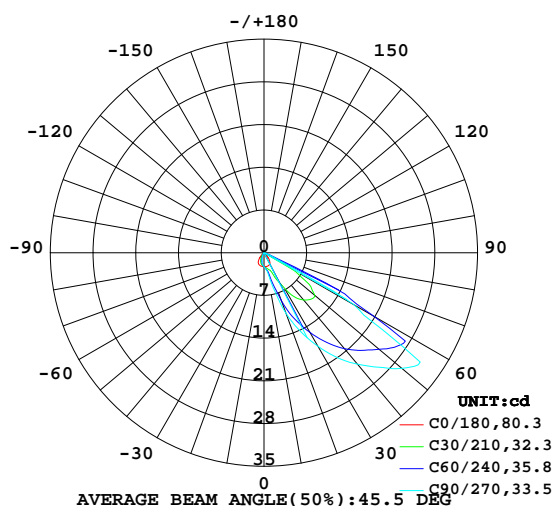


LUMINAIRE PHOTOMETRIC TEST REPORT

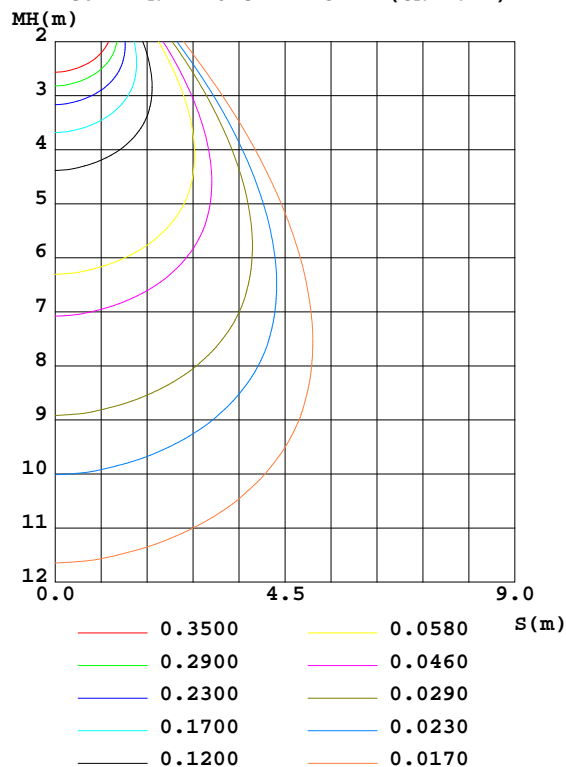
| | | |
|--|--------------------------------|------------------|
| Test:U:120.07V I:0.0176A P:1.8975W PF:0.8970 Freq:59.98Hz Lamp Flux:22.6273x1 lm | | |
| NAME: WL-LED102-30-BK | TYPE:Surface-mounted Luminaire | HEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: WAC Lighting | SUR.: | Shielding Angle: |

| DATA OF LAMP | | PHOTOMETRIC DATA | | | | Eff: 11.92 lm/W |
|------------------|---------|-----------------------|--------|-------------------|----------|-----------------|
| MODEL | | I _{max} (cd) | 31.26 | S/MH(C0/180) | 1.16 | |
| NOMINAL POWER(W) | | LOR(%) | 100.0 | S/MH(C90/270) | 2.68 | |
| RATED VOLTAGE(V) | 120 | TOTAL FLUX(lm) | 22.627 | η UP,DN(C0-180) | 0.0,4.2 | |
| NOMINAL FLUX(lm) | 22.6273 | CIE CLASS | DIRECT | η UP,DN(C180-360) | 0.0,95.8 | |
| LAMPS INSIDE | 1 | η up(%) | 0.0 | CIBSE SHR NOM | 0.00 | |
| TEST VOLTAGE(V) | 120 | η down(%) | 100.0 | CIBSE SHR MAX | 1.30 | |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Oliver
 Test Date:2019-12-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:2.499m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

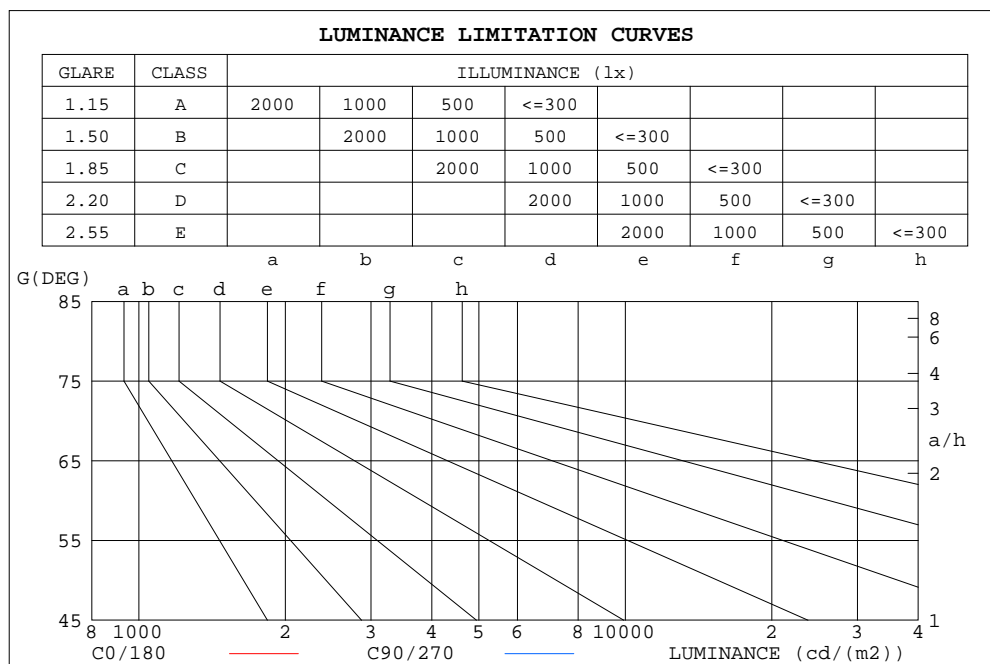
ZONAL FLUX DIAGRAM:

| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Φ zone | Φ total | %lum, lamp |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|------------|
| 10 | 2.257 | 1.925 | 1.741 | 1.948 | 2.292 | 2.776 | 3.096 | 2.743 | 0- 10 | 0.2210 | 0.2210 | 0.98,0.98 |
| 20 | 2.173 | 1.283 | 0.8912 | 1.312 | 2.232 | 5.617 | 10.53 | 5.441 | 10- 20 | 0.8231 | 1.044 | 4.61,4.61 |
| 30 | 1.895 | 0.6524 | 0.3738 | 0.6609 | 1.953 | 11.82 | 17.72 | 11.34 | 20- 30 | 2.192 | 3.236 | 14.3,14.3 |
| 40 | 1.151 | 0.2591 | 0.1443 | 0.2600 | 1.177 | 16.06 | 23.84 | 15.29 | 30- 40 | 4.071 | 7.306 | 32.3,32.3 |
| 50 | 0.3452 | 0.0886 | 0.0553 | 0.0849 | 0.3421 | 18.65 | 29.48 | 17.63 | 40- 50 | 6.024 | 13.33 | 58.9,58.9 |
| 60 | 0.1327 | 0.0338 | 0.0226 | 0.0313 | 0.1277 | 16.47 | 17.05 | 16.02 | 50- 60 | 7.034 | 20.37 | 90,90 |
| 70 | 0.0821 | 0.0133 | 0.0086 | 0.0107 | 0.0771 | 0.9612 | 0.5595 | 1.038 | 60- 70 | 2.128 | 22.49 | 99.4,99.4 |
| 80 | 0.0333 | 0.0013 | 0.0013 | 0.0013 | 0.0253 | 0.0432 | 0 | 0.0557 | 70- 80 | 0.1228 | 22.62 | 100,100 |
| 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80- 90 | 0.0040 | 22.62 | 100,100 |
| 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90-100 | 0 | 22.62 | 100,100 |
| 110 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100-110 | 0 | 22.62 | 100,100 |
| 120 | 0 | 0 | 0.0030 | 0 | 0 | 0 | 0 | 0 | 110-120 | 0.0001 | 22.62 | 100,100 |
| 130 | 0 | 0.0060 | 0.0047 | 0 | 0 | 0 | 0 | 0 | 120-130 | 0.0007 | 22.62 | 100,100 |
| 140 | 0.0004 | 0.0060 | 0.0060 | 0.0034 | 0.0021 | 0 | 0 | 0 | 130-140 | 0.0011 | 22.62 | 100,100 |
| 150 | 0.0060 | 0.0060 | 0.0060 | 0.0026 | 0.0038 | 0.0081 | 0 | 0.0056 | 140-150 | 0.0019 | 22.62 | 100,100 |
| 160 | 0.0059 | 0.0064 | 0.0047 | 0.0051 | 0.0089 | 0.0072 | 0 | 0.0051 | 150-160 | 0.0021 | 22.63 | 100,100 |
| 170 | 0.0038 | 0.0043 | 0.0017 | 0.0017 | 0.0034 | 0.0039 | 0 | 0 | 160-170 | 0.0010 | 22.63 | 100,100 |
| 180 | 0.0017 | 0.0021 | 0.0013 | 0.0013 | 0 | 0.0038 | 0.0004 | 0.0004 | 170-180 | 0.0002 | 22.63 | 100,100 |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | | |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Oliver
 Test Date:2019-12-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:2.499m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES



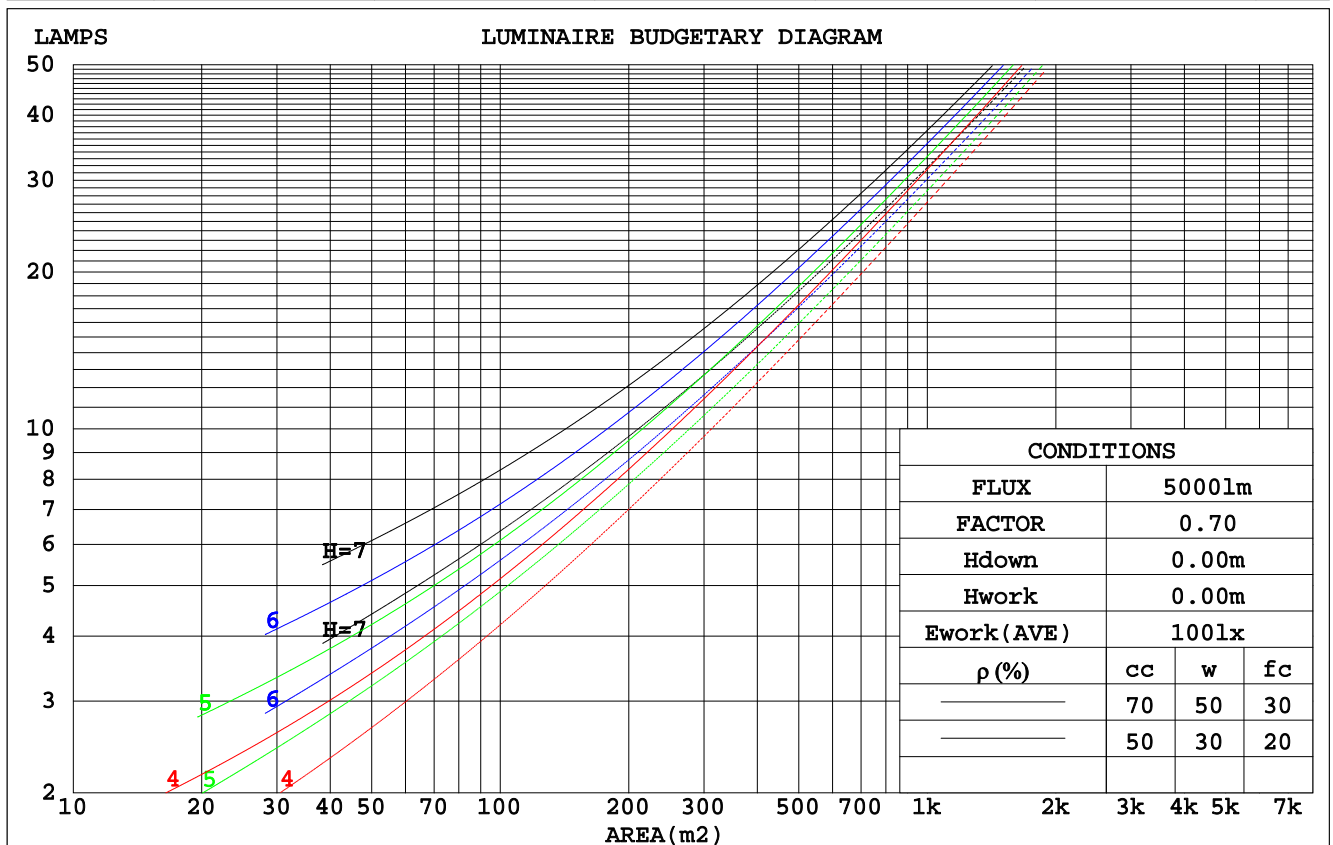
| LUMINANCE cd/(m2) | | |
|-------------------|--------|---------|
| G(°) | C0/180 | C90/270 |
| 85 | 1 | 0 |
| 80 | 2 | 0 |
| 75 | 2 | 0 |
| 70 | 2 | 0 |
| 65 | 2 | 0 |
| 60 | 3 | 0 |
| 55 | 3 | 1 |
| 50 | 5 | 1 |
| 45 | 10 | 1 |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|-----|
| ρw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| ρfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Coefficients of Utilization(CU) | | | | | | | | | |
| 0.0 | 1.19 | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | .00 |
| 1.0 | 1.05 | 1.02 | .98 | 1.03 | .90 | .96 | .99 | .96 | .93 | .95 | .93 | .91 | .92 | .90 | .88 | .86 |
| 2.0 | .92 | .85 | .80 | .90 | .84 | .79 | .86 | .81 | .77 | .83 | .79 | .75 | .80 | .76 | .73 | .71 |
| 3.0 | .79 | .71 | .65 | .78 | .70 | .64 | .75 | .68 | .63 | .72 | .66 | .62 | .69 | .65 | .61 | .59 |
| 4.0 | .69 | .60 | .53 | .68 | .59 | .53 | .65 | .58 | .52 | .63 | .56 | .51 | .61 | .55 | .50 | .48 |
| 5.0 | .60 | .51 | .44 | .59 | .50 | .44 | .57 | .49 | .43 | .55 | .48 | .43 | .53 | .47 | .42 | .40 |
| 6.0 | .53 | .43 | .37 | .52 | .43 | .36 | .50 | .42 | .36 | .48 | .41 | .36 | .47 | .40 | .35 | .33 |
| 7.0 | .47 | .37 | .31 | .46 | .37 | .31 | .44 | .36 | .31 | .43 | .36 | .30 | .41 | .35 | .30 | .28 |
| 8.0 | .42 | .33 | .26 | .41 | .32 | .26 | .40 | .32 | .26 | .38 | .31 | .26 | .37 | .31 | .26 | .24 |
| 9.0 | .37 | .29 | .23 | .37 | .28 | .23 | .36 | .28 | .23 | .35 | .27 | .22 | .33 | .27 | .22 | .20 |
| 10.0 | .34 | .25 | .20 | .33 | .25 | .20 | .32 | .25 | .20 | .31 | .24 | .19 | .30 | .24 | .19 | .17 |



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks:

WEC AND CCEC

| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 | |
|------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|--|
| pw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 | |
| pfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 | |
| RCR | RCR:Room Cavity Ratio | | | | | | Wall Exitance Coefficients(WEC) | | | | | | | | | | |
| 0.0 | | | | | | | | | | | | | | | | | |
| 1.0 | .279 | .159 | .050 | .272 | .155 | .049 | .259 | .149 | .047 | .247 | .142 | .046 | .236 | .137 | .044 | | |
| 2.0 | .280 | .153 | .047 | .274 | .151 | .046 | .262 | .146 | .045 | .251 | .141 | .044 | .242 | .137 | .043 | | |
| 3.0 | .270 | .143 | .043 | .264 | .141 | .043 | .254 | .137 | .042 | .244 | .134 | .041 | .235 | .130 | .040 | | |
| 4.0 | .255 | .133 | .039 | .250 | .131 | .039 | .241 | .128 | .038 | .232 | .125 | .038 | .224 | .122 | .037 | | |
| 5.0 | .240 | .122 | .035 | .236 | .121 | .035 | .227 | .118 | .035 | .220 | .116 | .034 | .212 | .113 | .034 | | |
| 6.0 | .225 | .113 | .032 | .221 | .112 | .032 | .214 | .110 | .032 | .207 | .107 | .032 | .200 | .105 | .031 | | |
| 7.0 | .211 | .104 | .030 | .207 | .103 | .029 | .201 | .101 | .029 | .194 | .100 | .029 | .188 | .098 | .029 | | |
| 8.0 | .198 | .097 | .027 | .194 | .096 | .027 | .188 | .094 | .027 | .183 | .093 | .027 | .177 | .091 | .027 | | |
| 9.0 | .186 | .090 | .025 | .183 | .089 | .025 | .177 | .088 | .025 | .172 | .086 | .025 | .167 | .085 | .025 | | |
| 10.0 | .175 | .084 | .023 | .172 | .083 | .023 | .167 | .082 | .023 | .162 | .081 | .023 | .158 | .080 | .023 | | |

| ρcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|------|-----------------------|------|------|------|------|------|--|------|------|------|------|------|------|------|------|---|
| ρw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| ρfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Ceiling Cavity Exitance Coefficients(CCEC) | | | | | | | | | |
| 0.0 | .191 | .191 | .191 | .163 | .163 | .163 | .111 | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 | |
| 1.0 | .178 | .157 | .137 | .153 | .134 | .118 | .104 | .092 | .082 | .060 | .054 | .047 | .019 | .017 | .015 | |
| 2.0 | .171 | .132 | .100 | .146 | .114 | .086 | .100 | .079 | .060 | .058 | .046 | .035 | .019 | .015 | .011 | |
| 3.0 | .165 | .115 | .075 | .141 | .099 | .065 | .097 | .069 | .045 | .056 | .040 | .027 | .018 | .013 | .009 | |
| 4.0 | .159 | .101 | .058 | .136 | .088 | .050 | .094 | .061 | .035 | .054 | .036 | .021 | .017 | .012 | .007 | |
| 5.0 | .153 | .091 | .046 | .131 | .079 | .040 | .090 | .055 | .028 | .052 | .032 | .017 | .017 | .011 | .006 | |
| 6.0 | .146 | .083 | .038 | .126 | .072 | .033 | .087 | .050 | .023 | .050 | .030 | .014 | .016 | .010 | .005 | |
| 7.0 | .140 | .076 | .032 | .121 | .066 | .028 | .083 | .046 | .020 | .048 | .027 | .012 | .016 | .009 | .004 | |
| 8.0 | .134 | .071 | .027 | .115 | .061 | .024 | .080 | .043 | .017 | .046 | .025 | .010 | .015 | .008 | .003 | |
| 9.0 | .128 | .066 | .024 | .110 | .057 | .021 | .077 | .040 | .015 | .045 | .024 | .009 | .014 | .008 | .003 | |
| 10.0 | .123 | .062 | .021 | .106 | .054 | .019 | .073 | .038 | .013 | .043 | .022 | .008 | .014 | .007 | .003 | |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

| | | | | | | | | | | |
|--|------------------|------|------|------|------|----------------|-------|-------|-------|-------|
| 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 | -3.2 | -1.5 | -2.9 | -1.3 | -1.1 | -12.3 | -10.7 | -12.0 | -10.4 | -10.2 |
| 3H | -2.9 | -1.5 | -2.6 | -1.2 | -1.0 | -12.3 | -10.8 | -12.0 | -10.6 | -10.4 |
| 4H | -2.8 | -1.4 | -2.4 | -1.1 | -0.9 | -12.4 | -11.0 | -12.1 | -10.7 | -10.5 |
| 6H | -2.6 | -1.3 | -2.3 | -1.0 | -0.8 | -12.5 | -11.2 | -12.1 | -10.9 | -10.6 |
| 8H | -2.6 | -1.3 | -2.2 | -1.0 | -0.7 | -12.5 | -11.3 | -12.2 | -11.0 | -10.7 |
| 12H | -2.6 | -1.4 | -2.2 | -1.1 | -0.8 | -12.6 | -11.4 | -12.2 | -11.1 | -10.8 |
| 4H 2H | -3.5 | -2.1 | -3.2 | -1.8 | -1.6 | -12.1 | -10.8 | -11.8 | -10.5 | -10.2 |
| 3H | -3.2 | -2.0 | -2.8 | -1.7 | -1.4 | -12.1 | -10.9 | -11.8 | -10.6 | -10.3 |
| 4H | -3.0 | -1.9 | -2.6 | -1.6 | -1.2 | -12.1 | -11.1 | -11.8 | -10.7 | -10.4 |
| 6H | -2.8 | -1.8 | -2.4 | -1.5 | -1.1 | -12.2 | -11.3 | -11.8 | -10.9 | -10.5 |
| 8H | -2.7 | -1.8 | -2.3 | -1.4 | -1.1 | -12.2 | -11.4 | -11.8 | -11.0 | -10.6 |
| 12H | -2.7 | -1.9 | -2.2 | -1.5 | -1.1 | -12.3 | -11.5 | -11.8 | -11.1 | -10.7 |
| 8H 4H | -3.1 | -2.2 | -2.7 | -1.9 | -1.5 | -12.1 | -11.2 | -11.7 | -10.9 | -10.5 |
| 6H | -2.9 | -2.2 | -2.4 | -1.7 | -1.3 | -12.1 | -11.4 | -11.7 | -11.0 | -10.6 |
| 8H | -2.8 | -2.2 | -2.3 | -1.7 | -1.3 | -12.2 | -11.6 | -11.7 | -11.1 | -10.7 |
| 12H | -2.7 | -2.2 | -2.3 | -1.8 | -1.3 | -12.2 | -11.7 | -11.7 | -11.2 | -10.8 |
| 12H 4H | -3.1 | -2.3 | -2.7 | -2.0 | -1.6 | -12.1 | -11.3 | -11.7 | -10.9 | -10.5 |
| 6H | -2.9 | -2.3 | -2.4 | -1.9 | -1.4 | -12.1 | -11.5 | -11.7 | -11.1 | -10.6 |
| 8H | -2.8 | -2.3 | -2.3 | -1.8 | -1.4 | -12.2 | -11.6 | -11.7 | -11.2 | -10.7 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S = 1.0H | + 3.7 / - 3.3 | | | | | + 1.7 / - 3.2 | | | | |
| 1.5H | + 5.2 / - 4.9 | | | | | + 2.0 / - 2.6 | | | | |
| 2.0H | + 6.4 / - 4.6 | | | | | + 2.4 / - 2.7 | | | | |

CIE Pub.117, 22.63 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -13.2$)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks:

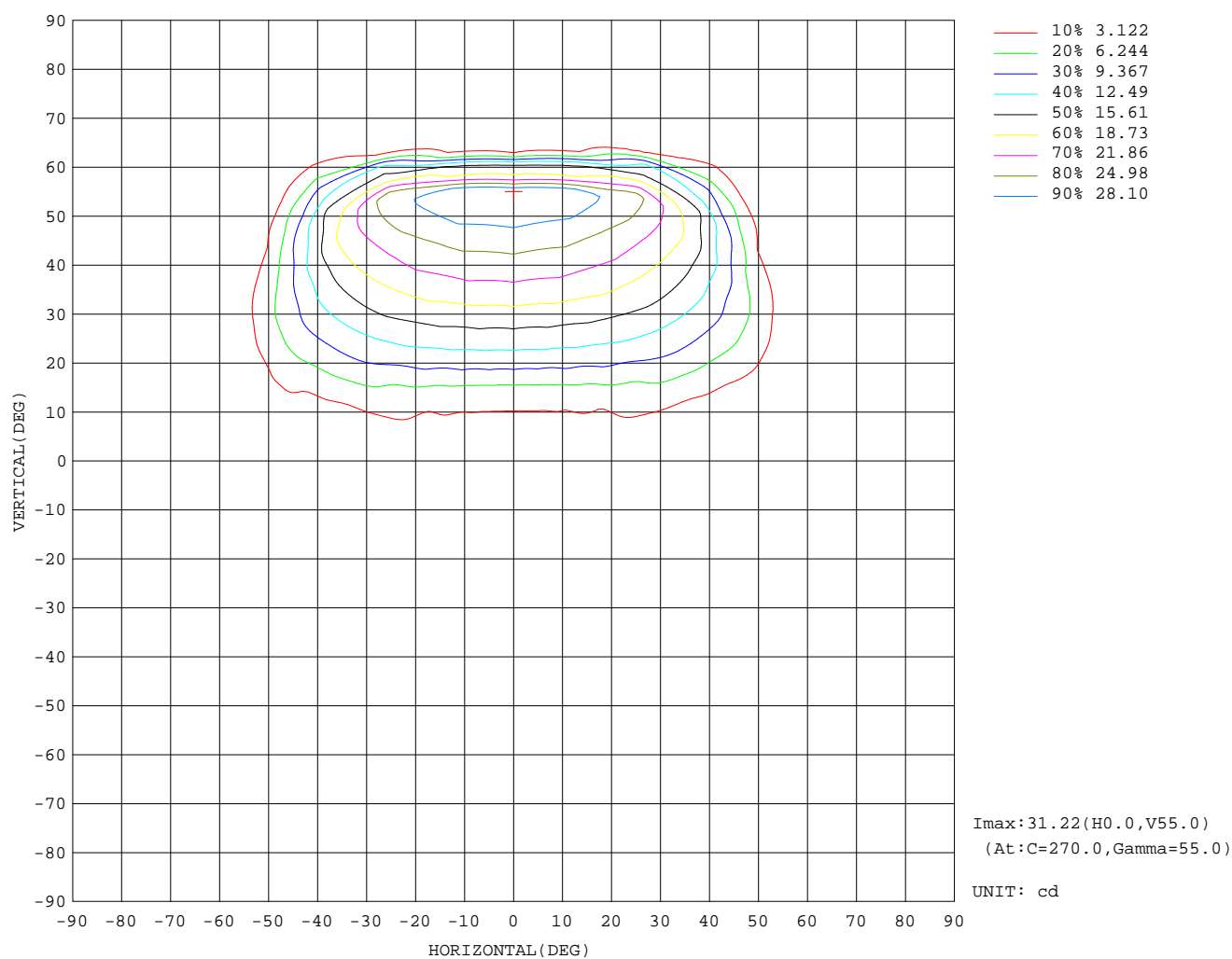
UTILIZATION FACTORS TABLE

| 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 | 47 | 34 | 26 | 46 | 33 | 25 | 45 | 33 | 25 | 18 |
| 0.80 | 60 | 47 | 39 | 59 | 47 | 39 | 57 | 46 | 38 | 30 |
| 1.00 | 72 | 60 | 52 | 71 | 60 | 52 | 69 | 61 | 52 | 44 |
| 1.25 | 81 | 70 | 63 | 80 | 70 | 62 | 77 | 68 | 62 | 54 |
| 1.50 | 87 | 77 | 70 | 85 | 76 | 69 | 82 | 74 | 68 | 61 |
| 2.00 | 95 | 87 | 81 | 94 | 86 | 80 | 90 | 84 | 78 | 71 |
| 2.50 | 99 | 92 | 86 | 97 | 90 | 85 | 93 | 88 | 83 | 75 |
| 3.00 | 103 | 96 | 91 | 101 | 95 | 90 | 97 | 92 | 88 | 79 |
| 4.00 | 107 | 101 | 96 | 104 | 99 | 95 | 100 | 96 | 92 | 84 |
| 5.00 | 109 | 104 | 100 | 106 | 102 | 98 | 102 | 98 | 95 | 86 |
| ROOM INDEX | UF(total) | | | | | | | | | Direct |
| According to DIN EN 13032-2 2004 | | | | Suspended | | | | SHRNOM = 1.25 | | |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks:

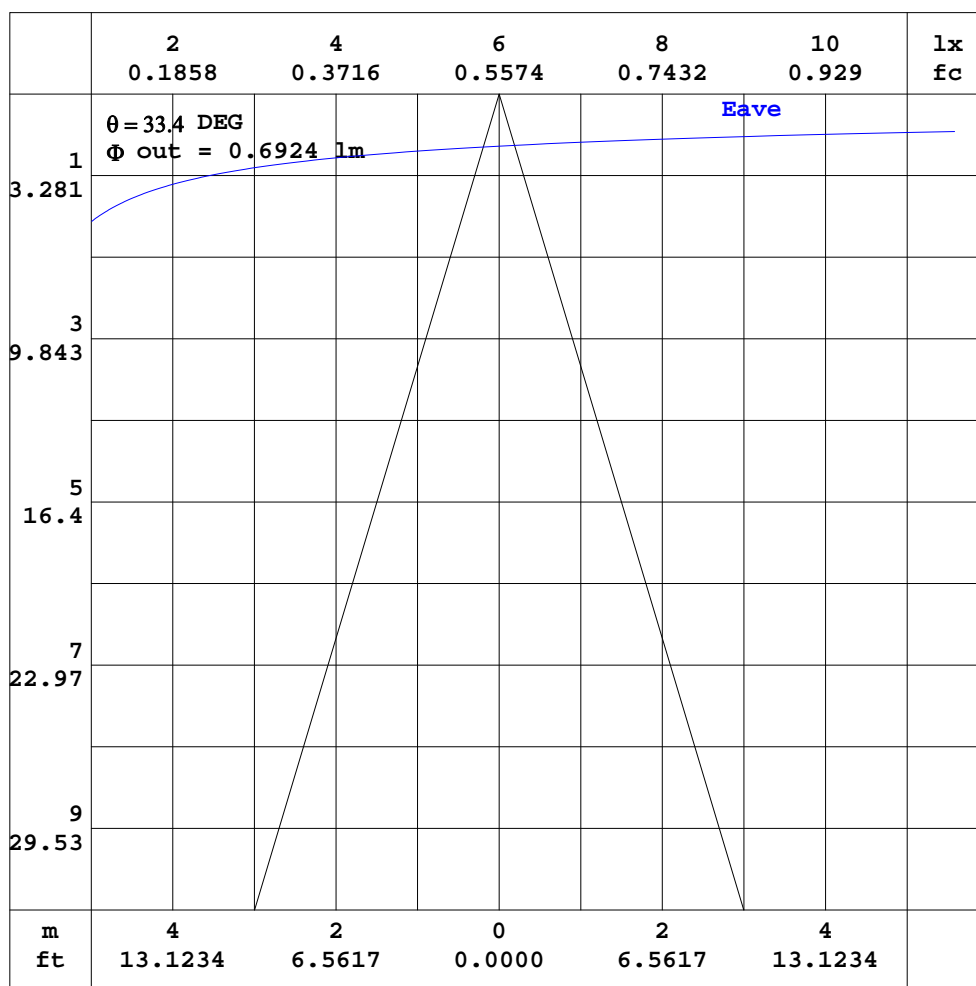
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Oliver
Test Date: 2019-12-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Humidity: 65.0%
Test Distance: 2.499m [K=1.0000]
Remarks:

AAI CURVES

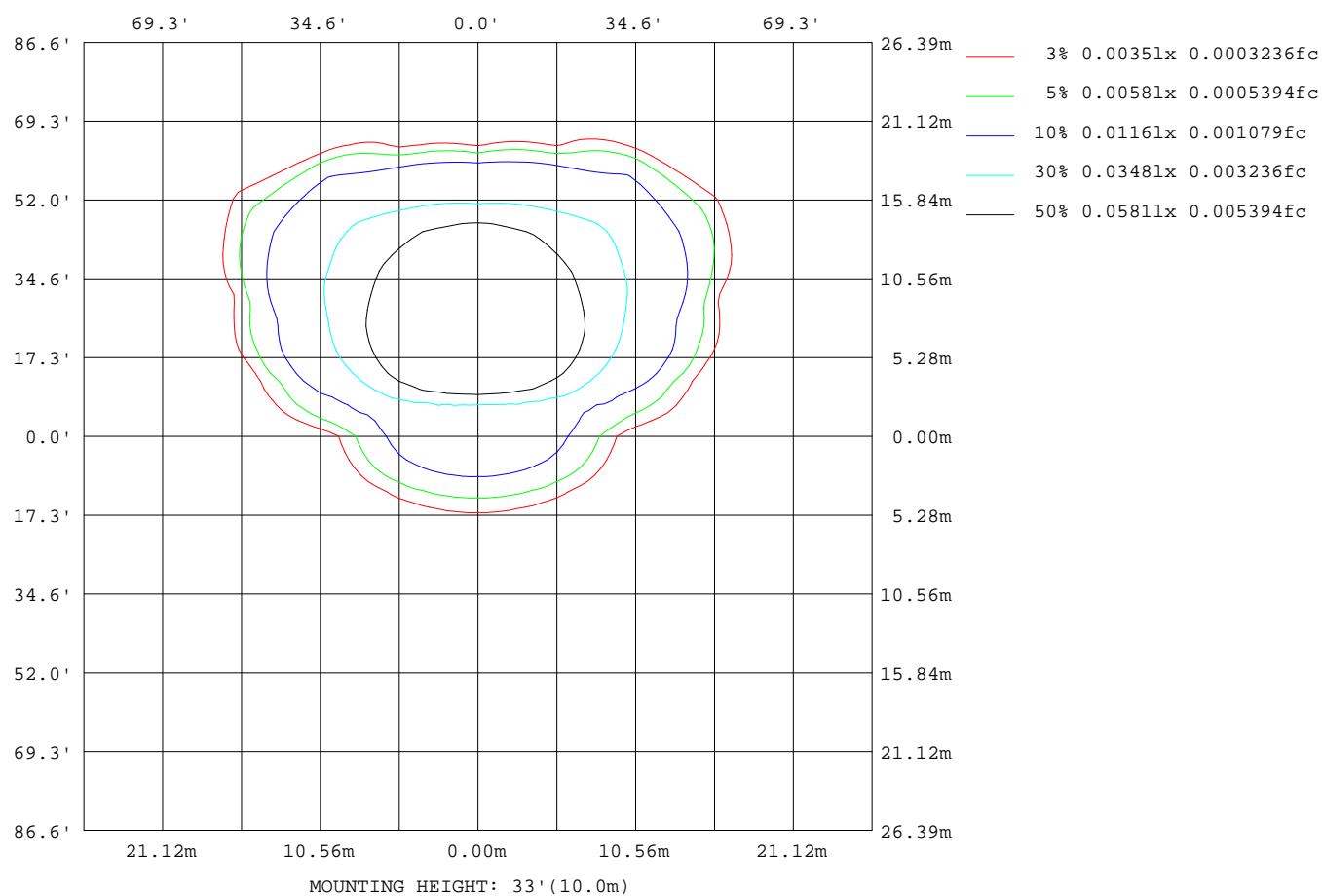


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Oliver
Test Date: 2019-12-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Humidity: 65.0%
Test Distance: 2.499m [K=1.0000]
Remarks:

LED Avg.L Report

| | | |
|--|--------------------------------|------------------|
| Test:U:120.07V I:0.0176A P:1.8975W PF:0.8970 Freq:59.98Hz Lamp Flux:22.6273x1 lm | | |
| NAME: WL-LED102-30-BK | TYPE:Surface-mounted Luminaire | HEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: WAC Lighting | SUR.: | Shielding Angle: |

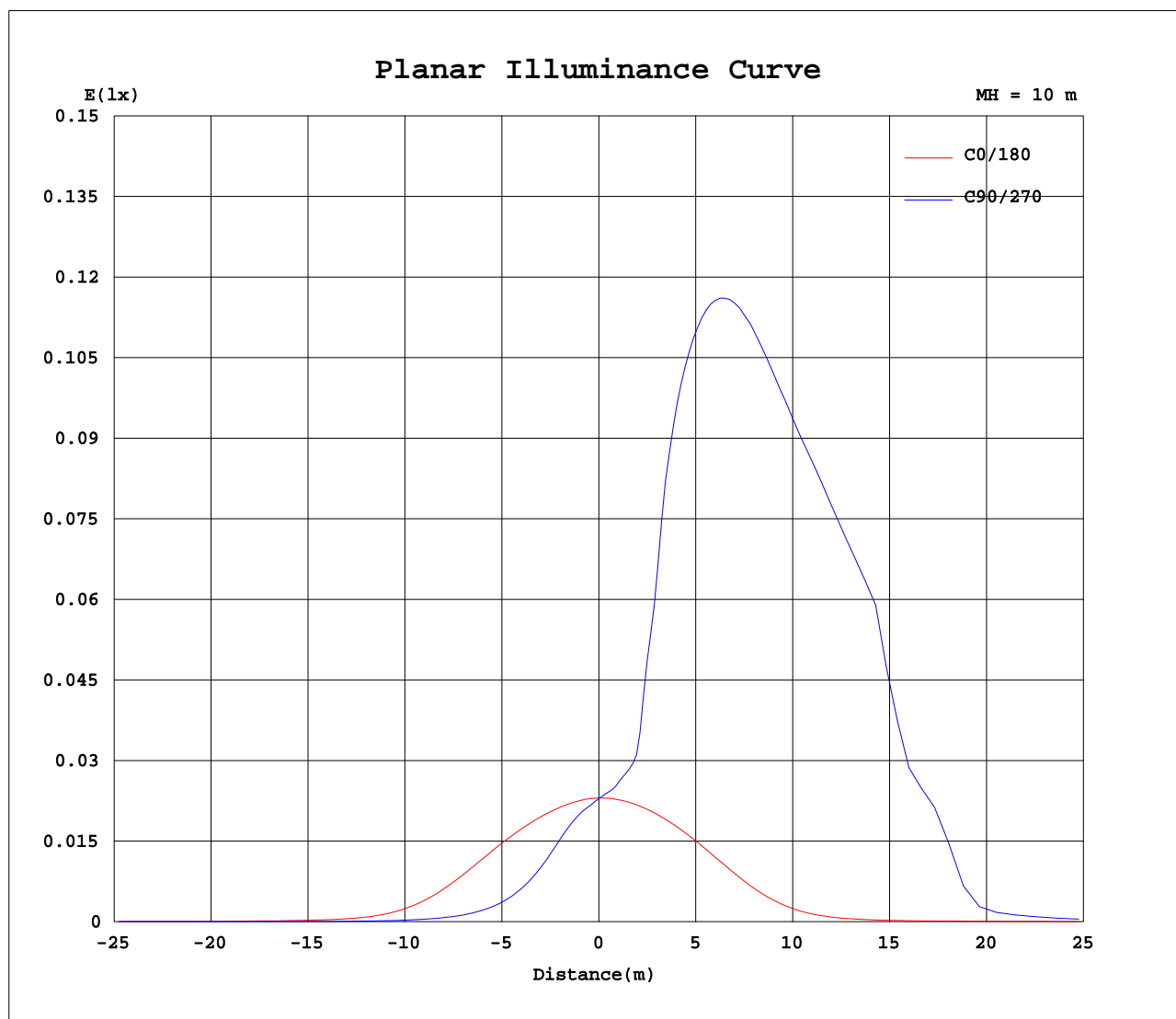
| AvgL | cd/m2 |
|----------------|-------|
| L_0~180(65)av | 2 |
| L_0~180(75)av | 2 |
| L_0~180(85)av | 1 |
| L_90~270(65)av | 21 |
| L_90~270(75)av | 3 |
| L_90~270(85)av | 0 |
| L_45(65)av | 90 |
| L_45(75)av | 5 |
| L_45(85)av | 0 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Oliver
 Test Date:2019-12-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:2.499m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Oliver
Test Date: 2019-12-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Humidity: 65.0%
Test Distance: 2.499m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

| C(DEG) γ (DEG) | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 |
| 5 | 2.28 | 2.22 | 2.17 | 2.13 | 2.10 | 2.08 | 2.07 | 2.08 | 2.10 | 2.14 | 2.18 | 2.24 | 2.30 | 2.36 | 2.42 | 2.47 | 2.50 | 2.54 | 2.56 |
| 10 | 2.26 | 2.14 | 2.03 | 1.93 | 1.83 | 1.76 | 1.74 | 1.77 | 1.85 | 1.95 | 2.06 | 2.17 | 2.29 | 2.42 | 2.57 | 2.78 | 2.94 | 3.05 | 3.10 |
| 15 | 2.23 | 2.05 | 1.85 | 1.63 | 1.44 | 1.33 | 1.30 | 1.34 | 1.47 | 1.67 | 1.90 | 2.09 | 2.28 | 2.48 | 2.82 | 3.25 | 4.70 | 5.67 | 5.95 |
| 20 | 2.17 | 1.93 | 1.61 | 1.28 | 1.05 | 0.93 | 0.89 | 0.93 | 1.07 | 1.31 | 1.66 | 1.98 | 2.23 | 2.56 | 3.13 | 5.62 | 8.27 | 10.1 | 10.5 |
| 25 | 2.08 | 1.76 | 1.31 | 0.94 | 0.72 | 0.62 | 0.59 | 0.62 | 0.73 | 0.96 | 1.36 | 1.81 | 2.14 | 2.61 | 4.76 | 8.97 | 12.0 | 13.8 | 14.3 |
| 30 | 1.90 | 1.52 | 0.99 | 0.65 | 0.48 | 0.39 | 0.37 | 0.40 | 0.48 | 0.66 | 1.03 | 1.57 | 1.95 | 2.56 | 6.65 | 11.8 | 15.1 | 17.1 | 17.7 |
| 35 | 1.59 | 1.18 | 0.68 | 0.42 | 0.30 | 0.25 | 0.23 | 0.25 | 0.30 | 0.43 | 0.70 | 1.22 | 1.63 | 2.44 | 8.92 | 14.1 | 17.9 | 20.3 | 21.0 |
| 40 | 1.15 | 0.80 | 0.43 | 0.26 | 0.18 | 0.15 | 0.14 | 0.15 | 0.18 | 0.26 | 0.43 | 0.81 | 1.18 | 2.94 | 10.1 | 16.1 | 20.5 | 23.1 | 23.8 |
| 45 | 0.69 | 0.46 | 0.25 | 0.15 | 0.11 | 0.09 | 0.09 | 0.09 | 0.11 | 0.15 | 0.24 | 0.46 | 0.69 | 3.17 | 10.8 | 17.6 | 22.6 | 25.7 | 26.5 |
| 50 | 0.35 | 0.24 | 0.14 | 0.09 | 0.07 | 0.06 | 0.06 | 0.06 | 0.06 | 0.08 | 0.13 | 0.23 | 0.34 | 3.36 | 10.9 | 18.6 | 24.6 | 28.5 | 29.5 |
| 55 | 0.19 | 0.13 | 0.08 | 0.05 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 | 0.08 | 0.13 | 0.18 | 2.44 | 9.03 | 19.3 | 26.7 | 30.6 | 31.3 |
| 60 | 0.13 | 0.08 | 0.05 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.05 | 0.08 | 0.13 | 1.15 | 5.14 | 16.5 | 20.7 | 17.6 | 17.1 |
| 65 | 0.10 | 0.06 | 0.03 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.03 | 0.05 | 0.10 | 0.31 | 1.33 | 7.79 | 5.63 | 1.96 | 1.72 |
| 70 | 0.08 | 0.04 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.02 | 0.04 | 0.08 | 0.18 | 0.42 | 0.96 | 0.96 | 0.67 | 0.56 |
| 75 | 0.06 | 0.03 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.02 | 0.05 | 0.10 | 0.15 | 0.25 | 0.23 | 0.18 | 0.15 |
| 80 | 0.03 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.03 | 0.04 | 0.04 | 0.04 | 0.01 | 0.00 | 0.00 |
| 85 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 90 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 100 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 105 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 110 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 115 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 120 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 125 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 130 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 135 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 140 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 145 | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 150 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 |
| 155 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 |
| 160 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 |
| 165 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 170 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
| 175 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 180 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--2

UNIT: cd

| C(DEG) γ (DEG) | 285 | 300 | 315 | 330 | 345 | | | | | | | | | | | | | |
|-------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0 | 2.29 | 2.29 | 2.29 | 2.29 | 2.29 | | | | | | | | | | | | | |
| 5 | 2.54 | 2.50 | 2.45 | 2.40 | 2.34 | | | | | | | | | | | | | |
| 10 | 3.04 | 2.92 | 2.74 | 2.53 | 2.38 | | | | | | | | | | | | | |
| 15 | 5.61 | 4.60 | 3.18 | 2.76 | 2.42 | | | | | | | | | | | | | |
| 20 | 9.89 | 8.04 | 5.44 | 3.05 | 2.49 | | | | | | | | | | | | | |
| 25 | 13.6 | 11.8 | 8.58 | 4.49 | 2.54 | | | | | | | | | | | | | |
| 30 | 16.9 | 14.7 | 11.3 | 6.17 | 2.49 | | | | | | | | | | | | | |
| 35 | 20.0 | 17.4 | 13.5 | 8.38 | 2.34 | | | | | | | | | | | | | |
| 40 | 22.7 | 19.8 | 15.3 | 9.48 | 2.59 | | | | | | | | | | | | | |
| 45 | 25.2 | 21.8 | 16.7 | 10.1 | 2.69 | | | | | | | | | | | | | |
| 50 | 27.9 | 23.6 | 17.6 | 10.1 | 2.95 | | | | | | | | | | | | | |
| 55 | 29.9 | 25.6 | 18.2 | 8.68 | 2.24 | | | | | | | | | | | | | |
| 60 | 17.4 | 20.9 | 16.0 | 4.85 | 1.00 | | | | | | | | | | | | | |
| 65 | 2.02 | 7.51 | 7.39 | 1.33 | 0.33 | | | | | | | | | | | | | |
| 70 | 0.70 | 1.03 | 1.04 | 0.45 | 0.19 | | | | | | | | | | | | | |
| 75 | 0.19 | 0.25 | 0.29 | 0.17 | 0.11 | | | | | | | | | | | | | |
| 80 | 0.00 | 0.03 | 0.06 | 0.05 | 0.05 | | | | | | | | | | | | | |
| 85 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | | | | | | | | | | | | | |
| 90 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 100 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 105 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 110 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 115 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 120 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 125 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 130 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 135 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 140 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 145 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 150 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 155 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 160 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 165 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 170 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 175 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | |
| 180 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-06

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks: