



| | | |
|---------------------|--------|--------------------------|
| Light Output Ratio: | 66.9% | |
| Luminaire Power: | 3.71 W | |
| SHR Nominal: | 1.75 | Calculated using the TM5 |
| SHR Maximum: | 1.75 | fine grid method. |

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-02-18

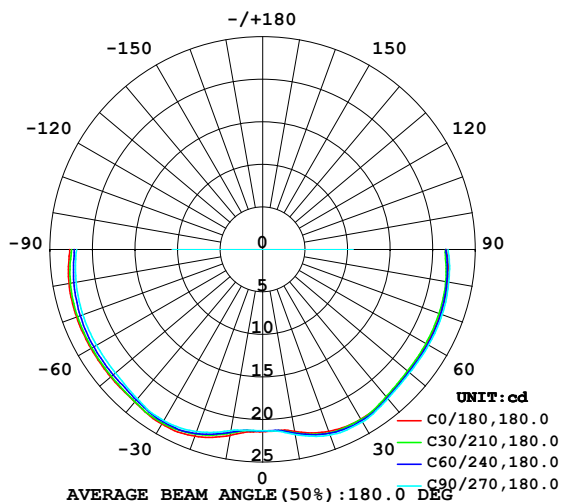
γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:10.214m [K=1.0000]
Remarks:

LUMINAIRE PHOTOMETRIC TEST REPORT

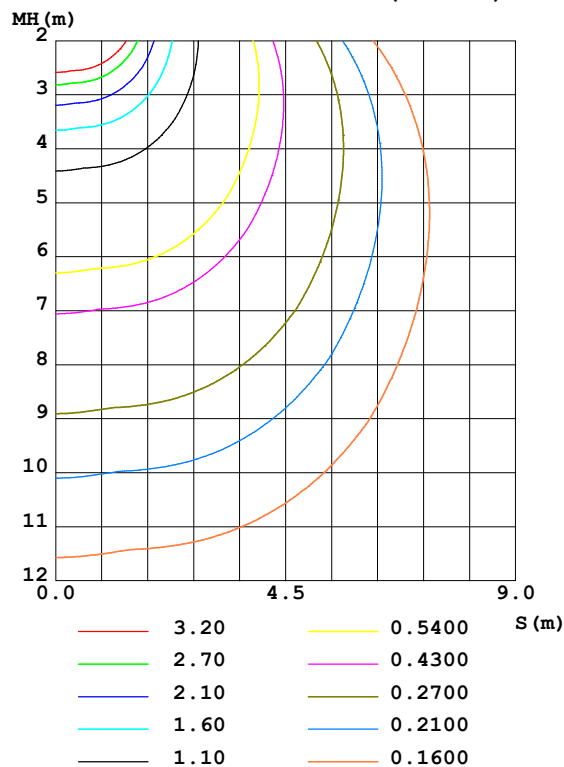
| | | |
|-------------------------------------------------------------------------------------|-----------|-------------------|
| Test:U:47.999V I:0.0773A P:3.7103W PF:1.0000 Freq:49.99Hz Lamp Flux:212.612x1 lm | | |
| NAME: LWE-9314E | TYPE: LED | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: 24004 |
| MFR.: Titanic | SUR.: | Shielding Angle: |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 38.34 lm/W | | | |
|------------------|---------------|----------------------------------|--------|-------------------|----------|
| MODEL | Bridgelux2835 | I _{max} (cd) | 23.71 | S/MH(C0/180) | 1.66 |
| NOMINAL POWER(W) | 3.7 | LOR(%) | 66.9 | S/MH(C90/270) | 1.64 |
| RATED VOLTAGE(V) | 48 | TOTAL FLUX(lm) | 142.26 | η UP,DN(C0-180) | 0.0,33.4 |
| NOMINAL FLUX(lm) | 212.612 | CIE CLASS | DIRECT | η UP,DN(C180-360) | 0.0,33.6 |
| LAMPS INSIDE | 1 | η up(%) | 0.0 | CIBSE SHR NOM | 1.75 |
| TEST VOLTAGE(V) | 48 | η down(%) | 66.9 | CIBSE SHR MAX | 1.75 |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2024-02-18

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000A_V1 SYSTEM V2.00.444
Humidity: 65.0%
Test Distance: 10.214m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

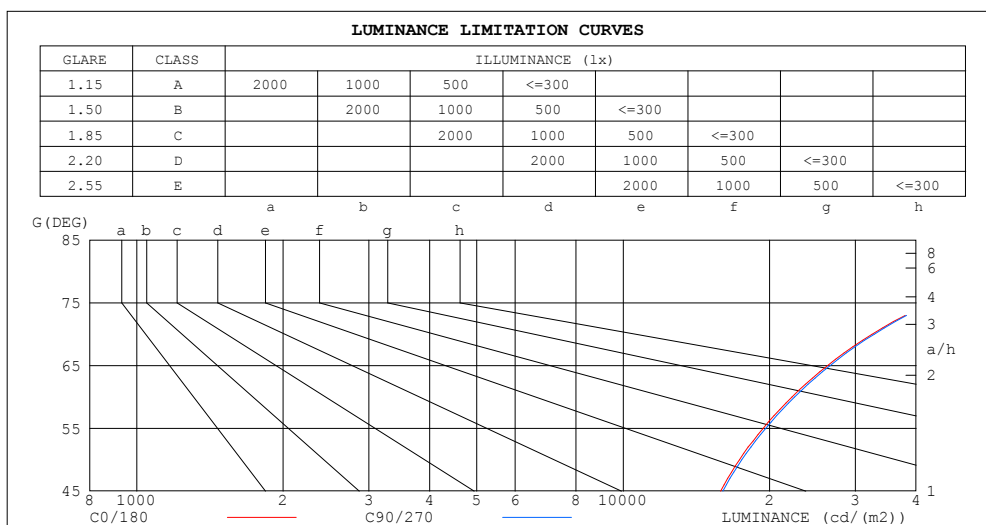
| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Φ zone | Φ total | %lum, lamp |
|----------|-----------------------|-------|-------|-------|-------|-------|-------|-------|----------|-------------|--------------|------------|
| 10 | 21.72 | 21.90 | 22.07 | 22.05 | 22.18 | 21.87 | 21.61 | 21.51 | 0- 10 | 2.055 | 2.055 | 1.44,0.97 |
| 20 | 22.75 | 22.96 | 23.22 | 23.20 | 23.35 | 23.06 | 22.78 | 22.62 | 10- 20 | 6.386 | 8.440 | 5.93,3.97 |
| 30 | 23.05 | 23.16 | 23.42 | 23.56 | 23.70 | 23.49 | 23.23 | 23.00 | 20- 30 | 10.75 | 19.19 | 13.5,9.03 |
| 40 | 22.66 | 22.68 | 22.89 | 23.22 | 23.40 | 23.23 | 22.92 | 22.68 | 30- 40 | 14.56 | 33.75 | 23.7,15.9 |
| 50 | 22.29 | 22.32 | 22.55 | 23.07 | 23.32 | 23.07 | 22.59 | 22.37 | 40- 50 | 17.65 | 51.41 | 36.1,24.2 |
| 60 | 22.24 | 22.26 | 22.52 | 23.05 | 23.30 | 23.05 | 22.54 | 22.32 | 50- 60 | 20.35 | 71.76 | 50.4,33.7 |
| 70 | 22.23 | 22.16 | 22.44 | 23.03 | 23.28 | 22.99 | 22.49 | 22.25 | 60- 70 | 22.48 | 94.23 | 66.2,44.3 |
| 80 | 22.09 | 21.91 | 22.21 | 22.82 | 23.11 | 22.75 | 22.28 | 22.02 | 70- 80 | 23.82 | 118.1 | 83,55.5 |
| 90 | 21.55 | 21.50 | 21.79 | 22.37 | 22.69 | 22.31 | 21.88 | 21.64 | 80- 90 | 24.21 | 142.3 | 100,66.9 |
| 100 | | | | | | | | | 90-100 | | | |
| 110 | | | | | | | | | 100-110 | | | |
| 120 | | | | | | | | | 110-120 | | | |
| 130 | | | | | | | | | 120-130 | | | |
| 140 | | | | | | | | | 130-140 | | | |
| 150 | | | | | | | | | 140-150 | | | |
| 160 | | | | | | | | | 150-160 | | | |
| 170 | | | | | | | | | 160-170 | | | |
| 180 | | | | | | | | | 170-180 | | | |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | | |

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-02-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:10.214m [K=1.0000]
Remarks:

LUMINANCE LIMITATION CURVES

| | | |
|-------------------------------------------------------------------------------------|------------------|--------------------------|
| Test:U:47.999V I:0.0773A P:3.7103W PF:1.0000 Freq:49.99Hz Lamp Flux:212.612x1 lm | | |
| NAME: LWE-9314E | TYPE: LED | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: 24004 |
| MFR.: Titanic | SUR.: | Shielding Angle: |



| LUMINANCE cd/ (m2) | | |
|--------------------|--------|---------|
| G (DEG) | C0/180 | C90/270 |
| 85 | 125599 | 126468 |
| 80 | 63594 | 63938 |
| 75 | 42914 | 43161 |
| 70 | 32501 | 32803 |
| 65 | 26309 | 26623 |
| 60 | 22243 | 22518 |
| 55 | 19399 | 19640 |
| 50 | 17342 | 17541 |
| 45 | 15872 | 16042 |

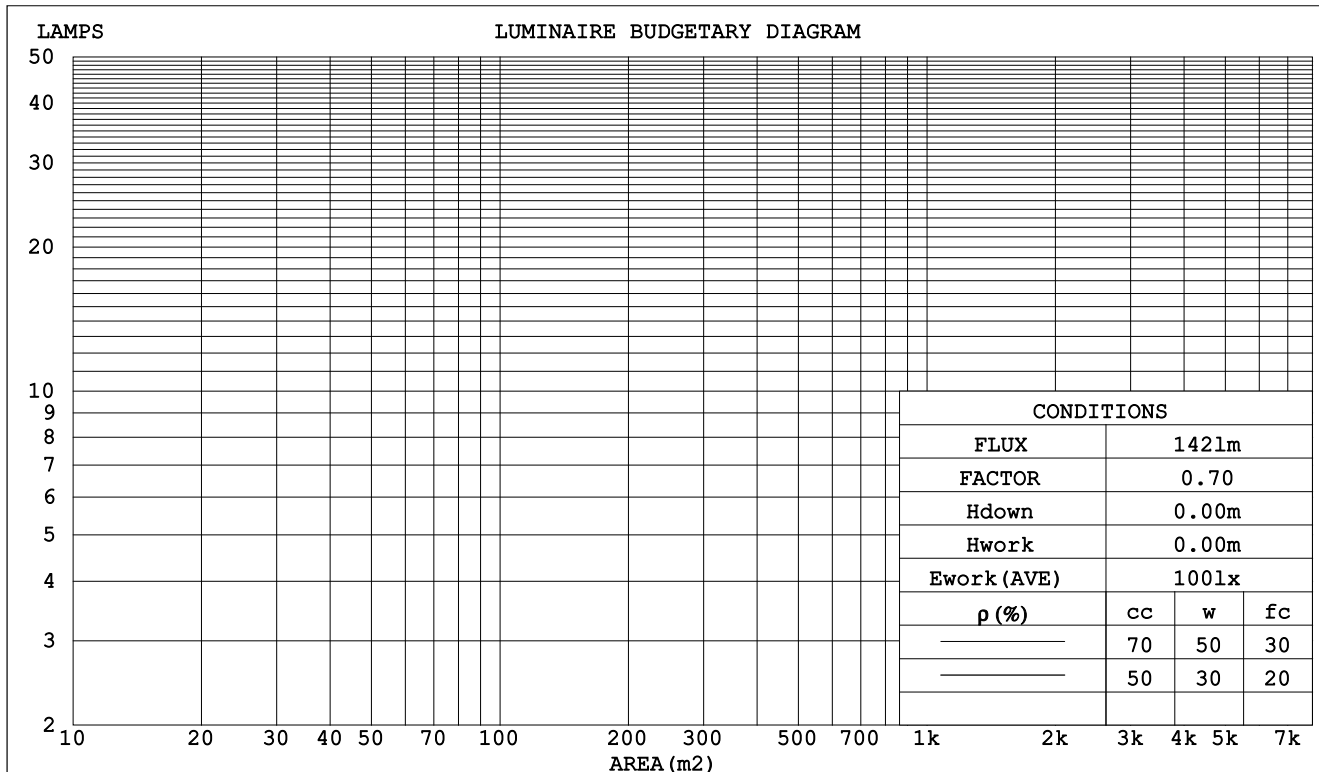
C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2024-02-18

γ Range: 0 - 90DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.444
 Humidity:65.0%
 Test Distance:10.214m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| | | |
|-------------------------------------------------------------------------------------|-----------|-------------------|
| Test:U:47.999V I:0.0773A P:3.7103W PF:1.0000 Freq:49.99Hz Lamp Flux:212.612x1 lm | | |
| NAME: LW-9314E | TYPE: LED | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: 24004 |
| MFR.: Titanic | SUR.: | Shielding Angle: |

| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|------|-----------------------|-----|-----|-----|-----|-----|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| pw | 50% | 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 | .80 | .80 | .80 | .78 | .78 | .78 | .74 | .74 | .74 | .71 | .71 | .71 | .68 | .68 | .68 | .67 |
| 1.0 | .62 | .57 | .53 | .60 | .56 | .52 | .57 | .53 | .50 | .54 | .51 | .48 | .52 | .49 | .47 | .45 |
| 2.0 | .51 | .44 | .39 | .50 | .44 | .38 | .47 | .42 | .37 | .45 | .40 | .36 | .42 | .39 | .35 | .34 |
| 3.0 | .43 | .36 | .30 | .42 | .35 | .30 | .40 | .34 | .29 | .38 | .33 | .29 | .36 | .32 | .28 | .26 |
| 4.0 | .38 | .30 | .24 | .37 | .30 | .24 | .35 | .29 | .24 | .33 | .28 | .23 | .31 | .27 | .23 | .21 |
| 5.0 | .33 | .26 | .20 | .32 | .25 | .20 | .31 | .24 | .20 | .29 | .24 | .19 | .28 | .23 | .19 | .17 |
| 6.0 | .29 | .22 | .17 | .29 | .22 | .17 | .27 | .21 | .17 | .26 | .21 | .17 | .25 | .20 | .16 | .15 |
| 7.0 | .26 | .20 | .15 | .26 | .19 | .15 | .25 | .19 | .15 | .24 | .18 | .14 | .23 | .18 | .14 | .13 |
| 8.0 | .24 | .17 | .13 | .23 | .17 | .13 | .22 | .17 | .13 | .22 | .16 | .13 | .21 | .16 | .13 | .11 |
| 9.0 | .22 | .16 | .11 | .21 | .15 | .11 | .21 | .15 | .11 | .20 | .15 | .11 | .19 | .14 | .11 | .10 |
| 10.0 | .20 | .14 | .10 | .20 | .14 | .10 | .19 | .14 | .10 | .18 | .13 | .10 | .18 | .13 | .10 | .09 |



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-02-18

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:10.214m [K=1.0000]
Remarks:

UGR(Unified Glare Rating) Table

| | | | | | | | | | | |
|-----------------------------------------------------------------|------------------|------|------|------|-----------|----------------|------|-------------------|------|------|
| Test:U:47.999V I:0.0773A P:3.7103W PF:1.0000 Freq:49.99Hz | | | | | | | | | | |
| Lamp Flux:212.612x1 lm | | | | | | | | | | |
| NAME: LW-9314E | | | | | TYPE: LED | | | WEIGHT: | | |
| SPEC.: | | | | | DIM.: | | | SERIAL No.: 24004 | | |
| 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 | 28.4 | 30.3 | 28.7 | 30.5 | 30.7 | 28.5 | 30.4 | 28.8 | 30.6 | 30.8 |
| 3H | 31.7 | 33.4 | 32.0 | 33.7 | 33.9 | 31.7 | 33.5 | 32.0 | 33.7 | 34.0 |
| 4H | 33.5 | 35.2 | 33.8 | 35.5 | 35.8 | 33.6 | 35.3 | 33.9 | 35.5 | 35.8 |
| 6H | 35.6 | 37.2 | 35.9 | 37.5 | 37.8 | 35.6 | 37.2 | 36.0 | 37.5 | 37.8 |
| 8H | 36.7 | 38.3 | 37.1 | 38.6 | 38.9 | 36.7 | 38.3 | 37.1 | 38.6 | 38.9 |
| 12H | 38.0 | 39.5 | 38.4 | 39.9 | 40.2 | 38.1 | 39.6 | 38.4 | 39.9 | 40.2 |
| 4H 2H | 29.5 | 31.2 | 29.9 | 31.5 | 31.8 | 29.6 | 31.3 | 29.9 | 31.5 | 31.8 |
| 3H | 32.9 | 34.4 | 33.3 | 34.8 | 35.1 | 33.0 | 34.5 | 33.3 | 34.8 | 35.1 |
| 4H | 34.9 | 36.3 | 35.3 | 36.7 | 37.0 | 34.9 | 36.4 | 35.3 | 36.7 | 37.1 |
| 6H | 37.1 | 38.4 | 37.5 | 38.8 | 39.2 | 37.2 | 38.5 | 37.6 | 38.8 | 39.2 |
| 8H | 38.4 | 39.6 | 38.8 | 40.0 | 40.4 | 38.4 | 39.6 | 38.8 | 40.0 | 40.4 |
| 12H | 39.8 | 40.9 | 40.2 | 41.4 | 41.8 | 39.8 | 41.0 | 40.3 | 41.4 | 41.8 |
| 8H 4H | 35.7 | 36.9 | 36.1 | 37.3 | 37.7 | 35.7 | 37.0 | 36.2 | 37.4 | 37.8 |
| 6H | 38.2 | 39.3 | 38.7 | 39.7 | 40.1 | 38.2 | 39.3 | 38.7 | 39.7 | 40.2 |
| 8H | 39.6 | 40.6 | 40.1 | 41.1 | 41.5 | 39.7 | 40.7 | 40.1 | 41.1 | 41.6 |
| 12H | 41.3 | 42.2 | 41.8 | 42.6 | 43.1 | 41.3 | 42.2 | 41.8 | 42.7 | 43.2 |
| 12H 4H | 35.9 | 37.1 | 36.4 | 37.5 | 37.9 | 36.0 | 37.1 | 36.4 | 37.5 | 38.0 |
| 6H | 38.6 | 39.6 | 39.0 | 40.0 | 40.5 | 38.6 | 39.6 | 39.1 | 40.0 | 40.5 |
| 8H | 40.1 | 41.0 | 40.6 | 41.5 | 41.9 | 40.1 | 41.0 | 40.6 | 41.5 | 42.0 |
| Variations with the observer position at spacings(CIE Pub.117): | | | | | | | | | | |
| 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 / - 0.4 | | | | | + 0.3 / - 0.4 | | | | |

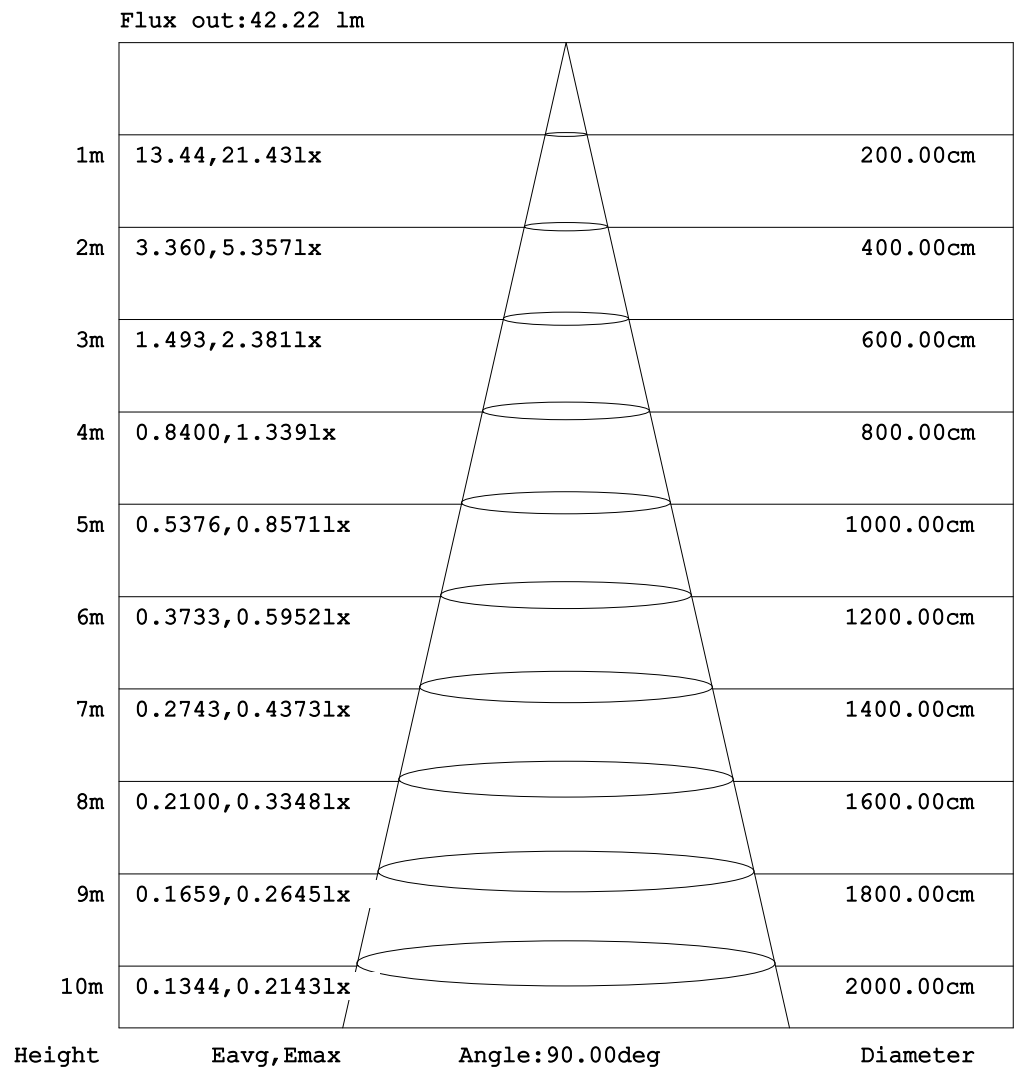
CIE Pub.117, 212.6 lm Total Lamp Luminous Flux Correct (8log(F/F0) = -5.4)
Area: 0.002 m2

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-02-18

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:10.214m [K=1.0000]
Remarks:

AAI Figure

| | | |
|-------------------------------------------------------------------------------------|------------------|--------------------------|
| Test:U:47.999V I:0.0773A P:3.7103W PF:1.0000 Freq:49.99Hz Lamp Flux:212.612x1 lm | | |
| NAME: LWE-9314E | TYPE: LED | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: 24004 |
| 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: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2024-02-18

γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:10.214m [K=1.0000]
Remarks:

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γ Range: 0 - 90DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000A_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:10.214m [K=1.0000]
Remarks:

```