

Luminaire Photograph

LED STREET LIGHT LED
FEELIGHT TECH CO., LIMITED



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature:20DEG
Operators:IVY
Test Date:2010-11-12

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
Test System:EVERFINE GO-2000B SYSTEM V1.0.250
Humidity:65%
Test Distance:5.360m [K=1.0000]
Remarks: SL650-60W, 90LM/W

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

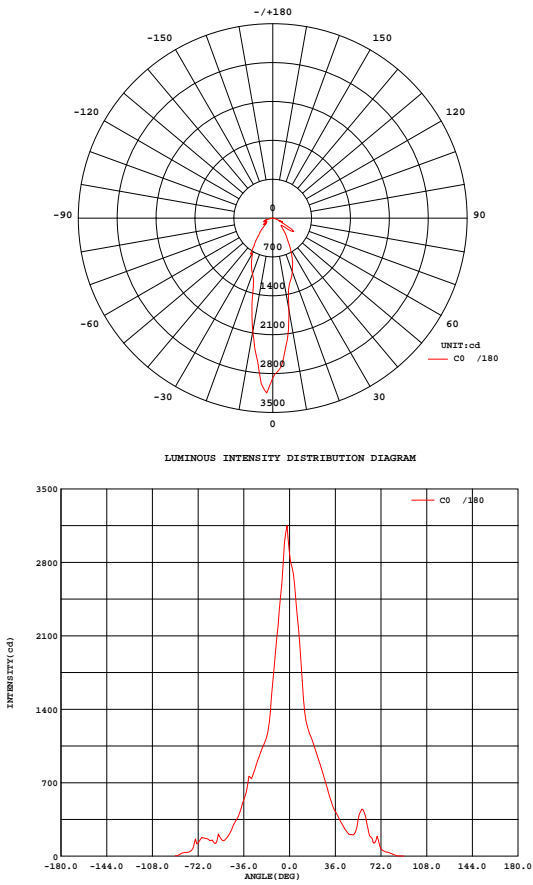


Fig. C0/C180

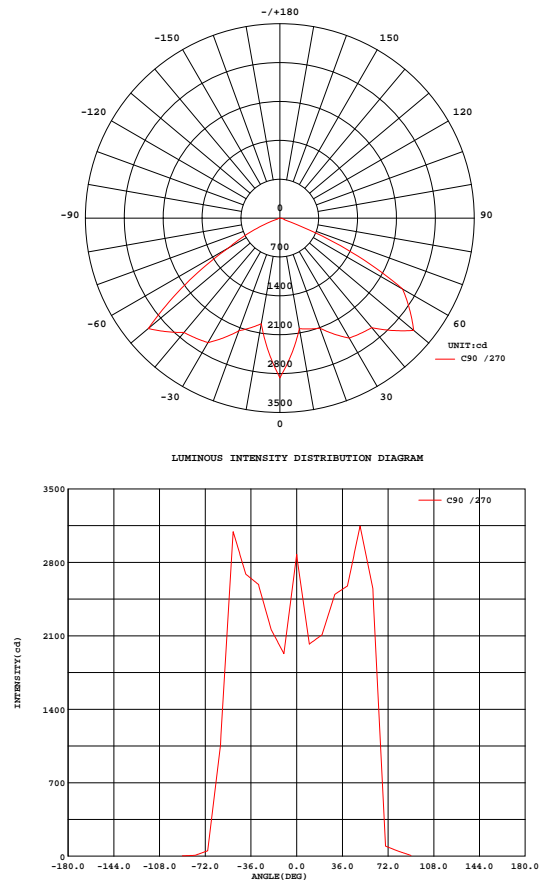


Fig. C90/C270

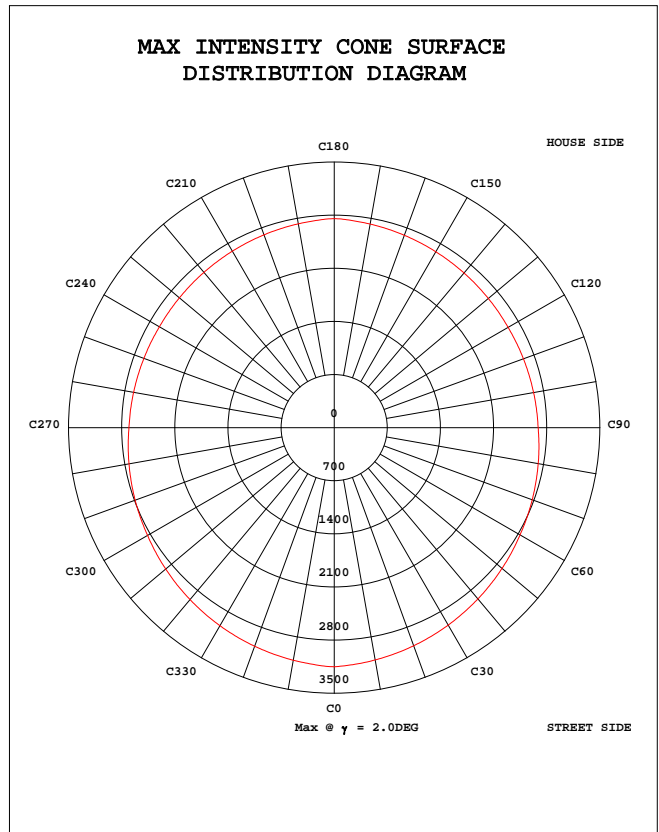
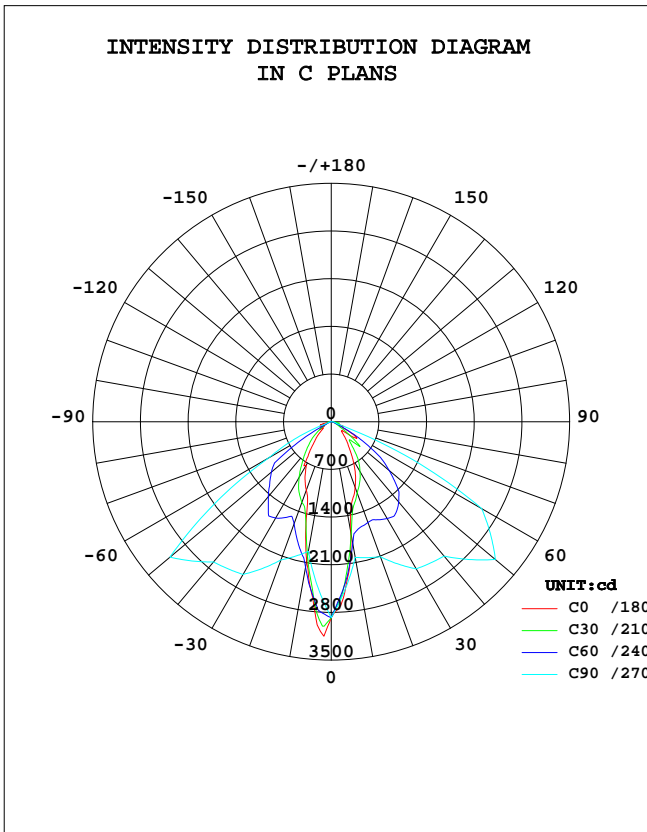
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:20DEG
 Operators:IVY
 Test Date:2010-11-12

γ Range: 0 - 90DEG
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 Test Distance:5.360m [K=1.0000]
 Remarks: SL650-60W, 90LM/W

STREETLIGHT PHOTOMETRIC TEST REPORT

| | | |
|----------------------------------------------------------------|----------------|-------------------|
| Test:U:236.3V I:0.2800A P:62.70W PF:0.9480 Lamp Flux:5000x1 lm | | |
| NAME: LED STREET LIGHT | TYPE:LED | WEIGHT:10.3KGS |
| DIMENSION: 650*270*180mm | SPECIFICATION: | SERIAL No.: |
| MANUFACTURER: FEELIGHT TECH CO., LIMITED | SURFACE: | PROTECTION ANGLE: |

| DATA OF LAMP | | PHOTOMETRIC DATA | | | |
|------------------|-----------|-------------------------|-------|-----------------------|--------|
| MODEL | SL650-60W | Imax(cd) | 3150 | η street_up(%) | 0.0 |
| NOMINAL POWER(W) | 64 | EFFICIENCY(%) | 80.3 | η street_down(%) | 43.9 |
| RATED VOLTAGE(V) | 236 | TOTAL FLUX(lm) | 4015 | η house_up(%) | 0.0 |
| NOMINAL FLUX(lm) | 5000.0 | MAXIMUM @(C, γ) | 0,2.0 | η house_down(%) | 36.4 |
| LAMPS INSIDE | 1 | η up(%) | 0.0 | 76 FLASHAREA(m2) | 0.0010 |
| TEST VOLTAGE(V) | 235.1 | η down(%) | 80.3 | SLI | 16.201 |



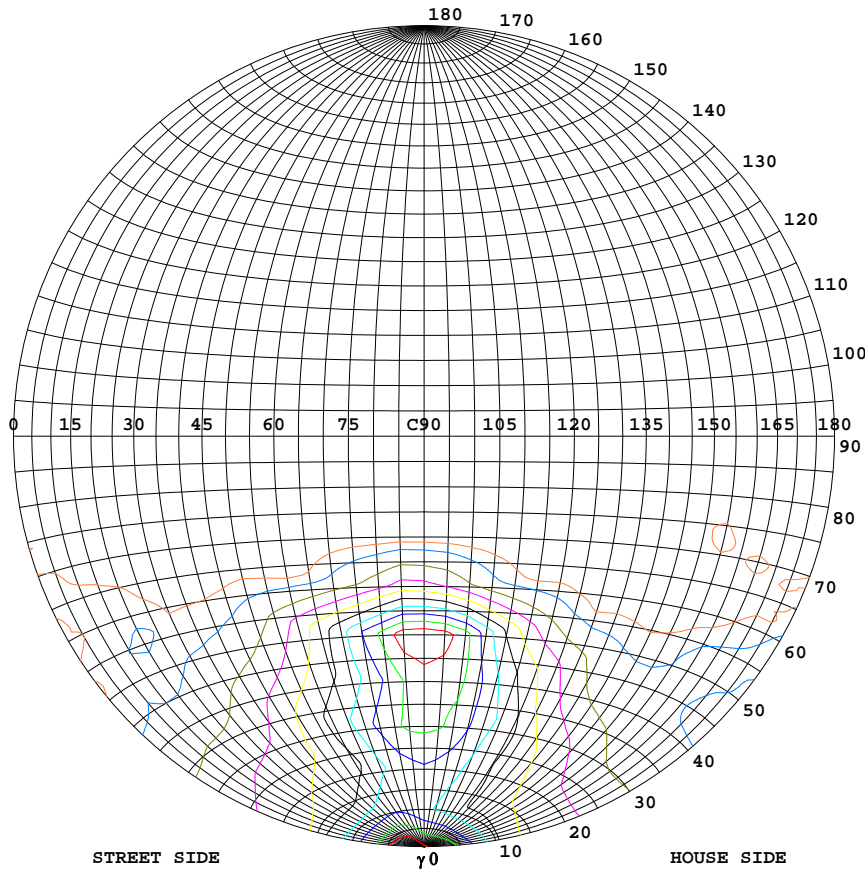
C Range: 0 - 360DEG
 C Interval: 5.0DEG
 Test Speed: HIGH
 Temperature:20DEG
 Operators:IVY
 Test Date:2010-11-12

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B SYSTEM V1.0.250
 Humidity:65%
 Test Distance:5.360m [K=1.0000]
 Remarks: SL650-60W, 90LM/W

Note: SLI:Specific Luminaire Index

STREETLIGHT ISOCANDELA DIAGRAM

| | | |
|----------------------------------------------------------------|----------------|-------------------|
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Classification:

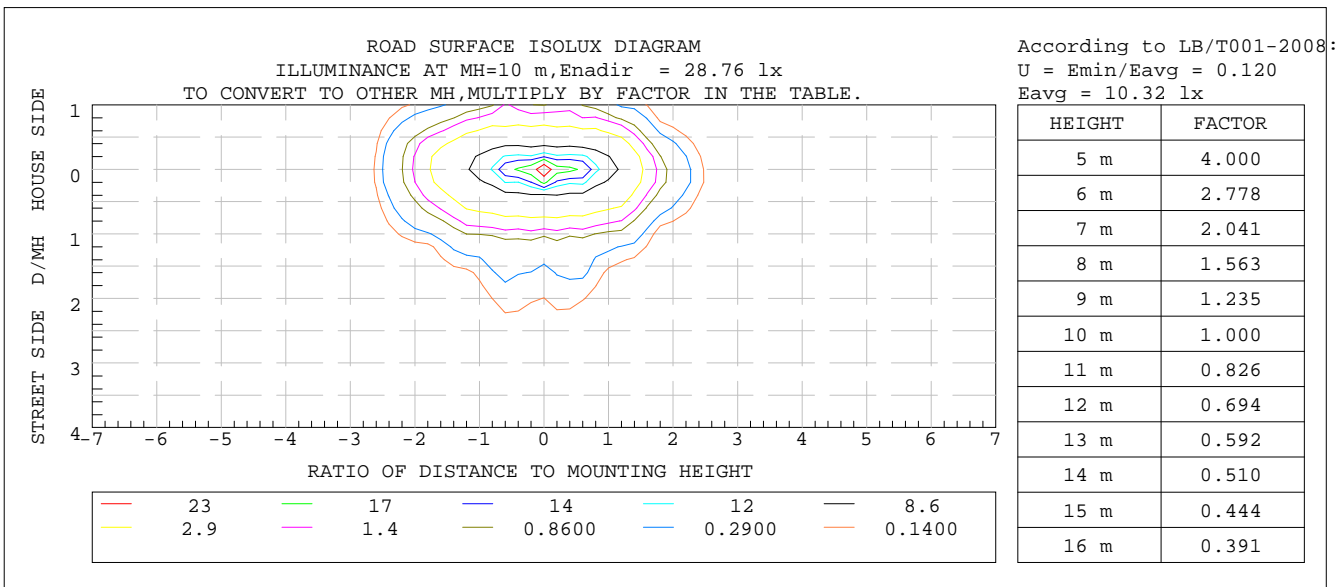
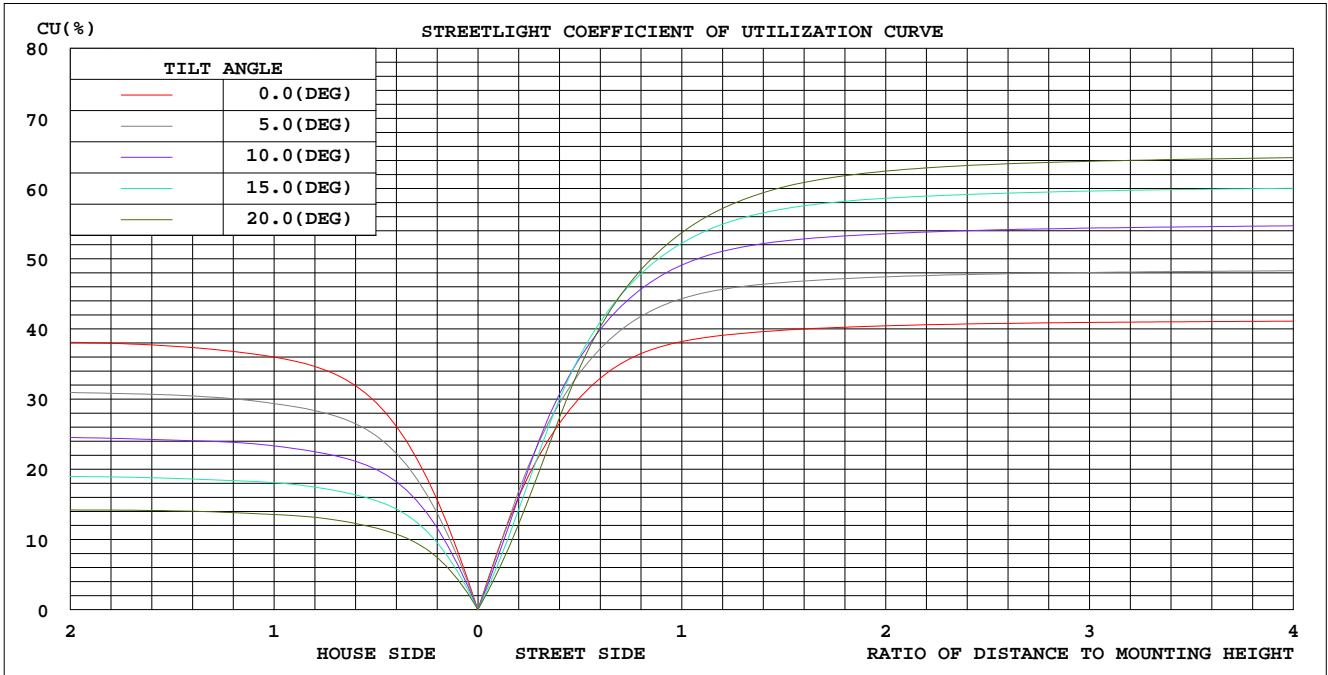
IES:Type III - Very Short
 CIE:Broad - Short
 IES:Cut-off
 CIE:Semi-cut-off
 Max.At80:31.29cd/klm
 Max.At90:1.806cd/klm
 Max.80-90:34.67cd/klm

| ISOCANDELA DIAGRAM | |
|------------------------|------|
| UNIT | cd |
| I _{max} =100% | 3150 |
| 90% | 2835 |
| 80% | 2520 |
| 70% | 2205 |
| 60% | 1890 |
| 50% | 1575 |
| 40% | 1260 |
| 30% | 945 |
| 20% | 630 |
| 10% | 315 |
| 5% | 158 |

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 Test System:EVERFINE GO-2000B SYSTEM V1.0.250
 Humidity:65%
 Test Distance:5.360m [K=1.0000]
 Remarks: SL650-60W, 90LM/W

**COEFFICIENT OF UTILIZATION CURVE
AND ISOLUX DIAGRAM**



C Range: 0 - 360DEG
C Interval: 5.0DEG
Test Speed: HIGH
Temperature: 20DEG
Operators: IVY
Test Date: 2010-11-12

γ Range: 0 - 90DEG
 γ Interval: 0.5DEG
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Humidity: 65%
Test Distance: 5.360m [K=1.0000]
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ZONAL FLUX DIAGRAM

| | | |
|----------------------------------------------------------------|----------------|-------------------|
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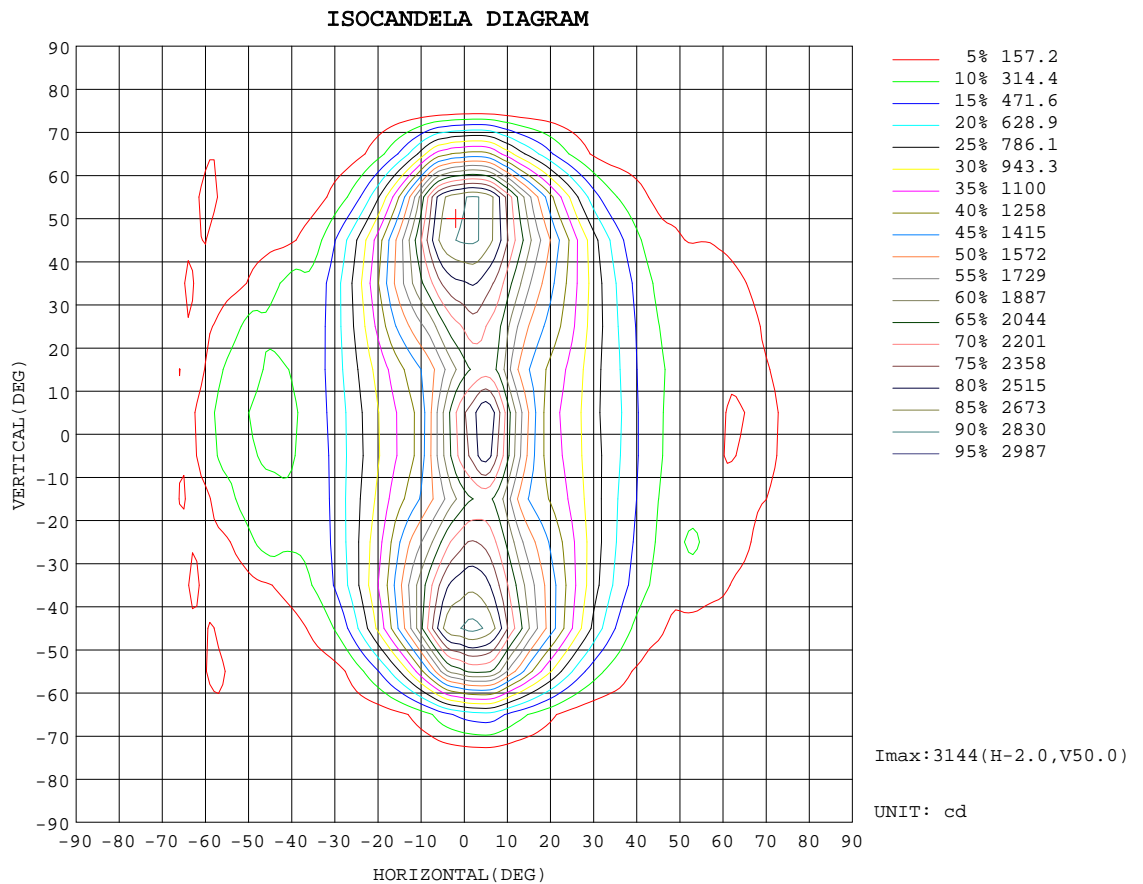
| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Φ zone | Φ total | % |
|-----|-----------------------|-------|-------|-------|-------|-------|-------|-------|---------|--------|---------|--------|
| 5 | 2791 | 2709 | 2403 | 2331 | 2443 | 2357 | 2449 | 2760 | 0- 5 | 64.36 | 64.36 | 1.60 |
| 10 | 2080 | 2087 | 1931 | 1719 | 1676 | 1743 | 2022 | 2172 | 5- 10 | 157.0 | 221.3 | 5.51 |
| 15 | 1389 | 1565 | 2044 | 1408 | 1196 | 1383 | 2066 | 1626 | 10- 15 | 205.4 | 426.7 | 10.63 |
| 20 | 1069 | 1362 | 2158 | 1327 | 1028 | 1325 | 2109 | 1377 | 15- 20 | 249.8 | 676.6 | 16.85 |
| 25 | 914.6 | 1269 | 2373 | 1259 | 837.7 | 1257 | 2301 | 1250 | 20- 25 | 298.5 | 975.0 | 24.29 |
| 30 | 736.9 | 1198 | 2588 | 1121 | 636.1 | 1178 | 2494 | 1186 | 25- 30 | 350.7 | 1326 | 33.02 |
| 35 | 573.4 | 1096 | 2638 | 938.0 | 449.3 | 1027 | 2534 | 1101 | 30- 35 | 390.3 | 1716 | 42.74 |
| 40 | 388.4 | 952.7 | 2687 | 714.3 | 333.5 | 810.0 | 2575 | 968.1 | 35- 40 | 404.3 | 2120 | 52.81 |
| 45 | 271.3 | 746.9 | 2890 | 579.3 | 234.5 | 667.7 | 2860 | 778.2 | 40- 45 | 412.6 | 2533 | 63.09 |
| 50 | 165.0 | 537.1 | 3093 | 454.9 | 201.5 | 547.7 | 3146 | 594.0 | 45- 50 | 427.2 | 2960 | 73.73 |
| 55 | 187.4 | 363.7 | 2075 | 220.0 | 402.2 | 290.8 | 2848 | 450.8 | 50- 55 | 404.5 | 3365 | 83.81 |
| 60 | 138.3 | 193.5 | 1057 | 87.15 | 369.6 | 108.3 | 2550 | 305.6 | 55- 60 | 303.9 | 3669 | 91.38 |
| 65 | 167.0 | 103.3 | 554.2 | 53.78 | 172.1 | 68.57 | 1323 | 146.8 | 60- 65 | 184.5 | 3853 | 95.97 |
| 70 | 164.0 | 50.93 | 51.50 | 34.30 | 152.4 | 47.74 | 95.72 | 68.35 | 65- 70 | 87.41 | 3940 | 98.15 |
| 75 | 123.5 | 32.05 | 29.85 | 14.32 | 44.68 | 27.86 | 71.98 | 43.99 | 70- 75 | 33.25 | 3974 | 98.98 |
| 80 | 37.01 | 18.43 | 8.201 | 6.524 | 26.73 | 15.49 | 48.24 | 28.56 | 75- 80 | 23.35 | 3997 | 99.56 |
| 85 | 27.73 | 9.310 | 5.662 | 2.139 | 2.361 | 7.368 | 27.64 | 17.27 | 80- 85 | 12.68 | 4010 | 99.88 |
| 90 | 4.173 | 2.049 | 3.122 | 1.457 | 1.361 | 4.060 | 7.038 | 5.852 | 85- 90 | 4.916 | 4015 | 100.00 |
| 95 | | | | | | | | | 90- 95 | | | |
| 100 | | | | | | | | | 95-100 | | | |
| 105 | | | | | | | | | 100-105 | | | |
| 110 | | | | | | | | | 105-110 | | | |
| 115 | | | | | | | | | 110-115 | | | |
| 120 | | | | | | | | | 115-120 | | | |
| 125 | | | | | | | | | 120-125 | | | |
| 130 | | | | | | | | | 125-130 | | | |
| 135 | | | | | | | | | 130-135 | | | |
| 140 | | | | | | | | | 135-140 | | | |
| 145 | | | | | | | | | 140-145 | | | |
| 150 | | | | | | | | | 145-150 | | | |
| 155 | | | | | | | | | 150-155 | | | |
| 160 | | | | | | | | | 155-160 | | | |
| 165 | | | | | | | | | 160-165 | | | |
| 170 | | | | | | | | | 165-170 | | | |
| 175 | | | | | | | | | 170-175 | | | |
| 180 | | | | | | | | | 175-180 | | | |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | UNIT:lm | | | |

C Range: 0 - 360DEG
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ISOCANDELA DIAGRAM

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Table--1

UNIT: cd

| C(DEG) γ (DEG) | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 |
| 5 | 2791 | 2763 | 2743 | 2729 | 2721 | 2718 | 2720 | 2726 | 2721 | 2709 | 2698 | 2686 | 2669 | 2653 | 2604 | 2544 | 2490 | 2445 | 2403 |
| 10 | 2080 | 2044 | 2017 | 1998 | 1988 | 1987 | 2004 | 2031 | 2058 | 2087 | 2116 | 2146 | 2173 | 2192 | 2172 | 2122 | 2053 | 1983 | 1931 |
| 15 | 1389 | 1386 | 1394 | 1410 | 1428 | 1444 | 1458 | 1472 | 1495 | 1565 | 1657 | 1759 | 1863 | 1958 | 2027 | 2081 | 2084 | 2064 | 2044 |
| 20 | 1069 | 1090 | 1116 | 1147 | 1183 | 1225 | 1261 | 1285 | 1315 | 1362 | 1421 | 1495 | 1597 | 1739 | 1866 | 1968 | 2050 | 2108 | 2158 |
| 25 | 915 | 936 | 966 | 1004 | 1052 | 1091 | 1125 | 1167 | 1217 | 1269 | 1328 | 1426 | 1547 | 1709 | 1917 | 2103 | 2250 | 2334 | 2373 |
| 30 | 737 | 764 | 798 | 839 | 874 | 903 | 945 | 998 | 1077 | 1198 | 1327 | 1471 | 1631 | 1811 | 2049 | 2265 | 2459 | 2572 | 2588 |
| 35 | 573 | 594 | 625 | 665 | 685 | 717 | 753 | 840 | 953 | 1096 | 1274 | 1456 | 1612 | 1773 | 1955 | 2178 | 2389 | 2574 | 2638 |
| 40 | 388 | 415 | 455 | 478 | 490 | 517 | 593 | 702 | 829 | 953 | 1088 | 1261 | 1438 | 1606 | 1797 | 2023 | 2289 | 2558 | 2687 |
| 45 | 271 | 301 | 329 | 314 | 326 | 377 | 457 | 557 | 640 | 747 | 878 | 1049 | 1278 | 1502 | 1771 | 2090 | 2451 | 2779 | 2890 |
| 50 | 165 | 212 | 258 | 278 | 274 | 277 | 340 | 383 | 447 | 537 | 681 | 885 | 1146 | 1455 | 1778 | 2191 | 2608 | 3022 | 3093 |
| 55 | 187 | 211 | 238 | 317 | 347 | 279 | 221 | 253 | 283 | 364 | 501 | 701 | 909 | 1096 | 1285 | 1513 | 1778 | 2073 | 2075 |
| 60 | 138 | 158 | 217 | 238 | 259 | 221 | 140 | 150 | 162 | 194 | 283 | 340 | 386 | 465 | 583 | 718 | 885 | 1098 | 1057 |
| 65 | 167 | 194 | 217 | 178 | 160 | 120 | 85.6 | 68.9 | 95.9 | 103 | 105 | 64.4 | 71.6 | 128 | 233 | 337 | 436 | 571 | 554 |
| 70 | 164 | 153 | 120 | 111 | 89.0 | 81.0 | 60.5 | 50.2 | 47.1 | 50.9 | 65.5 | 49.7 | 33.1 | 41.3 | 54.4 | 52.9 | 49.8 | 57.1 | 51.5 |
| 75 | 123 | 108 | 96.1 | 98.1 | 95.1 | 69.1 | 49.9 | 37.0 | 31.0 | 32.0 | 45.1 | 35.8 | 16.2 | 13.4 | 13.7 | 13.3 | 17.8 | 29.0 | 29.8 |
| 80 | 37.0 | 39.3 | 40.1 | 58.9 | 80.5 | 98.5 | 57.6 | 33.8 | 20.4 | 18.4 | 20.4 | 22.2 | 17.1 | 8.30 | 7.57 | 7.56 | 7.72 | 8.21 | 8.20 |
| 85 | 27.7 | 31.5 | 31.2 | 34.6 | 36.7 | 37.7 | 31.6 | 32.4 | 10.7 | 9.31 | 7.82 | 10.9 | 11.4 | 5.16 | 4.77 | 4.94 | 5.12 | 5.55 | 5.66 |
| 90 | 4.17 | 4.20 | 3.77 | 3.62 | 3.02 | 2.40 | 2.15 | 2.03 | 2.02 | 2.05 | 2.11 | 2.16 | 2.21 | 2.25 | 2.40 | 2.55 | 2.75 | 3.03 | 3.12 |
| | | | | | | | | | | | | | | | | | | | |
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 Operators:IVY
 Test Date:2010-11-12

γ Range: 0 - 90DEG
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 Test Distance:5.360m [K=1.0000]
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| MANUFACTURER: FEELIGHT TECH CO., LIMITED | SURFACE: | PROTECTION ANGLE: |

Table--4

UNIT: cd

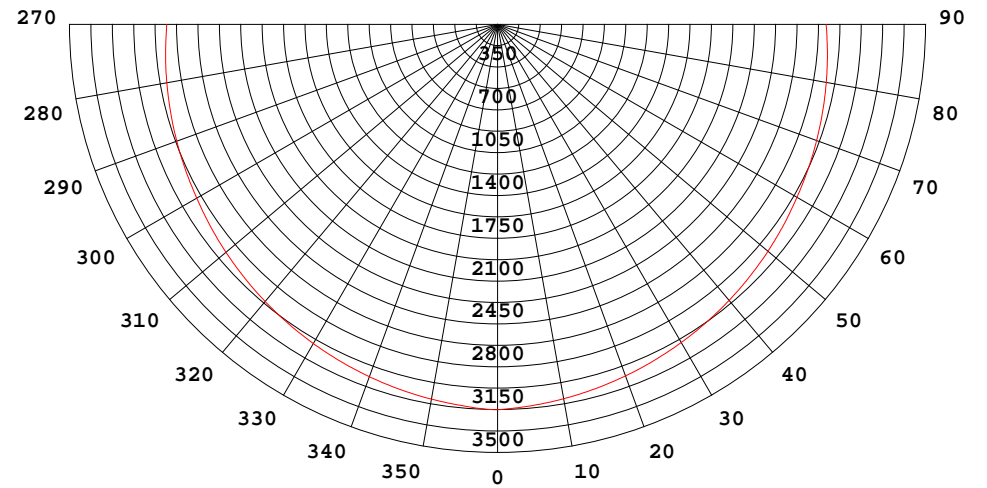
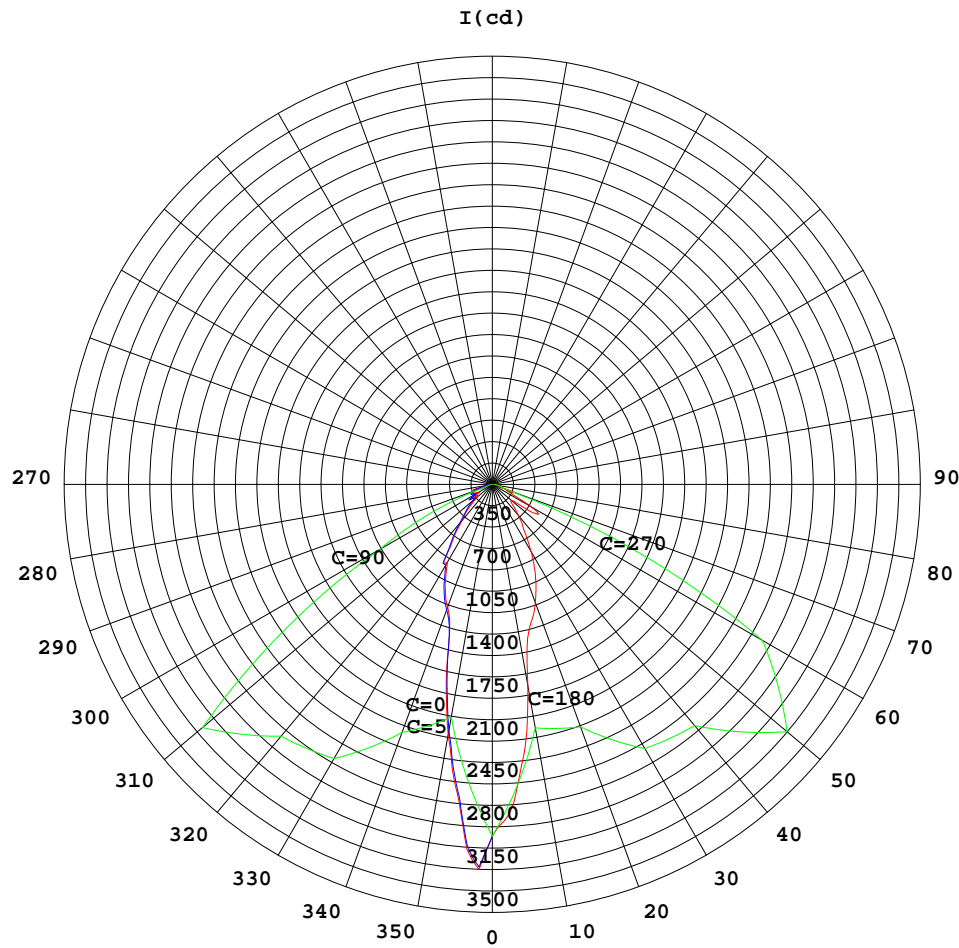
| C(DEG) γ (DEG) | 285 | 290 | 295 | 300 | 305 | 310 | 315 | 320 | 325 | 330 | 335 | 340 | 345 | 350 | 355 | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|
| 0 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | 2876 | | | | |
| 5 | 2585 | 2649 | 2701 | 2722 | 2743 | 2754 | 2760 | 2768 | 2769 | 2758 | 2751 | 2748 | 2750 | 2757 | 2771 | | | | |
| 10 | 2245 | 2309 | 2330 | 2317 | 2274 | 2223 | 2172 | 2115 | 2071 | 2039 | 2016 | 2011 | 2015 | 2028 | 2049 | | | | |
| 15 | 2126 | 2097 | 2027 | 1913 | 1795 | 1703 | 1626 | 1567 | 1535 | 1512 | 1487 | 1460 | 1431 | 1407 | 1391 | | | | |
| 20 | 1917 | 1830 | 1693 | 1574 | 1490 | 1428 | 1377 | 1329 | 1284 | 1233 | 1189 | 1156 | 1128 | 1104 | 1085 | | | | |
| 25 | 2025 | 1826 | 1638 | 1489 | 1375 | 1298 | 1250 | 1198 | 1147 | 1099 | 1064 | 1030 | 991 | 958 | 933 | | | | |
| 30 | 2157 | 1930 | 1713 | 1547 | 1416 | 1299 | 1186 | 1074 | 993 | 936 | 896 | 865 | 826 | 786 | 757 | | | | |
| 35 | 2080 | 1876 | 1686 | 1541 | 1406 | 1258 | 1101 | 956 | 848 | 766 | 710 | 710 | 706 | 643 | 599 | | | | |
| 40 | 1984 | 1768 | 1587 | 1416 | 1264 | 1105 | 968 | 840 | 711 | 609 | 525 | 495 | 480 | 456 | 416 | | | | |
| 45 | 2096 | 1792 | 1550 | 1296 | 1077 | 917 | 778 | 671 | 587 | 477 | 390 | 341 | 339 | 335 | 299 | | | | |
| 50 | 2231 | 1858 | 1542 | 1252 | 972 | 757 | 594 | 487 | 412 | 359 | 299 | 278 | 261 | 235 | 200 | | | | |
| 55 | 1912 | 1589 | 1321 | 1078 | 845 | 617 | 451 | 338 | 262 | 266 | 263 | 273 | 257 | 216 | 187 | | | | |
| 60 | 1494 | 1130 | 827 | 608 | 462 | 384 | 306 | 222 | 199 | 224 | 249 | 295 | 225 | 192 | 150 | | | | |
| 65 | 814 | 616 | 418 | 243 | 127 | 149 | 147 | 119 | 88.5 | 128 | 175 | 201 | 242 | 213 | 171 | | | | |
| 70 | 135 | 151 | 132 | 91.6 | 79.5 | 84.1 | 68.4 | 58.6 | 61.3 | 91.4 | 110 | 107 | 132 | 139 | 158 | | | | |
| 75 | 35.3 | 37.5 | 34.3 | 33.5 | 56.6 | 55.1 | 44.0 | 42.6 | 46.9 | 58.9 | 80.4 | 103 | 97.9 | 110 | 120 | | | | |
| 80 | 14.5 | 15.1 | 17.5 | 27.2 | 37.2 | 30.9 | 28.6 | 32.7 | 43.8 | 64.3 | 156 | 114 | 75.9 | 45.8 | 43.5 | | | | |
| 85 | 9.90 | 9.49 | 10.9 | 16.9 | 20.4 | 16.0 | 17.3 | 23.6 | 57.3 | 78.5 | 68.4 | 46.5 | 40.9 | 34.6 | 34.3 | | | | |
| 90 | 6.49 | 6.08 | 5.78 | 5.66 | 5.70 | 5.74 | 5.85 | 6.26 | 6.10 | 9.03 | 8.79 | 7.97 | 7.33 | 6.94 | 7.07 | | | | |

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 Test Date:2010-11-12

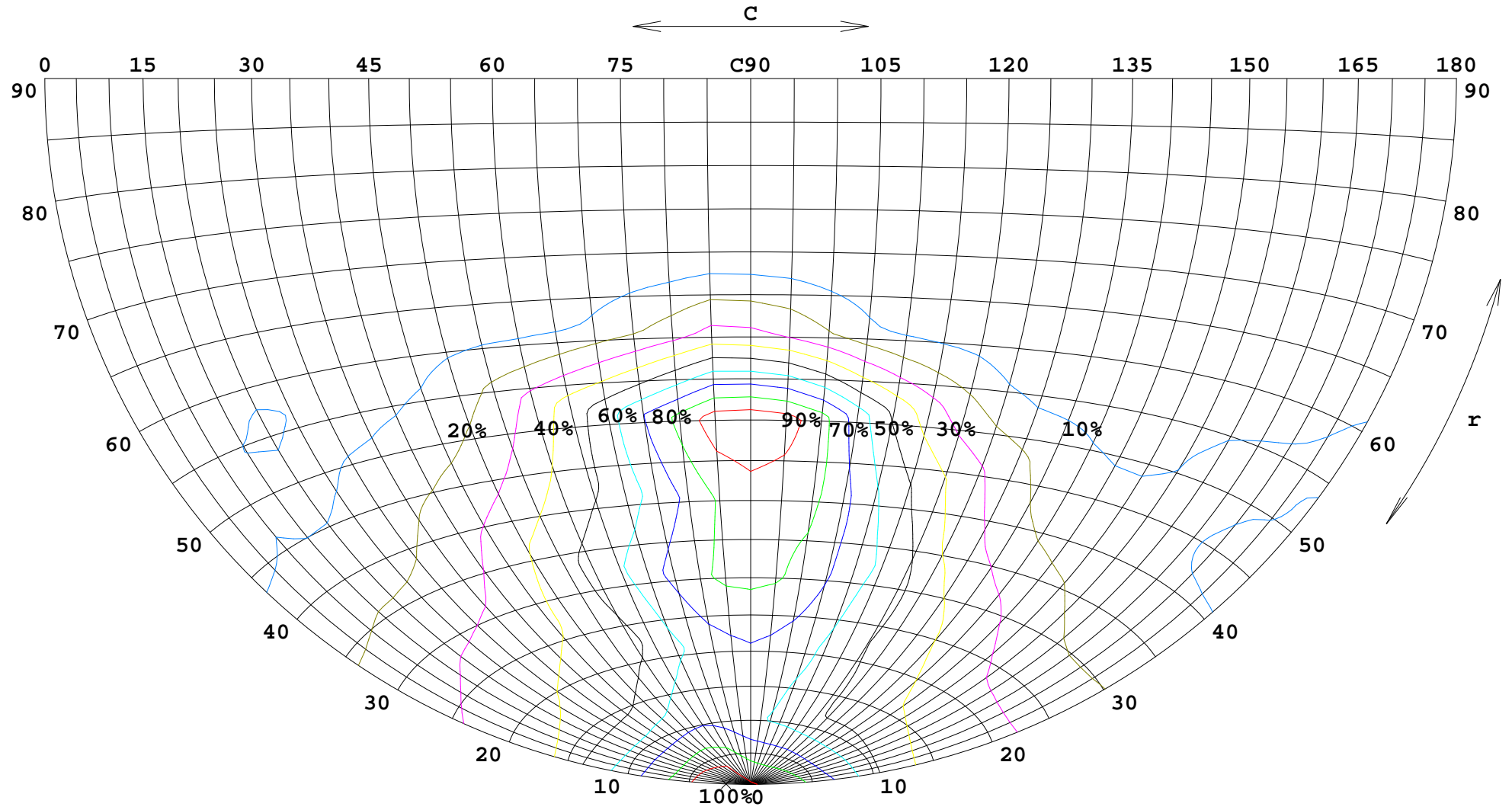
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 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B SYSTEM V1.0.250
 Humidity:65%
 Test Distance:5.360m [K=1.0000]
 Remarks: SL650-60W, 90LM/W

FLUX DATA:

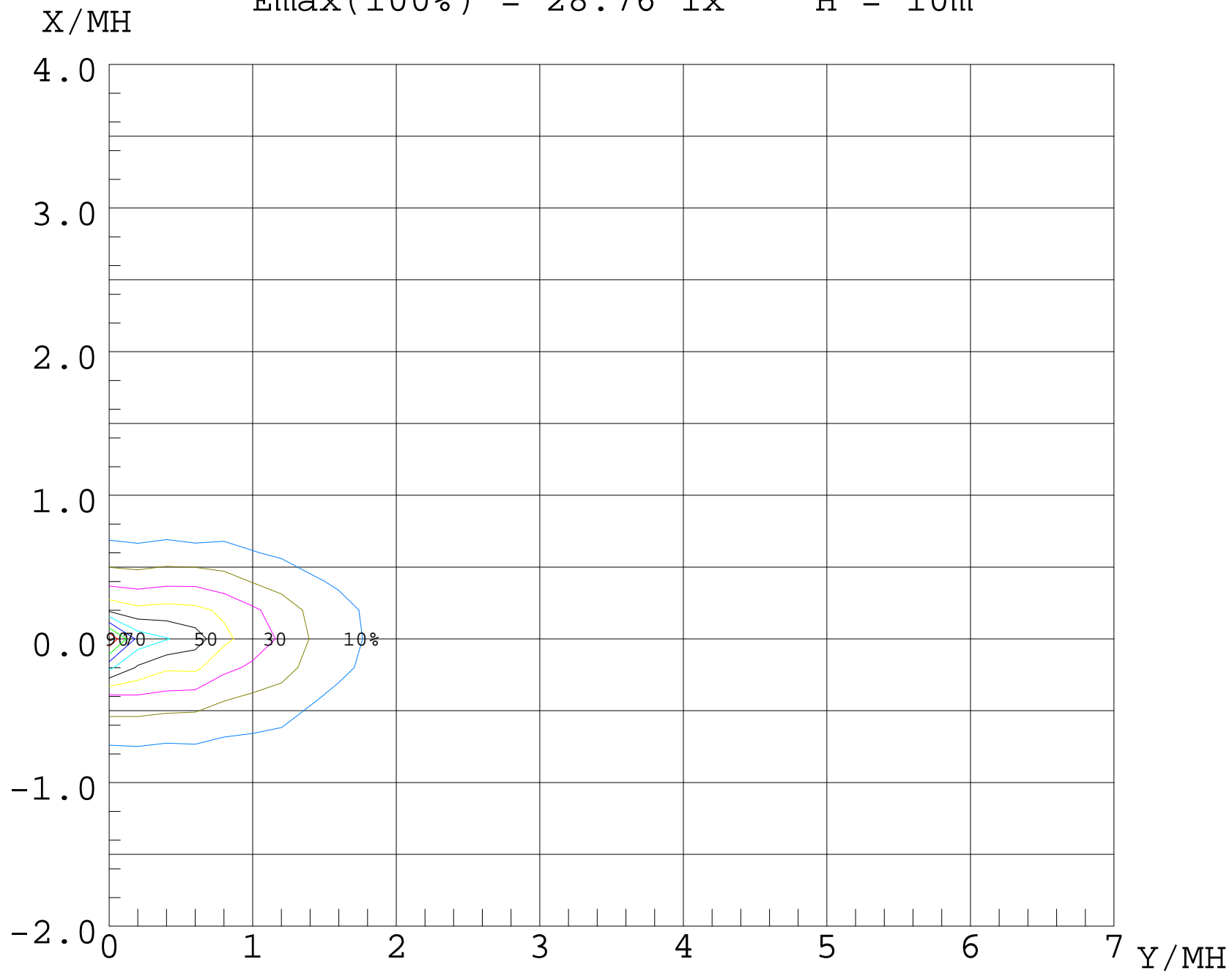
| | |
|---------------------|----------------|
| EFFICIENCY: | 80.3 % |
| STREET DOWN: | 2196 lm |
| STREET UP: | 0 lm |
| HOUSE DOWN: | 1818 lm |
| HOUSE UP: | 0 lm |



$I_{max}(100\%) = 3150 \text{ cd}$



$E_{\max}(100\%) = 28.76 \text{ lx}$ $H = 10\text{m}$



UF (%)

80

70

60

50

40

30

20

10

0

-2

-1

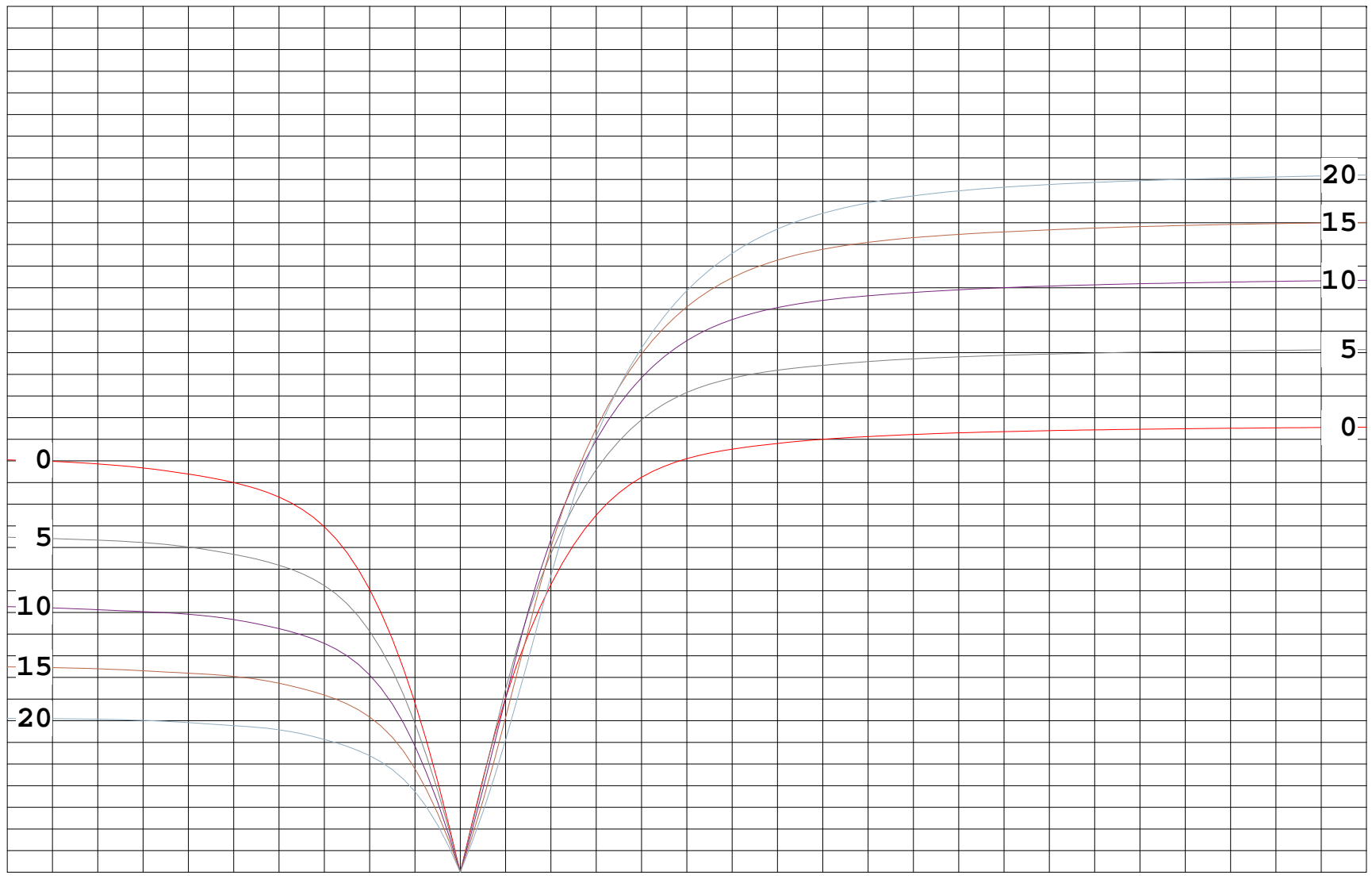
0

1

2

3

4 X/MH



20

15

10

5

0

0

5

10

15

20