

IES ROAD REPORT

PHOTOMETRIC FILENAME : NGRK-150WH.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST]
 [TESTLAB]
 [TESTDATE]
 [ISSUEDATE]
 [MANUFAC]
 [LUMCAT]
 [LUMINAIRE]
 [LAMPCAT]
 [LAMP]
 [LumELE] 277.05 0.527 144.84 0.9918

CHARACTERISTICS

| | |
|---|---------------------------------|
| IES Classification | Type I |
| Longitudinal Classification | Very Short |
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 18947 |
| Downward Total Efficiency | N.A. (absolute) |
| Total Luminaire Efficiency | N.A. (absolute) |
| Luminaire Efficacy Rating (LER) | 131 |
| Total Luminaire Watts | 144.84 |
| Ballast Factor | 1.00 |
| Upward Waste Light Ratio | 0.00 |
| Maximum Candela | 9488.817 |
| Maximum Candela Angle | 202.5H 5V |
| Maximum Candela (<90 Degrees Vertical) | 9488.817 |
| Maximum Candela Angle (<90 Degrees Vertical) | 202.5H 5V |
| Maximum Candela At 90 Degrees Vertical | 2.132 (0.0% Luminaire Lumens) |
| Maximum Candela from 80 to <90 Degrees Vertical | 109.351 (0.6% Luminaire Lumens) |
| Cutoff Classification (deprecated) | N.A. (absolute) |

LUMINAIRE CLASSIFICATION SYSTEM (LCS)

| | Lumens | % Lamp | % Luminaire |
|-------------------------------|--------|--------|-------------|
| FL - Front-Low (0-30) | 3410.4 | N.A. | 18.0 |
| FM - Front-Medium (30-60) | 4548.7 | N.A. | 24.0 |
| FH - Front-High (60-80) | 418.3 | N.A. | 2.2 |
| FVH - Front-Very High (80-90) | 12.2 | N.A. | 0.1 |
| BL - Back-Low (0-30) | 3611.0 | N.A. | 19.1 |
| BM - Back-Medium (30-60) | 5814.3 | N.A. | 30.7 |
| BH - Back-High (60-80) | 1069.8 | N.A. | 5.6 |
| BVH - Back-Very High (80-90) | 25.0 | N.A. | 0.1 |
| UL - Uplight-Low (90-100) | 1.9 | N.A. | 0.0 |
| UH - Uplight-High (100-180) | 35.3 | N.A. | 0.2 |

Total 18946.9 N.A. 100.0

BUG Rating B4-U2-G3

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CANDELA TABULATION

| Vert. Angles | Horizontal Angles | | | | | | | | | |
|--------------|-------------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|
| | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> | <u>112.5</u> | <u>135.0</u> | <u>157.5</u> | <u>180.0</u> | <u>202.5</u> |
| 0 | 9477.910 | 9477.910 | 9477.910 | 9477.910 | 9477.910 | 9477.910 | 9477.910 | 9477.910 | 9477.910 | 9477.910 |
| 5 | 9371.580 | 9380.106 | 9407.816 | 9448.317 | 9437.659 | 9437.659 | 9427.001 | 9450.449 | 9471.765 | 9488.817 |
| 10 | 9077.419 | 9166.946 | 9203.183 | 9318.290 | 9318.290 | 9326.816 | 9337.474 | 9350.264 | 9339.605 | 9365.185 |
| 15 | 8670.283 | 8764.074 | 8857.864 | 9045.445 | 9088.076 | 9083.814 | 9092.340 | 9090.208 | 9109.393 | 9120.051 |
| 20 | 8024.408 | 8184.278 | 8395.306 | 8589.282 | 8680.941 | 8764.074 | 8753.415 | 8776.863 | 8757.679 | 8740.626 |
| 25 | 7214.401 | 7416.902 | 7747.301 | 7975.382 | 8124.594 | 8250.358 | 8314.306 | 8327.095 | 8324.964 | 8250.358 |
| 30 | 6361.760 | 6566.394 | 6922.371 | 7289.006 | 7504.298 | 7619.404 | 7725.984 | 7751.564 | 7787.801 | 7672.694 |
| 35 | 5432.383 | 5658.332 | 6039.889 | 6491.788 | 6700.685 | 6888.265 | 7033.214 | 7073.715 | 7048.135 | 6939.424 |
| 40 | 4594.664 | 4750.271 | 5191.512 | 5681.780 | 5897.072 | 6144.337 | 6257.312 | 6325.523 | 6267.970 | 6191.232 |
| 45 | 3702.376 | 3913.404 | 4243.803 | 4837.666 | 5110.511 | 5353.513 | 5447.304 | 5534.700 | 5500.594 | 5370.566 |
| 50 | 2841.423 | 3008.327 | 3432.729 | 3999.095 | 4349.530 | 4564.822 | 4671.402 | 4728.955 | 4716.165 | 4579.743 |
| 55 | 1901.387 | 2145.242 | 2548.967 | 3085.917 | 3533.127 | 3746.287 | 3865.657 | 3936.000 | 3936.000 | 3754.813 |
| 60 | 556.561 | 1281.944 | 1696.967 | 2102.610 | 2541.933 | 2863.805 | 3010.885 | 3089.754 | 3036.464 | 2889.384 |
| 65 | 213.160 | 495.171 | 778.460 | 1119.303 | 1169.183 | 1955.743 | 2122.008 | 2177.429 | 2021.823 | 2023.954 |
| 70 | 116.385 | 165.412 | 228.508 | 337.645 | 301.195 | 1113.761 | 1233.131 | 1115.893 | 542.919 | 1068.997 |
| 75 | 77.590 | 97.414 | 100.825 | 124.699 | 160.296 | 287.979 | 361.093 | 303.966 | 216.144 | 261.760 |
| 80 | 44.764 | 47.322 | 46.895 | 53.503 | 74.606 | 100.185 | 109.351 | 109.351 | 98.693 | 105.941 |
| 85 | 13.429 | 17.479 | 17.905 | 21.742 | 33.679 | 40.927 | 43.271 | 45.616 | 46.469 | 48.387 |
| 90 | 1.492 | 1.492 | 1.492 | 1.705 | 1.705 | 1.918 | 2.132 | 1.705 | 1.918 | 1.918 |
| 95 | 1.705 | 1.705 | 1.705 | 1.705 | 1.492 | 1.705 | 1.492 | 1.492 | 1.492 | 1.492 |
| 100 | 2.132 | 2.132 | 2.132 | 1.918 | 1.492 | 1.705 | 1.705 | 1.705 | 1.705 | 1.492 |
| 105 | 2.558 | 2.345 | 2.771 | 2.132 | 2.132 | 1.918 | 1.918 | 1.705 | 1.705 | 1.705 |
| 110 | 3.624 | 3.197 | 2.984 | 2.984 | 2.558 | 2.558 | 2.345 | 2.132 | 2.132 | 2.345 |
| 115 | 4.476 | 4.263 | 4.050 | 3.837 | 3.411 | 2.984 | 2.984 | 2.771 | 2.771 | 2.771 |
| 120 | 5.755 | 5.329 | 4.903 | 4.690 | 4.476 | 4.050 | 3.837 | 3.624 | 3.197 | 3.411 |
| 125 | 6.821 | 6.608 | 5.968 | 5.542 | 5.329 | 5.116 | 4.903 | 4.690 | 4.690 | 4.476 |
| 130 | 8.100 | 7.887 | 7.247 | 6.821 | 6.821 | 6.395 | 6.182 | 5.968 | 5.755 | 5.542 |
| 135 | 9.379 | 9.166 | 8.740 | 8.313 | 8.313 | 7.674 | 7.247 | 7.461 | 7.034 | 7.247 |
| 140 | 10.658 | 10.232 | 10.019 | 9.592 | 8.953 | 9.166 | 8.953 | 8.740 | 8.526 | 8.313 |
| 145 | 11.724 | 11.511 | 11.084 | 10.445 | 10.445 | 10.232 | 10.019 | 9.805 | 9.805 | 9.805 |
| 150 | 12.790 | 12.363 | 11.937 | 11.511 | 11.724 | 11.297 | 11.297 | 11.297 | 11.084 | 10.871 |
| 155 | 13.429 | 13.216 | 13.003 | 12.363 | 12.790 | 12.150 | 12.150 | 12.150 | 11.937 | 12.150 |
| 160 | 13.855 | 13.642 | 13.216 | 12.790 | 13.003 | 12.790 | 12.790 | 12.576 | 12.576 | 12.363 |
| 165 | 14.069 | 13.855 | 13.429 | 13.216 | 13.429 | 13.003 | 12.790 | 12.790 | 12.790 | 13.003 |
| 170 | 14.069 | 13.855 | 13.429 | 13.216 | 13.429 | 13.003 | 13.216 | 13.003 | 13.216 | 13.003 |
| 175 | 14.069 | 14.282 | 14.069 | 13.855 | 13.855 | 13.855 | 13.429 | 13.429 | 13.216 | 13.642 |
| 180 | 14.633 | 14.633 | 14.633 | 14.633 | 14.633 | 14.633 | 14.633 | 14.633 | 14.633 | 14.633 |

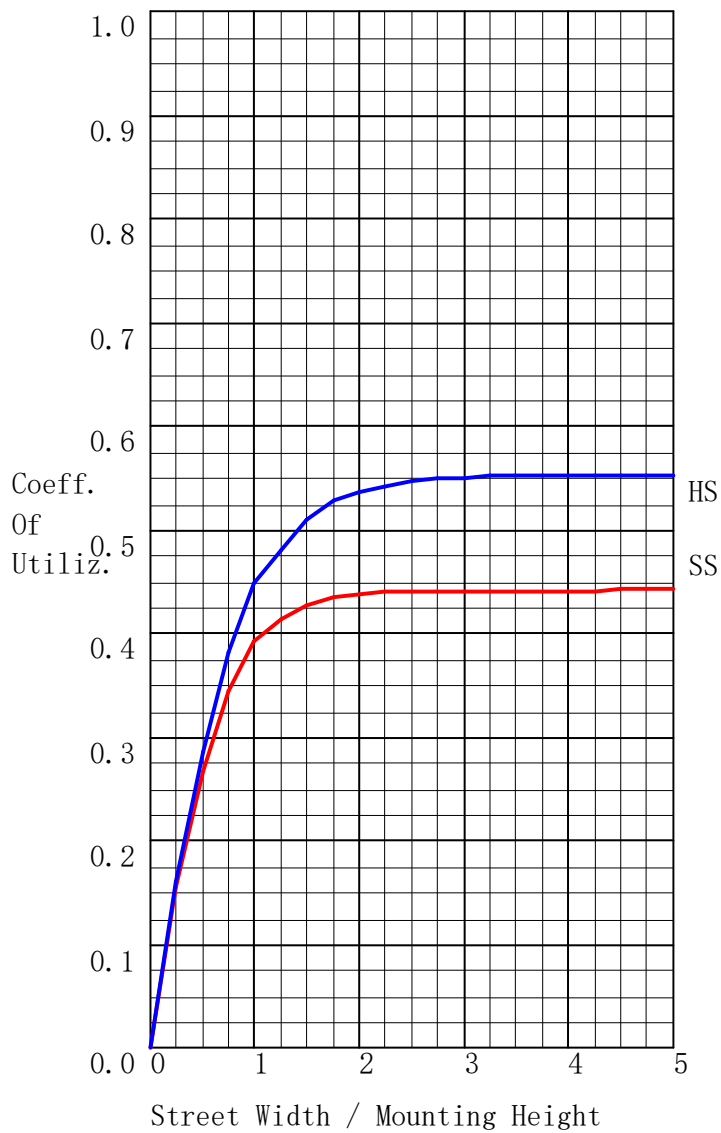
| Vert. Angles | Horizontal Angles | | | | | | |
|--------------|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| | <u>225.0</u> | <u>247.5</u> | <u>270.0</u> | <u>292.5</u> | <u>315.0</u> | <u>337.5</u> | <u>360.0</u> |
| 0 | 9477.910 | 9477.910 | 9477.910 | 9477.910 | 9477.910 | 9477.910 | 9477.910 |
| 5 | 9482.423 | 9461.106 | 9363.053 | 9326.816 | 9294.842 | 9299.105 | 9371.580 |
| 10 | 9341.737 | 9262.868 | 9166.946 | 9077.419 | 9041.182 | 9017.734 | 9077.419 |
| 15 | 9077.419 | 8998.550 | 8838.680 | 8685.204 | 8608.466 | 8602.072 | 8670.283 |
| 20 | 8691.599 | 8589.282 | 8354.806 | 8197.068 | 8094.751 | 7994.566 | 8024.408 |
| 25 | 8190.673 | 8005.224 | 7711.063 | 7502.166 | 7404.113 | 7229.322 | 7214.401 |
| 30 | 7536.272 | 7325.244 | 6990.582 | 6764.633 | 6530.157 | 6353.234 | 6361.760 |
| 35 | 6792.343 | 6555.736 | 6206.153 | 5961.020 | 5666.859 | 5434.514 | 5432.383 |
| 40 | 5988.730 | 5758.517 | 5389.751 | 5151.012 | 4809.956 | 4615.980 | 4594.664 |
| 45 | 5182.986 | 5006.063 | 4607.453 | 4247.426 | 3926.407 | 3748.845 | 3702.376 |
| 50 | 4385.767 | 4240.818 | 3841.783 | 3502.219 | 3054.157 | 2843.981 | 2841.423 |
| 55 | 3580.022 | 3398.836 | 2935.213 | 2589.894 | 2237.541 | 2000.720 | 1901.387 |
| 60 | 2703.935 | 2446.011 | 1671.388 | 1639.627 | 1372.111 | 1045.123 | 556.561 |
| 65 | 1795.873 | 1369.553 | 441.881 | 659.730 | 495.171 | 299.703 | 213.160 |
| 70 | 814.911 | 443.373 | 221.473 | 217.210 | 196.534 | 141.112 | 116.385 |
| 75 | 225.310 | 184.810 | 125.551 | 114.041 | 102.530 | 83.559 | 77.590 |

IES ROAD REPORT
PHOTOMETRIC FILENAME : NGRK-150WH.IES

CANDELA TABULATION - (Cont.)

| | | | | | | | |
|------------|--------|--------|--------|--------|--------|--------|--------|
| 80 | 99.546 | 83.985 | 58.832 | 47.748 | 42.632 | 46.043 | 44.764 |
| 85 | 46.469 | 39.008 | 28.350 | 20.250 | 17.266 | 16.626 | 13.429 |
| 90 | 1.918 | 1.705 | 1.492 | 1.705 | 1.705 | 1.492 | 1.492 |
| 95 | 1.492 | 1.492 | 1.918 | 1.705 | 1.705 | 1.918 | 1.705 |
| 100 | 1.705 | 1.705 | 1.918 | 2.132 | 2.345 | 2.132 | 2.132 |
| 105 | 2.132 | 2.132 | 2.558 | 2.558 | 2.771 | 2.771 | 2.558 |
| 110 | 2.345 | 2.771 | 3.197 | 3.624 | 3.411 | 3.411 | 3.624 |
| 115 | 2.984 | 3.411 | 4.263 | 4.263 | 4.690 | 4.263 | 4.476 |
| 120 | 3.837 | 4.476 | 5.329 | 5.755 | 5.755 | 5.542 | 5.755 |
| 125 | 4.903 | 5.329 | 6.608 | 7.034 | 6.821 | 6.821 | 6.821 |
| 130 | 5.968 | 6.608 | 7.674 | 8.313 | 8.313 | 8.313 | 8.100 |
| 135 | 7.461 | 7.887 | 9.166 | 9.166 | 9.379 | 9.592 | 9.379 |
| 140 | 8.526 | 9.166 | 10.445 | 10.232 | 10.658 | 10.658 | 10.658 |
| 145 | 9.805 | 10.232 | 11.724 | 11.511 | 11.724 | 11.511 | 11.724 |
| 150 | 11.084 | 11.511 | 12.363 | 12.576 | 12.576 | 13.003 | 12.790 |
| 155 | 12.363 | 12.363 | 13.216 | 13.216 | 13.642 | 13.216 | 13.429 |
| 160 | 12.790 | 12.790 | 13.642 | 13.855 | 13.855 | 13.855 | 13.855 |
| 165 | 12.790 | 12.790 | 13.642 | 13.642 | 14.069 | 14.069 | 14.069 |
| 170 | 13.003 | 12.790 | 13.855 | 13.855 | 14.282 | 14.069 | 14.069 |
| 175 | 13.216 | 13.429 | 14.282 | 14.282 | 14.282 | 14.282 | 14.069 |
| 180 | 14.633 | 14.633 | 14.633 | 14.633 | 14.633 | 14.633 | 14.633 |

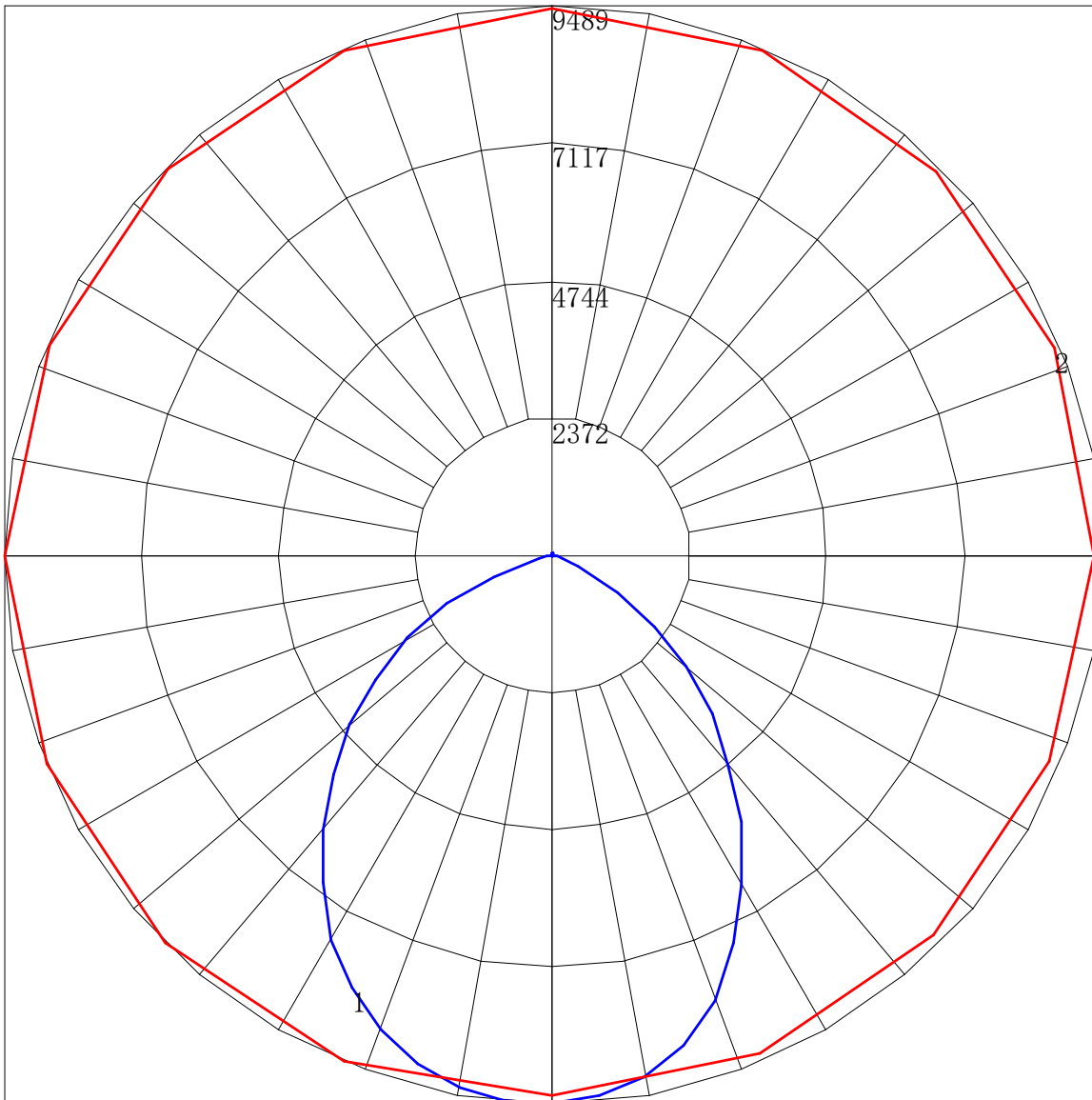
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

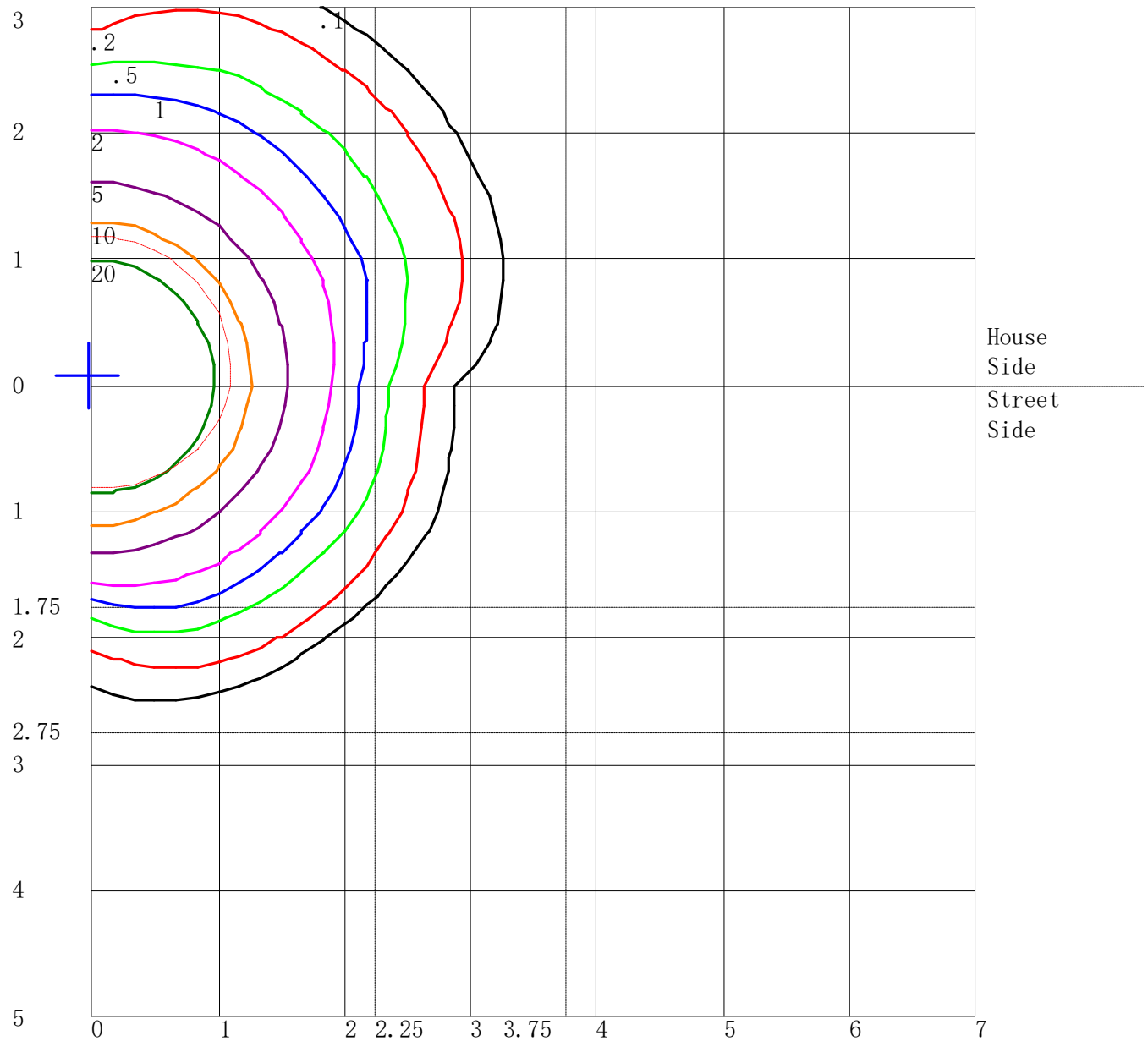
| | Lumens | Percent Of Luminaire |
|----------------------|----------------|-------------------------|
| Downward Street Side | 8389.7 | 44.3 |
| Downward House Side | 10520.1 | 55.5 |
| Downward Total | 18909.7 | 99.8 |
| Upward Street Side | 20.0 | 0.1 |
| Upward House Side | 17.1 | 0.1 |
| Upward Total | 37.1 | 0.2 |
| Total Flux | 18946.8 | 100.0 |

POLAR GRAPH



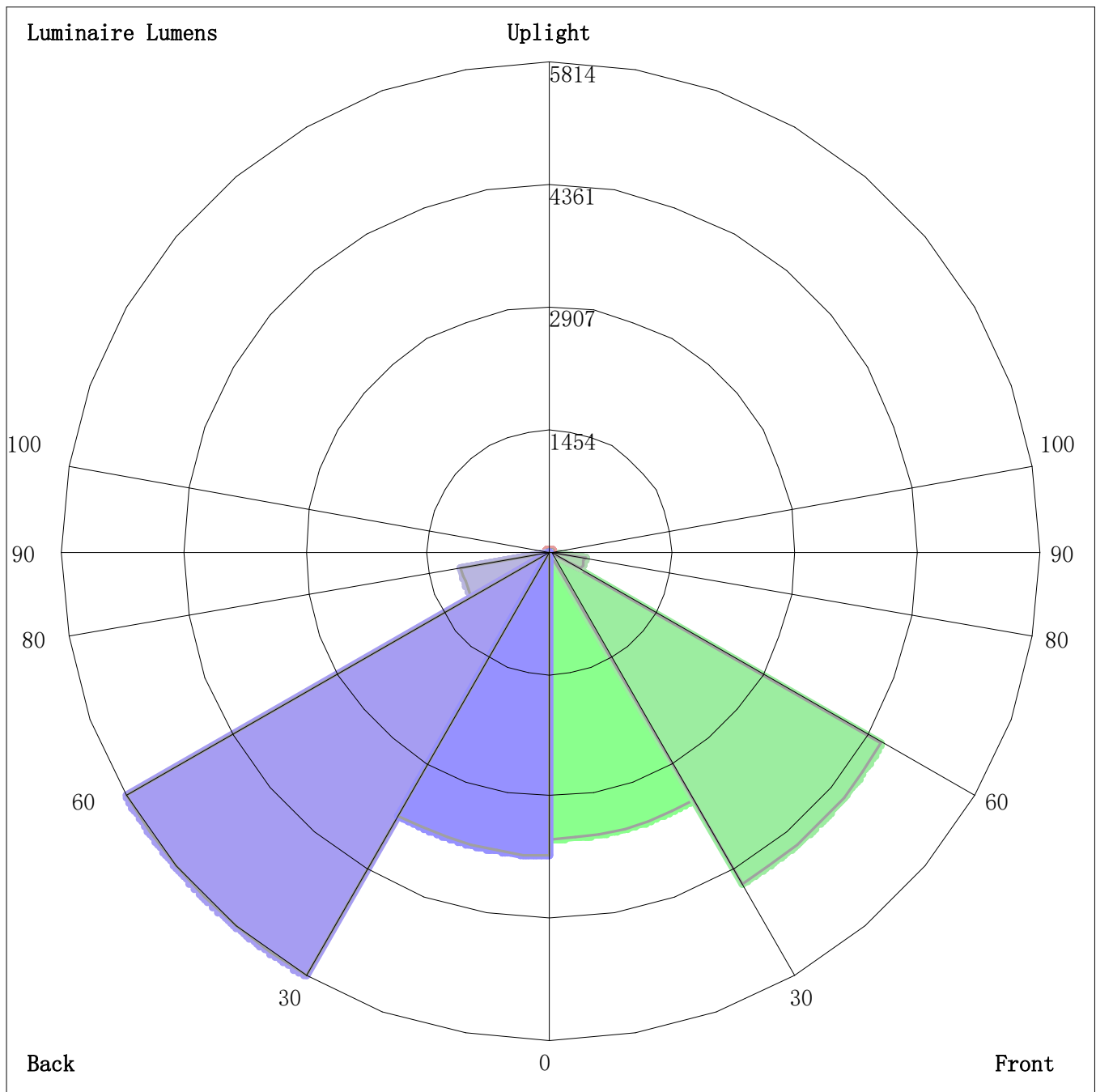
Maximum Candela = 9488.817 Located At Horizontal Angle = 202.5, Vertical Angle = 5
1 - Vertical Plane Through Horizontal Angles (202.5 - 22.5) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



Distance In Units Of Mounting Height
 Values Based On 10 Foot Mounting Height
 1/2 Maximum Candela Trace Shown As Dashed Curve
 (+) = Maximum Candela Point

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=3410.4, Medium=4548.7, High=418.3, Very High=12.2
Back: Low= 3611.0, Medium=5814.3, High=1069.8, Very High=25.0
Uplight: Low=1.9, High=35.3

BUG Rating : B4-U2-G3