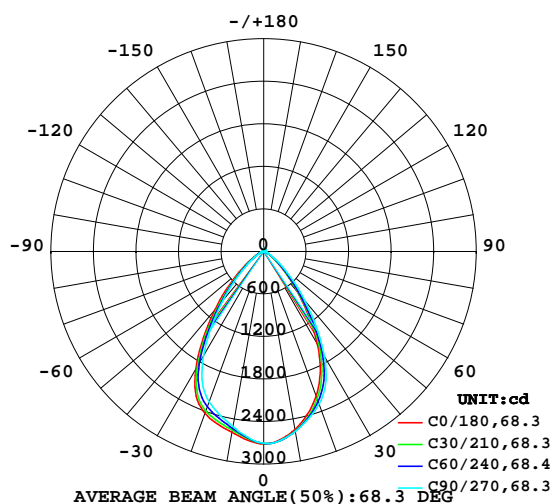


LUMINAIRE PHOTOMETRIC TEST REPORT

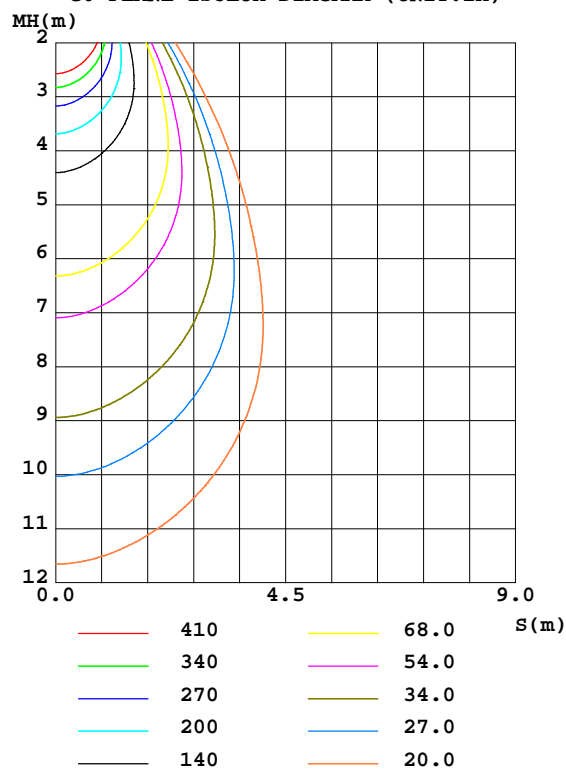
| | | |
|--|-------------------|--|
| Test:U:220.50V I:0.1310A P:27.300W PF:0.9460 Freq:50.00Hz Lamp Flux:3566.45x1 lm | | |
| NAME: LC-LL1603-30W-Standard 90° | TYPE:LED | |
| MFR.: LOW-CARBON | DIM.: 650*40*95mm | |
| | | |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 130.64 lm/W | | | |
|------------------|---------|-----------------------------------|--------|-------------------|----------|
| MODEL | | Imax(cd) | 2715 | S/MH(C0/180) | 0.95 |
| NOMINAL POWER(W) | 30 | LOR(%) | 100.0 | S/MH(C90/270) | 1.01 |
| RATED VOLTAGE(V) | 220 | TOTAL FLUX(lm) | 3566.5 | η UP,DN(C0-180) | 1.6,47.6 |
| NOMINAL FLUX(lm) | 3566.45 | CIE CLASS | DIRECT | η UP,DN(C180-360) | 1.7,49.1 |
| LAMPS INSIDE | 1 | η up(%) | 3.3 | CIBSE SHR NOM | 1.00 |
| TEST VOLTAGE(V) | 220 | η down(%) | 96.7 | CIBSE SHR MAX | 1.05 |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2018-12-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity:65.0%
Test Distance:8.000m [K=0.7063]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

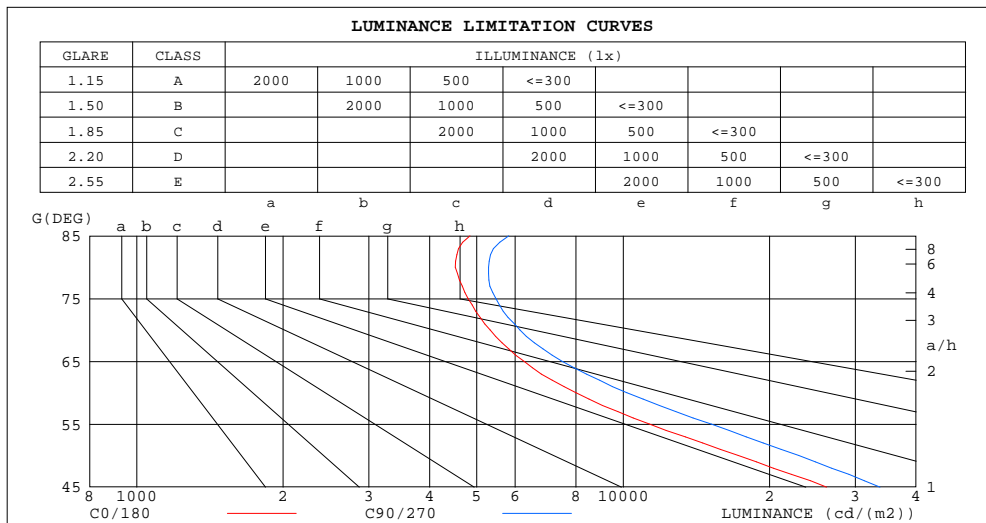
| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Φ zone | Φ total | %lum, lamp |
|----------|-----------------------|-------|-------|-------|-------|-------|-------|-------|----------|-------------|--------------|------------|
| 10 | 2548 | 2573 | 2577 | 2582 | 2591 | 2547 | 2508 | 2523 | 0- 10 | 250.5 | 250.5 | 7.02,7.02 |
| 20 | 2169 | 2229 | 2289 | 2358 | 2429 | 2362 | 2256 | 2206 | 10- 20 | 685.0 | 935.6 | 26.2,26.2 |
| 30 | 1519 | 1620 | 1717 | 1830 | 1919 | 1845 | 1701 | 1612 | 20- 30 | 939.5 | 1875 | 52.6,52.6 |
| 40 | 740.8 | 781.5 | 904.6 | 952.9 | 1064 | 958.8 | 889.6 | 774.7 | 30- 40 | 798.5 | 2674 | 75,75 |
| 50 | 277.0 | 301.0 | 368.8 | 397.4 | 455.0 | 388.7 | 341.0 | 298.2 | 40- 50 | 447.3 | 3121 | 87.5,87.5 |
| 60 | 99.90 | 110.8 | 127.2 | 143.8 | 158.2 | 136.1 | 117.9 | 109.6 | 50- 60 | 193.8 | 3315 | 92.9,92.9 |
| 70 | 45.54 | 48.95 | 52.43 | 57.42 | 64.62 | 56.80 | 52.17 | 50.06 | 60- 70 | 82.13 | 3397 | 95.2,95.2 |
| 80 | 19.60 | 20.84 | 22.94 | 22.29 | 27.05 | 24.19 | 24.06 | 23.24 | 70- 80 | 38.58 | 3435 | 96.3,96.3 |
| 90 | 5.303 | 4.800 | 4.488 | 4.264 | 7.731 | 7.613 | 7.779 | 8.208 | 80- 90 | 14.52 | 3450 | 96.7,96.7 |
| 100 | 7.984 | 7.286 | 6.775 | 6.579 | 9.604 | 9.607 | 9.887 | 10.25 | 90-100 | 7.903 | 3458 | 97,97 |
| 110 | 11.98 | 11.17 | 10.51 | 10.14 | 12.38 | 12.43 | 12.85 | 13.29 | 100-110 | 10.63 | 3468 | 97.3,97.3 |
| 120 | 17.14 | 16.13 | 15.24 | 14.82 | 16.13 | 16.26 | 16.73 | 17.37 | 110-120 | 13.79 | 3482 | 97.6,97.6 |
| 130 | 23.27 | 22.00 | 20.90 | 20.53 | 20.88 | 21.03 | 21.49 | 22.33 | 120-130 | 16.81 | 3499 | 98.1,98.1 |
| 140 | 29.21 | 27.96 | 27.01 | 26.48 | 26.27 | 26.31 | 26.81 | 27.55 | 130-140 | 18.79 | 3518 | 98.6,98.6 |
| 150 | 33.79 | 32.92 | 32.46 | 31.72 | 31.02 | 31.00 | 31.68 | 32.12 | 140-150 | 18.60 | 3536 | 99.2,99.2 |
| 160 | 37.20 | 36.71 | 36.47 | 35.76 | 34.89 | 34.78 | 35.42 | 35.65 | 150-160 | 15.68 | 3552 | 99.6,99.6 |
| 170 | 40.61 | 39.75 | 39.48 | 39.26 | 38.92 | 38.27 | 38.52 | 38.73 | 160-170 | 10.59 | 3563 | 99.9,99.9 |
| 180 | 41.69 | 40.95 | 40.86 | 40.99 | 41.78 | 40.95 | 40.81 | 41.01 | 170-180 | 3.812 | 3566 | 100,100 |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | | |

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-12-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
 Humidity:65.0%
 Test Distance:8.000m [K=0.7063]
 Remarks:

LUMINANCE LIMITATION CURVES

| | | |
|--|-------------------|--|
| Test:U:220.50V I:0.1310A P:27.300W PF:0.9460 Freq:50.00Hz Lamp Flux:3566.45x1 lm | | |
| NAME: LC-LL1603-30W-Standard 90° | TYPE:LED | |
| MFR.: LOW-CARBON | DIM.: 650*40*95mm | |
| | | |



| LUMINANCE cd/(m2) | | |
|-------------------|--------|---------|
| G(DEG) | C0/180 | C90/270 |
| 85 | 4844 | 5821 |
| 80 | 4516 | 5285 |
| 75 | 4797 | 5477 |
| 70 | 5326 | 6132 |
| 65 | 6257 | 7487 |
| 60 | 7992 | 10173 |
| 55 | 11335 | 15180 |
| 50 | 17235 | 22949 |
| 45 | 26209 | 33720 |

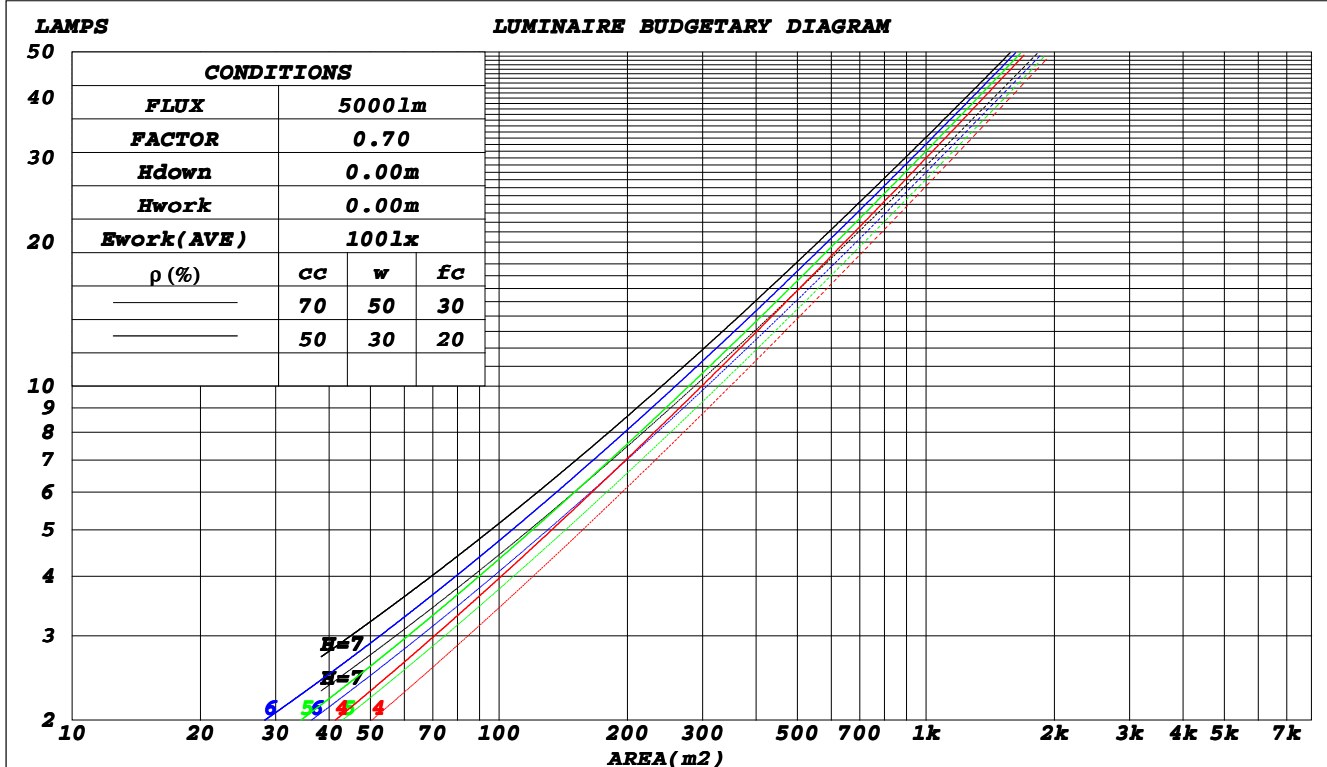
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2018-12-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| | | |
|--|-------------------|--|
| Test:U:220.50V I:0.1310A P:27.300W PF:0.9460 Freq:50.00Hz Lamp Flux:3566.45x1 lm | | |
| NAME: LC-LL1603-30W-Standard 90° | TYPE:LED | |
| MFR.: LOW-CARBON | DIM.: 650*40*95mm | |
| | | |

| ρ_{cc} | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|-----|-----|-----|-----|
| ρ_w | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| ρ_{fc} | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Coefficients of Utilization(CU) | | | | | | | | | |
| 0.0 | 1.18 | 1.18 | 1.18 | 1.15 | 1.15 | 1.15 | 1.09 | 1.09 | 1.09 | 1.04 | 1.04 | 1.04 | .99 | .99 | .99 | .97 |
| 1.0 | 1.08 | 1.05 | 1.03 | 1.06 | 1.03 | 1.01 | 1.01 | .99 | .97 | .97 | .95 | .93 | .93 | .91 | .90 | .88 |
| 2.0 | .99 | .94 | .90 | .97 | .92 | .89 | .93 | .89 | .86 | .89 | .86 | .84 | .86 | .84 | .82 | .80 |
| 3.0 | .90 | .84 | .80 | .89 | .83 | .79 | .86 | .81 | .77 | .83 | .79 | .76 | .80 | .77 | .74 | .72 |
| 4.0 | .83 | .77 | .72 | .82 | .76 | .71 | .79 | .74 | .70 | .76 | .72 | .68 | .74 | .70 | .67 | .66 |
| 5.0 | .77 | .70 | .65 | .75 | .69 | .64 | .73 | .68 | .63 | .71 | .66 | .62 | .69 | .65 | .62 | .60 |
| 6.0 | .71 | .64 | .59 | .70 | .63 | .58 | .68 | .62 | .58 | .66 | .61 | .57 | .64 | .60 | .56 | .55 |
| 7.0 | .66 | .59 | .54 | .65 | .58 | .54 | .63 | .57 | .53 | .62 | .56 | .52 | .60 | .55 | .52 | .50 |
| 8.0 | .61 | .54 | .49 | .60 | .54 | .49 | .59 | .53 | .49 | .58 | .52 | .48 | .56 | .52 | .48 | .46 |
| 9.0 | .57 | .50 | .46 | .56 | .50 | .46 | .55 | .49 | .45 | .54 | .49 | .45 | .53 | .48 | .45 | .43 |
| 10.0 | .53 | .47 | .42 | .53 | .47 | .42 | .52 | .46 | .42 | .51 | .45 | .42 | .50 | .45 | .41 | .40 |



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2018-12-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

WEC AND CCEC

| | | |
|--|-------------------|--|
| Test:U:220.50V I:0.1310A P:27.300W PF:0.9460 Freq:50.00Hz Lamp Flux:3566.45x1 lm | | |
| NAME: LC-LL1603-30W-Standard 90° | TYPE:LED | |
| MFR.: LOW-CARBON | DIM.: 650*40*95mm | |
| | | |

| ρ_{cc} | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 | |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|--|
| ρ_w | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 | |
| ρ_{fc} | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 | |
| RCR | RCR:Room Cavity Ratio | | | | | | Wall Exitance Coefficients(WEC) | | | | | | | | | | |
| 0.0 | | | | | | | | | | | | | | | | | |
| 1.0 | .213 | .121 | .038 | .205 | .117 | .037 | .191 | .109 | .035 | .177 | .102 | .033 | .165 | .095 | .031 | | |
| 2.0 | .204 | .112 | .034 | .198 | .109 | .034 | .185 | .103 | .032 | .173 | .097 | .030 | .163 | .092 | .029 | | |
| 3.0 | .194 | .103 | .031 | .188 | .101 | .030 | .177 | .096 | .029 | .167 | .092 | .028 | .158 | .087 | .027 | | |
| 4.0 | .184 | .096 | .028 | .179 | .094 | .028 | .169 | .090 | .027 | .160 | .086 | .026 | .152 | .082 | .025 | | |
| 5.0 | .174 | .089 | .026 | .170 | .087 | .025 | .161 | .084 | .025 | .153 | .081 | .024 | .145 | .078 | .023 | | |
| 6.0 | .165 | .083 | .024 | .161 | .081 | .023 | .153 | .079 | .023 | .146 | .076 | .022 | .139 | .073 | .022 | | |
| 7.0 | .157 | .077 | .022 | .153 | .076 | .022 | .146 | .074 | .021 | .140 | .072 | .021 | .133 | .069 | .020 | | |
| 8.0 | .149 | .073 | .020 | .146 | .072 | .020 | .139 | .070 | .020 | .133 | .068 | .020 | .128 | .066 | .019 | | |
| 9.0 | .142 | .069 | .019 | .139 | .068 | .019 | .133 | .066 | .019 | .128 | .064 | .018 | .123 | .062 | .018 | | |
| 10.0 | .135 | .065 | .018 | .132 | .064 | .018 | .127 | .062 | .018 | .122 | .061 | .017 | .118 | .059 | .017 | | |

| ρ_{cc} | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|-------------|-----------------------|------|------|------|------|------|--|------|------|------|------|------|------|------|------|---|
| ρ_w | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| ρ_{fc} | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Ceiling Cavity Exitance Coefficients(CCEC) | | | | | | | | | |
| 0.0 | .215 | .215 | .215 | .184 | .184 | .184 | .126 | .126 | .126 | .072 | .072 | .072 | .023 | .023 | .023 | |
| 1.0 | .199 | .182 | .167 | .170 | .156 | .144 | .116 | .108 | .099 | .067 | .062 | .058 | .021 | .020 | .019 | |
| 2.0 | .186 | .158 | .134 | .159 | .136 | .116 | .109 | .094 | .081 | .063 | .055 | .047 | .020 | .018 | .015 | |
| 3.0 | .175 | .139 | .110 | .150 | .120 | .096 | .103 | .083 | .067 | .060 | .049 | .040 | .019 | .016 | .013 | |
| 4.0 | .166 | .125 | .094 | .143 | .108 | .081 | .098 | .075 | .057 | .057 | .044 | .034 | .018 | .014 | .011 | |
| 5.0 | .158 | .114 | .081 | .136 | .099 | .071 | .094 | .069 | .050 | .054 | .040 | .030 | .017 | .013 | .010 | |
| 6.0 | .152 | .105 | .072 | .130 | .091 | .063 | .090 | .064 | .044 | .052 | .037 | .026 | .017 | .012 | .009 | |
| 7.0 | .145 | .098 | .065 | .125 | .085 | .056 | .086 | .059 | .040 | .050 | .035 | .024 | .016 | .011 | .008 | |
| 8.0 | .140 | .092 | .059 | .120 | .080 | .052 | .083 | .056 | .037 | .048 | .033 | .022 | .016 | .011 | .007 | |
| 9.0 | .134 | .087 | .055 | .116 | .075 | .048 | .080 | .053 | .034 | .047 | .031 | .020 | .015 | .010 | .007 | |
| 10.0 | .130 | .083 | .051 | .112 | .072 | .045 | .078 | .051 | .032 | .045 | .030 | .019 | .015 | .010 | .006 | |

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2018-12-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity:65.0%
Test Distance:8.000m [K=0.7063]
Remarks:

UGR(Unified Glare Rating) Table

| | | |
|--|-------------------|--|
| Test:U:220.50V I:0.1310A P:27.300W PF:0.9460 Freq:50.00Hz Lamp Flux:3566.45x1 lm | | |
| NAME: LC-LL1603-30W-Standard 90° | TYPE:LED | |
| MFR.: LOW-CARBON | DIM.: 650*40*95mm | |
| | | |

| | | | | | | | | | | |
|---|-------------------------|-------------|-------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|
| ceiling/cavity | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| walls | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| working plane | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Room dimensions | Viewed crosswise | | | | | Viewed endwise | | | | |
| x = 2H y = 2H | 19.8 | 20.9 | 20.0 | 21.1 | 21.3 | 20.6 | 21.7 | 20.8 | 21.9 | 22.1 |
| 3H | 19.8 | 20.8 | 20.1 | 21.1 | 21.4 | 20.6 | 21.6 | 20.9 | 21.9 | 22.2 |
| 4H | 19.8 | 20.8 | 20.2 | 21.1 | 21.4 | 20.7 | 21.6 | 21.0 | 21.9 | 22.2 |
| 6H | 19.9 | 20.8 | 20.2 | 21.1 | 21.4 | 20.7 | 21.6 | 21.0 | 21.9 | 22.2 |
| 8H | 19.9 | 20.7 | 20.2 | 21.0 | 21.4 | 20.7 | 21.5 | 21.0 | 21.8 | 22.2 |
| 12H | 19.9 | 20.7 | 20.2 | 21.0 | 21.4 | 20.7 | 21.5 | 21.1 | 21.8 | 22.2 |
| 4H 2H | 19.7 | 20.6 | 20.0 | 20.9 | 21.2 | 20.4 | 21.4 | 20.8 | 21.7 | 22.0 |
| 3H | 19.8 | 20.7 | 20.2 | 21.0 | 21.3 | 20.6 | 21.4 | 21.0 | 21.7 | 22.1 |
| 4H | 19.9 | 20.7 | 20.3 | 21.0 | 21.4 | 20.7 | 21.4 | 21.1 | 21.8 | 22.2 |
| 6H | 20.0 | 20.7 | 20.4 | 21.1 | 21.5 | 20.8 | 21.4 | 21.2 | 21.8 | 22.2 |
| 8H | 20.0 | 20.6 | 20.5 | 21.1 | 21.5 | 20.8 | 21.4 | 21.2 | 21.8 | 22.3 |
| 12H | 20.1 | 20.6 | 20.5 | 21.0 | 21.5 | 20.8 | 21.4 | 21.3 | 21.8 | 22.3 |
| 8H 4H | 19.9 | 20.5 | 20.3 | 20.9 | 21.3 | 20.6 | 21.2 | 21.1 | 21.6 | 22.1 |
| 6H | 20.0 | 20.5 | 20.5 | 21.0 | 21.5 | 20.8 | 21.3 | 21.2 | 21.7 | 22.2 |
| 8H | 20.1 | 20.5 | 20.6 | 21.0 | 21.5 | 20.8 | 21.3 | 21.3 | 21.7 | 22.3 |
| 12H | 20.2 | 20.6 | 20.7 | 21.0 | 21.6 | 20.9 | 21.3 | 21.4 | 21.8 | 22.3 |
| 12H 4H | 19.9 | 20.4 | 20.3 | 20.8 | 21.3 | 20.6 | 21.1 | 21.0 | 21.6 | 22.0 |
| 6H | 20.0 | 20.5 | 20.5 | 20.9 | 21.4 | 20.7 | 21.2 | 21.2 | 21.6 | 22.2 |
| 8H | 20.1 | 20.5 | 20.6 | 21.0 | 21.5 | 20.8 | 21.2 | 21.4 | 21.7 | 22.2 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S = 1.0H | + 1.5 / - 2.5 | | | | | + 1.6 / - 2.3 | | | | |
| 1.5H | + 2.2 / - 2.0 | | | | | + 2.5 / - 2.3 | | | | |
| 2.0H | + 3.0 / - 2.1 | | | | | + 3.6 / - 2.5 | | | | |

CIE Pub.117, 3566 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 4.4$)

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2018-12-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity:65.0%
Test Distance:8.000m [K=0.7063]
Remarks:

UTILIZATION FACTORS TABLE

| | | |
|--|-------------------|--|
| Test:U:220.50V I:0.1310A P:27.300W PF:0.9460 Freq:50.00Hz Lamp Flux:3566.45x1 lm | | |
| NAME: LC-LL1603-30W-Standard 90° | TYPE:LED | |
| MFR.: LOW-CARBON | DIM.: 650*40*95mm | |
| | | |

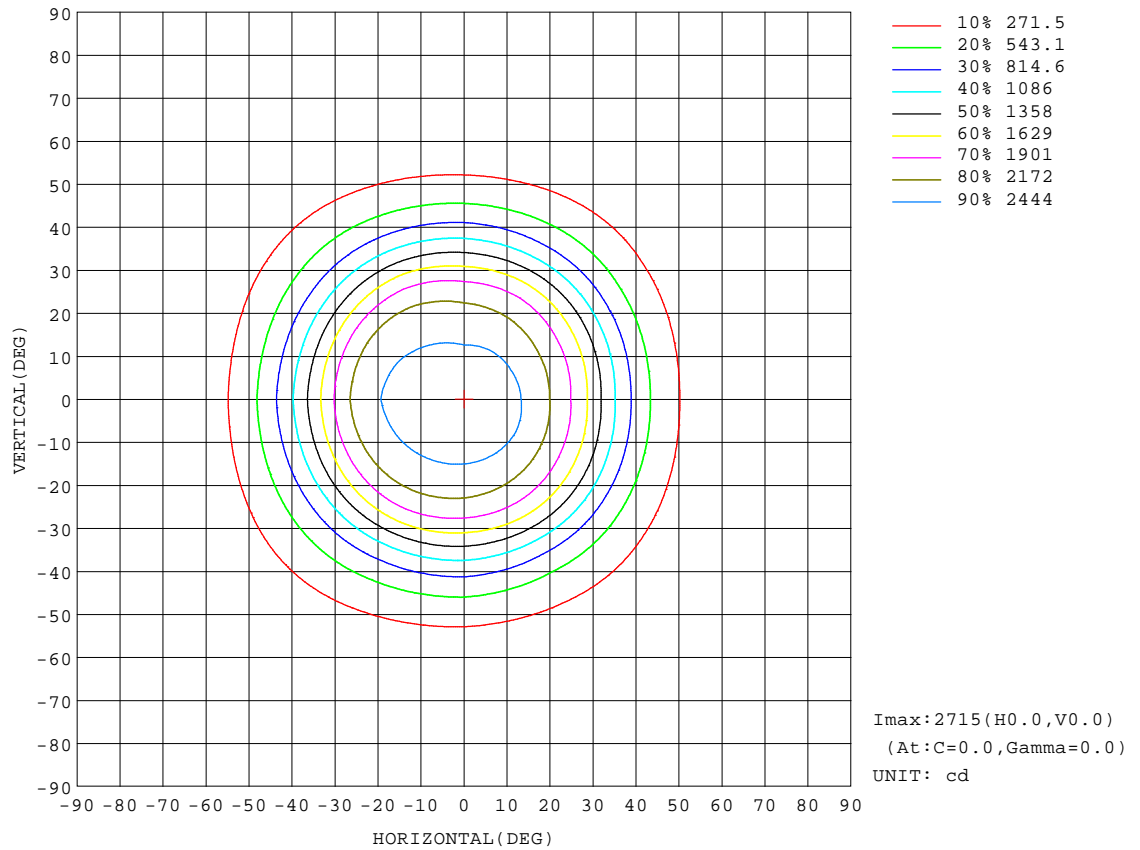
| REFLECTANCE | | | | | | | | | | |
|----------------------------------|---|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0 |
| Walls | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0 |
| Working plane | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0 |
| ROOM INDEX | UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$ | | | | | | | | | |
| $k = 0.60$ | 76 | 68 | 63 | 75 | 67 | 62 | 74 | 67 | 62 | 58 |
| 0.80 | 85 | 77 | 72 | 84 | 76 | 72 | 82 | 75 | 71 | 66 |
| 1.00 | 91 | 83 | 79 | 90 | 83 | 78 | 88 | 83 | 78 | 72 |
| 1.25 | 96 | 89 | 85 | 95 | 88 | 84 | 92 | 87 | 83 | 77 |
| 1.50 | 100 | 93 | 89 | 98 | 92 | 88 | 95 | 90 | 87 | 81 |
| 2.00 | 104 | 98 | 94 | 102 | 97 | 93 | 99 | 95 | 91 | 85 |
| 2.50 | 106 | 101 | 97 | 104 | 100 | 96 | 100 | 97 | 94 | 86 |
| 3.00 | 108 | 104 | 100 | 106 | 102 | 99 | 102 | 99 | 96 | 88 |
| 4.00 | 111 | 107 | 104 | 108 | 105 | 102 | 104 | 101 | 99 | 91 |
| 5.00 | 112 | 109 | 106 | 110 | 107 | 105 | 105 | 103 | 101 | 92 |
| ROOM INDEX | UF(total) | | | | | | | | | Direct |
| According to DIN EN 13032-2 2004 | | | Suspended | | | | | SHRNOM = 1.25 | | |

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2018-12-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity:65.0%
Test Distance:8.000m [K=0.7063]
Remarks:

ISOCANDELA DIAGRAM

| | | |
|--|-------------------|--|
| Test:U:220.50V I:0.1310A P:27.300W PF:0.9460 Freq:50.00Hz Lamp Flux:3566.45x1 lm | | |
| NAME: LC-LL1603-30W-Standard 90° | TYPE:LED | |
| MFR.: LOW-CARBON | DIM.: 650*40*95mm | |
| | | |



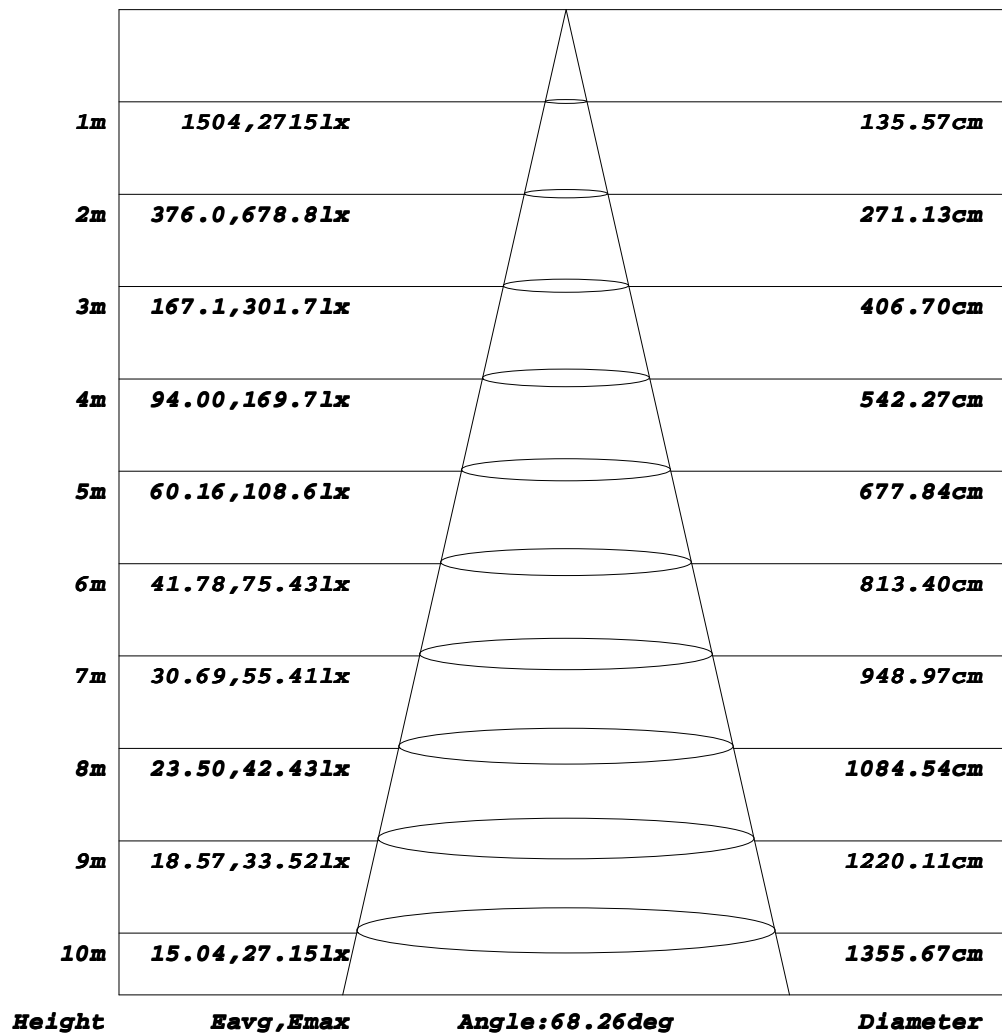
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2018-12-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

AAI Figure

| | | |
|--|-------------------|--|
| Test:U:220.50V I:0.1310A P:27.300W PF:0.9460 Freq:50.00Hz Lamp Flux:3566.45x1 lm | | |
| NAME: LC-LL1603-30W-Standard 90° | TYPE:LED | |
| MFR.: LOW-CARBON | DIM.: 650*40*95mm | |
| | | |

Flux out:2317 lm



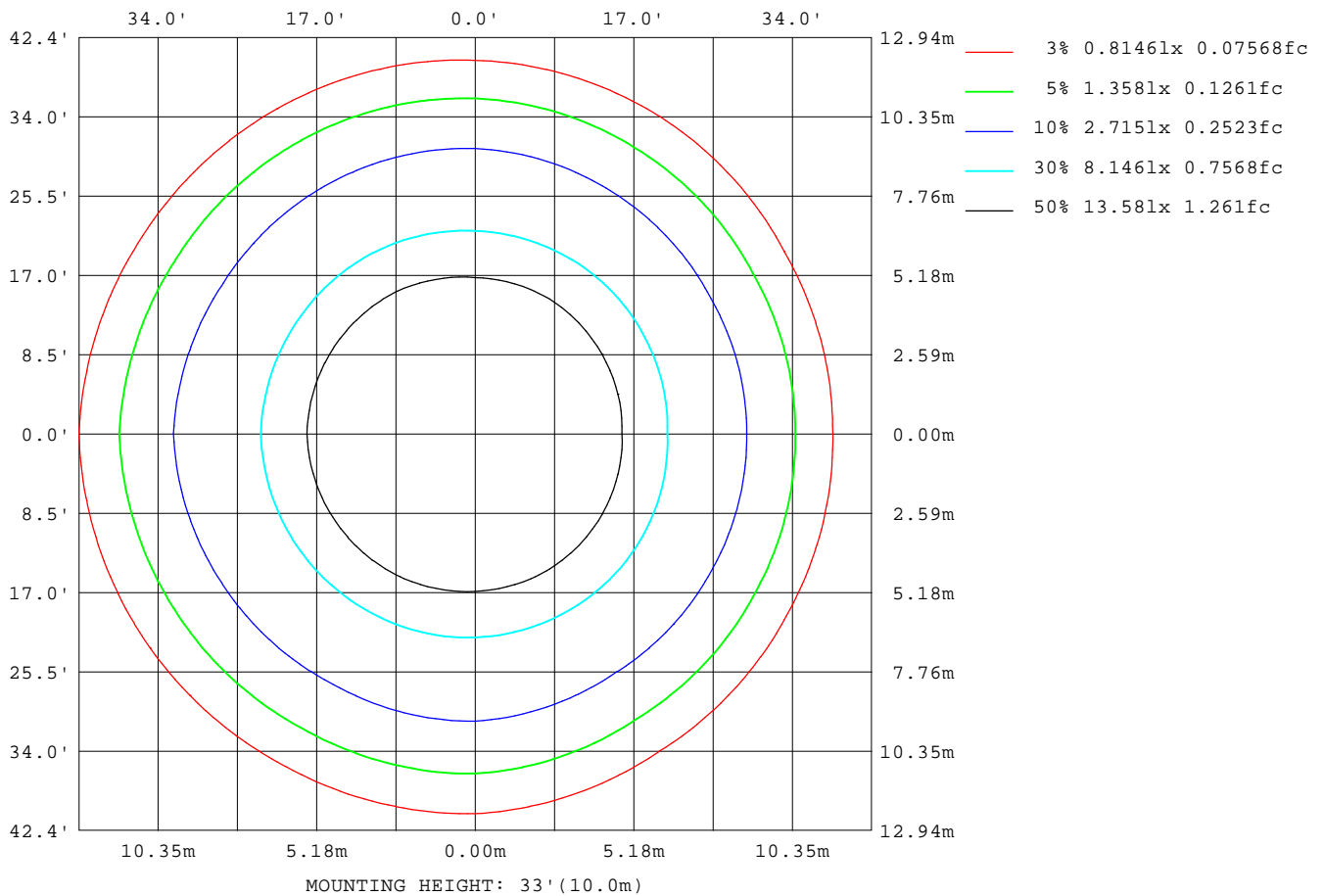
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2018-12-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

ISOLUX DIAGRAM

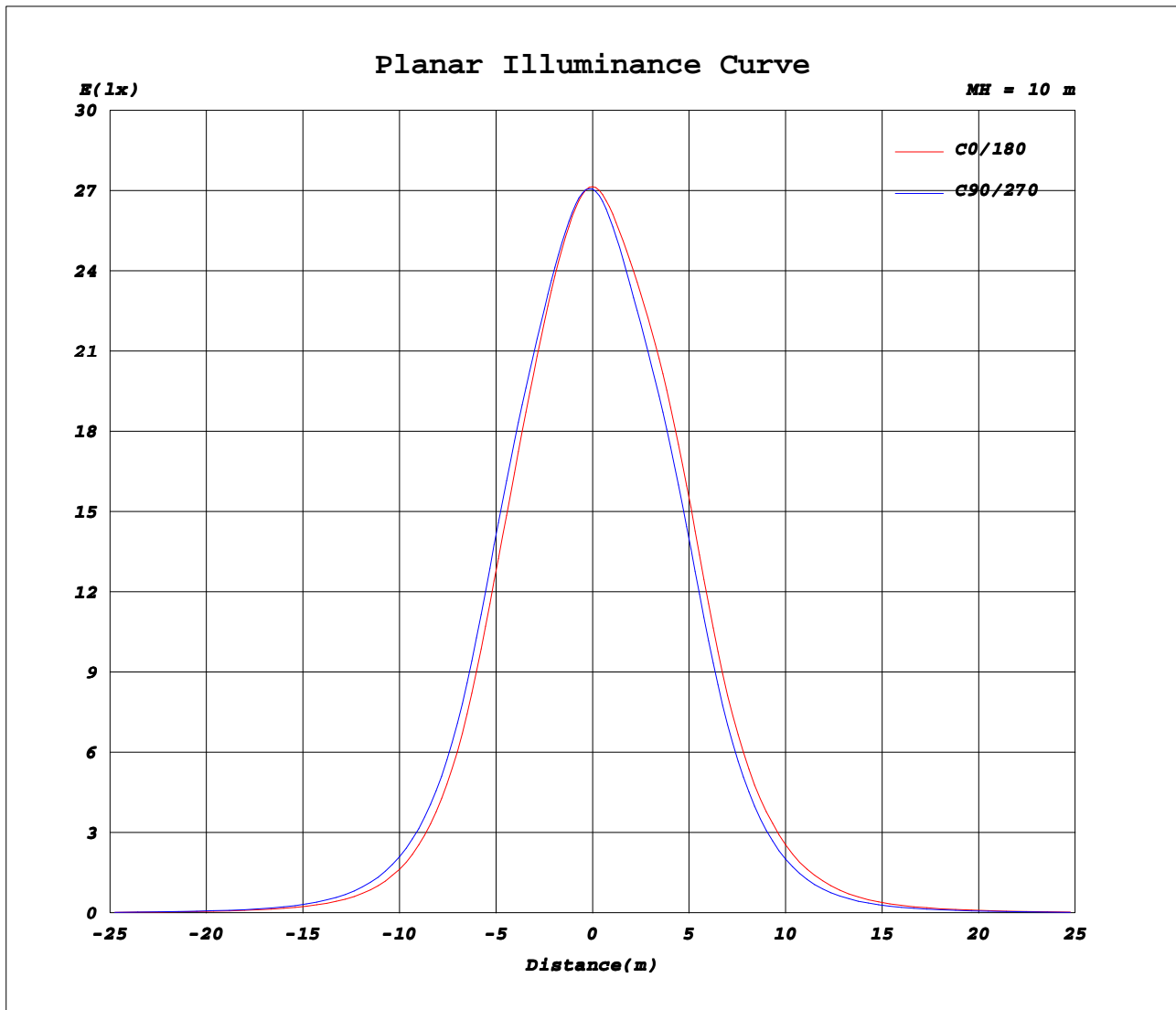
| | | |
|--|-------------------|--|
| Test:U:220.50V I:0.1310A P:27.300W PF:0.9460 Freq:50.00Hz Lamp Flux:3566.45x1 lm | | |
| NAME: LC-LL1603-30W-Standard 90° | TYPE:LED | |
| MFR.: LOW-CARBON | DIM.: 650*40*95mm | |
| | | |



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2018-12-22

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2018-12-22

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|--|-------------------|--|
| Test:U:220.50V I:0.1310A P:27.300W PF:0.9460 Freq:50.00Hz Lamp Flux:3566.45x1 lm | | |
| NAME: LC-LL1603-30W-Standard 90° | TYPE:LED | |
| MFR.: LOW-CARBON | DIM.: 650*40*95mm | |
| | | |

Table--1

UNIT: cd

| C(DEG) γ (DEG) | 0 | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 330 | | | | | | | |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|
| 0 | 2715 | 2710 | 2708 | 2706 | 2707 | 2705 | 2715 | 2710 | 2708 | 2706 | 2707 | 2705 | | | | | | | |
| 5 | 2667 | 2679 | 2680 | 2680 | 2671 | 2667 | 2671 | 2647 | 2640 | 2630 | 2644 | 2648 | | | | | | | |
| 10 | 2548 | 2572 | 2574 | 2577 | 2579 | 2585 | 2591 | 2560 | 2535 | 2508 | 2522 | 2525 | | | | | | | |
| 15 | 2382 | 2417 | 2429 | 2445 | 2467 | 2497 | 2521 | 2484 | 2436 | 2390 | 2383 | 2379 | | | | | | | |
| 20 | 2169 | 2208 | 2249 | 2289 | 2334 | 2383 | 2429 | 2394 | 2330 | 2256 | 2227 | 2184 | | | | | | | |
| 25 | 1891 | 1939 | 2010 | 2066 | 2134 | 2193 | 2252 | 2218 | 2150 | 2048 | 2001 | 1933 | | | | | | | |
| 30 | 1519 | 1585 | 1656 | 1717 | 1798 | 1863 | 1919 | 1875 | 1815 | 1701 | 1650 | 1574 | | | | | | | |
| 35 | 1098 | 1155 | 1205 | 1291 | 1340 | 1416 | 1479 | 1417 | 1360 | 1279 | 1201 | 1138 | | | | | | | |
| 40 | 741 | 762 | 801 | 905 | 919 | 987 | 1064 | 986 | 931 | 890 | 801 | 749 | | | | | | | |
| 45 | 463 | 478 | 509 | 596 | 603 | 655 | 722 | 649 | 610 | 570 | 516 | 467 | | | | | | | |
| 50 | 277 | 289 | 313 | 369 | 380 | 415 | 455 | 403 | 374 | 341 | 314 | 282 | | | | | | | |
| 55 | 163 | 174 | 188 | 218 | 229 | 252 | 267 | 239 | 217 | 198 | 184 | 169 | | | | | | | |
| 60 | 99.9 | 107 | 115 | 127 | 137 | 151 | 158 | 142 | 130 | 118 | 114 | 105 | | | | | | | |
| 65 | 66.1 | 69.4 | 74.8 | 79.1 | 85.5 | 93.0 | 98.3 | 89.7 | 82.8 | 76.8 | 75.1 | 70.1 | | | | | | | |
| 70 | 45.5 | 47.3 | 50.6 | 52.4 | 55.3 | 59.5 | 64.6 | 58.5 | 55.1 | 52.2 | 51.7 | 48.4 | | | | | | | |
| 75 | 31.0 | 31.8 | 34.0 | 35.4 | 35.8 | 37.9 | 42.8 | 38.4 | 37.0 | 35.9 | 35.9 | 33.5 | | | | | | | |
| 80 | 19.6 | 20.1 | 21.5 | 22.9 | 21.9 | 22.7 | 27.0 | 24.4 | 24.0 | 24.1 | 24.0 | 22.5 | | | | | | | |
| 85 | 10.6 | 10.9 | 11.7 | 12.7 | 11.2 | 11.2 | 15.2 | 13.8 | 14.1 | 14.6 | 14.6 | 13.7 | | | | | | | |
| 90 | 5.30 | 4.95 | 4.66 | 4.49 | 4.25 | 4.27 | 7.73 | 7.60 | 7.63 | 7.78 | 8.08 | 8.34 | | | | | | | |
| 95 | 6.46 | 6.02 | 5.64 | 5.38 | 5.27 | 5.21 | 8.50 | 8.47 | 8.53 | 8.73 | 8.93 | 9.25 | | | | | | | |
| 100 | 7.98 | 7.49 | 7.09 | 6.77 | 6.63 | 6.53 | 9.60 | 9.58 | 9.63 | 9.89 | 10.1 | 10.4 | | | | | | | |
| 105 | 9.87 | 9.32 | 8.90 | 8.50 | 8.33 | 8.16 | 10.9 | 10.9 | 11.0 | 11.3 | 11.5 | 11.9 | | | | | | | |
| 110 | 12.0 | 11.4 | 10.9 | 10.5 | 10.3 | 10.0 | 12.4 | 12.4 | 12.5 | 12.8 | 13.1 | 13.5 | | | | | | | |
| 115 | 14.4 | 13.8 | 13.2 | 12.8 | 12.5 | 12.2 | 14.1 | 14.1 | 14.3 | 14.7 | 15.0 | 15.4 | | | | | | | |
| 120 | 17.1 | 16.4 | 15.8 | 15.2 | 15.0 | 14.7 | 16.1 | 16.2 | 16.3 | 16.7 | 17.1 | 17.7 | | | | | | | |
| 125 | 20.1 | 19.3 | 18.6 | 18.0 | 17.7 | 17.4 | 18.4 | 18.5 | 18.7 | 19.0 | 19.4 | 20.1 | | | | | | | |
| 130 | 23.3 | 22.4 | 21.6 | 20.9 | 20.7 | 20.4 | 20.9 | 21.0 | 21.1 | 21.5 | 21.9 | 22.7 | | | | | | | |
| 135 | 26.3 | 25.5 | 24.5 | 23.9 | 23.6 | 23.4 | 23.5 | 23.7 | 23.7 | 24.1 | 24.5 | 25.4 | | | | | | | |
| 140 | 29.2 | 28.5 | 27.4 | 27.0 | 26.6 | 26.4 | 26.3 | 26.3 | 26.3 | 26.8 | 27.1 | 28.0 | | | | | | | |
| 145 | 31.7 | 31.1 | 30.1 | 29.9 | 29.4 | 29.1 | 28.8 | 28.7 | 28.8 | 29.4 | 29.6 | 30.4 | | | | | | | |
| 150 | 33.8 | 33.3 | 32.6 | 32.5 | 32.0 | 31.5 | 31.0 | 30.9 | 31.1 | 31.7 | 31.8 | 32.4 | | | | | | | |
| 155 | 35.5 | 35.2 | 34.6 | 34.6 | 34.2 | 33.6 | 33.0 | 32.8 | 33.2 | 33.6 | 33.7 | 34.2 | | | | | | | |
| 160 | 37.2 | 36.9 | 36.5 | 36.5 | 36.1 | 35.5 | 34.9 | 34.5 | 35.0 | 35.4 | 35.4 | 35.9 | | | | | | | |
| 165 | 39.0 | 38.6 | 38.1 | 38.1 | 37.8 | 37.2 | 36.9 | 36.4 | 36.8 | 37.1 | 37.1 | 37.6 | | | | | | | |
| 170 | 40.6 | 40.0 | 39.5 | 39.5 | 39.4 | 39.1 | 38.9 | 38.2 | 38.4 | 38.5 | 38.6 | 38.9 | | | | | | | |
| 175 | 41.5 | 40.8 | 40.5 | 40.5 | 40.5 | 40.5 | 40.5 | 39.8 | 39.8 | 39.8 | 39.9 | 40.1 | | | | | | | |
| 180 | 41.7 | 41.1 | 40.8 | 40.9 | 41.0 | 41.0 | 41.8 | 41.0 | 40.9 | 40.8 | 41.0 | 41.0 | | | | | | | |

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
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