



| | | |
|---------------------|---------|--------------------------|
| Light Output Ratio: | 100.0% | |
| Luminaire Power: | 14.09 W | |
| SHR Nominal: | 0.50 | Calculated using the TM5 |
| SHR Maximum: | 0.50 | fine grid method. |

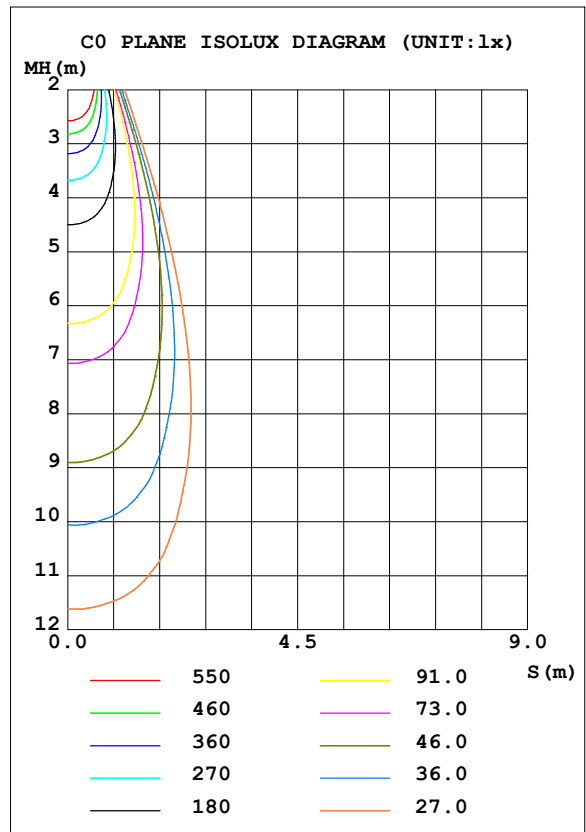
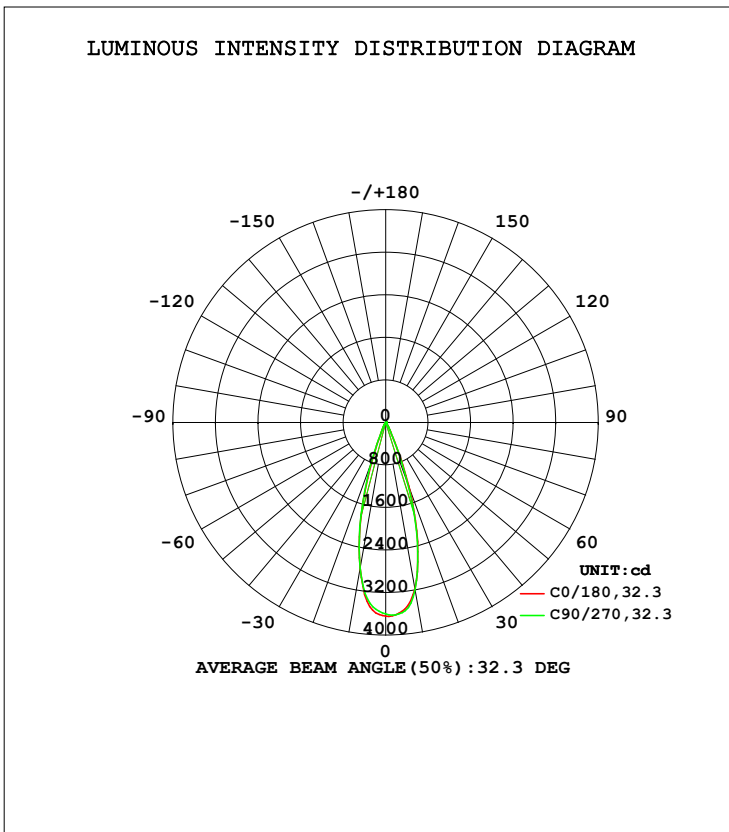
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-06-26

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

| | | |
|--|----------|-------------------|
| Test:U:42.000V I:0.3354A P:14.087W PF:1.0000 Freq:49.99Hz Lamp Flux:1083.24x1 lm | | |
| NAME: LLL803 15.7W | TYPE:LED | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.:200662 |
| MFR.: Titanic | SUR.: | Shielding Angle: |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 76.90 lm/W | | | |
|-------------------|---------|----------------------------------|--------|---------------------|-----------|
| MODEL | CXA1512 | I _{max} (cd) | 3647 | S/MH (C0/180) | 0.47 |
| NOMINAL POWER (W) | 13.5 | LOR (%) | 100.0 | S/MH (C90/270) | 0.48 |
| RATED VOLTAGE (V) | 42 | TOTAL FLUX (lm) | 1083.2 | η UP, DN (C0-180) | 0.0, 56.7 |
| NOMINAL FLUX (lm) | 1083.24 | CIE CLASS | DIRECT | η UP, DN (C180-360) | 0.0, 43.3 |
| LAMPS INSIDE | 1 | η up (%) | 0.0 | CIBSE SHR NOM | 0.50 |
| TEST VOLTAGE (V) | 42 | η down (%) | 100.0 | CIBSE SHR MAX | 0.50 |

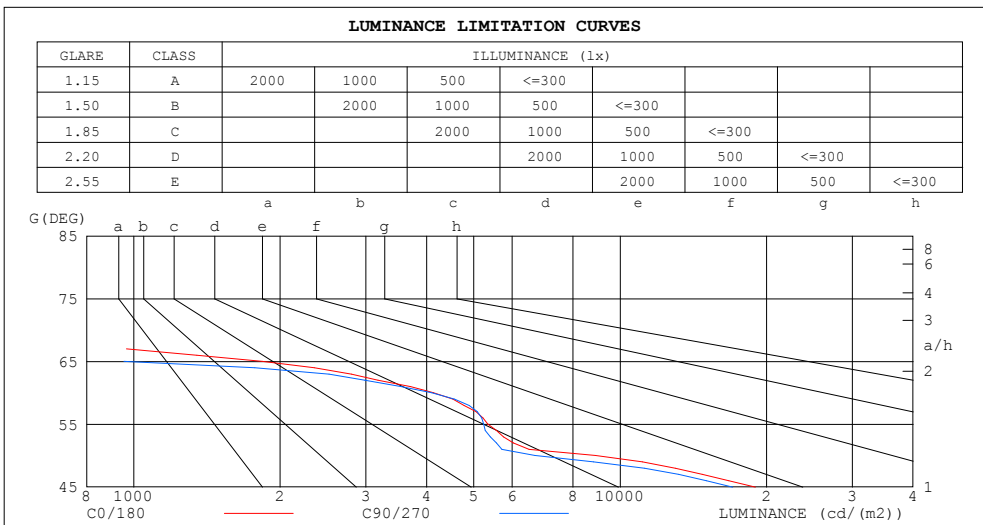


C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2021-06-26

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.00.421
 Humidity: 65.0%
 Test Distance: 10.000m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

| | | |
|--|----------|-------------------|
| Test:U:42.000V I:0.3354A P:14.087W PF:1.0000 Freq:49.99Hz Lamp Flux:1083.24x1 lm | | |
| NAME: LLL803 15.7W | TYPE:LED | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.:200662 |
| MFR.: Titanic | SUR.: | Shielding Angle: |



| LUMINANCE cd/(m2) | | |
|-------------------|--------|---------|
| G (DEG) | C0/180 | C90/270 |
| 85 | 0 | 0 |
| 80 | 41 | 0 |
| 75 | 164 | 0 |
| 70 | 520 | 185 |
| 65 | 1836 | 954 |
| 60 | 4132 | 4092 |
| 55 | 5344 | 5240 |
| 50 | 8888 | 6674 |
| 45 | 18971 | 17037 |

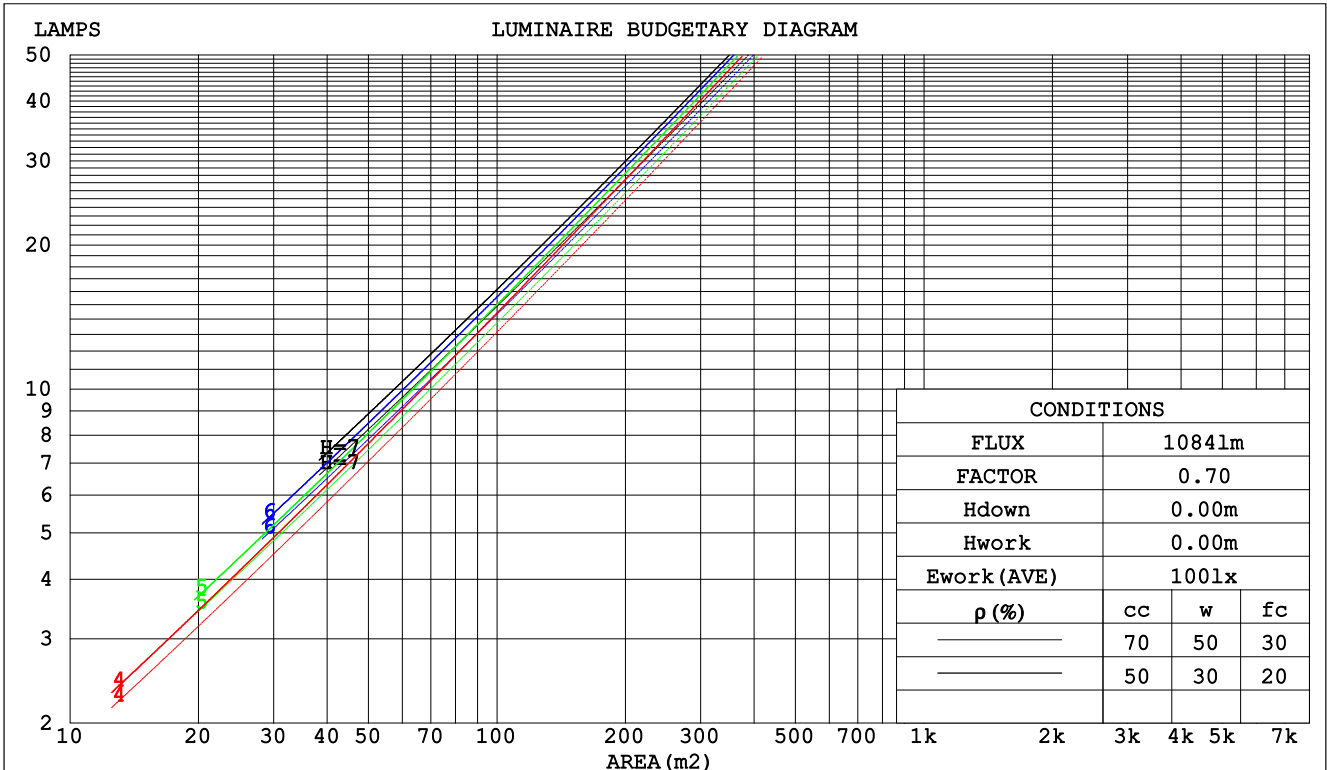
C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-06-26

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| | | |
|--|----------|-------------------|
| Test:U:42.000V I:0.3354A P:14.087W PF:1.0000 Freq:49.99Hz Lamp Flux:1083.24x1 lm | | |
| NAME: LLL803 15.7W | TYPE:LED | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.:200662 |
| MFR.: Titanic | SUR.: | Shielding Angle: |

| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|-----|
| | pw | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| pfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | 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 | 1.13 | 1.11 | 1.09 | 1.11 | 1.09 | 1.07 | 1.07 | 1.05 | 1.04 | 1.03 | 1.02 | 1.01 | .00 | .99 | .98 | .96 |
| 2.0 | 1.07 | 1.04 | 1.02 | 1.06 | 1.03 | 1.01 | 1.03 | 1.00 | .98 | .00 | .98 | .96 | .97 | .96 | .94 | .93 |
| 3.0 | 1.03 | .99 | .96 | 1.01 | .98 | .95 | .99 | .96 | .94 | .97 | .94 | .92 | .94 | .93 | .91 | .90 |
| 4.0 | .98 | .94 | .91 | .97 | .94 | .91 | .95 | .92 | .90 | .94 | .91 | .89 | .92 | .90 | .88 | .87 |
| 5.0 | .95 | .90 | .87 | .94 | .90 | .87 | .92 | .89 | .86 | .91 | .88 | .86 | .89 | .87 | .85 | .84 |
| 6.0 | .91 | .87 | .84 | .91 | .87 | .84 | .89 | .86 | .83 | .88 | .85 | .83 | .87 | .84 | .82 | .81 |
| 7.0 | .88 | .84 | .81 | .87 | .83 | .81 | .86 | .83 | .80 | .85 | .82 | .80 | .84 | .82 | .79 | .78 |
| 8.0 | .85 | .81 | .78 | .85 | .81 | .78 | .84 | .80 | .78 | .83 | .80 | .77 | .82 | .79 | .77 | .76 |
| 9.0 | .83 | .78 | .75 | .82 | .78 | .75 | .81 | .78 | .75 | .81 | .77 | .75 | .80 | .77 | .75 | .74 |
| 10.0 | .80 | .76 | .73 | .80 | .76 | .73 | .79 | .75 | .73 | .78 | .75 | .73 | .78 | .75 | .73 | .72 |



C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-06-26

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

| | | | | | | | | | | |
|--|------------------|------|------|------|----------|----------------|------|-------------------|------|------|
| Test:U:42.000V I:0.3354A P:14.087W PF:1.0000 Freq:49.99Hz Lamp Flux:1083.24x1 lm | | | | | | | | | | |
| NAME: LLL803 15.7W | | | | | TYPE:LED | | | WEIGHT: | | |
| SPEC.: | | | | | DIM.: | | | SERIAL No.:200662 | | |
| MFR.: Titanic | | | | | 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 | 13.3 | 14.0 | 13.5 | 14.2 | 14.3 | 13.2 | 13.9 | 13.4 | 14.0 | 14.2 |
| 3H | 13.2 | 13.8 | 13.4 | 14.0 | 14.2 | 13.1 | 13.7 | 13.3 | 13.9 | 14.0 |
| 4H | 13.1 | 13.7 | 13.4 | 13.9 | 14.1 | 13.0 | 13.6 | 13.2 | 13.8 | 14.0 |
| 6H | 13.0 | 13.6 | 13.3 | 13.8 | 14.1 | 12.9 | 13.4 | 13.2 | 13.7 | 13.9 |
| 8H | 13.0 | 13.5 | 13.3 | 13.8 | 14.0 | 12.8 | 13.4 | 13.1 | 13.6 | 13.9 |
| 12H | 12.9 | 13.5 | 13.2 | 13.7 | 14.0 | 12.8 | 13.3 | 13.1 | 13.6 | 13.8 |
| 4H 2H | 13.1 | 13.7 | 13.4 | 13.9 | 14.1 | 13.0 | 13.6 | 13.3 | 13.8 | 14.0 |
| 3H | 13.0 | 13.5 | 13.3 | 13.7 | 14.0 | 12.8 | 13.3 | 13.1 | 13.6 | 13.9 |
| 4H | 12.9 | 13.3 | 13.2 | 13.6 | 13.9 | 12.7 | 13.2 | 13.1 | 13.5 | 13.8 |
| 6H | 12.8 | 13.2 | 13.1 | 13.5 | 13.9 | 12.6 | 13.0 | 13.0 | 13.4 | 13.7 |
| 8H | 12.7 | 13.1 | 13.1 | 13.5 | 13.8 | 12.6 | 13.0 | 13.0 | 13.3 | 13.7 |
| 12H | 12.7 | 13.0 | 13.1 | 13.4 | 13.8 | 12.5 | 12.9 | 12.9 | 13.2 | 13.6 |
| 8H 4H | 12.7 | 13.1 | 13.1 | 13.5 | 13.8 | 12.6 | 13.0 | 13.0 | 13.3 | 13.7 |
| 6H | 12.6 | 12.9 | 13.0 | 13.3 | 13.7 | 12.5 | 12.8 | 12.9 | 13.2 | 13.6 |
| 8H | 12.5 | 12.8 | 13.0 | 13.2 | 13.7 | 12.4 | 12.7 | 12.8 | 13.1 | 13.5 |
| 12H | 12.5 | 12.7 | 12.9 | 13.2 | 13.6 | 12.3 | 12.6 | 12.8 | 13.0 | 13.5 |
| 12H 4H | 12.7 | 13.0 | 13.1 | 13.4 | 13.8 | 12.5 | 12.9 | 12.9 | 13.2 | 13.6 |
| 6H | 12.5 | 12.8 | 13.0 | 13.2 | 13.7 | 12.4 | 12.7 | 12.8 | 13.1 | 13.5 |
| 8H | 12.5 | 12.7 | 12.9 | 13.2 | 13.6 | 12.3 | 12.6 | 12.8 | 13.0 | 13.5 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S = 1.0H | + 3.6 / - 9.3 | | | | | + 3.6 / - 9.1 | | | | |
| 1.5H | + 5.9 / - 7.6 | | | | | + 5.8 / - 7.9 | | | | |
| 2.0H | + 5.7 / - 6.1 | | | | | + 5.4 / - 6.2 | | | | |

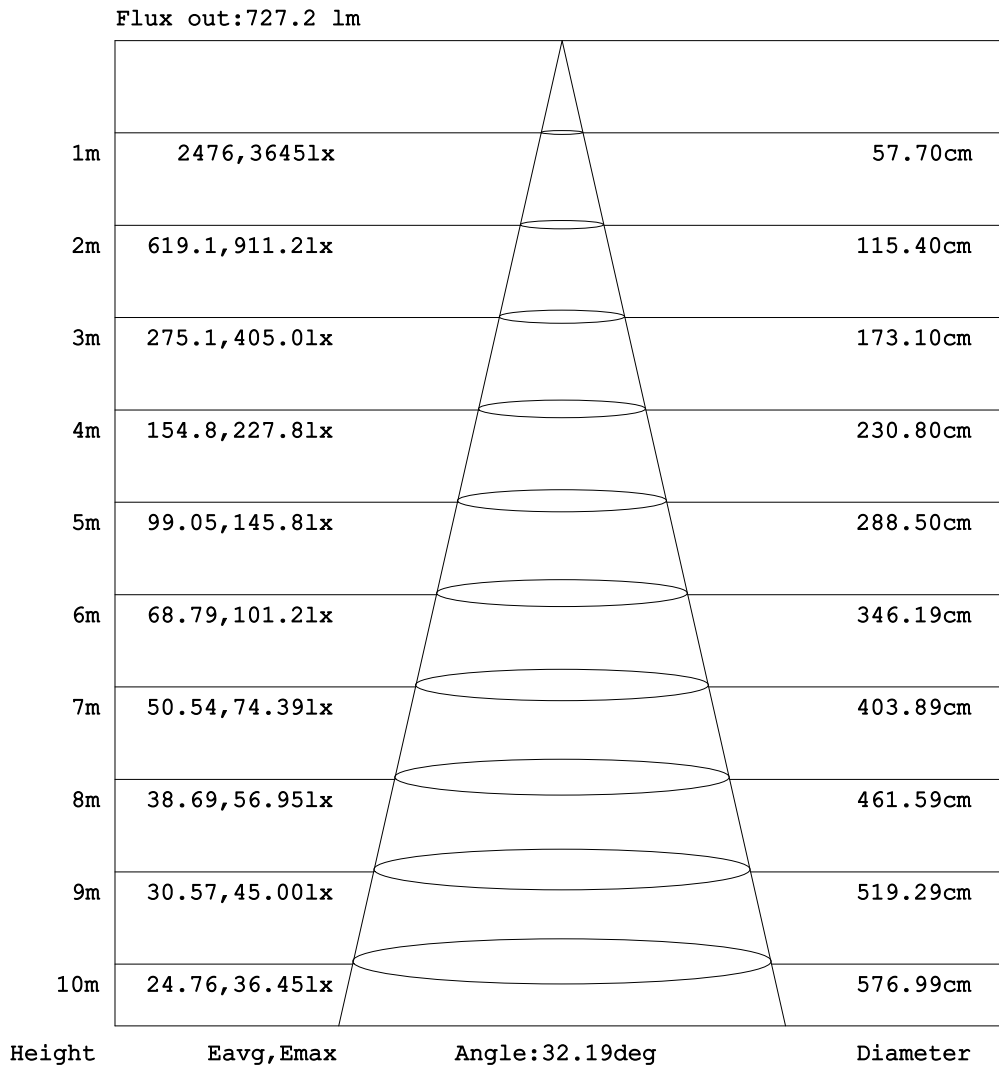
CIE Pub.117, 1083 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 0.3)
 Area: 0.001 m2

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-06-26

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

AAI Figure

| | | |
|--|----------|-------------------|
| Test:U:42.000V I:0.3354A P:14.087W PF:1.0000 Freq:49.99Hz Lamp Flux:1083.24x1 lm | | |
| NAME: LLL803 15.7W | TYPE:LED | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.:200662 |
| MFR.: Titanic | 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: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2021-06-26

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.421
 Humidity:65.0%
 Test Distance:10.000m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|--|----------|-------------------|
| Test:U:42.000V I:0.3354A P:14.087W PF:1.0000 Freq:49.99Hz Lamp Flux:1083.24x1 lm | | |
| NAME: LLL803 15.7W | TYPE:LED | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.:200662 |
| MFR.: Titanic | SUR.: | Shielding Angle: |

Table--1

UNIT: cd

| C (DEG) γ (DEG) | 0 | 90 | 180 | 270 | | | | | | | | | | | | | | |
|--------------------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0 | 3642 | 3603 | 3642 | 3603 | | | | | | | | | | | | | | |
| 5 | 3568 | 3590 | 3476 | 3417 | | | | | | | | | | | | | | |
| 10 | 3183 | 3188 | 2776 | 2775 | | | | | | | | | | | | | | |
| 15 | 2329 | 2306 | 1784 | 1806 | | | | | | | | | | | | | | |
| 20 | 1271 | 1212 | 713 | 780 | | | | | | | | | | | | | | |
| 25 | 419 | 412 | 188 | 225 | | | | | | | | | | | | | | |
| 30 | 139 | 136 | 89.4 | 88.4 | | | | | | | | | | | | | | |
| 35 | 72.7 | 70.6 | 48.9 | 45.6 | | | | | | | | | | | | | | |
| 40 | 30.3 | 28.0 | 20.3 | 18.5 | | | | | | | | | | | | | | |
| 45 | 13.4 | 12.0 | 9.47 | 8.76 | | | | | | | | | | | | | | |
| 50 | 5.71 | 4.29 | 3.50 | 3.37 | | | | | | | | | | | | | | |
| 55 | 3.07 | 3.01 | 2.63 | 2.41 | | | | | | | | | | | | | | |
| 60 | 2.07 | 2.05 | 1.41 | 1.42 | | | | | | | | | | | | | | |
| 65 | 0.78 | 0.40 | 0.19 | 0.31 | | | | | | | | | | | | | | |
| 70 | 0.18 | 0.06 | 0.00 | 0.09 | | | | | | | | | | | | | | |
| 75 | 0.04 | 0.00 | 0.00 | 0.04 | | | | | | | | | | | | | | |
| 80 | 0.01 | 0.00 | 0.00 | 0.01 | | | | | | | | | | | | | | |
| 85 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | |
| 90 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | | | | | | | | |

C Range: 0 - 360DEG
 C Interval: 90.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
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