

JLS-LLE-CR02-W SERIES

JAYKAL

PROJECT NAME:

JAYKAL LED SOLUTIONS, INC.

www.jaykal.net

PROJECT NOTES:

21499 Baltimore Ave.

Georgetown, DE 19947

(P) 302-295-0015

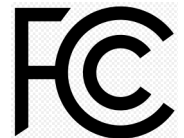
(F) 302-295-0016

PRODUCT DESCRIPTION

The JLS-LLE-CR02-W is an advanced long-range dongle incorporating a Real-Time Clock (RTC) module, specifically engineered for outdoor lighting applications. This device ensures accurate timekeeping functionality, maintaining precision even during power interruptions. The JLS-LLE-CR02-W acts as a central synchronization hub, coordinating all devices within a designated zone. When paired with the JLS-LLE-TX5 antenna (sold separately), it enables extended communication distances of up to 1,640 feet (500 meters), significantly enhancing network coverage and reliability in large-scale outdoor deployments.

FEATURES

- Flexible power options: Compatible with JLS-LLE-PPA102S.A1 through UTP devices, JLS-LLE-AE-W (Accessory Enclosure), or USB power supply
- Uninterrupted timekeeping: Internal battery maintains accurate time during power outages
- Enhanced signal propagation: 1dBi (JLS-LLE-TX1 Included) external antenna enables long-distance transmission up to 860ft
- Environmental resilience: IP65-rated for protection against dust and water ingress



Revised 11/13/24

Specifications are typical values and may change without notification

efficiency. illuminated.

JLS-LLE-CR02-W SERIES

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SPECIFICATIONS TABLE	
IFS108 SERIES	
INPUT VOLTAGE	USN 5V
INPUT CURRENT	30mA
BLUETOOTH TRANSMIT	JLS-LLE-TX1: 860ft Max, JLS-LLE-TX5 (not included): 1,640ft Max
RADIO FREQUENCY	2.4GHz ± 75MHz
BLUETOOTH VERSION	5.0
HOUSING MATERIAL	UL 94V-0
INDOOR/OUTDOOR USE	Indoor Use Only
OPERATING TEMPERATURE	-30°C to 65°C, -22°F to 149°F
STORAGE TEMPERATURE	-30°C to 85°C, -22°F to 185°F
IP RATING	IP20
COLOR	Black
WARRANTY	5 Years
COMPLIANCE	RoHS

Due to our continued efforts to improve our products, specifications are subject to change without notice.

Ordering Guide

MODEL	Description
JLS-LLE-CR02-W.A0	Long Range RTC Dongle

Accessories Ordering Guide

MODEL	Description
JLS-LLE-PPA102S.A1	Fixture Controller with CC Cable output to power UTP
JLS-LLE-UTP	Accessory to power the USB-A devices via PH2.0 connector internal to fixture body
JLS-LLE-TX5	2.5GHz - 5dbi Antenna
JLS-LLE-CR02-W-ENCL	Accessory Enclosure - Wet Location with JLS-LLE-CR02-W UTP included

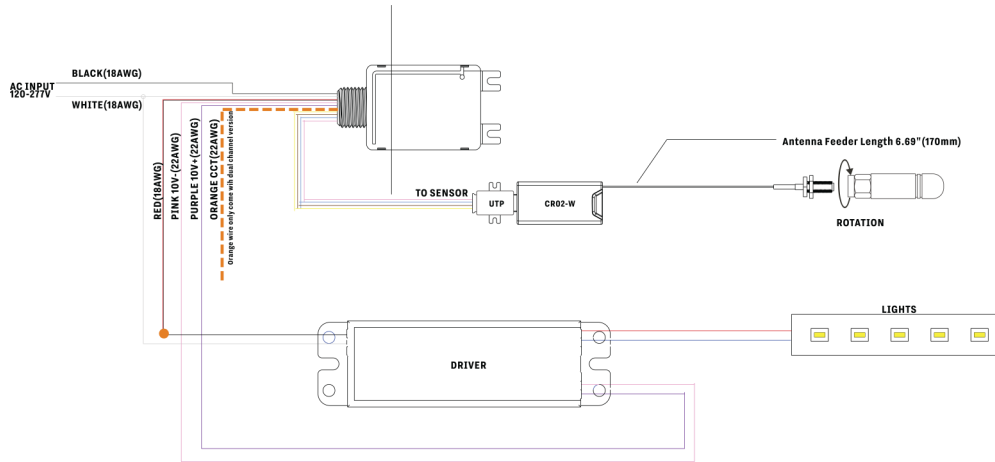
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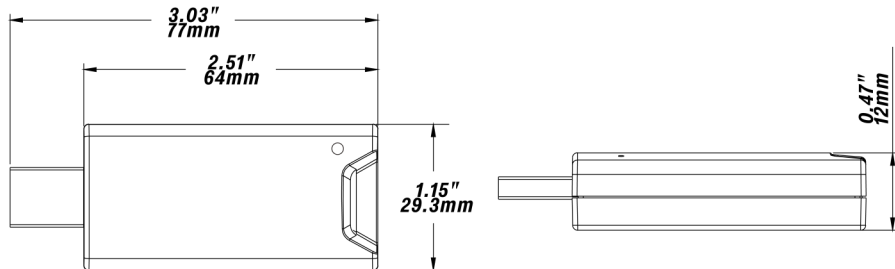
WIRING



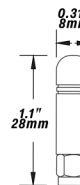
DIMENSIONS

Unit: inch/mm

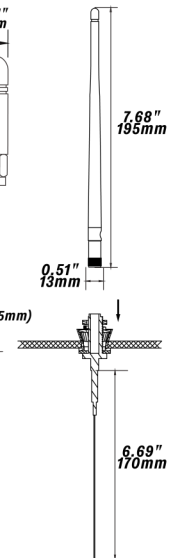
JLS-LLE-CR02-W



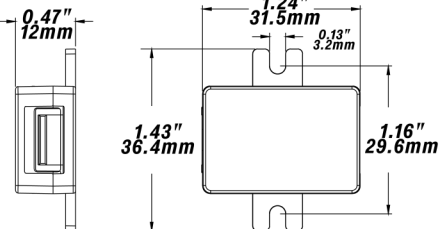
JLS-LLE-TX1



JLS-LLE-TX5



JLS-LLE-UTP



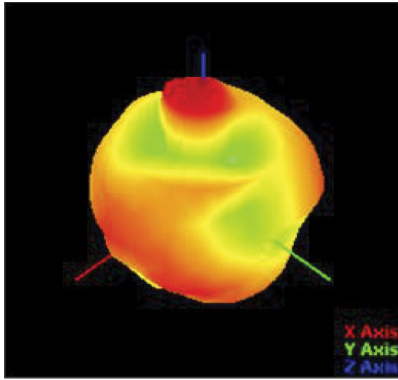
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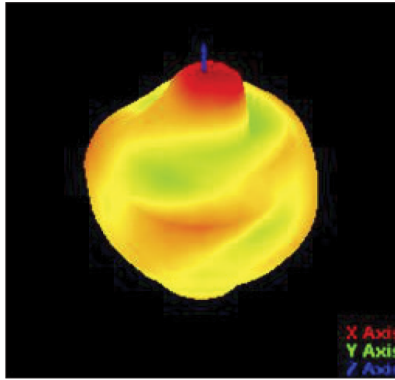
JLS-LLE-CR02-W SERIES

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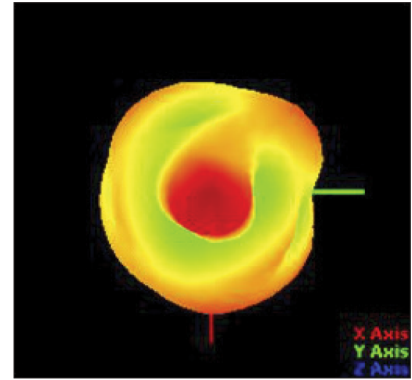
JLD-LLE-TX1 TRANSMISSION



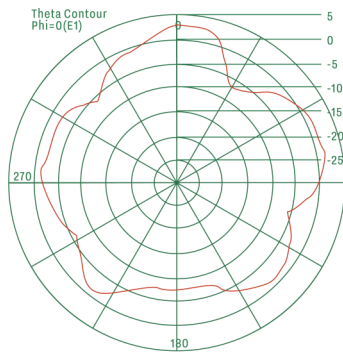
T45-P45



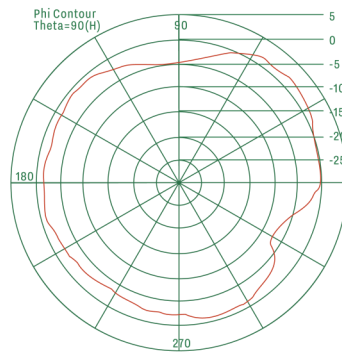
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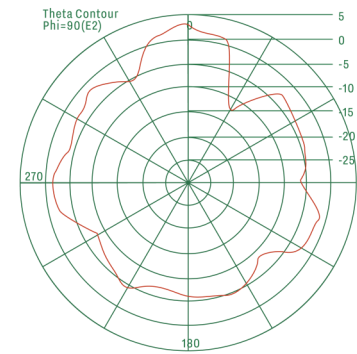
T0-P0



XOZ



XOY



YOZ

Wireless Signal Strength

Transmission Distance RSSI (dbm)

164ft (50m) -43

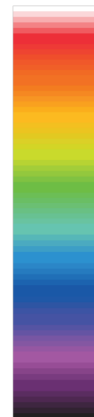
328ft (100m) -45

492ft (150m) -49

656ft (200m) -54

820ft (250m) -57

860ft (262m) -58



3.48
2.5
1.52
0.54
-0.44
-1.41
-2.39
-3.37
-4.35
-5.33
-6.31
-7.29
-8.27
-9.25
-10.23
-11.21
-12.19
-13.17

Coordination System Description:

Line Color	XYZ	Theta-Phi
Red L.	Axis X	Theta90-Phi0
Green L.	Axis Y	Theta90-Phi90
Blue L.	Axis Z	Theta0

Note: The test transmission distance of two JLS-LLE-CR02-W

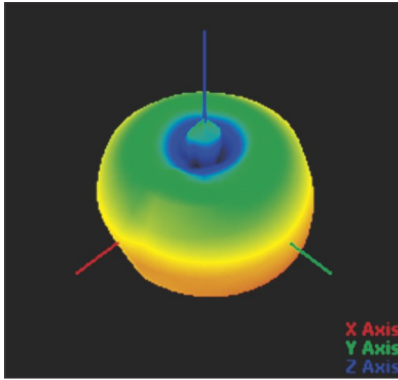
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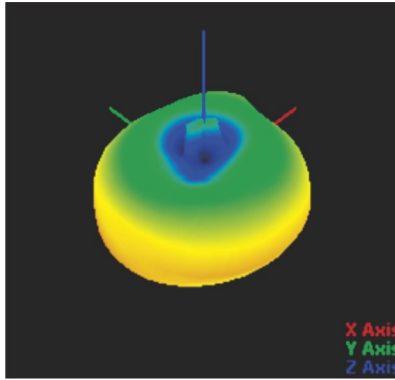
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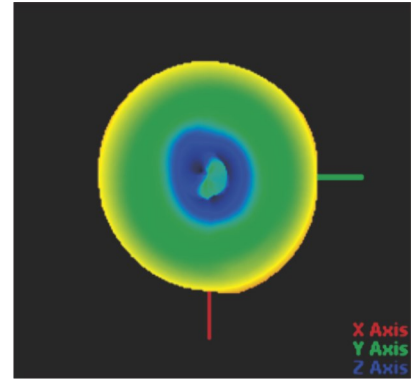
JLD-LLE-TX5 TRANSMISSION



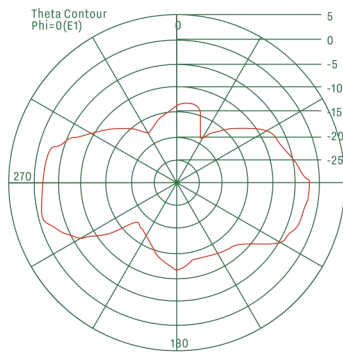
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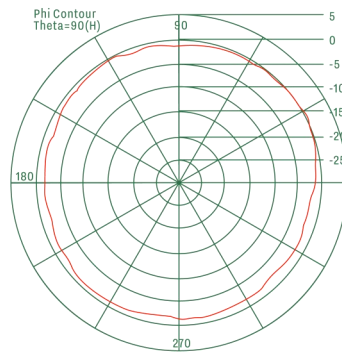
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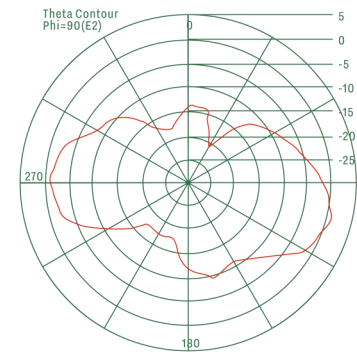
T0-P0



XOZ



XOY



YOZ

Wireless Signal Strength	
Transmission Distance	RSSI (dbm)
328ft (100m)	-37
656ft (200m)	-47
984ft (300m)	-48
1312ft (400m)	-59
1640ft (500m)	-60



- 5.4
- 3.89
- 2.38
- 0.87
- 0.65
- 2.16
- 3.67
- 5.18
- 6.69
- 8.21
- 9.72
- 11.23
- 12.74
- 14.26
- 15.77
- 17.28
- 18.79
- 20.31

Coordination System Description:

Line Colr	XYZ	Theta-Phi
Red L.	Axis X	Theta90-Phi0
Green L.	Axis Y	Theta90-Phi90
Blue L.	Axis Z	Theta0

Note: The test transmission distance of two JLS-LLE-CR02-W

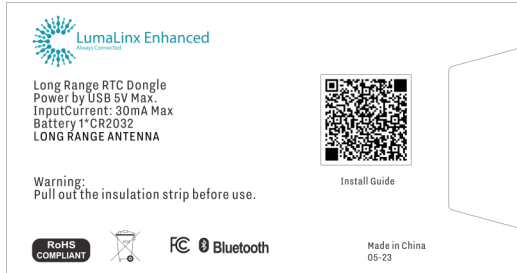
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PRODUCT LABEL



APP DOWNLOAD



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