# DESCRIPTION COOPER LIGHTING SOLUTIONS - METALUX 📆

energy solutions

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. Carefully balanced design elements combine to provide an efficient and exciting, high performance alternative to traditional general lighting. Ovation is an excellent choice for a wide variety of commercial applications.

| Catalog #   | Туре |
|-------------|------|
| 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 Class "P" and are positively secured. Rotor-lock lampholders ensure postive lamp retention. UL/CUL listed. Suitable for damp locations.

### **Ballast Access**

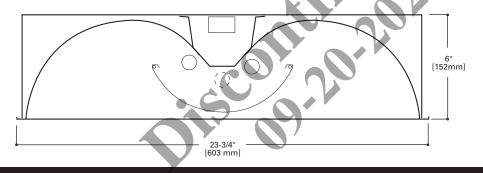
Ballast can be removed from below without tools.

### Finish

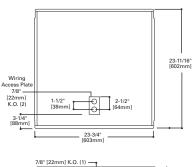
Durable cold rolled steel with multistage, iron phosphate pretreatment and white enamel finish to ensure maximum bonding and rust inhibition.

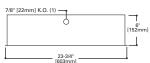
### Reflectors

Indirect reflector has high reflectance baked matte white enamel finish for luminous uniformity. Positively retained direct lamp shield is constructed of frosted white acrylic with linear refractors. All reflectors are precision formed in a computer-controlled operation.

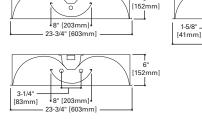


### MOUNTING DATA





### LAMP CONFIGURATIONS





Grid/Lav-in

| Staridard |                |
|-----------|----------------|
|           |                |
|           |                |
| <u>-</u>  |                |
|           | 7 <del>1</del> |

Slot Grid



Drywall Frame

8" [203mm]

23-3/4" [603mm]

Type\*\* Type

Exposed Grid G
Concealed T G or T
Slot Grid G or T
Flange \*\*\*

Trim

Ceiling

[152mm]

#### 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.



## **2RDI** 114T5, 214T5,

314T5 124T5HO 224T5HO 324T5HO

2' X 2' RECESSED

T5 OR T5HO LAMPS
DIRECT/INDIRECT
CENTER-MOUNT
FROSTED ACRYLIC BASKET





### ENERGY DATA

Input Watts:

EB Ballast & STD Lamps

114T5 (19), 214T5 (38), 314T5 (57) 124T5 (25), 224T5 (52), 324T5 (78)

Luminaire Efficacy Rating

LER = FL62

Catalog Number: 2RDI-214T5FLS

Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = \$3.89

\*Reference the lamp/ballast data in the

Technical Section for specific lamp/ ballast

requirements.

\*\*Consult Pre Sales Technical Support.

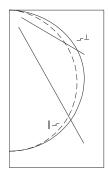
\*\*\*See Drywall Frame Kit Accessory

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









2RDI-214T5FLS **Electronic Ballast** (2) F14T5/835 Lamps 1200 Lumens

Spacing criterion: (II) 1.3 x mounting height,  $(\bot)$  1.3 x mounting height Efficiency 87.3%

Test Report: 2RDI214FLS.IES

LER = FL62

Yearly Cost of 1000 lumens, 3000 hrs at .08 KWH = \$3.89

### Coefficients of Utilization

| Effective floor cavity reflectance 20% |   |   |  |                                     |  |  | %   |      |      |    |    |  |      |      |      |      |      |
|--|---|---|--|-------------------------------------|--|--|-----|------|------|----|----|--|------|------|------|------|------|
|  | 80  | %   |  |                                     | 7  | 0%   |     |      | 50%  | )  |    | 30%  | •    |      | 10%  |      | 0%   |
| 70                                     | 50  | 30  | 10   | 70                                  | 50   | 30   | 10  | 50   | 30   | 10 | 50 | 30   | 10   | 50   | 30   | 10   | 0    |
|  |   |   |  |                                     |  |  |     |      |      |    |    |  |      |      |      |      |      |
| 104                                    | 104   | 104   | 104  | 101                                 | 101  | 101  | 101 | 97   | 97   | 97 | 93 | 93   | 93   | 89   | 89   | 89   | 87   |
| 94                                     | 90  | 86  | 82   | 92                                  | 88   | 84   | 81  | 84   | 81   | 78 | 81 | 78   | 76   | 77   | 75   | 74   | 72   |
| 85                                     | 78  | 71  | 66   | 83                                  | 76   | 70   | 65  | 73   | 68   | 64 | 70 | 66   | 62   | 67   | 64   | 61   | 59   |
| 77                                     | 68  | 60  | 54   | 75                                  | 66   | 60   | 54  | 64   | 58   | 53 | 61 | 56   | 52   | 59   | 55   | 51   | 49   |
| 71                                     | 60  | 52  | 46   | 69                                  | 59   | 51   | 45  | 56   | 50   | 45 | 54 | 49   | 44   | 52   | 48   | 44   | 42   |
| 65                                     | 53  | 45  | 39   | 63                                  | 52   | 45   | 39  | 50   | 44   | 38 | 49 | 43   | 38   | 47   | 42   | 38   | 36   |
| 60                                     | 48  | 40  | 34   | 58                                  | 47   | 39   | 34  | 45   | 39   | 34 | 44 | 38   | 33   | 42   | 37   | 33   | 31   |
| 55                                     | 43  | 35  | 30   | 54                                  | 43   | 35   | 30  | 41   | 34   | 30 | 40 | 34   | 29   | 39   | 33   | 29   | 27   |
| 52                                     | 39  | 32  | 27   | 50                                  | 39   | 32   | 26  | 38   | 31   | 26 | 37 | 31   | 26   | 35   | 30   | 26   | 24   |
| 48                                     | 36  | 29  | 24   | 47                                  | 36   | 29   | 24  | 35   | 28   | 24 | 34 | 28   | 24   | 33   | 27   | 23   | 22   |
| 45                                     | 33  | 26  | 22   | 44                                  | 33   | 26   | 22  | 32   | 26   | 21 | 31 | 25   | 21   | 30   | 25   | 21   | 20   |
|  | 70<br>104<br>94<br>85<br>77<br>71<br>65<br>60<br>55<br>52<br>48 | 80 70 50 104 104 104 104 104 104 104 104 104 10 | Name           70         80           104         104         104           94         90         86           85         78         71           71         68         50           65         53         48           60         48         40           55         43         35           48         36         28           48         36         28 | *********************************** | 104   104   104   101   101   94   90   86   82   92   85   78   71   66   83   77   68   60   52   46   69   65   53   45   39   63   60   48   40   34   58   55   43   35   30   54   52   39   32   27   50   48   36   29   24   47 | Temperatur   Tem | No  | Name | Name |    |    | 80%         70%         50%           70         50         30         10         70         50         30         10         50         30         10         50           104         104         104         101         101         101         101         97         97         97         93           94         90         86         82         92         88         84         81         84         81         78         81           85         78         71         66         83         76         70         65         73         68         64         70           77         68         60         54         75         66         60         54         64         58         53         61           71         60         52         46         69         59         51         45         56         60         54         64         58         53         61           71         60         53         45         39         35         50         54         44         38         49           60         48         40         34         58         4 | Note | Name | Note | Note | Note |

### Zonal Lumen Summary

| Zone  | Lumens | %Lamp | %Fixture |
|-------|--------|-------|----------|
| 0-30  | 527    | 21.9  | 25.2     |
| 0-40  | 871    | 36.3  | 41.6     |
| 0-60  | 1585   | 66.1  | 75.7     |
| 0-90  | 2094   | 87.3  | 100.0    |
| 0-180 | 2094   | 87.3  | 100.0    |

### Typical VCP Percentages

|       |       | _        |                 | Heigh | t Along | Height | t Across |
|-------|-------|----------|-----------------|-------|---------|--------|----------|
| ımens | %Lamp | %Fixture | Room Size (Ft.) | 8.5′  | 10.0′   | 8.5′   | 10.0′    |
| 527   | 21.9  | 25.2     | 20 x 20         | 63    | 70      | 58     | 67       |
| 871   | 36.3  | 41.6     | 30 x 30         | 57    | 62      | 53     | 57       |
| 1585  | 66.1  | 75.7     | 30 x 60         | 53    | 56      | 46     | 49       |
| 2094  | 87.3  | 100.0    | 60 x 30         | 59    | 63      | 57     | 60       |
| 2094  | 87.3  | 100.0    | 60 x 60         | 54    | 55      | 49     | 50       |
|       |       |          |                 |       |         | S      |          |

### Candela

| Angle | Along II | 45° | Across 1 |
|-------|----------|-----|----------|
| 0     | 668      | 668 | 668      |
| 5     | 666      | 666 | 666      |
| 10    | 658      | 659 | 660      |
| 15    | 645      | 647 | 650      |
| 20    | 625      | 630 | 635      |
| 25    | 600      | 608 | 616      |
| 30    | 570      | 581 | 593      |
| 35    | 535      | 550 | 565      |
| 40    | 496      | 515 | 535      |
| 45    | 453      | 476 | 500      |
| 50    | 406      | 434 | 462      |
| 55    | 354      | 389 | 419      |
| 60    | 300      | 340 | 369      |
| 65    | 243      | 287 | 313      |
| 70    | 185      | 230 | 251      |
| 75    | 130      | 171 | 186      |
| 80    | 78       | 111 | 120      |
| 85    | 34       | 54  | 58       |
| 90    | 2        | 3   | 3        |
|       |          |     |          |



### SAMPLE NUMBER: 2RDI-214T5FLS-120V-EBT1-U

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 **14T5**=14WT5 (24")(1) 24T5=24WT5HO (24")(1)

Lamp Shield FLS=Frosted Lamp Shield

Voltage (2) 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

NOTES: (1) 2' x 2' and 2' x 4' Center Lamp Shield models only, (2)Products also available in non-US voltages and frequencies for international markets. (9)An EQ Grid Clip is recommended for all 9/16" ceiling systems. Four required per fixture, (4). 90 ballast factor available for 2 or 3 14W T5 or 28W T5 lamps only, (8) 1-Lamp step dimming ballast in a Normal Ballast factor not available. 2-Lamp ballast in a High Ballast factor not available. (9) For a complete listing of Fifthlight Technology products and other solutions from Cooper Lighting Solutions, visit www.cooperlighting.com. (8) -10V ballast do not include DALI feature. Please select DALI ballast for use with Fifth Light system. (9) Specification grade 0-10V dimming ballast are NEMA premium and CEE listed. They are compatible with low mercury and energy saving lamps. (10) LAO is necessary for 2 ballast 0-10V option. (11) Specification Grade 0-10V ballast not offered in 3 or 4-lamp versions. (12) Standard 0-10V ballast not offered in 3 or 4-lamp versions.

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

EBT\_\_ =T5 orT5HO Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Standard Ballast Factor=1.0

Ballast/FactorType

EBT\_N=T5 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Normal Ballast Factor=.90 <sup>(4)</sup>

EBT\_H=T5 Electronic

Program Rapid Start. Total Harmonic Distortion < 10%. High Ballast Factor=1.15 <sup>(6)</sup> EBT\_NDIM=T5 Electronic

Program Rapid Start. Total Harmonic Distortion < 10%. Step Dimming, Normal Ballast Factor=.95-1.0 (5)

EBT\_HDIM=T5 Electronic Program Rapid Start. Total Harmonic Distortion < 10%. Step Dimming, High Ballast Factor=1.15

0-10V Dimming Ballasts (8)

5LTV5\_=T5 0-10V Program Rapid Start. Total Harmonic Distortion < 10%. Ballast Factor 1.0 (12)

5LTVS5\_=T5 0-10V Spec Grade
Program Rapid Start.
Total Harmonic Distortion
< 10%. Ballast Factor 1,0 (9),(11)

Fifth Light DALI Ballasts (7)

5LT5 =T5 DALI Program Rapid Start.
Total Harmonic Distortion <
10%. Ballast Factor 1,0

Number of Ballasts

Number of Balla
1=1 Ballast
2=2 Ballasts (10)
3=3 Ballasts

Options

RIF1=Radio Interference Suppressor REP=Riveted Endplates, for

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

use in New York City. **ST**=Semi-Specular Tannenbaum Main Reflector

### ACCESSORIES

EQ-CLIP-U=T-BAR Safety Earthquake Clips (3) DF-22-W=Drvwall Frame Kit

### SHIPPING DATA

| Catalog No.   | Wt.     |
|---------------|---------|
| 2RDI-114T5FLS | 17 lbs. |
| 2RDI-214T5FLS | 17 lbs. |
| 2RDI-314T5FLS | 17 lbs. |

