

# COOPER LIGHTING SOLUTIONS - METALUX®

## 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. 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		

## 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. 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. 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.

### Reflectors

Indirect reflector has high reflectance baked matte white enamel finish for luminous uniformity. A 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 energy saving products like occupancy sensors, daylighting controls, and lighting relay panels from Cooper Lighting Solutions ([www.cooperlighting.com](http://www.cooperlighting.com)) to maximize energy savings.



## 2RDI

1BX40, 2BX40  
3BX40  
117, 217, 317

### BIAXIAL OR T8 LAMPS

2' X 2' Recessed  
Direct/Indirect  
Center-Mount

*Ovation™*



## ENERGY DATA

Input Watts:

### EB Ballast & STD Lamps

1BX40 (43), 2BX40 (67), 3BX40 (102)  
1BX50 (54), 2BX50 (106), 3BX50 (160)  
1BX55 (59), 2BX55 (117), 3BX55 (176)  
117 (19), 217 (34), 317 (54)

### ES Ballast & STD Lamps

117 (23), 217 (45), 317 (68)

### STD Ballast & STD Lamps

1BX40 (46), 2BX40 (82), 3BX40 (128)

Luminaire Efficacy Rating

LER = FL65

Catalog Number: 2RDI-2BX40RP

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.

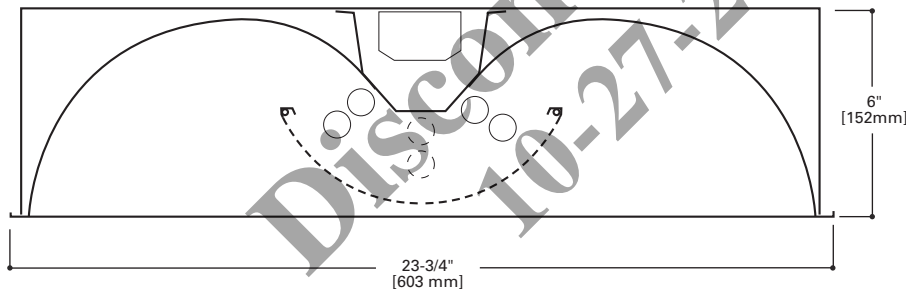
\*\*Consult Pre Sales Technical Support.

\*\*\*See Drywall Frame Kit Accessory

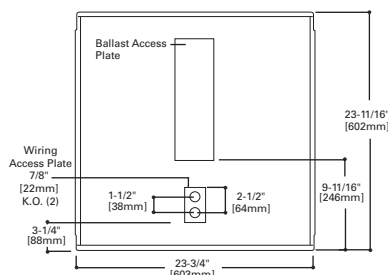
LAMPS CONTAIN MERCURY. DISPOSE ACCORDING TO  
LOCAL, STATE OR FEDERAL LAWS

**LINEAR DISCONNECT**

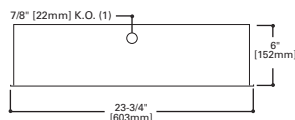
Safe and convenient means of disconnecting power.



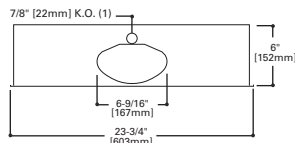
## MOUNTING DATA



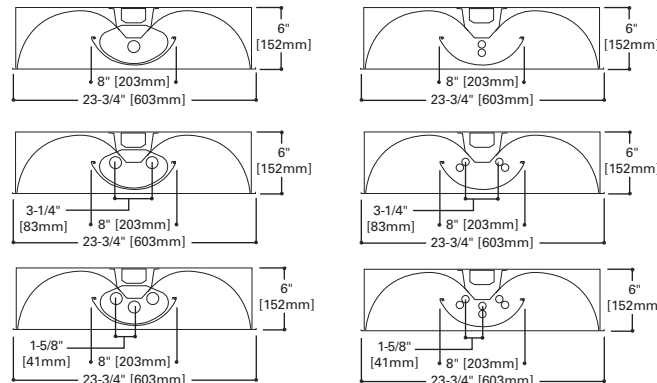
### BIAX MODEL



### T8 MODEL



## LAMP CONFIGURATIONS



## CEILING COMPATIBILITY

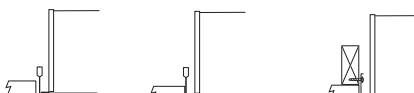
G  
Grid/Lay-in  
Standard

T  
Slot Grid

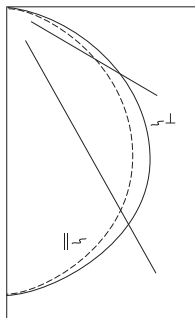
F  
Drywall Frame  
Kit

Ceiling  
Type\*\*  
Exposed Grid  
Concealed T  
Slot Grid  
Flange

Trim  
Type  
G  
G or T  
G or T  
\*\*\*



## PHOTOMETRICS



**2RDI-2BX40RP**  
Electronic Ballast  
F40BX/35K/RS Lamps  
3150 Lumens

Spacing criterion:  
(||) 1.2 x mounting  
height, (⊥) 1.3 x  
mounting height

Efficiency 78.2%

Test Report:  
2RDI2BX40RP.IES

LER = FL65

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

## Coefficients of Utilization

Effective floor cavity reflectance												
20%												
rc	80%				70%				50%			
rw	70	50	30	10	70	50	30	10	50	30	10	0
RCR												
0	93	93	93	93	91	91	91	91	87	87	87	78
1	86	82	79	76	84	81	78	75	77	75	73	67
2	79	73	68	63	77	71	66	63	68	64	61	57
3	72	64	58	53	70	63	57	53	61	56	52	49
4	66	57	51	46	64	56	50	45	54	49	45	42
5	60	50	44	38	59	50	43	38	48	42	38	35
6	55	45	38	33	54	44	38	33	43	37	33	31
7	51	40	34	29	50	40	33	29	39	33	29	27
8	47	36	30	25	46	36	29	25	35	29	25	23
9	43	32	26	21	42	32	26	21	31	25	21	20
10	40	29	23	19	39	29	23	19	28	23	19	17

## Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1339	21.2	27.2
0-40	2205	35.0	44.8
0-60	3932	62.4	79.8
0-90	4926	78.2	100.0
0-180	4926	78.2	100.0

## Typical VCP Percentages

Room Size (Ft.)	Height Along		Height Across	
	8.5'	10.0'	8.5'	10.0'
20 x 20	48	54	41	48
30 x 30	44	46	38	40
30 x 60	43	43	35	35
60 x 30	47	48	43	45
60 x 60	44	44	38	38

## Candela

Angle	Along	45°	Across ⊥
0	1701	1701	1701
5	1701	1698	1700
10	1677	1682	1689
15	1634	1648	1665
20	1574	1599	1631
25	1497	1539	1587
30	1406	1468	1533
35	1301	1386	1465
40	1182	1292	1381
45	1052	1186	1282
50	912	1067	1167
55	762	933	1029
60	610	792	867
65	465	637	683
70	334	466	520
75	217	305	362
80	119	176	205
85	48	66	72
90	0	0	0

## ORDERING INFORMATION

SAMPLE NUMBER: 2RDI-2BX40RP-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**  
**Blank**=Grid/Lay-in  
 (Standard)

**Lamp Position**  
**Blank**=Center  
 Mounted Lamps  
 (standard)

**Number  
 of Lamps**  
 1=1 Lamp  
 2=2 Lamp  
 3=3 Lamp

**Wattage**  
 17=17W T8 (24")  
**BX40**=40W Biax (24")  
**BX50**=50W Biax (24")<sup>(1)</sup>  
**BX55**=55W Biax (24")<sup>(1)</sup>

**Lamp Shield**  
**X**=Solid Matte White  
**RP**=Round Perforated  
 White Steel

**Voltage**<sup>(2)</sup>  
**120V**=120 Volt  
**277V**=277 Volt  
**347V**=347 Volt  
**UNV**=Universal  
 Voltage 120-277

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

**Ballast Type**

**Blank**=Standard Magnetic Ballast (40W Biax only)

**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%<sup>(3)</sup>

**TEB5**=T5 Biax Electronic Instant Start  
 Total Harmonic Distortion < 10%<sup>(3)</sup>

**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**<sup>(6)</sup>

**5LTV8**=T8 0-10V Program Rapid Start.  
 Total Harmonic Distortion < 10%.

Ballast Factor 0.87<sup>(10), (11)</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**<sup>(5)</sup>

**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**

**RIF1**=Radio  
 Interference  
 Suppressor  
**REP**=Riveted  
 Endplates, for  
 use in New York City.  
**ST**=Semi-Specular  
 Tannenbaum Main  
 Reflector  
**LSC**=Lamp Shield  
 Cable  
**RLS**=Rotor-Lock  
 Socket  
 (T8 Lamps Only)

**Packaging**

**U**=Unit Pack  
**PALC**=Job Pack,  
 in carton

## ACCESSORIES

**EQ-CLIP-U**=T-BAR Safety Earthquake Clips<sup>(4)</sup>  
**DF-22-W**=Drywall Frame Kit

**NOTES:** <sup>(1)</sup> 2' x 2' and 2' x 4' Center Lamp Shield models only. <sup>(2)</sup> Products also available in non-US voltages and frequencies for international markets. <sup>(3)</sup> Not available in UNV voltages. Must specify voltage. <sup>(4)</sup> An EQ Grid Clip is recommended for all 9/16" ceiling systems. Four required per fixture. <sup>(5)</sup> For a complete listing of Fifthlight Technology products and other solutions from Cooper Lighting Solutions, visit [www.cooperlighting.com](http://www.cooperlighting.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 lamps. <sup>(8)</sup> Specification Grade 0-10V ballast not available for Biax lamps. <sup>(9)</sup> Specification Grade 0-10V ballast not offered in 3 or 4-lamp versions. <sup>(10)</sup> Standard 0-10V ballast not available for Biax lamps. <sup>(11)</sup> Standard 0-10V ballast not offered in 3 or 4-lamp versions.

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-1BX40RP	19 lbs.
2RDI-2BX40RP	19 lbs.
2RDI-3BX40RP	19 lbs.
2RDI-117RP	19.5 lbs.
2RDI-217RP	19.5 lbs.
2RDI-317RP	19.5 lbs.