LumenF©cus

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Project:
Location:
Cat. #:
Туре:
Quantity:



RCL G2 4 | LED Channel Retrofit Kit

Features:

- High performance LED technology
- 90+ CRI Standard
- 0-10V dimming drivers standard
- DALI drivers available
- Field replaceable LED boards and drivers
- Frosted diffuser available to help minimize glare and improve aesthetics
- A wide variety of lumen packages and lengths allows for flexibility in design and helps maximize energy savings
- Saves on installation cost, material cost, and waste
- Advanced controls available

• Buy American Act compliant (All base luminaires are BAA compliant. Addition of options may change eligibility. Contact factory for details.)

Applications:

Suitable for most commercial, industrial and institutional applications

- Office
- Retail
- Warehouse
- Coves
- Valences

Predicted Lifetime:

- L70: \geq 129,000 hrs (calculated)
- L80: ≥ 81,000 hrs (calculated)
- L90: ≥ 39,000 hrs (reported)
- 85% lumen maintenance @ 60,000 hrs (based on LM80 and insitu laboratory testing)



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Construction:

- Precision brake formed from heavy gauge cold rolled steel
- Highly durable, highly reflective white finish

Certifications:

- UL 1598 listed for US and Canada, suitable for damp locations
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) http://designlights.org/



Ambient Operating Temp.:

• -30°C to 40°C

Warranty:

details.)

- 5 year limited system warranty see <u>www.LumenFocus.com</u> for complete warranty terms and conditions
- 10 year warranty option available on specific models (Not available on all models. Certain conditions apply. Consult factory or sales representative for

USING DOMESTIC AND FORFIGN COMPONENTS





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Newtork Capabilities⁽³⁾

ZL7S

Leviton Intellect 0-10V Sensor

with Dimming/Occupancy/

Daylight Harvesting with

Newtork Capabilities⁽³⁾

ZLDC

Leviton Intellect DALI Fixture

Controller with Newtork

Capabilities⁽³⁾

ZL7C Leviton Intellect 0-10V Fixture Controller with Newtork Capabilities⁽³⁾

ZENLC

Enlighted Connected Micro Sensor with Dimming/ Occupancy/Daylight Harvesting⁽³⁾

ZENLI

Enlighted IoT Micro Sensor

with Dimming/Occupancy/

Daylight Harvesting⁽³⁾

BAA Buy American Act

Compliant

Ordering Guide:

example: RCL G2 4 MD UV FR 940 4.25" ZOSMD EM10

Series	Version	Length	Output	Voltage	Shielding	CRI/CCT	Channel Width	Controls	Options
RCL	92	4							
RCL	G2 Gen 2	4 4'	LW Low ML Medium Low Medium MH Medium High MH High High VH Very High Super High	UV 120-277 34 347V	Blank No Lenses FR Frosted Acrylic Diffusers	930 90 CRI/3000K 935 90 CRI/3500K 940 90 CRI/4000K 950 90 CRI/5000K	x.xx" Specify Channel Width <i>(in inches)</i> VAR Variable - Adjusts to fit channel widths from 4.00" to 5.00"	Blank No Controls ZSOL Leviton Intellect Solo Programmable PIR/Daylight Harvesting Sensor ⁽¹⁾ ZOSMD Microwave Occupancy Sensor with Photocell (On/ Off/Dim) ⁽²⁾ ZSLFC2 Keystone SmartLoop Wireless Bluetooth Mesh Occupancy/ Daylight Harvesting Smart Sensor ⁽¹⁾ ZLDS	Blank No Options EXT10 10-Year Extended Warranty ⁽⁴⁾ EM6 6.5W Emergency Pack ⁽⁵⁾ EM10 10W Emergency Pack ⁽⁵⁾ EM14 14W Emergency Pack ⁽⁵⁾ CC Conformal Coating
			Saper High					Leviton Intellect DALI Sensor with Dimming/Occupancy/ Daylight Harvesting with	0-10V Dimming Leads for Easy Field Access

Notes

⁽¹⁾ See Page 4 for more details.

- ⁽²⁾ 120-277V only. See page 4 for more details.
- ⁽³⁾ See page 5 for more details.
- ⁽⁴⁾ Not available on all models. Certain conditions apply. Consult factory or sales representative for details.

⁽⁵⁾ 120-277V / 0°Ć-55°C ambient. To estimate lumen output in emergency mode, multiply EM wattage by the Lumens per Watt of the luminaire it is installed in.

ex. RCL G2 4 MD UV 940 EM10 → 149.9 LPW x 10W = 1,499 lm

Accessories (order separately)

STD(480V)

480V to 277V Step Down Transformer

Controls Accessories (order separately)

For Leviton Intellect Solo Controls



Wireless IR Programming Tool ZLSOR-RA1 (For ZSOL)

For Keystone SmartLoop Controls



34 4 •

KTSL-WS1-B-SG/G2 5-Button Bluetooth Wireless Wall Switch USB Time Keeper

For Leviton Intellect Networked Controls DRKDN eless Wall Controller

DRKDN-U1W	1-Button Wireless Wall Controller
DRKDN-U2W	2-Button Wireless Wall Controller
DRKDN-U4W	4-Button Wireless Wall Controller
DRKDN-U8W	8-Button Wireless Wall Controller

For Enlighted Controls WS-2-00

KTSL-TK1-USB

Enlighted Remote Control Wall (for Enlighted Connected & IoT)





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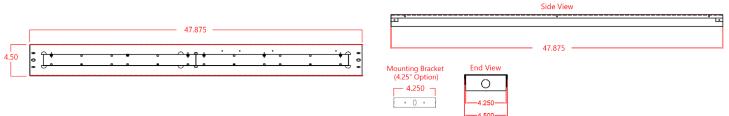
RCL_G2_4_LED_v1.7 Page 2 of 6

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Performance Chart:

Catalog #	Watts	Lumens (930)	LPW (930)	Lumens (935)	LPW (935)	Lumens (940)	LPW (940)	Lumens (950)	LPW (950)
RCL G2 4 LW UV FR 9xx	15.4	2124.9	138.2	2133.9	138.8	2184.6	142.1	2184.6	142.1
RCL G2 4 ML UV FR 9xx	22.3	3158.3	141.7	3171.6	142.3	3246.9	145.7	3246.9	145.7
RCL G2 4 MD UV FR 9xx	29.6	4110.6	138.7	4127.9	139.3	4225.9	142.6	4225.9	142.6
RCL G2 4 MH UV FR 9xx	34.2	5054.2	147.8	5075.5	148.4	5196.1	151.9	5196.1	151.9
RCL G2 4 HI UV FR 9xx	43.5	6253.9	143.8	6280.2	144.4	6429.4	147.9	6429.4	147.9
RCL G2 4 VH UV FR 9xx	56.3	8202.0	145.7	8236.6	146.4	8432.2	149.8	8432.2	149.8
RCL G2 4 SH UV FR 9xx	73.0	10264.3	140.6	10307.6	141.2	10552.4	144.6	10552.4	144.6
RCL G2 4 LW UV 9xx	15.4	2233.5	145.2	2243.0	145.9	2296.2	149.3	2296.2	149.3
RCL G2 4 ML UV 9xx	22.3	3319.7	149.0	3333.7	149.6	3412.9	153.2	3412.9	153.2
RCL G2 4 MD UV 9xx	29.6	4320.6	145.8	4338.9	146.4	4441.9	149.9	4441.9	149.9
RCL G2 4 MH UV 9xx	34.2	5312.6	155.3	5334.9	156.0	5461.7	159.7	5461.7	159.7
RCL G2 4 HI UV 9xx	43.5	6573.5	151.2	6601.2	151.8	6758.0	155.4	6758.0	155.4
RCL G2 4 VH UV 9xx	56.3	8621.2	153.2	8657.6	153.8	8863.2	157.5	8863.2	157.5
RCL G2 4 SH UV 9xx	73.2	10788.9	147.5	10834.4	148.1	11091.7	151.6	11091.7	151.6

Schematic:





Re-board ABILITY

The RCL G2 features field replaceable boards and drivers. This allows you to upgrade to more efficient technology in the future. Or, in the rare event of a failure, you can rapidly replace defective components. Re-boardABILITY helps to ensure you won't get stuck with an obsolete light fixture. Learn more about Re-boardABILITY here.



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Controls Summary:

Control Code	Туре	Capabilities	Communication
ZSOL	Motion (PIR), Daylight Harvesting	High/Low/Off	Wired 0-10V, Programmable via IR remote (sold separately)
ZOSMD	Motion (Microwave), Photosensor	On/Low/Off	Wired 1-10V
ZSLFC2	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling, LLLC (Keystone TechSmartLoop)	Wireless Bluetooth Mesh, Programmable via Keystone SmartLoop App for iOS or Android
ZLxS	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling, Demand Response*, BMS Integration*, LLLC (GreenMAX DRC)	Wireless Zigbee 2.4 GHz Mesh, Programmable via GreenMAX DRC app. for iOS or Android along with DRKDN-UxW Wall Controller (sold separately)
ZLxC	Controller, No Sensors	High/Low/Off, High-End Trim, Grouping, Scheduling, Demand Response*, BMS Integration*, LLLC (GreenMAX DRC)	Wireless Zigbee 2.4 GHz Mesh, Programmable via GreenMAX DRC app. for iOS or Android along with DRKDN-UxW Wall Controller (sold separately)
ZENLC	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling*, Energy Monitor- ing*, BMS Integration*, Upgradable to IoT (ZENLI), LLLC (Enlighted IoT)	Wireless Bluetooth Low Energy Mesh, Programmable via Enlighted IoT Software
ZENLI	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling*, Energy Monitor- ing*, BMS Integration*, LLLC (Enlighted IoT)*, Space - Building Utilization*, Where - Real Time Location Services*	Wireless Bluetooth Low Energy Mesh, Programmable via Enlighted IoT Software

LLLC = Luminaire Level Lighting Control

* Additional equipment required. Contact LumenFocus representative for details

Keystone SmartLoop Wireless Control System

The SmartLoop wireless lighting control system by Keystone is a Bluetooth mesh lighting control system that allows you to set up and manage your lighting ecosystem quickly and easily. It's powerful enough to run a space with multiple lighting zones, but simple enough to program in minutes with your smart-phone – perfect for warehouses, offices, schools, and auditoriums, whether new construction or retrofit.

- Wireless Bluetooth 2.4 GHz mesh network
- Supports up to 100 devices on a single region, with unlimited regions
- Independent per-fixture control: Occupancy, Daylight Harvesting, Task Tuning, Grouping, Scene Setting, Scheduling
- Commissioned via SmartLoop mobile app for iPhone and Android



ZSLFC2

- Low voltage individual fixture controller for SmartLoop system
- Integrated daylight and PIR motion sensors
- Up to 16' mounting height. 16' radius at 16' height.
- Works with 0-10V dim-to-off drivers with 12V aux. power

SmartLoop Accessories

- Bluetooth Wireless Wall Switch: KTSL-WS1-B-SG/G2
 - Battery Powered: 2x CR2032
 - 5 Button: Power Toggle, Dimming, Automatic Sensor/Preset Level Operation, Scene Activation



USB Time Keeper: **KTSL-TK1-USB**

- Relays time to system components after a power loss
- Powered by standard USB charging port
 Internal CR1220 battery backup



Microwave Occupancy Sensor (ZOSMD)

The Leviton OSM3D-DDW (or equivalent) detects motion through low density materials using high frequency electromagnetic waves. This means it can sit

discretely behind the RCL G2's frosted lens. The ZOSMD features automatic switching based on motion and ambient light level. ZOSMD option adds step-dimming functionality - standby dimming level 10% / 20% / 30% / 50%. Max mounting height for ZOSMD 40 feet.

Leviton Intellect Solo Dimming Sensor (ZSOL)

The RCL G2 can be equipped with an integrated Leviton Intellect Solo Sensor ("ZSOL" option). This is a 0-10V dimming Passive Infrared (PIR) occupancy and daylight harvesting sensor.

Other features:

- Partial-on
- Partial-off
- 8' to 10' mounting height
- IP20 rated
- Detection angle: 120 degrees
- IR remote available for programming sensor from the floor (sold separately)

• Can be used to comply with IECC, ASHRAE 90.1 and 2019 Title 24, Part 6 dimming, occupancy/vacancy sensing and daylight harvesting requirements.





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GreenMAX DRC Wireless Networked Control System

with Leviton Intellect Sensors & Controllers

The GreenMAX DRC Wireless Keypad Room Controllers are used as the brain of the system, managing the fixture integrated Leviton Intellect sensors & controllers. Wirelessly commission, configure, control, monitor and provision the GreenMAX DRC system using the GreenMAX DRC App and an Android or iOS smart device.

- Occupancy/Vacancy Sensing
- Multi-Level Lighting, Partial-On, Partial-Off
- Daylight Harvesting
- Task Tuning
- Scheduling
- Grouping
- Demand Response
- BMS Integration
- ZigBee 2.4 GHz Wireless Mesh Network
- Up to 75' between devices

* DRKDN-UxW room controller required for full functionality and programming of Intellect sensors & controllers



ZLxS

- PIR Occupancy Sensor
- Daylight Sensor
- 0-10V or DALI
- Up to 20' mounting height



Wireless fixture controller, no sensor0-10V or DALI

DRKDN-UxW Room Controllers



- 1-, 2-, 4-, and 8-button configurations
- Line voltage powered: 120-277V
- Max capacity: 60 devices
- Programmable: On/Off/Raise/Lower/ Toggle/Scene
- Use any Android or iOS device for configuration using the GreenMAX DRC App

Enlighted: All-in-one sensors, upgradeable systems

Enlighted

Connected

(ZENLC)

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Enlighted IoT (ZENLI)

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Enlighted's SMART Micro Sensor is an all-in-one unit: task tuning, high-end trimming, daylight harvesting, and occupancy/vacancy detection. Max installation height is 15 feet.

Enlighted Connected ("ZENLC") offers many features, including motion and switch groups, daylight harvesting, energy reporting, and more. The Enlighted IoT ("ZENLI") option allows the full implementation of Enlighted's services. Enlighted Connected can be fully upgraded to the next tier in the future. So if you start with ZENLC but want to add the functionality of the ZENLI option, you can.



Real-time data analytics

Enlighted's control units compile data in real-time, which can be viewed via the Energy Manager. The Energy Manager is part of the Enlighted Connected and Enlighted IoT configurations.

- Real-time measurements and verification of energy savings
- Space analytics data can be compiled into motion trails and heat maps
- Analyze traffic density and congestion in a space



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Enlighted Capabilities*

Motion and Switch Groups

Energy Reporting & Optimization

Where & Space Applications

Future App & API Ready

Environment Data & Lighting Controls API Building Management System Integration

Location & Occupancy APIs & Beaconing

Daylight Harvesting

Schedule Lighting

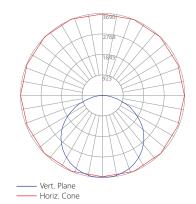
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Photometric Data:

RCL G2 4 SH UV 950	Luminanc	e Data (cd/s	q.m)	
Test No.: LLIA001735-017	Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
Luminaire Lumens: 11,092 lm	5	5		5
Luminaire Watts: 73.2W	45	26364	25480	25318
Efficacy: 151.6 LPW	55 65	25916 24491	24719 22492	24038 21673
Spacing Criterion (0-180): 1.30	75	20865	17646	16519
Spacing Criterion (90-270): 1.32	85	11718	7923	7122

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC		80				70				50			30	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25



Zonal Lumen Summary

Zonai Lamen	Summary	
Zone	Lumens	%Fixt
0-20	1356.53	12.20
0-30	2905.02	26.20
0-40	4809.58	43.40
0-60	8701.86	78.50
0-80	10912.54	98.40
0-90	11090.75	100.00
90-120	0.97	0.00
90-130	0.97	0.00
90-150	0.97	0.00
90-180	0.97	0.00
0-180	11091.72	100.00

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

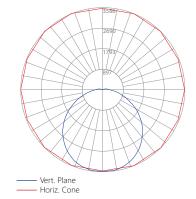
RCL G2 4 SH UV FR 950

Test No.: LLIA001735-019 Luminaire Lumens: 10,553 lm Luminaire Watts: 73.0W Efficacy: 144.6 LPW Spacing Criterion (0-180): 1.26 Spacing Criterion (90-270): 1.30

Luminanc Angle In Degrees	e Data (cd/s Average 0-Deg	q.m) Average 45-Deg	Average 90-Deg
45	22229	21400	21380
55	19375	19420	19637
65	15573	16982	17334
75	11302	14513	14676
85	6483	13505	12873

Coefficients Of Utilization - Zonal Cavity Method Effective Floor Cavity Reflectance 0.20

RC		80				70				50			30	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105
1	108	103	98	94	105	100	96	92	95	92	89	91	88	86
2	98	89	82	76	95	87	81	75	83	78	73	80	75	71
3	89	78	70	63	86	77	69	63	73	67	61	70	65	60
4	82	69	60	54	79	68	60	53	65	58	52	63	56	51
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39
7	64	51	42	36	62	50	41	35	48	40	35	46	40	35
8	60	46	38	32	58	45	37	32	44	36	31	42	36	31
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25



Zonal Lumen Summary %Fixt Zone Lumens 12.40 0-20 1311.98 0-30 2790.06 26.40 43.30 0-40 4568.43 75.90 0-60 8008.15 0-80 9982.62 94.60 0-90 10364.20 98.20 90-120 188.48 1.80 90-130 188.48 1.80 90-150 188.48 1.80 90-180 188.48 1.80 0-180 10552.68 100.00

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

