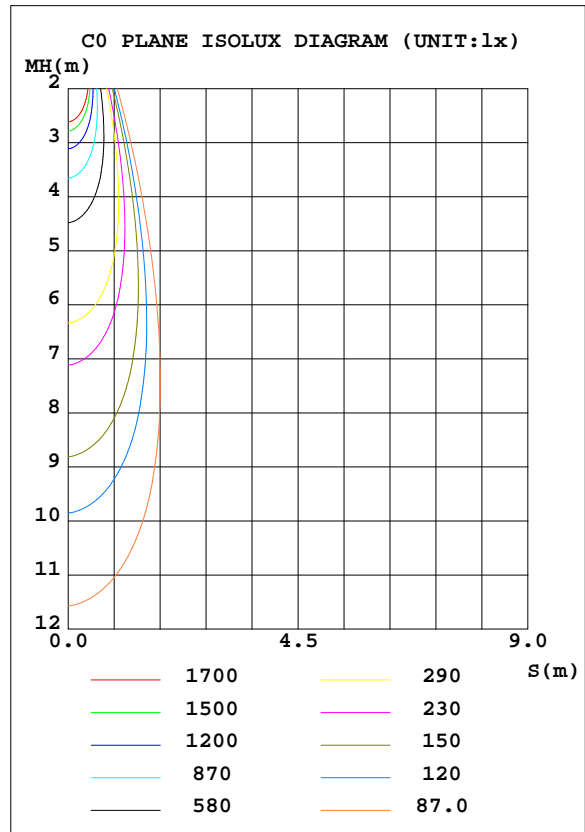
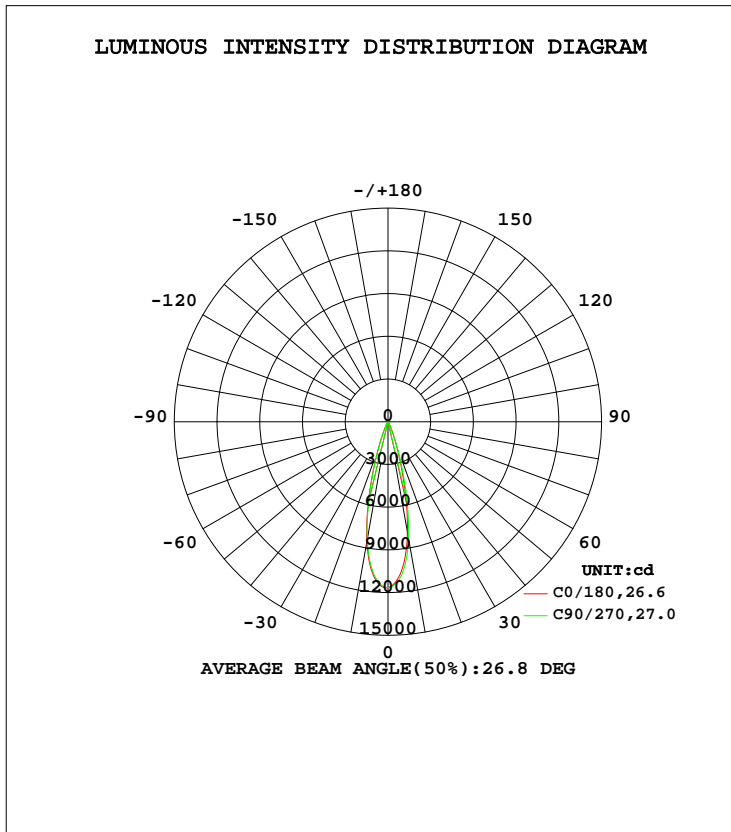


LUMINAIRE PHOTOMETRIC TEST REPORT

| | | |
|------------------------------|-------|------------------|
| NAME: VM090 | TYPE: | WEIGHT:1 |
| SPEC.:BR 3000K 34W 90CRI 24D | DIM.: | SERIAL No.: |
| MFR.: 1 | SUR.: | Shielding Angle: |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 81.75 lm/W | | | |
|------------------|---------|---------------------------------------|--------|--------------------|-----------|
| MODEL | | I _{max} (cd) | 11667 | S/MH(C0/180) | 0.44 |
| NOMINAL POWER(W) | 34 | LOR(%) | 95.5 | S/MH(C90/270) | 0.44 |
| RATED VOLTAGE(V) | 230 | TOTAL FLUX(lm) | 2755.5 | η UP, DN(C0-180) | 1.2, 46.5 |
| NOMINAL FLUX(lm) | 2886.78 | CIE CLASS | DIRECT | η UP, DN(C180-360) | 1.2, 46.6 |
| LAMPS INSIDE | 1 | η up(%) | 2.4 | CIBSE SHR NOM | 0.00 |
| TEST VOLTAGE(V) | 230 | η down(%) | 93.1 | CIBSE SHR MAX | 1.00 |



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:28DEG
 Operators:LGL
 Test Date:2020-08-26

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:5.190m [K=1.0000]
 Remarks:



ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

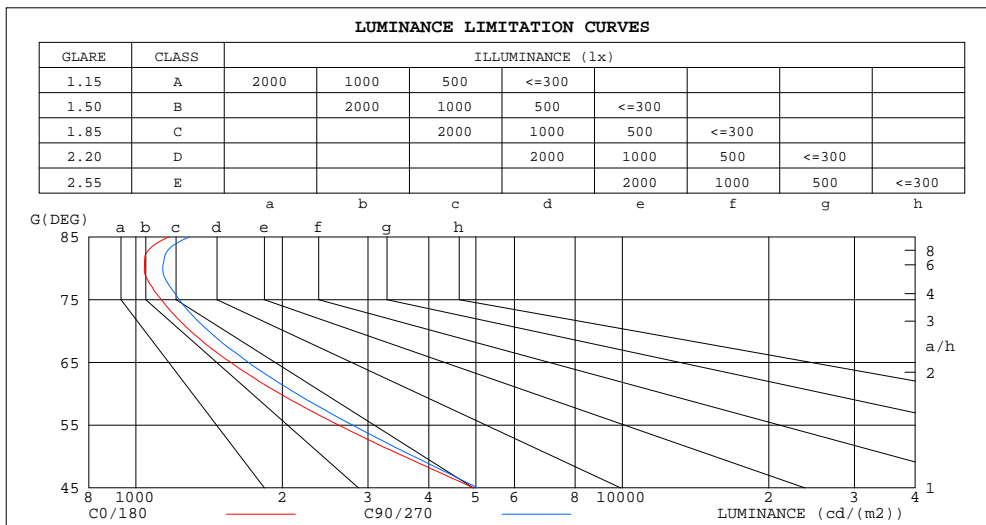
| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Φ zone | Φ total | lum, lamp |
|-----|--------------------------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|-----------|
| 10 | 789.0 | 802.5 | 833.2 | 855.7 | 854.8 | 854.0 | 838.9 | 809.1 | 0- 10 | 952.6 | 952.6 | 34.6,33 |
| 20 | 162.1 | 178.1 | 183.3 | 194.6 | 193.7 | 204.3 | 189.7 | 177.2 | 10- 20 | 1260 | 2213 | 80.3,76.7 |
| 30 | 20.98 | 27.28 | 23.34 | 29.55 | 25.00 | 31.58 | 24.03 | 26.88 | 20- 30 | 340.9 | 2554 | 92.7,88.5 |
| 40 | 5.313 | 5.952 | 5.472 | 6.843 | 6.103 | 7.033 | 5.742 | 5.922 | 30- 40 | 81.55 | 2635 | 95.6,91.3 |
| 50 | 2.429 | 1.773 | 2.543 | 1.945 | 2.654 | 1.918 | 2.559 | 1.750 | 40- 50 | 27.84 | 2663 | 96.6,92.2 |
| 60 | 1.049 | 0.7964 | 1.135 | 0.8726 | 1.158 | 0.8499 | 1.120 | 0.7859 | 50- 60 | 13.35 | 2676 | 97.1,92.7 |
| 70 | 0.4696 | 0.3844 | 0.5119 | 0.4204 | 0.5120 | 0.4027 | 0.4971 | 0.3762 | 60- 70 | 6.679 | 2683 | 97.4,92.9 |
| 80 | 0.1916 | 0.1710 | 0.2091 | 0.1892 | 0.2064 | 0.1748 | 0.1965 | 0.1592 | 70- 80 | 3.202 | 2686 | 97.5,93.1 |
| 90 | 0.0594 | 0.0578 | 0.0592 | 0.0589 | 0.0541 | 0.0508 | 0.0543 | 0.0513 | 80- 90 | 1.211 | 2687 | 97.5,93.1 |
| 100 | 0.0686 | 0.0662 | 0.0671 | 0.0645 | 0.0680 | 0.0660 | 0.0705 | 0.0679 | 90-100 | 0.6616 | 2688 | 97.6,93.1 |
| 110 | 0.0863 | 0.0874 | 0.0850 | 0.0831 | 0.0853 | 0.0870 | 0.0877 | 0.0905 | 100-110 | 0.7955 | 2689 | 97.6,93.1 |
| 120 | 0.1923 | 0.1982 | 0.1916 | 0.1779 | 0.1756 | 0.1852 | 0.1904 | 0.1979 | 110-120 | 1.202 | 2690 | 97.6,93.2 |
| 130 | 0.7906 | 0.7921 | 0.7816 | 0.7182 | 0.7301 | 0.7422 | 0.7815 | 0.8032 | 120-130 | 3.652 | 2694 | 97.8,93.3 |
| 140 | 2.185 | 2.174 | 2.129 | 2.056 | 2.077 | 2.082 | 2.143 | 2.191 | 130-140 | 10.67 | 2704 | 98.1,93.7 |
| 150 | 3.691 | 3.669 | 3.641 | 3.579 | 3.616 | 3.608 | 3.654 | 3.694 | 140-150 | 18.13 | 2723 | 98.8,94.3 |
| 160 | 4.307 | 4.217 | 4.186 | 4.202 | 4.305 | 4.290 | 4.288 | 4.292 | 150-160 | 18.72 | 2741 | 99.5,95 |
| 170 | 3.396 | 3.309 | 3.302 | 3.338 | 3.497 | 3.472 | 3.465 | 3.419 | 160-170 | 11.31 | 2753 | 99.9,95.4 |
| 180 | 2.560 | 2.673 | 2.624 | 2.657 | 2.562 | 2.674 | 2.627 | 2.656 | 170-180 | 2.883 | 2756 | 100,95.5 |
| DEG | LUMINOUS INTENSITY:×10cd | | | | | | | | | UNIT:lm | | |

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:28DEG
 Operators:LGL
 Test Date:2020-08-26

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:5.190m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

| | | |
|------------------------------|-------|------------------|
| NAME: VM090 | TYPE: | WEIGHT:1 |
| SPEC.:BR 3000K 34W 90CRI 24D | DIM.: | SERIAL No.: |
| MFR.: 1 | SUR.: | Shielding Angle: |



| LUMINANCE cd/(m2) | | |
|-------------------|--------|---------|
| G(DEG) | C0/180 | C90/270 |
| 85 | 1170 | 1290 |
| 80 | 1041 | 1136 |
| 75 | 1128 | 1228 |
| 70 | 1295 | 1411 |
| 65 | 1566 | 1702 |
| 60 | 1979 | 2140 |
| 55 | 2611 | 2788 |
| 50 | 3563 | 3730 |
| 45 | 4945 | 5036 |

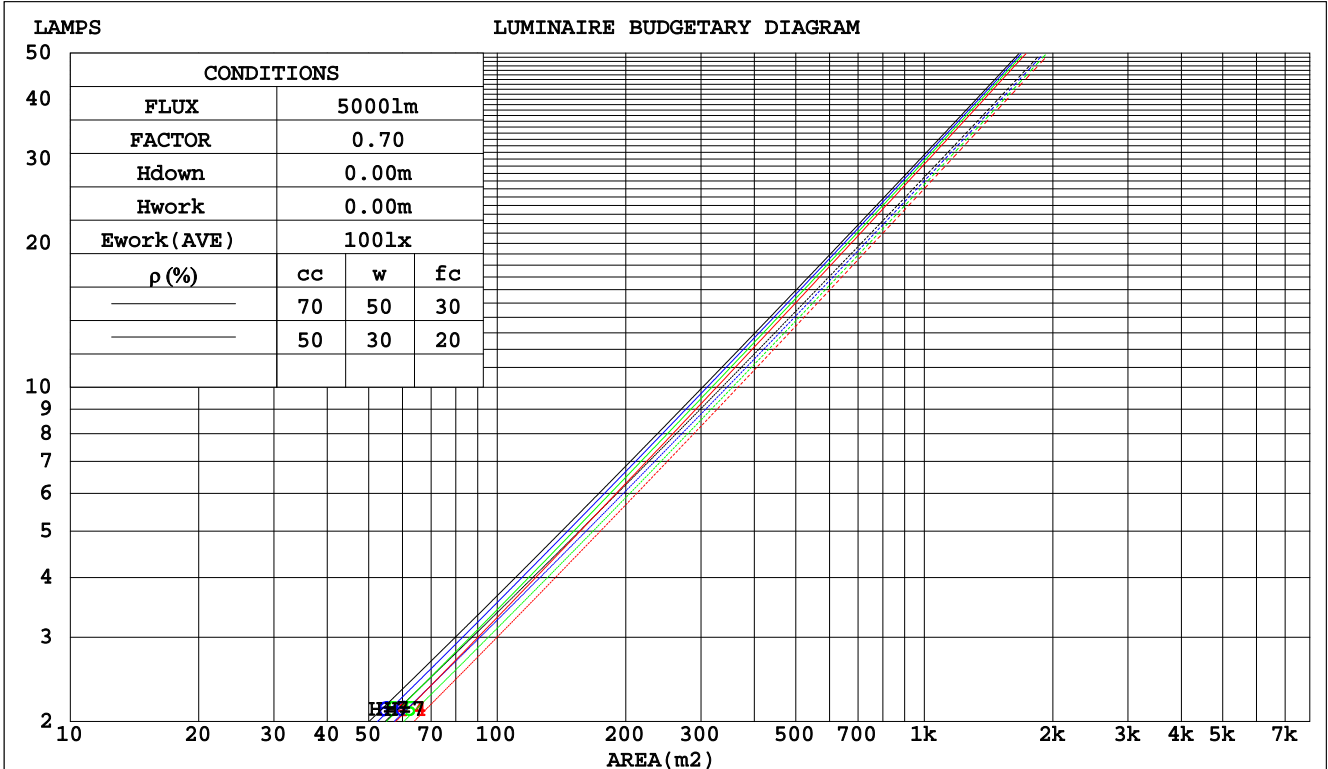
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature: 28DEG
 Operators: LGL
 Test Date: 2020-08-26

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.401
 Humidity: 65.0%
 Test Distance: 5.190m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| | | |
|------------------------------|-------|------------------|
| NAME: VM090 | TYPE: | WEIGHT:1 |
| SPEC.:BR 3000K 34W 90CRI 24D | DIM.: | SERIAL No.: |
| MFR.: 1 | SUR.: | Shielding Angle: |

| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|------|---------------------------------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|
| | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| pw | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| pfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | | | | | | | | | | |
| | Coefficients of Utilization(CU) | | | | | | | | | | | | | | | |
| 0.0 | 1.13 | 1.13 | 1.13 | 1.10 | 1.10 | 1.10 | 1.05 | 1.05 | 1.05 | .00 | .00 | .00 | .95 | .95 | .95 | .93 |
| 1.0 | 1.07 | 1.05 | 1.04 | 1.05 | 1.03 | 1.02 | 1.01 | .99 | .98 | .97 | .96 | .95 | .93 | .92 | .92 | .90 |
| 2.0 | 1.02 | .99 | .97 | 1.00 | .98 | .95 | .97 | .95 | .93 | .94 | .92 | .91 | .91 | .90 | .88 | .87 |
| 3.0 | .97 | .94 | .91 | .96 | .93 | .90 | .93 | .91 | .89 | .91 | .89 | .87 | .89 | .87 | .85 | .84 |
| 4.0 | .94 | .90 | .87 | .92 | .89 | .86 | .90 | .87 | .85 | .88 | .86 | .84 | .86 | .84 | .83 | .81 |
| 5.0 | .90 | .86 | .83 | .89 | .85 | .83 | .87 | .84 | .82 | .86 | .83 | .81 | .84 | .82 | .80 | .79 |
| 6.0 | .87 | .83 | .80 | .86 | .82 | .80 | .85 | .81 | .79 | .83 | .81 | .78 | .82 | .80 | .78 | .77 |
| 7.0 | .84 | .80 | .77 | .83 | .80 | .77 | .82 | .79 | .77 | .81 | .78 | .76 | .80 | .77 | .76 | .74 |
| 8.0 | .82 | .78 | .75 | .81 | .77 | .75 | .80 | .77 | .74 | .79 | .76 | .74 | .78 | .75 | .73 | .72 |
| 9.0 | .79 | .75 | .73 | .79 | .75 | .72 | .78 | .74 | .72 | .77 | .74 | .72 | .76 | .73 | .71 | .71 |
| 10.0 | .77 | .73 | .71 | .77 | .73 | .70 | .76 | .72 | .70 | .75 | .72 | .70 | .74 | .72 | .70 | .69 |



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature: 28DEG
 Operators: LGL
 Test Date: 2020-08-26

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.401
 Humidity: 65.0%
 Test Distance: 5.190m [K=1.0000]
 Remarks:



WEC AND CCEC

| | | |
|------------------------------|-------|------------------|
| NAME: VM090 | TYPE: | WEIGHT:1 |
| SPEC.:BR 3000K 34W 90CRI 24D | DIM.: | SERIAL No.: |
| MFR.: 1 | SUR.: | Shielding Angle: |

| ρcc | 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 | .134 | .076 | .024 | .127 | .072 | .023 | .113 | .065 | .021 | .101 | .058 | .019 | .090 | .052 | .017 | |
| 2.0 | .124 | .068 | .021 | .118 | .065 | .020 | .107 | .059 | .018 | .097 | .054 | .017 | .087 | .049 | .016 | |
| 3.0 | .115 | .061 | .018 | .110 | .059 | .018 | .101 | .055 | .017 | .092 | .050 | .015 | .084 | .047 | .014 | |
| 4.0 | .108 | .056 | .016 | .103 | .054 | .016 | .095 | .051 | .015 | .088 | .047 | .014 | .081 | .044 | .013 | |
| 5.0 | .101 | .052 | .015 | .097 | .050 | .015 | .091 | .047 | .014 | .084 | .044 | .013 | .078 | .042 | .013 | |
| 6.0 | .096 | .048 | .014 | .092 | .047 | .013 | .086 | .044 | .013 | .081 | .042 | .012 | .076 | .040 | .012 | |
| 7.0 | .091 | .045 | .013 | .088 | .044 | .012 | .083 | .042 | .012 | .078 | .040 | .012 | .073 | .038 | .011 | |
| 8.0 | .086 | .042 | .012 | .084 | .041 | .012 | .079 | .040 | .011 | .075 | .038 | .011 | .071 | .036 | .011 | |
| 9.0 | .082 | .040 | .011 | .080 | .039 | .011 | .076 | .038 | .011 | .072 | .036 | .010 | .068 | .035 | .010 | |
| 10.0 | .079 | .038 | .010 | .077 | .037 | .010 | .073 | .036 | .010 | .069 | .035 | .010 | .066 | .033 | .010 | |

| ρcc | 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 | | | | | | Ceiling Cavity Exitance Coefficients(CCEC) | | | | | | | | | |
| 0.0 | .200 | .200 | .200 | .171 | .171 | .171 | .117 | .117 | .117 | .067 | .067 | .067 | .021 | .021 | .021 | |
| 1.0 | .179 | .169 | .159 | .153 | .145 | .137 | .105 | .100 | .095 | .060 | .058 | .055 | .019 | .019 | .018 | |
| 2.0 | .162 | .145 | .131 | .139 | .125 | .113 | .095 | .086 | .079 | .055 | .050 | .046 | .018 | .016 | .015 | |
| 3.0 | .148 | .126 | .109 | .127 | .109 | .095 | .087 | .076 | .067 | .050 | .044 | .039 | .016 | .014 | .013 | |
| 4.0 | .136 | .112 | .093 | .117 | .097 | .081 | .080 | .067 | .057 | .046 | .039 | .034 | .015 | .013 | .011 | |
| 5.0 | .126 | .100 | .081 | .108 | .087 | .071 | .075 | .061 | .050 | .043 | .036 | .030 | .014 | .012 | .010 | |
| 6.0 | .118 | .091 | .071 | .101 | .079 | .062 | .070 | .055 | .044 | .040 | .032 | .026 | .013 | .011 | .009 | |
| 7.0 | .110 | .083 | .064 | .095 | .072 | .056 | .066 | .050 | .039 | .038 | .030 | .023 | .012 | .010 | .008 | |
| 8.0 | .104 | .077 | .058 | .090 | .066 | .050 | .062 | .047 | .036 | .036 | .028 | .021 | .012 | .009 | .007 | |
| 9.0 | .099 | .071 | .053 | .085 | .062 | .046 | .059 | .043 | .033 | .034 | .026 | .019 | .011 | .008 | .006 | |
| 10.0 | .094 | .067 | .048 | .081 | .058 | .042 | .056 | .041 | .030 | .033 | .024 | .018 | .011 | .008 | .006 | |

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:28DEG
 Operators:LGL
 Test Date:2020-08-26

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:5.190m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

| | | | | | | | | | | | | | | |
|--|------------------|-----|-----|-----|-------|----------------|-----|-----|-----|------------------|--|--|--|--|
| NAME: VM090 | | | | | TYPE: | | | | | WEIGHT:1 | | | | |
| SPEC.:BR 3000K 34W 90CRI 24D | | | | | DIM.: | | | | | SERIAL No.: | | | | |
| MFR.: 1 | | | | | SUR.: | | | | | Shielding Angle: | | | | |
| ceiling/cavity | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | | | | |
| walls | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | | | | |
| working plane | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | | | | |
| Room dimensions | Viewed crosswise | | | | | Viewed endwise | | | | | | | | |
| x = 2H y = 2H | 3.1 | 3.8 | 3.4 | 4.0 | 4.2 | 3.5 | 4.1 | 3.7 | 4.3 | 4.5 | | | | |
| 3H | 3.3 | 3.9 | 3.6 | 4.2 | 4.4 | 3.6 | 4.2 | 3.9 | 4.5 | 4.7 | | | | |
| 4H | 3.4 | 4.0 | 3.7 | 4.2 | 4.5 | 3.7 | 4.3 | 4.0 | 4.5 | 4.8 | | | | |
| 6H | 3.5 | 4.0 | 3.8 | 4.3 | 4.5 | 3.8 | 4.3 | 4.1 | 4.6 | 4.8 | | | | |
| 8H | 3.5 | 4.0 | 3.8 | 4.3 | 4.6 | 3.8 | 4.3 | 4.1 | 4.6 | 4.9 | | | | |
| 12H | 3.5 | 4.0 | 3.8 | 4.3 | 4.6 | 3.8 | 4.3 | 4.1 | 4.6 | 4.9 | | | | |
| 4H 2H | 3.1 | 3.6 | 3.4 | 3.9 | 4.1 | 3.4 | 4.0 | 3.7 | 4.2 | 4.5 | | | | |
| 3H | 3.3 | 3.8 | 3.7 | 4.2 | 4.5 | 3.6 | 4.1 | 4.0 | 4.4 | 4.7 | | | | |
| 4H | 3.5 | 3.9 | 3.9 | 4.3 | 4.6 | 3.7 | 4.2 | 4.1 | 4.5 | 4.9 | | | | |
| 6H | 3.6 | 4.0 | 4.0 | 4.4 | 4.8 | 3.8 | 4.2 | 4.2 | 4.6 | 5.0 | | | | |
| 8H | 3.6 | 4.0 | 4.1 | 4.4 | 4.8 | 3.9 | 4.2 | 4.3 | 4.6 | 5.0 | | | | |
| 12H | 3.7 | 4.0 | 4.1 | 4.4 | 4.9 | 3.9 | 4.3 | 4.4 | 4.7 | 5.1 | | | | |
| 8H 4H | 3.4 | 3.8 | 3.8 | 4.2 | 4.6 | 3.7 | 4.0 | 4.1 | 4.4 | 4.8 | | | | |
| 6H | 3.6 | 3.9 | 4.0 | 4.3 | 4.8 | 3.8 | 4.1 | 4.3 | 4.6 | 5.0 | | | | |
| 8H | 3.7 | 3.9 | 4.2 | 4.4 | 4.9 | 3.9 | 4.2 | 4.4 | 4.6 | 5.1 | | | | |
| 12H | 3.8 | 4.0 | 4.3 | 4.5 | 5.0 | 4.0 | 4.2 | 4.5 | 4.7 | 5.2 | | | | |
| 12H 4H | 3.4 | 3.7 | 3.8 | 4.1 | 4.6 | 3.6 | 4.0 | 4.1 | 4.4 | 4.8 | | | | |
| 6H | 3.6 | 3.8 | 4.0 | 4.3 | 4.8 | 3.8 | 4.1 | 4.3 | 4.5 | 5.0 | | | | |
| 8H | 3.7 | 3.9 | 4.2 | 4.4 | 4.9 | 3.9 | 4.1 | 4.4 | 4.6 | 5.1 | | | | |
| Variations with the observer position at spacings: | | | | | | | | | | | | | | |
| S = 1.0H | + 1.4 / - 1.7 | | | | | + 1.5 / - 2.0 | | | | | | | | |
| 1.5H | + 2.4 / - 1.5 | | | | | + 2.7 / - 2.1 | | | | | | | | |
| 2.0H | + 2.4 / - 1.6 | | | | | + 3.0 / - 1.7 | | | | | | | | |

CIE Pub.117, 2887 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.7)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:28DEG
 Operators:LGL
 Test Date:2020-08-26

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:5.190m [K=1.0000]
 Remarks:



UTILIZATION FACTORS TABLE

| | | |
|------------------------------|-------|------------------|
| NAME: VM090 | TYPE: | WEIGHT:1 |
| SPEC.:BR 3000K 34W 90CRI 24D | DIM.: | SERIAL No.: |
| MFR.: 1 | SUR.: | Shielding Angle: |

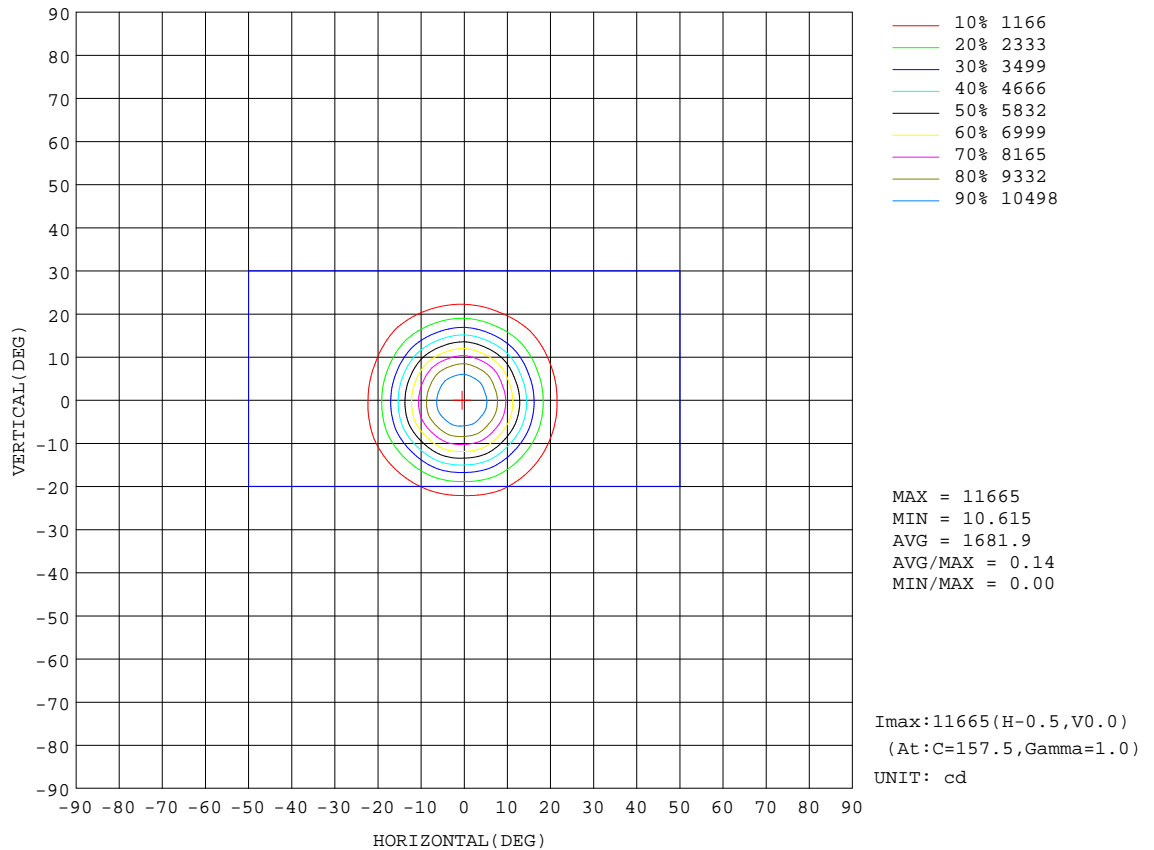
| REFLECTANCE | | | | | | | | | | |
|----------------------------------|---|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0 |
| Walls | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0 |
| Working plane | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0 |
| ROOM INDEX | UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$ | | | | | | | | | |
| k = 0.60 | 85 | 79 | 76 | 84 | 79 | 76 | 83 | 79 | 76 | 72 |
| 0.80 | 92 | 86 | 83 | 91 | 86 | 83 | 90 | 85 | 82 | 79 |
| 1.00 | 95 | 90 | 87 | 94 | 90 | 87 | 93 | 89 | 86 | 82 |
| 1.25 | 99 | 94 | 91 | 98 | 94 | 91 | 96 | 92 | 90 | 86 |
| 1.50 | 101 | 97 | 94 | 100 | 96 | 93 | 98 | 95 | 92 | 88 |
| 2.00 | 104 | 100 | 97 | 102 | 99 | 96 | 99 | 96 | 94 | 89 |
| 2.50 | 105 | 102 | 99 | 103 | 100 | 98 | 100 | 98 | 96 | 90 |
| 3.00 | 106 | 103 | 101 | 105 | 102 | 100 | 101 | 99 | 97 | 91 |
| 4.00 | 108 | 106 | 104 | 106 | 104 | 102 | 102 | 101 | 99 | 92 |
| 5.00 | 110 | 107 | 106 | 107 | 106 | 104 | 103 | 102 | 101 | 93 |
| ROOM INDEX | UF(total) | | | | | | | | | Direct |
| According to DIN EN 13032-2 2004 | | | Suspended | | | | SHRNOM = 1.25 | | | |

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:28DEG
 Operators:LGL
 Test Date:2020-08-26

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:5.190m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

| | | |
|------------------------------|-------|------------------|
| NAME: VM090 | TYPE: | WEIGHT:1 |
| SPEC.:BR 3000K 34W 90CRI 24D | DIM.: | SERIAL No.: |
| MFR.: 1 | SUR.: | Shielding Angle: |

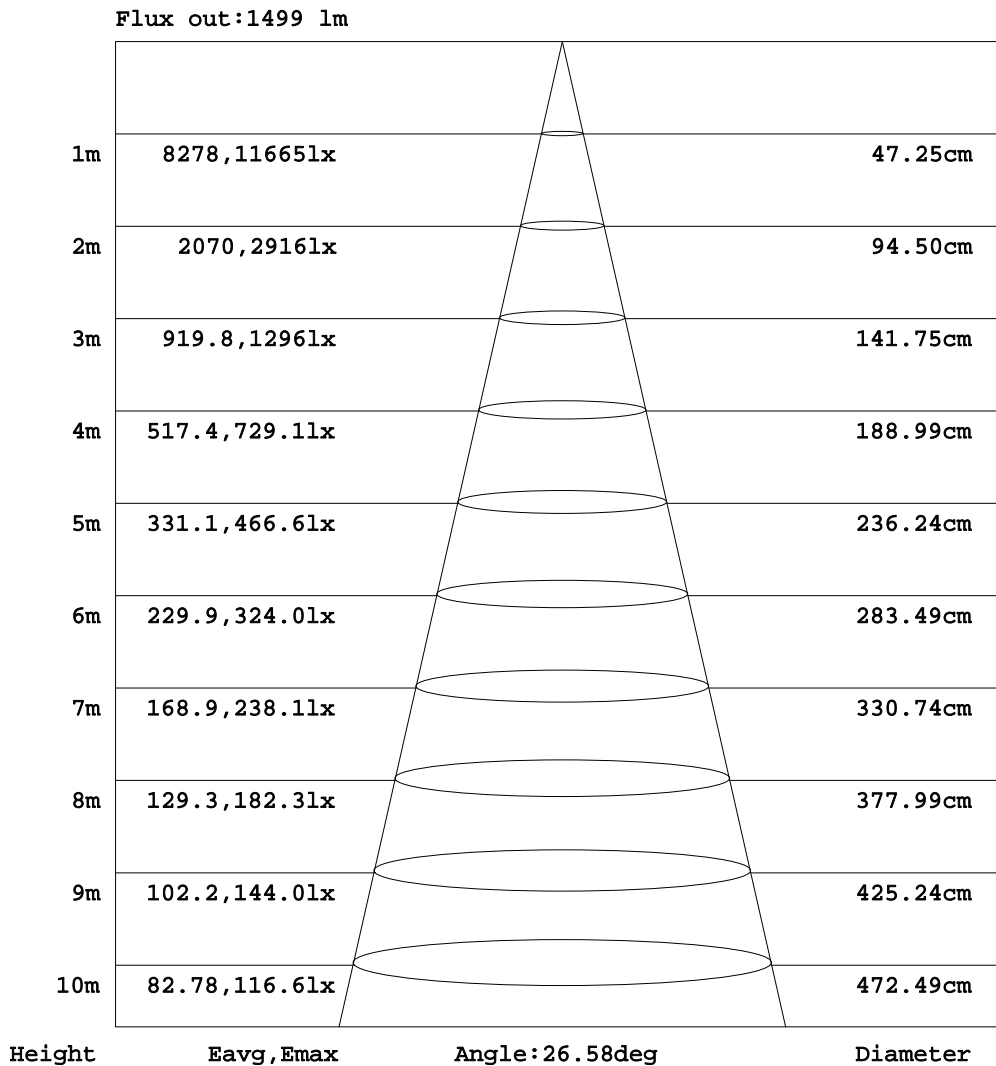


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature: 28DEG
 Operators: LGL
 Test Date: 2020-08-26

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.401
 Humidity: 65.0%
 Test Distance: 5.190m [K=1.0000]
 Remarks:

AAI Figure

| | | |
|------------------------------|-------|------------------|
| NAME: VM090 | TYPE: | WEIGHT:1 |
| SPEC.:BR 3000K 34W 90CRI 24D | DIM.: | SERIAL No.: |
| MFR.: 1 | SUR.: | Shielding Angle: |



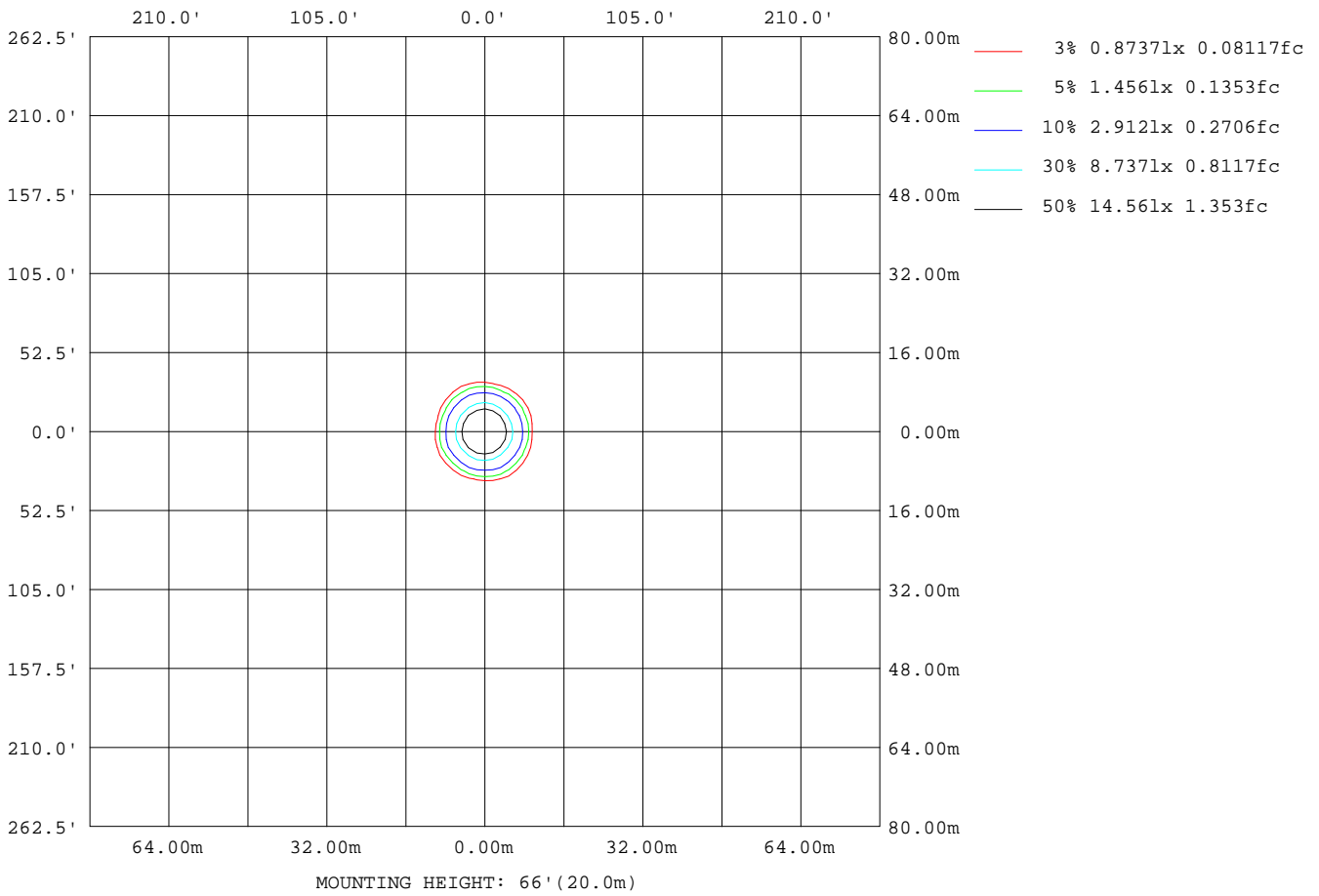
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:28DEG
 Operators:LGL
 Test Date:2020-08-26

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:5.190m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

| | | |
|------------------------------|-------|------------------|
| NAME: VM090 | TYPE: | WEIGHT:1 |
| SPEC.:BR 3000K 34W 90CRI 24D | DIM.: | SERIAL No.: |
| MFR.: 1 | SUR.: | Shielding Angle: |



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature: 28DEG
 Operators: LGL
 Test Date: 2020-08-26

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.401
 Humidity: 65.0%
 Test Distance: 5.190m [K=1.0000]
 Remarks:

LED Avg.L Report

| | | |
|------------------------------|-------|------------------|
| NAME: VM090 | TYPE: | WEIGHT:1 |
| SPEC.:BR 3000K 34W 90CRI 24D | DIM.: | SERIAL No.: |
| MFR.: 1 | SUR.: | Shielding Angle: |

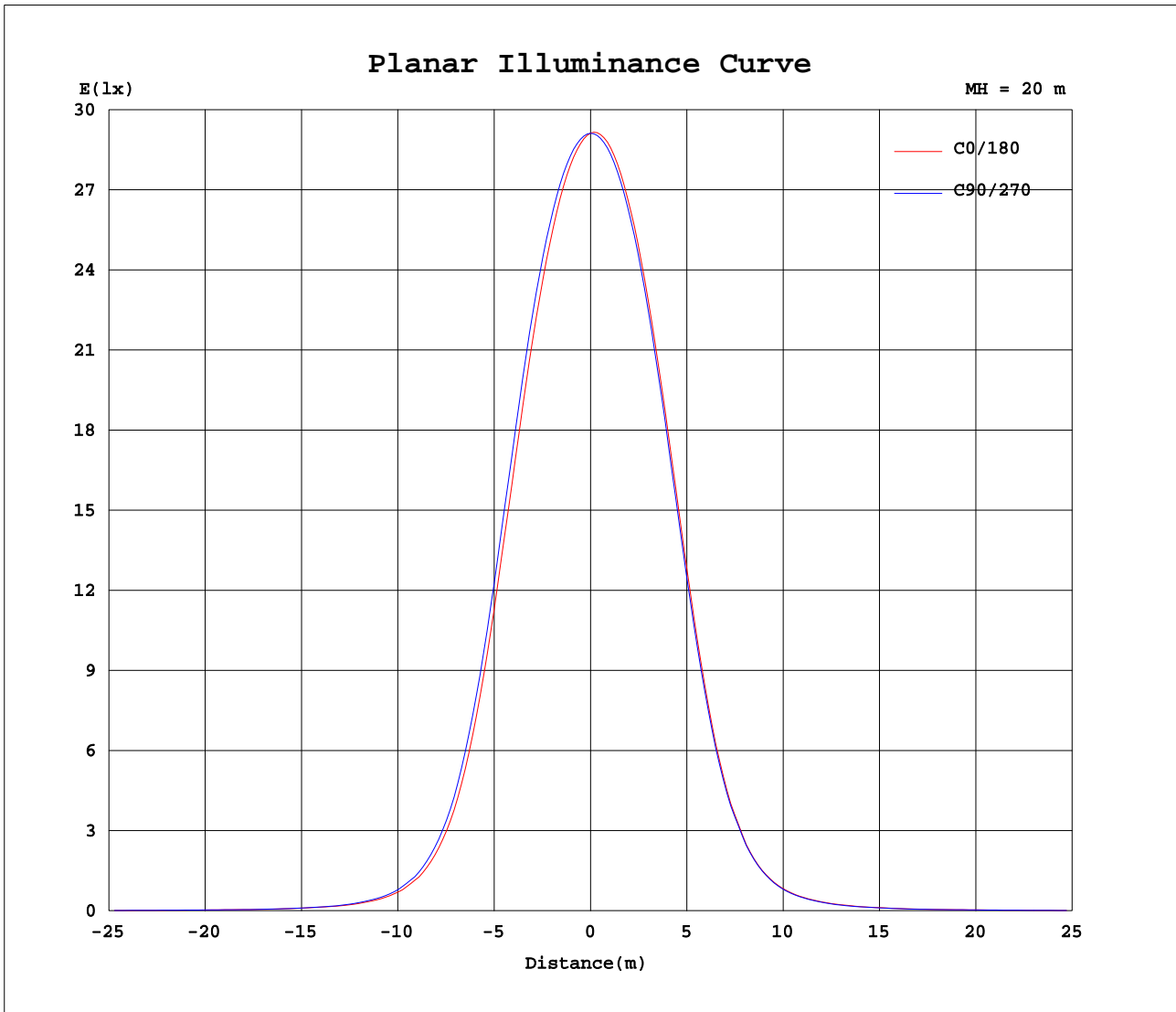
| AvgL | cd/m2 |
|----------------|-------|
| L_0~180(65)av | 1645 |
| L_0~180(75)av | 1170 |
| L_0~180(85)av | 1207 |
| L_90~270(65)av | 1686 |
| L_90~270(75)av | 1202 |
| L_90~270(85)av | 1218 |
| L_45(65)av | 1273 |
| L_45(75)av | 979 |
| L_45(85)av | 1097 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature:28DEG
 Operators:LGL
 Test Date:2020-08-26

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.401
 Humidity:65.0%
 Test Distance:5.190m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: MEDIUM
Temperature: 28DEG
Operators: LGL
Test Date: 2020-08-26

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.401
Humidity: 65.0%
Test Distance: 5.190m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|------------------------------|-------|------------------|
| NAME: VM090 | TYPE: | WEIGHT:1 |
| SPEC.:BR 3000K 34W 90CRI 24D | DIM.: | SERIAL No.: |
| MFR.: 1 | SUR.: | Shielding Angle: |

Table--1

UNIT: x10cd

| C(DEG) γ (DEG) | 0 | 22.5 | 45 | 67.5 | 90 | 112.5 | 135 | 157.5 | 180 | 202.5 | 225 | 247.5 | 270 | 292.5 | 315 | 337.5 | | | |
|-------------------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|--|--|--|
| 0 | 1164 | 1164 | 1164 | 1164 | 1164 | 1164 | 1164 | 1164 | 1164 | 1164 | 1164 | 1164 | 1164 | 1164 | 1164 | 1164 | | | |
| 5 | 1059 | 1064 | 1065 | 1080 | 1083 | 1096 | 1097 | 1106 | 1099 | 1093 | 1096 | 1087 | 1086 | 1072 | 1069 | 1055 | | | |
| 10 | 789 | 799 | 802 | 830 | 833 | 857 | 856 | 871 | 855 | 846 | 854 | 838 | 839 | 816 | 809 | 784 | | | |
| 15 | 427 | 439 | 441 | 467 | 467 | 490 | 487 | 505 | 490 | 482 | 492 | 475 | 477 | 451 | 445 | 419 | | | |
| 20 | 162 | 173 | 178 | 191 | 183 | 194 | 195 | 205 | 194 | 191 | 204 | 194 | 190 | 175 | 177 | 163 | | | |
| 25 | 55.0 | 56.9 | 65.5 | 69.4 | 62.1 | 64.3 | 68.8 | 72.1 | 64.3 | 64.1 | 74.4 | 70.8 | 63.1 | 59.6 | 63.6 | 59.3 | | | |
| 30 | 21.0 | 21.9 | 27.3 | 28.9 | 23.3 | 24.6 | 29.6 | 30.5 | 25.0 | 25.2 | 31.6 | 30.0 | 24.0 | 22.7 | 26.9 | 25.0 | | | |
| 35 | 10.0 | 10.2 | 12.6 | 13.4 | 10.6 | 11.1 | 14.2 | 14.7 | 11.5 | 11.5 | 14.9 | 13.9 | 11.0 | 10.5 | 12.6 | 11.7 | | | |
| 40 | 5.31 | 5.36 | 5.95 | 6.25 | 5.47 | 5.86 | 6.84 | 7.15 | 6.10 | 6.09 | 7.03 | 6.81 | 5.74 | 5.53 | 5.92 | 5.68 | | | |
| 45 | 3.71 | 3.68 | 2.80 | 2.96 | 3.78 | 3.91 | 3.17 | 3.40 | 4.00 | 3.92 | 3.19 | 3.13 | 3.87 | 3.74 | 2.78 | 2.79 | | | |
| 50 | 2.43 | 2.41 | 1.77 | 1.90 | 2.54 | 2.63 | 1.95 | 2.09 | 2.65 | 2.59 | 1.92 | 1.95 | 2.56 | 2.45 | 1.75 | 1.79 | | | |
| 55 | 1.59 | 1.58 | 1.17 | 1.26 | 1.70 | 1.75 | 1.29 | 1.36 | 1.75 | 1.70 | 1.26 | 1.27 | 1.69 | 1.61 | 1.15 | 1.17 | | | |
| 60 | 1.05 | 1.04 | 0.80 | 0.85 | 1.13 | 1.16 | 0.87 | 0.91 | 1.16 | 1.13 | 0.85 | 0.86 | 1.12 | 1.06 | 0.79 | 0.79 | | | |
| 65 | 0.70 | 0.70 | 0.55 | 0.59 | 0.76 | 0.78 | 0.60 | 0.63 | 0.77 | 0.75 | 0.59 | 0.59 | 0.75 | 0.71 | 0.54 | 0.54 | | | |
| 70 | 0.47 | 0.47 | 0.38 | 0.41 | 0.51 | 0.52 | 0.42 | 0.43 | 0.51 | 0.50 | 0.40 | 0.40 | 0.50 | 0.47 | 0.38 | 0.37 | | | |
| 75 | 0.31 | 0.31 | 0.26 | 0.28 | 0.34 | 0.35 | 0.29 | 0.30 | 0.33 | 0.32 | 0.27 | 0.27 | 0.32 | 0.31 | 0.25 | 0.25 | | | |
| 80 | 0.19 | 0.19 | 0.17 | 0.18 | 0.21 | 0.22 | 0.19 | 0.20 | 0.21 | 0.20 | 0.17 | 0.17 | 0.20 | 0.18 | 0.16 | 0.16 | | | |
| 85 | 0.11 | 0.11 | 0.10 | 0.11 | 0.12 | 0.12 | 0.11 | 0.12 | 0.12 | 0.11 | 0.10 | 0.10 | 0.11 | 0.10 | 0.09 | 0.09 | | | |
| 90 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | | | |
| 95 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | | | |
| 100 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | | | |
| 105 | 0.07 | 0.08 | 0.07 | 0.08 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.07 | 0.08 | | | |
| 110 | 0.09 | 0.09 | 0.09 | 0.09 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | | | |
| 115 | 0.11 | 0.12 | 0.12 | 0.12 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.12 | 0.11 | 0.12 | 0.12 | 0.12 | | | |
| 120 | 0.19 | 0.19 | 0.20 | 0.19 | 0.19 | 0.18 | 0.18 | 0.17 | 0.18 | 0.18 | 0.19 | 0.20 | 0.19 | 0.20 | 0.20 | 0.21 | | | |
| 125 | 0.39 | 0.39 | 0.39 | 0.38 | 0.39 | 0.36 | 0.35 | 0.33 | 0.36 | 0.37 | 0.37 | 0.39 | 0.39 | 0.40 | 0.40 | 0.41 | | | |
| 130 | 0.79 | 0.78 | 0.79 | 0.77 | 0.78 | 0.73 | 0.72 | 0.68 | 0.73 | 0.74 | 0.74 | 0.77 | 0.78 | 0.81 | 0.80 | 0.83 | | | |
| 135 | 1.41 | 1.40 | 1.41 | 1.37 | 1.39 | 1.33 | 1.31 | 1.26 | 1.32 | 1.35 | 1.33 | 1.38 | 1.39 | 1.44 | 1.42 | 1.47 | | | |
| 140 | 2.18 | 2.17 | 2.17 | 2.13 | 2.13 | 2.08 | 2.06 | 2.01 | 2.08 | 2.11 | 2.08 | 2.13 | 2.14 | 2.21 | 2.19 | 2.25 | | | |
| 145 | 2.99 | 2.97 | 2.98 | 2.93 | 2.93 | 2.88 | 2.86 | 2.82 | 2.89 | 2.90 | 2.89 | 2.93 | 2.94 | 3.00 | 2.99 | 3.04 | | | |
| 150 | 3.69 | 3.68 | 3.67 | 3.63 | 3.64 | 3.59 | 3.58 | 3.56 | 3.62 | 3.62 | 3.61 | 3.64 | 3.65 | 3.69 | 3.69 | 3.74 | | | |
| 155 | 4.16 | 4.14 | 4.12 | 4.09 | 4.10 | 4.07 | 4.06 | 4.06 | 4.13 | 4.12 | 4.11 | 4.13 | 4.14 | 4.16 | 4.16 | 4.20 | | | |
| 160 | 4.31 | 4.27 | 4.22 | 4.19 | 4.19 | 4.17 | 4.20 | 4.24 | 4.30 | 4.30 | 4.29 | 4.26 | 4.29 | 4.29 | 4.29 | 4.33 | | | |
| 165 | 4.04 | 3.99 | 3.93 | 3.91 | 3.88 | 3.88 | 3.95 | 4.03 | 4.10 | 4.10 | 4.08 | 4.01 | 4.02 | 4.02 | 4.03 | 4.04 | | | |
| 170 | 3.40 | 3.34 | 3.31 | 3.34 | 3.30 | 3.31 | 3.34 | 3.44 | 3.50 | 3.50 | 3.47 | 3.46 | 3.46 | 3.45 | 3.42 | 3.41 | | | |
| 175 | 2.73 | 2.73 | 2.80 | 2.78 | 2.75 | 2.77 | 2.82 | 2.84 | 2.82 | 2.89 | 2.94 | 2.89 | 2.89 | 2.89 | 2.89 | 2.81 | | | |
| 180 | 2.56 | 2.57 | 2.67 | 2.63 | 2.62 | 2.63 | 2.66 | 2.59 | 2.56 | 2.57 | 2.67 | 2.63 | 2.63 | 2.63 | 2.66 | 2.59 | | | |

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: MEDIUM
 Temperature: 28DEG
 Operators: LGL
 Test Date: 2020-08-26

γ Range: 0 - 180DEG
 γ Interval: 0.5DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.401
 Humidity: 65.0%
 Test Distance: 5.190m [K=1.0000]
 Remarks: