



COMMERCIAL DOWNLIGHT SERIES BY SPECTRUM

3" SQUARE FLANGELESS

NON-IC & IC NEW CONSTRUCTION / REMODEL

DIM TO WARM

Dimming from 3000K to 1600K, Spectrum's Infinium Dim To Warm series follows in the footsteps of older halogen lamps which turned warmer in color when dimmed.

| NOMINAL LUMENS / WATTAGE DATA | | | | |
|-------------------------------|-----------|-------------------------------|--------------|-----|
| PART NUMBER | CCT RANGE | DELIVERED LUMENS ¹ | SYSTEM WATTS | LPW |
| IF03SMN 007 | 27K-16K | 353 | 9.3 | 38 |
| IF03SMN 010 | 28K-16K | 456 | 11.3 | 40 |
| IF03SMN 015 | 30K-16K | 744 | 17.2 | 43 |
| IF03SMN 020 | 30K-16K | 930 | 21.7 | 43 |

¹ Nominal Delivered Lumens at DD1 020 DL FL GP MW

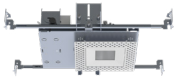
PROJECT: _____

TYPE: _____

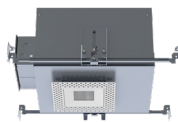


AVAILABLE HOUSING TYPES

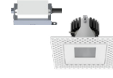
IF03SMN NC - New Construction



IF03SMN IC - IC New Construction



IF03SMN RT - Remodel Construction



| HOUSING | | | | | | HOUSING OPTIONS | | | | | |
|---------|------|----------------------|---------|-------------|------------|----------------------------|---|---------------------------------|------------------------------------|---|-------------------------|
| SERIES | TYPE | EMITTER | CRI/CCT | LUMENS | OPTIONS | DIMMING | | MOUNTING | BATTERY | | |
| IF03SMN | NC | New Construction | DW | DIM TO WARM | | PR 1.25" Ceiling Extension | D1 1%, 0-10V | 1 120V | NC/IC B1 Expandable Bar Hangers | EI 7W Integral Battery <small>Not Available in IC New Construction</small> | |
| | IC | IC New Construction | | DD1 30-16K | 007 353 Lm | | 2 277V | D3 1%, ELV/MLV Phase-Cut (120V) | | 1 120V | RT B0 No Bar Hangers |
| | IC | Dim to Warm | | 010 456 Lm | 015 744 Lm | | Nominal Delivered Lumens at DD1 020 DL FL GP MW | | 1 120V | B0 No Bar Hangers | |
| | RT | Remodel Construction | | 020 930 Lm | | | | | | | |

AVAILABLE TRIM / MODULE TYPES

DL - DOWNLIGHT

WW - WALL WASH



| TRIM OPTIONS | | | | | SEPARATE |
|--------------|-----------------------|--|--------------------|--|---|
| TRIM TYPE | BEAM ¹ | LENS | FINISH | OPTION | ADDITIONAL ACCESSORIES |
| DL Downlight | SP Spot (21°) | GN No Lens <small>Not Available in Wet Location</small> | MW Matte White | WL Wet Location <small>Requires GP or GC Lens</small> | BAR HANGERS B2 27" Solid Bar Hangers B4 24" C-Channel Bar Hangers |
| | NF Narrow Flood (28°) | GP Solite™ Micro Prism Lens | MB Matte Black | | |
| | FL Flood (38°) | GC Clear Glass Lens | PT Platinum Silver | | |
| | WF Wide Flood (54°) | | CC Custom Color | | |
| WW Wall Wash | WF Wide Flood | LW Wall Wash Lens | | | |

¹ Nominal Beam Angles Shown

EXAMPLE: IF03SMNNCWDD1007/D12B1/DLNF GCMWWL

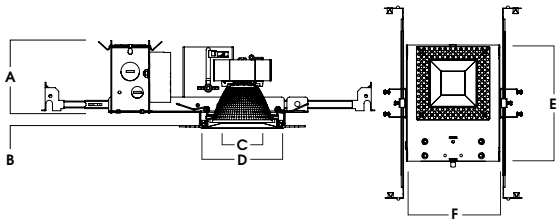
Dimensions and values shown are nominal. Spectrum Lighting continually works to improve products and reserves the right to make changes which may alter the performance or appearance of products.



HOUSING DIMENSIONS

IF03SMN 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.



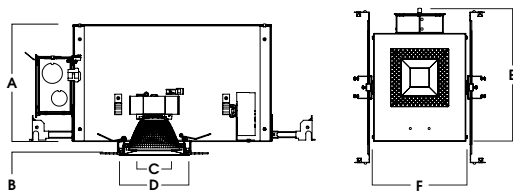
| A | B | C | D | E | F |
|----------------|-----------------|----------------|----------------|-----------------|-----------------|
| 3.4 86.4 mm | .625 15.9 mm | 2.0 50.8 mm | 3.8 96.5 mm | 9.5 241.3 mm | 7.6 193.0 mm |

Fixture Weight: 4.0 lbs

Ceiling Cutout: 4.1" Sq

IF03SMN IC - IC NEW CONSTRUCTION

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



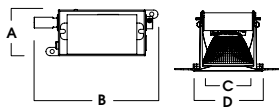
| A | B | C | D | E | F |
|-----------------|-----------------|----------------|----------------|------------------|-----------------|
| 6.5 165.1 mm | .625 15.9 mm | 2.0 50.8 mm | 3.8 96.5 mm | 13.2 335.3 mm | 9.5 241.3 mm |

Fixture Weight: 5.0 lbs

Ceiling Cutout: 4.1" Sq

IF03SMN RT - REMODEL CONSTRUCTION

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



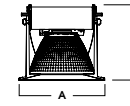
| A | B | C | D |
|----------------|-----------------|----------------|----------------|
| 2.8 71.1 mm | 7.5 190.5 mm | 2.0 50.8 mm | 3.8 96.5 mm |

Fixture Weight: 2.0 lbs

Ceiling Cutout: 4" Sq

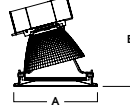
TRIM / MODULE DATA

DL - DOWNLIGHT MODULE



| A | B |
|----------------|----------------|
| 3.8 96.5 mm | 3.5 88.9 mm |

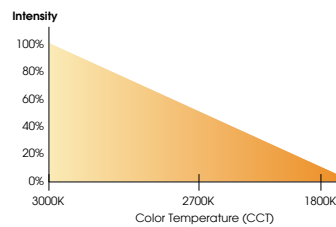
WW - WALL WASH MODULE



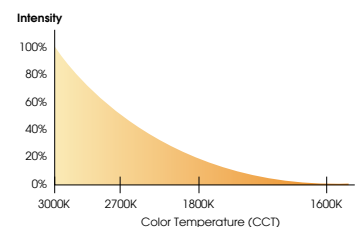
| A | B |
|----------------|-----------------|
| 3.8 96.5 mm | 4.1 104.1 mm |

DIMMING BEHAVIOR

PHASE DIMMING (LINEAR)



0-10V DIMMING (LOGARITHMIC)



FEATURES

APPLICATION

Versatile shallow plenum 3" square 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 powdercoat finishes are available. Trims available with and without lens.

ELECTRONICS

Dim to Warm offering a familiar dimming experience to traditional incandescent lamps (3000K-1600K). All options feature 3-step MacAdam Ellipse binning and 95 CRI 0-10V or phase-cut dimming to 1%, standard.

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. JA8 pending. City of Chicago Environmental Air (CCEA), and Insulated Ceiling (IC) options available.



PHOTOMETRIC DATA - 3" SQUARE

IF03SMx xx DWDD1020 DLSPGPMW

| CANDLEPOWER CURVE TEST SP-00944_1 | INTENSITY CANDELA 0° AZIMUTH | ZONAL LUMENS | SINGLE UNIT: PERFORMANCE INITIAL FOOTCANDLES BASED ON IES BEAM ANGLE | | | | MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT | | | | | | | | |
|--------------------------------------|------------------------------------|--------------|--|-----------------------|---------------|-----------------|--|-----------------|-------|---|-------|---------------------|------|---------------------|------|
| | | | Mounting Height AFF | FC at Center on Floor | Beam Diameter | FC at Beam Edge | Ceiling Height | Fixture Spacing | RCR 4 | | RCR 6 | | | | |
| | 0.00° | | 0° - 10° | 253 | 29% | 5.5' | 122 fc | 2.1' | 58 fc | 9' | 2' | 199 | 5.26 | 161 | 4.66 |
| | 0.00° | 3,691 | 0° - 20° | 569 | 65% | 6.5' | 87 fc | 2.4' | 41 fc | 12' | 2' | 209 | 5.54 | 193 | 5.58 |
| | 5.00° | 3,051 | 0° - 30° | 752 | 86% | 7.5' | 66 fc | 2.8' | 31 fc | 16' | 4' | 46 | 1.22 | 54 | 1.56 |
| | 10.00° | 1,968 | 0° - 40° | 803 | 92% | 8.5' | 51 fc | 3.2' | 24 fc | Delivered Illuminance Rating: (DIR) | | 38 FC per W/Sq. Ft. | | 35 FC per W/Sq. Ft. | |
| | 15.00° | 1,182 | 0° - 60° | 842 | 97% | 10.0' | 37 fc | 3.7' | 18 fc | Recessed Mounting Square rooms used for multiple units: - RCR 4: Length & Width = Ceiling Ht. -2.5' x 2.50 - RCR 6: Length & Width = Ceiling Ht. -2.5' x 1.66 + Average Footcandles at 2.5' Above Floor | | | | | |
| | 20.00° | 682 | 0° - 80° | 868 | 100% | 12.0' | 26 fc | 4.5' | 12 fc | | | | | | |
| | 30.00° | 134 | 0° - 90° | 871 | 100% | 14.0' | 19 fc | 5.2' | 9 fc | | | | | | |
| | 40.00° | 32 | Total | 871 | 100% | 16.0' | 14 fc | 6.0' | 7 fc | | | | | | |
| | 50.00° | 23 | | | | | | | | | | | | | |
| | 60.00° | 18 | | | | | | | | | | | | | |
| | 70.00° | 15 | | | | | | | | | | | | | |
| 80.00° | 6 | | | | | | | | | | | | | | |
| 90.00° | 1 | | | | | | | | | | | | | | |

Delivered Lumens: 871
Luminaire Watts: 21.7
LER: 40.14

CP at 0deg (Nadir): 3,691
CRI: 95

Beam Angle: 21.18
Spacing Ratio: 0.35

Lumen Multiplier: 7L x 0.38, 10L x 0.49, 15L x 0.8
CCT Multiplier: N/A, dim to warm emitter

IF03SMx xx DWDD1020 DLNFGPMW

| CANDLEPOWER CURVE TEST SP-00944_2 | INTENSITY CANDELA 0° AZIMUTH | ZONAL LUMENS | SINGLE UNIT: PERFORMANCE INITIAL FOOTCANDLES BASED ON IES BEAM ANGLE | | | | MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT | | | | | | | | |
|--------------------------------------|------------------------------------|--------------|--|-----------------------|---------------|-----------------|--|-----------------|-------|---|-------|---------------------|------|---------------------|------|
| | | | Mounting Height AFF | FC at Center on Floor | Beam Diameter | FC at Beam Edge | Ceiling Height | Fixture Spacing | RCR 3 | | RCR 5 | | | | |
| | 0.00° | | 0° - 10° | 216 | 24% | 5.5' | 91 fc | 2.7' | 41 fc | 9' | 2' | 230 | 5.60 | 171 | 4.62 |
| | 0.00° | 2,739 | 0° - 20° | 554 | 61% | 6.5' | 65 fc | 3.2' | 30 fc | 12' | 4' | 57 | 1.39 | 56 | 1.50 |
| | 5.00° | 2,491 | 0° - 30° | 770 | 85% | 7.5' | 49 fc | 3.7' | 22 fc | 16' | 6' | 22 | 0.53 | 18 | 0.48 |
| | 10.00° | 1,854 | 0° - 40° | 837 | 92% | 8.5' | 38 fc | 4.2' | 17 fc | Delivered Illuminance Rating: (DIR) | | 41 FC per W/Sq. Ft. | | 37 FC per W/Sq. Ft. | |
| | 15.00° | 1,233 | 0° - 60° | 879 | 97% | 10.0' | 27 fc | 4.9' | 13 fc | Recessed Mounting Square rooms used for multiple units: - RCR 3: Length & Width = Ceiling Ht. -2.5' x 3.33 - RCR 5: Length & Width = Ceiling Ht. -2.5' x 2.00 + Average Footcandles at 2.5' Above Floor | | | | | |
| | 20.00° | 760 | 0° - 80° | 905 | 100% | 12.0' | 19 fc | 5.9' | 9 fc | | | | | | |
| | 30.00° | 152 | 0° - 90° | 908 | 100% | 14.0' | 14 fc | 6.9' | 6 fc | | | | | | |
| | 40.00° | 41 | Total | 908 | 100% | 16.0' | 11 fc | 7.9' | 5 fc | | | | | | |
| | 50.00° | 23 | | | | | | | | | | | | | |
| | 60.00° | 18 | | | | | | | | | | | | | |
| | 70.00° | 14 | | | | | | | | | | | | | |
| 80.00° | 5 | | | | | | | | | | | | | | |
| 90.00° | 2 | | | | | | | | | | | | | | |

Delivered Lumens: 908
Luminaire Watts: 21.7
LER: 41.84

CP at 0deg (Nadir): 2,739
CRI: 95

Beam Angle: 27.78
Spacing Ratio: 0.45

Lumen Multiplier: 7L x 0.38, 10L x 0.49, 15L x 0.8
CCT Multiplier: N/A, dim to warm emitter

IF03SMx xx DWDD1020 DLFLGPMW

| CANDLEPOWER CURVE TEST SP-00944_3 | INTENSITY CANDELA 0° AZIMUTH | ZONAL LUMENS | SINGLE UNIT: PERFORMANCE INITIAL FOOTCANDLES BASED ON IES BEAM ANGLE | | | | MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT | | | | | | | | |
|--------------------------------------|------------------------------------|--------------|--|-----------------------|---------------|-----------------|--|-----------------|-------|---|-------|---------------------|------|---------------------|------|
| | | | Mounting Height AFF | FC at Center on Floor | Beam Diameter | FC at Beam Edge | Ceiling Height | Fixture Spacing | RCR 3 | | RCR 5 | | | | |
| | 0.00° | | 0° - 10° | 170 | 18% | 5.5' | 64 fc | 3.8' | 27 fc | 9' | 4' | 48 | 1.16 | 43 | 1.16 |
| | 0.00° | 1,922 | 0° - 20° | 518 | 56% | 6.5' | 45 fc | 4.5' | 19 fc | 12' | 4' | 58 | 1.39 | 56 | 1.50 |
| | 5.00° | 1,842 | 0° - 30° | 777 | 84% | 7.5' | 34 fc | 5.2' | 14 fc | 16' | 6' | 22 | 0.53 | 18 | 0.48 |
| | 10.00° | 1,609 | 0° - 40° | 858 | 92% | 8.5' | 27 fc | 5.9' | 11 fc | Delivered Illuminance Rating: (DIR) | | 42 FC per W/Sq. Ft. | | 37 FC per W/Sq. Ft. | |
| | 15.00° | 1,267 | 0° - 60° | 903 | 97% | 10.0' | 19 fc | 6.9' | 8 fc | Recessed Mounting Square rooms used for multiple units: - RCR 3: Length & Width = Ceiling Ht. -2.5' x 3.33 - RCR 5: Length & Width = Ceiling Ht. -2.5' x 2.00 + Average Footcandles at 2.5' Above Floor | | | | | |
| | 20.00° | 887 | 0° - 80° | 927 | 100% | 12.0' | 13 fc | 8.3' | 6 fc | | | | | | |
| | 30.00° | 197 | 0° - 90° | 930 | 100% | 14.0' | 10 fc | 9.6' | 4 fc | | | | | | |
| | 40.00° | 48 | Total | 930 | 100% | 16.0' | 8 fc | 11.0' | 3 fc | | | | | | |
| | 50.00° | 26 | | | | | | | | | | | | | |
| | 60.00° | 18 | | | | | | | | | | | | | |
| | 70.00° | 14 | | | | | | | | | | | | | |
| 80.00° | 6 | | | | | | | | | | | | | | |
| 90.00° | 1 | | | | | | | | | | | | | | |

Delivered Lumens: 930
Luminaire Watts: 21.7
LER: 42.86

CP at 0deg (Nadir): 1,922
CRI: 95

Beam Angle: 38.01
Spacing Ratio: 0.61

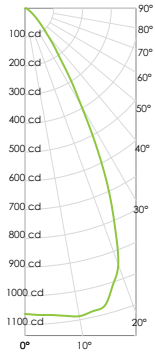
Lumen Multiplier: 7L x 0.38, 10L x 0.49, 15L x 0.8
CCT Multiplier: N/A, dim to warm emitter



PHOTOMETRIC DATA - 3" SQUARE

IF03SMx xx DWDD1020 DLWFGPMW

| CANDLEPOWER CURVE TEST SP-00944 | INTENSITY CANDELA 0° AZIMUTH | ZONAL LUMENS | | SINGLE UNIT: PERFORMANCE INITIAL FOOTCANDLES BASED ON IES BEAM ANGLE | | | | MULTIPLE UNITS: PERFORMANCE 80/50/20% REFLECTANCES INITIAL FOOTCANDLES AND WATTS PER SQUARE FOOT | | | | | | |
|------------------------------------|------------------------------------|--------------|-------|--|---------------------|-----------------------|---------------|--|---|-----------------|---------------------|------|---------------------|------|
| | | 0° - 10° | 104 | 10% | Mounting Height Aff | FC at Center on Floor | Beam Diameter | FC at Beam Edge | Ceiling Height | Fixture Spacing | RCR 2 | | RCR 4 | |
| | 0.00° 1,063 | 0° - 20° | 402 | 40% | 5.5' | 35 fc | 5.6' | 12 fc | 9' | 4' | 62 | 1.31 | 54 | 1.31 |
| | 5.00° 1,071 | 0° - 30° | 735 | 73% | 6.5' | 25 fc | 6.7' | 9 fc | 12' | 6' | 29 | 0.62 | 25 | 0.62 |
| | 10.00° 1,087 | 0° - 40° | 897 | 89% | 7.5' | 19 fc | 7.7' | 7 fc | 16' | 10' | 11 | 0.23 | 7 | 0.17 |
| | 15.00° 1,071 | 0° - 60° | 985 | 98% | 8.5' | 15 fc | 8.7' | 5 fc | Delivered Illuminance Rating: (DIR) | | 47 FC per W/Sq. Ft. | | 41 FC per W/Sq. Ft. | |
| | 20.00° 948 | 0° - 80° | 1,004 | 100% | 10.0' | 11 fc | 10.3' | 4 fc | Recessed Mounting Square rooms used for multiple units: - RCR 2: Length & Width = Ceiling Ht. -2.5' x 5.00 - RCR 4: Length & Width = Ceiling Ht. -2.5' x 2.50 * Average Footcandles at 2.5' Above Floor | | | | | |
| | 30.00° 391 | 0° - 90° | 1,006 | 100% | 12.0' | 7 fc | 12.3' | 3 fc | | | | | | |
| | 40.00° 124 | Total | 1,006 | 100% | 14.0' | 5 fc | 14.4' | 2 fc | | | | | | |
| | 50.00° 47 | | | | 16.0' | 4 fc | 16.4' | 1 fc | | | | | | |
| | 60.00° 19 | | | | | | | | | | | | | |
| | 70.00° 9 | | | | | | | | | | | | | |
| | 80.00° 4 | | | | | | | | | | | | | |
| | 90.00° 1 | | | | | | | | | | | | | |



Delivered Lumens: 1,006
Luminaire Watts: 21.7
LER: 46.36

CP at 0deg (Nadir): 1,063
CR: 95

Beam Angle: 54.33
Spacing Ratio: 0.91

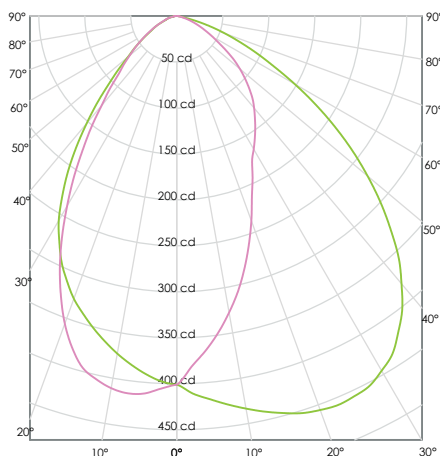
Lumen Multiplier: 7L x 0.38, 10L x 0.49, 15L x 0.8
CCT Multiplier: N/A, dim to warm emitter



PHOTOMETRIC DATA - 3" SQUARE WALL WASH

IF03SMx xx DWDD1020 WWWFLWMW

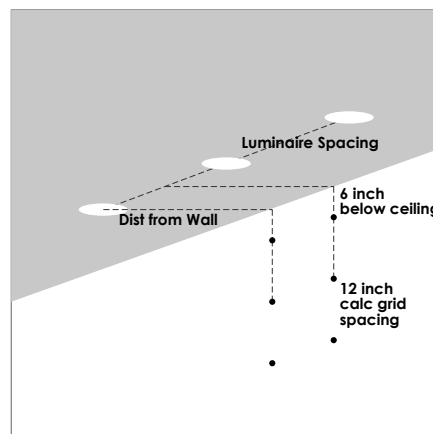
| CANDLEPOWER CURVE TEST SP-00950 | PERFORMANCE SUMMARY | REFERENCE DIAGRAM |
|------------------------------------|---------------------|-------------------|
|------------------------------------|---------------------|-------------------|



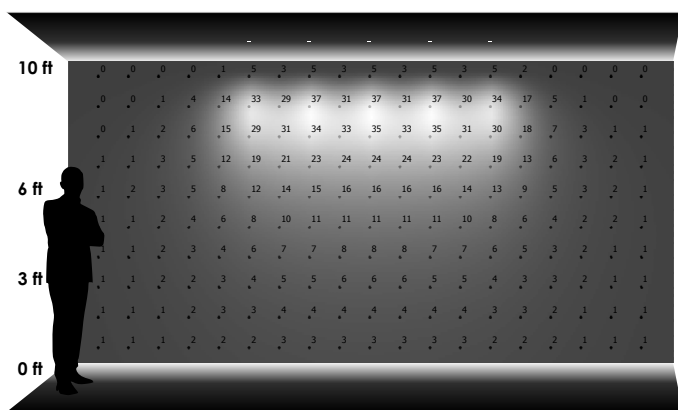
Delivered Lumens: 677
 Luminaire Watts: 21.5
 LER: 31.49

 CP at 0deg (Nadir): 401
 CRI: 95

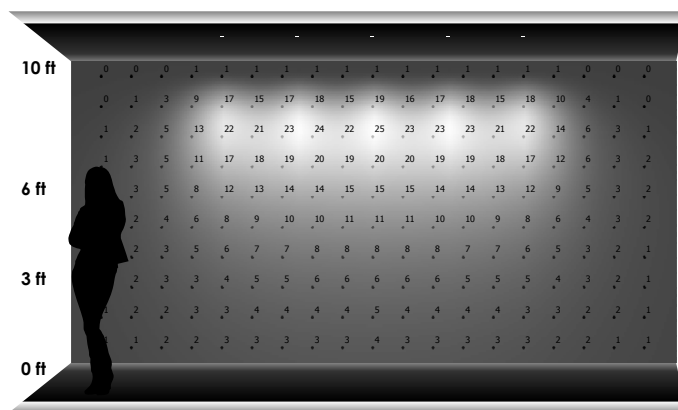
 Lumen Multiplier: 7L x 0.38, 10L x 0.49, 15L x 0.8
 CCT Multiplier: N/A, dim to warm emitter



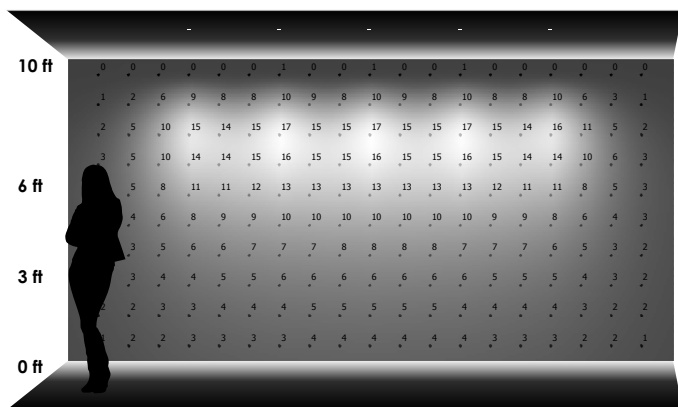
PERFORMANCE DATA - INITIAL ILLUMINATION (FOOTCANDLES) ON WALL - DIRECT LIGHT ONLY



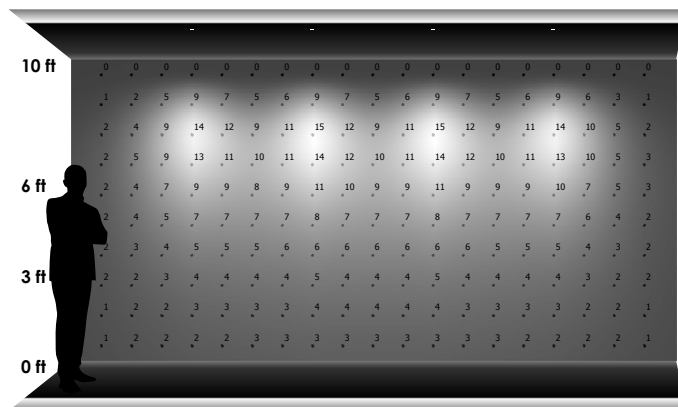
5 LUMINAIRES
 2' away from wall
 2' between luminaires



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

