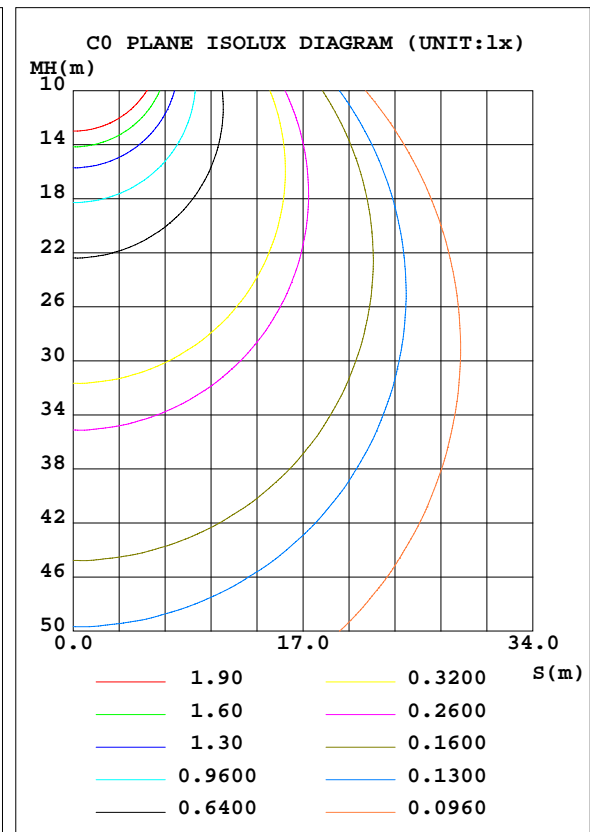
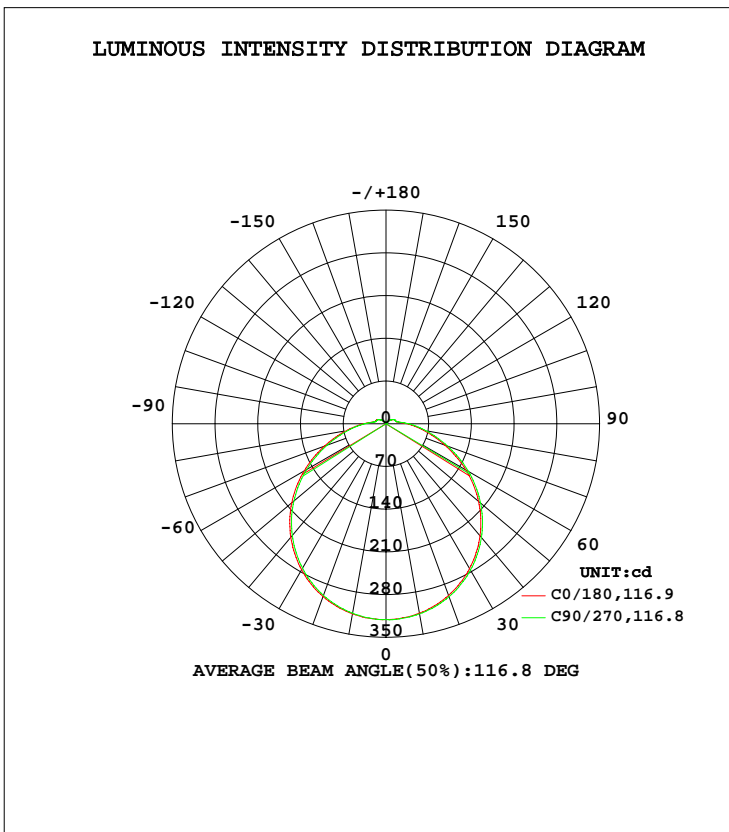


LUMINAIRE PHOTOMETRIC TEST REPORT

| | | |
|---|-----------|---------------------|
| Test:U:120.1V I:0.1302A P:15.39W PF:0.9844 Lamp Flux:1092.74x1 lm | | |
| NAME: ASD-LFMDR-12D1530-NK | TYPE:N/A | WEIGHT:N/A |
| SPEC.:N/A | DIM.: N/A | SERIAL No.:N/A |
| MFR.: ASD Lighting corp | SUR.:N/A | Shielding Angle:N/A |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 71.00 lm/W | | | |
|------------------|----------------------|----------------------------------|--------|--------------------|----------|
| MODEL | ASD-LFMDR-12D1530-NK | I _{max} (cd) | 321.2 | S/MH(C0/180) | 1.27 |
| NOMINAL POWER(W) | 15 | LOR(%) | 100.0 | S/MH(C90/270) | 1.28 |
| RATED VOLTAGE(V) | 120 | TOTAL FLUX(lm) | 1092.7 | η UP, DN(C0-180) | 3.7,45.9 |
| NOMINAL FLUX(lm) | 1092.74 | CIE CLASS | DIRECT | η UP, DN(C180-360) | 3.8,46.7 |
| LAMPS INSIDE | 1 | η up(%) | 7.5 | CIBSE SHR NOM | 1.25 |
| TEST VOLTAGE(V) | 120 | η down(%) | 92.5 | CIBSE SHR MAX | 1.35 |



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature:25.3DEG
 Operators:ben
 Test Date:2018-08-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity:45%
 Test Distance:2.445m [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 | 316.3 | 315.2 | 315.1 | 314.6 | 315.1 | 315.5 | 316.4 | 316.5 | 0- 10 | 30.38 | 30.38 | 2.78,2.78 |
| 20 | 301.3 | 300.1 | 299.5 | 298.4 | 299.4 | 300.2 | 301.7 | 302.0 | 10- 20 | 87.31 | 117.7 | 10.8,10.8 |
| 30 | 276.3 | 274.9 | 273.2 | 272.4 | 273.8 | 275.0 | 276.7 | 277.8 | 20- 30 | 133.2 | 250.9 | 23,23 |
| 40 | 242.7 | 240.5 | 238.9 | 237.6 | 239.5 | 241.3 | 243.4 | 244.5 | 30- 40 | 162.1 | 412.9 | 37.8,37.8 |
| 50 | 201.6 | 199.1 | 197.1 | 195.6 | 198.0 | 199.9 | 202.4 | 203.5 | 40- 50 | 170.6 | 583.5 | 53.4,53.4 |
| 60 | 154.9 | 152.3 | 150.0 | 148.6 | 151.2 | 153.4 | 156.0 | 157.4 | 50- 60 | 158.0 | 741.6 | 67.9,67.9 |
| 70 | 107.3 | 104.6 | 102.6 | 101.0 | 102.8 | 105.1 | 107.6 | 109.2 | 60- 70 | 127.5 | 869.0 | 79.5,79.5 |
| 80 | 66.46 | 63.90 | 62.79 | 61.44 | 62.75 | 64.84 | 66.59 | 68.12 | 70- 80 | 88.60 | 957.6 | 87.6,87.6 |
| 90 | 36.51 | 35.27 | 34.61 | 33.47 | 34.48 | 35.86 | 36.96 | 37.80 | 80- 90 | 53.60 | 1011 | 92.5,92.5 |
| 100 | 19.56 | 18.79 | 18.76 | 18.36 | 18.54 | 18.79 | 19.26 | 20.01 | 90-100 | 28.50 | 1040 | 95.1,95.1 |
| 110 | 17.09 | 16.22 | 16.23 | 16.21 | 16.15 | 16.10 | 16.42 | 17.04 | 100-110 | 17.98 | 1058 | 96.8,96.8 |
| 120 | 14.01 | 13.40 | 13.66 | 15.38 | 13.77 | 13.95 | 14.06 | 15.48 | 110-120 | 15.43 | 1073 | 98.2,98.2 |
| 130 | 9.122 | 9.554 | 9.757 | 9.282 | 9.655 | 9.480 | 9.241 | 10.36 | 120-130 | 10.80 | 1084 | 99.2,99.2 |
| 140 | 4.400 | 3.675 | 5.480 | 4.441 | 4.965 | 5.585 | 4.108 | 4.235 | 130-140 | 5.671 | 1090 | 99.7,99.7 |
| 150 | 1.354 | 1.464 | 1.898 | 3.222 | 1.647 | 1.595 | 1.371 | 3.016 | 140-150 | 1.914 | 1092 | 99.9,99.9 |
| 160 | 1.026 | 1.535 | 3.561 | 1.665 | 2.036 | 1.025 | 1.063 | 1.251 | 150-160 | 0.7328 | 1092 | 100,100 |
| 170 | 0.4982 | 1.524 | 1.443 | 2.300 | 1.223 | 1.002 | 0.9827 | 1.163 | 160-170 | 0.3742 | 1093 | 100,100 |
| 180 | 0.4066 | 0.3956 | 0.4052 | 0.4046 | 0.4097 | 0.4068 | 0.4061 | 0.4052 | 170-180 | 0.1002 | 1093 | 100,100 |
| DEG | LUMINOUS INTENSITY:cd Less than 25% Percent = 10.8 % | | | | | | | | UNIT:lm | | | |

Conical surface Flux(90deg): 498.52 lm

%lum = 45.6%
 %lamp = 45.6%

Conical surface Flux(120deg): 741.57 lm

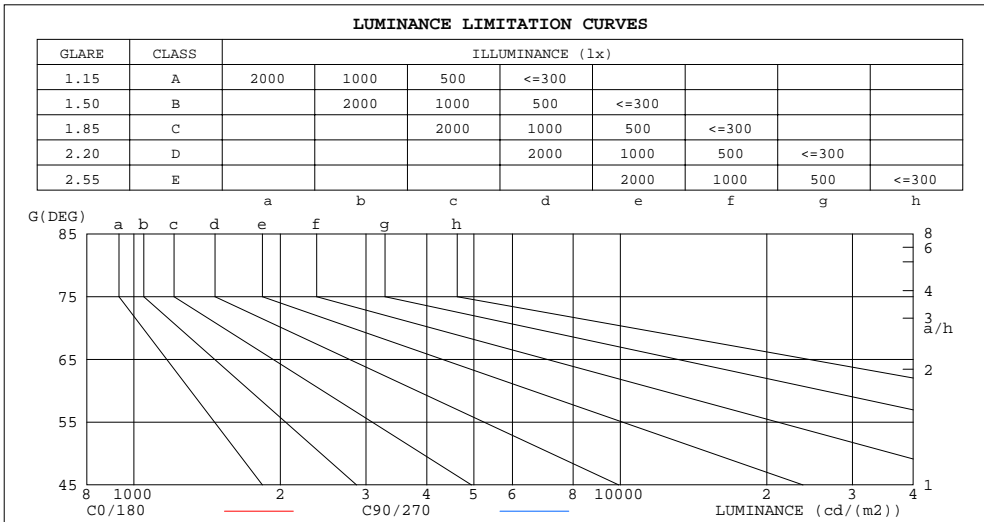
%lum = 67.9%
 %lamp = 67.9%

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature:25.3DEG
 Operators:ben
 Test Date:2018-08-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity:45%
 Test Distance:2.445m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

| | | |
|---|-----------|---------------------|
| Test:U:120.1V I:0.1302A P:15.39W PF:0.9844 Lamp Flux:1092.74x1 lm | | |
| NAME: ASD-LFMDR-12D1530-NK | TYPE:N/A | WEIGHT:N/A |
| SPEC.:N/A | DIM.: N/A | SERIAL No.:N/A |
| MFR.:ASD Lighting corp | SUR.:N/A | Shielding Angle:N/A |



| LUMINANCE cd/(m2) | | |
|-------------------|--------|---------|
| G(DEG) | C0/180 | C90/270 |
| 85 | 571964 | 539550 |
| 80 | 382499 | 361388 |
| 75 | 330384 | 313960 |
| 70 | 313519 | 299929 |
| 65 | 309253 | 297565 |
| 60 | 309597 | 299861 |
| 55 | 311310 | 302952 |
| 50 | 313396 | 306477 |
| 45 | 315242 | 309332 |

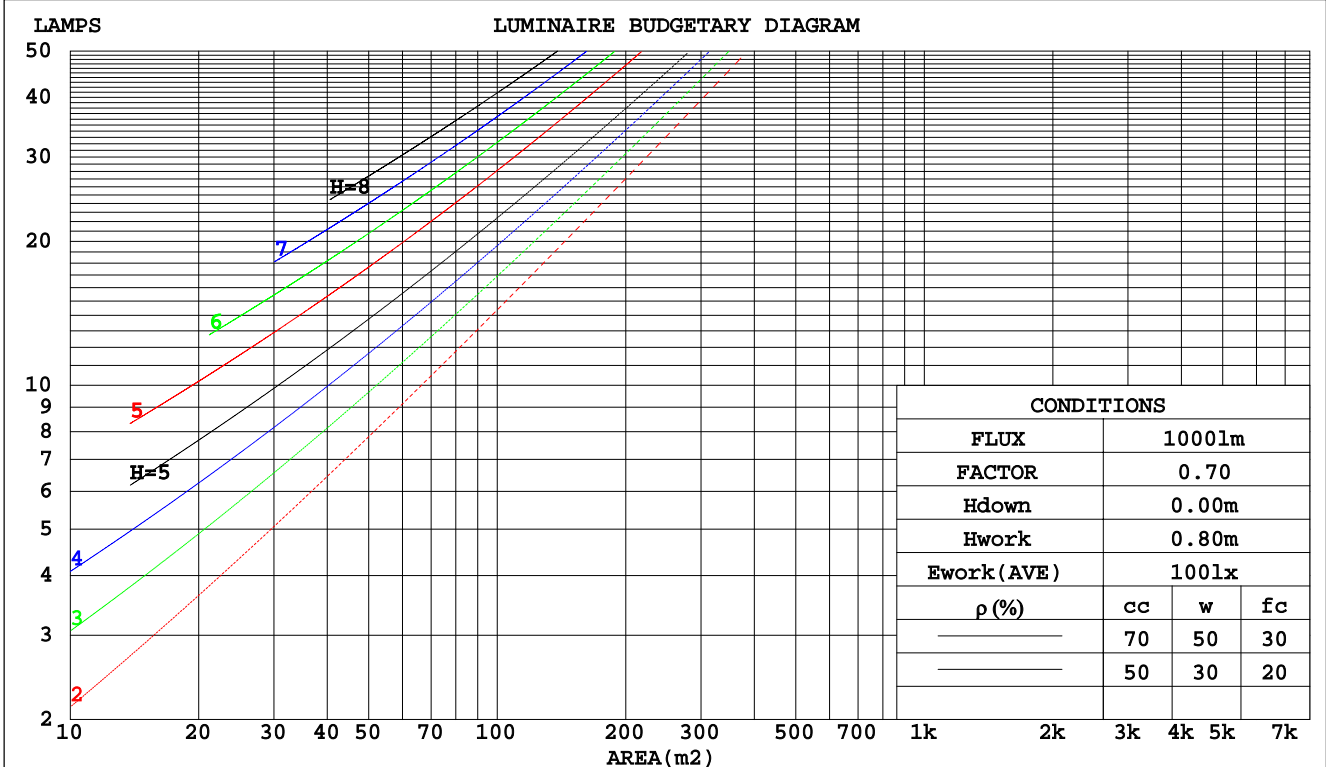
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature:25.3DEG
 Operators:ben
 Test Date:2018-08-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity:45%
 Test Distance:2.445m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| | | |
|---|-----------|---------------------|
| Test:U:120.1V I:0.1302A P:15.39W PF:0.9844 Lamp Flux:1092.74x1 lm | | |
| NAME: ASD-LFMDR-12D1530-NK | TYPE:N/A | WEIGHT:N/A |
| SPEC.:N/A | DIM.: N/A | SERIAL No.:N/A |
| MFR.: ASD Lighting corp | SUR.:N/A | Shielding Angle:N/A |

| 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 | | | | | | | | | | | | | | | | 0 |
| RCR | RCR:Room Cavity Ratio Coefficients of Utilization(CU) | | | | | | | | | | | | | | | |
| 0.0 | 1.17 | 1.17 | 1.17 | 1.14 | 1.14 | 1.14 | 1.07 | 1.07 | 1.07 | 1.01 | 1.01 | 1.01 | .95 | .95 | .95 | .93 |
| 1.0 | 1.00 | .95 | .91 | .97 | .93 | .89 | .91 | .88 | .85 | .86 | .83 | .81 | .81 | .79 | .77 | .74 |
| 2.0 | .87 | .79 | .73 | .84 | .77 | .71 | .79 | .74 | .69 | .75 | .70 | .66 | .71 | .67 | .63 | .61 |
| 3.0 | .76 | .67 | .60 | .73 | .65 | .59 | .69 | .63 | .57 | .66 | .60 | .55 | .62 | .57 | .53 | .51 |
| 4.0 | .67 | .58 | .51 | .65 | .56 | .50 | .61 | .54 | .48 | .58 | .52 | .47 | .55 | .50 | .45 | .43 |
| 5.0 | .59 | .50 | .43 | .58 | .49 | .43 | .55 | .47 | .42 | .52 | .46 | .40 | .49 | .44 | .39 | .37 |
| 6.0 | .53 | .44 | .38 | .52 | .43 | .37 | .49 | .42 | .36 | .47 | .40 | .35 | .45 | .39 | .34 | .32 |
| 7.0 | .48 | .39 | .33 | .47 | .39 | .33 | .45 | .37 | .32 | .43 | .36 | .31 | .41 | .35 | .30 | .28 |
| 8.0 | .44 | .35 | .29 | .43 | .35 | .29 | .41 | .34 | .28 | .39 | .33 | .28 | .37 | .32 | .27 | .25 |
| 9.0 | .40 | .32 | .26 | .39 | .32 | .26 | .38 | .31 | .26 | .36 | .30 | .25 | .35 | .29 | .25 | .23 |
| 10.0 | .37 | .29 | .24 | .36 | .29 | .24 | .35 | .28 | .23 | .33 | .27 | .23 | .32 | .26 | .22 | .20 |



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature:25.3DEG
 Operators:ben
 Test Date:2018-08-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity:45%
 Test Distance:2.445m [K=1.0000]
 Remarks:

WEC AND CCEC

| | | |
|---|-----------|---------------------|
| Test:U:120.1V I:0.1302A P:15.39W PF:0.9844 Lamp Flux:1092.74x1 lm | | |
| NAME: ASD-LFMDR-12D1530-NK | TYPE:N/A | WEIGHT:N/A |
| SPEC.:N/A | DIM.: N/A | SERIAL No.:N/A |
| MFR.: ASD Lighting corp | SUR.:N/A | Shielding Angle:N/A |

| 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 | .348 | .198 | .063 | .339 | .193 | .061 | .321 | .184 | .059 | .305 | .176 | .056 | .290 | .168 | .054 | |
| 2.0 | .312 | .171 | .053 | .304 | .167 | .052 | .288 | .160 | .050 | .274 | .153 | .048 | .260 | .147 | .046 | |
| 3.0 | .283 | .150 | .045 | .275 | .147 | .044 | .261 | .141 | .043 | .248 | .136 | .042 | .236 | .131 | .040 | |
| 4.0 | .258 | .134 | .039 | .251 | .131 | .039 | .238 | .126 | .038 | .226 | .122 | .037 | .215 | .117 | .036 | |
| 5.0 | .236 | .120 | .035 | .230 | .118 | .034 | .219 | .114 | .034 | .208 | .110 | .033 | .198 | .106 | .032 | |
| 6.0 | .218 | .109 | .031 | .212 | .107 | .031 | .202 | .103 | .030 | .192 | .100 | .029 | .183 | .096 | .029 | |
| 7.0 | .202 | .100 | .028 | .197 | .098 | .028 | .187 | .095 | .027 | .179 | .092 | .027 | .171 | .089 | .026 | |
| 8.0 | .188 | .092 | .026 | .183 | .090 | .026 | .175 | .087 | .025 | .167 | .085 | .024 | .159 | .082 | .024 | |
| 9.0 | .176 | .085 | .024 | .171 | .084 | .023 | .164 | .081 | .023 | .156 | .078 | .022 | .150 | .076 | .022 | |
| 10.0 | .165 | .079 | .022 | .161 | .078 | .022 | .154 | .075 | .021 | .147 | .073 | .021 | .141 | .071 | .020 | |

| 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 | .247 | .247 | .247 | .211 | .211 | .211 | .144 | .144 | .144 | .083 | .083 | .083 | .026 | .026 | .026 | |
| 1.0 | .240 | .213 | .189 | .206 | .183 | .162 | .141 | .126 | .112 | .081 | .073 | .065 | .026 | .023 | .021 | |
| 2.0 | .233 | .189 | .153 | .199 | .163 | .132 | .137 | .113 | .092 | .079 | .066 | .054 | .025 | .021 | .018 | |
| 3.0 | .225 | .172 | .130 | .193 | .149 | .113 | .132 | .103 | .079 | .076 | .060 | .047 | .025 | .020 | .015 | |
| 4.0 | .217 | .159 | .115 | .186 | .138 | .100 | .128 | .096 | .071 | .074 | .056 | .042 | .024 | .018 | .014 | |
| 5.0 | .210 | .149 | .105 | .180 | .129 | .091 | .124 | .090 | .064 | .072 | .053 | .038 | .023 | .017 | .013 | |
| 6.0 | .202 | .141 | .097 | .174 | .122 | .085 | .120 | .086 | .060 | .070 | .050 | .036 | .022 | .016 | .012 | |
| 7.0 | .195 | .134 | .092 | .168 | .116 | .080 | .116 | .082 | .057 | .067 | .048 | .034 | .022 | .016 | .011 | |
| 8.0 | .189 | .129 | .087 | .162 | .112 | .076 | .112 | .078 | .054 | .065 | .046 | .032 | .021 | .015 | .011 | |
| 9.0 | .183 | .124 | .084 | .157 | .107 | .073 | .109 | .075 | .052 | .063 | .045 | .031 | .021 | .015 | .010 | |
| 10.0 | .177 | .119 | .081 | .152 | .104 | .071 | .106 | .073 | .050 | .062 | .043 | .030 | .020 | .014 | .010 | |

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature:25.3DEG
 Operators:ben
 Test Date:2018-08-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity:45%
 Test Distance:2.445m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

| | | | | | | | | | | |
|---|------------------|------|------|------|-----------|----------------|------|---------------------|------|------|
| Test:U:120.1V I:0.1302A P:15.39W PF:0.9844 Lamp Flux:1092.74x1 lm | | | | | | | | | | |
| NAME: ASD-LFMDR-12D1530-NK | | | | | TYPE:N/A | | | WEIGHT:N/A | | |
| SPEC.:N/A | | | | | DIM.: N/A | | | SERIAL No.:N/A | | |
| MFR.: ASD Lighting corp | | | | | SUR.:N/A | | | Shielding Angle:N/A | | |
| 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 | 32.3 | 33.8 | 32.7 | 34.1 | 34.5 | 32.2 | 33.7 | 32.6 | 34.0 | 34.4 |
| 3H | 34.1 | 35.5 | 34.5 | 35.8 | 36.2 | 33.9 | 35.3 | 34.3 | 35.7 | 36.0 |
| 4H | 35.0 | 36.2 | 35.4 | 36.6 | 37.0 | 34.8 | 36.0 | 35.2 | 36.4 | 36.8 |
| 6H | 35.8 | 37.0 | 36.3 | 37.4 | 37.9 | 35.6 | 36.8 | 36.0 | 37.2 | 37.6 |
| 8H | 36.2 | 37.4 | 36.7 | 37.8 | 38.3 | 36.0 | 37.2 | 36.5 | 37.6 | 38.0 |
| 12H | 36.7 | 37.9 | 37.2 | 38.3 | 38.8 | 36.5 | 37.6 | 36.9 | 38.0 | 38.5 |
| 4H 2H | 33.0 | 34.2 | 33.4 | 34.6 | 35.0 | 32.9 | 34.1 | 33.3 | 34.5 | 34.9 |
| 3H | 34.9 | 36.1 | 35.4 | 36.5 | 37.0 | 34.8 | 35.9 | 35.3 | 36.4 | 36.8 |
| 4H | 35.9 | 37.0 | 36.4 | 37.4 | 37.9 | 35.8 | 36.8 | 36.3 | 37.3 | 37.8 |
| 6H | 37.0 | 37.9 | 37.5 | 38.4 | 38.9 | 36.8 | 37.7 | 37.3 | 38.2 | 38.7 |
| 8H | 37.5 | 38.4 | 38.0 | 38.9 | 39.4 | 37.3 | 38.2 | 37.8 | 38.7 | 39.2 |
| 12H | 38.1 | 38.9 | 38.7 | 39.4 | 40.0 | 37.9 | 38.7 | 38.4 | 39.2 | 39.7 |
| 8H 4H | 36.3 | 37.2 | 36.8 | 37.7 | 38.2 | 36.2 | 37.0 | 36.7 | 37.5 | 38.1 |
| 6H | 37.6 | 38.3 | 38.1 | 38.8 | 39.4 | 37.4 | 38.1 | 38.0 | 38.7 | 39.3 |
| 8H | 38.3 | 38.9 | 38.9 | 39.5 | 40.1 | 38.1 | 38.7 | 38.7 | 39.3 | 39.9 |
| 12H | 39.1 | 39.7 | 39.7 | 40.2 | 40.9 | 38.9 | 39.4 | 39.5 | 40.0 | 40.6 |
| 12H 4H | 36.4 | 37.2 | 36.9 | 37.7 | 38.2 | 36.2 | 37.0 | 36.8 | 37.5 | 38.1 |
| 6H | 37.7 | 38.4 | 38.3 | 38.9 | 39.5 | 37.6 | 38.2 | 38.1 | 38.8 | 39.4 |
| 8H | 38.5 | 39.1 | 39.1 | 39.7 | 40.3 | 38.3 | 38.9 | 38.9 | 39.5 | 40.1 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S = 1.0H | + 0.1 / - 0.1 | | | | | + 0.1 / - 0.2 | | | | |
| 1.5H | + 0.2 / - 0.3 | | | | | + 0.2 / - 0.3 | | | | |
| 2.0H | + 0.1 / - 0.3 | | | | | + 0.1 / - 0.3 | | | | |

CIE Pub.117 Corrected 1093 lm Total Lamp Luminous Flux.(8log(F/F0) = 0.3)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature:25.3DEG
 Operators:ben
 Test Date:2018-08-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity:45%
 Test Distance:2.445m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

| | | |
|---|-----------|---------------------|
| Test:U:120.1V I:0.1302A P:15.39W PF:0.9844 Lamp Flux:1092.74x1 lm | | |
| NAME: ASD-LFMDR-12D1530-NK | TYPE:N/A | WEIGHT:N/A |
| SPEC.:N/A | DIM.: N/A | SERIAL No.:N/A |
| MFR.: ASD Lighting corp | SUR.:N/A | Shielding Angle:N/A |

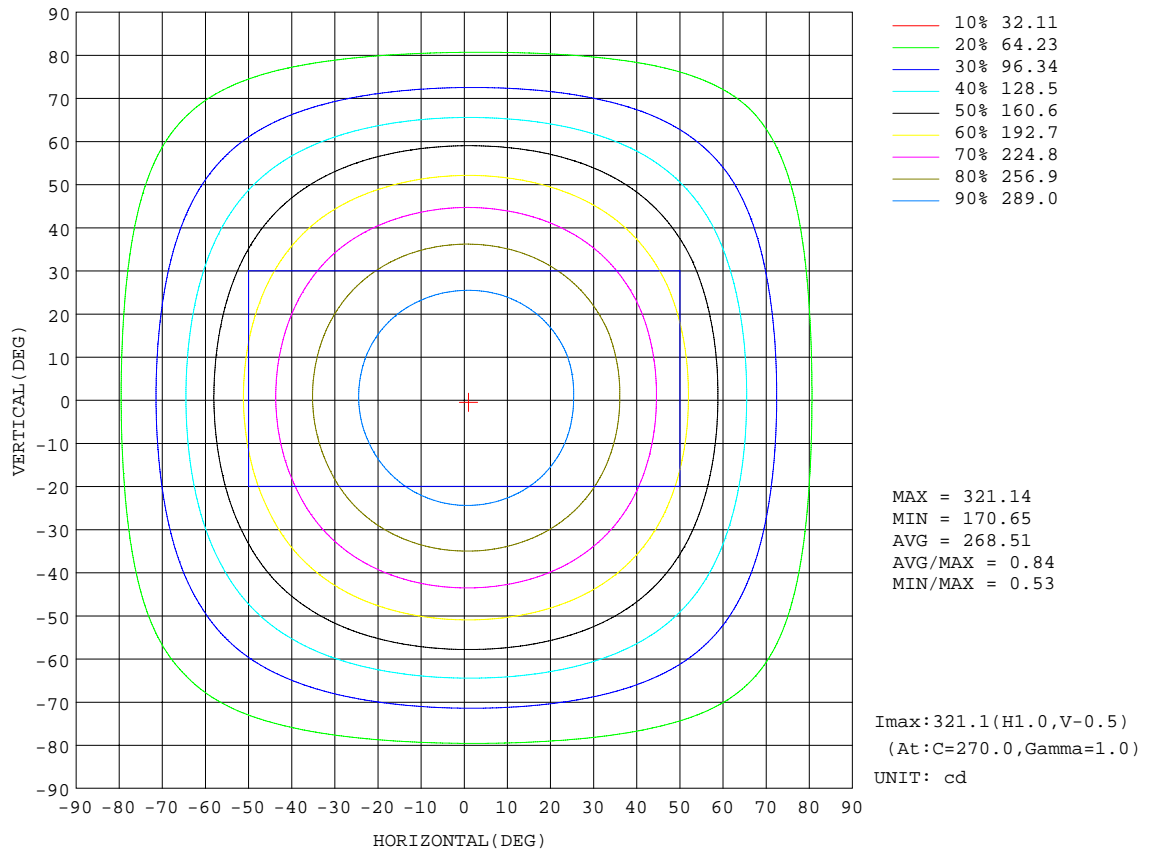
| REFLECTANCE | | | | | | | | | | |
|----------------------------------|---|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0 |
| Walls | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0 |
| Working plane | 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 | 53 | 41 | 34 | 52 | 41 | 34 | 51 | 40 | 34 | 27 |
| 0.80 | 63 | 51 | 43 | 62 | 50 | 43 | 60 | 49 | 42 | 35 |
| 1.00 | 71 | 59 | 51 | 70 | 58 | 51 | 67 | 59 | 50 | 42 |
| 1.25 | 78 | 67 | 59 | 76 | 66 | 58 | 73 | 64 | 57 | 49 |
| 1.50 | 83 | 72 | 64 | 81 | 71 | 64 | 77 | 69 | 62 | 53 |
| 2.00 | 90 | 80 | 73 | 88 | 79 | 72 | 83 | 76 | 70 | 61 |
| 2.50 | 94 | 85 | 78 | 92 | 84 | 77 | 87 | 80 | 75 | 65 |
| 3.00 | 98 | 90 | 83 | 95 | 88 | 82 | 90 | 84 | 79 | 68 |
| 4.00 | 102 | 95 | 90 | 99 | 93 | 88 | 94 | 89 | 84 | 73 |
| 5.00 | 105 | 99 | 94 | 102 | 96 | 92 | 96 | 92 | 88 | 76 |
| 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: 10.0deg/s
 Temperature:25.3DEG
 Operators:ben
 Test Date:2018-08-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity:45%
 Test Distance:2.445m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

| | | |
|---|-----------|---------------------|
| Test:U:120.1V I:0.1302A P:15.39W PF:0.9844 Lamp Flux:1092.74x1 lm | | |
| NAME: ASD-LFMDR-12D1530-NK | TYPE:N/A | WEIGHT:N/A |
| SPEC.:N/A | DIM.: N/A | SERIAL No.:N/A |
| MFR.: ASD Lighting corp | SUR.:N/A | Shielding Angle:N/A |



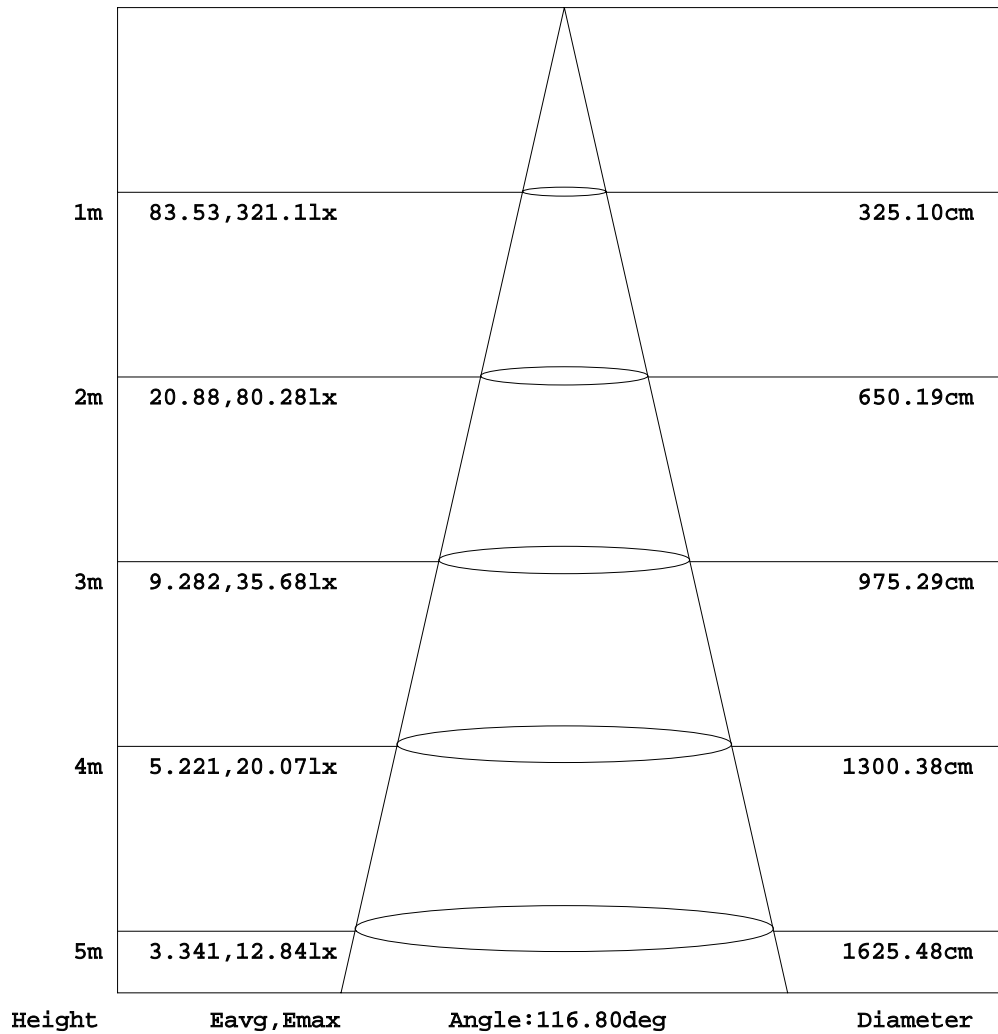
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature:25.3DEG
 Operators:ben
 Test Date:2018-08-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity:45%
 Test Distance:2.445m [K=1.0000]
 Remarks:

AAI Figure

| | | |
|---|-----------|---------------------|
| Test:U:120.1V I:0.1302A P:15.39W PF:0.9844 Lamp Flux:1092.74x1 lm | | |
| NAME: ASD-LFMDR-12D1530-NK | TYPE:N/A | WEIGHT:N/A |
| SPEC.:N/A | DIM.: N/A | SERIAL No.:N/A |
| MFR.: ASD Lighting corp | SUR.:N/A | Shielding Angle:N/A |

Flux out:726.9 lm



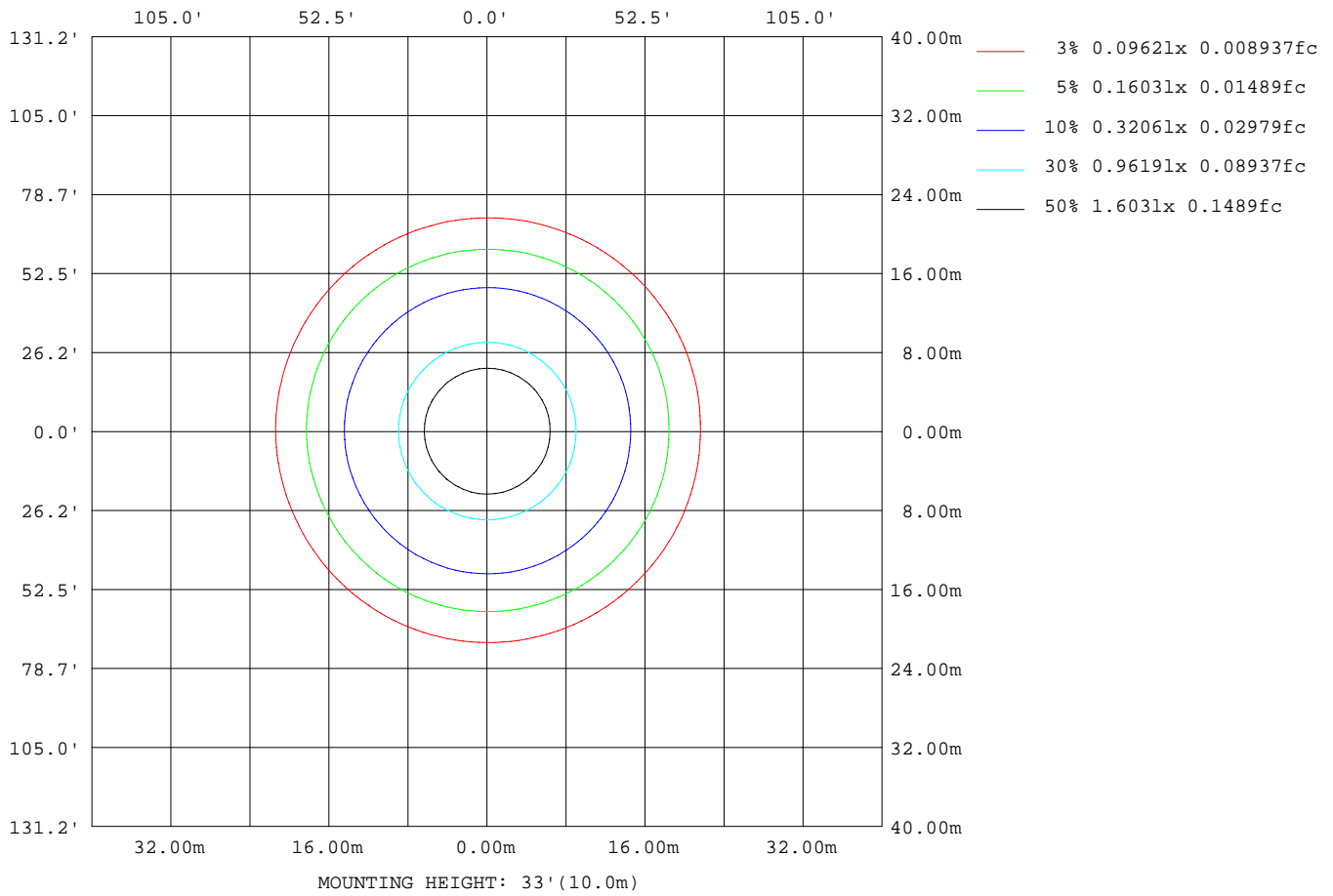
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature:25.3DEG
 Operators:ben
 Test Date:2018-08-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity:45%
 Test Distance:2.445m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

| | | |
|---|-----------|---------------------|
| Test:U:120.1V I:0.1302A P:15.39W PF:0.9844 Lamp Flux:1092.74x1 lm | | |
| NAME: ASD-LFMDR-12D1530-NK | TYPE:N/A | WEIGHT:N/A |
| SPEC.:N/A | DIM.: N/A | SERIAL No.:N/A |
| MFR.:ASD Lighting corp | SUR.:N/A | Shielding Angle:N/A |



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature:25.3DEG
 Operators:ben
 Test Date:2018-08-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity:45%
 Test Distance:2.445m [K=1.0000]
 Remarks:

LED Avg.L Report

| | | |
|---|-----------|---------------------|
| Test:U:120.1V I:0.1302A P:15.39W PF:0.9844 Lamp Flux:1092.74x1 lm | | |
| NAME: ASD-LFMDR-12D1530-NK | TYPE:N/A | WEIGHT:N/A |
| SPEC.:N/A | DIM.: N/A | SERIAL No.:N/A |
| MFR.: OASD Lighting corp | SUR.:N/A | Shielding Angle:N/A |

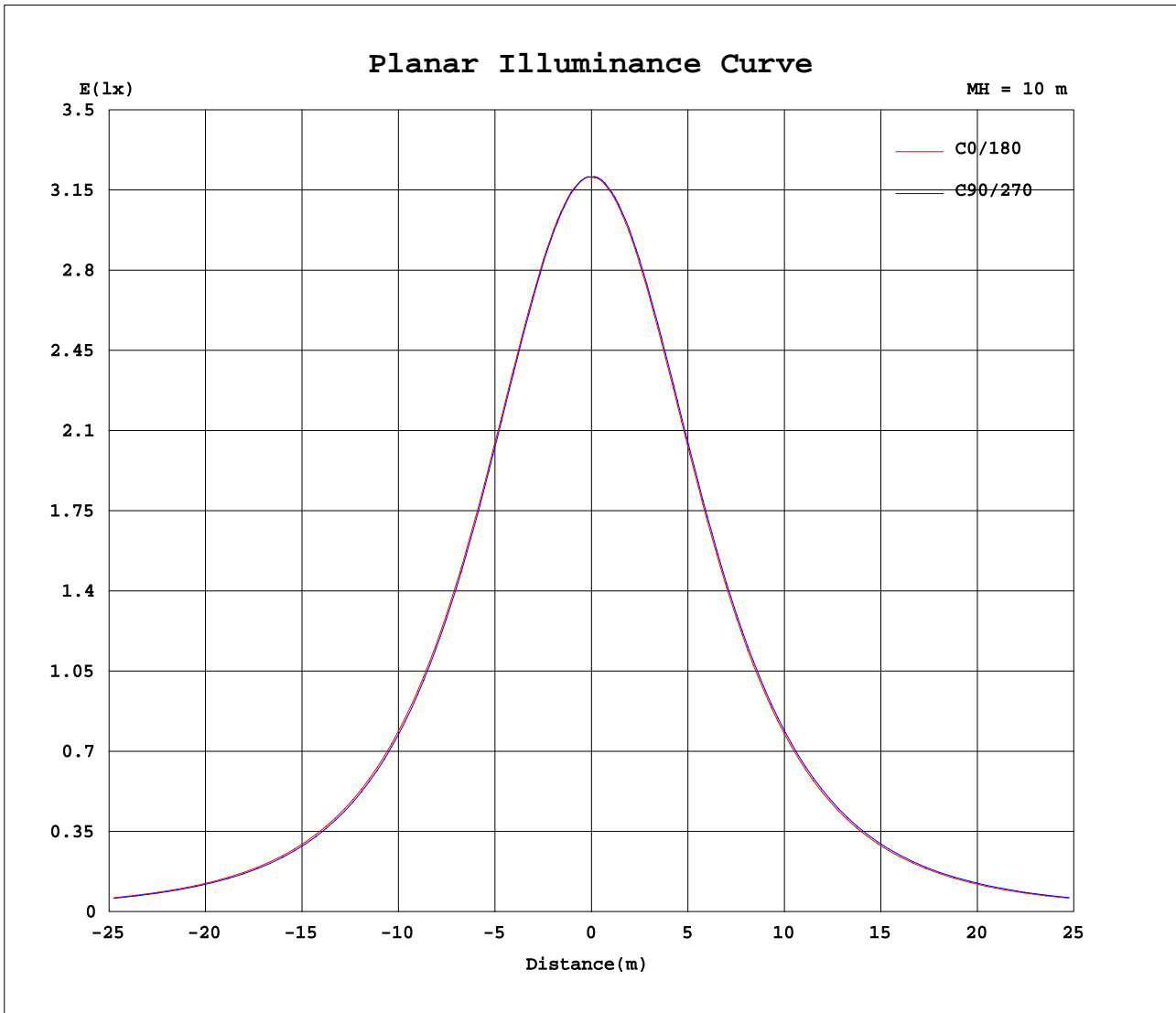
| AvgL | cd/m2 |
|----------------|--------|
| L_0~180(65)av | 303964 |
| L_0~180(75)av | 322385 |
| L_0~180(85)av | 556787 |
| L_90~270(65)av | 304321 |
| L_90~270(75)av | 322701 |
| L_90~270(85)av | 559535 |
| L_45(65)av | 304273 |
| L_45(75)av | 322115 |
| L_45(85)av | 557615 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature:25.3DEG
 Operators:ben
 Test Date:2018-08-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity:45%
 Test Distance:2.445m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: 10.0deg/s
 Temperature: 25.3DEG
 Operators: ben
 Test Date: 2018-08-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.351
 Humidity: 45%
 Test Distance: 2.445m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|---|-----------|---------------------|
| Test:U:120.1V I:0.1302A P:15.39W PF:0.9844 Lamp Flux:1092.74x1 lm | | |
| NAME: ASD-LFMDR-12D1530-NK | TYPE:N/A | WEIGHT:N/A |
| SPEC.:N/A | DIM.: N/A | SERIAL No.:N/A |
| MFR.: ASD Lighting corp | SUR.:N/A | Shielding Angle:N/A |

Table--1

UNIT: cd

| 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 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | 321 | | | |
| 5 | 320 | 320 | 319 | 319 | 319 | 319 | 319 | 319 | 319 | 319 | 320 | 320 | 320 | 320 | 320 | 320 | | | |
| 10 | 316 | 316 | 315 | 315 | 315 | 315 | 315 | 315 | 315 | 315 | 316 | 316 | 316 | 316 | 317 | 317 | | | |
| 15 | 310 | 309 | 309 | 309 | 309 | 308 | 308 | 308 | 309 | 309 | 309 | 310 | 310 | 310 | 310 | 311 | | | |
| 20 | 301 | 301 | 300 | 300 | 300 | 299 | 298 | 298 | 299 | 300 | 300 | 301 | 302 | 302 | 302 | 302 | | | |
| 25 | 290 | 289 | 289 | 288 | 288 | 287 | 287 | 287 | 288 | 288 | 289 | 289 | 290 | 291 | 291 | 291 | | | |
| 30 | 276 | 276 | 275 | 274 | 273 | 273 | 272 | 272 | 274 | 274 | 275 | 276 | 277 | 277 | 278 | 278 | | | |
| 35 | 260 | 260 | 259 | 258 | 257 | 256 | 256 | 256 | 258 | 258 | 259 | 260 | 261 | 261 | 262 | 262 | | | |
| 40 | 243 | 242 | 241 | 240 | 239 | 238 | 238 | 238 | 240 | 240 | 241 | 242 | 243 | 244 | 244 | 245 | | | |
| 45 | 223 | 222 | 221 | 220 | 219 | 218 | 217 | 218 | 220 | 220 | 222 | 222 | 224 | 224 | 225 | 225 | | | |
| 50 | 202 | 200 | 199 | 198 | 197 | 196 | 196 | 196 | 198 | 199 | 200 | 201 | 202 | 203 | 204 | 204 | | | |
| 55 | 179 | 178 | 176 | 175 | 174 | 173 | 173 | 173 | 175 | 176 | 177 | 178 | 180 | 180 | 181 | 181 | | | |
| 60 | 155 | 154 | 152 | 151 | 150 | 149 | 149 | 149 | 151 | 152 | 153 | 154 | 156 | 157 | 157 | 157 | | | |
| 65 | 131 | 130 | 128 | 127 | 126 | 125 | 124 | 124 | 126 | 127 | 129 | 130 | 131 | 132 | 133 | 133 | | | |
| 70 | 107 | 106 | 105 | 104 | 103 | 102 | 101 | 101 | 103 | 104 | 105 | 107 | 108 | 108 | 109 | 109 | | | |
| 75 | 85.6 | 84.3 | 82.9 | 82.0 | 81.3 | 80.5 | 79.7 | 79.5 | 81.3 | 82.3 | 83.6 | 84.8 | 85.7 | 86.5 | 87.2 | 87.5 | | | |
| 80 | 66.5 | 65.3 | 63.9 | 63.3 | 62.8 | 62.1 | 61.4 | 61.2 | 62.7 | 63.6 | 64.8 | 65.8 | 66.6 | 67.3 | 68.1 | 68.2 | | | |
| 85 | 49.9 | 48.9 | 48.2 | 47.6 | 47.1 | 46.5 | 45.9 | 45.6 | 47.2 | 47.9 | 48.8 | 49.8 | 50.5 | 51.1 | 51.5 | 51.7 | | | |
| 90 | 36.5 | 35.9 | 35.3 | 34.9 | 34.6 | 34.2 | 33.5 | 33.1 | 34.5 | 35.1 | 35.9 | 36.5 | 37.0 | 37.3 | 37.8 | 38.1 | | | |
| 95 | 26.2 | 25.6 | 25.2 | 25.0 | 25.1 | 24.7 | 24.0 | 23.6 | 24.6 | 25.2 | 25.5 | 26.1 | 26.1 | 26.4 | 26.8 | 27.1 | | | |
| 100 | 19.6 | 19.3 | 18.8 | 18.9 | 18.8 | 18.5 | 18.4 | 18.0 | 18.5 | 18.9 | 18.8 | 19.4 | 19.3 | 19.4 | 20.0 | 20.0 | | | |
| 105 | 17.3 | 16.9 | 16.4 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.3 | 16.4 | 16.1 | 16.4 | 16.5 | 16.7 | 17.2 | 17.4 | | | |
| 110 | 17.1 | 16.7 | 16.2 | 16.1 | 16.2 | 16.3 | 16.2 | 16.1 | 16.2 | 16.3 | 16.1 | 16.3 | 16.4 | 16.6 | 17.0 | 17.3 | | | |
| 115 | 16.2 | 15.7 | 15.3 | 15.3 | 15.5 | 15.6 | 15.4 | 15.3 | 15.4 | 15.6 | 15.6 | 15.7 | 15.7 | 15.9 | 16.2 | 16.5 | | | |
| 120 | 14.0 | 13.6 | 13.4 | 15.8 | 13.7 | 13.8 | 15.4 | 13.6 | 13.8 | 13.9 | 14.0 | 14.4 | 14.1 | 14.3 | 15.5 | 14.5 | | | |
| 125 | 11.5 | 11.2 | 11.5 | 11.7 | 11.4 | 11.6 | 11.6 | 11.7 | 11.5 | 11.8 | 11.8 | 13.9 | 11.7 | 11.9 | 15.4 | 12.2 | | | |
| 130 | 9.12 | 10.1 | 9.55 | 8.64 | 9.76 | 9.25 | 9.28 | 11.2 | 9.65 | 9.43 | 9.48 | 9.29 | 9.24 | 9.38 | 10.4 | 9.68 | | | |
| 135 | 6.78 | 7.46 | 7.52 | 5.97 | 7.79 | 7.03 | 7.45 | 10.6 | 8.78 | 7.00 | 7.87 | 6.68 | 6.61 | 7.14 | 6.77 | 6.89 | | | |
| 140 | 4.40 | 4.20 | 3.67 | 3.66 | 5.48 | 4.89 | 4.44 | 4.98 | 4.96 | 5.57 | 5.58 | 4.13 | 4.11 | 4.70 | 4.24 | 5.84 | | | |
| 145 | 2.53 | 2.37 | 2.25 | 2.31 | 4.15 | 3.40 | 2.92 | 2.90 | 2.73 | 2.55 | 2.70 | 2.49 | 2.42 | 3.01 | 3.86 | 2.59 | | | |
| 150 | 1.35 | 2.08 | 1.46 | 1.44 | 1.90 | 2.92 | 3.22 | 1.91 | 1.65 | 1.51 | 1.60 | 1.45 | 1.37 | 2.29 | 3.02 | 1.57 | | | |
| 155 | 0.99 | 1.42 | 1.38 | 1.31 | 1.39 | 2.57 | 2.66 | 1.46 | 1.12 | 1.02 | 1.00 | 1.05 | 2.01 | 1.12 | 2.68 | 1.19 | | | |
| 160 | 1.03 | 2.06 | 1.54 | 1.43 | 3.56 | 1.18 | 1.67 | 1.50 | 2.04 | 1.13 | 1.03 | 0.78 | 1.06 | 2.03 | 1.25 | 1.25 | | | |
| 165 | 0.54 | 1.56 | 1.52 | 1.55 | 2.15 | 1.56 | 1.14 | 1.50 | 1.19 | 1.17 | 1.04 | 0.84 | 0.69 | 1.10 | 1.27 | 1.25 | | | |
| 170 | 0.50 | 1.53 | 1.52 | 2.05 | 1.44 | 1.58 | 2.30 | 1.51 | 1.22 | 1.22 | 1.00 | 0.64 | 0.98 | 0.88 | 1.16 | 1.10 | | | |
| 175 | 0.47 | 0.97 | 1.07 | 1.03 | 1.04 | 1.20 | 0.94 | 1.07 | 0.92 | 0.92 | 0.65 | 0.63 | 1.05 | 0.70 | 2.28 | 1.28 | | | |
| 180 | 0.41 | 0.41 | 0.40 | 0.41 | 0.41 | 0.40 | 0.40 | 0.40 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | | | |

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 Operators:ben
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γ Range: 0 - 180DEG
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 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.351
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