OVATION
by RENOVA Lighting

Ovation Series Retrofit Kit

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

Prefix: KVN14

LC Application Category #14 "Integrated Retrofit Kits for 1x4 Luminaires"

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.

Ovation Series 1x4 Retrofit

Optional Wireless Sensor Shown Installed

project:

fixture type:

catalog #:

quantity:

ORDERING GUIDE

KVN	14	N							

PREFIX/ SERIES	SIZE	OPTICS (DISTRIBUTION)	LUMEN OUTPUT*	DRIVER VOLTAGE	DRIVER TYPE	COLOR TEMP.	CRI	LENS (DIFFUSER)	RETROFIT OPTIONS
KVN - Ovation Series Retrofit Kit	**14**- 1x4	**N** - Normal	**L015** - 1500 (11.7W) **L020** - 2000 (15.1W) **L030** - 3000 (22.2W) **L040** - 4000 (29.2W) **L050** - 5000 (39.6W) **L060** - 6000 (48.3W) **Lxxx** - Custom (Specify)	**UNV** - Universal Voltage (120v - 277v) (50/60 Hz)	**DM** - 0-10v Low Voltage Dimming (10% - 100%) (Standard) **DM1** - 0-10v Low Voltage* Dimming (1% - 100%) **LH1** - Lutron Hi-Lume* Dimming (1% - 100%) **LV** - Line Voltage* Dimming (120v only) **DA1** - Dali-2 and D4i cert * Dimming (1% - 100%) *Special Order Only	**C27** - 2700 K* **C30** - 3000 K* **C35** - 3500 K **C40** - 4000 K **C50** - 5000 K* *Special Order Only	**Blan**k -80 CRI **9** - 90 CRI* **S** - Sunlike 95 CRI* *Special Order Only	**AF** - Frosted Linear Prism Acrylic Lens (Standard)	**AR** - Air Return Slots **MPCxy** - Metal Pan Ceiling†† **HDCxyz** - Hard Ceiling †† **SNS21x** - Philips Wireless Sensor (EasySense)††† **SVP** - Silvair PIR Wireless Sensor††† **SVM** - Silvair Microwave Sensor†††† **LAR** - Lutron Athena Wireless control RF Only††††† **LAP** - Lutron Athena Wireless PIR Sensor††† **LVR** - Lutron Vive Wireless control RF Only††††† **LVP** - Lutron Vive Wireless PIR Sensor††† **WLI** - Wave Linx Integral PIR Sensor††† **Axx** - Auxiliary output 12 or 24V **EM** - Emergency Battery Pack †

† Standard "EM" option to be NiCd Battery @ 5 Watts constant power @ 90 min. duration (standard). Consult factory for all available options.

†† See page 2/4 for more information on dimensional requirements.

††† PIR sensors provide: Occupancy/Vacancy, Daylight Harvesting, Task Tuning & Advanced Grouping control options. (max 12 ft mounting height, highbay options available upon request)

†††† Microwave sensor provides: Occupancy/Vacancy, Task Tuning, Energy Monitoring & Advanced Grouping control options. (Sensor not visible from exterior of fixture, max 12 ft mounting height)

††††† RF sensors provide: Wireless fixture control only. (Wireless controls must be located within 60 ft (18 m) from each other in the line of sight, or 30 ft (9 m) through walls)

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.
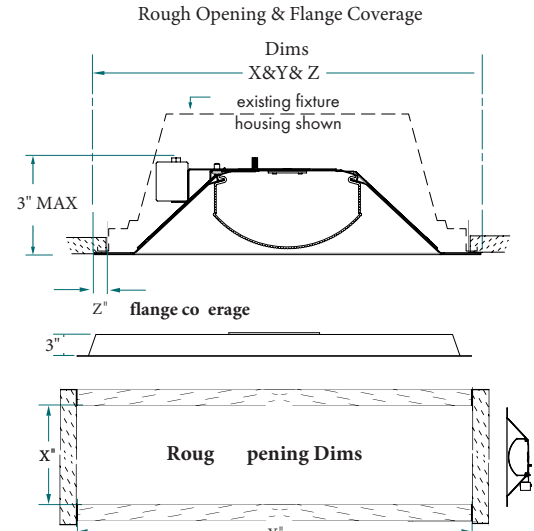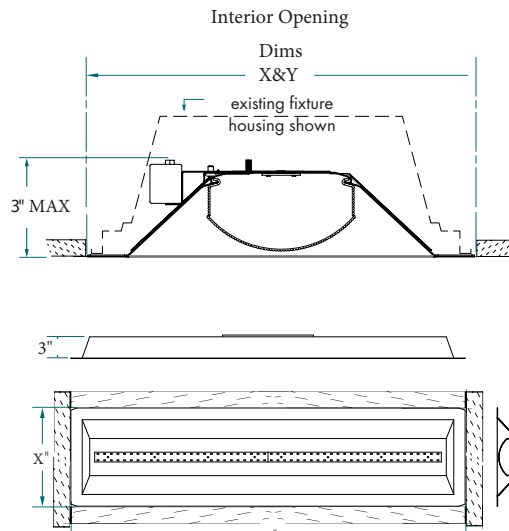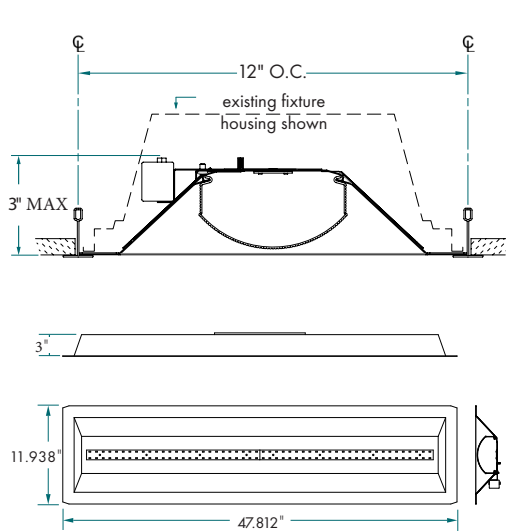
KVN 1x4 Cross Sections

Prefix: KVN14

T-GRID Mount (Standard)

12" O.C.

existing fixture housing shown

3" MAX

3"

11.938"

47.812"

Metal Pan Mount (MPC)

Interior Opening
Dims
X&Y

existing fixture housing shown

3" MAX

3"

X"

Y"

X"   Y"

Ordering Code: MPC ☐ ☐

Hard Ceiling Mount (HDC)

Rough Opening & Flange Coverage
Dims
X&Y& Z

existing fixture housing shown

3" MAX

Z"   flange coverage

3"

X"

Rough Opening Dims

Y"

X"   Y"   Z"

Ordering Code: HDC ☐ ☐ ☐

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 LEDs for maximum performance, efficiency and longevity.
- Standard color temperatures offered are 3500K and 4000K. Consult factory for all other color temperature options. 80 CRI (Minimum) standard, 90 CRI and Sunlike 95 CRI Options available.
- 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) 1-100% (Optional).
- Line Voltage Dimming Drivers are optional.
- Auxiliary output (Optional) used to power various sensors / wireless modules. (12 or 24Vdc options specify when ordering)
- Suitable for dry and damp locations.
- UL Recognized Class P, RoHS Compliant.

LENS (DIFFUSER)
- Extruded from 100% clear, virgin acrylic.
- 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
- 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 Warick, RI (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.
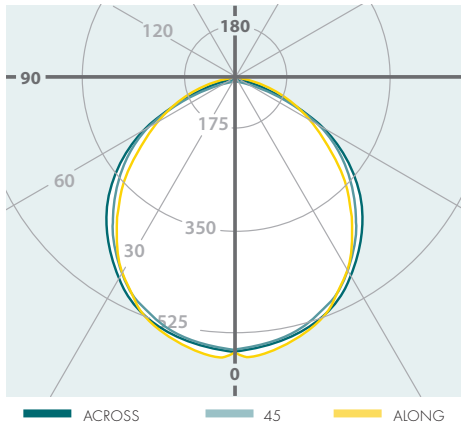
Photometric data, IES files and all other information is available on request.

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.
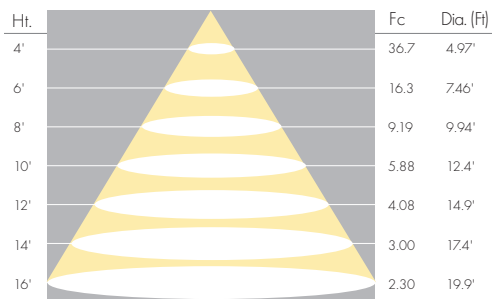
OVATION
by RENOVA Lighting

Catalog #: KVN14-N-L015-UNV-DM–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

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

pcc		80			70			50	
pw		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

Candela Distribution Polar Plot

ACROSS   45   **ALONG**

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

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
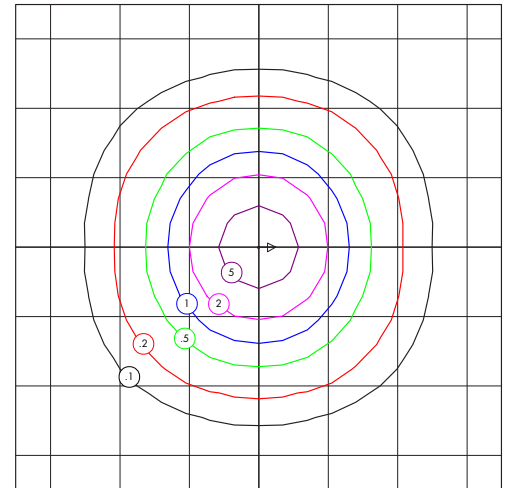
Grid Lines in Units of Mounting Height

■ 5 fc   ■ 2 fc   ■ 1 fc   ■ .5 fc   ■ .2 fc   ■ .1 fc

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'

OVATION
by RENOVA Lighting

KVN Series LED Luminaires Listed on the DLC Qualified Products List (QPL)

RENOVA Catalog Number	Delivered Lumens	Input Watts	Lumens per Watt	DLC – QPL Classification
K 14 L 1 to L D C A LA K AR	1500-6560	aries y utput	137.18	Standard
K 14 L 1 to L D C A LA K AR	1500-6560	aries y utput	139.04	Standard
KVN14-N-L015-UNV-DM-C35-AF-xx	1518	11.70	129.74	Standard
KVN14-N-L015-UNV-DM-C40-AF-xx	1544	11.63	132.76	Standard
KVN14-N-L020-UNV-DM-C35-AF-xx	1990	15.21	130.83	Standard
KVN14-N-L020-UNV-DM-C40-AF-xx	2025	15.10	134.11	Standard
KVN14-N-L030-UNV-DM-C35-AF-xx	3021	22.17	136.27	Standard
KVN14-N-L030-UNV-DM-C40-AF-xx	3104	22.17	140.05	Standard
KVN14-N-L040-UNV-DM-C35-AF-xx	3942	29.19	135.05	Standard
KVN14-N-L040-UNV-DM-C40-AF-xx	4051	29.19	138.80	Standard
KVN14-N-L050-UNV-DM-C35-AF-xx	5181	39.64	130.70	Standard
KVN14-N-L050-UNV-DM-C40-AF-xx	5324	39.64	134.33	Standard
KVN14-N-L060-UNV-DM-C35-AF-xx	5972	48.34	123.54	Standard
KVN14-N-L060-UNV-DM-C40-AF-xx	6137	48.34	126.97	Standard