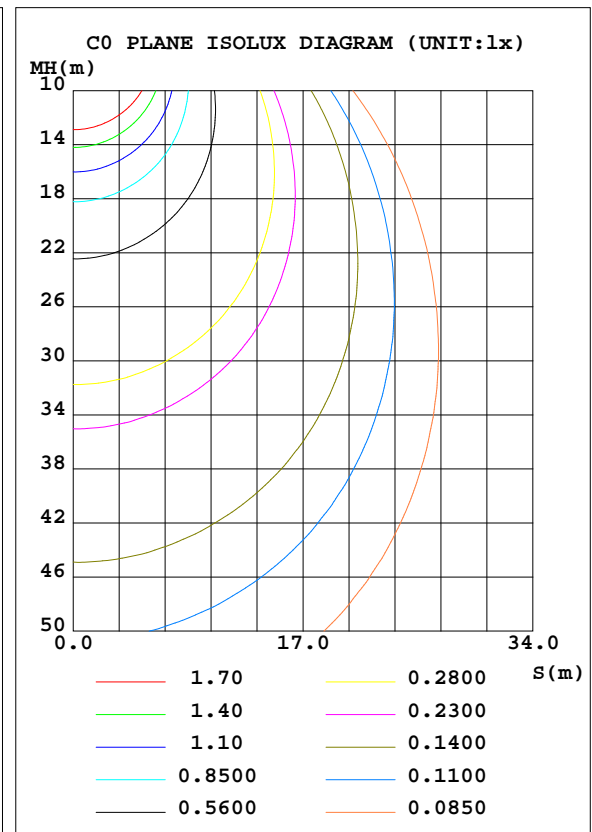
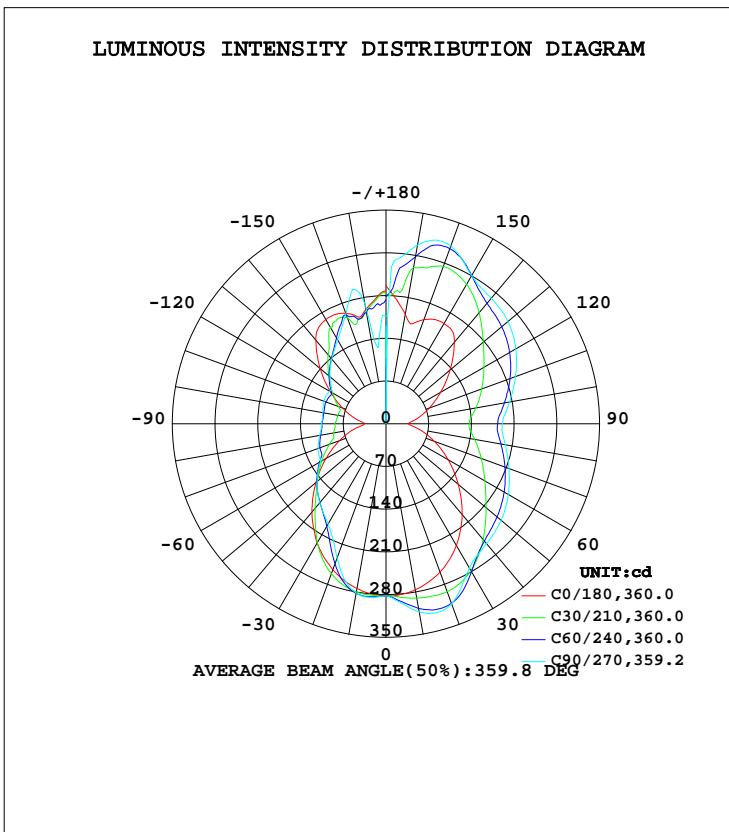


LUMINAIRE PHOTOMETRIC TEST REPORT

| | | |
|--|----------|------------------|
| Test:U:120.0V I:0.2849A P:33.29W PF:0.9738 Freq:60.00Hz Lamp Flux:2108.39x1 lm | | |
| NAME:ASD-LWS27C-48D36BK | TYPE:LED | WEIGHT: |
| SPEC.:5000K | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 63.33 lm/W | | | |
|------------------|--------------------|----------------------------------|---------|--------------------|------------|
| MODEL | ASD-LWS27C-48D36BK | I _{max} (cd) | 320.7 | S/MH(C0/180) | 1.20 |
| NOMINAL POWER(W) | 36 | LOR(%) | 100.0 | S/MH(C90/270) | 1.02 |
| RATED VOLTAGE(V) | 120-277 | TOTAL FLUX(lm) | 2108.4 | η UP, DN(C0-180) | 30.5, 30.6 |
| NOMINAL FLUX(lm) | 2108.39 | CIE CLASS | DIFFUSE | η UP, DN(C180-360) | 17.8, 21.1 |
| LAMPS INSIDE | 1 | η up(%) | 48.2 | CIBSE SHR NOM | 1.25 |
| TEST VOLTAGE(V) | 120 | η down(%) | 51.8 | CIBSE SHR MAX | 1.35 |



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 22 October 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.9%
 Test Distance: 2.500m [K=1.0393]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Φ zone | Φ total | %lum, lamp |
|----------|-----------------------|-------|-------|-------|-------|-------|-------|-------|----------|-------------|--------------|------------|
| 10 | 276.3 | 299.4 | 312.8 | 298.5 | 274.1 | 281.6 | 281.5 | 282.9 | 0- 10 | 27.39 | 27.39 | 1.3,1.3 |
| 20 | 258.7 | 306.9 | 314.2 | 303.6 | 254.8 | 254.8 | 234.2 | 256.3 | 10- 20 | 80.18 | 107.6 | 5.1,5.1 |
| 30 | 230.4 | 285.2 | 273.4 | 279.0 | 225.5 | 205.5 | 189.5 | 207.6 | 20- 30 | 118.5 | 226.0 | 10.7,10.7 |
| 40 | 194.3 | 249.2 | 256.3 | 242.1 | 188.8 | 169.5 | 168.7 | 171.3 | 30- 40 | 140.0 | 366.0 | 17.4,17.4 |
| 50 | 154.9 | 225.8 | 246.1 | 221.1 | 149.9 | 146.6 | 147.4 | 147.4 | 40- 50 | 151.5 | 517.5 | 24.5,24.5 |
| 60 | 117.5 | 209.8 | 231.4 | 207.7 | 113.4 | 125.2 | 124.1 | 125.5 | 50- 60 | 153.6 | 671.1 | 31.8,31.8 |
| 70 | 84.42 | 193.4 | 214.6 | 193.9 | 81.34 | 106.4 | 118.5 | 106.7 | 60- 70 | 148.6 | 819.7 | 38.9,38.9 |
| 80 | 56.21 | 177.1 | 198.7 | 180.2 | 53.65 | 102.6 | 110.4 | 102.6 | 70- 80 | 140.8 | 960.5 | 45.6,45.6 |
| 90 | 36.82 | 168.2 | 190.9 | 172.7 | 35.32 | 99.69 | 106.0 | 98.82 | 80- 90 | 131.2 | 1092 | 51.8,51.8 |
| 100 | 52.46 | 181.5 | 205.6 | 185.9 | 51.79 | 96.77 | 105.2 | 95.12 | 90-100 | 130.9 | 1223 | 58,58 |
| 110 | 75.49 | 199.1 | 225.7 | 202.7 | 75.97 | 95.09 | 107.8 | 93.70 | 100-110 | 138.0 | 1361 | 64.5,64.5 |
| 120 | 103.4 | 215.5 | 245.5 | 217.8 | 105.5 | 103.8 | 106.8 | 101.9 | 110-120 | 143.0 | 1504 | 71.3,71.3 |
| 130 | 137.2 | 229.7 | 261.0 | 230.7 | 140.8 | 121.2 | 119.9 | 119.9 | 120-130 | 144.6 | 1648 | 78.2,78.2 |
| 140 | 174.3 | 249.1 | 268.6 | 248.5 | 178.7 | 140.9 | 138.3 | 140.3 | 130-140 | 141.1 | 1789 | 84.9,84.9 |
| 150 | 189.7 | 278.7 | 280.7 | 278.4 | 197.4 | 167.2 | 158.5 | 169.7 | 140-150 | 128.9 | 1918 | 91,91 |
| 160 | 181.6 | 295.1 | 310.3 | 283.4 | 192.6 | 183.2 | 192.0 | 207.4 | 150-160 | 104.8 | 2023 | 95.9,95.9 |
| 170 | 182.6 | 268.9 | 297.1 | 222.0 | 190.5 | 189.8 | 199.8 | 221.2 | 160-170 | 65.29 | 2088 | 99,99 |
| 180 | 225.9 | 205.0 | 95.70 | 198.2 | 217.6 | 209.4 | 176.9 | 183.1 | 170-180 | 20.11 | 2108 | 100,100 |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | | |

Conical surface Flux(90deg): 440.92 lm

%lum = 20.9%

%lamp = 20.9%

Conical surface Flux(120deg): 671.09 lm

%lum = 31.8%

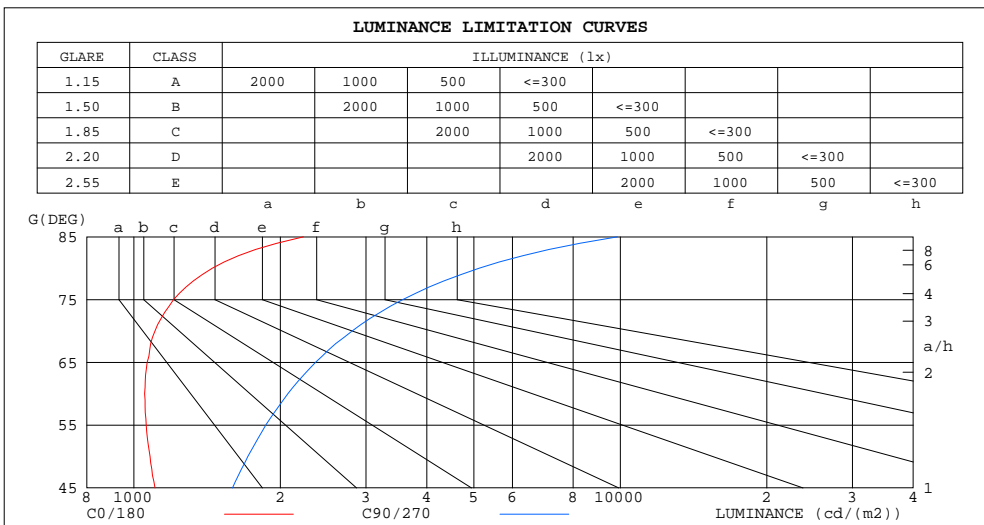
%lamp = 31.8%

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 22 October 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.9%
 Test Distance: 2.500m [K=1.0393]
 Remarks:

LUMINANCE LIMITATION CURVES

| | | |
|--|----------|------------------|
| Test:U:120.0V I:0.2849A P:33.29W PF:0.9738 Freq:60.00Hz Lamp Flux:2108.39x1 lm | | |
| NAME:ASD-LWS27C-48D36BK | TYPE:LED | WEIGHT: |
| SPEC.:5000K | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |



| LUMINANCE cd/(m2) | | |
|-------------------|--------|---------|
| G(DEG) | C0/180 | C90/270 |
| 85 | 2232 | 9869 |
| 80 | 1450 | 5126 |
| 75 | 1207 | 3573 |
| 70 | 1106 | 2811 |
| 65 | 1065 | 2363 |
| 60 | 1052 | 2073 |
| 55 | 1060 | 1867 |
| 50 | 1080 | 1715 |
| 45 | 1105 | 1595 |

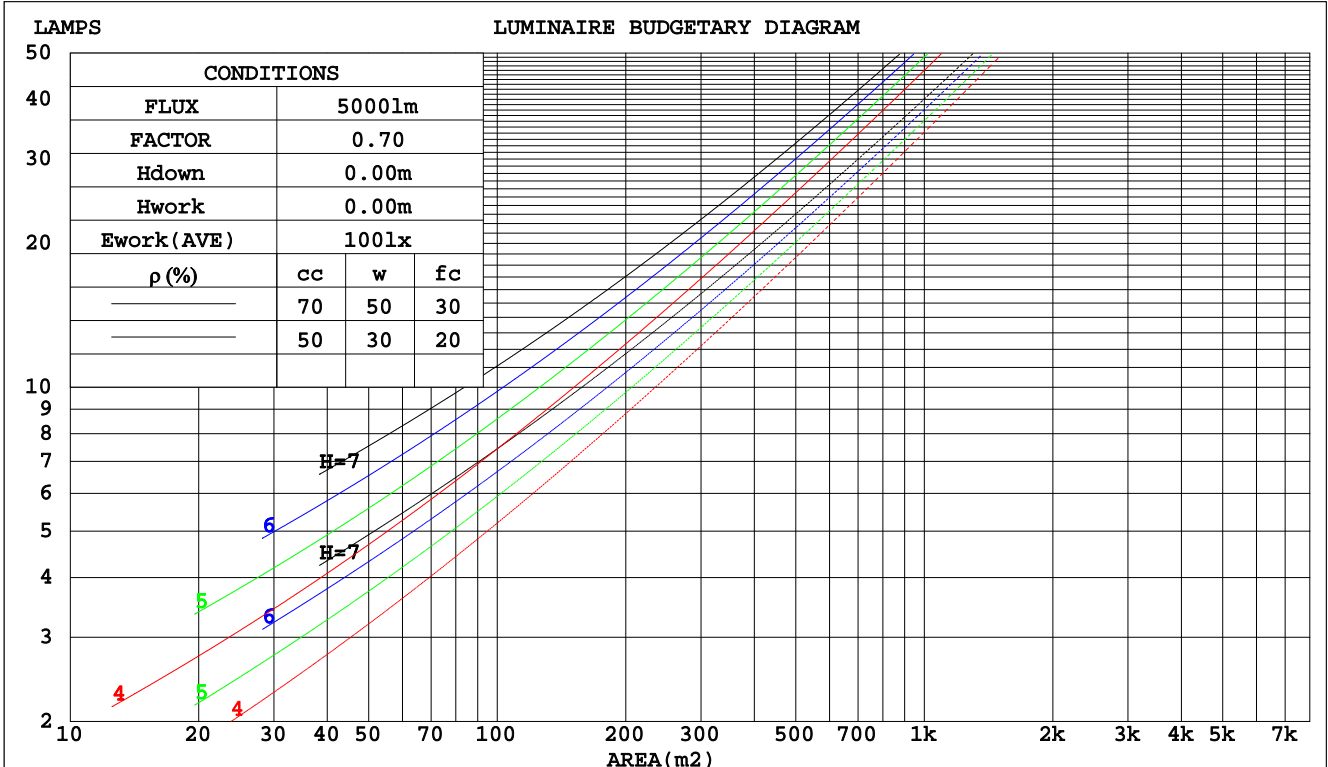
C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 22 October 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.9%
 Test Distance: 2.500m [K=1.0393]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| | | |
|--|----------|------------------|
| Test:U:120.0V I:0.2849A P:33.29W PF:0.9738 Freq:60.00Hz Lamp Flux:2108.39x1 lm | | |
| NAME:ASD-LWS27C-48D36BK | TYPE:LED | WEIGHT: |
| SPEC.:5000K | 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 | | | | | | | | | | | | | | | | 0 |
| pfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Coefficients of Utilization(CU) | | | | | | | | | |
| 0.0 | 1.08 | 1.08 | 1.08 | .99 | .99 | .99 | .84 | .84 | .84 | .70 | .70 | .70 | .58 | .58 | .58 | .52 |
| 1.0 | .90 | .85 | .80 | .83 | .79 | .75 | .70 | .67 | .64 | .58 | .55 | .53 | .47 | .45 | .43 | .38 |
| 2.0 | .77 | .70 | .64 | .71 | .65 | .59 | .60 | .55 | .51 | .49 | .46 | .43 | .40 | .37 | .35 | .30 |
| 3.0 | .67 | .59 | .52 | .62 | .55 | .49 | .52 | .46 | .42 | .43 | .39 | .35 | .35 | .31 | .29 | .24 |
| 4.0 | .59 | .50 | .44 | .54 | .47 | .41 | .46 | .40 | .35 | .38 | .33 | .29 | .31 | .27 | .24 | .20 |
| 5.0 | .52 | .44 | .37 | .48 | .40 | .35 | .41 | .35 | .30 | .34 | .29 | .25 | .27 | .24 | .21 | .17 |
| 6.0 | .47 | .38 | .32 | .43 | .35 | .30 | .37 | .30 | .26 | .30 | .26 | .22 | .25 | .21 | .18 | .15 |
| 7.0 | .42 | .34 | .28 | .39 | .31 | .26 | .33 | .27 | .23 | .28 | .23 | .19 | .23 | .19 | .16 | .13 |
| 8.0 | .38 | .30 | .24 | .35 | .28 | .23 | .30 | .24 | .20 | .25 | .21 | .17 | .21 | .17 | .14 | .12 |
| 9.0 | .35 | .27 | .22 | .32 | .25 | .20 | .28 | .22 | .18 | .23 | .19 | .15 | .19 | .15 | .13 | .11 |
| 10.0 | .32 | .24 | .19 | .30 | .23 | .18 | .25 | .20 | .16 | .21 | .17 | .14 | .18 | .14 | .12 | .09 |



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 22 October 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.9%
 Test Distance: 2.500m [K=1.0393]
 Remarks:

WEC AND CCEC

| | | |
|--|----------|------------------|
| Test:U:120.0V I:0.2849A P:33.29W PF:0.9738 Freq:60.00Hz Lamp Flux:2108.39x1 lm | | |
| NAME:ASD-LWS27C-48D36BK | TYPE:LED | WEIGHT: |
| SPEC.:5000K | 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 | .356 | .202 | .064 | .334 | .191 | .061 | .293 | .168 | .054 | .256 | .148 | .047 | .221 | .128 | .041 | |
| 2.0 | .307 | .168 | .052 | .288 | .158 | .049 | .250 | .139 | .043 | .216 | .121 | .038 | .184 | .104 | .033 | |
| 3.0 | .273 | .145 | .044 | .255 | .137 | .041 | .221 | .120 | .036 | .190 | .104 | .032 | .161 | .089 | .028 | |
| 4.0 | .247 | .128 | .038 | .230 | .120 | .036 | .199 | .106 | .032 | .170 | .091 | .028 | .143 | .078 | .024 | |
| 5.0 | .225 | .115 | .033 | .210 | .108 | .031 | .181 | .094 | .028 | .154 | .081 | .024 | .129 | .069 | .021 | |
| 6.0 | .207 | .104 | .030 | .193 | .097 | .028 | .166 | .085 | .025 | .141 | .074 | .022 | .118 | .062 | .018 | |
| 7.0 | .191 | .094 | .027 | .178 | .089 | .025 | .154 | .078 | .022 | .131 | .067 | .019 | .109 | .057 | .017 | |
| 8.0 | .177 | .087 | .024 | .166 | .081 | .023 | .143 | .071 | .020 | .121 | .061 | .018 | .101 | .052 | .015 | |
| 9.0 | .166 | .080 | .022 | .155 | .075 | .021 | .133 | .066 | .019 | .113 | .057 | .016 | .094 | .048 | .014 | |
| 10.0 | .155 | .074 | .021 | .145 | .070 | .020 | .125 | .061 | .017 | .106 | .053 | .015 | .089 | .045 | .013 | |

| 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 | .558 | .558 | .558 | .477 | .477 | .477 | .325 | .325 | .325 | .187 | .187 | .187 | .060 | .060 | .060 | |
| 1.0 | .554 | .526 | .501 | .474 | .452 | .431 | .324 | .311 | .298 | .187 | .180 | .173 | .060 | .058 | .056 | |
| 2.0 | .547 | .505 | .469 | .469 | .434 | .405 | .321 | .301 | .283 | .185 | .175 | .166 | .059 | .057 | .054 | |
| 3.0 | .540 | .489 | .449 | .463 | .422 | .389 | .318 | .293 | .273 | .184 | .171 | .161 | .059 | .056 | .053 | |
| 4.0 | .533 | .477 | .435 | .457 | .413 | .378 | .314 | .288 | .266 | .182 | .168 | .158 | .059 | .055 | .052 | |
| 5.0 | .526 | .468 | .426 | .451 | .405 | .370 | .311 | .283 | .262 | .180 | .166 | .155 | .058 | .054 | .051 | |
| 6.0 | .519 | .461 | .419 | .446 | .399 | .365 | .308 | .279 | .258 | .179 | .164 | .153 | .058 | .054 | .051 | |
| 7.0 | .512 | .455 | .414 | .441 | .394 | .361 | .305 | .276 | .256 | .177 | .163 | .152 | .057 | .053 | .050 | |
| 8.0 | .506 | .449 | .410 | .436 | .390 | .358 | .302 | .274 | .254 | .175 | .161 | .151 | .057 | .053 | .050 | |
| 9.0 | .500 | .445 | .408 | .431 | .386 | .355 | .299 | .271 | .252 | .174 | .160 | .151 | .056 | .053 | .050 | |
| 10.0 | .495 | .441 | .405 | .427 | .383 | .354 | .296 | .270 | .251 | .173 | .159 | .150 | .056 | .052 | .050 | |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 22 October 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.9%
 Test Distance: 2.500m [K=1.0393]
 Remarks:

UGR(Unified Glare Rating) Table

| | | | | | | | | | | |
|--|------------------|------|------|------|----------|----------------|------|------------------|------|------|
| Test:U:120.0V I:0.2849A P:33.29W PF:0.9738 Freq:60.00Hz Lamp Flux:2108.39x1 lm | | | | | | | | | | |
| NAME:ASD-LWS27C-48D36BK | | | | | TYPE:LED | | | WEIGHT: | | |
| SPEC.:5000K | | | | | 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 | 10.7 | 11.7 | 11.6 | 12.6 | 13.7 | 12.8 | 13.8 | 13.6 | 14.7 | 15.8 |
| 3H | 12.6 | 13.5 | 13.4 | 14.4 | 15.5 | 15.6 | 16.6 | 16.5 | 17.5 | 18.6 |
| 4H | 13.5 | 14.4 | 14.4 | 15.2 | 16.4 | 17.2 | 18.1 | 18.1 | 19.0 | 20.2 |
| 6H | 14.4 | 15.2 | 15.3 | 16.1 | 17.3 | 19.0 | 19.9 | 19.9 | 20.8 | 21.9 |
| 8H | 14.8 | 15.6 | 15.7 | 16.5 | 17.7 | 20.0 | 20.8 | 21.0 | 21.8 | 22.9 |
| 12H | 15.2 | 16.0 | 16.2 | 16.9 | 18.1 | 21.2 | 22.0 | 22.1 | 22.9 | 24.1 |
| 4H 2H | 12.1 | 13.0 | 13.0 | 13.8 | 15.0 | 13.5 | 14.3 | 14.3 | 15.2 | 16.4 |
| 3H | 14.3 | 15.0 | 15.2 | 16.0 | 17.2 | 16.5 | 17.3 | 17.5 | 18.2 | 19.4 |
| 4H | 15.5 | 16.1 | 16.4 | 17.1 | 18.3 | 18.3 | 19.0 | 19.3 | 20.0 | 21.2 |
| 6H | 16.6 | 17.2 | 17.5 | 18.2 | 19.4 | 20.3 | 20.9 | 21.3 | 21.9 | 23.1 |
| 8H | 17.1 | 17.7 | 18.1 | 18.7 | 19.9 | 21.4 | 22.0 | 22.4 | 23.0 | 24.2 |
| 12H | 17.7 | 18.2 | 18.6 | 19.2 | 20.4 | 22.7 | 23.2 | 23.7 | 24.2 | 25.5 |
| 8H 4H | 16.7 | 17.3 | 17.7 | 18.2 | 19.5 | 18.8 | 19.4 | 19.8 | 20.4 | 21.6 |
| 6H | 18.3 | 18.8 | 19.3 | 19.8 | 21.0 | 21.1 | 21.6 | 22.1 | 22.6 | 23.9 |
| 8H | 19.1 | 19.5 | 20.1 | 20.5 | 21.8 | 22.4 | 22.9 | 23.4 | 23.9 | 25.2 |
| 12H | 19.9 | 20.3 | 20.9 | 21.3 | 22.6 | 24.0 | 24.3 | 25.0 | 25.3 | 26.7 |
| 12H 4H | 17.0 | 17.6 | 18.0 | 18.5 | 19.8 | 18.9 | 19.4 | 19.9 | 20.4 | 21.7 |
| 6H | 18.9 | 19.3 | 19.9 | 20.3 | 21.6 | 21.3 | 21.7 | 22.3 | 22.7 | 24.0 |
| 8H | 19.9 | 20.3 | 20.9 | 21.3 | 22.6 | 22.8 | 23.1 | 23.8 | 24.1 | 25.5 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S = 1.0H | + 0.1 / - 0.1 | | | | | + 0.1 / - 0.1 | | | | |
| 1.5H | + 0.2 / - 0.3 | | | | | + 0.2 / - 0.3 | | | | |
| 2.0H | + 0.3 / - 0.5 | | | | | + 0.3 / - 0.4 | | | | |

CIE Pub.117, 2108 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 2.6)
 Area: 0.22326 m2

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 22 October 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.9%
 Test Distance: 2.500m [K=1.0393]
 Remarks:

UTILIZATION FACTORS TABLE

| | | |
|--|----------|------------------|
| Test:U:120.0V I:0.2849A P:33.29W PF:0.9738 Freq:60.00Hz Lamp Flux:2108.39x1 lm | | |
| NAME:ASD-LWS27C-48D36BK | TYPE:LED | WEIGHT: |
| SPEC.:5000K | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |

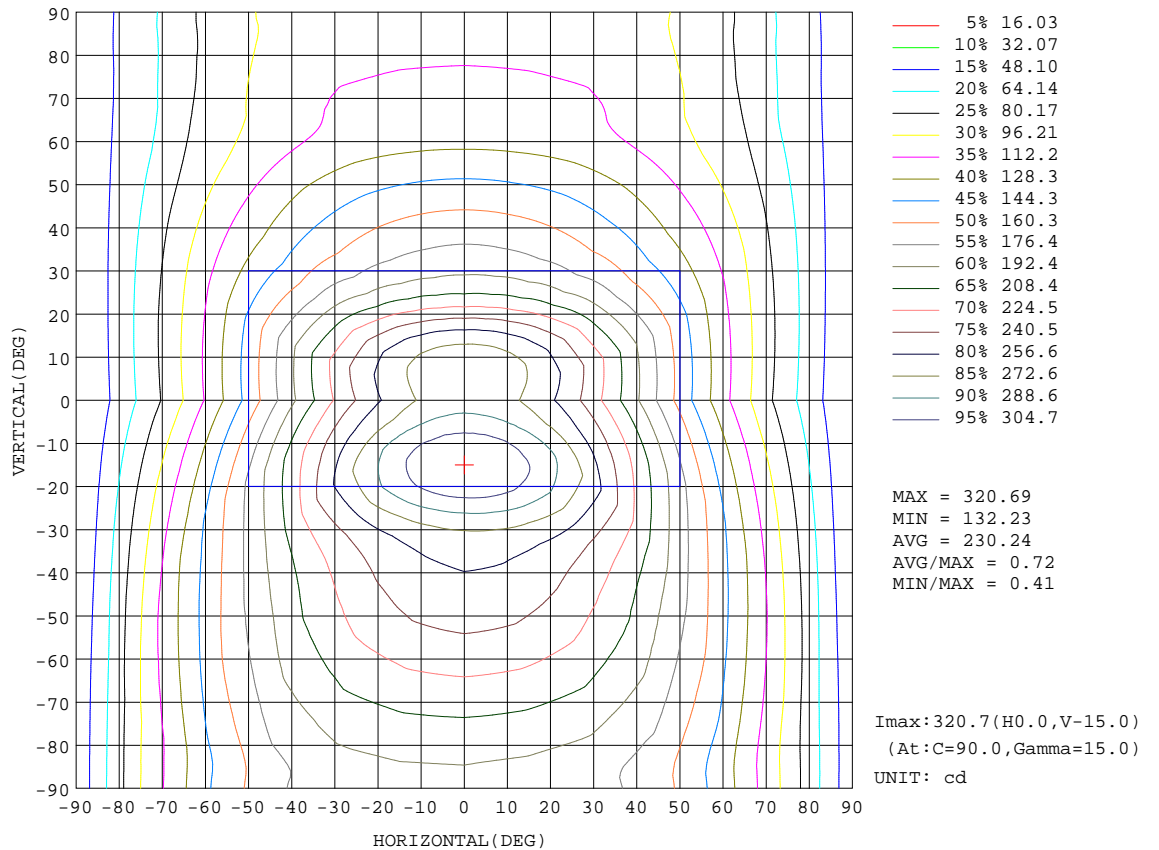
| REFLECTANCE | | | | | | | | | | |
|----------------------------------|--|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0 |
| Walls | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0 |
| Working plane | 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) x RCR = 5 | | | | | | | | | |
| k = 0.60 | 41 | 29 | 22 | 39 | 28 | 21 | 35 | 25 | 20 | 13 |
| 0.80 | 50 | 37 | 29 | 47 | 35 | 28 | 41 | 32 | 26 | 16 |
| 1.00 | 57 | 44 | 36 | 53 | 42 | 34 | 47 | 39 | 31 | 20 |
| 1.25 | 64 | 51 | 42 | 59 | 48 | 40 | 52 | 43 | 36 | 23 |
| 1.50 | 69 | 56 | 48 | 64 | 53 | 45 | 55 | 47 | 41 | 25 |
| 2.00 | 76 | 65 | 56 | 71 | 61 | 53 | 61 | 53 | 47 | 29 |
| 2.50 | 81 | 70 | 62 | 75 | 66 | 59 | 64 | 57 | 51 | 32 |
| 3.00 | 84 | 75 | 67 | 78 | 70 | 63 | 67 | 61 | 55 | 34 |
| 4.00 | 89 | 81 | 74 | 83 | 76 | 70 | 70 | 65 | 60 | 37 |
| 5.00 | 92 | 85 | 79 | 85 | 79 | 74 | 73 | 68 | 64 | 39 |
| 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: 24.8DEG
 Operators: Alan Wang
 Test Date: 22 October 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.9%
 Test Distance: 2.500m [K=1.0393]
 Remarks:

ISOCANDELA DIAGRAM

| | | |
|--|----------|------------------|
| Test:U:120.0V I:0.2849A P:33.29W PF:0.9738 Freq:60.00Hz Lamp Flux:2108.39x1 lm | | |
| NAME:ASD-LWS27C-48D36BK | TYPE:LED | WEIGHT: |
| SPEC.:5000K | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |

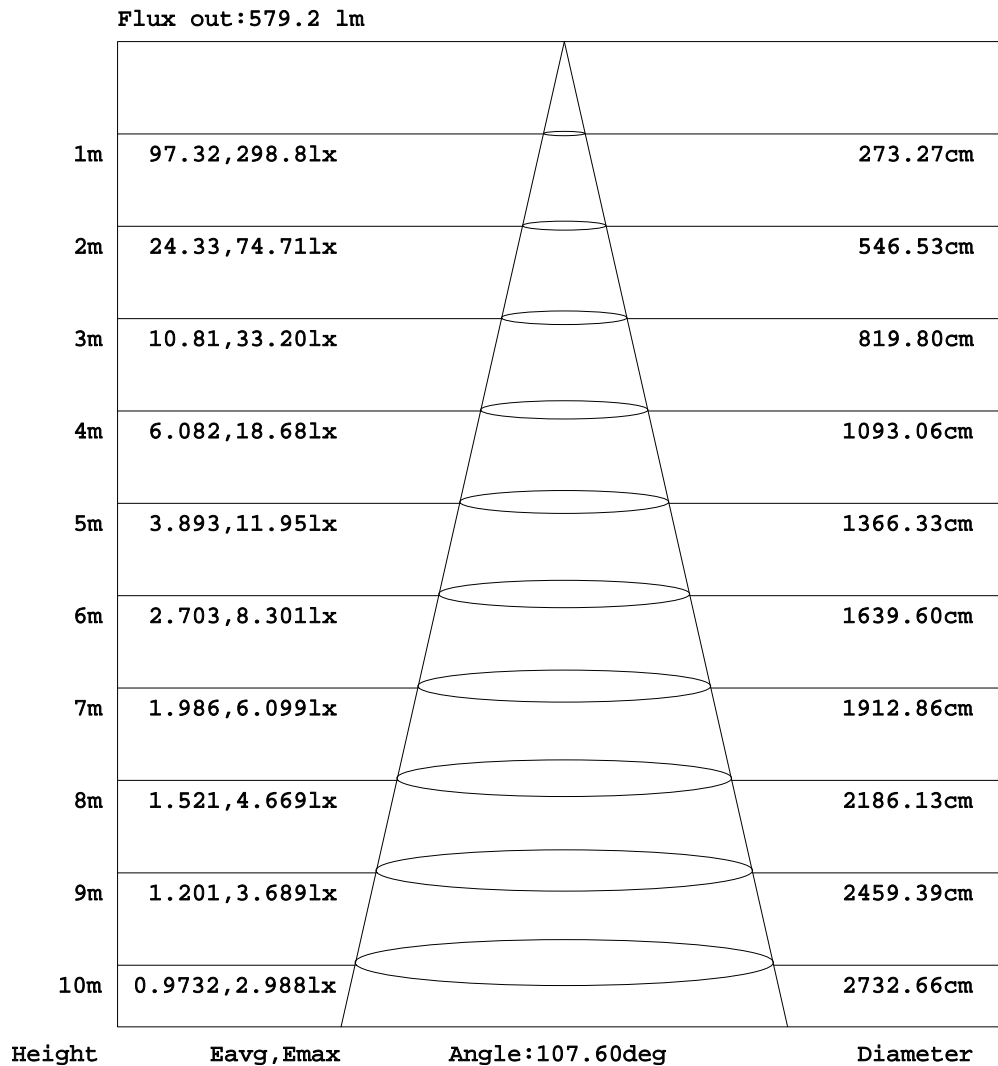


C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 22 October 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.9%
 Test Distance: 2.500m [K=1.0393]
 Remarks:

AAI Figure

| | | |
|--|----------|------------------|
| Test:U:120.0V I:0.2849A P:33.29W PF:0.9738 Freq:60.00Hz Lamp Flux:2108.39x1 lm | | |
| NAME:ASD-LWS27C-48D36BK | TYPE:LED | WEIGHT: |
| SPEC.:5000K | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |



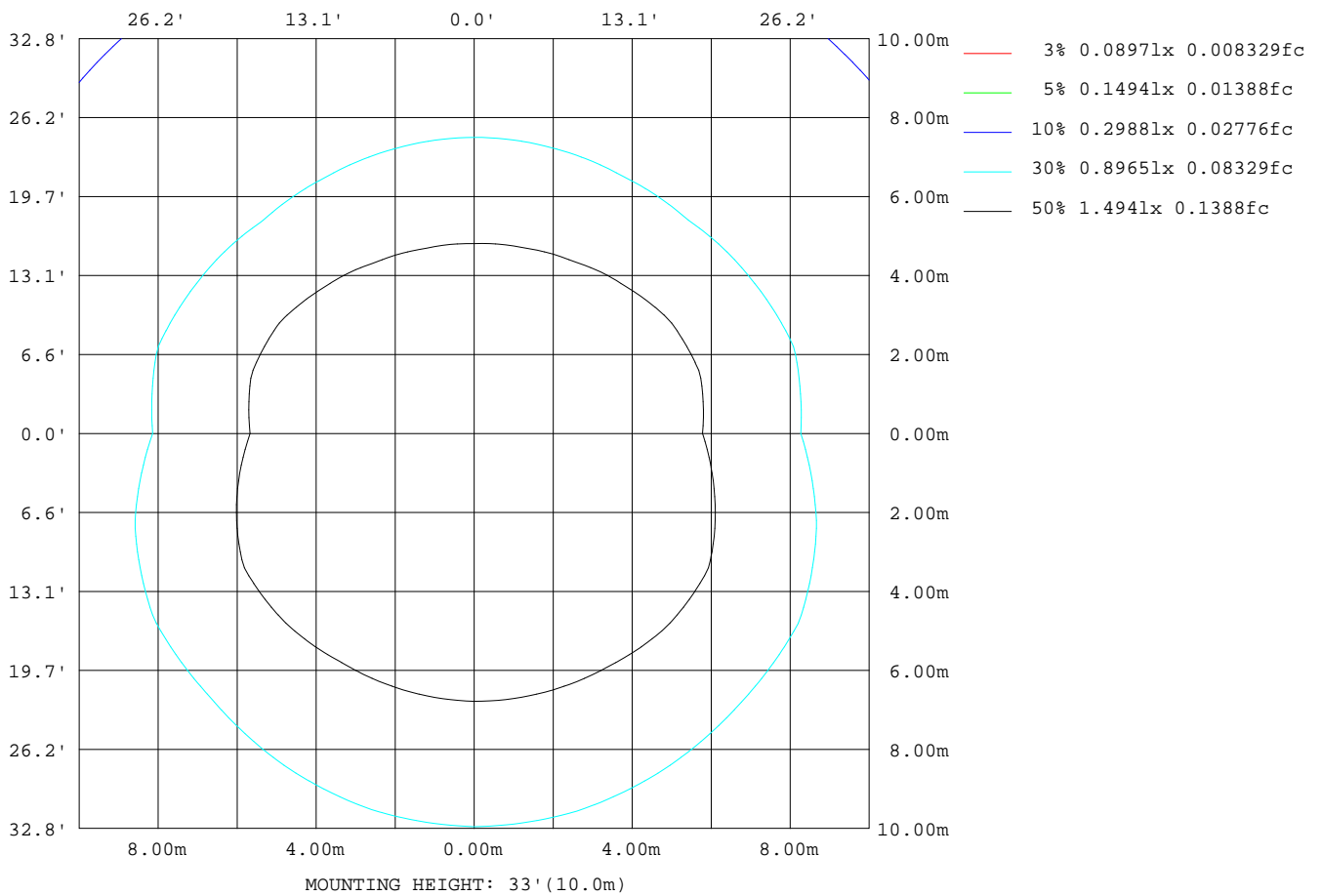
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 22 October 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.9%
 Test Distance: 2.500m [K=1.0393]
 Remarks:

ISOLUX DIAGRAM

| | | |
|--|----------|------------------|
| Test:U:120.0V I:0.2849A P:33.29W PF:0.9738 Freq:60.00Hz Lamp Flux:2108.39x1 lm | | |
| NAME:ASD-LWS27C-48D36BK | TYPE:LED | WEIGHT: |
| SPEC.:5000K | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 22 October 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.9%
 Test Distance: 2.500m [K=1.0393]
 Remarks:

LED Avg.L Report

| | | |
|--|----------|------------------|
| Test:U:120.0V I:0.2849A P:33.29W PF:0.9738 Freq:60.00Hz Lamp Flux:2108.39x1 lm | | |
| NAME:ASD-LWS27C-48D36BK | TYPE:LED | WEIGHT: |
| SPEC.:5000K | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |

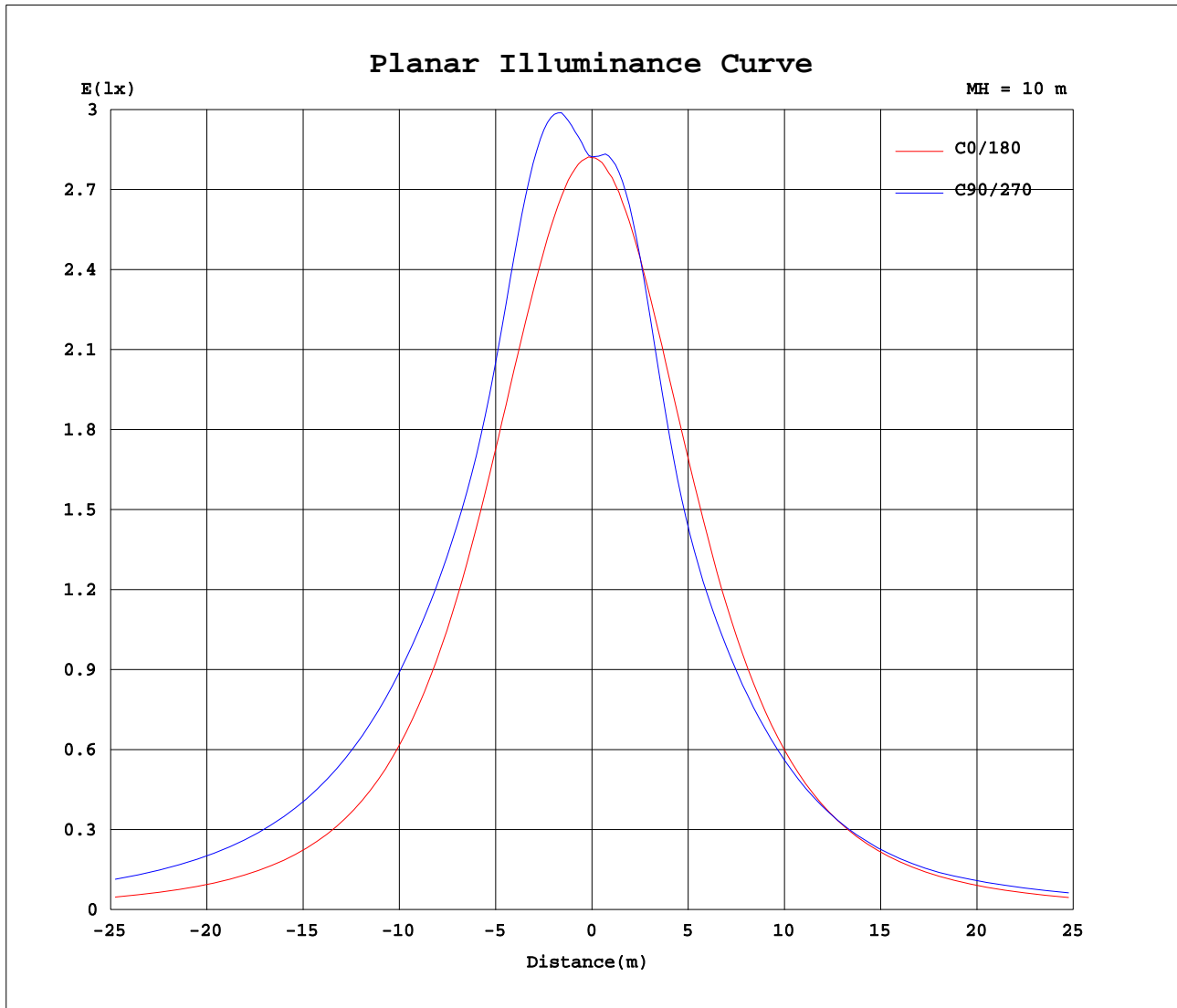
| AvgL | cd/m2 |
|----------------|-------|
| L_0~180(65)av | 1045 |
| L_0~180(75)av | 1185 |
| L_0~180(85)av | 2170 |
| L_90~270(65)av | 1825 |
| L_90~270(75)av | 2776 |
| L_90~270(85)av | 7679 |
| L_45(65)av | 1672 |
| L_45(75)av | 2522 |
| L_45(85)av | 6978 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
C Interval: 15.0DEG
Test Speed: HIGH
Temperature: 24.8DEG
Operators: Alan Wang
Test Date: 22 October 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
Humidity: 42.9%
Test Distance: 2.500m [K=1.0393]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 22 October 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.9%
 Test Distance: 2.500m [K=1.0393]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|--|----------|------------------|
| Test:U:120.0V I:0.2849A P:33.29W PF:0.9738 Freq:60.00Hz Lamp Flux:2108.39x1 lm | | |
| NAME:ASD-LWS27C-48D36BK | TYPE:LED | WEIGHT: |
| SPEC.:5000K | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding 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 | 282 | 283 | 282 | 282 | 282 | 282 | 282 | 282 | 282 | 283 | 282 | 282 | 282 | 283 | 282 | 282 | 282 | 282 | 282 |
| 5 | 281 | 282 | 285 | 289 | 293 | 295 | 295 | 294 | 292 | 289 | 285 | 281 | 279 | 281 | 282 | 284 | 285 | 285 | 286 |
| 10 | 276 | 281 | 290 | 299 | 307 | 311 | 313 | 311 | 306 | 298 | 289 | 280 | 274 | 276 | 280 | 282 | 282 | 282 | 282 |
| 15 | 269 | 278 | 292 | 307 | 315 | 320 | 321 | 318 | 314 | 305 | 291 | 275 | 266 | 270 | 273 | 272 | 269 | 265 | 264 |
| 20 | 259 | 271 | 293 | 307 | 313 | 315 | 314 | 313 | 311 | 304 | 290 | 268 | 255 | 260 | 261 | 255 | 244 | 237 | 234 |
| 25 | 246 | 263 | 288 | 300 | 300 | 297 | 294 | 294 | 296 | 295 | 284 | 260 | 241 | 248 | 245 | 231 | 217 | 209 | 207 |
| 30 | 230 | 253 | 278 | 285 | 280 | 275 | 273 | 272 | 275 | 279 | 273 | 249 | 226 | 233 | 225 | 205 | 194 | 190 | 190 |
| 35 | 213 | 239 | 264 | 267 | 262 | 262 | 262 | 260 | 257 | 259 | 259 | 235 | 207 | 215 | 202 | 185 | 179 | 178 | 179 |
| 40 | 194 | 224 | 248 | 249 | 251 | 255 | 256 | 253 | 247 | 242 | 242 | 220 | 189 | 196 | 181 | 169 | 169 | 168 | 169 |
| 45 | 174 | 207 | 230 | 236 | 244 | 250 | 252 | 248 | 241 | 230 | 224 | 204 | 169 | 176 | 162 | 158 | 158 | 158 | 159 |
| 50 | 155 | 190 | 214 | 226 | 238 | 244 | 246 | 243 | 235 | 221 | 208 | 187 | 150 | 157 | 147 | 147 | 148 | 147 | 147 |
| 55 | 136 | 173 | 200 | 217 | 231 | 238 | 239 | 237 | 229 | 214 | 194 | 171 | 131 | 138 | 133 | 136 | 137 | 136 | 136 |
| 60 | 117 | 157 | 187 | 210 | 224 | 229 | 231 | 229 | 223 | 208 | 184 | 156 | 113 | 121 | 121 | 125 | 126 | 124 | 124 |
| 65 | 100 | 142 | 176 | 202 | 215 | 221 | 223 | 221 | 215 | 201 | 175 | 142 | 96.6 | 106 | 110 | 114 | 116 | 120 | 121 |
| 70 | 84.4 | 129 | 166 | 193 | 207 | 213 | 215 | 213 | 208 | 194 | 166 | 130 | 81.3 | 91.6 | 98.7 | 106 | 115 | 118 | 119 |
| 75 | 69.7 | 117 | 157 | 185 | 199 | 204 | 206 | 205 | 201 | 187 | 158 | 119 | 67.1 | 78.3 | 88.4 | 105 | 112 | 114 | 114 |
| 80 | 56.2 | 106 | 148 | 177 | 191 | 196 | 199 | 198 | 194 | 180 | 150 | 109 | 53.6 | 65.9 | 86.9 | 103 | 109 | 110 | 110 |
| 85 | 43.4 | 95.1 | 139 | 170 | 184 | 189 | 192 | 191 | 188 | 174 | 143 | 99.5 | 41.0 | 58.5 | 84.3 | 99.9 | 106 | 107 | 107 |
| 90 | 36.8 | 90.8 | 137 | 168 | 183 | 188 | 191 | 191 | 187 | 173 | 142 | 96.3 | 35.3 | 57.3 | 84.1 | 99.7 | 106 | 106 | 106 |
| 95 | 42.1 | 94.8 | 141 | 173 | 188 | 193 | 196 | 196 | 192 | 178 | 146 | 101 | 41.1 | 54.9 | 81.3 | 97.4 | 104 | 105 | 105 |
| 100 | 52.5 | 104 | 149 | 181 | 197 | 203 | 206 | 205 | 201 | 186 | 155 | 110 | 51.8 | 57.7 | 80.1 | 96.8 | 104 | 105 | 105 |
| 105 | 63.5 | 113 | 158 | 191 | 207 | 213 | 215 | 214 | 210 | 195 | 163 | 120 | 63.3 | 67.1 | 78.9 | 96.6 | 104 | 106 | 106 |
| 110 | 75.5 | 122 | 167 | 199 | 216 | 223 | 226 | 225 | 219 | 203 | 171 | 130 | 76.0 | 77.7 | 83.1 | 95.1 | 105 | 107 | 108 |
| 115 | 88.7 | 133 | 176 | 208 | 225 | 233 | 236 | 234 | 228 | 211 | 180 | 142 | 89.9 | 89.0 | 91.7 | 95.1 | 103 | 107 | 109 |
| 120 | 103 | 145 | 186 | 215 | 234 | 243 | 246 | 243 | 236 | 218 | 189 | 154 | 106 | 101 | 101 | 104 | 104 | 105 | 107 |
| 125 | 120 | 159 | 196 | 223 | 241 | 251 | 254 | 252 | 242 | 224 | 199 | 168 | 123 | 111 | 111 | 112 | 113 | 111 | 110 |
| 130 | 137 | 173 | 208 | 230 | 248 | 257 | 261 | 258 | 248 | 231 | 211 | 183 | 141 | 129 | 122 | 121 | 122 | 120 | 120 |
| 135 | 156 | 189 | 222 | 238 | 253 | 262 | 265 | 262 | 253 | 238 | 225 | 199 | 160 | 142 | 134 | 130 | 130 | 129 | 129 |
| 140 | 174 | 204 | 238 | 249 | 258 | 266 | 269 | 265 | 257 | 248 | 241 | 212 | 179 | 164 | 147 | 141 | 139 | 138 | 138 |
| 145 | 187 | 218 | 252 | 264 | 267 | 270 | 272 | 270 | 265 | 264 | 257 | 220 | 193 | 184 | 163 | 152 | 149 | 148 | 148 |
| 150 | 190 | 230 | 264 | 279 | 281 | 281 | 281 | 280 | 280 | 278 | 270 | 228 | 197 | 189 | 182 | 167 | 162 | 159 | 158 |
| 155 | 189 | 240 | 272 | 290 | 297 | 297 | 296 | 296 | 297 | 291 | 266 | 222 | 198 | 179 | 189 | 186 | 178 | 174 | 173 |
| 160 | 182 | 249 | 275 | 295 | 305 | 310 | 310 | 310 | 307 | 283 | 239 | 210 | 193 | 192 | 185 | 183 | 190 | 196 | 192 |
| 165 | 170 | 224 | 264 | 286 | 303 | 309 | 312 | 310 | 287 | 248 | 221 | 200 | 182 | 183 | 178 | 187 | 177 | 198 | 222 |
| 170 | 183 | 195 | 260 | 269 | 278 | 295 | 297 | 293 | 238 | 222 | 222 | 209 | 191 | 190 | 187 | 190 | 185 | 164 | 200 |
| 175 | 204 | 202 | 219 | 231 | 256 | 256 | 273 | 217 | 199 | 215 | 211 | 204 | 205 | 205 | 202 | 196 | 195 | 186 | 135 |
| 180 | 226 | 218 | 209 | 205 | 208 | 156 | 95.7 | 125 | 191 | 198 | 219 | 222 | 218 | 217 | 215 | 209 | 203 | 201 | 177 |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 22 October 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.9%
 Test Distance: 2.500m [K=1.0393]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|--|----------|------------------|
| Test:U:120.0V I:0.2849A P:33.29W PF:0.9738 Freq:60.00Hz Lamp Flux:2108.39x1 lm | | |
| NAME:ASD-LWS27C-48D36BK | TYPE:LED | WEIGHT: |
| SPEC.:5000K | DIM.: | SERIAL No.: |
| MFR.: ASD Lighting Corp | SUR.: | Shielding Angle: |

Table--2

UNIT: cd

| C(DEG) γ (DEG) | 285 | 300 | 315 | 330 | 345 | | | | | | | | | | | | | | |
|-------------------|-----|-----|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0 | 282 | 282 | 283 | 282 | 282 | | | | | | | | | | | | | | |
| 5 | 285 | 285 | 284 | 283 | 281 | | | | | | | | | | | | | | |
| 10 | 282 | 283 | 283 | 281 | 278 | | | | | | | | | | | | | | |
| 15 | 265 | 270 | 273 | 276 | 272 | | | | | | | | | | | | | | |
| 20 | 238 | 245 | 256 | 264 | 264 | | | | | | | | | | | | | | |
| 25 | 210 | 218 | 233 | 248 | 252 | | | | | | | | | | | | | | |
| 30 | 191 | 196 | 208 | 227 | 236 | | | | | | | | | | | | | | |
| 35 | 179 | 180 | 187 | 204 | 219 | | | | | | | | | | | | | | |
| 40 | 169 | 169 | 171 | 183 | 199 | | | | | | | | | | | | | | |
| 45 | 158 | 159 | 159 | 165 | 179 | | | | | | | | | | | | | | |
| 50 | 147 | 148 | 147 | 149 | 160 | | | | | | | | | | | | | | |
| 55 | 136 | 137 | 137 | 136 | 141 | | | | | | | | | | | | | | |
| 60 | 124 | 126 | 126 | 123 | 124 | | | | | | | | | | | | | | |
| 65 | 120 | 116 | 115 | 111 | 109 | | | | | | | | | | | | | | |
| 70 | 118 | 115 | 107 | 100 | 95.1 | | | | | | | | | | | | | | |
| 75 | 114 | 112 | 106 | 89.5 | 82.0 | | | | | | | | | | | | | | |
| 80 | 110 | 108 | 103 | 87.7 | 69.7 | | | | | | | | | | | | | | |
| 85 | 106 | 105 | 99.6 | 85.2 | 61.5 | | | | | | | | | | | | | | |
| 90 | 106 | 104 | 98.8 | 84.6 | 59.5 | | | | | | | | | | | | | | |
| 95 | 104 | 102 | 95.9 | 81.1 | 56.5 | | | | | | | | | | | | | | |
| 100 | 104 | 102 | 95.1 | 79.5 | 58.0 | | | | | | | | | | | | | | |
| 105 | 105 | 102 | 94.7 | 77.8 | 66.3 | | | | | | | | | | | | | | |
| 110 | 106 | 103 | 93.7 | 81.0 | 75.1 | | | | | | | | | | | | | | |
| 115 | 107 | 102 | 93.3 | 89.7 | 85.1 | | | | | | | | | | | | | | |
| 120 | 104 | 102 | 102 | 99.1 | 96.6 | | | | | | | | | | | | | | |
| 125 | 110 | 111 | 111 | 109 | 107 | | | | | | | | | | | | | | |
| 130 | 119 | 120 | 120 | 120 | 122 | | | | | | | | | | | | | | |
| 135 | 129 | 129 | 129 | 132 | 134 | | | | | | | | | | | | | | |
| 140 | 138 | 138 | 140 | 147 | 158 | | | | | | | | | | | | | | |
| 145 | 148 | 149 | 153 | 162 | 178 | | | | | | | | | | | | | | |
| 150 | 160 | 163 | 170 | 180 | 188 | | | | | | | | | | | | | | |
| 155 | 174 | 179 | 188 | 200 | 191 | | | | | | | | | | | | | | |
| 160 | 193 | 200 | 207 | 219 | 187 | | | | | | | | | | | | | | |
| 165 | 221 | 225 | 226 | 223 | 171 | | | | | | | | | | | | | | |
| 170 | 247 | 239 | 221 | 200 | 186 | | | | | | | | | | | | | | |
| 175 | 111 | 169 | 185 | 195 | 193 | | | | | | | | | | | | | | |
| 180 | 104 | 139 | 183 | 203 | 209 | | | | | | | | | | | | | | |

C Range: 0 - 360DEG
 C Interval: 15.0DEG
 Test Speed: HIGH
 Temperature: 24.8DEG
 Operators: Alan Wang
 Test Date: 22 October 2023

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.00.416
 Humidity: 42.9%
 Test Distance: 2.500m [K=1.0393]
 Remarks: