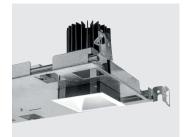
2DS PoE | tunable WHITE 2" Downlight – Square





NEW CONSTRUCTION AND REMODEL

FEATURES

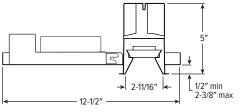
- Deliver scalable, data-driven smart buildings with PoE-enabled fixtures and controls
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING Die-cast aluminum trim housing with forged aluminum heat sink. Swing-out mounting arms field adjust for ceiling thickness from 1/2" - 2-3/8".
- **OPEN REFLECTOR Low-iridescent** anodized aluminum with top diffuser.
- LENSED TRIM Die-cast aluminum frame with micro-prismatic, acrylic lens. Diffuse acrylic lens standard with A Trim Type.
- ELECTRICAL High-performance Class 2 C.O.B. LED array. Modular quick-connect plug for easy field-connection of LED light assembly to node. Reported L70>55,000 hours. Reported L90>55,000 hours. Estimated L70 = 200,000 hours. Lowvoltage DC fixture, to be fed by Class 2 power supply. Tunable White products use LEDs of multiple CCTs and may produce a perceptibly different shade of white from single-CCT products at the same CCT. All CCTs are within 3 MacAdam ellipses.
- MOUNTING Recessed. 20 ga. galvanized steel mounting pan for new construction or IC-rated enclosure. Minimum 12-1/2" O.C. marked spacing required for P20 and P23 static white, and P12 and P15 tunable white lumen packages when specified with R Mounting Type, and P15 static white lumen package when specified with S Distribution. Nodes cannot be mounted above hard ceilings. LISTINGS
 - cCSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0 for dry and damp locations. LED light assembly conforms to UL 2108 for remote installation.
 - Suitable for wet location under covered ceiling when specified with WET/CC.
 - IC-rated for direct contact with insulation when specified with I Mounting Type.
 - City of Chicago Environmental Air approved when specified with CP option.
 - Complies with ASTM-E283 when specified with ATH option.
 - RoHS compliant.
 - Complies with the Buy American Act and other federal regulations. Request certification at hew.com/baa.
- WARRANTY 5-year limited warranty, see hew.com/warranty.

SYSTEM REQUIREMENTS

- PoE-ready luminaires are connected to building power systems through network integration and require other components for complete PoE lighting system.
- 8 For additional PoE info, see hew.com/poe.



CATALOG #: _



POE PR Power over Ethernet-ready

CONTROL^[2]

ORDERING EXAMPLE: 2DS - P20/835 - OPTIONS - POE PR - LW - OF - WH - TRIM OPTIONS Ν - F1 - HOUSING -- TRIM MOUNT

HOUSING

| HOUSIN | IG | | | | | | | |
|--------|-----|---------------------|-----|--------|-----|---|--|--|
| SERIES | LUM | IENS ^[1] | CRI | | ССТ | | | |
| 2DS | P5 | 500lm | 8 | 80 [3] | 27 | 2700K | | |
| | P7 | 700lm | 9 | 90 | 30 | 3000K | | |
| | P9 | 900lm | | | 35 | 3500K | | |
| | P12 | 1,200lm | | | 40 | 4000K | | |
| | P15 | 1,500lm | | | 50 | 5000K | | |
| | P20 | 2,000lm | | | τw | Tunable | | |
| | P23 | 2,300lm | | | | white (90 CRI, 2700K-5000K) ^[4] | | |
| | | | | | | | | |

| DI | M | [6] | |
|----|---|-----|--|

| TRIM TYPE | DISTRIBUTION [7] | FLANGE TYPE | REFLECTOR FINISH | TRIM O | PTIONS |
|----------------------------------|----------------------------|------------------------|---|--------|--|
| L Flush lens O Open reflector | W 50° Wide M 30° Medium | OF 1/2" standard | Open trim types CS Clear semi-specular | MWT | Smooth matte white trim flange [13] |
| R Regressed lens | N 20° Narrow ^{[9} | j flange | anodize | AD | Diffuse acrylic lens [14] |
| A Angled lens ^[8] | S 14° Narrow sp | ot [10] ZF Zero-flange | SG Satin-glow anodize | PD | Diffuse 1/8" |
| 5 | WW Wall wash [11] | | GD Gold anodize | | polycarbonate lens [15] |
| | | | CG Champagne gold anodize | WET/CC | Wet location, covered ceiling listed ^[16] |
| | | | PW Pewter anodize | AM | Anti-microbial ^[17] |

OPTIONS

CP

ATH Airtight construction

Chicago plenum (CCEA)^[5]

| PW | Pewter | anodize | |
|-------|--------|---------|--|
| ~ ~ ~ | ~ | | |

Clear specular anodize RG Rose gold anodize

Lens trim types

Clear semi-specular powder coat CS

Integral 2-position fixed pan bracket, universal bar hanger included [23]

- WH White texture powder coat
- Black texture powder coat BL

BA1 Adjustable butterfly pan bracket, bar hanger not included ^[24]

CA1 Adjustable caterpillar pan bracket, universal bar hanger included ^[25]

Black texture splay with white flange [18] MB

MOUNTING

- MOUNTING TYPE [19]
- N Open pan for new construction
- I IC-rated enclosure for new construction [21] R Remodel kit^[22]
- NOTES
- Lumen output based on O Trim Type, W Distribution, and WH Reflector Finish, 80 CRI/3500K CCT for single CCT and 90 CRI/4000K CCT for TW. Actual performance may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- For additional PoE connection details,
- P15 lumen package max with W, M, and WW Distributions. P12 lumen package max with N Distribution. Not available

- With S Distribution. I Mounting Type required. Trim ships separately. Beam angle based on static white, L Trim Type and WH Reflector Finish. Trim Type affects beam angle. See page 2 for FIXTURE PERFORMANCE DATA.
- Available with WW Distribution only.

P20 static white and P12 tunable white lumen packages max for N and R Mounting and P12 static white and P7 tunable white lumen packages max for I

MOUNTING HARDWARE [20]

- Mounting. ¹⁰ Static white only. P15 lumen package max for N and R Mounting. P12 lumen package max for I Mounting. Not available with 950 CRI/CCT.
- ¹¹ A Trim Type only.
 ¹² For use with mud-in plaster construction only, supplied with mud flange installation kit. See page 4 for TRIM TYPE DETAILS. Not available with O Trim Type or ATH Option.
- Not available with L Trim Type, ZF Flange Type or WH Reflector Finish.
- W distribution only. Not available with O Trim Type. ¹⁵ W and WW Distributions only. Not
- available with O Trim Type

- ¹⁶ Not available with O Trim Type.
 ¹⁷ WH and BL Reflector Finishes only.
 ¹⁸ R Trim Type only. Not available with ZF Flange Type or MWT.
- Mounting hardware required (N and I only), ordered separately, see MOUNTING HARDWARE ordering info. See page 5 for MOUNTING TYPE DETAILS.
- 20 Additional mounting hardware options available. See page 5 for MOUNTING HARDWARE DETAILS.
- ²¹ P15 static white and P9 tunable white lumen packages max. ²² Also used in new construction sheetrock
- ceilings. Pan-less installation.
- ²³ N and I Mounting Types only. I Mounting requires external brackets.
- 24 N Mounting Type only
- 25 N Mounting Type only

H.E. Williams, Inc. Carthage, Missouri www.hew.com 417-358-4065 Information contained herein is subject to change without notice

Designed and Manufactured in the USA REV 07/24/24 | A

- - consult factory. Not available with tunable white.

2DS PoE I tunable WHITE 2" Downlight – Square

FIXTURE PERFORMANCE DATA

STATIC WHITE (See page 3 for tunable white data)

| | | FLUSH LENS TRIM TYPE | | OPEN REFLECTOR TRIM TYPE | | REGRESSED LENS TRIM TYPE | | ANGLED LENS TRIM TYPE | | |
|-----|--------------|----------------------|---------------------|--------------------------|---------------------|--------------------------|---------------------|-----------------------|---------------------|--------------------|
| | DISTRIBUTION | WATTAGE | DELIVERED LUMENS | EFFICACY (Im/W) | DELIVERED LUMENS | EFFICACY (Im/W) | DELIVERED LUMENS | EFFICACY (Im/W) | DELIVERED LUMENS | EFFICACY (Im/W) |
| | W | 4.2 | 526 | 125 | 381 | 91 | 530 | 126 | - | - |
| | М | 4.2 | 528 | 126 | 361 | 86 | 520 | 124 | - | - |
| Ρ5 | N | 4.2 | 511 | 122 | 372 | 89 | 511 | 122 | - | - |
| | S | 5.4 | 607 | 112 | 435 | 80 | 609 | 113 | - | - |
| | WW | 4.2 | - | - | - | - | - | - | 407 | 97 |
| | W | 5.9 | 720 | 122 | 521 | 88 | 725 | 123 | - | - |
| | М | 5.9 | 722 | 122 | 494 | 84 | 711 | 121 | - | - |
| P7 | N | 5.9 | 699 | 118 | 509 | 86 | 699 | 119 | - | - |
| | S | 7.6 | 789 | 104 | 565 | 74 | 792 | 104 | - | - |
| | WW | 5.9 | - | - | - | - | - | - | 557 | 94 |
| | W | 7.9 | 928 | 117 | 672 | 85 | 935 | 118 | - | - |
| | М | 7.9 | 931 | 118 | 637 | 81 | 917 | 116 | - | - |
| 6 | N | 7.9 | 901 | 114 | 656 | 83 | 901 | 114 | - | - |
| | S | 11.1 | 1085 | 98 | 777 | 70 | 1089 | 98 | - | - |
| | WW | 7.9 | - | - | - | - | - | - | 718 | 91 |
| | W | 11.5 | 1292 | 112 | 936 | 81 | 1302 | 113 | - | - |
| | М | 11.5 | 1296 | 113 | 886 | 77 | 1277 | 111 | - | - |
| 13 | N | 11.5 | 1254 | 109 | 914 | 79 | 1255 | 109 | - | - |
| _ | S | 15.3 | 1345 | 88 | 963 | 63 | 1349 | 88 | - | - |
| | WW | 11.5 | - | - | - | - | - | - | 1000 | 87 |
| | W | 14.7 | 1602 | 109 | 1160 | 79 | 1614 | 110 | - | - |
| | М | 14.7 | 1607 | 109 | 1099 | 75 | 1583 | 108 | - | - |
| P15 | N | 14.7 | 1555 | 106 | 1133 | 77 | 1556 | 106 | - | - |
| _ | S | 22.7 | 1783 | 79 | 1276 | 56 | 1789 | 79 | - | - |
| | WW | 14.7 | - | - | - | - | - | - | 1240 | 84 |
| | w | 20.6 | 2104 | 102 | 1523 | 74 | 2119 | 103 | _ | - |
| | М | 20.6 | 2110 | 102 | 1443 | 70 | 2079 | 101 | _ | - |
| P20 | N | 20.6 | 2042 | 99 | 1488 | 72 | 2043 | 99 | _ | - |
| | S | - | - | - | - | - | - | - | _ | - |
| | WW | 20.6 | - | _ | - | - | - | _ | 1628 | 79 |
| | W | 23.7 | 2326 | 98 | 1983 | 84 | 2343 | 99 | - | - |
| | М | 23.7 | 2333 | 98 | 1596 | 67 | 2298 | 97 | _ | - |
| P23 | N | - | - | - | - | - | - | _ | _ | - |
| | S | - | - | _ | - | - | - | _ | _ | - |
| | WW | 23.7 | - | _ | - | _ | - | _ | 1800 | 76 |

MULTIPLIER TABLES

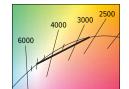
| | | COLOR TEMP | ERATURE | | REFLEC |
|--------|-------|------------|---------------|--------|-----------------|
| | сст | L | UMENS | | CATALOG |
| | | STANDARD | TUNABLE WHITE | | NUMBER |
| | 2700K | 0.92 | _ | | CS |
| = | 3000K | 0.98 | _ | | SG ¹ |
| 80 CRI | 3500K | 1.00 | _ | Σ | GD |
| × | 4000K | 1.01 | _ | 0 TRIM | CG |
| | 5000K | 1.02 | _ | 0 | PW |
| _ | | | | | SPC |
| | 2700K | 0.76 | 0.87 | | RG |
| ~ | 3000K | 0.79 | 0.96 | | ĸo |
| 90 CRI | 3500K | 0.82 | 1.02 | Σ | WH |
| 6 | 4000K | 0.84 | 1.00 | TRIM | CS |
| | 5000K | 0.88 | 1.02 | ~ | BL |

TOR FINISH CONVERSION FACTOR 1.00 0.92 0.93 0.96 0.86 1.02 0.88

1.00 0.98 0.79

BEAM ANGLE

| OPTIONS | | TRIM TYPE | | | | | | | | |
|------------|---|-----------|------|-----------|--|--|--|--|--|--|
| CONVERSION | | FLUSH | OPEN | REGRESSED | | | | | | |
| FACTOR | W | 50° | 50° | 55° | | | | | | |
| 0.85 | | | | | | | | | | |
| | M | 30° | 47° | 30° | | | | | | |
| 0.85 | Ν | 20° | 47° | 20° | | | | | | |
| | S | 14° | 43° | 14° | | | | | | |



1

TRIM OPTIONS

CATALOG NUMBER

AD

PD

Distribution will also be affected, consult factory. Photometrics tested in accordance with IESNA LM-79. Results based on CS (O Tim Type) or WH (L, R and A Trim Types) reflector finish, W distribution and 25°C ambient temperature. Static white results based on 80 CRI/3500K CCT. Tunable white results based on 90 CRI/4000K CCT. Actual performance may vary +/5%Wattage and efficacy data shown do not account for node losses. Beam angle based on static white, L Trim Type and WH Reflector Finish. Use multiplier tables to calculate additional options.

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FIXTURE PERFORMANCE DATA CONTINUED ON NEXT PAGE.



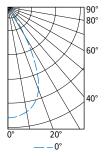
2DS PoE | tunable WHITE 2" Downlight – Square

TUNABLE WHITE (See page 2 for static white data)

| | FLUSH LENS T | | S TRIM TYPE | OPEN REFLECT | OR TRIM TYPE | REGRESSED LENS TRIM TYPE | | ANGLED LENS TRIM TYPE | | |
|-----|--------------|---------|---------------------|--------------------|---------------------|--------------------------|---------------------|-----------------------|---------------------|--------------------|
| | DISTRIBUTION | WATTAGE | DELIVERED LUMENS | EFFICACY (Im/W) | DELIVERED LUMENS | EFFICACY (Im/W) | DELIVERED LUMENS | EFFICACY (Im/W) | DELIVERED LUMENS | EFFICACY (Im/W) |
| | W | 7.3 | 581 | 80 | 421 | 58 | 586 | 80 | - | - |
| | М | 7.3 | 609 | 83 | 416 | 57 | 600 | 82 | - | - |
| ЪЗ | N | 7.3 | 552 | 76 | 402 | 55 | 553 | 76 | - | - |
| | S | _ | - | - | - | - | - | _ | - | - |
| | WW | 7.3 | - | - | - | - | - | - | 450 | 62 |
| | W | 10.1 | 776 | 77 | 562 | 56 | 782 | 77 | - | - |
| | М | 10.1 | 813 | 80 | 556 | 55 | 801 | 79 | - | - |
| P7 | N | 10.1 | 737 | 73 | 537 | 53 | 738 | 73 | - | - |
| | S | _ | - | - | - | - | - | _ | - | - |
| | WW | 10.1 | - | - | - | - | - | _ | 601 | 59 |
| | W | 14.6 | 1083 | 74 | 784 | 54 | 1091 | 75 | - | - |
| | М | 14.6 | 1134 | 78 | 776 | 53 | 1117 | 77 | - | - |
| B | N | 14.6 | 1029 | 70 | 750 | 51 | 1030 | 71 | - | - |
| | S | - | - | - | - | - | - | - | - | - |
| | WW | 14.6 | - | - | - | - | - | - | 838 | 57 |
| | w | 19.3 | 1332 | 69 | 964 | 50 | 1342 | 70 | - | - |
| | М | 19.3 | 1395 | 72 | 954 | 49 | 1374 | 71 | - | - |
| 13 | N | 19.3 | 1265 | 66 | 922 | 48 | 1266 | 66 | - | - |
| | S | - | - | - | - | - | - | - | - | - |
| | WW | 19.3 | - | - | - | - | - | _ | 1031 | 53 |
| | w | 23.7 | 1491 | 63 | 1080 | 46 | 1502 | 63 | - | - |
| | М | 23.7 | 1562 | 66 | 1068 | 45 | 1538 | 65 | - | - |
| P15 | N | - | - | - | - | - | - | - | - | - |
| | S | _ | _ | - | - | - | _ | - | - | - |
| | WW | 23.7 | - | - | _ | - | - | - | 1154 | 49 |
| | W | _ | _ | - | - | - | _ | - | - | - |
| | М | - | _ | - | - | - | _ | _ | - | _ |
| P20 | N | _ | _ | - | - | - | _ | - | - | - |
| | S | - | - | - | - | - | - | - | - | - |
| | WW | - | - | - | - | - | - | - | | |
| | W | - | - | - | - | - | - | - | - | - |
| | М | - | - | - | - | - | - | - | - | - |
| P23 | N | - | - | - | - | - | - | - | - | - |
| | S | - | _ | _ | - | _ | _ | _ | _ | _ |
| | WW | - | _ | - | - | _ | _ | _ | _ | - |

PHOTOMETRY

2DS-P15/835-POE PR-LW-OF-WH Total Luminaire Output: 1602 lumens; 14.7 Watts | Efficacy: 109 lm/W | 80 CRI; 3500K CCT



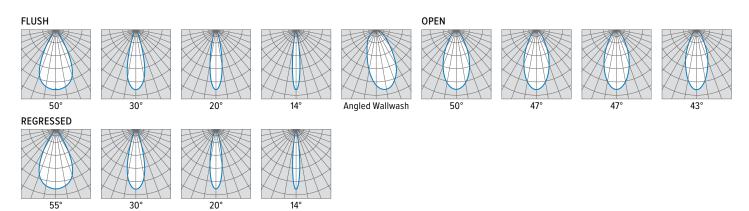
| | | ERTICAL ANGLE HORIZONTAL ANGLE | | | |
|--------------------------|----------------|--------------------------------|--------------|--|--|
| | VERTICAL ANGLE | 0° | ZONAL LUMENS | | |
| NO | 0 | 1852 | | | |
| 5 | 5 | 1869 | 173 | | |
| | 15 | 1690 | 464 | | |
| CANDLEPOWER DISTRIBUTION | 25 | 1065 | 496 | | |
| 8 | 35 | 269 | 227 | | |
| No. | 45 | 109 | 97 | | |
| Ē | 55 | 72 | 68 | | |
| Ē | 65 | 46 | 47 | | |
| 2 | 75 | 22 | 24 | | |
| | 85 | 5 | 5 | | |
| | 90 | 0 | | | |

| LUMEN SUMMARY | ZONE | LUMENS | % FIXTURE |
|---------------|--------|--------|-----------|
| M | 0 - 40 | 1360 | 85 |
| NS | 0 - 60 | 1526 | 95 |
| W | 0 - 90 | 1602 | 100 |
| 3 | 0-180 | 1602 | 100 |

PHOTOMETRY CONTINUED ON NEXT PAGE

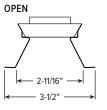


2DS PoE | tunable WHITE 2" Downlight – Square

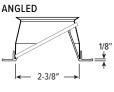


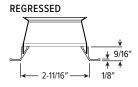
TRIM TYPE DETAILS











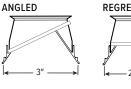
5/8″

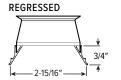
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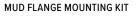
Ceiling Cutout: 3"

ZERO-FLANGE MUD-IN

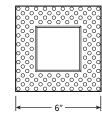








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REFLECTOR FINISH DETAILS

| SPC Clear specular | SG Satin glow | PW Pewter | GD Gold | CG Champagne gold | RG Rose gold | CS Clear semi-specula | WH r White | BL Black |
|------------------------------|-------------------------|---------------------|-------------------|-----------------------------|------------------------|--|---------------|--------------------|
| | | | | | | | | |
| | | | | | | and the second s | | |

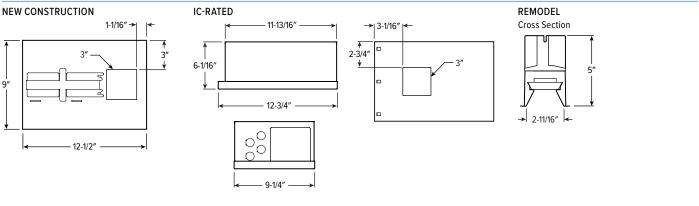
1/8″

SEE NEXT PAGE FOR MOUNTING DETAILS



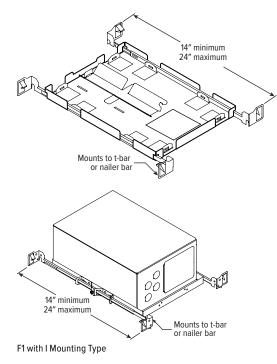
2DS PoE | tunable WHITE 2" Downlight – Square

MOUNTING TYPE DETAILS



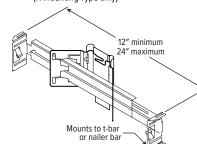
MOUNTING HARDWARE DETAILS

F1 Integral 2-position fixed pan bracket, universal bar hanger included



BA2 Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)

BA1 Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)



CA1 Adjustable caterpillar pan bracket, universal bar hanger included (N Mounting Type only)



CA2 Adjustable caterpillar pan bracket, t-bar hanger included (N Mounting Type only)

