

| | | |
|----------|-----------|-------|
| Project: | Catalog#: | Type: |
| Notes: | | |

Product Description

The Certolux BDL downlights provide acute behavioral health centers with the protections they need, combined with a comfortable residential appeal. Our sealed, specification grade downlights are engineered to withstand high abuse and tampering using a rigid construction and lensing choices without looking clinical nor institutional. These highly capable downlights are tested to IK10, the highest IK impact level. They are also certified for clean-ability to NSF2 and carry a certified IP65 seal, and antimicrobial finishes.



Features

- Designed for use with metal security ceilings and other hard ceilings
- Delivered lumens: 1000 - 5,000 lm
- Rigid die cast trim
- Tamper Resistant Torx Screws
- IK10 Impact Rated
- NSF2 Splash Zone Certified
- IP65 rated sealed optical chamber
- Antimicrobial finished trims
- Optional low voltage controller

Install Frame

18 Ga Rigid Steel Frame supported by two universal style vertically adjustable brackets. Frame supports a large junction box with (5) 1/2 inch trade size knockouts. Plaster ring attachment provides for adjustment after installation from below the ceiling.

Optical Assembly

The assembly is factory sealed to maintain a clean appearance. The heat sink, reflector, lens and trim are sealed with long-life EPDM closed cell gasket materials. Supported by tamper resistant Torx screws to a vertically adjustable collar (plaster flange) that allows up to 2.5" thick ceilings.

Lens

Standard lens; Clear, flat, 0.125" thick high impact polycarbonate sealed into the trim assembly secured by a die-cast ring and trim providing continuous compression to lens, reflector and gaskets. Smooth external surface for easy cleaning.

Gaskets

Die cut closed cell EPDM foam gaskets seal lens to the trim and reflector.

LED

Factory sealed COB style LED light engine that is field replaceable and serviceable from below. COB LEDs are high efficiency and closely regulated to maintain CRI, color consistency, lumen performance, and efficacy. Choose from 2700K, 3000K, 3500K, 4000K, and 5000K color temperatures with a color consistency of 2 SDCM, standard 80 CRI, optional 90 and 95 CRI. Lifetime L70 is greater than 60,000 hrs.

Electrical

The standard electronic driver is constant current, programmable and dimmable to 1% using a 0-10V protocol. High efficiency (>85%) and low THD (<10%). Certified to FCC Part 15, Class A. 120-277Vac or 347Vac, 50/60hz. See "Options" for DALI driver choices.

Trim Finish

5 Stage pretreatment and antimicrobial gloss white polyester powder coated. Antimicrobial matte white polyester powder coating is optional*. See "Finish Options".

Installation

Recessed Non-IC- Marked Spacings for T-bar Grid and F type (drywall) ceilings. Compatible with 9/16" (NFG), 15/16", 1" and 1-1/2" standard grid ceilings. Plaster Ring has vertical adjustment for ceilings from 1/2"-2.5" thick. Use under a covered structural ceiling.

Listings, Certifications and Ratings

ETL listed for recessed type Non-IC Marked Spacings, Wet locations. Ingress protection rated IP64 (regressed lens) or IP65 (Flush lens). NSF certified for Splash Zone. ISO-3 cleanroom rated with FSL or FSS trim style.

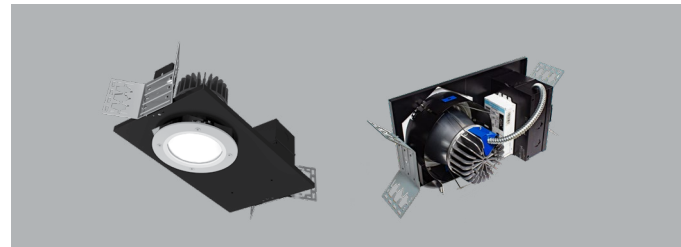
Warranty

5 year limited warranty. For complete warranty, click here:

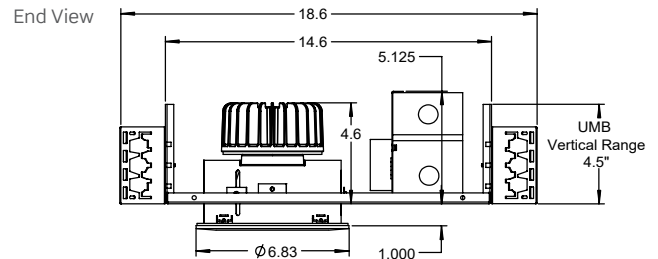


Approvals

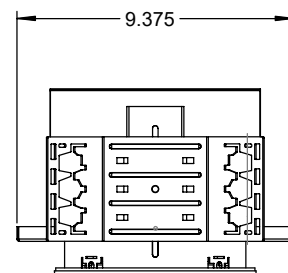
- UL listed to CSA and UL standards for insulated ceilings
- Certified IP65 & Certified NSF



Dimensions



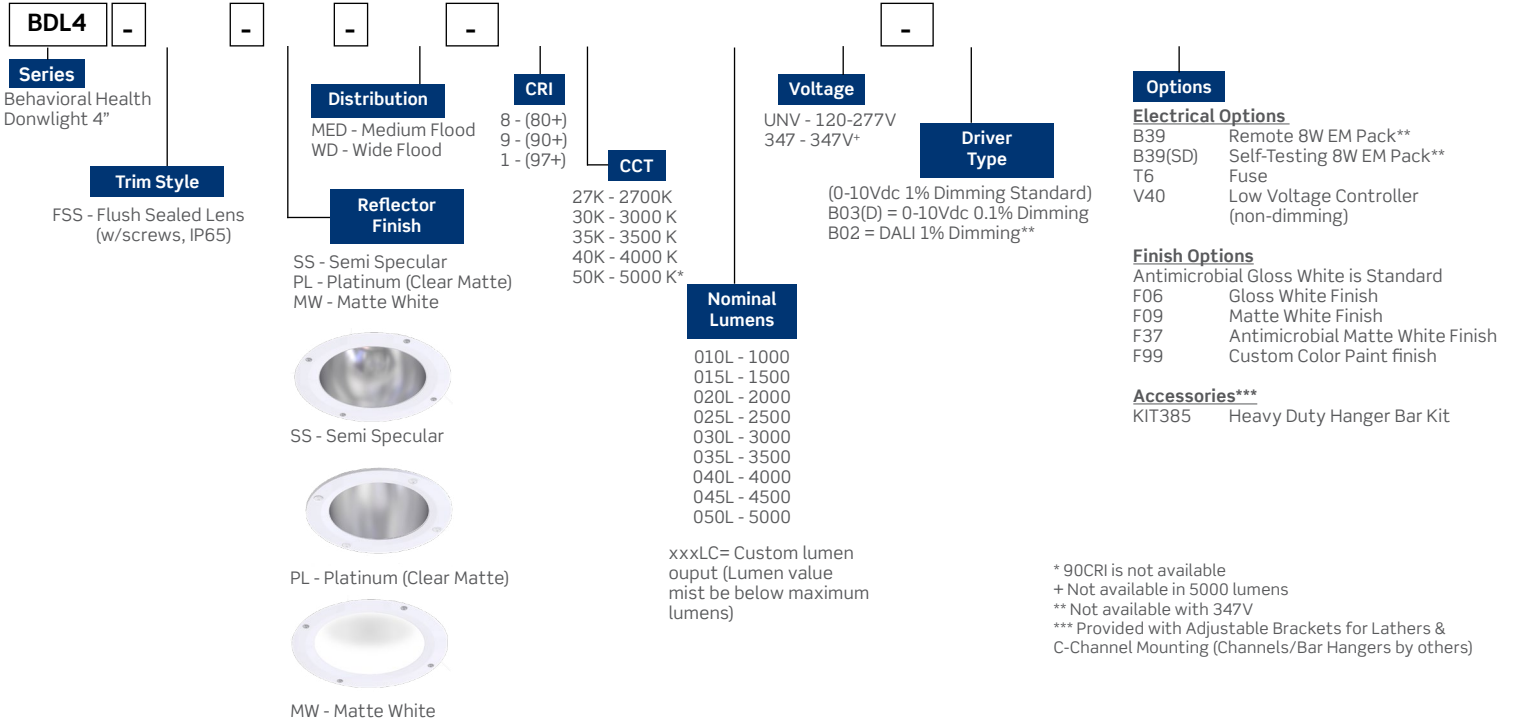
Side View



| | | |
|----------|-----------|-------|
| Project: | Catalog#: | Type: |
| Notes: | | |

Order Key

EXAMPLE: BDL4-FSS-SS-WD-840KUNV



Performance Scaling

| CRI | CCT | Lumen Multiplier |
|-----|-------|------------------|
| 80 | 2700K | 0.91 |
| | 3000K | 0.92 |
| | 3500K | 0.98 |
| | 4000K | 1.00 |
| | 5000K | 1.02 |
| 90 | 3000K | 0.84 |
| | 3500K | 0.79 |
| | 4000K | 0.82 |
| 98 | 3500K | 0.75 |
| | 4000K | 0.79 |

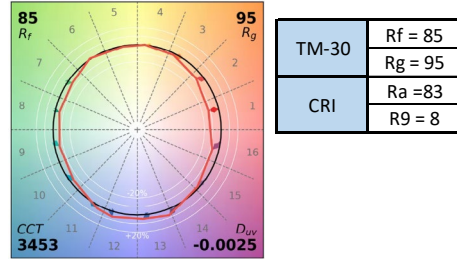
| | | |
|----------|-----------|-------|
| Project: | Catalog#: | Type: |
| Notes: | | |

| LED Performance Data - 4" FLS (Flush Sealed Lens) | | | | | | | | | | | | | | | |
|---|----------------------|-------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------------|--------------|----------------|
| Distribution Order Code | Reflector Order Code | Lumens Order Code | Delivered Lumens 2700K | Delivered Lumens 3000K | Delivered Lumens 3000K | Delivered Lumens 3500K | Delivered Lumens 3500K | Delivered Lumens 4000K | Delivered Lumens 4000K | Delivered Lumens 5000K | Delivered Lumens 3500K | Delivered Lumens 4000K | Estimated L80 LED Life (hrs) | Supply Watts | Efficacy Range |
| | | | 80 CRI | 80 CRI | 90 CRI | 80 CRI | 90 CRI | 80 CRI | 90 CRI | 80 CRI | 90 CRI | 80 CRI | | | |
| MED - Medium | SS | 010L | 845 | 851 | 778 | 909 | 736 | 929 | 758 | 944 | 692 | 730 | >90Khrs | 10.2 | 67.9 - 92.5 |
| | | 015L | 1268 | 1276 | 1166 | 1363 | 1104 | 1393 | 1137 | 1416 | 1038 | 1095 | >90Khrs | 15.4 | 67.4 - 91.9 |
| | | 020L | 1691 | 1702 | 1555 | 1817 | 1471 | 1858 | 1516 | 1888 | 1384 | 1460 | >90Khrs | 20.5 | 67.5 - 92.1 |
| | | 025L | 2113 | 2127 | 1944 | 2271 | 1839 | 2322 | 1895 | 2360 | 1730 | 1825 | >80Khrs | 25.6 | 67.6 - 92.2 |
| | | 030L | 2536 | 2553 | 2333 | 2726 | 2207 | 2787 | 2274 | 2832 | 2076 | 2191 | >80Khrs | 30.8 | 67.4 - 91.9 |
| | | 035L | 2959 | 2978 | 2721 | 3180 | 2575 | 3251 | 2653 | 3303 | 2422 | 2556 | >80Khrs | 35.9 | 67.5 - 92.0 |
| | | 040L | 3381 | 3404 | 3110 | 3634 | 2943 | 3716 | 3032 | 3775 | 2768 | 2921 | >80Khrs | 41.3 | 67.0 - 91.4 |
| | | 045L | 3804 | 3829 | 3499 | 4088 | 3311 | 4180 | 3411 | 4247 | 3114 | 3286 | >70Khrs | 46.2 | 67.4 - 91.9 |
| | | 050L | 4227 | 4255 | 3888 | 4543 | 3679 | 4645 | 3790 | 4719 | 3460 | 3651 | >70Khrs | 51.3 | 67.5 - 92.0 |
| | PL | 010L | 889 | 895 | 818 | 956 | 774 | 977 | 797 | 993 | 728 | 768 | >90Khrs | 10.2 | 71.4 - 97.3 |
| | | 015L | 1334 | 1342 | 1227 | 1433 | 1161 | 1466 | 1196 | 1489 | 1092 | 1152 | >90Khrs | 15.4 | 70.9 - 96.7 |
| | | 020L | 1778 | 1790 | 1636 | 1911 | 1548 | 1954 | 1595 | 1985 | 1456 | 1536 | >90Khrs | 20.5 | 71.0 - 96.8 |
| | | 025L | 2223 | 2237 | 2044 | 2389 | 1935 | 2443 | 1993 | 2482 | 1820 | 1920 | >80Khrs | 25.6 | 71.1 - 96.9 |
| | | 030L | 2667 | 2685 | 2453 | 2867 | 2321 | 2931 | 2392 | 2978 | 2184 | 2304 | >80Khrs | 30.8 | 70.9 - 96.7 |
| | | 035L | 3112 | 3132 | 2862 | 3344 | 2708 | 3420 | 2790 | 3474 | 2548 | 2688 | >80Khrs | 35.9 | 71.0 - 96.8 |
| | | 040L | 3556 | 3580 | 3271 | 3822 | 3095 | 3908 | 3189 | 3971 | 2912 | 3072 | >80Khrs | 41.3 | 70.5 - 96.1 |
| | | 045L | 4001 | 4027 | 3680 | 4300 | 3482 | 4397 | 3588 | 4467 | 3276 | 3456 | >70Khrs | 46.2 | 70.9 - 96.7 |
| | | 050L | 4446 | 4475 | 4089 | 4778 | 3869 | 4885 | 3986 | 4963 | 3639 | 3840 | >70Khrs | 51.3 | 70.9 - 96.8 |
| W - Wide | SS | 010L | 890 | 896 | 819 | 957 | 775 | 978 | 798 | 994 | 729 | 769 | >90Khrs | 10.2 | 71.4 - 97.4 |
| | | 015L | 1335 | 1344 | 1228 | 1435 | 1162 | 1467 | 1197 | 1491 | 1093 | 1153 | >90Khrs | 15.4 | 71.0 - 96.8 |
| | | 020L | 1780 | 1792 | 1637 | 1913 | 1549 | 1956 | 1596 | 1988 | 1457 | 1538 | >90Khrs | 20.5 | 71.1 - 97.0 |
| | | 025L | 2225 | 2240 | 2047 | 2392 | 1937 | 2445 | 1995 | 2485 | 1822 | 1922 | >80Khrs | 25.6 | 71.2 - 97.1 |
| | | 030L | 2670 | 2688 | 2456 | 2870 | 2324 | 2934 | 2395 | 2981 | 2186 | 2307 | >80Khrs | 30.8 | 71.0 - 96.8 |
| | | 035L | 3115 | 3136 | 2866 | 3348 | 2711 | 3424 | 2794 | 3478 | 2551 | 2691 | >80Khrs | 35.9 | 71.0 - 96.9 |
| | | 040L | 3561 | 3584 | 3275 | 3827 | 3099 | 3913 | 3193 | 3975 | 2915 | 3075 | >80Khrs | 41.3 | 70.6 - 96.3 |
| | | 045L | 4006 | 4032 | 3684 | 4305 | 3486 | 4402 | 3592 | 4472 | 3279 | 3460 | >70Khrs | 46.2 | 71.0 - 96.8 |
| | | 050L | 4451 | 4480 | 4094 | 4783 | 3874 | 4891 | 3991 | 4969 | 3644 | 3844 | >70Khrs | 51.3 | 71.0 - 96.9 |
| | PL | 010L | 897 | 903 | 825 | 964 | 781 | 986 | 804 | 1001 | 734 | 775 | >90Khrs | 10.2 | 71.4 - 97.4 |
| | | 015L | 1345 | 1354 | 1237 | 1446 | 1171 | 1478 | 1206 | 1502 | 1101 | 1162 | >90Khrs | 15.4 | 71.0 - 96.8 |
| | | 020L | 1794 | 1806 | 1650 | 1928 | 1561 | 1971 | 1609 | 2003 | 1469 | 1549 | >90Khrs | 20.5 | 71.1 - 97.0 |
| | | 025L | 2242 | 2257 | 2062 | 2410 | 1952 | 2464 | 2011 | 2504 | 1836 | 1937 | >80Khrs | 25.6 | 71.2 - 97.1 |
| | | 030L | 2691 | 2709 | 2475 | 2892 | 2342 | 2957 | 2413 | 3004 | 2203 | 2324 | >80Khrs | 30.8 | 71.0 - 96.8 |
| | | 035L | 3139 | 3160 | 2887 | 3374 | 2732 | 3450 | 2815 | 3505 | 2570 | 2711 | >80Khrs | 35.9 | 71.0 - 96.9 |
| | | 040L | 3588 | 3611 | 3300 | 3856 | 3122 | 3943 | 3217 | 4006 | 2937 | 3099 | >80Khrs | 41.3 | 70.6 - 96.3 |
| | | 045L | 4036 | 4063 | 3712 | 4338 | 3513 | 4435 | 3619 | 4506 | 3304 | 3486 | >70Khrs | 46.2 | 71.0 - 96.8 |
| | | 050L | 4485 | 4514 | 4125 | 4820 | 3903 | 4928 | 4021 | 5007 | 3671 | 3874 | >70Khrs | 51.3 | 71.0 - 96.9 |
| | MW | 010L | 836 | 841 | 769 | 898 | 727 | 918 | 749 | 933 | 684 | 722 | >90Khrs | 10.2 | 67.1 - 91.5 |
| | | 015L | 1254 | 1262 | 1153 | 1347 | 1091 | 1378 | 1124 | 1400 | 1026 | 1083 | >90Khrs | 15.4 | 66.6 - 90.9 |
| | | 020L | 1672 | 1683 | 1537 | 1796 | 1455 | 1837 | 1499 | 1866 | 1368 | 1444 | >90Khrs | 20.5 | 66.8 - 91.0 |
| | | 025L | 2089 | 2103 | 1922 | 2246 | 1818 | 2296 | 1874 | 2333 | 1711 | 1805 | >80Khrs | 25.6 | 66.8 - 91.1 |
| | | 030L | 2507 | 2524 | 2306 | 2695 | 2182 | 2755 | 2248 | 2799 | 2053 | 2166 | >80Khrs | 30.8 | 66.6 - 90.9 |
| | | 035L | 2925 | 2944 | 2690 | 3144 | 2546 | 3214 | 2623 | 3266 | 2395 | 2527 | >80Khrs | 35.9 | 66.7 - 91.0 |
| | | 040L | 3343 | 3365 | 3075 | 3593 | 2910 | 3674 | 2998 | 3732 | 2737 | 2887 | >80Khrs | 41.3 | 66.3 - 90.4 |
| | | 045L | 3761 | 3786 | 3459 | 4042 | 3273 | 4133 | 3372 | 4199 | 3079 | 3248 | >70Khrs | 46.2 | 66.6 - 90.9 |
| | | 050L | 4179 | 4206 | 3844 | 4491 | 3637 | 4592 | 3747 | 4666 | 3421 | 3609 | >70Khrs | 51.3 | 66.7 - 90.9 |

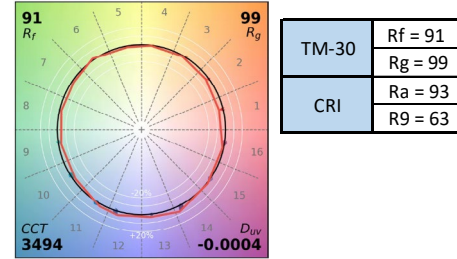
This chart is for performance selection and may change without notice. Consult IES files for official performance data.

| | | |
|----------|-----------|-------|
| Project: | Catalog#: | Type: |
| Notes: | | |

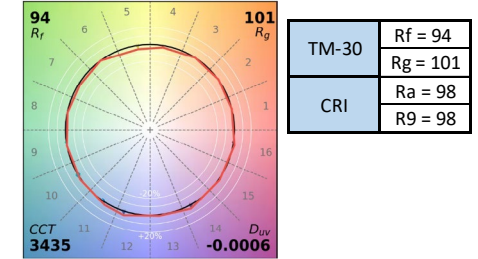
| 3500K CCT Color Metric Summary | | | | |
|--------------------------------|------|------|------|------|
| CCT: | 3453 | CRI: | 83 | |
| Δ | | | | |
| 2700 | 3000 | 3500 | 4000 | 5000 |



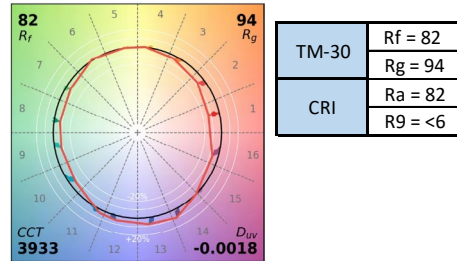
| 3500K CCT Color Metric Summary | | | | |
|--------------------------------|------|------|------|------|
| CCT: | 3494 | CRI: | 93 | |
| Δ | | | | |
| 2700 | 3000 | 3500 | 4000 | 5000 |



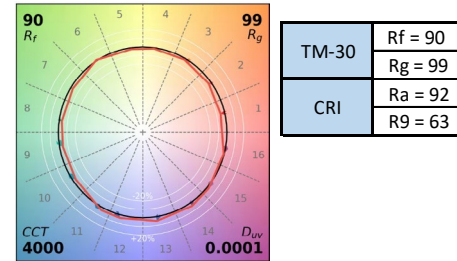
| 3500K CCT Color Metric Summary | | | | |
|--------------------------------|-------|------|------|------|
| CCT: | 3500K | CRI: | 98 | |
| Δ | | | | |
| 2700 | 3000 | 3500 | 4000 | 5000 |



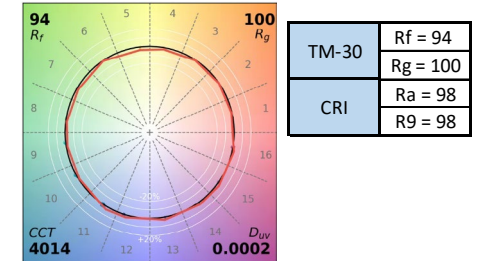
| 4000K CCT Color Metric Summary | | | | |
|--------------------------------|------|------|------|------|
| CCT: | 3933 | CRI: | 82 | |
| Δ | | | | |
| 2700 | 3000 | 3500 | 4000 | 5000 |



| 4000K CCT Color Metric Summary | | | | |
|--------------------------------|-------|------|------|------|
| CCT: | 4000K | CRI: | 92 | |
| Δ | | | | |
| 2700 | 3000 | 3500 | 4000 | 5000 |



| 4000K CCT Color Metric Summary | | | | |
|--------------------------------|------|------|------|------|
| CCT: | 4014 | CRI: | 98 | |
| Δ | | | | |
| 2700 | 3000 | 3500 | 4000 | 5000 |



| | | | | |
|--------------------------------------|------------------|-------------------------|------------------------------|----------------|
| xxx4-FSL-SS-MED-840K040L | 3716 Lumens | UGR Rating: | 13 | 20x30x10h |
| Medical Downlight Performance | | Spacing Criteria: 0-180 | | 0.58 |
| Size | Distribution | Finish | Spacing Criteria: Diag. 0.72 | |
| 4" | Medium | Semi-Specular | Beam Angle 34.1 | |
| Watts: | 41.4 | 80CRI | 2000 | 4000 6000 8000 |
| Mtg. Ht. (ft) | Light Level (fc) | Beam Dia. (ft) | | |
| 5 | 308.8 | 3.1 | | |
| 6 | 214.4 | 3.7 | | |
| 7 | 157.6 | 4.3 | | |
| 8 | 120.6 | 4.9 | | |
| 9 | 95.3 | 5.5 | | |
| 10 | 77.2 | 6.1 | | |

| | | | | |
|--------------------------------------|------------------|-------------------------|------------------------------|----------------|
| xxx4-FSL-SS-WD-840K-040L | 3913 Lumens | UGR Rating: | 14 | 20x30x10h |
| Medical Downlight Performance | | Spacing Criteria: 0-180 | | 1.62 |
| Size | Distribution | Finish | Spacing Criteria: Diag. 1.22 | |
| 4" | Wide | Semi-Specular | Beam Angle 79.8 | |
| Watts: | 40.5w | 80CRI | 700 | 1400 2100 2800 |
| Mtg. Ht. (ft) | Light Level (fc) | Beam Dia. (ft) | | |
| 5 | 88.4 | 8.4 | | |
| 6 | 61.4 | 10.0 | | |
| 7 | 45.1 | 11.7 | | |
| 8 | 34.5 | 13.4 | | |
| 9 | 27.3 | 15.1 | | |
| 10 | 22.1 | 16.7 | | |

| | | | | |
|--------------------------------------|------------------|-------------------------|-----------------------------|----------------|
| xxx4-FSL-PL-WD-840K-040L | 3943 Lumens | UGR Rating: | 13 | 20x30x10h |
| Medical Downlight Performance | | Spacing Criteria: 0-180 | | 1.26 |
| Size | Distribution | Finish | Spacing Criteria: Diag. 1.1 | |
| 4" | Wide | Platinum (PL) | Beam Angle 75.5 | |
| Watts: | 41.7 | 80CRI | 750 | 1500 2250 3000 |
| Mtg. Ht. (ft) | Light Level (fc) | Beam Dia. (ft) | | |
| 5 | 116.0 | 7.7 | | |
| 6 | 80.6 | 9.3 | | |
| 7 | 59.2 | 10.8 | | |
| 8 | 45.3 | 12.4 | | |
| 9 | 35.8 | 13.9 | | |
| 10 | 29.0 | 15.5 | | |

This chart is for performance selection and may change without notice. Consult IES files for official performance data.