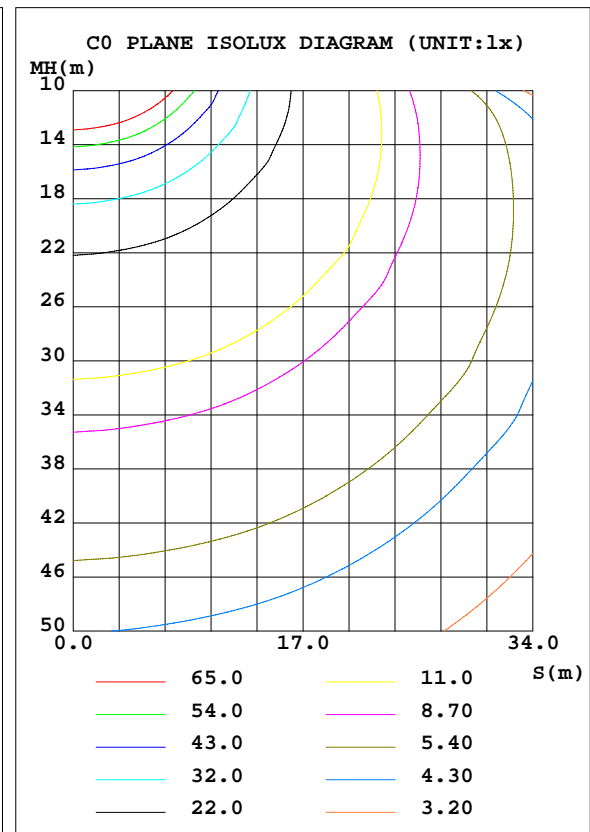
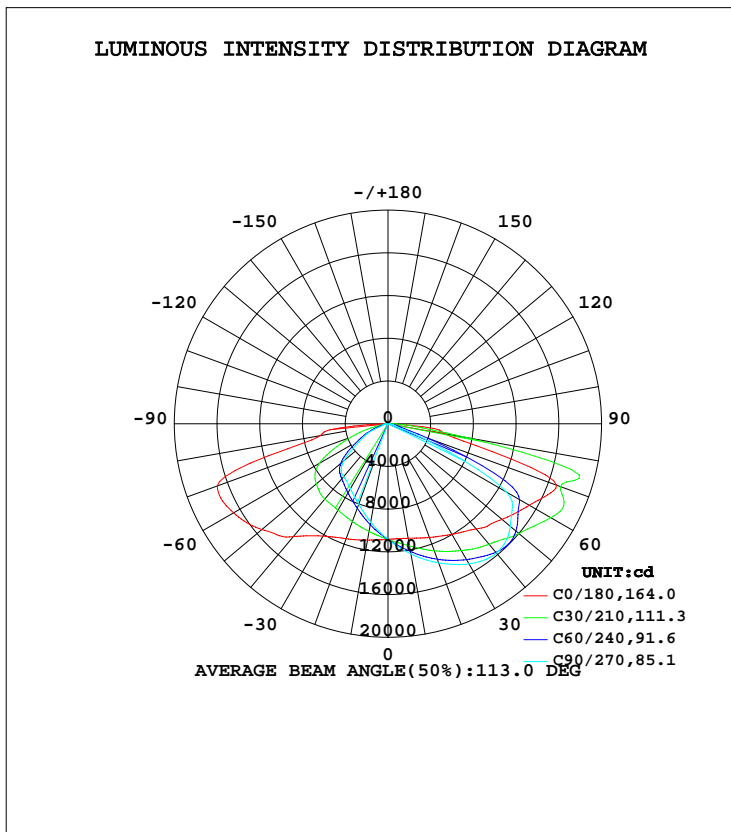


LUMINAIRE PHOTOMETRIC TEST REPORT

| | | |
|--|-----------|------------------|
| Test:U:277.00V I:1.4497A P:398.06W PF:0.9913 Freq:60.00Hz Lamp Flux:54800x1 lm | | |
| NAME: ASD Lighting Corp | TYPE: LED | WEIGHT: |
| SPEC.: ASD-LSB2HV-400D50B-PRM | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 132.96 lm/W | | | |
|------------------|------------------------|-----------------------------------|--------|--------------------|----------|
| MODEL | ASD-LSB2HV-400D50B-PRM | I _{max} (cd) | 22032 | S/MH(C0/180) | 1.94 |
| NOMINAL POWER(W) | 400 | LOR(%) | 100.0 | S/MH(C90/270) | 0.97 |
| RATED VOLTAGE(V) | 277-480 | TOTAL FLUX(lm) | 54800 | η UP, DN(C0-180) | 0.1,65.7 |
| NOMINAL FLUX(lm) | 54800 | CIE CLASS | DIRECT | η UP, DN(C180-360) | 0.1,34.2 |
| LAMPS INSIDE | 1 | η up(%) | 0.1 | CIBSE SHR NOM | 1.75 |
| TEST VOLTAGE(V) | 277 | η down(%) | 99.9 | CIBSE SHR MAX | 1.75 |



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 August 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 50.3%
 Test Distance: 2.500m [K=1.0473]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Φ zone | Φ total | %lum,lamp |
|----------|--|--------|--------|--------|-------|-------|--------|-------|----------|-------------|--------------|-----------|
| 10 | 1089 | 1191 | 1238 | 1202 | 1106 | 988.8 | 936.6 | 978.9 | 0- 10 | 1038 | 1038 | 1.96,1.96 |
| 20 | 1133 | 1313 | 1386 | 1325 | 1146 | 897.2 | 802.4 | 887.8 | 10- 20 | 3123 | 4161 | 7.86,7.86 |
| 30 | 1196 | 1430 | 1515 | 1447 | 1215 | 817.8 | 704.8 | 806.1 | 20- 30 | 5210 | 9371 | 17.7,17.7 |
| 40 | 1285 | 1532 | 1579 | 1568 | 1380 | 752.3 | 647.2 | 736.6 | 30- 40 | 7302 | 16672 | 31.5,31.5 |
| 50 | 1393 | 1625 | 1494 | 1692 | 1541 | 650.9 | 538.5 | 646.5 | 40- 50 | 9283 | 25955 | 49,49 |
| 60 | 1527 | 1571 | 1281 | 1649 | 1669 | 438.3 | 284.6 | 429.1 | 50- 60 | 10423 | 36379 | 68.7,68.7 |
| 70 | 1678 | 1195 | 141.2 | 1255 | 1700 | 189.1 | 71.29 | 189.6 | 60- 70 | 9774 | 46152 | 87.2,87.2 |
| 80 | 539.2 | 128.3 | 43.46 | 135.8 | 644.1 | 42.12 | 34.30 | 42.36 | 70- 80 | 5632 | 51785 | 97.8,97.8 |
| 90 | 9.772 | 6.822 | 3.091 | 6.559 | 37.54 | 1.855 | 0.2077 | 1.577 | 80- 90 | 1074 | 52858 | 99.9,99.9 |
| 100 | 0.7140 | 0.2197 | 0.1140 | 0.2857 | 1.346 | 1.044 | 0.5723 | 1.232 | 90-100 | 18.76 | 52877 | 99.9,99.9 |
| 110 | 0.7856 | 0.3020 | 0.1809 | 0.4481 | 1.244 | 1.167 | 0.8567 | 1.274 | 100-110 | 7.870 | 52885 | 99.9,99.9 |
| 120 | 0.9575 | 0.3816 | 0.2738 | 0.5600 | 1.211 | 1.270 | 1.025 | 1.259 | 110-120 | 8.027 | 52893 | 99.9,99.9 |
| 130 | 1.094 | 0.4969 | 0.3793 | 0.6536 | 1.334 | 1.472 | 1.350 | 1.363 | 120-130 | 8.489 | 52902 | 100,100 |
| 140 | 1.002 | 0.6201 | 0.5219 | 0.7361 | 1.249 | 1.553 | 1.433 | 1.418 | 130-140 | 8.230 | 52910 | 100,100 |
| 150 | 0.8837 | 0.7225 | 0.6720 | 0.8010 | 1.206 | 1.426 | 1.431 | 1.356 | 140-150 | 6.735 | 52917 | 100,100 |
| 160 | 0.9560 | 0.8511 | 0.8091 | 0.9689 | 1.294 | 1.394 | 1.347 | 1.336 | 150-160 | 5.067 | 52922 | 100,100 |
| 170 | 1.066 | 1.065 | 1.009 | 1.131 | 1.313 | 1.320 | 1.228 | 1.207 | 160-170 | 3.281 | 52925 | 100,100 |
| 180 | 1.100 | 1.100 | 1.100 | 1.100 | 1.130 | 1.130 | 1.130 | 1.130 | 170-180 | 1.141 | 52926 | 100,100 |
| DEG | LUMINOUS INTENSITY: $\times 10\text{cd}$ | | | | | | | | | UNIT:lm | | |

Conical surface Flux(90deg): 21101 lm

%lum = 39.9%

%lamp = 39.9%

Conical surface Flux(120deg): 36379 lm

%lum = 68.7%

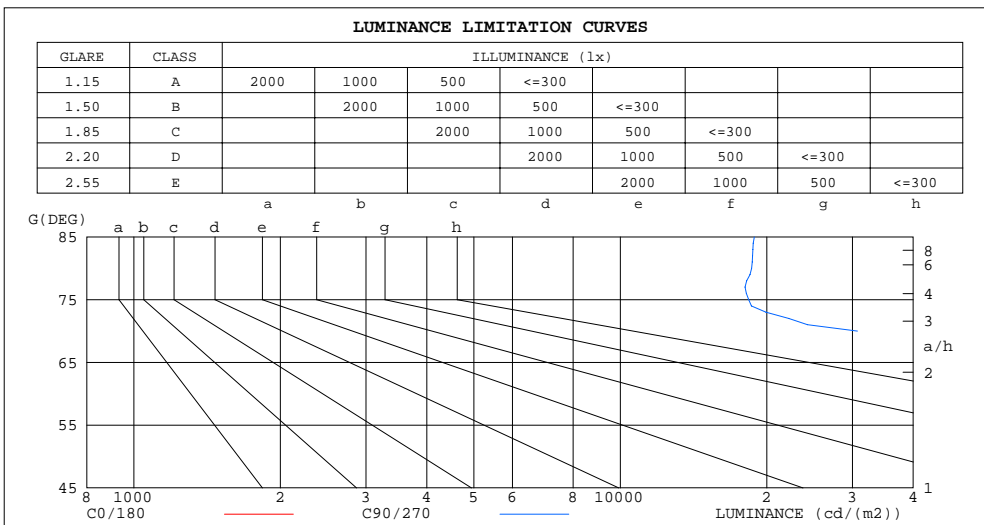
%lamp = 68.7%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 August 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 50.3%
 Test Distance: 2.500m [K=1.0473]
 Remarks:

LUMINANCE LIMITATION CURVES

| | | |
|--|-----------|------------------|
| Test:U:277.00V I:1.4497A P:398.06W PF:0.9913 Freq:60.00Hz Lamp Flux:54800x1 lm | | |
| NAME: ASD Lighting Corp | TYPE: LED | WEIGHT: |
| SPEC.: ASD-LSB2HV-400D50B-PRM | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |



| LUMINANCE cd/(m2) | | |
|-------------------|--------|---------|
| G (DEG) | C0/180 | C90/270 |
| 85 | 277611 | 18856 |
| 80 | 231035 | 18621 |
| 75 | 290621 | 18359 |
| 70 | 365081 | 30719 |
| 65 | 284671 | 112874 |
| 60 | 227239 | 190587 |
| 55 | 189233 | 184008 |
| 50 | 161246 | 172954 |
| 45 | 141077 | 164017 |

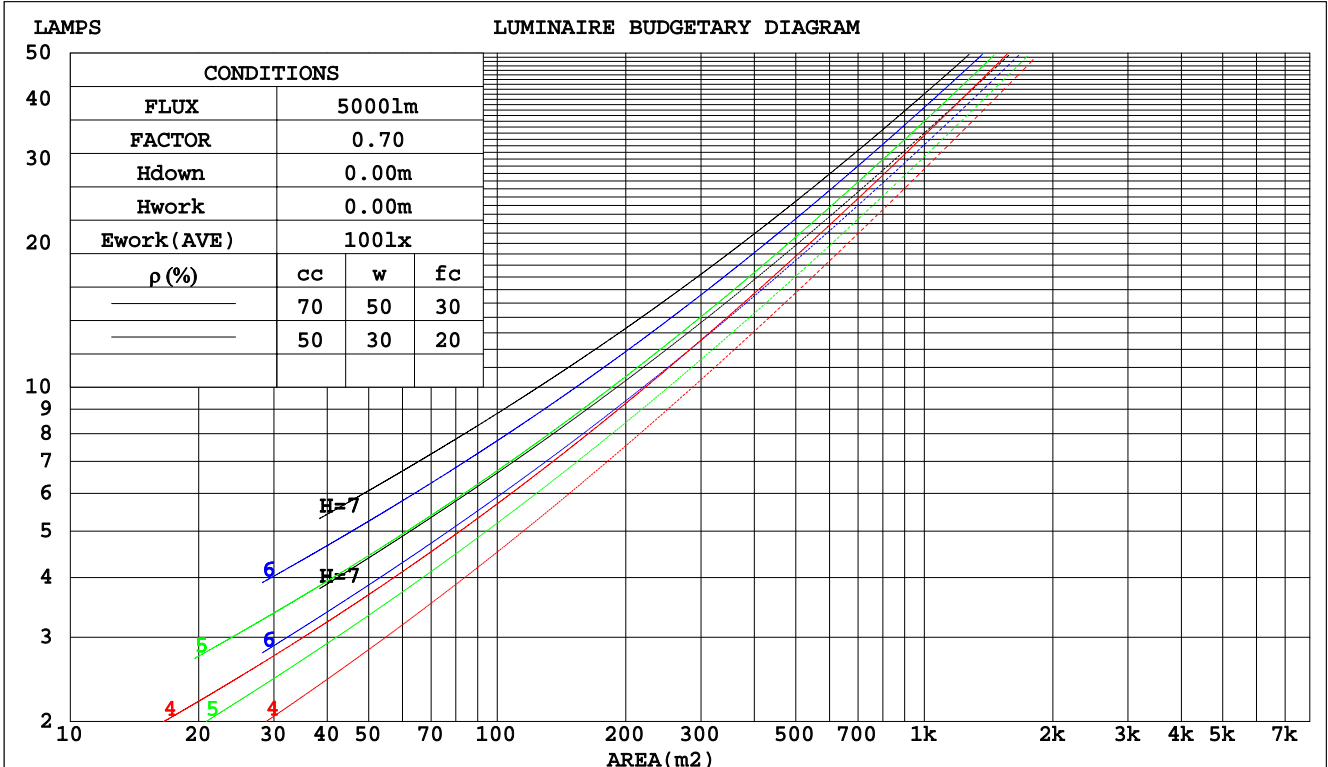
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 August 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 50.3%
 Test Distance: 2.500m [K=1.0473]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| | | |
|--|-----------|------------------|
| Test:U:277.00V I:1.4497A P:398.06W PF:0.9913 Freq:60.00Hz Lamp Flux:54800x1 lm | | |
| NAME: ASD Lighting Corp | TYPE: LED | WEIGHT: |
| SPEC.: ASD-LSB2HV-400D50B-PRM | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | 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 | | | | | | | | | | | | | | | | |
| pfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | | | | | | | | | | |
| | Coefficients of Utilization(CU) | | | | | | | | | | | | | | | |
| 0.0 | 1.19 | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | .00 |
| 1.0 | 1.02 | .97 | .92 | .99 | .95 | .91 | .95 | .91 | .88 | .91 | .88 | .85 | .87 | .85 | .82 | .80 |
| 2.0 | .86 | .78 | .72 | .84 | .77 | .71 | .81 | .74 | .69 | .77 | .72 | .68 | .74 | .70 | .66 | .64 |
| 3.0 | .74 | .65 | .57 | .72 | .64 | .57 | .69 | .62 | .56 | .66 | .60 | .55 | .64 | .58 | .54 | .51 |
| 4.0 | .64 | .54 | .47 | .63 | .54 | .46 | .60 | .52 | .46 | .58 | .51 | .45 | .55 | .49 | .44 | .42 |
| 5.0 | .56 | .46 | .39 | .55 | .46 | .39 | .53 | .45 | .38 | .51 | .44 | .38 | .49 | .42 | .37 | .35 |
| 6.0 | .50 | .40 | .33 | .49 | .40 | .33 | .47 | .39 | .33 | .45 | .38 | .32 | .44 | .37 | .32 | .30 |
| 7.0 | .45 | .35 | .29 | .44 | .35 | .28 | .42 | .34 | .28 | .41 | .33 | .28 | .39 | .33 | .28 | .25 |
| 8.0 | .40 | .31 | .25 | .40 | .31 | .25 | .38 | .30 | .25 | .37 | .30 | .24 | .36 | .29 | .24 | .22 |
| 9.0 | .37 | .28 | .22 | .36 | .28 | .22 | .35 | .27 | .22 | .34 | .27 | .22 | .33 | .26 | .21 | .19 |
| 10.0 | .34 | .25 | .20 | .33 | .25 | .20 | .32 | .25 | .19 | .31 | .24 | .19 | .30 | .24 | .19 | .17 |



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 August 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 50.3%
 Test Distance: 2.500m [K=1.0473]
 Remarks:

WEC AND CCEC

| | | |
|--|-----------|------------------|
| Test:U:277.00V I:1.4497A P:398.06W PF:0.9913 Freq:60.00Hz Lamp Flux:54800x1 lm | | |
| NAME: ASD Lighting Corp | TYPE: LED | WEIGHT: |
| SPEC.: ASD-LSB2HV-400D50B-PRM | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | 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 | .353 | .201 | .064 | .346 | .197 | .063 | .333 | .191 | .061 | .320 | .185 | .059 | .309 | .179 | .058 | |
| 2.0 | .332 | .182 | .056 | .326 | .179 | .055 | .313 | .174 | .054 | .302 | .170 | .053 | .292 | .165 | .052 | |
| 3.0 | .305 | .162 | .049 | .299 | .160 | .048 | .288 | .156 | .047 | .278 | .152 | .047 | .269 | .149 | .046 | |
| 4.0 | .278 | .145 | .043 | .273 | .143 | .042 | .263 | .140 | .042 | .255 | .137 | .041 | .246 | .134 | .041 | |
| 5.0 | .255 | .130 | .038 | .250 | .128 | .037 | .242 | .126 | .037 | .234 | .123 | .037 | .226 | .121 | .036 | |
| 6.0 | .234 | .117 | .034 | .230 | .116 | .033 | .223 | .114 | .033 | .215 | .112 | .033 | .209 | .110 | .033 | |
| 7.0 | .216 | .107 | .030 | .213 | .106 | .030 | .206 | .104 | .030 | .199 | .102 | .030 | .193 | .100 | .030 | |
| 8.0 | .201 | .098 | .028 | .197 | .097 | .027 | .191 | .096 | .027 | .186 | .094 | .027 | .180 | .092 | .027 | |
| 9.0 | .187 | .090 | .025 | .184 | .090 | .025 | .179 | .088 | .025 | .173 | .087 | .025 | .168 | .086 | .025 | |
| 10.0 | .175 | .084 | .023 | .172 | .083 | .023 | .167 | .082 | .023 | .163 | .081 | .023 | .158 | .080 | .023 | |

| 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 | .191 | .191 | .191 | .164 | .164 | .164 | .112 | .112 | .112 | .064 | .064 | .064 | .021 | .021 | .021 | |
| 1.0 | .184 | .157 | .132 | .158 | .135 | .114 | .108 | .093 | .079 | .062 | .054 | .046 | .020 | .017 | .015 | |
| 2.0 | .179 | .133 | .094 | .153 | .114 | .081 | .105 | .079 | .057 | .060 | .046 | .033 | .019 | .015 | .011 | |
| 3.0 | .172 | .116 | .070 | .148 | .100 | .061 | .101 | .069 | .043 | .059 | .040 | .025 | .019 | .013 | .008 | |
| 4.0 | .165 | .103 | .055 | .142 | .089 | .048 | .097 | .062 | .034 | .056 | .036 | .020 | .018 | .012 | .007 | |
| 5.0 | .158 | .093 | .045 | .135 | .080 | .039 | .093 | .056 | .027 | .054 | .033 | .016 | .017 | .011 | .005 | |
| 6.0 | .150 | .084 | .037 | .129 | .073 | .032 | .089 | .051 | .023 | .052 | .030 | .014 | .017 | .010 | .004 | |
| 7.0 | .143 | .078 | .032 | .123 | .067 | .028 | .085 | .047 | .020 | .049 | .028 | .012 | .016 | .009 | .004 | |
| 8.0 | .136 | .072 | .028 | .117 | .062 | .024 | .081 | .044 | .017 | .047 | .026 | .010 | .015 | .008 | .003 | |
| 9.0 | .130 | .067 | .025 | .112 | .058 | .022 | .077 | .041 | .015 | .045 | .024 | .009 | .015 | .008 | .003 | |
| 10.0 | .123 | .063 | .022 | .106 | .054 | .019 | .074 | .038 | .014 | .043 | .023 | .008 | .014 | .007 | .003 | |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 August 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 50.3%
 Test Distance: 2.500m [K=1.0473]
 Remarks:

UGR(Unified Glare Rating) Table

| | | | | | | | | | | |
|--|------------------|------|------|------|-----------|----------------|------|------------------|------|------|
| Test:U:277.00V I:1.4497A P:398.06W PF:0.9913 Freq:60.00Hz Lamp Flux:54800x1 lm | | | | | | | | | | |
| NAME: ASD Lighting Corp | | | | | TYPE: LED | | | WEIGHT: | | |
| SPEC.: ASD-LSB2HV-400D50B-PRM | | | | | DIM.: | | | SERIAL No.: | | |
| MFR.: ASD Lighting Corp | | | | | 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 | 33.5 | 35.3 | 33.8 | 35.6 | 35.9 | 32.0 | 33.8 | 32.3 | 34.1 | 34.4 |
| 3H | 37.9 | 39.6 | 38.3 | 39.9 | 40.3 | 32.1 | 33.8 | 32.5 | 34.1 | 34.5 |
| 4H | 39.2 | 40.8 | 39.6 | 41.1 | 41.5 | 32.1 | 33.7 | 32.5 | 34.0 | 34.4 |
| 6H | 39.6 | 41.0 | 40.0 | 41.4 | 41.8 | 32.1 | 33.5 | 32.5 | 33.9 | 34.3 |
| 8H | 39.7 | 41.1 | 40.1 | 41.5 | 41.9 | 32.0 | 33.4 | 32.5 | 33.8 | 34.2 |
| 12H | 39.9 | 41.2 | 40.3 | 41.6 | 42.0 | 32.0 | 33.4 | 32.5 | 33.7 | 34.2 |
| 4H 2H | 34.4 | 35.9 | 34.7 | 36.3 | 36.6 | 33.5 | 35.1 | 33.9 | 35.4 | 35.8 |
| 3H | 38.9 | 40.2 | 39.3 | 40.6 | 41.0 | 33.7 | 35.1 | 34.1 | 35.4 | 35.8 |
| 4H | 40.7 | 41.9 | 41.1 | 42.3 | 42.7 | 33.7 | 34.9 | 34.1 | 35.3 | 35.7 |
| 6H | 41.2 | 42.3 | 41.6 | 42.7 | 43.1 | 33.7 | 34.7 | 34.1 | 35.2 | 35.6 |
| 8H | 41.3 | 42.3 | 41.8 | 42.8 | 43.2 | 33.7 | 34.7 | 34.1 | 35.1 | 35.6 |
| 12H | 41.5 | 42.4 | 42.0 | 42.9 | 43.3 | 33.7 | 34.6 | 34.1 | 35.0 | 35.5 |
| 8H 4H | 40.8 | 41.8 | 41.3 | 42.2 | 42.7 | 35.0 | 36.0 | 35.5 | 36.4 | 36.9 |
| 6H | 41.5 | 42.3 | 42.0 | 42.8 | 43.3 | 35.0 | 35.8 | 35.5 | 36.3 | 36.8 |
| 8H | 41.7 | 42.4 | 42.2 | 42.9 | 43.4 | 35.0 | 35.7 | 35.5 | 36.2 | 36.7 |
| 12H | 41.9 | 42.6 | 42.4 | 43.1 | 43.6 | 35.0 | 35.6 | 35.5 | 36.1 | 36.7 |
| 12H 4H | 40.8 | 41.7 | 41.3 | 42.2 | 42.6 | 35.4 | 36.3 | 35.9 | 36.7 | 37.2 |
| 6H | 41.5 | 42.2 | 42.0 | 42.7 | 43.2 | 35.4 | 36.1 | 35.9 | 36.6 | 37.1 |
| 8H | 41.7 | 42.3 | 42.2 | 42.8 | 43.4 | 35.4 | 36.0 | 35.9 | 36.5 | 37.1 |
| CIE190: 2010 | | | | | | | | | | |
| | | | | | | | | | | |

CIE190: 2010
Area: 0.1344 m2

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 25.1DEG
Operators: Alan Wang
Test Date: 16 August 2021

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
Humidity: 50.3%
Test Distance: 2.500m [K=1.0473]
Remarks:

UTILIZATION FACTORS TABLE

| | | |
|--|-----------|------------------|
| Test:U:277.00V I:1.4497A P:398.06W PF:0.9913 Freq:60.00Hz Lamp Flux:54800x1 lm | | |
| NAME: ASD Lighting Corp | TYPE: LED | WEIGHT: |
| SPEC.: ASD-LSB2HV-400D50B-PRM | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |

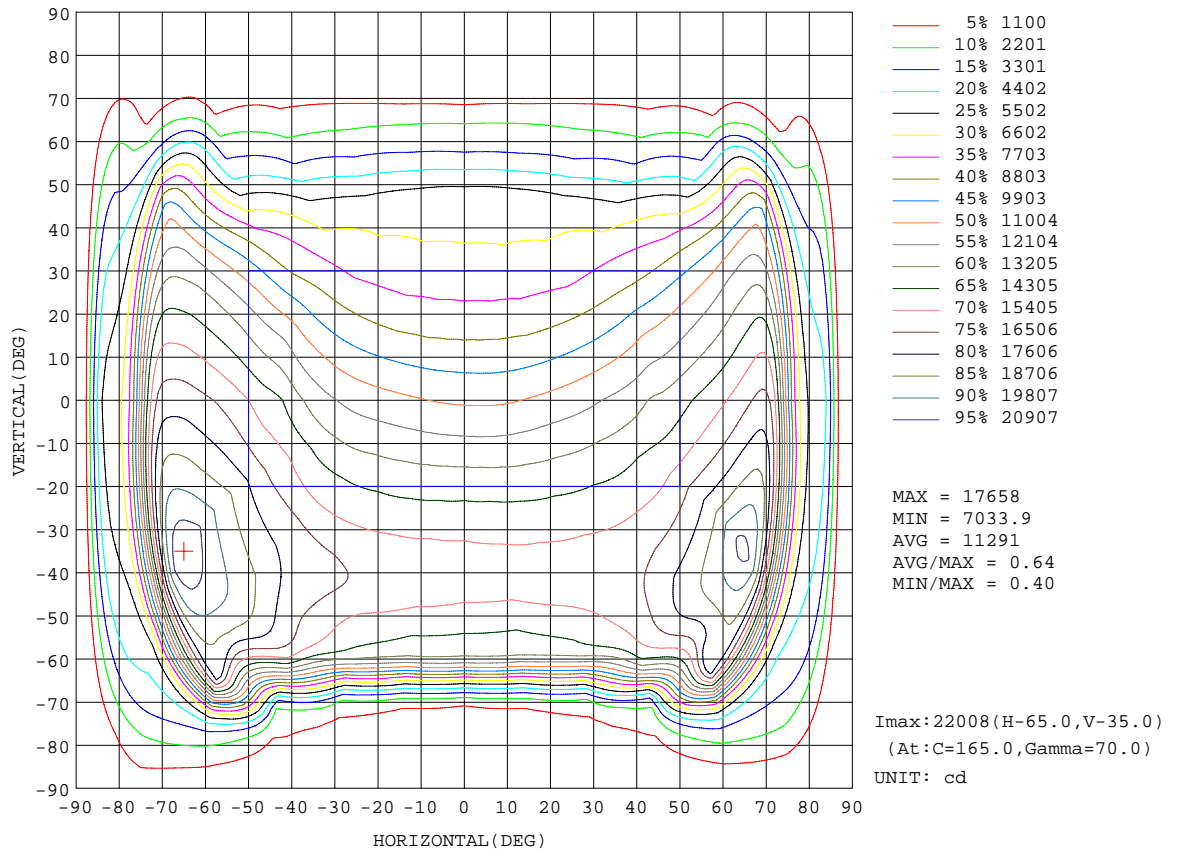
| REFLECTANCE | | | | | | | | | | |
|----------------------------------|---|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0 |
| Walls | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0 |
| Working plane | 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 | 50 | 37 | 29 | 49 | 37 | 29 | 48 | 36 | 29 | 22 |
| 0.80 | 60 | 47 | 39 | 59 | 47 | 38 | 57 | 46 | 38 | 30 |
| 1.00 | 69 | 56 | 48 | 68 | 56 | 48 | 65 | 57 | 47 | 39 |
| 1.25 | 77 | 64 | 56 | 75 | 64 | 56 | 72 | 62 | 55 | 47 |
| 1.50 | 82 | 71 | 63 | 80 | 70 | 62 | 77 | 68 | 61 | 52 |
| 2.00 | 90 | 80 | 73 | 88 | 79 | 72 | 85 | 77 | 70 | 62 |
| 2.50 | 95 | 86 | 79 | 93 | 85 | 78 | 89 | 82 | 76 | 67 |
| 3.00 | 99 | 91 | 85 | 97 | 89 | 84 | 92 | 86 | 81 | 72 |
| 4.00 | 104 | 97 | 92 | 101 | 96 | 91 | 97 | 92 | 88 | 78 |
| 5.00 | 107 | 101 | 97 | 104 | 99 | 95 | 100 | 96 | 92 | 82 |
| 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: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 August 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 50.3%
 Test Distance: 2.500m [K=1.0473]
 Remarks:

ISOCANDELA DIAGRAM

| | | |
|--|-----------|------------------|
| Test:U:277.00V I:1.4497A P:398.06W PF:0.9913 Freq:60.00Hz Lamp Flux:54800x1 lm | | |
| NAME: ASD Lighting Corp | TYPE: LED | WEIGHT: |
| SPEC.: ASD-LSB2HV-400D50B-PRM | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |



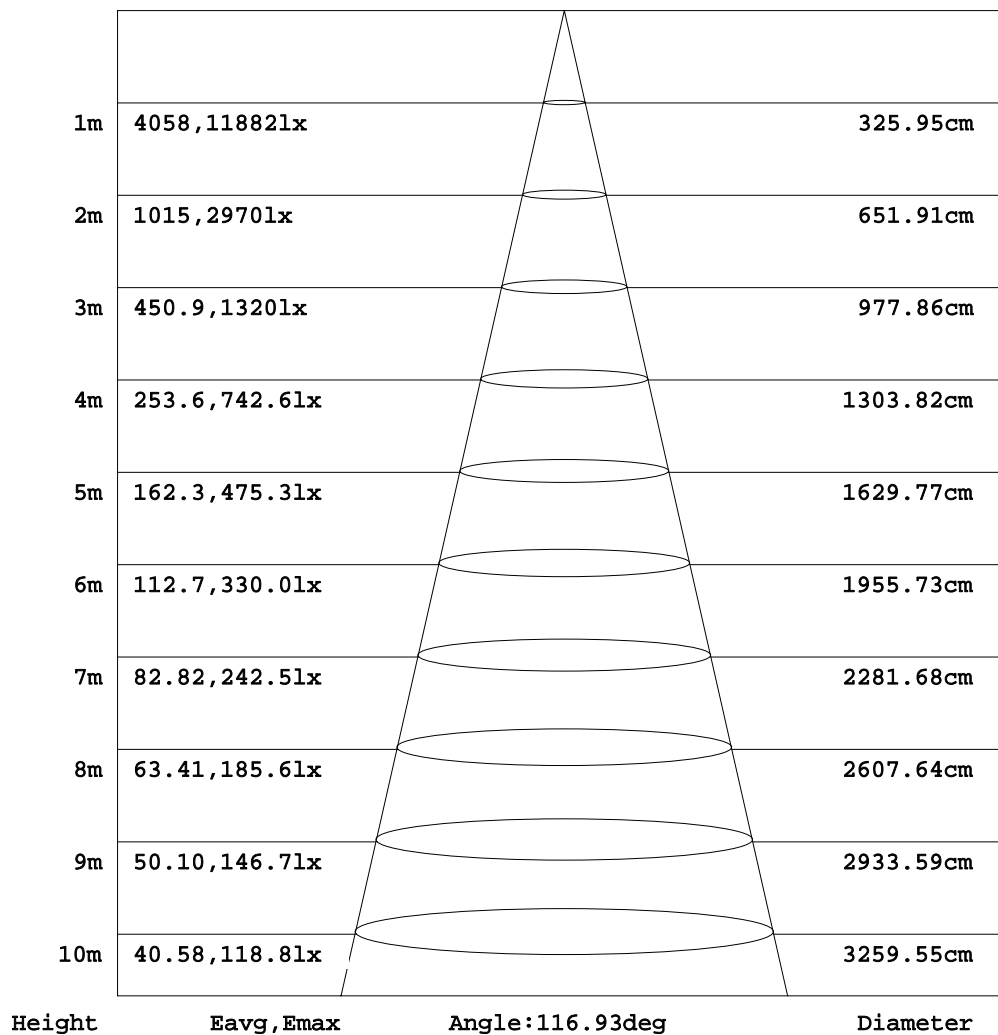
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 August 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 50.3%
 Test Distance: 2.500m [K=1.0473]
 Remarks:

AAI Figure

| | | |
|--|-----------|------------------|
| Test:U:277.00V I:1.4497A P:398.06W PF:0.9913 Freq:60.00Hz Lamp Flux:54800x1 lm | | |
| NAME: ASD Lighting Corp | TYPE: LED | WEIGHT: |
| SPEC.: ASD-LSB2HV-400D50B-PRM | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |

Flux out:35313 lm



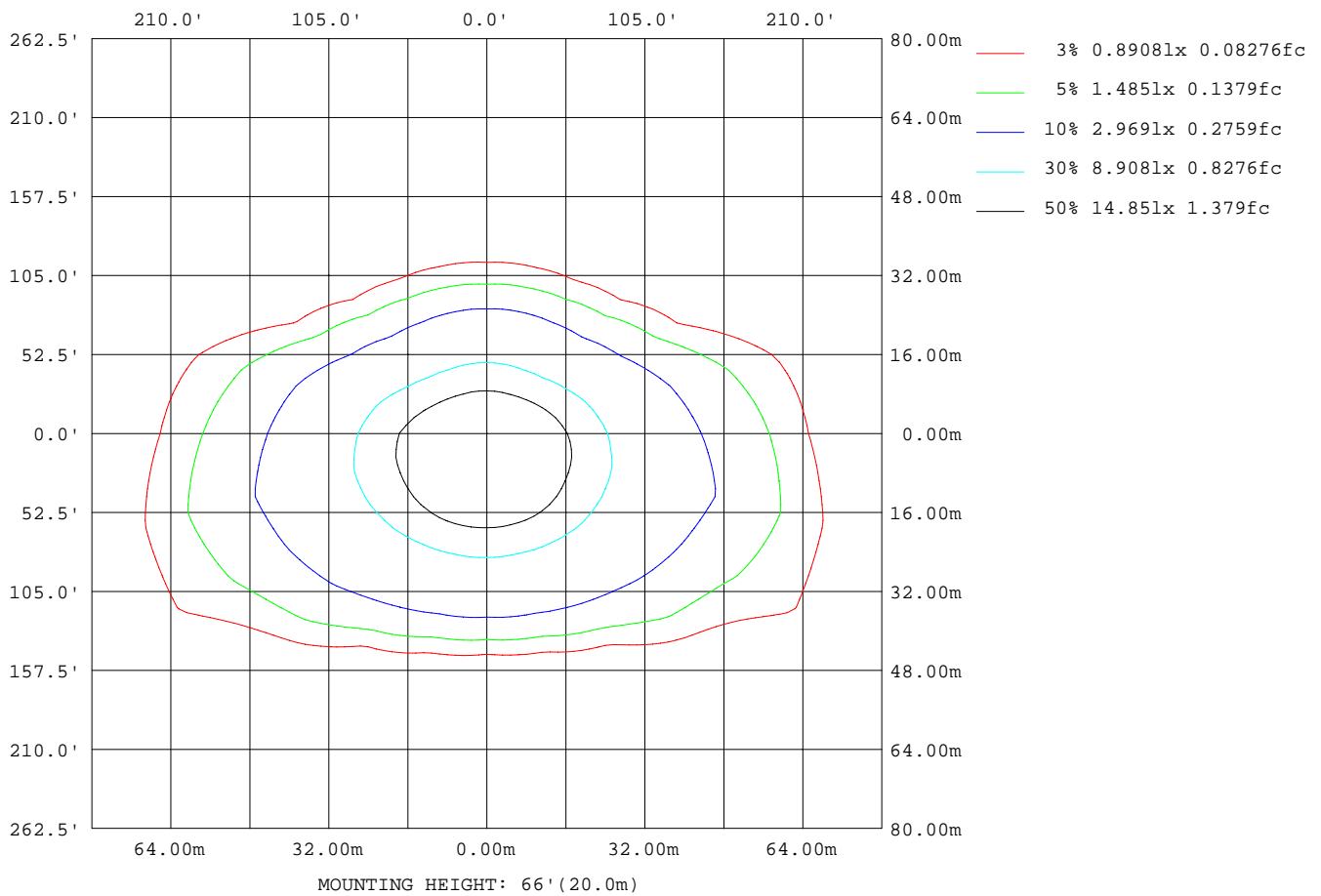
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators:Alan Wang
 Test Date:16 August 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 50.3%
 Test Distance:2.500m [K=1.0473]
 Remarks:

ISOLUX DIAGRAM

| | | |
|--|-----------|------------------|
| Test:U:277.00V I:1.4497A P:398.06W PF:0.9913 Freq:60.00Hz Lamp Flux:54800x1 lm | | |
| NAME: ASD Lighting Corp | TYPE: LED | WEIGHT: |
| SPEC.: ASD-LSB2HV-400D50B-PRM | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 August 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 50.3%
 Test Distance: 2.500m [K=1.0473]
 Remarks:

LED Avg.L Report

| | | |
|--|-----------|------------------|
| Test:U:277.00V I:1.4497A P:398.06W PF:0.9913 Freq:60.00Hz Lamp Flux:54800x1 lm | | |
| NAME: ASD Lighting Corp | TYPE: LED | WEIGHT: |
| SPEC.: ASD-LSB2HV-400D50B-PRM | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |

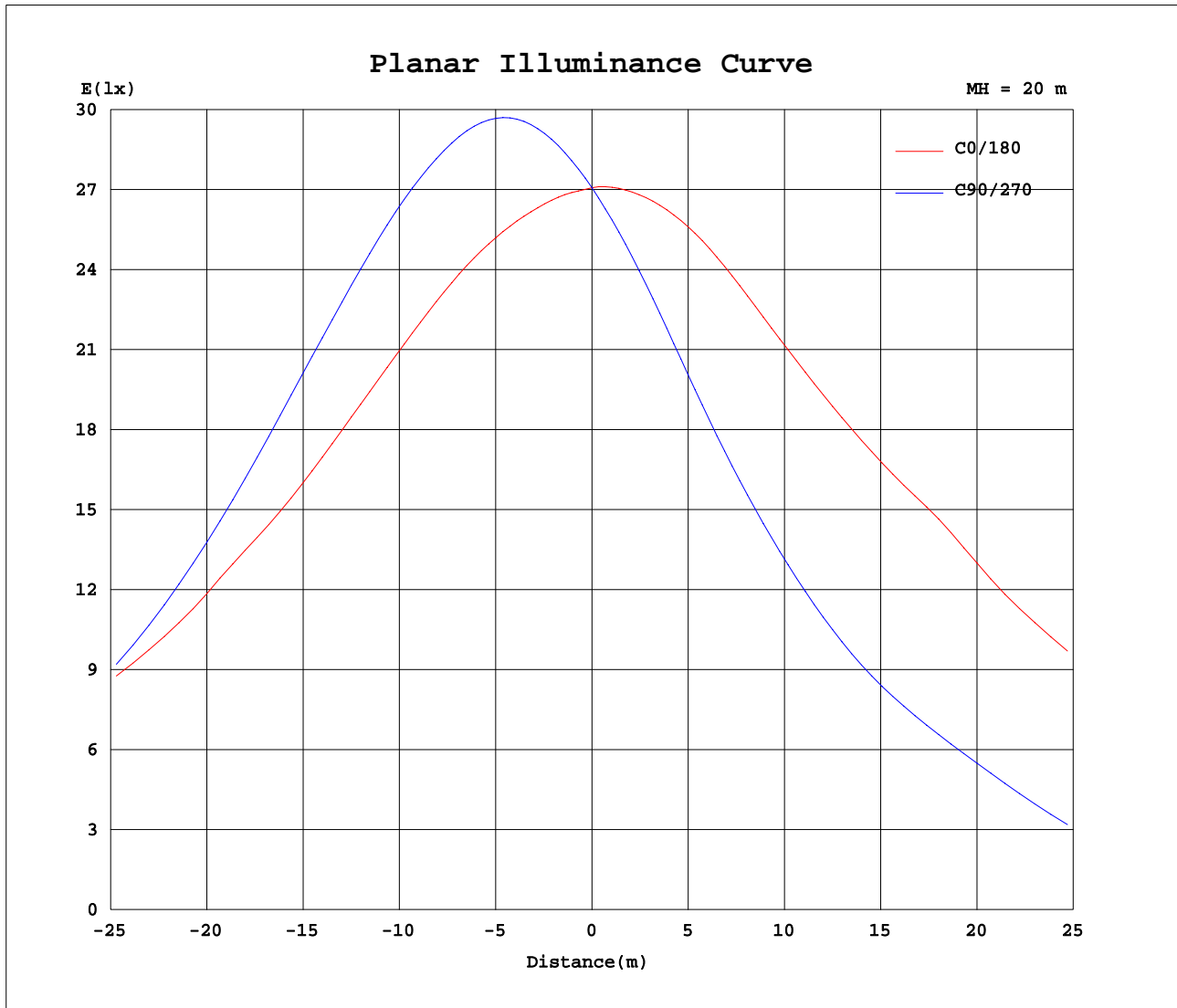
| AvgL | cd/m2 |
|----------------|--------|
| L_0~180(65)av | 292879 |
| L_0~180(75)av | 311206 |
| L_0~180(85)av | 331459 |
| L_90~270(65)av | 74129 |
| L_90~270(75)av | 16377 |
| L_90~270(85)av | 14211 |
| L_45(65)av | 164868 |
| L_45(75)av | 60003 |
| L_45(85)av | 29926 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 August 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 50.3%
 Test Distance: 2.500m [K=1.0473]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 August 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 50.3%
 Test Distance: 2.500m [K=1.0473]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|--|-----------|------------------|
| Test:U:277.00V I:1.4497A P:398.06W PF:0.9913 Freq:60.00Hz Lamp Flux:54800x1 lm | | |
| NAME: ASD Lighting Corp | TYPE: LED | WEIGHT: |
| SPEC.: ASD-LSB2HV-400D50B-PRM | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |

Table--1

UNIT: x10cd

| C(DEG) γ (DEG) | 0 | 15 | 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0 | 1083 | 1083 | 1083 | 1083 | 1083 | 1083 | 1083 | 1083 | 1083 | 1083 | 1083 | 1083 | 1083 | 1083 | 1083 | 1083 | 1083 | 1083 | 1083 |
| 5 | 1081 | 1101 | 1119 | 1134 | 1147 | 1155 | 1159 | 1157 | 1151 | 1141 | 1126 | 1109 | 1092 | 1072 | 1053 | 1036 | 1022 | 1014 | 1010 |
| 10 | 1089 | 1127 | 1162 | 1191 | 1215 | 1231 | 1238 | 1234 | 1222 | 1202 | 1175 | 1142 | 1106 | 1065 | 1025 | 989 | 961 | 944 | 937 |
| 15 | 1108 | 1165 | 1212 | 1252 | 1284 | 1305 | 1314 | 1309 | 1292 | 1264 | 1227 | 1180 | 1126 | 1063 | 999 | 942 | 899 | 875 | 865 |
| 20 | 1133 | 1206 | 1266 | 1313 | 1350 | 1376 | 1386 | 1379 | 1357 | 1325 | 1278 | 1217 | 1146 | 1062 | 975 | 897 | 843 | 813 | 802 |
| 25 | 1162 | 1250 | 1319 | 1373 | 1412 | 1441 | 1454 | 1444 | 1420 | 1384 | 1330 | 1258 | 1172 | 1066 | 953 | 856 | 793 | 761 | 750 |
| 30 | 1196 | 1295 | 1371 | 1430 | 1469 | 1499 | 1515 | 1507 | 1483 | 1447 | 1387 | 1311 | 1215 | 1082 | 935 | 818 | 749 | 716 | 705 |
| 35 | 1235 | 1345 | 1426 | 1482 | 1521 | 1548 | 1561 | 1561 | 1542 | 1508 | 1459 | 1388 | 1281 | 1114 | 925 | 785 | 708 | 676 | 668 |
| 40 | 1285 | 1405 | 1472 | 1532 | 1571 | 1577 | 1579 | 1595 | 1598 | 1568 | 1530 | 1493 | 1380 | 1167 | 921 | 752 | 673 | 650 | 647 |
| 45 | 1341 | 1466 | 1529 | 1590 | 1595 | 1563 | 1559 | 1584 | 1629 | 1644 | 1625 | 1593 | 1471 | 1224 | 905 | 707 | 640 | 624 | 621 |
| 50 | 1393 | 1542 | 1599 | 1625 | 1564 | 1500 | 1494 | 1522 | 1598 | 1692 | 1718 | 1692 | 1541 | 1253 | 877 | 651 | 579 | 550 | 539 |
| 55 | 1459 | 1658 | 1670 | 1611 | 1486 | 1420 | 1418 | 1437 | 1511 | 1677 | 1795 | 1821 | 1615 | 1283 | 835 | 570 | 464 | 415 | 394 |
| 60 | 1527 | 1803 | 1760 | 1571 | 1422 | 1318 | 1281 | 1330 | 1450 | 1649 | 1875 | 1944 | 1669 | 1292 | 743 | 438 | 331 | 299 | 285 |
| 65 | 1617 | 2001 | 1815 | 1523 | 1101 | 737 | 641 | 751 | 1155 | 1639 | 1937 | 2087 | 1710 | 1275 | 564 | 292 | 237 | 214 | 201 |
| 70 | 1678 | 2122 | 1718 | 1195 | 397 | 202 | 141 | 200 | 423 | 1255 | 1867 | 2203 | 1700 | 1204 | 371 | 189 | 139 | 93.0 | 71.3 |
| 75 | 1011 | 1593 | 1854 | 308 | 118 | 69.2 | 63.9 | 71.1 | 122 | 353 | 1864 | 1719 | 1154 | 1054 | 203 | 88.4 | 64.2 | 48.4 | 50.1 |
| 80 | 539 | 549 | 748 | 128 | 59.5 | 44.8 | 43.5 | 45.6 | 62.4 | 136 | 930 | 586 | 644 | 380 | 55.8 | 42.1 | 36.4 | 38.0 | 34.3 |
| 85 | 325 | 282 | 205 | 52.1 | 26.3 | 22.6 | 22.1 | 23.2 | 28.3 | 59.1 | 223 | 339 | 451 | 45.4 | 19.9 | 15.6 | 14.7 | 13.6 | 11.2 |
| 90 | 9.77 | 29.2 | 21.4 | 6.82 | 3.55 | 3.61 | 3.09 | 3.72 | 5.47 | 6.56 | 27.5 | 60.3 | 37.5 | 5.03 | 3.23 | 1.86 | 1.26 | 0.29 | 0.21 |
| 95 | 0.63 | 0.46 | 0.31 | 0.17 | 0.10 | 0.09 | 0.09 | 0.10 | 0.13 | 0.23 | 0.85 | 0.49 | 1.22 | 1.31 | 1.14 | 0.89 | 0.60 | 0.41 | 0.37 |
| 100 | 0.71 | 0.54 | 0.38 | 0.22 | 0.13 | 0.12 | 0.11 | 0.13 | 0.18 | 0.29 | 0.43 | 0.59 | 1.35 | 1.40 | 1.26 | 1.04 | 0.82 | 0.62 | 0.57 |
| 105 | 0.73 | 0.59 | 0.43 | 0.27 | 0.17 | 0.15 | 0.15 | 0.16 | 0.24 | 0.37 | 0.52 | 0.67 | 1.31 | 1.32 | 1.26 | 1.15 | 1.01 | 0.81 | 0.76 |
| 110 | 0.79 | 0.64 | 0.46 | 0.30 | 0.20 | 0.18 | 0.18 | 0.21 | 0.30 | 0.45 | 0.61 | 0.75 | 1.24 | 1.24 | 1.21 | 1.17 | 1.07 | 0.91 | 0.86 |
| 115 | 0.86 | 0.71 | 0.51 | 0.33 | 0.24 | 0.22 | 0.22 | 0.26 | 0.36 | 0.51 | 0.68 | 0.82 | 1.19 | 1.19 | 1.20 | 1.21 | 1.10 | 0.96 | 0.92 |
| 120 | 0.96 | 0.77 | 0.56 | 0.38 | 0.29 | 0.27 | 0.27 | 0.31 | 0.42 | 0.56 | 0.75 | 0.90 | 1.21 | 1.26 | 1.26 | 1.27 | 1.18 | 1.06 | 1.02 |
| 125 | 1.08 | 0.82 | 0.61 | 0.44 | 0.35 | 0.32 | 0.33 | 0.37 | 0.48 | 0.61 | 0.78 | 0.96 | 1.27 | 1.39 | 1.34 | 1.37 | 1.32 | 1.25 | 1.20 |
| 130 | 1.09 | 0.85 | 0.64 | 0.50 | 0.43 | 0.38 | 0.38 | 0.43 | 0.53 | 0.65 | 0.81 | 0.99 | 1.33 | 1.48 | 1.48 | 1.47 | 1.43 | 1.40 | 1.35 |
| 135 | 1.08 | 0.88 | 0.69 | 0.55 | 0.50 | 0.45 | 0.45 | 0.51 | 0.60 | 0.69 | 0.83 | 0.99 | 1.33 | 1.47 | 1.56 | 1.54 | 1.49 | 1.50 | 1.45 |
| 140 | 1.00 | 0.88 | 0.73 | 0.62 | 0.56 | 0.52 | 0.52 | 0.58 | 0.65 | 0.74 | 0.82 | 0.96 | 1.25 | 1.39 | 1.48 | 1.55 | 1.52 | 1.50 | 1.43 |
| 145 | 0.92 | 0.86 | 0.76 | 0.67 | 0.63 | 0.61 | 0.60 | 0.65 | 0.72 | 0.77 | 0.82 | 0.91 | 1.21 | 1.33 | 1.41 | 1.49 | 1.52 | 1.50 | 1.45 |
| 150 | 0.88 | 0.85 | 0.79 | 0.72 | 0.69 | 0.68 | 0.67 | 0.71 | 0.77 | 0.80 | 0.82 | 0.87 | 1.21 | 1.29 | 1.35 | 1.43 | 1.46 | 1.48 | 1.43 |
| 155 | 0.90 | 0.90 | 0.87 | 0.79 | 0.76 | 0.76 | 0.74 | 0.80 | 0.86 | 0.88 | 0.90 | 0.91 | 1.23 | 1.25 | 1.35 | 1.39 | 1.41 | 1.44 | 1.39 |
| 160 | 0.96 | 0.96 | 0.92 | 0.85 | 0.83 | 0.83 | 0.81 | 0.89 | 0.95 | 0.97 | 0.98 | 0.99 | 1.29 | 1.30 | 1.33 | 1.39 | 1.38 | 1.40 | 1.35 |
| 165 | 0.99 | 1.02 | 1.00 | 0.97 | 0.94 | 0.94 | 0.91 | 1.00 | 1.07 | 1.08 | 1.06 | 1.05 | 1.30 | 1.31 | 1.32 | 1.35 | 1.37 | 1.36 | 1.30 |
| 170 | 1.07 | 1.09 | 1.09 | 1.07 | 1.03 | 1.03 | 1.01 | 1.07 | 1.14 | 1.13 | 1.11 | 1.10 | 1.31 | 1.31 | 1.32 | 1.32 | 1.31 | 1.30 | 1.23 |
| 175 | 1.19 | 1.19 | 1.18 | 1.15 | 1.10 | 1.09 | 1.08 | 1.10 | 1.18 | 1.21 | 1.20 | 1.20 | 1.33 | 1.33 | 1.34 | 1.33 | 1.30 | 1.27 | 1.22 |
| 180 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.13 | 1.13 | 1.13 | 1.13 | 1.13 | 1.13 | 1.13 |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 August 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 50.3%
 Test Distance: 2.500m [K=1.0473]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|--|-----------|------------------|
| Test:U:277.00V I:1.4497A P:398.06W PF:0.9913 Freq:60.00Hz Lamp Flux:54800x1 lm | | |
| NAME: ASD Lighting Corp | TYPE: LED | WEIGHT: |
| SPEC.: ASD-LSB2HV-400D50B-PRM | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |

Table--2

UNIT: x10cd

| C(DEG) γ (DEG) | 285 | 300 | 315 | 330 | 345 | | | | | | | | | | | | | | |
|-------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0 | 1083 | 1083 | 1083 | 1083 | 1083 | | | | | | | | | | | | | | |
| 5 | 1011 | 1018 | 1029 | 1043 | 1060 | | | | | | | | | | | | | | |
| 10 | 941 | 955 | 979 | 1011 | 1047 | | | | | | | | | | | | | | |
| 15 | 872 | 894 | 933 | 984 | 1044 | | | | | | | | | | | | | | |
| 20 | 810 | 837 | 888 | 961 | 1046 | | | | | | | | | | | | | | |
| 25 | 757 | 786 | 846 | 940 | 1052 | | | | | | | | | | | | | | |
| 30 | 711 | 740 | 806 | 921 | 1062 | | | | | | | | | | | | | | |
| 35 | 672 | 699 | 770 | 906 | 1076 | | | | | | | | | | | | | | |
| 40 | 648 | 665 | 737 | 893 | 1097 | | | | | | | | | | | | | | |
| 45 | 625 | 637 | 699 | 874 | 1128 | | | | | | | | | | | | | | |
| 50 | 552 | 580 | 646 | 841 | 1140 | | | | | | | | | | | | | | |
| 55 | 413 | 459 | 561 | 796 | 1160 | | | | | | | | | | | | | | |
| 60 | 296 | 322 | 429 | 713 | 1178 | | | | | | | | | | | | | | |
| 65 | 218 | 236 | 292 | 552 | 1195 | | | | | | | | | | | | | | |
| 70 | 93.8 | 139 | 190 | 364 | 1171 | | | | | | | | | | | | | | |
| 75 | 47.6 | 63.1 | 85.3 | 200 | 1010 | | | | | | | | | | | | | | |
| 80 | 37.3 | 35.1 | 42.4 | 55.0 | 315 | | | | | | | | | | | | | | |
| 85 | 12.8 | 13.3 | 13.4 | 16.3 | 39.0 | | | | | | | | | | | | | | |
| 90 | 0.26 | 0.65 | 1.58 | 2.34 | 3.60 | | | | | | | | | | | | | | |
| 95 | 0.43 | 0.66 | 1.04 | 1.28 | 1.36 | | | | | | | | | | | | | | |
| 100 | 0.64 | 0.90 | 1.23 | 1.40 | 1.45 | | | | | | | | | | | | | | |
| 105 | 0.83 | 1.07 | 1.30 | 1.39 | 1.38 | | | | | | | | | | | | | | |
| 110 | 0.92 | 1.08 | 1.27 | 1.32 | 1.29 | | | | | | | | | | | | | | |
| 115 | 0.95 | 1.09 | 1.24 | 1.25 | 1.24 | | | | | | | | | | | | | | |
| 120 | 1.04 | 1.14 | 1.26 | 1.26 | 1.28 | | | | | | | | | | | | | | |
| 125 | 1.21 | 1.27 | 1.33 | 1.35 | 1.38 | | | | | | | | | | | | | | |
| 130 | 1.33 | 1.36 | 1.36 | 1.44 | 1.48 | | | | | | | | | | | | | | |
| 135 | 1.40 | 1.36 | 1.41 | 1.50 | 1.53 | | | | | | | | | | | | | | |
| 140 | 1.38 | 1.38 | 1.42 | 1.44 | 1.45 | | | | | | | | | | | | | | |
| 145 | 1.40 | 1.41 | 1.36 | 1.38 | 1.38 | | | | | | | | | | | | | | |
| 150 | 1.40 | 1.34 | 1.36 | 1.35 | 1.34 | | | | | | | | | | | | | | |
| 155 | 1.38 | 1.35 | 1.33 | 1.40 | 1.34 | | | | | | | | | | | | | | |
| 160 | 1.31 | 1.34 | 1.34 | 1.41 | 1.34 | | | | | | | | | | | | | | |
| 165 | 1.26 | 1.30 | 1.32 | 1.38 | 1.33 | | | | | | | | | | | | | | |
| 170 | 1.23 | 1.22 | 1.21 | 1.30 | 1.28 | | | | | | | | | | | | | | |
| 175 | 1.20 | 1.22 | 1.22 | 1.31 | 1.26 | | | | | | | | | | | | | | |
| 180 | 1.13 | 1.13 | 1.13 | 1.13 | 1.13 | | | | | | | | | | | | | | |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 25.1DEG
 Operators: Alan Wang
 Test Date: 16 August 2021

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 50.3%
 Test Distance: 2.500m [K=1.0473]
 Remarks: