

# Photometrics Pro

## Luminaire Photometric Report

**Filename:** SB16 - Shoebox - CCT Tunable - 150W - 120V -T3 - IES

**Manufacturer:** SARIN Energy Solutions

**Lamp Output:** 1 lamp, rated Lumens/lamp: 23847

**Max Candela:** 9,863.9 at Horizontal: 270°, Vertical: 70°

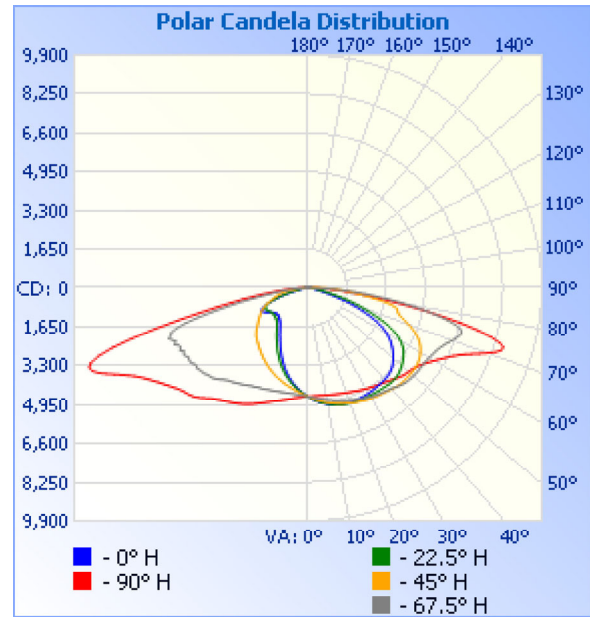
**Input Wattage:** 150.199

**Luminous Opening:** Circular (Dia: 3.94")

**Test Date:** 2023-02-01

**Photometry :** Type C

**Nema Type:** 7 X 7



### Roadway Summary

|                        |                  |              |
|------------------------|------------------|--------------|
| Cutoff Classification: | SEMICUTOFF       |              |
| Distribution:          | TYPE III, MEDIUM |              |
| Max Cd, 90 Deg Vert:   | 869.8            |              |
| Max Cd, 80 to <90 Deg: | 4,623.8          |              |
|                        | Lumens           | % Lamp       |
| Downward Street Side:  | 14,228.5         | 59.7%        |
| Downward House Side:   | 9,256.1          | 38.8%        |
| Downward Total:        | 23,484.6         | 98.5%        |
| Upward Street Side:    | 136.8            | 0.6%         |
| Upward House Side:     | 168.7            | 0.7%         |
| Upward Total:          | 305.5            | 1.3%         |
| <b>Total Lumens:</b>   | <b>23,790.0</b>  | <b>99.8%</b> |

### Flood Summary

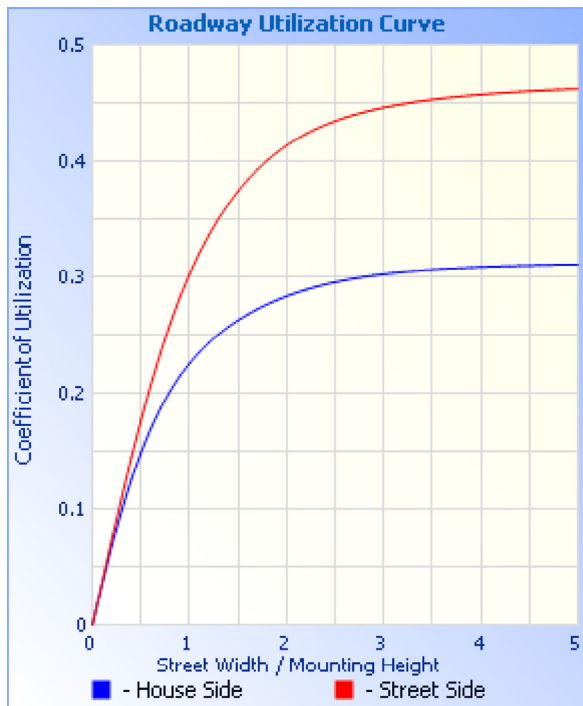
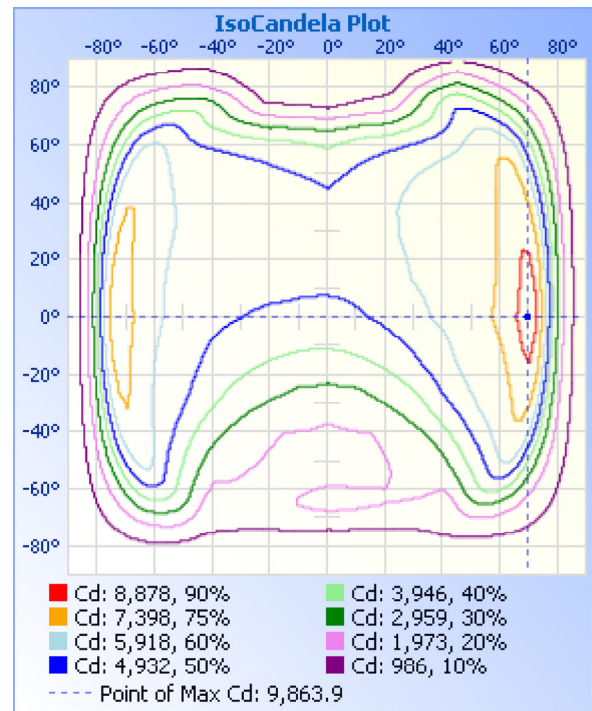
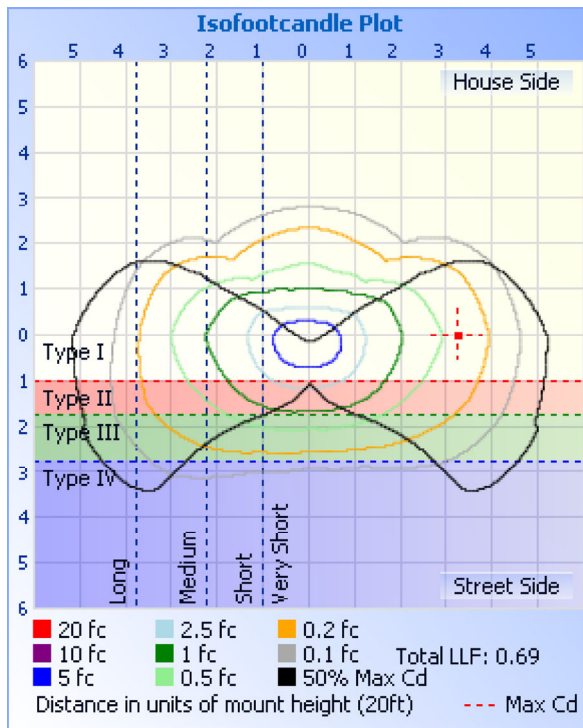
|               | Efficiency   | Lumens          | Horizontal Spread | Vertical Spread |
|---------------|--------------|-----------------|-------------------|-----------------|
| Field (10%):  | 97%          | 23,133.3        | 171.4             | 153.3           |
| Beam (50%):   | 60.5%        | 14,432.5        | 62.4              | 99.1            |
| <b>Total:</b> | <b>99.7%</b> | <b>23,778.4</b> |                   |                 |

### Zonal Lumen Summary

| Zone   | Lumens   | % Lamp | % Luminaire |
|--------|----------|--------|-------------|
| 0-30   | 3,843.5  | 16.1%  | 16.2%       |
| 0-40   | 6,683.2  | 28%    | 28.1%       |
| 0-60   | 14,330.3 | 60.1%  | 60.2%       |
| 60-90  | 9,153.8  | 38.4%  | 38.5%       |
| 70-100 | 4,745.9  | 19.9%  | 19.9%       |
| 90-120 | 148.3    | 0.6%   | 0.6%        |
| 0-90   | 23,484.1 | 98.5%  | 98.7%       |
| 90-180 | 305.4    | 1.3%   | 1.3%        |
| 0-180  | 23,789.5 | 99.8%  | 100%        |

### Lumens Per Zone

| Zone  | Lumens  | % Total | Zone    | Lumens | % Total |
|-------|---------|---------|---------|--------|---------|
| 0-10  | 439.2   | 1.8%    | 90-100  | 50.7   | 0.2%    |
| 10-20 | 1,299.6 | 5.5%    | 100-110 | 47.3   | 0.2%    |
| 20-30 | 2,104.8 | 8.8%    | 110-120 | 50.4   | 0.2%    |
| 30-40 | 2,839.7 | 11.9%   | 120-130 | 46.9   | 0.2%    |
| 40-50 | 3,543.5 | 14.9%   | 130-140 | 39.2   | 0.2%    |
| 50-60 | 4,103.6 | 17.2%   | 140-150 | 30.2   | 0.1%    |
| 60-70 | 4,458.5 | 18.7%   | 150-160 | 21.8   | 0.1%    |
| 70-80 | 3,646.9 | 15.3%   | 160-170 | 14.0   | 0.1%    |
| 80-90 | 1,048.4 | 4.4%    | 170-180 | 5.0    | 0%      |



**Illuminance at a Distance**

|       | Center Beam fc | Beam Width |         |
|-------|----------------|------------|---------|
| 6.0R  | 128 fc         | 14.1 ft    | 7.3 ft  |
| 12.0R | 32.0 fc        | 28.2 ft    | 14.5 ft |
| 18.0R | 14.2 fc        | 42.2 ft    | 21.8 ft |
| 24.0R | 7.99 fc        | 56.3 ft    | 29.1 ft |
| 30.0R | 5.12 fc        | 70.4 ft    | 36.3 ft |
| 36.0R | 3.55 fc        | 84.5 ft    | 43.6 ft |

■ Vert. Spread: 99.1°  
 ■ Horiz. Spread: 62.4°

**Coefficients Of Utilization - Zonal Cavity Method**

Effective Floor Cavity Reflectance: 20%

| RCC %: | 80   |      |      |      | 70   |      |      |     | 50   |      |      |      | 30   |      |      |      | 10   |      |      |      | 0   |
|--------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|------|------|------|------|------|------|-----|
| RW %:  | 70   | 50   | 30   | 0    | 70   | 50   | 30   | 0   | 50   | 30   | 20   | 50   | 30   | 20   | 50   | 30   | 20   | 50   | 30   | 20   | 0   |
| RCR: 0 | 1.18 | 1.18 | 1.18 | 1.18 | 1.16 | 1.16 | 1.16 | .98 | 1.10 | 1.10 | 1.10 | 1.05 | 1.05 | 1.05 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | 1.01 | .98 |
| 1      | 1.05 | .99  | .93  | .88  | 1.02 | .96  | .91  | .77 | .92  | .87  | .83  | .87  | .84  | .81  | .83  | .81  | .78  | .83  | .81  | .78  | .76 |
| 2      | .93  | .83  | .74  | .67  | .90  | .81  | .73  | .60 | .77  | .70  | .64  | .73  | .67  | .63  | .70  | .65  | .61  | .70  | .65  | .61  | .58 |
| 3      | .83  | .70  | .61  | .53  | .80  | .69  | .59  | .48 | .65  | .57  | .51  | .62  | .55  | .50  | .59  | .54  | .49  | .59  | .54  | .49  | .46 |

|    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 4  | .75 | .61 | .51 | .43 | .72 | .59 | .50 | .40 | .57 | .48 | .42 | .54 | .47 | .41 | .51 | .45 | .40 | .37 |
| 5  | .68 | .54 | .43 | .36 | .66 | .52 | .42 | .33 | .50 | .41 | .35 | .48 | .40 | .34 | .45 | .39 | .34 | .31 |
| 6  | .63 | .48 | .37 | .30 | .60 | .46 | .37 | .28 | .44 | .36 | .29 | .42 | .35 | .29 | .41 | .34 | .29 | .26 |
| 7  | .58 | .43 | .33 | .26 | .56 | .42 | .32 | .25 | .40 | .32 | .25 | .38 | .31 | .25 | .37 | .30 | .25 | .23 |
| 8  | .53 | .39 | .29 | .23 | .52 | .38 | .29 | .22 | .36 | .28 | .22 | .35 | .27 | .22 | .33 | .27 | .22 | .20 |
| 9  | .50 | .35 | .26 | .20 | .48 | .34 | .26 | .19 | .33 | .25 | .20 | .32 | .25 | .20 | .31 | .24 | .19 | .17 |
| 10 | .47 | .32 | .24 | .18 | .45 | .32 | .23 | .17 | .31 | .23 | .18 | .29 | .22 | .18 | .28 | .22 | .17 | .15 |

Candela Table - Type C

|    | 0    | 22.5 | 45   | 67.5 | 90   | 112.5 | 135  | 157.5 | 180  | 202.5 | 225  | 247.5 | 270  | 292.5 | 315  | 337.5 | 360  |
|----|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
| 0  | 4605 | 4605 | 4605 | 4605 | 4605 | 4605  | 4605 | 4605  | 4605 | 4605  | 4605 | 4605  | 4605 | 4605  | 4605 | 4605  | 4605 |
| 1  | 4655 | 4652 | 4640 | 4623 | 4599 | 4579  | 4564 | 4555  | 4553 | 4557  | 4572 | 4591  | 4614 | 4632  | 4645 | 4654  | 4655 |
| 2  | 4704 | 4696 | 4675 | 4642 | 4593 | 4555  | 4524 | 4501  | 4498 | 4508  | 4538 | 4576  | 4625 | 4659  | 4685 | 4701  | 4704 |
| 3  | 4749 | 4738 | 4708 | 4659 | 4589 | 4532  | 4482 | 4448  | 4442 | 4457  | 4504 | 4565  | 4637 | 4687  | 4723 | 4746  | 4749 |
| 4  | 4792 | 4780 | 4742 | 4679 | 4586 | 4509  | 4442 | 4392  | 4382 | 4405  | 4468 | 4552  | 4652 | 4717  | 4762 | 4789  | 4792 |
| 5  | 4834 | 4820 | 4774 | 4700 | 4586 | 4487  | 4398 | 4335  | 4322 | 4353  | 4435 | 4543  | 4669 | 4747  | 4800 | 4830  | 4834 |
| 6  | 4872 | 4857 | 4806 | 4722 | 4586 | 4467  | 4356 | 4278  | 4261 | 4300  | 4403 | 4536  | 4688 | 4779  | 4838 | 4869  | 4872 |
| 7  | 4909 | 4893 | 4838 | 4744 | 4589 | 4448  | 4315 | 4221  | 4198 | 4246  | 4370 | 4531  | 4709 | 4813  | 4874 | 4907  | 4909 |
| 8  | 4942 | 4927 | 4868 | 4766 | 4593 | 4430  | 4275 | 4163  | 4135 | 4191  | 4339 | 4527  | 4733 | 4848  | 4910 | 4943  | 4942 |
| 9  | 4974 | 4959 | 4900 | 4791 | 4599 | 4414  | 4235 | 4103  | 4068 | 4134  | 4308 | 4525  | 4760 | 4884  | 4947 | 4975  | 4974 |
| 10 | 5003 | 4989 | 4930 | 4816 | 4606 | 4399  | 4195 | 4044  | 4001 | 4078  | 4276 | 4527  | 4789 | 4923  | 4984 | 5008  | 5003 |
| 11 | 5030 | 5018 | 4958 | 4838 | 4614 | 4385  | 4157 | 3981  | 3930 | 4017  | 4247 | 4530  | 4818 | 4960  | 5019 | 5038  | 5030 |
| 12 | 5054 | 5043 | 4987 | 4863 | 4623 | 4373  | 4121 | 3918  | 3859 | 3956  | 4217 | 4535  | 4847 | 5000  | 5056 | 5067  | 5054 |
| 13 | 5078 | 5068 | 5014 | 4888 | 4633 | 4362  | 4084 | 3855  | 3784 | 3895  | 4187 | 4542  | 4880 | 5039  | 5092 | 5094  | 5078 |
| 14 | 5098 | 5091 | 5041 | 4913 | 4644 | 4352  | 4047 | 3789  | 3707 | 3830  | 4157 | 4548  | 4915 | 5081  | 5127 | 5118  | 5098 |
| 15 | 5115 | 5113 | 5064 | 4936 | 4655 | 4344  | 4009 | 3723  | 3627 | 3764  | 4126 | 4554  | 4949 | 5122  | 5162 | 5142  | 5115 |
| 16 | 5131 | 5133 | 5089 | 4960 | 4667 | 4336  | 3973 | 3655  | 3545 | 3697  | 4096 | 4560  | 4983 | 5164  | 5197 | 5164  | 5131 |
| 17 | 5144 | 5152 | 5112 | 4985 | 4680 | 4330  | 3936 | 3584  | 3462 | 3625  | 4065 | 4572  | 5021 | 5206  | 5232 | 5185  | 5144 |
| 18 | 5154 | 5169 | 5137 | 5010 | 4693 | 4325  | 3899 | 3512  | 3377 | 3554  | 4034 | 4586  | 5060 | 5252  | 5267 | 5204  | 5154 |
| 19 | 5162 | 5185 | 5159 | 5035 | 4707 | 4321  | 3862 | 3440  | 3289 | 3480  | 4003 | 4599  | 5103 | 5299  | 5303 | 5221  | 5162 |
| 20 | 5166 | 5196 | 5182 | 5061 | 4722 | 4317  | 3825 | 3366  | 3201 | 3405  | 3969 | 4608  | 5147 | 5348  | 5339 | 5236  | 5166 |
| 21 | 5170 | 5207 | 5205 | 5085 | 4738 | 4314  | 3787 | 3291  | 3113 | 3329  | 3938 | 4617  | 5195 | 5401  | 5374 | 5250  | 5170 |
| 22 | 5170 | 5216 | 5227 | 5112 | 4755 | 4312  | 3749 | 3217  | 3025 | 3252  | 3905 | 4634  | 5248 | 5456  | 5413 | 5260  | 5170 |
| 23 | 5168 | 5224 | 5249 | 5139 | 4774 | 4311  | 3710 | 3142  | 2938 | 3175  | 3870 | 4657  | 5299 | 5512  | 5452 | 5270  | 5168 |
| 24 | 5166 | 5230 | 5272 | 5165 | 4795 | 4310  | 3672 | 3070  | 2850 | 3098  | 3835 | 4675  | 5355 | 5568  | 5492 | 5280  | 5166 |
| 25 | 5162 | 5235 | 5294 | 5193 | 4816 | 4311  | 3634 | 2996  | 2766 | 3020  | 3800 | 4684  | 5410 | 5624  | 5532 | 5289  | 5162 |
| 26 | 5158 | 5239 | 5315 | 5222 | 4837 | 4312  | 3596 | 2925  | 2683 | 2945  | 3764 | 4695  | 5464 | 5677  | 5573 | 5298  | 5158 |
| 27 | 5153 | 5243 | 5337 | 5248 | 4859 | 4315  | 3557 | 2853  | 2604 | 2868  | 3727 | 4721  | 5517 | 5728  | 5612 | 5307  | 5153 |
| 28 | 5149 | 5246 | 5357 | 5274 | 4882 | 4318  | 3520 | 2784  | 2527 | 2795  | 3691 | 4750  | 5569 | 5777  | 5652 | 5314  | 5149 |
| 29 | 5143 | 5251 | 5376 | 5300 | 4905 | 4322  | 3481 | 2715  | 2452 | 2722  | 3653 | 4766  | 5616 | 5824  | 5687 | 5324  | 5143 |
| 30 | 5138 | 5255 | 5394 | 5323 | 4927 | 4328  | 3444 | 2647  | 2381 | 2651  | 3616 | 4784  | 5663 | 5865  | 5722 | 5335  | 5138 |
| 31 | 5131 | 5261 | 5411 | 5346 | 4949 | 4335  | 3406 | 2583  | 2313 | 2582  | 3578 | 4817  | 5710 | 5906  | 5756 | 5346  | 5131 |
| 32 | 5124 | 5268 | 5427 | 5368 | 4971 | 4344  | 3368 | 2519  | 2245 | 2516  | 3541 | 4855  | 5753 | 5944  | 5789 | 5358  | 5124 |
| 33 | 5116 | 5273 | 5442 | 5388 | 4993 | 4354  | 3330 | 2456  | 2179 | 2450  | 3503 | 4892  | 5798 | 5980  | 5819 | 5371  | 5116 |
| 34 | 5107 | 5280 | 5457 | 5407 | 5014 | 4368  | 3293 | 2394  | 2118 | 2384  | 3465 | 4932  | 5842 | 6016  | 5849 | 5386  | 5107 |
| 35 | 5098 | 5286 | 5471 | 5426 | 5037 | 4382  | 3256 | 2335  | 2060 | 2324  | 3427 | 4964  | 5887 | 6050  | 5876 | 5399  | 5098 |
| 36 | 5088 | 5291 | 5486 | 5446 | 5060 | 4398  | 3218 | 2274  | 2007 | 2261  | 3389 | 5000  | 5933 | 6085  | 5905 | 5416  | 5088 |
| 37 | 5078 | 5298 | 5501 | 5466 | 5085 | 4416  | 3182 | 2214  | 1959 | 2202  | 3352 | 5029  | 5981 | 6120  | 5933 | 5433  | 5078 |
| 38 | 5069 | 5303 | 5520 | 5489 | 5111 | 4434  | 3146 | 2158  | 1917 | 2148  | 3315 | 5081  | 6031 | 6159  | 5962 | 5453  | 5069 |
| 39 | 5061 | 5310 | 5540 | 5515 | 5138 | 4456  | 3110 | 2102  | 1881 | 2098  | 3279 | 5117  | 6085 | 6200  | 5994 | 5476  | 5061 |
| 40 | 5051 | 5318 | 5562 | 5546 | 5168 | 4480  | 3074 | 2051  | 1850 | 2052  | 3243 | 5139  | 6145 | 6246  | 6030 | 5497  | 5051 |
| 41 | 5040 | 5324 | 5585 | 5580 | 5202 | 4506  | 3038 | 2004  | 1822 | 2013  | 3208 | 5183  | 6213 | 6298  | 6066 | 5518  | 5040 |
| 42 | 5025 | 5328 | 5606 | 5618 | 5241 | 4536  | 3003 | 1959  | 1797 | 1976  | 3172 | 5232  | 6295 | 6355  | 6100 | 5535  | 5025 |
| 43 | 5006 | 5327 | 5624 | 5657 | 5284 | 4568  | 2967 | 1920  | 1776 | 1945  | 3139 | 5298  | 6385 | 6416  | 6129 | 5550  | 5006 |
| 44 | 4981 | 5320 | 5636 | 5695 | 5330 | 4603  | 2932 | 1885  | 1758 | 1920  | 3106 | 5378  | 6480 | 6477  | 6155 | 5556  | 4981 |
| 45 | 4950 | 5308 | 5645 | 5726 | 5376 | 4639  | 2898 | 1854  | 1742 | 1898  | 3072 | 5449  | 6570 | 6532  | 6173 | 5556  | 4950 |
| 46 | 4913 | 5289 | 5651 | 5751 | 5420 | 4675  | 2860 | 1828  | 1730 | 1880  | 3036 | 5513  | 6649 | 6579  | 6189 | 5550  | 4913 |

|    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 47 | 4869 | 5264 | 5654 | 5772 | 5457 | 4712 | 2821 | 1805 | 1720 | 1866 | 3000 | 5569 | 6712 | 6615 | 6202 | 5537 | 4869 |
| 48 | 4819 | 5234 | 5657 | 5785 | 5489 | 4744 | 2778 | 1785 | 1715 | 1854 | 2959 | 5595 | 6762 | 6644 | 6213 | 5519 | 4819 |
| 49 | 4764 | 5201 | 5660 | 5797 | 5516 | 4774 | 2733 | 1767 | 1713 | 1845 | 2912 | 5609 | 6802 | 6669 | 6224 | 5498 | 4764 |
| 50 | 4702 | 5165 | 5662 | 5809 | 5538 | 4803 | 2684 | 1751 | 1715 | 1838 | 2863 | 5668 | 6843 | 6694 | 6237 | 5470 | 4702 |
| 51 | 4638 | 5126 | 5664 | 5819 | 5562 | 4830 | 2632 | 1737 | 1722 | 1833 | 2810 | 5708 | 6894 | 6720 | 6249 | 5441 | 4638 |
| 52 | 4568 | 5084 | 5663 | 5827 | 5591 | 4858 | 2578 | 1726 | 1735 | 1832 | 2755 | 5734 | 6958 | 6744 | 6259 | 5407 | 4568 |
| 53 | 4497 | 5040 | 5660 | 5834 | 5632 | 4888 | 2523 | 1717 | 1753 | 1833 | 2700 | 5754 | 7034 | 6764 | 6268 | 5369 | 4497 |
| 54 | 4420 | 4992 | 5654 | 5841 | 5680 | 4922 | 2467 | 1710 | 1779 | 1838 | 2645 | 5798 | 7118 | 6782 | 6271 | 5326 | 4420 |
| 55 | 4338 | 4938 | 5642 | 5846 | 5738 | 4959 | 2411 | 1706 | 1811 | 1846 | 2593 | 5775 | 7212 | 6799 | 6270 | 5274 | 4338 |
| 56 | 4254 | 4879 | 5626 | 5853 | 5806 | 4996 | 2356 | 1704 | 1850 | 1859 | 2543 | 5782 | 7307 | 6818 | 6263 | 5217 | 4254 |
| 57 | 4162 | 4811 | 5603 | 5864 | 5883 | 5037 | 2303 | 1706 | 1895 | 1874 | 2498 | 5867 | 7407 | 6841 | 6247 | 5150 | 4162 |
| 58 | 4063 | 4732 | 5572 | 5879 | 5970 | 5078 | 2252 | 1711 | 1945 | 1893 | 2452 | 5901 | 7515 | 6869 | 6221 | 5072 | 4063 |
| 59 | 3957 | 4641 | 5536 | 5898 | 6065 | 5123 | 2204 | 1718 | 1998 | 1914 | 2405 | 5886 | 7632 | 6902 | 6186 | 4981 | 3957 |
| 60 | 3842 | 4536 | 5494 | 5920 | 6167 | 5169 | 2160 | 1732 | 2050 | 1938 | 2360 | 5867 | 7760 | 6940 | 6144 | 4877 | 3842 |
| 61 | 3714 | 4414 | 5444 | 5946 | 6279 | 5218 | 2119 | 1750 | 2101 | 1961 | 2316 | 5944 | 7898 | 6976 | 6094 | 4757 | 3714 |
| 62 | 3571 | 4273 | 5388 | 5975 | 6399 | 5271 | 2081 | 1770 | 2144 | 1982 | 2270 | 5964 | 8051 | 7016 | 6040 | 4621 | 3571 |
| 63 | 3405 | 4112 | 5323 | 6010 | 6525 | 5327 | 2045 | 1792 | 2171 | 1999 | 2226 | 5904 | 8232 | 7060 | 5980 | 4465 | 3405 |
| 64 | 3221 | 3925 | 5251 | 6051 | 6658 | 5386 | 2012 | 1810 | 2182 | 2006 | 2176 | 6040 | 8448 | 7113 | 5914 | 4283 | 3221 |
| 65 | 3012 | 3717 | 5168 | 6099 | 6812 | 5452 | 1978 | 1824 | 2165 | 2002 | 2120 | 5950 | 8707 | 7174 | 5838 | 4084 | 3012 |
| 66 | 2790 | 3480 | 5070 | 6158 | 6995 | 5520 | 1944 | 1830 | 2106 | 1981 | 2057 | 5993 | 8990 | 7250 | 5759 | 3853 | 2790 |
| 67 | 2557 | 3228 | 4958 | 6228 | 7213 | 5598 | 1903 | 1824 | 2005 | 1940 | 1994 | 6154 | 9296 | 7336 | 5670 | 3605 | 2557 |
| 68 | 2319 | 2971 | 4830 | 6308 | 7475 | 5676 | 1853 | 1798 | 1904 | 1879 | 1915 | 6040 | 9584 | 7433 | 5570 | 3345 | 2319 |
| 69 | 2082 | 2714 | 4687 | 6399 | 7766 | 5765 | 1807 | 1752 | 1776 | 1791 | 1832 | 6159 | 9798 | 7540 | 5463 | 3079 | 2082 |
| 70 | 1831 | 2473 | 4535 | 6494 | 8073 | 5866 | 1748 | 1683 | 1637 | 1676 | 1745 | 6277 | 9864 | 7648 | 5349 | 2834 | 1831 |
| 71 | 1552 | 2237 | 4387 | 6591 | 8374 | 5977 | 1677 | 1588 | 1491 | 1541 | 1671 | 6149 | 9726 | 7751 | 5247 | 2599 | 1552 |
| 72 | 1259 | 1976 | 4234 | 6680 | 8589 | 6071 | 1607 | 1457 | 1338 | 1378 | 1591 | 6089 | 9325 | 7830 | 5156 | 2363 | 1259 |
| 73 | 1007 | 1716 | 4096 | 6746 | 8643 | 6087 | 1539 | 1303 | 1180 | 1212 | 1527 | 5814 | 8675 | 7854 | 5060 | 2108 | 1007 |
| 74 | 841  | 1424 | 3994 | 6758 | 8458 | 5948 | 1455 | 1138 | 1010 | 1060 | 1463 | 5408 | 7766 | 7778 | 4988 | 1854 | 841  |
| 75 | 677  | 1176 | 3936 | 6671 | 8022 | 5644 | 1387 | 986  | 823  | 916  | 1403 | 4832 | 6737 | 7546 | 4959 | 1615 | 677  |
| 76 | 563  | 975  | 3902 | 6432 | 7410 | 5215 | 1308 | 833  | 632  | 790  | 1345 | 4185 | 5678 | 7130 | 4966 | 1413 | 563  |
| 77 | 466  | 820  | 3844 | 6061 | 6671 | 4737 | 1227 | 680  | 476  | 665  | 1280 | 3547 | 4756 | 6556 | 4980 | 1247 | 466  |
| 78 | 382  | 692  | 3711 | 5591 | 5851 | 4239 | 1132 | 553  | 377  | 562  | 1198 | 2985 | 3982 | 5895 | 4952 | 1106 | 382  |
| 79 | 317  | 587  | 3477 | 5081 | 5005 | 3713 | 1046 | 451  | 303  | 466  | 1124 | 2456 | 3347 | 5245 | 4828 | 984  | 317  |
| 80 | 265  | 500  | 3171 | 4548 | 4152 | 3157 | 964  | 378  | 256  | 403  | 1034 | 2021 | 2810 | 4624 | 4594 | 867  | 265  |
| 81 | 223  | 420  | 2823 | 3992 | 3390 | 2589 | 841  | 327  | 221  | 358  | 905  | 1636 | 2327 | 4020 | 4266 | 754  | 223  |
| 82 | 190  | 353  | 2478 | 3417 | 2796 | 2152 | 684  | 288  | 187  | 321  | 746  | 1326 | 1931 | 3402 | 3878 | 643  | 190  |
| 83 | 160  | 298  | 2167 | 2877 | 2264 | 1723 | 558  | 238  | 153  | 288  | 591  | 1127 | 1592 | 2798 | 3456 | 552  | 160  |
| 84 | 134  | 252  | 1930 | 2417 | 1802 | 1360 | 405  | 186  | 117  | 247  | 454  | 945  | 1282 | 2274 | 3068 | 476  | 134  |
| 85 | 111  | 212  | 1704 | 1974 | 1415 | 1019 | 273  | 128  | 78   | 183  | 320  | 772  | 1023 | 1823 | 2735 | 410  | 111  |
| 86 | 94   | 180  | 1455 | 1531 | 1067 | 741  | 171  | 78   | 38   | 108  | 208  | 600  | 805  | 1373 | 2384 | 347  | 94   |
| 87 | 77   | 147  | 1244 | 1125 | 751  | 463  | 70   | 29   | 20   | 65   | 98   | 438  | 589  | 1003 | 1996 | 293  | 77   |
| 88 | 61   | 119  | 996  | 776  | 468  | 211  | 42   | 25   | 16   | 22   | 48   | 290  | 402  | 689  | 1662 | 239  | 61   |
| 89 | 47   | 91   | 730  | 466  | 257  | 128  | 38   | 23   | 14   | 16   | 37   | 129  | 221  | 443  | 1268 | 187  | 47   |
| 90 | 34   | 65   | 465  | 261  | 48   | 46   | 38   | 24   | 14   | 17   | 31   | 87   | 76   | 266  | 870  | 136  | 34   |
| 91 | 22   | 39   | 172  | 58   | 44   | 47   | 40   | 25   | 15   | 18   | 33   | 47   | 47   | 90   | 480  | 82   | 22   |
| 92 | 14   | 19   | 97   | 54   | 44   | 50   | 42   | 26   | 16   | 19   | 35   | 48   | 42   | 35   | 91   | 35   | 14   |
| 93 | 12   | 15   | 26   | 56   | 47   | 52   | 43   | 28   | 17   | 20   | 36   | 50   | 45   | 31   | 18   | 14   | 12   |
| 94 | 12   | 14   | 26   | 58   | 49   | 54   | 45   | 29   | 17   | 21   | 37   | 52   | 47   | 33   | 16   | 12   | 12   |
| 95 | 12   | 15   | 27   | 60   | 52   | 57   | 47   | 30   | 18   | 22   | 39   | 54   | 49   | 35   | 17   | 12   | 12   |

|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 96  | 13 | 16 | 26 | 62 | 54 | 59 | 48 | 31 | 20 | 24 | 40 | 56 | 51 | 37 | 18 | 12 | 13 |
| 97  | 13 | 16 | 27 | 58 | 57 | 61 | 50 | 33 | 21 | 25 | 41 | 57 | 53 | 38 | 18 | 13 | 13 |
| 98  | 14 | 17 | 28 | 56 | 59 | 63 | 51 | 34 | 22 | 26 | 42 | 59 | 55 | 39 | 19 | 14 | 14 |
| 99  | 15 | 18 | 29 | 56 | 61 | 64 | 52 | 36 | 24 | 28 | 43 | 60 | 57 | 41 | 20 | 14 | 15 |
| 100 | 15 | 19 | 30 | 57 | 63 | 66 | 53 | 37 | 25 | 29 | 44 | 61 | 59 | 42 | 21 | 14 | 15 |
| 101 | 16 | 20 | 31 | 58 | 65 | 67 | 54 | 38 | 27 | 30 | 45 | 62 | 60 | 44 | 21 | 15 | 16 |
| 102 | 17 | 20 | 32 | 59 | 67 | 69 | 55 | 40 | 28 | 32 | 46 | 63 | 62 | 45 | 22 | 16 | 17 |
| 103 | 17 | 21 | 34 | 61 | 68 | 70 | 56 | 41 | 30 | 33 | 47 | 64 | 63 | 46 | 23 | 16 | 17 |
| 104 | 18 | 22 | 35 | 62 | 70 | 70 | 57 | 43 | 31 | 34 | 48 | 65 | 64 | 47 | 24 | 17 | 18 |
| 105 | 18 | 23 | 36 | 63 | 71 | 71 | 58 | 44 | 33 | 36 | 48 | 65 | 64 | 47 | 24 | 18 | 18 |
| 106 | 19 | 23 | 38 | 64 | 71 | 71 | 59 | 45 | 34 | 37 | 49 | 66 | 65 | 48 | 25 | 18 | 19 |
| 107 | 20 | 24 | 39 | 64 | 72 | 72 | 60 | 47 | 36 | 38 | 50 | 66 | 65 | 49 | 25 | 19 | 20 |
| 108 | 20 | 25 | 41 | 65 | 72 | 72 | 61 | 48 | 37 | 40 | 51 | 67 | 65 | 49 | 26 | 19 | 20 |
| 109 | 21 | 25 | 41 | 66 | 72 | 72 | 61 | 49 | 39 | 41 | 51 | 67 | 65 | 49 | 27 | 20 | 21 |
| 110 | 21 | 26 | 42 | 66 | 71 | 72 | 62 | 50 | 40 | 42 | 52 | 68 | 66 | 50 | 27 | 20 | 21 |
| 111 | 22 | 27 | 43 | 67 | 71 | 73 | 63 | 51 | 42 | 43 | 53 | 68 | 66 | 50 | 28 | 21 | 22 |
| 112 | 22 | 27 | 44 | 67 | 71 | 73 | 63 | 52 | 43 | 44 | 53 | 69 | 66 | 50 | 28 | 21 | 22 |
| 113 | 23 | 28 | 44 | 68 | 71 | 73 | 64 | 53 | 44 | 45 | 54 | 69 | 66 | 50 | 29 | 22 | 23 |
| 114 | 24 | 29 | 46 | 68 | 71 | 73 | 65 | 54 | 45 | 46 | 55 | 69 | 66 | 50 | 29 | 22 | 24 |
| 115 | 24 | 29 | 46 | 68 | 71 | 73 | 65 | 54 | 46 | 46 | 55 | 70 | 66 | 50 | 29 | 23 | 24 |
| 116 | 25 | 30 | 47 | 68 | 71 | 73 | 65 | 55 | 48 | 47 | 56 | 70 | 65 | 50 | 30 | 23 | 25 |
| 117 | 25 | 30 | 48 | 68 | 70 | 72 | 66 | 56 | 49 | 48 | 56 | 70 | 65 | 50 | 30 | 24 | 25 |
| 118 | 26 | 31 | 48 | 68 | 70 | 72 | 66 | 56 | 50 | 49 | 57 | 70 | 64 | 50 | 31 | 24 | 26 |
| 119 | 26 | 32 | 48 | 67 | 70 | 72 | 66 | 57 | 51 | 50 | 57 | 70 | 64 | 49 | 31 | 25 | 26 |
| 120 | 27 | 32 | 48 | 67 | 69 | 72 | 66 | 58 | 52 | 51 | 57 | 70 | 63 | 49 | 31 | 25 | 27 |
| 121 | 27 | 33 | 47 | 67 | 68 | 71 | 66 | 58 | 53 | 52 | 57 | 69 | 62 | 49 | 31 | 26 | 27 |
| 122 | 28 | 33 | 47 | 67 | 68 | 71 | 66 | 58 | 54 | 52 | 58 | 69 | 61 | 48 | 32 | 26 | 28 |
| 123 | 28 | 34 | 48 | 67 | 67 | 70 | 65 | 59 | 55 | 53 | 58 | 69 | 60 | 48 | 32 | 27 | 28 |
| 124 | 29 | 34 | 48 | 66 | 66 | 70 | 65 | 59 | 56 | 54 | 58 | 69 | 59 | 47 | 32 | 27 | 29 |
| 125 | 29 | 35 | 49 | 65 | 65 | 69 | 65 | 60 | 56 | 55 | 58 | 68 | 58 | 47 | 32 | 27 | 29 |
| 126 | 30 | 35 | 50 | 65 | 65 | 68 | 64 | 60 | 57 | 55 | 58 | 68 | 57 | 46 | 33 | 28 | 30 |
| 127 | 30 | 36 | 51 | 64 | 64 | 67 | 64 | 60 | 58 | 56 | 58 | 68 | 56 | 46 | 33 | 28 | 30 |
| 128 | 30 | 36 | 50 | 63 | 63 | 66 | 63 | 61 | 59 | 57 | 59 | 67 | 55 | 45 | 33 | 29 | 30 |
| 129 | 31 | 36 | 49 | 62 | 62 | 65 | 63 | 61 | 59 | 58 | 59 | 67 | 54 | 44 | 33 | 29 | 31 |
| 130 | 31 | 37 | 49 | 61 | 61 | 64 | 62 | 61 | 60 | 58 | 59 | 66 | 53 | 44 | 33 | 29 | 31 |
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| 132 | 32 | 37 | 49 | 59 | 58 | 62 | 61 | 61 | 60 | 59 | 60 | 65 | 51 | 43 | 34 | 30 | 32 |
| 133 | 32 | 38 | 49 | 58 | 57 | 61 | 61 | 60 | 60 | 59 | 60 | 65 | 50 | 42 | 34 | 31 | 32 |
| 134 | 32 | 38 | 50 | 58 | 57 | 60 | 60 | 60 | 60 | 59 | 60 | 65 | 49 | 42 | 34 | 31 | 32 |
| 135 | 32 | 38 | 51 | 57 | 56 | 60 | 60 | 60 | 60 | 59 | 60 | 65 | 48 | 41 | 34 | 31 | 32 |
| 136 | 33 | 39 | 51 | 56 | 55 | 59 | 59 | 60 | 60 | 59 | 60 | 64 | 47 | 41 | 34 | 32 | 33 |
| 137 | 33 | 39 | 51 | 55 | 54 | 58 | 58 | 59 | 60 | 59 | 60 | 64 | 47 | 41 | 35 | 32 | 33 |
| 138 | 33 | 39 | 51 | 55 | 53 | 57 | 58 | 59 | 60 | 58 | 59 | 63 | 46 | 41 | 35 | 32 | 33 |
| 139 | 34 | 40 | 51 | 54 | 52 | 56 | 57 | 58 | 59 | 58 | 59 | 63 | 45 | 40 | 35 | 33 | 34 |
| 140 | 34 | 40 | 51 | 54 | 51 | 55 | 56 | 58 | 59 | 58 | 59 | 62 | 45 | 40 | 35 | 33 | 34 |
| 141 | 35 | 40 | 51 | 53 | 51 | 54 | 55 | 57 | 58 | 57 | 58 | 62 | 44 | 40 | 35 | 34 | 35 |
| 142 | 35 | 40 | 51 | 52 | 50 | 53 | 54 | 56 | 58 | 57 | 58 | 61 | 44 | 40 | 35 | 34 | 35 |
| 143 | 36 | 41 | 51 | 52 | 49 | 52 | 54 | 56 | 58 | 57 | 58 | 61 | 43 | 40 | 36 | 34 | 36 |
| 144 | 36 | 41 | 50 | 51 | 48 | 52 | 53 | 56 | 58 | 57 | 58 | 60 | 43 | 39 | 36 | 35 | 36 |



|     |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 145 | 37 | 41 | 50 | 50 | 48 | 51 | 53 | 55 | 57 | 56 | 58 | 60 | 42 | 39 | 36 | 35 | 37 |
| 146 | 37 | 42 | 50 | 50 | 47 | 50 | 52 | 55 | 57 | 56 | 57 | 59 | 42 | 39 | 36 | 36 | 37 |
| 147 | 38 | 42 | 49 | 49 | 46 | 49 | 51 | 54 | 57 | 56 | 57 | 59 | 41 | 39 | 37 | 36 | 38 |
| 148 | 38 | 42 | 49 | 49 | 46 | 49 | 51 | 54 | 56 | 56 | 57 | 58 | 40 | 39 | 37 | 37 | 38 |
| 149 | 38 | 42 | 49 | 48 | 45 | 48 | 50 | 53 | 56 | 55 | 57 | 58 | 40 | 39 | 37 | 37 | 38 |
| 150 | 39 | 42 | 48 | 48 | 45 | 47 | 50 | 53 | 56 | 55 | 57 | 58 | 39 | 39 | 37 | 38 | 39 |
| 151 | 40 | 42 | 47 | 49 | 45 | 47 | 50 | 53 | 55 | 55 | 56 | 58 | 39 | 39 | 38 | 38 | 40 |
| 152 | 40 | 42 | 46 | 49 | 45 | 47 | 49 | 53 | 55 | 54 | 56 | 58 | 39 | 39 | 38 | 39 | 40 |
| 153 | 41 | 43 | 45 | 49 | 45 | 47 | 49 | 53 | 55 | 54 | 56 | 58 | 39 | 39 | 38 | 39 | 41 |
| 154 | 41 | 43 | 45 | 50 | 45 | 47 | 49 | 52 | 55 | 54 | 56 | 59 | 39 | 39 | 38 | 40 | 41 |
| 155 | 42 | 43 | 45 | 49 | 45 | 46 | 49 | 52 | 54 | 54 | 56 | 59 | 39 | 39 | 39 | 40 | 42 |
| 156 | 42 | 44 | 45 | 48 | 45 | 46 | 49 | 52 | 54 | 54 | 56 | 59 | 39 | 40 | 39 | 41 | 42 |
| 157 | 43 | 44 | 46 | 47 | 45 | 46 | 49 | 52 | 54 | 54 | 56 | 59 | 40 | 40 | 40 | 41 | 43 |
| 158 | 44 | 45 | 46 | 47 | 46 | 46 | 49 | 52 | 54 | 54 | 56 | 59 | 40 | 40 | 40 | 42 | 44 |
| 159 | 44 | 45 | 46 | 47 | 46 | 46 | 49 | 52 | 54 | 55 | 57 | 59 | 40 | 41 | 40 | 43 | 44 |
| 160 | 45 | 46 | 47 | 47 | 46 | 46 | 49 | 52 | 55 | 55 | 57 | 59 | 41 | 41 | 41 | 43 | 45 |
| 161 | 45 | 46 | 47 | 47 | 46 | 46 | 48 | 53 | 55 | 55 | 57 | 59 | 41 | 41 | 41 | 44 | 45 |
| 162 | 46 | 46 | 47 | 48 | 46 | 46 | 49 | 53 | 55 | 55 | 57 | 59 | 41 | 42 | 42 | 44 | 46 |
| 163 | 46 | 47 | 48 | 48 | 47 | 47 | 48 | 53 | 55 | 55 | 58 | 59 | 42 | 42 | 42 | 45 | 46 |
| 164 | 47 | 48 | 48 | 48 | 47 | 47 | 49 | 53 | 55 | 55 | 58 | 60 | 42 | 43 | 43 | 46 | 47 |
| 165 | 47 | 48 | 49 | 49 | 47 | 47 | 49 | 53 | 55 | 55 | 58 | 60 | 43 | 43 | 43 | 46 | 47 |
| 166 | 48 | 49 | 49 | 49 | 47 | 47 | 49 | 53 | 55 | 55 | 58 | 60 | 43 | 44 | 44 | 47 | 48 |
| 167 | 49 | 49 | 50 | 49 | 48 | 47 | 49 | 53 | 55 | 55 | 58 | 60 | 44 | 44 | 44 | 47 | 49 |
| 168 | 49 | 50 | 51 | 50 | 48 | 48 | 49 | 53 | 55 | 55 | 58 | 61 | 44 | 45 | 45 | 48 | 49 |
| 169 | 50 | 50 | 51 | 51 | 48 | 48 | 49 | 53 | 55 | 55 | 58 | 61 | 45 | 45 | 46 | 49 | 50 |
| 170 | 50 | 51 | 52 | 51 | 49 | 48 | 50 | 53 | 55 | 55 | 58 | 61 | 46 | 46 | 46 | 49 | 50 |
| 171 | 51 | 52 | 52 | 52 | 49 | 48 | 50 | 53 | 55 | 56 | 58 | 61 | 46 | 47 | 47 | 50 | 51 |
| 172 | 51 | 52 | 54 | 52 | 50 | 49 | 50 | 53 | 55 | 56 | 58 | 62 | 47 | 47 | 47 | 50 | 51 |
| 173 | 51 | 53 | 56 | 53 | 50 | 49 | 50 | 53 | 54 | 55 | 58 | 61 | 48 | 48 | 48 | 50 | 51 |
| 174 | 52 | 53 | 57 | 54 | 50 | 49 | 50 | 52 | 53 | 54 | 57 | 61 | 49 | 48 | 48 | 51 | 52 |
| 175 | 52 | 54 | 57 | 57 | 50 | 49 | 50 | 51 | 52 | 53 | 56 | 60 | 49 | 49 | 49 | 51 | 52 |
| 176 | 53 | 54 | 57 | 61 | 50 | 49 | 49 | 50 | 51 | 52 | 56 | 59 | 50 | 49 | 49 | 51 | 53 |
| 177 | 53 | 55 | 58 | 61 | 50 | 49 | 49 | 50 | 51 | 52 | 55 | 59 | 50 | 49 | 49 | 52 | 53 |
| 178 | 53 | 55 | 58 | 61 | 50 | 49 | 49 | 50 | 51 | 52 | 55 | 59 | 50 | 49 | 50 | 52 | 53 |
| 179 | 52 | 54 | 57 | 61 | 50 | 49 | 49 | 50 | 51 | 52 | 56 | 59 | 50 | 49 | 50 | 51 | 52 |
| 180 | 51 | 51 | 51 | 51 | 51 | 51 | 51 | 51 | 51 | 51 | 51 | 51 | 51 | 51 | 51 | 51 | 51 |

**Luminaire Report Summary**

IESNA:LM-63-2002  
[TEST]  
[TESTDATE] 2023-02-01  
[TESTLAB]  
[ISSUEDATE] 2023-02-02 10:19:53  
[MANUFAC] SARIN Energy Solutions  
[\_LAMPPOSITION] 0,0  
[\_TOTALLUMINAIRELUMENS] 23789.5  
[OTHER] EVERFINE GO-2000A\_V1 SYSTEM  
FILE: CANDELA MULTIPLIER: 1  
FILE: VERTICAL ANGLES: 181, HORIZONTAL ANGLES: 17  
FILE: COORDINATE SYSTEM: TYPE C  
FILE: UNIT OF MEASURE: METRIC  
FILE: BALLAST FACTOR: 1

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Reported data calculated from manufacturer's data file, based on IES recommended methods.