

● PROJECT INFORMATION

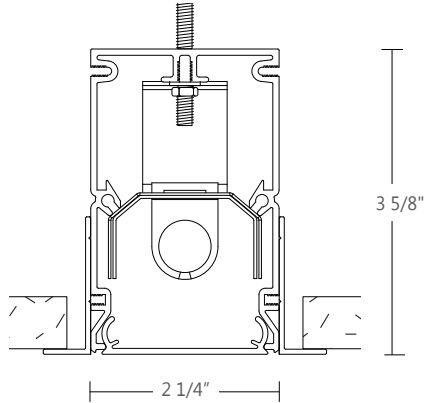
Project:

Type:

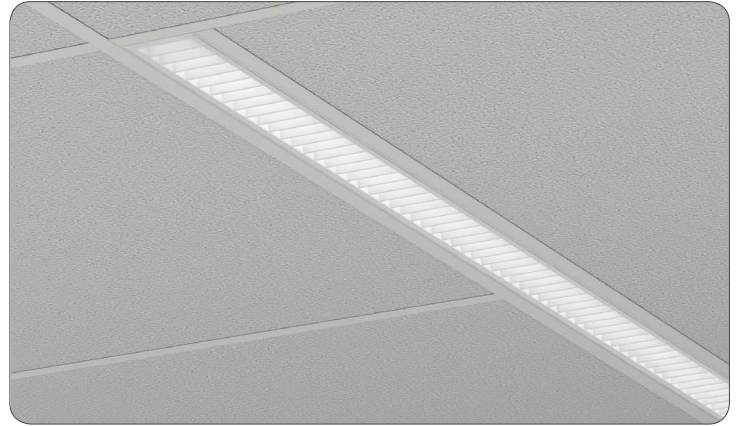
Notes:

● DIMENSIONS

SECTION VIEW



IC
 cULus Listed
 Type I.C.



● ORDERING CODE

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|

● PRODUCT SPECIFICATIONS

| 1 PRODUCT ID | 2 OPTICS | 3 LENGTH (FT) | 4 SPECIFY LENGTH | 5 LAMP | 6 LAMP CONFIGURATION |
|--|---|---|--|---|--|
| BR recessed | S satin lens F frosted lens ⁽¹⁾ PL semi spec. para. louvers B blank | 2 2' 3 3' 4 4' 5 5' 6 6' 8 8' 12 12' S# System Run | NL nominal (3' & 4' lamps) NL4 nominal (4' lamps only) EX exact (3' & 4' lamps) EX4 exact (4' lamps only) | T5 T5 T5HO T5HO T8 T8 ⁽²⁾ | 0 0 lamp 1 1 lamp +S staggered ⁽³⁾ |
| (1) not recommended with staggered lamping | | | | (2) Not available for T-grids | |
| | | | | (3) Not available with T8 lamping. | |

| 7 MR | 8 FINISH | 9 VOLTAGE | 10 BALLAST | 11 CIRCUITS | 12 MOUNTING/SUSPENSION |
|---|-----------------------------------|---|---|--|---|
| M11# MR 11 halogen M11LED# MR 11 LED | W white C custom | 120 120 V 277 277 V 347 347 V ⁽⁴⁾ UNV universal | D dimming E instant start ⁽⁵⁾ ERS program start BI bi-level dimming | 1 1 regular 2A/B 2 alternating +E(#) emergency section +NL(#) night light section +GTD(#) generator transfer device +M MR | TB9 t-bar 9/16" TB15 t-bar 15/16" ST screw slot t-bar TG9 tegular 9/16" TG15 tegular 15/16" DF drywall flange D drywall flangeless DB slip-through bracket DS drywall spackle flange |
| Add 6" per lamp Requires 120V or 277V | | (4) Please consult factory | (5) Available with T8 lamp only | | |

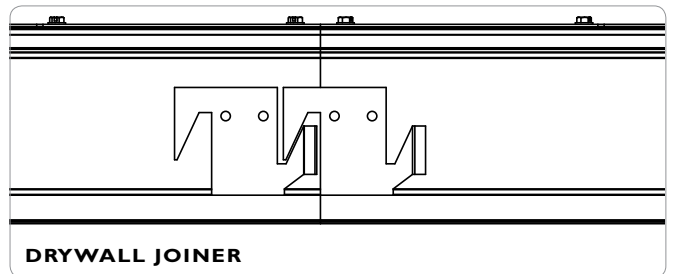
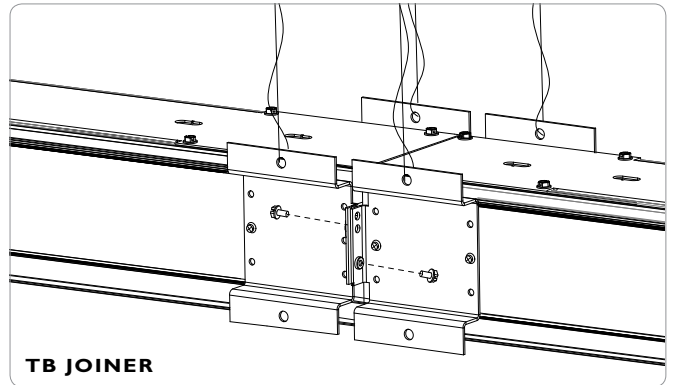
| 13 BATTERY (OPTIONAL) | 14 OTHER (OPTIONAL) | 15 IC CONTROLS (OPTIONAL) | 16 CUSTOM (OPTIONAL) |
|------------------------------------|--|--|----------------------|
| B# battery pack 4' sections | F fuse EF end feed FW(#) flex whip (6' std) CP Chicago plenum HD hold-down clip | DS# daylight sensor OS# occupancy sensor DOS# daylight & occupancy sensor | C custom |
| Requires 120V or 277V | See integrated controls guide for further details | | Please specify |

● CONSTRUCTION

| | |
|---------------------------------|--|
| Housing | Extruded Aluminum (0.075" nominal) 70% Recycled Content |
| Interior Brackets | Die Formed Sheet Steel (18 ga) |
| Reflectors | White Powder Coated Sheet Steel (22 ga) |
| Louvers | Die Formed Semi-Specular Aluminum (22 ga) |
| Blank | Extruded Aluminum (0.075" nominal) |
| Lenses | Extruded Acrylic (0.070" nominal) Satin: 68% trans. Frosted: 85% trans. |
| T-Bar Bracket | Die Formed Sheet Steel (16 ga) |
| Screw Slot T-Bar Bracket | Die Formed Sheet Steel (16 ga) |
| Slip-Through Bracket | Die Formed Sheet Steel (18 ga) |
| Spackle Flange | Die Formed Perforated Sheet Steel (20 ga) |
| Flange | Extruded Aluminum (0.075" nominal) visible flange width: 9/16" |

● JOINERS

In order to allow very long runs of BEAM 2 luminaires, Axis has developed a number of different joining systems. Special care has been taken to maximize the performance of the joiner for each BEAM option.

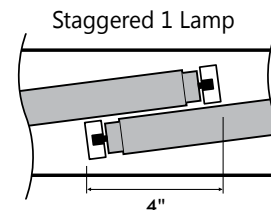


NOTE: Mount each system segment individually. Do not assemble system prior to hanging.

● STAGGERED LAMPING

When BEAM 2 is used in continuous runs longer than 4', staggered lamping can be used to eliminate the appearance of socket shadows at the ends of the lamps. BEAM 2 uses a staggered overlap of bracket lengths (4"), along with 3' and 4' lamps, allowing us to match almost any row length requirements with optimal results. For example 3 x 3' staggered T5 lamps can be used to completely illuminate the lens of an 8' nominal luminaire.

| LAMP TYPE | T5 | T5HO |
|-----------|----|------|
| 1 lamp | • | • |



● WEIGHT

| | |
|--------------|--------------------|
| 4 ft | 10.5 lbs / 4.8 kg |
| 8 ft | 21.0 lbs / 9.6 kg |
| 12 ft | 31.5 lbs / 14.4 kg |

● SYSTEM (S#)

BEAM 2 linear systems, with the use of a strong profile, allow for a nearly hair thin connection system of continuous runs. Lengths of 4', 8', 12' as well as custom lengths are available. Runs of BEAM 2 that are greater than 12' in length are designated as systems (S#). This means that the run is comprised of a combination 4', 8' and/or 12' sections to be assembled on site using our joining system. For more information on systems and joining, please refer to the BEAM installation sheets available for download at www.axislighting.com.

● ELECTRICAL

| | |
|------------------|--|
| Ballast | Electronic IS, Electronic Rapid Start, Dimming (0-10V, Line, EcoSystem, DALI), BI-level dimming With preinstalled ballast disconnect as per NEC & CEC |
| Emergency | Emergency battery pack or emergency circuit |
| Voltage | 120V, 277V, 347V, UNV |

i Incorporating these components may have limitations or effect the length of the luminaire, please contact factory for more details.

● FINISH

Powder Coated and custom finishes are also available.

● APPROVALS

Certified to UL and CUL standards
 Meets NYC requirements
 Meets CCEC requirements (Chicago plenum)
 Suitable for damp locations.
 IC Rated (Insulated ceiling)

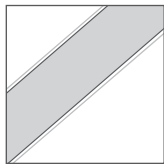
OPTICS

Satin & Frosted Lens - (acrylic snap-in lens)

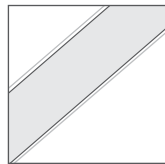
satin: 68% trans.
 frosted: 85% trans.

Semi-spec. parabolic louver

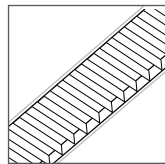
9/16" deep blades – 5/8" spacing
 72 blades per 4'



S satin lens



F frosted lens

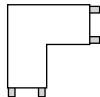
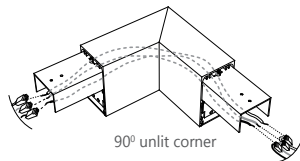


PL semi-specular parabolic louvers

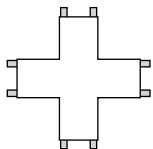
CORNERS

Unlit Corners - BEAM2

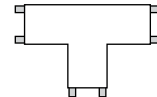
features a multitude of layout patterns with the use of a number of corners, 90° corner, T or X junctions.



90° corner

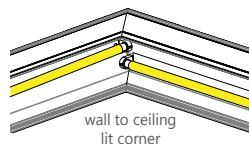


X junction



T junction

Lit Corners - In addition Axis offers 90° Wall to Ceiling lit corners.



i For custom corner angles, please consult factory. Specifications sheets for all corners are available at: www.axislighting.com

MR11

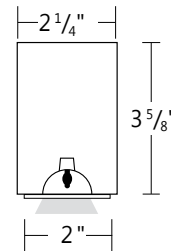
Blank MR11 Halogens MR11 LED Quantity

Extruded Aluminum (0.075" nominal)
 1.4" diameter (20W / 35W)
 1.4" diameter

For every 4' fluorescent lamp section, there may be up to a maximum of 4 x MR11 lamps.

Each MR11 is placed centered on a blank section 6" in length.

Spacing

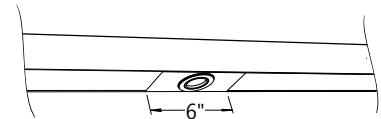


For a series of MR11's within a given section length, they will be spaced evenly on a longer blank section.

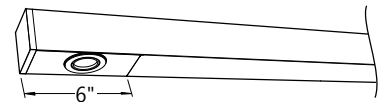
The directed light of MR11 Halogen lamps are fixed downward.

Custom spacing may be available on special request.

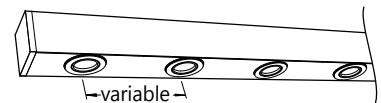
Between fluorescent lamps sections



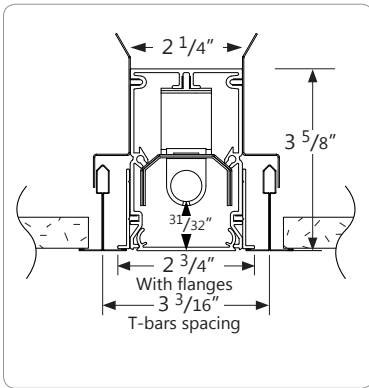
At luminaire ends



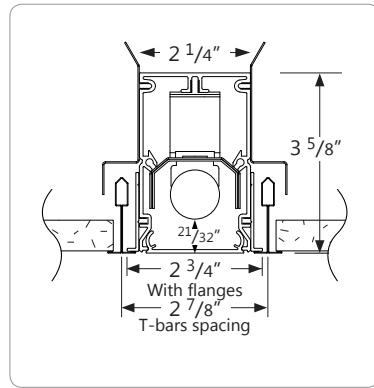
Several in a long blank section



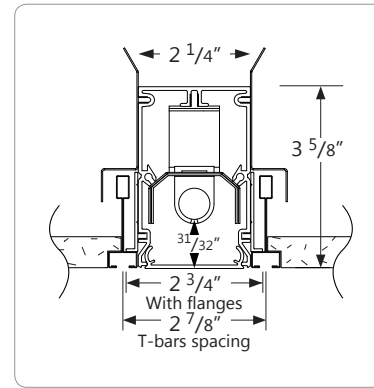
● **TB CEILING MOUNTING OPTIONS**



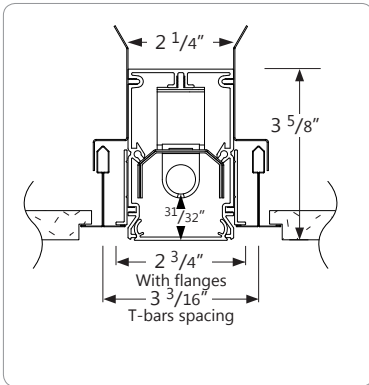
TB15 15/16" T-BAR



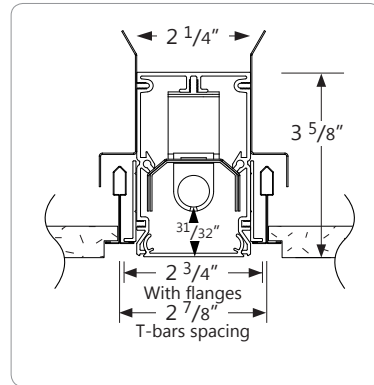
TB9 9/16" T-BAR



ST SCREW SLOT T-BAR

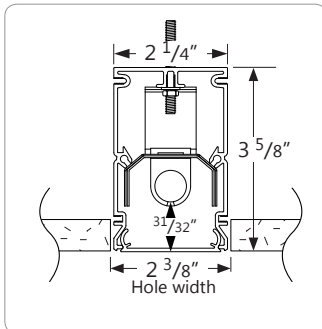


TG15 15/16" TEGULAR

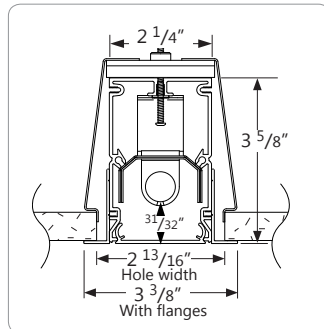


TG9 9/16" T-TEGULAR

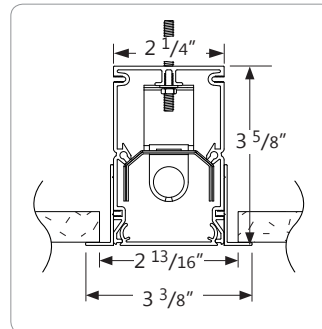
● **DRYWALL CEILING MOUNTING OPTIONS**



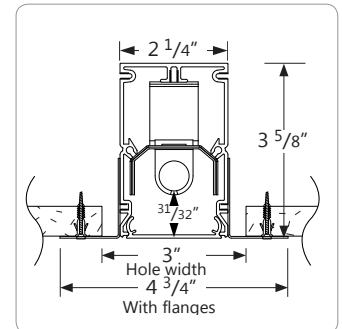
D FLANGELESS WITH 1/4-20 STUD MOUNTING



DB VISIBLE FLANGES WITH SLIP-THROUGH BRACKET



DF VISIBLE FLANGES WITH 1/4-20 STUD MOUNTING

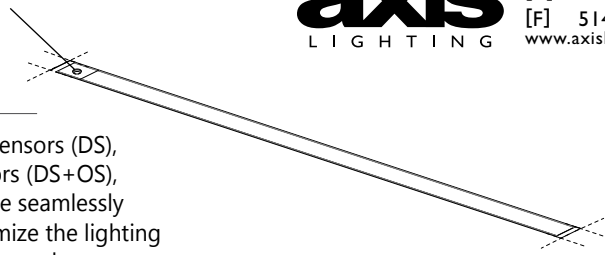


DS SPACKLE FLANGES

● **OTHER MOUNTING OPTIONS**

BEAM 2 is also available with pendant, surface, wall, asymmetric and recessed wall mounted options.

i Specification sheets and Installation sheets for all mounting for BEAM luminaires are available for download at www.axislighting.com



● INTEGRATED CONTROL OPTIONS

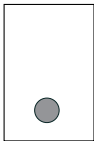
BEAM 2 luminaires allow the use of integrated controls such as daylight sensors (DS), occupancy sensors (OS), individual daylight sensors and occupancy sensors (DS+OS), and combination daylight/occupancy sensors (DOS). These options can be seamlessly integrated into our luminaires. The control system could be used to optimize the lighting of the space by reducing energy consumption through daylight harvesting and occupancy, thereby improving the overall interior environment and allowing for LEED credits.

- Consult factory for other options.
- Refer to IC guide for more information.

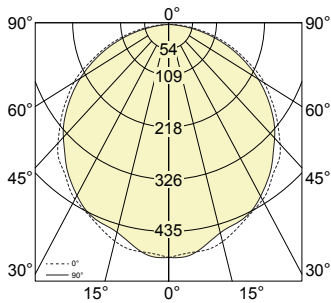
| SENSORS | BRAND | Model | TYPE | CODE | COMPATIBLE DIMMING BALLAST |
|------------------------------------|-------------|-----------|--------------------------|------|----------------------------|
| Daylight Sensor (DS) | Lutron | EC-DIR-WH | Daylight | LD | EcoSystem |
| | Wattstopper | FD-301 | Daylight | WD | 0-10V |
| | Philips | Luxsense | Daylight | PL | 0-10V |
| Occupancy Sensor (OS) | Wattstopper | FS-205 | PIR Occupancy | WP1 | Programmed Rapid Start |
| | | FS-355 | PIR Occupancy | WP2 | Programmed Rapid Start |
| | | FM-105 | High Frequency Occupancy | WH | Programmed Rapid Start |
| Daylight & Occupancy Sensors (DOS) | Philips | Actilume | Daylight & PIR Occupancy | PA | DALI or 0-10V |

● PHOTOMETRIC DATA

I T5



PHOTOMETRIC CURVE



Test Lamp: IxF28T5
 IES FILE: BDR-S-4-T5-1

Efficiency: 47.2%

CANDELA DISTRIBUTION

| Vertical Angle | Horizontal Angles | | | | | Zonal Lumens |
|----------------|-------------------|------|-----|------|-----|--------------|
| | 0 | 22.5 | 45 | 67.5 | 90 | |
| 0 | 486 | 486 | 486 | 486 | 486 | |
| 5 | 478 | 481 | 490 | 472 | 484 | 26 |
| 15 | 462 | 458 | 454 | 457 | 444 | 109 |
| 25 | 424 | 427 | 423 | 415 | 421 | 180 |
| 35 | 380 | 380 | 376 | 369 | 370 | 228 |
| 45 | 325 | 322 | 310 | 313 | 312 | 244 |
| 55 | 256 | 253 | 248 | 250 | 244 | 231 |
| 65 | 179 | 177 | 173 | 170 | 169 | 187 |
| 75 | 102 | 98 | 94 | 91 | 90 | 119 |
| 85 | 31 | 27 | 23 | 20 | 18 | 44 |
| 90 | 6 | 3 | 1 | 0 | 0 | |

LUMINANCE DATA (CD/M²)

| Vertical Angle | Horizontal Angles | | |
|----------------|-------------------|------|------|
| | 0 | 45 | 90 |
| 45 | 6157 | 2892 | 2443 |
| 55 | 5808 | 2314 | 1866 |
| 65 | 5252 | 1662 | 1296 |
| 75 | 4411 | 961 | 716 |
| 85 | 2745 | 255 | 157 |

COEFFICIENTS OF UTILIZATION (%)

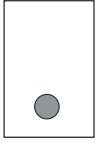
| Ceiling | 80 | | | 70 | | | 50 | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|
| | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| Wall | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| 0 | 56 | 56 | 56 | 56 | 55 | 55 | 55 | 55 | 53 | 53 | 53 |
| 1 | 51 | 49 | 47 | 45 | 50 | 48 | 46 | 44 | 46 | 44 | 43 |
| 2 | 47 | 43 | 39 | 37 | 45 | 42 | 39 | 36 | 40 | 38 | 35 |
| 3 | 43 | 37 | 34 | 30 | 41 | 37 | 33 | 30 | 35 | 32 | 30 |
| 4 | 39 | 33 | 29 | 26 | 38 | 33 | 29 | 26 | 31 | 28 | 25 |
| 5 | 36 | 30 | 25 | 22 | 35 | 29 | 25 | 22 | 28 | 24 | 22 |
| 6 | 33 | 27 | 22 | 19 | 32 | 26 | 22 | 19 | 25 | 22 | 19 |
| 7 | 31 | 24 | 20 | 17 | 30 | 24 | 20 | 17 | 23 | 19 | 17 |
| 8 | 28 | 22 | 18 | 15 | 28 | 22 | 18 | 15 | 21 | 18 | 15 |
| 9 | 27 | 20 | 16 | 14 | 26 | 20 | 16 | 14 | 19 | 16 | 14 |
| 10 | 25 | 19 | 15 | 12 | 24 | 18 | 15 | 12 | 18 | 15 | 12 |

Based on floor reflectance of 20

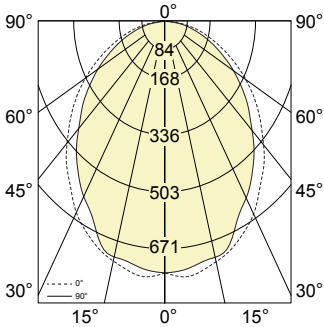
i All IES files for other lamping are available for download at: www.axislighting.com

● PHOTOMETRIC DATA

I T5



PHOTOMETRIC CURVE



Test Lamp: IxF28T5
 IES FILE: BDR-F-4-T5-1

Efficiency: 55.7%

CANDELA DISTRIBUTION

| Vertical Angle | Horizontal Angles | | | | | Zonal Lumens |
|----------------|-------------------|------|-----|------|-----|--------------|
| | 0 | 22.5 | 45 | 67.5 | 90 | |
| 0 | 737 | 737 | 737 | 737 | 737 | |
| 5 | 750 | 739 | 729 | 755 | 728 | 40 |
| 15 | 702 | 689 | 675 | 676 | 692 | 166 |
| 25 | 616 | 598 | 585 | 576 | 564 | 256 |
| 35 | 504 | 495 | 474 | 453 | 452 | 295 |
| 45 | 389 | 375 | 355 | 340 | 339 | 285 |
| 55 | 281 | 268 | 255 | 238 | 237 | 242 |
| 65 | 180 | 175 | 161 | 152 | 149 | 179 |
| 75 | 100 | 94 | 86 | 80 | 77 | 109 |
| 85 | 32 | 28 | 23 | 19 | 18 | 42 |
| 90 | 5 | 4 | 1 | 0 | 1 | |

LUMINANCE DATA (CD/M²)

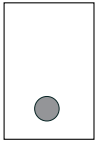
| Vertical Angle | Horizontal Angles | | |
|----------------|-------------------|------|------|
| | 0 | 45 | 90 |
| 45 | 7363 | 3305 | 2651 |
| 55 | 6363 | 2373 | 1811 |
| 65 | 5285 | 1547 | 1141 |
| 75 | 4328 | 882 | 617 |
| 85 | 2808 | 257 | 150 |

COEFFICIENTS OF UTILIZATION (%)

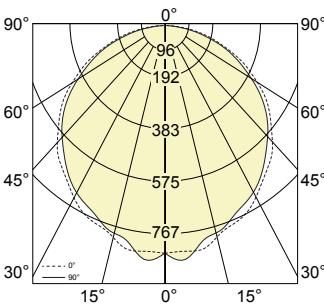
| Ceiling | 80 | | | 70 | | | 50 | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|
| | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| Wall | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| 0 | 67 | 67 | 67 | 67 | 65 | 65 | 65 | 65 | 62 | 62 | 62 |
| 1 | 61 | 59 | 56 | 54 | 60 | 57 | 55 | 54 | 55 | 53 | 52 |
| 2 | 56 | 52 | 48 | 45 | 55 | 51 | 47 | 45 | 49 | 46 | 44 |
| 3 | 51 | 46 | 42 | 38 | 50 | 45 | 41 | 38 | 43 | 40 | 37 |
| 4 | 47 | 41 | 36 | 33 | 46 | 40 | 36 | 33 | 39 | 35 | 32 |
| 5 | 44 | 37 | 32 | 29 | 43 | 36 | 32 | 28 | 35 | 31 | 28 |
| 6 | 41 | 33 | 29 | 25 | 40 | 33 | 28 | 25 | 32 | 28 | 25 |
| 7 | 38 | 31 | 26 | 23 | 37 | 30 | 26 | 22 | 29 | 25 | 22 |
| 8 | 35 | 28 | 23 | 20 | 34 | 28 | 23 | 20 | 27 | 23 | 20 |
| 9 | 33 | 26 | 21 | 18 | 32 | 25 | 21 | 18 | 25 | 21 | 18 |
| 10 | 31 | 24 | 20 | 17 | 30 | 24 | 20 | 17 | 23 | 19 | 17 |

Based on floor reflectance of 20

I T5HO



PHOTOMETRIC CURVE



Test Lamp: IxF54T5HO
 IES FILE: BDR-S-4-T5HO-1

Efficiency: 47.2%

CANDELA DISTRIBUTION

| Vertical Angle | Horizontal Angles | | | | | Zonal Lumens |
|----------------|-------------------|------|-----|------|-----|--------------|
| | 0 | 22.5 | 45 | 67.5 | 90 | |
| 0 | 837 | 837 | 837 | 837 | 837 | |
| 5 | 833 | 819 | 815 | 834 | 863 | 45 |
| 15 | 790 | 789 | 787 | 785 | 781 | 189 |
| 25 | 740 | 736 | 735 | 715 | 712 | 311 |
| 35 | 651 | 653 | 644 | 641 | 631 | 391 |
| 45 | 554 | 557 | 540 | 533 | 534 | 420 |
| 55 | 445 | 437 | 430 | 426 | 420 | 399 |
| 65 | 311 | 307 | 300 | 294 | 289 | 322 |
| 75 | 174 | 169 | 163 | 158 | 155 | 206 |
| 85 | 52 | 47 | 40 | 32 | 32 | 76 |
| 90 | 10 | 6 | 2 | 1 | 1 | |

LUMINANCE DATA (CD/M²)

| Vertical Angle | Horizontal Angles | | |
|----------------|-------------------|------|------|
| | 0 | 45 | 90 |
| 45 | 10496 | 5026 | 4183 |
| 55 | 10082 | 4004 | 3204 |
| 65 | 9116 | 2879 | 2216 |
| 75 | 7542 | 1674 | 1233 |
| 85 | 4565 | 450 | 276 |

COEFFICIENTS OF UTILIZATION (%)

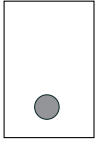
| Ceiling | 80 | | | 70 | | | 50 | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|
| | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| Wall | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| 0 | 56 | 56 | 56 | 56 | 55 | 55 | 55 | 55 | 53 | 53 | 53 |
| 1 | 51 | 49 | 47 | 45 | 50 | 48 | 46 | 44 | 46 | 44 | 43 |
| 2 | 47 | 43 | 39 | 37 | 45 | 42 | 39 | 36 | 40 | 38 | 35 |
| 3 | 43 | 37 | 34 | 30 | 41 | 37 | 33 | 30 | 35 | 32 | 30 |
| 4 | 39 | 33 | 29 | 26 | 38 | 32 | 29 | 26 | 31 | 28 | 25 |
| 5 | 36 | 30 | 25 | 22 | 35 | 29 | 25 | 22 | 28 | 24 | 22 |
| 6 | 33 | 27 | 22 | 19 | 32 | 26 | 22 | 19 | 25 | 22 | 19 |
| 7 | 31 | 24 | 20 | 17 | 30 | 24 | 20 | 17 | 23 | 19 | 17 |
| 8 | 28 | 22 | 18 | 15 | 28 | 22 | 18 | 15 | 21 | 18 | 15 |
| 9 | 27 | 20 | 16 | 14 | 26 | 20 | 16 | 14 | 19 | 16 | 14 |
| 10 | 25 | 19 | 15 | 12 | 24 | 18 | 15 | 12 | 18 | 15 | 12 |

Based on floor reflectance of 20

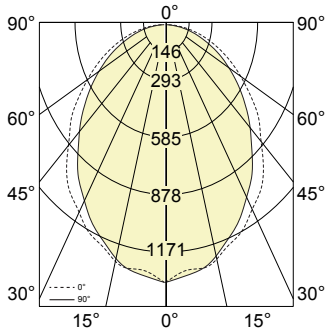
i All IES files for other lamping are available for download at: www.axislighting.com

● PHOTOMETRIC DATA

I T5HO



PHOTOMETRIC CURVE



Test Lamp: IxF54T5HO
 IES FILE: BDR-F-4-T5HO-1

Efficiency: 55.7%

CANDELA DISTRIBUTION

| Vertical Angle | Horizontal Angles | | | | | Zonal Lumens |
|----------------|-------------------|------|------|------|------|--------------|
| | 0 | 22.5 | 45 | 67.5 | 90 | |
| 0 | 1317 | 1317 | 1317 | 1317 | 1317 | |
| 5 | 1254 | 1247 | 1232 | 1223 | 1246 | 69 |
| 15 | 1129 | 1127 | 1115 | 1098 | 1079 | 285 |
| 25 | 974 | 940 | 915 | 882 | 883 | 443 |
| 35 | 756 | 744 | 716 | 679 | 669 | 507 |
| 45 | 568 | 558 | 522 | 498 | 486 | 491 |
| 55 | 389 | 381 | 359 | 333 | 328 | 417 |
| 65 | 239 | 226 | 211 | 197 | 189 | 310 |
| 75 | 111 | 103 | 93 | 86 | 82 | 189 |
| 85 | 58 | 49 | 38 | 31 | 29 | 73 |
| 90 | 10 | 7 | 2 | 1 | 1 | |

COEFFICIENTS OF UTILIZATION (%)

| Ceiling | 80 | | | 70 | | | 50 | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|
| | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| Wall | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| 0 | 66 | 66 | 66 | 66 | 65 | 65 | 65 | 65 | 62 | 62 | 62 |
| 1 | 61 | 59 | 56 | 54 | 60 | 57 | 55 | 53 | 55 | 53 | 52 |
| 2 | 56 | 52 | 48 | 45 | 54 | 51 | 47 | 44 | 49 | 46 | 43 |
| 3 | 51 | 46 | 41 | 38 | 50 | 45 | 41 | 38 | 43 | 40 | 37 |
| 4 | 47 | 41 | 36 | 33 | 46 | 40 | 36 | 32 | 39 | 35 | 32 |
| 5 | 44 | 37 | 32 | 28 | 42 | 36 | 32 | 28 | 35 | 31 | 28 |
| 6 | 40 | 33 | 29 | 25 | 39 | 33 | 28 | 25 | 32 | 28 | 25 |
| 7 | 38 | 30 | 26 | 22 | 37 | 30 | 26 | 22 | 29 | 25 | 22 |
| 8 | 35 | 28 | 23 | 20 | 34 | 28 | 23 | 20 | 27 | 23 | 20 |
| 9 | 33 | 26 | 21 | 18 | 32 | 25 | 21 | 18 | 25 | 21 | 18 |
| 10 | 31 | 24 | 20 | 17 | 30 | 24 | 19 | 17 | 23 | 19 | 17 |

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

| Vertical Angle | Horizontal Angles | | |
|----------------|-------------------|------|------|
| | 0 | 45 | 90 |
| 45 | 12718 | 5726 | 4494 |
| 55 | 10724 | 4095 | 3074 |
| 65 | 9109 | 2687 | 1957 |
| 75 | 7431 | 1529 | 1066 |
| 85 | 5100 | 433 | 251 |

COEFFICIENTS OF UTILIZATION (%)

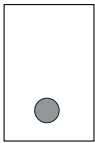
| Ceiling | 80 | | | 70 | | | 50 | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|
| | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| Wall | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| 0 | 66 | 66 | 66 | 66 | 65 | 65 | 65 | 65 | 62 | 62 | 62 |
| 1 | 61 | 59 | 56 | 54 | 60 | 57 | 55 | 53 | 55 | 53 | 52 |
| 2 | 56 | 52 | 48 | 45 | 54 | 51 | 47 | 44 | 49 | 46 | 43 |
| 3 | 51 | 46 | 41 | 38 | 50 | 45 | 41 | 38 | 43 | 40 | 37 |
| 4 | 47 | 41 | 36 | 33 | 46 | 40 | 36 | 32 | 39 | 35 | 32 |
| 5 | 44 | 37 | 32 | 28 | 42 | 36 | 32 | 28 | 35 | 31 | 28 |
| 6 | 40 | 33 | 29 | 25 | 39 | 33 | 28 | 25 | 32 | 28 | 25 |
| 7 | 38 | 30 | 26 | 22 | 37 | 30 | 26 | 22 | 29 | 25 | 22 |
| 8 | 35 | 28 | 23 | 20 | 34 | 28 | 23 | 20 | 27 | 23 | 20 |
| 9 | 33 | 26 | 21 | 18 | 32 | 25 | 21 | 18 | 25 | 21 | 18 |
| 10 | 31 | 24 | 20 | 17 | 30 | 24 | 19 | 17 | 23 | 19 | 17 |

Based on floor reflectance of 20

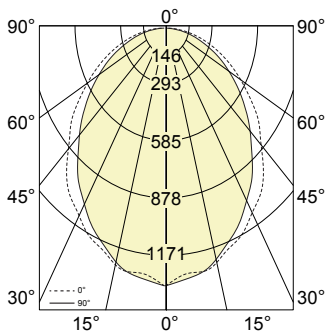
LUMINANCE DATA (CD/M²)

| Vertical Angle | Horizontal Angles | | |
|----------------|-------------------|------|------|
| | 0 | 45 | 90 |
| 45 | 12718 | 5726 | 4494 |
| 55 | 10724 | 4095 | 3074 |
| 65 | 9109 | 2687 | 1957 |
| 75 | 7431 | 1529 | 1066 |
| 85 | 5100 | 433 | 251 |

I T5HO



PHOTOMETRIC CURVE



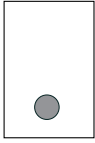
Test Lamp: IxF54T5HO
 IES FILE: BDR-F-4-T5HO-1

Efficiency: 55.7%

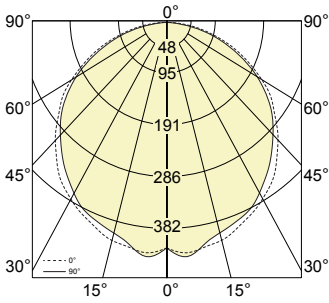
i All IES files for other lamping are available for download at: www.axislighting.com

● PHOTOMETRIC DATA

I T8



PHOTOMETRIC CURVE



Test Lamp: IxF32T8

IES FILE: BDR-S-4-T8-1

Efficiency: 41.9%

CANDELA DISTRIBUTION

| Vertical Angle | Horizontal Angles | | | | | Zonal Lumens |
|----------------|-------------------|------|-----|------|-----|--------------|
| | 0 | 22.5 | 45 | 67.5 | 90 | |
| 0 | 412 | 412 | 412 | 412 | 412 | |
| 5 | 422 | 423 | 425 | 417 | 429 | 23 |
| 15 | 409 | 404 | 410 | 400 | 395 | 97 |
| 25 | 379 | 376 | 372 | 371 | 370 | 160 |
| 35 | 342 | 333 | 329 | 325 | 325 | 201 |
| 45 | 287 | 281 | 279 | 277 | 275 | 216 |
| 55 | 231 | 225 | 225 | 217 | 219 | 206 |
| 65 | 159 | 159 | 154 | 151 | 150 | 167 |
| 75 | 89 | 86 | 85 | 82 | 81 | 106 |
| 85 | 28 | 25 | 21 | 17 | 16 | 40 |
| 90 | 5 | 3 | 1 | 0 | 0 | |

COEFFICIENTS OF UTILIZATION (%)

| Ceiling | 80 | | | 70 | | | 50 | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|
| | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| Wall | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| 0 | 50 | 50 | 50 | 50 | 49 | 49 | 49 | 49 | 47 | 47 | 47 |
| 1 | 46 | 44 | 42 | 40 | 44 | 43 | 41 | 39 | 41 | 39 | 38 |
| 2 | 41 | 38 | 35 | 33 | 40 | 37 | 34 | 32 | 36 | 33 | 31 |
| 3 | 38 | 33 | 30 | 27 | 37 | 33 | 29 | 27 | 31 | 28 | 26 |
| 4 | 34 | 29 | 26 | 23 | 33 | 29 | 25 | 23 | 28 | 25 | 22 |
| 5 | 32 | 26 | 22 | 20 | 31 | 26 | 22 | 19 | 25 | 22 | 19 |
| 6 | 29 | 24 | 20 | 17 | 28 | 23 | 20 | 17 | 22 | 19 | 17 |
| 7 | 27 | 21 | 18 | 15 | 26 | 21 | 17 | 15 | 20 | 17 | 15 |
| 8 | 25 | 19 | 16 | 13 | 25 | 19 | 16 | 13 | 19 | 15 | 13 |
| 9 | 24 | 18 | 14 | 12 | 23 | 18 | 14 | 12 | 17 | 14 | 12 |
| 10 | 22 | 16 | 13 | 11 | 22 | 16 | 13 | 11 | 16 | 13 | 11 |

Based on floor reflectance of 20

LUMINANCE DATA (CD/M²)

| Vertical Angle | Horizontal Angles | | |
|----------------|-------------------|------|------|
| | 0 | 45 | 90 |
| 45 | 5266 | 2510 | 2077 |
| 55 | 5065 | 2028 | 1614 |
| 65 | 4533 | 1430 | 1115 |
| 75 | 3760 | 840 | 623 |
| 85 | 2454 | 231 | 133 |

COEFFICIENTS OF UTILIZATION (%)

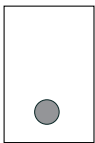
| Ceiling | 80 | | | 70 | | | 50 | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|
| | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| Wall | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 |
| 0 | 59 | 59 | 59 | 59 | 58 | 58 | 58 | 58 | 55 | 55 | 55 |
| 1 | 54 | 52 | 50 | 48 | 53 | 51 | 49 | 47 | 49 | 47 | 46 |
| 2 | 50 | 46 | 43 | 40 | 48 | 45 | 42 | 39 | 43 | 41 | 38 |
| 3 | 46 | 41 | 37 | 34 | 44 | 40 | 36 | 33 | 38 | 35 | 33 |
| 4 | 42 | 36 | 32 | 29 | 41 | 36 | 32 | 29 | 34 | 31 | 28 |
| 5 | 39 | 33 | 28 | 25 | 38 | 32 | 28 | 25 | 31 | 27 | 25 |
| 6 | 36 | 30 | 25 | 22 | 35 | 29 | 25 | 22 | 28 | 25 | 22 |
| 7 | 33 | 27 | 23 | 20 | 33 | 27 | 23 | 20 | 26 | 22 | 20 |
| 8 | 31 | 25 | 21 | 18 | 30 | 24 | 20 | 18 | 24 | 20 | 18 |
| 9 | 29 | 23 | 19 | 16 | 29 | 22 | 19 | 16 | 22 | 18 | 16 |
| 10 | 27 | 21 | 17 | 15 | 27 | 21 | 17 | 15 | 20 | 17 | 15 |

Based on floor reflectance of 20

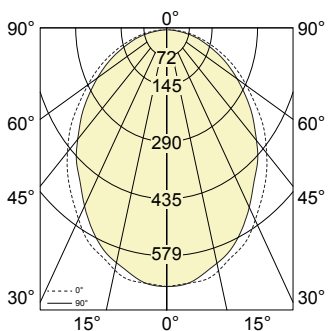
LUMINANCE DATA (CD/M²)

| Vertical Angle | Horizontal Angles | | |
|----------------|-------------------|------|------|
| | 0 | 45 | 90 |
| 45 | 6304 | 2855 | 2301 |
| 55 | 5352 | 2072 | 1589 |
| 65 | 4632 | 1389 | 1031 |
| 75 | 3768 | 789 | 580 |
| 85 | 2576 | 230 | 135 |

I T8



PHOTOMETRIC CURVE



Test Lamp: IxF32T8

IES FILE: BDR-F-4-T8-1

Efficiency: 49.6%

i All IES files for other lamping are available for download at: www.axislighting.com