
LED Downlight M Series LE-
M2-9W-830-40D

| | | |
|---------------------|---------|--------------------------|
| Light Output Ratio: | 100.0% | |
| Luminaire Power: | 11.79 W | |
| SHR Nominal: | 0.50 | Calculated using the TM5 |
| SHR Maximum: | 0.55 | fine grid method. |

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Cao Chengpei
Test Date: 2014-06-21

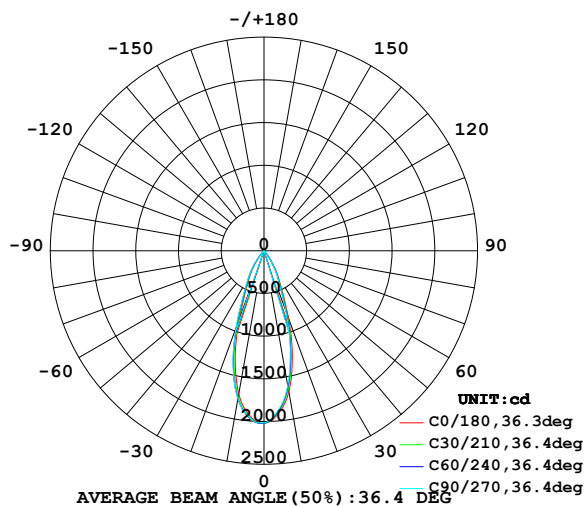
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.288
Humidity: 53.0%
Test Distance: 5.780m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

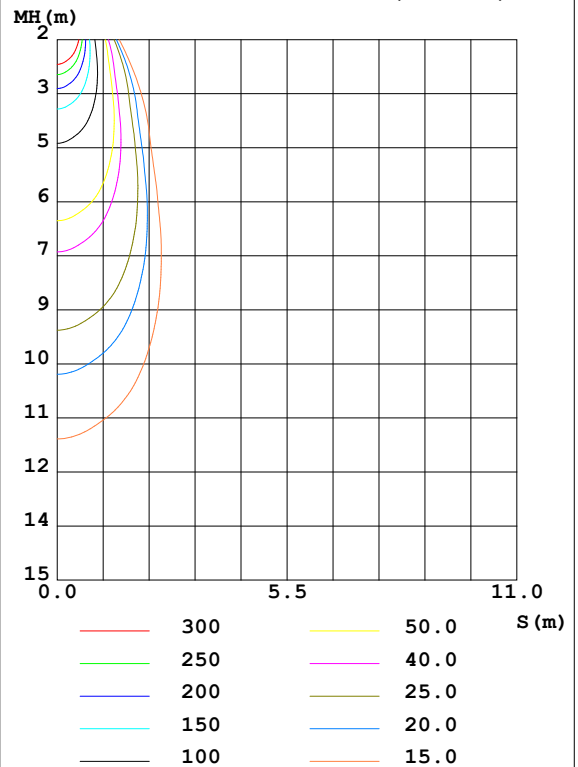
| | | |
|---|--------------------------------|-------------|
| Test:U:220.3V I:0.0563A P:11.79W PF:0.9505 Lamp Flux:887.967x1 lm | | |
| NAME: M2-9W-830-40D | TYPE:Downlight | SERIAL No.: |
| SPEC.:3000K | DIM.: \varnothing 50mm*H72mm | |
| | | |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 75.33 lm/W | | | |
|-------------------|-----------------|----------------------------------|--------|--------------------------|-----------|
| MODEL | BRIDGELUX-3000K | I _{max} (cd) | 2022 | S/MH (C0/180) | 0.59 |
| NOMINAL POWER (W) | 12 | LOR (%) | 100.0 | S/MH (C90/270) | 0.62 |
| RATED VOLTAGE (V) | 220 | TOTAL FLUX (lm) | 887.97 | η UP, DN (C0-180) | 0.0, 46.5 |
| NOMINAL FLUX (lm) | 887.967 | CIE CLASS | DIRECT | η UP, DN (C180-360) | 0.0, 53.5 |
| LAMPS INSIDE | 1 | η up (%) | 0.0 | CIBSE SHR NOM | 0.50 |
| TEST VOLTAGE (V) | 220 | η down (%) | 100.0 | CIBSE SHR MAX | 0.55 |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



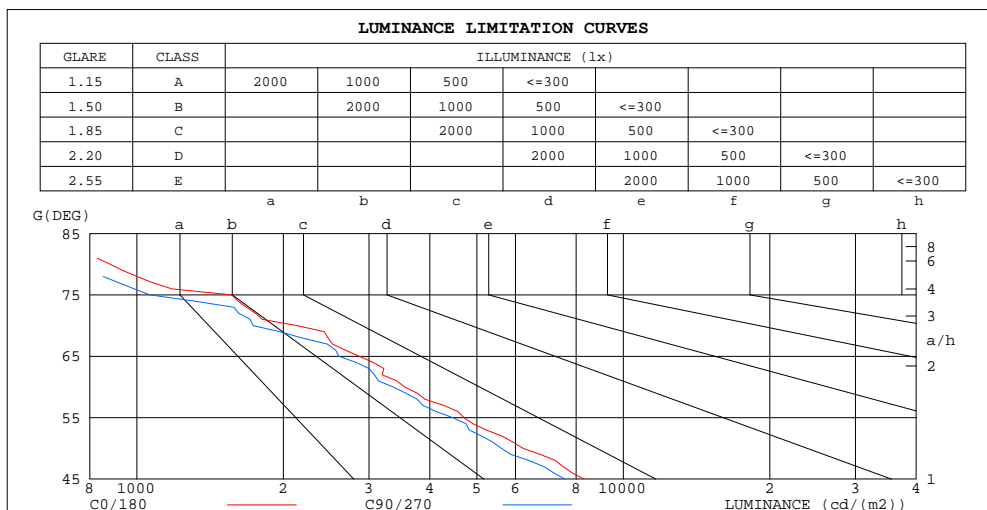
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Cao Chengpei
Test Date:2014-06-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
Humidity:53.0%
Test Distance:5.780m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Φ zone | Φ total | Φ lum, lamp |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|------------------|
| 10 | 1679 | 1636 | 1604 | 1627 | 1704 | 1741 | 1762 | 1725 | 0- 10 | 176.2 | 176.2 | 19.8,19.8 |
| 20 | 843.9 | 789.2 | 745.5 | 772.0 | 849.1 | 912.0 | 954.4 | 916.0 | 10- 20 | 351.3 | 527.5 | 59.4,59.4 |
| 30 | 305.7 | 278.1 | 265.3 | 286.5 | 321.9 | 352.0 | 367.7 | 343.3 | 20- 30 | 235.9 | 763.4 | 86,86 |
| 40 | 38.74 | 24.78 | 21.99 | 33.23 | 50.84 | 72.61 | 83.88 | 65.34 | 30- 40 | 103.7 | 867.1 | 97.7,97.7 |
| 50 | 7.853 | 7.264 | 7.087 | 7.250 | 7.894 | 8.862 | 8.769 | 8.469 | 40- 50 | 12.45 | 879.6 | 99.1,99.1 |
| 60 | 3.487 | 3.467 | 3.299 | 3.364 | 3.739 | 4.032 | 3.835 | 3.829 | 50- 60 | 4.925 | 884.5 | 99.6,99.6 |
| 70 | 1.434 | 1.298 | 1.165 | 1.217 | 1.621 | 1.942 | 1.819 | 1.691 | 60- 70 | 2.489 | 887.0 | 99.9,99.9 |
| 80 | 0.3000 | 0.2720 | 0.2521 | 0.2450 | 0.3634 | 0.4517 | 0.3800 | 0.3269 | 70- 80 | 0.8478 | 887.8 | 100,100 |
| 90 | 0.0042 | 0.0021 | 0 | 0 | 0 | 0 | 0 | 0 | 80- 90 | 0.1357 | 888.0 | 100,100 |
| 100 | | | | | | | | | 90-100 | | | |
| 110 | | | | | | | | | 100-110 | | | |
| 120 | | | | | | | | | 110-120 | | | |
| 130 | | | | | | | | | 120-130 | | | |
| 140 | | | | | | | | | 130-140 | | | |
| 150 | | | | | | | | | 140-150 | | | |
| 160 | | | | | | | | | 150-160 | | | |
| 170 | | | | | | | | | 160-170 | | | |
| 180 | | | | | | | | | 170-180 | | | |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | | |



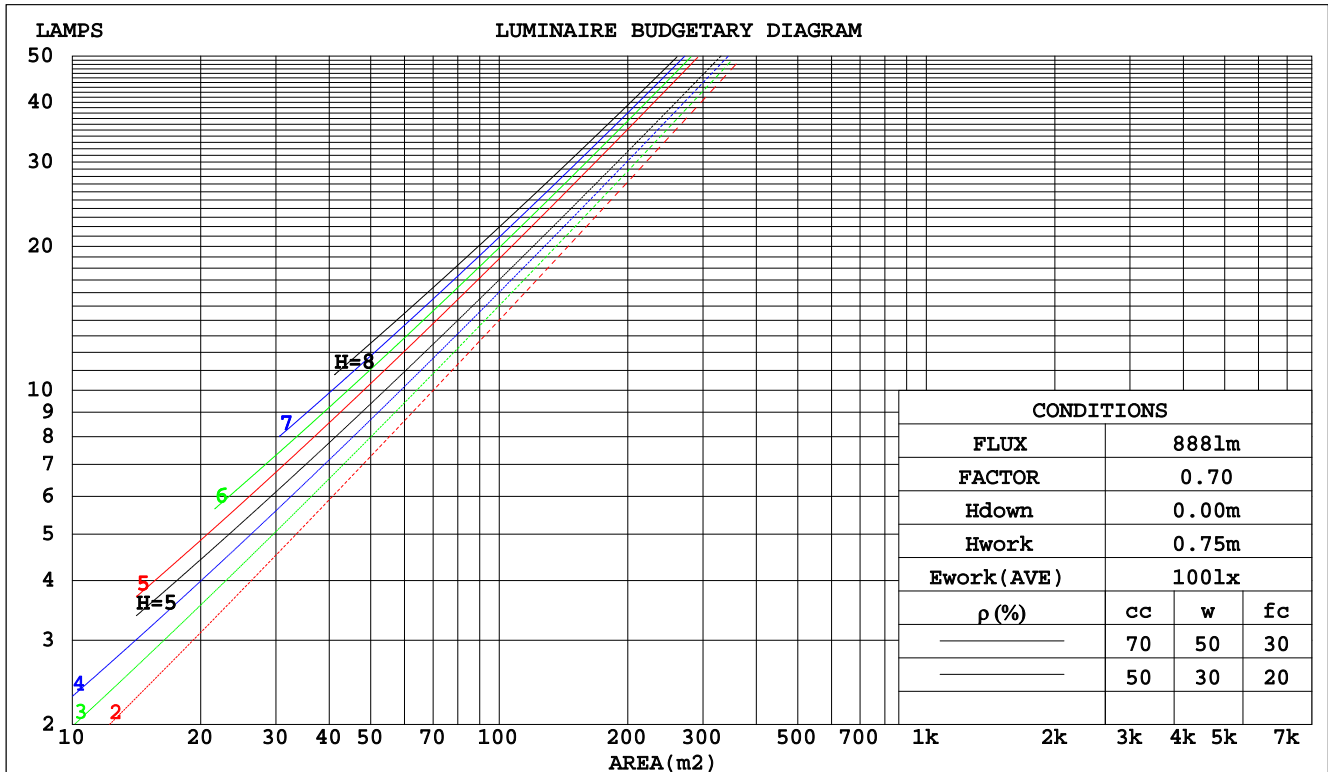
C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Cao Chengpei
Test Date: 2014-06-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.288
Humidity: 53.0%
Test Distance: 5.780m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| | | |
|---|---|-------------|
| Test:U:220.3V I:0.0563A P:11.79W PF:0.9505 Lamp Flux:887.967x1 lm | | |
| NAME: M2-9W-830-40D | TYPE:Downlight | SERIAL No.: |
| SPEC.:3000K | DIM.: $\phi 50\text{mm} \times \text{H}72\text{mm}$ | |
| | | |

| ρ_{cc} | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|-------------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| ρ_w | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| ρ_{fc} | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | 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 | 1.00 |
| 1.0 | 1.12 | 1.10 | 1.08 | 1.10 | 1.08 | 1.06 | 1.06 | 1.04 | 1.03 | 1.02 | 1.01 | .00 | .99 | .98 | .97 | .95 |
| 2.0 | 1.05 | 1.02 | .99 | 1.04 | 1.01 | .98 | 1.01 | .98 | .96 | .98 | .96 | .94 | .95 | .93 | .92 | .90 |
| 3.0 | .00 | .95 | .92 | .98 | .94 | .91 | .96 | .93 | .90 | .93 | .91 | .88 | .91 | .89 | .87 | .86 |
| 4.0 | .95 | .90 | .86 | .93 | .89 | .86 | .91 | .88 | .85 | .89 | .86 | .84 | .88 | .85 | .83 | .81 |
| 5.0 | .90 | .85 | .81 | .89 | .84 | .81 | .87 | .83 | .80 | .86 | .82 | .80 | .84 | .81 | .79 | .78 |
| 6.0 | .86 | .81 | .77 | .85 | .80 | .77 | .83 | .79 | .76 | .82 | .78 | .76 | .81 | .78 | .75 | .74 |
| 7.0 | .82 | .77 | .73 | .81 | .76 | .73 | .80 | .76 | .73 | .79 | .75 | .72 | .78 | .74 | .72 | .71 |
| 8.0 | .78 | .73 | .70 | .78 | .73 | .70 | .77 | .72 | .69 | .76 | .72 | .69 | .75 | .71 | .69 | .68 |
| 9.0 | .75 | .70 | .67 | .74 | .70 | .66 | .74 | .69 | .66 | .73 | .69 | .66 | .72 | .68 | .66 | .65 |
| 10.0 | .72 | .67 | .64 | .71 | .67 | .64 | .71 | .66 | .63 | .70 | .66 | .63 | .69 | .66 | .63 | .62 |



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Cao Chengpei
 Test Date: 2014-06-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity: 53.0%
 Test Distance: 5.780m [K=1.0000]
 Remarks:

WEC AND CCEC

| | | |
|---|-------------------|-------------|
| Test:U:220.3V I:0.0563A P:11.79W PF:0.9505 Lamp Flux:887.967x1 lm | | |
| NAME: M2-9W-830-40D | TYPE:Downlight | SERIAL No.: |
| SPEC.:3000K | DIM.: φ50mm*H72mm | |
| | | |

| 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 | .157 | .089 | .028 | .150 | .086 | .027 | .138 | .079 | .025 | .126 | .073 | .023 | .116 | .067 | .022 | | |
| 2.0 | .148 | .081 | .025 | .143 | .079 | .024 | .132 | .073 | .023 | .123 | .069 | .022 | .114 | .064 | .020 | | |
| 3.0 | .140 | .074 | .022 | .135 | .072 | .022 | .126 | .069 | .021 | .118 | .065 | .020 | .111 | .061 | .019 | | |
| 4.0 | .132 | .069 | .020 | .128 | .067 | .020 | .121 | .064 | .019 | .114 | .061 | .018 | .108 | .058 | .018 | | |
| 5.0 | .126 | .064 | .019 | .122 | .063 | .018 | .116 | .060 | .018 | .110 | .058 | .017 | .104 | .056 | .017 | | |
| 6.0 | .120 | .060 | .017 | .117 | .059 | .017 | .111 | .057 | .017 | .106 | .055 | .016 | .101 | .053 | .016 | | |
| 7.0 | .114 | .057 | .016 | .112 | .056 | .016 | .107 | .054 | .016 | .102 | .052 | .015 | .098 | .051 | .015 | | |
| 8.0 | .109 | .053 | .015 | .107 | .053 | .015 | .103 | .051 | .015 | .099 | .050 | .014 | .095 | .049 | .014 | | |
| 9.0 | .105 | .051 | .014 | .103 | .050 | .014 | .099 | .049 | .014 | .095 | .048 | .014 | .092 | .047 | .013 | | |
| 10.0 | .101 | .048 | .013 | .099 | .048 | .013 | .095 | .047 | .013 | .092 | .046 | .013 | .089 | .045 | .013 | | |

| 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 | .190 | .190 | .190 | .163 | .163 | .163 | .111 | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 | |
| 1.0 | .170 | .157 | .146 | .145 | .135 | .126 | .099 | .093 | .087 | .057 | .054 | .051 | .018 | .017 | .016 | |
| 2.0 | .153 | .133 | .115 | .131 | .114 | .100 | .090 | .079 | .070 | .052 | .046 | .041 | .017 | .015 | .013 | |
| 3.0 | .139 | .113 | .093 | .120 | .098 | .080 | .082 | .068 | .056 | .047 | .040 | .033 | .015 | .013 | .011 | |
| 4.0 | .128 | .098 | .076 | .110 | .085 | .066 | .076 | .059 | .046 | .044 | .035 | .027 | .014 | .011 | .009 | |
| 5.0 | .119 | .086 | .063 | .102 | .075 | .055 | .070 | .052 | .039 | .041 | .031 | .023 | .013 | .010 | .008 | |
| 6.0 | .110 | .077 | .053 | .095 | .067 | .046 | .066 | .047 | .032 | .038 | .027 | .019 | .012 | .009 | .006 | |
| 7.0 | .104 | .069 | .045 | .089 | .060 | .039 | .062 | .042 | .028 | .036 | .025 | .016 | .012 | .008 | .005 | |
| 8.0 | .098 | .062 | .038 | .084 | .054 | .033 | .058 | .038 | .024 | .034 | .022 | .014 | .011 | .007 | .005 | |
| 9.0 | .092 | .057 | .033 | .079 | .050 | .029 | .055 | .035 | .021 | .032 | .021 | .012 | .010 | .007 | .004 | |
| 10.0 | .088 | .053 | .029 | .076 | .046 | .026 | .052 | .032 | .018 | .031 | .019 | .011 | .010 | .006 | .004 | |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Cao Chengpei
 Test Date:2014-06-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity:53.0%
 Test Distance:5.780m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

| | | | | | | | | | | |
|---|------------------|------|------|------|-------------------------|----------------|------|-------------|------|------|
| Test:U:220.3V I:0.0563A P:11.79W PF:0.9505 Lamp Flux:887.967x1 lm | | | | | | | | | | |
| NAME: M2-9W-830-40D | | | | | TYPE:Downlight | | | SERIAL No.: | | |
| SPEC.:3000K | | | | | DIM.: ϕ 50mm*H72mm | | | | | |
| | | | | | | | | | | |
| 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 | 16.4 | 17.2 | 16.6 | 17.4 | 17.5 | 15.5 | 16.3 | 15.7 | 16.5 | 16.6 |
| 3H | 16.3 | 17.0 | 16.5 | 17.2 | 17.4 | 15.4 | 16.1 | 15.6 | 16.3 | 16.5 |
| 4H | 16.2 | 16.9 | 16.5 | 17.1 | 17.3 | 15.3 | 16.0 | 15.6 | 16.2 | 16.5 |
| 6H | 16.1 | 16.8 | 16.4 | 17.0 | 17.3 | 15.2 | 15.9 | 15.5 | 16.1 | 16.4 |
| 8H | 16.1 | 16.7 | 16.4 | 17.0 | 17.2 | 15.2 | 15.8 | 15.5 | 16.1 | 16.3 |
| 12H | 16.1 | 16.7 | 16.4 | 16.9 | 17.2 | 15.2 | 15.8 | 15.5 | 16.0 | 16.3 |
| 4H 2H | 16.2 | 16.9 | 16.5 | 17.1 | 17.3 | 15.3 | 16.0 | 15.6 | 16.2 | 16.4 |
| 3H | 16.1 | 16.7 | 16.4 | 16.9 | 17.2 | 15.2 | 15.8 | 15.5 | 16.1 | 16.3 |
| 4H | 16.0 | 16.5 | 16.3 | 16.8 | 17.1 | 15.1 | 15.7 | 15.5 | 16.0 | 16.3 |
| 6H | 15.9 | 16.4 | 16.3 | 16.7 | 17.1 | 15.0 | 15.5 | 15.4 | 15.8 | 16.2 |
| 8H | 15.9 | 16.3 | 16.2 | 16.7 | 17.0 | 15.0 | 15.4 | 15.4 | 15.8 | 16.1 |
| 12H | 15.8 | 16.2 | 16.2 | 16.6 | 17.0 | 14.9 | 15.3 | 15.3 | 15.7 | 16.1 |
| 8H 4H | 15.9 | 16.3 | 16.2 | 16.7 | 17.0 | 15.0 | 15.4 | 15.4 | 15.8 | 16.1 |
| 6H | 15.8 | 16.1 | 16.2 | 16.5 | 16.9 | 14.9 | 15.3 | 15.3 | 15.6 | 16.1 |
| 8H | 15.7 | 16.0 | 16.1 | 16.4 | 16.9 | 14.8 | 15.2 | 15.3 | 15.6 | 16.0 |
| 12H | 15.6 | 15.9 | 16.1 | 16.4 | 16.8 | 14.8 | 15.0 | 15.2 | 15.5 | 16.0 |
| 12H 4H | 15.8 | 16.2 | 16.2 | 16.6 | 17.0 | 14.9 | 15.3 | 15.3 | 15.7 | 16.1 |
| 6H | 15.7 | 16.0 | 16.1 | 16.4 | 16.9 | 14.8 | 15.2 | 15.3 | 15.6 | 16.0 |
| 8H | 15.6 | 15.9 | 16.1 | 16.4 | 16.8 | 14.8 | 15.0 | 15.2 | 15.5 | 16.0 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S = 1.0H | + 4.9 / - 7.3 | | | | | + 4.5 / - 6.2 | | | | |
| 1.5H | + 7.5 / - 6.2 | | | | | + 6.9 / - 4.7 | | | | |
| 2.0H | + 2.4 / - 1.8 | | | | | + 2.2 / - 1.8 | | | | |

CIE Pub.117 Corrected 888.0 lm Total Lamp Luminous Flux.(8log(F/F0) = -0.4)

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Cao Chengpei
 Test Date:2014-06-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity:53.0%
 Test Distance:5.780m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

| | | |
|---|--|-------------|
| Test:U:220.3V I:0.0563A P:11.79W PF:0.9505 Lamp Flux:887.967x1 lm | | |
| NAME: M2-9W-830-40D | TYPE:Downlight | SERIAL No.: |
| SPEC.:3000K | DIM.: $\phi 50\text{mm} \times H72\text{mm}$ | |
| | | |

| 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) $k(RI) \times RCR = 5$ | | | | | | | | | |
| $k = 0.60$ | 90 | 84 | 81 | 90 | 84 | 81 | 89 | 84 | 81 | 77 |
| 0.80 | 97 | 92 | 88 | 97 | 91 | 88 | 95 | 91 | 88 | 85 |
| 1.00 | 101 | 96 | 93 | 100 | 96 | 92 | 99 | 95 | 92 | 88 |
| 1.25 | 105 | 100 | 97 | 104 | 99 | 96 | 102 | 98 | 96 | 92 |
| 1.50 | 107 | 103 | 100 | 106 | 102 | 99 | 104 | 101 | 98 | 94 |
| 2.00 | 109 | 106 | 103 | 108 | 105 | 102 | 105 | 103 | 100 | 95 |
| 2.50 | 111 | 108 | 105 | 109 | 106 | 104 | 106 | 104 | 102 | 96 |
| 3.00 | 112 | 109 | 107 | 111 | 108 | 106 | 107 | 105 | 103 | 97 |
| 4.00 | 114 | 112 | 110 | 112 | 110 | 108 | 109 | 107 | 106 | 99 |
| 5.00 | 116 | 113 | 112 | 113 | 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: 15.0DEG
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γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity:53.0%
 Test Distance:5.780m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

| | | |
|---|-------------------------|-------------|
| Test:U:220.3V I:0.0563A P:11.79W PF:0.9505 Lamp Flux:887.967x1 lm | | |
| NAME: M2-9W-830-40D | TYPE:Downlight | SERIAL No.: |
| SPEC.:3000K | DIM.: ϕ 50mm*H72mm | |
| | | |

Conical surface Flux(90deg):

875.68 lm

%lum = 98.6%

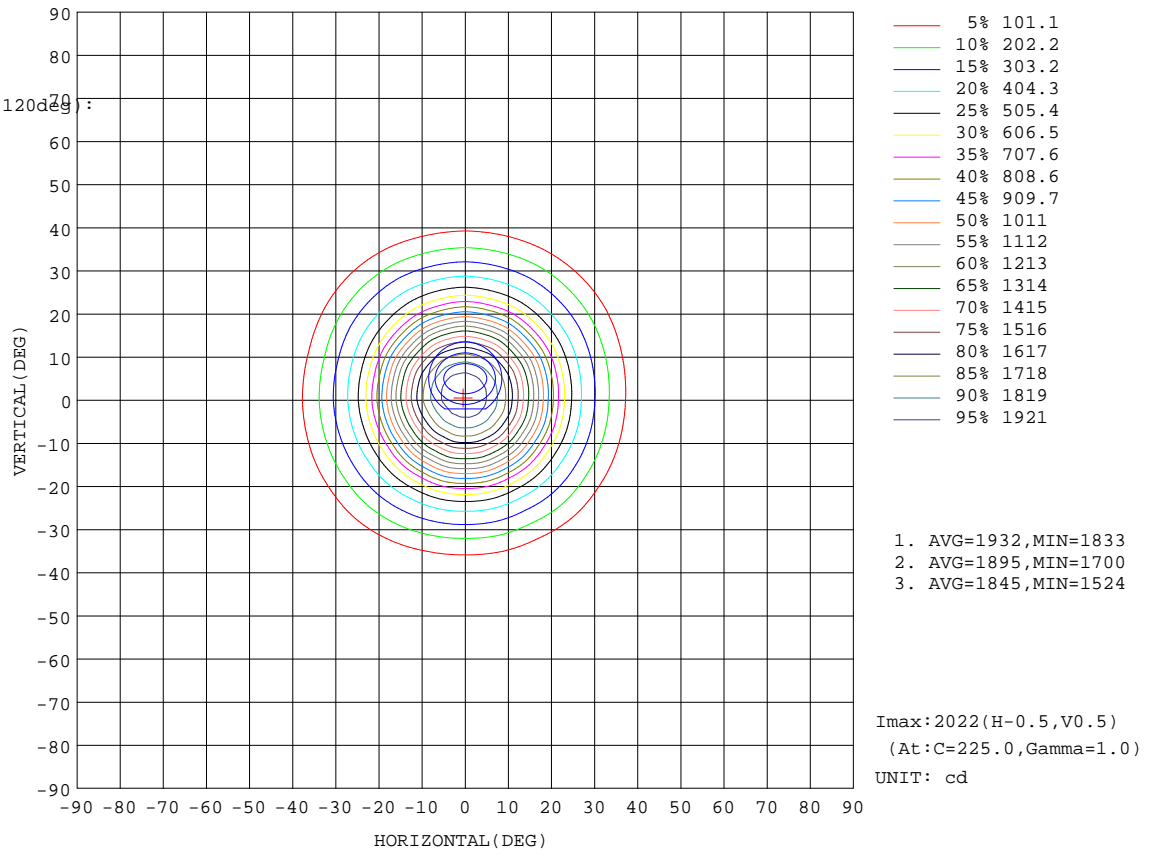
%lamp = 98.6%

Conical surface Flux(120deg):

884.49 lm

%lum = 99.6%

%lamp = 99.6%



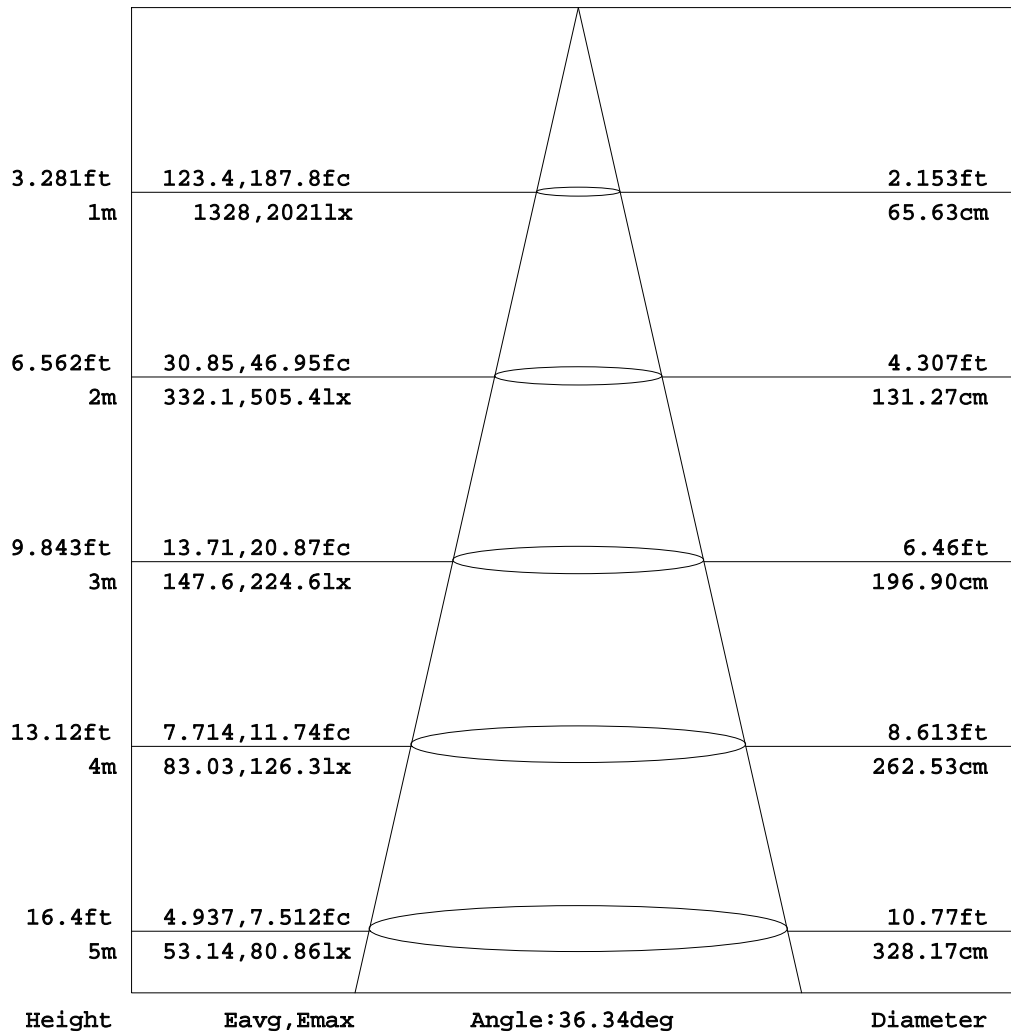
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Test Speed: HIGH
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γ Range: 0 - 90DEG
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Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
Humidity:53.0%
Test Distance:5.780m [K=1.0000]
Remarks:

AAI Figure

| | | |
|---|-------------------------|-------------|
| Test:U:220.3V I:0.0563A P:11.79W PF:0.9505 Lamp Flux:887.967x1 lm | | |
| NAME: M2-9W-830-40D | TYPE:Downlight | SERIAL No.: |
| SPEC.:3000K | DIM.: ϕ 50mm*H72mm | |
| | | |

Flux out:494.8 lm



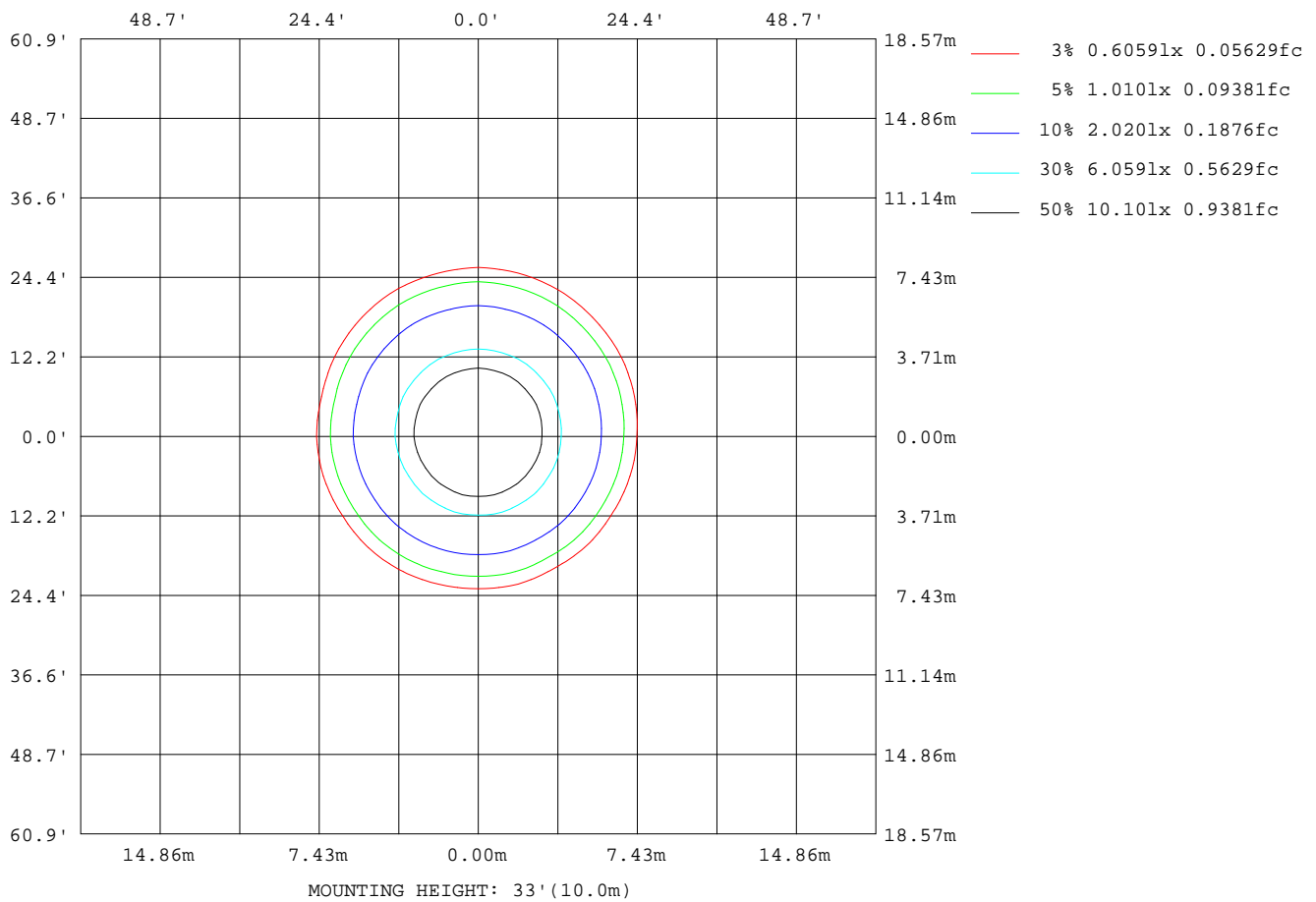
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Cao Chengpei
 Test Date:2014-06-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity:53.0%
 Test Distance:5.780m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

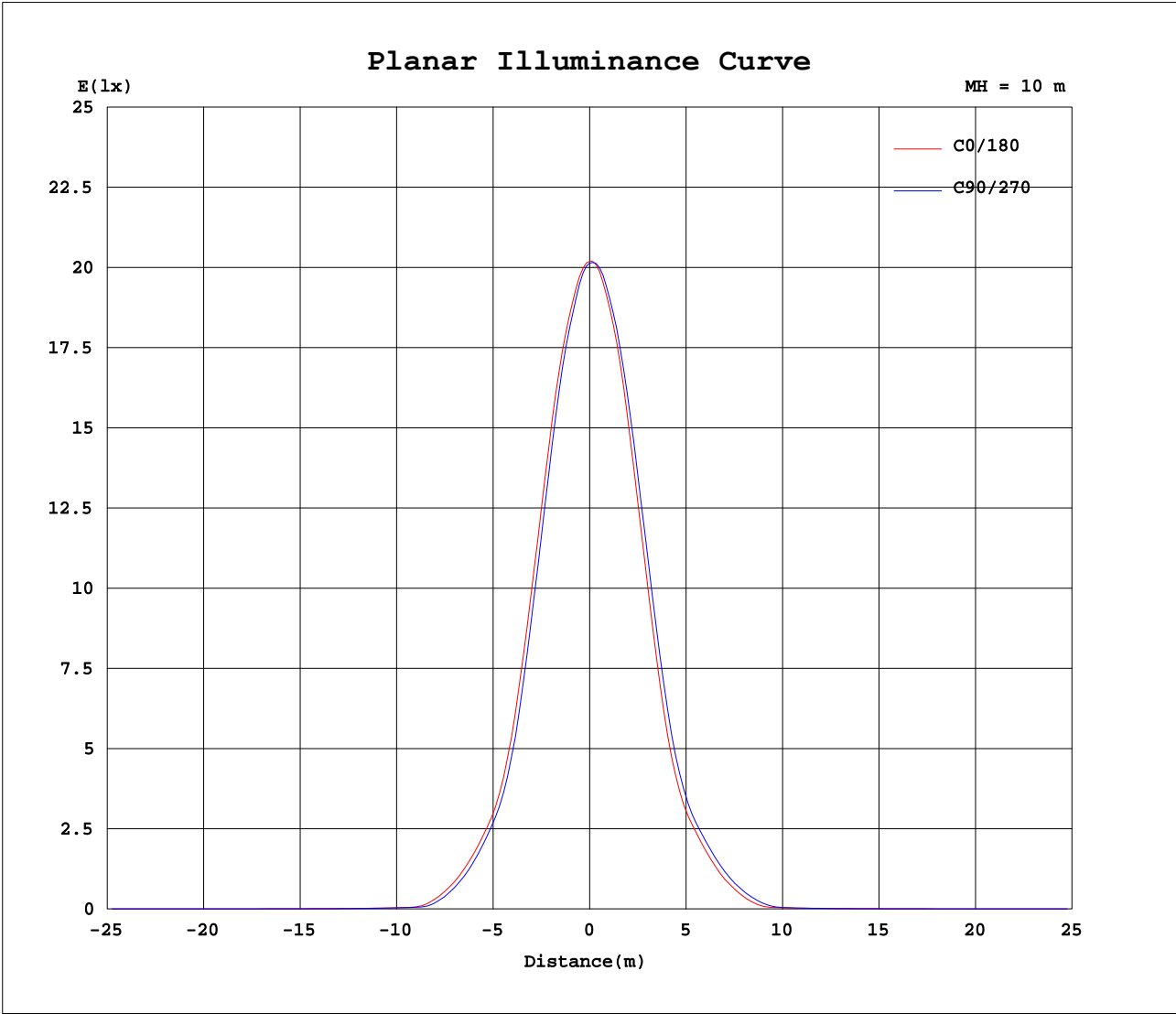
| | | |
|---|-------------------------|-------------|
| Test:U:220.3V I:0.0563A P:11.79W PF:0.9505 Lamp Flux:887.967x1 lm | | |
| NAME: M2-9W-830-40D | TYPE:Downlight | SERIAL No.: |
| SPEC.:3000K | DIM.: ϕ 50mm*H72mm | |
| | | |



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Cao Chengpei
 Test Date:2014-06-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity:53.0%
 Test Distance:5.780m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:Cao Chengpei
Test Date:2014-06-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
Humidity:53.0%
Test Distance:5.780m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|---|-------------------|-------------|
| Test:U:220.3V I:0.0563A P:11.79W PF:0.9505 Lamp Flux:887.967x1 lm | | |
| NAME: M2-9W-830-40D | TYPE:Downlight | SERIAL No.: |
| SPEC.:3000K | DIM.: φ50mm*H72mm | |
| | | |

Table--1

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Cao Chengpei
Test Date: 2014-06-21

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
Humidity:53.0%
Test Distance:5.780m [K=1.0000]
Remarks:

```

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|---|-------------------|-------------|
| Test:U:220.3V I:0.0563A P:11.79W PF:0.9505 Lamp Flux:887.967x1 lm | | |
| NAME: M2-9W-830-40D | TYPE:Downlight | SERIAL No.: |
| SPEC.:3000K | DIM.: φ50mm*H72mm | |
| | | |

Table--2

UNIT: cd

[illegible]

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Cao Chengpei
Test Date: 2014-06-21

```

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.288
Humidity:53.0%
Test Distance:5.780m [K=1.0000]
Remarks:

```

Photometric Data Table [cd]

| G/C | 0.0 | 15.0 | 30.0 | 45.0 | 60.0 | 75.0 | 90.0 | 105.0 | 120.0 | 135.0 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0.0 | 2020 | 2021 | 2020 | 2020 | 2018 | 2014 | 2013 | 2013 | 2011 | 2012 |
| 3.0 | 1979 | 1978 | 1970 | 1969 | 1963 | 1959 | 1955 | 1960 | 1958 | 1966 |
| 6.0 | 1879 | 1872 | 1859 | 1857 | 1847 | 1842 | 1837 | 1843 | 1842 | 1855 |
| 9.0 | 1739 | 1732 | 1709 | 1703 | 1686 | 1683 | 1674 | 1683 | 1676 | 1695 |
| 12.0 | 1533 | 1523 | 1493 | 1486 | 1461 | 1459 | 1447 | 1458 | 1449 | 1473 |
| 15.0 | 1283 | 1273 | 1238 | 1230 | 1205 | 1203 | 1187 | 1202 | 1193 | 1219 |
| 18.0 | 1018 | 1007 | 972.1 | 964.3 | 937.2 | 935.2 | 920.0 | 935.1 | 926.5 | 948.2 |
| 21.0 | 756.6 | 744.9 | 713.5 | 703.1 | 675.9 | 676.2 | 662.7 | 674.7 | 668.3 | 689.5 |
| 24.0 | 541.0 | 529.9 | 509.2 | 499.6 | 483.9 | 484.1 | 477.9 | 482.7 | 484.4 | 498.2 |
| 27.0 | 401.2 | 394.1 | 381.5 | 374.8 | 364.8 | 366.4 | 362.6 | 367.1 | 370.1 | 379.4 |
| 30.0 | 305.7 | 295.6 | 283.9 | 278.1 | 266.7 | 269.8 | 265.3 | 269.2 | 276.6 | 286.5 |
| 33.0 | 213.0 | 202.2 | 190.4 | 185.1 | 174.5 | 178.8 | 174.8 | 177.7 | 187.2 | 195.8 |
| 36.0 | 130.0 | 120.7 | 108.8 | 105.3 | 96.11 | 100.4 | 97.68 | 100.8 | 110.1 | 118.6 |
| 39.0 | 59.40 | 49.59 | 42.28 | 39.73 | 34.75 | 35.75 | 35.41 | 38.04 | 43.93 | 51.49 |
| 42.0 | 16.01 | 14.66 | 13.79 | 13.99 | 13.47 | 13.36 | 13.77 | 13.91 | 13.67 | 14.07 |
| 45.0 | 11.52 | 11.00 | 10.44 | 10.75 | 10.34 | 10.21 | 10.51 | 10.55 | 10.24 | 10.48 |
| 48.0 | 9.522 | 9.098 | 8.616 | 8.671 | 8.285 | 8.220 | 8.412 | 8.504 | 8.299 | 8.594 |
| 51.0 | 7.329 | 7.045 | 6.870 | 6.820 | 6.687 | 6.558 | 6.656 | 6.617 | 6.544 | 6.877 |
| 54.0 | 5.658 | 5.672 | 5.526 | 5.457 | 5.358 | 5.356 | 5.476 | 5.493 | 5.358 | 5.489 |
| 57.0 | 4.570 | 4.461 | 4.214 | 4.234 | 4.191 | 4.100 | 4.138 | 4.162 | 4.159 | 4.176 |
| 60.0 | 3.487 | 3.547 | 3.468 | 3.467 | 3.351 | 3.285 | 3.299 | 3.388 | 3.355 | 3.364 |
| 63.0 | 2.869 | 2.781 | 2.796 | 2.772 | 2.696 | 2.696 | 2.672 | 2.751 | 2.748 | 2.696 |
| 66.0 | 2.140 | 2.105 | 2.095 | 2.062 | 2.055 | 2.022 | 2.045 | 2.061 | 2.069 | 2.058 |
| 69.0 | 1.708 | 1.635 | 1.533 | 1.529 | 1.472 | 1.414 | 1.383 | 1.404 | 1.388 | 1.400 |
| 72.0 | 1.064 | 1.066 | 1.084 | 1.045 | 1.006 | 0.9601 | 0.9830 | 1.001 | 0.9955 | 0.9828 |
| 75.0 | 0.7953 | 0.7512 | 0.6453 | 0.6189 | 0.5825 | 0.5277 | 0.5406 | 0.5318 | 0.5409 | 0.5504 |
| 78.0 | 0.4083 | 0.4030 | 0.4083 | 0.3801 | 0.3812 | 0.3323 | 0.3479 | 0.3303 | 0.3541 | 0.3427 |
| 81.0 | 0.2542 | 0.2408 | 0.2542 | 0.2263 | 0.2251 | 0.1930 | 0.2105 | 0.1889 | 0.2146 | 0.2014 |
| 84.0 | 0.1335 | 0.1078 | 0.1252 | 0.0933 | 0.1024 | 0.0744 | 0.0961 | 0.0786 | 0.1003 | 0.0953 |
| 87.0 | 0.0255 | 0.0021 | 0.0087 | 0.0000 | 0.0022 | 0 | 0.0022 | 0.0000 | 0.0063 | 0 |
| 90.0 | 0.0042 | 0.0042 | 0.0021 | 0.0021 | 0 | 0 | 0 | 0 | 0 | 0 |
| G/C | 150.0 | 165.0 | 180.0 | 195.0 | 210.0 | 225.0 | 240.0 | 255.0 | 270.0 | 285.0 |
| 0.0 | 2011 | 2011 | 2020 | 2021 | 2020 | 2020 | 2018 | 2014 | 2013 | 2013 |
| 3.0 | 1968 | 1977 | 1994 | 1998 | 2004 | 2006 | 2009 | 2006 | 2006 | 2002 |
| 6.0 | 1860 | 1877 | 1902 | 1911 | 1924 | 1929 | 1936 | 1932 | 1933 | 1922 |
| 9.0 | 1704 | 1728 | 1765 | 1777 | 1796 | 1798 | 1815 | 1809 | 1815 | 1804 |
| 12.0 | 1484 | 1516 | 1556 | 1571 | 1600 | 1608 | 1631 | 1628 | 1637 | 1621 |
| 15.0 | 1227 | 1263 | 1306 | 1321 | 1357 | 1367 | 1394 | 1391 | 1402 | 1387 |
| 18.0 | 953.7 | 988.5 | 1032 | 1048 | 1089 | 1097 | 1127 | 1125 | 1139 | 1123 |
| 21.0 | 693.2 | 723.7 | 761.4 | 775.8 | 813.2 | 822.6 | 852.6 | 850.8 | 867.9 | 852.9 |
| 24.0 | 504.0 | 521.8 | 548.0 | 562.0 | 583.5 | 597.5 | 615.2 | 613.2 | 628.4 | 615.7 |
| 27.0 | 384.8 | 396.9 | 411.4 | 419.7 | 434.8 | 443.3 | 459.4 | 462.2 | 467.2 | 459.5 |
| 30.0 | 292.5 | 306.2 | 321.9 | 328.2 | 343.4 | 352.0 | 362.7 | 363.0 | 367.7 | 361.9 |
| 33.0 | 200.3 | 214.3 | 229.3 | 232.2 | 249.5 | 258.7 | 268.9 | 270.0 | 274.6 | 267.9 |
| 36.0 | 122.2 | 135.2 | 145.5 | 144.9 | 160.3 | 170.1 | 179.0 | 179.6 | 183.8 | 178.5 |
| 39.0 | 56.49 | 64.15 | 71.70 | 71.27 | 85.39 | 95.44 | 102.3 | 103.0 | 106.8 | 102.8 |
| 42.0 | 15.03 | 17.01 | 20.73 | 21.00 | 28.51 | 35.43 | 41.09 | 40.17 | 43.24 | 40.05 |
| 45.0 | 10.78 | 10.79 | 11.59 | 11.88 | 13.05 | 13.91 | 14.70 | 13.86 | 13.71 | 13.45 |
| 48.0 | 8.583 | 8.752 | 9.332 | 9.570 | 10.07 | 10.22 | 10.41 | 10.01 | 10.12 | 9.984 |
| 51.0 | 6.768 | 6.998 | 7.230 | 7.500 | 7.931 | 8.033 | 8.193 | 8.105 | 8.063 | 7.818 |
| 54.0 | 5.437 | 5.523 | 5.836 | 5.991 | 6.259 | 6.433 | 6.464 | 6.506 | 6.502 | 6.325 |
| 57.0 | 4.342 | 4.414 | 4.783 | 4.974 | 5.229 | 5.171 | 5.144 | 5.022 | 5.153 | 5.093 |
| 60.0 | 3.443 | 3.535 | 3.739 | 3.963 | 4.063 | 4.032 | 3.990 | 3.847 | 3.835 | 3.914 |
| 63.0 | 2.873 | 2.914 | 3.016 | 3.168 | 3.333 | 3.116 | 3.071 | 2.995 | 3.119 | 3.184 |
| 66.0 | 2.111 | 2.242 | 2.385 | 2.542 | 2.722 | 2.720 | 2.625 | 2.524 | 2.495 | 2.557 |
| 69.0 | 1.491 | 1.740 | 1.877 | 2.103 | 2.103 | 2.116 | 2.026 | 1.976 | 1.935 | 1.910 |
| 72.0 | 1.032 | 1.083 | 1.141 | 1.256 | 1.367 | 1.369 | 1.335 | 1.337 | 1.333 | 1.337 |
| 75.0 | 0.5848 | 0.6933 | 0.8382 | 1.014 | 1.073 | 1.070 | 1.049 | 1.020 | 0.9534 | 0.8932 |
| 78.0 | 0.3791 | 0.4009 | 0.4715 | 0.5807 | 0.5629 | 0.5684 | 0.5421 | 0.5249 | 0.4984 | 0.4961 |
| 81.0 | 0.2396 | 0.2513 | 0.3135 | 0.4246 | 0.3945 | 0.3956 | 0.3675 | 0.3581 | 0.3280 | 0.3331 |
| 84.0 | 0.1273 | 0.1307 | 0.1888 | 0.2957 | 0.2553 | 0.2500 | 0.2116 | 0.2167 | 0.1845 | 0.1897 |
| 87.0 | 0.0168 | 0.0083 | 0.0391 | 0.1504 | 0.1322 | 0.1314 | 0.0847 | 0.0898 | 0.0598 | 0.0690 |
| 90.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| G/C | 300.0 | 315.0 | 330.0 | 345.0 | | | | | | |
| 0.0 | 2011 | 2012 | 2011 | 2011 | | | | | | |
| 3.0 | 2001 | 1996 | 1991 | 1982 | | | | | | |
| 6.0 | 1920 | 1908 | 1901 | 1888 | | | | | | |
| 9.0 | 1800 | 1782 | 1774 | 1754 | | | | | | |
| 12.0 | 1622 | 1598 | 1588 | 1559 | | | | | | |
| 15.0 | 1389 | 1361 | 1350 | 1316 | | | | | | |
| 18.0 | 1128 | 1096 | 1088 | 1050 | | | | | | |
| 21.0 | 858.4 | 829.0 | 821.9 | 786.0 | | | | | | |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Cao Chengpei
 Test Date: 2014-06-21

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.288
 Humidity: 53.0%
 Test Distance: 5.780m [K=1.0000]
 Remarks:

Photometric Data Table [cd]

| | | | | |
|------|--------|--------|--------|--------|
| 24.0 | 620.3 | 601.8 | 588.6 | 565.4 |
| 27.0 | 455.0 | 440.0 | 431.0 | 414.3 |
| 30.0 | 357.2 | 343.3 | 334.6 | 319.0 |
| 33.0 | 264.2 | 250.0 | 242.0 | 227.7 |
| 36.0 | 172.7 | 162.9 | 155.9 | 143.3 |
| 39.0 | 96.68 | 88.30 | 81.41 | 69.04 |
| 42.0 | 36.00 | 29.52 | 25.28 | 19.50 |
| 45.0 | 13.13 | 12.85 | 12.43 | 11.67 |
| 48.0 | 9.833 | 9.793 | 9.646 | 9.242 |
| 51.0 | 7.886 | 7.617 | 7.393 | 7.246 |
| 54.0 | 6.482 | 6.259 | 5.958 | 5.755 |
| 57.0 | 5.114 | 4.853 | 4.780 | 4.714 |
| 60.0 | 3.959 | 3.829 | 3.714 | 3.596 |
| 63.0 | 3.143 | 2.923 | 2.947 | 2.801 |
| 66.0 | 2.497 | 2.352 | 2.370 | 2.237 |
| 69.0 | 1.900 | 1.790 | 1.772 | 1.717 |
| 72.0 | 1.357 | 1.204 | 1.124 | 1.048 |
| 75.0 | 0.8578 | 0.8268 | 0.8180 | 0.8116 |
| 78.0 | 0.4527 | 0.4332 | 0.3966 | 0.4019 |
| 81.0 | 0.2864 | 0.2790 | 0.2386 | 0.2437 |
| 84.0 | 0.1492 | 0.1501 | 0.1118 | 0.1231 |
| 87.0 | 0.0432 | 0.0460 | 0.0103 | 0.0211 |
| 90.0 | 0 | 0 | 0 | 0 |

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Cao Chengpei
Test Date: 2014-06-21

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.288
Humidity: 53.0%
Test Distance: 5.780m [K=1.0000]
Remarks: