

## Floodlight Summary:

Report based on lamp delivering 1000 lumens.

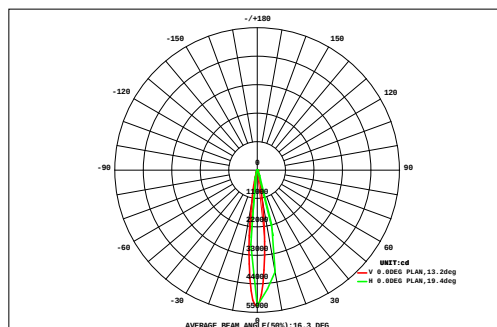
|                                                         |                |                                                                      |
|---------------------------------------------------------|----------------|----------------------------------------------------------------------|
| Maximum Intensity<br>(Luminaire orientation as tested.) |                | 8748.3 cd per klm.<br>0.0 degrees vertical<br>0.0 degrees horizontal |
| Beam Spread                                             | At 10% of Imax | 29.5V x 26.5H                                                        |
|                                                         | At 50% of Imax | 19.4V x 13.2H                                                        |
|                                                         | At 90% of Imax | 6.2V x 5.1H                                                          |
| Beam Flux                                               | Total          | 981.4 lumens per klm.                                                |
|                                                         | To 10% of Imax | 687.1 lumens per klm.                                                |
|                                                         | To 50% of Imax | 376.0 lumens per klm.                                                |
|                                                         | To 90% of Imax | 43.7 lumens per klm.                                                 |
| Upward LOR                                              |                | 0.0 %                                                                |
| Downward LOR                                            |                | 98.1 %                                                               |
| Luminaire Efficiency(Light Output Ratio)                |                | 100.0 %                                                              |

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:30.3DEG  
Operators:QC1  
Test Date:2023-07-19

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.275  
Humidity:50%  
Test Distance:8.300m [K=1.0000]  
Remarks:

## LUMINAIRE PHOTOMETRIC TEST REPORT

|                                                                   |          |                       |
|-------------------------------------------------------------------|----------|-----------------------|
| Test:U:220.3V I:0.8999A P:193.1W PF:0.9741 Lamp Flux:5991.22x1 lm |          |                       |
| NAME: 8.03.006.0112 30°SP-F620A-108P-RDM                          | TYPE:LED | WEIGHT:               |
| DIM.:                                                             | SPEC.:   | SERIAL No.:2023070052 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                            | SUR.:    | PROTECTION ANGLE:     |



| DATA OF LAMP     |                   | Eff:31.02lm/W   |          |
|------------------|-------------------|-----------------|----------|
| MODEL            | SP-F620A-108P-RDM | Imax(cd)        | 52413    |
| NOMINAL POWER(W) | 194               | AVAILABILITY(%) | 72.1     |
| RATED VOLTAGE(V) | 220               | Avai. FLUX(lm)  | 4317     |
| NOMINAL FLUX(lm) | 5991.22           | LOR(%)          | 100.0    |
| LAMPS INSIDE     | 1                 | TOTAL FLUX(lm)  | 5991     |
| TEST VOLTAGE(V)  | 220.3             | θ @50%(H,V)     | 13,19DEG |

| VERTICAL (DEG) | AREA FLUX DIAGRAM |      |      |      |      |      |      |      |                   |      |      |      |      |      |      |      | UNIT:lm |      | Φ t  | Φ a  |
|----------------|-------------------|------|------|------|------|------|------|------|-------------------|------|------|------|------|------|------|------|---------|------|------|------|
|                | 1.02              | 1.33 | 1.73 | 2.19 | 2.70 | 3.30 | 3.90 | 4.42 | 4.77              | 4.82 | 4.54 | 4.02 | 3.39 | 2.76 | 2.21 | 1.76 | 1.39    | 1.12 | 51.4 | 0.00 |
| 27             | 1.02              | 1.33 | 1.73 | 2.19 | 2.70 | 3.30 | 3.90 | 4.42 | 4.77              | 4.82 | 4.54 | 4.02 | 3.39 | 2.76 | 2.21 | 1.76 | 1.39    | 1.12 | 51.4 | 0.00 |
| 24             | 1.28              | 1.78 | 2.44 | 3.16 | 3.99 | 5.04 | 6.29 | 7.51 | 8.35              | 8.39 | 7.63 | 6.40 | 5.15 | 4.09 | 3.23 | 2.51 | 1.88    | 1.41 | 80.5 | 0.00 |
| 21             | 1.47              | 2.09 | 2.91 | 3.80 | 4.84 | 6.16 | 7.79 | 9.40 | 10.5              | 10.6 | 9.53 | 7.90 | 6.28 | 4.96 | 3.90 | 3.00 | 2.20    | 1.61 | 98.9 | 0.00 |
| 18             | 1.65              | 2.40 | 3.38 | 4.44 | 5.68 | 7.28 | 9.29 | 11.3 | 12.7              | 12.7 | 11.4 | 9.40 | 7.41 | 5.83 | 4.56 | 3.49 | 2.53    | 1.82 | 117  | 0.00 |
| 15             | 1.97              | 2.79 | 3.91 | 5.66 | 9.19 | 17.2 | 33.0 | 54.3 | 71.8              | 72.4 | 55.5 | 33.6 | 17.8 | 9.50 | 5.85 | 4.06 | 2.98    | 2.26 | 404  | 350  |
| 12             | 2.21              | 3.13 | 4.40 | 6.57 | 11.3 | 22.3 | 44.7 | 75.2 | 100               | 101  | 76.9 | 45.6 | 23.2 | 11.7 | 6.81 | 4.58 | 3.37    | 2.57 | 546  | 493  |
| 9              | 2.46              | 3.47 | 4.90 | 7.47 | 13.3 | 27.5 | 56.4 | 96.1 | 129               | 130  | 98.2 | 57.5 | 28.5 | 13.8 | 7.76 | 5.11 | 3.76    | 2.88 | 688  | 636  |
|                | 2.53              | 3.48 | 4.90 | 7.55 | 13.7 | 28.6 | 58.9 | 101  | 134               | 132  | 98.3 | 56.7 | 27.6 | 13.2 | 7.54 | 4.97 | 3.62    | 2.72 | 701  | 651  |
|                | 2.58              | 3.45 | 4.83 | 7.53 | 13.8 | 29.2 | 60.2 | 103  | 136               | 132  | 95.6 | 54.3 | 25.9 | 12.3 | 7.17 | 4.75 | 3.42    | 2.49 | 698  | 647  |
|                | 2.70              | 3.54 | 4.96 | 7.81 | 14.6 | 31.3 | 65.0 | 112  | 146               | 141  | 101  | 56.7 | 26.6 | 12.4 | 7.24 | 4.78 | 3.42    | 2.44 | 744  | 696  |
|                | 2.56              | 3.36 | 4.68 | 7.28 | 13.3 | 28.0 | 57.2 | 98.0 | 127               | 122  | 87.4 | 49.3 | 23.4 | 11.2 | 6.74 | 4.53 | 3.24    | 2.28 | 652  | 602  |
| -9             | 1.90              | 2.61 | 3.57 | 5.05 | 7.71 | 13.2 | 23.3 | 36.6 | 46.4              | 45.1 | 34.3 | 21.5 | 12.2 | 7.32 | 5.03 | 3.69 | 2.70    | 1.89 | 274  | 216  |
| -12            | 1.61              | 2.26 | 3.03 | 4.00 | 5.12 | 6.40 | 7.57 | 8.68 | 9.89              | 9.87 | 8.80 | 7.87 | 6.58 | 5.31 | 4.16 | 3.27 | 2.42    | 1.66 | 98.5 | 27.2 |
| -15            | 1.31              | 1.91 | 2.50 | 2.95 | 2.52 | 0.74 | 0.00 | 0.00 | 0.00              | 0.00 | 0.00 | 0.03 | 1.44 | 3.29 | 3.29 | 2.84 | 2.13    | 1.44 | 26.4 | 0.00 |
| -18            | 1.24              | 1.58 | 2.03 | 2.65 | 3.44 | 4.45 | 5.63 | 6.80 | 7.55              | 7.53 | 6.79 | 5.64 | 4.50 | 3.57 | 2.79 | 2.18 | 1.66    | 1.22 | 71.3 | 0.00 |
| -21            | 1.05              | 1.24 | 1.53 | 1.95 | 2.47 | 3.02 | 3.53 | 3.95 | 4.18              | 4.18 | 3.95 | 3.56 | 3.11 | 2.62 | 2.09 | 1.65 | 1.29    | 1.00 | 46.4 | 0.00 |
| -24            | 0.86              | 0.89 | 1.03 | 1.25 | 1.50 | 1.60 | 1.43 | 1.10 | 0.92              | 0.92 | 1.12 | 1.49 | 1.73 | 1.66 | 1.40 | 1.12 | 0.92    | 0.78 | 21.7 | 0.00 |
| -27            | 0.77              | 0.84 | 0.96 | 1.14 | 1.34 | 1.46 | 1.45 | 1.54 | 1.62              | 1.62 | 1.56 | 1.50 | 1.56 | 1.47 | 1.25 | 1.03 | 0.86    | 0.72 | 22.7 | 0.00 |
|                | -27               | -24  | -21  | -18  | -15  | -12  | -9   | -6   | HORIZONTAL( DEG ) | 6    | 9    | 12   | 15   | 18   | 21   | 24   | 27      |      |      |      |
| Φ t            | 31.2              | 42.2 | 57.7 | 82.4 | 130  | 237  | 446  | 731  | 951               | 935  | 703  | 423  | 226  | 127  | 83.0 | 59.3 | 43.8    | 32.3 | 5341 | ---  |
| Φ a            | 0.00              | 0.00 | 0.00 | 0.00 | 38.5 | 187  | 400  | 682  | 898               | 882  | 653  | 375  | 172  | 29.3 | 0.00 | 0.00 | 0.00    | 0.00 | ---  | 4317 |

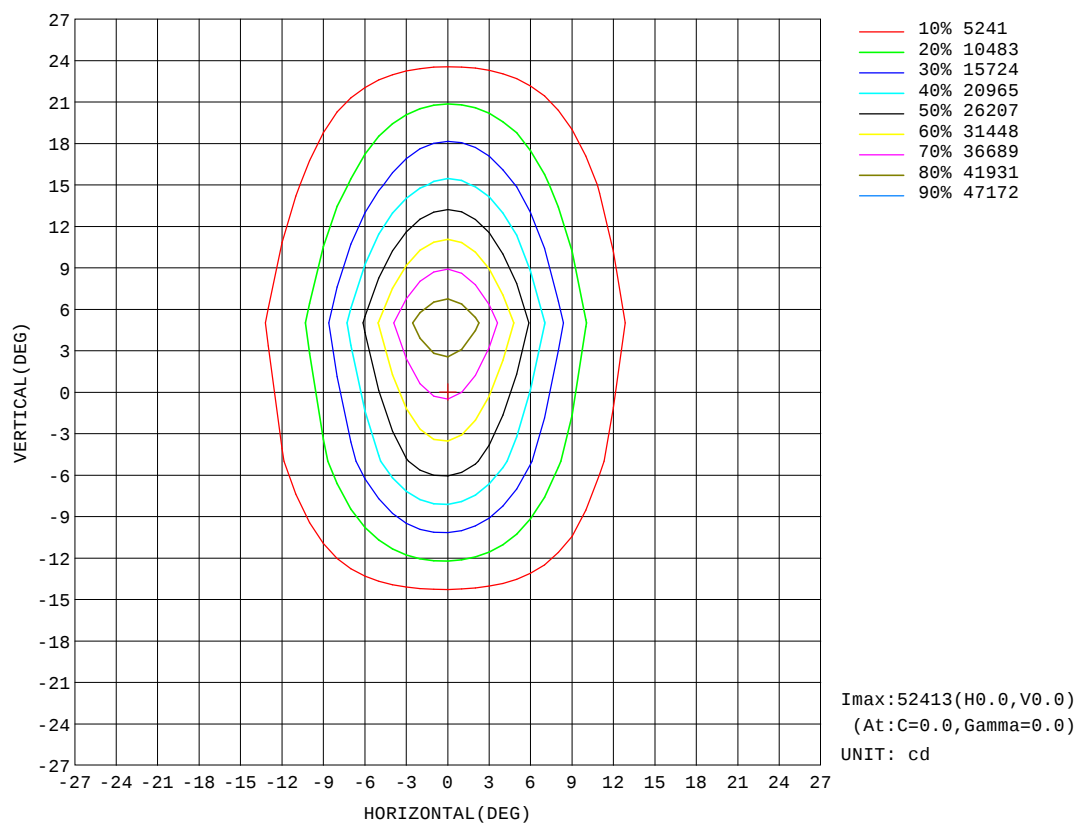
one-half-peak spread: U:5.5,D:14.0 , L:6.9,R:6.9, CEMA Beam Type: Type 2 x 3 (H x V)

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:30.3DEG  
Operators:QC1  
Test Date:2023-07-19

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.275  
Humidity:50%  
Test Distance:8.300m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

|                                                                   |          |                       |
|-------------------------------------------------------------------|----------|-----------------------|
| Test:U:220.3V I:0.8999A P:193.1W PF:0.9741 Lamp Flux:5991.22x1 lm |          |                       |
| NAME: 8.03.006.0112 30°SP-F620A-108P-RDM                          | TYPE:LED | WEIGHT:               |
| DIM.:                                                             | SPEC.:   | SERIAL No.:2023070052 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                            | SUR.:    | PROTECTION ANGLE:     |

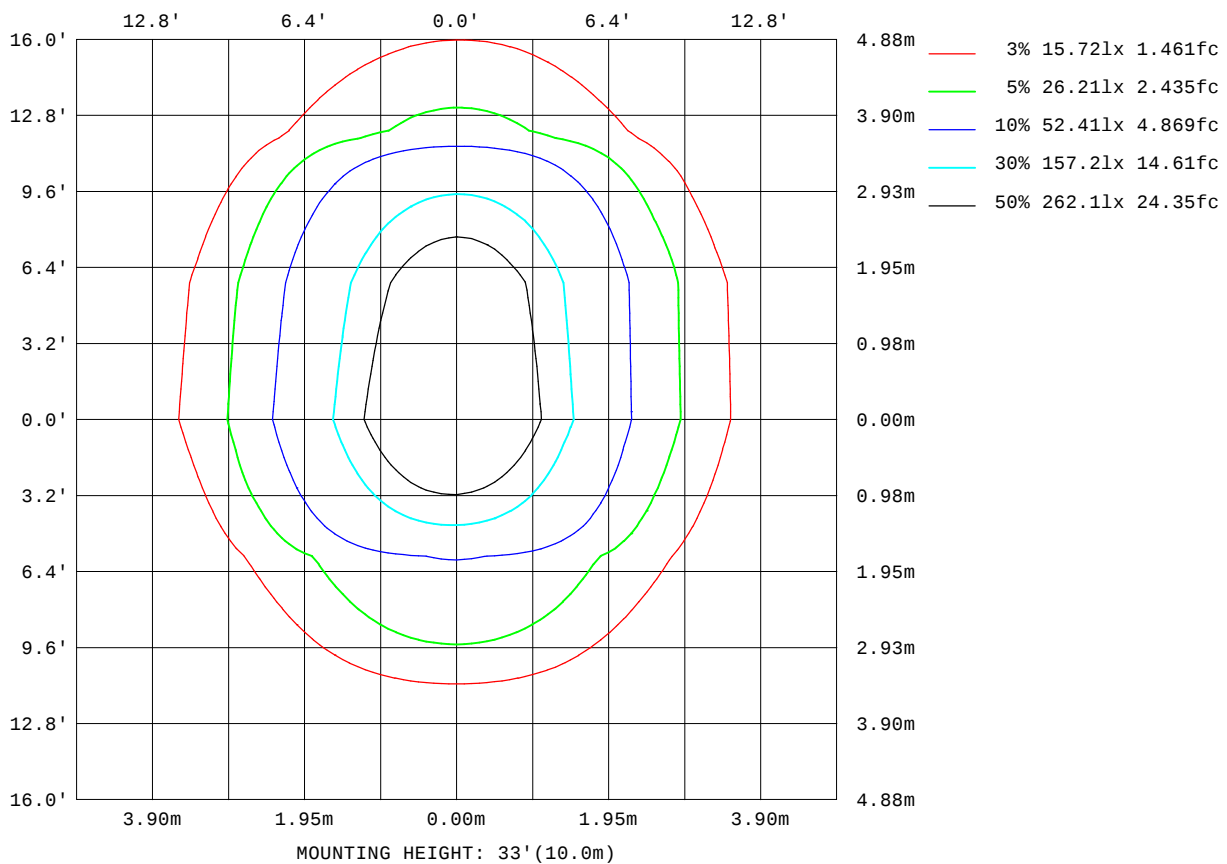


H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:30.3DEG  
Operators:QC1  
Test Date:2023-07-19

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.275  
Humidity:50%  
Test Distance:8.300m [K=1.0000]  
Remarks:

## ISOLUX DIAGRAM

|                                                                   |          |                       |
|-------------------------------------------------------------------|----------|-----------------------|
| Test:U:220.3V I:0.8999A P:193.1W PF:0.9741 Lamp Flux:5991.22x1 lm |          |                       |
| NAME: 8.03.006.0112 30°SP-F620A-108P-RDM                          | TYPE:LED | WEIGHT:               |
| DIM.:                                                             | SPEC.:   | SERIAL No.:2023070052 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                            | SUR.:    | PROTECTION ANGLE:     |



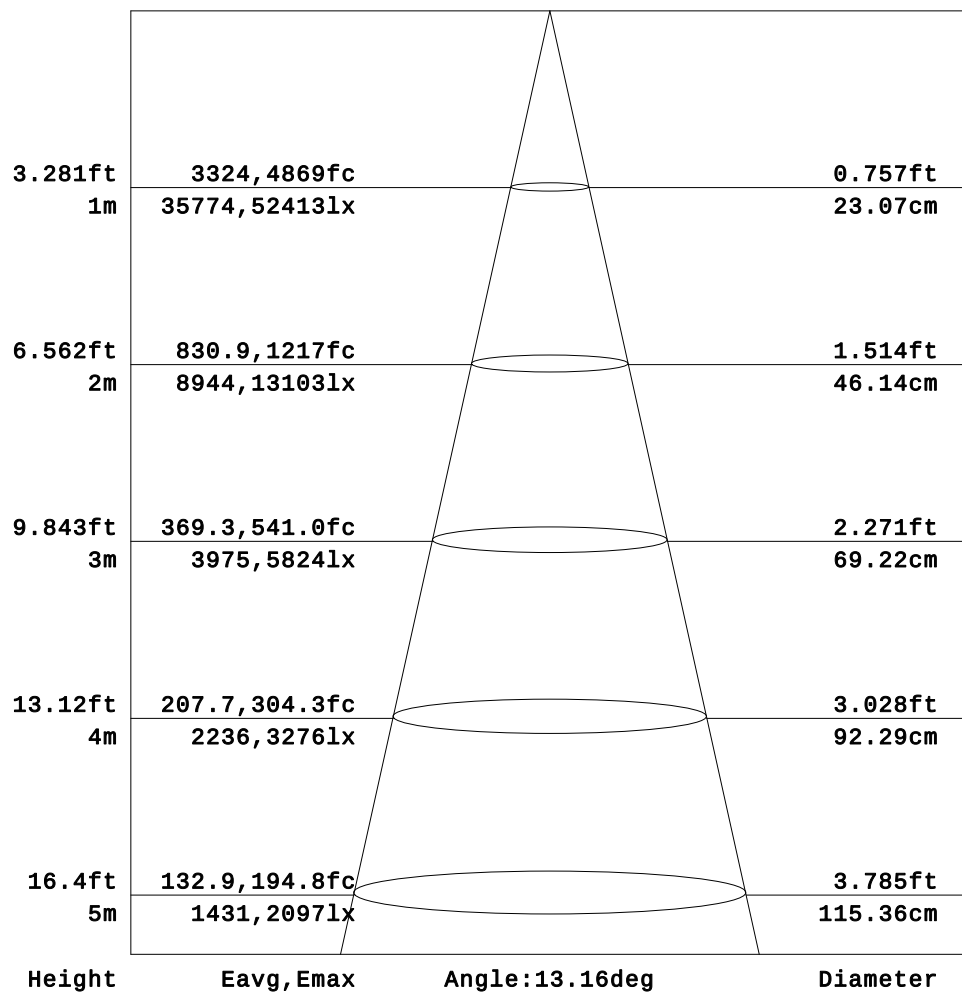
H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:30.3DEG  
Operators:QC1  
Test Date:2023-07-19

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.275  
Humidity:50%  
Test Distance:8.300m [K=1.0000]  
Remarks:

## AAI Figure

|                                                                   |          |                       |
|-------------------------------------------------------------------|----------|-----------------------|
| Test:U:220.3V I:0.8999A P:193.1W PF:0.9741 Lamp Flux:5991.22x1 lm |          |                       |
| NAME: 8.03.006.0112 30°SP-F620A-108P-RDM                          | TYPE:LED | WEIGHT:               |
| DIM.:                                                             | SPEC.:   | SERIAL No.:2023070052 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                            | SUR.:    | PROTECTION ANGLE:     |

Flux out:1694 lm

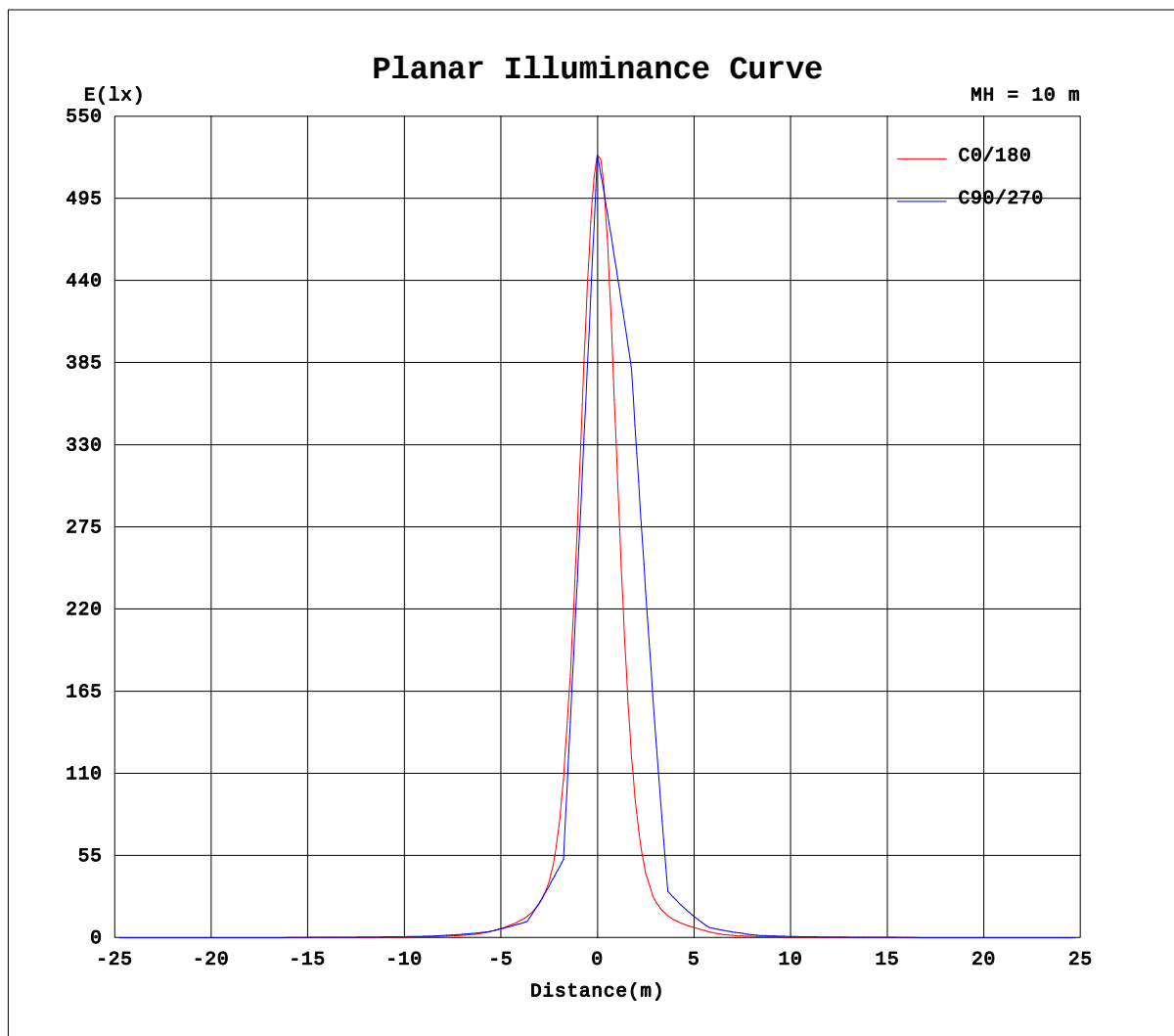


Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:30.3DEG  
Operators:QC1  
Test Date:2023-07-19

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.275  
Humidity:50%  
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: 30.3DEG  
Operators: QC1  
Test Date: 2023-07-19

V(B) Range: -80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.0.275  
Humidity: 50%  
Test Distance: 8.300m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                   |          |                       |
|-------------------------------------------------------------------|----------|-----------------------|
| Test:U:220.3V I:0.8999A P:193.1W PF:0.9741 Lamp Flux:5991.22x1 lm |          |                       |
| NAME: 8.03.006.0112 30°SP-F620A-108P-RDM                          | TYPE:LED | WEIGHT:               |
| DIM.:                                                             | SPEC.:   | SERIAL No.:2023070052 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                            | SUR.:    | PROTECTION ANGLE:     |

Table--1

UNIT: ×10cd

| 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 | 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 | 0.04 | 0.55 | 1.51 | 2.10 |
| -75         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.22 | 0.51 | 0.78 | 1.05 | 1.33 | 1.58 | 1.88 | 2.46 | 3.46 | 4.07 |
| -70         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.44 | 1.02 | 1.55 | 2.11 | 2.66 | 3.16 | 3.72 | 4.38 | 5.40 | 6.04 |
| -65         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.20 | 0.66 | 1.20 | 2.07 | 3.08 | 4.06 | 5.02 | 5.90 | 6.66 | 7.40 | 8.28 | 9.42 | 10.1 |
| -60         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.40 | 1.32 | 2.40 | 3.69 | 5.14 | 6.57 | 7.93 | 9.13 | 10.2 | 11.1 | 12.2 | 13.4 | 14.1 |
| -55         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.32 | 1.21 | 2.59 | 4.31 | 6.14 | 7.86 | 9.65 | 11.1 | 12.0 | 12.6 | 13.1 | 14.0 | 15.3 | 16.0 |
| -50         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.64 | 2.02 | 3.86 | 6.22 | 8.59 | 10.6 | 12.7 | 14.2 | 14.9 | 15.0 | 15.2 | 15.9 | 17.1 | 17.9 |
| -45         | 0.00 | 0.00 | 0.00 | 0.00 | 0.23 | 1.30 | 3.10 | 5.57 | 8.44 | 11.0 | 12.7 | 14.1 | 15.2 | 16.2 | 17.1 | 18.1 | 19.7 | 21.8 | 23.2 |
| -40         | 0.00 | 0.00 | 0.00 | 0.00 | 0.45 | 1.95 | 4.18 | 7.28 | 10.7 | 13.4 | 14.9 | 15.4 | 16.1 | 17.5 | 19.1 | 20.9 | 23.5 | 26.5 | 28.4 |
| -35         | 0.00 | 0.00 | 0.00 | 0.00 | 0.82 | 2.63 | 5.31 | 8.69 | 12.1 | 14.4 | 15.6 | 16.8 | 18.7 | 22.0 | 26.0 | 30.1 | 35.6 | 41.1 | 44.1 |
| -30         | 0.00 | 0.00 | 0.00 | 0.00 | 1.19 | 3.31 | 6.43 | 10.1 | 13.5 | 15.5 | 16.3 | 18.2 | 21.2 | 26.5 | 32.9 | 39.2 | 47.6 | 55.7 | 59.8 |
| -25         | 0.00 | 0.00 | 0.00 | 0.01 | 1.46 | 3.80 | 7.29 | 11.3 | 14.0 | 15.3 | 16.8 | 19.9 | 26.4 | 34.2 | 43.5 | 58.6 | 76.7 | 90.7 | 96.3 |
| -20         | 0.00 | 0.00 | 0.00 | 0.03 | 1.72 | 4.30 | 8.15 | 12.5 | 14.5 | 15.2 | 17.2 | 21.5 | 31.6 | 42.0 | 54.1 | 78.1 | 106  | 126  | 133  |
| -15         | 0.00 | 0.00 | 0.00 | 0.13 | 1.95 | 4.82 | 9.01 | 13.3 | 14.5 | 15.4 | 18.1 | 23.5 | 36.5 | 56.3 | 85.0 | 130  | 200  | 293  | 341  |
| -10         | 0.00 | 0.00 | 0.00 | 0.24 | 2.19 | 5.34 | 9.87 | 14.0 | 14.6 | 15.6 | 19.0 | 25.5 | 41.4 | 70.6 | 116  | 182  | 294  | 460  | 550  |
| -5          | 0.00 | 0.00 | 0.00 | 0.31 | 2.36 | 5.65 | 10.3 | 14.2 | 14.6 | 15.9 | 19.8 | 28.2 | 52.1 | 91.1 | 148  | 289  | 784  | 2052 | 2896 |
| 0           | 0.00 | 0.00 | 0.00 | 0.39 | 2.53 | 5.96 | 10.8 | 14.4 | 14.6 | 16.3 | 20.7 | 30.8 | 62.9 | 112  | 179  | 396  | 1273 | 3644 | 5241 |
| 5           | 0.00 | 0.00 | 0.00 | 0.32 | 2.40 | 5.73 | 10.4 | 14.2 | 14.7 | 16.7 | 21.3 | 31.7 | 58.1 | 104  | 172  | 362  | 1123 | 3161 | 4615 |
| 10          | 0.00 | 0.00 | 0.00 | 0.25 | 2.27 | 5.50 | 9.97 | 13.9 | 14.8 | 17.0 | 21.9 | 32.5 | 53.4 | 96.7 | 164  | 328  | 972  | 2678 | 3989 |
| 15          | 0.00 | 0.00 | 0.00 | 0.19 | 2.13 | 5.25 | 9.60 | 13.7 | 15.1 | 17.0 | 21.1 | 30.9 | 47.4 | 78.8 | 135  | 243  | 601  | 1501 | 2182 |
| 20          | 0.00 | 0.00 | 0.00 | 0.12 | 1.99 | 5.00 | 9.24 | 13.4 | 15.3 | 16.9 | 20.3 | 29.3 | 41.3 | 61.0 | 105  | 157  | 230  | 323  | 376  |
| 25          | 0.00 | 0.00 | 0.00 | 0.06 | 1.71 | 4.45 | 8.37 | 12.4 | 14.8 | 16.2 | 18.8 | 24.9 | 33.6 | 47.7 | 76.0 | 111  | 157  | 212  | 242  |
| 30          | 0.00 | 0.00 | 0.00 | 0.00 | 1.42 | 3.90 | 7.50 | 11.4 | 14.2 | 15.5 | 17.4 | 20.6 | 25.9 | 34.4 | 47.5 | 64.9 | 84.8 | 100  | 108  |
| 35          | 0.00 | 0.00 | 0.00 | 0.00 | 1.11 | 3.27 | 6.34 | 9.95 | 13.0 | 14.8 | 16.3 | 18.4 | 21.9 | 27.4 | 35.5 | 45.8 | 57.7 | 67.4 | 72.1 |
| 40          | 0.00 | 0.00 | 0.00 | 0.00 | 0.79 | 2.64 | 5.18 | 8.47 | 11.7 | 14.1 | 15.2 | 16.3 | 17.9 | 20.3 | 23.5 | 26.7 | 30.7 | 34.4 | 36.0 |
| 45          | 0.00 | 0.00 | 0.00 | 0.00 | 0.39 | 1.90 | 3.98 | 6.75 | 9.66 | 12.2 | 13.9 | 15.0 | 16.2 | 17.6 | 19.5 | 21.6 | 24.0 | 26.4 | 27.6 |
| 50          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.16 | 2.78 | 5.02 | 7.63 | 10.3 | 12.5 | 13.8 | 14.4 | 14.8 | 15.6 | 16.6 | 17.2 | 18.4 | 19.1 |
| 55          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.58 | 1.79 | 3.49 | 5.56 | 7.69 | 9.65 | 11.1 | 12.2 | 13.0 | 13.9 | 14.7 | 15.2 | 16.1 | 16.8 |
| 60          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.80 | 1.95 | 3.48 | 5.09 | 6.77 | 8.38 | 9.97 | 11.2 | 12.1 | 12.8 | 13.1 | 13.8 | 14.5 |
| 65          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.40 | 0.98 | 2.05 | 3.22 | 4.44 | 5.63 | 6.79 | 7.79 | 8.60 | 9.22 | 9.61 | 10.3 | 11.0 |
| 70          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.62 | 1.35 | 2.10 | 2.88 | 3.61 | 4.38 | 5.06 | 5.64 | 6.11 | 6.84 | 7.53 |
| 75          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.31 | 0.67 | 1.05 | 1.44 | 1.81 | 2.27 | 2.72 | 3.14 | 3.52 | 4.09 | 4.59 |
| 80          | 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 | 0.17 | 0.39 | 0.64 | 0.92 | 1.34 | 1.64 |
| 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:30.3DEG  
 Operators:QC1  
 Test Date:2023-07-19

$V(\beta)$  Range:-80 - 80DEG  
 $V(\beta)$  Interval: 5.0DEG  
 Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.275  
 Humidity:50%  
 Test Distance:8.300m [K=1.0000]  
 Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                   |          |                       |
|-------------------------------------------------------------------|----------|-----------------------|
| Test:U:220.3V I:0.8999A P:193.1W PF:0.9741 Lamp Flux:5991.22x1 lm |          |                       |
| NAME: 8.03.006.0112 30°SP-F620A-108P-RDM                          | TYPE:LED | WEIGHT:               |
| DIM.:                                                             | SPEC.:   | SERIAL No.:2023070052 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                            | SUR.:    | PROTECTION ANGLE:     |

Table--2

UNIT: ×10cd

| 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 |
| -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 |
| -80         | 1.58 | 0.69 | 0.16 | 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 |
| -75         | 3.55 | 2.64 | 2.07 | 1.77 | 1.51 | 1.23 | 0.98 | 0.71 | 0.46 | 0.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| -70         | 5.52 | 4.59 | 3.98 | 3.54 | 3.02 | 2.46 | 1.96 | 1.43 | 0.92 | 0.42 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| -65         | 9.45 | 8.35 | 7.64 | 7.02 | 6.32 | 5.42 | 4.46 | 3.51 | 2.61 | 1.70 | 0.90 | 0.41 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| -60         | 13.4 | 12.1 | 11.3 | 10.5 | 9.62 | 8.39 | 6.96 | 5.59 | 4.30 | 2.98 | 1.80 | 0.81 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| -55         | 15.3 | 14.1 | 13.2 | 12.7 | 12.1 | 11.0 | 9.77 | 8.23 | 6.57 | 4.85 | 3.18 | 1.74 | 0.65 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 |
| -50         | 17.3 | 16.0 | 15.1 | 14.8 | 14.6 | 13.7 | 12.6 | 10.9 | 8.85 | 6.73 | 4.56 | 2.66 | 1.26 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 |
| -45         | 22.8 | 20.5 | 18.7 | 17.4 | 16.3 | 14.9 | 13.6 | 12.4 | 10.7 | 8.60 | 6.13 | 3.76 | 1.96 | 0.50 | 0.00 | 0.00 | 0.00 | 0.00 |
| -40         | 28.3 | 25.0 | 22.2 | 20.0 | 18.0 | 16.1 | 14.7 | 13.9 | 12.7 | 10.5 | 7.71 | 4.87 | 2.65 | 0.90 | 0.00 | 0.00 | 0.00 | 0.00 |
| -35         | 42.6 | 37.2 | 31.8 | 26.9 | 22.4 | 18.9 | 16.5 | 14.7 | 13.3 | 11.5 | 8.92 | 5.86 | 3.23 | 1.21 | 0.00 | 0.00 | 0.00 | 0.00 |
| -30         | 56.9 | 49.3 | 41.4 | 33.7 | 26.7 | 21.8 | 18.2 | 15.6 | 13.9 | 12.5 | 10.1 | 6.86 | 3.81 | 1.52 | 0.00 | 0.00 | 0.00 | 0.00 |
| -25         | 91.5 | 79.1 | 62.6 | 46.0 | 33.6 | 25.1 | 20.1 | 16.5 | 14.3 | 13.0 | 10.9 | 7.50 | 4.18 | 1.70 | 0.02 | 0.00 | 0.00 | 0.00 |
| -20         | 126  | 109  | 83.8 | 58.3 | 40.4 | 28.3 | 21.9 | 17.5 | 14.7 | 13.4 | 11.6 | 8.15 | 4.54 | 1.87 | 0.04 | 0.00 | 0.00 | 0.00 |
| -15         | 292  | 201  | 135  | 91.1 | 56.6 | 37.1 | 26.5 | 19.1 | 15.7 | 13.8 | 12.2 | 8.78 | 4.95 | 2.10 | 0.16 | 0.00 | 0.00 | 0.00 |
| -10         | 458  | 292  | 186  | 124  | 72.7 | 45.9 | 31.0 | 20.8 | 16.6 | 14.2 | 12.8 | 9.40 | 5.37 | 2.33 | 0.27 | 0.00 | 0.00 | 0.00 |
| -5          | 1894 | 703  | 267  | 149  | 89.0 | 51.0 | 31.1 | 20.9 | 16.3 | 13.8 | 12.7 | 9.54 | 5.44 | 2.36 | 0.29 | 0.00 | 0.00 | 0.00 |
| 0           | 3331 | 1113 | 348  | 174  | 105  | 56.1 | 31.1 | 21.0 | 16.1 | 13.4 | 12.7 | 9.68 | 5.52 | 2.39 | 0.32 | 0.00 | 0.00 | 0.00 |
| 5           | 3049 | 1058 | 347  | 173  | 108  | 57.8 | 30.3 | 20.3 | 15.6 | 13.1 | 12.5 | 9.64 | 5.45 | 2.36 | 0.32 | 0.00 | 0.00 | 0.00 |
| 10          | 2767 | 1003 | 346  | 172  | 111  | 59.4 | 29.4 | 19.6 | 15.1 | 12.8 | 12.4 | 9.60 | 5.37 | 2.33 | 0.31 | 0.00 | 0.00 | 0.00 |
| 15          | 1548 | 619  | 254  | 140  | 88.7 | 49.8 | 27.1 | 18.8 | 14.7 | 12.7 | 12.3 | 9.20 | 5.12 | 2.20 | 0.24 | 0.00 | 0.00 | 0.00 |
| 20          | 329  | 235  | 161  | 108  | 66.5 | 40.1 | 24.8 | 18.0 | 14.2 | 12.5 | 12.2 | 8.80 | 4.87 | 2.06 | 0.16 | 0.00 | 0.00 | 0.00 |
| 25          | 216  | 161  | 114  | 78.1 | 51.8 | 34.7 | 22.5 | 17.0 | 14.0 | 12.5 | 11.5 | 8.02 | 4.43 | 1.84 | 0.08 | 0.00 | 0.00 | 0.00 |
| 30          | 104  | 87.8 | 65.5 | 48.2 | 37.0 | 29.2 | 20.1 | 16.0 | 13.8 | 12.5 | 10.8 | 7.25 | 3.99 | 1.62 | 0.00 | 0.00 | 0.00 | 0.00 |
| 35          | 69.3 | 59.7 | 46.4 | 36.3 | 28.9 | 23.6 | 17.9 | 15.1 | 13.4 | 11.8 | 9.51 | 6.23 | 3.35 | 1.27 | 0.00 | 0.00 | 0.00 | 0.00 |
| 40          | 34.6 | 31.5 | 27.3 | 24.4 | 20.9 | 17.9 | 15.6 | 14.2 | 13.1 | 11.1 | 8.17 | 5.22 | 2.72 | 0.92 | 0.00 | 0.00 | 0.00 | 0.00 |
| 45          | 26.6 | 24.5 | 21.7 | 19.9 | 17.8 | 15.9 | 14.5 | 13.1 | 11.6 | 9.61 | 6.89 | 4.24 | 2.12 | 0.57 | 0.00 | 0.00 | 0.00 | 0.00 |
| 50          | 18.6 | 17.4 | 16.2 | 15.4 | 14.6 | 13.9 | 13.3 | 12.1 | 10.2 | 8.11 | 5.62 | 3.26 | 1.53 | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 |
| 55          | 16.5 | 15.5 | 14.6 | 13.9 | 13.1 | 12.1 | 11.1 | 9.60 | 7.85 | 6.03 | 4.07 | 2.28 | 0.89 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 |
| 60          | 14.4 | 13.6 | 13.0 | 12.4 | 11.6 | 10.3 | 8.92 | 7.14 | 5.51 | 3.94 | 2.52 | 1.30 | 0.25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 65          | 10.9 | 10.2 | 9.65 | 9.03 | 8.28 | 7.24 | 6.15 | 4.88 | 3.67 | 2.51 | 1.49 | 0.65 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 70          | 7.43 | 6.82 | 6.29 | 5.67 | 4.98 | 4.21 | 3.38 | 2.63 | 1.84 | 1.08 | 0.46 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 75          | 4.45 | 3.98 | 3.58 | 3.15 | 2.69 | 2.20 | 1.69 | 1.32 | 0.92 | 0.54 | 0.23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 80          | 1.47 | 1.14 | 0.88 | 0.63 | 0.40 | 0.19 | 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 |
| 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:30.3DEG  
 Operators:QC1  
 Test Date:2023-07-19

V(B) Range:-80 - 80DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.275  
 Humidity:50%  
 Test Distance:8.300m [K=1.0000]  
 Remarks: