



IES ROAD REPORT

PHOTOMETRIC FILENAME : TEL22-5-LED-34L-45.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] 2,915

[TESTLAB] TUV SUD America

[TESTDATE] 5/13/2016 8:08:54 AM

[ISSUE DATE] 11/15/2019

[MANUFAC] LSI INDUSTRIES, INC.

[LUMCAT] TEL22-5-LED-34L-45

[OTHER] TEST PROCEDURE: IESNA LM-79-08

[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED

[SEARCH_SOURCETYPE] LED

[SEARCH_APPLICATION] Outdoor

CHARACTERISTICS

| | |
|---|------------------------------|
| IES Classification | Type VS |
| Longitudinal Classification | Short |
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 33383 |
| Downward Total Efficiency | N.A. (absolute) |
| Total Luminaire Efficiency | N.A. (absolute) |
| Luminaire Efficacy Rating (LER) | 111 |
| Total Luminaire Watts | 300.14 |
| Ballast Factor | 1.00 |
| Upward Waste Light Ratio | 0.00 |
| Maximum Candela | 9906 |
| Maximum Candela Angle | 90H 65V |
| Maximum Candela (<90 Degrees Vertical) | 9906 |
| Maximum Candela Angle (<90 Degrees Vertical) | 90H 65V |
| Maximum Candela At 90 Degrees Vertical | 0 (0.0% Luminaire Lumens) |
| Maximum Candela from 80 to <90 Degrees Vertical | 1549 (4.6% Luminaire Lumens) |
| Cutoff Classification (deprecated) | N.A. (absolute) |

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

| | Lumens | % Lamp | % Luminaire |
|-------------------------------|----------|--------|-------------|
| FL - Front-Low (0-30) | 1935.2 | N.A. | 5.8 |
| FM - Front-Medium (30-60) | 7643.3 | N.A. | 22.9 |
| FH - Front-High (60-80) | 6561.2 | N.A. | 19.7 |
| FVH - Front-Very High (80-90) | 178.4 | N.A. | 0.5 |
| BL - Back-Low (0-30) | 2181.0 | N.A. | 6.5 |
| BM - Back-Medium (30-60) | 9181.1 | N.A. | 27.5 |
| BH - Back-High (60-80) | 5605.1 | N.A. | 16.8 |
| BVH - Back-Very High (80-90) | 97.4 | N.A. | 0.3 |
| UL - Uplight-Low (90-100) | 0.0 | N.A. | 0.0 |
| UH - Uplight-High (100-180) | 0.0 | N.A. | 0.0 |
| Total | 33382.7 | N.A. | 100.0 |
| BUG Rating | B5-U0-G3 | | |

IES ROAD REPORT
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CANDELA TABULATION

| Vert. Angles | Horizontal Angles | | | | | | | | | |
|-------------------------|--------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | <u>0</u> | <u>10</u> | <u>20</u> | <u>30</u> | <u>40</u> | <u>50</u> | <u>60</u> | <u>70</u> | <u>80</u> | <u>90</u> |
| 0 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 |
| 5 | 4242 | 4239 | 4238 | 4244 | 4253 | 4266 | 4278 | 4290 | 4303 | 4322 |
| 10 | 4283 | 4292 | 4300 | 4306 | 4312 | 4320 | 4333 | 4353 | 4382 | 4419 |
| 15 | 4386 | 4396 | 4407 | 4417 | 4423 | 4431 | 4448 | 4474 | 4518 | 4571 |
| 20 | 4511 | 4527 | 4547 | 4565 | 4577 | 4590 | 4613 | 4647 | 4709 | 4783 |
| 25 | 4681 | 4708 | 4731 | 4754 | 4774 | 4800 | 4839 | 4890 | 4974 | 5071 |
| 30 | 4916 | 4953 | 4979 | 5003 | 5026 | 5065 | 5131 | 5211 | 5313 | 5427 |
| 35 | 5205 | 5249 | 5282 | 5310 | 5336 | 5390 | 5489 | 5606 | 5741 | 5885 |
| 40 | 5531 | 5592 | 5639 | 5683 | 5724 | 5804 | 5941 | 6098 | 6277 | 6468 |
| 45 | 5984 | 6052 | 6100 | 6174 | 6262 | 6376 | 6534 | 6719 | 6946 | 7189 |
| 50 | 6548 | 6652 | 6740 | 6868 | 7019 | 7163 | 7306 | 7482 | 7729 | 7997 |
| 55 | 7303 | 7430 | 7551 | 7730 | 7943 | 8113 | 8236 | 8393 | 8644 | 8920 |
| 60 | 8216 | 8340 | 8470 | 8649 | 8868 | 9068 | 9230 | 9398 | 9603 | 9831 |
| 65 | 8478 | 8688 | 8944 | 9148 | 9347 | 9466 | 9517 | 9615 | 9767 | 9906 |
| 70 | 7774 | 7842 | 8016 | 8092 | 8161 | 8189 | 8117 | 8041 | 8054 | 8033 |
| 75 | 4012 | 4156 | 4403 | 4627 | 4792 | 4836 | 4769 | 4658 | 4506 | 4273 |
| 80 | 610 | 917 | 1204 | 1393 | 1519 | 1549 | 1455 | 1314 | 1197 | 1044 |
| 85 | 61 | 110 | 164 | 195 | 204 | 201 | 189 | 169 | 149 | 124 |
| 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 95 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 105 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 115 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 120 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 125 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 130 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 135 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 140 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 145 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 155 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 160 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 165 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Vert. Angles | Horizontal Angles | | | | | | | | | |
|-------------------------|--------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | <u>100</u> | <u>110</u> | <u>120</u> | <u>130</u> | <u>140</u> | <u>150</u> | <u>160</u> | <u>170</u> | <u>180</u> | <u>190</u> |
| 0 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 |
| 5 | 4344 | 4369 | 4389 | 4393 | 4382 | 4382 | 4389 | 4399 | 4405 | 4405 |
| 10 | 4465 | 4513 | 4562 | 4605 | 4639 | 4633 | 4608 | 4606 | 4617 | 4617 |
| 15 | 4648 | 4727 | 4802 | 4872 | 4930 | 4964 | 4935 | 4910 | 4913 | 4915 |
| 20 | 4894 | 5008 | 5115 | 5218 | 5309 | 5377 | 5362 | 5324 | 5312 | 5308 |
| 25 | 5215 | 5364 | 5509 | 5655 | 5794 | 5909 | 5924 | 5883 | 5846 | 5804 |
| 30 | 5613 | 5806 | 5992 | 6171 | 6311 | 6402 | 6408 | 6355 | 6310 | 6280 |
| 35 | 6111 | 6341 | 6533 | 6708 | 6869 | 7019 | 7090 | 7077 | 7046 | 6982 |
| 40 | 6737 | 7005 | 7169 | 7314 | 7515 | 7744 | 7868 | 7858 | 7807 | 7728 |
| 45 | 7485 | 7781 | 7950 | 8101 | 8290 | 8473 | 8568 | 8563 | 8526 | 8398 |
| 50 | 8295 | 8598 | 8802 | 8971 | 9037 | 8986 | 8883 | 8741 | 8629 | 8689 |
| 55 | 9113 | 9306 | 9439 | 9530 | 9475 | 9312 | 9175 | 9084 | 9016 | 8990 |

IES ROAD REPORT
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CANDELA TABULATION - (Cont.)

| | | | | | | | | | | |
|------------|------|------|------|------|------|------|------|------|------|------|
| 60 | 9788 | 9743 | 9629 | 9461 | 9290 | 9169 | 9095 | 9090 | 9114 | 9021 |
| 65 | 9598 | 9257 | 8911 | 8577 | 8303 | 8061 | 7890 | 7942 | 8012 | 7846 |
| 70 | 7588 | 7100 | 6733 | 6373 | 6042 | 5784 | 5683 | 5930 | 6194 | 5901 |
| 75 | 4021 | 3705 | 3444 | 3191 | 2922 | 2611 | 2393 | 2476 | 2535 | 2584 |
| 80 | 989 | 915 | 896 | 870 | 768 | 616 | 499 | 420 | 266 | 367 |
| 85 | 124 | 120 | 114 | 105 | 89 | 69 | 53 | 46 | 35 | 41 |
| 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 95 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 105 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 115 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 120 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 125 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 130 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 135 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 140 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 145 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 155 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 160 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 165 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Vert.
Angles**

Horizontal Angles

| | <u>200</u> | <u>210</u> | <u>220</u> | <u>230</u> | <u>240</u> | <u>250</u> | <u>260</u> | <u>270</u> | <u>280</u> | <u>290</u> |
|------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 0 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 |
| 5 | 4402 | 4396 | 4385 | 4372 | 4358 | 4342 | 4326 | 4308 | 4295 | 4282 |
| 10 | 4605 | 4585 | 4556 | 4520 | 4481 | 4439 | 4397 | 4353 | 4330 | 4307 |
| 15 | 4888 | 4845 | 4791 | 4726 | 4654 | 4582 | 4510 | 4436 | 4402 | 4367 |
| 20 | 5264 | 5192 | 5104 | 5006 | 4901 | 4797 | 4697 | 4593 | 4543 | 4490 |
| 25 | 5730 | 5630 | 5519 | 5392 | 5249 | 5105 | 4967 | 4823 | 4757 | 4688 |
| 30 | 6223 | 6128 | 6002 | 5850 | 5685 | 5514 | 5333 | 5145 | 5058 | 4966 |
| 35 | 6881 | 6708 | 6511 | 6342 | 6199 | 6031 | 5812 | 5584 | 5460 | 5329 |
| 40 | 7595 | 7370 | 7136 | 6962 | 6822 | 6638 | 6375 | 6100 | 5934 | 5760 |
| 45 | 8275 | 8097 | 7918 | 7743 | 7542 | 7301 | 6997 | 6681 | 6469 | 6248 |
| 50 | 8713 | 8694 | 8670 | 8548 | 8319 | 8064 | 7757 | 7436 | 7187 | 6925 |
| 55 | 8995 | 9072 | 9140 | 9073 | 8904 | 8742 | 8585 | 8422 | 8165 | 7889 |
| 60 | 8949 | 8945 | 9000 | 9071 | 9167 | 9247 | 9184 | 9112 | 9014 | 8895 |
| 65 | 7734 | 7800 | 7936 | 8108 | 8315 | 8538 | 8790 | 9082 | 9027 | 8985 |
| 70 | 5697 | 5621 | 5586 | 5587 | 5640 | 5789 | 6130 | 6531 | 6738 | 6992 |
| 75 | 2608 | 2538 | 2450 | 2375 | 2315 | 2303 | 2386 | 2524 | 2792 | 3142 |
| 80 | 441 | 469 | 478 | 462 | 432 | 414 | 415 | 429 | 503 | 598 |
| 85 | 46 | 49 | 52 | 51 | 49 | 47 | 46 | 46 | 54 | 63 |
| 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 95 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 105 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 115 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 120 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 125 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 130 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

IES ROAD REPORT
PHOTOMETRIC FILENAME : TEL22-5-LED-34L-45.IES

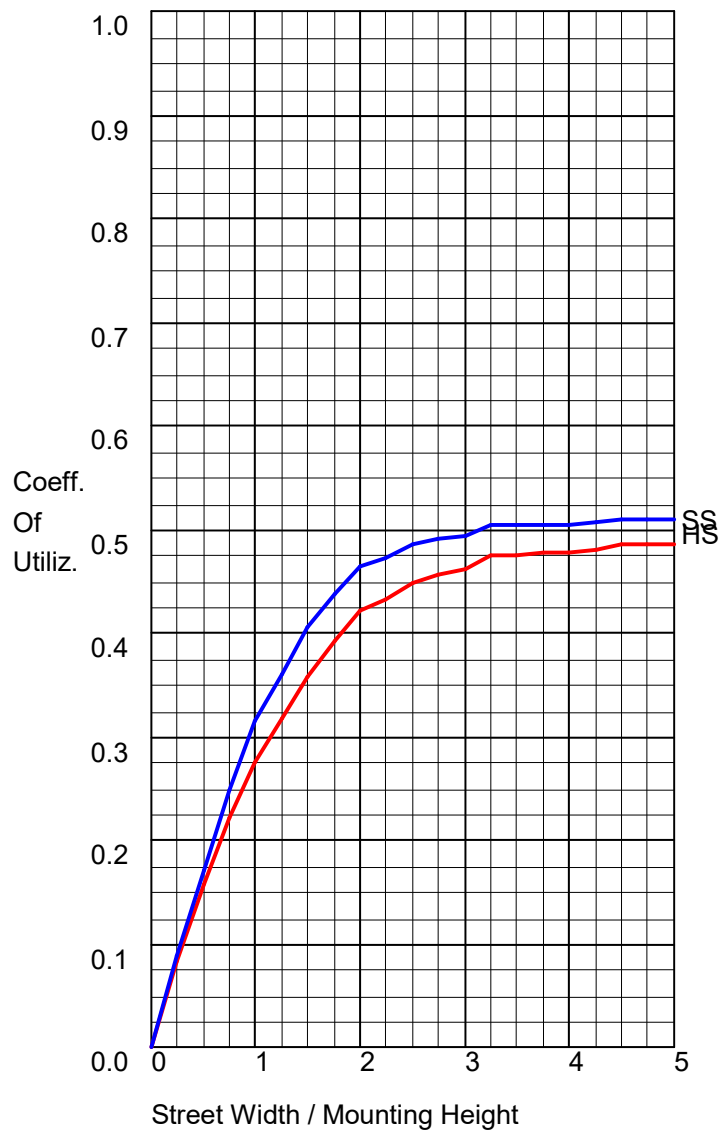
CANDELA TABULATION - (Cont.)

| | | | | | | | | | | |
|-----|---|---|---|---|---|---|---|---|---|---|
| 135 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 140 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 145 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 155 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 160 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 165 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Vert. Angles **Horizontal Angles**

| | <u>300</u> | <u>310</u> | <u>320</u> | <u>330</u> | <u>340</u> | <u>350</u> | <u>360</u> |
|-----|------------|------------|------------|------------|------------|------------|------------|
| 0 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 | 4291 |
| 5 | 4270 | 4262 | 4257 | 4252 | 4249 | 4246 | 4242 |
| 10 | 4291 | 4284 | 4281 | 4280 | 4280 | 4280 | 4283 |
| 15 | 4350 | 4346 | 4349 | 4356 | 4366 | 4375 | 4386 |
| 20 | 4464 | 4455 | 4455 | 4464 | 4480 | 4496 | 4511 |
| 25 | 4646 | 4621 | 4610 | 4615 | 4630 | 4653 | 4681 |
| 30 | 4901 | 4850 | 4821 | 4820 | 4835 | 4869 | 4916 |
| 35 | 5229 | 5144 | 5095 | 5089 | 5105 | 5147 | 5205 |
| 40 | 5631 | 5519 | 5447 | 5427 | 5436 | 5483 | 5531 |
| 45 | 6117 | 6016 | 5933 | 5876 | 5853 | 5910 | 5984 |
| 50 | 6789 | 6696 | 6600 | 6501 | 6436 | 6484 | 6548 |
| 55 | 7729 | 7609 | 7474 | 7321 | 7210 | 7244 | 7303 |
| 60 | 8752 | 8597 | 8436 | 8265 | 8124 | 8131 | 8216 |
| 65 | 8999 | 9012 | 8954 | 8845 | 8723 | 8575 | 8478 |
| 70 | 7218 | 7477 | 7716 | 7892 | 7963 | 7819 | 7774 |
| 75 | 3470 | 3819 | 4187 | 4582 | 4832 | 4476 | 4012 |
| 80 | 726 | 889 | 1042 | 1168 | 1214 | 956 | 610 |
| 85 | 76 | 93 | 112 | 135 | 147 | 110 | 61 |
| 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 95 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 105 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 115 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 120 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 125 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 130 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 135 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 140 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 145 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 155 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 160 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 165 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

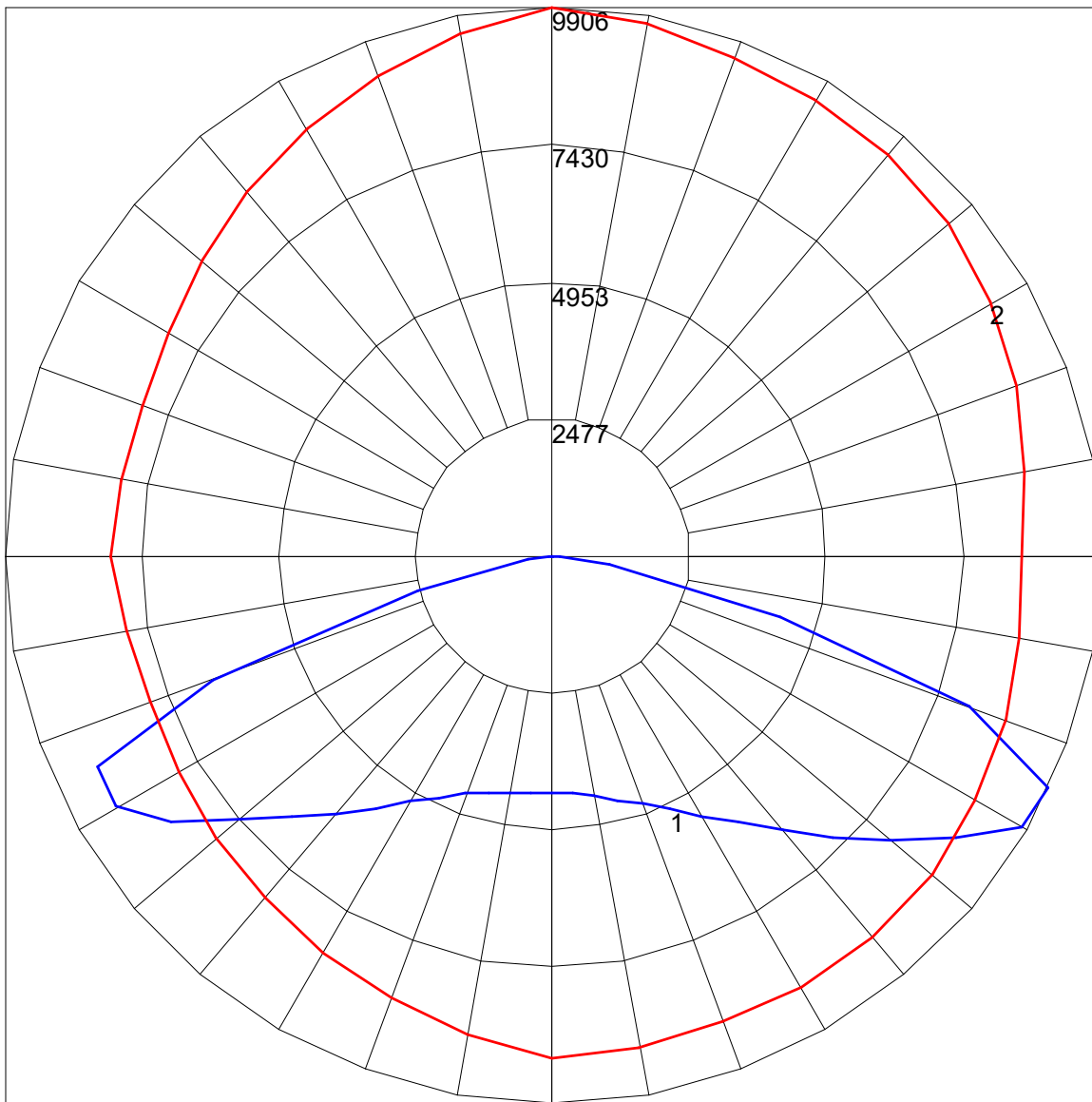
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

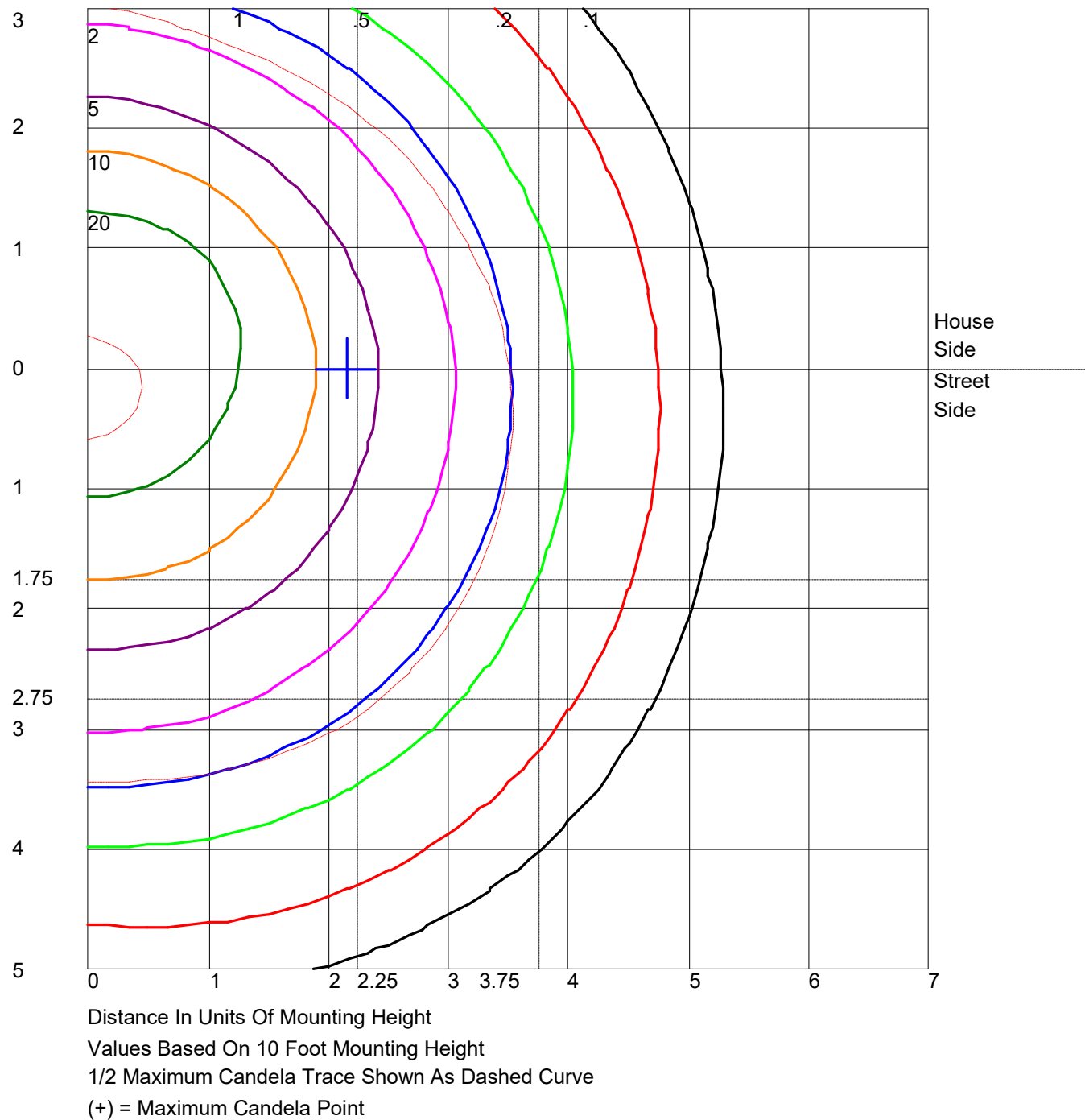
| | Lumens | Percent Of Luminaire |
|----------------------|---------|-------------------------|
| Downward Street Side | 16318.2 | 48.9 |
| Downward House Side | 17064.6 | 51.1 |
| Downward Total | 33382.9 | 100.0 |
| Upward Street Side | 0.0 | 0.0 |
| Upward House Side | 0.0 | 0.0 |
| Upward Total | 0.0 | 0.0 |
| Total Flux | 33382.9 | 100.0 |

POLAR GRAPH

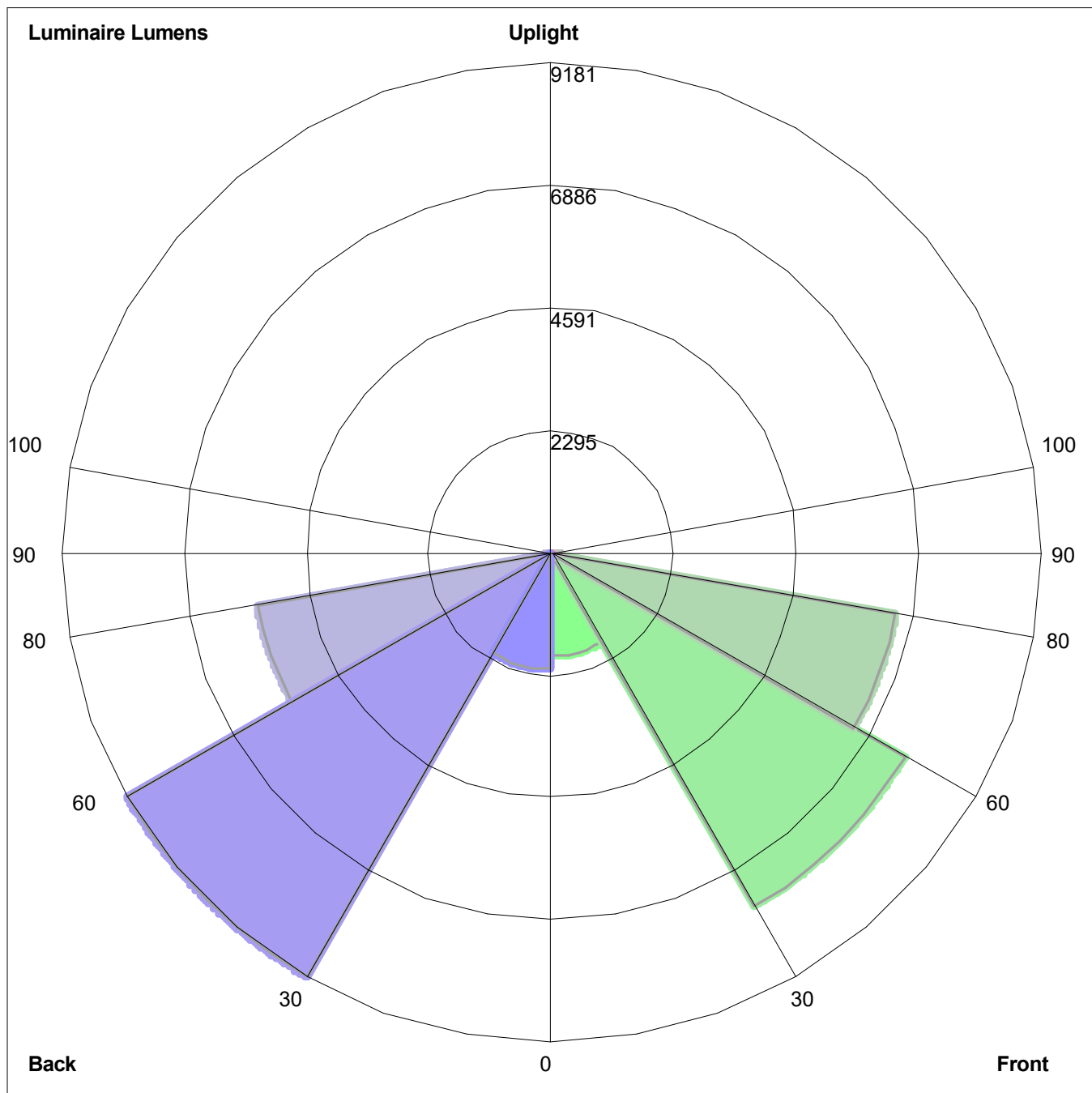


Maximum Candela = 9906 Located At Horizontal Angle = 90, Vertical Angle = 65
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (65) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=1935.2, Medium=7643.3, High=6561.2, Very High=178.4
Back: Low= 2181.0, Medium=9181.1, High=5605.1, Very High=97.4
Uplight: Low=0.0, High=0.0

BUG Rating : B5-U0-G3