# COOPER LIGHTING SOLUTIONS - METALUX \*

# DESCRIPTION

The Ovation Series is a complete family of recessed direct/indirect luminaires featuring pleasant modern architectural styling, computerdesigned optics and the latest energy efficient lamp and ballast technology. The luminaire combines a matte white indirect reflector and a frosted white acrylic lamp shield. All components are located above the ceiling plane for a clean architectural appearance in the finished space. 2RDI-IC is designed for installations when the housing will be in direct contact with insulation. Carefully balanced design elements combine to provide an efficient and exciting alternative to traditional general lighting. Ovation is an excellent choice for a wide variety of commercial applications.

# SPECIFICATION FEATURES

# Construction

Nominal 6" deep housing is die formed of code gauge, prime cold rolled steel. Heavy gauge end plates are securely attached with screws for strength and rigidity and the elimination of gaps. Four auxiliary fixture end suspension points are provided. KOs for continuous row wiring. Large access plate for supply connection.

# Electrical\*

Ballasts are CBM/ETL Class "P" and are positively secured. T8 models use rotor-lock lampholders for positive lamp retention. UL/CUL listed for Type IC Recessed Luminaire (Rated for direct contact with insulation) Suitable for damp locations.

# Ballast Access

Ballast can be removed from below without tools or from above using the unique ballast mounting/access plate.

# Finish

Durable cold rolled steel with multistage, iron phosphate pretreatment and white enamel finish to ensure maximum bonding and rust inhibition.

Catalog #	Туре
Project	
Comments	Date
Prepared by	

# Reflectors

Indirect reflector has high reflectance baked matte white enamel finish for luminous uniformity. Positively retained direct lamp shield constructed of frosted white acrylic with linear refractors.

# Controls

Fifth Light ballast options are offered for both 0-10V continuous dimming and DALI applications. Combine with energysaving prod-ucts like occupancy sensors, day-lighting controls, and lighting relay panels from Cooper Lighting Solutions (www.cooperlighting.com) to maximize energy savings.

> 6' [152mm]



# 2RDI-IC

132 232 332

# 1, 2 OR 3 T8 LAMPS

2' X 4' Recessed Direct/Indirect Center-Mount Frosted Acrylic Basket For Use in Insulated Ceilings





### ENERGY DATA

Input Watts:

EB Ballast & STD Lamps 132 (32), 232 (61), 332 (91)

HB Ballast & STD Lamps 132 (30), 232 (53), 332 (80) Luminaire Efficacy Rating

I FR = FI 82 Catalog Number: 2RDI-IC--232FLS Yearly Cost of 1000 lumens,

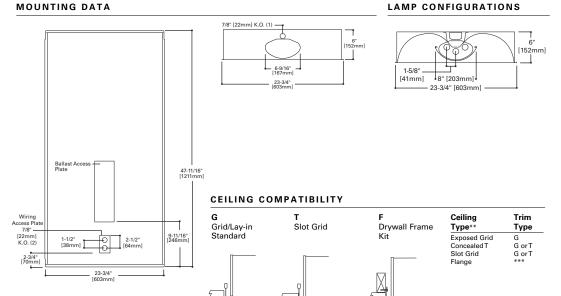
3000 hrs at .08 KWH = \$2.92

\*Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.

\*\*Consult Pre Sales Technical Support. \*\*\*See Drywall Frame Kit Accessory

#### LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS





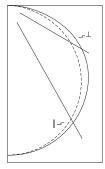
23-3/4 [603 mm]

# **COOPER LIGHTING SOLUTIONS**

# LAMP CONFIGURATIONS



# PHOTOMETRICS



# 2RDI-IC-232FLS Electronic Ballast

(2) FO32/35K 32W Lamps 2800 Lumens

Spacing criterion: (II) 1.3 x mounting height,  $(\perp)$  1.3 x mounting height Efficiency 82.0%

Test Report: 2RDI-IC-232FLS.IES LER = FL82

Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = \$2.92

**Coefficients of Utilization** 

Zonal Lumen Summary

%Lamp

20.0

33.3

61.2

%Fixture

24.4

40.5

74.5

Lumens

1123

1863

3425

4597

4597

Zone

0-30

0-40

0-60

0-90

0-180

Effe	ctiv	e flo	or cav	vity ref	lecta	ince		20	%								
	80	%			7	0%			50%	5		30%	D		10%		0%
70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
98	98	98	98	95	95	95	95	91	91	91	87	87	87	84	84	84	82
88	84	80	77	86	82	79	76	79	76	73	76	73	71	73	71	69	67
80	73	67	62	78	71	66	61	68	63	59	65	61	58	63	60	57	55
73	63	56	51	70	62	55	50	60	54	49	57	52	48	55	51	47	46
66	56	48	42	64	55	48	42	53	46	41	51	45	41	49	44	40	38
61	50	42	36	59	49	41	36	47	41	36	45	40	35	44	39	35	33
56	45	37	31	54	44	37	31	42	36	31	41	35	31	39	34	30	29
52	40	33	28	50	40	33	27	38	32	27	37	31	27	36	31	27	25
48	37	29	24	47	36	29	24	35	29	24	34	28	24	33	28	24	22
45	34	27	22	44	33	26	22	32	26	22	31	26	22	30	25	22	20
42	31	24	20	41	31	24	20	30	24	20	29	23	20	28	23	19	18
	70 98 88 80 73 66 61 56 52 48 45	80   70 50   98 98   84 84   80 73   63 66   61 50   55 40   48 37   48 37   48 34	80%   70 50 30   98 98 98 98   88 84 80   80 73 67   73 63 56   66 50 42   61 50 42   65 45 37   62 40 33   48 37 29   445 34 27	80% 30 10   98 98 98 98 98   98 94 80 77   80 73 67 62   73 63 56 51   66 56 48 42   61 50 42 36   56 45 37 31   52 40 33 28   448 37 29 24   45 34 27 22	80%   70 50 30 10 70   98 98 98 98 95   88 84 80 77 86   80 73 67 62 78   73 63 56 51 70   66 56 48 42 64   61 50 42 36 59   56 45 37 31 54   52 40 33 28 50   48 37 29 24 47   45 34 27 22 44	80% 70   70 50 30 10 70 50   98 98 98 98 95 95   88 84 80 77 86 82   80 73 67 62 78 71   73 63 56 51 70 62   66 56 48 42 64 55   61 50 42 36 59 49   52 40 33 28 50 40   48 37 29 24 47 36   44 53 34 27 22 44 33	70 50 30 10 70 50 30   98 98 98 98 95 95 95   88 84 80 77 86 82 79   80 73 67 62 78 71 66   73 63 56 51 70 62 55   66 56 48 42 64 55 48   61 50 42 36 59 41 37   56 45 37 31 54 44 37   52 40 33 28 50 40 33   48 37 29 24 47 36 29   445 34 27 22 44 33 26	80% 70%   70 50 30 10 70 50 30 10   98 98 98 98 95 95 95 95   88 84 80 77 86 82 79 76   80 73 67 62 78 71 66 61   73 63 56 51 70 62 55 50   66 56 48 42 64 54 64 73 11 56 44 37 31 54 44 37 31 54 44 37 31 54 44 37 31	80% 70 50 30 10 70 50 30 10 50   98 98 98 95 95 95 95 95 91   88 84 80 77 86 82 79 76 79   80 73 67 62 78 71 66 61 68   73 63 56 51 70 62 55 50 60   66 56 48 42 64 55 48 42 53   61 50 42 36 59 49 41 36 47   56 45 37 31 54 44 33 27 38   48 37 29 24 47 36 29 24 35   45 34 27 22 44 33 26 22 32	80% 70% 50%   70 50 30 10 70 50 30 10 50 30   98 98 98 95 95 95 95 95 91 91   88 84 80 77 86 82 79 76 79 76   80 73 67 62 78 71 66 61 68 63   73 63 56 51 70 62 55 50 60 54   66 56 48 42 64 55 48 42 53 46   61 50 42 36 59 49 41 36 47 41   56 45 37 31 54 44 37 31 42 36   52 40 33 28 50 40 33 27 38 32	80% 70% 50%   70 50 30 10 70 50 30 10 50 30 10   98 98 98 98 95 95 95 95 91 91 91   98 98 98 97 86 82 79 76 73 73 67 62 78 61 68 63 59   73 63 56 51 70 62 55 50 60 54 49   66 56 48 42 64 55 48 42 53 46 51   66 54 42 36 55 44 37 31 42 36 31 34   66 54 47 36 44 37 31 42 36 31 32 27   65 45 37 31 54 43	80% 70% 50%   70 50 30 10 70 50 30 10 5	80% 70% 50% 50% 30% 50% 30% 50% 30% 50% 30% 50% 30% 50% 30% 50% 30% 50% 30% 50% 30% 50% 30% 50% 30% 50% 30% 50% 30% 50% <td>80% 70% 50% 50% 30% 10 50% 30% 10   98 98 98 95 95 95 95 91 91 91 87 87 87   98 98 98 95 95 95 91 91 91 87 87 87   88 84 80 77 86 82 79 76 79 76 73 76 <td< td=""><td>80% 70% 50% 30%   70 50 30 10 50 50 60 61 63 50 63 63</td><td>80% 70% 50% 30% 10%   70 50 30 10 70% 50% 30% 10% 50% 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%</td><td>80% 70% 50% 30% 10% 10%   70 50 30 10 70 50 30 10 50 <t< td=""></t<></td></td<></td>	80% 70% 50% 50% 30% 10 50% 30% 10   98 98 98 95 95 95 95 91 91 91 87 87 87   98 98 98 95 95 95 91 91 91 87 87 87   88 84 80 77 86 82 79 76 79 76 73 76 <td< td=""><td>80% 70% 50% 30%   70 50 30 10 50 50 60 61 63 50 63 63</td><td>80% 70% 50% 30% 10%   70 50 30 10 70% 50% 30% 10% 50% 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%</td><td>80% 70% 50% 30% 10% 10%   70 50 30 10 70 50 30 10 50 <t< td=""></t<></td></td<>	80% 70% 50% 30%   70 50 30 10 50 50 60 61 63 50 63 63	80% 70% 50% 30% 10%   70 50 30 10 70% 50% 30% 10% 50% 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%	80% 70% 50% 30% 10% 10%   70 50 30 10 70 50 30 10 50 <t< td=""></t<>

# **Typical VCP Percentages**

	Heigh	t Along	Height Across			
Room Size (Ft.)	8.5′	10.0′	8.5′	10.0′		
20 x 20	60	68	57	65		
30 x 30	53	58	50	55		
30 x 60	48	51	44	47		
60 x 30	56	60	54	58		
60 x 60	49	51	46	48		

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Angle	Along II	45°	Across ⊥
0	1419	1419	1419
5	1411	1415	1417
10	1396	1401	1405
15	1369	1376	1383
20	1330	1342	1353
25	1281	1298	1313
30	1221	1244	1265
35	1152	1182	1209
40	1074	1110	1146
45	987	1034	1076
50	892	948	998
55	788	856	909
60	678	756	806
65	560	648	691
70	436	529	558
75	311	402	415
80	192	264	271
85	88	131	135
90	7	11	11



# ORDERING INFORMATION

#### SAMPLE NUMBER: 2RDI-IC-232FLS-120V-EB81-U Number Lamp Shield Width Options Ballast Type of Lamps FLS=Frosted Lamp 2= 2' Width RIF1=Radio Shield Blank=Standard Magnetic Biax Ballast 1=1 Lamp Interference 2=2 Lamp EB8\_=T8 Electronic Start. Total Harmonic Distortion < 10% Suppressor Series 3=3 Lamp Voltage<sup>(1)</sup> **RDI**=Ovation Series EB8\_/PLUS=T8 Electronic Start. 120V=120 Volt Packaging (Recessed Total Harmonic Distortion < 10%. High Ballast Factor > 1.15. 277V=277 Volt 347V=347 Volt Wattage Direct/Indirect) U=Unit Pack PALC=Palletized Fixtures 32=32WT8 (48") ER8\_=T8 Electronic Program Rapid Start. UNV=Universal Voltage in Carton Total Harmonic Distortion < 10% Type IC-IC Rated 120-277 High Performance T8 Ballasts HB8\_=T8 Electronic Instant Start. Options Total Harmonic Distortion < 10%. GL=Single Element Fuse Trim Type Standard Ballast Factor .86 - .88 GM=Double Element Fuse Blank=Grid/Lay-in HB8\_L=T8 Electronic Instant Start. Lamps=Lamps installed (Standard) Total Harmonic Distortion < 10% Flex=Flex installed Low Ballast Factor .77 - .82 EL=Emergency Installed Lamp Position HB8\_N=T8 Electronic Instant Start. ACCESSORIES Blank=Center Mounted Total Harmonic Distortion < 10%. Lamps (Standard) Normal Ballast Factor 1.0 EQ-CLIP-U=T-BAR Safety HB8\_H=T8 Electronic Instant Start. Earthquake Clips<sup>(2)</sup> **DF-24-W**=Drywall Frame Kit Total Harmonic Distortion < 10%. High Ballast Factor 1.15 – 1.20 **NOTES:** <sup>(1)</sup> Products also available in non-US voltages and frequencies for international markets. <sup>(2)</sup> An EO Grid Clip is recommended for all 9/16" ceiling systems. Four required per fixture. <sup>(9)</sup> For a complete listing of Fithlight Technology products and other solutions from Cooper Lighting Solutions, visit www.cooperlighting.com.<sup>(4)</sup> 0-10V ballast do not include DAL feature. Please select DAL ballast for use with Fith Light system. <sup>15</sup>Specification grade 0-10V dimming ballast are NEMA premium and CEE listed. They are compatible with low mercury and energy saving lamps. <sup>(6)</sup>Specification Grade 0-10V ballast not officed in 3 or 4-lamp versions. <sup>(7)</sup> Voltage must be specified for Standard 0-10V 32W 3 and 4-lamp ballast. 4-lamp ballast versions must be 277V. HR8 T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Standard Ballast Factor .86 - .88 HR8\_DIM=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Step Dimming. Ballast Factor .88 HR8\_L=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Low Ballast Factor .71 – .79 HR8\_H=T8 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. High Ballast Factor 1.15 – 1.20 For complete product data, reference the Fluorescent Specification binder. Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Solutions Representative for availability and ordering information. 0-10V Dimming Ballasts (4) 5LTV8\_=T8 0-10V Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 0.87 <sup>(7)</sup> 5LTVS8\_=T8 0-10V Spec Grade Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 0.87 <sup>(6), (6)</sup> Number of Ballasts 1-4" Ballast 2-2 Ballasts 3-3 Ballasts Fifth Light DALI Ballasts (3) 5LT8\_=T8 DALI Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 1.0

# SHIPPING INFORMATION

Catalog No.	Wt.
2RDI-IC-132FLS	30 lbs.
2RDI-IC-232FLS	30 lbs.
2RDI-IC-332FLS	30 lbs.

