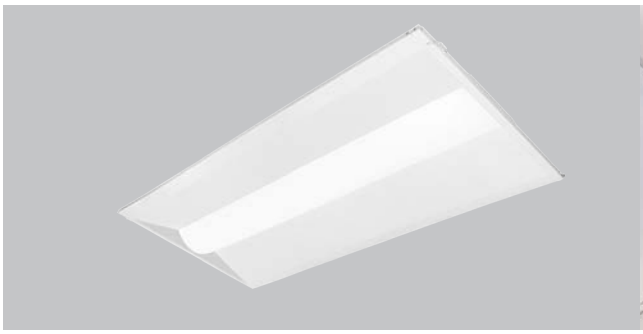
ORACLE LIGHTING
By Elite Lighting

24-OVHP-RTK-LED

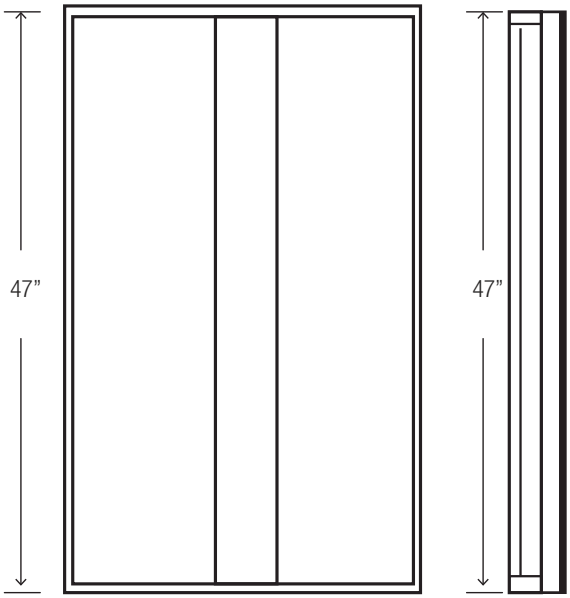
2'x4'

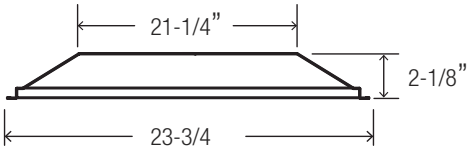
2'x4' Architectural LED Recessed Troffer Retrofit Kit Lumen/CCT Select



MULTI-LUMEN SELECTOR

EASY 3 COLORS SELECCTOR
3500K-4000K-5000K





NOMINAL LUMENS	DELIVERED LUMENS	WATTAGE
5000	5271	37 W
4000	4148	29 W
3000	3245	22 W

Based on 4000K, 85+ CRI. Actual wattage may vary +/- 5%

FEATURES

The OVHP-RTK is a DLC Premium-qualified architectural-grade troffer retrofit kit that makes it easy to upgrade fluorescent troffers to LED. One-piece construction allows the fixture to be accessed from the bottom without having to remove the lens. Easily adjust output and color temperature in the field with multi-lumen and multi-CCT selector switches. Brighter, volumetric illumination makes this troffer retrofit kit ideal for offices, hallways, conference rooms, warehouses, gymnasiums, retail, hospitality, commercial, and healthcare applications.

LUMENS	3000/4000/5000
CCT & DYNAMIC PLATFORMS	35K/40K/50K
CRI	85+
COLOR QUALITY	3 Step MacAdam Ellipse
SIZE	1'x4', 2'x2', 2'x4'
MOUNTING	Recessed
DIMMING & CONTROL	0-10V Flicker Free 1% Dimming Standard (DIM10)
EMERGENCY	10W - Up to 1000L 20W - Up to 2000L
LIFETIME	L70 at 167,000 Hours
PHOTOMETRIC TESTS	In Accordance with IES LM79-08, LM80 and TM-30, TM-21

DLC PREMIUM · c UL us LISTED · PROUDLY ASSEMBLED in AMERICA · QUICKSHIP CONSULT FACTORY · 5 YEARS LIMITED WARRANTY

Due to the changes of constant improvement in LED technology, all details are subject to change without notice. Consult factory for up to date information.

MAINTENANCE
The center acrylic diffuser is secured tightly to the body with screws, so the lens will not detach from the fixture when undergoing cleaning, in multi-storied spaces, or in high-vibration areas. The center acrylic diffuser can be removed, allowing easy access to LED boards.

OPTICAL SYSTEM
LED light engines are attached directly to the housing and keep LED engines cool. An advanced thermal management system allows the light output of the LED engines to be maintained at 80% of initial lumens at 60,000 hours of operation. Frosted acrylic lens gathers light scattered by the LED chips and delivers highly efficient volumetric lighting, eliminating unwanted shadows and surface glare.

CONSTRUCTION
The LED light engine is secured to the body of the luminaire, with the body acting as a heat sink. Housing is constructed of heavy-duty 20-gauge cold-rolled steel for maximum strength and long-life, post-painted with a 93% reflective white coat to protect against rusting, corrosion, and for safety of use when handling the fixture. All corners are rounded to remove sharp edges for safe handling.

FINISH
Post-painted with a 93% reflective white coat to improve luminaire efficacy, with all body components seamlessly interlocked for added structural strength.

MULTI-LUMEN, MULTI-CCT SELECTOR SWITCHES
Lumen and CCT selector switches are clearly visible and identifiable on the back of the fixture for easy adjustability. No need to remove the lens to access the two switches. One switch controls CCT and another switch operates lumens, allowing the contractor to easily mix and match intensity and color temperatures in the field.

MOUNTING
Compatible with surface mounting and for fixtures with recessed with recessed housings of 3-1/8" depth or greater.

Fast, Simple Installation

Can be installed into existing housings with 3-1/8" depth or greater.

1. Open the cover of the existing fixture. Remove all florescent tubes and internal components.
2. Remove the cover. Disconnect ballast.
3. Slide the 2 provided hanger bars into each side of the existing housing.
4. Slide in one end of the fixture onto a hanger bar. Secure with a self-tapping screw.
5. Secure aircraft cable to frame of the housing. Connect your wiring.
6. Flip fixture up and secure in place by pushing built-in tabs inward.

OPTIONS
Flange kits and surface mount kits are available as additional accessories. A factory-installed 10 or 20W 90-min. emergency battery is also available. Consult factory for details. Option for Made in America compliance.

DRIVER ELECTRICAL INFORMATION
Powered by high-quality constant-current power LED drivers which are rated for 50 to 60Hz at 120/277V input. Available in 347V., produce less than 20% THD, and have a power factor of .90 to 1.00.

DIMMING & DRIVER INFORMATION
DIM10 - Flicker Free 1% Dimming Standard (DIM10) 0-10V dimming on either MVOLT 120, 277V.

WARRANTY
Five-year warranty for parts and components. (Labor not included)

LISTINGS
cULus
DLC Premium

Example: **24-OVHP-RTK-LED-3000L/4000L/5000L-DIM10-MVOLT-35K/40K/50K-85**

24	OVHP-RTK	LED							
FIXTURE SIZE	SERIES	TYPE	LUMENS	DIMMING	VOLTAGE	CCT	CRI	EMERGENCY	OTHER OPTIONS
24 - 2' X4'	**OVHP-RTK** - LED Retrofit Kit	**LED**	**3000L/4000L/5000L**	**DIM10** - 0-10V Dimming	**MVOLT**	**35K/40K/50K**	**85**	**O-EMG-LED-10W** **O-EMG-LED-20W**	**FBF** - Internal Fast Blow Fuse **SBF** - Internal Slow Blow Fuse **USA** - Made in America Compliance

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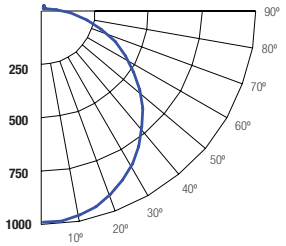
24-OVHP-RTK-LED-3000L-4000L-5000L-DIM10-MVOLT-35K-40K-50K-85(3000L)

TEST NO.: EL12261988

INPUT WATTS: **22** LUMENS: **3245** CRI: **85** EFFICACY: **148** CCT: **40K** SPACING CRITERIA: **1.42**

Candle Power Distribution (Candelas)



Cone of Light			
2	346	5.0	7.4
4	91.9	9.6	14.3
6	40.0	14.6	21.6
8	22.3	19.6	29.0
10	14.5	24.2	35.9
12	10.0	29.2	43.3
(FT.)Distance to Plane	(FC.) Initial Footcandle at Nadir	(FT.) Beam Vert. Spread	(FT.) Beam Horiz. Spread

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	366.22	11.30	11.30
0-30	781.63	24.10	24.10
0-40	1291.79	39.80	39.80
0-60	2346.26	72.40	72.30
0-80	3079.14	95.00	94.90
0-90	3198.17	98.60	98.60

Luminance (Average candela/M^2)

Angle in Degrees	Average 0º	Average 45º	Average 90º
45	2514	2645	2796
55	2438	2661	2927
65	2366	2733	3187
75	2182	2997	3815
85	1943	3909	4506

Lumens Per Zone

Zone	Lumens
0-10	94.64
10-20	271.58
20-30	415.41
30-40	510.17
40-50	541.41
50-60	513.06
60-70	430.62
70-80	302.25
80-90	119.03

Candela Tabulation

	0
0	1000.419
5	997.180
15	960.460
25	887.760
35	785.780
45	661.110
55	520.190
65	371.990
75	210.060
85	62.990
90	14.820

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80%				70%				50%			30%			10%			0%
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
ROOM CAVITY RATIO																		
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	99
1	107	102	97	93	104	99	95	91	95	91	88	91	88	85	87	84	82	80
2	97	88	80	74	94	86	79	73	82	76	71	78	74	69	75	71	68	65
3	88	77	68	61	85	75	67	60	72	65	59	69	63	58	66	61	56	54
4	80	67	58	51	78	66	57	51	63	56	50	61	54	49	58	53	48	46
5	74	60	51	44	71	59	50	43	56	49	43	54	47	42	52	46	41	39
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	47	41	36	34
7	63	49	40	33	61	48	39	33	46	38	33	45	38	32	43	37	32	30
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	39	33	29	27
9	54	41	32	27	53	40	32	26	39	31	26	38	31	26	36	30	26	24
10	51	38	29	24	50	37	29	24	36	29	24	35	28	24	34	28	23	22

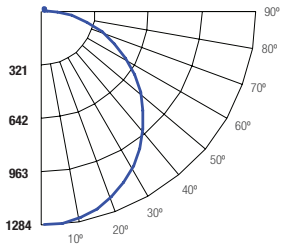
RC - Ceiling Cavity Reflectance RW - Wall Reflectance

24-OVHP-RTK-LED-3000L-4000L-5000L-DIM10-MVOLT-35K-40K-50K-85(4000L)

TEST NO.: EL12261989

INPUT WATTS: **28.7** LUMENS: **4148** CRI: **85** EFFICACY: **145** CCT: **40K** SPACING CRITERIA: **1.42**

Candle Power Distribution (Candelas)



Cone of Light			
2	444	5.0	7.4
4	118	9.6	14.3
6	51.3	14.6	21.6
8	28.6	19.5	29.0
10	18.6	24.2	35.9
12	12.8	29.1	43.3
(FT.)Distance to Plane	(FC.) Initial Footcandle at Nadir	(FT.) Beam Vert. Spread	(FT.) Beam Horiz. Spread

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	469.73	11.30	11.30
0-30	1000.72	24.10	24.10
0-40	1649.44	39.80	39.80
0-60	2998.31	72.30	72.30
0-80	3935.46	95.00	94.90
0-90	4087.77	98.60	98.50

Luminance (Average candela/M^2)

Angle in Degrees	Average 0º	Average 45º	Average 90º
45	3219	3394	3589
55	3119	3419	3757
65	2982	3511	4088
75	2783	3847	4823
85	2464	5039	5754

Lumens Per Zone

Zone	Lumens
0-10	121.41
10-20	348.33
20-30	530.99
30-40	648.72
40-50	691.19
50-60	657.68
60-70	551.04
70-80	386.11
80-90	152.32

Candela Tabulation

	0
0	1283.555
5	1279.430
15	1232.340
25	1138.190
35	1006.850
45	846.540
55	665.440
65	468.700
75	267.910
85	79.890
90	18.380

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80%				70%				50%			30%			10%			0%
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
ROOM CAVITY RATIO																		
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	99
1	107	102	97	93	104	99	95	91	95	91	88	91	88	85	87	84	82	80
2	97	88	80	74	94	86	79	73	82	76	71	78	74	69	75	71	68	65
3	88	77	68	61	85	75	67	60	72	65	59	69	63	58	66	61	56	54
4	80	67	58	51	78	66	57	51	63	56	50	61	54	49	58	53	48	46
5	74	60	51	44	71	59	50	43	56	49	43	54	47	42	52	46	41	39
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	47	41	36	34
7	63	49	40	33	61	48	39	33	46	38	33	45	38	32	43	37	32	30
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	39	33	29	27
9	55	41	32	27	53	40	32	26	39	31	26	38	31	26	36	30	26	24
10	51	38	29	24	50	37	29	24	36	29	24	35	28	24	34	28	23	22

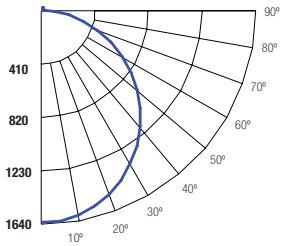
RC - Ceiling Cavity Reflectance RW - Wall Reflectance

24-OVHP-RTK-LED-3000L-4000L-5000L-DIM10-MVOLT-35K-40K-50K-85(5000L)

TEST NO.: EL12261990

INPUT WATTS: **37.7** LUMENS: **5271** CRI: **85** EFFICACY: **140** CCT: **40K** SPACING CRITERIA: **1.40**

Candle Power Distribution (Candelas)



Cone of Light			
2	568	4.9	7.4
4	151	9.5	14.3
6	65.6	14.5	21.6
8	36.5	19.4	29.0
10	23.8	24.0	35.9
12	16.4	28.9	43.3
(FT.)Distance to Plane	(FC.) Initial Footcandle at Nadir	(FT.) Beam Vert. Spread	(FT.) Beam Horiz. Spread

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	599.73	11.40	11.40
0-30	1277.22	24.20	24.20
0-40	2104.31	40.00	39.90
0-60	3813.9	72.40	72.40
0-80	5002.52	95.00	94.90
0-90	5194.24	98.60	98.50

Luminance (Average candela/M^2)

Angle in Degrees	Average 0º	Average 45º	Average 90º
45	4084	4312	4583
55	3946	4336	4794
65	3752	4434	5217
75	3460	4778	6156
85	2939	6148	7319

Lumens Per Zone

Zone	Lumens
0-10	155.10
10-20	444.64
20-30	677.49
30-40	827.08
40-50	876.94
50-60	832.65
60-70	699.80
70-80	488.82
80-90	191.72

Candela Tabulation

	0
0	1640.378
5	1635.190
15	1571.710
25	1449.550
35	1279.710
45	1074.040
55	841.840
65	589.800
75	333.080
85	95.270
90	19.490

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RC	80%				70%				50%			30%			10%			0%
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
ROOM CAVITY RATIO																		
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	99
1	107	102	97	93	104	99	95	91	95	91	88	91	88	85	87	84	82	80
2	97	88	80	74	94	86	79	73	82	76	71	78	74	69	75	71	68	65
3	88	77	68	61	85	75	67	60	72	65	59	69	63	58	66	61	57	54
4	80	68	58	51	78	66	57	51	63	56	50	61	54	49	58	53	48	46
5	74	60	51	44	71	59	50	43	57	49	43	54	48	42	52	46	42	39
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	47	41	36	34
7	63	49	40	33	61	48	39	33	46	38	33	45	38	32	43	37	32	30
8	58	44	36	30	57	44	35	30	42	35	29	41	34	29	40	33	29	27
9	55	41	32	27	53	40	32	27	39	31	26	38	31	26	36	30	26	24
10	51	38	29	24	50	37	29	24	36	29	24	35	28	24	34	28	23	22

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

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