

Report No.: LG-8005/2

Test Time: 2016-06-02 16:48

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: LED

Lamp Catalog: CO

Lumens per Lamp: 1822

Luminous Width (mm): 70

Voltage: 109.8 V

Power: 21.30 W

Luminaire Description: AR-111

Number of Lamps: 1

Luminous Length (mm): 70

Luminous Height (mm): 3

Current: 0.195 A

Power Factor: 0.993

## Photometric Results

CIE Class: Direct

Measurement Flux: 1456.9 lm

Downward Ratio: 79.96%

Field Angle: H31.9 V32.8

Luminaire Efficacy Rating (LER): 68

Max. Intensity: 8253.47 cd

Total Rated Lamp Lumens: 1822.0 lm

Efficiency: 79.96%

Upward Ratio: 0.00%

Beam Angle: H17.7 V17.7

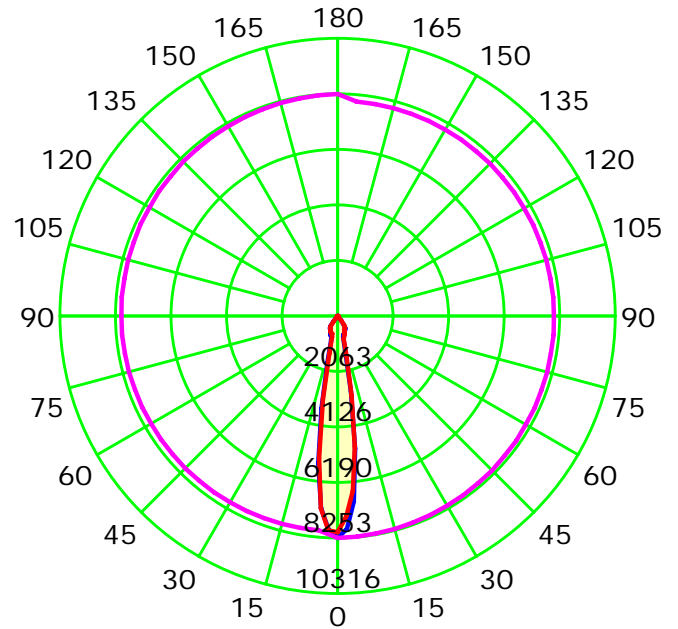
Central Intensity: 8253.47 cd

Pos of Max. Intensity: H0 V0

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— C0-C180 — C90-C270 — G0

C Plane (°):0.0-360.0: 5.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: 1

Gamma Plane (°):0.0-90.0:2.5

Test Device: GPM-1600L

Distance: 8.961 m

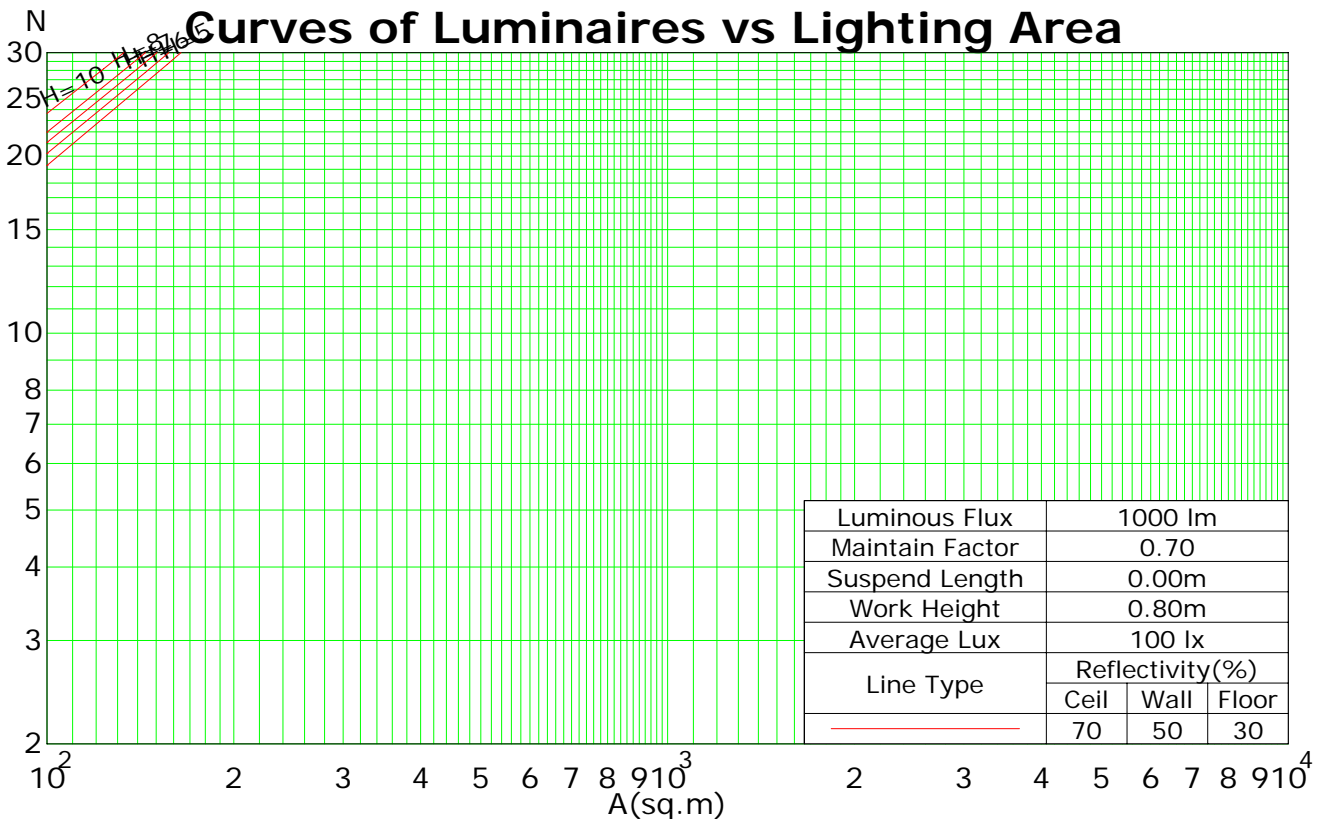
Humidity:

Inspector:

### Coefficients Of Utilization - Zonal Cavity Method

|     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| RC  | 0.8      | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0  |
| RW  | 0.7      | 0.5 | 0.3 | 0.1 | 0.7 | 0.5 | 0.3 | 0.1 | 0.5 | 0.3 | 0.1 | 0.5 | 0.3 | 0.1 | 0.5 | 0.3 | 0.1 | 0  |
| RCR | RF = 0.2 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
| 0   | 95       | 95  | 95  | 95  | 93  | 93  | 93  | 93  | 89  | 89  | 89  | 85  | 85  | 85  | 82  | 82  | 82  | 80 |
| 1   | 91       | 89  | 88  | 86  | 89  | 88  | 86  | 85  | 84  | 83  | 82  | 81  | 80  | 80  | 79  | 78  | 77  | 76 |
| 2   | 88       | 84  | 81  | 79  | 86  | 83  | 80  | 78  | 80  | 78  | 76  | 78  | 76  | 75  | 76  | 74  | 73  | 72 |
| 3   | 84       | 80  | 76  | 74  | 83  | 79  | 76  | 73  | 77  | 74  | 72  | 75  | 73  | 71  | 73  | 71  | 70  | 69 |
| 4   | 81       | 76  | 72  | 69  | 80  | 75  | 71  | 69  | 73  | 70  | 68  | 72  | 69  | 67  | 70  | 68  | 66  | 65 |
| 5   | 78       | 72  | 68  | 66  | 77  | 72  | 68  | 65  | 70  | 67  | 65  | 69  | 66  | 64  | 68  | 65  | 64  | 63 |
| 6   | 75       | 69  | 65  | 62  | 74  | 69  | 65  | 62  | 67  | 64  | 62  | 66  | 64  | 61  | 65  | 63  | 61  | 60 |
| 7   | 72       | 66  | 62  | 60  | 72  | 66  | 62  | 60  | 65  | 62  | 59  | 64  | 61  | 59  | 63  | 61  | 59  | 58 |
| 8   | 70       | 64  | 60  | 57  | 69  | 63  | 60  | 57  | 63  | 59  | 57  | 62  | 59  | 57  | 61  | 59  | 57  | 56 |
| 9   | 68       | 62  | 58  | 55  | 67  | 61  | 58  | 55  | 61  | 57  | 55  | 60  | 57  | 55  | 59  | 57  | 55  | 54 |
| 10  | 66       | 60  | 56  | 53  | 65  | 59  | 56  | 53  | 59  | 55  | 53  | 58  | 55  | 53  | 58  | 55  | 53  | 52 |

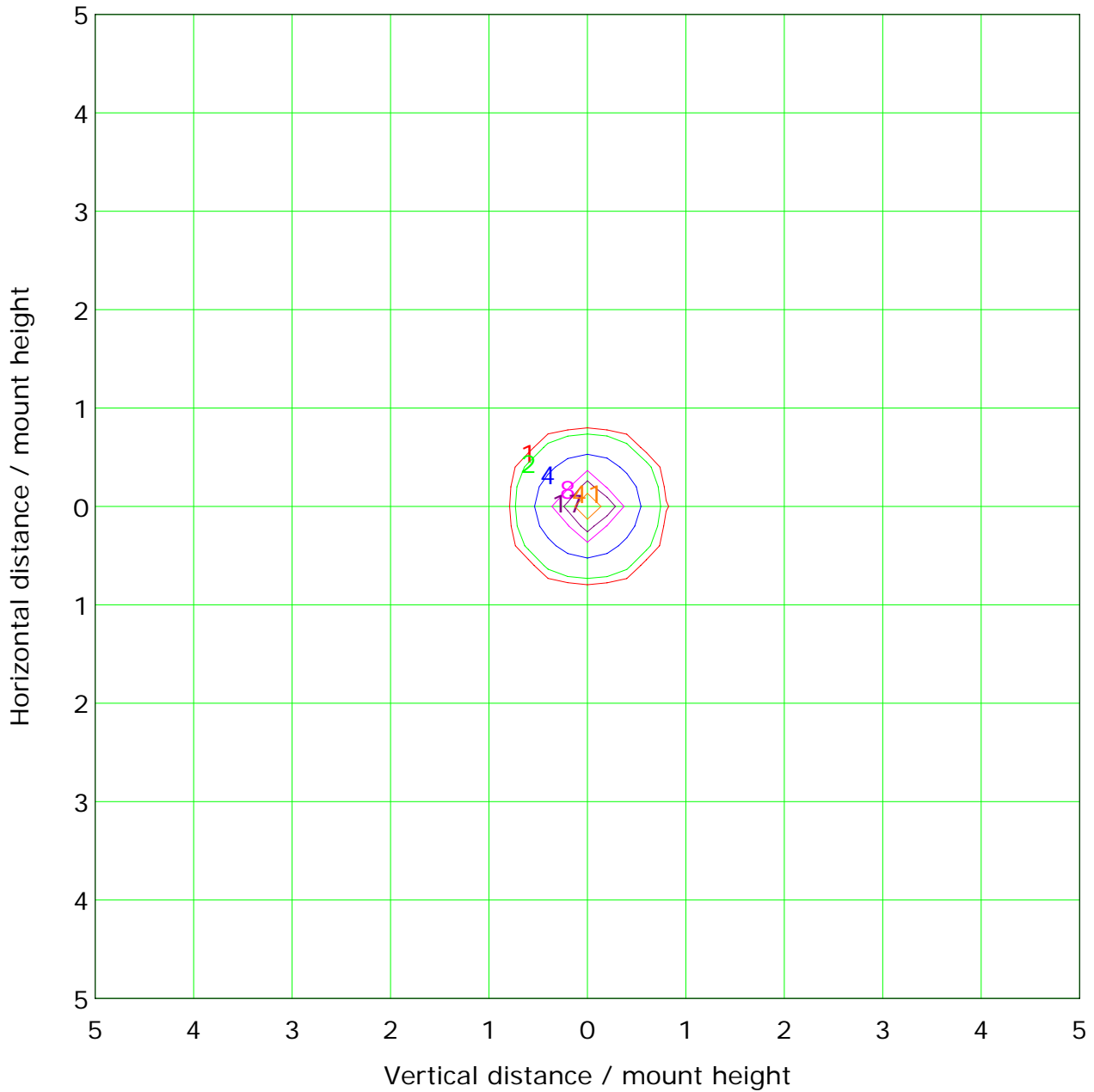
Spacing Criteria (0-180): 0.31  
 Spacing Criteria (90-270): 0.31  
 Spacing Criteria (Diagonal): 0.28



C Plane (°):0.0-360.0: 5.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature: 25  
 Operator: 1

Gamma Plane (°):0.0-90.0:2.5  
 Test Device: GPM-1600L  
 Distance: 8.961 m  
 Humidity:  
 Inspector:

### IsoLux Plot



|                        |         |                        |         |
|------------------------|---------|------------------------|---------|
| Mounting Height: 10.0m |         | Max Lux(100%): 82.5 lx |         |
| — ( 1%):               | 0.8 lx  | — ( 2%):               | 1.7 lx  |
| — ( 5%):               | 4.1 lx  | — ( 10%):              | 8.3 lx  |
| — ( 20%):              | 16.5 lx | — ( 50%):              | 41.3 lx |
| — (100%):              | 82.5 lx |                        |         |

C Plane (°):0.0-360.0: 5.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: 1

Gamma Plane (°):0.0-90.0:2.5

Test Device: GPM-1600L

Distance: 8.961 m

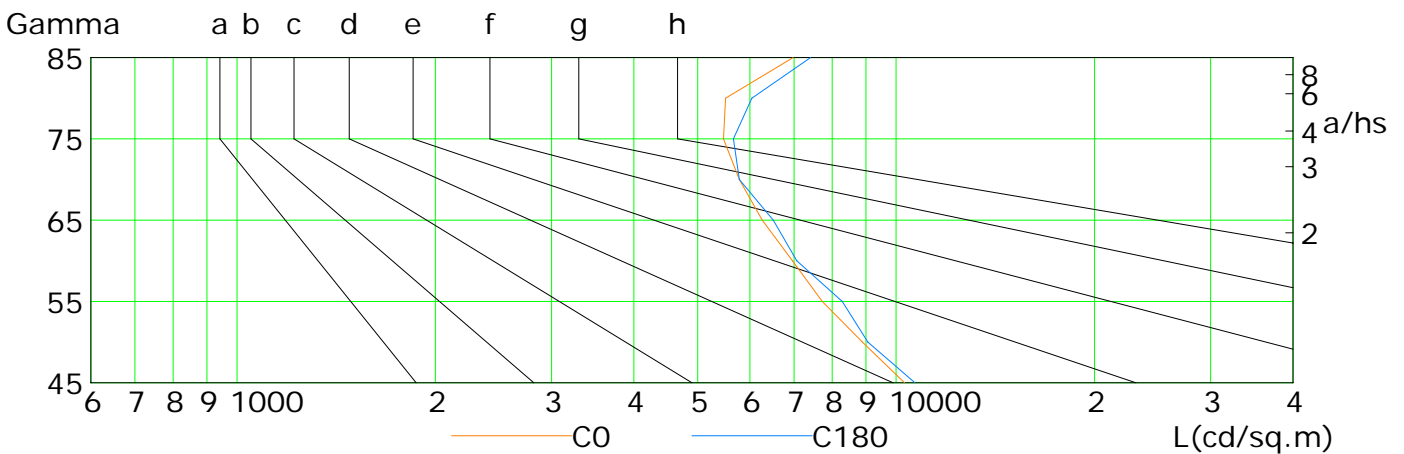
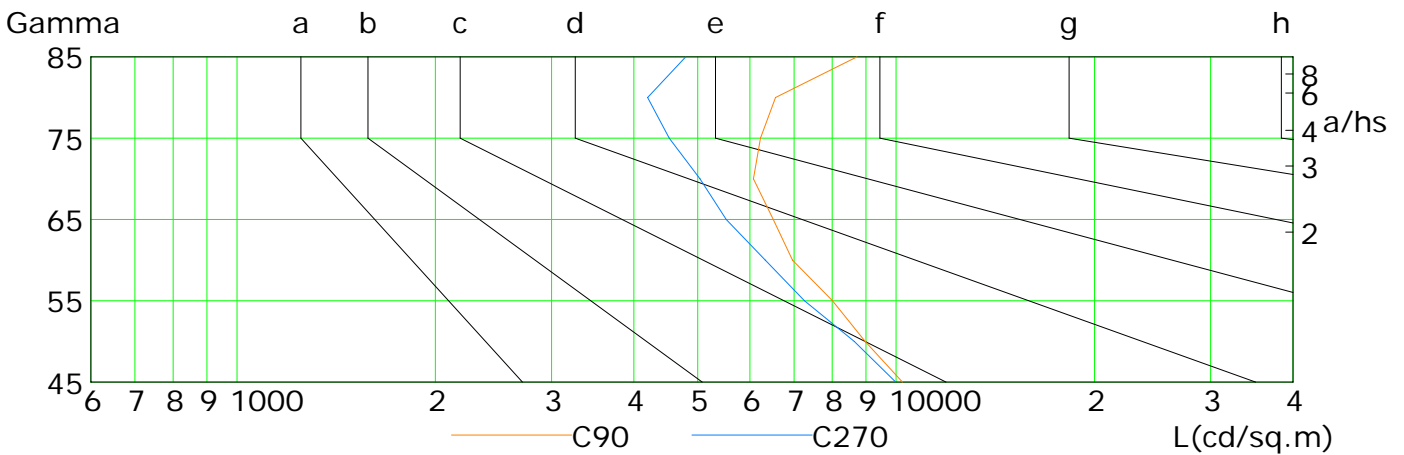
Humidity:

Inspector:

### Lum Limit Curve

| Dazzle | Quality | Illuminance (lx) |      |      |       |       |       |       |       |
|--------|---------|------------------|------|------|-------|-------|-------|-------|-------|
|        |         | 2000             | 1000 | 500  | <=300 |       |       |       |       |
| 1.15   | A       |                  |      |      |       |       |       |       |       |
| 1.50   | B       |                  | 2000 | 1000 | 500   | <=300 |       |       |       |
| 1.85   | C       |                  |      | 2000 | 1000  | 500   | <=300 |       |       |
| 2.20   | D       |                  |      |      | 2000  | 1000  | 500   | <=300 |       |
| 2.55   | E       |                  |      |      |       | 2000  | 1000  | 500   | <=300 |

a b c d e f g h



| L(cd/sq.m) | G45   | G50  | G55  | G60  | G65  | G70  | G75  | G80  | G85  |
|------------|-------|------|------|------|------|------|------|------|------|
| C0         | 10295 | 8890 | 7725 | 6961 | 6262 | 5781 | 5472 | 5512 | 6978 |
| C90        | 10221 | 8974 | 8007 | 6961 | 6510 | 6075 | 6227 | 6561 | 8723 |
| C180       | 10680 | 9059 | 8285 | 7067 | 6510 | 5781 | 5663 | 6041 | 7418 |
| C270       | 9988  | 8639 | 7262 | 6330 | 5524 | 5039 | 4527 | 4198 | 4794 |

C Plane (°):0.0-360.0: 5.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: 1

Gamma Plane (°):0.0-90.0:2.5

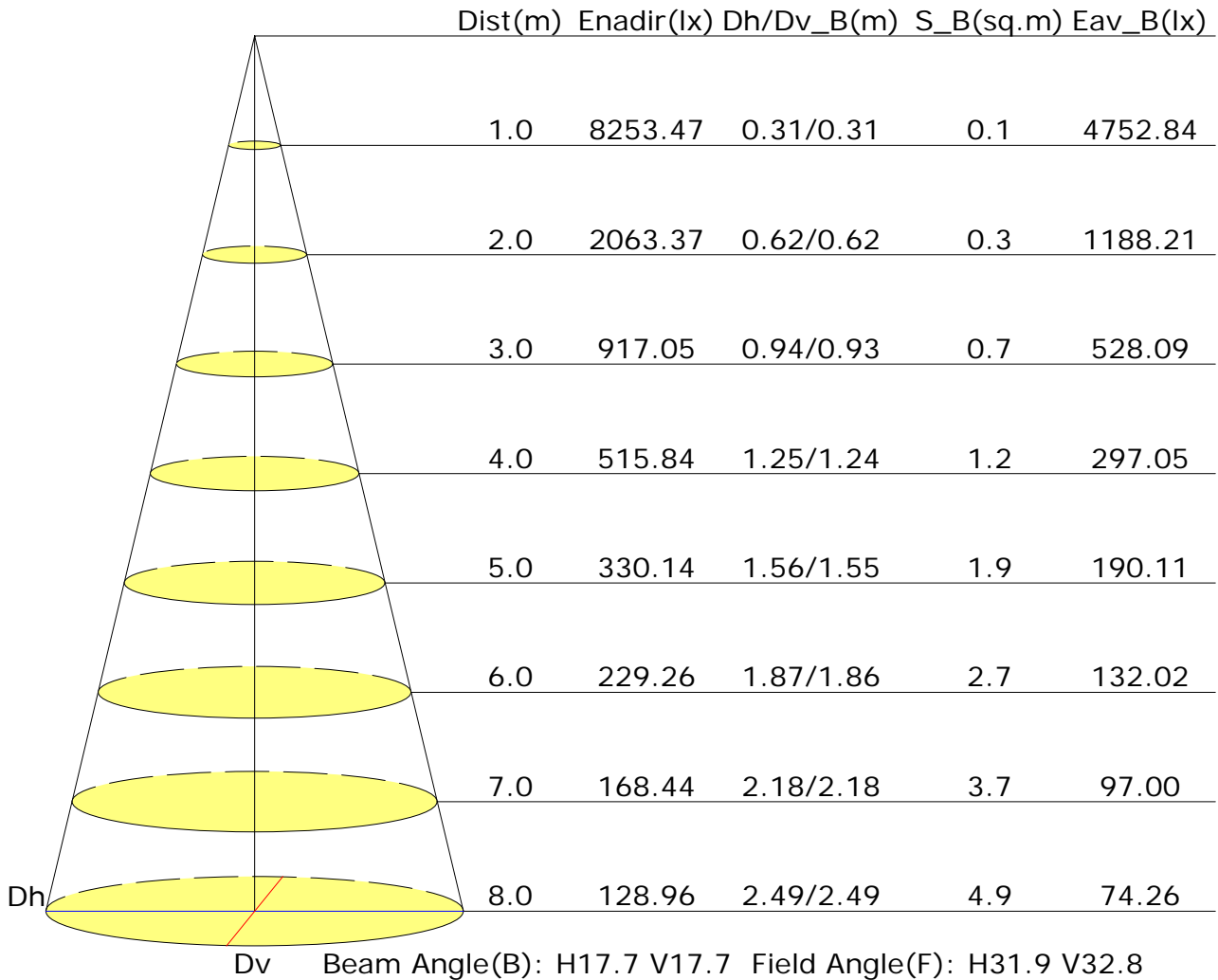
Test Device: GPM-1600L

Distance: 8.961 m

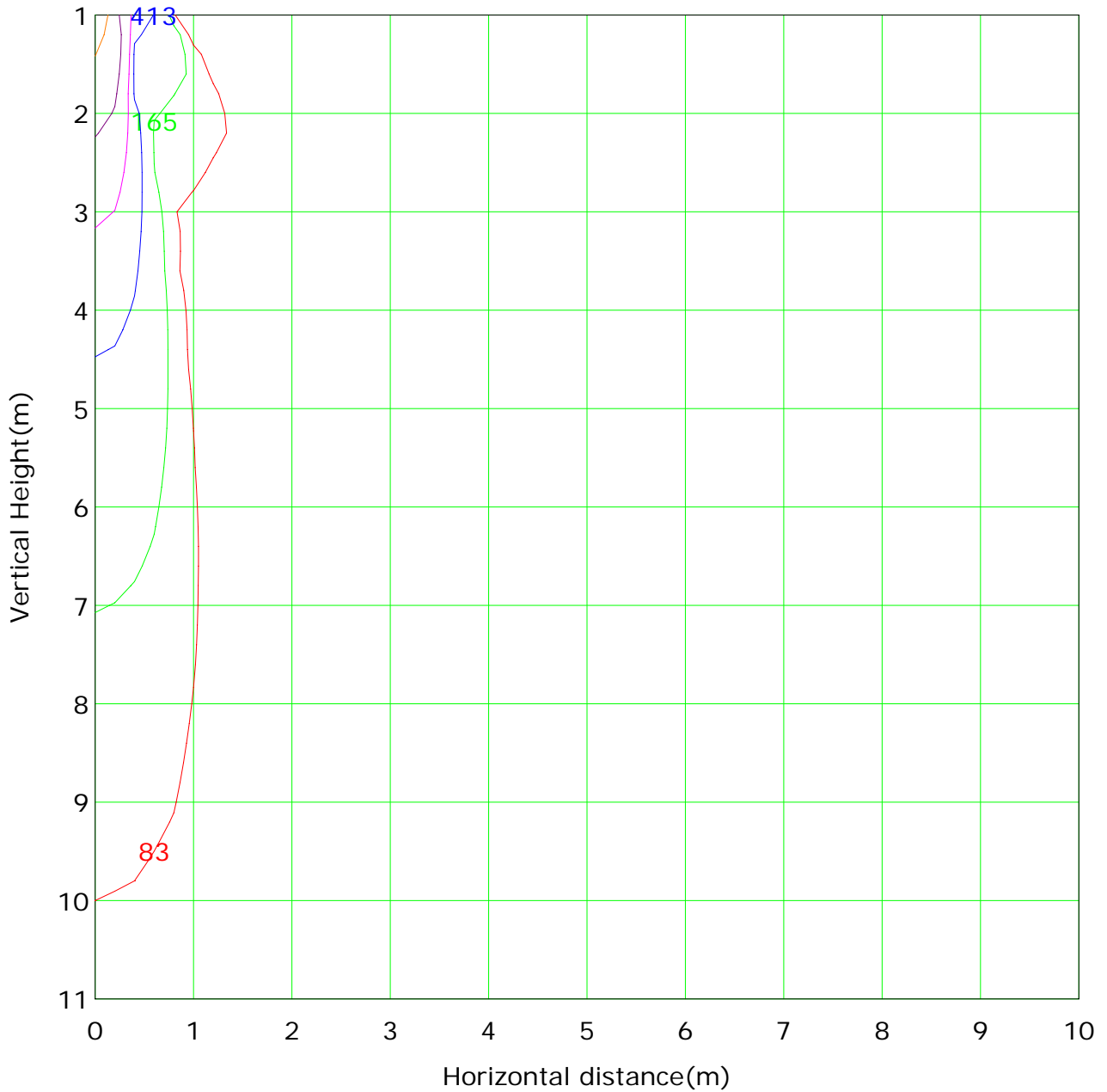
Humidity:

Inspector:

## Illuminance at a Distance



### Vertical IsoLux Plot



Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 8253.5 lx  
— ( 1%): 82.5 lx                      — ( 2%): 165.1 lx  
— ( 5%): 412.7 lx                      — ( 10%): 825.3 lx  
— ( 20%): 1650.7 lx                    — ( 50%): 4126.7 lx  
— (100%): 8253.5 lx

C Plane (°):0.0-360.0: 5.0  
Test Lab:  
Test Type: TYPE C  
Temperature: 25  
Operator: 1

Gamma Plane (°):0.0-90.0:2.5  
Test Device: GPM-1600L  
Distance: 8.961 m  
Humidity:  
Inspector: