized, but the unit price is higher, the lead time is much longer.

Optic Lens Options:

1) T1M:Type Medium	7) T5V: 25°
2) T2M: Type II Medium	8) T5W:40°
3) T3M: Type III Medium	9) T5S: 60°
4) T3L: Type III Long	10) T5M: 90°
5) T4S: Type IV Short	11) T5L: 120°
6) T5U: 10°	12) T5D: (frosted front cover, glare resistant)

1, 2, 3, 4, 7: DALI control is not available.

5, 6: Photocell and motion sensing are available based on customization request.

7: Photocell is available based on customization request.

LED low bay / high bay light (Mounting bracket code: D)

BRIEF SPECIFICATIONS

Model No.	FLA30-D	FLA60-D	FLA90-D	FLA120-D	FLA150-D	FLA180-D	FLA210-D	FLA240-D	FLA270-D	FLA300-D
No. of LEDs	18	36	54	72	90	108	126	144	162	180
Power	30W	60W	90W	120W	150W	180W	210W	240W	270W	300W
Net Weight	4.84Kg	4.84Kg	5.83Kg	6.49Kg	7.16Kg	9.18Kg	9.82Kg	10.8Kg	11.58Kg	12.24Kg
Gross Weight	5.49Kg	5.49Kg	6.58Kg	7.34Kg	8.13Kg	10.21Kg	10.97Kg	11.92Kg	12.77Kg	13.49Kg
Dimensions (L x W x H)	210 x 330 x 128mm	210 x 330 x 128mm	270 x 330 x 128mm	330 x 330 x 128mm	390 x 330 x 128mm	510 x 330 x 128mm	570 x 330 x 128mm	630 x 330 x 128mm	690 x 330 x 128mm	750 x 330 x 128mm
Carton Dimensions (L x W x H)	315 x 425 x 160mm	315 x 425 x 160mm	375 x 425 x 160mm	435 x 425 x 160mm	495 x 425 x 160mm	615 x 425 x 160mm	675 x 425 x 160mm	735 x 425 x 160mm	795 x 425 x 160mm	855 x 425 x 160mm
Input	120-277V AC or 220-240V AC 50/60Hz									

Model No.	FLB40-D	FLB80-D	FLB120-D	FLB160-D	FLB200-D	FLB240-D	FLB280-D	FLB320-D
No. of LEDs	18	36	54	72	90	108	126	144
Power	40W	80W	120W	160W	200W	240W	280W	320W
Net Weight	4.84Kg	4.84Kg	5.83Kg	6.49Kg	8.22Kg	9.18Kg	9.82Kg	10.8Kg
Gross Weight	5.49Kg	5.49Kg	6.58Kg	7.34Kg	9.19Kg	10.21Kg	10.97Kg	11.92Kg
Dimensions (L x W x H)	210 x 330 x 128mm	210 x 330 x 128mm	270 x 330 x 128mm	330 x 330 x 128mm	450x 330 x 128mm	510 x 330 x 128mm	570 x 330 x 128mm	630 x 330 x 128mm
Carton Dimensions (L x W x H)	315 x 425 x 160mm	315 x 425 x 160mm	375 x 425 x 160mm	435 x 425 x 160mm	555 x 425 x 160mm	615 x 425 x 160mm	675 x 425 x 160mm	735 x 425 x 160mm
Input	120-277V AC or 220-240V AC 50/60Hz							

Model No.	FLC80-D	FLC120-D	FLC160-D	FLC200-D	FLC240-D	FLC280-D	FLC320-D	
No. of LEDs	36	54	72	90	108	126	144	
Power	80W	120W	160W	200W	240W	280W	320W	
Net Weight	4.84Kg	5.83Kg	6.49Kg	8.22Kg	9.18Kg	9.82Kg	10.8Kg	
Gross Weight	5.49Kg	6.58Kg	7.34Kg	9.19Kg	10.21Kg	10.97Kg	11.92Kg	
Dimensions (L x W x H)	210 x 330 x 128mm	270 x 330 x 128mm	330 x 330 x 128mm	450x 330 x 128mm	510 x 330 x 128mm	570 x 330 x 128mm	630 x 330 x 128mm	
Carton Dimensions (L x W x H)	315 x 425 x 160mm	375 x 425 x 160mm	435 x 425 x 160mm	555 x 425 x 160mm	615 x 425 x 160mm	675 x 425 x 160mm	735 x 425 x 160mm	
Input	347-480V AC 50/60Hz							

Drive current

1. FLA*D: 530mA 2. FLB*D: 700mA 3. FLC*D: 700mA

General specifications for all the above items:

Electrical: 1. Power Factor: >0.95 at full load. 2. Total Harmonic Distortion: <20% at full load.

Lifetime per TM21 and working temperature: 3. Reported L70 Lifetime: >60,000 hours . Calculated L70 Lifetime: >100,000 hours.

- 4. Ambient Temperature (Ta): -40 to 50 degrees celcius (-40 to 122 degrees Fahrenheit).
- Typical Luminous Efficacy:

5. Typical Luminous Efficacy (FLA models): 110 lm/w (5000K CCT, Ra>70).
 6. Typical Luminous Efficacy (FLB, FLC models): 100 lm/w (5000K CCT, Ra>70).

7. System Efficacy and power are customized, e.g. 130 ${\rm Im/W}.$

Materials:

8. LED option: CREE or PHILIPS Lumileds.
 9. LED Driver Origin: PHILIPS or MEANWELL.

 Worldwide top brand quick connector for tool-free wiring, and terminal block for easiest wiring.
 Extruded aluminium LED driver compartment with die cast aluminium end cap, and led light bar end caps with corrosion resistant powder coating. Extruded aluminium alloy heat sink with anodized finish. 304 graded stainless steel protective cover to protect UV resistant polycarbonate lenses.



LED canopy light (Mounting bracket code: E)



(€ CB IP67 IK08 ErP ☑

Compliant with the following standards: IEC /EN 60598-1: 2008 IEC /EN 60598-2-3/A1: 2011 EN 62493:2010 IEC62471: 2008 IEC62471-2:2009 EN 55015: 2013 EN61547:2009 EN61000-3-2/A2:2009 EN 61000-3-2/A2:2009 EN 61000-3-3:2013 (EU) 1194/2012:2012-12-12 (EC) 244/2009:2009-03-18

Ik08 rating, 1000 hours salt mist test reports are furnished upon request.

Dimensional Drawing



Features & Benefits

- 1) Based on the most successful product development, manufacturing and application expertise and experience.
- 2) Powered by the worldwide best LED, LED drivers, and other key components.
- 3) Compliant with almost all the major product qualifications.
- 4) Sufficient optics solutions at option to meet almost all the lighting standards.
- 5) Modular mechanical construction, and the most thoughtful design, make the product the most user friendly and easiest for assembly, maintenance and installation.
- 6) The most competitive in cost performance, and one of the best ownership costs. 10 years limited warranty, free from maintenance for 10 years at least, the most competitive in operating cost, soonest in return on investment (ROI) or payback.
- 7) Environmentally friendly packaging materials (EPE).

Applications

Commercial and industrial lighting.

LED canopy light (Mounting bracket code: E)

T5M

T5L

T5D

ΒZ

Bronze

(RAL:8017)

57K

5665

+355K

Ordering Information

Example 1: FLA-90-E-T5L-50K-WH-00 Example 2: FLB-200-E-T5L-50K-WH-00 Example 3: FLC-240-E-T5L-50K-WH-00

Product ID	Power (W)	or	Product ID	Power (W)	or	Product ID	Power (W)	Mounting	Optic Lens	CCT* (ANSI)	Housing Color**	Lighting Control
FLA	90		FLB	120		FLC 1	120	E	T1M	30K	wн	00
	90W			120W			120W		T2M	3045	White	Not
	120	1		160	1		160		тзм	±175K	(RAL:9010)	required
	120W			160W			160W		T3L	40K	GR	01
	150	1		200	1		200		T4S	3985	Grey	DALI
	150W			200W			200W		T5U	±275K	(RAL:7004)	02
	180	1		240	1		240		T5V	50K	вк	1-10V
	180W			240W			240W		T5W	5028	Black	dimming
		-						•	T5S	±283K	(RAL:9011)	

Footnotes:

• cct*:

1. LEDs at 5000k CCT are always in stock largely to support prompt delivery of finished products.

LEDs at 3000k, 4000k, 5700k CCT are in stock as well, but the quantity is small to meet small needs, and the shipment for the finished products with these LEDs cannot be made sooner than those with LEDs at 5000k CCT.
 LEDs at CCT or wavelength (unit nm) which is not in stock are available upon request, but the lead time for the finished products with these types of LEDs cannot be soon, also the unit price is higher.

• Housing Color**:

1. WH (White) housings are always in stock largely to support prompt delivery of finished products.

 BK (Black), GR (Grey), BZ (Bronze) housing are available too, and the unit price of the finished product with these types of housings may be different from that with white housing, but the lead time is longer relatively.
 Other housing colors which are not mentioned can be customized, but the unit price is higher, the lead time is much longer.

Optic Lens Options:

1) T1M:Type Medium	7) T5V: 25°
T2M: Type II Medium	8) T5W:40°
T3M: Type III Medium	9) T5S: 60°
T3L: Type III Long	10) T5M: 90°
5) T4S: Type IV Short	11) T5L: 120°
6) T5U:10°	12) T5D: (frosted front cover, glare resistant)

1: DALI control is not available.



LED canopy light (Mounting bracket code: E)

BRIEF SPECIFICATIONS

Model No.	FLA90-E	FLA120-E	FLA150-E	FLA180-E
No. of LEDs	54	72	90	108
Power	90W	120W	150W	180W
Net Weight	6.13kg	6.89kg	7.62kg	9.68kg
Gross Weight	7kg	7.83kg	8.66kg	10.78kg
Dimensions (L x W x H)	298 x 389 x 125mm	358 x 389 x 125mm	418 x 389 x 125mm	478 x 389 x 125mm
Carton Dimensions (L x W x H)	375 x 425 x 160mm	435 x 425 x 160mm	495 x 425 x 160mm	615 x 425 x 160mm
Cut-out(L x W)	240 x 360mm	300 x 360mm	360 x 360mm	420 x 360mm
Input		120-277V AC or 220-240V A	C 50/60Hz	

Model No.	FLB120-E	FLB160-E	FLB200-E	FLB240-E				
No. of LEDs	54	72	90	108				
Power	120W	160W	200W	240W				
Net Weight	6.13kg	6.89kg	8.69kg	9.68kg				
Gross Weight	7kg	7.83kg	9.42kg	10.78kg				
Dimensions (L x W x H)	298 x 389 x 125mm	358 x 389 x 125mm	418 x 389 x 125mm	478 x 389 x 125mm				
Carton Dimensions (L x W x H)	375 x 425 x 160mm	435 x 425 x 160mm	555 x 425 x 160mm	615 x 425 x 160mm				
Cut-out(L x W)	240 x 360mm	300 x 360mm	360 x 360mm	420 x 360mm				
Input		120-277V AC or 220-240V AC 50/60Hz						

Model No.	FLC120-E	FLC160-E	FLC200-E	FLC240-E		
No. of LEDs	54	72	90	108		
Power	120W	160W	200W	240W		
Net Weight	6.13kg	6.89kg	8.69kg	9.68kg		
Gross Weight	7kg	7.83kg	9.42kg	10.78kg		
Dimensions (L x W x H)	298 x 389 x 125mm	358 x 389 x 125mm	418 x 389 x 125mm	478 x 389 x 125mm		
Carton Dimensions (L x W x H)	375 x 425 x 160mm	435 x 425 x 160mm	555 x 425 x 160mm	615 x 425 x 160mm		
Cut-out(L x W)	ut-out(L x W) 240 x 360mm		360 x 360mm	420 x 360mm		
Input	347-480V AC 50/60Hz					

Drive current

- 1. FLA*E: 530mA 2. FLB*E: 700mA 3. FLC*E: 700mA

General specifications for all the above items:

- Electrical: 1. Power Factor: >0.95 at full load. 2. Total Harmonic Distortion: <20% at full load.

- Lifetime and working temperature: 3. Reported L70 Lifetime: >60,000 hours . Calculated L70 Lifetime: >100,000 hours. 4. Ambient Temperature (Ta): -40 to 50 degrees celcius (-40 to 122 degrees Fahrenheit).
- Typical Luminous Efficacy:
- Typical Luminous Efficacy (FLA models): 110 lm/w (5000K CCT, Ra>70).
 Typical Luminous Efficacy (FLB, FLC models): 100 lm/w (5000K CCT, Ra>70).
 System Efficacy and power are customized, e.g. 130 lm/W.

Materials:

8. LED option: CREE or PHILIPS Lumileds.
9. LED Driver Origin: PHILIPS or MEANWELL.
10. Worldwide top brand quick connector for tool-free wiring, and terminal block for easiest wiring. 11. Extruded aluminium LED driver compartment with die cast aluminium end cap, and led light bar end caps with corrosion resistant powder coating. Extruded aluminium alloy heat sink with anodized finish. 304 graded stainless steel protective cover to protect UV resistant polycarbonate lenses.

LED area light (Mounting bracket code: T)





Compliant with the following standards: IEC /EN 60598-2-3/A1: 2011 EN 62493:2010 IEC62471: 2008 IEC62471-2:2009 EN 55015: 2013 EN61547:2009 EN 61000-3-2/A2:2009 EN 61000-3-3:2013 (EU) 1194/2012:2012-12-12 (EC) 244/2009:2009-03-18

lk08 rating, 1000 hours salt mist test reports are furnished upon request.

Dimensional Drawing



Features & Benefits

- 1) Based on the most successful product development, manufacturing and application expertise and experience.
- 2) Powered by the worldwide best LED, LED drivers, and other key components.
- 3) Meet all the major product qualifications e. g cULus, DLC, CE, CB etc.
- 4) Sufficient optics solutions at option to meet almost all the lighting standards.
- 5) Modular mechanical construction, and the most thoughtful design, make the product the most user friendly and easiest for assembly, maintenance and installation.
- 6) The most competitive in cost performance, and one of the best ownership costs. 10 years limited warranty, free from maintenance for 10 years at least, the most competitive in operating cost, soonest in return on investment (ROI) or payback.
- 7) Environmentally friendly packaging materials (EPE).

Applications

- Airport Illumination
- Company Campus Illumination
- Healthcare Facilities Illumination
- Municipal Illumination
- Petroleum & Convenience Illumination
- Restaurant & Hotel Illumination
- Retail & Grocery Illumination
- Education Facilities Illumination
- Government Facilities Illumination



LED area light (Mounting bracket code: T)

Ordering Information

Example 1: FLB-200-T-T3L-50K-BK-00 Example 2: FLC-240-T-T3L-50K-BK-00

Product ID	Power (W)	or	Product ID	Power (W)	Mounting	Optic Lens	CCT* (ANSI)	Housing Color**	Lighting Control
FLB	80 ₁		FLC ₂	80	Т	T1M	30K	вк	00
	80W			80W		T2M	3045	Black	Not
	120	1		120		T3M	±175K	(RAL:9011)	required
	120W			120W		T3L	40K	GR	01
	160			160		T4S	3985	Grey	DALI
	160W			160W		T5U	±275K	(RAL:7004)	02
	200	1		200		T5V	50K	wн	1-10V dimming
	200W			200W		T5W	5028	White	unning
	240	1		240		T5S	±283K	(RAL:9010)	
	240W			240W		T5M	57K	BZ	
						T5L	5665	Bronze	
						T5D	±355K	(RAL:8017)	

Footnotes:

• сст*:

LEDs at 5000k CCT are always in stock largely to support prompt delivery of finished products.
 LEDs at 3000k, 4000k, 5700k CCT are in stock as well, but the quantity is small to meet small needs, and the shipment for the finished products with these LEDs cannot be made sooner than those with LEDs at 5000k CCT.
 LEDs at CCT or wavelength (unit nm) which is not in stock are available upon request, but the lead time for the finished products with these types of LEDs cannot be soon, also the unit price is higher.

• Housing Color**:

1. BK (Black) housings are always in stock largely to support prompt delivery of finished products.

GR (Grey), WH (White), BZ (Bronze) housing are available too, and the unit price of the finished product with these types of housings may be different from that with black housing, but the lead time is longer relatively.
 Other housing colors which are not mentioned can be customized, but the unit price is higher, the lead time is much longer.

Optic Lens Options:

1) T1M:Type Medium	7) T5V: 25°
2) T2M: Type II Medium	8) T5W:40°
3) T3M: Type III Medium	9) T5S: 60°
4) T3L: Type III Long	10) T5M: 90°
5) T4S: Type IV Short	11) T5L: 120°
6) T5U:10°	12) T5D: (frosted front cover, glare resistant)

1, 2: DALI control is not available.

LED area light (Mounting bracket code: T)

BRIEF SPECIFICATIONS

Model No.	FLB80-T	FLB120-T	FLB160-T	FLB200-T	FLB240-T				
No. of LEDs	No. of LEDs 36		72	90	108				
Power	80W	120W	160W	200W	240W				
Net Weight	5.88kg	6.87kg	7.53kg	9.25kg	10.21kg				
Gross Weight	6.53kg	7.62kg	8.38kg	10.22kg	11.24kg				
Dimensions (L x W x H)	360 x 330 x 70mm	420 x 330 480 x 330 x 70mm x 70mm		600 x 330 x 70mm	660 x 330 x 70mm				
Carton Dimensions (L x W x H)	370 x 425 x 160mm	430x 425 x 160mm			670 x 425 x 160mm				
Input		120-277V AC or 220-240V AC 50/60Hz							
EPA	0.398sq.ft	0.421sq.ft	0.459sq.ft	0.526sq.ft	0.564sq.ft				

Model No.	FLC80-T	FLC120-T	FLC160-T	FLC200-T	FLC240-T				
No. of LEDs	36	54	72	90	108				
Power	80W	120W	160W	200W	240W				
Net Weight	5.88kg	6.87kg	7.53kg	9.25kg	10.21kg				
Gross Weight	6.53kg	7.62kg	7.62kg 8.38kg		11.24kg				
Dimensions (L x W x H)	360 x 330 x 70mm	420 x 330 480 x 330 x 70mm x 70mm		600 x 330 x 70mm	660 x 330 x 70mm				
Carton Dimensions (L x W x H)	370 x 425 x 160mm	430x 425 x 160mm	490 x 425 x 160mm	610 x 425 x 160mm	670 x 425 x 160mm				
Input		347-480V AC 50/60Hz							
EPA	0.398sq.ft	0.421sq.ft	0.459sq.ft	0.526sq.ft	0.564sq.ft				

Drive current

1. FLB*T: 700mA 2. FLC*T: 700mA

General specifications for all the above items:

Electrical: 1. Power Factor: >0.95 at full load. 2. Total Harmonic Distortion: <20% at full load.

Lifetime and working temperature:

Reported I/70 Lifetime: >60,000 hours. Calculated L70 Lifetime: >100,000 hours.
 Ambient Temperature (Ta): -40 to 50 degrees celcius (-40 to 122 degrees Fahrenheit).

Typical Luminous Efficacy: 5. Typical Luminous Efficacy (FLB, FLC models): 100 lm/w (5000K CCT, Ra>70).

6. System Efficacy and power are customized, e.g. 130 lm/W.

Materials:

7. LED option: CREE or PHILIPS Lumileds.
8. LED Driver Origin: PHILIPS or MEANWELL.
9. Worldwide top brand quick connector for tool-free wiring, and terminal block for easiest wiring. 10. Extruded aluminium LED driver compartment with die cast aluminium end cap, and led light and end caps with corrosion resistant powder coating. Extruded aluminium alloy heat sink with anolized finish. 304 graded stainless steel protective cover to protect UV resistant polycarbonate lenses.



LED wall light (Mounting bracket code: W)





Ik08 rating, 1000 hours salt mist test reports are furnished upon request.

Dimensional Drawing



Features & Benefits

- 1) Based on the most successful product development, manufacturing and application expertise and experience.
- 2) Powered by the worldwide best LED, LED drivers, and other key components.
- 3) Meet all the major product qualifications e.g cULus, DLC, CE, CB etc.
- 4) Sufficient optics solutions at option to meet almost all lighting standards.
- 5) Modular mechanical construction, and the most thoughtful design, make the product the most user friendly and easiest for assembly, maintenance and installation.
- 6) The most competitive in cost performance, and one of the best ownership costs. 10 years limited warranty, free from maintenance for 10 years at least, the most competitive in operating cost, soonest in return on investment (ROI) or payback.
- 7) Environmentally friendly packaging materials (EPE).

Applications

- Airport Illumination
- Company Campus Illumination
- Healthcare Facilities Illumination
- Municipal Illumination
- Petroleum & Convenience Illumination
- Restaurant & Hotel Illumination
- Retail & Grocery Illumination
- Education Facilities Illumination
- Government Facilities Illumination

LED wall light (Mounting bracket code: W)

Ordering Information

Example 1: FLB-120-W-T3L-50K-BK-00 Example 2: FLC-120-W-T3L-50K-BK-00

Product ID	Power (W)	or	Product ID	Power (W)	Mounting	Optic Lens	CCT* (ANSI)	Housing Color**	Lighting Control
FLB	40 ¹		FLC 3	80	w	T1M	30K	вк	00
	40W			80W		T2M	3045	Black	Not
	80 ₂	1		120		тзм	±175K	(RAL:9011)	required
	80W			120W		T3L	40K	GR	01
	120	1		160		T4S	3985	Grey	DALI
	120W			160W		T5U	±275K	(RAL:7004)	02
	160	1				T5V	50K	wн	1-10V dimming
	160W					T5W	5028	White	aimming
		-				T5S	±283K	(RAL:9010)	
						T5M	57K	BZ	
						T5L	5665	Bronze	
						T5D	±355K	(RAL:8017)	

Footnotes:

• сст*:

1. LEDs at 5000k CCT are always in stock largely to support prompt delivery of finished products.

LEDs at 3000k, 4000k, 5700k CCT are in stock as well, but the quantity is small to meet small needs, and the shipment for the finished products with these LEDs cannot be made sooner than those with LEDs at 5000k CCT.
 LEDs at CCT or wavelength (unit nm) which is not in stock are available upon request, but the lead time for the finished products with these types of LEDs cannot be soon, also the unit price is higher.

• Housing Color**:

1. BK (Black) housings are always in stock largely to support prompt delivery of finished products.

GR (Grey), WH (White), BZ (Bronze) housing are available too, and the unit price of the finished product with these types of housings may be different from that with black housing, but the lead time is longer relatively.
 Other housing colors which are not mentioned can be customized, but the unit price is higher, the lead time is much longer.

Optic Lens Options:

1) T1M:Type Medium	7) T5V: 25°
T2M: Type II Medium	8) T5W:40°
T3M: Type III Medium	9) T5S: 60°
T3L: Type III Long	10) T5M: 90°
T4S: Type IV Short	11) T5L: 120°
6) T5U:10°	12) T5D: (frosted front cover, glare resistant)

1, 2, 3: DALI control is not available.

LED wall light (Mounting bracket code: W)

BRIEF SPECIFICATIONS

Model No.	FLB40-W	FLB80-W	FLB120-W	FLB160-W	
No. of LEDs	18	36	54	72	
Power	40W	80W	120W	160W	
Net Weight	4.09kg	5.08kg	6.07kg	7.8kg	
Gross Weight	4.74kg	5.73kg	6.82kg	8.65kg	
Dimensions (L x W x H)	215 x 330 x 70mm	275 x 330 x 70mm	335 x 330 x 70mm	395 x 330 x 70mm	
Carton Dimensions (L x W x H)	225 x 425 x 160mm			405 x 425 x 160mm	
Input		120-277V AC	or 220-240V AC 50/60Hz		
EPA	0.300sq.ft	0.323sq.ft	0.346sq.ft	0.383sq.ft	

Model No.	FLC80-W	FLC120-W	FLC160-W			
No. of LEDs	36	54	72			
Power	80W	120W	160W			
Net Weight	5.08kg	6.07kg	7.8kg			
Gross Weight	5.73kg	6.82kg	8.65kg			
Dimensions (L x W x H)	275 x 330 x 70mm	335 x 330 x 70mm	395 x 330 x 70mm			
Carton Dimensions (L x W x H)	285 x 425 x 160mm	345 x 425 x 160mm	405 x 425 x 160mm			
Input	347-480V AC 50/60Hz					
EPA	0.323sq.ft	0.346sq.ft	0.383sq.ft			

Drive current

1. FLB*W: 700mA 2. FLC*W: 700mA

General specifications for all the above items:

Electrical:

1. Power Factor: >0.95 at full load. 2. Total Harmonic Distortion: <20% at full load.

Lifetime and working temperature:

3. Reported L70 Lifetime: >60,000 hours .

Calculated L70 Lifetime: >100,000 hours. 4. Ambient Temperature (Ta): -40 to 50 degrees celcius (-40 to 122 degrees Fahrenheit).

Typical Luminous Efficacy:

5. Typical Luminous Efficacy (FLB, FLC models): 100 lm/w (5000K CCT, Ra>70).
6. System Efficacy and power are customized, e.g. 130 lm/W.

Materials:

Materials: 7. LED option: CREE or PHILIPS Lumileds. 8. LED Driver Origin: PHILIPS or MEANWELL. 9. Worldwide top brand quick connector for tool-free wiring, and terminal block for easiest wiring. 10. Extruded aluminium LED driver compartment with die cast aluminium end cap, and led light bar end caps with corrosion resistant powder coating. Extruded aluminium alloy heat sink with anodized finish. 304 graded stainless steel protective cover to protect UV resistant polycarbonate lenses.

Photometrics

























LED Street Light





EN61547:2009 EN61000-3-2/A2:2009 EN 61000-3-3:2013 (EU) 1194/2012:2012-12-12 (EC) 244/2009:2009-03-18

1000 hours salt mist test reports are furnished upon request.

Dimensional Drawing





Features & Benefits

- 1) Revolutionary mechanical and thermal solution, integrating part of the die cast aluminium housing with the heat sink. The heat conductivity and radiation perform the best for much longer LED L70 lifespan. No dust, leaves or other pollution substances are accumulated, zero concern and possibility to block the heat radiation.
- 2) Truly classic cobrahead style LED streetlight, which makes it possible to remain the classic urban street landscape after the HID solution is replaced.
- 3) Powered by the worldwide best LED, LED drivers, and other key components.
- 4) Compliant with cULus, DLC, CE (lvd, emc, rohs, Erp directives), and CB standards.
- 5) Low profile design, compliant with KISS principle for product design, less uncertainty because its concise mechanical structure, ensure it most reliable performance.
- 6) Human centered design, and extremely easy for installation and maintenance.
- 7) The most competitive in cost performance, and one of the best ownership costs. 10 years limited warranty, free from maintenance for 10 years at least, the most competitive in operating cost, soonest in return on investment (ROI) or payback.
- 8) Class II rated led lighting luminaire.
- 9) Environmentally friendly packaging materials (EPE).

Applications

Municipal and rural street, roadway, or area lighting.

LED Street Light

Ordering Information

Example 1: SLG-25-T2M-50K-GR-00 Example 2: SLE-90-T2M-50K-GR-00

Product ID	Power (W)	or	Product ID	Power (W)	or	Product ID	Power (W)	Optic Lens	CCT* (ANSI)	Housing Color**	Lighting Control
SLG 1	25		SLE 2	40		SLF 3	20	T2M	30K	GR	00
	30W			45W			20W	T5U	3045	Grey	Not
	40			60			30	T5V	±175K	(RAL:7004)	required
	45W			65W			30W	T5W	40K	ВК	01
	45			80			40	T5S	3985	Black	Photocell
	40W			80W			40W	T5M	±275K	(RAL:9011)	
	60			90	1			T5L	50K	wн	
	65W			100W				T5D	5028	White	
									±283K	(RAL:9010)	
									57K	BZ	

5665

±355K

Bronze

(RAL:8017)

Footnotes

• CCT*:

1. LEDs at 5000k CCT are always in stock largely to support prompt delivery of finished products.

LEDs at 3000k, 4000k, 5700k CCT are in stock as well, but the quantity is small to meet small needs, and the shipment for the finished products with these LEDs cannot be made sooner than those with LEDs at 5000k CCT.
 LEDs at CCT or wavelength (unit nm) which is not in stock are available upon request, but the lead time for the finished products with these types of LEDs cannot be soon, also the unit price is higher.

• Housing Color**:

1. GR (Grey) housings are always in stock largely to support prompt delivery of finished products.

BK (Black), WH (White), BZ (Bronze) housing are available too, and the unit price of the finished product with these types of housings may be different from that with grey housing, but the lead time is longer relatively.
 Other housing colors which are not mentioned can be customized, but the unit price is higher, the lead time is much longer.

Optic Lens Options:

- 1) T2M: Type II Medium
- 2) T5U:10°
- 3) T5V: 25°
- 4) T5W:40°
- 5) T5S:60°
- 6) T5M: 90°
- 7) T5L: 120°
- 8) T5D: Glare resistant diffuser.

1, 2: 1-10V dimming interface (wire) are available based on customization request.
 3: Photocell is available based on customization request.



BRIEF SPECIFICATIONS

Mandal Ma	61.635	61.6.40	61.000	CLC45*	01520	61 520	61540	61540	01500	CL 500	CL 500*		
Model No.	SLG25	SLG40	SLG60	SLG45*	SLF20	SLF30	SLF40	SLE40	SLE60	SLE90	SLE80*		
No. of LEDs		1	.8			18		36					
System Power	30W	45W	65W	40W	20W	30W	40W	45W	65W	100W	80W		
Efficacy*	105 lm/W	100 lm/W	90 lm/W	95 lm/W	120lm/W	115lm/W	110lm/W	110 lm/W	105 lm/W	95 lm/W	100 lm/W		
Input		90-305V		120-277V	9-18	V DC or 18-32V	DC		120-277V				
Driver		Meanwell		Philips		Philips			Philips				
Net Weight		3.2	2Kg		3.2Kg			4.6Kg					
Gross Weight		4.3	2kg		4.2kg			5.9kg					
Dimensions (L x W x H)		714 x 210) x 107mm		71	714 x 210 x 107mm			718 x 283 x 107mm				
Carton Dimensions (L x W x H)		810 x 295	x 160mm		810 x 295 x 160mm			810 x 365 x 160mm					
EPA (1 Fixture at 0° mount)		0.82	2sq.ft		0.822sq.ft			0.827sq.ft					

Drive current: SLF20: 350mA, SLF30: 500mA, SLF40: 700mA

General specifications for all the above models.

Electrical:

- Power Factor: >0.95 at full load.
 Total Harmonic Distortion: <20% at full load.
- Lifetime and working temperature:

- 3. Reported L70 Lifetime: >60,000 hours . Calculated L70 Lifetime: >100,000 hours. 4. Ambient Temperature (Ta): -40 to 50 degrees celcius (-40 to 122 degrees Fahrenheit).
- Typical Luminous Efficacy:
- 5. Typical Luminous Efficacy (SLE and SLG models): 5000K CCT, Ra>70.
- 6. System Efficacy and power are customized, e.g. 130 lm/W.

Photometrics

Materials:

- Materials:
 T. LED option: CREE or PHILIPS Lumileds.
 8. LED Driver Origin: PHILIPS or MEANWELL.
 9. 45* and 80* are powered by 120-277V AC 50/60Hz Philips branded LED driver.
 10. Suitable for 42-60mm(1.653"-2.375") outer diameter horizontal tennon mounting.
 11. Optional NEMA photocell with its receptacle, or shorting cap with its receptacle.
 12. Optional bird spike to avoid bird waste pollution.
 13. Worldwide top brand quick connector for tool-free wiring, and terminal block for easiest wiring, two axis T-shaped bubble level for ease of leveling and tilting angle setup as well.
 14. Extruded aluminium alloy heat sink with anodized finish. 304 graded stainless steel protective cover to protect UV resistant polycarbonate lenses.





















LED Street Light

Simulation Calculation Summary Reference



Pole Arrangement: Single Sided

MH=Mounting Height (unit: m) Area = Pole Spacing x Road Width (unit: m) Lav* (cd/sq.m.) and Eav* (lux) are the values based on Dialux simulation calculations for one typical section of street.

Model No.		SLG25		SLG40		SLG60		SLE40		SLE60		SLE90	
T2M	Area	Lav* cd/m2	Eav*/lx										
6	35 x 7	0.60	8.54	0.91	13	1.23	18	0.96	14	1.44	21	2.05	29
8	35 x 7	0.39	5.20	0.60	7.92	0.81	11	0.63	8	0.95	12	1.35	18
10	40 x 10.5	0.31	3.88	0.47	5.90	0.63	8	0.49	6	0.74	9	1.06	13



Pole Arrangement: Opposite (double rows opposing) MH=Mounting Height (unit: m) Area = Pole Spacing x Road Width (unit: m) Lav* (cd/sq.m.) and Eav* (lux) are the values based on Dialux simulation calculations for one typical section of street.

Model No.		SLG25		SLG40		SLG60		SLE40		SLE60		SLE90	
T2N	Area	Lav* cd/m2	Eav*/lx										
6	35 x 7	0.59	8.54	0.90	13	1.21	18	0.95	14	1.42	21	2.03	29
8	35 x 7	0.41	5.88	0.63	8.95	0.85	12	0.66	9.40	0.99	14	1.42	20
10	40 x 10.5	0.35	4.93	0.53	7.50	0.71	10	0.56	7.88	0.84	12	1.19	17



Super High Output Floodlight / Area Light(Horizontal tenon mount/Pole-top mount)





Mounting Type U



Mounting Type C

Features & Benefits

- 1) Patented mechanical design and thermal management.
- 2) Compact, low profile design. Smaller in size and weight.
- 3) Standard 700mA drive current only, 100lm/W system efficacy.
- 4) Incomparable wattage (450W, 600W, 750W and 900W), lumen output and optic choices
- 5) Powered by the worldwide best LED, LED drivers, and other key components.
- 6) Compliant with almost all the major product qualifications e. g cULus, DLC, CE, CB.
- 7) The most competitive in cost performance, and one of the best ownership costs. 10 years limited warranty, free from maintenance for 10 years at least, the most competitive in operating cost, soonest in return on investment (ROI) or payback.
- 9) Environmentally friendly packaging materials (EPE).

Applications

Commercial and industrial high bay/super bay, airport hangars, and gymnasiums etc.
±355K

(RAL:8017)

Ordering Information

Example 1: FLD-600-U-T5M-50K-BK-00 Example 2: FLG-450-C-T5L-50K-BK-00

Product ID	Power (W)	or	Product ID	Power (W)	Mounting	Optic Lens	CCT* (ANSI)	Housing Color**	Lighting Control
FLD1	450		FLG ₂	450	U	T1M	30K	вк	00
	450W			450W	С	T2M	3045	Black	Not
	600			600		тзм	±175K	(RAL:9011)	required
	600W			600W		T3L	40K	GR	01
	750			750		T4S	3985	Grey	DALI
	750W			750W		T5U	±275K	(RAL:7004)	02
	900			900		T5V	50K	wн	1-10V
	900W			900W		T5W	5028	White	dimming
						Т55	±283K	(RAL:9010)	
						T5M	57K	BZ	
						T5L	5665	Bronze	
						T5D	±355K	(RAL:8017)	

Footnotes:

• CCT*:

1. LEDs at 5000k CCT are always in stock largely to support prompt delivery of finished products.

2. LEDs at 3000k, 4000k, 5700k CCT are in stock as well, but the quantity is small to meet small needs, and the shipment for the finished products with these LEDs cannot be made sooner than those with LEDs at 5000k CCT. 3. LEDs at CCT or wavelength (unit nm) which is not in stock are available upon request, but the lead time for the finished products with these types of LEDs cannot be soon, also the unit price is higher.

• Housing Color**:

1. BK (Black) housings are always in stock largely to support prompt delivery of finished products. 2. GR (Grey), WH (White), BZ (Bronze) housing are available too, and the unit price of the finished product with these types of housings may be different from that with black housing, but the lead time is longer relatively. 3. Other housing colors which are not mentioned can be customized, but the unit price is higher, the lead time is much longer.

• Optic Lens Options:

T1M:Type | Medium T5U: 10° T5V-25° T5W: 40° T5S: 60° T5M: 90° T5L: 120° T5D: 120° (frosted front cover, glare resistant) T2M, T3M, T3L, T4S: Under Development

1, 2: Photocell and motion sensing are available based on customization request. 2: DALI control is not available.

AUROR/ Series



Super High Output Floodlight / Area Light (Horizontal tenon mount/Pole-top mount)

BRIEF SPECIFICATIONS

Model No.	FLD450-U	FLG450-U	FLD600-U	FLG600-U	FLD750-U	FLG750-U	FLD900-U	FLG900-U	
No. of LEDs	22	216		288		360		432	
Power	45	450W		600W 7		0W	900W		
Net Weight	19.6	19.63kg		21kg	27.45kg		30.72kg		
Gross Weight	21.6	21.68kg		76kg	30.07kg		33.72kg		
Dimensions (L x W x H)	502 x x 123	< 680 3mm		x 680 3mm			862 x 680 x 123mm		
Carton Dimensions (L x W x H)	605 x 740 x 170mm			x 740 0mm	845 x 740 x 170mm		965 x 740 x 170mm		
Input	120-277V AC 220-240V AC	347-480V AC	120-277V AC 220-240V AC	347-480V AC	120-277V AC 220-240V AC	347-480V AC	120-277V AC 220-240V AC	347-480V AC	

Model No.	FLD450-C	FLG450-C	FLD600-C	FLG600-C	FLD750-C	FLG750-C	FLD900-C	FLG900-C	
No. of LEDs	2	216		288		360		432	
Power	45	450W		0W	750W		900W		
Net Weight	14.7	14.75kg		43kg	22.51kg		25.99kg		
Gross Weight	16.8	16.80kg		98kg	25.13kg		28.99kg		
Dimensions (L x W x H)		634.5 3mm		634.5 3mm	742 x 634.5 x 123mm		862 x 634.5 x 123mm		
Carton Dimensions (L x W x H)	605 x 740 x 170mm			x 740 0mm	845 x 740 x 170mm		965 x 740 x 170mm		
Input	120-277V AC 220-240V AC	347-480V AC	120-277V AC 220-240V AC	347-480V AC	120-277V AC 220-240V AC	347-480V AC	120-277V AC 220-240V AC	347-480V AC	

Drive current

1. FLD, FLG: 700mA

General specifications for all the above items:

Electrical: 1. Power Factor: >0.95 at full load. 2. Total Harmonic Distortion: <20% at full load.

Lifetime and working temperature:

Reported I.70 Lifetime: >60,000 hours.
 Calculated L70 Lifetime: >100,000 hours.
 Ambient Temperature (Ta): -40 to 50 degrees celcius (-40 to 122 degrees Fahrenheit).

Typical Luminous Efficacy:

5. Typical Luminous Efficacy (FLD, FLG models): 100 lm/w (5000K CCT, Ra>70).
 6. System Efficacy and power are customized, e.g. 130 lm/W.

Materials:

7. LED option: CREE or PHILIPS Lumileds.
8. LED Driver Origin: PHILIPS or MEANWELL.
9. Worldwide top brand quick connector for tool-free wiring, and terminal block for easiest wiring.
10. Extruded aluminium LED driver compartment with die cast aluminium end cap, and led light bar end caps with corrosion resistant powder coating. Extruded aluminium alloy heat sink with anodized $finish.\ 304\ graded\ stainless\ steel\ protective\ cover\ to\ protect\ UV\ resistant\ polycarbonate\ lenses.$

Photometrics



Super High Output Floodlight / Bay Light(Mounting bracket Code: U & C)





AURORA Series

C € CB IP67 IK08 ErP

Compliant with the following standards: IEC /EN 60598-1: 2008 IEC /EN 60598-2-3/A1: 2011 EN 62493:2010 IEC62471: 2008 IEC62471-2:2009 EN 55015: 2013 EN61547:2009 EN61000-3-2/A2:2009 EN 61000-3-2/A2:2009 EN 61000-3-3:2013 (EU) 1194/2012:2012-12-12 (EC) 244/2009:2009-03-18

Dimensional Drawing





Features & Benefits

- 1) Patented mechanical design and thermal management.
- 2) Compact, low profile design. Smaller in size and weight.
- 3) Standard 700mA drive current only, 100lm/W system efficacy.
- 4) Incomparable wattage (450W, 600W, 750W and 900W), lumen output and optic choices.
- 5) Powered by the worldwide best LED, LED drivers, and other key components.
- 6) Meet all the major product qualifications e. g cULus, DLC, CE, CB.
- 7) The most competitive in cost performance, and one of the best ownership costs. 10 years limited warranty, free from maintenance for 10 years at least, the most competitive in operating cost, soonest in return on investment (ROI) or payback.
- 8) Environmentally friendly packaging materials (EPE).

Applications

- **1**. Airport Illumination
- 2. Auto Dealership Illumination
- 3. Government Facilities Illumination
- 4. Municipal Illumination

- 5. Parking Structure Illumination
- 6. Petroleum & Convenience Illumination
- 7. Recreation & Public Venue Illumination
- 8. Other high-lumen applications



Super High Output Floodlight / Area Light (Horizontal tenon mount/Pole-top mount)

Ordering Information

Example: FLE-600-T5L-50K-BK-00 Example: FLF-450-T5L-50K-BK-00

Product ID	Power (W)	or	Product ID	Power (W)	Optic Lens	CCT* (ANSI)	Housing Color**	Lighting Control
FLE ₁	450		FLF ₂	450	T1M	30K	вк	00
	450W			450W	T2M	3045	Black	Not
	600			600	тзм	±175K	(RAL:9011)	required
	600W			600W	T3L	40K	GR	01
	750			750	T4S	3985	Grey	DALI
	750W			750W	T5U	±275K	(RAL:7004)	02
	900			900	T5V	50K	wн	1-10V
	900W			900W	T5W	5028	White	dimming
		•			T5S	±283K	(RAL:9010)	
					T5M	57K	BZ	
					T5L	5665	Bronze	
					T5D	±355K	(RAL:8017)	

Footnotes:

• cct*:

LEDs at 5000k CCT are always in stock largely to support prompt delivery of finished products.
 LEDs at 3000k, 4000k, 5700k CCT are in stock as well, but the quantity is small to meet small needs, and the shipment for the finished products with these LEDs cannot be made sooner than those with LEDs at 5000k CCT.
 LEDs at CCT or wavelength (unit nm) which is not in stock are available upon request, but the lead time for the finished products with these types of LEDs cannot be soon, also the unit price is higher.

• Housing Color**:

BK (Black) housings are always in stock largely to support prompt delivery of finished products.
 GR (Grey), WH (White), BZ (Bronze) housing are available too, and the unit price of the finished product with these types of housings may be different from that with black housing, but the lead time is longer relatively.

• Lighting Luminaire System Efficacy and power are customized, e.g. 130 lm/W efficacy.

• Optic Lens Options:

T1M:Type I Medium T5U: 10° T5V: 25° T5W: 40° T5S: 60° T5M: 90° T5L: 120° T5L: 120° T5D: 120° (frosted front cover, glare resistant) T2M, T3M, T3L, T4S: Under Development

1, 2: Photocell and motion sensing are available based on customization request.

2: DALI control is not available.

Super High Output Floodlight / Bay Light (Mounting bracket Code: U & C)

BRIEF SPECIFICATIONS

Model No.	FLE450	FLF450	FLE600	FLF600	FLE750	FLF750	FLE900	FLF900	
No. of LEDs	21	16	2	88	3	60	4	432	
Power	450	450W		0W	75	0W	900W		
Net Weight	19.6	i3kg	23.2	21kg	27.45kg		30.72kg		
Gross Weight	20.6	j3kg	24.	71kg	29.0	02kg	32.67kg		
Dimensions (L x W x H)	765 x 635	765 x 635 x 83mm		5 x 83mm	1065 x 635 x 83mm		1185 x 635 x 83mm		
Carton Dimensions (L x W x H)	843 x 740	x 170mm	963 x 740	x 170mm	1143 x 740 x 170mm		1263 x 740 x 170mm		
EPA	0.778	3sq.ft	0.84	6sq.ft	0.959sq.ft		1.034sq.ft		
Input	120-277V AC 220-240V AC	347-480V AC	120-277V AC 220-240V AC	347-480V AC	120-277V AC 220-240V AC	347-480V AC	120-277V AC 220-240V AC	347-480V AC	

Drive current

1. FLE, FLF: 700mA

General specifications for all the above items:

Electrical: 1. Power Factor: >0.95 at full load.

2. Total Harmonic Distortion: <20% at full load.

Lifetime and working temperature: 3. Reported L70 Lifetime: >60,000 hours. Calculated L70 Lifetime: >100,000 hours. 4. Ambient Temperature (Ta): -40 to 50 degrees celcius (-40 to 122 degrees Fahrenheit).

Typical Luminous Efficacy:
5. Typical Luminous Efficacy (FLE, FLF models): 100 lm/w (5000K CCT, Ra>70).
6. System Efficacy and power are customized, e.g. 130 lm/W.

Materials:

7. LED option: CREE or PHILIPS Lumileds.
8. LED Driver Origin: PHILIPS or MEANWELL.
9. Worldwide top brand quick connector for tool-free wiring, and terminal block for easiest wiring. 10. Extruded aluminium LED driver compartment with die cast aluminium end cap, and led light bar end caps with corrosion resistant powder coating. Extruded aluminium alloy heat sink with anodized

finish. 304 graded stainless steel protective cover to protect UV resistant polycarbonate lenses.

11. Suitable for 60mm(2.375") outer diameter pole-arm mount

Photometrics





Linear LED Bay Light





Dimensional Drawing



Features & Benefits

- 1) Top quality LEDs and built-in class II UL listed LED driver.
- 2) Aluminium PCB with LEDs mounted are attached to the extruded aluminium housing functioning as a heatsink, which ensures the best heat conductivity and radiation, as a result, the unique mechanical and thermal solutions enable the whole system to be free of maintenance for 5 years at least. Accordingly the operating cost is almost zero because of no maintenance in the first 5 years. The housing is not sealed, but with a slot for led driver heat radiation.
- **3)** Super bright with higher lumen output than that from conventional LED T8 tube lights, and no concern about thermal management, lumen maintenance.
- 4) Multiple units Linkble.
- 5) Environmentally friendly packaging materials (EPE).

Applications

Commercial and industrial low bay lighting

Linear LED Bay Light

Ordering Information

Example:BLA-180-T5D-50K-WH-00

Product ID	Power (W)	Optic Lens	CCT* (ANSI)	Housing Color**	Lighting Control
BLA ₁	120	T5D	30K	wн	00
	120W		3045	White	Not
	180	1	±175K	(RAL:9010)	required
	180W		40K		
	240	1	3985		
	240W		±275K		
			50K		
			5028		
			±283K		
			57K		
			5665		
			±355K		

Footnotes:

• сст*:

1. LEDs at 5000k CCT are always in stock largely to support prompt delivery of finished products.

2. LEDs at 3000k, 4000k, 5700k CCT are in stock as well, but the quantity is small to meet small needs, and the shipment for the finished products with these LEDs cannot be made sooner than those with LEDs at 5000k CCT.

3. LEDs at CCT or wavelength (unit nm) which is not in stock are available upon request, but the lead time for the finished products with these types of LEDs cannot be soon, also the unit price is higher.

• Housing Color**:

1. WH (White) housings are always in stock largely to support prompt delivery of finished products.

2. Other housing colors which are not mentioned can be customized, but the unit price is higher, the lead time is much longer.

Optic Lens Options:

T5D: 120 DEG frosted front cover (diffuser).

1: Photocell, motion sensing and 1-10V dimming interface (wire) are available based on customization request.



BRIEF SPECIFICATIONS

Model No.	No. of LEDs	System Power	Net Weight	Gross Weight	Dimensions (L x W x H)	Carton Dimensions (L x W x H)
BLA120	160	120W	4.83kg	6.12kg		
BLA180	240	180W	4.88kg	6.17kg	1234.5 x 158 x 153.5mm	1308 x 225 x 200mm
BLA240	320	240W	4.99kg	6.28kg		

General specifications for all the above items:

Electrical: 1. 90-305V AC 50/60Hz Input. 2. Power Factor: >0.95 at full load. 3. Total Harmonic Distortion: <20% at full load.

Lifetime and working temperature:

4. L70 Lifespan: >50,000 hours .

Typical Luminous Efficacy: 5. Typical Luminous Efficacy (BLA models): 100 lm/w (5000K CCT, Ra>80). 6. System Efficacy and power are customized, e.g. 130 lm/W.

Materials:

7. LED option: CREE or PHILIPS Lumileds.
8. LED Driver Origin: MEANWELL.
9. Worldwide top brand quick connector for tool-free wiring, and terminal block for easiest wiring.

Photometrics



BLA120



BLA180



BLA240





Linear LED Bay Light

US

lighting



Dimensional Drawing



Features & Benefits

- 1) Top quality LEDs and built-in class II UL listed LED driver.
- 2) Aluminium PCB with LEDs mounted are attached to the extruded aluminium housing functioning as a heatsink, which ensures the best heat conductivity and radiation, as a result, the unique mechanical and thermal solutions enable the whole system to be free of maintenance for 5 years at least. Accordingly the operating cost is almost zero because of no maintenance in the first 5 years. The housing is not sealed, but with a slot for led driver heat radiation.
- 3) Super bright with higher lumen output than that from conventional LED T8 tube lights, and no concern about thermal management, lumen maintenance.
- 4) Multiple units Linkble.
- 5) Environmentally friendly packaging materials (EPE).

Applications

Commercial and industrial lighting

Linear LED Bay Light

Ordering Information

Example:BLB-40-T5D-50K-WH-00

Product ID	Power (W)	Optic Lens	CCT* (ANSI)	Housing Color**	Lighting Control
BLB 1	40	T5D	30K	WН	00
	40W		3045	White	Not
	60		±175K	(RAL:9010)	required
	60W		40K		
	90		3985		
	90W		±275K		
			50K		
			5028		
			±283K		
			57K		
			5665		
			±355K		

Footnotes

• cct*:

1. LEDs at 5000k CCT are always in stock largely to support prompt delivery of finished products.

LEDs at 3000k, 4000k, CCT are in stock as well, but the quantity is small to meet small needs, and the shipment for the finished products with these LEDs cannot be made sooner than those with LEDs at 5000k CCT.
 LEDs at CCT or wavelength (unit nm) which is not in stock are available upon request, but the lead time for the finished products with these types of LEDs cannot be soon, also the unit price is higher.

• Housing Color**:

1. WH (White) housings are always in stock largely to support prompt delivery of finished products.

2. Other housing colors which are not mentioned can be customized, but the unit price is higher, the lead time

is much longer.

Optic Lens Options:

T5D: 120 DEG frosted front cover (diffuser).

1: Photocell, motion sensing and 1-10V dimming interface (wire) are available based on customization request.

Linear LED Bay Light

BRIEF SPECIFICATIONS

Model No.	No. of LEDs	System Power	Net Weight	Gross Weight	Dimensions (L x W x H)	Carton Dimensions (L x W x H)
BLB40	48	40W	1.85kg	2.15kg	1203 x 49	1206 x 50
BLB60	72	60W	1.85kg	2.15kg	x 69mm	x 70mm
BLB90	112	90W	2.34kg	2.64kg	1203 x 49 x 95mm	1206 x 50 x 97mm

General specifications for all the above items:

Electrical:

1. 90-305V AC 50/60Hz Input. 2. Power Factor: >0.95 at full load. 3. Total Harmonic Distortion: <20% at full load.

Lifetime and working temperature: 4. L70 Lifespan: >50,000 hours .

Typical Luminous Efficacy:

5. Typical Luminous Efficacy (BLB models): 100 lm/w (5000K CCT, Ra>80).
6. System Efficacy and power are customized, e.g. 130 lm/W.

Materials:

7. LED option: CREE or PHILIPS Lumileds.

8. LED Driver Origin: MEANWELL.
9. Worldwide top brand quick connector for tool-free wiring, and terminal block for easiest wiring.

Photometrics



BLB40



BLB60



BLB90





Dimensional Drawing

BRIGHT



Features & Benefits

- 1) Compact, low-profile and lightweight mechanical construction design.
- 2) Ideal direct replacement for HID and fluorescent high/low bay lights, saving energy and re-lamp maintenance costs significantly.
- 3) Significant flexibility and versatility for a variety of application areas.
- 4) Ideal, energy-efficient and low-maintenance solution that can be customized for practically any area.
- 5) Environmentally friendly packaging materials (EPE).

Applications

Interior high-bay low-bay, auto dealership, education, municipal, retail and grocery, industrial and warehouses.

Linear LED Bay Light

Ordering Information

Example:BLC-120-T5D-50K-WH-00

Product ID	Power (W)	Optic Lens	CCT* (ANSI)	Housing Color**	Lighting Control
BLC	80	T1M	30K	WH	00
	80W	T5U	3045	White	Not
	120	T5V	±175K	(RAL:9010)	required
	120W	T5W	40K		01
	160	T5S	3985		DALI
	160W	T5M	±275K		02
		T5L	50K		1-10V
	200 200W	T5D	5028		dimming
	240		±283K		
	240W		57K		
	L	1	5665		
			±355K		

Footnotes

• CCT*:

LEDs at 5000k CCT are always in stock largely to support prompt delivery of finished products.
 LEDs at 3000k, 4000k, 5700k CCT are in stock as well, but the quantity is small to meet small needs, and the shipment for the finished products with these LEDs cannot be made sooner than those with LEDs at 5000k CCT.
 LEDs at CCT or wavelength (unit nm) which is not in stock are available upon request, but the lead time for the finished products with these types of LEDs cannot be soon, also the unit price is higher.

• Housing Color**:

1. WH (White) housings are always in stock largely to support prompt delivery of finished products.

2. Other housing colors which are not mentioned can be customized, but the unit price is higher, the lead time is much longer.

Optic Lens Options:

- 1) T1M:Type I Medium
- 2) T5U:10°
- 3) T5V: 25°
- 4) T5W:40°
- 5) T5S:60°
- 6) T5M:90°
- 7) T5L: 120°

8) T5D: (frosted front cover, glare resistant)

1: Photocell and motion sensing are available based on customization request.

Linear LED Bay Light

BRIEF SPECIFICATIONS

Model No.	BLC120	BLC160	BLC200	BLC240			
No. of LEDs	54	72	90	108			
Power	120W	160W	200W	240W			
Weight	4Kg	5Kg	6Kg	7Kg			
Gross Weight	4.5Kg	5.5Kg	6.5Kg	7.5Kg			
Dimensions (L x W x H)	835 x 70 x 102mm	1110 x 70 x 102mm	1385 x 70 x 102mm	1660 x 70 x 102mm			
Carton Dimensions (L x W x H)	845 x 80 x 112mm	1120 x 80 x 112mm	1395 x 80 x 112mm	1670 x 80 x 112mm			
Input	120-277V AC or 220-240V AC						

General specifications for all the above items:

Electrical: 1. 90-305V AC 50/60Hz Input. 2. Power Factor: >0.95 at full load. 3. Total Harmonic Distortion: <20% at full load.

Lifetime per and working temperature: 4. L70 Lifespan: >50,000 hours .

Typical Luminous Efficacy:

5. Typical Luminous Efficacy (BLA models): 100 lm/w (5000K CCT, Ra>80).
 6. System Efficacy and power are customized, e.g. 130 lm/W.

Materials:

7. LED option: CREE or PHILIPS Lumileds.
8. LED Driver Origin: MEANWELL.
9. Worldwide top brand quick connector for tool-free wiring, and terminal block for easiest wiring.



















Traditional style LED bay light (pendant mount)





Features & Benefits

- 1) Compact, low-profile and lightweight mechanical construction design.
- 2) Ideal direct replacement for HID and fluorescent high/low bay lights, saving energy and re-lamp maintenance costs significantly.
- 3) Unique optic design provide excellent light distribution performance.
- 4) Flexible mounting choices, hook, cable, pendant, junction box direct mount.
- 5) Environmentally friendly packaging materials (EPE).

Applications

Interior high-bay, low-bay, auto dealership, education, municipal, retail and grocery, industrial and warehouses.



Traditional style LED bay light (pendant mount)

Ordering Information

Example 1: BLD-40-T5R-50K-BK-00

Product ID	Power (W)	Optic Lens	CCT* (ANSI)	Housing Color**	Lighting Control
BLD ₁	40	T5R	30K	вк	00
	40W		3045	Black	Not
	60		±175K	(RAL:9011)	required
	60W		40K	GR	
	90		3985	Grey	
	90W		±275K	(RAL:7004)	
	120		50K		
	120W		5028		
	180		±283K		
	180W		57K		
	240				
	240W		5700		
			±355K		

Footnotes

• cct*:

1. LEDs at 5000k CCT are always in stock largely to support prompt delivery of finished products.

LEDs at 3000k, 4000k, 5700k CCT are in stock as well, but the quantity is small to meet small needs, and the shipment for the finished products with these LEDs cannot be made sooner than those with LEDs at 5000k CCT.
 LEDs at CCT or wavelength (unit nm) which is not in stock are available upon request, but the lead time for the finished products with these types of LEDs cannot be soon, also the unit price is higher.

• Housing Color**:

1. BK (Black) housings are always in stock largely to support prompt delivery of finished products.

2. GR (Grey) housing are available too, and the unit price of the finished product.

with these types of housings may be different from that with black housing, but the lead time is longer relatively. 3. Other housing colors which are not mentioned can be customized, but the unit price is higher, the lead time is much longer.

1: Photocell and 1-10V dimming interface (wire) are available based on customization request.

Traditional style LED bay light (pendant mount)

BRIEF SPECIFICATIONS

Model No.	BLD40	BLD60	BLD90	BLD120	BLD180	BLD240	
No. of LEDs	48	72	112	160	240	320	
Power	40W	60W	90W	120W	180W	240W	
Net Weight	2.5kg	2.46kg	2.7kg	5.31kg	5.36kg	5.47kg	
Gross Weight	4.17kg	4.13kg	4.37kg	6.98kg	7.03kg	7.14kg	
Dimensions		Ф330*Н400			Ф480*Н560		
Carton Dimensions	555 x 415 x 210mm				770 x 570 x 270mm		
Input	90-305V AC						

General specifications for all the above items:

Electrical: 1. Power Factor: >0.95 at full load. 2. Total Harmonic Distortion: <20% at full load.

- Lifetime and working temperature: 3. L70 Lifespan: >50,000 hours.

Typical Luminous Efficacy:

 Typical Luminous Efficacy (BLD models): 100 lm/w (5000K CCT, Ra>70). 5. System Efficacy and power are customized, e.g. 130 lm/W.

Materials:

- 6. LED option: CREE or PHILIPS Lumileds.
 7. LED Driver Origin: MEANWELL.
 8. Worldwide top brand quick connector for tool-free wiring, and terminal block for easiest wiring.

Photometrics















PHOTOCELL

Product Summary



- ANSI C136.10-1996 Twist Lock
- Time Delay 30~120 seconds
- Temperature compensate
- Various Enclosures
- Lightning Arrester Available

• 1" Photocell Deluxe Version Available

1. The photocell PCA, PCB series is applicable to control the street lighting, garden lighting, passage lighting and doorway lighting automatically in accordance with the ambient natural lighting level.

This product is designed on the basis of thermal - bimetallic structure that provides time delay over 30 seconds to avoid mis-operation due to spotlight or lightning during the night time. A temperature compensation system provides consistent performance regardless to the ambient

temperature. **2.**This product provides three twist-lock terminals meeting the requirements of ANSI C136.10-1996 and the Standard for Plug-In, Locking Type Photocell for Use with Area Lighting UL773, 4th Edition, dated Jan.19th, 1995. PCA, PCB series has been listed by UL Inc for United States and Canada.



- SPST-NO
- Thermal switch
- Polycarbonate enclosure & eye
- 1/2" CDS photocell
- 3/8"- 18 thread nipple, with
- rubber gasket & plastici lock nut

• High grade leads available

1. Applicable to control passage lighting and doorway lighting automatically in accordance with the ambient lighting level.

2. UL & C-UL listed by UL Inc and is comply with the Standard for Nonindustrial Photoelectric Switches for lighting Control UL773A

3. Raintight, applicable for outdoor purpose

Technical Data

Model No.	PCA120	PCA240	PCB120	PCB240	
Nominal Rated Voltage	90-120V AC	220-277V AC	90-120V AC	220-277V AC	
Applicable Volt Range	Nomina	l +/-10%	Nomina	al +/-10%	
Rated Frequency	50/6	50Hz	50/	60Hz	
Rated Loading	1200W	1800W	600W	1000W	
Power Consumption	1.5VA (A	verage)	1.5VA Max		
Standard Operate Level	10~20Lx On,	30~60Lx Off	10~20Lx On(Dusk); 30~60Lx Off(Dawn)		
Ambient Temperature	-40°C ^	° +70℃	-40°C ~ +70°C		
Related Humidity	99	9%	9	9%	
Overall Dimensions (mm)	Ф74 x	50mm	52.2(L) x 29(w) x 42(H)mm	
**Enclosure Color (M/H)	Gr	ау	Black		
**Clear Enclosure (Null)	Avai	lable	Ava	ilable	
Weight Approx.	62~9	Ogrs	32	2grs	

Materials: Enclosure & Lens – High impact UV stabilized Polycarbonate Base – High impact Polybutylene terephthalate Photocell – Cadmium Sulfide 0.5" with heat sink (Standard) / 1" (Deluxe)

Installation

Disconnect power; wire the color coded receptacle according to the diagram below. Push the photocell on and twist it clockwise to lock it into the receptacle. Install the photocell with the Photocell facing the NORTH direction as indicated on the top of the photocell. Adjust the receptacle position if necessary.



Microwave motion sensor





Model No.: MSA277

Applications and Features

The sensor is mainly used for the roadway automatic lighting control or roadway lighting real-time dimming control for energy saving purpose. The sensor detects the moving object(s) and transmits the preset 1-10v dimming control signal to the led electronic driver (s) with 1-10v dimming interface so as to activate the 1-10v dimmable led driver. The qualified technician authorized by the end user can set codes by themselves so as to preset the delay period, brightness dimming, power-on delay period etc. The sensor can be equipped with a wireless transceiver as well, thus the wireless communication grouping frequency band (WCGFB) can be set to make all the motion sensors in WCGFB installed to the led street lights communicate by themselves, as a result the led street lights with MSA277 equipped which are not in MSA277 detection range are activated and dimmed to a preset percentage of brightness in advance, e.g. 100% brightness (lumen output) for enough driving security and safety.

Technical Parameters

- Rated Operating Voltage: 120-277VAC 50/60Hz
- Ingress Protection Rating: IP67
- Compliance: UL, FCC
- Lifetime: 50,000 hours

Operating Environment Requirements

- Operating Ambient Temperature:-40°C 60°C
- Applicable Mounting Height: 6-18m. Maximum mounting height is 30 meters, but the sensing range is decreased. To achieve the same sensing performance, the sensing surface of the moving object is required to be increased, or increase the speed of the moving object, e.g. a running car.
- Detection Range: A rectangular area under a 120°× 60° detection angle.
- Detection Sensitivity: The motion sensor is mainly used for the detection and reaction for the automobiles on the roadway. The detection sensitivity rating is 100% if the speed of the automobile is 20km/h~150km/h, while there is no metal plate or glass cover to block the sensor. If the speed of the automobile is less than 20km/h~150km/h, or there are passing pedestrians only, the sensitivity is supposed to be lowered. To remain the sensitivity, another model # MSB277 is the choice.

Function Code Set

a) 100% brightness hold-on time					
	1	2	3 Delay period		
Ι	Ļ	Ļ	Ļ	5s	
II	1	Ļ	Ļ	1min	
III	Ļ	1	Ļ	3min	
IV	Ţ	Ļ	† †	10min	

b) Brightness Dimming Preset Function

(Consta	Constant Voltage Output 5v/3v/2v/1.5v)					
	4	5	Constant Voltage Output	Luminaire Brightness Ratio		
Ι	Ļ	Ļ	5V	45-50%		
II	1	Ļ	3V	25-30%		
III	l †	1	2V	15-20%		
IV	1	1	1.5V	5-10%		

c) Dimming Start-up Delay

		6	7	8	Power-on Detection Period
Г	Ι	Ļ	Ļ	Ļ	10s
	II	1	Ļ	Ļ	4h
	III	Ļ	1	Ļ	6h
	IV	Ļ	↓ ↓	Ť	8h

d) Wireless Management Grouping Configuration

9	10	Wireless Communication Frequency Band
Ļ	Ļ	A
1	1	В

Si-Fe Battery Module

Introduction

Si-Fe battery module includes the solar PV panel with Fe battery pack and controller attached to the back of it. The PV panel converts solar energy to electricity and charge the Fe battery, which enables the battery discharge to power on the led light.

Compared with conventional solar solution powered by lead acid solar battery, the key component Fe battery features its super long service time, higher electricity charge and discharge efficiency, safety, high energy density, nice temperature performance and zero environment pollution.

Discharge Curve



Cycle-life Curve



Dimensional Drawing





Model No.	SL13045	SL13090		
General Specifications	Γ			
Solar PV Panel	Peak Power 130Wp			
Fe Battery	12V 45AH, made by BYD	12V 90AH, made by BYD		
Controller and protection	12V 8A, with all-round protections incl. Over-discharge, over-charge, over-current, reverse connection, overheat, lightning stroke (surge) etc.			
Mechanical Specifications	1			
Dimensions [mm]	L1490 x W684	4 x H103		
Weight [kg]	36	46		
Electrical Specifications				
Rated Output Voltage[V]	12.8VD	C		
Rated Output Current[A]	8			
Current for Over-current Protection [A]	10			
Rated Operating Voltage Range [V]	8~14.6VDC			
Mode of Output Control	Light-Probe			
Environmental Specificatio	ns / Safety & EMC Complia	ince		
Operating Temperature	Charge: -10~+55℃/ Discharge: -20~+55 / Tolerance ±3℃			
Operating Humidity	0~85%R	н		
Storage Temperature	0~+45°0	2		
EMC Compliance	EMI: EN550152006; EN	MS: EN61547-11996		
Safety Compliance	EN60598-	-1		
Reliability Compliance	GB/T2423, GB4208	B (IP65)		
Ingress Protection	Ip65			
Packaging and Transportati	on			
Packaging Method	Cardboard Box			
Transportation Compliance	Un3090			
Warranty				
Solar Pv panel	10 year	S		
Fe battery and controller	3 years			

Surge Protection Device

Features

Adapted to SSL outdoor lighting, the SPD277and SPD480 surge protection device provides single phase protection for line/neutral, line/ground and neutral/ground in accordance with IEEE C62.41 2002C High.The SPD277and SPD480small size corresponds to the current design requirements for the new technology luminaires, like a LED light engine in outdoor lighting.



Electrical diagram



Brief specifications

Model No.	SPD277-10	SPD277-20	SPD480-10	SPD480-20
Voltage Input:	120V-27 (+/- 5%		347V-480V (+/- 5%))	
Frequency:	50Hz-60)Hz	50Hz-60Hz	
Clamping Voltage:	320V		625V	
Maximum Energy:	430 Joules	850 Joules	630 Joules	1260 Joules
Maximum Peak Current:	10kA (8/20μs standard wave)	22kA (8/20µs standard wave)	10kA (8/20µs standard wave)	22kA (8/20µs standard wave)
Wiring:	14 Gauges stranded wires, 200°C, 600V			
Wire Connections:	Black and white: 10mm skinned and thin platted Green: 10mm skinned with terminal malt			
Mounting hole:	Φ5mm			

Dimensional drawing



Street / Roadway Lighting Criteria

(ANSI / IESNA_RP-8-2000)

Road and Pedestrian Conflict area		Average Luminance	Unifomity Ratio	Unifomity Ratio	Veiling Luminance Ratio
Road	Pedestrian Conflict area	Lavg (cd/m ²)	Lavg/Lmin Maximum Allowed	Lmax / Lmin Maximum Allowed	L _{Vmax} /Lavg Maximum Allowed
Freeway Class A	-	0.6	3.5	6.0	0.3
Freeway Class B	-	0.4	3.5	6.0	0.3
	High	1.0	3.0	5.0	0.3
Expressway	Medium	0.8	3.0	5.0	0.3
	Low	0.6	3.5	5.0	0.3
	High	1.2	3.0	5.0	0.3
Major	Medium	0.9	3.0	6.0	0.3
	Low	0.6	3.5	5.0	0.3
	High	0.8	3.0	6.0	0.3
Collector	Medium	0.6	3.5	8.0	0.3
	Low	0.4	4.0	6.0	0.3
	High	0.6	6.0	10	0.3
Local	Medium	0.6	6.0	10	0.3
	Low	0.6	6.0	10	0.3

(CIE115)

		EXTENT O	FAPPLICATION		
LIGHTING CLASS	L(cd.m ²) Minimum Maintained	Uo Minimum	TI(%) Maximum Initial	UL Minimum	SR Minimum
M1	2.0	0.4	10	0.7	0.5
M2	1.5	0.4	10	0.7	0.5
M3	1.0	0.4	10	0.5	0.5
M4	0.75	0.4	15	-	-
M5	0.5	0.4	15	-	-

Note:	

LEDTRON Beleuchtung & Tankstellentechnik

St. Oswald 34, A-9184 St. Jakob im Rosental

Tel:	+43 664 322 51 30
Fax:	+43 4253 38 629
E-Mail:	ibounig@ledtron.at

www.ledtron.at