# Solux Halogen

...THE Quality Lamp!


- 35 & 50 Watt MR16
- 3500/4100/4700 Kelvin

Lighting the World with Quality Products
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# Solux Halogen

| Lamp No | Bulb | Page | Line |
|---|---|---|---|
| 18001 | MR16 | 3 | 1 |
| 18002 | MR16 | 3 | 2 |
| 18003 | MR16 | 3 | 4 |
| 18004 | MR16 | 3 | 3 |
| 18006 | MR16 | 3 | 9 |
| 18007 | MR16 | 3 | 10 |
| 18008 | MR16 | 3 | 12 |
| 18009 | MR16 | 3 | 11 |
| 18011 | MR16 | 3 | 5 |
| 18012 | MR16 | 3 | 6 |
| 18013 | MR16 | 3 | 8 |
| 18014 | MR16 | 3 | 7 |
| 35001 | MR16 | 3 | 1 |
| 35002 | MR16 | 3 | 2 |
| 35003 | MR16 | 3 | 4 |
| 35004 | MR16 | 3 | 3 |
| 35006 | MR16 | 3 | 9 |
| 35007 | MR16 | 3 | 10 |
| 35008 | MR16 | 3 | 12 |
| 35009 | MR16 | 3 | 11 |
| 35011 | MR16 | 3 | 5 |
| 35012 | MR16 | 3 | 6 |
| 35013 | MR16 | 3 | 8 |
| 35014 | MR16 | 3 | 7 |


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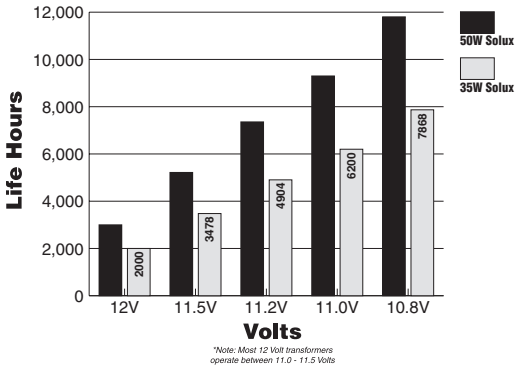
PATENT NUMBER 5,418,419

## Natural Daylight Lamps MR16 - 35W & 50W

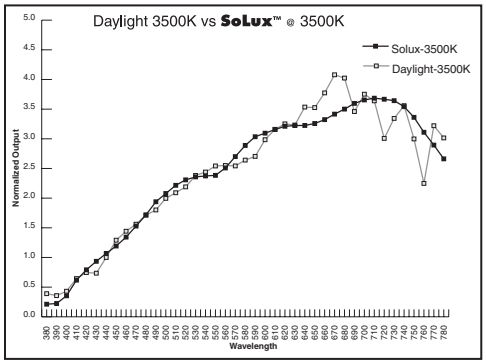
### A Superior Light Source That Far Exceeds All Other Attempts To Reproduce Daylight

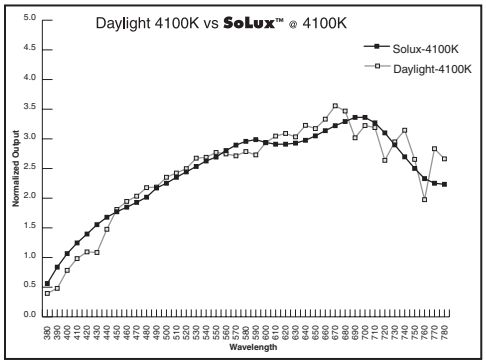
### Life Hours Chart

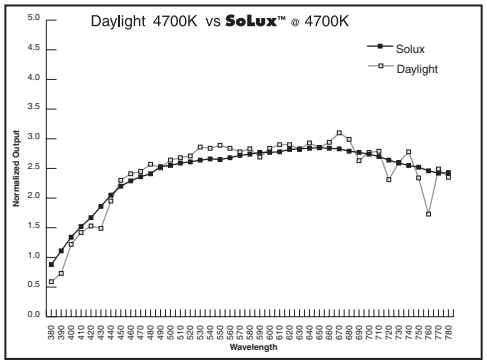



| IR Emmissions Compared to Standard MR16 | 3500K | 4100K | 4700K |
|---|---|---|---|
| | 76% Less | 56% Less | 58% Less |
| UV Total | 8.55uW/Lumen | 9.75uW/Lumen | 41.99uW/Lumen |
| UVA (380-315nm) | 8.29uW/Lumen | 9.39uW/Lumen | 39.63uW/Lumen |
| UVB (315-280nm) | 0.26uW/Lumen | 0.36uW/Lumen | 2.36uW/Lumen |

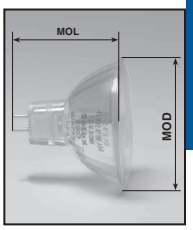
### *Spectral Power Distribution*



# Solux NATURAL DAYLIGHT LAMPS




## 35W Solux Reflector w/Front Glass

| Line No | Lamp No | Volts | MOL mm | MOD mm | Filament | Base | Approx Initial Max Beam CP | CT deg K | Avg. Life | CRI | Beam Desc. | Common Code | Replaces |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 35001 | 12 | 45 | 50 | C-8 | GU5.3 | 7534 | 4700 | 2000 | 99+ | Narrow Spot (10) | Q35MR16/CG/47/10 | FMT-CG |
| 2 | 35002 | 12 | 45 | 50 | C-8 | GU5.3 | 2736 | 4700 | 2000 | 99+ | Spot (17) | Q35MR16/CG/47/17 | FMT-CG |
| 3 | 35004 | 12 | 45 | 50 | C-8 | GU5.3 | 1638 | 4700 | 2000 | 99+ | Narrow Flood (24) | Q35MR16/CG/47/24 | FMV-CG |
| 4 | 35003 | 12 | 45 | 50 | C-8 | GU5.3 | 663 | 4700 | 2000 | 99+ | Flood (36) | Q35MR16/CG/47/36 | FMW-CG |
| 5 | 35011 | 12 | 45 | 50 | C-8 | GU5.3 | 9783 | 4100 | 2000 | 98+ | Narrow Spot (10) | Q35MR16/CG/41/10 | FMT-CG |
| 6 | 35012 | 12 | 45 | 50 | C-8 | GU5.3 | 3447 | 4100 | 2000 | 98+ | Spot (17) | Q35MR16/CG/41/17 | FMT-CG |
| 7 | 35014 | 12 | 45 | 50 | C-8 | GU5.3 | 2107 | 4100 | 2000 | 98+ | Narrow Flood (24) | Q35MR16/CG/41/24 | FMV-CG |
| 8 | 35013 | 12 | 45 | 50 | C-8 | GU5.3 | 1298 | 4100 | 2000 | 98+ | Flood (36) | Q35MR16/CG/41/36 | FMW-CG |
| 9 | 35006 | 12 | 45 | 50 | C-8 | GU5.3 | 11895 | 3500 | 2000 | 98+ | Narrow Spot (10) | Q35MR16/CG/35/10 | FMT-CG |
| 10 | 35007 | 12 | 45 | 50 | C-8 | GU5.3 | 5017 | 3500 | 2000 | 98+ | Spot (17) | Q35MR16/CG/35/17 | FMT-CG |
| 11 | 35009 | 12 | 45 | 50 | C-8 | GU5.3 | 2834 | 3500 | 2000 | 98+ | Narrow Flood (24) | Q35MR16/CG/35/24 | FMV-CG |
| 12 | 35008 | 12 | 45 | 50 | C-8 | GU5.3 | 1867 | 3500 | 2000 | 98+ | Flood (36) | Q35MR16/CG/35/36 | FMW-CG |

## 50W Solux Reflector w/Front Glass

| Line No | Lamp No | Volts | MOL mm | MOD mm | Filament | Base | Approx Initial Max Beam CP | CT deg K | Avg. Life | CRI | Beam Desc. | Common Code | Replaces |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18001 | 12 | 45 | 50 | C-8 | GU5.3 | 8081 | 4700 | 3000 | 99+ | Narrow Spot (10) | Q50MR16/CG/47/10 | EXT-CG |
| 2 | 18002 | 12 | 45 | 50 | C-8 | GU5.3 | 3998 | 4700 | 3000 | 99+ | Spot (17) | Q50MR16/CG/47/17 | EXZ-CG |
| 3 | 18004 | 12 | 45 | 50 | C-8 | GU5.3 | 2306 | 4700 | 3000 | 99+ | Narrow Flood (24) | Q50MR16/CG/47/24 | EXZ-CG |
| 4 | 18003 | 12 | 45 | 50 | C-8 | GU5.3 | 1390 | 4700 | 3000 | 99+ | Flood (36) | Q50MR16/CG/47/36 | EXN-CG |
| 5 | 18011 | 12 | 45 | 50 | C-8 | GU5.3 | 10295 | 4100 | 3000 | 98+ | Narrow Spot (10) | Q50MR16/CG/41/10 | EXT-CG |
| 6 | 18012 | 12 | 45 | 50 | C-8 | GU5.3 | 5726 | 4100 | 3000 | 98+ | Spot (17) | Q50MR16/CG/41/17 | EXZ-CG |
| 7 | 18014 | 12 | 45 | 50 | C-8 | GU5.3 | 3263 | 4100 | 3000 | 98+ | Narrow Flood (24) | Q50MR16/CG/41/24 | EXZ-CG |
| 8 | 18013 | 12 | 45 | 50 | C-8 | GU5.3 | 1622 | 4100 | 3000 | 98+ | Flood (36) | Q50MR16/CG/41/36 | EXN-CG |
| 9 | 18006 | 12 | 45 | 50 | C-8 | GU5.3 | 12482 | 3500 | 3000 | 98+ | Narrow Spot (10) | Q50MR16/CG/35/10 | EXT-CG |
| 10 | 18007 | 12 | 45 | 50 | C-8 | GU5.3 | 6911 | 3500 | 3000 | 98+ | Spot (17) | Q50MR16/CG/35/17 | EXZ-CG |
| 11 | 18009 | 12 | 45 | 50 | C-8 | GU5.3 | 3715 | 3500 | 3000 | 98+ | Narrow Flood (24) | Q50MR16/CG/35/24 | EXZ-CG |
| 12 | 18008 | 12 | 45 | 50 | C-8 | GU5.3 | 2285 | 3500 | 3000 | 98+ | Flood (36) | Q50MR16/CG/35/36 | EXN-GC |

## Solux Beam Patterns

**3500 Kelvin**

| Beam Angle | | 10 degrees | | | | | | 17 degrees | | | | | | 24 degrees | | | | | | 36 degrees | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Distance from Source | | Beam Diameter | | Illuminance | | | | Beam Diameter | | Illuminance | | | | Beam Diameter | | Illuminance | | | | Beam Diameter | | Illuminance | | | |
| | | | | 35 Watt | | 50 Watt | | | | 35 Watt | | 50 Watt | | | | 35 Watt | | 50 Watt | | | | 35 Watt | | 50 Watt | |
| Feet | Meters | Feet | Meters | fc | lux | fc | lux | Feet | Meters | fc | lux | fc | lux | Feet | Meters | fc | lux | fc | lux | Feet | Meters | fc | lux | fc | lux |
| 2 | 0.6 | 0.35 | 0.11 | 2838 | 30550 | 3121 | 33589 | 0.60 | 0.18 | 1254 | 13935 | 1728 | 18597 | 0.85 | 0.26 | 708 | 7871 | 929 | 9997 | 1.30 | 0.40 | 467 | 5187 | 571 | 6149 |
| 4 | 1.2 | 0.70 | 0.21 | 666 | 7170 | 780 | 8397 | 1.20 | 0.36 | 314 | 3484 | 432 | 4649 | 1.70 | 0.52 | 177 | 1968 | 232 | 2499 | 2.60 | 0.79 | 117 | 1297 | 143 | 1537 |
| 6 | 1.8 | 1.05 | 0.32 | 294 | 3170 | 347 | 3732 | 1.79 | 0.55 | 139 | 1548 | 192 | 2066 | 2.55 | 0.78 | 79 | 875 | 103 | 1111 | 3.90 | 1.19 | 52 | 576 | 63 | 683 |
| 8 | 2.4 | 1.40 | 0.43 | 168 | 1809 | 195 | 2099 | 2.39 | 0.73 | 78 | 871 | 108 | 1162 | 3.40 | 1.04 | 44 | 492 | 58 | 625 | 5.20 | 1.58 | 29 | 324 | 36 | 384 |
| 10 | 3.0 | 1.75 | 0.53 | 108 | 1167 | 125 | 1344 | 2.99 | 0.91 | 50 | 557 | 69 | 744 | 4.25 | 1.30 | 28 | 315 | 37 | 400 | 6.50 | 1.98 | 19 | 207 | 23 | 246 |

**4100 Kelvin**

| Beam Angle | | 10 degrees | | | | | | 17 degrees | | | | | | 24 degrees | | | | | | 36 degrees | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Distance from Source | | Beam Diameter | | Illuminance | | | | Beam Diameter | | Illuminance | | | | Beam Diameter | | Illuminance | | | | Beam Diameter | | Illuminance | | | |
| | | | | 35 Watt | | 50 Watt | | | | 35 Watt | | 50 Watt | | | | 35 Watt | | 50 Watt | | | | 35 Watt | | 50 Watt | |
| Feet | Meters | Feet | Meters | fc | lux | fc | lux | Feet | Meters | fc | lux | fc | lux | Feet | Meters | fc | lux | fc | lux | Feet | Meters | fc | lux | fc | lux |
| 2 | 0.6 | 0.35 | 0.11 | 2,446 | 27,174 | 2,574 | 27,702 | 0.60 | 0.18 | 862 | 9,574 | 1,431 | 15,407 | 0.85 | 0.26 | 527 | 5,853 | 816 | 8,780 | 1.30 | 0.40 | 325 | 3,606 | 405 | 4,365 |
| 4 | 1.2 | 0.70 | 0.21 | 611 | 6,794 | 643 | 6,926 | 1.20 | 0.36 | 215 | 2,394 | 358 | 3,852 | 1.70 | 0.52 | 132 | 1,463 | 204 | 2,195 | 2.60 | 0.79 | 81 | 902 | 101 | 1,091 |
| 6 | 1.8 | 1.05 | 0.32 | 272 | 3,019 | 286 | 3,078 | 1.79 | 0.55 | 96 | 1,064 | 159 | 1,712 | 2.55 | 0.78 | 59 | 650 | 91 | 976 | 3.90 | 1.19 | 36 | 401 | 45 | 485 |
| 8 | 2.4 | 1.40 | 0.43 | 153 | 1,698 | 161 | 1,731 | 2.39 | 0.73 | 54 | 598 | 89 | 963 | 3.40 | 1.04 | 33 | 366 | 51 | 549 | 5.20 | 1.58 | 20 | 225 | 25 | 273 |
| 10 | 3.0 | 1.75 | 0.53 | 98 | 1,087 | 103 | 1,108 | 2.99 | 0.91 | 34 | 383 | 57 | 616 | 4.25 | 1.30 | 21 | 234 | 33 | 351 | 6.50 | 1.98 | 13 | 144 | 16 | 175 |

**4700 Kelvin**

| Beam Angle | | 10 degrees | | | | | | 17 degrees | | | | | | 24 degrees | | | | | | 36 degrees | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Distance from Source | | Beam Diameter | | Illuminance | | | | Beam Diameter | | Illuminance | | | | Beam Diameter | | Illuminance | | | | Beam Diameter | | Illuminance | | | |
| | | | | 35 Watt | | 50 Watt | | | | 35 Watt | | 50 Watt | | | | 35 Watt | | 50 Watt | | | | 35 Watt | | 50 Watt | |
| Feet | Meters | Feet | Meters | fc | lux | fc | lux | Feet | Meters | fc | lux | fc | lux | Feet | Meters | fc | lux | fc | lux | Feet | Meters | fc | lux | fc | lux |
| 2 | 0.6 | 0.35 | 0.11 | 1,884 | 20,929 | 2,020 | 21,746 | 0.60 | 0.18 | 684 | 7,600 | 1,000 | 10,759 | 0.85 | 0.26 | 409 | 4,550 | 576 | 6,204 | 1.30 | 0.40 | 166 | 1,843 | 348 | 3,741 |
| 4 | 1.2 | 0.70 | 0.21 | 471 | 5,232 | 505 | 5,436 | 1.20 | 0.36 | 171 | 1,900 | 250 | 2,690 | 1.70 | 0.52 | 102 | 1,137 | 144 | 1,551 | 2.60 | 0.79 | 41 | 461 | 87 | 935 |
| 6 | 1.8 | 1.05 | 0.32 | 209 | 2,325 | 224 | 2,416 | 1.79 | 0.55 | 76 | 844 | 111 | 1,195 | 2.55 | 0.78 | 45 | 506 | 64 | 689 | 3.90 | 1.19 | 18 | 205 | 39 | 416 |
| 8 | 2.4 | 1.40 | 0.43 | 118 | 1,308 | 126 | 1,359 | 2.39 | 0.73 | 43 | 475 | 62 | 672 | 3.40 | 1.04 | 26 | 284 | 36 | 388 | 5.20 | 1.58 | 10 | 115 | 22 | 234 |
| 10 | 3.0 | 1.75 | 0.53 | 75 | 837 | 81 | 870 | 2.99 | 0.91 | 27 | 304 | 40 | 430 | 4.25 | 1.30 | 16 | 182 | 23 | 248 | 6.50 | 1.98 | 7 | 74 | 14 | 150 |

Footcandles, Lux and Candlepower are scotopically corrected

## Notes

Average Life is the rated average life that is obtained in closely controlled laboratory conditions of lamps at their design voltage. It is the life point where 50% of the test group are still functioning. Average Life is not the same as service life; shocks, vibration, voltage fluctuations, temperature and other environmental influences may result in a shorter service life.

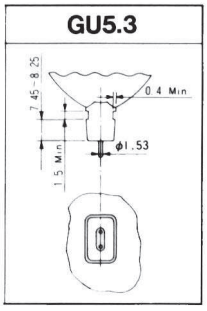
Approximate Mean Spherical Candlepower (MSCP) is the initial MSCP at the design voltage. This is the generally accepted method of rating the total light output of miniature lamps. To convert this rating to lumens, multiply it by 12.57 (4pi)

Base The base designator for the Solux lamps is GU5.3, an improved version of the GX5.3. The construction of this base is similar to the GX5.3 with the addition of a groove across the flats for engaging a retaining spring or clamp in the GU5.3 socket. The GU5.3 base will fit in all GX5.3 sockets.

## Warnings

SOLUX & MR16 FRONT GLASS LAMPS
Lamps operate at high temperature and pressure. Use only in fixtures that specify this lamp type and that provide adequate ventilation. Turn power off and allow lamp to cool before replacing.
Excessive voltage will cause greatly reduced lamp life as halogen lamps are designed to be operated within close voltage tolerances. Halogen lamps should not be operated in excess of 110% of rated voltage.
Direct exposure to halogen lamps may cause ultraviolet irritation of skin and eyes. Protection from this ultraviolet light is provided by the front glass.The front glass also provides protection if the inner halogen burner should shatter. Replace the lamp if the front glass is cracked or missing.
Replace socket if deterioration is evident.

## Bases




## Filaments