

Ovation Series Retrofit Kit

Prefix: KVN14

The Ovation Series LED Retrofit system has been developed to dramatically improve existing recessed troffer performance using Solid State Lighting (SSL) technologies. The Ovation retrofit series provides an attractive, energy efficient architectural look which has been specifically designed to upgrade existing fluorescent recessed troffer style fixtures. Comfortable, low glare, uniform lighting is attributed to this style of retrofit. Typical applications for this type of product are interior spaces where finished ceilings and walls exist. Applications Include:

- Commercial/Corporate Office Spaces
- Retail Spaces, Public Spaces and Airports
- Schools, Colleges and Universities
- Hospitals, Government Facilities and Military Bases



project:

fixture type:

catalog #:

quantity:

ORDERING GUIDE

L	-	KVN	14	-	W	N	-	UNV	-		-	104	-	AF	-	
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LIGHT SOURCE/CATEGORY	PREFIX/SERIES	SIZE	REFLECTOR MATERIAL	OPTICS (DISTRIBUTION)	LUMEN OUTPUT*	DRIVER VOLTAGE	DRIVER TYPE	INPUT WATTS*	LED CONFIG.	COLOR TEMP.*	LENS (DIFFUSER)	RETROFIT OPTIONS
L - Light Emitting Diode (LED)	KVN - Ovation Series Retrofit Kit	14 - 1x4	W - High Reflectance Matte White Powder Coat Finish (97% T.R.)	N - Normal	L15 - 1500 L20 - 2000 L30 - 3000 L40 - 4000	UNV - Universal Voltage (120v-277v) (60 Hz)	30 DM - 0-10v Dimming (Standard) 30 SD - Step Dimming	W12 - 12 W17 - 17 W26 - 26 W36 - 36	104 - 104	C35 - 3500 K C40 - 4000 K	AF - Frosted Linear Prism Acrylic Lens (Standard)	AR - Air Return Slots OS - Occupancy Sensor DS - Daylight Sensor OD - Occupancy/Daylight Sensor DT - "DainTree" Sensor EM - Emergency Battery [†]

RENOVA Products Listed on the DLC Qualified Products List (QPL)

L-KVN14-WN-L15-UNV-30DM-W12-104-C40-AF (120v only)

L-KVN14-WN-L30-UNV-30DM-W25-104-C40-AF

*When selecting LUMEN OUTPUT, INPUT WATTS, and COLOR TEMPERATURE, select all within one row.
 ** Color Temperature affects Input Watts. All Input Watts shown are based on 4000 K. Add approx. 1 watt to catalog number (Input Watts) for 3500 K configuration.
 †Standard "EM" option to be NiCd Battery @ 1000 Lumens @ 90 min. duration (standard). Consult factory for all available options.
 †† L-KVN14 Series Retrofit Kit has a lumen output range from 1500 through 5800 depending on driver/board configuration. Consult factory for correct catalog number on all custom configured lighting products.

PRIOR TO RETROFITTING THE EXISTING FLUORESCENT FIXTURE, PLEASE NOTE THE FOLLOWING:

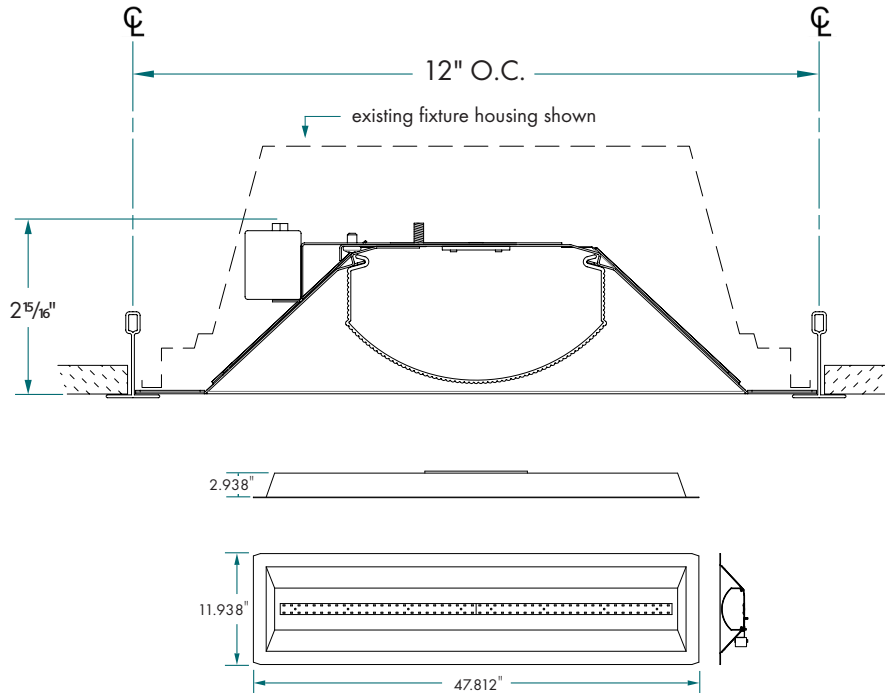
Fluorescent lamps contain small amounts of mercury. Such lamps are labeled "Contains Mercury" and / or with the symbol "Hg." Lamps that contain mercury must be disposed of in accordance with local requirements. Information regarding lamp recycling and disposal can be found at www.lamprecycle.org.

DLC Application Category #32
 "Retrofit Kits for 1x4 Luminaires for Ambient Lighting of Interior Commercial Spaces"

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org to confirm which versions are qualified.

KVN 1x4 Cross Section

Prefix: KVN14



CONSTRUCTION

- Precision die-formed from 22 gage cold rolled steel.
- Mechanically fastened / resistance welded.
- Consult factory for all options or any modifications needed.

FINISH

- High Reflectance Matte White polyester powder coat baked enamel for extreme durability and superior fixture efficiency. Total Reflectance = 97%.

LED's/OPTICS

- High performance LED boards manufactured specifically for interior lighting. LED boards feature the most current mid-power LEDs for maximum performance, efficiency and longevity.
- Standard color temperatures offered as standard are 3500K and 4000K. Consult factory for all other color temperature options. 80 CRI (Minimum). RoHS Compliant.
- Always consult factory for the latest developments and improvements concerning LEDs and Optics.

DRIVERS

- Electronic, constant current type. Universal voltage (120v-277v).
- 0-10v dimmable. 10-100% (Standard) / 0-100% (Optional).
- Step-Dim driver is optional.
- Suitable for dry and damp locations.
- UL Recognized Class 2, RoHS Compliant.

LENS (DIFFUSER)

- Custom extruded from special blend of 100% virgin acrylic & high light transmission/LED diffusing polymer. 30% DR additive used to increase resistance to breakage.
- Extruded linear ribs provide clean, aesthetic architectural look.

MOUNTING

- Retrofit kit is designed to be mounted into an existing prismatic or parabolic troffer installed into a standard grid (NEMA "G") or narrow grid (NEMA "NFG") ceiling T-grids. Consult factory for all other special mounting conditions.

ELECTRICAL

- Retrofit kits are UL/CUL Class II listed and labeled.
- LM80 performance for 50,000+ hours
- Bi-Level dimming option allows 50% power for compliance with common energy codes.
- Driver disconnect provided where required to comply with US & Canadian codes.

QUALITY CONTROL

- All retrofit kits are designed, fabricated, painted, assembled, tested, packaged and shipped from RENOVA's manufacturing facility in Mansfield, MA (USA).

WARRANTY

- 5-year limited warranty. Please refer to RENOVA's website at www.renova.com/sales/warranties for the latest warranty terms and conditions.

NOTES:

LED Drivers have adjustable output capability. A wide range of input watts/lumen output can be adjusted up or down on all models to suit a particular application. Always consult factory for the latest information.

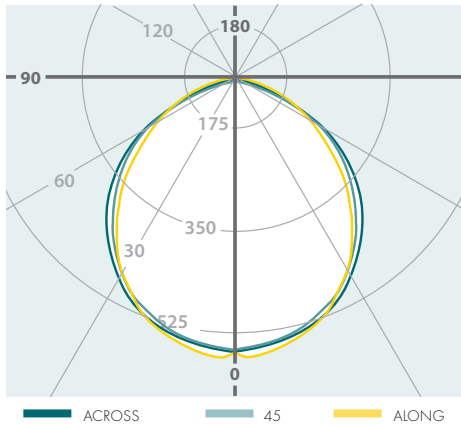
Photometric data, IES files and all other information is available on request.

RENOVA products are constantly being improved; therefore the information shown is subject to change without notice. Always consult your lighting representative or RENOVA Lighting Systems, Inc. for the latest information.



Catalog #: L-KVN14-WN-L15-UNV-30DM-W12-104-C40-AF
 Photometric Test Report #: 10551935-803983
 Delivered Lumens: 1554
 Efficacy (Lumens/Watt): 119.5
 Power: 12.97w @ 120 VAC
 Power Factor: 0.987
 Current THD: 5.49%
 CRI: 82.6
 CCT: 3892 K
 LED Life: 50,000+ hrs

Candela Distribution Polar Plot



Spacing/Mounting Height: 1.3
 SC (Along): 1.2 SC (Across): 1.3

Cone of Light Tabulation

Ht.	Fc	Dia. (Ft)
4'	36.7	4.97'
6'	16.3	7.46'
8'	9.19	9.94'
10'	5.88	12.4'
12'	4.08	14.9'
14'	3.00	17.4'
16'	2.30	19.9'

Coefficients of Utilizations (%)
Effective Floor Cavity Reflectance 20 Per (pfc=0.20)

pcc	80			70			50		
	70	50	30	70	50	30	50	30	
RCR	0	119	119	119	116	116	116	111	111
	1	110	106	102	107	104	100	99	96
	2	101	94	88	99	92	87	89	84
	3	93	83	76	91	82	75	79	73
	4	86	75	67	84	74	67	71	65
	5	79	67	59	77	66	58	64	57
	6	73	61	52	71	60	52	58	51
	7	67	54	46	66	54	46	52	45
	8	62	49	41	61	49	41	47	40
	9	58	45	37	57	44	37	43	36
	10	54	41	33	53	40	33	39	32

Luminance Summary CD./SQ.M.

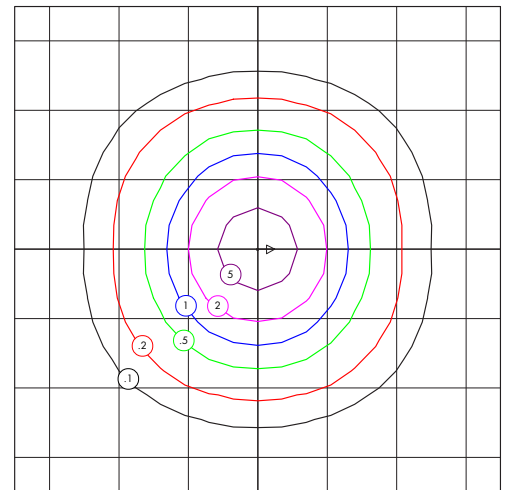
Angle	Along	45.0	Across
45	1813	1996	2087
55	1566	1861	1975
65	1315	1692	1550
75	1068	1323	956
85	723	824	687

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	455	29.28
0-40	739	47.58
0-60	1273	81.89
0-90	1554	100.00
40-90	815	52.42
60-90	281	18.11
90-180	0	0
0-180	1554	100.00

Horizontal Footcandles

Mounting Height = 8'-0" A.F.F.
 Maximum Calculated Value = 9.19 Fc



Grid Lines in Units of Mounting Height

█ 5fc █ 2fc █ 1fc █ .5fc █ .2fc █ .1fc

LED lighting facts
A Program of the U.S. DOE

Light Output (Lumens)	1554
Watts	12.97
Lumens per Watt (Efficacy)	119.5

Color Accuracy
Color Rendering Index (CRI) **82**

Light Color
Correlated Color Temperature (CCT) **3892 (Bright White)**

2700K 3000K 4500K 6500K

All results are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the Label Reference Guide.

Registration Number: -DB3E12 (1/22/2015)
Model Number: L-KVN14-WN-L15-UNV-30DM-W12-104-C40-AF
Type: Retrofit Kit - TrofferGrid Ceiling

The U.S. Department of Energy's LED Lighting Facts® Program has verified product performance based on industry-standardized testing.

For details, see: RENOVA
Model # L-KVN14-WN-L15-UNV-30DM-W12-104-C40-AF
www.lightingfacts.com/products

RENOVA CATALOG: L-KVN14-WN-L15-UNV-30DM-W12-104-C40-AF

LED lighting facts
A Program of the U.S. DOE

Light Output (Lumens)	3139
Watts	24.17
Lumens per Watt (Efficacy)	129.9

Color Accuracy
Color Rendering Index (CRI) **85**

Light Color
Correlated Color Temperature (CCT) **4218 (Bright White)**

2700K 3000K 4500K 6500K

Warranty** **Yes**

All results, except LED Lumen Maintenance, are according to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting. The U.S. Department of Energy (DOE) verifies product test data and results.

** See www.lightingfacts.com/products for details.

Registration Number: -30CV23 (8/14/2015)
Model Number: L-KVN14-WN-L30-UNV-30DM-W25-104-C40-AF
Type: Retrofit Kit - TrofferGrid Ceiling

The U.S. Department of Energy's LED Lighting Facts® Program has verified product performance based on industry-standardized testing.

For details, see: RENOVA Lighting Systems, Inc.
Model # L-KVN14-WN-L30-UNV-30DM-W25-104-C40-AF
www.lightingfacts.com/products

RENOVA CATALOG: L-KVN14-WN-L30-UNV-30DM-W25-104-C40-AF