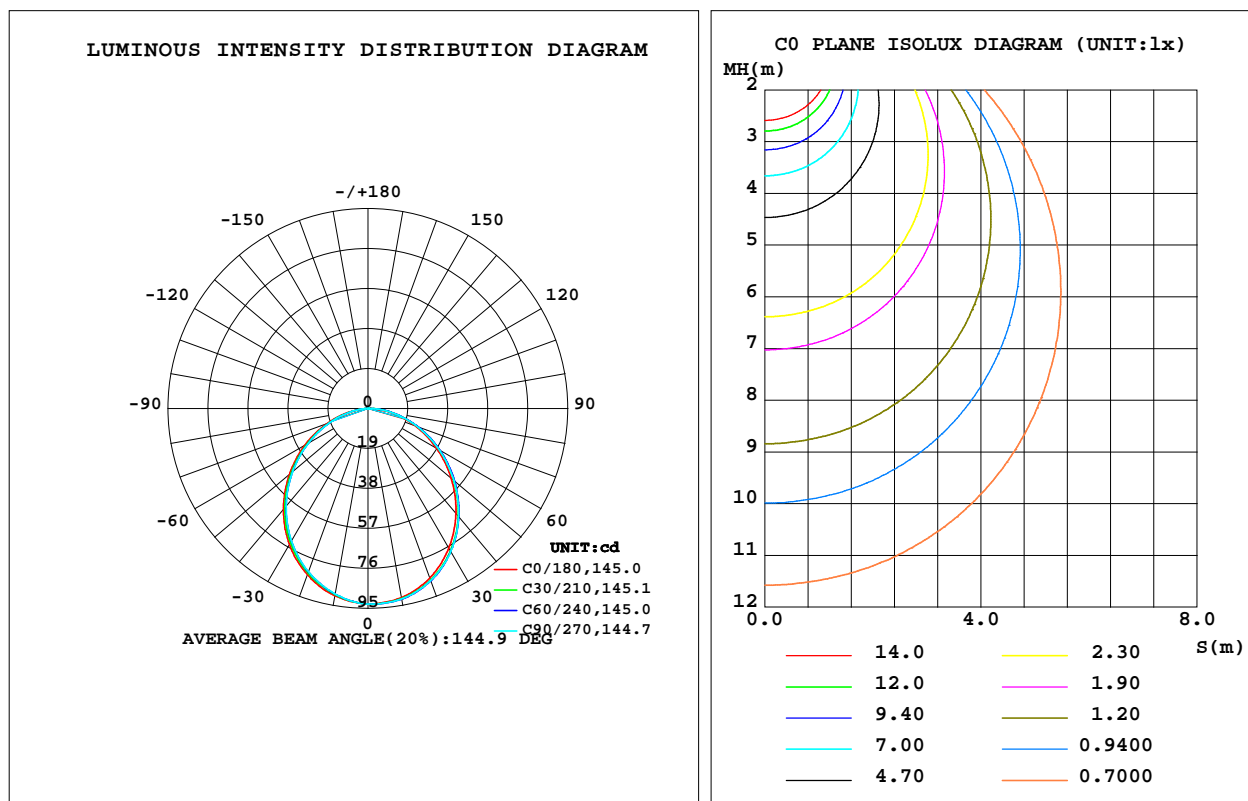


## LUMINAIRE PHOTOMETRIC TEST REPORT

|  |       |                  |
|--|-------|------------------|
| Test:U:120.03V I:0.0366A P:4.3547W PF:0.9915 Freq:59.98Hz Lamp Flux:247.407x1 lm |       |                  |
| NAME: MVP-1-30-WH  | TYPE: | WEIGHT:          |
| SPEC.:4.3W   | DIM.: | SERIAL No.:      |
| MFR.: LiBo   | SUR.: | Shielding Angle: |

| DATA OF LAMP     |             | PHOTOMETRIC DATA Eff: 56.81 lm/W |        |                   |          |
|------------------|-------------|----------------------------------|--------|-------------------|----------|
| MODEL            | MVP-1-30-WH | I <sub>max</sub> (cd)            | 93.04  | S/MH(C0/180)      | 1.20     |
| NOMINAL POWER(W) | 4.3         | LOR(%)                           | 100.0  | S/MH(C90/270)     | 1.17     |
| RATED VOLTAGE(V) | 120         | TOTAL FLUX(lm)                   | 247.41 | h UP,DN(C0-180)   | 0.2,52.2 |
| NOMINAL FLUX(lm) | 247.407     | CIE CLASS                        | DIRECT | h UP,DN(C180-360) | 0.2,47.4 |
| LAMPS INSIDE     | 1           | h up(%)                          | 0.4    | CIBSE SHR NOM     | 1.25     |
| TEST VOLTAGE(V)  | 120         | h down(%)                        | 99.6   | CIBSE SHR MAX     | 1.35     |



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:16 July 2020

g Range: 0 - 180DEG  
g Interval: 0.5DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
Humidity:65.0%  
Test Distance:3.010m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

| g   | C0                    | C45    | C90    | C135   | C180   | C225   | C270   | C315   | g       | F zone  | F total | %lum,lamp |
|-----|-----------------------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|-----------|
| 10  | 91.27                 | 91.90  | 91.90  | 91.31  | 90.39  | 89.70  | 89.58  | 90.29  | 0- 10   | 8.764   | 8.764   | 3.54,3.54 |
| 20  | 85.82                 | 87.26  | 87.05  | 85.94  | 84.05  | 82.89  | 82.62  | 83.82  | 10- 20  | 24.90   | 33.67   | 13.6,13.6 |
| 30  | 76.71                 | 78.77  | 78.63  | 77.42  | 74.65  | 73.12  | 72.73  | 74.04  | 20- 30  | 37.18   | 70.85   | 28.6,28.6 |
| 40  | 65.04                 | 67.18  | 66.96  | 65.49  | 62.60  | 60.88  | 60.54  | 62.10  | 30- 40  | 43.82   | 114.7   | 46.3,46.3 |
| 50  | 51.68                 | 53.83  | 53.38  | 51.65  | 48.78  | 47.02  | 46.81  | 48.46  | 40- 50  | 44.08   | 158.7   | 64.2,64.2 |
| 60  | 37.55                 | 39.57  | 38.97  | 37.20  | 34.51  | 32.73  | 32.59  | 34.32  | 50- 60  | 38.52   | 197.3   | 79.7,79.7 |
| 70  | 23.50                 | 25.29  | 24.71  | 22.94  | 20.46  | 18.80  | 18.87  | 20.52  | 60- 70  | 28.53   | 225.8   | 91.3,91.3 |
| 80  | 10.58                 | 12.15  | 11.55  | 10.06  | 7.986  | 6.747  | 6.889  | 8.219  | 70- 80  | 16.23   | 242.0   | 97.8,97.8 |
| 90  | 0.2303                | 0.0123 | 0.0075 | 0.0078 | 0      | 0      | 0      | 0      | 80- 90  | 4.359   | 246.4   | 99.6,99.6 |
| 100 | 0.0525                | 0.0497 | 0.0470 | 0.0526 | 0.0550 | 0.0583 | 0.0568 | 0.0450 | 90-100  | 0.0261  | 246.4   | 99.6,99.6 |
| 110 | 0.1361                | 0.1143 | 0.1150 | 0.1247 | 0.1319 | 0.1322 | 0.1309 | 0.1208 | 100-110 | 0.0910  | 246.5   | 99.6,99.6 |
| 120 | 0.2251                | 0.1876 | 0.1871 | 0.1926 | 0.2024 | 0.1869 | 0.1946 | 0.1811 | 110-120 | 0.1576  | 246.7   | 99.7,99.7 |
| 130 | 0.2698                | 0.2426 | 0.2396 | 0.2412 | 0.2388 | 0.2352 | 0.2431 | 0.2280 | 120-130 | 0.1949  | 246.9   | 99.8,99.8 |
| 140 | 0.2876                | 0.2800 | 0.2812 | 0.2758 | 0.2443 | 0.2367 | 0.2744 | 0.2381 | 130-140 | 0.1957  | 247.1   | 99.9,99.9 |
| 150 | 0.2752                | 0.2771 | 0.3106 | 0.2574 | 0.2261 | 0.2156 | 0.2655 | 0.2203 | 140-150 | 0.1646  | 247.2   | 99.9,99.9 |
| 160 | 0.2438                | 0.2414 | 0.2553 | 0.2157 | 0.1893 | 0.1718 | 0.2092 | 0.1883 | 150-160 | 0.1109  | 247.3   | 100,100   |
| 170 | 0.2357                | 0.2308 | 0.2106 | 0.2039 | 0.1959 | 0.1784 | 0.1962 | 0.1997 | 160-170 | 0.0593  | 247.4   | 100,100   |
| 180 | 0.2302                | 0.2487 | 0.2363 | 0.2424 | 0.2345 | 0.2484 | 0.2372 | 0.2433 | 170-180 | 0.0203  | 247.4   | 100,100   |
| DEG | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |         | UNIT:lm |         |           |

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:16 July 2020

g Range: 0 - 180DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:3.010m [K=1.0000]  
 Remarks:

**UGR(Unified Glare Rating) Table**

|  |               |                  |      |      |       |               |                |                  |      |      |      |
|--|---------------|------------------|------|------|-------|---------------|----------------|------------------|------|------|------|
| Test:U:120.03V I:0.0366A P:4.3547W PF:0.9915 Freq:59.98Hz Lamp Flux:247.407x1 lm |               |                  |      |      |       |               |                |                  |      |      |      |
| NAME: MVP-1-30-WH  |               |                  |      |      | TYPE: |               |                | WEIGHT:          |      |      |      |
| SPEC.:4.3W   |               |                  |      |      | DIM.: |               |                | SERIAL No.:      |      |      |      |
| MFR.: LiBo   |               |                  |      |      | 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  | 6.6           | 8.1              | 6.9  | 8.3  | 8.5   | 6.7           | 8.2            | 7.0              | 8.4  | 8.6  |      |
|  | 3H            | 8.1              | 9.5  | 8.4  | 9.7   | 10.0          | 8.3            | 9.6              | 8.6  | 9.9  | 10.1 |
|  | 4H            | 8.8              | 10.1 | 9.1  | 10.3  | 10.6          | 8.9            | 10.2             | 9.2  | 10.5 | 10.7 |
|  | 6H            | 9.2              | 10.5 | 9.6  | 10.7  | 11.0          | 9.4            | 10.7             | 9.8  | 10.9 | 11.2 |
|  | 8H            | 9.4              | 10.6 | 9.7  | 10.8  | 11.1          | 9.6            | 10.8             | 10.0 | 11.1 | 11.4 |
|  | 12H           | 9.3              | 10.5 | 9.7  | 10.8  | 11.1          | 9.8            | 10.9             | 10.1 | 11.2 | 11.5 |
| 4H   | 2H            | 7.3              | 8.6  | 7.6  | 8.8   | 9.1           | 7.3            | 8.7              | 7.7  | 8.9  | 9.2  |
|  | 3H            | 9.0              | 10.1 | 9.3  | 10.4  | 10.7          | 9.1            | 10.2             | 9.4  | 10.5 | 10.8 |
|  | 4H            | 9.7              | 10.8 | 10.1 | 11.1  | 11.5          | 9.9            | 10.9             | 10.3 | 11.3 | 11.6 |
|  | 6H            | 10.4             | 11.3 | 10.8 | 11.6  | 12.0          | 10.5           | 11.5             | 10.9 | 11.8 | 12.2 |
|  | 8H            | 10.6             | 11.4 | 11.0 | 11.8  | 12.2          | 10.8           | 11.7             | 11.2 | 12.0 | 12.4 |
|  | 12H           | 10.6             | 11.4 | 11.0 | 11.8  | 12.2          | 11.0           | 11.8             | 11.5 | 12.2 | 12.6 |
| 8H   | 4H            | 10.1             | 10.9 | 10.5 | 11.3  | 11.7          | 10.2           | 11.1             | 10.6 | 11.4 | 11.8 |
|  | 6H            | 10.9             | 11.6 | 11.3 | 12.0  | 12.4          | 11.0           | 11.8             | 11.5 | 12.2 | 12.6 |
|  | 8H            | 11.2             | 11.8 | 11.6 | 12.2  | 12.7          | 11.4           | 12.0             | 11.9 | 12.5 | 12.9 |
|  | 12H           | 11.3             | 11.9 | 11.8 | 12.3  | 12.8          | 11.7           | 12.3             | 12.2 | 12.7 | 13.2 |
| 12H  | 4H            | 10.1             | 10.9 | 10.5 | 11.3  | 11.7          | 10.2           | 11.0             | 10.6 | 11.4 | 11.8 |
|  | 6H            | 11.0             | 11.6 | 11.4 | 12.0  | 12.5          | 11.1           | 11.8             | 11.6 | 12.2 | 12.6 |
|  | 8H            | 11.3             | 11.9 | 11.8 | 12.3  | 12.8          | 11.5           | 12.1             | 12.0 | 12.5 | 13.0 |
| Variations with the observer position at spacings:                               |               |                  |      |      |       |               |                |                  |      |      |      |
| S = 1.0H   | + 0.2 / - 0.2 |                  |      |      |       | + 0.2 / - 0.2 |                |                  |      |      |      |
| 1.5H   | + 0.2 / - 0.3 |                  |      |      |       | + 0.2 / - 0.3 |                |                  |      |      |      |
| 2.0H   | + 0.1 / - 0.3 |                  |      |      |       | + 0.1 / - 0.3 |                |                  |      |      |      |

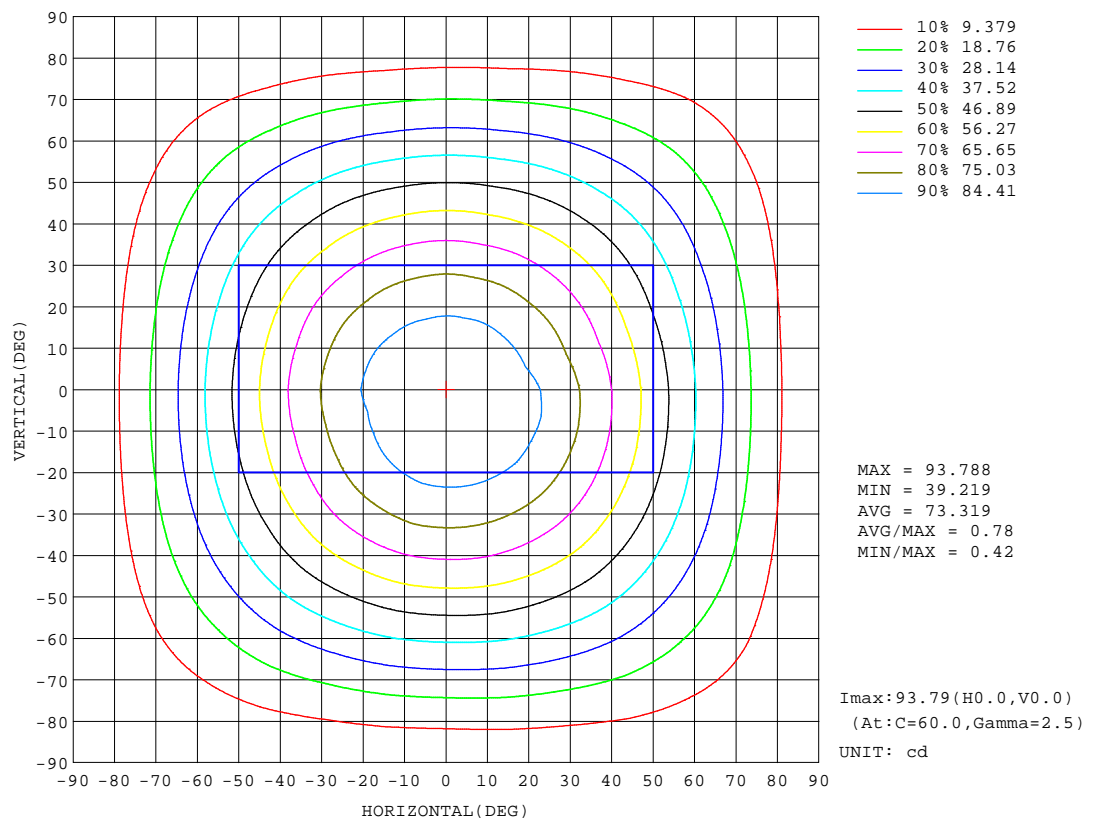
CIE Pub.117, 247.4 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = -4.9)

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature:25.3DEG  
 Operators:  
 Test Date:16 July 2020

g Range: 0 - 180DEG  
 g Interval: 0.5DEG  
 Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
 Humidity:65.0%  
 Test Distance:3.010m [K=1.0000]  
 Remarks:

### ISOCANDELA DIAGRAM

|  |       |                  |
|--|-------|------------------|
| Test:U:120.03V I:0.0366A P:4.3547W PF:0.9915 Freq:59.98Hz Lamp Flux:247.407x1 lm |       |                  |
| NAME: MVP-1-30-WH  | TYPE: | WEIGHT:          |
| SPEC.:4.3W   | DIM.: | SERIAL No.:      |
| MFR.: LiBo   | SUR.: | Shielding Angle: |



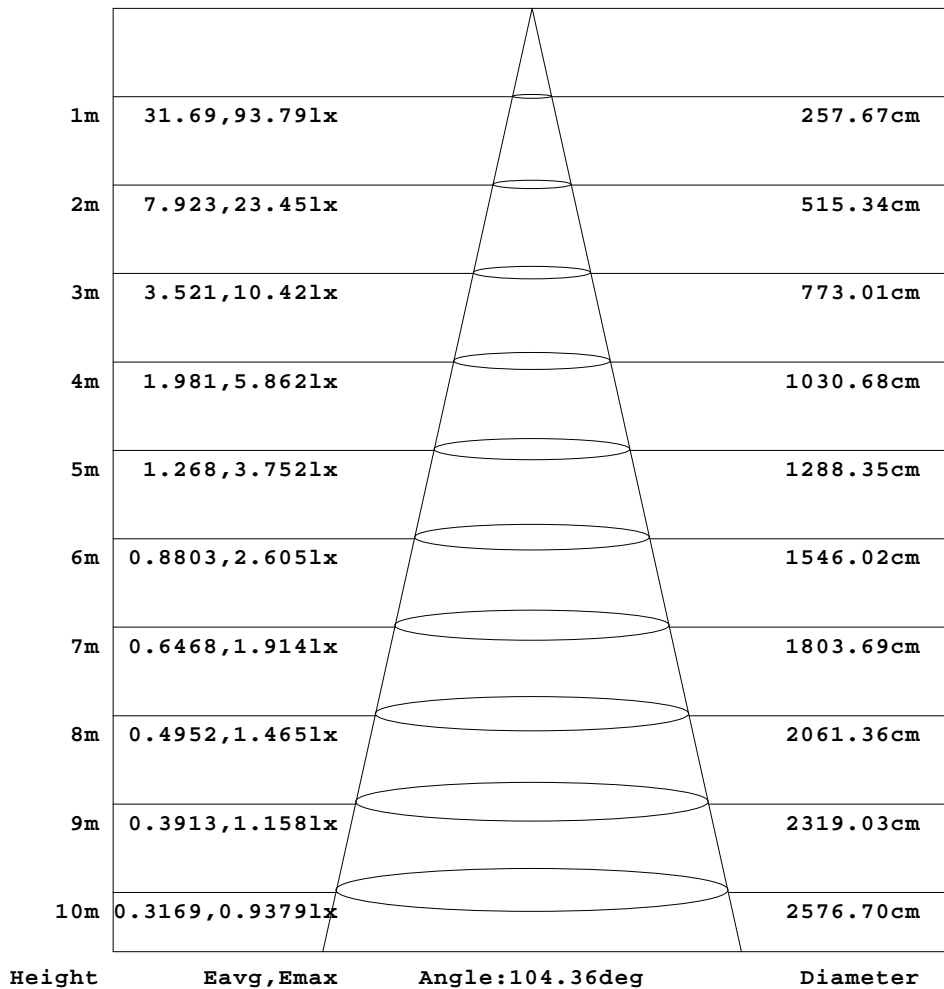
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:16 July 2020

g Range: 0 - 180DEG  
g Interval: 0.5DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
Humidity:65.0%  
Test Distance:3.010m [K=1.0000]  
Remarks:

### AAI Figure

|  |       |                  |
|--|-------|------------------|
| Test:U:120.03V I:0.0366A P:4.3547W PF:0.9915 Freq:59.98Hz Lamp Flux:247.407x1 lm |       |                  |
| NAME: MVP-1-30-WH  | TYPE: | WEIGHT:          |
| SPEC.:4.3W   | DIM.: | SERIAL No.:      |
| MFR.: LiBo   | SUR.: | Shielding Angle: |

Flux out:169.1 lm



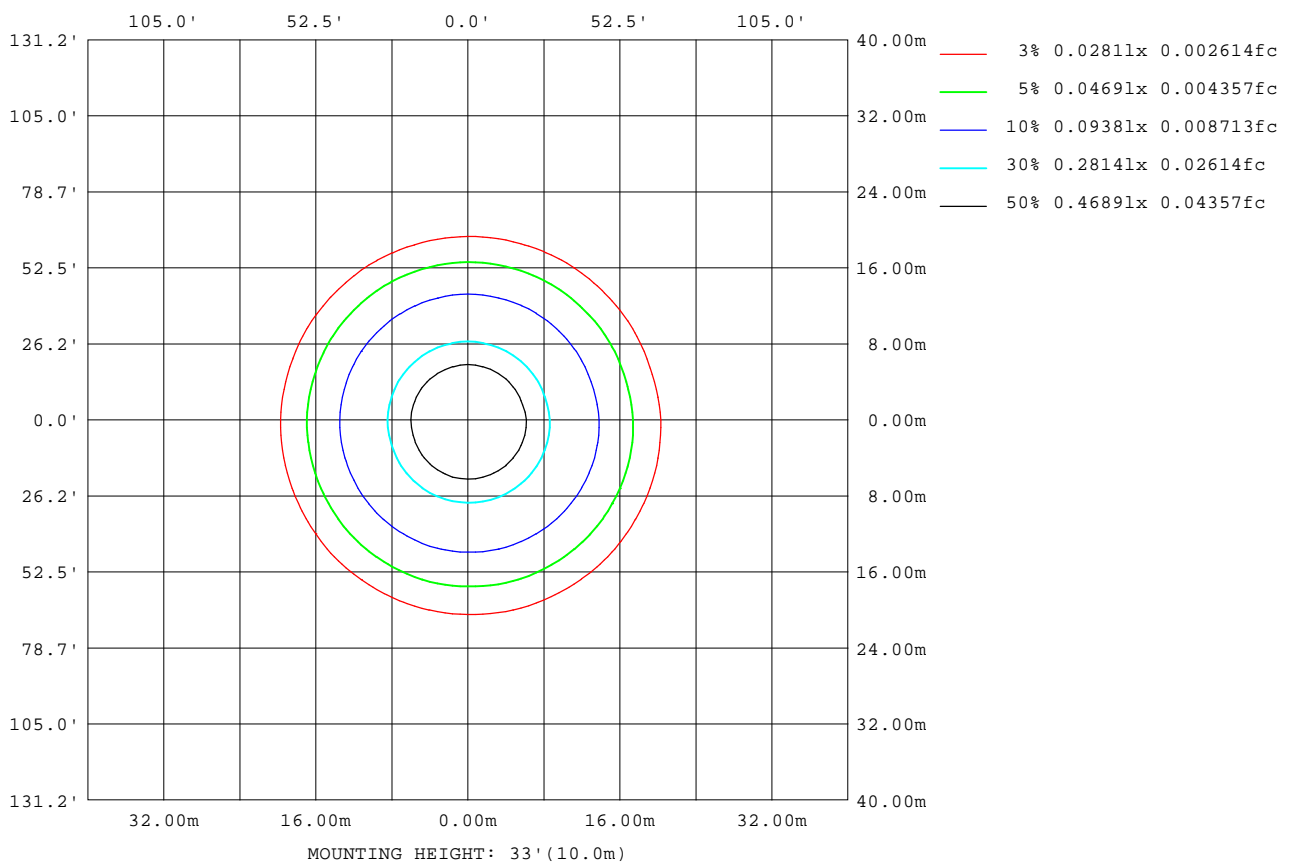
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:16 July 2020

g Range: 0 - 180DEG  
g Interval: 0.5DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
Humidity:65.0%  
Test Distance:3.010m [K=1.0000]  
Remarks:

### ISOLUX DIAGRAM

|  |       |                  |
|--|-------|------------------|
| Test:U:120.03V I:0.0366A P:4.3547W PF:0.9915 Freq:59.98Hz Lamp Flux:247.407x1 lm |       |                  |
| NAME: MVP-1-30-WH  | TYPE: | WEIGHT:          |
| SPEC.:4.3W   | DIM.: | SERIAL No.:      |
| MFR.: LiBo   | SUR.: | Shielding Angle: |



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 16 July 2020

g Range: 0 - 180DEG  
 g Interval: 0.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
 Humidity: 65.0%  
 Test Distance: 3.010m [K=1.0000]  
 Remarks:

### LED Avg.L Report

|  |       |                  |
|--|-------|------------------|
| Test:U:120.03V I:0.0366A P:4.3547W PF:0.9915 Freq:59.98Hz Lamp Flux:247.407x1 lm |       |                  |
| NAME: MVP-1-30-WH  | TYPE: | WEIGHT:          |
| SPEC.:4.3W   | DIM.: | SERIAL No.:      |
| MFR.: LiBo   | SUR.: | Shielding Angle: |

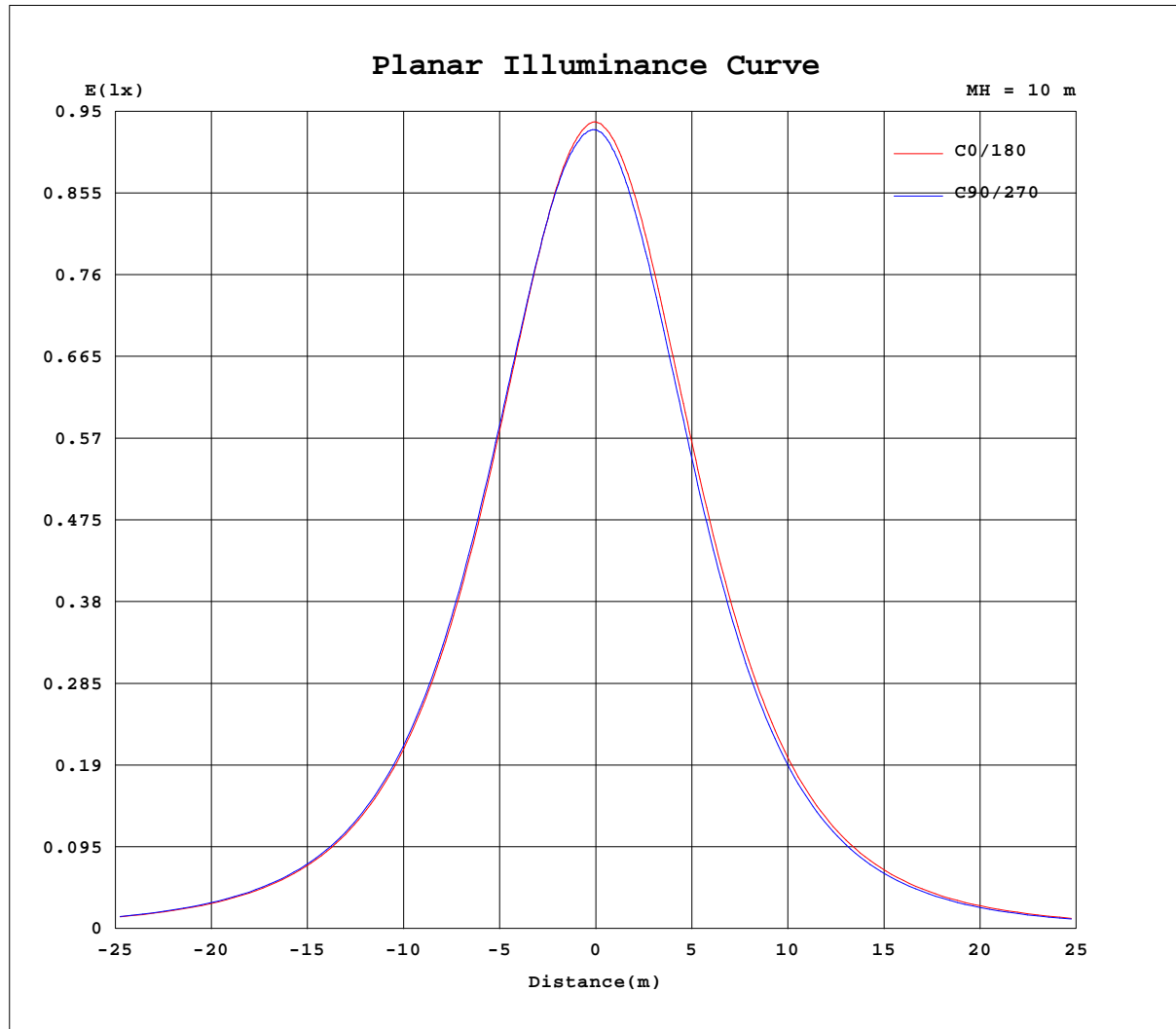
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 137   |
| L_0~180(75)av  | 119   |
| L_0~180(85)av  | 17    |
| L_90~270(65)av | 136   |
| L_90~270(75)av | 118   |
| L_90~270(85)av | 91    |
| L_45(65)av     | 136   |
| L_45(75)av     | 118   |
| L_45(85)av     | 93    |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: MEDIUM  
Temperature:25.3DEG  
Operators:  
Test Date:16 July 2020

g Range: 0 - 180DEG  
g Interval: 0.5DEG  
Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
Humidity:65.0%  
Test Distance:3.010m [K=1.0000]  
Remarks:

### Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: MEDIUM  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 16 July 2020

g Range: 0 - 180DEG  
 g Interval: 0.5DEG  
 Test System: EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402  
 Humidity: 65.0%  
 Test Distance: 3.010m [K=1.0000]  
 Remarks:



LUMINOUS DISTRIBUTION INTENSITY DATA

|  |       |                  |
|--|-------|------------------|
| Test:U:120.03V I:0.0366A P:4.3547W PF:0.9915 Freq:59.98Hz Lamp Flux:247.407x1 lm |       |                  |
| NAME: MVP-1-30-WH  | TYPE: | WEIGHT:          |
| SPEC.:4.3W   | DIM.: | SERIAL No.:      |
| MFR.: LiBo   | SUR.: | Shielding Angle: |

Table--1

UNIT: cd

| C(DEG)<br>g (DEG) | 0    | 15   | 30   | 45   | 60   | 75   | 90   | 105  | 120  | 135  | 150  | 165  | 180  | 195  | 210  | 225  | 240  | 255  | 270  |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0                 | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 |
| 5                 | 92.5 | 92.6 | 92.7 | 92.8 | 92.9 | 92.9 | 92.7 | 92.8 | 92.7 | 92.6 | 92.4 | 92.3 | 92.1 | 92.0 | 91.9 | 91.8 | 91.8 | 91.7 | 91.8 |
| 10                | 91.3 | 91.7 | 91.7 | 91.9 | 92.0 | 92.1 | 91.9 | 91.8 | 91.5 | 91.3 | 91.0 | 90.7 | 90.4 | 90.0 | 89.9 | 89.7 | 89.6 | 89.4 | 89.6 |
| 15                | 89.0 | 89.6 | 89.8 | 90.1 | 90.0 | 90.1 | 90.0 | 90.0 | 89.5 | 89.1 | 88.5 | 88.2 | 87.8 | 87.4 | 86.9 | 86.6 | 86.5 | 86.3 | 86.5 |
| 20                | 85.8 | 86.7 | 86.8 | 87.3 | 87.2 | 87.2 | 87.0 | 87.0 | 86.5 | 85.9 | 85.2 | 84.7 | 84.1 | 83.6 | 83.3 | 82.9 | 82.7 | 82.4 | 82.6 |
| 25                | 81.7 | 82.9 | 83.0 | 83.5 | 83.4 | 83.4 | 83.3 | 83.3 | 82.7 | 82.1 | 81.2 | 80.8 | 79.8 | 79.3 | 78.8 | 78.3 | 78.1 | 77.9 | 78.1 |
| 30                | 76.7 | 77.9 | 78.3 | 78.8 | 78.6 | 78.6 | 78.6 | 78.8 | 77.9 | 77.4 | 76.2 | 75.7 | 74.7 | 74.1 | 73.7 | 73.1 | 72.9 | 72.5 | 72.7 |
| 35                | 71.2 | 72.3 | 72.9 | 73.3 | 73.3 | 73.3 | 73.2 | 73.2 | 72.3 | 71.7 | 70.5 | 69.8 | 68.9 | 68.2 | 67.9 | 67.3 | 67.0 | 66.8 | 66.9 |
| 40                | 65.0 | 66.1 | 66.8 | 67.2 | 67.2 | 67.3 | 67.0 | 66.9 | 66.1 | 65.5 | 64.2 | 63.6 | 62.6 | 61.8 | 61.6 | 60.9 | 60.6 | 60.3 | 60.5 |
| 45                | 58.5 | 59.6 | 60.1 | 60.7 | 60.7 | 60.8 | 60.3 | 60.2 | 59.3 | 58.7 | 57.6 | 56.8 | 55.8 | 55.1 | 54.8 | 54.1 | 53.9 | 53.6 | 53.8 |
| 50                | 51.7 | 52.7 | 53.2 | 53.8 | 53.8 | 53.9 | 53.4 | 53.1 | 52.2 | 51.7 | 50.5 | 49.8 | 48.8 | 48.0 | 47.7 | 47.0 | 46.9 | 46.6 | 46.8 |
| 55                | 44.6 | 45.7 | 46.2 | 46.7 | 46.7 | 46.7 | 46.2 | 46.0 | 45.1 | 44.5 | 43.3 | 42.6 | 41.7 | 40.9 | 40.5 | 39.9 | 39.7 | 39.4 | 39.7 |
| 60                | 37.6 | 38.6 | 39.0 | 39.6 | 39.5 | 39.5 | 39.0 | 38.7 | 37.8 | 37.2 | 36.1 | 35.4 | 34.5 | 33.7 | 33.3 | 32.7 | 32.6 | 32.3 | 32.6 |
| 65                | 30.5 | 31.4 | 31.8 | 32.4 | 32.3 | 32.3 | 31.8 | 31.5 | 30.6 | 30.0 | 28.9 | 28.3 | 27.4 | 26.6 | 26.2 | 25.6 | 25.5 | 25.3 | 25.6 |
| 70                | 23.5 | 24.4 | 24.8 | 25.3 | 25.2 | 25.2 | 24.7 | 24.4 | 23.5 | 22.9 | 22.0 | 21.3 | 20.5 | 19.7 | 19.4 | 18.8 | 18.8 | 18.5 | 18.9 |
| 75                | 16.8 | 17.7 | 18.0 | 18.5 | 18.4 | 18.5 | 17.9 | 17.6 | 16.7 | 16.3 | 15.3 | 14.8 | 13.9 | 13.2 | 12.9 | 12.4 | 12.4 | 12.2 | 12.6 |
| 80                | 10.6 | 11.4 | 11.6 | 12.1 | 12.0 | 12.1 | 11.5 | 11.3 | 10.5 | 10.1 | 9.16 | 8.73 | 7.99 | 7.37 | 7.11 | 6.75 | 6.71 | 6.62 | 6.89 |
| 85                | 0.79 | 5.82 | 6.10 | 6.39 | 6.25 | 6.23 | 5.80 | 5.64 | 5.06 | 4.66 | 3.98 | 3.56 | 0.65 | 2.42 | 2.20 | 1.92 | 1.92 | 1.88 | 2.12 |
| 90                | 0.23 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95                | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.02 |
| 100               | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 |
| 105               | 0.09 | 0.09 | 0.08 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.10 | 0.09 | 0.10 | 0.09 |
| 110               | 0.14 | 0.13 | 0.12 | 0.11 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.14 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 |
| 115               | 0.18 | 0.17 | 0.16 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.15 | 0.16 | 0.17 | 0.17 | 0.17 | 0.16 | 0.16 | 0.16 | 0.16 | 0.17 | 0.16 |
| 120               | 0.23 | 0.21 | 0.20 | 0.19 | 0.18 | 0.19 | 0.19 | 0.19 | 0.18 | 0.19 | 0.20 | 0.21 | 0.20 | 0.20 | 0.19 | 0.19 | 0.19 | 0.20 | 0.19 |
| 125               | 0.25 | 0.23 | 0.23 | 0.22 | 0.21 | 0.22 | 0.22 | 0.22 | 0.21 | 0.22 | 0.23 | 0.24 | 0.23 | 0.22 | 0.21 | 0.21 | 0.21 | 0.21 | 0.22 |
| 130               | 0.27 | 0.25 | 0.25 | 0.24 | 0.24 | 0.24 | 0.24 | 0.24 | 0.23 | 0.24 | 0.25 | 0.25 | 0.24 | 0.23 | 0.22 | 0.24 | 0.23 | 0.24 | 0.24 |
| 135               | 0.28 | 0.27 | 0.27 | 0.26 | 0.26 | 0.26 | 0.27 | 0.26 | 0.25 | 0.26 | 0.26 | 0.26 | 0.25 | 0.24 | 0.23 | 0.24 | 0.24 | 0.25 | 0.25 |
| 140               | 0.29 | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | 0.28 | 0.27 | 0.28 | 0.26 | 0.26 | 0.24 | 0.24 | 0.23 | 0.24 | 0.25 | 0.27 | 0.27 |
| 145               | 0.29 | 0.27 | 0.27 | 0.28 | 0.30 | 0.31 | 0.30 | 0.29 | 0.28 | 0.28 | 0.26 | 0.25 | 0.24 | 0.23 | 0.22 | 0.23 | 0.25 | 0.26 | 0.27 |
| 150               | 0.28 | 0.27 | 0.27 | 0.28 | 0.30 | 0.32 | 0.31 | 0.30 | 0.29 | 0.26 | 0.25 | 0.25 | 0.23 | 0.21 | 0.21 | 0.22 | 0.24 | 0.26 | 0.27 |
| 155               | 0.26 | 0.26 | 0.26 | 0.26 | 0.28 | 0.30 | 0.29 | 0.28 | 0.26 | 0.24 | 0.23 | 0.24 | 0.21 | 0.19 | 0.20 | 0.19 | 0.21 | 0.24 | 0.25 |
| 160               | 0.24 | 0.25 | 0.24 | 0.24 | 0.26 | 0.27 | 0.26 | 0.25 | 0.23 | 0.22 | 0.21 | 0.22 | 0.19 | 0.19 | 0.18 | 0.17 | 0.19 | 0.20 | 0.21 |
| 165               | 0.23 | 0.23 | 0.23 | 0.23 | 0.23 | 0.24 | 0.23 | 0.23 | 0.21 | 0.20 | 0.20 | 0.21 | 0.18 | 0.18 | 0.17 | 0.18 | 0.19 | 0.20 | 0.20 |
| 170               | 0.24 | 0.24 | 0.24 | 0.23 | 0.22 | 0.22 | 0.21 | 0.21 | 0.21 | 0.20 | 0.21 | 0.21 | 0.20 | 0.19 | 0.18 | 0.18 | 0.19 | 0.19 | 0.20 |
| 175               | 0.23 | 0.23 | 0.24 | 0.24 | 0.23 | 0.23 | 0.22 | 0.22 | 0.22 | 0.22 | 0.21 | 0.20 | 0.20 | 0.20 | 0.19 | 0.20 | 0.21 | 0.20 | 0.20 |
| 180               | 0.23 | 0.23 | 0.24 | 0.25 | 0.24 | 0.23 | 0.24 | 0.23 | 0.23 | 0.24 | 0.24 | 0.23 | 0.23 | 0.23 | 0.24 | 0.25 | 0.24 | 0.24 | 0.24 |

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: MEDIUM

Temperature:25.3DEG

Operators:

Test Date:16 July 2020

g Range: 0 - 180DEG

g Interval: 0.5DEG

Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402

Humidity:65.0%

Test Distance:3.010m [K=1.0000]

Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|  |       |                  |
|--|-------|------------------|
| Test:U:120.03V I:0.0366A P:4.3547W PF:0.9915 Freq:59.98Hz Lamp Flux:247.407x1 lm |       |                  |
| NAME: MVP-1-30-WH  | TYPE: | WEIGHT:          |
| SPEC.:4.3W   | DIM.: | SERIAL No.:      |
| MFR.: LiBo   | SUR.: | Shielding Angle: |

Table--2

UNIT: cd

| C(DEG)<br>g (DEG) | 285  | 300  | 315  | 330  | 345  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                 | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                 | 91.9 | 92.0 | 92.1 | 92.2 | 92.3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                | 89.7 | 90.0 | 90.3 | 90.7 | 90.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                | 86.7 | 87.2 | 87.5 | 88.1 | 88.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                | 82.8 | 83.3 | 83.8 | 84.3 | 85.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                | 78.2 | 78.7 | 79.3 | 80.0 | 80.6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                | 72.8 | 73.4 | 74.0 | 75.0 | 75.7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                | 66.9 | 67.6 | 68.3 | 69.4 | 70.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                | 60.6 | 61.3 | 62.1 | 63.1 | 63.9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                | 53.9 | 54.6 | 55.4 | 56.5 | 57.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                | 47.0 | 47.7 | 48.5 | 49.6 | 50.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                | 39.9 | 40.7 | 41.4 | 42.6 | 43.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                | 32.8 | 33.6 | 34.3 | 35.5 | 36.3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                | 25.8 | 26.6 | 27.3 | 28.4 | 29.3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                | 19.0 | 19.9 | 20.5 | 21.6 | 22.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                | 12.7 | 13.5 | 14.0 | 15.1 | 15.7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                | 7.13 | 7.75 | 8.22 | 9.13 | 9.66 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                | 2.33 | 2.83 | 3.27 | 3.94 | 4.45 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95                | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100               | 0.06 | 0.05 | 0.05 | 0.04 | 0.04 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 105               | 0.09 | 0.08 | 0.08 | 0.08 | 0.08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110               | 0.13 | 0.12 | 0.12 | 0.11 | 0.11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 115               | 0.16 | 0.15 | 0.15 | 0.15 | 0.15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 120               | 0.19 | 0.18 | 0.18 | 0.18 | 0.19 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 125               | 0.21 | 0.20 | 0.21 | 0.21 | 0.21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 130               | 0.24 | 0.23 | 0.23 | 0.23 | 0.23 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135               | 0.25 | 0.25 | 0.24 | 0.23 | 0.24 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140               | 0.27 | 0.25 | 0.24 | 0.23 | 0.24 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145               | 0.26 | 0.25 | 0.24 | 0.23 | 0.24 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 150               | 0.26 | 0.25 | 0.22 | 0.23 | 0.23 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 155               | 0.24 | 0.22 | 0.20 | 0.22 | 0.22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 160               | 0.22 | 0.20 | 0.19 | 0.20 | 0.21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 165               | 0.20 | 0.20 | 0.20 | 0.19 | 0.20 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 170               | 0.20 | 0.20 | 0.20 | 0.21 | 0.22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 175               | 0.20 | 0.21 | 0.22 | 0.22 | 0.22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 180               | 0.23 | 0.24 | 0.24 | 0.23 | 0.22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 360DEG

C Interval: 15.0DEG

Test Speed: MEDIUM

Temperature:25.3DEG

Operators:

Test Date:16 July 2020

g Range: 0 - 180DEG

g Interval: 0.5DEG

Test System:EVERFINE GO-SPEX500\_V1 SYSTEM V2.0.402

Humidity:65.0%

Test Distance:3.010m [K=1.0000]

Remarks: