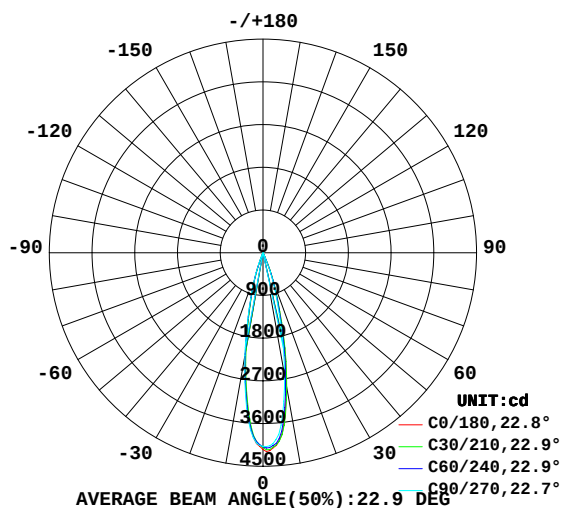


**LUMINAIRE PHOTOMETRIC TEST REPORT**

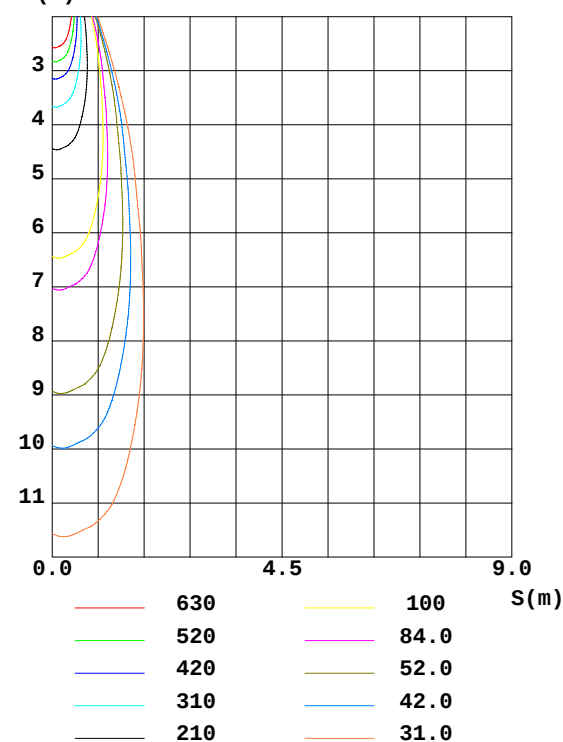
|                                   |        |                   |
|-----------------------------------|--------|-------------------|
| NAME:CL-Spot50-u1s 3000k-Ra90-24D | TYPE:  | WEIGHT:           |
| DIM.:                             | SPEC.: | SERIAL No.:       |
| MFR.:                             | SUR.:  | PROTECTION ANGLE: |

| DATA OF LAMP     |         | PHOTOMETRIC DATA Eff: 68.23 lm/W |        |                         |           |
|------------------|---------|----------------------------------|--------|-------------------------|-----------|
| MODEL            |         | Imax(cd)                         | 4188   | S/MH(C0/180)            | 0.42      |
| NOMINAL POWER(W) | 10      | LOR(%)                           | 100.0  | S/MH(C90/270)           | 0.40      |
| RATED VOLTAGE(V) | 24      | TOTAL FLUX(lm)                   | 704.11 | $\eta$ UP, DN(C0-180)   | 0.2, 54.1 |
| NOMINAL FLUX(lm) | 704.107 | CIE CLASS                        | DIRECT | $\eta$ UP, DN(C180-360) | 0.2, 45.5 |
| LAMPS INSIDE     | 1       | $\eta$ up(%)                     | 0.4    | CIBSE SHR NOM           | 0.00      |
| TEST VOLTAGE(V)  | 24      | $\eta$ down(%)                   | 99.6   | CIBSE SHR MAX           | 1.00      |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:0  
Test Date:2022-04-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.262  
Humidity:65.0%  
Test Distance:7.100m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

| $\gamma$ | C0                    | C45    | C90    | C135   | C180   | C225   | C270   | C315   | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum, lamp |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|------------|
| 10       | 2849                  | 2827   | 2636   | 2351   | 2128   | 2113   | 2197   | 2425   | 0- 10    | 309.9       | 309.9        | 44,44      |
| 20       | 628.1                 | 644.6  | 558.8  | 434.1  | 315.5  | 301.0  | 352.6  | 456.3  | 10- 20   | 335.9       | 645.9        | 91.7,91.7  |
| 30       | 15.39                 | 15.74  | 14.70  | 11.73  | 9.859  | 10.98  | 11.74  | 12.57  | 20- 30   | 50.35       | 696.2        | 98.9,98.9  |
| 40       | 2.795                 | 2.717  | 2.413  | 2.032  | 1.838  | 2.001  | 1.985  | 2.116  | 30- 40   | 3.604       | 699.9        | 99.4,99.4  |
| 50       | 0.7749                | 0.7340 | 0.6223 | 0.5994 | 0.5750 | 0.6063 | 0.6282 | 0.6417 | 40- 50   | 0.9286      | 700.8        | 99.5,99.5  |
| 60       | 0.3212                | 0.2997 | 0.2594 | 0.2737 | 0.2638 | 0.2571 | 0.2975 | 0.2996 | 50- 60   | 0.3820      | 701.2        | 99.6,99.6  |
| 70       | 0.0426                | 0.0237 | 0      | 0.0001 | 0      | 0      | 0.0001 | 0.0049 | 60- 70   | 0.1350      | 701.3        | 99.6,99.6  |
| 80       | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 70- 80   | 0.0005      | 701.3        | 99.6,99.6  |
| 90       | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 80- 90   | 0           | 701.3        | 99.6,99.6  |
| 100      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 90-100   | 0           | 701.3        | 99.6,99.6  |
| 110      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 100-110  | 0           | 701.3        | 99.6,99.6  |
| 120      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 110-120  | 0           | 701.3        | 99.6,99.6  |
| 130      | 0                     | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 120-130  | 0           | 701.3        | 99.6,99.6  |
| 140      | 0                     | 0.0049 | 0.0334 | 0.0449 | 0.1659 | 0.1417 | 0.0845 | 0.0590 | 130-140  | 0.0061      | 701.3        | 99.6,99.6  |
| 150      | 0.8998                | 0.9108 | 1.016  | 1.147  | 1.342  | 1.331  | 1.183  | 1.043  | 140-150  | 0.2868      | 701.6        | 99.6,99.6  |
| 160      | 3.027                 | 3.008  | 3.150  | 3.332  | 3.461  | 3.419  | 3.259  | 3.077  | 150-160  | 0.9518      | 702.5        | 99.8,99.8  |
| 170      | 4.643                 | 4.587  | 4.630  | 4.618  | 4.682  | 4.537  | 4.464  | 4.436  | 160-170  | 1.121       | 703.7        | 99.9,99.9  |
| 180      | 4.932                 | 4.809  | 4.743  | 4.717  | 4.946  | 4.811  | 4.719  | 4.710  | 170-180  | 0.4447      | 704.1        | 100,100    |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |            |

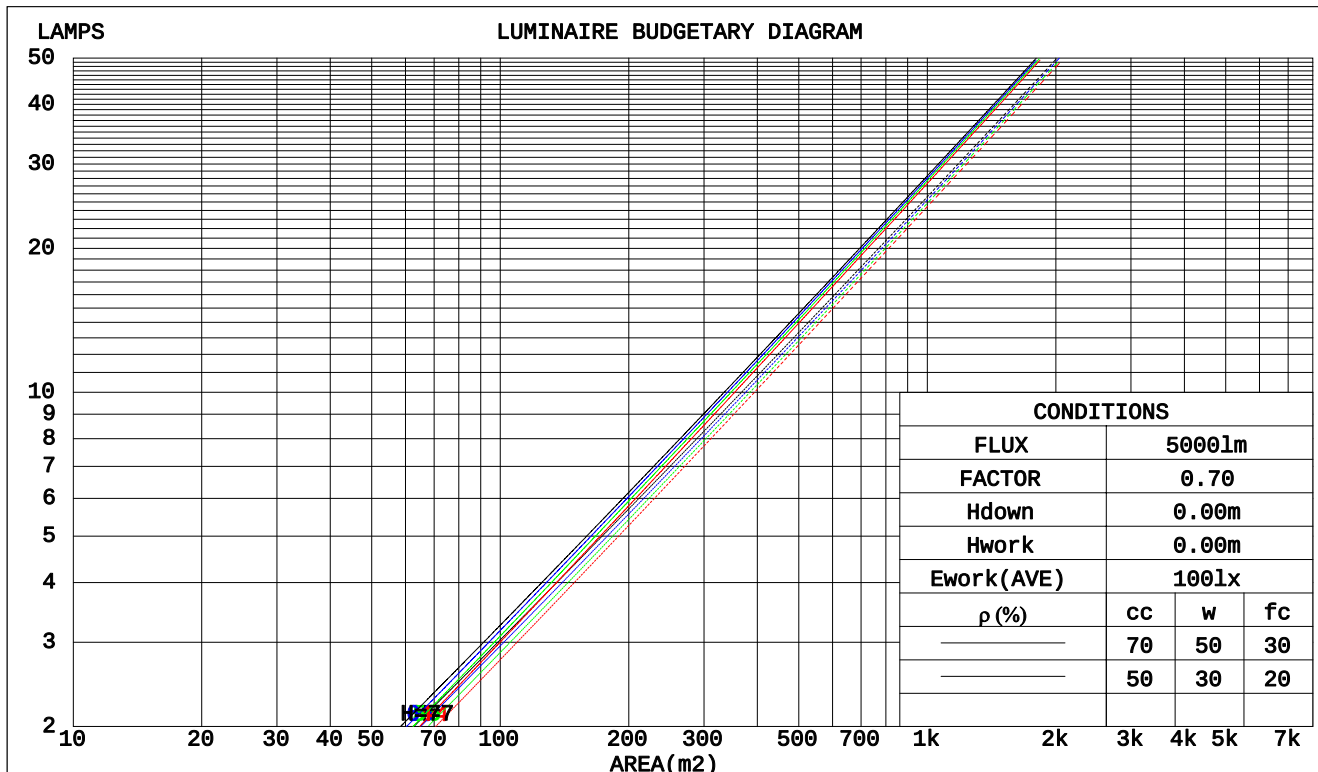
C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:0  
Test Date:2022-04-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.262  
Humidity:65.0%  
Test Distance:7.100m [K=1.0000]  
Remarks:

### CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                  |        |                   |
|----------------------------------|--------|-------------------|
| NAME: Spot50-3000K-RA90-10W-24D. | TYPE:  | WEIGHT:           |
| DIM.:                            | SPEC.: | SERIAL No.:       |
| MFR.: 0                          | SUR.:  | PROTECTION ANGLE: |

| $\rho_{CC}$ | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0   |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|-----|
| $\rho_W$    | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0   |
| $\rho_{fc}$ | 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         | 1.13                  | 1.12 | 1.10 | 1.11 | 1.10 | 1.08 | 1.07                            | 1.06 | 1.05 | 1.04 | 1.03 | 1.02 | 1.00 | .99  | .99  | .97 |
| 2.0         | 1.09                  | 1.06 | 1.04 | 1.07 | 1.05 | 1.03 | 1.04                            | 1.02 | 1.00 | 1.01 | .00  | .98  | .98  | .97  | .96  | .95 |
| 3.0         | 1.05                  | 1.02 | .99  | 1.04 | 1.01 | .98  | 1.01                            | .99  | .97  | .99  | .97  | .95  | .97  | .95  | .94  | .93 |
| 4.0         | 1.01                  | .98  | .95  | 1.00 | .97  | .95  | .98                             | .96  | .94  | .97  | .94  | .93  | .95  | .93  | .92  | .90 |
| 5.0         | .98                   | .95  | .92  | .98  | .94  | .92  | .96                             | .93  | .91  | .94  | .92  | .90  | .93  | .91  | .89  | .88 |
| 6.0         | .96                   | .92  | .89  | .95  | .92  | .89  | .94                             | .91  | .89  | .92  | .90  | .88  | .91  | .89  | .87  | .86 |
| 7.0         | .93                   | .90  | .87  | .93  | .89  | .87  | .92                             | .89  | .86  | .91  | .88  | .86  | .90  | .87  | .86  | .85 |
| 8.0         | .91                   | .87  | .85  | .91  | .87  | .85  | .90                             | .87  | .84  | .89  | .86  | .84  | .88  | .86  | .84  | .83 |
| 9.0         | .89                   | .85  | .83  | .88  | .85  | .83  | .88                             | .85  | .83  | .87  | .84  | .82  | .86  | .84  | .82  | .81 |
| 10.0        | .87                   | .83  | .81  | .87  | .83  | .81  | .86                             | .83  | .81  | .85  | .83  | .81  | .85  | .82  | .80  | .80 |



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:0  
Test Date:2022-04-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.262  
Humidity:65.0%  
Test Distance:7.100m [K=1.0000]  
Remarks:

WEC AND CCEC

|                                  |        |                   |
|----------------------------------|--------|-------------------|
| NAME: Spot50-3000K-RA90-10W-24D. | TYPE:  | WEIGHT:           |
| DIM.:                            | SPEC.: | SERIAL No.:       |
| MFR.: 0                          | SUR.:  | PROTECTION ANGLE: |

| $\rho_{cc}$ | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0 |  |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|--|
| $\rho_w$    | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |  |
| $\rho_{fc}$ | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20%  |      |      | 20%  |      |      | 0 |  |
| RCR         | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |   |  |
| 0.0         |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |   |  |
| 1.0         | .125                  | .071 | .023 | .119 | .068 | .021 | .106                            | .061 | .019 | .095 | .055 | .018 | .084 | .049 | .016 |   |  |
| 2.0         | .115                  | .063 | .019 | .109 | .060 | .019 | .099                            | .055 | .017 | .089 | .050 | .016 | .081 | .046 | .014 |   |  |
| 3.0         | .106                  | .056 | .017 | .101 | .054 | .016 | .093                            | .050 | .015 | .085 | .047 | .014 | .078 | .043 | .013 |   |  |
| 4.0         | .099                  | .051 | .015 | .095 | .050 | .015 | .088                            | .046 | .014 | .081 | .043 | .013 | .075 | .041 | .012 |   |  |
| 5.0         | .092                  | .047 | .014 | .089 | .046 | .013 | .083                            | .043 | .013 | .077 | .041 | .012 | .072 | .038 | .012 |   |  |
| 6.0         | .087                  | .044 | .012 | .084 | .043 | .012 | .079                            | .040 | .012 | .074 | .038 | .011 | .070 | .037 | .011 |   |  |
| 7.0         | .082                  | .041 | .012 | .080 | .040 | .011 | .075                            | .038 | .011 | .071 | .036 | .011 | .067 | .035 | .010 |   |  |
| 8.0         | .078                  | .038 | .011 | .076 | .037 | .011 | .072                            | .036 | .010 | .068 | .035 | .010 | .065 | .033 | .010 |   |  |
| 9.0         | .075                  | .036 | .010 | .073 | .035 | .010 | .069                            | .034 | .010 | .066 | .033 | .009 | .063 | .032 | .009 |   |  |
| 10.0        | .071                  | .034 | .009 | .070 | .034 | .009 | .067                            | .033 | .009 | .064 | .032 | .009 | .061 | .031 | .009 |   |  |

| $\rho_{cc}$ | 80%                   |      |      | 70%  |      |      | 50%                                        |      |      | 30%  |      |      | 10%  |      |      | 0 |
|-------------|-----------------------|------|------|------|------|------|--------------------------------------------|------|------|------|------|------|------|------|------|---|
| $\rho_w$    | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                                        | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| $\rho_{fc}$ | 20%                   |      |      | 20%  |      |      | 20%                                        |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR         | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0         | .194                  | .194 | .194 | .165 | .165 | .165 | .113                                       | .113 | .113 | .065 | .065 | .065 | .021 | .021 | .021 |   |
| 1.0         | .171                  | .161 | .152 | .146 | .138 | .131 | .100                                       | .095 | .090 | .057 | .055 | .053 | .018 | .018 | .017 |   |
| 2.0         | .152                  | .136 | .123 | .130 | .117 | .106 | .089                                       | .081 | .074 | .051 | .047 | .043 | .016 | .015 | .014 |   |
| 3.0         | .136                  | .116 | .101 | .117 | .100 | .087 | .080                                       | .070 | .061 | .046 | .041 | .036 | .015 | .013 | .012 |   |
| 4.0         | .123                  | .101 | .084 | .105 | .087 | .073 | .072                                       | .061 | .051 | .042 | .036 | .030 | .013 | .012 | .010 |   |
| 5.0         | .112                  | .088 | .071 | .096 | .076 | .062 | .066                                       | .053 | .044 | .038 | .031 | .026 | .012 | .010 | .009 |   |
| 6.0         | .102                  | .078 | .061 | .088 | .068 | .053 | .061                                       | .047 | .037 | .035 | .028 | .022 | .011 | .009 | .007 |   |
| 7.0         | .095                  | .070 | .052 | .081 | .060 | .046 | .056                                       | .042 | .032 | .033 | .025 | .019 | .011 | .008 | .006 |   |
| 8.0         | .088                  | .063 | .046 | .076 | .054 | .040 | .052                                       | .038 | .028 | .030 | .023 | .017 | .010 | .007 | .006 |   |
| 9.0         | .082                  | .057 | .040 | .071 | .049 | .035 | .049                                       | .035 | .025 | .028 | .021 | .015 | .009 | .007 | .005 |   |
| 10.0        | .077                  | .052 | .036 | .066 | .045 | .031 | .046                                       | .032 | .022 | .027 | .019 | .013 | .009 | .006 | .004 |   |

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:0  
Test Date:2022-04-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.262  
Humidity:65.0%  
Test Distance:7.100m [K=1.0000]  
Remarks:

### Uncorrected UGR Table

|                                                    |     |     |     |     |     |                  |       |       |       |       |                   |       |       |       |       |
|----------------------------------------------------|-----|-----|-----|-----|-----|------------------|-------|-------|-------|-------|-------------------|-------|-------|-------|-------|
| NAME: Spot50-3000K-RA90-10W-24D.                   |     |     |     |     |     | TYPE:            |       |       |       |       | WEIGHT:           |       |       |       |       |
| DIM.:                                              |     |     |     |     |     | SPEC.:           |       |       |       |       | SERIAL No.:       |       |       |       |       |
| MFR.: 0                                            |     |     |     |     |     | SUR.:            |       |       |       |       | PROTECTION ANGLE: |       |       |       |       |
| ceiling/cavity                                     | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 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   | 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   | 0.2               | 0.2   | 0.2   | 0.2   | 0.2   |
| Room dimensions                                    |     |     |     |     |     | Viewed crosswise |       |       |       |       | Viewed endwise    |       |       |       |       |
| x = 2H y = 2H                                      |     |     |     |     |     | -16.7            | -16.1 | -16.5 | -16.0 | -15.8 | -17.3             | -16.8 | -17.1 | -16.6 | -16.5 |
| 3H                                                 |     |     |     |     |     | -16.8            | -16.3 | -16.6 | -16.1 | -15.9 | -17.4             | -16.9 | -17.2 | -16.7 | -16.5 |
| 4H                                                 |     |     |     |     |     | -16.9            | -16.4 | -16.6 | -16.2 | -15.9 | -17.5             | -17.0 | -17.3 | -16.8 | -16.6 |
| 6H                                                 |     |     |     |     |     | -17.0            | -16.5 | -16.7 | -16.2 | -16.0 | -17.6             | -17.1 | -17.3 | -16.9 | -16.6 |
| 8H                                                 |     |     |     |     |     | -17.0            | -16.5 | -16.7 | -16.3 | -16.0 | -17.6             | -17.2 | -17.3 | -16.9 | -16.7 |
| 12H                                                |     |     |     |     |     | -17.0            | -16.6 | -16.7 | -16.3 | -16.1 | -17.7             | -17.2 | -17.4 | -17.0 | -16.7 |
| 4H 2H                                              |     |     |     |     |     | -16.8            | -16.3 | -16.6 | -16.1 | -15.9 | -17.5             | -17.0 | -17.2 | -16.8 | -16.5 |
| 3H                                                 |     |     |     |     |     | -17.0            | -16.5 | -16.7 | -16.3 | -16.0 | -17.6             | -17.2 | -17.3 | -16.9 | -16.6 |
| 4H                                                 |     |     |     |     |     | -17.1            | -16.7 | -16.7 | -16.4 | -16.1 | -17.7             | -17.3 | -17.4 | -17.0 | -16.7 |
| 6H                                                 |     |     |     |     |     | -17.2            | -16.8 | -16.8 | -16.5 | -16.1 | -17.8             | -17.4 | -17.4 | -17.1 | -16.8 |
| 8H                                                 |     |     |     |     |     | -17.2            | -16.9 | -16.8 | -16.5 | -16.2 | -17.9             | -17.5 | -17.5 | -17.2 | -16.8 |
| 12H                                                |     |     |     |     |     | -17.3            | -17.0 | -16.9 | -16.6 | -16.2 | -17.9             | -17.6 | -17.5 | -17.2 | -16.8 |
| 8H 4H                                              |     |     |     |     |     | -17.2            | -16.9 | -16.8 | -16.5 | -16.2 | -17.9             | -17.5 | -17.5 | -17.2 | -16.8 |
| 6H                                                 |     |     |     |     |     | -17.3            | -17.1 | -16.9 | -16.7 | -16.2 | -18.0             | -17.7 | -17.6 | -17.3 | -16.9 |
| 8H                                                 |     |     |     |     |     | -17.4            | -17.2 | -17.0 | -16.7 | -16.3 | -18.0             | -17.8 | -17.6 | -17.4 | -16.9 |
| 12H                                                |     |     |     |     |     | -17.5            | -17.3 | -17.0 | -16.8 | -16.3 | -18.1             | -17.9 | -17.6 | -17.4 | -17.0 |
| 12H 4H                                             |     |     |     |     |     | -17.3            | -17.0 | -16.9 | -16.6 | -16.2 | -17.9             | -17.6 | -17.5 | -17.2 | -16.8 |
| 6H                                                 |     |     |     |     |     | -17.4            | -17.2 | -17.0 | -16.7 | -16.3 | -18.0             | -17.8 | -17.6 | -17.4 | -16.9 |
| 8H                                                 |     |     |     |     |     | -17.5            | -17.3 | -17.0 | -16.8 | -16.3 | -18.1             | -17.9 | -17.6 | -17.4 | -17.0 |
| Variations with the observer position at spacings: |     |     |     |     |     |                  |       |       |       |       |                   |       |       |       |       |
| S = 1.0H                                           |     |     |     |     |     | + 3.1 / - 6.2    |       |       |       |       | + 2.9 / - 6.1     |       |       |       |       |
| 1.5H                                               |     |     |     |     |     | + 5.0 / - 4.9    |       |       |       |       | + 4.7 / - 4.2     |       |       |       |       |
| 2.0H                                               |     |     |     |     |     | + 4.1 / - 3.8    |       |       |       |       | + 3.5 / - 2.8     |       |       |       |       |

CIE Pub.117 Corrected 704.1 lm Total Lamp Luminous Flux.(8log(F/F0) = -1.2)

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:0  
Test Date:2022-04-22

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.262  
Humidity:65.0%  
Test Distance:7.100m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

|                                  |        |                   |
|----------------------------------|--------|-------------------|
| NAME: Spot50-3000K-RA90-10W-24D. | TYPE:  | WEIGHT:           |
| DIM.:                            | SPEC.: | SERIAL No.:       |
| MFR.: 0                          | SUR.:  | PROTECTION ANGLE: |

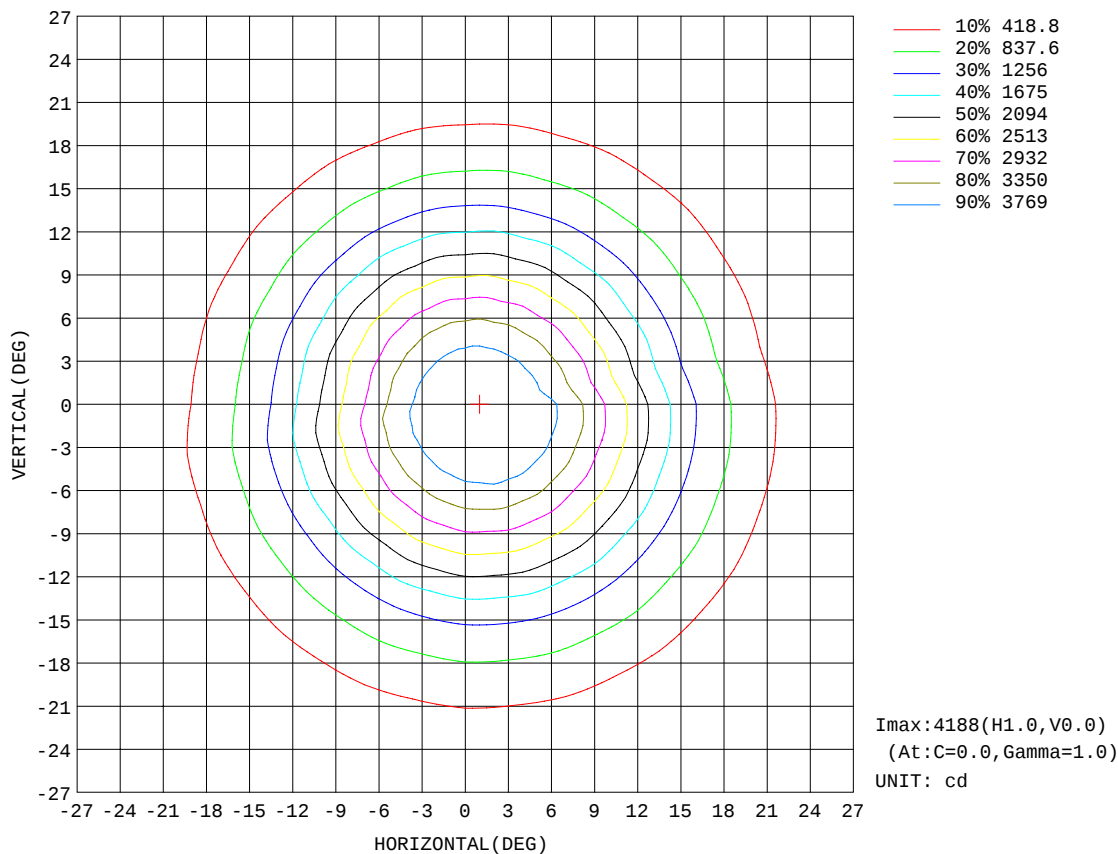
| REFLECTANCE                      |                                                     |     |           |     |     |     |     |               |     |        |
|----------------------------------|-----------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 91                                                  | 86  | 82        | 91  | 85  | 82  | 90  | 85            | 82  | 79     |
| 0.80                             | 98                                                  | 93  | 90        | 97  | 93  | 90  | 96  | 92            | 89  | 86     |
| 1.00                             | 102                                                 | 97  | 94        | 101 | 96  | 93  | 99  | 96            | 93  | 89     |
| 1.25                             | 105                                                 | 101 | 98        | 104 | 100 | 97  | 102 | 99            | 96  | 93     |
| 1.50                             | 108                                                 | 103 | 101       | 106 | 103 | 100 | 104 | 101           | 99  | 95     |
| 2.00                             | 110                                                 | 106 | 103       | 108 | 105 | 102 | 106 | 103           | 101 | 96     |
| 2.50                             | 111                                                 | 108 | 105       | 110 | 107 | 104 | 107 | 104           | 102 | 97     |
| 3.00                             | 113                                                 | 110 | 107       | 111 | 108 | 106 | 107 | 105           | 104 | 97     |
| 4.00                             | 114                                                 | 112 | 110       | 112 | 110 | 109 | 109 | 107           | 106 | 99     |
| 5.00                             | 116                                                 | 114 | 112       | 114 | 112 | 110 | 110 | 108           | 107 | 100    |
| ROOM INDEX                       | UF(total)                                           |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |                                                     |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: 0  
Test Date: 2022-04-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 $\gamma$  Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.0.262  
Humidity: 65.0%  
Test Distance: 7.100m [K=1.0000]  
Remarks:

### ISOCANDELA DIAGRAM

|                                  |        |                   |
|----------------------------------|--------|-------------------|
| NAME: Spot50-3000K-RA90-10W-24D. | TYPE:  | WEIGHT:           |
| DIM.:                            | SPEC.: | SERIAL No.:       |
| MFR.: 0                          | SUR.:  | PROTECTION ANGLE: |

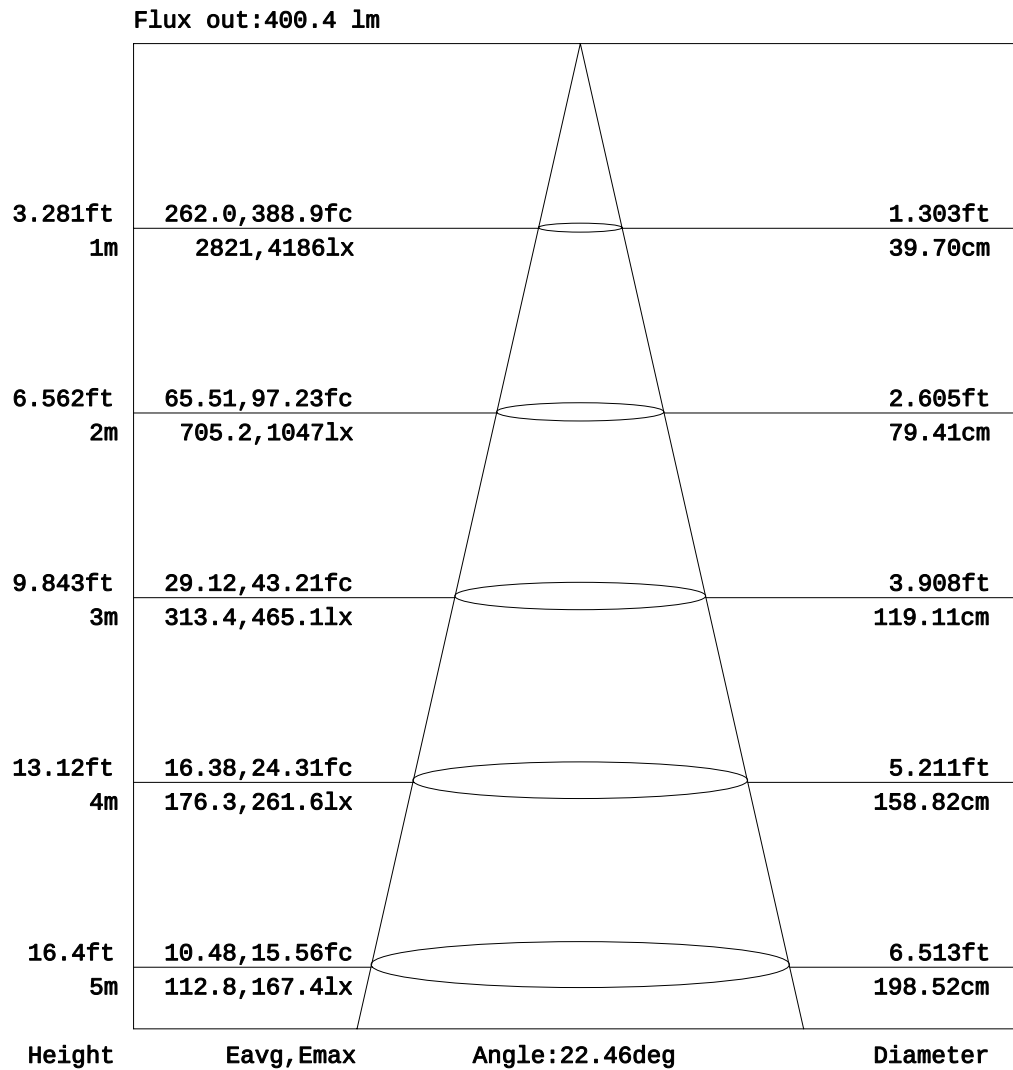


C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: 0  
Test Date: 2022-04-22

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.0.262  
Humidity: 65.0%  
Test Distance: 7.100m [K=1.0000]  
Remarks:

### AAI Figure

|                                  |        |                   |
|----------------------------------|--------|-------------------|
| NAME: Spot50-3000K-RA90-10W-24D. | TYPE:  | WEIGHT:           |
| DIM.:                            | SPEC.: | SERIAL No.:       |
| MFR.: 0                          | SUR.:  | PROTECTION ANGLE: |



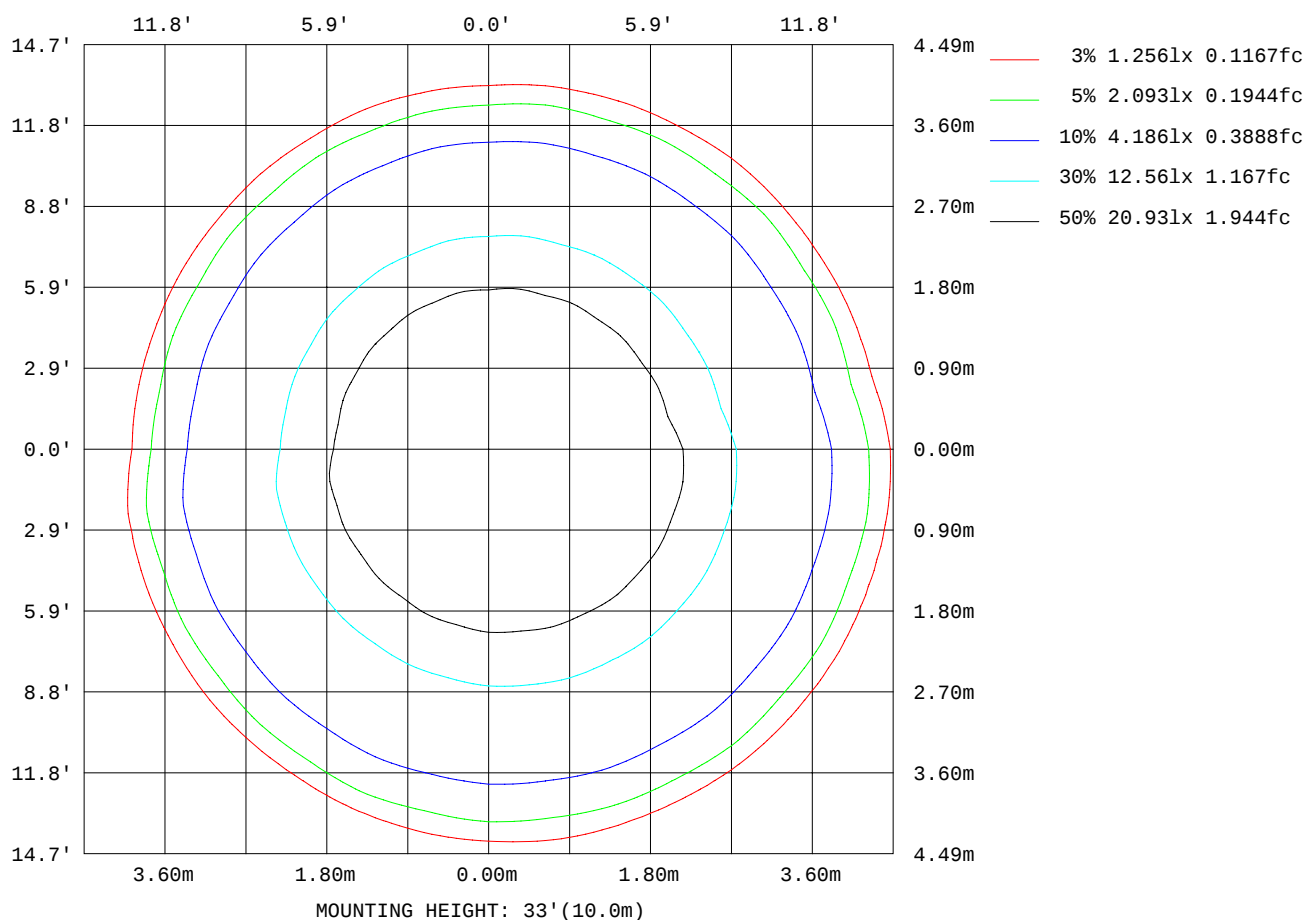
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: 0  
Test Date: 2022-04-22

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.0.262  
Humidity: 65.0%  
Test Distance: 7.100m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

|                                  |        |                   |
|----------------------------------|--------|-------------------|
| NAME: Spot50-3000K-RA90-10W-24D. | TYPE:  | WEIGHT:           |
| DIM.:                            | SPEC.: | SERIAL No.:       |
| MFR.: 0                          | SUR.:  | PROTECTION ANGLE: |



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: 0  
Test Date: 2022-04-22

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.0.262  
Humidity: 65.0%  
Test Distance: 7.100m [K=1.0000]  
Remarks:

### Average Luminance Table(CIBSE)

|                                  |        |                   |
|----------------------------------|--------|-------------------|
| NAME: Spot50-3000K-RA90-10W-24D. | TYPE:  | WEIGHT:           |
| DIM.:                            | SPEC.: | SERIAL No.:       |
| MFR.: 0                          | SUR.:  | PROTECTION ANGLE: |

| Parameter description for average Luminance            | Symbol | Value         | Unit     |
|--------------------------------------------------------|--------|---------------|----------|
| Luminance in Azimuth Plane                             | Bc     | refer Table 2 | cd/sq.m. |
| Intensity at angle Gamma in given azimuth plane        | I      | from data     | cd/klm   |
| Number of lamps                                        | N      | 1             |          |
| Output of each lamp(initial lumens as specified)       | F      | 704.107       | lm       |
| Multiplying factor                                     | K      | 1             |          |
| Luminous area in horizontal plane used in calculations | A      | 0.1           | sq.m.    |
| Angle to the downward vertical from light centre       | Gamma  | from data     | deg      |

Table 1. Calculation parameters for determination of CIBSE LG3:1996 Average Luminance

| G   | C plane(deg) |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |
|-----|--------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| deg | 0            | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
| 55  | 9            | 8  | 8  | 7  | 8  | 7  | 8  | 7  | 8  | 7  | 7   | 7   | 7   | 6   | 7   | 6   | 7   | 6   | 7   |
| 60  | 6            | 5  | 6  | 6  | 7  | 5  | 6  | 6  | 6  | 5  | 6   | 5   | 6   | 5   | 6   | 5   | 6   | 5   | 5   |
| 65  | 5            | 3  | 5  | 4  | 5  | 4  | 5  | 4  | 4  | 3  | 4   | 3   | 4   | 3   | 4   | 3   | 4   | 2   | 2   |
| 70  | 1            | 0  | 1  | 0  | 1  | 0  | 1  | 0  | 1  | 0  | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
| 75  | 0            | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
| 80  | 0            | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
| 85  | 0            | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

| CIBSE Category | Gamma (deg) | Average Luminance  |                   | Patch Luminance  |                   |
|----------------|-------------|--------------------|-------------------|------------------|-------------------|
|                |             | maximum calculated | specified maximum | maximum measured | specified maximum |
| Category 1     | 55 to 90    | 9                  | 200               | ---              | 500               |
| Category 2     | 65 to 90    | 5                  | 200               | ---              | 500               |
| Category 3     | 75 to 90    | 0                  | 200               | ---              | 500               |

Table 3. Tabulation of Average and Patch Luminance(cd/sq.m.) for defined CIBSE categories

No match

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:0  
Test Date:2022-04-22

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.262  
Humidity:65.0%  
Test Distance:7.100m [K=1.0000]  
Remarks:

### Average Luminance Table(CIBSE)

|                                  |        |                   |
|----------------------------------|--------|-------------------|
| NAME: Spot50-3000K-RA90-10W-24D. | TYPE:  | WEIGHT:           |
| DIM.:                            | SPEC.: | SERIAL No.:       |
| MFR.: 0                          | SUR.:  | PROTECTION ANGLE: |

| Parameter description for average Luminance            | Symbol | Value         | Unit     |
|--------------------------------------------------------|--------|---------------|----------|
| Luminance in Azimuth Plane                             | Bc     | refer Table 2 | cd/sq.m. |
| Intensity at angle Gamma in given azimuth plane        | I      | from data     | cd/klm   |
| Number of lamps                                        | N      | 1             |          |
| Output of each lamp(initial lumens as specified)       | F      | 704.107       | lm       |
| Multiplying factor                                     | K      | 1             |          |
| Luminous area in horizontal plane used in calculations | A      | 0.1           | sq.m.    |
| Angle to the downward vertical from light centre       | Gamma  | from data     | deg      |

Table 1. Calculation parameters for determination of CIBSE LG3:2001 Average Luminance

| G<br>deg | C plane(deg) |    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |
|----------|--------------|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|          | 0            | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
| 55       | 9            | 8  | 8  | 7  | 8  | 7  | 8  | 7  | 8  | 7  | 7   | 7   | 7   | 6   | 7   | 6   | 7   | 6   | 7   |
| 60       | 6            | 5  | 6  | 6  | 7  | 5  | 6  | 6  | 6  | 5  | 6   | 5   | 6   | 5   | 6   | 5   | 6   | 5   | 5   |
| 65       | 5            | 3  | 5  | 4  | 5  | 4  | 5  | 4  | 4  | 3  | 4   | 3   | 4   | 3   | 4   | 3   | 4   | 2   | 2   |
| 70       | 1            | 0  | 1  | 0  | 1  | 0  | 1  | 0  | 1  | 0  | 1   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
| 75       | 0            | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
| 80       | 0            | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
| 85       | 0            | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |

Table 2. Average Luminance(cd/sq.m.) for defined C plane,Gamma angle

| range<br>(deg) | Maximum<br>measured | Average Luminance(cd/sq.m)                             |                                     |                                    |                                    |
|----------------|---------------------|--------------------------------------------------------|-------------------------------------|------------------------------------|------------------------------------|
|                |                     | Maximum limit for screen type & software category used |                                     |                                    |                                    |
|                |                     | Type I,II screen<br>Some neg.s'ware                    | Type I,II screen<br>Only pos.s'ware | Type III screen<br>Some neg.s'ware | Type III screen<br>Only pos.s'ware |
| 55 to 90       | 9                   | 1000                                                   | 1500                                | 200                                | 500                                |
| 65 to 90       | 5                   | 1000                                                   | 1500                                | 200                                | 500                                |

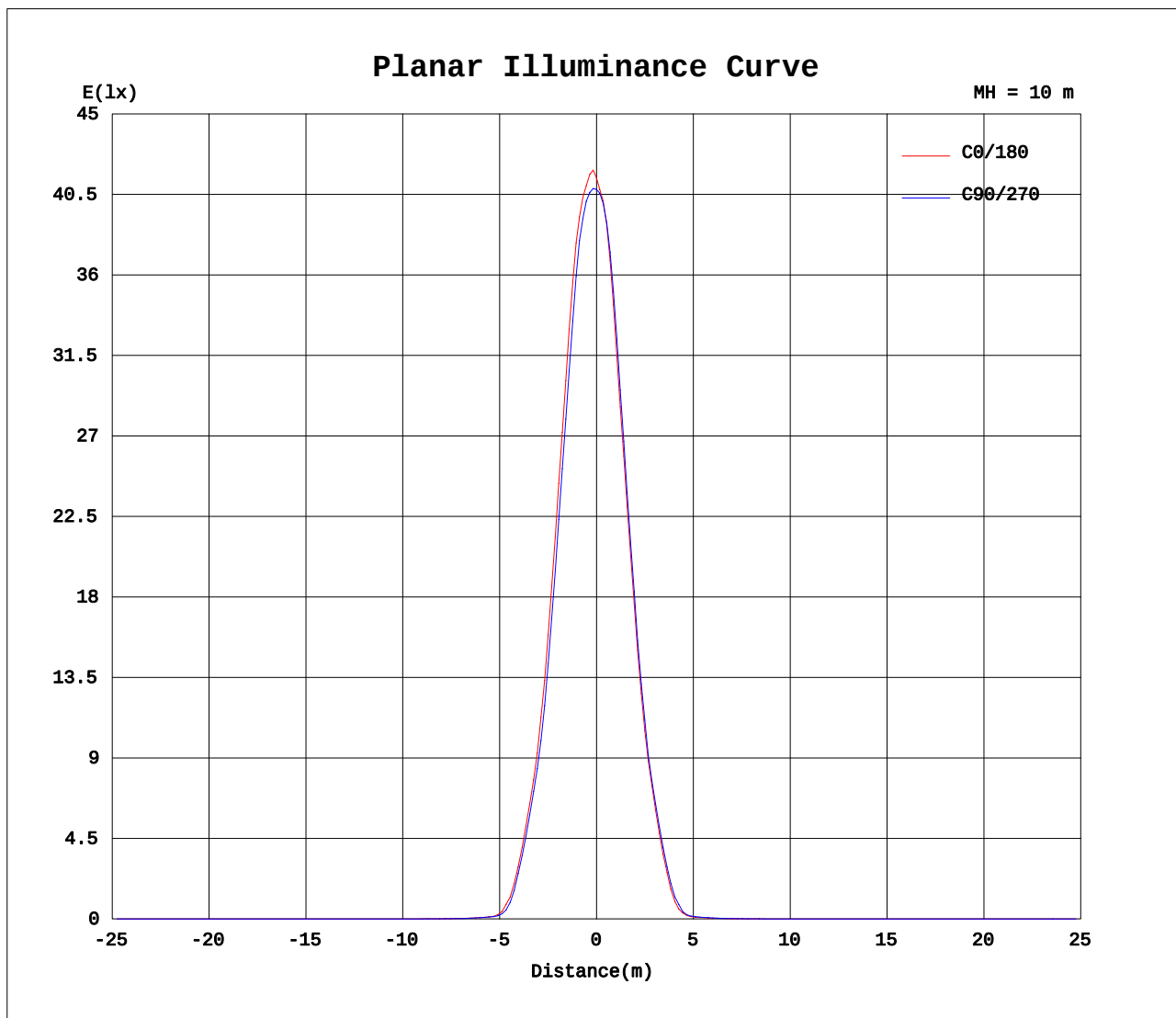
Table 3. Tabulation of average luminance(cd/sq.m.) and luminance limits

The luminaire satisfies the specified luminance criteria for  
Negative Software with Type I & II Screen(Good to Moderate treatment).

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:0  
Test Date:2022-04-22

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.262  
Humidity:65.0%  
Test Distance:7.100m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: 0  
Test Date: 2022-04-22

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.0.262  
Humidity: 65.0%  
Test Distance: 7.100m [K=1.0000]  
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

|                                  |        |                   |
|----------------------------------|--------|-------------------|
| NAME: Spot50-3000K-RA90-10W-24D. | TYPE:  | WEIGHT:           |
| DIM.:                            | SPEC.: | SERIAL No.:       |
| MFR.: 0                          | SUR.:  | PROTECTION ANGLE: |

Table--1

UNIT: cd

| C(°) \ γ (°) | 0    | 10   | 20   | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  | 110  | 120  | 130  | 140  | 150  | 160  | 170  | 180  |
|--------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0            | 4145 | 4125 | 4120 | 4103 | 4102 | 4088 | 4088 | 4080 | 4081 | 4079 | 4080 | 4082 | 4083 | 4087 | 4087 | 4093 | 4094 | 4100 | 4145 |
| 5            | 3970 | 3990 | 3982 | 3981 | 3962 | 3959 | 3931 | 3919 | 3865 | 3837 | 3779 | 3755 | 3698 | 3672 | 3617 | 3611 | 3564 | 3565 | 3471 |
| 10           | 2849 | 2902 | 2861 | 2875 | 2826 | 2829 | 2753 | 2737 | 2658 | 2636 | 2550 | 2514 | 2420 | 2395 | 2308 | 2300 | 2242 | 2252 | 2128 |
| 15           | 1480 | 1530 | 1503 | 1528 | 1487 | 1489 | 1430 | 1415 | 1363 | 1324 | 1272 | 1230 | 1190 | 1149 | 1098 | 1092 | 1059 | 1060 | 980  |
| 20           | 628  | 653  | 649  | 658  | 644  | 645  | 616  | 607  | 575  | 559  | 521  | 508  | 467  | 450  | 418  | 404  | 376  | 374  | 316  |
| 25           | 111  | 104  | 116  | 106  | 115  | 97.7 | 103  | 83.8 | 74.3 | 68.7 | 59.5 | 54.7 | 46.5 | 44.2 | 39.5 | 37.6 | 35.4 | 35.4 | 27.5 |
| 30           | 15.4 | 15.9 | 15.8 | 16.1 | 15.7 | 15.7 | 15.4 | 15.4 | 14.8 | 14.7 | 13.9 | 13.6 | 12.7 | 12.2 | 11.3 | 11.1 | 10.6 | 10.5 | 9.86 |
| 35           | 6.48 | 6.63 | 6.51 | 6.57 | 6.35 | 6.25 | 6.06 | 5.96 | 5.74 | 5.67 | 5.45 | 5.37 | 5.02 | 4.84 | 4.49 | 4.41 | 4.26 | 4.27 | 4.02 |
| 40           | 2.79 | 2.82 | 2.84 | 2.83 | 2.75 | 2.68 | 2.65 | 2.59 | 2.46 | 2.41 | 2.32 | 2.27 | 2.15 | 2.06 | 2.00 | 1.96 | 1.95 | 1.90 | 1.84 |
| 45           | 1.37 | 1.34 | 1.37 | 1.34 | 1.37 | 1.28 | 1.30 | 1.23 | 1.22 | 1.15 | 1.13 | 1.09 | 1.09 | 1.02 | 1.04 | 0.99 | 1.03 | 0.99 | 0.97 |
| 50           | 0.77 | 0.73 | 0.77 | 0.74 | 0.77 | 0.70 | 0.73 | 0.66 | 0.69 | 0.62 | 0.65 | 0.59 | 0.64 | 0.58 | 0.61 | 0.56 | 0.62 | 0.58 | 0.58 |
| 55           | 0.49 | 0.44 | 0.48 | 0.43 | 0.47 | 0.42 | 0.45 | 0.41 | 0.44 | 0.39 | 0.43 | 0.38 | 0.42 | 0.37 | 0.41 | 0.36 | 0.42 | 0.37 | 0.38 |
| 60           | 0.32 | 0.27 | 0.32 | 0.28 | 0.33 | 0.27 | 0.32 | 0.28 | 0.32 | 0.26 | 0.30 | 0.25 | 0.31 | 0.25 | 0.30 | 0.25 | 0.31 | 0.25 | 0.26 |
| 65           | 0.20 | 0.15 | 0.19 | 0.15 | 0.21 | 0.16 | 0.20 | 0.15 | 0.19 | 0.13 | 0.17 | 0.12 | 0.17 | 0.11 | 0.16 | 0.11 | 0.16 | 0.10 | 0.09 |
| 70           | 0.04 | 0.00 | 0.03 | 0.00 | 0.05 | 0.00 | 0.04 | 0.00 | 0.05 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 75           | 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 |
| 80           | 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 |
| 85           | 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 |
| 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 | 0.00 | 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 |
| 130          | 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 |
| 135          | 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 |
| 140          | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.02 | 0.00 | 0.03 | 0.00 | 0.05 | 0.00 | 0.06 | 0.03 | 0.08 | 0.04 | 0.10 | 0.17 |
| 145          | 0.27 | 0.30 | 0.26 | 0.30 | 0.26 | 0.31 | 0.28 | 0.34 | 0.31 | 0.36 | 0.33 | 0.39 | 0.38 | 0.43 | 0.42 | 0.47 | 0.46 | 0.51 | 0.59 |
| 150          | 0.90 | 0.91 | 0.89 | 0.91 | 0.89 | 0.93 | 0.92 | 0.97 | 0.96 | 1.02 | 1.01 | 1.07 | 1.09 | 1.14 | 1.15 | 1.21 | 1.23 | 1.27 | 1.34 |
| 155          | 1.87 | 1.87 | 1.85 | 1.86 | 1.86 | 1.88 | 1.89 | 1.93 | 1.95 | 2.00 | 2.03 | 2.09 | 2.12 | 2.17 | 2.21 | 2.26 | 2.28 | 2.33 | 2.37 |
| 160          | 3.03 | 3.03 | 3.00 | 3.00 | 2.99 | 3.02 | 3.03 | 3.08 | 3.10 | 3.15 | 3.17 | 3.23 | 3.26 | 3.31 | 3.35 | 3.40 | 3.41 | 3.47 | 3.46 |
| 165          | 4.04 | 4.05 | 4.00 | 4.03 | 3.99 | 4.03 | 4.00 | 4.05 | 4.05 | 4.11 | 4.10 | 4.16 | 4.15 | 4.21 | 4.20 | 4.25 | 4.24 | 4.30 | 4.28 |
| 170          | 4.64 | 4.67 | 4.60 | 4.63 | 4.57 | 4.61 | 4.56 | 4.61 | 4.57 | 4.63 | 4.59 | 4.63 | 4.59 | 4.63 | 4.60 | 4.66 | 4.63 | 4.70 | 4.68 |
| 175          | 4.85 | 4.87 | 4.81 | 4.82 | 4.75 | 4.78 | 4.72 | 4.75 | 4.70 | 4.74 | 4.69 | 4.72 | 4.66 | 4.70 | 4.65 | 4.71 | 4.69 | 4.79 | 4.83 |
| 180          | 4.93 | 4.93 | 4.88 | 4.87 | 4.81 | 4.81 | 4.77 | 4.77 | 4.74 | 4.74 | 4.72 | 4.72 | 4.71 | 4.71 | 4.72 | 4.72 | 4.76 | 4.81 | 4.95 |

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: 0  
Test Date: 2022-04-22

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.0.262  
Humidity: 65.0%  
Test Distance: 7.100m [K=1.0000]  
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

|                                  |        |                   |
|----------------------------------|--------|-------------------|
| NAME: Spot50-3000K-RA90-10W-24D. | TYPE:  | WEIGHT:           |
| DIM.:                            | SPEC.: | SERIAL No.:       |
| MFR.: 0                          | SUR.:  | PROTECTION ANGLE: |

Table--2

UNIT: cd

| C(°)<br>γ (°) | 190  | 200  | 210  | 220  | 230  | 240  | 250  | 260  | 270  | 280  | 290  | 300  | 310  | 320  | 330  | 340  | 350  |  |  |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|
| 0             | 4125 | 4120 | 4103 | 4102 | 4088 | 4088 | 4080 | 4081 | 4079 | 4080 | 4082 | 4083 | 4087 | 4087 | 4093 | 4094 | 4100 |  |  |
| 5             | 3426 | 3441 | 3415 | 3445 | 3445 | 3491 | 3499 | 3537 | 3546 | 3602 | 3615 | 3662 | 3691 | 3732 | 3750 | 3800 | 3819 |  |  |
| 10            | 2078 | 2103 | 2076 | 2119 | 2108 | 2155 | 2152 | 2208 | 2197 | 2267 | 2274 | 2361 | 2380 | 2469 | 2496 | 2593 | 2613 |  |  |
| 15            | 949  | 958  | 941  | 958  | 953  | 979  | 972  | 1007 | 1013 | 1054 | 1065 | 1116 | 1144 | 1198 | 1234 | 1281 | 1313 |  |  |
| 20            | 289  | 303  | 285  | 305  | 297  | 325  | 321  | 351  | 353  | 382  | 388  | 424  | 438  | 475  | 485  | 520  | 530  |  |  |
| 25            | 25.8 | 26.4 | 25.9 | 27.8 | 27.6 | 29.6 | 30.3 | 32.6 | 32.8 | 35.9 | 37.8 | 43.2 | 46.4 | 53.5 | 56.3 | 63.3 | 66.5 |  |  |
| 30            | 9.80 | 10.1 | 10.3 | 10.9 | 11.1 | 11.6 | 11.7 | 11.8 | 11.7 | 11.9 | 12.0 | 12.3 | 12.3 | 12.8 | 12.8 | 13.4 | 13.7 |  |  |
| 35            | 4.05 | 4.22 | 4.25 | 4.49 | 4.54 | 4.68 | 4.61 | 4.70 | 4.60 | 4.63 | 4.66 | 4.79 | 4.90 | 5.08 | 5.16 | 5.41 | 5.53 |  |  |
| 40            | 1.87 | 1.89 | 1.95 | 1.99 | 2.01 | 2.04 | 2.01 | 2.00 | 1.99 | 1.98 | 2.00 | 2.03 | 2.08 | 2.15 | 2.24 | 2.33 | 2.42 |  |  |
| 45            | 1.01 | 0.98 | 1.02 | 1.01 | 1.06 | 1.03 | 1.05 | 1.00 | 1.03 | 0.99 | 1.05 | 1.03 | 1.08 | 1.06 | 1.13 | 1.14 | 1.22 |  |  |
| 50            | 0.62 | 0.57 | 0.62 | 0.58 | 0.63 | 0.59 | 0.62 | 0.58 | 0.63 | 0.58 | 0.65 | 0.60 | 0.66 | 0.62 | 0.67 | 0.63 | 0.70 |  |  |
| 55            | 0.42 | 0.36 | 0.41 | 0.36 | 0.42 | 0.36 | 0.41 | 0.37 | 0.42 | 0.38 | 0.43 | 0.40 | 0.45 | 0.40 | 0.44 | 0.40 | 0.45 |  |  |
| 60            | 0.29 | 0.24 | 0.28 | 0.23 | 0.28 | 0.24 | 0.28 | 0.24 | 0.30 | 0.25 | 0.32 | 0.28 | 0.33 | 0.27 | 0.31 | 0.26 | 0.31 |  |  |
| 65            | 0.13 | 0.08 | 0.12 | 0.08 | 0.13 | 0.09 | 0.12 | 0.08 | 0.13 | 0.10 | 0.17 | 0.13 | 0.18 | 0.14 | 0.17 | 0.13 | 0.17 |  |  |
| 70            | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.02 | 0.00 | 0.02 |  |  |
| 75            | 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 |  |  |
| 80            | 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 |  |  |
| 85            | 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 |  |  |
| 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 |  |  |
| 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 |  |  |
| 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 |  |  |
| 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 |  |  |
| 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 |  |  |
| 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 |  |  |
| 125           | 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 |  |  |
| 130           | 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 |  |  |
| 135           | 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 |  |  |
| 140           | 0.12 | 0.17 | 0.13 | 0.17 | 0.12 | 0.15 | 0.10 | 0.14 | 0.08 | 0.12 | 0.07 | 0.09 | 0.04 | 0.08 | 0.03 | 0.07 | 0.03 |  |  |
| 145           | 0.57 | 0.60 | 0.57 | 0.60 | 0.56 | 0.57 | 0.51 | 0.54 | 0.48 | 0.49 | 0.44 | 0.45 | 0.39 | 0.40 | 0.36 | 0.38 | 0.34 |  |  |
| 150           | 1.34 | 1.36 | 1.34 | 1.35 | 1.31 | 1.30 | 1.25 | 1.25 | 1.18 | 1.17 | 1.11 | 1.09 | 1.05 | 1.04 | 0.99 | 0.98 | 0.95 |  |  |
| 155           | 2.37 | 2.39 | 2.37 | 2.37 | 2.33 | 2.31 | 2.26 | 2.24 | 2.18 | 2.15 | 2.09 | 2.06 | 2.00 | 1.98 | 1.93 | 1.91 | 1.88 |  |  |
| 160           | 3.44 | 3.46 | 3.42 | 3.44 | 3.40 | 3.39 | 3.33 | 3.32 | 3.26 | 3.23 | 3.17 | 3.15 | 3.08 | 3.07 | 3.02 | 3.01 | 2.97 |  |  |
| 165           | 4.21 | 4.24 | 4.19 | 4.21 | 4.15 | 4.18 | 4.11 | 4.14 | 4.07 | 4.08 | 4.01 | 4.02 | 3.95 | 3.98 | 3.92 | 3.94 | 3.90 |  |  |
| 170           | 4.60 | 4.62 | 4.54 | 4.56 | 4.51 | 4.54 | 4.48 | 4.52 | 4.46 | 4.50 | 4.44 | 4.47 | 4.42 | 4.46 | 4.42 | 4.46 | 4.42 |  |  |
| 175           | 4.75 | 4.75 | 4.67 | 4.69 | 4.62 | 4.67 | 4.60 | 4.65 | 4.59 | 4.63 | 4.58 | 4.62 | 4.57 | 4.64 | 4.61 | 4.67 | 4.64 |  |  |
| 180           | 4.92 | 4.91 | 4.83 | 4.83 | 4.79 | 4.79 | 4.75 | 4.75 | 4.72 | 4.73 | 4.71 | 4.71 | 4.70 | 4.71 | 4.72 | 4.76 | 4.80 |  |  |

C Range: 0 - 360DEG  
C Interval: 10.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators: 0  
Test Date: 2022-04-22

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.0.262  
Humidity: 65.0%  
Test Distance: 7.100m [K=1.0000]  
Remarks: