

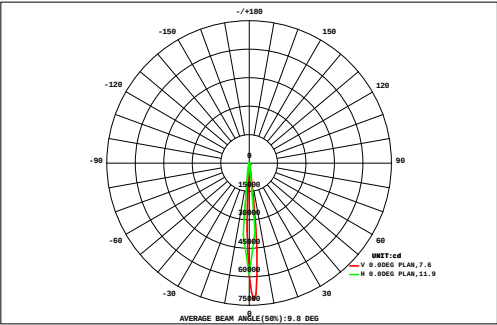
Floodlight Summary:

Report based on lamp delivering 1000 lumens.

|                                                         |                |                                                                       |
|---------------------------------------------------------|----------------|-----------------------------------------------------------------------|
| Maximum Intensity<br>(Luminaire orientation as tested.) |                | 21698.2 cd per klm.<br>0.0 degrees vertical<br>0.0 degrees horizontal |
| Beam Spread                                             | At 10% of Imax | 19.2V x 14.4H                                                         |
|                                                         | At 50% of Imax | 11.9V x 7.6H                                                          |
|                                                         | At 90% of Imax | 4.8V x 2.8H                                                           |
| Beam Flux                                               | Total          | 920.7 lumens per klm.                                                 |
|                                                         | To 10% of Imax | 538.2 lumens per klm.                                                 |
|                                                         | To 50% of Imax | 259.0 lumens per klm.                                                 |
|                                                         | To 90% of Imax | 21.2 lumens per klm.                                                  |
| Upward LOR                                              |                | 0.0 %                                                                 |
| Downward LOR                                            |                | 92.1 %                                                                |
| Luminaire Efficiency(Light Output Ratio)                |                | 100.0 %                                                               |

LUMINAIRE PHOTOMETRIC TEST REPORT

|                                                                                |          |                       |
|--------------------------------------------------------------------------------|----------|-----------------------|
| Test:U:120.2V I:0.6375A P:50.05W PF:0.6663 Freq:49.99Hz Lamp Flux:3329.34x1 lm |          |                       |
| NAME: SP-PZT-R170-12P-RDM-4                                                    | TYPE:LED | WEIGHT:               |
| SPEC.:                                                                         | DIM.:    | SERIAL No.:2025080060 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                                         | SUR.:    | Shielding Angle:      |



| DATA OF LAMP                |         | Eff:66.52lm/W   |         |
|-----------------------------|---------|-----------------|---------|
| MODEL:SP-PZT-R170-12P-RDM-4 |         | Imax(cd)        | 72241   |
| NOMINAL POWER(W)            | 50      | AVAILABILITY(%) | 64.0    |
| RATED VOLTAGE(V)            | 120     | Avai. FLUX(lm)  | 2132    |
| NOMINAL FLUX(lm)            | 3329.34 | LOR(%)          | 100.0   |
| LAMPS INSIDE                | 1       | TOTAL FLUX(lm)  | 3329    |
| TEST VOLTAGE(V)             | 120     | θ @50%(H,V)     | 8,12DEG |

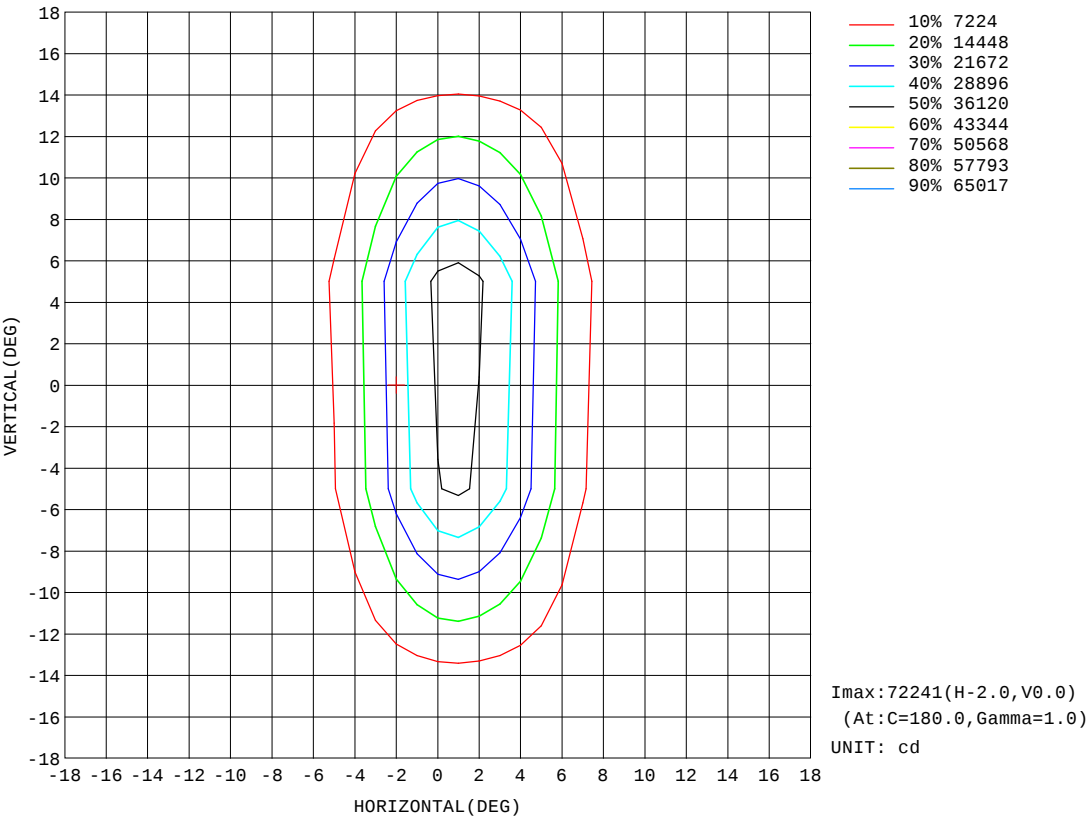
| AREA FLUX DIAGRAM |      |      |      |      |      |      |      |      |                   |      |      |      |      |      |      |      |      | UNIT:lm |      |      | Φ t  | Φ a |
|-------------------|------|------|------|------|------|------|------|------|-------------------|------|------|------|------|------|------|------|------|---------|------|------|------|-----|
| VERTICAL (DEG)    | 18   | 0.98 | 1.11 | 1.24 | 1.36 | 1.48 | 1.58 | 1.64 | 1.66              | 1.64 | 1.58 | 1.49 | 1.38 | 1.25 | 1.13 | 1.00 | 0.87 | 0.76    | 0.67 | 22.8 | 0.00 |     |
|                   | 16   | 0.98 | 1.14 | 1.31 | 1.52 | 1.76 | 2.04 | 2.38 | 2.77              | 3.18 | 3.33 | 3.06 | 2.60 | 2.15 | 1.78 | 1.48 | 1.24 | 1.04    | 0.89 | 34.7 | 0.00 |     |
|                   | 14   | 0.93 | 1.11 | 1.35 | 1.68 | 2.10 | 2.66 | 3.42 | 4.40              | 5.47 | 5.96 | 5.42 | 4.43 | 3.49 | 2.76 | 2.21 | 1.79 | 1.46    | 1.21 | 51.9 | 0.00 |     |
|                   | 12   | 0.96 | 1.17 | 1.45 | 1.84 | 2.35 | 3.05 | 4.01 | 5.26              | 6.64 | 7.28 | 6.60 | 5.36 | 4.17 | 3.25 | 2.58 | 2.07 | 1.67    | 1.38 | 61.1 | 0.00 |     |
|                   | 10   | 1.57 | 1.98 | 2.50 | 3.21 | 4.21 | 5.54 | 7.22 | 8.57              | 8.33 | 6.79 | 5.20 | 3.91 | 3.02 | 2.36 | 1.86 | 1.50 | 1.23    | 1.02 | 70.0 | 6.74 |     |
|                   | 8    | 1.80 | 2.28 | 2.92 | 3.78 | 5.00 | 6.63 | 8.68 | 10.2              | 9.67 | 7.50 | 5.52 | 4.05 | 3.09 | 2.40 | 1.87 | 1.50 | 1.23    | 1.01 | 79.2 | 24.5 |     |
|                   | 6    | 1.57 | 1.97 | 2.52 | 3.28 | 4.42 | 5.97 | 9.45 | 18.0              | 27.5 | 30.4 | 24.4 | 14.8 | 6.84 | 3.84 | 2.69 | 2.03 | 1.59    | 1.27 | 163  | 117  |     |
|                   | 4    | 1.08 | 1.33 | 1.67 | 2.19 | 3.09 | 4.34 | 9.83 | 29.0              | 54.2 | 65.5 | 53.5 | 31.4 | 12.6 | 6.05 | 3.94 | 2.84 | 2.15    | 1.66 | 286  | 252  |     |
|                   | 2    | 0.98 | 1.18 | 1.49 | 1.98 | 2.88 | 4.16 | 10.8 | 35.0              | 67.5 | 82.4 | 67.3 | 39.2 | 15.3 | 7.11 | 4.54 | 3.23 | 2.41    | 1.84 | 349  | 314  |     |
|                   | 0    | 1.89 | 2.51 | 3.51 | 5.15 | 8.76 | 27.9 | 67.3 | 99.3              | 91.8 | 59.7 | 23.4 | 6.74 | 4.14 | 3.10 | 2.31 | 1.75 | 1.37    | 1.11 | 412  | 377  |     |
|                   | -2   | 2.13 | 2.86 | 4.06 | 6.06 | 10.6 | 35.7 | 86.8 | 125               | 109  | 63.4 | 18.0 | 1.27 | 2.24 | 2.48 | 1.96 | 1.52 | 1.20    | 0.99 | 475  | 442  |     |
|                   | -4   | 1.65 | 2.17 | 2.98 | 4.29 | 7.15 | 21.7 | 52.1 | 79.4              | 77.9 | 55.5 | 26.3 | 11.6 | 5.03 | 3.23 | 2.34 | 1.78 | 1.40    | 1.13 | 358  | 330  |     |
|                   | -6   | 0.79 | 0.91 | 1.01 | 1.06 | 0.88 | 0.00 | 0.00 | 1.60              | 20.9 | 41.4 | 42.1 | 27.0 | 10.4 | 4.73 | 3.11 | 2.32 | 1.81    | 1.42 | 161  | 136  |     |
|                   | -8   | 0.51 | 0.50 | 0.38 | 0.14 | 0.02 | 0.00 | 0.00 | 0.00              | 6.97 | 36.8 | 46.6 | 32.0 | 11.9 | 5.10 | 3.29 | 2.44 | 1.91    | 1.49 | 150  | 132  |     |
|                   | -10  | 1.13 | 1.33 | 1.54 | 1.79 | 2.00 | 2.17 | 1.70 | 0.52              | 0.00 | 0.00 | 0.00 | 0.16 | 0.73 | 1.12 | 1.11 | 1.00 | 0.87    | 0.75 | 17.9 | 0.00 |     |
|                   | -12  | 1.14 | 1.33 | 1.51 | 1.69 | 1.72 | 1.61 | 0.37 | 0.00              | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 0.50 | 0.60 | 0.59    | 0.55 | 11.8 | 0.00 |     |
| -14               | 0.89 | 1.02 | 1.16 | 1.29 | 1.31 | 1.23 | 0.72 | 0.80 | 0.87              | 0.90 | 0.90 | 0.85 | 0.78 | 0.70 | 0.65 | 0.69 | 0.65 | 0.60    | 16.0 | 0.00 |      |     |
| -16               | 0.48 | 0.55 | 0.64 | 0.72 | 0.83 | 0.95 | 1.09 | 1.25 | 1.41              | 1.54 | 1.59 | 1.56 | 1.46 | 1.32 | 1.17 | 1.03 | 0.90 | 0.78    | 19.3 | 0.00 |      |     |
| -18               | -18  | -16  | -14  | -12  | -10  | -8   | -6   | -4   | HORIZONTAL( DEG ) |      |      |      |      | 4    | 6    | 8    | 10   | 12      | 14   | 16   | 18   |     |
| Φ t               | 21.4 | 26.5 | 33.2 | 43.0 | 60.5 | 127  | 268  | 423  | 493               | 470  | 331  | 188  | 88.5 | 52.6 | 38.6 | 30.2 | 24.3 | 19.8    | 2739 | ---  |      |     |
| Φ a               | 0.00 | 0.00 | 0.00 | 0.00 | 17.8 | 84.4 | 231  | 400  | 465               | 431  | 296  | 156  | 50.2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00    | ---  | 2132 |      |     |

one-half-peak spread: U:5.8,D:6.2 , L:3.8,R:3.8,EMA Beam Type: Type 1 x 2 (H x V)

|                        |                                                  |
|------------------------|--------------------------------------------------|
| H(β) Range:-90 - 90DEG | V(B) Range:-80 - 80DEG                           |
| H(β) Interval: 1.0DEG  | V(B) Interval: 5.0DEG                            |
| Test Speed: HIGH       | Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.354 |
| Temperature:28.0DEG    | Humidity:83%                                     |
| Operators:QC1          | Test Distance:8.300m [K=1.0000]                  |
| Test Date:2025-08-07   | Remarks:                                         |

ISOCANDELA DIAGRAM

|                                                                                |          |                       |
|--------------------------------------------------------------------------------|----------|-----------------------|
| Test:U:120.2V I:0.6375A P:50.05W PF:0.6663 Freq:49.99Hz Lamp Flux:3329.34x1 lm |          |                       |
| NAME: SP-PZT-R170-12P-RDM-4                                                    | TYPE:LED | WEIGHT:               |
| SPEC.:                                                                         | DIM.:    | SERIAL No.:2025080060 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                                         | SUR.:    | Shielding Angle:      |

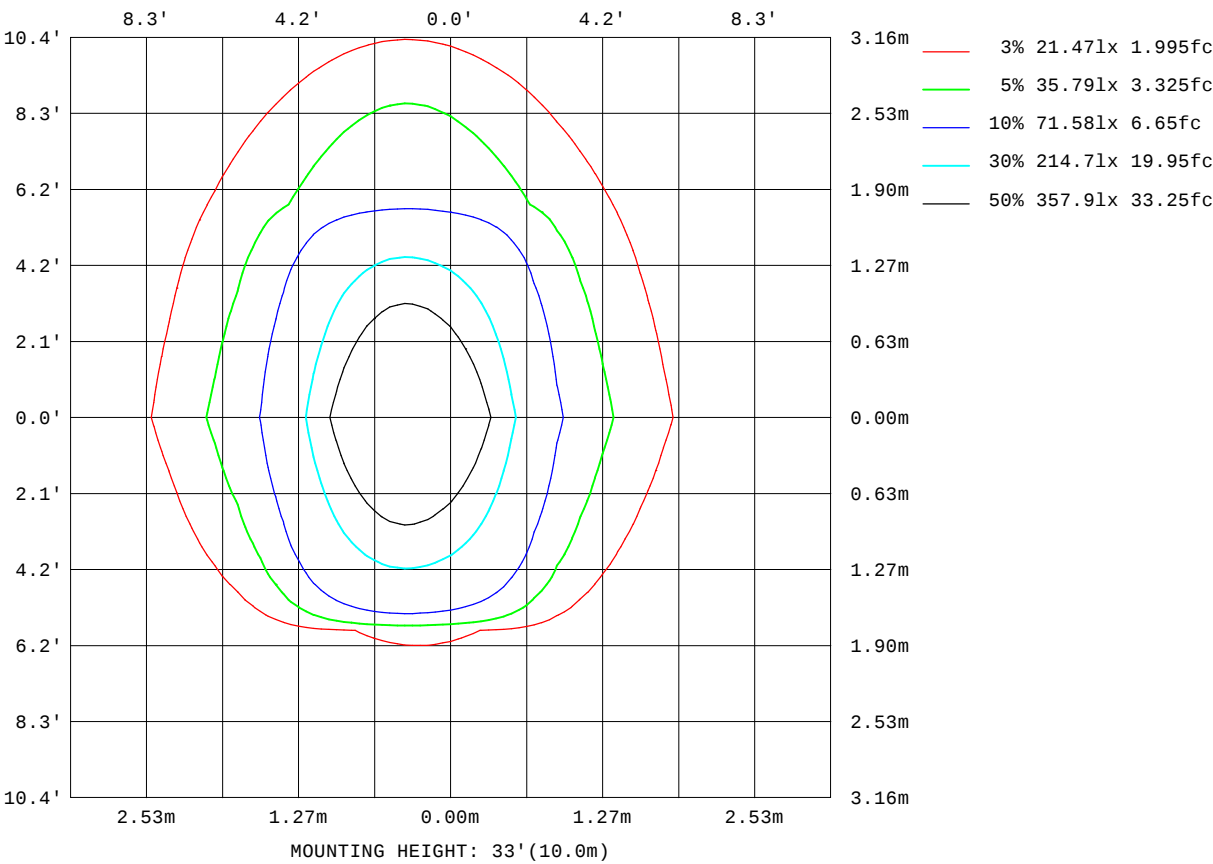


H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:28.0DEG  
Operators:QC1  
Test Date:2025-08-07

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.354  
Humidity:83%  
Test Distance:8.300m [K=1.0000]  
Remarks:

ISOLUX DIAGRAM

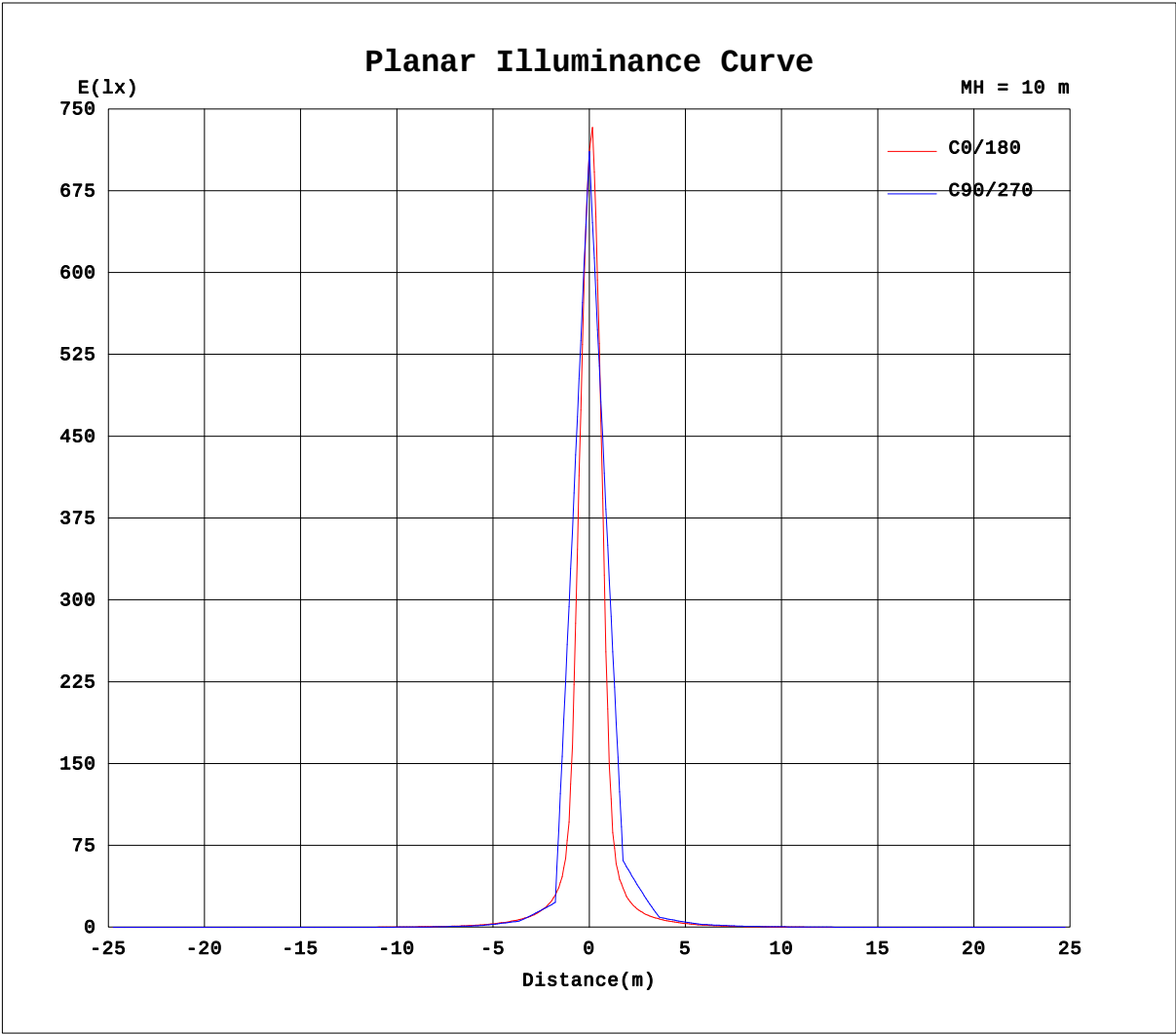
|                                                                                |          |                       |
|--------------------------------------------------------------------------------|----------|-----------------------|
| Test:U:120.2V I:0.6375A P:50.05W PF:0.6663 Freq:49.99Hz Lamp Flux:3329.34x1 lm |          |                       |
| NAME: SP-PZT-R170-12P-RDM-4                                                    | TYPE:LED | WEIGHT:               |
| SPEC.:                                                                         | DIM.:    | SERIAL No.:2025080060 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                                         | SUR.:    | Shielding Angle:      |



H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:28.0DEG  
Operators:QC1  
Test Date:2025-08-07

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.354  
Humidity:83%  
Test Distance:8.300m [K=1.0000]  
Remarks:

Planar Illuminance Curve

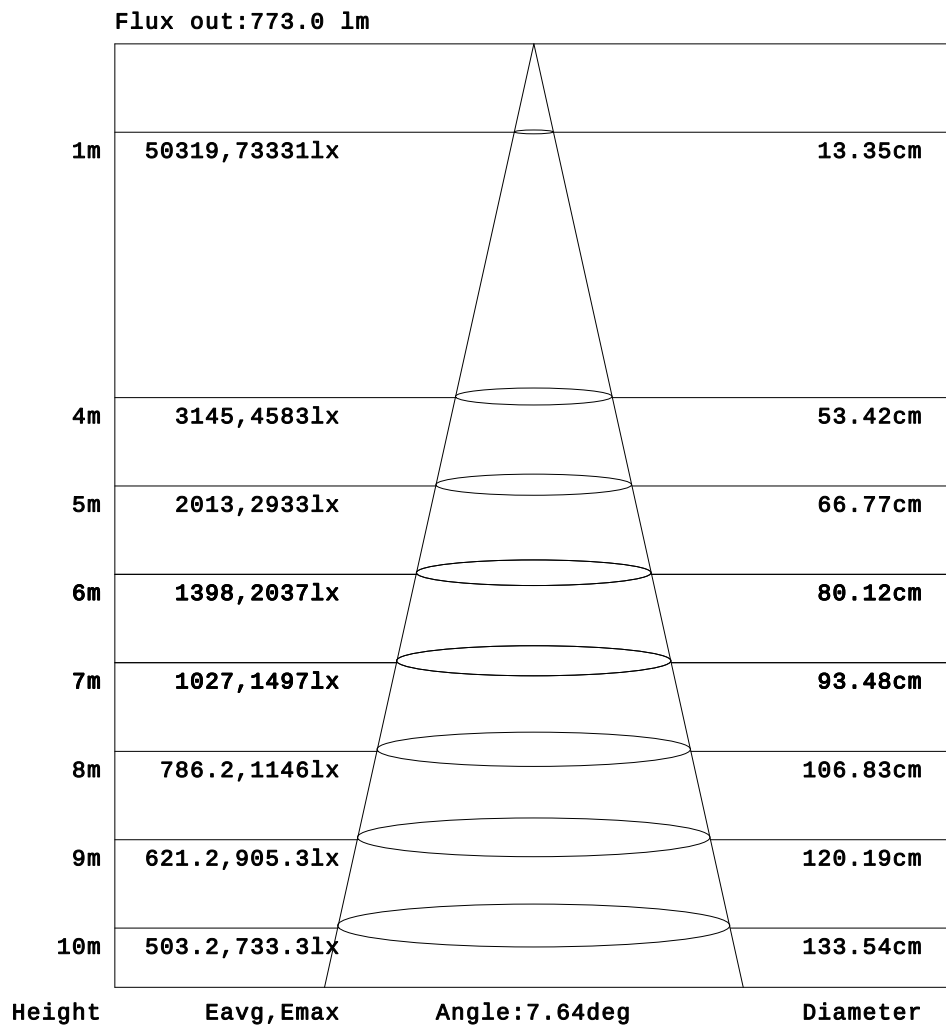


H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:28.0DEG  
Operators:QC1  
Test Date:2025-08-07

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.354  
Humidity:83%  
Test Distance:8.300m [K=1.0000]  
Remarks:

## AAI Figure

|                                                                                |          |                       |
|--------------------------------------------------------------------------------|----------|-----------------------|
| Test:U:120.2V I:0.6375A P:50.05W PF:0.6663 Freq:49.99Hz Lamp Flux:3329.34x1 lm |          |                       |
| NAME: SP-PZT-R170-12P-RDM-4                                                    | TYPE:LED | WEIGHT:               |
| SPEC.:                                                                         | DIM.:    | SERIAL No.:2025080060 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                                         | SUR.:    | Shielding 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:2025-08-07

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.0.354  
Humidity:83%  
Test Distance:8.300m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                |          |                       |
|--------------------------------------------------------------------------------|----------|-----------------------|
| Test:U:120.2V I:0.6375A P:50.05W PF:0.6663 Freq:49.99Hz Lamp Flux:3329.34x1 lm |          |                       |
| NAME: SP-PZT-R170-12P-RDM-4                                                    | TYPE:LED | WEIGHT:               |
| SPEC.:                                                                         | DIM.:    | SERIAL No.:2025080060 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                                         | SUR.:    | Shielding 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 | 0.00 | 0.00 | 0.00 | 0.00 |
| -75         | 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 |
| -70         | 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 |
| -65         | 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 |
| -60         | 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 |
| -55         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 | 0.36 | 0.70 | 1.07 | 1.50 | 1.87 | 2.17 | 2.43 | 2.60 | 2.64 | 2.59 |
| -50         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.48 | 1.11 | 1.84 | 2.65 | 3.46 | 4.07 | 4.71 | 5.08 | 5.30 | 5.20 | 5.12 |
| -45         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.44 | 1.08 | 2.00 | 3.01 | 3.90 | 4.80 | 5.71 | 6.55 | 7.30 | 7.90 | 8.21 | 8.32 |
| -40         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.49 | 1.52 | 2.73 | 4.05 | 5.30 | 6.19 | 7.26 | 8.35 | 9.36 | 10.2 | 11.0 | 11.4 | 11.6 |
| -35         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.56 | 1.77 | 3.25 | 4.66 | 5.94 | 7.38 | 9.00 | 10.8 | 12.6 | 14.5 | 16.5 | 17.7 | 18.2 |
| -30         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.59 | 1.97 | 3.83 | 5.49 | 6.73 | 8.26 | 10.4 | 12.9 | 15.6 | 18.0 | 21.2 | 23.7 | 24.8 | 24.7 |
| -25         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.37 | 1.82 | 3.55 | 5.37 | 6.86 | 8.66 | 11.2 | 14.5 | 18.7 | 24.1 | 31.1 | 38.8 | 45.0 | 47.8 |
| -20         | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | 1.77 | 3.65 | 5.57 | 7.03 | 8.97 | 12.0 | 15.7 | 20.8 | 27.9 | 38.2 | 50.4 | 61.9 | 69.6 | 70.3 |
| -15         | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.09 | 2.94 | 4.96 | 6.70 | 8.57 | 11.7 | 15.8 | 21.6 | 31.1 | 45.3 | 65.8 | 93.4 | 128  | 154  |
| -10         | 0.00 | 0.00 | 0.00 | 0.00 | 0.71 | 2.59 | 4.65 | 6.54 | 8.39 | 11.6 | 16.1 | 22.3 | 32.7 | 50.4 | 75.1 | 113  | 166  | 224  | 235  |
| -5          | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 1.69 | 3.65 | 5.78 | 7.69 | 10.2 | 14.3 | 19.8 | 29.0 | 45.0 | 70.3 | 112  | 204  | 695  | 3584 |
| 0           | 0.00 | 0.00 | 0.00 | 0.00 | 1.19 | 3.06 | 5.23 | 7.30 | 9.74 | 13.4 | 18.6 | 27.1 | 42.5 | 67.2 | 110  | 201  | 530  | 4668 | 5897 |
| 5           | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 1.94 | 3.95 | 6.19 | 8.32 | 11.0 | 15.4 | 21.7 | 31.9 | 49.5 | 77.3 | 125  | 235  | 782  | 3780 |
| 10          | 0.00 | 0.00 | 0.00 | 0.00 | 1.24 | 3.11 | 5.31 | 7.65 | 9.86 | 13.4 | 19.2 | 27.1 | 40.1 | 61.5 | 95.3 | 155  | 280  | 531  | 583  |
| 15          | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 1.87 | 3.86 | 6.18 | 8.31 | 10.7 | 14.7 | 20.3 | 28.2 | 40.9 | 60.5 | 89.9 | 140  | 234  | 371  |
| 20          | 0.00 | 0.00 | 0.00 | 0.00 | 1.11 | 2.91 | 5.11 | 7.40 | 9.31 | 12.3 | 16.7 | 22.3 | 29.7 | 41.7 | 58.1 | 77.2 | 97.4 | 112  | 113  |
| 25          | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 1.54 | 3.40 | 5.57 | 7.68 | 9.64 | 12.6 | 16.5 | 21.5 | 28.3 | 37.5 | 48.9 | 61.9 | 73.7 | 79.7 |
| 30          | 0.00 | 0.00 | 0.00 | 0.00 | 0.68 | 2.30 | 4.25 | 6.38 | 8.29 | 10.3 | 13.0 | 16.6 | 20.7 | 25.1 | 30.2 | 36.2 | 41.4 | 44.9 | 45.2 |
| 35          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.98 | 2.62 | 4.44 | 6.38 | 8.25 | 10.2 | 12.5 | 15.5 | 18.6 | 22.0 | 25.8 | 29.6 | 32.4 | 33.7 |
| 40          | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 1.52 | 3.18 | 4.85 | 6.79 | 8.61 | 10.0 | 11.9 | 14.0 | 16.1 | 18.1 | 20.1 | 21.3 | 21.9 | 21.9 |
| 45          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 1.59 | 3.08 | 4.60 | 6.28 | 7.90 | 9.37 | 11.0 | 12.5 | 14.0 | 15.4 | 16.6 | 17.2 | 17.5 |
| 50          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.50 | 1.82 | 3.11 | 4.44 | 5.99 | 7.50 | 8.75 | 9.86 | 10.8 | 11.5 | 12.2 | 12.7 | 12.9 | 12.9 |
| 55          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.49 | 1.55 | 2.68 | 3.86 | 5.16 | 6.35 | 7.36 | 8.33 | 9.14 | 9.83 | 10.3 | 10.6 | 10.7 |
| 60          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.36 | 1.37 | 2.31 | 3.28 | 4.29 | 5.17 | 6.04 | 6.90 | 7.63 | 8.11 | 8.41 | 8.50 | 8.51 |
| 65          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 0.87 | 1.53 | 2.31 | 3.04 | 3.73 | 4.39 | 5.00 | 5.53 | 5.87 | 6.12 | 6.13 |
| 70          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.69 | 1.22 | 1.76 | 2.21 | 2.64 | 3.06 | 3.39 | 3.66 | 3.76 | 3.74 |
| 75          | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.45 | 0.72 | 0.97 | 1.20 | 1.40 | 1.60 | 1.75 | 1.87 | 1.88 |
| 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 | 0.00 | 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 |
| 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:2025-08-07

V(B) Range:-80 - 80DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
 Humidity:83%  
 Test Distance:8.300m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                |          |                       |
|--------------------------------------------------------------------------------|----------|-----------------------|
| Test:U:120.2V I:0.6375A P:50.05W PF:0.6663 Freq:49.99Hz Lamp Flux:3329.34x1 lm |          |                       |
| NAME: SP-PZT-R170-12P-RDM-4                                                    | TYPE:LED | WEIGHT:               |
| SPEC.:                                                                         | DIM.:    | SERIAL No.:2025080060 |
| MFR.: TPK OPTOELECTRONIC TECH CO., LTD                                         | SUR.:    | Shielding 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         | 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        |  |
| -75         | 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        |  |
| -70         | 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        |  |
| -65         | 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        |  |
| -60         | 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        |  |
| -55         | 2.54 | 2.49 | 2.37 | 2.21 | 2.02 | 1.79 | 1.49 | 1.11 | 0.75 | 0.35 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| -50         | 5.03 | 4.86 | 4.55 | 4.20 | 3.77 | 3.26 | 2.51 | 1.79 | 1.05 | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| -45         | 8.33 | 8.09 | 7.50 | 6.82 | 6.12 | 5.35 | 4.54 | 3.68 | 2.78 | 1.74 | 0.87 | 0.39 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| -40         | 11.4 | 10.7 | 9.64 | 8.61 | 7.55 | 6.51 | 5.54 | 4.52 | 3.27 | 2.13 | 1.16 | 0.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| -35         | 18.0 | 16.9 | 15.3 | 13.5 | 11.5 | 9.66 | 8.05 | 6.62 | 5.31 | 3.93 | 2.55 | 1.37 | 0.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| -30         | 23.5 | 21.4 | 18.8 | 16.0 | 13.2 | 10.8 | 8.82 | 7.12 | 5.76 | 4.04 | 2.53 | 1.22 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| -25         | 46.5 | 41.5 | 34.6 | 27.2 | 20.7 | 16.0 | 12.5 | 9.87 | 7.77 | 6.06 | 4.33 | 2.56 | 1.15 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| -20         | 64.2 | 53.9 | 41.3 | 30.3 | 22.4 | 16.8 | 12.9 | 10.0 | 7.70 | 6.04 | 3.96 | 2.13 | 0.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| -15         | 145  | 111  | 79.1 | 54.8 | 37.5 | 25.5 | 18.0 | 13.4 | 10.1 | 7.69 | 5.85 | 3.75 | 1.91 | 0.40 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| -10         | 186  | 128  | 86.0 | 57.3 | 36.9 | 24.4 | 17.2 | 12.6 | 9.36 | 7.15 | 5.19 | 3.05 | 1.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| -5          | 1852 | 295  | 146  | 87.0 | 55.4 | 35.0 | 23.1 | 16.3 | 11.9 | 8.80 | 6.66 | 4.58 | 2.48 | 0.77 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| 0           | 814  | 243  | 124  | 75.5 | 47.0 | 29.8 | 20.1 | 14.3 | 10.5 | 7.81 | 5.65 | 3.50 | 1.57 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| 5           | 1977 | 338  | 161  | 94.5 | 59.9 | 37.8 | 25.0 | 17.5 | 12.7 | 9.41 | 7.04 | 4.80 | 2.75 | 0.94 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| 10          | 318  | 175  | 105  | 67.9 | 43.7 | 28.5 | 20.1 | 14.4 | 10.7 | 8.11 | 5.76 | 3.56 | 1.70 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| 15          | 290  | 170  | 106  | 70.9 | 47.7 | 32.1 | 22.7 | 16.4 | 12.1 | 9.27 | 6.98 | 4.57 | 2.65 | 0.90 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| 20          | 99.5 | 80.0 | 60.6 | 43.6 | 31.2 | 23.1 | 17.5 | 12.9 | 9.84 | 7.68 | 5.29 | 3.17 | 1.44 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| 25          | 76.5 | 66.1 | 53.2 | 41.1 | 30.8 | 23.4 | 18.2 | 13.9 | 10.7 | 8.47 | 6.33 | 3.98 | 2.24 | 0.63 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| 30          | 42.1 | 37.0 | 30.7 | 25.4 | 21.0 | 17.1 | 13.7 | 10.8 | 8.76 | 6.74 | 4.46 | 2.59 | 1.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| 35          | 33.0 | 30.4 | 26.9 | 22.9 | 19.5 | 16.3 | 13.5 | 11.1 | 8.93 | 7.03 | 5.07 | 3.08 | 1.57 | 0.23 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| 40          | 21.2 | 19.8 | 18.1 | 16.2 | 14.1 | 12.1 | 10.3 | 8.74 | 6.86 | 4.99 | 3.21 | 1.71 | 0.37 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| 45          | 17.3 | 16.6 | 15.6 | 14.3 | 12.9 | 11.5 | 9.86 | 8.32 | 6.65 | 5.03 | 3.47 | 1.97 | 0.71 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| 50          | 12.7 | 12.2 | 11.5 | 10.8 | 9.97 | 8.87 | 7.59 | 5.96 | 4.48 | 3.19 | 1.86 | 0.71 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| 55          | 10.7 | 10.4 | 9.92 | 9.24 | 8.51 | 7.60 | 6.53 | 5.34 | 4.04 | 2.89 | 1.78 | 0.73 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| 60          | 8.34 | 8.08 | 7.55 | 6.82 | 5.99 | 5.06 | 4.13 | 3.12 | 2.19 | 1.27 | 0.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| 65          | 6.09 | 5.92 | 5.64 | 5.16 | 4.59 | 3.89 | 3.13 | 2.34 | 1.57 | 0.91 | 0.45 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| 70          | 3.65 | 3.47 | 3.21 | 2.83 | 2.38 | 1.83 | 1.20 | 0.63 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00        |  |
| 75          | 1.86 | 1.79 | 1.69 | 1.54 | 1.33 | 1.09 | 0.79 | 0.48 | 0.20 | 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 | 0.00 | 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:28.0DEG  
Operators:QC1  
Test Date:2025-08-07

V(B) Range:-80 - 80DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.354  
Humidity:83%  
Test Distance:8.300m [K=1.0000]  
Remarks: