

Report No.:

Test Time: 2014-08-14 17:10

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: MR16-3000K-40D

Current: 0.537 A

Power Factor: 0.665

Voltage: 12.3 V

Power: 4.40 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 272.6 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(15%,30%,50%,75%): H67.6,H52.3,H39.6,H25.5

Vertical Diffuse Angle(15%,30%,50%,75%): V67.9,V52.7,V39.6,V25.8

Luminaire Efficacy Rating (LER): 62

Max. Intensity: 457.45 cd

Total Rated Lamp Lumens: 272.6 lm

Efficiency: 100%

Upward Ratio: 0%

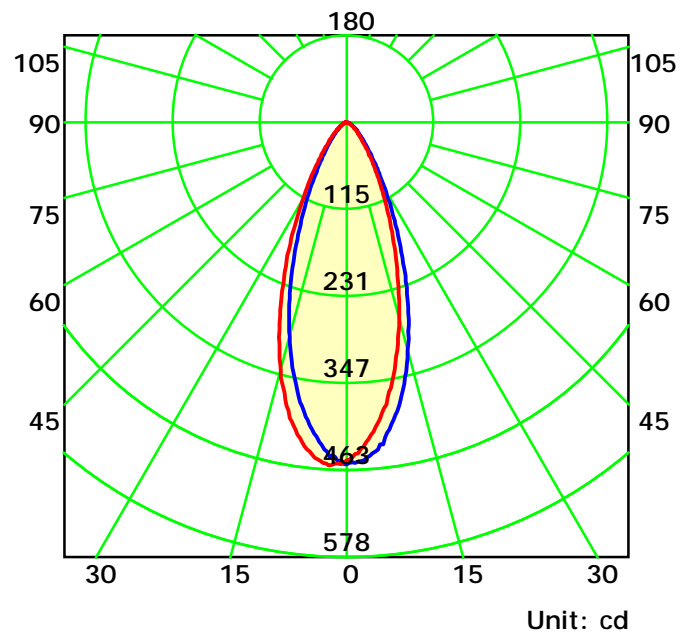
Central Intensity: 455.11 cd

Pos of Max. Intensity: H270 V3

Picture Of Luminaire



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 45.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:0.5

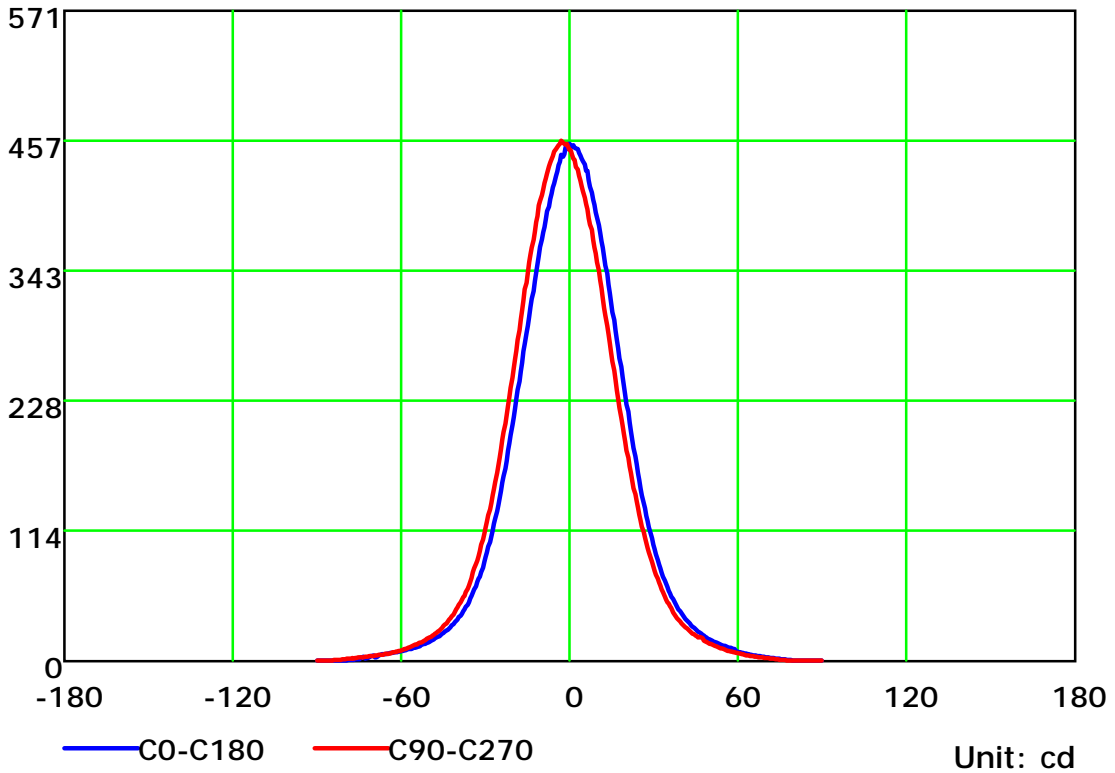
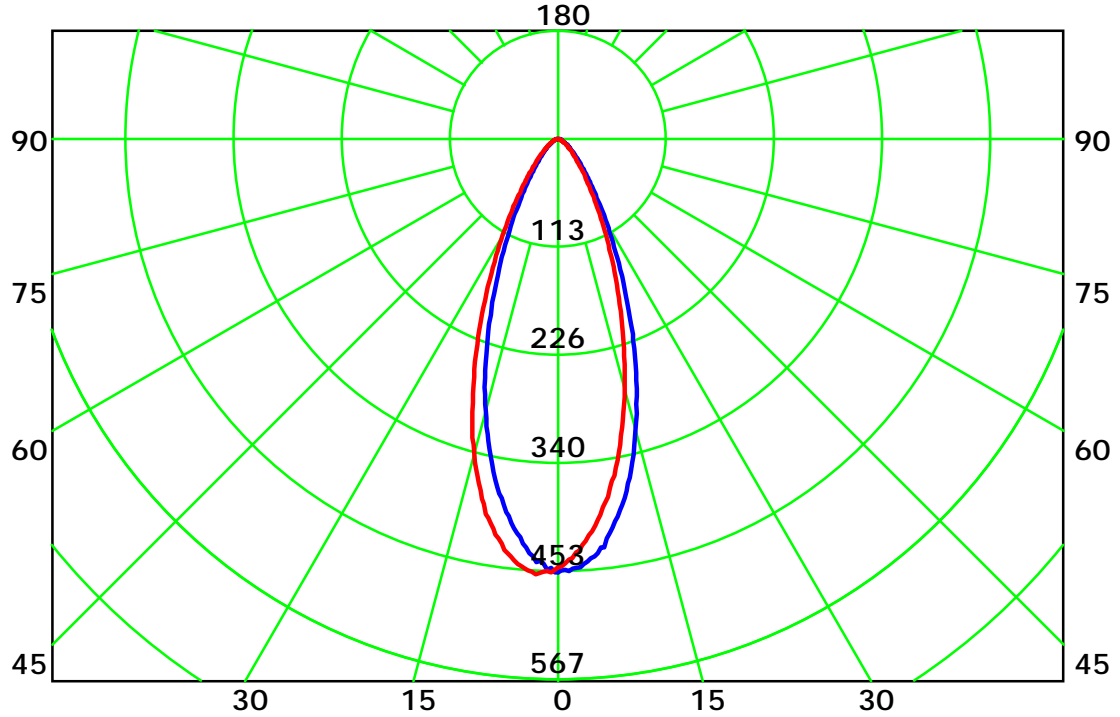
Test Device: GPM-1600

Distance: 8.177 m

Humidity:

Inspector:

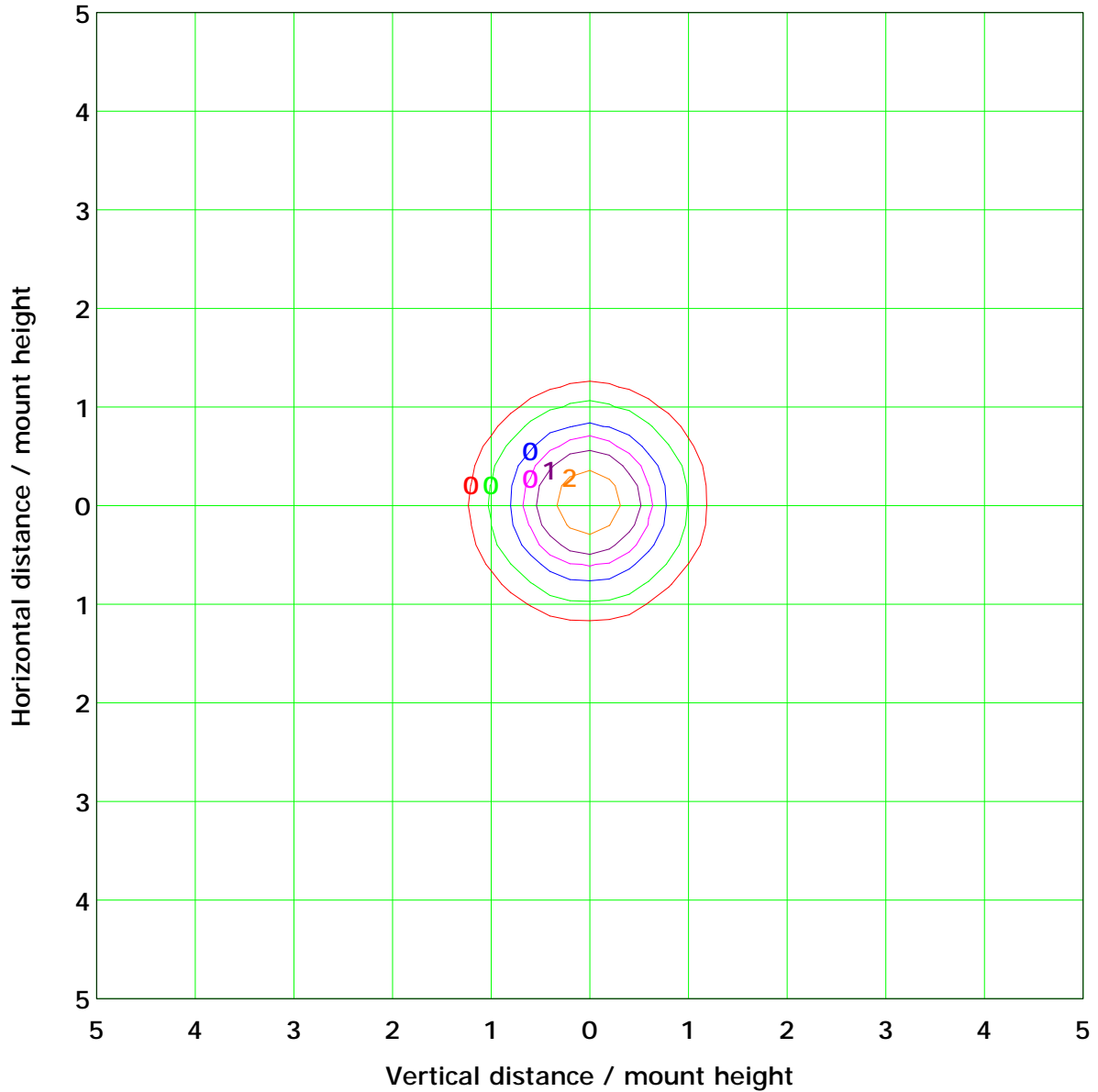
## Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 45.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1600  
 Distance: 8.177 m  
 Humidity:  
 Inspector:

### IsoLux Plot



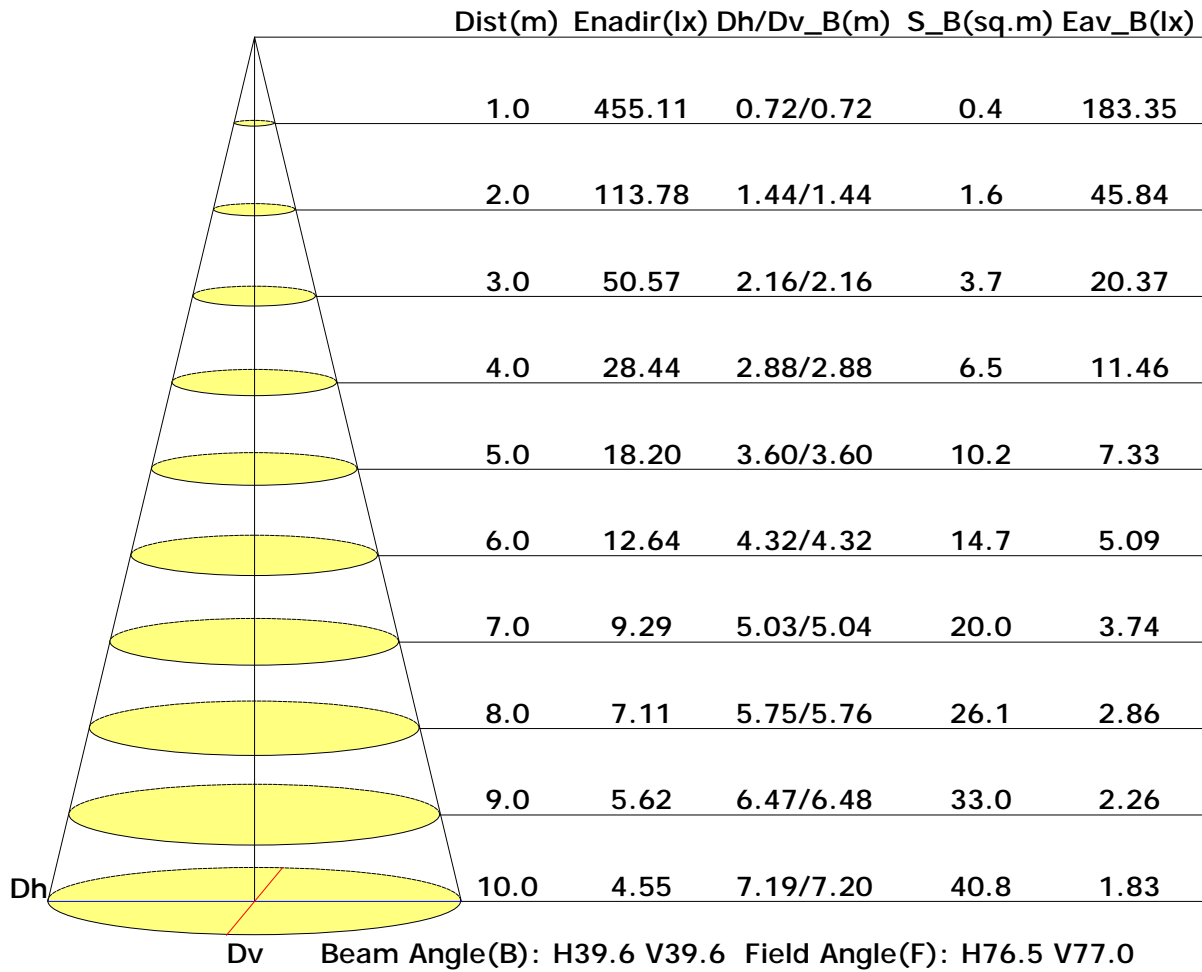
Mounting Height: 10.0m    Max Lux(100%): 4.6 lx

|                 |                 |
|-----------------|-----------------|
| ( 1%): 0.0 lx   | ( 2%): 0.1 lx   |
| ( 5%): 0.2 lx   | ( 10%): 0.5 lx  |
| ( 20%): 0.9 lx  | ( 50%): 2.3 lx  |
| (100%): 4.6 lx  | (200%): 9.1 lx  |
| (300%): 13.7 lx | (500%): 22.8 lx |

C Plane (°):0.0-360.0: 45.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1600  
 Distance: 8.177 m  
 Humidity:  
 Inspector:

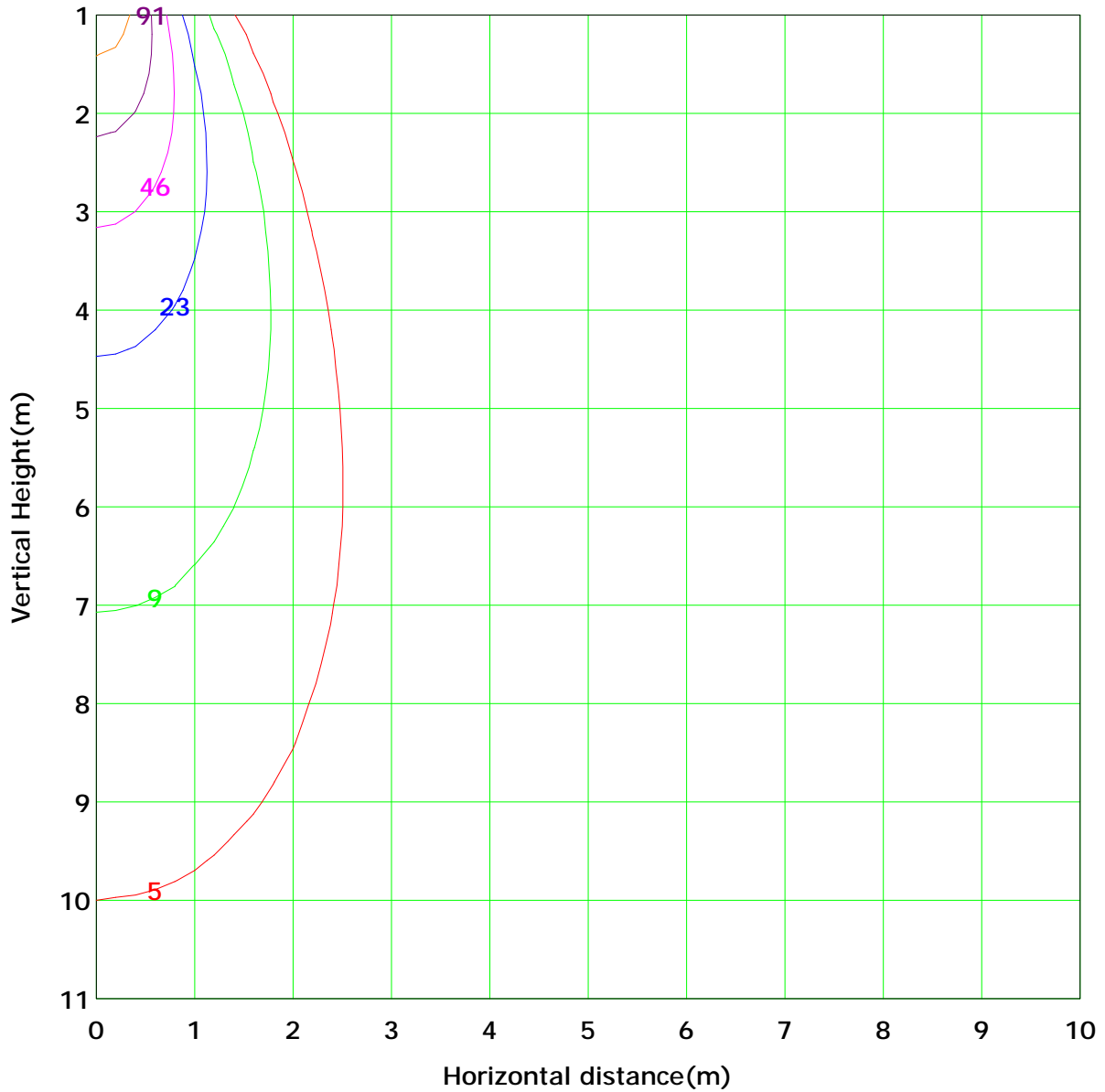
## Illuminance at a Distance



C Plane (°):0.0-360.0: 45.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1600  
 Distance: 8.177 m  
 Humidity:  
 Inspector:

## Vertical IsoLux Plot



|                   |                   |                   |
|-------------------|-------------------|-------------------|
| Lowest(m): 1.0m   | Highest(m): 11.0m | Max Lux: 455.1 lx |
| ( 1%): 4.6 lx     | ( 2%): 9.1 lx     |                   |
| ( 5%): 22.8 lx    | ( 10%): 45.5 lx   |                   |
| ( 20%): 91.0 lx   | ( 50%): 227.6 lx  |                   |
| (100%): 455.1 lx  | (200%): 910.2 lx  |                   |
| (300%): 1365.3 lx | (500%): 2275.5 lx |                   |

C Plane (°): 0.0-360.0: 45.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°): 0.0-90.0: 0.5  
 Test Device: GPM-1600  
 Distance: 8.177 m  
 Humidity:  
 Inspector:

**Area Flux Table**

|       |      | Vertical plane |       |       |       |       |       |       |       |       |     |      |      |      |      |      |      |      |      |      |     |     |
|-------|------|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-----|------|------|------|------|------|------|------|------|------|-----|-----|
|       |      | -90.0          | -80.0 | -70.0 | -60.0 | -50.0 | -40.0 | -30.0 | -20.0 | -10.0 | 0.0 | 10.0 | 20.0 | 30.0 | 40.0 | 50.0 | 60.0 | 70.0 | 80.0 | 90.0 |     |     |
| ΦE    | ΦT   | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 273 | ΦE  |
| -90.0 | 0.1  | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 273 | 228 |
| -80.0 | 0.6  | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| -70.0 | 1.4  | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| -60.0 | 2.9  | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| -50.0 | 5.7  | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| -40.0 | 11.8 | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| -30.0 | 24.6 | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| -20.0 | 43.1 | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| -10.0 | 56.0 | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| 0.0   | 52.7 | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| 10.0  | 36.2 | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| 20.0  | 19.4 | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| 30.0  | 9.3  | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| 40.0  | 4.7  | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| 50.0  | 2.4  | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| 60.0  | 1.1  | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| 70.0  | 0.4  | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| 80.0  | 0.1  | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |
| 90.0  | 273  | 0.0            | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |     |     |

Unit: lx

Horizontal plane

C Plane (°):0.0-360.0: 45.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1600  
 Distance: 8.177 m  
 Humidity:  
 Inspector:

### Zonal Lumen

| Gamma<br>[°] | I <sub>mean</sub><br>[cd] | Zonal Flux<br>[lm] | Sum Zonal Flux<br>[lm] | Rel Zonal Flux<br>[%] | Sum Rel Zonal Flux<br>[%] |
|--------------|---------------------------|--------------------|------------------------|-----------------------|---------------------------|
| 0.0-0.5      | 451.9                     | 0.1                | 0.1                    | 0.04                  | 0.04                      |
| 0.5-1.0      | 451.1                     | 0.3                | 0.4                    | 0.12                  | 0.16                      |
| 1.0-1.5      | 450.3                     | 0.5                | 1.0                    | 0.20                  | 0.36                      |
| 1.5-2.0      | 449.1                     | 0.8                | 1.7                    | 0.28                  | 0.63                      |
| 2.0-2.5      | 447.2                     | 1.0                | 2.7                    | 0.35                  | 0.98                      |
| 2.5-3.0      | 445.7                     | 1.2                | 3.9                    | 0.43                  | 1.42                      |
| 3.0-3.5      | 443.3                     | 1.4                | 5.2                    | 0.51                  | 1.92                      |
| 3.5-4.0      | 440.2                     | 1.6                | 6.8                    | 0.58                  | 2.50                      |
| 4.0-4.5      | 437.2                     | 1.8                | 8.6                    | 0.65                  | 3.15                      |
| 4.5-5.0      | 433.6                     | 2.0                | 10.6                   | 0.72                  | 3.87                      |
| 5.0-5.5      | 429.9                     | 2.2                | 12.7                   | 0.79                  | 4.66                      |
| 5.5-6.0      | 425.7                     | 2.3                | 15.1                   | 0.86                  | 5.52                      |
| 6.0-6.5      | 421.6                     | 2.5                | 17.6                   | 0.92                  | 6.45                      |
| 6.5-7.0      | 416.9                     | 2.7                | 20.3                   | 0.99                  | 7.43                      |
| 7.0-7.5      | 411.5                     | 2.8                | 23.1                   | 1.04                  | 8.48                      |
| 7.5-8.0      | 406.4                     | 3.0                | 26.1                   | 1.10                  | 9.58                      |
| 8.0-8.5      | 400.9                     | 3.2                | 29.3                   | 1.16                  | 10.74                     |
| 8.5-9.0      | 395.2                     | 3.3                | 32.6                   | 1.21                  | 11.94                     |
| 9.0-9.5      | 389.3                     | 3.4                | 36.0                   | 1.26                  | 13.20                     |
| 9.5-10.0     | 383.2                     | 3.6                | 39.6                   | 1.31                  | 14.51                     |
| 10.0-10.5    | 377.0                     | 3.7                | 43.2                   | 1.35                  | 15.86                     |
| 10.5-11.0    | 370.2                     | 3.8                | 47.0                   | 1.39                  | 17.25                     |
| 11.0-11.5    | 363.0                     | 3.9                | 50.9                   | 1.42                  | 18.67                     |
| 11.5-12.0    | 355.8                     | 4.0                | 54.9                   | 1.46                  | 20.13                     |
| 12.0-12.5    | 348.5                     | 4.1                | 58.9                   | 1.49                  | 21.62                     |
| 12.5-13.0    | 340.8                     | 4.1                | 63.0                   | 1.51                  | 23.13                     |
| 13.0-13.5    | 333.2                     | 4.2                | 67.2                   | 1.54                  | 24.66                     |
| 13.5-14.0    | 325.7                     | 4.2                | 71.5                   | 1.56                  | 26.22                     |
| 14.0-14.5    | 317.9                     | 4.3                | 75.8                   | 1.57                  | 27.80                     |
| 14.5-15.0    | 309.7                     | 4.3                | 80.1                   | 1.59                  | 29.38                     |
| 15.0-15.5    | 301.9                     | 4.4                | 84.4                   | 1.60                  | 30.98                     |
| 15.5-16.0    | 293.9                     | 4.4                | 88.8                   | 1.60                  | 32.58                     |
| 16.0-16.5    | 285.5                     | 4.4                | 93.2                   | 1.61                  | 34.19                     |
| 16.5-17.0    | 277.1                     | 4.4                | 97.6                   | 1.61                  | 35.80                     |
| 17.0-17.5    | 268.8                     | 4.4                | 102.0                  | 1.60                  | 37.40                     |
| 17.5-18.0    | 260.3                     | 4.4                | 106.3                  | 1.60                  | 39.00                     |

C Plane (°):0.0-360.0: 45.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1600  
 Distance: 8.177 m  
 Humidity:  
 Inspector:

## Zonal Lumen (Continue 1)

| Gamma<br>[°] | I <sub>mean</sub><br>[cd] | Zonal Flux<br>[lm] | Sum Zonal Flux<br>[lm] | Rel Zonal Flux<br>[%] | Sum Rel Zonal Flux<br>[%] |
|--------------|---------------------------|--------------------|------------------------|-----------------------|---------------------------|
| 18.0-18.5    | 252.0                     | 4.3                | 110.6                  | 1.59                  | 40.58                     |
| 18.5-19.0    | 243.8                     | 4.3                | 114.9                  | 1.58                  | 42.16                     |
| 19.0-19.5    | 235.6                     | 4.3                | 119.2                  | 1.56                  | 43.72                     |
| 19.5-20.0    | 228.0                     | 4.2                | 123.4                  | 1.55                  | 45.27                     |
| 20.0-20.5    | 220.2                     | 4.2                | 127.6                  | 1.53                  | 46.80                     |
| 20.5-21.0    | 212.4                     | 4.1                | 131.7                  | 1.51                  | 48.32                     |
| 21.0-21.5    | 204.7                     | 4.1                | 135.8                  | 1.49                  | 49.81                     |
| 21.5-22.0    | 197.1                     | 4.0                | 139.8                  | 1.47                  | 51.28                     |
| 22.0-22.5    | 189.7                     | 3.9                | 143.7                  | 1.44                  | 52.72                     |
| 22.5-23.0    | 182.6                     | 3.9                | 147.6                  | 1.42                  | 54.14                     |
| 23.0-23.5    | 175.8                     | 3.8                | 151.4                  | 1.40                  | 55.54                     |
| 23.5-24.0    | 168.9                     | 3.7                | 155.1                  | 1.37                  | 56.91                     |
| 24.0-24.5    | 162.1                     | 3.7                | 158.8                  | 1.34                  | 58.25                     |
| 24.5-25.0    | 155.4                     | 3.6                | 162.4                  | 1.31                  | 59.56                     |
| 25.0-25.5    | 149.0                     | 3.5                | 165.8                  | 1.28                  | 60.83                     |
| 25.5-26.0    | 142.8                     | 3.4                | 169.2                  | 1.25                  | 62.08                     |
| 26.0-26.5    | 136.7                     | 3.3                | 172.6                  | 1.22                  | 63.30                     |
| 26.5-27.0    | 130.9                     | 3.2                | 175.8                  | 1.19                  | 64.48                     |
| 27.0-27.5    | 125.4                     | 3.1                | 178.9                  | 1.15                  | 65.64                     |
| 27.5-28.0    | 119.9                     | 3.1                | 182.0                  | 1.12                  | 66.76                     |
| 28.0-28.5    | 114.8                     | 3.0                | 185.0                  | 1.09                  | 67.85                     |
| 28.5-29.0    | 109.8                     | 2.9                | 187.9                  | 1.06                  | 68.91                     |
| 29.0-29.5    | 105.0                     | 2.8                | 190.7                  | 1.03                  | 69.95                     |
| 29.5-30.0    | 100.3                     | 2.7                | 193.4                  | 1.00                  | 70.95                     |
| 30.0-30.5    | 95.8                      | 2.6                | 196.1                  | 0.97                  | 71.92                     |
| 30.5-31.0    | 91.5                      | 2.6                | 198.6                  | 0.94                  | 72.86                     |
| 31.0-31.5    | 87.3                      | 2.5                | 201.1                  | 0.91                  | 73.77                     |
| 31.5-32.0    | 83.1                      | 2.4                | 203.5                  | 0.88                  | 74.65                     |
| 32.0-32.5    | 79.4                      | 2.3                | 205.8                  | 0.85                  | 75.50                     |
| 32.5-33.0    | 76.0                      | 2.3                | 208.1                  | 0.83                  | 76.33                     |
| 33.0-33.5    | 72.5                      | 2.2                | 210.3                  | 0.80                  | 77.13                     |
| 33.5-34.0    | 69.2                      | 2.1                | 212.4                  | 0.77                  | 77.90                     |
| 34.0-34.5    | 66.1                      | 2.0                | 214.4                  | 0.75                  | 78.65                     |
| 34.5-35.0    | 63.0                      | 2.0                | 216.4                  | 0.72                  | 79.37                     |
| 35.0-35.5    | 60.2                      | 1.9                | 218.3                  | 0.70                  | 80.07                     |
| 35.5-36.0    | 57.5                      | 1.8                | 220.1                  | 0.68                  | 80.75                     |

C Plane (°):0.0-360.0: 45.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1600  
 Distance: 8.177 m  
 Humidity:  
 Inspector:



### Zonal Lumen (Continue 2)

| Gamma<br>[°] | I <sub>mean</sub><br>[cd] | Zonal Flux<br>[lm] | Sum Zonal Flux<br>[lm] | Rel Zonal Flux<br>[%] | Sum Rel Zonal Flux<br>[%] |
|--------------|---------------------------|--------------------|------------------------|-----------------------|---------------------------|
| 36.0-36.5    | 55.0                      | 1.8                | 221.9                  | 0.65                  | 81.40                     |
| 36.5-37.0    | 52.5                      | 1.7                | 223.6                  | 0.63                  | 82.03                     |
| 37.0-37.5    | 50.1                      | 1.7                | 225.3                  | 0.61                  | 82.64                     |
| 37.5-38.0    | 47.9                      | 1.6                | 226.9                  | 0.59                  | 83.23                     |
| 38.0-38.5    | 46.0                      | 1.6                | 228.5                  | 0.57                  | 83.80                     |
| 38.5-39.0    | 44.0                      | 1.5                | 230.0                  | 0.55                  | 84.36                     |
| 39.0-39.5    | 42.2                      | 1.5                | 231.4                  | 0.54                  | 84.90                     |
| 39.5-40.0    | 40.4                      | 1.4                | 232.8                  | 0.52                  | 85.41                     |
| 40.0-40.5    | 38.7                      | 1.4                | 234.2                  | 0.50                  | 85.92                     |
| 40.5-41.0    | 37.1                      | 1.3                | 235.5                  | 0.49                  | 86.40                     |
| 41.0-41.5    | 35.6                      | 1.3                | 236.8                  | 0.47                  | 86.88                     |
| 41.5-42.0    | 34.1                      | 1.2                | 238.1                  | 0.46                  | 87.33                     |
| 42.0-42.5    | 32.7                      | 1.2                | 239.3                  | 0.44                  | 87.77                     |
| 42.5-43.0    | 31.4                      | 1.2                | 240.4                  | 0.43                  | 88.20                     |
| 43.0-43.5    | 30.1                      | 1.1                | 241.6                  | 0.42                  | 88.62                     |
| 43.5-44.0    | 28.9                      | 1.1                | 242.7                  | 0.40                  | 89.02                     |
| 44.0-44.5    | 27.7                      | 1.1                | 243.7                  | 0.39                  | 89.41                     |
| 44.5-45.0    | 26.6                      | 1.0                | 244.8                  | 0.38                  | 89.79                     |
| 45.0-45.5    | 25.6                      | 1.0                | 245.8                  | 0.37                  | 90.15                     |
| 45.5-46.0    | 24.5                      | 1.0                | 246.7                  | 0.35                  | 90.51                     |
| 46.0-46.5    | 23.6                      | 0.9                | 247.7                  | 0.34                  | 90.85                     |
| 46.5-47.0    | 22.8                      | 0.9                | 248.6                  | 0.33                  | 91.18                     |
| 47.0-47.5    | 21.9                      | 0.9                | 249.4                  | 0.32                  | 91.50                     |
| 47.5-48.0    | 21.0                      | 0.9                | 250.3                  | 0.31                  | 91.82                     |
| 48.0-48.5    | 20.1                      | 0.8                | 251.1                  | 0.30                  | 92.12                     |
| 48.5-49.0    | 19.3                      | 0.8                | 251.9                  | 0.29                  | 92.41                     |
| 49.0-49.5    | 18.6                      | 0.8                | 252.7                  | 0.28                  | 92.69                     |
| 49.5-50.0    | 17.9                      | 0.7                | 253.4                  | 0.27                  | 92.97                     |
| 50.0-50.5    | 17.3                      | 0.7                | 254.2                  | 0.27                  | 93.24                     |
| 50.5-51.0    | 16.8                      | 0.7                | 254.9                  | 0.26                  | 93.50                     |
| 51.0-51.5    | 16.2                      | 0.7                | 255.6                  | 0.25                  | 93.75                     |
| 51.5-52.0    | 15.5                      | 0.7                | 256.2                  | 0.24                  | 94.00                     |
| 52.0-52.5    | 14.9                      | 0.6                | 256.9                  | 0.24                  | 94.23                     |
| 52.5-53.0    | 14.3                      | 0.6                | 257.5                  | 0.23                  | 94.46                     |
| 53.0-53.5    | 13.8                      | 0.6                | 258.1                  | 0.22                  | 94.69                     |
| 53.5-54.0    | 13.4                      | 0.6                | 258.7                  | 0.22                  | 94.90                     |

C Plane (°):0.0-360.0: 45.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1600  
 Distance: 8.177 m  
 Humidity:  
 Inspector:

### Zonal Lumen (Continue 3)

| Gamma<br>[°] | I <sub>mean</sub><br>[cd] | Zonal Flux<br>[lm] | Sum Zonal Flux<br>[lm] | Rel Zonal Flux<br>[%] | Sum Rel Zonal Flux<br>[%] |
|--------------|---------------------------|--------------------|------------------------|-----------------------|---------------------------|
| 54.0-54.5    | 12.9                      | 0.6                | 259.3                  | 0.21                  | 95.11                     |
| 54.5-55.0    | 12.4                      | 0.6                | 259.8                  | 0.20                  | 95.32                     |
| 55.0-55.5    | 12.0                      | 0.5                | 260.4                  | 0.20                  | 95.52                     |
| 55.5-56.0    | 11.5                      | 0.5                | 260.9                  | 0.19                  | 95.71                     |
| 56.0-56.5    | 11.1                      | 0.5                | 261.4                  | 0.19                  | 95.89                     |
| 56.5-57.0    | 10.7                      | 0.5                | 261.9                  | 0.18                  | 96.07                     |
| 57.0-57.5    | 10.3                      | 0.5                | 262.4                  | 0.17                  | 96.25                     |
| 57.5-58.0    | 9.9                       | 0.5                | 262.8                  | 0.17                  | 96.42                     |
| 58.0-58.5    | 9.6                       | 0.4                | 263.3                  | 0.16                  | 96.58                     |
| 58.5-59.0    | 9.2                       | 0.4                | 263.7                  | 0.16                  | 96.74                     |
| 59.0-59.5    | 8.8                       | 0.4                | 264.1                  | 0.15                  | 96.89                     |
| 59.5-60.0    | 8.4                       | 0.4                | 264.5                  | 0.15                  | 97.04                     |
| 60.0-60.5    | 8.0                       | 0.4                | 264.9                  | 0.14                  | 97.18                     |
| 60.5-61.0    | 7.7                       | 0.4                | 265.3                  | 0.14                  | 97.32                     |
| 61.0-61.5    | 7.4                       | 0.4                | 265.6                  | 0.13                  | 97.45                     |
| 61.5-62.0    | 7.1                       | 0.3                | 266.0                  | 0.13                  | 97.57                     |
| 62.0-62.5    | 6.9                       | 0.3                | 266.3                  | 0.12                  | 97.70                     |
| 62.5-63.0    | 6.6                       | 0.3                | 266.7                  | 0.12                  | 97.81                     |
| 63.0-63.5    | 6.4                       | 0.3                | 267.0                  | 0.11                  | 97.93                     |
| 63.5-64.0    | 6.1                       | 0.3                | 267.3                  | 0.11                  | 98.04                     |
| 64.0-64.5    | 5.9                       | 0.3                | 267.6                  | 0.11                  | 98.15                     |
| 64.5-65.0    | 5.7                       | 0.3                | 267.8                  | 0.10                  | 98.25                     |
| 65.0-65.5    | 5.5                       | 0.3                | 268.1                  | 0.10                  | 98.35                     |
| 65.5-66.0    | 5.3                       | 0.3                | 268.4                  | 0.10                  | 98.45                     |
| 66.0-66.5    | 5.1                       | 0.3                | 268.6                  | 0.09                  | 98.54                     |
| 66.5-67.0    | 4.9                       | 0.2                | 268.9                  | 0.09                  | 98.63                     |
| 67.0-67.5    | 4.7                       | 0.2                | 269.1                  | 0.09                  | 98.72                     |
| 67.5-68.0    | 4.5                       | 0.2                | 269.3                  | 0.08                  | 98.80                     |
| 68.0-68.5    | 4.2                       | 0.2                | 269.5                  | 0.08                  | 98.88                     |
| 68.5-69.0    | 3.9                       | 0.2                | 269.7                  | 0.07                  | 98.95                     |
| 69.0-69.5    | 3.8                       | 0.2                | 269.9                  | 0.07                  | 99.02                     |
| 69.5-70.0    | 3.7                       | 0.2                | 270.1                  | 0.07                  | 99.09                     |
| 70.0-70.5    | 3.6                       | 0.2                | 270.3                  | 0.07                  | 99.16                     |
| 70.5-71.0    | 3.4                       | 0.2                | 270.5                  | 0.07                  | 99.22                     |
| 71.0-71.5    | 3.2                       | 0.2                | 270.7                  | 0.06                  | 99.29                     |
| 71.5-72.0    | 3.0                       | 0.2                | 270.8                  | 0.06                  | 99.34                     |

C Plane (°):0.0-360.0: 45.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1600  
 Distance: 8.177 m  
 Humidity:  
 Inspector:

### Zonal Lumen (Continue 4)

| Gamma<br>[°] | I <sub>mean</sub><br>[cd] | Zonal Flux<br>[lm] | Sum Zonal Flux<br>[lm] | Rel Zonal Flux<br>[%] | Sum Rel Zonal Flux<br>[%] |
|--------------|---------------------------|--------------------|------------------------|-----------------------|---------------------------|
| 72.0-72.5    | 2.8                       | 0.1                | 271.0                  | 0.05                  | 99.40                     |
| 72.5-73.0    | 2.6                       | 0.1                | 271.1                  | 0.05                  | 99.45                     |
| 73.0-73.5    | 2.6                       | 0.1                | 271.2                  | 0.05                  | 99.50                     |
| 73.5-74.0    | 2.6                       | 0.1                | 271.4                  | 0.05                  | 99.55                     |
| 74.0-74.5    | 2.4                       | 0.1                | 271.5                  | 0.05                  | 99.59                     |
| 74.5-75.0    | 2.2                       | 0.1                | 271.6                  | 0.04                  | 99.64                     |
| 75.0-75.5    | 2.0                       | 0.1                | 271.7                  | 0.04                  | 99.68                     |
| 75.5-76.0    | 1.8                       | 0.1                | 271.8                  | 0.04                  | 99.71                     |
| 76.0-76.5    | 1.7                       | 0.1                | 271.9                  | 0.03                  | 99.74                     |
| 76.5-77.0    | 1.5                       | 0.1                | 272.0                  | 0.03                  | 99.77                     |
| 77.0-77.5    | 1.4                       | 0.1                | 272.1                  | 0.03                  | 99.80                     |
| 77.5-78.0    | 1.2                       | 0.1                | 272.1                  | 0.02                  | 99.83                     |
| 78.0-78.5    | 1.1                       | 0.1                | 272.2                  | 0.02                  | 99.85                     |
| 78.5-79.0    | 1.0                       | 0.1                | 272.2                  | 0.02                  | 99.87                     |
| 79.0-79.5    | 0.9                       | 0.0                | 272.3                  | 0.02                  | 99.88                     |
| 79.5-80.0    | 0.8                       | 0.0                | 272.3                  | 0.02                  | 99.90                     |
| 80.0-80.5    | 0.7                       | 0.0                | 272.4                  | 0.01                  | 99.91                     |
| 80.5-81.0    | 0.6                       | 0.0                | 272.4                  | 0.01                  | 99.93                     |
| 81.0-81.5    | 0.5                       | 0.0                | 272.4                  | 0.01                  | 99.94                     |
| 81.5-82.0    | 0.4                       | 0.0                | 272.5                  | 0.01                  | 99.94                     |
| 82.0-82.5    | 0.4                       | 0.0                | 272.5                  | 0.01                  | 99.95                     |
| 82.5-83.0    | 0.4                       | 0.0                | 272.5                  | 0.01                  | 99.96                     |
| 83.0-83.5    | 0.3                       | 0.0                | 272.5                  | 0.01                  | 99.97                     |
| 83.5-84.0    | 0.3                       | 0.0                | 272.5                  | 0.01                  | 99.97                     |
| 84.0-84.5    | 0.2                       | 0.0                | 272.5                  | 0.00                  | 99.98                     |
| 84.5-85.0    | 0.1                       | 0.0                | 272.6                  | 0.00                  | 99.98                     |
| 85.0-85.5    | 0.1                       | 0.0                | 272.6                  | 0.00                  | 99.98                     |
| 85.5-86.0    | 0.1                       | 0.0                | 272.6                  | 0.00                  | 99.98                     |
| 86.0-86.5    | 0.1                       | 0.0                | 272.6                  | 0.00                  | 99.99                     |
| 86.5-87.0    | 0.1                       | 0.0                | 272.6                  | 0.00                  | 99.99                     |
| 87.0-87.5    | 0.1                       | 0.0                | 272.6                  | 0.00                  | 99.99                     |
| 87.5-88.0    | 0.1                       | 0.0                | 272.6                  | 0.00                  | 99.99                     |
| 88.0-88.5    | 0.1                       | 0.0                | 272.6                  | 0.00                  | 99.99                     |
| 88.5-89.0    | 0.1                       | 0.0                | 272.6                  | 0.00                  | 100.00                    |
| 89.0-89.5    | 0.1                       | 0.0                | 272.6                  | 0.00                  | 100.00                    |
| 89.5-90.0    | 0.1                       | 0.0                | 272.6                  | 0.00                  | 100.00                    |

C Plane (°):0.0-360.0: 45.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1600  
 Distance: 8.177 m  
 Humidity:  
 Inspector: