



Bridgelux H Series LED Array: Product Selection Guide PSG-050A

Refer to relevant product data sheets for specific information on application and performance.

Product Data sheets available at Bridgelux.com or from Bridgelux Sales Representatives.

The tables below include the base BXRH part number which defines color (CCT), color rendering (CRI) and flux characteristics.

Product Nomenclature – BXRH H Series Part Numbers

Product Number: **B X R H – A B C D E F G – H – I J**

B X R H – designates product family

AB – designates nominal CCT color

27 - 2700 K

30 - 3000 K

35 - 3500 K

40 - 4000 K

C - Color Rendering (CRI)

C - CRI > 70

E - CRI > 80

G - CRI > 90

A - Class A

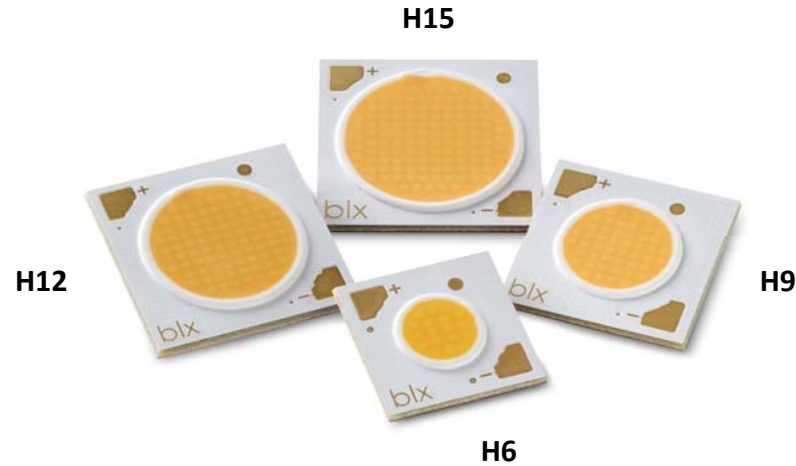
D E F G – designates nominal flux. (Example: 0400 for 400 lumen product)

H - Array Configuration

I J – designates color binning

23 - 3SDCM (3-step) available on Warm and Neutral White

H Series (BXRH) Form Factors



| Form Factor | MOQ | Tube Count | LES Diameter | Dimensions | Total Z-Height | Substrate Z-Height |
|-------------|-----|------------|--------------|---------------------|----------------|--------------------|
| H6 | 700 | 35 units | 6 mm | 13.35 mm x 13.35mm | 1.6 mm | 1.1 mm |
| H9 | 300 | 30 units | 9 mm | 15.85 mm x 15.85 mm | 1.6 mm | 1.1 mm |
| H12 | 100 | 25 units | 12 mm | 17.85 mm x 17.85 mm | 1.6 mm | 1.1 mm |
| H15 | 100 | 25 units | 15 mm | 19.00 mm x 19.00 mm | 1.6 mm | 1.1 mm |

Notes:

1.) Thermal Resistance based on 3000K 80 CRI component.



| Form Factor | Part Number | CCT (Nominal) | CRI (min) | Current (mA) | Rated Current | Typical Pulsed Flux T _c 25°C (lm) | Minimum Pulsed Flux T _c 25°C (lm) | Vf T _c 25°C (V) | Power T _c 25°C (W) | Typical Efficacy T _c 25°C (lm/W) | Thermal Resistance Junction to Case ¹ (C/W) | Typical DC Flux T _c 85°C (lm) | Minimum DC Flux T _c 85°C (lm) | Vf T _c 85°C (V) | Power T _c 85°C (W) | Typical Efficacy T _c 85°C (lm/W) | Data Sheet |
|-------------|-------------------|---------------|-----------|--------------|---------------|---|---|-------------------------------|----------------------------------|--|---|---|---|-------------------------------|----------------------------------|--|------------|
| H6 | BXRH-27E1000-C-23 | 2700K | 80 | 350 | .5x | 621 | 569 | 17.2 | 6.0 | 103 | - | 546 | 500 | 16.4 | 5.7 | 95 | DS80 |
| | | | | 500 | - | 853 | 781 | 17.7 | 8.9 | 96 | - | 749 | 687 | 16.9 | 8.4 | 89 | |
| | | | | 750 | 1x | 1200 | 1100 | 18.3 | 13.7 | 87 | 0.60 | 1054 | 967 | 17.5 | 13.1 | 80 | |
| | | | | 1050 | 1.5x | 1571 | 1440 | 18.9 | 19.8 | 79 | 0.63 | 1380 | 1265 | 18.1 | 19.0 | 73 | |
| H6 | BXRH-30E1000-C-23 | 3000K | 80 | 350 | .5x | 652 | 595 | 17.2 | 6.0 | 108 | - | 574 | 524 | 16.4 | 5.7 | 100 | DS80 |
| | | | | 500 | - | 895 | 817 | 17.7 | 8.9 | 101 | - | 788 | 719 | 16.9 | 8.4 | 93 | |
| | | | | 750 | 1x | 1260 | 1150 | 18.3 | 13.7 | 92 | 0.60 | 1110 | 1013 | 17.5 | 13.1 | 85 | |
| | | | | 1050 | 1.5x | 1649 | 1505 | 18.9 | 19.8 | 83 | 0.63 | 1452 | 1326 | 18.1 | 19.0 | 77 | |
| H6 | BXRH-30G1000-C-23 | 3000K | 90 | 350 | .5x | 518 | 479 | 17.2 | 6.0 | 86 | - | 459 | 424 | 16.4 | 5.7 | 80 | DS80 |
| | | | | 500 | - | 710 | 657 | 17.7 | 8.9 | 80 | - | 629 | 582 | 16.9 | 8.4 | 75 | |
| | | | | 750 | 1x | 1000 | 925 | 18.3 | 13.7 | 73 | 0.60 | 886 | 820 | 17.5 | 13.1 | 68 | |
| | | | | 1050 | 1.5x | 1309 | 1211 | 18.9 | 19.8 | 66 | 0.63 | 1160 | 1073 | 18.1 | 19.0 | 61 | |
| H6 | BXRH-35A1001-C-23 | 3500K | 93 | 350 | .5x | 512 | 466 | 17.2 | 6.0 | 85 | - | 448 | 407 | 16.4 | 5.7 | 78 | DS80 |
| | | | | 500 | - | 703 | 639 | 17.7 | 8.9 | 79 | - | 615 | 559 | 16.9 | 8.4 | 73 | |
| | | | | 750 | 1x | 990 | 900 | 18.3 | 13.7 | 72 | 0.60 | 865 | 786 | 17.5 | 13.1 | 66 | |
| | | | | 1050 | 1.5x | 1296 | 1178 | 18.9 | 19.8 | 65 | 0.63 | 1132 | 1029 | 18.1 | 19.0 | 60 | |
| H6 | BXRH-40E1000-C-23 | 4000K | 80 | 350 | .5x | 712 | 681 | 17.2 | 6.0 | 118 | - | 620 | 593 | 16.4 | 5.7 | 108 | DS80 |
| | | | | 500 | - | 977 | 934 | 17.7 | 8.9 | 110 | - | 851 | 814 | 16.9 | 8.4 | 101 | |
| | | | | 750 | 1x | 1375 | 1315 | 18.3 | 13.7 | 100 | 0.60 | 1198 | 1146 | 17.5 | 13.1 | 91 | |
| | | | | 1050 | 1.5x | 1800 | 1721 | 18.9 | 19.8 | 91 | 0.63 | 1569 | 1500 | 18.1 | 19.0 | 83 | |

| Form Factor | Part Number | CCT (Nominal) | CRI (min) | Current (mA) | Rated Current | Typical Pulsed Flux T _c 25°C (lm) | Minimum Pulsed Flux T _c 25°C (lm) | Vf T _c 25°C (V) | Power T _c 25°C (W) | Typical Efficacy T _c 25°C (lm/W) | Thermal Resistance Junction to Case ¹ (C/W) | Typical DC Flux T _c 85°C (lm) | Minimum DC Flux T _c 85°C (lm) | Vf T _c 85°C (V) | Power T _c 85°C (W) | Typical Efficacy T _c 85°C (lm/W) | Data Sheet |
|-------------|-------------------|---------------|-----------|--------------|---------------|---|---|-------------------------------|----------------------------------|--|---|---|---|-------------------------------|----------------------------------|--|------------|
| H9 | BXRH-27E3000-D-23 | 2700K | 80 | 500 | - | 4363 | 3811 | 34.6 | 17.3 | 252 | - | 3775 | 3297 | 33.1 | 16.5 | 228 | DS81 |
| | | | | 700 | - | 2340 | 2072 | 35.5 | 24.9 | 94 | - | 2024 | 1793 | 34.0 | 23.8 | 85 | |
| | | | | 1000 | 1x | 3150 | 2790 | 36.6 | 36.6 | 86 | 0.22 | 2726 | 2414 | 35.1 | 35.1 | 78 | |
| | | | | 1200 | 1.2x | 3651 | 3234 | 37.2 | 44.6 | 82 | - | 3159 | 2798 | 35.7 | 42.8 | 74 | |
| | | | | 1400 | 1.4x | 4101 | 3632 | 37.6 | 52.6 | 78 | 0.23 | 3548 | 3143 | 36.1 | 50.5 | 70 | |
| H9 | BXRH-30E3000-D-23 | 3000K | 80 | 500 | - | 1850 | 1734 | 34.6 | 17.3 | 107 | - | 1632 | 1530 | 33.1 | 16.5 | 99 | DS81 |
| | | | | 700 | - | 2488 | 2332 | 35.5 | 24.9 | 100 | - | 2195 | 2057 | 34.0 | 23.8 | 92 | |
| | | | | 1000 | 1x | 3350 | 3140 | 36.6 | 36.6 | 92 | 0.22 | 2955 | 2770 | 35.1 | 35.1 | 84 | |
| | | | | 1200 | 1.2x | 3883 | 3640 | 37.2 | 44.6 | 87 | - | 3425 | 3210 | 35.7 | 42.8 | 80 | |
| H9 | BXRH-30G3000-D-23 | 3000K | 90 | 500 | - | 1477 | 1348 | 34.6 | 17.3 | 85 | - | 1266 | 1155 | 33.1 | 16.5 | 77 | DS81 |
| | | | | 700 | - | 1987 | 1812 | 35.5 | 24.9 | 80 | - | 1703 | 1554 | 34.0 | 23.8 | 72 | |
| | | | | 1000 | 1x | 2675 | 2440 | 36.6 | 36.6 | 73 | 0.22 | 2293 | 2092 | 35.1 | 35.1 | 65 | |
| | | | | 1200 | 1.2x | 3101 | 2828 | 37.2 | 44.6 | 69 | - | 2658 | 2424 | 35.7 | 42.8 | 62 | |
| H9 | BXRH-35A3001-D-23 | 3500K | 93 | 500 | - | 1463 | 1331 | 34.6 | 17.3 | 85 | - | 1296 | 1179 | 33.1 | 16.5 | 78 | DS81 |
| | | | | 700 | - | 1968 | 1790 | 35.5 | 24.9 | 79 | - | 1743 | 1585 | 34.0 | 23.8 | 73 | |
| | | | | 1000 | 1x | 2650 | 2410 | 36.6 | 36.6 | 72 | 0.22 | 2347 | 2135 | 35.1 | 35.1 | 67 | |
| | | | | 1200 | 1.2x | 3072 | 2793 | 37.2 | 44.6 | 69 | - | 2721 | 2474 | 35.7 | 42.8 | 64 | |
| H9 | BXRH-40E3000-D-23 | 4000K | 80 | 500 | - | 2016 | 1789 | 34.6 | 17.3 | 117 | - | 1744 | 1548 | 33.1 | 16.5 | 105 | DS81 |
| | | | | 700 | - | 2711 | 2406 | 35.5 | 24.9 | 109 | - | 2346 | 2082 | 34.0 | 23.8 | 99 | |
| | | | | 1000 | 1x | 3650 | 3240 | 36.6 | 36.6 | 100 | 0.22 | 3159 | 2804 | 35.1 | 35.1 | 90 | |
| | | | | 1200 | 1.2x | 4231 | 3755 | 37.2 | 44.6 | 95 | - | 3661 | 3250 | 35.7 | 42.8 | 86 | |
| H9 | BXRH-40E3000-D-23 | 4000K | 80 | 1400 | 1.4x | 4751 | 4218 | 37.6 | 52.6 | 90 | 0.23 | 4112 | 3650 | 36.1 | 50.5 | 81 | DS81 |

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|-------------|-------------------|------------------|--------------|-----------------|------------------|--|--|----------------------------------|-------------------------------------|--|--|---|---|----------------------------------|-------------------------------------|--|------------|
| H12 | BXRH-27E6000-G-23 | 2700K | 80 | 500 | .3x | 1842 | 1612 | 33.2 | 16.6 | 111 | - | 1570 | 1374 | 31.5 | 15.8 | 100 | DS82 |
| | | | | 1000 | .6x | 3459 | 3026 | 34.8 | 34.8 | 99 | - | 2947 | 2579 | 33.1 | 33.1 | 89 | |
| | | | | 1450 | .8x | 4791 | 4192 | 36.0 | 52.2 | 92 | - | 4082 | 3572 | 34.3 | 49.8 | 82 | |
| | | | | 1750 | 1x | 5600 | 4900 | 36.6 | 64.1 | 87 | 0.13 | 4772 | 4176 | 34.9 | 61.1 | 78 | |
| | | | | 2200 | 1.3x | 6754 | 5910 | 37.4 | 82.3 | 82 | 0.13 | 5756 | 5036 | 35.7 | 78.6 | 73 | |
| | | | | 2450 | 1.4x | 7337 | 6420 | 37.9 | 92.9 | 79 | - | 6253 | 5471 | 36.2 | 88.8 | 70 | |
| H12 | BXRH-30E6000-G-23 | 3000K | 80 | 500 | .3x | 1941 | 1711 | 33.2 | 16.6 | 117 | - | 1687 | 1486 | 31.5 | 15.8 | 107 | DS82 |
| | | | | 1000 | .6x | 3644 | 3211 | 34.8 | 34.8 | 105 | - | 3166 | 2790 | 33.1 | 33.1 | 96 | |
| | | | | 1450 | .8x | 5048 | 4449 | 36.0 | 52.2 | 97 | - | 4385 | 3865 | 34.3 | 49.8 | 88 | |
| | | | | 1750 | 1x | 5900 | 5200 | 36.6 | 64.1 | 92 | 0.13 | 5126 | 4518 | 34.9 | 61.1 | 84 | |
| | | | | 2200 | 1.3x | 7116 | 6272 | 37.4 | 82.3 | 86 | 0.13 | 6183 | 5449 | 35.7 | 78.6 | 79 | |
| | | | | 2450 | 1.4x | 7731 | 6813 | 37.9 | 92.9 | 83 | - | 6716 | 5920 | 36.2 | 88.8 | 76 | |
| H12 | BXRH-30G6000-G-23 | 3000K | 90 | 500 | .3x | 1612 | 1365 | 33.2 | 16.6 | 97 | - | 1363 | 1154 | 31.5 | 15.8 | 86 | DS82 |
| | | | | 1000 | .6x | 3026 | 2563 | 34.8 | 34.8 | 87 | - | 2558 | 2167 | 33.1 | 33.1 | 77 | |
| | | | | 1450 | .8x | 4192 | 3550 | 36.0 | 52.2 | 80 | - | 3544 | 3001 | 34.3 | 49.8 | 71 | |
| | | | | 1750 | 1x | 4900 | 4150 | 36.6 | 64.1 | 77 | 0.13 | 4142 | 3508 | 34.9 | 61.1 | 68 | |
| | | | | 2200 | 1.3x | 5910 | 5005 | 37.4 | 82.3 | 72 | 0.13 | 4996 | 4231 | 35.7 | 78.6 | 64 | |
| | | | | 2450 | 1.4x | 6420 | 5438 | 37.9 | 92.9 | 69 | - | 5427 | 4596 | 36.2 | 88.8 | 61 | |
| H12 | BXRH-35A6001-G-23 | 3500K | 93 | 500 | .3x | 1546 | 1382 | 33.2 | 16.6 | 93 | - | 1338 | 1195 | 31.5 | 15.8 | 85 | DS82 |
| | | | | 1000 | .6x | 2903 | 2594 | 34.8 | 34.8 | 83 | - | 2511 | 2244 | 33.1 | 33.1 | 76 | |
| | | | | 1450 | .8x | 4021 | 3593 | 36.0 | 52.2 | 77 | - | 3478 | 3108 | 34.3 | 49.8 | 70 | |
| | | | | 1750 | 1x | 4700 | 4200 | 36.6 | 64.1 | 73 | 0.13 | 4066 | 3633 | 34.9 | 61.1 | 67 | |
| | | | | 2200 | 1.3x | 5669 | 5066 | 37.4 | 82.3 | 69 | 0.13 | 4904 | 4382 | 35.7 | 78.6 | 62 | |
| | | | | 2450 | 1.4x | 6158 | 5503 | 37.9 | 92.9 | 66 | - | 5328 | 4761 | 36.2 | 88.8 | 60 | |
| H12 | BXRH-40E6000-G-23 | 4000K | 80 | 500 | .3x | 2106 | 1908 | 33.2 | 16.6 | 127 | - | 1807 | 1638 | 31.5 | 15.8 | 115 | DS82 |
| | | | | 1000 | .6x | 3953 | 3582 | 34.8 | 34.8 | 114 | - | 3392 | 3074 | 33.1 | 33.1 | 102 | |
| | | | | 1450 | .8x | 5475 | 4962 | 36.0 | 52.2 | 105 | - | 4698 | 4258 | 34.3 | 49.8 | 94 | |
| | | | | 1750 | 1x | 6400 | 5800 | 36.6 | 64.1 | 100 | 0.13 | 5492 | 4977 | 34.9 | 61.1 | 90 | |
| | | | | 2200 | 1.3x | 7719 | 6996 | 37.4 | 82.3 | 94 | 0.13 | 6624 | 6003 | 35.7 | 78.6 | 84 | |
| | | | | 2450 | 1.4x | 8386 | 7600 | 37.9 | 92.9 | 90 | - | 7196 | 6521 | 36.2 | 88.8 | 81 | |

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|-------------|-------------------|------------------|--------------|-----------------|------------------|--|--|----------------------------------|-------------------------------------|--|--|---|---|----------------------------------|-------------------------------------|--|------------|
| H15 | BXRH-27E8000-J-23 | 2700K | 80 | 1050 | .4x | 3710 | 3240 | 34.1 | 35.8 | 104 | - | 3161 | 2760 | 32.6 | 34.3 | 92 | DS83 |
| | | | | 1400 | .6x | 4795 | 4188 | 34.8 | 48.7 | 98 | - | 4085 | 3568 | 33.3 | 46.7 | 88 | |
| | | | | 2100 | .8x | 6840 | 5974 | 36.0 | 75.6 | 90 | - | 5827 | 5089 | 34.5 | 72.5 | 80 | |
| | | | | 2500 | 1x | 7900 | 6900 | 36.6 | 91.5 | 86 | 0.10 | 6730 | 5878 | 35.1 | 87.8 | 77 | |
| | | | | 3150 | 1.3x | 9594 | 8380 | 37.6 | 118.4 | 81 | 0.10 | 8173 | 7138 | 36.1 | 113.8 | 72 | |
| | | | | 3500 | 1.4x | 10428 | 9108 | 37.8 | 132.3 | 79 | - | 8884 | 7759 | 36.3 | 127.2 | 70 | |
| H15 | BXRH-30E8000-J-23 | 3000K | 80 | 1050 | .4x | 3945 | 3475 | 34.1 | 35.8 | 110 | - | 3397 | 2993 | 32.6 | 34.3 | 99 | DS83 |
| | | | | 1400 | .6x | 5099 | 4492 | 34.8 | 48.7 | 105 | - | 4391 | 3868 | 33.3 | 46.7 | 94 | |
| | | | | 2100 | .8x | 7273 | 6407 | 36.0 | 75.6 | 96 | - | 6263 | 5517 | 34.5 | 72.5 | 86 | |
| | | | | 2500 | 1x | 8400 | 7400 | 36.6 | 91.5 | 92 | 0.10 | 7233 | 6372 | 35.1 | 87.8 | 82 | |
| | | | | 3150 | 1.3x | 10201 | 8987 | 37.6 | 118.4 | 86 | 0.10 | 8784 | 7738 | 36.1 | 113.8 | 77 | |
| | | | | 3500 | 1.4x | 11088 | 9768 | 37.8 | 132.3 | 84 | - | 9548 | 8411 | 36.3 | 127.2 | 75 | |
| H15 | BXRH-30G8000-J-23 | 3000K | 90 | 1050 | .4x | 3212 | 2700 | 34.1 | 35.8 | 90 | - | 2721 | 2288 | 32.6 | 34.3 | 79 | DS83 |
| | | | | 1400 | .6x | 4152 | 3490 | 34.8 | 48.7 | 85 | - | 3517 | 2957 | 33.3 | 46.7 | 75 | |
| | | | | 2100 | .8x | 5922 | 4979 | 36.0 | 75.6 | 78 | - | 5017 | 4218 | 34.5 | 72.5 | 69 | |
| | | | | 2500 | 1x | 6840 | 5750 | 36.6 | 91.5 | 75 | 0.10 | 5794 | 4871 | 35.1 | 87.8 | 66 | |
| | | | | 3150 | 1.3x | 8307 | 6983 | 37.6 | 118.4 | 70 | 0.10 | 7037 | 5916 | 36.1 | 113.8 | 62 | |
| | | | | 3500 | 1.4x | 9029 | 7590 | 37.8 | 132.3 | 68 | - | 7649 | 6430 | 36.3 | 127.2 | 60 | |
| H15 | BXRH-35A8001-J-23 | 3500K | 93 | 1050 | .4x | 3147 | 2724 | 34.1 | 35.8 | 88 | - | 2770 | 2398 | 32.6 | 34.3 | 81 | DS83 |
| | | | | 1400 | .6x | 4067 | 3521 | 34.8 | 48.7 | 83 | - | 3580 | 3099 | 33.3 | 46.7 | 77 | |
| | | | | 2100 | .8x | 5801 | 5022 | 36.0 | 75.6 | 77 | - | 5107 | 4421 | 34.5 | 72.5 | 70 | |
| | | | | 2500 | 1x | 6700 | 5800 | 36.6 | 91.5 | 73 | 0.10 | 5898 | 5106 | 35.1 | 87.8 | 67 | |
| | | | | 3150 | 1.3x | 8137 | 7044 | 37.6 | 118.4 | 69 | 0.10 | 7163 | 6201 | 36.1 | 113.8 | 63 | |
| | | | | 3500 | 1.4x | 8844 | 7656 | 37.8 | 132.3 | 67 | - | 7786 | 6740 | 36.3 | 127.2 | 61 | |
| H15 | BXRH-40E8000-J-23 | 4000K | 80 | 1050 | .4x | 4297 | 3898 | 34.1 | 35.8 | 120 | - | 3658 | 3318 | 32.6 | 34.3 | 107 | DS83 |
| | | | | 1400 | .6x | 5554 | 5038 | 34.8 | 48.7 | 114 | - | 4728 | 4289 | 33.3 | 46.7 | 101 | |
| | | | | 2100 | .8x | 7922 | 7187 | 36.0 | 75.6 | 105 | - | 6744 | 6118 | 34.5 | 72.5 | 93 | |
| | | | | 2500 | 1x | 9150 | 8300 | 36.6 | 91.5 | 100 | 0.10 | 7789 | 7066 | 35.1 | 87.8 | 89 | |
| | | | | 3150 | 1.3x | 11112 | 10080 | 37.6 | 118.4 | 94 | 0.10 | 9459 | 8581 | 36.1 | 113.8 | 83 | |
| | | | | 3500 | 1.4x | 12078 | 10956 | 37.8 | 132.3 | 91 | - | 10282 | 9327 | 36.3 | 127.2 | 81 | |