COOPER LIGHTING SOLUTIONS - METALUX®

energy solutions

DESCRIPTION

The Ovation Series is a complete family of recessed direct/indirect luminaires featuring pleasant modern architectural styling, computer-designed optics and the latest energy efficient lamp and ballast technology. The luminaire combines a matte white indirect reflector and a perforated direct lamp shield to provide optimum brightness control. All components are located above the ceiling plane for a clean architectural appearance in the finished space. The 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.

Catalog #		Type
Project		
Comments		Date
Prepared by		

2RDI-IC
128T8
132
228T8
232
328T8
332
T1BX,T2BX

T8 OR BIAXIAL LAMPS

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

Ovation™

powered by fifthlight technology

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.

Ballast Access

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

Electrical*

Ballasts are CBM/ETL Class "P" and are positively secured. Biax models use 2G11 base lampholders with double edge wiping action pressure lock contacts and vertically oriented lamp support clips. 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.

Finish

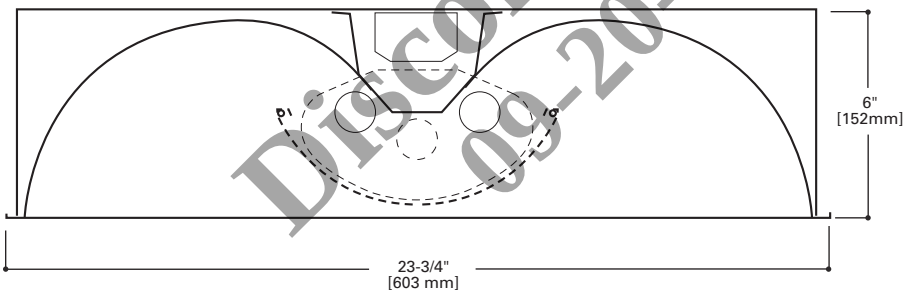
Durable cold rolled steel with multi-stage, iron phosphate pretreatment and white enamel finish to ensure maximum bonding and rust inhibition.

Reflectors

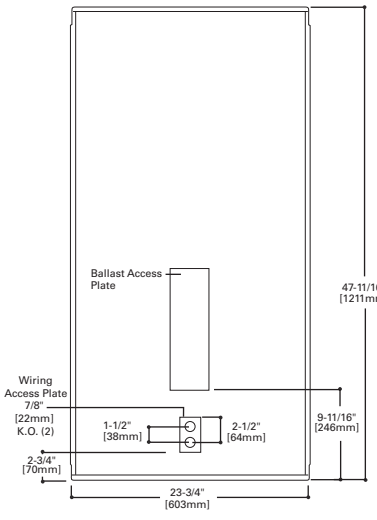
Indirect reflector has high reflectance baked matte white enamel finish for luminous uniformity. Positively retained direct lamp shield is constructed of heavy gauge perforated steel with high reflectance painted after fabrication finish and milky white overlay diffuser for visual comfort. All reflectors are precision formed in a computer-controlled operation.

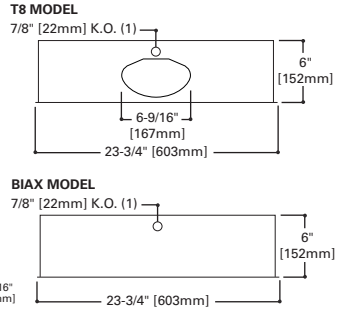
Controls

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

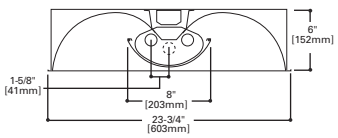


MOUNTING DATA

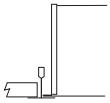
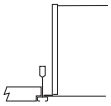




LAMP CONFIGURATIONS



CEILING COMPATIBILITY

G Grid/Lay-in Standard	T Slot Grid	F Drywall Frame Kit
		

Ceiling Type**	Trim Type
Exposed Grid	G
Concealed T	G or T
Slot Grid	G or T
Flange	***

ENERGY DATA

Input Watts:

EB Ballast & STD Lamps
128T8 (28), 228T8 (49), 328T8 (98)
132 (32), 232 (61), 332 (91),
T1BX40 (70), T2BX40 (140),
T1BX50 (106), T1 BX55 (110)

LER = FL65

Catalog Number: 2RDI-IC-232RP

Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = $3.69

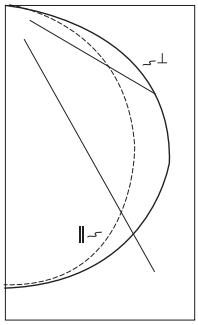
*Reference the lamp/ballast data in the Technical Section for specific lamp/ballast requirements.
**Consult Pre Sales Technical Support.

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

LINEAR DISCONNECT
Safe and convenient means of disconnecting power.

ADF110363

PHOTOMETRICS



2RDI-IC-232RP
Electronic Ballast

F032/830/XP3 Lamps
3100 Lumens

Spacing criterion: (II) 1.2 x mounting height, (⊥) 1.4 x mounting height

Efficiency 70.7 %

Test Report: 2RDI-IC-232RP.IES

LER = FL61

Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = $3.93

Coefficients of Utilization

Effective floor cavity reflectance																				
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		
RCR																				
0	84	84	84	84	82	82	82	82	79	79	79	75	75	75	72	72	72	71		
1	77	73	70	67	75	71	68	66	68	66	64	66	64	62	63	61	60	58		
2	69	63	58	54	67	62	57	53	59	55	52	57	54	51	55	52	50	48		
3	63	55	49	44	61	54	48	44	52	47	43	50	46	42	48	45	42	40		
4	57	49	42	37	56	48	42	37	46	41	36	44	40	36	43	39	35	34		
5	53	43	37	32	51	42	36	32	41	35	31	39	35	31	38	34	31	29		
6	48	39	32	28	47	38	32	27	37	31	27	36	31	27	34	30	27	25		
7	45	35	29	24	44	34	28	24	33	28	24	32	27	24	31	27	24	22		
8	42	32	26	21	41	31	25	21	30	25	21	30	25	21	29	24	21	20		
9	39	29	23	19	38	29	23	19	28	23	19	27	22	19	26	22	19	18		
10	36	27	21	17	36	27	21	17	26	21	17	25	20	17	24	20	17	16		

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1088.56	17.6	24.8
0-40	1810.67	29.2	41.3
0-60	3339.06	53.9	76.2
0-90	4383.85	70.7	100.0
0-180	4383.85	70.7	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/sm	Average 45-Deg cd/sm	Average 90-Deg cd/sm
0-30	1801	2068	2279
0-40	1693	2130	2393
0-60	1519	2142	2380
0-90	1284	1893	2125
0-180	953	1397	1545

Candela

Angle	Along II	45°	Across
0	1372	1372	1372
5	1367	1370	1374
10	1348	1357	1365
15	1316	1334	1351
20	1273	1302	1332
25	1216	1261	1304
30	1148	1212	1271
35	1071	1156	1231
40	984	1092	1182
45	889	1021	1125
50	785	941	1053
55	678	853	958
60	564	753	846
65	448	632	702
70	335	498	539
75	232	342	384
80	139	205	228
85	58	85	94
90	0	0	0

ORDERING INFORMATION

SAMPLE NUMBER: 2RDI-IC-232RP-120V-EB51-U

Rating
Blank=Standard
NY=New York City Rated
ATW-SW4=Chicago Rated

Width
2=2' Width

Series
RDI=Ovation Series (Recessed Direct/Indirect)

Trim Type
Leave Blank=Grid/Lay-in (Standard)

Type
IC=IC Rated

Lamp Position
Leave Blank=Center Mounted Lamps (Standard)

Number of Lamps
1=1 Lamp
2=2 Lamp
3=3 Lamp
T1=2' x 4' Fixture with One Biax Lamp at Each End [1]
T2=2' x 4' Fixture with Two Biax Lamps at Each End

Wattage
28T8=28W T8 (48")
32=32W T8 (48")
BX40=40W Biax (24")
BX50=50W Biax (24") [1]
BX55=55W Biax (24") [1]

Lamp Shield
RP=Round Perforated White Steel

Voltage [2]
120V=120 Volt
277V=277 Volt
347V=347 Volt
UNV=Universal Voltage 120-277

Options
GL=Single Element Fuse
GM=Double Element Fuse
Lamps=Lamps Installed
Flex=Flex Installed
EL=Emergency Installed

Ballast Type
Blank=Standard Magnetic Biax Ballast
EB8__=T8 Electronic Start.
Total Harmonic Distortion < 10%
EB8__/PLUS=T8 Electronic Start.
Total Harmonic Distortion < 10%.
High Ballast Factor > 1.15.
ER8__=T8 Electronic Program Rapid Start.
Total Harmonic Distortion < 10%
EB5__=T5 Biax Electronic Instant Start.
Total Harmonic Distortion < 20% [4]
TEB5__=T5 Biax Electronic Instant Start.
Total Harmonic Distortion < 10% [4]
ER5__=T5 Biax Electronic Program Rapid Start.
Total Harmonic Distortion < 10%
High Performance T8 Ballasts
HB8__=T8 Electronic Instant Start.
Total Harmonic Distortion < 10%.
Standard Ballast Factor .86 – .88
HB8__L=T8 Electronic Instant Start.
Total Harmonic Distortion < 10%.
Low Ballast Factor .77 – .82
HB8__N=T8 Electronic Instant Start.
Total Harmonic Distortion < 10%.
Normal Ballast Factor 1.0
HB8__H=T8 Electronic Instant Start.
Total Harmonic Distortion < 10%.
High Ballast Factor 1.15 – 1.20
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
0-10V Dimming Ballasts [6]
5LTV8__=T8 0-10V Program Rapid Start.
Total Harmonic Distortion < 10%.
Ballast Factor 0.87 [10], [11], [12]
5LTVS8__=T8 0-10V Spec Grade Program Rapid Start.
Total Harmonic Distortion < 10%.
Ballast Factor 0.87 [7], [8], [9]
Fifth Light DALI Ballasts [5]
5LT8__=T8 DALI Program Rapid Start.
Total Harmonic Distortion < 10%.
Ballast Factor 1.0
5LT5B__=T5 Biax DALI Program Rapid Start.
Total Harmonic Distortion < 10%.
Ballast Factor 1.0

Number of Ballasts
1=1 Ballast
2=2 Ballasts
3=3 Ballasts

Options
RLS=Rotor-Lock Socket (T8 Lamps Only)
RIF1=Radio Interference Suppressor
REP=Riveted Endplates
LSC=Lamp Shield Cable
ST=Semi-Specular Tannenbaum

Packaging
U=Unit Pack
PALC=Palletized Fixtures in Carton

ACCESSORIES

EQ=T-BAR Safety Earthquake Clips [3]
DF-24-W=Drywall Frame Kit

NOTES: [1] Biax 50 or 55W only available in tandem 1 lamp option. [2] Products also available in non-US voltages and frequencies for international markets. [3] An EQ Grid Clip is recommended for all 9/16" ceiling systems. Four required per fixture. [4] Not available in UNV voltages. Must specify voltage. [5] For a complete listing of Fifth light Technology products and other solutions from Cooper Lighting Solutions, visit www.cooperlighting.com [6] 0-10V ballast do not include DALI feature. Please select DALI ballast for use with Fifth Light system. [7] Specification grade 0-10V dimming ballast are NEMA premium and CEE listed. They are compatible with low mercury and energy saving lamps. [8] Specification Grade 0-10V ballast not available for Biax lamps. [9] Specification Grade 0-10V ballast not offered in 3 or 4-lamp versions. [10] Standard 0-10V ballast not available for Biax lamps. [11] Standard 0-10V ballast not available for 28W T8 lamps. [12] Voltage must be specified for Standard 0-10V 32W 3 and 4-lamp ballast. 4-lamp ballast versions must be 277V.

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.

SHIPPING INFORMATION

Catalog No.	Wt.
2RDI-IC-132RP	30 lbs.
2RDI-IC-128T8RP	30 lbs.
2RDI-IC-232RP	30 lbs.
2RDI-IC-228T8RP	30 lbs.
2RDI-IC-332RP	30 lbs.
2RDI-IC-328T8RP	30 lbs.
2RDI-IC-T1BX40	31 lbs.
2RDI-IC-T2BX40	31 lbs.