### COOPER LIGHTING - 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 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.

#### SPECIFICATION FEATURES

#### Construction

#### Electrical\*

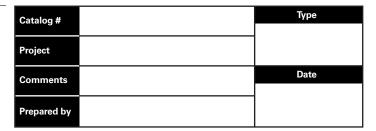
Nominal 6" deep housing is die formed of code gauge, prime cold rolled steel. Heavy gauge end plates are securely attached with screws for strength and rigidity and the elimination of gaps. Four auxiliary fixture end suspension points are provided. KOs for continuous row wiring. Large access plate for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

#### Ballast Access

Ballast can be removed from below without tools or from above using the unique ballast mounting/access plate. 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 multistage, 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 Controls (www.coopercontrol.com) to maximize energy savings.



### 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.



# powered by fifthlight

#### 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.

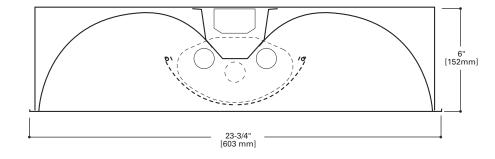
LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO LOCAL, STATE OR FEDERAL LAWS

## LINEAR DISCONNECT

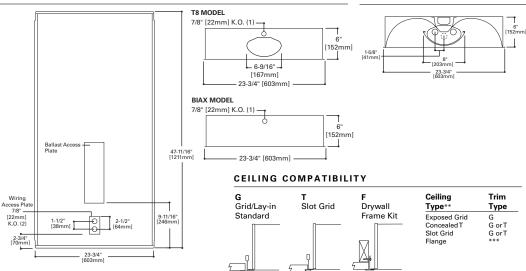
disconnecting power.

ADF110363





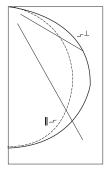
#### MOUNTING DATA



LAMP CONFIGURATIONS

#### PHOTOMETRICS

Across



#### 2RDI-IC-232RP **Electronic Ballast**

F032/830/XP3 Lamps 3100 Lumens

Spacing criterion: (II) 1.2 x mounting height,  $(\perp)$  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**

Zonal Lumen Summary

	Effe	ctiv	e flo	or cav	ity ref	lecta	ince		20	1%								
rc		80	%			70	0%			50%	5		30%	5		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

#### Luminance Data

Zone	Lumens	%Lamp	%Fixture	Angle in Deg	Average 0-Deg cd/sm	
0-30	1088.56	17.6	24.8	0-30	1801	
0-40	1810.67	29.2	41.3	0-40	1693	
0-60	3339.06	53.9	76.2	0-60	1519	
0-90	4383.85	70.7	100.0	0-90	1284	
0-180	4383.85	70.7	100.0	0-180	953	

-	,	,		7101000
-	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

0

0

0

Along II

45°

Candela

Angle

90

Average 90-Deg cd/sm

2279

2393

2380

2125

1545

Average 45-Deg cd/sm

2068

2130

2142

1893

1397

# **COOPER** Lighting

Options

RLS=Rotor-Lock Socket (T8 Lamps Only) RIF1=Radio Interference

Suppressor REP=Riveted Endplates

LSC=Lamp Shield Cable

**ST**=Semi-Specular Tannenbaum

Palletized Fixtures in

EQ=T-BAR Safety Earthquake Clips<sup>(3)</sup> DF-24-W=Drywall Frame Kit

Packaging

Carton

U=Unit Pack PALC=

ACCESSORIES

#### ORDERING INFORMATION

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

Rating Blank= Standard NY=NewYork Citv Rated	Number of Lamps 1=1 Lamp 2=2 Lamp 3=3 Lamp	Lamp Shield RP=Round Perforated White Steel				
ATW-SW4 Chicago Rated Width 2=2' Width	T1=2' x 4' Fixture with One Biax Lamp at Each End <sup>(10)</sup> T2=2' x 4' Fixture	Voltage <sup>(2)</sup> 120V=120 Volt 277V=277 Volt 347V=347 Volt UNV=Universal Voltage 120-277				
Series RDI=Ovation Series (Recessed Direct/Indirect)	with Two Biax Lamps at Each End	Options GL=Single Element Fuse GM=Double Element Fuse Lamps=Lamps Installed				
<b>Trim Type Leave Blank</b> =Grid/Lay-in (Standard)	Wattage 28T8=28WT8 (48") 32=32WT8 (48")	<b>28T8</b> =28WT8 (48") <b>32</b> =32WT8 (48")				
Type IC=IC Rated		BX40=40W Biax (24") BX50=50W Biax (24") <sup>(1)</sup> BX55=55W Biax (24") <sup>(1)</sup>				

Lamps (Standard)

For complete product data, reference the Fluorescent Specification binder. Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Representative for availability and ordering information.

#### Ballast Type Blank=Standard Magnetic Biax Ballast EB8\_=T8 Electronic Start. Total Harmonic Distortion < 10% \_/PLUS=T8 Electronic Start. Total Harmonic Distortion < 10%. FRS 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 10 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 <sup>(10), (11), (12)</sup> 5LTVS8\_=T8 0-10V Spec Grade Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 0.87 <sup>(7), (8), (9)</sup> 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

#### 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.



NOTES: <sup>(1)</sup> Biax 50 or 55W only available in tandem 1 lamp option. <sup>(2)</sup>Products also available in non-US voltages and frequencies for international markets. <sup>(3)</sup>An EQ Grid Clip is recommended for all 9/16" ceiling systems. Four required per fixture. <sup>(4)</sup> Not available in UNV voltages. Must specify voltage. <sup>(5)</sup> For a complete listing of FithIhght Technology products and other solutions from Cooper Controls, visit www.coopercontrol.com. <sup>(6)</sup> 0-10V ballast do not include DALI feature. Please select DALI ballast for use with Fifth Light system. <sup>(7)</sup> Specification grade 0-10V dimming ballast are NEMA premium and CEE listed. They are compatible with low mercury and energy saving Jamps. <sup>(8)</sup> Specification Grade 0-10V ballast not offered in 3 or 4-lamp versions. <sup>(10)</sup> Standard 0-10V ballast not available for 28WT8 lamps. <sup>(11)</sup> Standard 0-10V ballast not available for Standard 0-10V 32W 3 and 4-lamp ballast versions must be 277V.