

## Floodlight Summary:

Report based on lamp delivering 1000 lumens.

|                                                         |                                                                     |
|---------------------------------------------------------|---------------------------------------------------------------------|
| Maximum Intensity<br>(Luminaire orientation as tested.) | 314.0 cd per klm.<br>0.0 degrees vertical<br>0.0 degrees horizontal |
|---------------------------------------------------------|---------------------------------------------------------------------|

|             |                |                 |
|-------------|----------------|-----------------|
| Beam Spread | At 10% of Imax | 154.5V x 177.8H |
|             | At 50% of Imax | 106.5V x 137.8H |
|             | At 90% of Imax | 43.1V x 69.6H   |

|           |                |                       |
|-----------|----------------|-----------------------|
| Beam Flux | Total          | 997.3 lumens per klm. |
|           | To 10% of Imax | 991.7 lumens per klm. |
|           | To 50% of Imax | 769.0 lumens per klm. |
|           | To 90% of Imax | 217.6 lumens per klm. |

|              |        |
|--------------|--------|
| Upward LOR   | 0.0 %  |
| Downward LOR | 99.7 % |

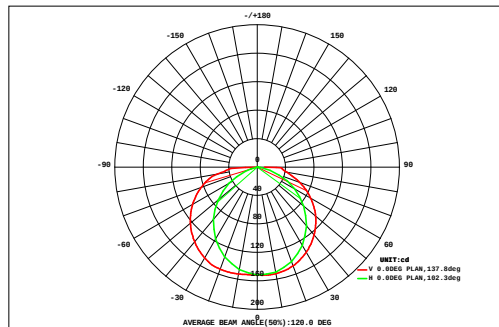
|                                          |         |
|------------------------------------------|---------|
| Luminaire Efficiency(Light Output Ratio) | 100.0 % |
|------------------------------------------|---------|

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:28.0DEG  
Operators:QC1  
Test Date:2024-09-21

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.275  
Humidity:83%  
Test Distance:8.300m [K=1.0000]  
Remarks:

## LUMINAIRE PHOTOMETRIC TEST REPORT

|                                                                   |          |                       |
|-------------------------------------------------------------------|----------|-----------------------|
| Test:U:220.5V I:0.1117A P:13.73W PF:0.5575 Lamp Flux:487.509x1 lm |          |                       |
| NAME: 8.02.019.0096 LLS-OP-W30A-L6-DIM                            | TYPE:LED | WEIGHT:               |
| DIM.:                                                             | SPEC.:   | SERIAL No.:2024090102 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                            | SUR.:    | PROTECTION ANGLE:     |



| DATA OF LAMP             |          | Eff:35.50lm/W      |            |
|--------------------------|----------|--------------------|------------|
| MODEL LLS-OP-W30A-L6-DIM | Imax(cd) | 153.1              |            |
| NOMINAL POWER(W)         | 14       | AVAILABILITY(%)    | 99.6       |
| RATED VOLTAGE(V)         | 220      | Avai. FLUX(lm)     | 485.6      |
| NOMINAL FLUX(lm)         | 487.509  | LOR(%)             | 100.0      |
| LAMPS INSIDE             | 1        | TOTAL FLUX(lm)     | 487.5      |
| TEST VOLTAGE(V)          | 220.5    | $\theta$ @50%(H,V) | 138,106DEG |

| VERTICAL (DEG)                                                           | AREA FLUX DIAGRAM |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      | UNIT: lm |      |      |  | Φ t | Φ a |
|--------------------------------------------------------------------------|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------|------|------|--|-----|-----|
|                                                                          | 90                | 80   | 70   | 60   | 50   | 40   | 30   | 20   | 10   | 0    | -10  | -20  | -30  | -40  | -50  | -60  | -70      | -80  | -90  |  |     |     |
|                                                                          | 0.00              | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00     | 0.00 | 0.00 |  |     |     |
|                                                                          | 0.03              | 0.34 | 0.68 | 0.96 | 1.13 | 1.15 | 1.04 | 0.82 | 0.58 | 0.54 | 0.65 | 0.76 | 0.81 | 0.78 | 0.68 | 0.52 | 0.33     | 0.11 | 11.9 |  |     |     |
|                                                                          | 0.08              | 0.40 | 0.75 | 1.09 | 1.37 | 1.56 | 1.63 | 1.58 | 1.46 | 1.44 | 1.47 | 1.41 | 1.27 | 1.05 | 0.79 | 0.52 | 0.29     | 0.09 | 18.2 |  |     |     |
|                                                                          | 0.10              | 0.45 | 0.88 | 1.32 | 1.74 | 2.07 | 2.27 | 2.31 | 2.25 | 2.24 | 2.22 | 2.07 | 1.79 | 1.43 | 1.02 | 0.64 | 0.32     | 0.09 | 25.2 |  |     |     |
|                                                                          | 0.11              | 0.49 | 0.99 | 1.54 | 2.08 | 2.53 | 2.84 | 2.97 | 2.96 | 2.96 | 2.90 | 2.66 | 2.27 | 1.77 | 1.24 | 0.74 | 0.35     | 0.10 | 31.5 |  |     |     |
|                                                                          | 0.12              | 0.53 | 1.08 | 1.72 | 2.37 | 2.93 | 3.35 | 3.55 | 3.58 | 3.59 | 3.48 | 3.16 | 2.67 | 2.07 | 1.43 | 0.84 | 0.38     | 0.10 | 36.9 |  |     |     |
|                                                                          | 0.12              | 0.55 | 1.15 | 1.86 | 2.59 | 3.25 | 3.76 | 4.02 | 4.09 | 4.10 | 3.95 | 3.56 | 2.99 | 2.29 | 1.57 | 0.91 | 0.40     | 0.10 | 41.3 |  |     |     |
|                                                                          | 0.12              | 0.57 | 1.20 | 1.96 | 2.74 | 3.46 | 4.04 | 4.35 | 4.44 | 4.45 | 4.28 | 3.83 | 3.19 | 2.44 | 1.66 | 0.96 | 0.42     | 0.10 | 44.2 |  |     |     |
|                                                                          | 0.12              | 0.58 | 1.22 | 1.99 | 2.80 | 3.55 | 4.16 | 4.49 | 4.60 | 4.61 | 4.42 | 3.95 | 3.29 | 2.51 | 1.71 | 0.98 | 0.43     | 0.10 | 45.5 |  |     |     |
|                                                                          | 0.11              | 0.57 | 1.22 | 1.98 | 2.78 | 3.52 | 4.12 | 4.44 | 4.55 | 4.56 | 4.37 | 3.91 | 3.25 | 2.48 | 1.69 | 0.97 | 0.42     | 0.10 | 45.0 |  |     |     |
|                                                                          | 0.10              | 0.53 | 1.18 | 1.91 | 2.67 | 3.36 | 3.91 | 4.20 | 4.28 | 4.29 | 4.12 | 3.71 | 3.10 | 2.37 | 1.62 | 0.94 | 0.41     | 0.09 | 42.8 |  |     |     |
|                                                                          | 0.07              | 0.49 | 1.10 | 1.79 | 2.48 | 3.09 | 3.56 | 3.79 | 3.84 | 3.84 | 3.72 | 3.36 | 2.83 | 2.18 | 1.50 | 0.88 | 0.39     | 0.07 | 39.0 |  |     |     |
|                                                                          | 0.05              | 0.42 | 1.00 | 1.62 | 2.22 | 2.73 | 3.09 | 3.26 | 3.26 | 3.26 | 3.18 | 2.90 | 2.46 | 1.92 | 1.34 | 0.79 | 0.35     | 0.05 | 33.9 |  |     |     |
|                                                                          | 0.05              | 0.34 | 0.89 | 1.41 | 1.90 | 2.29 | 2.55 | 2.63 | 2.59 | 2.58 | 2.54 | 2.35 | 2.02 | 1.59 | 1.13 | 0.69 | 0.29     | 0.05 | 27.9 |  |     |     |
|                                                                          | 0.04              | 0.27 | 0.75 | 1.17 | 1.54 | 1.80 | 1.94 | 1.94 | 1.84 | 1.82 | 1.82 | 1.72 | 1.52 | 1.23 | 0.90 | 0.58 | 0.23     | 0.05 | 21.2 |  |     |     |
|                                                                          | 0.04              | 0.22 | 0.59 | 0.93 | 1.16 | 1.28 | 1.29 | 1.19 | 1.03 | 0.99 | 1.05 | 1.05 | 0.99 | 0.85 | 0.67 | 0.46 | 0.18     | 0.05 | 14.0 |  |     |     |
|                                                                          | 0.02              | 0.16 | 0.45 | 0.69 | 0.78 | 0.76 | 0.63 | 0.43 | 0.28 | 0.25 | 0.31 | 0.41 | 0.49 | 0.52 | 0.48 | 0.35 | 0.14     | 0.05 | 7.20 |  |     |     |
|                                                                          | 0.00              | 0.05 | 0.18 | 0.26 | 0.26 | 0.20 | 0.09 | 0.01 | 0.00 | 0.00 | 0.00 | 0.02 | 0.09 | 0.16 | 0.19 | 0.14 | 0.06     | 0.02 | 1.73 |  |     |     |
| -90 -80 -70 -60 -50 -40 -30 -20 HORIZONTAL (DEG) 20 30 40 50 60 70 80 90 |                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |          |      |      |  |     |     |
| Φ t                                                                      | 1.27              | 6.96 | 15.3 | 24.2 | 32.6 | 39.5 | 44.3 | 46.0 | 45.6 | 45.5 | 44.5 | 40.9 | 35.0 | 27.7 | 19.6 | 11.9 | 5.38     | 1.32 | 488  |  |     |     |
| Φ a                                                                      | 1.22              | 6.92 | 15.3 | 24.2 | 32.6 | 39.5 | 44.1 | 45.8 | 45.3 | 45.2 | 44.2 | 40.7 | 34.9 | 27.6 | 19.6 | 11.9 | 5.34     | 1.30 | 486  |  |     |     |

one-half-peak spread: U:51.0,D:56.2 , L:58.6,R:57.9

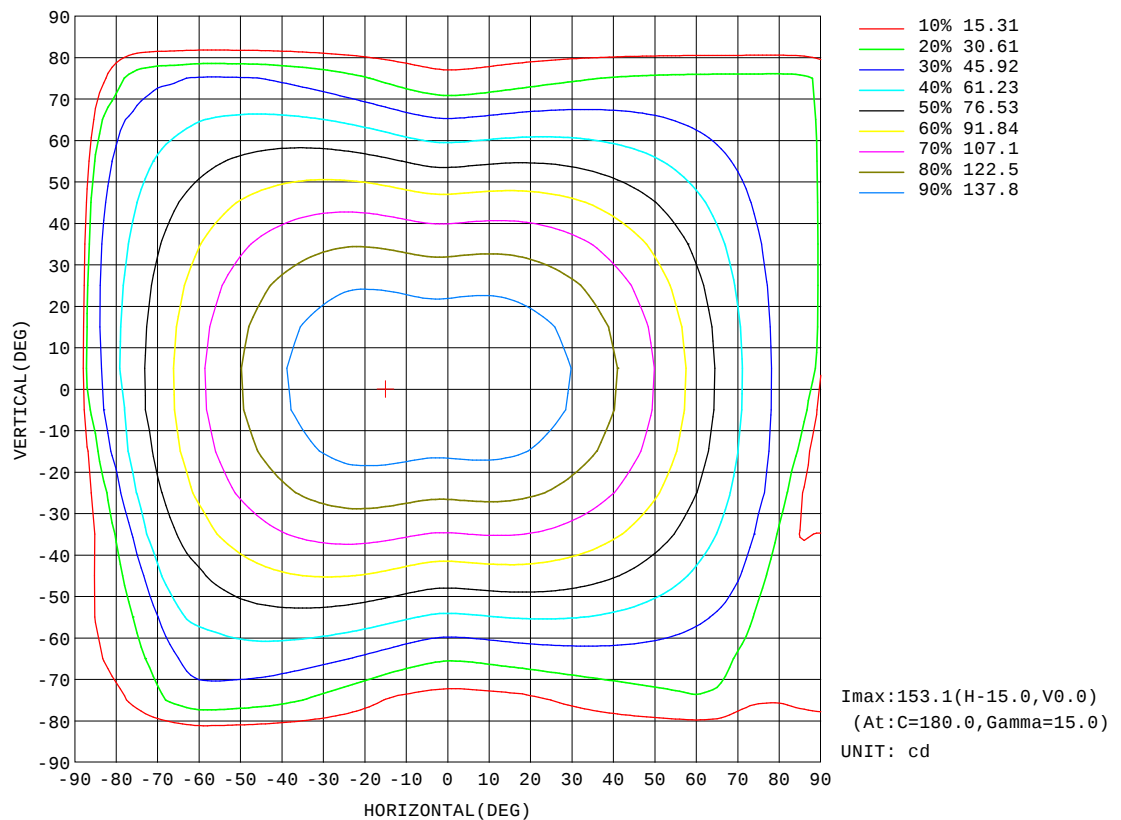
NEMA Beam Type: Type 7

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:28.0DEG  
Operators:QC1  
Test Date:2024-09-21

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.275  
Humidity:83%  
Test Distance:8.300m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

|                                                                   |          |                       |
|-------------------------------------------------------------------|----------|-----------------------|
| Test:U:220.5V I:0.1117A P:13.73W PF:0.5575 Lamp Flux:487.509x1 lm |          |                       |
| NAME: 8.02.019.0096 LLS-OP-W30A-L6-DIM                            | TYPE:LED | WEIGHT:               |
| DIM.:                                                             | SPEC.:   | SERIAL No.:2024090102 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                            | SUR.:    | PROTECTION ANGLE:     |

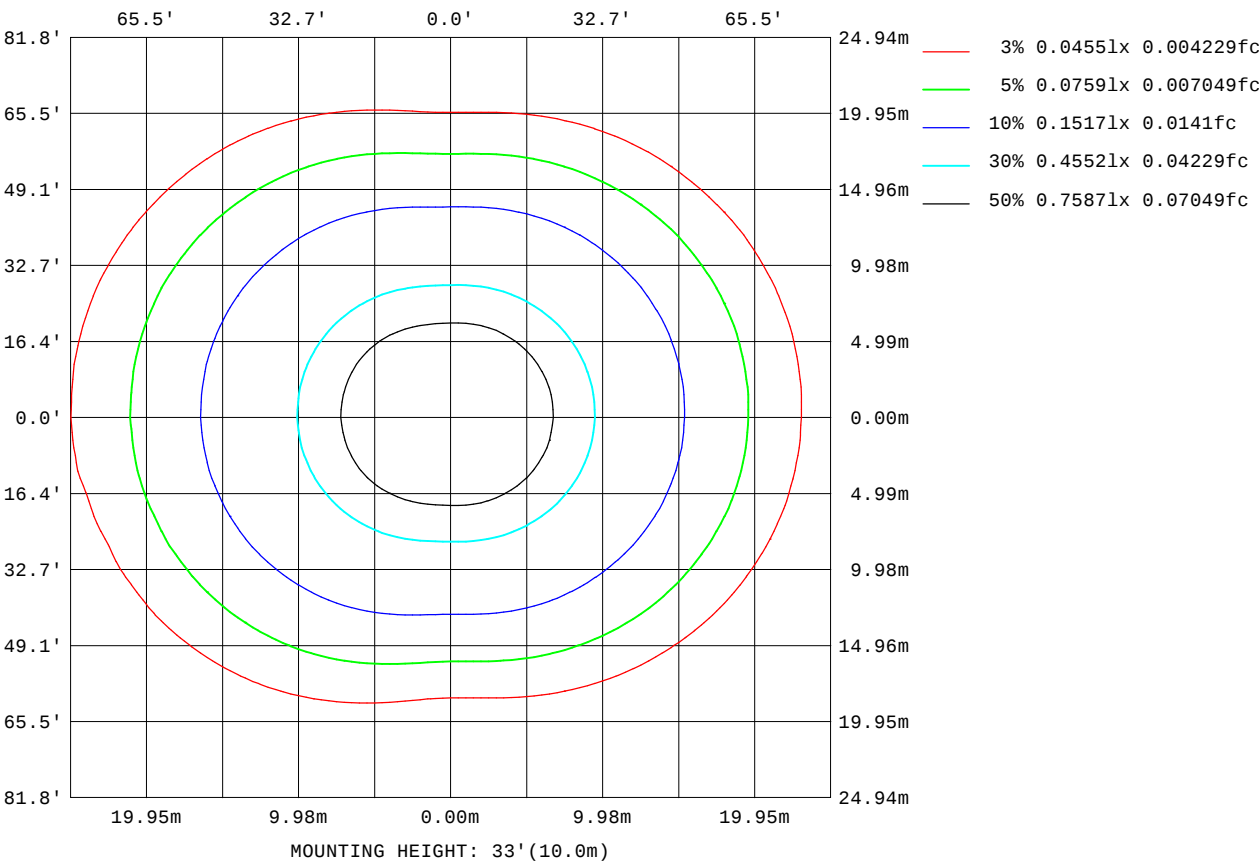


H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:28.0DEG  
Operators:QC1  
Test Date:2024-09-21

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.275  
Humidity:83%  
Test Distance:8.300m [K=1.0000]  
Remarks:

ISOLUX DIAGRAM

|                                                                   |          |                       |
|-------------------------------------------------------------------|----------|-----------------------|
| Test:U:220.5V I:0.1117A P:13.73W PF:0.5575 Lamp Flux:487.509x1 lm |          |                       |
| NAME: 8.02.019.0096 LLS-OP-W30A-L6-DIM                            | TYPE:LED | WEIGHT:               |
| DIM.:                                                             | SPEC.:   | SERIAL No.:2024090102 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                            | SUR.:    | PROTECTION ANGLE:     |

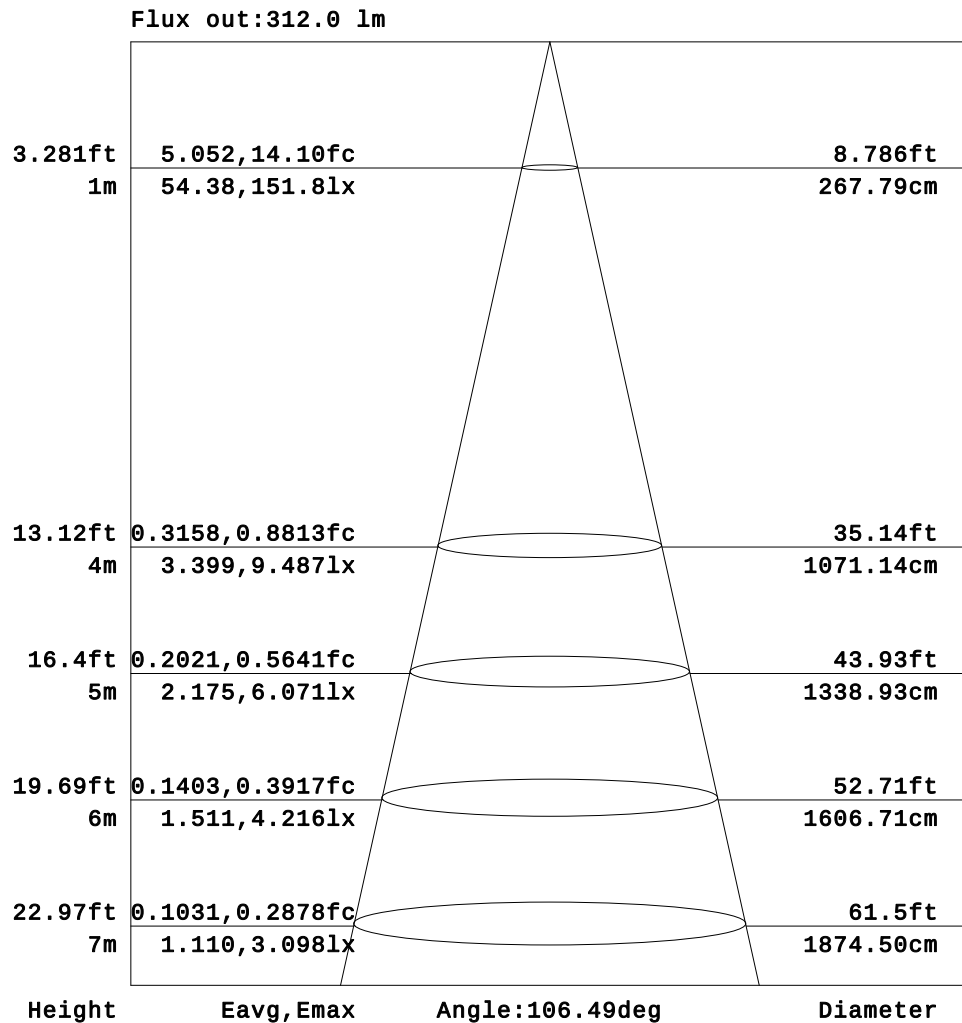


H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:28.0DEG  
Operators:QC1  
Test Date:2024-09-21

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.275  
Humidity:83%  
Test Distance:8.300m [K=1.0000]  
Remarks:

## AAI Figure

|                                                                   |          |                       |
|-------------------------------------------------------------------|----------|-----------------------|
| Test:U:220.5V I:0.1117A P:13.73W PF:0.5575 Lamp Flux:487.509x1 lm |          |                       |
| NAME: 8.02.019.0096 LLS-OP-W30A-L6-DIM                            | TYPE:LED | WEIGHT:               |
| DIM.:                                                             | SPEC.:   | SERIAL No.:2024090102 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                            | SUR.:    | PROTECTION ANGLE:     |

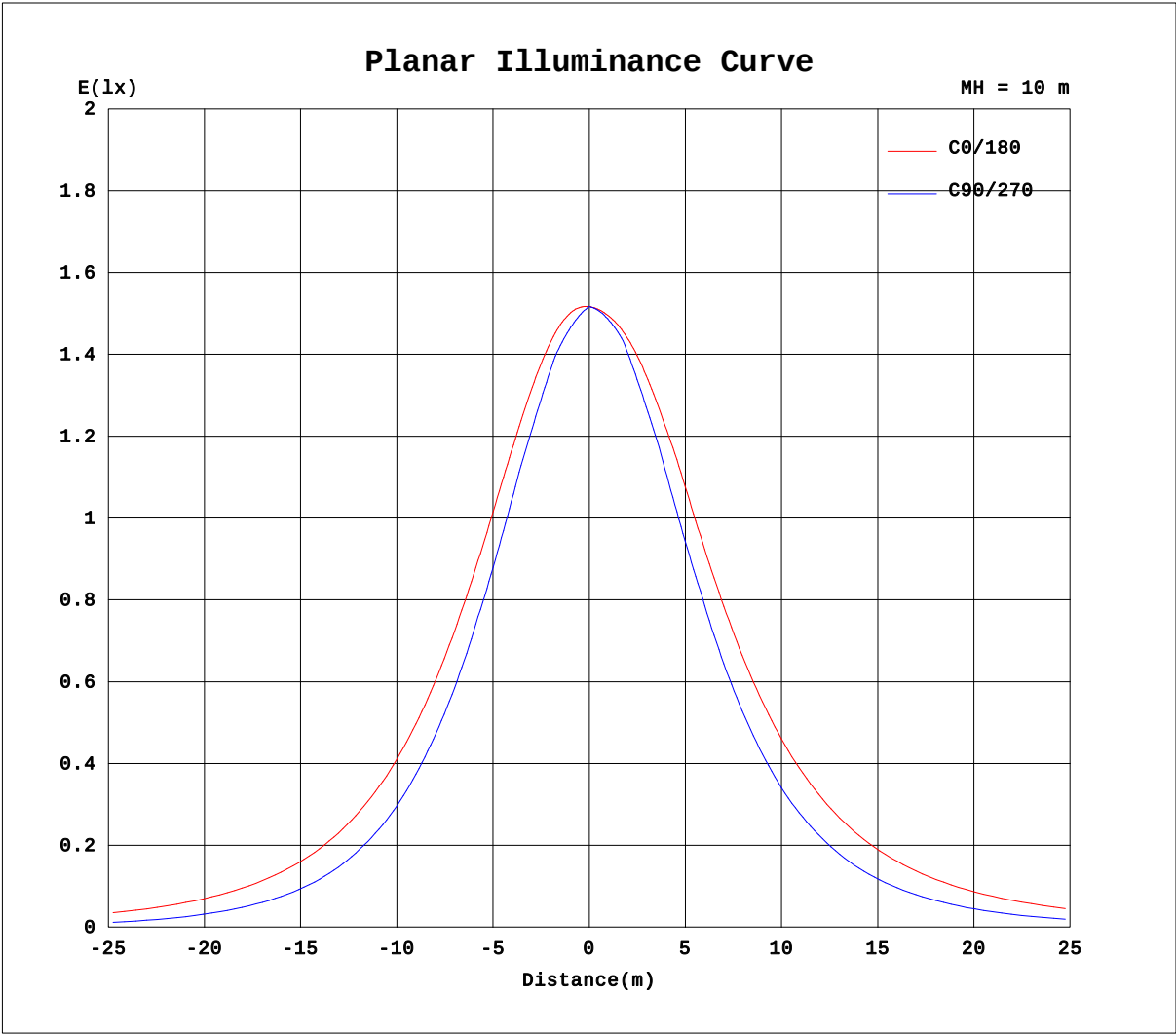


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:28.0DEG  
Operators:QC1  
Test Date:2024-09-21

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.275  
Humidity:83%  
Test Distance:8.300m [K=1.0000]  
Remarks:

Planar Illuminance Curve



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:28.0DEG  
Operators:QC1  
Test Date:2024-09-21

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.275  
Humidity:83%  
Test Distance:8.300m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                   |          |                       |
|-------------------------------------------------------------------|----------|-----------------------|
| Test:U:220.5V I:0.1117A P:13.73W PF:0.5575 Lamp Flux:487.509x1 lm |          |                       |
| NAME: 8.02.019.0096 LLS-OP-W30A-L6-DIM                            | TYPE:LED | WEIGHT:               |
| DIM.:                                                             | SPEC.:   | SERIAL No.:2024090102 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                            | SUR.:    | PROTECTION ANGLE:     |

Table--1

UNIT: cd

| H(°) \ V(°) | -90  | -85  | -80  | -75  | -70  | -65  | -60  | -55  | -50  | -45  | -40  | -35  | -30  | -25  | -20  | -15  | -10  | -5   | 0    |
|-------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| -90         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| -85         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| -80         | 0.00 | 0.00 | 7.22 | 14.8 | 23.6 | 30.4 | 34.6 | 33.6 | 30.9 | 28.1 | 24.8 | 20.8 | 16.5 | 12.0 | 7.32 | 2.70 | 0.00 | 0.00 | 0.00 |
| -75         | 0.00 | 2.73 | 12.6 | 19.3 | 27.8 | 34.9 | 40.1 | 39.8 | 38.3 | 36.5 | 33.9 | 30.7 | 27.1 | 23.3 | 19.2 | 15.0 | 11.7 | 10.0 | 9.08 |
| -70         | 0.00 | 5.46 | 18.0 | 23.8 | 31.9 | 39.4 | 45.7 | 46.1 | 45.7 | 44.8 | 43.1 | 40.6 | 37.8 | 34.6 | 31.0 | 27.2 | 23.4 | 20.1 | 18.2 |
| -65         | 0.00 | 9.90 | 19.0 | 26.9 | 35.9 | 45.7 | 52.0 | 53.0 | 53.7 | 53.9 | 52.9 | 51.3 | 49.3 | 46.7 | 43.6 | 40.3 | 36.7 | 33.6 | 32.0 |
| -60         | 0.00 | 14.3 | 20.1 | 30.1 | 39.9 | 52.0 | 58.3 | 60.0 | 61.8 | 62.9 | 62.8 | 62.1 | 60.8 | 58.8 | 56.3 | 53.3 | 50.1 | 47.2 | 45.8 |
| -55         | 0.00 | 16.1 | 22.0 | 32.9 | 45.5 | 58.6 | 64.0 | 66.7 | 69.8 | 71.5 | 72.3 | 72.3 | 71.6 | 70.3 | 68.3 | 65.7 | 62.8 | 60.1 | 59.0 |
| -50         | 0.00 | 17.9 | 24.0 | 35.8 | 51.0 | 65.1 | 69.7 | 73.4 | 77.8 | 80.2 | 81.7 | 82.5 | 82.5 | 81.8 | 80.3 | 78.1 | 75.5 | 73.1 | 72.1 |
| -45         | 0.00 | 16.1 | 26.3 | 40.4 | 58.1 | 69.5 | 74.4 | 80.4 | 85.0 | 88.1 | 90.4 | 91.8 | 92.4 | 92.3 | 91.2 | 89.4 | 87.1 | 84.9 | 84.1 |
| -40         | 0.00 | 14.4 | 28.5 | 45.0 | 65.2 | 73.9 | 79.2 | 87.4 | 92.1 | 96.0 | 99.0 | 101  | 102  | 103  | 102  | 101  | 98.6 | 96.7 | 96.0 |
| -35         | 0.00 | 15.9 | 31.6 | 51.3 | 68.7 | 77.2 | 85.0 | 92.7 | 98.1 | 103  | 106  | 109  | 111  | 112  | 112  | 111  | 109  | 107  | 106  |
| -30         | 0.00 | 17.3 | 34.7 | 57.5 | 72.2 | 80.5 | 90.9 | 97.9 | 104  | 109  | 114  | 117  | 120  | 121  | 121  | 120  | 119  | 117  | 117  |
| -25         | 0.00 | 19.4 | 40.9 | 61.6 | 74.5 | 84.8 | 94.5 | 102  | 109  | 115  | 120  | 124  | 127  | 129  | 129  | 129  | 127  | 126  | 126  |
| -20         | 0.00 | 21.5 | 47.1 | 65.7 | 76.9 | 89.1 | 98.1 | 106  | 114  | 120  | 126  | 130  | 134  | 136  | 137  | 137  | 136  | 134  | 134  |
| -15         | 0.00 | 26.6 | 49.8 | 67.0 | 79.6 | 90.9 | 100  | 109  | 117  | 124  | 129  | 134  | 138  | 141  | 142  | 142  | 141  | 140  | 140  |
| -10         | 0.00 | 31.7 | 52.5 | 68.4 | 82.3 | 92.7 | 103  | 112  | 120  | 127  | 133  | 139  | 143  | 147  | 148  | 148  | 147  | 146  | 146  |
| -5          | 0.00 | 36.0 | 54.9 | 70.5 | 83.1 | 93.7 | 104  | 113  | 121  | 129  | 135  | 141  | 145  | 149  | 150  | 150  | 150  | 149  | 149  |
| 0           | 0.00 | 40.3 | 57.3 | 72.6 | 83.9 | 94.7 | 105  | 114  | 123  | 130  | 137  | 143  | 148  | 151  | 153  | 153  | 152  | 152  | 152  |
| 5           | 0.00 | 40.1 | 58.0 | 72.3 | 83.6 | 94.3 | 104  | 114  | 122  | 130  | 136  | 142  | 147  | 151  | 152  | 152  | 152  | 151  | 151  |
| 10          | 0.00 | 40.0 | 58.7 | 72.0 | 83.2 | 93.9 | 104  | 113  | 122  | 129  | 136  | 141  | 146  | 150  | 151  | 151  | 151  | 150  | 150  |
| 15          | 0.00 | 40.7 | 58.3 | 71.4 | 82.3 | 92.7 | 102  | 111  | 120  | 127  | 133  | 138  | 143  | 146  | 147  | 147  | 147  | 146  | 146  |
| 20          | 0.00 | 41.5 | 57.9 | 70.8 | 81.5 | 91.6 | 101  | 110  | 117  | 124  | 130  | 135  | 139  | 142  | 143  | 143  | 142  | 141  | 141  |
| 25          | 0.00 | 40.9 | 57.1 | 69.4 | 79.6 | 89.2 | 98.1 | 106  | 114  | 120  | 125  | 130  | 133  | 136  | 137  | 136  | 135  | 134  | 134  |
| 30          | 0.00 | 40.4 | 56.2 | 68.0 | 77.6 | 86.7 | 95.1 | 103  | 110  | 115  | 120  | 124  | 128  | 130  | 130  | 129  | 128  | 127  | 127  |
| 35          | 0.00 | 39.9 | 55.3 | 66.0 | 75.2 | 83.6 | 91.3 | 98.3 | 104  | 110  | 114  | 117  | 120  | 121  | 121  | 120  | 119  | 117  | 117  |
| 40          | 0.00 | 39.3 | 54.3 | 64.0 | 72.8 | 80.5 | 87.4 | 93.7 | 99.2 | 104  | 107  | 110  | 112  | 113  | 113  | 111  | 110  | 108  | 108  |
| 45          | 0.00 | 38.0 | 52.9 | 61.2 | 69.6 | 76.4 | 82.5 | 87.9 | 92.6 | 96.4 | 99.4 | 101  | 103  | 103  | 102  | 101  | 98.9 | 97.0 | 96.6 |
| 50          | 0.00 | 36.7 | 51.5 | 58.4 | 66.4 | 72.3 | 77.5 | 82.1 | 86.0 | 89.0 | 91.3 | 92.8 | 93.4 | 93.1 | 92.1 | 90.3 | 88.1 | 86.0 | 85.4 |
| 55          | 0.00 | 32.7 | 48.6 | 55.8 | 62.5 | 67.8 | 72.1 | 75.7 | 78.6 | 80.8 | 82.3 | 83.0 | 83.0 | 82.2 | 80.7 | 78.5 | 75.9 | 73.6 | 72.9 |
| 60          | 0.00 | 28.7 | 45.7 | 53.3 | 58.6 | 63.3 | 66.7 | 69.3 | 71.2 | 72.5 | 73.2 | 73.3 | 72.6 | 71.2 | 69.2 | 66.7 | 63.8 | 61.3 | 60.3 |
| 65          | 0.00 | 19.3 | 41.5 | 50.0 | 54.4 | 57.7 | 60.7 | 62.3 | 63.2 | 63.6 | 63.4 | 62.7 | 61.3 | 59.3 | 56.7 | 53.8 | 50.6 | 47.8 | 46.7 |
| 70          | 0.00 | 9.81 | 37.3 | 46.8 | 50.2 | 52.0 | 54.7 | 55.3 | 55.3 | 54.7 | 53.6 | 52.0 | 49.9 | 47.3 | 44.3 | 40.9 | 37.4 | 34.4 | 33.0 |
| 75          | 0.00 | 4.91 | 24.2 | 38.1 | 43.2 | 44.9 | 47.0 | 47.2 | 46.7 | 45.8 | 43.8 | 41.3 | 38.4 | 35.1 | 31.4 | 27.6 | 23.8 | 20.6 | 19.1 |
| 80          | 0.00 | 0.00 | 11.1 | 29.5 | 36.2 | 37.8 | 39.3 | 39.2 | 38.1 | 36.9 | 34.0 | 30.6 | 26.9 | 22.8 | 18.6 | 14.3 | 10.3 | 6.88 | 5.14 |
| 85          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 90          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:28.0DEG  
Operators:QC1  
Test Date:2024-09-21

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.275  
Humidity:83%  
Test Distance:8.300m [K=1.0000]  
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                   |          |                       |
|-------------------------------------------------------------------|----------|-----------------------|
| Test:U:220.5V I:0.1117A P:13.73W PF:0.5575 Lamp Flux:487.509x1 lm |          |                       |
| NAME: 8.02.019.0096 LLS-OP-W30A-L6-DIM                            | TYPE:LED | WEIGHT:               |
| DIM.:                                                             | SPEC.:   | SERIAL No.:2024090102 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                            | SUR.:    | PROTECTION ANGLE:     |

| Table--2 |      | UNIT: cd |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----------|------|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| H(°)     | V(°) | 5        | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   |
| -90      | 0.00 | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| -85      | 0.00 | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| -80      | 0.00 | 0.00     | 0.00 | 1.49 | 4.97 | 8.47 | 11.9 | 15.2 | 18.3 | 21.2 | 24.0 | 26.2 | 23.2 | 18.8 | 14.4 | 15.9 | 19.3 | 21.6 |      |
| -75      | 9.31 | 10.1     | 11.0 | 12.7 | 15.4 | 18.0 | 20.4 | 22.7 | 24.8 | 26.6 | 28.2 | 29.5 | 28.0 | 20.9 | 16.8 | 16.5 | 19.3 | 21.4 |      |
| -70      | 18.6 | 20.2     | 22.0 | 24.0 | 25.8 | 27.5 | 29.0 | 30.2 | 31.2 | 32.0 | 32.5 | 32.9 | 32.8 | 22.9 | 19.3 | 17.2 | 19.2 | 21.2 |      |
| -65      | 32.5 | 33.9     | 35.5 | 36.9 | 38.1 | 39.0 | 39.6 | 39.8 | 39.8 | 39.4 | 38.7 | 37.8 | 36.6 | 28.7 | 21.0 | 18.7 | 19.4 | 20.6 |      |
| -60      | 46.3 | 47.6     | 49.0 | 49.9 | 50.5 | 50.5 | 50.2 | 49.4 | 48.4 | 46.8 | 44.9 | 42.8 | 40.5 | 34.5 | 22.7 | 20.2 | 19.7 | 20.1 |      |
| -55      | 59.6 | 60.7     | 61.8 | 62.3 | 62.3 | 61.8 | 60.7 | 59.1 | 57.0 | 54.5 | 51.6 | 48.3 | 44.7 | 39.2 | 27.2 | 20.1 | 19.7 | 19.3 |      |
| -50      | 72.8 | 73.8     | 74.6 | 74.7 | 74.2 | 73.0 | 71.2 | 68.7 | 65.7 | 62.2 | 58.2 | 53.7 | 49.0 | 43.9 | 31.7 | 20.0 | 19.8 | 18.4 |      |
| -45      | 84.7 | 85.7     | 86.1 | 85.9 | 84.9 | 83.2 | 80.7 | 77.6 | 73.7 | 69.3 | 64.4 | 58.9 | 53.1 | 47.0 | 35.8 | 22.5 | 18.3 | 18.1 |      |
| -40      | 96.7 | 97.5     | 97.7 | 97.1 | 95.6 | 93.3 | 90.3 | 86.4 | 81.8 | 76.4 | 70.6 | 64.1 | 57.2 | 50.2 | 40.0 | 25.0 | 16.7 | 17.7 |      |
| -35      | 107  | 108      | 108  | 107  | 105  | 102  | 98.5 | 94.0 | 88.7 | 82.7 | 76.0 | 68.7 | 61.0 | 53.0 | 43.6 | 28.9 | 15.1 | 15.5 |      |
| -30      | 118  | 118      | 118  | 116  | 114  | 111  | 107  | 102  | 95.7 | 89.0 | 81.5 | 73.3 | 64.7 | 55.8 | 47.2 | 32.8 | 13.4 | 13.2 |      |
| -25      | 126  | 127      | 126  | 124  | 121  | 118  | 113  | 107  | 101  | 93.6 | 85.5 | 76.7 | 67.4 | 57.8 | 48.5 | 37.0 | 17.6 | 8.93 |      |
| -20      | 135  | 135      | 134  | 132  | 129  | 124  | 119  | 113  | 106  | 98.3 | 89.6 | 80.1 | 70.2 | 59.8 | 49.8 | 41.1 | 21.9 | 4.62 |      |
| -15      | 141  | 141      | 140  | 137  | 134  | 129  | 124  | 117  | 110  | 101  | 92.4 | 82.5 | 72.1 | 61.3 | 50.8 | 41.7 | 28.7 | 3.47 |      |
| -10      | 147  | 147      | 145  | 143  | 139  | 134  | 128  | 121  | 113  | 105  | 95.2 | 84.9 | 74.1 | 62.9 | 51.9 | 42.3 | 35.5 | 2.32 |      |
| -5       | 150  | 149      | 148  | 145  | 141  | 136  | 130  | 123  | 115  | 106  | 96.3 | 85.8 | 74.8 | 63.4 | 52.2 | 42.4 | 35.8 | 6.46 |      |
| 0        | 152  | 152      | 150  | 148  | 143  | 138  | 132  | 124  | 116  | 107  | 97.3 | 86.6 | 75.5 | 63.8 | 52.4 | 42.6 | 36.1 | 10.6 |      |
| 5        | 151  | 151      | 150  | 147  | 143  | 138  | 131  | 124  | 116  | 107  | 97.1 | 86.5 | 75.4 | 63.8 | 52.4 | 42.5 | 36.1 | 17.1 |      |
| 10       | 151  | 150      | 149  | 146  | 142  | 137  | 131  | 124  | 116  | 107  | 97.0 | 86.4 | 75.3 | 63.8 | 52.4 | 42.5 | 36.1 | 23.6 |      |
| 15       | 146  | 146      | 145  | 142  | 139  | 134  | 128  | 121  | 113  | 104  | 94.9 | 84.6 | 73.8 | 62.6 | 51.6 | 42.1 | 36.0 | 25.4 |      |
| 20       | 142  | 142      | 141  | 138  | 135  | 130  | 125  | 118  | 110  | 102  | 92.7 | 82.7 | 72.3 | 61.4 | 50.8 | 41.6 | 35.9 | 27.2 |      |
| 25       | 135  | 135      | 134  | 132  | 129  | 125  | 119  | 113  | 106  | 98.2 | 89.5 | 80.0 | 70.1 | 59.8 | 49.8 | 41.1 | 35.8 | 27.5 |      |
| 30       | 128  | 128      | 127  | 126  | 123  | 119  | 114  | 108  | 102  | 94.5 | 86.2 | 77.3 | 67.9 | 58.2 | 48.7 | 40.7 | 35.7 | 27.8 |      |
| 35       | 118  | 119      | 118  | 117  | 114  | 111  | 107  | 102  | 95.7 | 88.9 | 81.4 | 73.2 | 64.6 | 55.6 | 47.1 | 39.8 | 35.5 | 27.8 |      |
| 40       | 109  | 109      | 109  | 108  | 106  | 103  | 99.5 | 94.9 | 89.5 | 83.4 | 76.5 | 69.1 | 61.2 | 53.0 | 45.4 | 39.0 | 35.3 | 27.9 |      |
| 45       | 97.4 | 98.2     | 98.4 | 97.7 | 96.2 | 93.8 | 90.7 | 86.8 | 82.1 | 76.8 | 70.8 | 64.3 | 57.3 | 50.3 | 43.7 | 38.2 | 35.2 | 27.9 |      |
| 50       | 86.2 | 87.2     | 87.6 | 87.3 | 86.3 | 84.4 | 81.9 | 78.7 | 74.7 | 70.2 | 65.1 | 59.4 | 53.5 | 47.5 | 41.9 | 37.4 | 35.0 | 27.9 |      |
| 55       | 73.7 | 74.8     | 75.5 | 75.5 | 75.0 | 73.7 | 71.8 | 69.3 | 66.2 | 62.6 | 58.5 | 54.0 | 49.2 | 44.4 | 40.0 | 36.6 | 34.8 | 27.9 |      |
| 60       | 61.1 | 62.3     | 63.3 | 63.8 | 63.7 | 63.0 | 61.7 | 59.9 | 57.7 | 55.0 | 51.9 | 48.5 | 44.9 | 41.3 | 38.1 | 35.9 | 34.5 | 27.9 |      |
| 65       | 47.4 | 48.7     | 50.0 | 50.9 | 51.4 | 51.4 | 51.0 | 50.1 | 48.9 | 47.4 | 45.4 | 43.2 | 40.9 | 38.6 | 36.6 | 35.3 | 34.2 | 27.8 |      |
| 70       | 33.7 | 35.1     | 36.6 | 38.0 | 39.1 | 39.8 | 40.3 | 40.3 | 40.2 | 39.7 | 38.9 | 37.9 | 36.9 | 35.9 | 35.1 | 34.7 | 34.0 | 27.7 |      |
| 75       | 19.7 | 21.2     | 23.2 | 25.2 | 27.0 | 28.7 | 30.1 | 31.3 | 32.2 | 32.9 | 33.4 | 33.7 | 33.9 | 34.0 | 34.1 | 34.1 | 33.2 | 27.7 |      |
| 80       | 5.65 | 7.38     | 9.73 | 12.3 | 15.0 | 17.5 | 19.9 | 22.2 | 24.2 | 26.1 | 27.8 | 29.4 | 30.8 | 32.1 | 33.1 | 33.5 | 32.4 | 27.7 |      |
| 85       | 0.00 | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |      |
| 90       | 0.00 | 0.00     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |      |

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:28.0DEG  
Operators:QC1  
Test Date:2024-09-21

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.275  
Humidity:83%  
Test Distance:8.300m [K=1.0000]  
Remarks: