

PRODUCT DATASHEET

FL-series LED Flood Light



PRODUCT OVERVIEW

Power Rating [W]:	10 20 30 50 80 100 120 150 180 200 250 300
Input:	100~305VAC 47~63 Hz
Operating Temperature:	-40°C ~ +50°C
Working Humidity:	20% ~ 95% RH non-condensing
Corrosion Resistance:	High — suitable for both indoor and outdoor installations, including humid and coastal environments
Mounting Option:	Bracket-based installation on any surface
Min./Max. weight:	0.43 kg - 8.50 kg
Ingress Protection Rating:	IP66
Impact Protection Rating:	IK08
Safety:	CE EMC RoHS
Warranty:	5 7 years (STD PRO version)
LED Driver Brand:	Mean Well® XLG/HLG series
Light Control Protocols:	1-10V DIM, DALI-2 (optional)
LED Chip Brand:	Cree®
LED Chip Type:	SMD 3030 LED
LED Optic:	15° 30° 60° 90° 120° T2M T3M
LED CCT [K]:	2700 3000 3500 4000 5000 5700 6500
LED CRI:	70 80 90
Luminaire's Efficacy on 300W power load:	> 160 lm/w
Application:	Indoor/Outdoor Warehouses, Factories, Workshops, Hangars

DRAWING BY MODELS

FL-series LED Flood Light

FL-010-STD

(ONLY STD VERSION AVAILABLE)

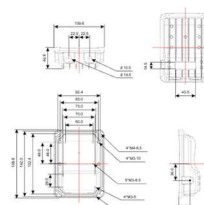
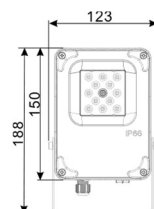
INPUT 36V/220V AC

RATED POWER: 10W

LED CHIP QNTY: 12 PCS.

LENS 12 * 1

WEIGHT 0.43 kg



FL-020-STD

(ONLY STD VERSION AVAILABLE)

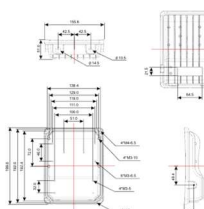
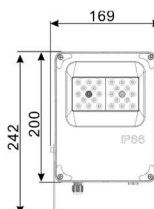
INPUT 220V AC

RATED POWER: 20W

LED CHIP QNTY: 24 PCS.

LENS 12 * 2

WEIGHT 1.20 kg



FL-030-STD

(ONLY STD VERSION AVAILABLE)

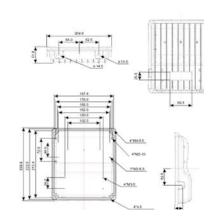
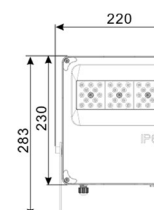
INPUT 220V AC

RATED POWER: 30W

LED CHIP QNTY: 32 PCS.

LENS 16 * 2

WEIGHT 1.20 kg



FL-050-STD | PRO

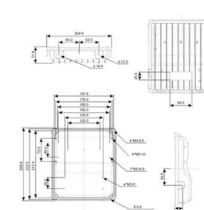
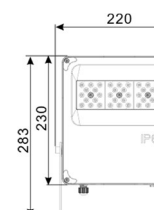
INPUT 220V AC

RATED POWER: 50W

LED CHIP QNTY: 72 PCS.

LENS 24 * 3

WEIGHT 1.80 kg

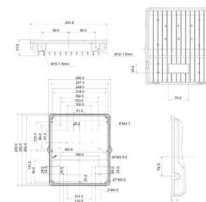
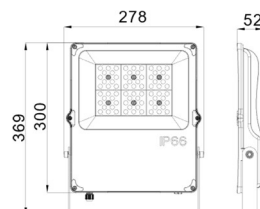


DRAWING BY MODELS

FL-series LED Flood Light

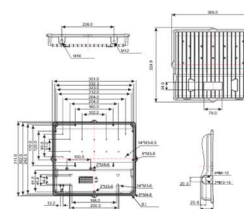
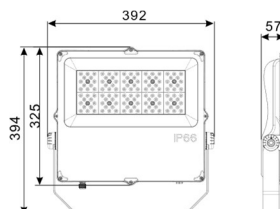
FL-080-STD|PRO

INPUT 220V AC
RATED POWER: 80W
LED CHIP QNTY: 144 PCS.
LENS 24 * 6
WEIGHT 2.90 kg



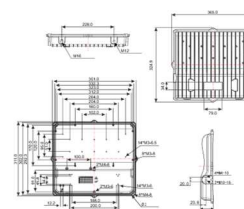
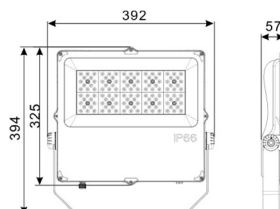
FL-100-STD|PRO

INPUT 220V AC
RATED POWER: 100W
LED CHIP QNTY: 240 PCS.
LENS 24 * 10
WEIGHT 3.70 kg



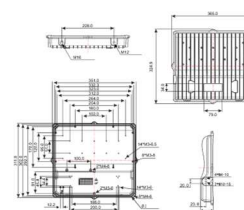
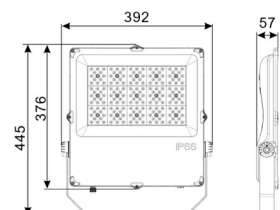
FL-120-STD|PRO

INPUT 220V AC
RATED POWER: 120W
LED CHIP QNTY: 240 PCS.
LENS 24 * 10
WEIGHT 3.90 kg



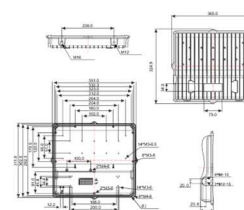
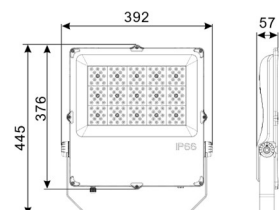
FL-150-STD|PRO

INPUT 220V AC
RATED POWER: 150W
LED CHIP QNTY: 360 PCS.
LENS 24 * 15
WEIGHT 4.20 kg



FL-180-STD|PRO

INPUT 220V AC
RATED POWER: 180W
LED CHIP QNTY: 360 PCS.
LENS 24 * 15
WEIGHT 4.70 kg

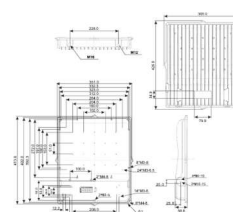
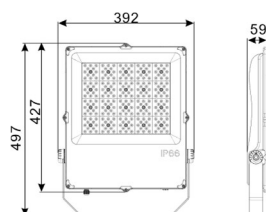


DRAWING BY MODELS

FL-series LED Flood Light

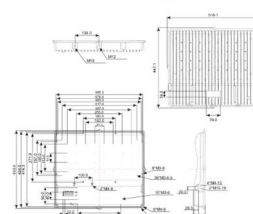
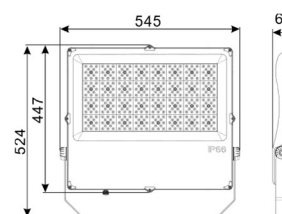
FL-200-STD|PRO

INPUT 220V AC
RATED POWER: 200W
LED CHIP QNTY: 320 PCS.
LENS 16 * 20
WEIGHT 5.00 kg

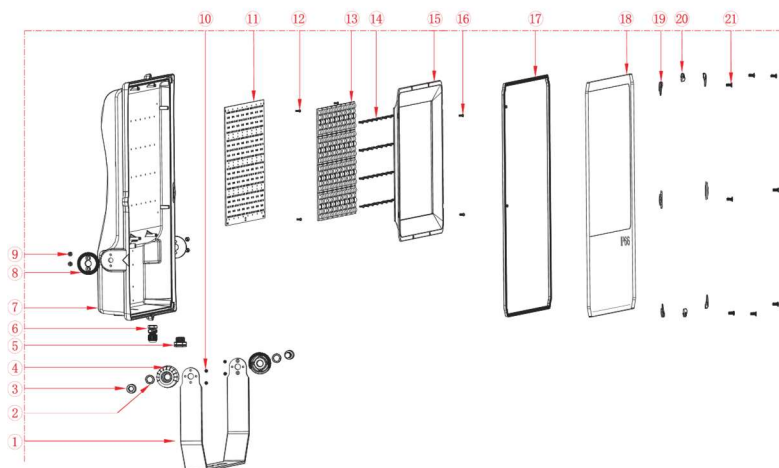


FL-300-STD|PRO

INPUT 220V AC
RATED POWER: 300W
LED CHIP QNTY: 512 PCS.
LENS 16 * 32
WEIGHT 8.50 kg



EXPLODED VIEW (FL-300-STD MODEL)



No.	Part	Qty
1	Installation bracket	1
2	M10x25 internal hexagon machine screw	2
3	M10 spring washer	2
4	Shaft 2	2
5	M12 breather	1
6	Pg9 waterproof gland	1
7	Heat dissipation housing	1
8	Shaft 1	2
9	M4x10 flat head machine screw	4
10	M3x8 flat head machine screw	4
11	PCB board	1
12	M3x5 round head machine screw	4
13	Lens	32
14	M3x5 round head machine screw	32
15	PC reflective cup	1
16	M3x5 round head machine screw	4
17	Foam silicone ring	1
18	Tempered glass	1
19	Waterproof pressing piece Type 1	4
20	Waterproof pressing piece Type 2	4
21	M4x6 flat head machine screw	8

TECHNICAL INFORMATION

FL-series LED Flood Light

GENERAL INFORMATION

Product	LED Flood Light
Series	FL (STD PRO versions)
Rated Power[W]	10 20 30 50 80 100 120 150 180 200 250 300
Mounting Option	Bracket-based installation on any surface
Operating temperature	-40°C ~ +50°C
Operating Humidity	20% ~ 95% RH
Warranty	5 7 years (STD PRO version)

HOUSING AND FINISH

Material	ADC12 Die-Casting
Housing finish	Powder coating
Standard color	Black
Optic Cover	Tempered Glass
Optic lens	UV-resistant polycarbonate
Corrosion Resistance	High
Ingress Protection	IP66
Impact Resistance	IK08

SAFETY INFORMATION

CE Mark	Directive 2014/35/EU (Low Voltage Directive)
Electromagnetic compatibility (EMC)	Directive 2014/30/EU (Electromagnetic Compatibility)
RoHS Compliant	Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU (Restriction of Hazardous Substances)
IP66	IP Rating tested according to IEC 60529
IK08	IK Rating tested according to IEC 62262

ELECTRICAL INFORMATION

Input	100~305VAC 47~63 Hz
Electrical Class	Class I EU
Surge Protection	Line-Earth 4KV/6KV Line-Line 2KV/4KV
LED driver brand	Mean Well® XLG/HLG series
Power Factor at full load	PF≥0.98/115VAC PF≥0.95/230VAC PF≥0.93/277VAC
Total Harmonic Distortion	THD<20% @load≥50%/115VAC,230VAC @load≥75%/277VAC
Inrush Current	COLD START max 85A ($t_{width}=500$ s measured at 50% I_{peak}) at 230VAC
Light Control Protocols	1-10V DIM (optional) DALI-2 (optional)

OPTICAL INFORMATION

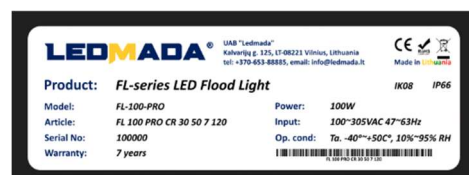
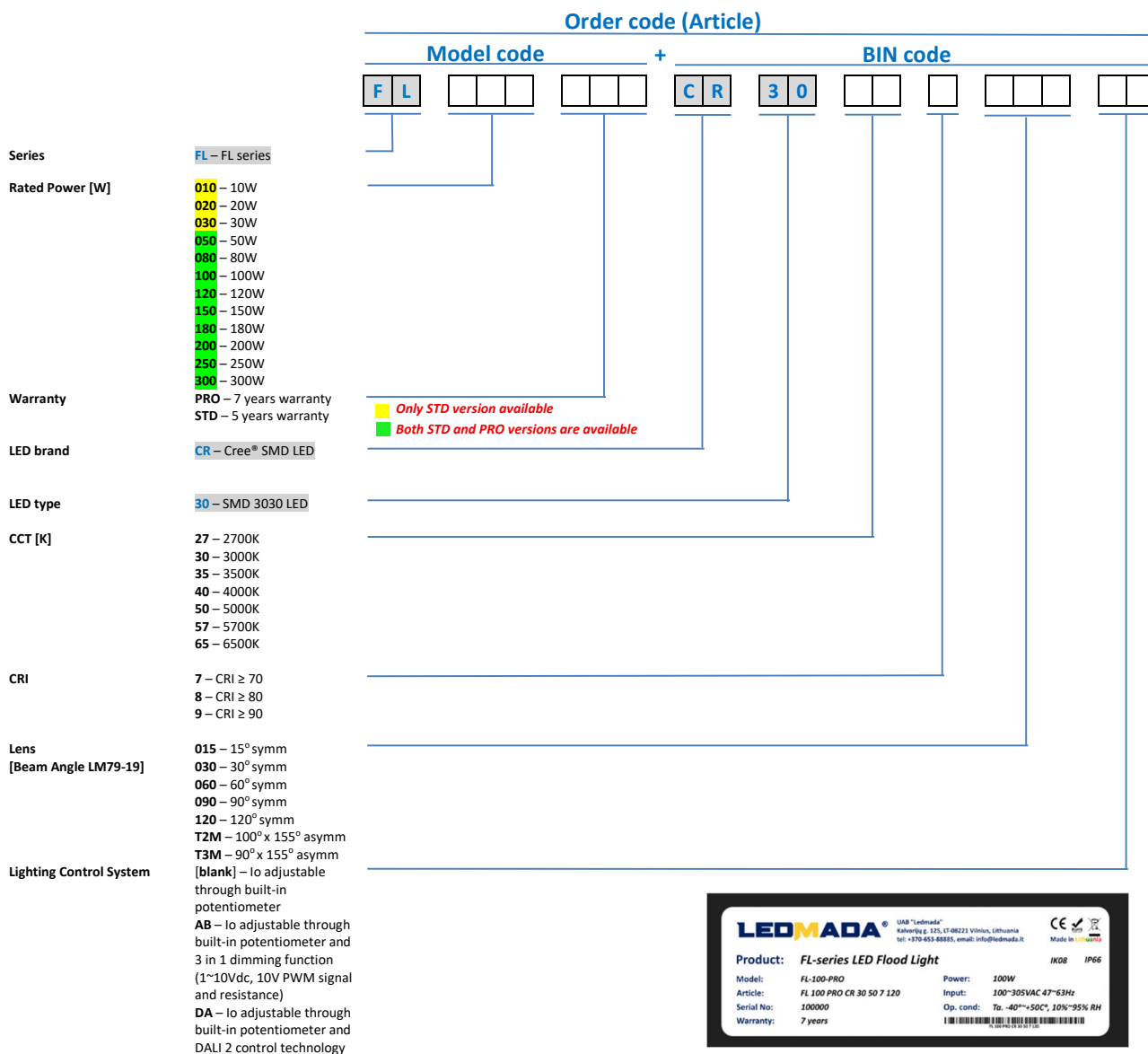
LED Chip Brand	Cree®
LED CCT [K]	2700 3000 3500 4000 5000 5700 6500
LED CRI	CRI>70 CRI>80 CRI>90
LED Chip Type	SMD3030
Beam Angle	15° 30° 60° 90° 120° T2M T3M
Luminaire's efficacy on 300W power load	> 160 lm/W



ORDER&MODEL&BIN CODE INFORMATION

FL-series LED Flood Light

ORDER&MODEL&BIN codes for FL-series LED Flood Light are configured in the following manner:



VALID ORDER&MODEL&BIN CODES COMBINATIONS

F	L	0	1	0	S	T	D	C	R	3	0	X	X	X	X	X	X
F	L	0	2	0	S	T	D	C	R	3	0	X	X	X	X	X	X
F	L	0	3	0	S	T	D	C	R	3	0	X	X	X	X	X	X
F	L	0	5	0	X	X	X	C	R	3	0	X	X	X	X	X	X
F	L	3	0	0	X	X	X	C	R	3	0	X	X	X	X	X	X

X - fixed values

X - all available values

All available ORDER&MODEL&BIN Codes for FL-series LED Flood Light are presented in Appendix „LIST OF ORDER&MODEL&BIN CODES FOR FL-SERIES LED FLOOD LIGHT”.

WARRANTY INFORMATION AND WARNING

FL-series LED Flood Light

 WARRANTY

The following circumstances will not receive replacement warranty:

- A replacement warranty will be provided during the warranty period if the product suffers quality problems.
- During the warranty period, the customer shall return the damaged goods or failed parts for inspection and repair by Ledmada. Ledmada will then send the fixed or new parts back.
- A replacement warranty will be provided once valid documents are presented.
- Damage caused, including, but not limited to, damage from abnormal working conditions, improper usage, storage that does not conform to this Datasheet.
- Dismantling, modification or improper installation or repairing of the products without Ledmada's authorization.
- Damages caused by environmental circumstances including, but not limited to fire, flood, lighting strike, earthquake.

 WARNING**To avoid the risk of fire, explosion, or electric shock:**

- This product should be installed, inspected, and maintained by a qualified electrician only, in accordance with all applicable electrical codes.
- Verify power wire is by following per under applicable electrical codes.
- The light source and power supply contained in this luminaire shall only be replaced by the manufacturer or his service agent.
- The external flexible cable or cord of this luminaire cannot be replaced; if the cord is damaged, the luminaire shall be destroyed.

To avoid electric shock:

- Be certain electrical power is OFF before and during installation and maintenance.
- Product must be supplied with a wiring system suitable for local code with equipment grounding conductor.

To avoid burning hands:

- Before performing maintenance, ensure Luminaire is allowed to cool after powering off for a period of 30 minutes.

To avoid product degradation:

- Do not operate in ambient temperatures above those indicated on the product date sheet.
- Use proper supply wiring as specified on the product date sheet. Make sure the supply voltage is within the voltage range stated on the date sheet.
- Use only replacement parts from Ledmada.
- Use only Ledmada or equivalent parts for mounting product.
- Do not cover the fixture with any material that impedes heat dissipation.
- Avoid installing the product close to heat sources.
- Avoid use in environments containing sulfur, chlorine or other halides, methyl acetate or ethyl acetate, cyanoacrylates, glycol ethers, formaldehyde, or butadiene.

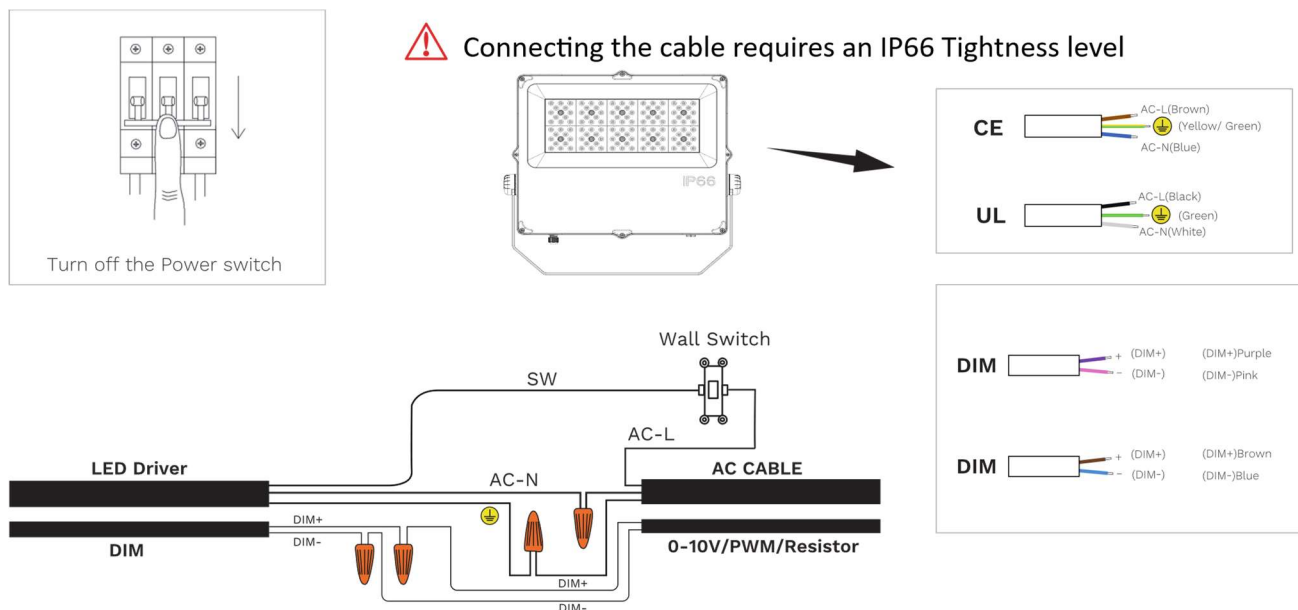
To avoid product fall:

- To avoid product fall, make sure the product is installed correctly, and all mounting elements are firmly secured.
- The mounting system securing the product to the surface must be capable of supporting a minimum load of 50 kg.

INSTALLATION INFORMATION

FL-series LED Flood Light

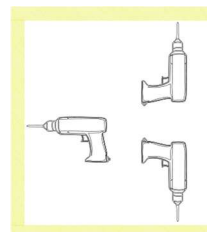
WIRING DIAGRAM TO MAKE ELECTRICAL CONNECTIONS



BRACKET-BASED INSTALLATION ON ANY SURFACE

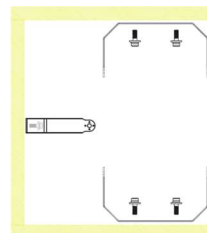
Step 1

Drill mounting holes that precisely match the Bracket's hole pattern. Detailed specifications of the Bracket screw holes are provided below.



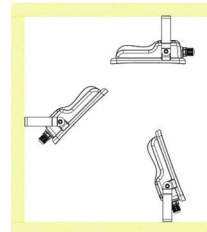
Step 2

Align the Bracket with the screw hole, tighten the screw and fix the Bracket.



Step 3

Orient the lamp body correctly according to the installation layout. Secure the screws that fasten the Bracket to the lamp body.



Step 4

Refer to the Wiring Diagram to make electrical connections.

DETAILED SPECIFICATIONS OF THE BRACKET SCREW HOLES (BY MODELS)

FL-010-STD			
FL-020-STD FL-030-STD			
FL-050-STD PRO			
FL-80-STD PRO			
FL-100-STD PRO FL-120-STD PRO FL-150-STD PRO FL-180-STD PRO FL-200-STD PRO FL-250-STD PRO			
FL-300-STD PRO			

CLEANING INFORMATION

It is important to clean the product during luminaire installation or when replacing components. The housing (metal parts) should be cleaned of dust and grime. Always ensure that power is disconnected before beginning the cleaning process. Electrical components and cables must not meet water or cleaning agents.

Housing (metal parts) cleaning

Vacuum the surface using a soft brush attachment. For general cleaning, use a neutral dishwashing detergent diluted in lukewarm water or a non-abrasive cleaning solution. Drying: Allow to air dry at room temperature or gently wipe with a slightly damp cleaning cloth. For loose dust or particles, use a soft duster, a microfiber-free cloth, or compressed air. For light soiling, dilute a citric acid-based cleaner with water. The cleaning agent must be non-abrasive, pH neutral, and alcohol-free. For heavy soiling, such as oil or grease, use a 1:1 mixture of alcohol and water (e.g. methylated spirits). Residues from alcohol-based products can be removed with a water-soaked cotton cloth. For stubborn stains, soak the area in a diluted citrus cleaner. Final drying: Use compressed air or a fresh, clean, lint-free cotton cloth.

Optic (glass parts cleaning)

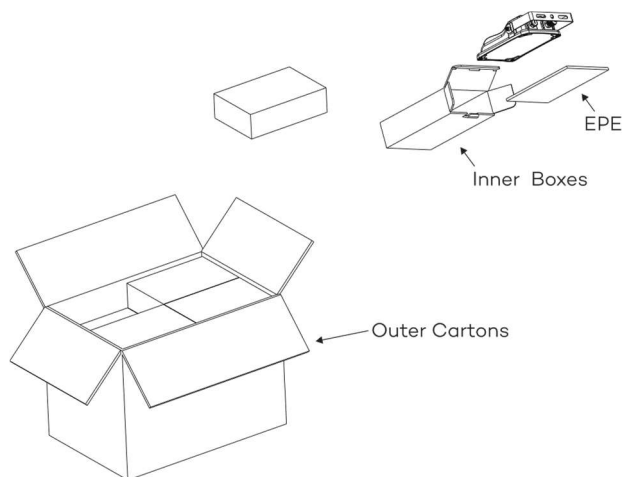
Vacuum the surface using a soft brush or blow off dust using compressed air. In case of heavy soiling, use a non-abrasive cleaning detergent in warm water (maximum 55 °C). Wash with a soft, clean, microfiber-free cloth, using plenty of water. Rinse thoroughly with lukewarm water. Drying: Allow to air dry at room temperature, or gently wipe with a slightly damp, microfiber-free cloth.

PACKAGING INFORMATION

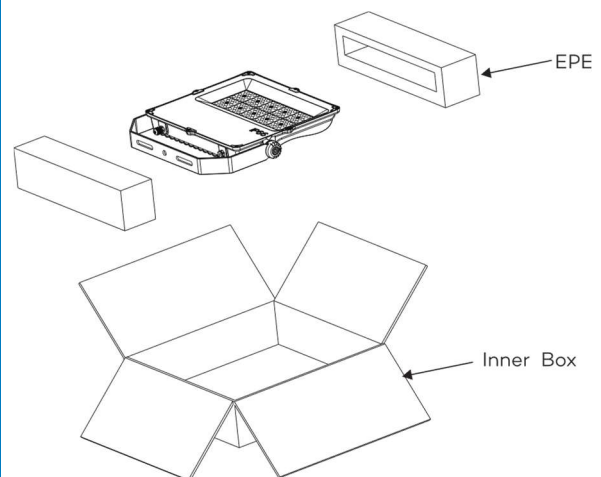
FL-series LED Flood Light

PRODUCT LED Flood Light HS CODE: 94054210	QTY/CTN (pcs)	PACKAGE SIZE (m)	PACKAGE VOLUME (m ³)	NETTO WEIGHT (kg)	BRUTTO WEIGHT (kg)
FL-010-STD	1	0,196 x 0,198 x 0,056	0,002	0,430	0,500
FL-020-STD FL-030-STD	1	0,260 x 0,185 x 0,060	0,003	1,200	1,300
FL-050-STD PRO	1	0,300 x 0,230 x 0,060	0,005	1,800	1,900
FL-080-STD PRO	1	0,380 x 0,300 x 0,060	0,007	2,900	3,000
FL-100-STD PRO FL-120-STD PRO	1	0,460 x 0,440 x 0,130	0,027	3,700 3,900	5,200 5,400
FL-150-STD PRO FL-180-STD PRO	1	0,510 x 0,430 x 0,130	0,029	4,200 4,700	5,700 6,200
FL-200-STD PRO FL-250-STD PRO	1	0,560 x 0,440 x 0,130	0,033	5,000 5,700	6,700 7,400
FL-300-STD PRO	1	0,600 x 0,600 x 0,140	0,051	8,500	10,900

FL-010-STD FL-020-STD FL-030-STD
FL-050-STD|PRO FL-080-STD|PRO



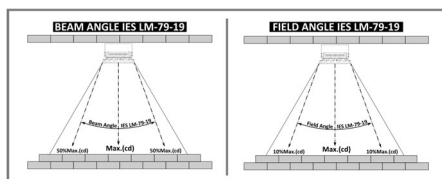
FL-100-STD|PRO FL-120-STD|PRO FL-150-STD|PRO
FL-180-STD|PRO FL-200-STD|PRO FL-250-STD|PRO
FL-300-STD|PRO



OPTICS INFORMATION

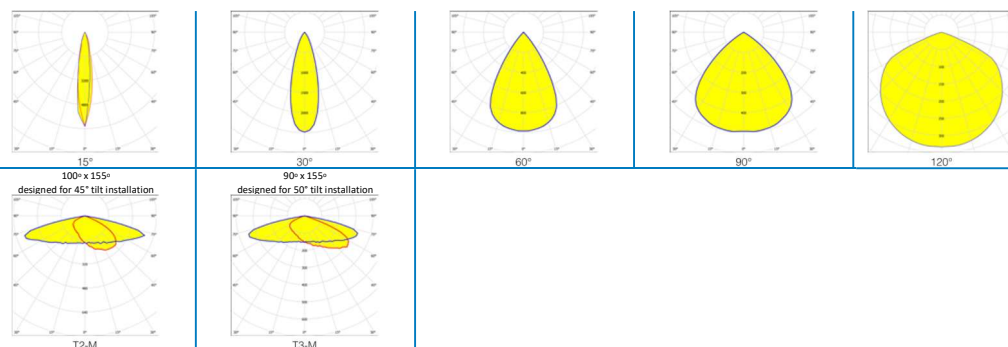
FL-series LED Flood Light

OPTICS SELECTION RECOMMENDATIONS



Beam Angle – The beam angle, also known as beam spread, is a value that describes the downward light cone emitted by a lighting fixture with a reflector. The beam angle is measured between the downward direction, where the lamp provides maximum lighting intensity, and the direction in which intensity drops to 50%. In other words, a lamp with a large beam angle spread its lighting into a wider cone.

SYMMETRIC ASYMMETRIC



EXCERPT FROM GONIOPHOTOMETERS SYSTEM TEST REPORT

BEAM ANGLE (IES LM-79-19) 120° CREE SMD3030 CCT 4000K CRI>80			
FL-100-STD POWER 100W		FL-300-STD POWER 300W	
	DATA OF LAMP	Eff:169.44lm/W	DATA OF LAMP
	MODEL FL-100-STD	Imax(cd) 5690	MODEL FL-300-STD
	CR-30-50-7-120	AVAILABILITY (%) 98.8	CR-30-50-7-120
	NOMINAL POWER (W) 100	Avail. FLUX (lm) 16490	NOMINAL POWER (W) 294
	RATED VOLTAGE (V) 230	LOR (%) 100.0	RATED VOLTAGE (V) 230
	NOMINAL FLUX (lm) 16689.4	TOTAL FLUX (lm) 16689	NOMINAL FLUX (lm) 46894.8
	LAMPS INSIDE 1	TEST VOLTAGE (V) 229.5	LAMPS INSIDE 1
Flux out:13833 lm		Flux out:37174 lm	
Height: 3.281ft, 6.562ft, 9.843ft, 13.12ft, 16.4ft		Height: 3.281ft, 6.562ft, 9.843ft, 13.12ft, 16.4ft	
Avg, Fmax: 125.7, 528.7fc		Avg, Fmax: 539.0, 1702.7fc	
Angle: 120.99deg		Angle: 108.86deg	
Diameter: 11.6ft		Diameter: 9.175ft	
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.		Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.	
High Range: 90 = 90DEG		High Range: 90 = 90DEG	
High Interval: 0.5DEG		High Interval: 0.5DEG	
Test Speed: HIGH		Test Speed: HIGH	
Temperature: 25.3DEG		Temperature: 25.3DEG	
Operator: 2025-06-14		Operator: 2025-06-14	
V(R) Range: 90 = 90DEG		V(R) Range: 90 = 90DEG	
V(R) Interval: 0.5DEG		V(R) Interval: 0.5DEG	
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.265		Test System: EVERFINE GO-2000A_V1 SYSTEM V2.0.265	
Humidity: 65.0%		Humidity: 65.0%	
Test Distance: 16.500m [K=1.0000]		Test Distance: 16.500m [K=1.0000]	
Remarks:		Remarks:	

THERMAL MANAGEMENT INFORMATION

FL-series LED Flood Light

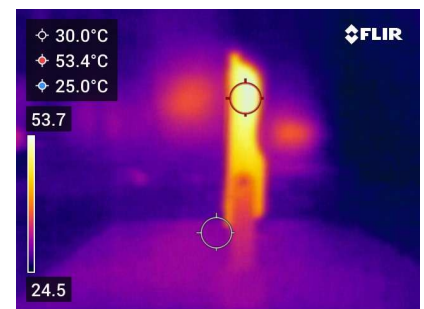
FL 050 STD CR 30 40 7 120 AT FULL 50W LOAD (AFTER 2 HOURS OF OPERATION)



BACK

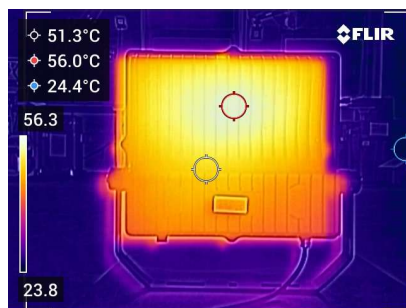


FRONT

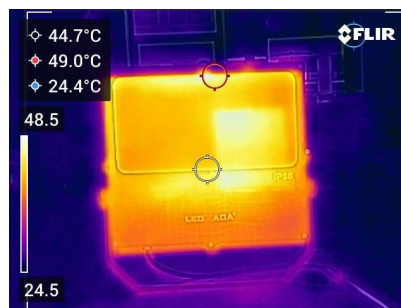


SIDE

FL 100 STD CR 30 40 7 120 AT FULL 100W LOAD (AFTER 2 HOURS OF OPERATION)



BACK

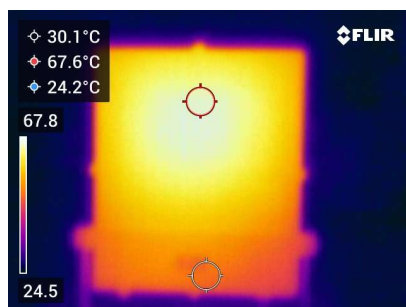


FRONT

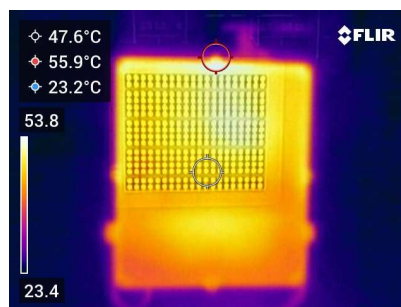


SIDE

FL 200 STD CR 30 40 7 120 AT FULL 200W LOAD (AFTER 2 HOURS OF OPERATION)



BACK

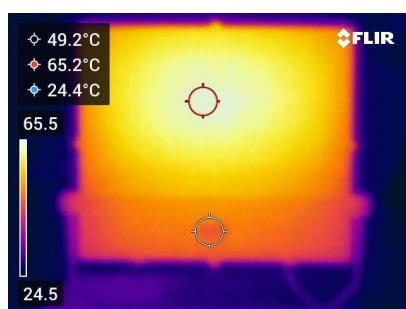


FRONT

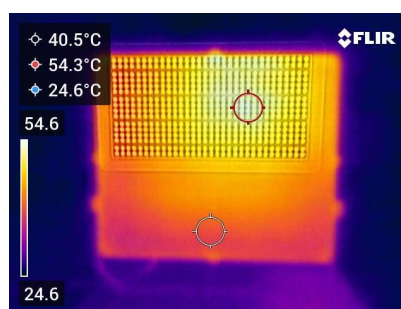


SIDE

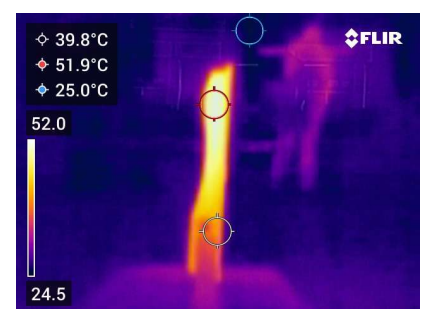
FL 300 STD CR 30 40 7 120 AT FULL 300W LOAD (AFTER 2 HOURS OF OPERATION)



BACK



FRONT



SIDE

TECHNINĖ SPECIFIKACIJA

FL-serijos LED prožektorius



GAMINIO APRAŠYMAS

Vardinė galia [W]:	10 20 30 50 80 100 120 150 180 200 250 300
Maitinimas:	100~305VAC 47~63 Hz
Darbinė temperatūra:	-40°C ~ +50°C
Darbinė drėgmė:	20% ~ 95% RH be kondensacijos
Atsparumas korozijai:	Aukštas — tinkamas tiek patalpų, tiek lauko montavimui, įskaitant drėgną ir pakrančių aplinką
Montavimo būdai:	Tvirtinimas prie laikiklio ant bet koks paviršiaus
Min./Max. svoris:	0.43 kg - 8.50 kg
IP apsaugos klasė:	IP66
IK smūgio atsparumo klasė:	IK08
Saugumas:	CE EMC RoHS
Garantija:	5 7 metai (STD PRO versijos)
LED maitinimo šaltinio gamintojas:	Mean Well® XLG/HLG serijos
Šviesos valdymo protokolai:	1-10V DIM, DALI-2 (pasirenkamas)
LED lustų gamintojas:	Cree®
LED lustų tipas:	SMD 3030 LED
LED optika:	15° 30° 60° 90° 120° T2M T3M
LED CCT [K]:	2700 3000 3500 4000 5000 5700 6500
LED CRI:	70 80 90
Šviestuvo efektyvumas esant 300W apkrovai:	> 160 lm/w
Pritaikymas:	Vidaus/Lauko sandėliai, gamyklos, dirbtuvės, angariai

MODELIŲ BRĖŽINIAI

FL-serijos LED prožektorius

FL-010-STD

(TIK STD VERSIJA)

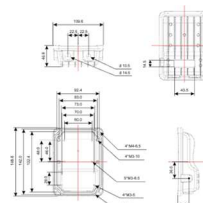
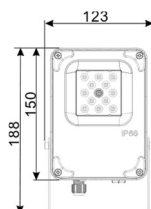
MAITINIMAS 36V/220V AC

VARDINĖ GALIA: 10W

LED LUSTŲ KIEKIS: 12 VNT.

OPTINIS LĘŠIS 12 * 1

SVORIS 0.43 kg



FL-020-STD

(TIK STD VERSIJA)

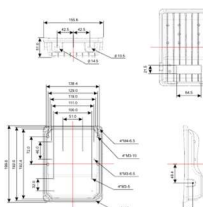
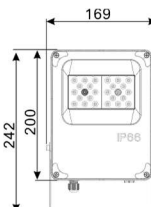
MAITINIMAS 220V AC

VARDINĖ GALIA: 20W

LED LUSTŲ KIEKIS: 24 VNT.

OPTINIS LĘŠIS 12 * 2

SVORIS 1.20 kg



FL-030-STD

(TIK STD VERSIJA)

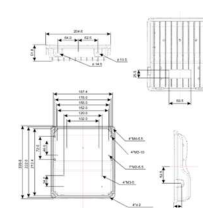
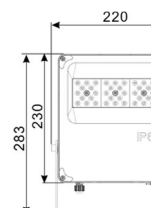
MAITINIMAS 220V AC

VARDINĖ GALIA: 30W

LED LUSTŲ KIEKIS: 32 VNT.

OPTINIS LĘŠIS 16 * 2

SVORIS 1.20 kg



FL-050-STD | PRO

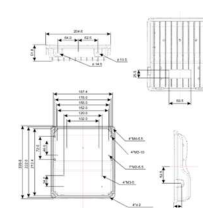
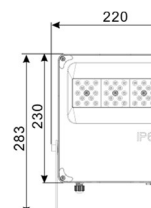
MAITINIMAS 220V AC

VARDINĖ GALIA: 50W

LED LUSTŲ KIEKIS: 72 VNT.

OPTINIS LĘŠIS 24 * 3

SVORIS 1.80 kg

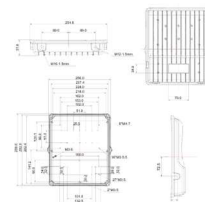
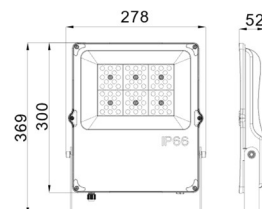


MODELIŲ BRĖŽINIAI

FL-serijos LED prožektorius

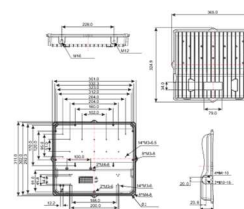
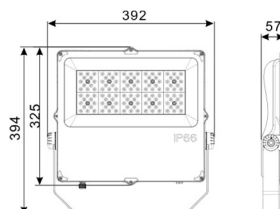
FL-080-STD|PRO

MAITINIMAS 220V AC
VARDINĖ GALIA: 80W
LED LUSTŲ KIEKIS: 144 VNT.
OPTINIS LĘŠIS 24 * 6
SVORIS 2.90 kg



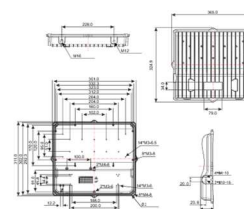
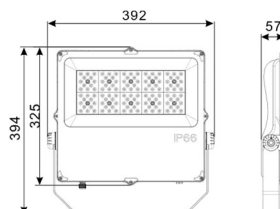
FL-100-STD|PRO

MAITINIMAS 220V AC
VARDINĖ GALIA: 100W
LED LUSTŲ KIEKIS: 240 VNT.
OPTINIS LĘŠIS 24 * 10
SVORIS 3.70 kg



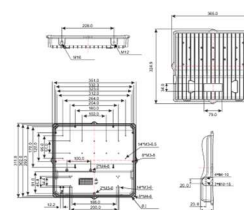
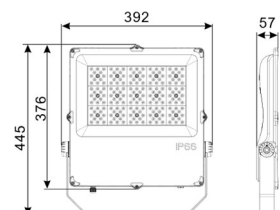
FL-120-STD|PRO

MAITINIMAS 220V AC
VARDINĖ GALIA: 120W
LED LUSTŲ KIEKIS: 240 VNT.
OPTINIS LĘŠIS 24 * 10
SVORIS 3.90 kg



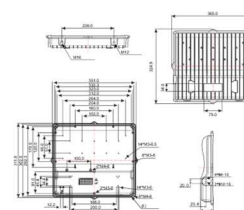
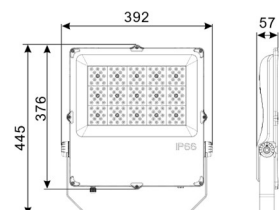
FL-150-STD|PRO

MAITINIMAS 220V AC
VARDINĖ GALIA: 150W
LED LUSTŲ KIEKIS: 360 VNT.
OPTINIS LĘŠIS 24 * 15
SVORIS 4.20 kg



FL-180-STD|PRO

MAITINIMAS 220V AC
VARDINĖ GALIA: 180W
LED LUSTŲ KIEKIS: 360 VNT.
OPTINIS LĘŠIS 24 * 15
SVORIS 4.70 kg



MODELIŲ BRĖŽINIAI

FL-serijos LED prožektorius

FL-200-STD|PRO

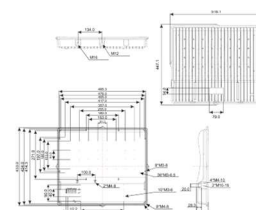
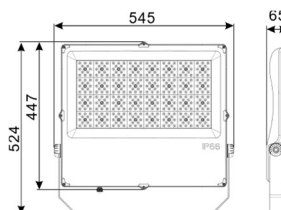
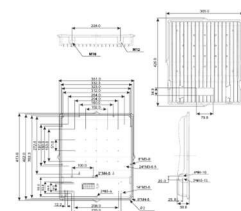
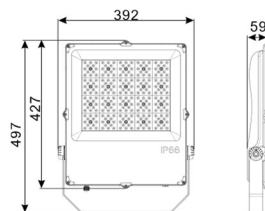
MAITINIMAS 220V AC
VARDINĖ GALIA: 200W
LED LUSTŲ KIEKIS: 320 VNT.
OPTINIS LĘŠIS 16 * 20
SVORIS 5.00 kg

FL-250-STD|PRO

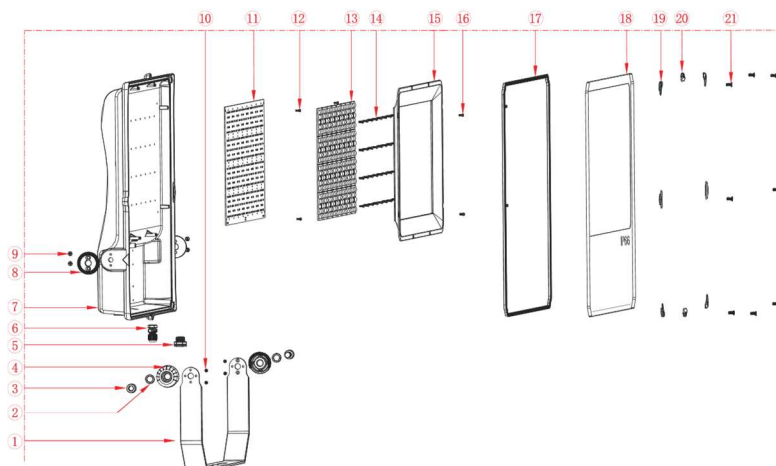
MAITINIMAS 220V AC
VARDINĖ GALIA: 250W
LED LUSTŲ KIEKIS: 480 VNT.
OPTINIS LĘŠIS 24 * 20
SVORIS 5.70 kg

FL-300-STD|PRO

MAITINIMAS 220V AC
VARDINĖ GALIA: 300W
LED LUSTŲ KIEKIS: 512 VNT.
OPTINIS LĘŠIS 16 * 32
SVORIS 8.50 kg



IŠSKAIDYTAS BRĖŽINYS (FL-300-STD MODELIS)



No.	Part	Qty
1	Installation bracket	1
2	M10x25 internal hexagon machine screw	2
3	M10 spring washer	2
4	Shaft 2	2
5	M12 breather	1
6	Pg9 waterproof gland	1
7	Heat dissipation housing	1
8	Shaft 1	2
9	M4x10 flat head machine screw	4
10	M3x8 flat head machine screw	4
11	PCB board	1
12	M3x5 round head machine screw	4
13	Lens	32
14	M3x5 round head machine screw	32
15	PC reflective cup	1
16	M3x5 round head machine screw	4
17	Foam silicone ring	1
18	Tempered glass	1
19	Waterproof pressing piece Type 1	4
20	Waterproof pressing piece Type 2	4
21	M4x6 flat head machine screw	8

TECHNINĖ INFORMACIJA

FL-serijos LED prožektorius

PAGRINDINĖ INFORMACIJA

Gaminys	LED prožektorius
Serija	FL (STD PRO versijos)
Vardinė galia[W]	10 20 30 50 80 100 120 150 180 200 250 300
Montavimo būdai	Tvirtinimas prie laikiklio ant bet kokio paviršiaus
Darbinė temperatūra	-40°C ~ +50°C
Darbinė drėgmė	20% ~ 95% RH
Garantija	5 7 metai (STD PRO versijos)

KORPUSAS IR PADENGIMAS

Medžiagos	Lietas iš ADC12 lydinio
Padengimas	Miltelinis dažymas
Standartinė spalva	Juoda
Lęšių apsauga	Grūdintas stiklas
Optinis lęšis	UV-atsparus polikarbonatas
Atsparumas korozijai	Aukštas
IP apsaugos klasė	IP66
IK atsparumo smūgiams klasė	IK08

SAUGOS INFORMACIJA

CE ženklavimas	Directive 2014/35/EU (Low Voltage Directive)
Elektromagnetinis suderinamumas (EMC)	Directive 2014/30/EU (Electromagnetic Compatibility)
RoHS reikalavimai	Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU (Restriction of Hazardous Substances)
IP66	IP Rating tested according to IEC 60529
IK08	IK Rating tested according to IEC 62262

ELEKTROS INFORMACIJA

Maitinimas	100~305VAC 47~63 Hz
Elektros saugos klasė	Class I EU
Viršįtampių apsauga	Line-Earth 4KV/6KV Line-Line 2KV/4KV
LED maitinimo šaltinio gamintojas	Mean Well® XLG/HLG serijos
Galios koeficientas (PF) esant pilnai apkrovai	PF≥0.98/115VAC PF≥0.95/230VAC PF≥0.93/277VAC
Bendras harmoninis iškraipymas (THD)	THD<20% @load≥50%/115VAC, 230VAC @load≥75%/277VAC
Ijungimo srovė	COLD START max 85A ($t_{width}=500$ s measured at 50% I_{peak}) at 230VAC
Šviesos valdymo protokolai	1-10V DIM (pasirenkamas) DALI-2 (pasirenkamas)

OPTIKOS INFORMACIJA

LED lustų gamintojas	Cree®
LED CCT [K]	2700 3000 3500 4000 5000 5700 6500
LED CRI	CRI>70 CRI>80 CRI>90
LED lustų tipas	SMD3030
Šviesos sklaidos kampas	15° 30° 60° 90° 120° T2M T3M
Šviestuvo efektyvumas esant 300W apkrovai	> 160 lm/W



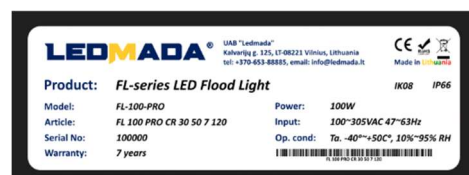
UŽSAKYO&MODELIO&BIN KODŲ INFORMACIJA

FL-serijos LED prožektorius

UŽSAKYO&MODELIO&BIN kodai FL-serijos LED prožektoriams yra išdėstyti šia tvarka

		Užsakymo kodas (Artikulas)									
		Modelio kodas					BIN kodas				
		F	L				C	R	3	0	
Serija	FL – FL serija										
Vardinė galia [W]	010 – 10W 020 – 20W 030 – 30W 050 – 50W 080 – 80W 100 – 100W 120 – 120W 150 – 150W 180 – 180W 200 – 200W 250 – 250W 300 – 300W										
Garantija	PRO – 7 metai STD – 5 metai										
LED lustų gamintojas	CR – Cree® SMD LED										
LED lustų tipas	30 – SMD 3030 LED										
CCT [K]	27 – 2700K 30 – 3000K 35 – 3500K 40 – 4000K 50 – 5000K 57 – 5700K 65 – 6500K										
CRI	7 – CRI ≥ 70 8 – CRI ≥ 80 9 – CRI ≥ 90										
Optika [Beam Angle LM79-19]	015 – 15° symm 030 – 30° symm 060 – 60° symm 090 – 90° symm 120 – 120° symm T2M – 100° x 155° asymm T3M – 90° x 155° asymm [Tuščia] – lo reguliuojamas										
Šviesos valdymo protokolai	per įmontuotą potenciometrą AB – lo reguliuojamas per įmontuotą potenciometrą ir 3 in 1 pritemdymo funkciją (1 ~ 10 Vdc, 10 V PWM signalas ir varžą) DA – lo reguliuojamas per įmontuotą potenciometrą ir DALI 2 valdymo technologiją										

Galima tik STD versija
Galimos STD ir PRO versijos



⚠ GALIMOS UŽSAKYO&MODELIO&BIN KODŲ KOMBINACIJOS

F L	0 1 0	S T D	C R	3 0	X X	X	X X X	X X
F L	0 2 0	S T D	C R	3 0	X X	X	X X X	X X
F L	0 3 0	S T D	C R	3 0	X X	X	X X X	X X
F L	0 5 0	X X X	C R	3 0	X X	X	X X X	X X
F L	3 0 0	X X X	C R	3 0	X X	X	X X X	X X

□ - fiksuotos reikšmės

X - visos galimos reikšmės

Visi galimi UŽSAKYO&MODELIO&BIN FL-serijos LED prožektorių kodai pateikti dokumente **Appendix „LIST OF ORDER&MODEL&BIN CODES FOR FL-SERIES LED FLOOD LIGHT”**.

GARANTIJOS INFORMACIJA IR ĮSPĖJIMAI**FL-serijos LED prožektorius****⚠ GARANTIJA**

Šios aplinkybės nebus laikomos pagrindu suteikti pakeitimo garantiją:

- Garantinio laikotarpio metu, jei gaminys patirs kokybės trūkumų, bus suteikta teisė į jo pakeitimą pagal galiojančias garantijos sąlygas.
- Garantiniu laikotarpiu klientas privalo grąžinti sugadintas prekes arba sugedusias dalis, kad „Ledmada“ galėtų jas patikrinti ir suremontuoti. Vėliau „Ledmada“ išsiųs suremontuotas arba naujas dalis atgal.
- Teisė į gaminio pakeitimo garantiją bus suteikta tik pateikus galiojančius gaminio dokumentus.
- Sugadinimai, įvykę dėl nenormalių darbo sąlygų, netinkamo naudojimo arba saugojimo, kuris neatitinka šio techninio aprašymo, įskaitant, bet neapsiribojant jais.
- Produkto ardymas, modifikavimas, netinkamas montavimas arba taisymas be „Ledmada“ leidimo.
- Sugadinimai, atsiradę dėl aplinkos veiksnių, įskaitant, bet neapsiribojant gaisru, potvyniu, žaibo iškrova ar žemės drebėjimu.

⚠ ĮSPĖJIMAI

Siekiant išvengti gaisro, sprogo ar elektros smūgio pavojaus:

- Šį gaminį gali montuoti, tikrinti ir prižiūrėti tik kvalifikuotas elektrikas, laikantis visų taikomų elektros instaliacijos taisyklių.
- Patikrinkite, ar maitinimo laidai prijungti pagal galiojančias elektros instaliacijos taisykles.
- Šiame šviestuve esantį šviesos šaltinį ir maitinimo bloką gali pakeisti tik gamintojas arba jo įgaliotas serviso atstovas.
- Šviestuvo maitinimo kabelis nekeičiamas; jei kabelis pažeistas, šviestuvą turi būti utilizuotas.

Siekiant išvengti elektros smūgio:

- Įsitinkite, kad elektros maitinimas būtų IŠJUNGTAS prieš ir montavimo metu.
- Gaminys turi būti prijungtas prie elektros instaliacijos, atitinkančios vietinius reikalavimus ir turinčios įžeminimo laidą.

Siekiant išvengti rankų nudegimo:

- Prieš atlikdami priežiūrą, įsitinkite, kad šviestuvą po išjungimo būtų paliktas atvėsti bent 30 minučių.

Siekiant išvengti gaminio gedimo ar nusidėvėjimo:

- Negalima eksploatuoti gaminio aplinkos temperatūroje, viršijančioje techniniame aprašyme nurodytas ribas.
- Naudokite tinkamus maitinimo laidus, kaip nurodyta techniniame aprašyme. Įsitinkite, kad maitinimo įtampa atitinka dokumente pateiktą įtampų diapazoną.
- Naudokite tik „Ledmada“ pateiktas atsargines dalis.
- Montavimui naudokite tik „Ledmada“ pateiktas arba lygiavertes tvirtinimo dalis.
- Neuždenkite šviestuvo jokia medžiaga, kuri trukdo šilumos sklaidai.
- Venkite montuoti gaminį šalia šilumos šaltinių.
- Nenaudokite gaminio aplinkoje, kurioje yra sieros, chloro ar kitų halogenidų, metilo acetato, etilo acetato, ciano akrilato, glikolio eterių, formaldehido ar butadieno.

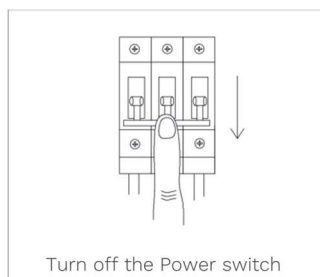
Siekiant išvengti gaminio nukritimo:

- Siekiant išvengti gaminio nukritimo, įsitinkite, kad gaminys yra tinkamai sumontuotas, o visi montavimo elementai tvirtai pritvirtinti.
- Montavimo sistema, pritvirtinanti gaminį prie paviršiaus, turi atlaikyti ne mažesnę nei 50 kg apkrovą.

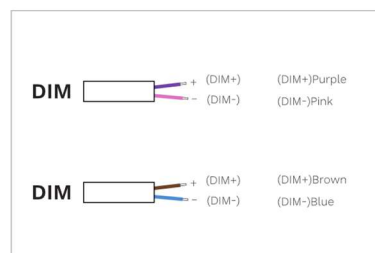
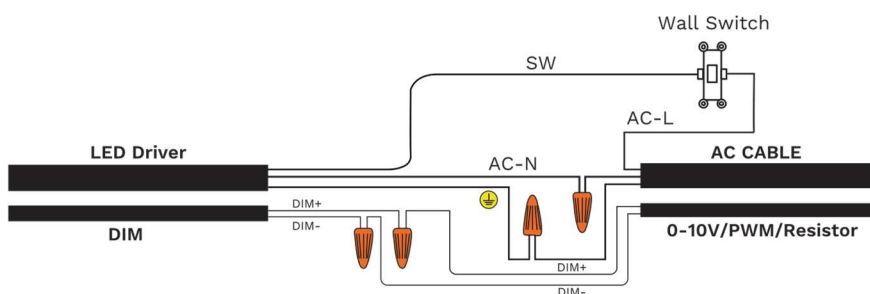
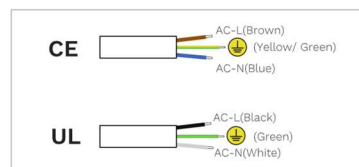
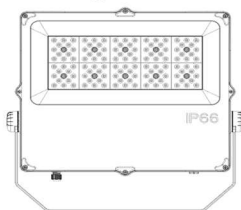
MONTAVIMO INFORMACIJA

FL-serijos LED prožektorius

ELEKTROS JUNGTIES SCHEMA



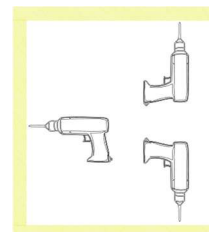
⚠ Connecting the cable requires an IP66 Tightness level



TVIRTINIMAS PRIE LAIKIKLIO ANT BET KOKIO PAVIRŠIAUS

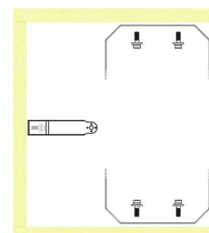
1 žingsnis

Išgręžkite tvirtinimo skyles, kurios tiksliai atitinka laikiklio skylių modelį. Išsamios laikiklio varžtų skylių specifikacijos pateikiamos žemiau.



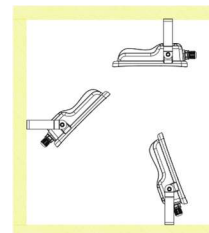
2 žingsnis

Sulygiuokite laikiklį su varžto anga, priveržkite varžtą ir pritvirtinkite laikiklį.



3 žingsnis

Teisingai nukreipkite lempos korpusą pagal montavimo išdėstymą. Pritvirtinkite varžtus, kurie pritvirtina laikiklį prie lempos korpuso.



4 žingsnis

Norėdami atlikti elektros jungtis, žiūrėkite elektros jungties schemą.

IŠSAMIOS LAIKIKLIO VARŽTŲ SKYLIŲ SPECIFIKACIJOS (PAGAL MODELIUS)

FL-010-STD			
FL-020-STD FL-030-STD			
FL-050-STD PRO			
FL-80-STD PRO			
FL-100-STD PRO FL-120-STD PRO FL-150-STD PRO FL-180-STD PRO FL-200-STD PRO FL-250-STD PRO			
FL-300-STD PRO			

VALYMO INFORMACIJA

Svarbu išvalyti gaminį montuojant šviestuvą arba keičiant komponentus. Korpusą (metelines dalis) reikia nuvalyti nuo dulkių ir nešvarumų. Prieš pradėdami valymo procesą, visada įsitinkinkite, kad maitinimas yra atjungtas. Elektriniai komponentai ir kabeliai neturi kontaktuoti su vandeniu ar valymo priemonėmis.

Korpuso (metalinų dalių) valymas

Siurbkite paviršių naudodami minkštą šepetėlį antgalį. Bendrai valant, naudokite neutralaus poveikio indų ploviklio tirpalą šiltame vandenyje arba neabrazyvinį valymo skystį. Džiovinimas: leiskite natūraliai išdžiūti kambario temperatūroje arba švelniai nuvalykite šiek tiek drėgna šluoste. Lengvam dulkeis ar smulkioms dalelėms pašalinti naudokite minkštą dulkių šluostę, mikropluošto neturinčią šluostę arba suspaustą orą. Lengvam nešvarumui: praskiesti citrinų rūgšties pagrindu pagamintą valiklį vandeniu. Valiklis turi būti neabrazyvinis, pH neutralus ir be alkoholio. Stipresniam nešvarumui, pavyzdžiui, riebalams ar alyvai, naudokite 1:1 alkoholio ir vandens mišinį (pvz., denatūruotas alkoholis). Likučius nuo alkoholio pagrindu pagamintų produktų pašalinkite vandeniu sudrėkinta medvilnine šluoste. Įsisenėjusiems dėmėms, pamirkykite paviršių praskiestame citriniame valiklyje. Galutinis džiovinimas: naudokite suspaustą orą arba švarią, sausa, be pluošto medvilninę šluostę.

Optika (stiklo dalių valymas)

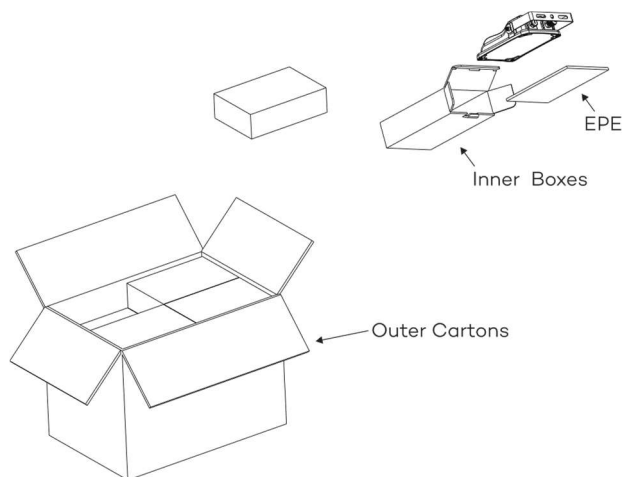
Siurbkite paviršių naudodami minkštą šepetį arba pašalinkite dulkes suspaustu oru. Esant stipriam nešvarumui, naudokite neabrazyvinį valiklį šiltame vandenyje (max. 55 °C). Plaudami naudokite švarią, minkštą, be mikropluošto šluostę ir gausiai vandens. Kruopščiai nuplaukite šiltu vandeniu. Džiovinimas: leiskite natūraliai išdžiūti kambario temperatūroje arba švelniai nuvalykite šiek tiek drėgna, be mikropluošto šluoste.

PAKUOTĖS INFORMACIJA

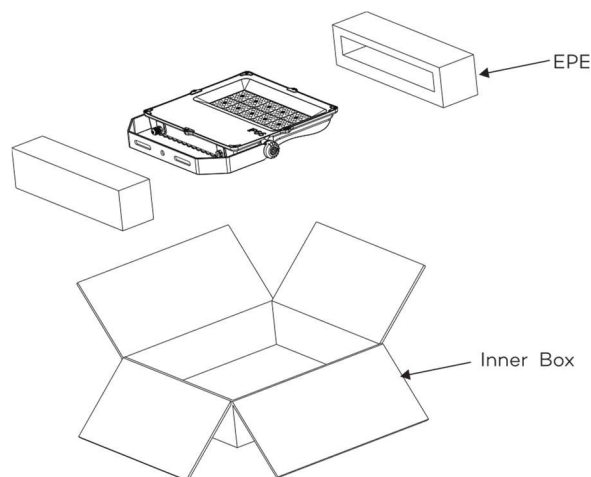
FL-serijos LED prožektorius

GAMINYS LED prožektorius HS CODE: 94054210	KIEKIS/DĖŽĖ (vnt)	PAKUOTĖS DYDIS (m)	PAKUOTĖS TŪRIS (m ³)	NETO SVORIS (kg)	BRUTTO SVORIS (kg)
FL-010-STD	1	0,196 x 0,198 x 0,056	0,002	0,430	0,500
FL-020-STD FL-030-STD	1	0,260 x 0,185 x 0,060	0,003	1,200	1,300
FL-050-STD PRO	1	0,300 x 0,230 x 0,060	0,005	1,800	1,900
FL-080-STD PRO	1	0,380 x 0,300 x 0,060	0,007	2,900	3,000
FL-100-STD PRO FL-120-STD PRO	1	0,460 x 0,440 x 0,130	0,027	3,700 3,900	5,200 5,400
FL-150-STD PRO FL-180-STD PRO	1	0,510 x 0,430 x 0,130	0,029	4,200 4,700	5,700 6,200
FL-200-STD PRO FL-250-STD PRO	1	0,560 x 0,440 x 0,130	0,033	5,000 5,700	6,700 7,400
FL-300-STD PRO	1	0,600 x 0,600 x 0,140	0,051	8,500	10,900

FL-010-STD FL-020-STD FL-030-STD
FL-050-STD|PRO FL-080-STD|PRO



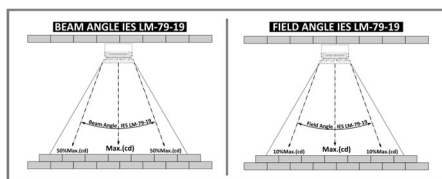
FL-100-STD|PRO FL-120-STD|PRO FL-150-STD|PRO
FL-180-STD|PRO FL-200-STD|PRO FL-250-STD|PRO
FL-300-STD|PRO



OPTIKOS INFORMACIJA

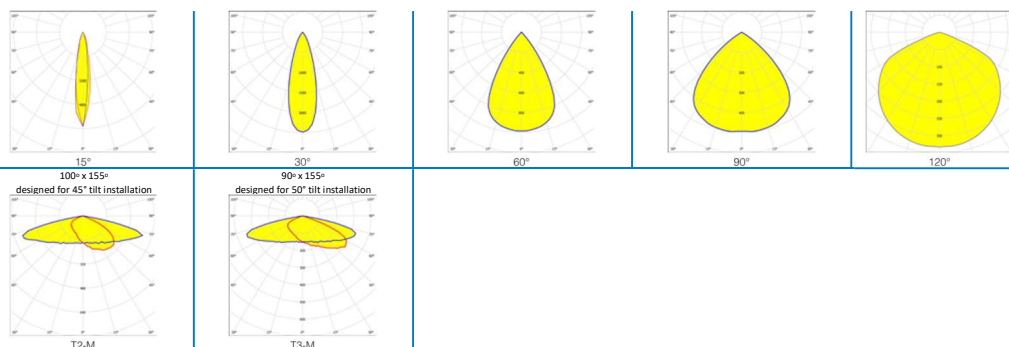
FL-serijos LED prožektorius

OPTIKOS PASIRINKIMO REKOMENDACIJOS



Beam Angle – Šviesos kampas, dar vadinamas šviesos spindulio pločiu, yra parametras, apibūdinantis žemyn nukreiptą šviesos kūgį, kurį skleidžia šviestuvas su reflektoriumi. Šviesos kampas matuojamas nuo krypties, kurioje lemputė skleidžia didžiausią šviesos intensyvumą, iki krypties, kurioje intensyvumas sumažėja iki 50 %. Kitaip tariant, lemputė su didesniu šviesos kampu paskleidžia šviesą plačiau.

SIMETRINIS ASIMETRINIS



IŠTRAUKA IŠ GONIOFOTOMETRŲ SISTEMOS BANDYMO ATASKAITOS

BEAM ANGLE (IES LM-79-19) 120° CREE SMD3030 CCT 4000K CRI>80																																																																																											
FL-100-STD GALIA 100W		FL-300-STD GALIA 300W																																																																																									
	DATA OF LAMP	Eff:169.44lm/W	DATA OF LAMP																																																																																								
	MODEL FL-100-STD	Imax(cd) 5690	MODEL FL-300-STD																																																																																								
	NOMINAL POWER(W) 100	AVAILABILITY(%) 98.8	CR-30-50-7-120																																																																																								
	RATED VOLTAGE(V) 230	Avail. FLUX(lm) 16490	NOMINAL POWER(W) 294																																																																																								
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	LAMPS INSIDE 1	TOTAL FLUX(lm) 16689	NOMINAL FLUX(lm) 46894.8																																																																																								
	TEST VOLTAGE(V) 229.5	θ @50°(H,V) 122,121DEG	LAMPS INSIDE 1																																																																																								
Flux out:13833 lm		Flux out:37174 lm																																																																																									
<table border="1"> <thead> <tr> <th>Height</th><th>Eavg,Emax</th><th>Angle:120.99deg</th><th>Diameter</th></tr> </thead> <tbody> <tr> <td>3.281ft</td><td>125.7,528.7fc</td><td></td><td>11.6ft</td></tr> <tr> <td>1m</td><td>1353,5690lx</td><td></td><td>353.42cm</td></tr> <tr> <td>6.562ft</td><td>31.42,132.2fc</td><td></td><td>23.19ft</td></tr> <tr> <td>2m</td><td>338.2,1423lx</td><td></td><td>706.84cm</td></tr> <tr> <td>9.843ft</td><td>13.97,58.74fc</td><td></td><td>34.79ft</td></tr> <tr> <td>3m</td><td>150.3,632.3lx</td><td></td><td>1060.26cm</td></tr> <tr> <td>13.12ft</td><td>7.856,33.04fc</td><td></td><td>46.38ft</td></tr> <tr> <td>4m</td><td>84.56,355.6lx</td><td></td><td>1413.67cm</td></tr> <tr> <td>16.4ft</td><td>5.028,21.15fc</td><td></td><td>57.98ft</td></tr> <tr> <td>5m</td><td>54.12,227.6lx</td><td></td><td>1767.09cm</td></tr> </tbody> </table>		Height	Eavg,Emax	Angle:120.99deg	Diameter	3.281ft	125.7,528.7fc		11.6ft	1m	1353,5690lx		353.42cm	6.562ft	31.42,132.2fc		23.19ft	2m	338.2,1423lx		706.84cm	9.843ft	13.97,58.74fc		34.79ft	3m	150.3,632.3lx		1060.26cm	13.12ft	7.856,33.04fc		46.38ft	4m	84.56,355.6lx		1413.67cm	16.4ft	5.028,21.15fc		57.98ft	5m	54.12,227.6lx		1767.09cm	<table border="1"> <thead> <tr> <th>Height</th><th>Eavg,Emax</th><th>Angle:108.86deg</th><th>Diameter</th></tr> </thead> <tbody> <tr> <td>3.281ft</td><td>539.0,1702fc</td><td></td><td>9.175ft</td></tr> <tr> <td>1m</td><td>5802,18319lx</td><td></td><td>279.67cm</td></tr> <tr> <td>6.562ft</td><td>134.7,425.5fc</td><td></td><td>18.35ft</td></tr> <tr> <td>2m</td><td>1450,4580lx</td><td></td><td>559.33cm</td></tr> <tr> <td>9.843ft</td><td>59.89,189.1fc</td><td></td><td>27.53ft</td></tr> <tr> <td>3m</td><td>644.6,2035lx</td><td></td><td>839.00cm</td></tr> <tr> <td>13.12ft</td><td>33.69,106.4fc</td><td></td><td>36.7ft</td></tr> <tr> <td>4m</td><td>362.6,1145lx</td><td></td><td>1118.66cm</td></tr> <tr> <td>16.4ft</td><td>21.56,68.07fc</td><td></td><td>45.88ft</td></tr> <tr> <td>5m</td><td>232.1,732.8lx</td><td></td><td>1398.33cm</td></tr> </tbody> </table>		Height	Eavg,Emax	Angle:108.86deg	Diameter	3.281ft	539.0,1702fc		9.175ft	1m	5802,18319lx		279.67cm	6.562ft	134.7,425.5fc		18.35ft	2m	1450,4580lx		559.33cm	9.843ft	59.89,189.1fc		27.53ft	3m	644.6,2035lx		839.00cm	13.12ft	33.69,106.4fc		36.7ft	4m	362.6,1145lx		1118.66cm	16.4ft	21.56,68.07fc		45.88ft	5m	232.1,732.8lx		1398.33cm
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V(R) Range:-90 = 90DEG V(R) Interval: 0.5DEG Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.265 Humidity:65.0% Test Distance:16.500m [K=1.0000] Remarks:		V(R) Range:-90 = 90DEG V(R) Interval: 0.5DEG Test System:EVERFINE GO-2000A_V1 SYSTEM V2.0.265 Humidity:65.0% Test Distance:16.500m [K=1.0000] Remarks:																																																																																									

ŠILUMOS VALDYMO INFORMACIJA

FL-serijos LED prožektorius

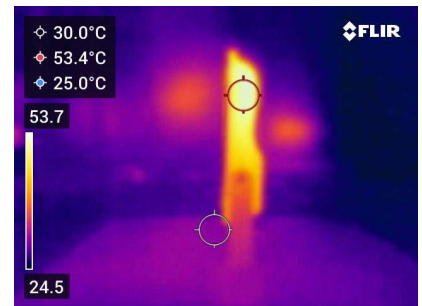
FL 050 STD CR 30 40 7 120 ESANT PILNAI 50W APKROVAI (PO 2 VALANDŲ VEIKIMO)



NUGARA

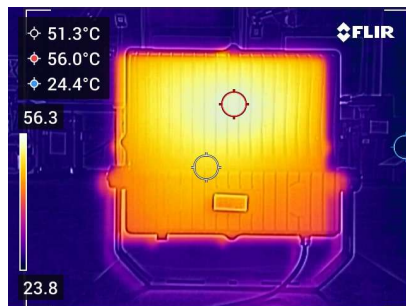


PRIEKIS



ŠONAS

FL 100 STD CR 30 40 7 120 ESANT PILNAI 100W APKROVAI (PO 2 VALANDŲ VEIKIMO)



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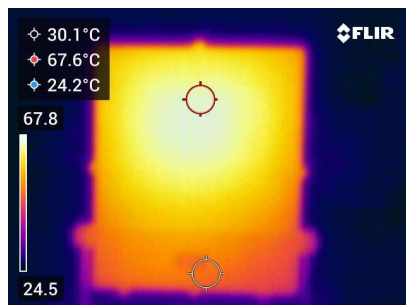


PRIEKIS

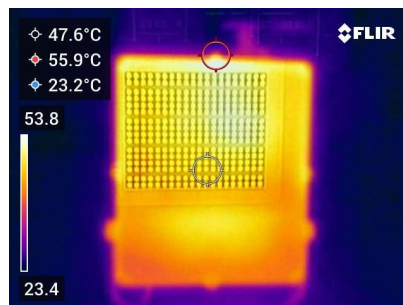


ŠONAS

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NUGARA

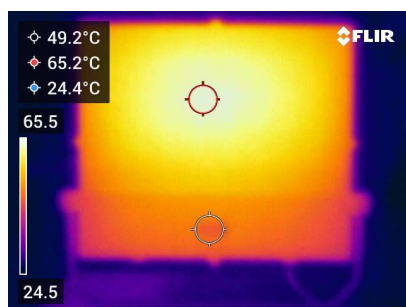


PRIEKIS

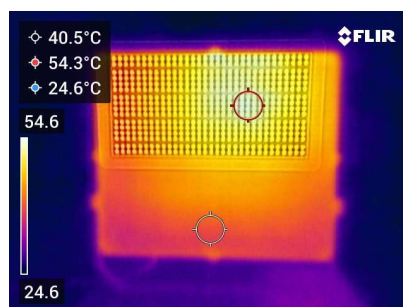


ŠONAS

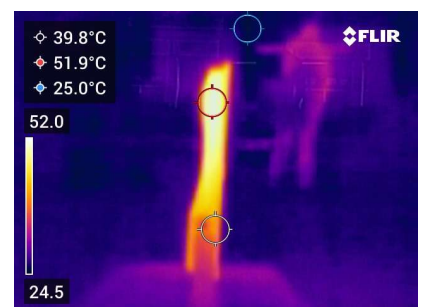
FL 300 STD CR 30 40 7 120 ESANT PILNAI 300W APKROVAI (PO 2 VALANDŲ VEIKIMO)



NUGARA



PREKIS



ŠONAS