

40W | FULLY TUNABLE LED JBOX DOWN LIGHT



PRODUCT DESCRIPTION

High-performance lighting solution designed for fast, hassle-free installation in commercial and public spaces. Featuring an integrated junction box, this canless fixture eliminates the need for traditional recessed housings, reducing labor and ceiling penetration complexity.

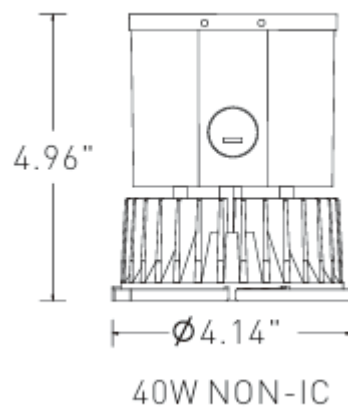


#: RGL-40W-DL-TT

PRODUCT FEATURES & COMMON USE APPLICATIONS

- UL cUL DLC certificate.
- Lumileds or Samsung Chip, high CRI.
- Input voltage 120-277VAC.
- No UV or IR in the beam.
- Easy to install and operate.
- Energy saving, long lifespan.
- Light is soft and uniform, safe to eyes.
- Instant start, NO flickering, NO humming.
- Green and eco-friendly without mercury.
- Offices, Classrooms, ETC.
- Highway toll station and gas station.
- Exhibition hall.
- Gymnasium and supermarkets, etc
- Residential Locations, Kitchen, Den, Living Room

PRODUCT DIMENSIONS



LEGENDARY USA SUPPORT



US based phone and online customer support



Rugged Grade Lighting
Industrial Grade Solutions



888-953-2476
sales@ruggedgrade.com

PRODUCT TECHNICAL SPECIFICATIONS

OPTICAL	Input Power (Tolerance : ±10%)	27/34/40 Watt (Wattage Selectable)
	Color Temperature	3000K/3500K/4000K (Color Selectable)
	Lumen (Tolerance : -10%)	2430LM/2890LM/3200LM
	Efficacy (Tolerance : -3%)	80LM/W
	CRI	>80
	Available Trims	4", 6", 8" and 10" trim size options
	Diffuser Type	PC Lens(Shatter Proof Lens)
	Beam Angle (50%) (Tolerance :	Multiple Beam Angles(See Photometrics)
ELECTRICAL	Input Voltage and Frequency	120-277VAC, 50/60Hz
	PF (Tolerance : -3%)	≥0.95
	THD (Tolerance : +5%)	≤20%
	Driver Efficacy	<90%
	Driver Brand	Rugged Grade Lighting
	Driver Model	Rugged Grade Lighting Driver
	Dimming	Wattage Selectable Switch
	Optional Accessory	New Construction Frame Kits
MATERIALS	Housing	Aluminum Alloy
	Housing Color	Grey
MATERIALS	Warranty	5 years warranty with 24/7 operating hours Luminaire lifetime at

PRODUCT MOUNTS & ACCESSORIES

All In One, Now Made Simpler

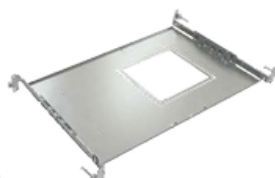
OKT engineers understand how challenging it can be to install full range CP series downlight in one frame kit and perfectly aligned for new construction. That's why they've incorporated a suite of features that work together seamlessly to give you a flawless fit more and with less hassle. This frame kit can suitable for round trims from 3" to 8".

An Ideal Match, CP Downlight + Frame Kits

Because the frame kit was specifically designed for the CP series, it delivers the perfect aperture for a tight, seamless fit. This minimizes the space and materials required for installation.



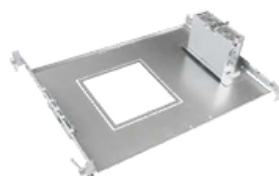
FKR
Round Frame Kit
For 3"-8" Downlights



FKS
Square Frame Kit
For 4"-6" Downlights



FKRJ
Round Frame Kit With J-Box
For 3"-8" Downlights



FKSJ
Square Frame Kit With J-Box
For 4"-6" Downlights



PRODUCT INSTALLATION GUIDE

NOTE

- Please read this entire manual to fully understand and safely use this product.
1. Unpack and carefully examine the product.
 2. Report any damage and save all packing materials if any part(s) were damaged during shipping.
 3. Do not attempt to use this apparatus if it is damaged.

IMPORTANT SAFETY INFORMATION

CAUTION: RISK OF ELECTRIC SHOCK

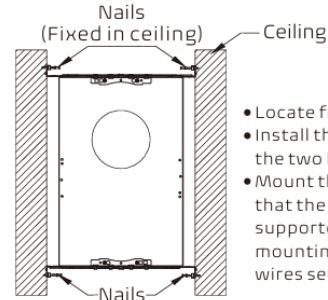
Suitable for damp location. Access above ceiling required. Suitable for suspended ceilings.

READ ALL INSTRUCTIONS BEFORE INSTALLATION

1. Consult a qualified electrician to ensure correct branch circuit conductor.
2. The product should be installed and operated by a qualified electrician or technician in accordance with relevant local codes.
3. Risk of electric shock. Ensure that main power source is off when wiring or soldering the sections of the product.
4. Before installing this fixture or doing any maintenance, make sure to turn off the power supply at the circuit breaker or fuse box.
5. Check to make sure that all fixture connections have been properly made and the fixture is grounded to avoid potential electrical shocks.
6. Designed for use in AC 120-277V for 60w and AC 120-347V for 40w maximum, 50/60Hz, 0-10V dimming, protected circuit.

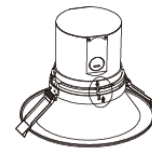
PRE-INSTALLATION

Install the frame kit (Separated order if need)

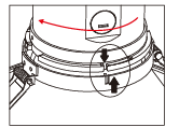


- Locate frame kit position.
- Install the frame kit in the ceiling using the two hanger bars (supplied).
- Mount the frame kit in the ceiling so that the weight of the frame kit is supported by the hanger bars, mounting channel, bar, and/or hanger wires secured to the building structure.

Combine the LED engine and trim together if they are separate.



1. Match the slot of LED engine and trim according to the direction of arrow as shown.

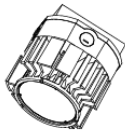


2. Turn clockwise until it is tightened.

Optional LED Engines



20W Max (120-347VAC)



60W Max (120-277VAC)
(Only for 6inch/8inch/10inch round trim and 6inch square trim)



40W Max (120-347VAC)

Optional Trims



4" Round



6" Round



8" Round



10" Round



4" Round Wall Wash



6" Round Wall Wash



4" Square



6" Square

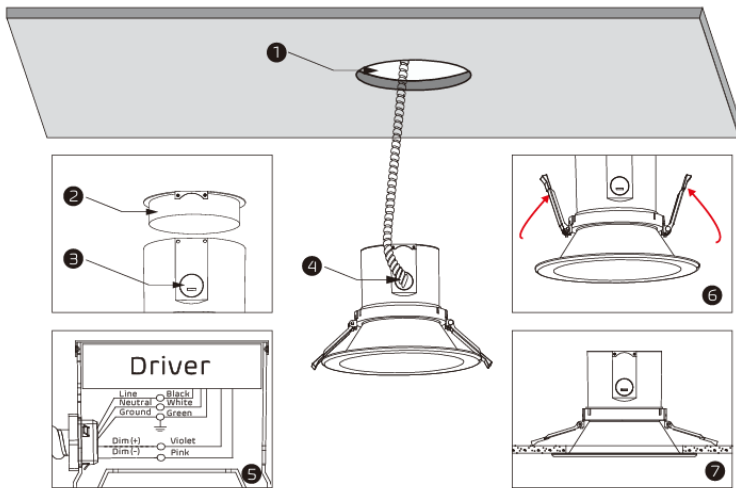


4" Square Wall Wash



6" Square Wall Wash

INSTALLATION



Step 1

Drill hole in the ceiling according to the trim size (See Table 1)

Step 2

Open the cover of LED engine according to the direction of arrow.

Step 3

Remove appropriate knockout(s) for power supply wiring.

Step 4

Bring power supply wires into the junction box using a conduit fitting

Step 5

– Connect the line to the black wire, neutral to the white wire and ground wire to the green wire with the supplied quick disconnect.

Note: Compatible with 0-10V dimmer if need dimming. The driver VIOLET (D+) to the dimmer+ (VIOLET), and the driver PINK (D-) to the dimmer- (PINK) with the supplied nuts.

- Tuck all wires and wire nuts into the fixture junction box.
- Close the cover according to the direction of arrow.

Step 6

Tighten up the spring to mount the LED downlight onto the ceiling, then adjust the position and complete installation 7.

Optional Function:

Use the wattage and CCT dip-switch (if equipped) to adjust the fixture to the desired wattage level and CCT. Refer to label on top of driver for each setting.

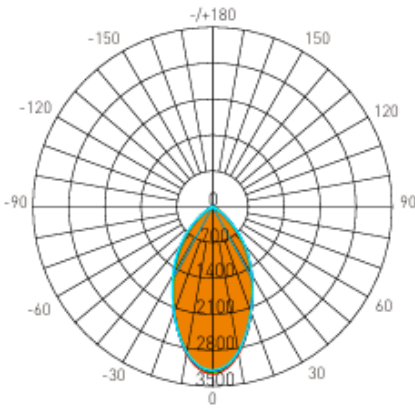
Trim Type	Recommended Hole Size
4 inch round	4.7" min. to 5.2" max.
4 inch round wall wash	5.3" min. to 6" max.
4 inch square	5.3" min. to 6" max.
4 inch square wall wash	5.3" min. to 6" max.
6 inch round	6" min. to 7.3" max.
6 inch round wall wash	6" min. to 7.3" max.
6 inch square	6" min. to 7.3" max.
6 inch square wall wash	6" min. to 7.3" max.
8 inch round	7.4" min. to 8.9" max.
10 inch round	9.5" min. to 10.8" max.

Table 1



PHOTOMETRICS

6" 40W Round Trim



AVERAGE BEAM ANGLE[50%]: 57.4°

Lumens: 3328.0 Lm
Watts: 40 W
LPW: 83.2 Lm/W
CCT: 4000K

UNIT: cd
— C0/180, 56.4°
— C30/210, 56.9°
— C60/240, 57.9°
— C90/270, 58.4°

Zonal Flux Diagram

T	C0	C45	C90	C135	C180
10	2916	2896	2871	2857	2912
20	2201	2209	2188	2161	2186
30	1521	1544	1542	1506	1498
40	891.0	956.2	972.7	929.2	869.3
50	335.4	424.5	441.2	395.6	321.0
60	58.83	91.82	97.54	78.63	54.01
70	3.285	2.050	1.504	1.915	3.235
80	1.606	0.8562	0.5011	0.8066	1.591
90	0.1094	0.0676	0.0949	0.0811	0.0721
100	0.0902	0.0812	0.0857	0.0992	0.0993
110	0.1532	0.2302	0.2280	0.2212	0.1986
120	0.5046	0.6317	0.6711	0.6273	0.5778
130	1.262	1.372	1.496	1.403	1.359
140	2.366	2.405	2.542	2.450	2.455
150	3.683	3.717	3.809	3.735	3.735
160	5.157	5.110	5.117	5.088	5.184
170	6.245	6.183	6.145	6.160	6.273
180	6.732	6.710	6.593	6.620	6.755

DEG LUMINOUS INTENSITY:cd

Zonal Lumens

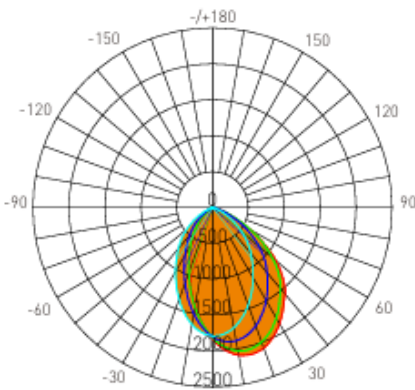
T	φ total
0-10	289.3
10-20	997.9
20-30	1840
30-40	2601
40-50	3101
50-60	3290
60-70	3317
70-80	3318
80-90	3319
90-100	3319
100-110	3319
110-120	3320
120-130	3320
130-140	3322
140-150	3324
150-160	3326
160-170	3327
170-180	3328

UNIT: lm

Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	742	162
80	524	163
75	497	189
70	544	249
65	1661	3557
60	6661	11045
55	15820	22953
50	29545	38863
45	47042	55891

6" 40W Round Wall Wash



AVERAGE BEAM ANGLE[50%]: 71.0°

Lumens: 2949.1 Lm
Watts: 40 W
LPW: 73.73 Lm/W
CCT: 3000K

UNIT: cd
— C0/180, 69.2°
— C30/210, 70.4°
— C60/240, 72.4°
— C90/270, 72.2°

Zonal Flux Diagram

T	C0	C45	C90	C135	C180
10	2085	1962	1700	1461	1397
20	2080	1892	1449	1069	944.4
30	1866	1658	1132	716.4	584.0
40	1572	1343	828.3	446.7	318.6
50	1152	1001	540.1	222.7	107.6
60	593.4	562.8	253.7	36.59	12.99
70	169.5	186.5	59.76	4.875	5.799
80	4.680	16.81	1.576	1.973	2.586
90	0.0996	0.0631	0.0831	0.1709	0.1311
100	0.0811	0.0677	0.1123	0.2708	0.3476
110	0.0812	0.1309	0.3018	0.6949	0.9297
120	0.2162	0.3294	0.7163	1.394	1.832
130	0.4958	0.6814	1.271	2.125	2.851
140	0.9914	1.173	1.857	2.832	3.771
150	1.650	1.822	2.520	3.504	4.325
160	2.502	2.603	3.201	3.991	4.613
170	3.422	3.432	3.765	4.225	4.744
180	4.216	4.104	4.000	4.054	4.230

DEG LUMINOUS INTENSITY:cd

Zonal Lumens

T	φ total
0-10	166.4
10-20	610.3
20-30	1207
30-40	1830
40-50	2383
50-60	2750
60-70	2907
70-80	2940
80-90	2941
90-100	2941
100-110	2942
110-120	2942
120-130	2943
130-140	2945
140-150	2946
150-160	2948
160-170	2949
170-180	2949

UNIT: lm

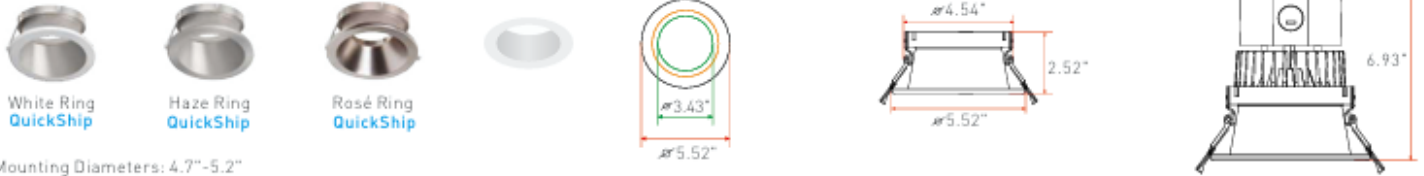
Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	182	531
80	1526	514
75	14095	3272
70	28056	9893
65	45639	18782
60	67192	28730
55	86754	38552
50	101454	47569
45	111057	55165



PRODUCT TRIM DIMENSIONS

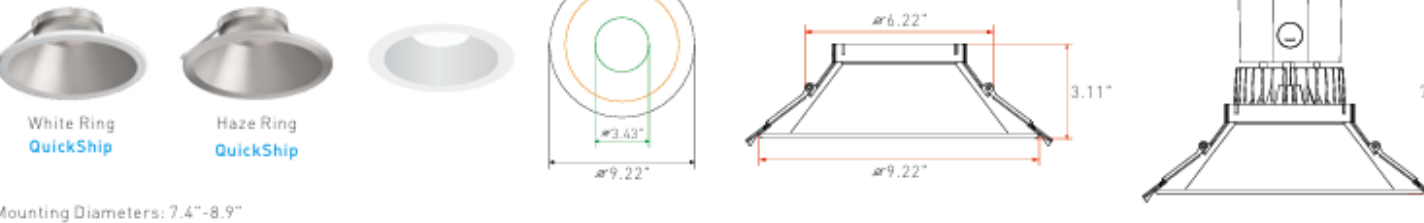
4" Round Trims



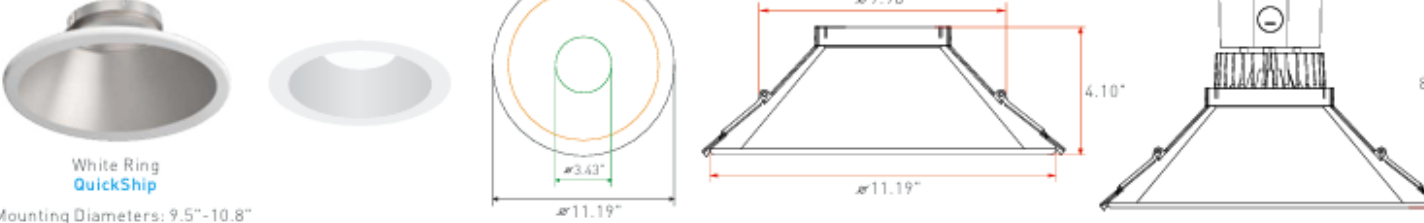
6" Round Trims



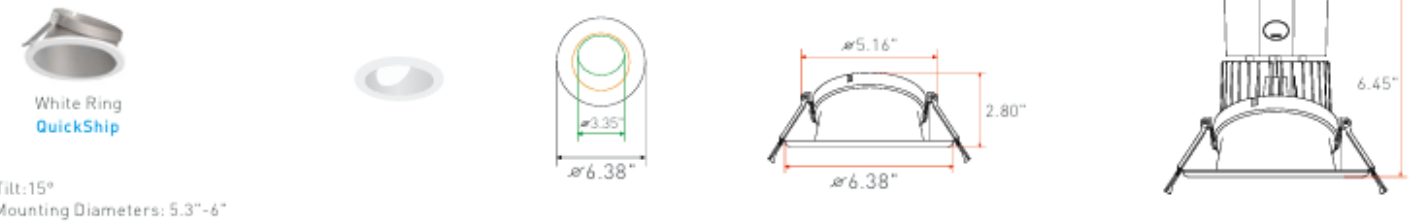
8" Round Trims



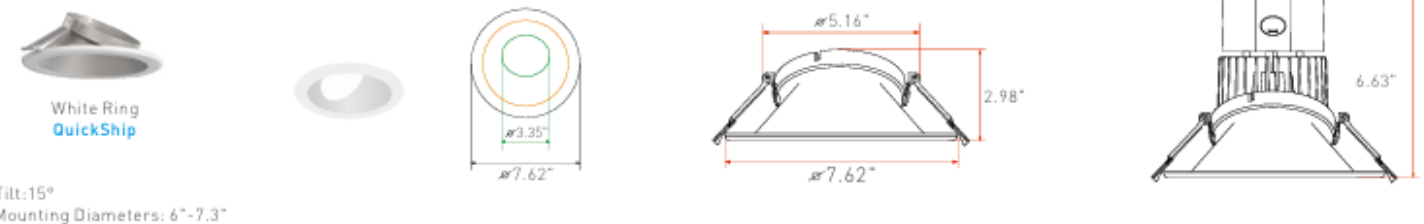
10" Round Trims



4" Round Wall Wash Trims



6" Round Wall Wash Trims

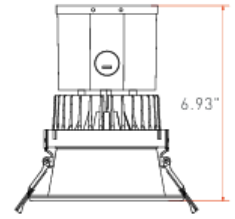
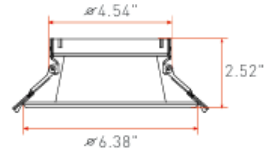
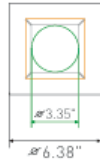


PRODUCT TRIM DIMENSIONS

4" Square Trims



White Ring
QuickShip

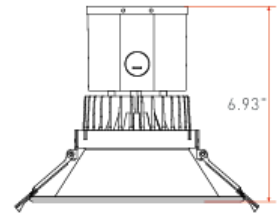
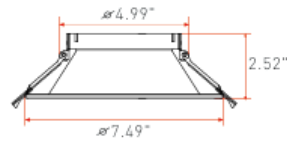
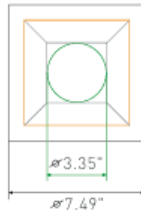


Mounting Diameters: 5.3"-6"

6" Square Trims



White Ring
QuickShip

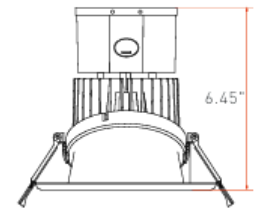
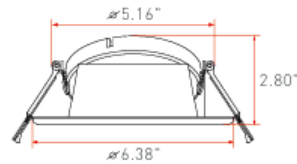
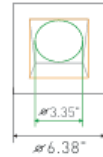


Mounting Diameters: 6"-7.3"

4" Square Wall Wash Trims



White Ring
QuickShip

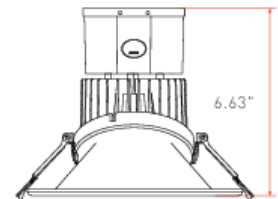
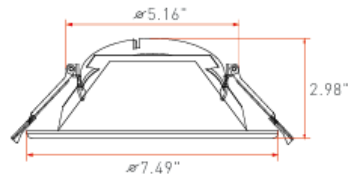
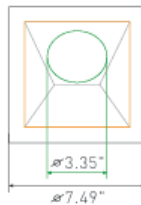


Tilt: 15°
Mounting Diameters: 5.3"-6"

6" Square Wall Wash Trims



White Ring
QuickShip



Tilt: 15°
Mounting Diameters: 6"-7.3"



OPTIONAL NEW CONSTRUCTION KITS



Optional New Construction Frame Kits



FKR **QuickShip**
New Construction Round Frame Kit For 3"-8" Downlights



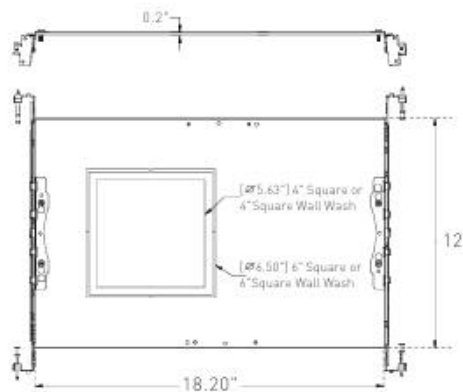
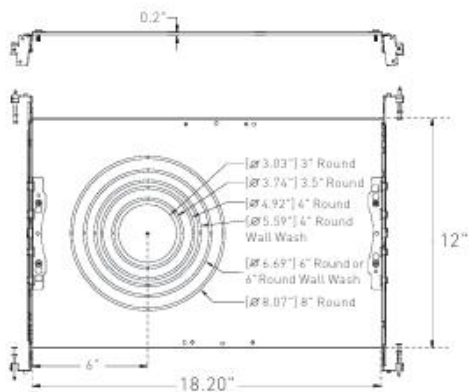
FKS **QuickShip**
New Construction Square Frame Kit For 4"-6" Downlights



FKRJ **QuickShip**
New Construction Round Frame Kit With J-Box For 3"-8" Downlights



FKSJ **QuickShip**
New Construction Square Frame Kit With J-Box For 4"-6" Downlights



PRODUCT WARNINGS

- ⚡ Please turn off power before install or change assembly parts.
- ⚡ The input voltage and lamps should be matched, after connecting the power line.
- ⚡ Please make sure the wiring section is insulated.
- ⚡ Professionals must install and disassemble the lamps.
- ⚡ Surge is the number 1 cause of LED light failure. Outdoor lights must have surge at fixture, pole, and breaker.
- ⚡ Surge is the number 1 cause of LED light failure. Indoor lights must have surge at fixture and breaker.

PRODUCT TROUBLESHOOTING

Issue	Check points
Light Flickers	Check all wiring for disconnections, shorts and burnt wiring and connections. Confirm steady input voltage to the light fixture, fluctuating input voltage will harm the LED driver and can lead to premature failure. Lights with photocells can have photocell tag from ambient light or light reflecting at the sensor. Simply cover the photocell completely and see if flickering continues while the photocell is covered. Call Tech Support for help if none of the above solves the issue.
Light does not work at all.	Check all wiring for disconnections, shorts and burnt wiring and connections. Confirm steady input voltage to the light fixture, fluctuating input voltage will harm the LED driver and can lead to premature failure. If input voltage is not in the voltage range of the fixture, you will need to find the source of your input voltage issue. Call Tech Support for help if none of the above solves the issue.

For more technical information, install questions, troubleshooting help or warranty claims, we have a dedicated US Tech and Customer Support Team to help solve any issues you have and can be reached by email or phone. If you need help with any of our products, we are here for you so that you are never in the dark!

BETTER LIGHTS. BETTER SUPPORT.

