



COMMERCIAL DOWNLIGHT SERIES BY SPECTRUM

### 3" ROUND FLANGELESS

NON-IC & IC NEW CONSTRUCTION / REMODEL

Spectrum's Infinium 3" recessed round downlight series features a shallow plenum housing and variety of trims for accent and general illumination.

| NOMINAL LUMENS / WATTAGE DATA |                              |                               |              |     |
|-------------------------------|------------------------------|-------------------------------|--------------|-----|
| CURRENT PART NUMBER EXAMPLE   | PREVIOUS PART NUMBER EXAMPLE | DELIVERED LUMENS <sup>1</sup> | SYSTEM WATTS | LPW |
| IF03RMN 007                   | N/A                          | 537                           | 7            | 73  |
| IF03RMN 010                   | RDZO3OC 10L                  | 751                           | 9            | 81  |
| IF03RMN 015                   | N/A                          | 1046                          | 12           | 86  |
| IF03RMN 020                   | RDZO3OC 20L                  | 1341                          | 15           | 89  |

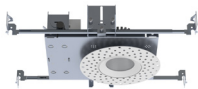
<sup>1</sup> Nominal Delivered Lumens at 835 DL FL GP MW

PROJECT: \_\_\_\_\_  
 TYPE: \_\_\_\_\_

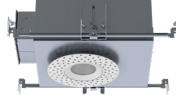


#### AVAILABLE HOUSING TYPES

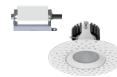
**IF03RMN NC** - New Construction



**IF03RMN IC** - IC New Construction



**IF03RMN RT** - Remodel Construction



| HOUSING                |                            |            |   |                                |                            | HOUSING OPTIONS                  |             |          |        |                           |  |  |
|------------------------|----------------------------|------------|---|--------------------------------|----------------------------|----------------------------------|-------------|----------|--------|---------------------------|--|--|
| SERIES                 | TYPE                       | EMITTER    | CRI/CCT                                     | LUMENS                         | OPTIONS                    | DIMMING                          |             | MOUNTING |        | BATTERY                   |  |  |
| IF03RMN                | NC<br>New Construction     | PC         | 90 Minimum                                  | 007 537 Lm                     | PR 1.25" Ceiling Extension | N1 Non-Dimming Electronic Driver | D1 1% 0-10V | 1 120V   | 2 277V | NC/IC                     |  | EI 7W Integral Battery<br>Not Available in IC New Construction |
|                        |                            |            | 922 2200K                                   | 010 751 Lm                     |                            |                                  |             |          |        | B1 Expandable Bar Hangers |  |  |
|                        | 927 2700K                  |            | 015 1046 Lm                                 | RT                             |                            |                                  |             |          |        |                           |  |  |
|                        | 930 3000K                  |            | 020 1341 Lm                                 |                                |                            |                                  |             |          |        | B0 No Bar Hangers         | ER 7W Remote Battery<br>Available in All Types |  |
| IC<br>New Construction | RT<br>Remodel Construction | 80 Minimum | Nominal Delivered Lumens at 835 DL FL GP MW | D3 1% ELV/MLV Phase-Cut (120V) | 1 120V                     |                                  |             |          |        |                           |  |  |
|                        |                            | 827 2700K  |   |                                |                            |                                  |             |          |        |                           |  |  |
|                        |                            | 830 3000K  |   |                                |                            |                                  |             |          |        |                           |  |  |
|                        |                            | 835 3500K  |   |                                |                            |                                  |             |          |        |                           |  |  |
|                        |                            | 840 4000K  |   |                                |                            |                                  |             |          |        |                           |  |  |

#### AVAILABLE TRIM / MODULE TYPES

DL - DOWNLIGHT      WW - WALL WASH



| TRIM OPTIONS |   |   |   |   | SEPARATE ADDITIONAL ACCESSORIES |  |
|--------------|---|---|---|---|---------------------------------|--|
| TRIM TYPE    | BEAM <sup>1</sup>   | LENS  | FINISH  | OPTION                                    |                                 |  |
| DL Downlight | SP Spot (24°)<br>NF Narrow Flood (28°)<br>FL Flood (38°)<br>WF Wide Flood (61°) | GN No Lens<br>Not Available in Wet Location | MW Matte White<br>MB Matte Black<br>PT Platinum Silver<br>CC Custom Color | WL Wet Location<br>Requires GP or GC Lens | BAR HANGERS                     |  |
|              |   | GP Solite™ Micro Prism Lens                 |   |   | B2 27" Solid Bar Hangers        |  |
|              |   | GC Clear Glass Lens                         |   |   | B4 24" C-Channel Bar Hangers    |  |
|              |   |   |   |   |                                 |  |
| WW Wall Wash | WF Wide Flood   | LW Wall Wash Lens                           |   |   |                                 |  |

<sup>1</sup> Nominal Beam Angles Shown

EXAMPLE: IF03RMNNCPC927010/N11B1/DLSPGPMW

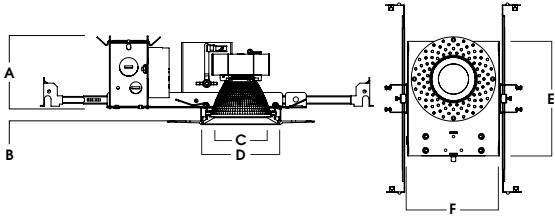
Dimensions and values shown are nominal. Spectrum Lighting continually works to improve products and reserves the right to make changes which may alter the performance or appearance of products.



## HOUSING DIMENSIONS

### IF03RMN NC - NEW CONSTRUCTION

Non-IC rated, thermally protected frame-in kit for new construction. Non-IC designation requires insulation must be minimum of 3" from housing.



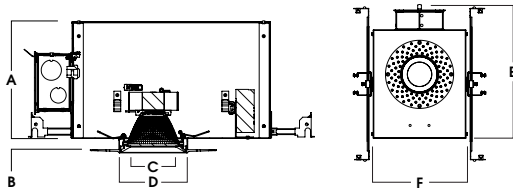
| A              | B               | C              | D              | E               | F               |
|----------------|-----------------|----------------|----------------|-----------------|-----------------|
| 3.4<br>86.4 mm | .625<br>15.9 mm | 2.5<br>63.5 mm | 3.8<br>96.5 mm | 9.5<br>241.3 mm | 7.6<br>193.0 mm |

Fixture Weight: 4.0 lbs

Ceiling Cutout:  $\varnothing 3\frac{7}{8}$ "

### IF03RMN IC - IC NEW CONSTRUCTION

IC rated frame-in kit for new construction with direct insulation contact and CCEA (Chicago Plenum) compatibility.



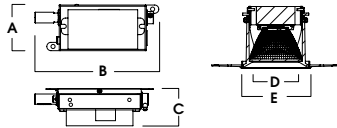
| A               | B               | C              | D              | E                | F               |
|-----------------|-----------------|----------------|----------------|------------------|-----------------|
| 6.5<br>165.1 mm | .625<br>15.9 mm | 2.5<br>63.5 mm | 3.8<br>96.5 mm | 13.2<br>335.3 mm | 9.5<br>241.3 mm |

Fixture Weight: 5.0 lbs

Ceiling Cutout:  $\varnothing 3\frac{7}{8}$ "

### IF03RMN RT - REMODEL CONSTRUCTION

Non-IC rated frame-in kit for existing construction. Non-IC designation requires insulation must be minimum of 3" from housing.



| A              | B               | C              | D              | E              |
|----------------|-----------------|----------------|----------------|----------------|
| 2.8<br>71.1 mm | 7.5<br>190.5 mm | 2.3<br>58.4 mm | 2.5<br>63.5 mm | 3.8<br>96.5 mm |

Fixture Weight: 2.0 lbs

Ceiling Cutout:  $\varnothing 3\frac{7}{8}$ "

## FEATURES

### APPLICATION

Versatile shallow plenum 3" round recessed LED luminaire features downlight and wall wash flangeless trim options with new construction, insulated ceiling and retrofit housings.

### FEATURES

Two-stage optical system for smooth low glare light distribution. Zhaga International Standard LED module for ease of maintenance and replacement. Shallow plenum design. Tool-less LED module, driver, and J-Box access. Multi-Bar mounting brackets. Expandable bar hangers with horizontal range of 14.2"-26", and vertical adjustment of 1.75" for Non-IC housing and 2.325" for IC housings. Post-lock trim retention springs. Integral 0.625" collar, works with up to 1" ceiling. For thicker ceilings consult factory.

### TRIM FINISH

A variety of architectural 3" powdercoat finishes are available. Trims available with and without lens.

### ELECTRONICS

LED module features high brightness Philips LEDs. 3-step MacAdam Ellipse binning and 80 and 90 CRI available. 0-10V or phase-cut dimming to 1%, standard. Variety of 120V/277V drivers available. 2200K closely resembles candle light or high pressure sodium lamps.

### CONSTRUCTION

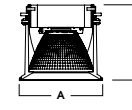
Housing/frame constructed of #20 ga. galvanized steel to resist corrosion. Flangeless one piece die-cast aluminum trim is finished to specification. Passive machined aluminum heatsink.

### CODE COMPLIANCE

BAA Compliant. ETL certified to meet US and Canadian standards. Suitable for dry or damp locations. Optional Wet Location. Manufactured and tested to UL standards No. 1598/8750. City of Chicago Environmental Air (CCEA), and Insulated Ceiling (IC) options available.

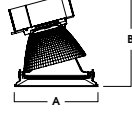
## TRIM / MODULE DATA

### DL - DOWNLIGHT MODULE



| A              | B              |
|----------------|----------------|
| 3.8<br>96.5 mm | 3.6<br>91.4 mm |

### WW - WALL WASH MODULE



| A              | B               |
|----------------|-----------------|
| 3.8<br>96.5 mm | 4.1<br>104.1 mm |

infinium

SPECTRUM  
LIGHTING INC.

# PHOTOMETRIC DATA - 3" ROUND DOWNLIGHT

IF03RMx xx 835 020 DLSPGP MW

| CANDLEPOWER CURVE<br>TEST SP-00760_2 | INTENSITY<br>CANDELA<br>0° AZIMUTH | ZONAL LUMENS |          | SINGLE UNIT: PERFORMANCE<br>DIRECT FOOTCANDLES<br>BASED ON DOWNLIGHT ONLY |      |                     |                       | MULTIPLE UNITS: PERFORMANCE<br>80/50/20% REFLECTANCES<br>INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT |                 |   |                 |       |      |       |      |
|--------------------------------------|------------------------------------|--------------|----------|---|------|---------------------|-----------------------|--|-----------------|---|-----------------|-------|------|-------|------|
|                                      |                                    | 0°           | 0° - 10° | 356   | 26%  | Mounting Height AFF | FC at Center on Floor | Beam Diameter  | FC at Beam Edge | Ceiling Height  | Fixture Spacing | RCR 4 |      | RCR 6 |      |
|                                      | 0°                                 | 4733         | 0° - 20° | 832   | 61%  | 8'                  | 74 fc                 | 3.4'   | 35 fc           | 18'   | 4'              | 68    | 0.81 | 63    | 0.82 |
|                                      | 5°                                 | 4195         | 0° - 30° | 1145  | 84%  | 10'                 | 47 fc                 | 4.2'   | 22 fc           | 22'   | 6'              | 34    | 0.40 | 28    | 0.36 |
|                                      | 15°                                | 1707         | 0° - 40° | 1285  | 94%  | 12'                 | 33 fc                 | 5.1'   | 15 fc           | 26'   | 8'              | 18    | 0.21 | 19    | 0.25 |
|                                      | 25°                                | 675          | 0° - 60° | 1340  | 98%  | 14'                 | 24 fc                 | 5.9'   | 11 fc           | Delivered Illuminance Rating: (DIR)   |                 |       |      |       |      |
|                                      | 35°                                | 211          | 0° - 80° | 1363  | 100% | 16'                 | 18 fc                 | 6.8'   | 9 fc            | 84 FC per W/Sq. Ft.   |                 |       |      |       |      |
|                                      | 45°                                | 36           | 0° - 90° | 1364  | 100% | 20'                 | 12 fc                 | 8.4'   | 6 fc            | 77 FC per W/Sq. Ft.   |                 |       |      |       |      |
|                                      | 55°                                | 24           | Total    | 1365  | 100% | 24'                 | 8 fc                  | 10.1'  | 4 fc            | Recessed mounting<br>Square rooms used for multiple units:<br>RCR 4: Length & Width = Ceiling Ht. - 2.5' x 2.50<br>RCR 6: Length & Width = Ceiling Ht. - 2.5' x 1.66<br>* Average Footcandles at 2.5' Above Floor |                 |       |      |       |      |
|                                      | 90°                                | 1            |          |   |      | 28'                 | 6 fc                  | 11.8'  | 3 fc            |   |                 |       |      |       |      |

Delivered Lumens: 1365  
Luminaire Watts: 15  
LER: 91.00

CP at 0° (Nadir): 4733  
CRI: 80

Beam Angle: 24°  
Spacing Ratio: 0.40

Lumen Multiplier: 07L x 0.40, 10L x 0.56, 15L x 0.78  
CCT Multiplier: 40K x 1.03

IF03RMx xx 835 020 DLNFGP MW

| CANDLEPOWER CURVE<br>TEST SP-00759_2 | INTENSITY<br>CANDELA<br>0° AZIMUTH | ZONAL LUMENS |          | SINGLE UNIT: PERFORMANCE<br>DIRECT FOOTCANDLES<br>BASED ON DOWNLIGHT ONLY |      |                     |                       | MULTIPLE UNITS: PERFORMANCE<br>80/50/20% REFLECTANCES<br>INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT |                 |   |                 |       |      |       |      |
|--------------------------------------|------------------------------------|--------------|----------|---|------|---------------------|-----------------------|--|-----------------|---|-----------------|-------|------|-------|------|
|                                      |                                    | 0°           | 0° - 10° | 315   | 23%  | Mounting Height AFF | FC at Center on Floor | Beam Diameter  | FC at Beam Edge | Ceiling Height  | Fixture Spacing | RCR 3 |      | RCR 5 |      |
|                                      | 0°                                 | 3815         | 0° - 20° | 801   | 59%  | 8'                  | 60 fc                 | 4.1'   | 27 fc           | 14'   | 6"              | 32    | 0.37 | 36    | 0.45 |
|                                      | 5°                                 | 3595         | 0° - 30° | 1124  | 83%  | 10'                 | 38 fc                 | 5.1'   | 17 fc           | 18'   | 8"              | 18    | 0.20 | 20    | 0.25 |
|                                      | 15°                                | 1725         | 0° - 40° | 1271  | 94%  | 12'                 | 26 fc                 | 6.1'   | 12 fc           | 22'   | 10"             | 15    | 0.17 | 12    | 0.16 |
|                                      | 25°                                | 669          | 0° - 60° | 1324  | 98%  | 14'                 | 19 fc                 | 7.1'   | 9 fc            | Delivered Illuminance Rating: (DIR)   |                 |       |      |       |      |
|                                      | 35°                                | 192          | 0° - 80° | 1345  | 100% | 16'                 | 15 fc                 | 8.1'   | 7 fc            | 87 FC per W/Sq. Ft.   |                 |       |      |       |      |
|                                      | 45°                                | 35           | 0° - 90° | 1347  | 100% | 20'                 | 10 fc                 | 10.2'  | 4 fc            | 79 FC per W/Sq. Ft.   |                 |       |      |       |      |
|                                      | 55°                                | 19           | Total    | 1347  | 100% | 24'                 | 7 fc                  | 12.2'  | 3 fc            | Recessed mounting<br>Square rooms used for multiple units:<br>RCR 3: Length & Width = Ceiling Ht. - 2.5' x 3.33<br>RCR 5: Length & Width = Ceiling Ht. - 2.5' x 2.00<br>* Average Footcandles at 2.5' Above Floor<br>* Exceeds Spacing Ratio by 11%<br>** Exceeds Spacing Ratio by 10%<br>*** Exceeds Spacing Ratio by 9% |                 |       |      |       |      |
|                                      | 90°                                | 1            |          |   |      | 28'                 | 5 fc                  | 14.2'  | 2 fc            |   |                 |       |      |       |      |

Delivered Lumens: 1347  
Luminaire Watts: 15  
LER: 89.80

CP at 0° (Nadir): 3815  
CRI: 80

Beam Angle: 28°  
Spacing Ratio: 0.47

Lumen Multiplier: 07L x 0.40, 10L x 0.56, 15L x 0.78  
CCT Multiplier: 40K x 1.03

IF03RMx xx 835 020 DLFLGP MW

| CANDLEPOWER CURVE<br>TEST SP-00758_2 | INTENSITY<br>CANDELA<br>0° AZIMUTH | ZONAL LUMENS |          | SINGLE UNIT: PERFORMANCE<br>DIRECT FOOTCANDLES<br>BASED ON DOWNLIGHT ONLY |      |                     |                       | MULTIPLE UNITS: PERFORMANCE<br>80/50/20% REFLECTANCES<br>INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT |                 |   |                 |       |      |       |      |
|--------------------------------------|------------------------------------|--------------|----------|---|------|---------------------|-----------------------|--|-----------------|---|-----------------|-------|------|-------|------|
|                                      |                                    | 0°           | 0° - 10° | 236   | 18%  | Mounting Height AFF | FC at Center on Floor | Beam Diameter  | FC at Beam Edge | Ceiling Height  | Fixture Spacing | RCR 3 |      | RCR 5 |      |
|                                      | 0°                                 | 2698         | 0° - 20° | 712   | 53%  | 8'                  | 42 fc                 | 5.5'   | 18 fc           | 14'   | 6'              | 32    | 0.37 | 35    | 0.45 |
|                                      | 5°                                 | 2550         | 0° - 30° | 1102  | 82%  | 10'                 | 27 fc                 | 6.9'   | 11 fc           | 18'   | 8'              | 17    | 0.20 | 19    | 0.25 |
|                                      | 15°                                | 1723         | 0° - 40° | 1267  | 94%  | 12'                 | 19 fc                 | 8.3'   | 8 fc            | 22'   | 10'             | 11    | 0.13 | 12    | 0.16 |
|                                      | 25°                                | 852          | 0° - 60° | 1321  | 98%  | 14'                 | 14 fc                 | 9.7'   | 6 fc            | Delivered Illuminance Rating: (DIR)   |                 |       |      |       |      |
|                                      | 35°                                | 261          | 0° - 80° | 1340  | 100% | 16'                 | 11 fc                 | 11.0'  | 4 fc            | 86 FC per W/Sq. Ft.   |                 |       |      |       |      |
|                                      | 45°                                | 38           | 0° - 90° | 1341  | 100% | 20'                 | 7 fc                  | 13.8'  | 3 fc            | 77 FC per W/Sq. Ft.   |                 |       |      |       |      |
|                                      | 55°                                | 16           | Total    | 1341  | 100% | 24'                 | 5 fc                  | 16.6'  | 2 fc            | Recessed mounting<br>Square rooms used for multiple units:<br>RCR 3: Length & Width = Ceiling Ht. - 2.5' x 3.33<br>RCR 5: Length & Width = Ceiling Ht. - 2.5' x 2.00<br>* Average Footcandles at 2.5' Above Floor |                 |       |      |       |      |
|                                      | 90°                                | 1            |          |   |      | 28'                 | 3 fc                  | 19.3'  | 1 fc            |   |                 |       |      |       |      |

Delivered Lumens: 1341  
Luminaire Watts: 15  
LER: 89.40

CP at 0° (Nadir): 2698  
CRI: 80

Beam Angle: 38°  
Spacing Ratio: 0.60

Lumen Multiplier: 07L x 0.40, 10L x 0.56, 15L x 0.78  
CCT Multiplier: 40K x 1.03



# PHOTOMETRIC DATA - 3" ROUND DOWNLIGHT

IF03RMx xx 835 020 DLWFGP MW

| CANDLEPOWER CURVE<br>TEST SP-00761_2 | INTENSITY<br>CANDELA<br>0° AZIMUTH | ZONAL LUMENS |          | SINGLE UNIT: PERFORMANCE<br>DIRECT FOOTCANDLES<br>BASED ON DOWNLIGHT ONLY |                           |                             |                  | MULTIPLE UNITS: PERFORMANCE<br>80/50/20% REFLECTANCES<br>INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT |                   |   |       |    |       |    |      |
|--------------------------------------|------------------------------------|--------------|----------|---|---------------------------|-----------------------------|------------------|--|-------------------|---|-------|----|-------|----|------|
|                                      |                                    | 0° - 10°     | 115      | 9%  | Mounting<br>Height<br>AFF | FC at<br>Center<br>on Floor | Beam<br>Diameter | FC at<br>Beam<br>Edge  | Ceiling<br>Height | Fixture<br>Spacing  | RCR 2 |    | RCR 4 |    |      |
|                                      | 0°                                 | 1218         | 0° - 20° | 418   | 34%                       | 8'                          | 19 fc            | 9.4'   | 6 fc              | 10'   | 6'    | 31 | 0.38  | 27 | 0.38 |
|                                      | 5°                                 | 1200         | 0° - 30° | 800   | 65%                       | 10'                         | 12 fc            | 11.8'  | 4 fc              | 14'   | 8'    | 18 | 0.22  | 11 | 0.16 |
|                                      | 15°                                | 1076         | 0° - 40° | 1044  | 85%                       | 12'                         | 8 fc             | 14.1'  | 3 fc              | 18'   | 10'   | 13 | 0.16  | 11 | 0.16 |
|                                      | 25°                                | 858          | 0° - 60° | 1201  | 98%                       | 14'                         | 6 fc             | 16.5'  | 2 fc              | Delivered<br>Illuminance<br>Rating: (DIR)   |       |    |       |    |      |
|                                      | 35°                                | 375          | 0° - 80° | 1227  | 100%                      | 16'                         | 5 fc             | 18.9'  | 2 fc              |   |       |    |       |    |      |
|                                      | 45°                                | 128          | 0° - 90° | 1228  | 100%                      | 20'                         | 3 fc             | 23.6'  | 1 fc              | Recessed mounting<br>Square rooms used for multiple units:<br>RCR 2: Length & Width = Ceiling Ht. - 2.5' x 5.00<br>RCR 4: Length & Width = Ceiling Ht. - 2.5' x 2.50<br>* Average Footcandles at 2.5' Above Floor |       |    |       |    |      |
|                                      | 55°                                | 56           | Total    | 1228  | 100%                      | 24'                         | 2 fc             | 28.3'  | 1 fc              |   |       |    |       |    |      |
|                                      | 90°                                | 1            |          |   |                           | 28'                         | 2 fc             | 33.0'  | 0 fc              |   |       |    |       |    |      |

Delivered Lumens: 1228  
Luminaire Watts: 15  
LER: 81.87

CP at 0° (Nadir): 1218  
CRI: 80

Beam Angle: 61°  
Spacing Ratio: 0.95

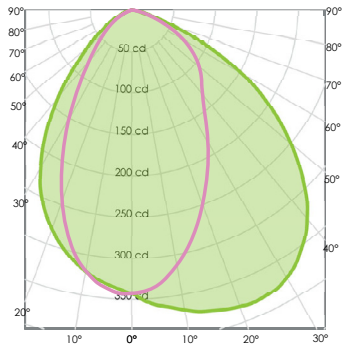
Lumen Multiplier: 07L x 0.40, 10L x 0.56, 15L x 0.78  
CCT Multiplier: 40K x 1.03



# PHOTOMETRIC DATA - 3" ROUND WALL WASH

IF03RMx xx PC 835 020 WW WF LW MW

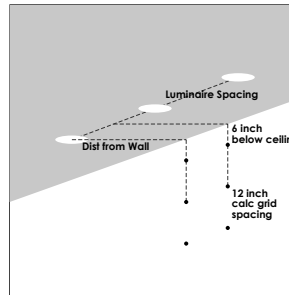
## CANDLEPOWER CURVE TEST SP-00849



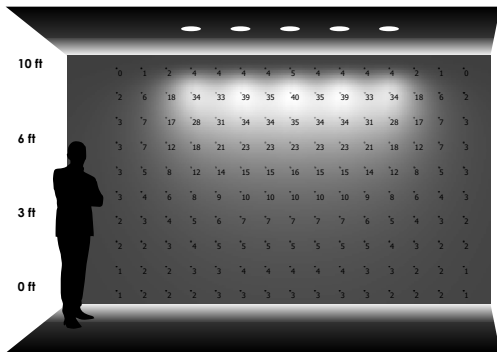
## PERFORMANCE SUMMARY

Delivered Lumens: 598  
 Luminaire Watts: 15  
 LER: 39.87  
 CP at 0deg (Nadir): 343  
 CRI: 80+  
 Lumen Multiplier: 07L x 0.40, 10L x 0.56, 15L x 0.78  
 CCT Multiplier: 27K x 0.95, 30K x 0.98, 40K x 1.03

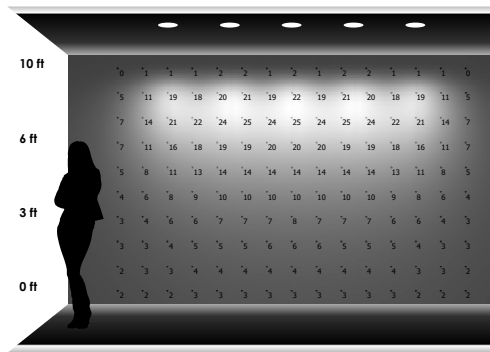
## REFERENCE DIAGRAM



## PERFORMANCE DATA - INITIAL ILLUMINATION (FOOTCANDLES) ON WALL - DIRECT LIGHT ONLY



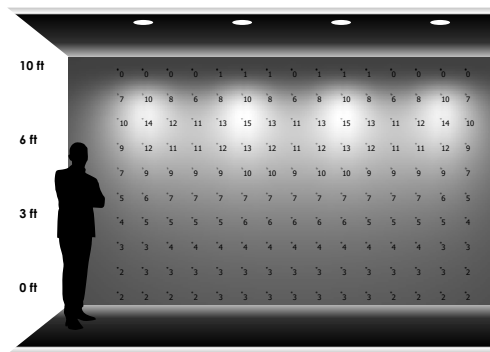
**5 LUMINAIRES**  
 2' away from wall  
 2' between luminaires



**5 LUMINAIRES**  
 2'-6" away from wall  
 2'-6" between luminaires



**5 LUMINAIRES**  
 3' away from wall  
 3' between luminaires



**4 LUMINAIRES**  
 3' away from wall  
 4' between luminaires

