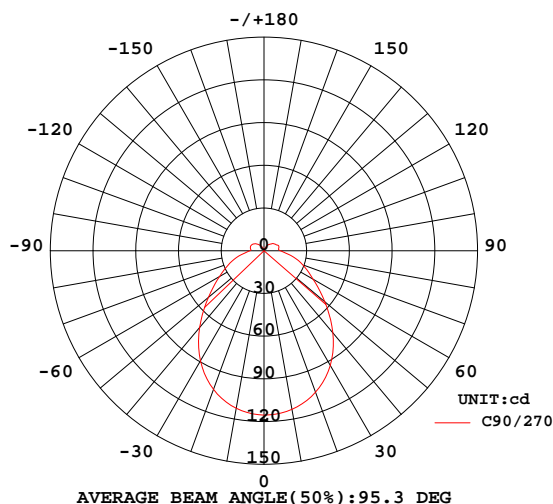


LUMINAIRE PHOTOMETRIC TEST REPORT

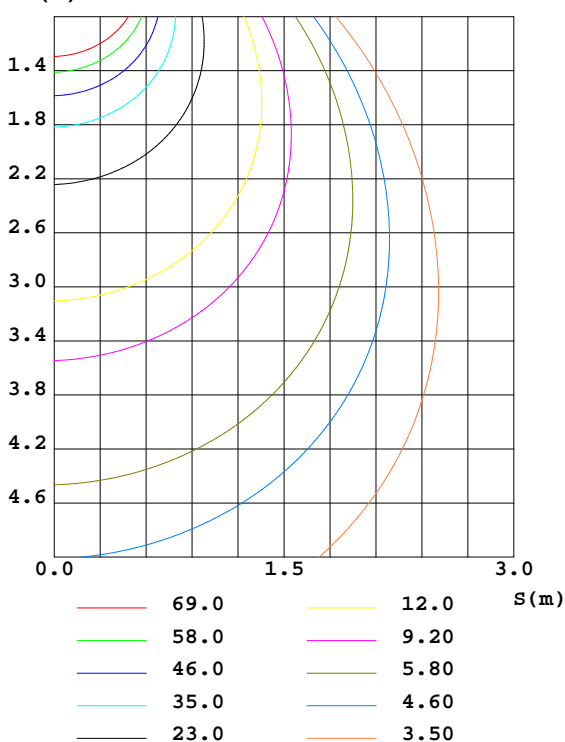
| | |
|--|--------------------|
| NAME: C-SFR-F16S-VB-D24CC-RGBW(2700K)-56-5050-1M-W | WEIGHT:0.129kg/m |
| DIM.: 15.5*6mm | SPEC.: |
| MFR.: | SUR.:15.5*1000mm |
| | PROTECTION ANGLE:/ |

| DATA OF LAMP | | PHOTOMETRIC DATA | | | | Eff: 69.14 lm/W |
|------------------|------|------------------|--------|-------------------|----------|-----------------|
| MODEL | 5050 | Imax(cd) | 115.5 | S/MH(C0/180) | 1.15 | |
| NOMINAL POWER(W) | 4.63 | LOR(%) | 114.3 | S/MH(C90/270) | 1.16 | |
| RATED VOLTAGE(V) | 24 | TOTAL FLUX(lm) | 320.13 | η UP,DN(C0-180) | 4.8,50.6 | |
| NOMINAL FLUX(lm) | 280 | CIE CLASS | DIRECT | η UP,DN(C180-360) | 5.5,53.4 | |
| LAMPS INSIDE | 1 | η up(%) | 10.3 | CIBSE SHR NOM | 1.25 | |
| TEST VOLTAGE(V) | 24 | η down(%) | 104.0 | CIBSE SHR MAX | 1.30 | |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:shan
Test Date:2018-09-01

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 | 111.5 | 111.8 | 112.4 | 113.1 | 113.9 | 113.5 | 113.1 | 112.5 | 0- 10 | 10.89 | 10.89 | 3.4,3.89 |
| 20 | 102.4 | 102.9 | 103.7 | 105.2 | 107.0 | 106.4 | 105.8 | 104.7 | 10- 20 | 30.83 | 41.71 | 13,14.9 |
| 30 | 87.94 | 88.40 | 89.26 | 91.49 | 94.34 | 93.66 | 93.08 | 91.50 | 20- 30 | 45.36 | 87.08 | 27.2,31.1 |
| 40 | 69.46 | 69.52 | 70.29 | 73.25 | 76.56 | 75.67 | 75.18 | 73.83 | 30- 40 | 51.52 | 138.6 | 43.3,49.5 |
| 50 | 50.26 | 50.15 | 51.01 | 53.88 | 56.59 | 56.08 | 55.79 | 54.96 | 40- 50 | 48.75 | 187.3 | 58.5,66.9 |
| 60 | 34.01 | 34.98 | 35.99 | 37.86 | 38.75 | 39.74 | 39.82 | 38.75 | 50- 60 | 40.45 | 227.8 | 71.2,81.4 |
| 70 | 21.09 | 23.75 | 25.47 | 25.56 | 24.40 | 27.30 | 28.95 | 26.61 | 60- 70 | 31.00 | 258.8 | 80.8,92.4 |
| 80 | 9.196 | 13.82 | 16.37 | 15.20 | 11.72 | 16.40 | 19.13 | 16.26 | 70- 80 | 21.37 | 280.2 | 87.5,100 |
| 90 | 0.0033 | 6.303 | 10.03 | 7.704 | 0.5132 | 7.212 | 11.59 | 8.445 | 80- 90 | 11.12 | 291.3 | 91,104 |
| 100 | 0.0144 | 6.404 | 9.723 | 6.243 | 0.0701 | 6.516 | 10.56 | 7.326 | 90-100 | 6.524 | 297.8 | 93,106 |
| 110 | 0.2337 | 6.386 | 9.994 | 5.255 | 0.0892 | 7.095 | 10.86 | 7.586 | 100-110 | 6.425 | 304.2 | 95,109 |
| 120 | 0.4435 | 5.696 | 9.271 | 4.924 | 0.1183 | 5.247 | 9.254 | 7.238 | 110-120 | 5.659 | 309.9 | 96.8,111 |
| 130 | 0.6509 | 4.448 | 7.708 | 3.679 | 0.1833 | 3.810 | 7.901 | 6.340 | 120-130 | 4.358 | 314.3 | 98.2,112 |
| 140 | 0.8005 | 2.948 | 5.628 | 2.602 | 0.2583 | 2.399 | 6.004 | 4.990 | 130-140 | 2.909 | 317.2 | 99.1,113 |
| 150 | 0.9694 | 1.856 | 3.558 | 1.796 | 0.5067 | 1.614 | 3.900 | 3.647 | 140-150 | 1.682 | 318.8 | 99.6,114 |
| 160 | 1.039 | 1.193 | 1.901 | 1.263 | 0.7358 | 1.539 | 1.433 | 2.512 | 150-160 | 0.8416 | 319.7 | 99.9,114 |
| 170 | 1.083 | 0.9237 | 0.8287 | 0.7625 | 0.9262 | 1.315 | 0.7646 | 1.533 | 160-170 | 0.3535 | 320.0 | 100,114 |
| 180 | 1.078 | 1.078 | 0.4514 | 0.8813 | 1.068 | 1.090 | 0.4442 | 0.8571 | 170-180 | 0.0890 | 320.1 | 100,114 |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | | |

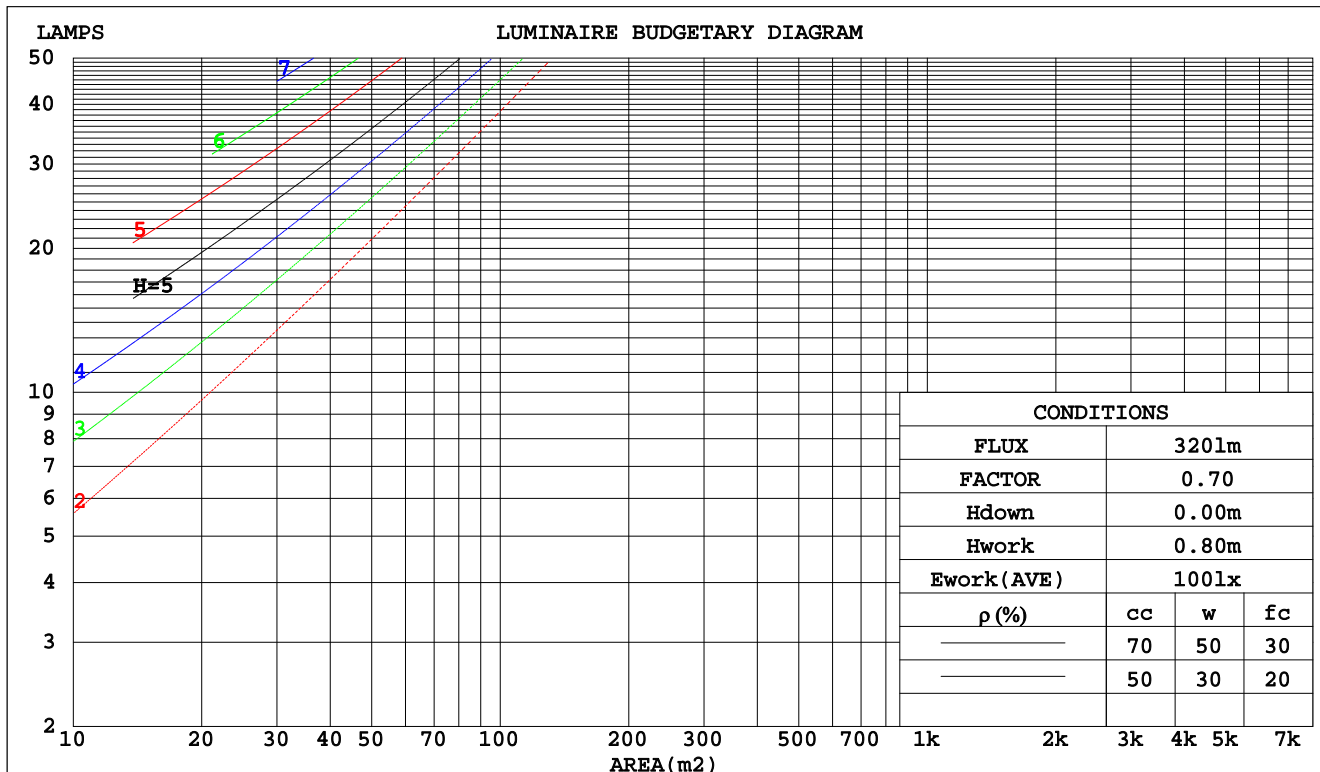
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:shan
Test Date:2018-09-01

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-F16S-VB-D24CC-RGBW(2700K)-56-5050-1M-W | WEIGHT:0.129kg/m |
| DIM.: 15.5*6mm | SPEC.: |
| MFR.: | SUR.:15.5*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 | | | | | | | | | | | | | | | CU |
| | Coefficients of Utilization(CU) | | | | | | | | | | | | | | | |
| 0.0 | 1.34 | 1.34 | 1.34 | 1.29 | 1.29 | 1.29 | 1.21 | 1.21 | 1.21 | 1.14 | 1.14 | 1.14 | 1.07 | 1.07 | 1.07 | 1.04 |
| 1.0 | 1.16 | 1.11 | 1.06 | 1.12 | 1.08 | 1.04 | 1.05 | 1.02 | .98 | .99 | .96 | .94 | .94 | .91 | .89 | .86 |
| 2.0 | 1.01 | .93 | .87 | .98 | .91 | .85 | .92 | .87 | .82 | .87 | .82 | .78 | .82 | .78 | .75 | .72 |
| 3.0 | .89 | .80 | .73 | .87 | .78 | .71 | .82 | .75 | .69 | .77 | .71 | .66 | .73 | .68 | .64 | .61 |
| 4.0 | .79 | .70 | .62 | .77 | .68 | .61 | .73 | .65 | .59 | .69 | .63 | .57 | .66 | .60 | .55 | .53 |
| 5.0 | .71 | .61 | .54 | .69 | .60 | .53 | .66 | .58 | .51 | .62 | .55 | .50 | .59 | .53 | .49 | .46 |
| 6.0 | .64 | .54 | .47 | .63 | .53 | .47 | .60 | .51 | .45 | .57 | .50 | .44 | .54 | .48 | .43 | .40 |
| 7.0 | .58 | .49 | .42 | .57 | .48 | .41 | .54 | .46 | .40 | .52 | .45 | .39 | .50 | .43 | .38 | .36 |
| 8.0 | .53 | .44 | .37 | .52 | .43 | .37 | .50 | .42 | .36 | .48 | .41 | .35 | .46 | .39 | .35 | .32 |
| 9.0 | .49 | .40 | .34 | .48 | .39 | .33 | .46 | .38 | .33 | .44 | .37 | .32 | .42 | .36 | .31 | .29 |
| 10.0 | .45 | .37 | .31 | .44 | .36 | .30 | .43 | .35 | .30 | .41 | .34 | .29 | .39 | .33 | .29 | .27 |



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:shan
Test Date:2018-09-01

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-F16S-VB-D24CC-RGBW(2700K)-56-5050-1M-W | WEIGHT:0.129kg/m |
| DIM.: 15.5*6mm | SPEC.: SERIAL No.: |
| MFR.: | SUR.:15.5*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 Wall Exitance Coefficients(WEC) | | | | | |
| 0.0 | | | | | | |
| 1.0 | .363 .206 .065 | .351 .200 .064 | .330 .189 .061 | .311 .179 .058 | .293 .170 .055 | |
| 2.0 | .331 .181 .056 | .321 .177 .054 | .302 .168 .052 | .285 .160 .050 | .269 .152 .048 | |
| 3.0 | .302 .161 .048 | .293 .157 .047 | .277 .150 .046 | .261 .143 .044 | .247 .137 .042 | |
| 4.0 | .277 .144 .042 | .269 .141 .042 | .254 .135 .040 | .240 .129 .039 | .227 .123 .038 | |
| 5.0 | .256 .130 .038 | .249 .128 .037 | .235 .122 .036 | .222 .117 .035 | .211 .112 .034 | |
| 6.0 | .237 .119 .034 | .230 .116 .034 | .218 .112 .033 | .207 .107 .032 | .196 .103 .031 | |
| 7.0 | .220 .109 .031 | .215 .107 .030 | .203 .103 .030 | .193 .099 .029 | .183 .095 .028 | |
| 8.0 | .206 .101 .028 | .201 .099 .028 | .190 .095 .027 | .181 .092 .026 | .172 .088 .026 | |
| 9.0 | .193 .093 .026 | .188 .092 .026 | .179 .088 .025 | .170 .085 .024 | .162 .082 .024 | |
| 10.0 | .182 .087 .024 | .177 .086 .024 | .169 .083 .023 | .161 .080 .023 | .153 .077 .022 | |

| 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 | .296 .296 .296 | .253 .253 .253 | .173 .173 .173 | .099 .099 .099 | .032 .032 .032 | |
| 1.0 | .286 .258 .232 | .245 .221 .200 | .167 .152 .138 | .096 .088 .080 | .031 .028 .026 | |
| 2.0 | .276 .230 .192 | .237 .198 .166 | .162 .137 .116 | .093 .080 .068 | .030 .026 .022 | |
| 3.0 | .267 .211 .166 | .229 .182 .144 | .157 .126 .101 | .091 .074 .059 | .029 .024 .019 | |
| 4.0 | .258 .196 .148 | .221 .169 .129 | .152 .118 .091 | .088 .069 .054 | .028 .022 .018 | |
| 5.0 | .249 .184 .136 | .214 .159 .118 | .147 .111 .083 | .085 .065 .049 | .028 .021 .016 | |
| 6.0 | .241 .175 .127 | .207 .151 .110 | .143 .106 .078 | .083 .062 .046 | .027 .020 .015 | |
| 7.0 | .233 .167 .120 | .201 .145 .105 | .139 .101 .074 | .081 .060 .044 | .026 .020 .015 | |
| 8.0 | .226 .160 .115 | .195 .139 .100 | .135 .098 .071 | .078 .058 .042 | .025 .019 .014 | |
| 9.0 | .219 .155 .111 | .189 .134 .097 | .131 .094 .069 | .076 .056 .041 | .025 .018 .014 | |
| 10.0 | .213 .150 .108 | .184 .130 .094 | .127 .092 .067 | .074 .054 .040 | .024 .018 .013 | |

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:shan
Test Date:2018-09-01

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-F16S-VB-D24CC-RGBW(2700K)-56-5050-1M-W | | | | | | WEIGHT:0.129kg/m | | | | |
| DIM.: 15.5*6mm | | | | | | SPEC.: | | SERIAL No.: | | |
| MFR.: | | | | | | SUR.:15.5*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 | | | | |
| x = 2H y = 2H | | | | | | Viewed endwise | | | | |
| 3H | | | | | | 17.1 | 18.5 | 17.5 | 18.8 | 19.2 |
| 4H | | | | | | 17.3 | 18.6 | 17.6 | 19.0 | 19.4 |
| 6H | | | | | | 18.9 | 20.2 | 19.3 | 20.6 | 21.0 |
| 8H | | | | | | 19.1 | 20.3 | 19.5 | 20.7 | 21.1 |
| 12H | | | | | | 19.8 | 21.0 | 20.2 | 21.4 | 21.8 |
| 4H | | | | | | 19.5 | 20.6 | 20.0 | 21.1 | 21.5 |
| 8H | | | | | | 20.7 | 21.8 | 21.1 | 22.2 | 22.7 |
| 12H | | | | | | 21.1 | 22.2 | 21.6 | 22.6 | 23.1 |
| 2H | | | | | | 21.6 | 22.7 | 22.1 | 23.1 | 23.6 |
| 3H | | | | | | 17.7 | 18.8 | 18.1 | 19.2 | 19.7 |
| 4H | | | | | | 19.3 | 20.3 | 19.7 | 20.8 | 21.2 |
| 6H | | | | | | 20.0 | 21.0 | 20.5 | 21.5 | 22.0 |
| 8H | | | | | | 20.6 | 21.5 | 21.2 | 22.0 | 22.5 |
| 12H | | | | | | 21.8 | 22.7 | 22.3 | 23.2 | 23.7 |
| 4H | | | | | | 20.8 | 21.6 | 21.4 | 22.1 | 22.7 |
| 6H | | | | | | 22.3 | 23.1 | 22.9 | 23.7 | 24.2 |
| 8H | | | | | | 20.9 | 21.7 | 21.5 | 22.2 | 22.8 |
| 12H | | | | | | 23.0 | 23.7 | 23.5 | 24.2 | 24.8 |
| 4H | | | | | | 20.4 | 21.2 | 21.0 | 21.7 | 22.3 |
| 6H | | | | | | 21.0 | 21.8 | 21.6 | 22.4 | 22.9 |
| 8H | | | | | | 22.3 | 23.0 | 22.9 | 23.6 | 24.2 |
| 12H | | | | | | 21.6 | 22.2 | 22.2 | 22.7 | 23.4 |
| 4H | | | | | | 23.0 | 23.6 | 23.6 | 24.2 | 24.8 |
| 6H | | | | | | 21.8 | 22.3 | 22.4 | 22.9 | 23.5 |
| 8H | | | | | | 23.8 | 24.4 | 24.5 | 24.9 | 25.6 |
| 12H | | | | | | 20.5 | 21.2 | 21.1 | 21.8 | 22.4 |
| 4H | | | | | | 21.1 | 21.8 | 21.6 | 22.3 | 22.9 |
| 6H | | | | | | 21.4 | 22.0 | 22.0 | 22.6 | 23.2 |
| 8H | | | | | | 22.4 | 23.0 | 23.0 | 23.6 | 24.2 |
| 12H | | | | | | 21.8 | 22.3 | 22.4 | 22.9 | 23.6 |
| 4H | | | | | | 23.2 | 23.7 | 23.8 | 24.3 | 25.0 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S = 1.0H | | + 0.2 / - 0.2 | | | | + 0.1 / - 0.2 | | | | |
| 1.5H | | + 0.1 / - 0.2 | | | | + 0.1 / - 0.2 | | | | |
| 2.0H | | + 0.2 / - 0.3 | | | | + 0.1 / - 0.2 | | | | |

CIE Pub.117 Corrected 280.0 lm Total Lamp Luminous Flux.(8log(F/F0) = -4.4)

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:shan
Test Date:2018-09-01

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-F16S-VB-D24CC-RGBW(2700K)-56-5050-1M-W | WEIGHT:0.129kg/m |
| DIM.: 15.5*6mm | SERIAL No.: |
| MFR.: | PROTECTION ANGLE:/ |

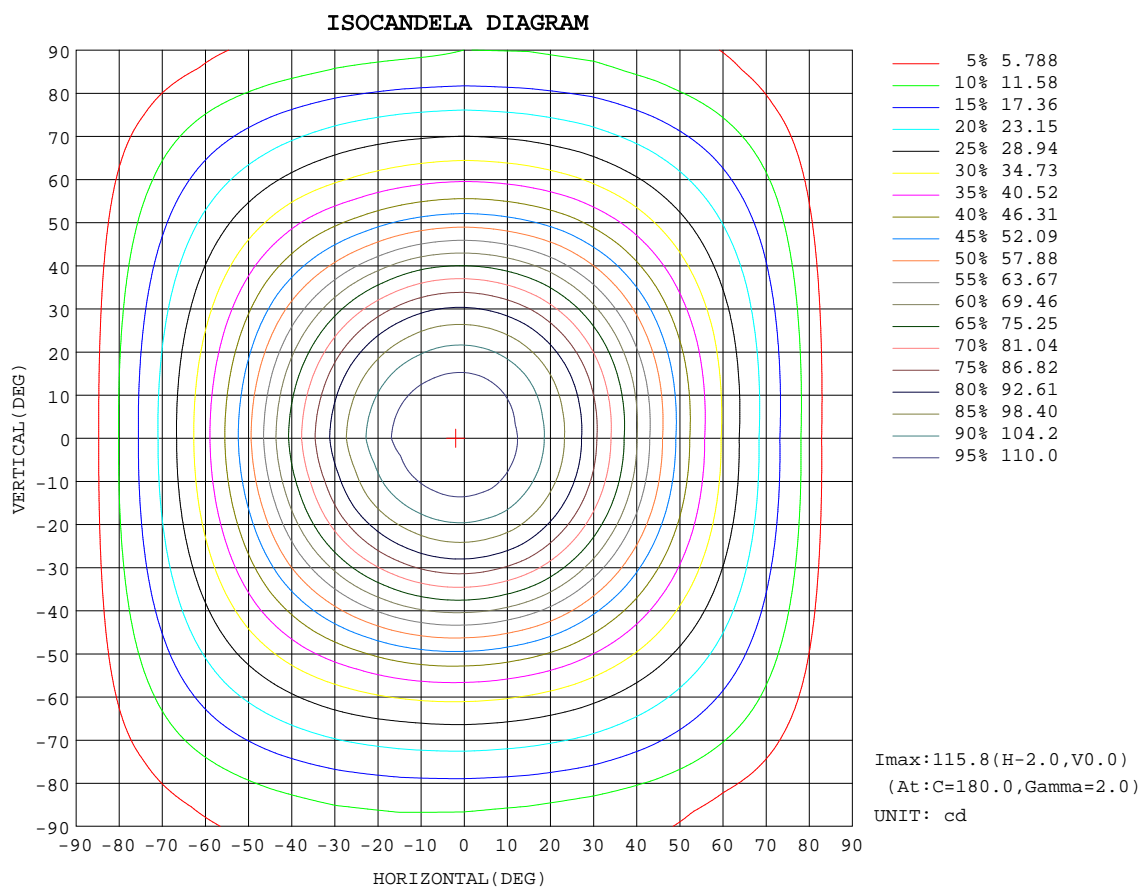
| REFLECTANCE | | | | | | | | | | |
|----------------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| Ceiling | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0 |
| Walls | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0 |
| Working plane | 0.2 | 0.2 | 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 | 65 | 52 | 44 | 64 | 51 | 44 | 62 | 51 | 43 | 36 |
| 0.80 | 76 | 62 | 54 | 74 | 62 | 54 | 72 | 60 | 53 | 45 |
| 1.00 | 85 | 72 | 64 | 83 | 71 | 63 | 80 | 72 | 62 | 53 |
| 1.25 | 92 | 80 | 72 | 90 | 79 | 71 | 86 | 77 | 70 | 60 |
| 1.50 | 98 | 86 | 78 | 95 | 85 | 77 | 91 | 82 | 75 | 65 |
| 2.00 | 105 | 95 | 87 | 102 | 93 | 86 | 97 | 90 | 83 | 73 |
| 2.50 | 110 | 100 | 93 | 107 | 98 | 91 | 101 | 94 | 88 | 77 |
| 3.00 | 113 | 105 | 98 | 110 | 103 | 96 | 104 | 98 | 93 | 81 |
| 4.00 | 118 | 111 | 105 | 114 | 108 | 103 | 108 | 103 | 99 | 86 |
| 5.00 | 121 | 115 | 110 | 117 | 112 | 107 | 110 | 106 | 102 | 89 |
| 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:shan
Test Date:2018-09-01

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-F16S-VB-D24CC-RGBW(2700K)-56-5050-1M-W | WEIGHT:0.129kg/m |
| DIM.: 15.5*6mm | SERIAL No.: |
| MFR.: | SUR.:15.5*1000mm |
| | PROTECTION ANGLE:/ |

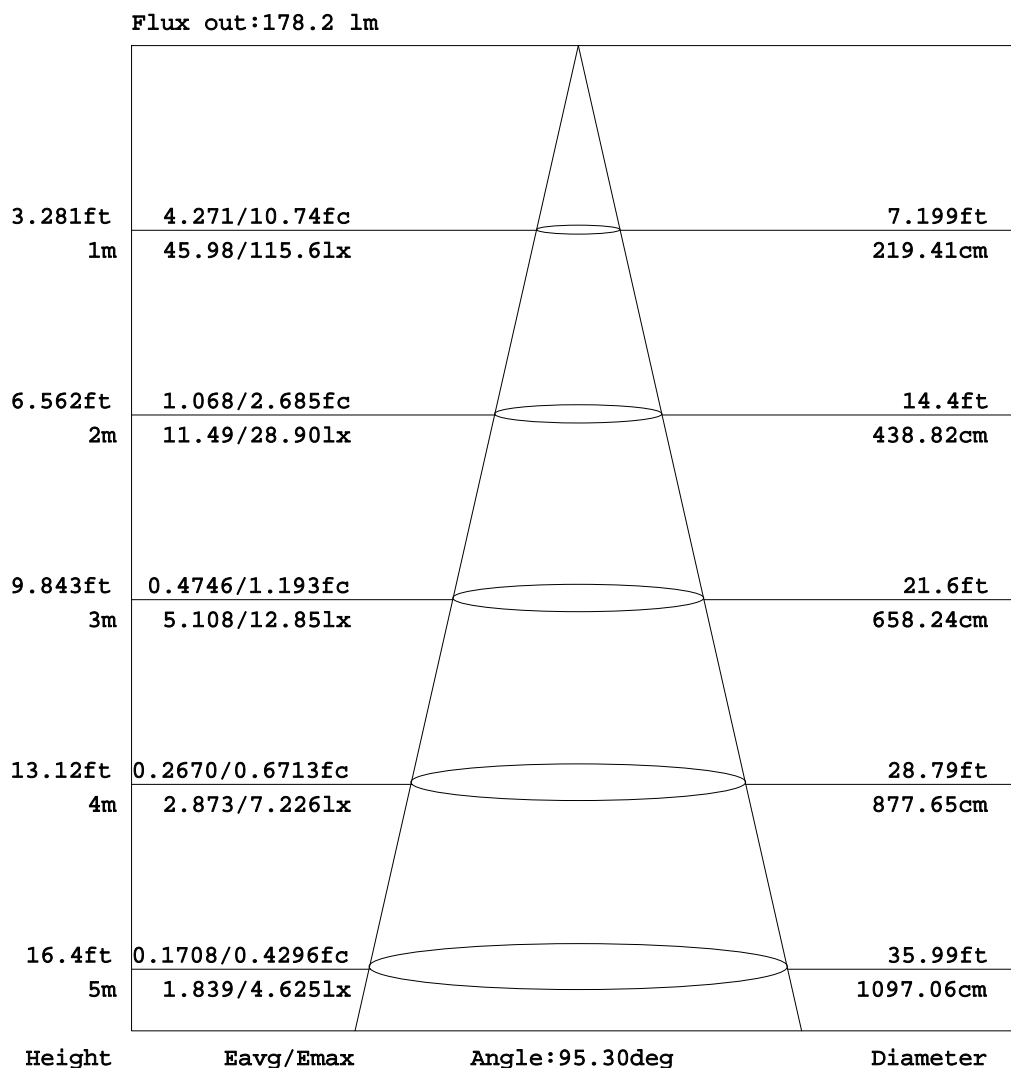


C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:shan
Test Date:2018-09-01

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-F16S-VB-D24CC-RGBW(2700K)-56-5050-1M-W | 5050-1M-W | WEIGHT:0.129kg/m |
| DIM.: 15.5*6mm | SPEC.: | SERIAL No.: |
| MFR.: | SUR.:15.5*1000mm | PROTECTION ANGLE:/ |



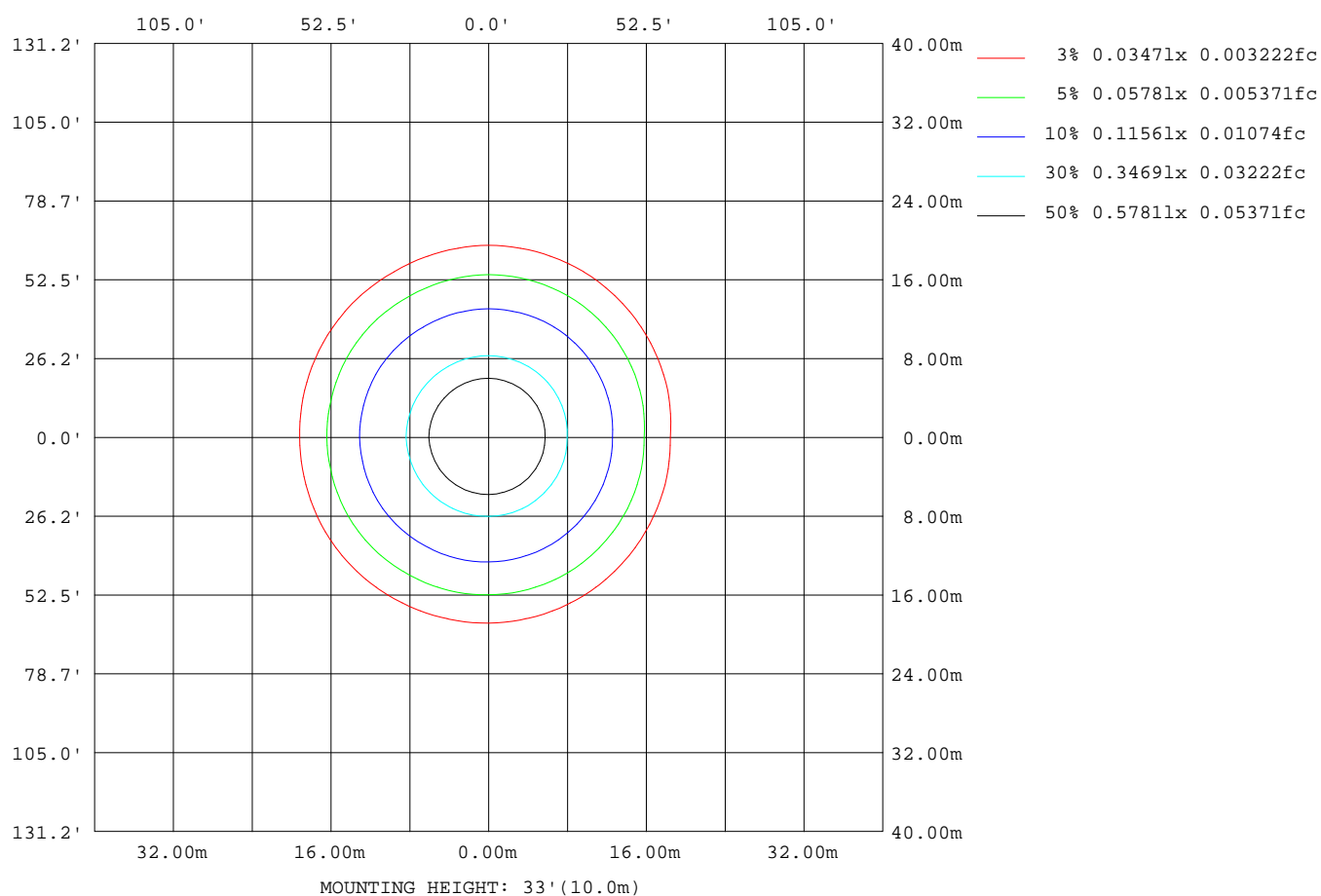
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:shan
Test Date:2018-09-01

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-F16S-VB-D24CC-RGBW(2700K)-56-5050-1M-W | WEIGHT:0.129kg/m |
| DIM.: 15.5*6mm | SPEC.: |
| MFR.: | SUR.:15.5*1000mm |
| | PROTECTION ANGLE:/ |



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:shan
Test Date:2018-09-01

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-F16S-VB-D24CC-RGBW(2700K)-56-5050-1M-W | WEIGHT:0.129kg/m |
| DIM.: 15.5*6mm | SERIAL No.: |
| MFR.: | 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 | 280 | lm |
| Multiplying factor | K | 1 | |
| Luminous area in horizontal plane used in calculations | A | 0.0155 | 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 | 4683 | 4699 | 4703 | 4702 | 4712 | 4734 | 4761 | 4771 | 4787 | 4818 | 4863 | 4910 | 4964 | 5056 | 5143 | 5208 | 5239 | 5268 | 5301 |
| 60 | 4389 | 4427 | 4450 | 4467 | 4496 | 4534 | 4572 | 4591 | 4613 | 4644 | 4683 | 4724 | 4772 | 4847 | 4917 | 4966 | 4979 | 4986 | 5000 |
| 65 | 4161 | 4230 | 4286 | 4335 | 4396 | 4462 | 4524 | 4565 | 4600 | 4632 | 4649 | 4681 | 4730 | 4766 | 4798 | 4820 | 4813 | 4787 | 4773 |
| 70 | 3979 | 4093 | 4197 | 4300 | 4419 | 4540 | 4647 | 4716 | 4767 | 4805 | 4818 | 4834 | 4850 | 4834 | 4816 | 4795 | 4734 | 4653 | 4603 |
| 75 | 3782 | 3974 | 4162 | 4354 | 4578 | 4791 | 4971 | 5096 | 5177 | 5221 | 5244 | 5238 | 5197 | 5107 | 5004 | 4895 | 4754 | 4590 | 4485 |
| 80 | 3417 | 3759 | 4120 | 4502 | 4928 | 5325 | 5650 | 5871 | 6010 | 6084 | 6120 | 6087 | 5972 | 5771 | 5509 | 5209 | 4892 | 4563 | 4356 |
| 85 | 2438 | 3199 | 4065 | 5030 | 6107 | 7101 | 7919 | 8523 | 8953 | 9224 | 9355 | 9278 | 8952 | 8337 | 7453 | 6413 | 5469 | 4574 | 4022 |

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 | 9355 | 200 | --- | 500 |
| Category 2 | 65 to 90 | 9355 | 200 | --- | 500 |
| Category 3 | 75 to 90 | 9355 | 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:shan
Test Date:2018-09-01

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-F16S-VB-D24CC-RGBW(2700K)-56-5050-1M-W | WEIGHT:0.129kg/m |
| DIM.: 15.5*6mm | SPEC.: SERIAL No.: |
| MFR.: | SUR.:15.5*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 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 |
| 5 | 114 | 114 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 115 |
| 10 | 111 | 111 | 112 | 112 | 112 | 112 | 112 | 113 | 113 | 113 | 113 | 114 | 114 | 114 | 114 | 113 | 113 | 113 | 113 |
| 15 | 108 | 108 | 109 | 109 | 109 | 109 | 110 | 110 | 110 | 111 | 111 | 111 | 112 | 112 | 112 | 111 | 111 | 111 | 111 |
| 20 | 102 | 102 | 103 | 103 | 103 | 103 | 104 | 104 | 105 | 105 | 106 | 106 | 107 | 107 | 107 | 106 | 106 | 106 | 106 |
| 25 | 97.2 | 97.3 | 97.4 | 97.7 | 98.1 | 98.2 | 98.5 | 98.9 | 99.5 | 100 | 101 | 102 | 103 | 102 | 102 | 102 | 102 | 102 | 101 |
| 30 | 87.9 | 88.0 | 88.2 | 88.4 | 88.8 | 88.9 | 89.3 | 89.8 | 90.5 | 91.5 | 92.6 | 93.3 | 94.3 | 94.1 | 94.0 | 93.7 | 93.3 | 93.4 | 93.1 |
| 35 | 80.9 | 80.9 | 81.0 | 81.2 | 81.6 | 81.7 | 82.1 | 82.6 | 83.5 | 84.6 | 85.8 | 86.6 | 87.7 | 87.4 | 87.3 | 86.9 | 86.6 | 86.7 | 86.4 |
| 40 | 69.5 | 69.5 | 69.3 | 69.5 | 69.8 | 69.9 | 70.3 | 71.0 | 71.9 | 73.2 | 74.5 | 75.5 | 76.6 | 76.3 | 76.0 | 75.7 | 75.2 | 75.5 | 75.2 |
| 45 | 61.6 | 61.6 | 61.4 | 61.5 | 61.8 | 61.9 | 62.3 | 63.1 | 64.1 | 65.3 | 66.6 | 67.6 | 68.6 | 68.5 | 68.2 | 67.7 | 67.2 | 67.4 | 67.3 |
| 50 | 50.3 | 50.2 | 50.1 | 50.2 | 50.5 | 50.6 | 51.0 | 51.7 | 52.6 | 53.9 | 55.2 | 55.8 | 56.6 | 56.7 | 56.7 | 56.1 | 55.5 | 55.7 | 55.8 |
| 55 | 43.3 | 43.4 | 43.4 | 43.5 | 43.9 | 44.0 | 44.4 | 45.0 | 45.7 | 47.0 | 48.0 | 48.4 | 49.0 | 49.1 | 49.5 | 49.0 | 48.4 | 48.6 | 48.8 |
| 60 | 34.0 | 34.4 | 34.6 | 35.0 | 35.4 | 35.6 | 36.0 | 36.5 | 37.0 | 37.9 | 38.5 | 38.6 | 38.8 | 39.1 | 39.6 | 39.7 | 39.2 | 39.5 | 39.8 |
| 65 | 28.6 | 29.2 | 29.6 | 30.1 | 30.7 | 31.1 | 31.4 | 31.6 | 32.1 | 32.6 | 32.9 | 32.8 | 32.7 | 33.4 | 34.0 | 34.3 | 34.2 | 34.7 | 35.1 |
| 70 | 21.1 | 22.0 | 22.8 | 23.7 | 24.6 | 25.1 | 25.5 | 25.6 | 25.7 | 25.6 | 25.4 | 24.9 | 24.4 | 25.4 | 26.5 | 27.3 | 28.1 | 28.6 | 29.0 |
| 75 | 16.3 | 17.5 | 18.5 | 19.8 | 20.9 | 21.5 | 21.9 | 22.0 | 21.8 | 21.3 | 20.8 | 20.0 | 19.2 | 20.4 | 21.7 | 23.0 | 24.0 | 24.8 | 25.2 |
| 80 | 9.20 | 10.6 | 12.1 | 13.8 | 15.2 | 16.0 | 16.4 | 16.5 | 16.1 | 15.2 | 14.0 | 12.8 | 11.7 | 13.0 | 14.8 | 16.4 | 17.8 | 18.6 | 19.1 |
| 85 | 4.44 | 6.01 | 7.81 | 9.85 | 11.5 | 12.5 | 13.1 | 13.3 | 12.8 | 11.5 | 9.66 | 7.96 | 6.66 | 8.08 | 10.1 | 12.0 | 13.6 | 14.6 | 15.2 |
| 90 | 0.00 | 1.72 | 4.00 | 6.30 | 8.17 | 9.41 | 10.0 | 10.0 | 9.34 | 7.70 | 5.24 | 2.69 | 0.51 | 2.32 | 4.98 | 7.21 | 8.50 | 9.64 | 11.6 |
| 95 | 0.00 | 1.65 | 3.90 | 6.06 | 7.73 | 8.78 | 9.25 | 9.02 | 7.56 | 6.39 | 4.31 | 1.94 | 0.00 | 2.00 | 4.54 | 6.72 | 7.85 | 8.76 | 10.4 |
| 100 | 0.01 | 1.69 | 4.11 | 6.40 | 8.21 | 9.34 | 9.72 | 9.38 | 8.16 | 6.24 | 3.78 | 1.94 | 0.07 | 1.97 | 4.46 | 6.52 | 7.75 | 9.10 | 10.6 |
| 105 | 0.11 | 1.67 | 4.13 | 6.48 | 8.40 | 9.59 | 9.96 | 9.59 | 8.01 | 5.63 | 4.12 | 2.05 | 0.11 | 2.11 | 4.65 | 7.02 | 7.63 | 9.20 | 10.8 |
| 110 | 0.23 | 1.36 | 4.01 | 6.39 | 8.35 | 9.62 | 9.99 | 9.46 | 7.37 | 5.25 | 4.07 | 1.89 | 0.09 | 1.84 | 4.28 | 7.10 | 8.92 | 8.90 | 10.9 |
| 115 | 0.33 | 1.18 | 3.84 | 6.19 | 8.15 | 9.46 | 9.82 | 8.41 | 6.79 | 5.38 | 3.72 | 1.66 | 0.11 | 1.53 | 3.84 | 6.22 | 8.64 | 7.83 | 10.0 |
| 120 | 0.44 | 0.90 | 3.43 | 5.70 | 7.59 | 8.93 | 9.27 | 7.91 | 6.00 | 4.92 | 3.22 | 1.43 | 0.12 | 1.14 | 3.24 | 5.25 | 7.40 | 8.08 | 9.25 |
| 125 | 0.54 | 0.73 | 3.03 | 5.26 | 7.06 | 8.40 | 8.73 | 7.48 | 5.23 | 4.44 | 2.85 | 1.29 | 0.14 | 0.99 | 2.91 | 4.61 | 6.45 | 7.95 | 8.79 |
| 130 | 0.65 | 0.70 | 2.41 | 4.45 | 6.08 | 7.40 | 7.71 | 6.41 | 4.71 | 3.68 | 2.35 | 1.15 | 0.18 | 0.88 | 2.19 | 3.81 | 5.19 | 7.10 | 7.90 |
| 135 | 0.72 | 0.69 | 2.05 | 3.85 | 5.37 | 6.67 | 6.93 | 5.41 | 4.20 | 3.21 | 2.09 | 1.07 | 0.21 | 0.81 | 1.82 | 3.25 | 4.45 | 5.71 | 6.95 |
| 140 | 0.80 | 0.67 | 1.64 | 2.95 | 4.22 | 5.42 | 5.63 | 4.13 | 3.35 | 2.60 | 1.76 | 0.92 | 0.26 | 0.69 | 1.53 | 2.40 | 3.47 | 4.41 | 6.00 |
| 145 | 0.90 | 0.68 | 1.39 | 2.46 | 3.47 | 4.62 | 4.80 | 3.29 | 2.88 | 2.24 | 1.57 | 0.88 | 0.36 | 0.73 | 1.36 | 2.02 | 2.85 | 3.59 | 5.37 |
| 150 | 0.97 | 0.73 | 1.17 | 1.86 | 2.51 | 3.38 | 3.56 | 2.45 | 2.20 | 1.80 | 1.36 | 0.77 | 0.51 | 0.85 | 1.38 | 1.61 | 2.00 | 2.59 | 3.90 |
| 155 | 1.00 | 0.78 | 1.05 | 1.54 | 2.03 | 2.68 | 2.84 | 2.02 | 1.84 | 1.60 | 1.21 | 0.71 | 0.61 | 0.90 | 1.37 | 1.58 | 1.67 | 1.91 | 2.89 |
| 160 | 1.04 | 0.87 | 0.92 | 1.19 | 1.48 | 1.81 | 1.90 | 1.50 | 1.39 | 1.26 | 0.97 | 0.63 | 0.74 | 0.98 | 1.32 | 1.54 | 1.28 | 1.40 | 1.43 |
| 165 | 1.06 | 0.92 | 0.90 | 1.03 | 1.22 | 1.34 | 1.27 | 1.21 | 1.20 | 1.03 | 0.80 | 0.61 | 0.82 | 1.02 | 1.28 | 1.46 | 1.30 | 1.12 | 1.16 |
| 170 | 1.08 | 1.01 | 0.93 | 0.92 | 0.96 | 0.91 | 0.83 | 0.80 | 0.84 | 0.76 | 0.65 | 0.60 | 0.93 | 1.06 | 1.21 | 1.31 | 1.22 | 0.74 | 0.76 |
| 175 | 1.09 | 1.04 | 1.01 | 0.97 | 0.94 | 0.71 | 0.60 | 0.62 | 0.69 | 0.71 | 0.63 | 0.61 | 0.99 | 1.07 | 1.16 | 1.22 | 1.15 | 0.71 | 0.57 |
| 180 | 1.08 | 1.09 | 1.09 | 1.08 | 1.04 | 0.72 | 0.45 | 0.67 | 0.83 | 0.88 | 0.70 | 0.67 | 1.07 | 1.08 | 1.09 | 1.09 | 1.05 | 0.70 | 0.44 |

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:shan
Test Date:2018-09-01

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-F16S-VB-D24CC-RGBW(2700K)-56-5050-1M-W | WEIGHT:0.129kg/m |
| DIM.: 15.5*6mm | SPEC.: SERIAL No.: |
| MFR.: | SUR.:15.5*1000mm PROTECTION ANGLE:/ |

Table--2

UNIT: cd

| C(DEC) γ (DEC) | 285 | 300 | 315 | 330 | 345 | | | | | | | | | | | | | | |
|-------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0 | 115 | 115 | 115 | 115 | 115 | | | | | | | | | | | | | | |
| 5 | 115 | 115 | 115 | 115 | 115 | | | | | | | | | | | | | | |
| 10 | 113 | 113 | 113 | 112 | 112 | | | | | | | | | | | | | | |
| 15 | 111 | 110 | 110 | 110 | 109 | | | | | | | | | | | | | | |
| 20 | 106 | 105 | 105 | 104 | 103 | | | | | | | | | | | | | | |
| 25 | 101 | 101 | 100 | 99.2 | 98.3 | | | | | | | | | | | | | | |
| 30 | 92.6 | 92.3 | 91.5 | 90.6 | 89.5 | | | | | | | | | | | | | | |
| 35 | 85.9 | 85.7 | 84.8 | 83.8 | 82.6 | | | | | | | | | | | | | | |
| 40 | 74.9 | 74.7 | 73.8 | 72.7 | 71.5 | | | | | | | | | | | | | | |
| 45 | 67.1 | 67.0 | 66.2 | 65.0 | 63.7 | | | | | | | | | | | | | | |
| 50 | 55.7 | 55.7 | 55.0 | 53.9 | 52.5 | | | | | | | | | | | | | | |
| 55 | 48.7 | 48.8 | 48.0 | 46.9 | 45.5 | | | | | | | | | | | | | | |
| 60 | 39.7 | 39.5 | 38.8 | 37.6 | 36.2 | | | | | | | | | | | | | | |
| 65 | 34.9 | 34.4 | 33.4 | 32.2 | 30.8 | | | | | | | | | | | | | | |
| 70 | 28.6 | 27.9 | 26.6 | 25.1 | 23.5 | | | | | | | | | | | | | | |
| 75 | 24.7 | 23.9 | 22.4 | 20.7 | 18.9 | | | | | | | | | | | | | | |
| 80 | 18.8 | 18.0 | 16.3 | 14.2 | 11.9 | | | | | | | | | | | | | | |
| 85 | 14.9 | 14.1 | 12.3 | 9.94 | 7.35 | | | | | | | | | | | | | | |
| 90 | 11.4 | 10.5 | 8.44 | 5.65 | 2.68 | | | | | | | | | | | | | | |
| 95 | 10.2 | 9.26 | 7.26 | 4.74 | 2.25 | | | | | | | | | | | | | | |
| 100 | 10.2 | 9.18 | 7.33 | 4.98 | 2.43 | | | | | | | | | | | | | | |
| 105 | 10.5 | 9.39 | 7.48 | 5.11 | 2.51 | | | | | | | | | | | | | | |
| 110 | 10.6 | 9.53 | 7.59 | 5.18 | 2.56 | | | | | | | | | | | | | | |
| 115 | 10.5 | 9.45 | 7.52 | 5.14 | 2.46 | | | | | | | | | | | | | | |
| 120 | 10.1 | 9.10 | 7.24 | 4.95 | 2.18 | | | | | | | | | | | | | | |
| 125 | 9.70 | 8.71 | 6.93 | 4.74 | 2.06 | | | | | | | | | | | | | | |
| 130 | 8.80 | 7.93 | 6.34 | 4.23 | 1.84 | | | | | | | | | | | | | | |
| 135 | 8.09 | 7.32 | 5.88 | 3.84 | 1.72 | | | | | | | | | | | | | | |
| 140 | 6.97 | 6.35 | 4.99 | 3.30 | 1.55 | | | | | | | | | | | | | | |
| 145 | 6.21 | 5.63 | 4.39 | 2.96 | 1.42 | | | | | | | | | | | | | | |
| 150 | 4.91 | 4.45 | 3.65 | 2.45 | 1.24 | | | | | | | | | | | | | | |
| 155 | 4.14 | 3.82 | 3.19 | 2.16 | 1.14 | | | | | | | | | | | | | | |
| 160 | 3.20 | 3.01 | 2.51 | 1.71 | 0.99 | | | | | | | | | | | | | | |
| 165 | 2.60 | 2.47 | 2.10 | 1.46 | 0.91 | | | | | | | | | | | | | | |
| 170 | 1.64 | 1.70 | 1.53 | 1.12 | 0.81 | | | | | | | | | | | | | | |
| 175 | 1.16 | 1.27 | 1.21 | 0.93 | 0.74 | | | | | | | | | | | | | | |
| 180 | 0.68 | 0.83 | 0.86 | 0.73 | 0.68 | | | | | | | | | | | | | | |

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:shan
Test Date:2018-09-01

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: