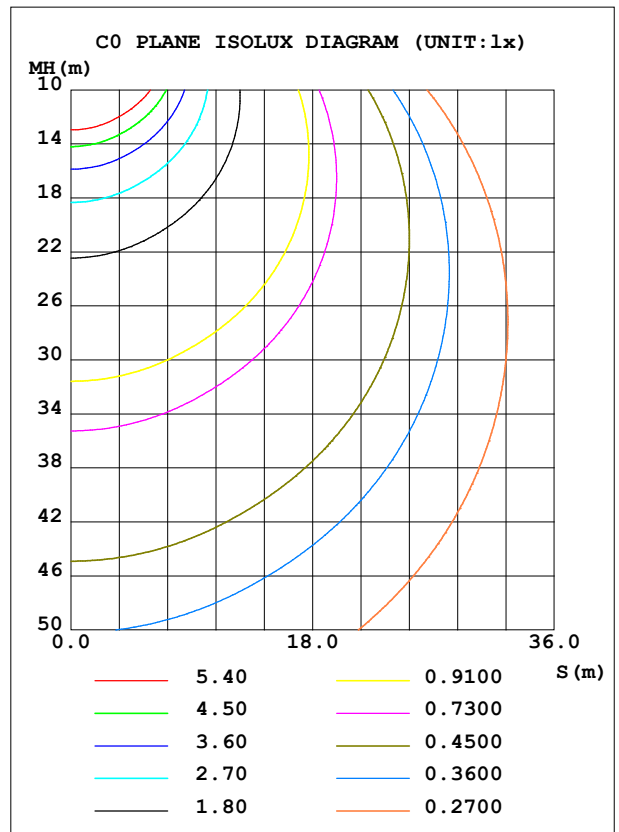
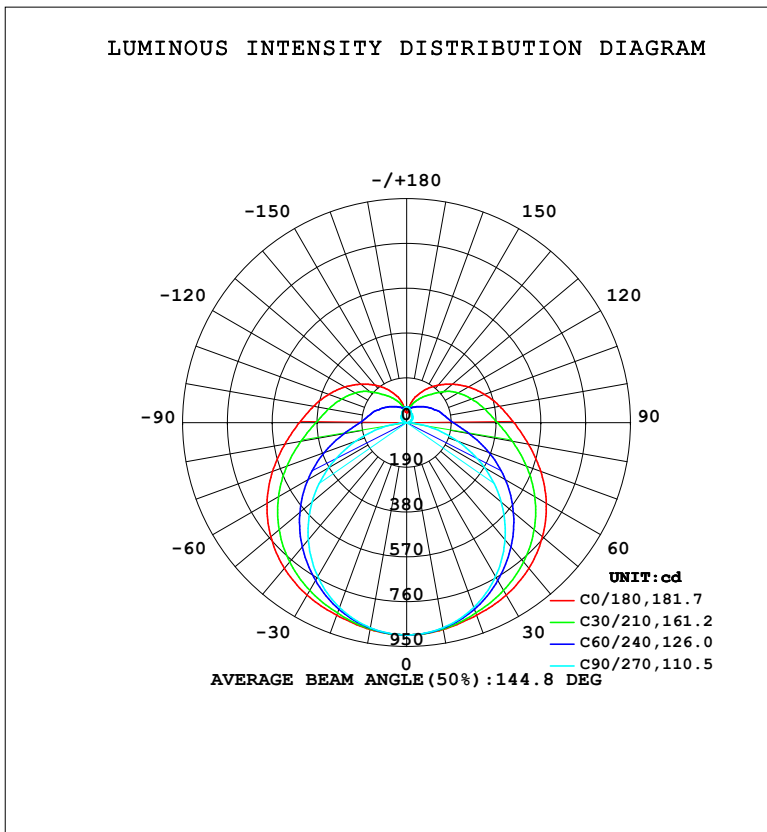


**LUMINAIRE PHOTOMETRIC TEST REPORT**

|  |       |                  |
|--|-------|------------------|
| Test:U:230.42V I:0.1328A P:29.004W PF:0.9479 Freq:49.99Hz    |       |                  |
| UTHDi:0.21% ITHDi:11.23% KDisp:0.9511 Lamp Flux:4600.35x1 lm |       |                  |
| NAME: RH-TP01-30W  | TYPE: | WEIGHT:          |
| SPEC.:   | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |

| DATA OF LAMP      |         | PHOTOMETRIC DATA                  |         |  |           |
|-------------------|---------|-----------------------------------|---------|--|-----------|
| MODEL             | TP01    | Imax (cd)                         | 900.6   | S/MH (C0/180)                              | 1.42      |
| NOMINAL POWER (W) | 30      | LOR (%)                           | 100.0   | S/MH (C90/270)                             | 1.25      |
| RATED VOLTAGE (V) | 100     | TOTAL FLUX (lm)                   | 4600.3  | <input type="checkbox"/> UP, DN (C0-180)   | 12.0,38.0 |
| NOMINAL FLUX (lm) | 4600.35 | CIE CLASS                         | SEMI-D. | <input type="checkbox"/> UP, DN (C180-360) | 12.0,38.0 |
| LAMPS INSIDE      | 1       | <input type="checkbox"/> up (%)   | 23.9    | CIBSE SHR NOM                              | 1.50      |
| TEST VOLTAGE (V)  | 100     | <input type="checkbox"/> down (%) | 76.1    | CIBSE SHR MAX                              | 1.55      |



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: QC  
 Test Date: 2022-06-17

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity: 65.0%  
 Test Distance: 10.640m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

| °   | C0                    | C45   | C90   | C135  | C180  | C225  | C270  | C315  | °       | □ zone  | □ total | %lum, lamp |
|-----|-----------------------|-------|-------|-------|-------|-------|-------|-------|---------|---------|---------|------------|
| 10  | 891.4                 | 887.8 | 883.7 | 887.8 | 891.4 | 887.8 | 883.7 | 887.8 | 0- 10   | 85.35   | 85.35   | 1.86,1.86  |
| 20  | 869.3                 | 850.4 | 834.2 | 850.4 | 869.3 | 850.4 | 834.2 | 850.4 | 10- 20  | 246.3   | 331.7   | 7.21,7.21  |
| 30  | 844.9                 | 797.5 | 754.5 | 797.5 | 844.9 | 797.5 | 754.5 | 797.5 | 20- 30  | 381.7   | 713.3   | 15.5,15.5  |
| 40  | 806.9                 | 732.5 | 649.6 | 732.5 | 806.9 | 732.5 | 649.6 | 732.5 | 30- 40  | 480.0   | 1193    | 25.9,25.9  |
| 50  | 752.5                 | 653.5 | 523.5 | 653.5 | 752.5 | 653.5 | 523.5 | 653.5 | 40- 50  | 532.3   | 1726    | 37.5,37.5  |
| 60  | 684.3                 | 563.0 | 381.2 | 563.0 | 684.3 | 563.0 | 381.2 | 563.0 | 50- 60  | 535.0   | 2261    | 49.1,49.1  |
| 70  | 605.6                 | 466.3 | 229.4 | 466.3 | 605.6 | 466.3 | 229.4 | 466.3 | 60- 70  | 491.7   | 2752    | 59.8,59.8  |
| 80  | 524.3                 | 373.5 | 85.44 | 373.5 | 524.3 | 373.5 | 85.44 | 373.5 | 70- 80  | 414.9   | 3167    | 68.8,68.8  |
| 90  | 455.3                 | 303.8 | 6.208 | 303.8 | 455.3 | 303.8 | 6.208 | 303.8 | 80- 90  | 332.5   | 3500    | 76.1,76.1  |
| 100 | 401.4                 | 260.8 | 10.01 | 260.8 | 401.4 | 260.8 | 10.01 | 260.8 | 90-100  | 276.7   | 3776    | 82.1,82.1  |
| 110 | 352.4                 | 227.1 | 16.29 | 227.1 | 352.4 | 227.1 | 16.29 | 227.1 | 100-110 | 235.5   | 4012    | 87.2,87.2  |
| 120 | 303.0                 | 191.0 | 23.33 | 191.0 | 303.0 | 191.0 | 23.33 | 191.0 | 110-120 | 193.3   | 4205    | 91.4,91.4  |
| 130 | 254.6                 | 152.9 | 30.33 | 152.9 | 254.6 | 152.9 | 30.33 | 152.9 | 120-130 | 148.9   | 4354    | 94.6,94.6  |
| 140 | 207.8                 | 125.0 | 36.39 | 125.0 | 207.8 | 125.0 | 36.39 | 125.0 | 130-140 | 107.0   | 4461    | 97,97      |
| 150 | 163.2                 | 100.3 | 42.50 | 100.3 | 163.2 | 100.3 | 42.50 | 100.3 | 140-150 | 70.88   | 4532    | 98.5,98.5  |
| 160 | 119.2                 | 79.90 | 52.94 | 79.90 | 119.2 | 79.90 | 52.94 | 79.90 | 150-160 | 41.70   | 4574    | 99.4,99.4  |
| 170 | 61.62                 | 65.42 | 62.39 | 65.42 | 61.62 | 65.42 | 62.39 | 65.42 | 160-170 | 20.77   | 4594    | 99.9,99.9  |
| 180 | 43.87                 | 66.17 | 67.94 | 66.17 | 43.87 | 66.17 | 67.94 | 66.17 | 170-180 | 5.971   | 4600    | 100,100    |
| DEG | LUMINOUS INTENSITY:cd |       |       |       |       |       |       |       |         | UNIT:lm |         |            |

Conical surface Flux(90deg): 1456.1 lm

%lum = 31.7%

%lamp = 31.7%

Conical surface Flux(130deg): 2514.4 lm

%lum = 54.7%

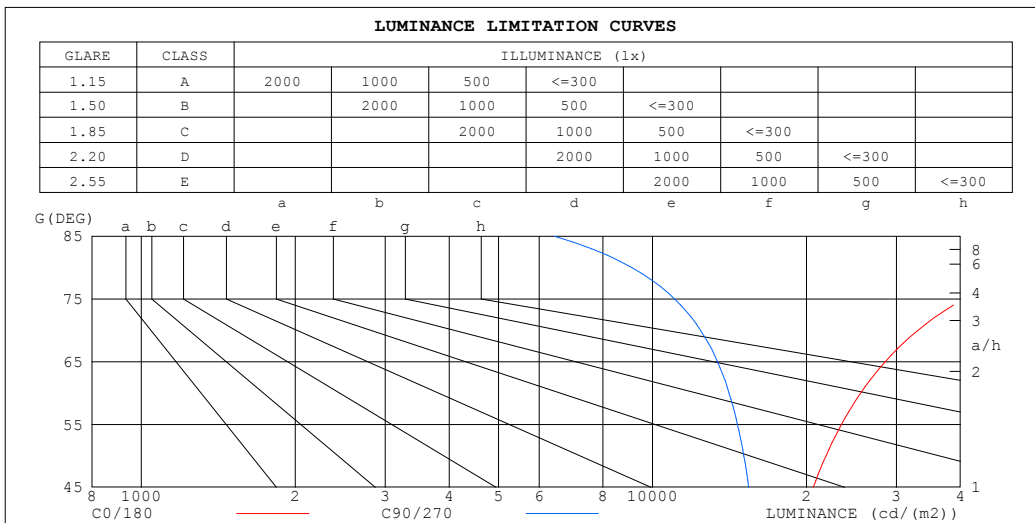
%lamp = 54.7%

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:QC  
 Test Date:2022-06-17

□ Range: 0 - 180DEG  
 □ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity:65.0%  
 Test Distance:10.640m [K=1.0000]  
 Remarks:

**LUMINANCE LIMITATION CURVES**

|   |              |                         |
|---|--------------|-------------------------|
| <b>Test:U:230.42V I:0.1328A P:29.004W PF:0.9479 Freq:49.99Hz</b><br><b>UTHDi:0.21% ITHDi:11.23% KDisp:0.9511 Lamp Flux:4600.35x1 lm</b> |              |                         |
| <b>NAME: RH-TP01-30W</b>  | <b>TYPE:</b> | <b>WEIGHT:</b>          |
| <b>SPEC.:</b>   | <b>DIM.:</b> | <b>SERIAL No.:</b>      |
| <b>MFR.:</b>  | <b>SUR.:</b> | <b>Shielding Angle:</b> |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 104420 | 6429    |
| 80                | 56329  | 9112    |
| 75                | 40688  | 11048   |
| 70                | 33037  | 12420   |
| 65                | 28524  | 13406   |
| 60                | 25534  | 14119   |
| 55                | 23423  | 14661   |
| 50                | 21842  | 15082   |
| 45                | 20626  | 15421   |

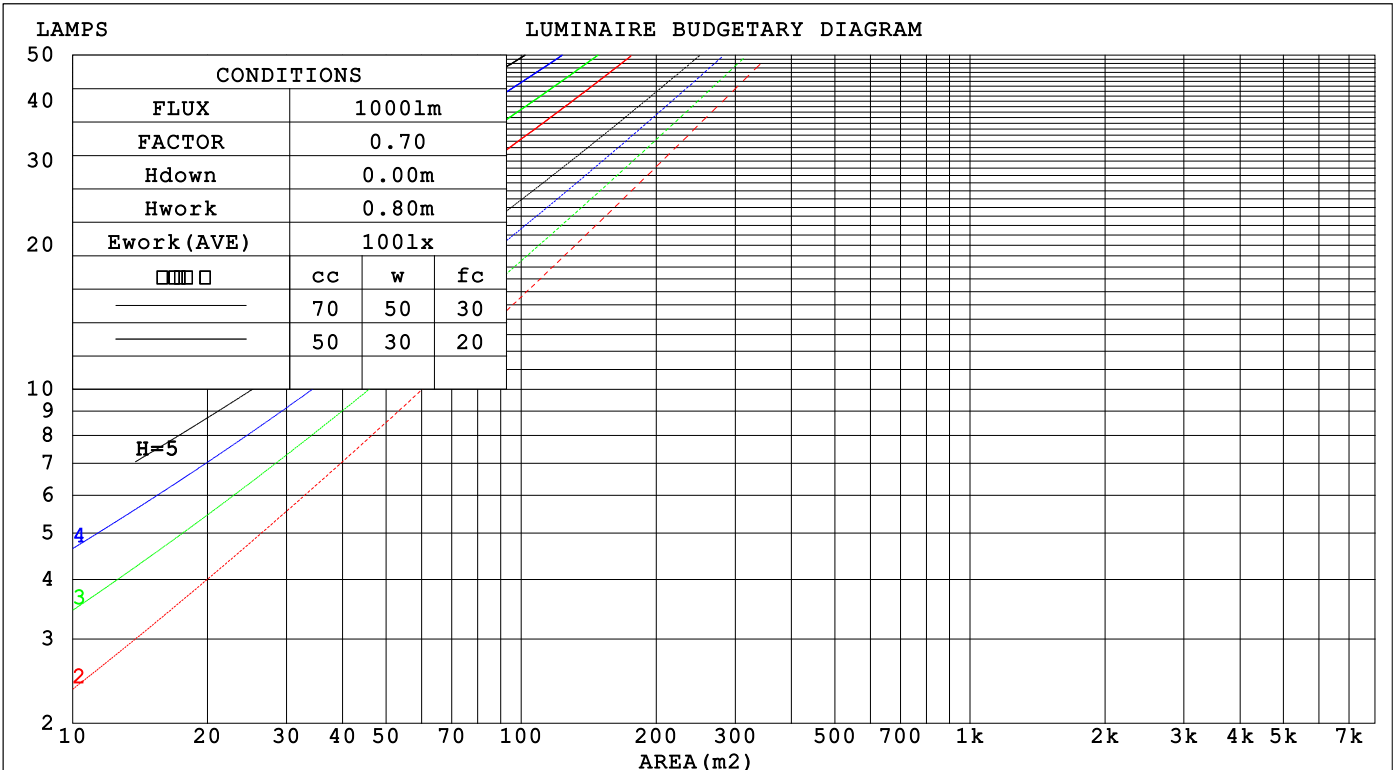
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: QC  
 Test Date: 2022-06-17

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity: 65.0%  
 Test Distance: 10.640m [K=1.0000]  
 Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

|  |       |                  |
|--|-------|------------------|
| Test:U:230.42V I:0.1328A P:29.004W PF:0.9479 Freq:49.99Hz    |       |                  |
| UTHdi:0.21% ITHdi:11.23% KDisp:0.9511 Lamp Flux:4600.35x1 lm |       |                  |
| NAME: RH-TP01-30W  | TYPE: | WEIGHT:          |
| SPEC.:   | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |

|                             |                       |      |      |      |      |      |                                 |     |     |     |     |     |     |     |     |     |
|-----------------------------|-----------------------|------|------|------|------|------|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| <input type="checkbox"/> cc | 80%                   |      |      | 70%  |      |      | 50%                             |     |     | 30% |     |     | 10% |     |     | 0   |
| <input type="checkbox"/> w  | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0   |
| <input type="checkbox"/> fc | 20%                   |      |      | 20%  |      |      | 20%                             |     |     | 20% |     |     | 20% |     |     | 0   |
| RCR                         | RCR:Room Cavity Ratio |      |      |      |      |      | Coefficients of Utilization(CU) |     |     |     |     |     |     |     |     |     |
| 0.0                         | 1.13                  | 1.13 | 1.13 | 1.08 | 1.08 | 1.08 | .98                             | .98 | .98 | .89 | .89 | .89 | .80 | .80 | .80 | .76 |
| 1.0                         | .94                   | .89  | .84  | .90  | .85  | .81  | .81                             | .77 | .74 | .73 | .70 | .67 | .66 | .63 | .61 | .57 |
| 2.0                         | .81                   | .73  | .66  | .77  | .70  | .64  | .69                             | .64 | .59 | .62 | .58 | .54 | .56 | .52 | .49 | .46 |
| 3.0                         | .70                   | .61  | .54  | .67  | .58  | .52  | .60                             | .53 | .48 | .54 | .49 | .44 | .49 | .44 | .40 | .37 |
| 4.0                         | .61                   | .52  | .45  | .58  | .50  | .43  | .53                             | .46 | .40 | .48 | .42 | .37 | .43 | .38 | .34 | .31 |
| 5.0                         | .54                   | .45  | .38  | .52  | .43  | .37  | .47                             | .40 | .34 | .43 | .36 | .32 | .38 | .33 | .29 | .26 |
| 6.0                         | .49                   | .39  | .33  | .46  | .38  | .32  | .42                             | .35 | .30 | .38 | .32 | .27 | .35 | .29 | .25 | .23 |
| 7.0                         | .44                   | .35  | .29  | .42  | .34  | .28  | .38                             | .31 | .26 | .35 | .29 | .24 | .31 | .26 | .22 | .20 |
| 8.0                         | .40                   | .31  | .25  | .38  | .30  | .24  | .35                             | .28 | .23 | .32 | .26 | .21 | .29 | .24 | .20 | .18 |
| 9.0                         | .36                   | .28  | .22  | .35  | .27  | .22  | .32                             | .25 | .20 | .29 | .23 | .19 | .27 | .21 | .18 | .16 |
| 10.0                        | .33                   | .25  | .20  | .32  | .25  | .20  | .29                             | .23 | .18 | .27 | .21 | .17 | .25 | .20 | .16 | .14 |



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:QC  
 Test Date:2022-06-17

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity:65.0%  
 Test Distance:10.640m [K=1.0000]  
 Remarks:

**WEC AND CCEC**

|  |       |                  |
|--|-------|------------------|
| Test:U:230.42V I:0.1328A P:29.004W PF:0.9479 Freq:49.99Hz    |       |                  |
| UTHDi:0.21% ITHDi:11.23% KDisp:0.9511 Lamp Flux:4600.35x1 lm |       |                  |
| NAME: RH-TP01-30W  | TYPE: | WEIGHT:          |
| SPEC.:   | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |

|                             |                       |                |                                 |                |                |   |
|-----------------------------|-----------------------|----------------|---------------------------------|----------------|----------------|---|
| <input type="checkbox"/> cc | 80%                   | 70%            | 50%                             | 30%            | 10%            | 0 |
| <input type="checkbox"/> w  | 50% 30% 10%           | 50% 30% 10%    | 50% 30% 10%                     | 50% 30% 10%    | 50% 30% 10%    | 0 |
| <input type="checkbox"/> fc | 20%                   | 20%            | 20%                             | 20%            | 20%            | 0 |
| RCR                         | RCR:Room Cavity Ratio |                | Wall Exitance Coefficients(WEC) |                |                |   |
| 0.0                         |                       |                |                                 |                |                |   |
| 1.0                         | .381 .216 .069        | .366 .209 .066 | .339 .195 .062                  | .314 .181 .058 | .291 .169 .054 |   |
| 2.0                         | .330 .181 .055        | .316 .174 .054 | .292 .162 .050                  | .269 .151 .047 | .248 .140 .044 |   |
| 3.0                         | .293 .156 .047        | .281 .150 .045 | .259 .140 .043                  | .238 .130 .040 | .219 .121 .037 |   |
| 4.0                         | .264 .137 .040        | .253 .132 .039 | .233 .123 .037                  | .214 .115 .035 | .196 .107 .032 |   |
| 5.0                         | .240 .122 .035        | .230 .118 .034 | .211 .110 .032                  | .194 .102 .030 | .178 .095 .029 |   |
| 6.0                         | .220 .110 .032        | .211 .106 .031 | .194 .099 .029                  | .178 .092 .027 | .163 .086 .026 |   |
| 7.0                         | .203 .100 .028        | .195 .097 .028 | .179 .090 .026                  | .164 .084 .025 | .151 .078 .023 |   |
| 8.0                         | .188 .092 .026        | .180 .089 .025 | .166 .083 .024                  | .153 .077 .022 | .140 .072 .021 |   |
| 9.0                         | .175 .085 .024        | .168 .082 .023 | .155 .077 .022                  | .143 .071 .020 | .131 .066 .019 |   |
| 10.0                        | .164 .079 .022        | .158 .076 .021 | .145 .071 .020                  | .134 .066 .019 | .123 .062 .018 |   |

|                             |                       |                |  |                |                |   |
|-----------------------------|-----------------------|----------------|--|----------------|----------------|---|
| <input type="checkbox"/> cc | 80%                   | 70%            | 50%  | 30%            | 10%            | 0 |
| <input type="checkbox"/> w  | 50% 30% 10%           | 50% 30% 10%    | 50% 30% 10%                                | 50% 30% 10%    | 50% 30% 10%    | 0 |
| <input type="checkbox"/> fc | 20%                   | 20%            | 20%  | 20%            | 20%            | 0 |
| RCR                         | RCR:Room Cavity Ratio |                | Ceiling Cavity Exitance Coefficients(CCEC) |                |                |   |
| 0.0                         | .373 .373 .373        | .319 .319 .319 | .217 .217 .217                             | .125 .125 .125 | .040 .040 .040 |   |
| 1.0                         | .369 .339 .313        | .316 .291 .269 | .216 .200 .186                             | .124 .116 .108 | .040 .037 .035 |   |
| 2.0                         | .362 .317 .278        | .310 .273 .241 | .213 .189 .168                             | .123 .110 .098 | .039 .035 .032 |   |
| 3.0                         | .355 .300 .257        | .304 .259 .223 | .209 .180 .156                             | .121 .105 .092 | .039 .034 .030 |   |
| 4.0                         | .347 .288 .243        | .298 .249 .211 | .205 .174 .149                             | .119 .102 .088 | .038 .033 .029 |   |
| 5.0                         | .340 .278 .233        | .292 .241 .203 | .201 .168 .143                             | .116 .099 .085 | .038 .032 .028 |   |
| 6.0                         | .332 .271 .226        | .286 .234 .197 | .197 .164 .139                             | .114 .097 .083 | .037 .032 .027 |   |
| 7.0                         | .325 .264 .221        | .280 .229 .193 | .193 .161 .137                             | .112 .095 .081 | .036 .031 .027 |   |
| 8.0                         | .319 .259 .217        | .274 .224 .189 | .190 .158 .134                             | .110 .093 .080 | .036 .030 .027 |   |
| 9.0                         | .313 .254 .214        | .269 .220 .187 | .187 .155 .133                             | .109 .091 .079 | .035 .030 .026 |   |
| 10.0                        | .307 .250 .212        | .265 .217 .185 | .184 .153 .131                             | .107 .090 .078 | .035 .030 .026 |   |

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:QC  
 Test Date:2022-06-17

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity:65.0%  
 Test Distance:10.640m [K=1.0000]  
 Remarks:

**UGR(Unified Glare Rating) Table**

|   |                  |      |       |      |      |                  |      |      |      |      |
|---|------------------|------|-------|------|------|------------------|------|------|------|------|
| Test:U:230.42V I:0.1328A P:29.004W PF:0.9479 Freq:49.99Hz<br>UTHDi:0.21% ITHDi:11.23% KDisp:0.9511 Lamp Flux:4600.35x1 lm |                  |      |       |      |      |                  |      |      |      |      |
| NAME: RH-TP01-30W   |                  |      | TYPE: |      |      | WEIGHT:          |      |      |      |      |
| SPEC.:  |                  |      | DIM.: |      |      | SERIAL No.:      |      |      |      |      |
| MFR.:   |                  |      | SUR.: |      |      | Shielding Angle: |      |      |      |      |
| 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   | 17.5             | 18.8 | 18.1  | 19.4 | 20.1 | 15.1             | 16.4 | 15.6 | 16.9 | 17.6 |
| 3H  | 20.3             | 21.5 | 20.9  | 22.1 | 22.8 | 16.5             | 17.7 | 17.1 | 18.3 | 19.0 |
| 4H  | 21.8             | 22.9 | 22.4  | 23.6 | 24.3 | 17.0             | 18.2 | 17.7 | 18.8 | 19.5 |
| 6H  | 23.4             | 24.5 | 24.1  | 25.2 | 25.9 | 17.4             | 18.5 | 18.1 | 19.1 | 19.9 |
| 8H  | 24.4             | 25.4 | 25.0  | 26.1 | 26.8 | 17.5             | 18.5 | 18.2 | 19.2 | 20.0 |
| 12H   | 25.4             | 26.4 | 26.1  | 27.1 | 27.9 | 17.5             | 18.5 | 18.2 | 19.2 | 20.0 |
| 4H 2H   | 18.1             | 19.2 | 18.7  | 19.8 | 20.6 | 16.3             | 17.4 | 16.9 | 18.1 | 18.8 |
| 3H  | 21.0             | 22.0 | 21.7  | 22.7 | 23.5 | 18.0             | 19.0 | 18.7 | 19.7 | 20.5 |
| 4H  | 22.8             | 23.7 | 23.4  | 24.4 | 25.2 | 18.8             | 19.7 | 19.5 | 20.4 | 21.2 |
| 6H  | 24.6             | 25.5 | 25.4  | 26.2 | 27.0 | 19.3             | 20.1 | 20.0 | 20.9 | 21.7 |
| 8H  | 25.7             | 26.5 | 26.4  | 27.2 | 28.1 | 19.5             | 20.3 | 20.2 | 21.0 | 21.9 |
| 12H   | 26.9             | 27.6 | 27.7  | 28.4 | 29.3 | 19.6             | 20.3 | 20.4 | 21.1 | 21.9 |
| 8H 4H   | 23.1             | 23.8 | 23.8  | 24.6 | 25.4 | 20.0             | 20.7 | 20.7 | 21.5 | 22.3 |
| 6H  | 25.3             | 25.9 | 26.0  | 26.7 | 27.6 | 21.0             | 21.6 | 21.7 | 22.4 | 23.3 |
| 8H  | 26.5             | 27.1 | 27.3  | 27.9 | 28.8 | 21.4             | 21.9 | 22.1 | 22.7 | 23.6 |
| 12H   | 28.0             | 28.5 | 28.8  | 29.3 | 30.3 | 21.7             | 22.2 | 22.4 | 23.0 | 23.9 |
| 12H 4H  | 23.1             | 23.8 | 23.8  | 24.5 | 25.4 | 20.4             | 21.1 | 21.1 | 21.8 | 22.7 |
| 6H  | 25.4             | 26.0 | 26.2  | 26.7 | 27.7 | 21.6             | 22.2 | 22.4 | 23.0 | 23.9 |
| 8H  | 26.8             | 27.3 | 27.6  | 28.1 | 29.0 | 22.2             | 22.7 | 23.0 | 23.5 | 24.5 |
| Variations with the observer position at spacings(CIE Pub.117):   |                  |      |       |      |      |                  |      |      |      |      |
| S = 1.0H  | + 0.1 / - 0.1    |      |       |      |      | + 0.1 / - 0.1    |      |      |      |      |
| 1.5H  | + 0.2 / - 0.3    |      |       |      |      | + 0.2 / - 0.2    |      |      |      |      |
| 2.0H  | + 0.3 / - 0.4    |      |       |      |      | + 0.2 / - 0.4    |      |      |      |      |

CIE Pub.117, 4600 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 5.3)  
 Area: 0.054 m2

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:QC  
 Test Date:2022-06-17

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity:65.0%  
 Test Distance:10.640m [K=1.0000]  
 Remarks:

**UTILIZATION FACTORS TABLE**

|   |       |                  |
|---|-------|------------------|
| Test:U:230.42V I:0.1328A P:29.004W PF:0.9479 Freq:49.99Hz<br>UTHDi:0.21% ITHDi:11.23% KDisp:0.9511 Lamp Flux:4600.35x1 lm |       |                  |
| NAME: RH-TP01-30W   | TYPE: | WEIGHT:          |
| SPEC.:  | DIM.: | SERIAL No.:      |
| MFR.:   | SUR.: | Shielding Angle: |

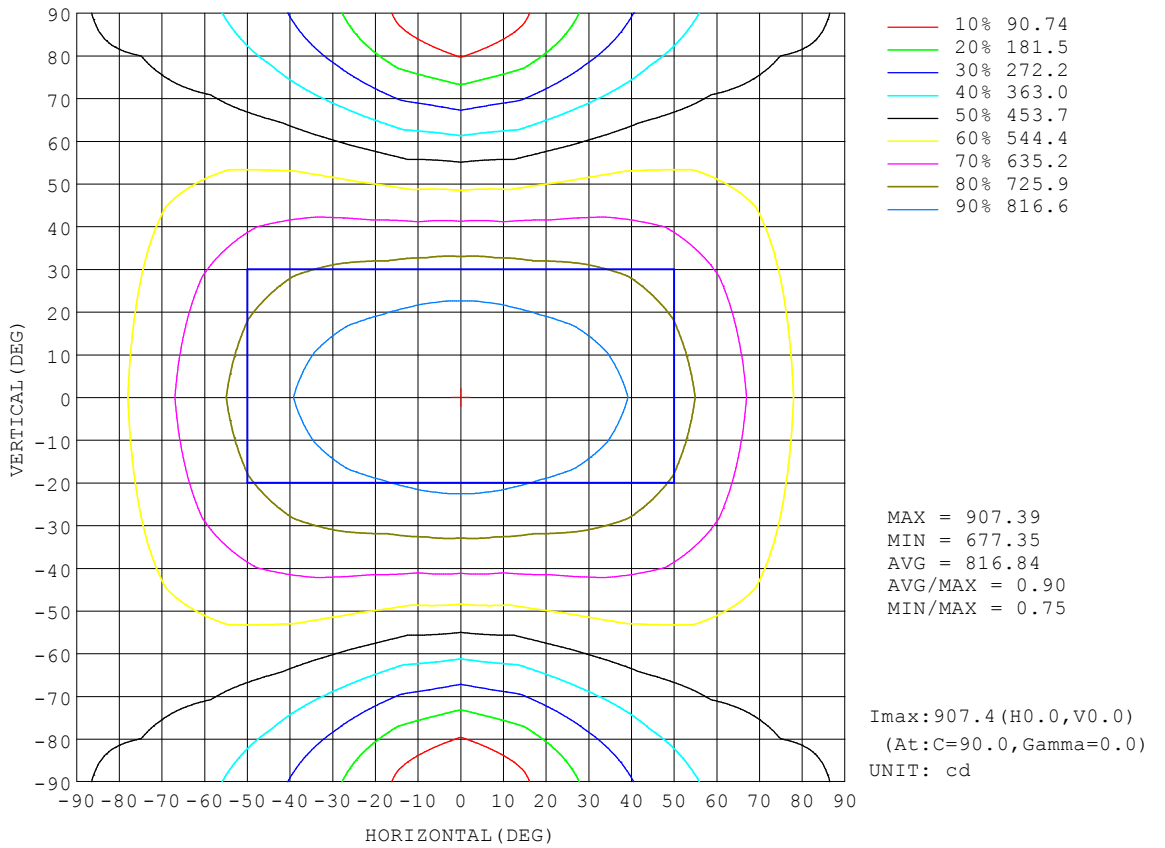
| REFLECTANCE                      |  |     |           |     |     |     |               |     |     |        |
|----------------------------------|--|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling                          | 0.8  | 0.8 | 0.8       | 0.7 | 0.7 | 0.7 | 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                         | 46   | 34  | 26        | 45  | 33  | 26  | 42            | 32  | 25  | 19     |
| 0.80                             | 55   | 42  | 34        | 53  | 41  | 34  | 50            | 39  | 32  | 24     |
| 1.00                             | 63   | 50  | 41        | 61  | 49  | 41  | 56            | 48  | 39  | 30     |
| 1.25                             | 70   | 57  | 48        | 67  | 55  | 47  | 62            | 52  | 45  | 35     |
| 1.50                             | 75   | 63  | 54        | 72  | 61  | 53  | 66            | 57  | 50  | 39     |
| 2.00                             | 82   | 71  | 63        | 79  | 69  | 61  | 72            | 64  | 57  | 45     |
| 2.50                             | 87   | 76  | 68        | 83  | 74  | 66  | 76            | 68  | 62  | 48     |
| 3.00                             | 91   | 81  | 74        | 86  | 78  | 71  | 79            | 72  | 66  | 52     |
| 4.00                             | 95   | 87  | 81        | 91  | 84  | 78  | 83            | 77  | 72  | 56     |
| 5.00                             | 98   | 91  | 85        | 94  | 87  | 82  | 85            | 80  | 76  | 59     |
| 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:25.3°C  
 Operators:QC  
 Test Date:2022-06-17

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity:65.0%  
 Test Distance:10.640m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

|   |       |                  |
|---|-------|------------------|
| Test:U:230.42V I:0.1328A P:29.004W PF:0.9479 Freq:49.99Hz<br>UTHDi:0.21% ITHDi:11.23% KDisp:0.9511 Lamp Flux:4600.35x1 lm |       |                  |
| NAME: RH-TP01-30W   | TYPE: | WEIGHT:          |
| SPEC.:  | DIM.: | SERIAL No.:      |
| MFR.:   | SUR.: | Shielding Angle: |



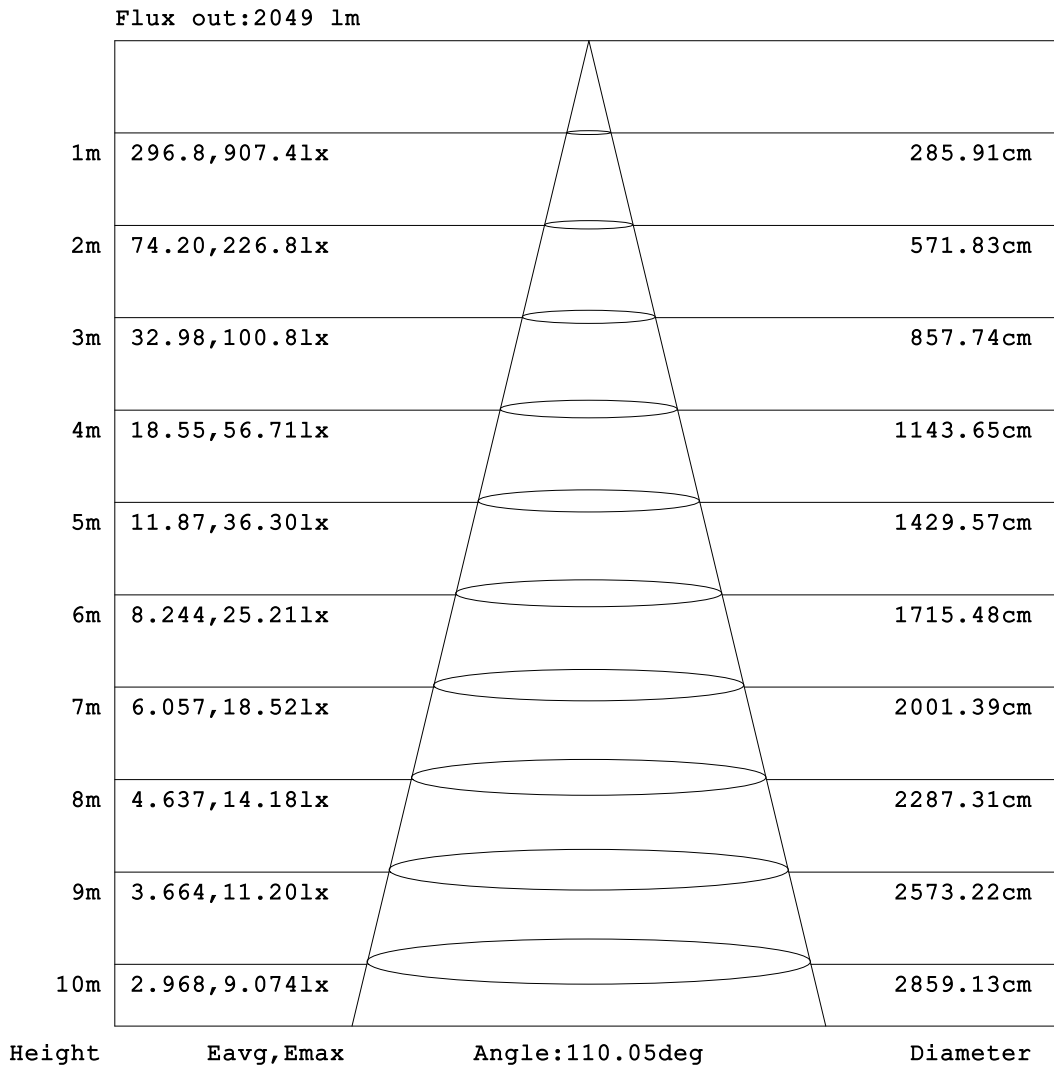
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:QC  
 Test Date:2022-06-17

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity:65.0%  
 Test Distance:10.640m [K=1.0000]  
 Remarks:



**AAI Figure**

|  |       |                  |
|--|-------|------------------|
| Test:U:230.42V I:0.1328A P:29.004W PF:0.9479 Freq:49.99Hz    |       |                  |
| UTHDi:0.21% ITHDi:11.23% KDisp:0.9511 Lamp Flux:4600.35x1 lm |       |                  |
| NAME: RH-TP01-30W  | TYPE: | WEIGHT:          |
| SPEC.:   | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |



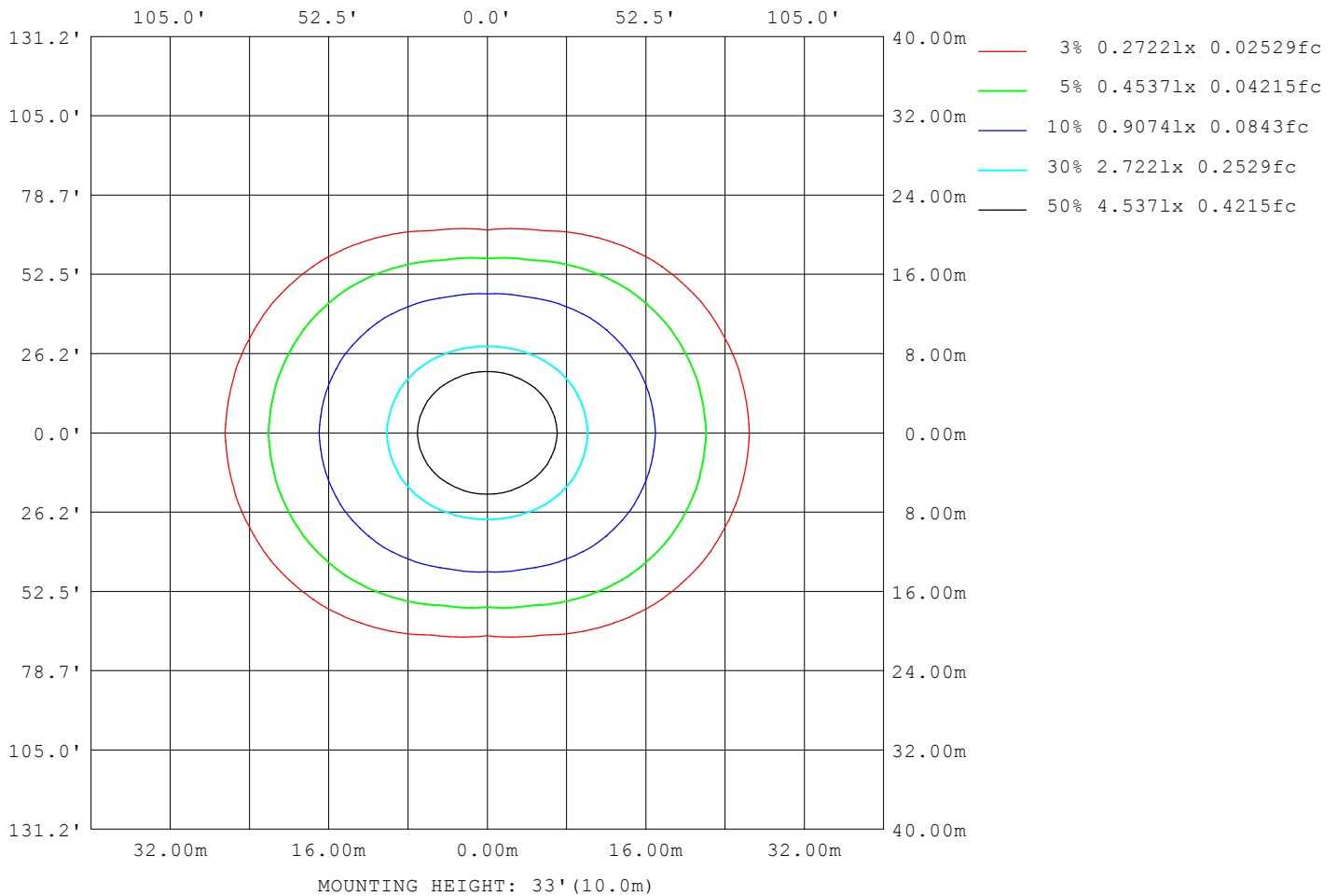
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: QC  
 Test Date: 2022-06-17

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity: 65.0%  
 Test Distance: 10.640m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

|   |       |                  |
|---|-------|------------------|
| Test:U:230.42V I:0.1328A P:29.004W PF:0.9479 Freq:49.99Hz<br>UTHDi:0.21% ITHDi:11.23% KDisp:0.9511 Lamp Flux:4600.35x1 lm |       |                  |
| NAME: RH-TP01-30W   | TYPE: | WEIGHT:          |
| SPEC.:  | DIM.: | SERIAL No.:      |
| MFR.:   | SUR.: | Shielding Angle: |



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:QC  
 Test Date:2022-06-17

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity:65.0%  
 Test Distance:10.640m [K=1.0000]  
 Remarks:

**LED Avg.L Report**

|   |       |                  |
|---|-------|------------------|
| Test:U:230.42V I:0.1328A P:29.004W PF:0.9479 Freq:49.99Hz<br>UTHDi:0.21% ITHDi:11.23% KDisp:0.9511 Lamp Flux:4600.35x1 lm |       |                  |
| NAME: RH-TP01-30W   | TYPE: | WEIGHT:          |
| SPEC.:  | DIM.: | SERIAL No.:      |
| MFR.:   | SUR.: | Shielding Angle: |

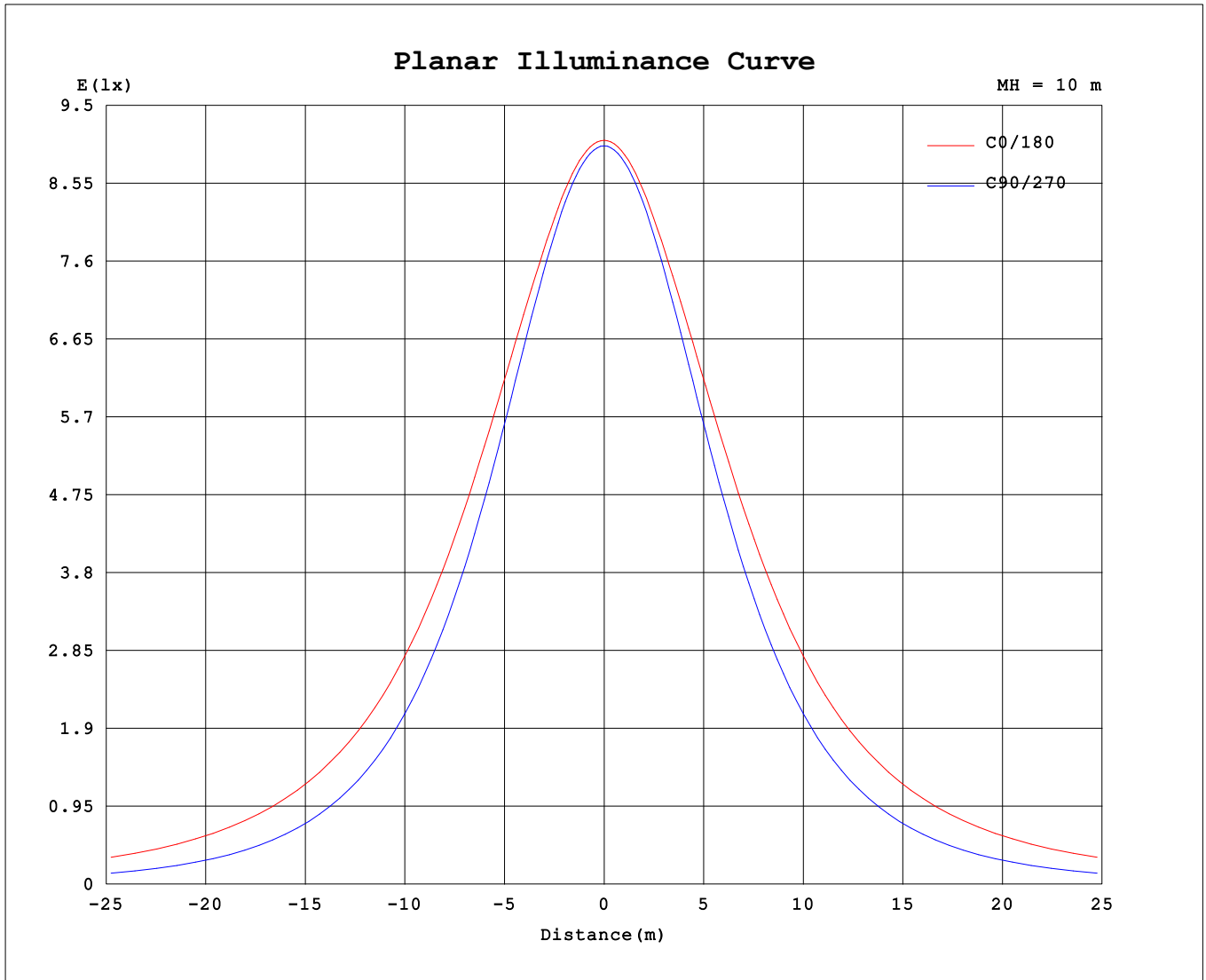
| AvgL             | cd/m2  |
|------------------|--------|
| L_0~180 (65) av  | 28311  |
| L_0~180 (75) av  | 40384  |
| L_0~180 (85) av  | 103640 |
| L_90~270 (65) av | 13406  |
| L_90~270 (75) av | 11048  |
| L_90~270 (85) av | 6429   |
| L_45 (65) av     | 22568  |
| L_45 (75) av     | 29934  |
| L_45 (85) av     | 71119  |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:QC  
 Test Date:2022-06-17

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity:65.0%  
 Test Distance:10.640m [K=1.0000]  
 Remarks:

**Planar Illuminance Curve**



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3°C  
 Operators: QC  
 Test Date: 2022-06-17

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity: 65.0%  
 Test Distance: 10.640m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

|  |       |                  |
|--|-------|------------------|
| Test:U:230.42V I:0.1328A P:29.004W PF:0.9479 Freq:49.99Hz    |       |                  |
| UTHDi:0.21% ITHDi:11.23% KDisp:0.9511 Lamp Flux:4600.35x1 lm |       |                  |
| NAME: RH-TP01-30W  | TYPE: | WEIGHT:          |
| SPEC.:   | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |

Table--1

UNIT: cd

| C (DEG)<br>□ (DEG) | 0    | 15   | 30   | 45   | 60   | 75   | 90   | 105  | 120  | 135  | 150  | 165  | 180  | 195  | 210  | 225  | 240  | 255  | 270  |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0                  | 901  | 901  | 901  | 901  | 901  | 901  | 901  | 901  | 901  | 901  | 901  | 901  | 901  | 901  | 901  | 901  | 901  | 901  | 901  |
| 5                  | 898  | 898  | 898  | 897  | 897  | 896  | 896  | 896  | 897  | 897  | 898  | 898  | 898  | 898  | 898  | 897  | 897  | 896  | 896  |
| 10                 | 891  | 891  | 889  | 888  | 886  | 884  | 884  | 884  | 886  | 888  | 889  | 891  | 891  | 891  | 889  | 888  | 886  | 884  | 884  |
| 15                 | 880  | 880  | 876  | 872  | 867  | 864  | 863  | 864  | 867  | 872  | 876  | 880  | 880  | 880  | 876  | 872  | 867  | 864  | 863  |
| 20                 | 869  | 867  | 859  | 850  | 842  | 836  | 834  | 836  | 842  | 850  | 859  | 867  | 869  | 867  | 859  | 850  | 842  | 836  | 834  |
| 25                 | 858  | 854  | 842  | 825  | 811  | 801  | 798  | 801  | 811  | 825  | 842  | 854  | 858  | 854  | 842  | 825  | 811  | 801  | 798  |
| 30                 | 845  | 839  | 822  | 797  | 774  | 759  | 754  | 759  | 774  | 797  | 822  | 839  | 845  | 839  | 822  | 797  | 774  | 759  | 754  |
| 35                 | 828  | 821  | 799  | 767  | 733  | 712  | 705  | 712  | 733  | 767  | 799  | 821  | 828  | 821  | 799  | 767  | 733  | 712  | 705  |
| 40                 | 807  | 798  | 772  | 732  | 689  | 659  | 650  | 659  | 689  | 732  | 772  | 798  | 807  | 798  | 772  | 732  | 689  | 659  | 650  |
| 45                 | 782  | 771  | 741  | 695  | 642  | 601  | 589  | 601  | 642  | 695  | 741  | 771  | 782  | 771  | 741  | 695  | 642  | 601  | 589  |
| 50                 | 752  | 741  | 706  | 653  | 591  | 540  | 524  | 540  | 591  | 653  | 706  | 741  | 752  | 741  | 706  | 653  | 591  | 540  | 524  |
| 55                 | 720  | 707  | 668  | 609  | 539  | 475  | 454  | 475  | 539  | 609  | 668  | 707  | 720  | 707  | 668  | 609  | 539  | 475  | 454  |
| 60                 | 684  | 670  | 628  | 563  | 484  | 409  | 381  | 409  | 484  | 563  | 628  | 670  | 684  | 670  | 628  | 563  | 484  | 409  | 381  |
| 65                 | 646  | 631  | 585  | 515  | 428  | 342  | 306  | 342  | 428  | 515  | 585  | 631  | 646  | 631  | 585  | 515  | 428  | 342  | 306  |
| 70                 | 606  | 590  | 541  | 466  | 372  | 275  | 229  | 275  | 372  | 466  | 541  | 590  | 606  | 590  | 541  | 466  | 372  | 275  | 229  |
| 75                 | 564  | 548  | 497  | 418  | 318  | 211  | 154  | 211  | 318  | 418  | 497  | 548  | 564  | 548  | 497  | 418  | 318  | 211  | 154  |
| 80                 | 524  | 507  | 455  | 373  | 269  | 153  | 85.4 | 153  | 269  | 373  | 455  | 507  | 524  | 507  | 455  | 373  | 269  | 153  | 85.4 |
| 85                 | 488  | 470  | 418  | 335  | 228  | 108  | 30.3 | 108  | 228  | 335  | 418  | 470  | 488  | 470  | 418  | 335  | 228  | 108  | 30.3 |
| 90                 | 455  | 438  | 386  | 304  | 199  | 81.9 | 6.21 | 81.9 | 199  | 304  | 386  | 438  | 455  | 438  | 386  | 304  | 199  | 81.9 | 6.21 |
| 95                 | 427  | 410  | 359  | 280  | 179  | 71.2 | 7.45 | 71.2 | 179  | 280  | 359  | 410  | 427  | 410  | 359  | 280  | 179  | 71.2 | 7.45 |
| 100                | 401  | 385  | 336  | 261  | 166  | 66.7 | 10.0 | 66.7 | 166  | 261  | 336  | 385  | 401  | 385  | 336  | 261  | 166  | 66.7 | 10.0 |
| 105                | 377  | 361  | 315  | 243  | 155  | 64.5 | 13.1 | 64.5 | 155  | 243  | 315  | 361  | 377  | 361  | 315  | 243  | 155  | 64.5 | 13.1 |
| 110                | 352  | 338  | 294  | 227  | 145  | 64.5 | 16.3 | 64.5 | 145  | 227  | 294  | 338  | 352  | 338  | 294  | 227  | 145  | 64.5 | 16.3 |
| 115                | 328  | 314  | 274  | 210  | 131  | 63.2 | 19.8 | 63.2 | 131  | 210  | 274  | 314  | 328  | 314  | 274  | 210  | 131  | 63.2 | 19.8 |
| 120                | 303  | 291  | 253  | 191  | 122  | 61.3 | 23.3 | 61.3 | 122  | 191  | 253  | 291  | 303  | 291  | 253  | 191  | 122  | 61.3 | 23.3 |
| 125                | 279  | 267  | 231  | 169  | 113  | 59.9 | 26.9 | 59.9 | 113  | 169  | 231  | 267  | 279  | 267  | 231  | 169  | 113  | 59.9 | 26.9 |
| 130                | 255  | 244  | 205  | 153  | 105  | 59.3 | 30.3 | 59.3 | 105  | 153  | 205  | 244  | 255  | 244  | 205  | 153  | 105  | 59.3 | 30.3 |
| 135                | 231  | 219  | 179  | 139  | 97.0 | 58.7 | 33.5 | 58.7 | 97.0 | 139  | 179  | 219  | 231  | 219  | 179  | 139  | 97.0 | 58.7 | 33.5 |
| 140                | 208  | 199  | 157  | 125  | 90.2 | 57.2 | 36.4 | 57.2 | 90.2 | 125  | 157  | 199  | 208  | 199  | 157  | 125  | 90.2 | 57.2 | 36.4 |
| 145                | 185  | 171  | 139  | 112  | 84.3 | 55.9 | 39.0 | 55.9 | 84.3 | 112  | 139  | 171  | 185  | 171  | 139  | 112  | 84.3 | 55.9 | 39.0 |
| 150                | 163  | 142  | 121  | 100  | 78.1 | 54.5 | 42.5 | 54.5 | 78.1 | 100  | 121  | 142  | 163  | 142  | 121  | 100  | 78.1 | 54.5 | 42.5 |
| 155                | 140  | 118  | 105  | 89.6 | 72.8 | 54.8 | 47.7 | 54.8 | 72.8 | 89.6 | 105  | 118  | 140  | 118  | 105  | 89.6 | 72.8 | 54.8 | 47.7 |
| 160                | 119  | 100  | 90.3 | 79.9 | 69.1 | 57.3 | 52.9 | 57.3 | 69.1 | 79.9 | 90.3 | 100  | 119  | 100  | 90.3 | 79.9 | 69.1 | 57.3 | 52.9 |
| 165                | 96.4 | 81.4 | 76.3 | 72.7 | 64.8 | 61.0 | 58.0 | 61.0 | 64.8 | 72.7 | 76.3 | 81.4 | 96.4 | 81.4 | 76.3 | 72.7 | 64.8 | 61.0 | 58.0 |
| 170                | 61.6 | 65.1 | 65.7 | 65.4 | 64.8 | 63.6 | 62.4 | 63.6 | 64.8 | 65.4 | 65.7 | 65.1 | 61.6 | 65.1 | 65.7 | 65.4 | 64.8 | 63.6 | 62.4 |
| 175                | 45.2 | 55.2 | 63.1 | 65.9 | 66.3 | 65.9 | 65.8 | 65.9 | 66.3 | 65.9 | 63.1 | 55.2 | 45.2 | 55.2 | 63.1 | 65.9 | 66.3 | 65.9 | 65.8 |
| 180                | 43.9 | 55.2 | 63.7 | 66.2 | 67.2 | 67.7 | 67.9 | 67.7 | 67.2 | 66.2 | 63.7 | 55.2 | 43.9 | 55.2 | 63.7 | 66.2 | 67.2 | 67.7 | 67.9 |

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:QC  
 Test Date:2022-06-17

□ Range: 0 - 180DEG  
 □ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity:65.0%  
 Test Distance:10.640m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

|  |       |                  |
|--|-------|------------------|
| Test:U:230.42V I:0.1328A P:29.004W PF:0.9479 Freq:49.99Hz    |       |                  |
| UTHDi:0.21% ITHDi:11.23% KDisp:0.9511 Lamp Flux:4600.35x1 lm |       |                  |
| NAME: RH-TP01-30W  | TYPE: | WEIGHT:          |
| SPEC.:   | DIM.: | SERIAL No.:      |
| MFR.:  | SUR.: | Shielding Angle: |

Table--2

UNIT: cd

| C (DEG)<br>□ (DEG) | 285  | 300  | 315  | 330  | 345  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                  | 901  | 901  | 901  | 901  | 901  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                  | 896  | 897  | 897  | 898  | 898  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                 | 884  | 886  | 888  | 889  | 891  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                 | 864  | 867  | 872  | 876  | 880  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                 | 836  | 842  | 850  | 859  | 867  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                 | 801  | 811  | 825  | 842  | 854  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                 | 759  | 774  | 797  | 822  | 839  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                 | 712  | 733  | 767  | 799  | 821  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                 | 659  | 689  | 732  | 772  | 798  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                 | 601  | 642  | 695  | 741  | 771  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                 | 540  | 591  | 653  | 706  | 741  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                 | 475  | 539  | 609  | 668  | 707  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                 | 409  | 484  | 563  | 628  | 670  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                 | 342  | 428  | 515  | 585  | 631  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                 | 275  | 372  | 466  | 541  | 590  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                 | 211  | 318  | 418  | 497  | 548  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                 | 153  | 269  | 373  | 455  | 507  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                 | 108  | 228  | 335  | 418  | 470  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                 | 81.9 | 199  | 304  | 386  | 438  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95                 | 71.2 | 179  | 280  | 359  | 410  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100                | 66.7 | 166  | 261  | 336  | 385  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 105                | 64.5 | 155  | 243  | 315  | 361  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110                | 64.5 | 145  | 227  | 294  | 338  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 115                | 63.2 | 131  | 210  | 274  | 314  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 120                | 61.3 | 122  | 191  | 253  | 291  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 125                | 59.9 | 113  | 169  | 231  | 267  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 130                | 59.3 | 105  | 153  | 205  | 244  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135                | 58.7 | 97.0 | 139  | 179  | 219  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140                | 57.2 | 90.2 | 125  | 157  | 199  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145                | 55.9 | 84.3 | 112  | 139  | 171  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 150                | 54.5 | 78.1 | 100  | 121  | 142  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 155                | 54.8 | 72.8 | 89.6 | 105  | 118  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 160                | 57.3 | 69.1 | 79.9 | 90.3 | 100  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 165                | 61.0 | 64.8 | 72.7 | 76.3 | 81.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 170                | 63.6 | 64.8 | 65.4 | 65.7 | 65.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 175                | 65.9 | 66.3 | 65.9 | 63.1 | 55.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 180                | 67.7 | 67.2 | 66.2 | 63.7 | 55.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3°C  
 Operators:QC  
 Test Date:2022-06-17

□ Range: 0 - 180DEG  
 □ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.458  
 Humidity:65.0%  
 Test Distance:10.640m [K=1.0000]  
 Remarks: