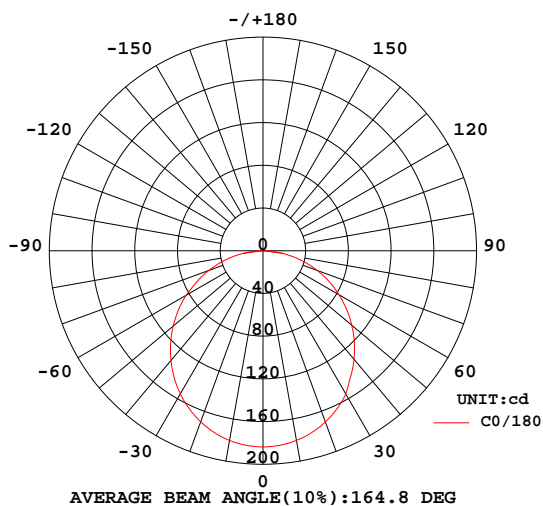


LUMINAIRE PHOTOMETRIC TEST REPORT

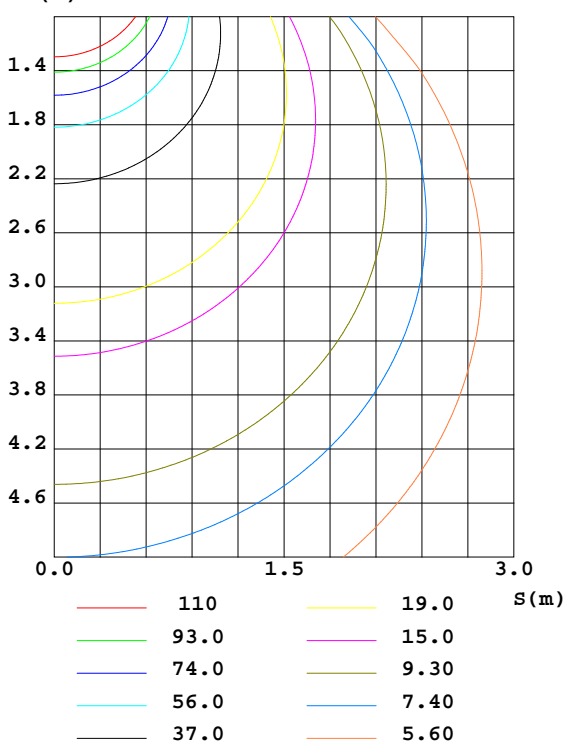
| | | |
|---|----------------|-------------------|
| NAME: C-SFR-F22B-HB-D24CC-W5700-108-2835-1M | TYPE: | WEIGHT:0.325Kg/m |
| DIM.: 16*17mm | SPEC.: | SERIAL No.: |
| MFR.: | SUR.:16*1000mm | PROTECTION ANGLE: |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 49.75 lm/W | | | |
|------------------|--------|----------------------------------|--------|-------------------|----------|
| MODEL | 2835 | I _{max} (cd) | 184.5 | S/MH(C0/180) | 1.25 |
| NOMINAL POWER(W) | 12 | LOR(%) | 99.4 | S/MH(C90/270) | 1.19 |
| RATED VOLTAGE(V) | 24 | TOTAL FLUX(lm) | 543.27 | η UP,DN(C0-180) | 0.6,45.3 |
| NOMINAL FLUX(lm) | 546.81 | CIE CLASS | DIRECT | η UP,DN(C180-360) | 0.8,52.7 |
| LAMPS INSIDE | 1 | η up(%) | 1.3 | CIBSE SHR NOM | 1.25 |
| TEST VOLTAGE(V) | 24 | η down(%) | 98.0 | CIBSE SHR MAX | 1.35 |

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:
Test Date:2018-06-28

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:45.0%
Test Distance:6.950m [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 | 180.3 | 178.0 | 177.0 | 178.2 | 180.4 | 182.8 | 183.6 | 182.5 | 0- 10 | 17.38 | 17.38 | 3.2,3.18 |
| 20 | 170.5 | 165.9 | 164.0 | 166.4 | 170.6 | 175.3 | 176.5 | 174.6 | 10- 20 | 49.72 | 67.10 | 12.4,12.3 |
| 30 | 154.8 | 146.4 | 145.5 | 147.0 | 155.1 | 161.5 | 163.1 | 160.4 | 20- 30 | 75.19 | 142.3 | 26.2,26 |
| 40 | 134.2 | 124.7 | 122.9 | 125.4 | 132.7 | 142.2 | 142.0 | 140.8 | 30- 40 | 90.17 | 232.5 | 42.8,42.5 |
| 50 | 109.9 | 99.78 | 97.57 | 100.5 | 108.6 | 118.6 | 118.9 | 117.2 | 40- 50 | 93.62 | 326.1 | 60,59.6 |
| 60 | 83.13 | 73.34 | 69.79 | 73.99 | 82.05 | 92.15 | 92.74 | 90.70 | 50- 60 | 85.65 | 411.7 | 75.8,75.3 |
| 70 | 54.18 | 46.06 | 42.70 | 46.56 | 54.18 | 62.92 | 65.17 | 61.63 | 60- 70 | 67.54 | 479.3 | 88.2,87.6 |
| 80 | 25.54 | 18.35 | 15.33 | 18.79 | 25.22 | 34.11 | 36.67 | 33.11 | 70- 80 | 42.32 | 521.6 | 96,95.4 |
| 90 | 0.0163 | 0.8717 | 1.377 | 2.121 | 2.269 | 6.409 | 8.467 | 5.421 | 80- 90 | 14.31 | 535.9 | 98.6,98 |
| 100 | 0 | 0.6945 | 1.108 | 1.835 | 2.112 | 2.426 | 1.607 | 0.9606 | 90-100 | 1.960 | 537.9 | 99,98.4 |
| 110 | 0.1016 | 0.6846 | 1.006 | 1.650 | 1.886 | 2.104 | 1.309 | 0.8275 | 100-110 | 1.387 | 539.3 | 99.3,98.6 |
| 120 | 0.2506 | 0.7096 | 0.9529 | 1.427 | 1.705 | 1.727 | 1.141 | 0.7899 | 110-120 | 1.159 | 540.4 | 99.5,98.8 |
| 130 | 0.3796 | 0.7421 | 0.9202 | 1.264 | 1.534 | 1.429 | 1.020 | 0.7798 | 120-130 | 0.9414 | 541.4 | 99.6,99 |
| 140 | 0.4814 | 0.7220 | 0.8801 | 1.098 | 1.348 | 1.175 | 0.9151 | 0.7422 | 130-140 | 0.7376 | 542.1 | 99.8,99.1 |
| 150 | 0.5782 | 0.6172 | 0.8000 | 0.9201 | 1.159 | 0.9471 | 0.8172 | 0.6395 | 140-150 | 0.5386 | 542.6 | 99.9,99.2 |
| 160 | 0.6552 | 0.6871 | 0.6819 | 0.8424 | 0.9778 | 0.7971 | 0.6369 | 0.6393 | 150-160 | 0.3554 | 543.0 | 99.9,99.3 |
| 170 | 0.7272 | 0.7446 | 0.7546 | 0.7848 | 0.8265 | 0.7471 | 0.7122 | 0.7321 | 160-170 | 0.2106 | 543.2 | 100,99.3 |
| 180 | 0.7819 | 0.7770 | 0.7948 | 0.7999 | 0.7869 | 0.7845 | 0.8024 | 0.7923 | 170-180 | 0.0727 | 543.3 | 100,99.4 |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | | |

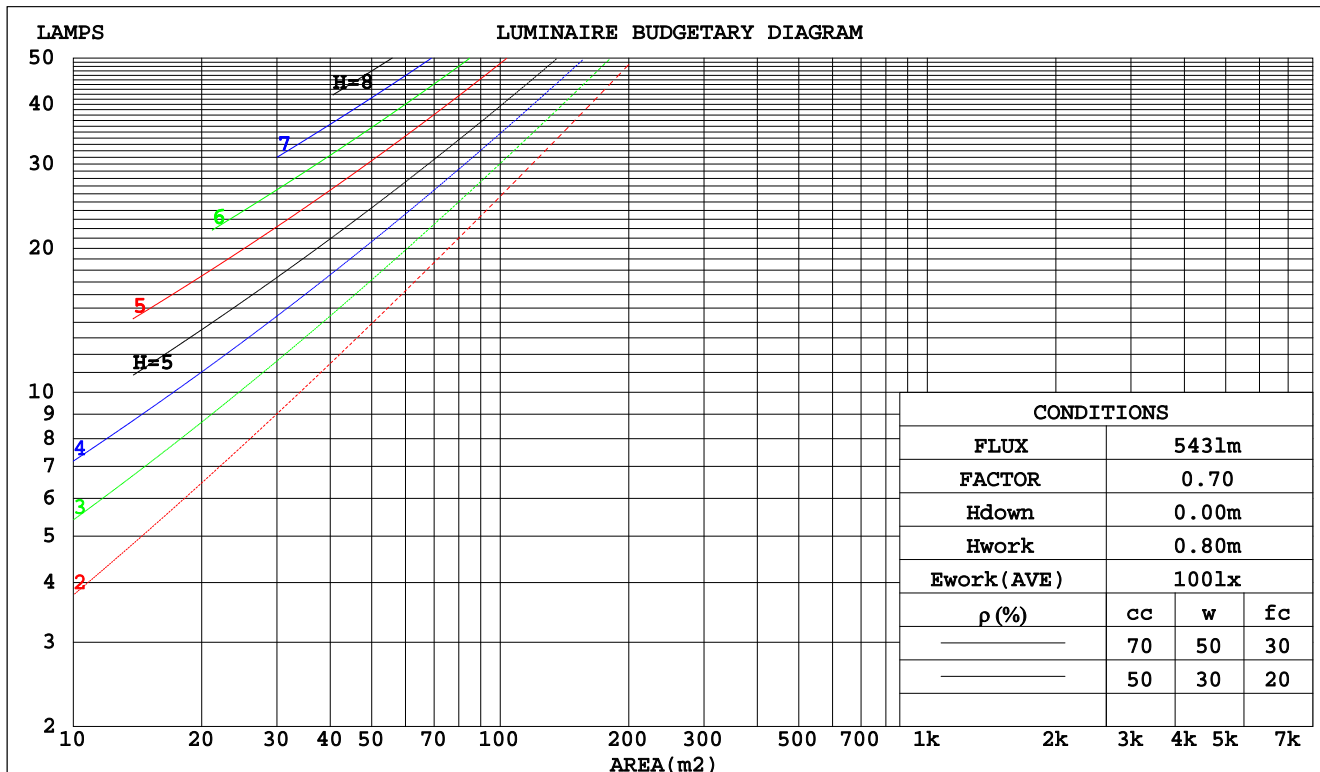
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-06-28

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:45.0%
Test Distance:6.950m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| | | |
|---|----------------|-------------------|
| NAME: C-SFR-F22B-HB-D24CC-W5700-108-2835-1M | TYPE: | WEIGHT:0.325Kg/m |
| DIM.: 16*17mm | SPEC.: | SERIAL No.: |
| MFR.: | SUR.:16*1000mm | PROTECTION ANGLE: |

| 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 | | | | | | | | | | | | | | | Coefficients of Utilization(CU) | | | | | | | | | | | | | | |
| 0.0 | 1.18 | 1.18 | 1.18 | 1.15 | 1.15 | 1.15 | 1.10 | 1.10 | 1.10 | 1.05 | 1.05 | 1.05 | 1.00 | 1.00 | 1.00 | .98 | | | | | | | | | | | | | | |
| 1.0 | 1.02 | .98 | .94 | .90 | .96 | .92 | .95 | .92 | .89 | .91 | .88 | .86 | .87 | .85 | .83 | .81 | | | | | | | | | | | | | | |
| 2.0 | .89 | .82 | .76 | .87 | .80 | .75 | .83 | .78 | .73 | .79 | .75 | .71 | .76 | .73 | .69 | .67 | | | | | | | | | | | | | | |
| 3.0 | .78 | .69 | .63 | .76 | .68 | .62 | .73 | .66 | .61 | .70 | .64 | .60 | .67 | .62 | .58 | .56 | | | | | | | | | | | | | | |
| 4.0 | .69 | .60 | .53 | .67 | .59 | .53 | .65 | .57 | .52 | .62 | .56 | .51 | .60 | .54 | .50 | .48 | | | | | | | | | | | | | | |
| 5.0 | .61 | .52 | .46 | .60 | .52 | .45 | .58 | .50 | .45 | .56 | .49 | .44 | .54 | .48 | .43 | .41 | | | | | | | | | | | | | | |
| 6.0 | .55 | .46 | .40 | .54 | .46 | .39 | .52 | .45 | .39 | .50 | .44 | .38 | .49 | .43 | .38 | .36 | | | | | | | | | | | | | | |
| 7.0 | .50 | .41 | .35 | .49 | .41 | .35 | .47 | .40 | .34 | .46 | .39 | .34 | .44 | .38 | .34 | .32 | | | | | | | | | | | | | | |
| 8.0 | .46 | .37 | .31 | .45 | .37 | .31 | .43 | .36 | .31 | .42 | .35 | .30 | .41 | .35 | .30 | .28 | | | | | | | | | | | | | | |
| 9.0 | .42 | .34 | .28 | .41 | .33 | .28 | .40 | .33 | .28 | .39 | .32 | .27 | .38 | .32 | .27 | .25 | | | | | | | | | | | | | | |
| 10.0 | .39 | .31 | .25 | .38 | .30 | .25 | .37 | .30 | .25 | .36 | .29 | .25 | .35 | .29 | .25 | .23 | | | | | | | | | | | | | | |



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2018-06-28

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity: 45.0%
Test Distance: 6.950m [K=1.0000]
Remarks:

WEC AND CCEC

| | | |
|---|----------------|-------------------|
| NAME: C-SFR-F22B-HB-D24CC-W5700-108-2835-1M | TYPE: | WEIGHT:0.325Kg/m |
| DIM.: 16*17mm | SPEC.: | SERIAL No.: |
| MFR.: | SUR.:16*1000mm | PROTECTION ANGLE: |

| 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 | | | | | | Wall Exitance Coefficients(WEC) | | | | | | | | | | |
| 0.0 | | | | | | | | | | | | | | | | | |
| 1.0 | .320 | .182 | .058 | .313 | .178 | .057 | .299 | .171 | .055 | .286 | .165 | .053 | .274 | .159 | .051 | | |
| 2.0 | .297 | .163 | .050 | .291 | .160 | .049 | .278 | .155 | .048 | .267 | .150 | .047 | .256 | .145 | .046 | | |
| 3.0 | .273 | .145 | .044 | .268 | .143 | .043 | .257 | .139 | .042 | .246 | .135 | .041 | .237 | .131 | .041 | | |
| 4.0 | .251 | .131 | .038 | .246 | .129 | .038 | .236 | .125 | .037 | .227 | .122 | .037 | .219 | .119 | .036 | | |
| 5.0 | .231 | .118 | .034 | .227 | .116 | .034 | .218 | .114 | .033 | .210 | .111 | .033 | .202 | .108 | .033 | | |
| 6.0 | .214 | .107 | .031 | .210 | .106 | .031 | .202 | .104 | .030 | .195 | .101 | .030 | .188 | .099 | .029 | | |
| 7.0 | .199 | .098 | .028 | .195 | .097 | .028 | .188 | .095 | .027 | .182 | .093 | .027 | .176 | .091 | .027 | | |
| 8.0 | .186 | .091 | .026 | .182 | .090 | .025 | .176 | .088 | .025 | .170 | .086 | .025 | .165 | .085 | .025 | | |
| 9.0 | .174 | .084 | .023 | .171 | .083 | .023 | .165 | .082 | .023 | .160 | .080 | .023 | .155 | .079 | .023 | | |
| 10.0 | .163 | .078 | .022 | .161 | .078 | .022 | .155 | .076 | .021 | .151 | .075 | .021 | .146 | .073 | .021 | | |

| 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 | | | | | | Ceiling Cavity Exitance Coefficients(CCEC) | | | | | | | | | |
| 0.0 | .200 | .200 | .200 | .171 | .171 | .171 | .116 | .116 | .116 | .067 | .067 | .067 | .021 | .021 | .021 | |
| 1.0 | .190 | .165 | .143 | .163 | .142 | .123 | .111 | .098 | .085 | .064 | .056 | .049 | .021 | .018 | .016 | |
| 2.0 | .183 | .141 | .107 | .156 | .122 | .092 | .107 | .084 | .064 | .062 | .049 | .038 | .020 | .016 | .012 | |
| 3.0 | .175 | .124 | .084 | .150 | .107 | .072 | .103 | .074 | .051 | .059 | .043 | .030 | .019 | .014 | .010 | |
| 4.0 | .167 | .111 | .068 | .144 | .096 | .059 | .099 | .067 | .042 | .057 | .039 | .025 | .018 | .013 | .008 | |
| 5.0 | .160 | .101 | .057 | .137 | .087 | .050 | .095 | .061 | .035 | .055 | .036 | .021 | .018 | .012 | .007 | |
| 6.0 | .153 | .092 | .049 | .131 | .080 | .043 | .090 | .056 | .030 | .052 | .033 | .018 | .017 | .011 | .006 | |
| 7.0 | .146 | .086 | .043 | .125 | .074 | .038 | .087 | .052 | .027 | .050 | .031 | .016 | .016 | .010 | .005 | |
| 8.0 | .139 | .080 | .039 | .120 | .069 | .034 | .083 | .049 | .024 | .048 | .029 | .014 | .016 | .009 | .005 | |
| 9.0 | .133 | .075 | .036 | .115 | .065 | .031 | .079 | .046 | .022 | .046 | .027 | .013 | .015 | .009 | .004 | |
| 10.0 | .127 | .071 | .033 | .110 | .061 | .029 | .076 | .043 | .020 | .044 | .026 | .012 | .014 | .008 | .004 | |

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-06-28

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:45.0%
Test Distance:6.950m [K=1.0000]
Remarks:

Uncorrected UGR Table

| | | | | | | | | | | | |
|--|---------------|------------------|------|------|------|----------------|----------------|-------------------|------|------|------|
| NAME: C-SFR-F22B-HB-D24CC-W5700-108-2835-1M | | | | | | TYPE: | | WEIGHT:0.325Kg/m | | | |
| DIM.: 16*17mm | | | | | | SPEC.: | | SERIAL No.: | | | |
| MFR.: | | | | | | SUR.:16*1000mm | | PROTECTION 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 | 20.7 | 22.2 | 21.0 | 22.4 | 22.7 | 20.0 | 21.5 | 20.3 | 21.8 | 22.0 | |
| | 3H | 22.4 | 23.8 | 22.7 | 24.0 | 24.3 | 21.5 | 22.9 | 21.8 | 23.1 | 23.4 |
| | 4H | 23.1 | 24.4 | 23.4 | 24.7 | 25.0 | 22.0 | 23.3 | 22.3 | 23.6 | 23.9 |
| | 6H | 23.6 | 24.9 | 24.0 | 25.2 | 25.5 | 22.3 | 23.6 | 22.7 | 23.9 | 24.2 |
| | 8H | 23.8 | 25.1 | 24.2 | 25.4 | 25.7 | 22.4 | 23.6 | 22.7 | 23.9 | 24.2 |
| | 12H | 23.9 | 25.1 | 24.3 | 25.4 | 25.8 | 22.3 | 23.5 | 22.7 | 23.8 | 24.2 |
| 4H | 2H | 21.2 | 22.5 | 21.5 | 22.8 | 23.1 | 20.7 | 22.0 | 21.0 | 22.3 | 22.6 |
| | 3H | 23.0 | 24.2 | 23.4 | 24.5 | 24.9 | 22.3 | 23.5 | 22.7 | 23.8 | 24.1 |
| | 4H | 23.9 | 25.0 | 24.3 | 25.3 | 25.7 | 22.9 | 24.0 | 23.3 | 24.4 | 24.7 |
| | 6H | 24.6 | 25.5 | 25.0 | 25.9 | 26.3 | 23.4 | 24.3 | 23.8 | 24.7 | 25.1 |
| | 8H | 24.8 | 25.7 | 25.3 | 26.1 | 26.5 | 23.4 | 24.3 | 23.9 | 24.7 | 25.1 |
| | 12H | 25.0 | 25.8 | 25.4 | 26.2 | 26.7 | 23.4 | 24.3 | 23.9 | 24.7 | 25.1 |
| 8H | 4H | 24.1 | 25.0 | 24.5 | 25.4 | 25.8 | 23.2 | 24.1 | 23.7 | 24.5 | 24.9 |
| | 6H | 24.9 | 25.6 | 25.4 | 26.1 | 26.5 | 23.8 | 24.5 | 24.2 | 24.9 | 25.4 |
| | 8H | 25.2 | 25.9 | 25.7 | 26.3 | 26.8 | 23.9 | 24.6 | 24.4 | 25.0 | 25.5 |
| | 12H | 25.4 | 26.0 | 25.9 | 26.5 | 27.0 | 23.9 | 24.5 | 24.4 | 25.0 | 25.5 |
| 12H | 4H | 24.1 | 24.9 | 24.5 | 25.3 | 25.7 | 23.2 | 24.1 | 23.7 | 24.5 | 24.9 |
| | 6H | 24.9 | 25.6 | 25.4 | 26.0 | 26.5 | 23.8 | 24.5 | 24.3 | 24.9 | 25.4 |
| | 8H | 25.3 | 25.8 | 25.8 | 26.3 | 26.8 | 24.0 | 24.6 | 24.5 | 25.0 | 25.5 |
| Variations with the observer position at spacings: | | | | | | | | | | | |
| S = 1.0H | + 0.1 / - 0.2 | | | | | + 0.2 / - 0.2 | | | | | |
| 1.5H | + 0.1 / - 0.2 | | | | | + 0.2 / - 0.3 | | | | | |
| 2.0H | + 0.2 / - 0.3 | | | | | + 0.2 / - 0.3 | | | | | |

CIE Pub.117 Corrected 546.8 lm Total Lamp Luminous Flux.(8log(F/F0) = -2.1)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2018-06-28

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity: 45.0%
Test Distance: 6.950m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

| | | |
|---|----------------|-------------------|
| NAME: C-SFR-F22B-HB-D24CC-W5700-108-2835-1M | TYPE: | WEIGHT:0.325Kg/m |
| DIM.: 16*17mm | SPEC.: | SERIAL No.: |
| MFR.: | SUR.:16*1000mm | PROTECTION ANGLE: |

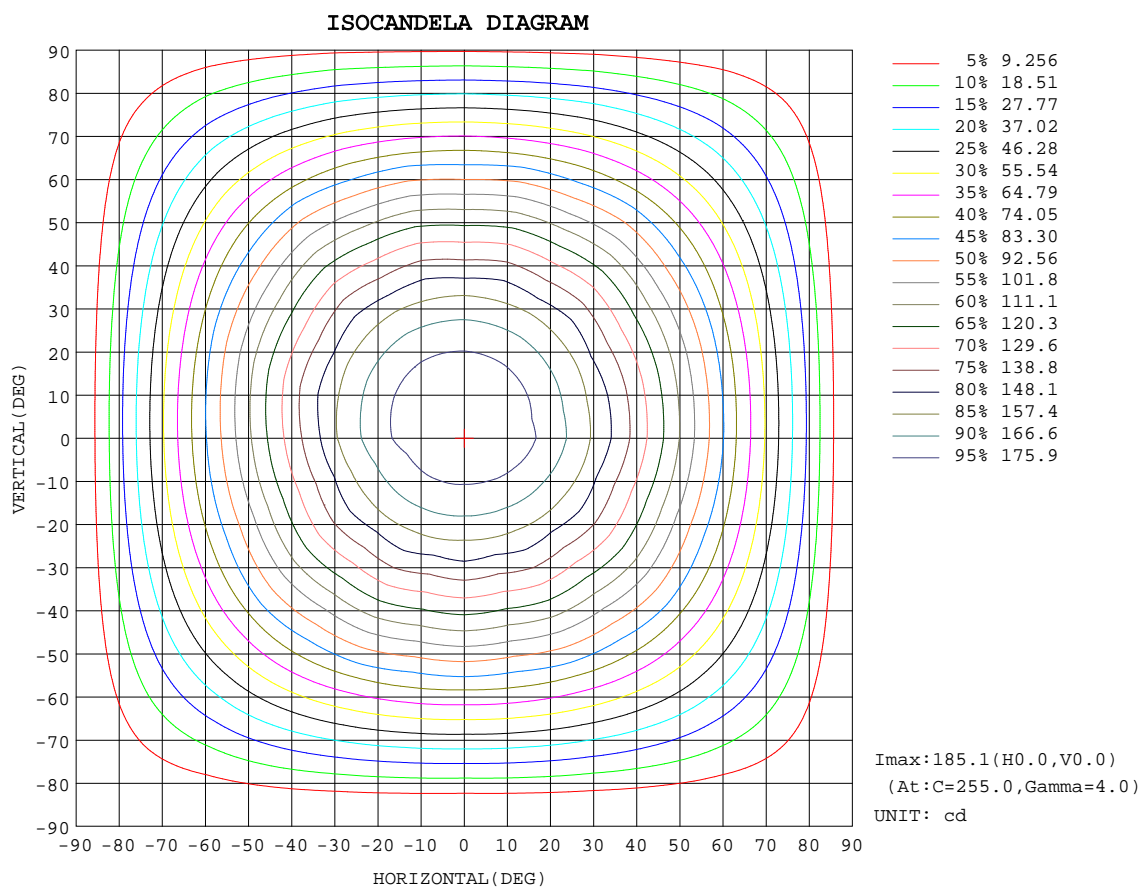
| REFLECTANCE | | | | | | | | | | |
|----------------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| Ceiling | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0 |
| Walls | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0 |
| Working plane | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0 |
| ROOM INDEX | UTILIZATION FACTORS(PERCENT) k(RI) x RCR = 5 | | | | | | | | | |
| k = 0.60 | 56 | 44 | 37 | 55 | 44 | 37 | 54 | 44 | 37 | 31 |
| 0.80 | 66 | 54 | 47 | 65 | 54 | 47 | 63 | 53 | 46 | 39 |
| 1.00 | 74 | 63 | 56 | 73 | 62 | 55 | 71 | 64 | 55 | 47 |
| 1.25 | 81 | 71 | 63 | 80 | 70 | 63 | 77 | 68 | 62 | 54 |
| 1.50 | 86 | 76 | 69 | 84 | 75 | 68 | 81 | 73 | 67 | 59 |
| 2.00 | 93 | 84 | 78 | 91 | 83 | 77 | 87 | 81 | 75 | 67 |
| 2.50 | 97 | 89 | 83 | 95 | 88 | 82 | 91 | 85 | 80 | 71 |
| 3.00 | 100 | 93 | 88 | 98 | 92 | 86 | 94 | 89 | 84 | 75 |
| 4.00 | 105 | 99 | 94 | 102 | 97 | 92 | 98 | 93 | 89 | 80 |
| 5.00 | 107 | 102 | 98 | 104 | 100 | 96 | 100 | 96 | 93 | 83 |
| 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:
Test Date:2018-06-28

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:45.0%
Test Distance:6.950m [K=1.0000]
Remarks:

ISOCANDELA DIAGRAM

| | | |
|---|----------------|-------------------|
| NAME: C-SFR-F22B-HB-D24CC-W5700-108-2835-1M | TYPE: | WEIGHT:0.325Kg/m |
| DIM.: 16*17mm | SPEC.: | SERIAL No.: |
| MFR.: | SUR.:16*1000mm | PROTECTION ANGLE: |

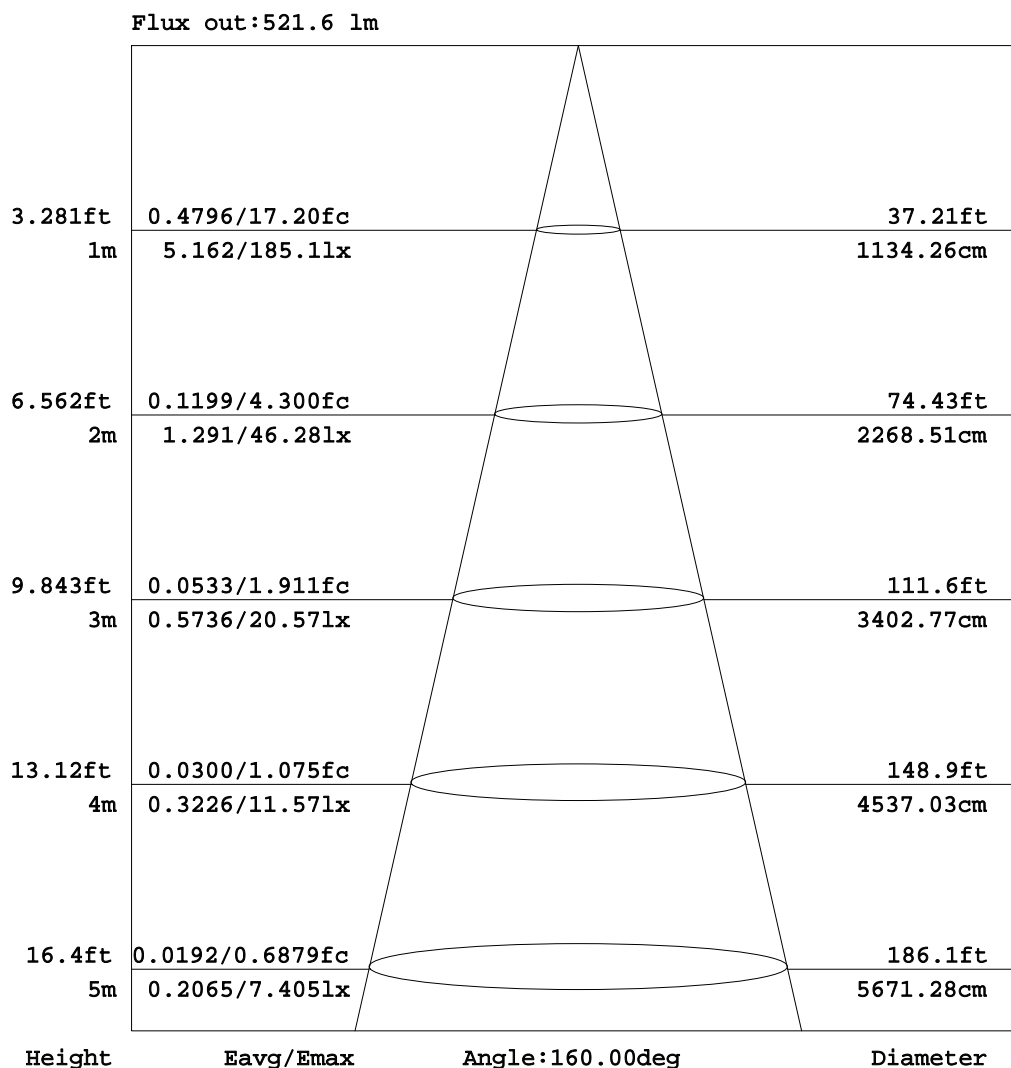


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-06-28

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:45.0%
Test Distance:6.950m [K=1.0000]
Remarks:

AAI Figure

| | | |
|---|----------------|-------------------|
| NAME: C-SFR-F22B-HB-D24CC-W5700-108-2835-1M | TYPE: | WEIGHT:0.325Kg/m |
| DIM.: 16*17mm | SPEC.: | SERIAL No.: |
| MFR.: | SUR.:16*1000mm | PROTECTION ANGLE: |



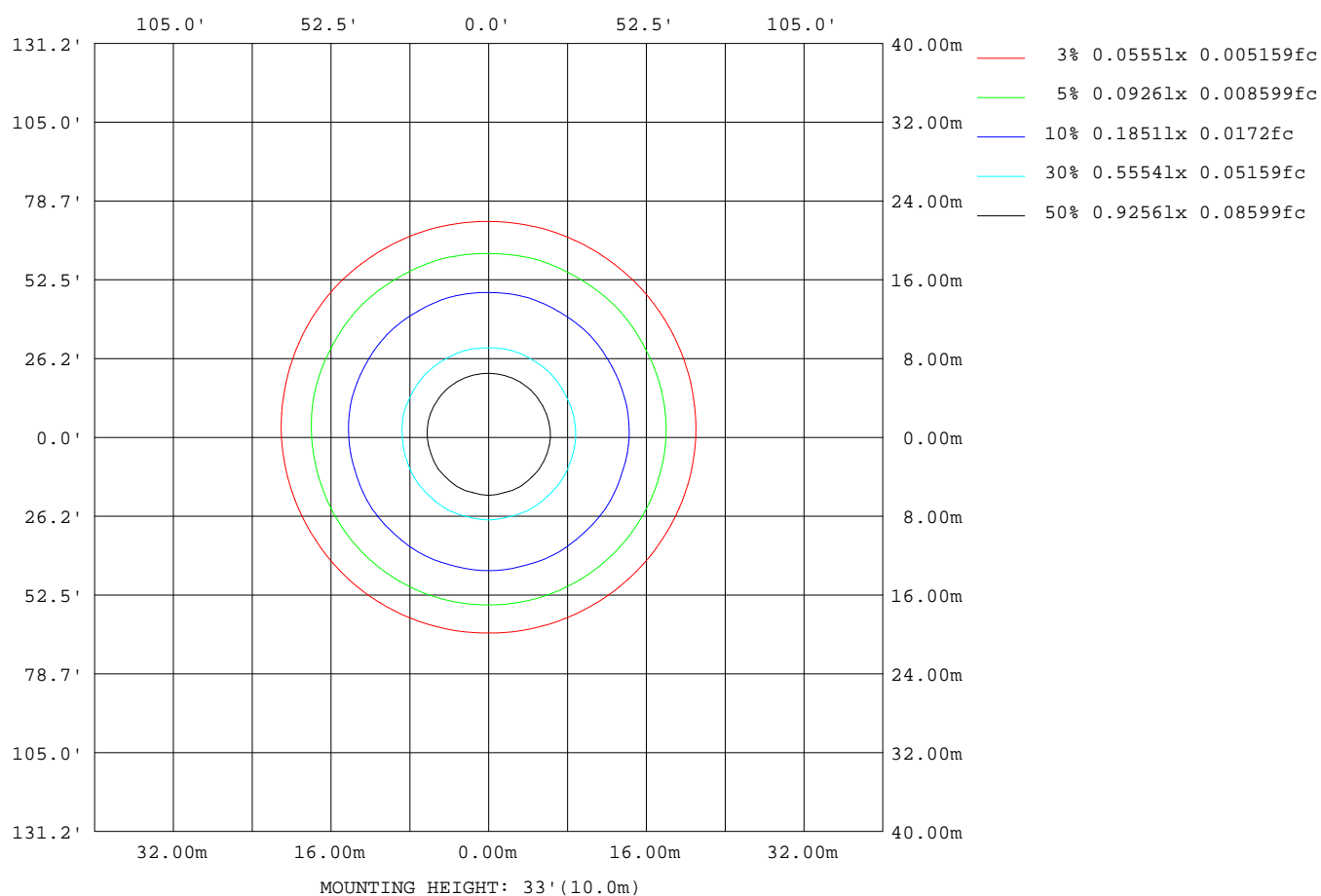
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-06-28

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:45.0%
Test Distance:6.950m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

| | | |
|---|----------------|-------------------|
| NAME: C-SFR-F22B-HB-D24CC-W5700-108-2835-1M | TYPE: | WEIGHT:0.325Kg/m |
| DIM.: 16*17mm | SPEC.: | SERIAL No.: |
| MFR.: | SUR.:16*1000mm | PROTECTION ANGLE: |



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-06-28

γ Range: 0 - 180DEG
 γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:45.0%
Test Distance:6.950m [K=1.0000]
Remarks:

Average Luminance Table(CIBSE)

| | | |
|---|----------------|-------------------|
| NAME: C-SFR-F22B-HB-D24CC-W5700-108-2835-1M | TYPE: | WEIGHT:0.325Kg/m |
| DIM.: 16*17mm | SPEC.: | SERIAL No.: |
| MFR.: | SUR.:16*1000mm | 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 | 546.81 | lm |
| Multiplying factor | K | 1 | |
| Luminous area in horizontal plane used in calculations | A | 0.016 | 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 deg | C plane(deg) | | | | | | | | | | | | | | | | | | |
|----------|--------------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
| 55 | 10538 | 10182 | 9983 | 9864 | 9577 | 9412 | 9375 | 9187 | 9125 | 9195 | 9144 | 9230 | 9443 | 9487 | 9644 | 9911 | 10007 | 10155 | 10412 |
| 60 | 10391 | 10017 | 9716 | 9476 | 9262 | 9077 | 8924 | 8823 | 8754 | 8724 | 8771 | 8865 | 8994 | 9159 | 9335 | 9523 | 9746 | 9986 | 10256 |
| 65 | 10079 | 9789 | 9488 | 9193 | 8949 | 8737 | 8561 | 8449 | 8368 | 8327 | 8385 | 8492 | 8636 | 8827 | 9027 | 9240 | 9531 | 9823 | 10100 |
| 70 | 9900 | 9546 | 9186 | 8836 | 8546 | 8292 | 8081 | 7946 | 7850 | 7802 | 7872 | 8001 | 8170 | 8388 | 8617 | 8867 | 9224 | 9574 | 9900 |
| 75 | 9636 | 9194 | 8732 | 8280 | 7923 | 7608 | 7342 | 7181 | 7061 | 6995 | 7081 | 7238 | 7444 | 7726 | 8004 | 8301 | 8773 | 9208 | 9592 |
| 80 | 9191 | 8598 | 7955 | 7313 | 6822 | 6380 | 5998 | 5799 | 5632 | 5516 | 5656 | 5872 | 6136 | 6546 | 6920 | 7292 | 7967 | 8569 | 9077 |
| 85 | 7868 | 6909 | 5826 | 4746 | 4040 | 3478 | 3032 | 2838 | 2687 | 2583 | 2740 | 3009 | 3354 | 3826 | 4283 | 4830 | 5942 | 6908 | 7737 |

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 | 10538 | 200 | --- | 500 |
| Category 2 | 65 to 90 | 10100 | 200 | --- | 500 |
| Category 3 | 75 to 90 | 9636 | 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: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators:
Test Date: 2018-06-28

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity: 45.0%
Test Distance: 6.950m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|---|----------------|-------------------|
| NAME: C-SFR-F22B-HB-D24CC-W5700-108-2835-1M | TYPE: | WEIGHT:0.325Kg/m |
| DIM.: 16*17mm | SPEC.: | SERIAL No.: |
| MFR.: | SUR.:16*1000mm | PROTECTION ANGLE: |

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 | 184 | 184 | 184 | 184 | 184 | 184 | 184 | 184 | 184 | 184 | 184 | 184 | 184 | 184 | 184 | 184 | 184 | 184 | 184 |
| 5 | 183 | 183 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 182 | 183 | 183 | 183 | 184 | 184 | 184 | 184 | 184 |
| 10 | 180 | 180 | 179 | 178 | 177 | 177 | 177 | 177 | 178 | 178 | 179 | 180 | 180 | 181 | 182 | 183 | 183 | 184 | 184 |
| 15 | 177 | 176 | 175 | 174 | 173 | 173 | 172 | 173 | 173 | 174 | 175 | 176 | 177 | 178 | 180 | 181 | 181 | 182 | 182 |
| 20 | 171 | 169 | 167 | 166 | 165 | 164 | 164 | 165 | 165 | 166 | 168 | 169 | 171 | 172 | 174 | 175 | 176 | 177 | 177 |
| 25 | 165 | 163 | 161 | 159 | 158 | 157 | 157 | 158 | 159 | 160 | 161 | 163 | 165 | 167 | 169 | 170 | 172 | 172 | 172 |
| 30 | 155 | 153 | 150 | 146 | 147 | 144 | 146 | 144 | 147 | 147 | 151 | 152 | 155 | 157 | 160 | 161 | 163 | 163 | 163 |
| 35 | 147 | 143 | 142 | 138 | 138 | 136 | 137 | 136 | 139 | 139 | 142 | 143 | 145 | 150 | 152 | 154 | 156 | 156 | 156 |
| 40 | 134 | 130 | 129 | 125 | 124 | 122 | 123 | 122 | 125 | 125 | 129 | 130 | 133 | 137 | 138 | 142 | 142 | 144 | 142 |
| 45 | 125 | 120 | 119 | 115 | 115 | 112 | 113 | 112 | 115 | 116 | 120 | 120 | 123 | 128 | 129 | 133 | 133 | 135 | 133 |
| 50 | 110 | 105 | 104 | 99.8 | 99.2 | 96.7 | 97.6 | 97.0 | 99.8 | 100 | 104 | 105 | 109 | 113 | 115 | 119 | 119 | 121 | 119 |
| 55 | 99.3 | 94.9 | 93.2 | 89.3 | 88.6 | 86.2 | 87.0 | 86.5 | 89.3 | 90.0 | 93.6 | 94.9 | 98.2 | 103 | 105 | 108 | 108 | 110 | 109 |
| 60 | 83.1 | 78.8 | 75.8 | 73.3 | 71.4 | 70.3 | 69.8 | 70.5 | 72.0 | 74.0 | 76.2 | 78.9 | 82.0 | 86.6 | 88.5 | 92.2 | 92.3 | 94.1 | 92.7 |
| 65 | 70.9 | 68.0 | 64.9 | 62.5 | 60.6 | 59.6 | 59.0 | 59.8 | 61.1 | 63.1 | 65.2 | 68.2 | 71.1 | 74.3 | 77.6 | 81.1 | 81.4 | 83.1 | 81.8 |
| 70 | 54.2 | 51.3 | 48.4 | 46.1 | 44.2 | 43.2 | 42.7 | 43.4 | 44.7 | 46.6 | 48.5 | 51.5 | 54.2 | 57.3 | 60.7 | 62.9 | 64.6 | 65.1 | 65.2 |
| 75 | 42.8 | 40.0 | 37.1 | 34.9 | 33.1 | 32.2 | 31.7 | 32.4 | 33.6 | 35.4 | 37.2 | 40.2 | 42.6 | 45.9 | 49.2 | 51.6 | 53.2 | 53.6 | 53.8 |
| 80 | 25.5 | 23.0 | 20.3 | 18.4 | 16.7 | 15.9 | 15.3 | 16.0 | 17.0 | 18.8 | 20.3 | 23.1 | 25.2 | 28.4 | 31.9 | 34.1 | 36.0 | 36.4 | 36.7 |
| 85 | 13.9 | 11.7 | 9.23 | 7.59 | 6.33 | 5.78 | 5.41 | 5.88 | 6.70 | 7.96 | 9.25 | 11.8 | 13.6 | 16.8 | 20.3 | 22.7 | 24.4 | 25.0 | 25.2 |
| 90 | 0.02 | 0.21 | 0.54 | 0.87 | 1.14 | 1.31 | 1.38 | 1.61 | 1.98 | 2.12 | 2.17 | 2.91 | 2.27 | 3.03 | 4.81 | 6.41 | 7.79 | 8.29 | 8.47 |
| 95 | 0.00 | 0.13 | 0.44 | 0.75 | 1.02 | 1.18 | 1.24 | 1.45 | 1.82 | 1.97 | 2.04 | 2.79 | 2.22 | 2.53 | 2.81 | 2.70 | 2.62 | 2.35 | 2.20 |
| 100 | 0.00 | 0.15 | 0.42 | 0.69 | 0.92 | 1.06 | 1.11 | 1.30 | 1.65 | 1.84 | 1.92 | 2.64 | 2.11 | 2.39 | 2.59 | 2.43 | 2.21 | 1.85 | 1.61 |
| 105 | 0.02 | 0.19 | 0.43 | 0.68 | 0.89 | 1.01 | 1.07 | 1.24 | 1.57 | 1.75 | 1.86 | 2.53 | 2.02 | 2.29 | 2.47 | 2.27 | 2.04 | 1.71 | 1.47 |
| 110 | 0.10 | 0.24 | 0.47 | 0.68 | 0.87 | 0.98 | 1.01 | 1.17 | 1.45 | 1.65 | 1.75 | 2.33 | 1.89 | 2.09 | 2.26 | 2.10 | 1.87 | 1.51 | 1.31 |
| 115 | 0.17 | 0.27 | 0.50 | 0.69 | 0.86 | 0.95 | 0.99 | 1.12 | 1.35 | 1.55 | 1.67 | 2.11 | 1.82 | 1.95 | 2.07 | 1.93 | 1.76 | 1.42 | 1.23 |
| 120 | 0.25 | 0.29 | 0.54 | 0.71 | 0.85 | 0.93 | 0.95 | 1.07 | 1.25 | 1.43 | 1.56 | 1.75 | 1.71 | 1.76 | 1.84 | 1.73 | 1.56 | 1.31 | 1.14 |
| 125 | 0.30 | 0.32 | 0.56 | 0.73 | 0.85 | 0.92 | 0.94 | 1.04 | 1.19 | 1.35 | 1.49 | 1.61 | 1.65 | 1.64 | 1.71 | 1.60 | 1.42 | 1.24 | 1.09 |
| 130 | 0.38 | 0.40 | 0.58 | 0.74 | 0.85 | 0.91 | 0.92 | 1.00 | 1.10 | 1.26 | 1.38 | 1.46 | 1.53 | 1.50 | 1.52 | 1.43 | 1.27 | 1.12 | 1.02 |
| 135 | 0.42 | 0.45 | 0.56 | 0.74 | 0.84 | 0.90 | 0.91 | 0.94 | 1.04 | 1.19 | 1.30 | 1.39 | 1.46 | 1.41 | 1.41 | 1.33 | 1.17 | 1.02 | 0.97 |
| 140 | 0.48 | 0.51 | 0.53 | 0.72 | 0.82 | 0.88 | 0.88 | 0.86 | 0.97 | 1.10 | 1.18 | 1.29 | 1.35 | 1.29 | 1.24 | 1.17 | 1.04 | 0.90 | 0.92 |
| 145 | 0.52 | 0.54 | 0.56 | 0.69 | 0.80 | 0.85 | 0.86 | 0.81 | 0.92 | 1.03 | 1.11 | 1.23 | 1.27 | 1.22 | 1.14 | 1.08 | 0.97 | 0.83 | 0.88 |
| 150 | 0.58 | 0.59 | 0.61 | 0.62 | 0.73 | 0.80 | 0.80 | 0.75 | 0.84 | 0.92 | 1.03 | 1.13 | 1.16 | 1.10 | 1.01 | 0.95 | 0.86 | 0.74 | 0.82 |
| 155 | 0.61 | 0.62 | 0.64 | 0.64 | 0.66 | 0.71 | 0.74 | 0.71 | 0.78 | 0.88 | 0.99 | 1.06 | 1.08 | 1.03 | 0.95 | 0.86 | 0.80 | 0.69 | 0.76 |
| 160 | 0.66 | 0.67 | 0.68 | 0.69 | 0.69 | 0.68 | 0.68 | 0.69 | 0.76 | 0.84 | 0.92 | 0.97 | 0.98 | 0.94 | 0.88 | 0.80 | 0.72 | 0.63 | 0.64 |
| 165 | 0.69 | 0.70 | 0.71 | 0.71 | 0.72 | 0.71 | 0.71 | 0.71 | 0.76 | 0.82 | 0.88 | 0.91 | 0.92 | 0.88 | 0.84 | 0.77 | 0.71 | 0.64 | 0.65 |
| 170 | 0.73 | 0.74 | 0.74 | 0.74 | 0.75 | 0.75 | 0.75 | 0.75 | 0.75 | 0.78 | 0.81 | 0.83 | 0.83 | 0.80 | 0.78 | 0.75 | 0.71 | 0.70 | 0.71 |
| 175 | 0.75 | 0.76 | 0.76 | 0.76 | 0.78 | 0.77 | 0.78 | 0.78 | 0.77 | 0.77 | 0.78 | 0.78 | 0.78 | 0.76 | 0.75 | 0.74 | 0.74 | 0.75 | 0.75 |
| 180 | 0.78 | 0.79 | 0.78 | 0.78 | 0.79 | 0.80 | 0.79 | 0.80 | 0.79 | 0.80 | 0.79 | 0.79 | 0.79 | 0.77 | 0.78 | 0.78 | 0.79 | 0.79 | 0.80 |

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-06-28

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:45.0%
Test Distance:6.950m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|---|----------------|-------------------|
| NAME: C-SFR-F22B-HB-D24CC-W5700-108-2835-1M | TYPE: | WEIGHT:0.325Kg/m |
| DIM.: 16*17mm | SPEC.: | SERIAL No.: |
| MFR.: | SUR.:16*1000mm | PROTECTION ANGLE: |

Table--2

UNIT: cd

| C(DEC) γ (DEC) | 285 | 300 | 315 | 330 | 345 | | | | | | | | | | | | | | |
|-------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0 | 184 | 184 | 184 | 184 | 184 | | | | | | | | | | | | | | |
| 5 | 184 | 184 | 184 | 184 | 184 | | | | | | | | | | | | | | |
| 10 | 183 | 183 | 182 | 182 | 181 | | | | | | | | | | | | | | |
| 15 | 181 | 181 | 180 | 179 | 178 | | | | | | | | | | | | | | |
| 20 | 176 | 176 | 175 | 174 | 172 | | | | | | | | | | | | | | |
| 25 | 171 | 171 | 170 | 168 | 167 | | | | | | | | | | | | | | |
| 30 | 162 | 162 | 160 | 159 | 157 | | | | | | | | | | | | | | |
| 35 | 155 | 155 | 153 | 149 | 150 | | | | | | | | | | | | | | |
| 40 | 143 | 141 | 141 | 137 | 137 | | | | | | | | | | | | | | |
| 45 | 134 | 132 | 132 | 128 | 128 | | | | | | | | | | | | | | |
| 50 | 120 | 117 | 117 | 114 | 113 | | | | | | | | | | | | | | |
| 55 | 110 | 107 | 107 | 104 | 102 | | | | | | | | | | | | | | |
| 60 | 93.5 | 91.1 | 90.7 | 87.4 | 86.2 | | | | | | | | | | | | | | |
| 65 | 82.5 | 80.2 | 79.1 | 76.5 | 74.0 | | | | | | | | | | | | | | |
| 70 | 64.4 | 63.5 | 61.6 | 59.7 | 57.2 | | | | | | | | | | | | | | |
| 75 | 53.2 | 52.2 | 50.4 | 48.3 | 45.8 | | | | | | | | | | | | | | |
| 80 | 36.0 | 35.1 | 33.1 | 31.1 | 28.5 | | | | | | | | | | | | | | |
| 85 | 24.7 | 23.7 | 21.7 | 19.7 | 17.1 | | | | | | | | | | | | | | |
| 90 | 8.02 | 7.05 | 5.42 | 3.71 | 1.81 | | | | | | | | | | | | | | |
| 95 | 1.99 | 1.63 | 1.15 | 0.70 | 0.22 | | | | | | | | | | | | | | |
| 100 | 1.52 | 1.29 | 0.96 | 0.57 | 0.21 | | | | | | | | | | | | | | |
| 105 | 1.39 | 1.19 | 0.89 | 0.55 | 0.24 | | | | | | | | | | | | | | |
| 110 | 1.25 | 1.08 | 0.83 | 0.54 | 0.28 | | | | | | | | | | | | | | |
| 115 | 1.18 | 1.03 | 0.82 | 0.55 | 0.30 | | | | | | | | | | | | | | |
| 120 | 1.11 | 0.98 | 0.79 | 0.57 | 0.31 | | | | | | | | | | | | | | |
| 125 | 1.06 | 0.95 | 0.78 | 0.59 | 0.32 | | | | | | | | | | | | | | |
| 130 | 1.01 | 0.92 | 0.78 | 0.60 | 0.36 | | | | | | | | | | | | | | |
| 135 | 0.97 | 0.90 | 0.77 | 0.58 | 0.40 | | | | | | | | | | | | | | |
| 140 | 0.92 | 0.86 | 0.74 | 0.54 | 0.47 | | | | | | | | | | | | | | |
| 145 | 0.89 | 0.83 | 0.71 | 0.51 | 0.51 | | | | | | | | | | | | | | |
| 150 | 0.81 | 0.76 | 0.64 | 0.55 | 0.57 | | | | | | | | | | | | | | |
| 155 | 0.75 | 0.69 | 0.59 | 0.59 | 0.61 | | | | | | | | | | | | | | |
| 160 | 0.64 | 0.63 | 0.64 | 0.65 | 0.66 | | | | | | | | | | | | | | |
| 165 | 0.65 | 0.67 | 0.67 | 0.68 | 0.69 | | | | | | | | | | | | | | |
| 170 | 0.71 | 0.72 | 0.73 | 0.73 | 0.73 | | | | | | | | | | | | | | |
| 175 | 0.75 | 0.76 | 0.76 | 0.75 | 0.76 | | | | | | | | | | | | | | |
| 180 | 0.80 | 0.79 | 0.79 | 0.79 | 0.78 | | | | | | | | | | | | | | |

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:
Test Date:2018-06-28

γ Range: 0 - 180DEG
γ Interval: 2.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V1.0.257
Humidity:45.0%
Test Distance:6.950m [K=1.0000]
Remarks: