

Report No.: LG-8005/3

Test Time: 2016-06-02 12:44

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: LED

Lamp Catalog: CO

Lumens per Lamp: 1732

Luminous Width (mm): 70

Voltage: 110.0 V

Power: 21.77 W

Luminaire Description: AR-111

Number of Lamps: 1

Luminous Length (mm): 70

Luminous Height (mm): 3

Current: 0.200 A

Power Factor: 0.992

## Photometric Results

CIE Class: Direct

Measurement Flux: 1361.1 lm

Downward Ratio: 78.59%

Field Angle: H75.3 V74.8

Luminaire Efficacy Rating (LER): 63

Max. Intensity: 3061.29 cd

Total Rated Lamp Lumens: 1732.0 lm

Efficiency: 78.59%

Upward Ratio: 0.00%

Beam Angle: H26.9 V26.8

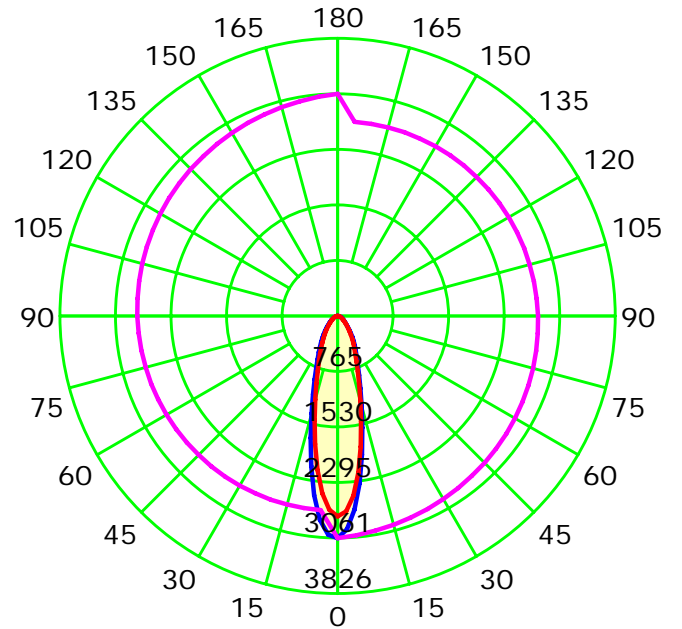
Central Intensity: 3061.28 cd

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

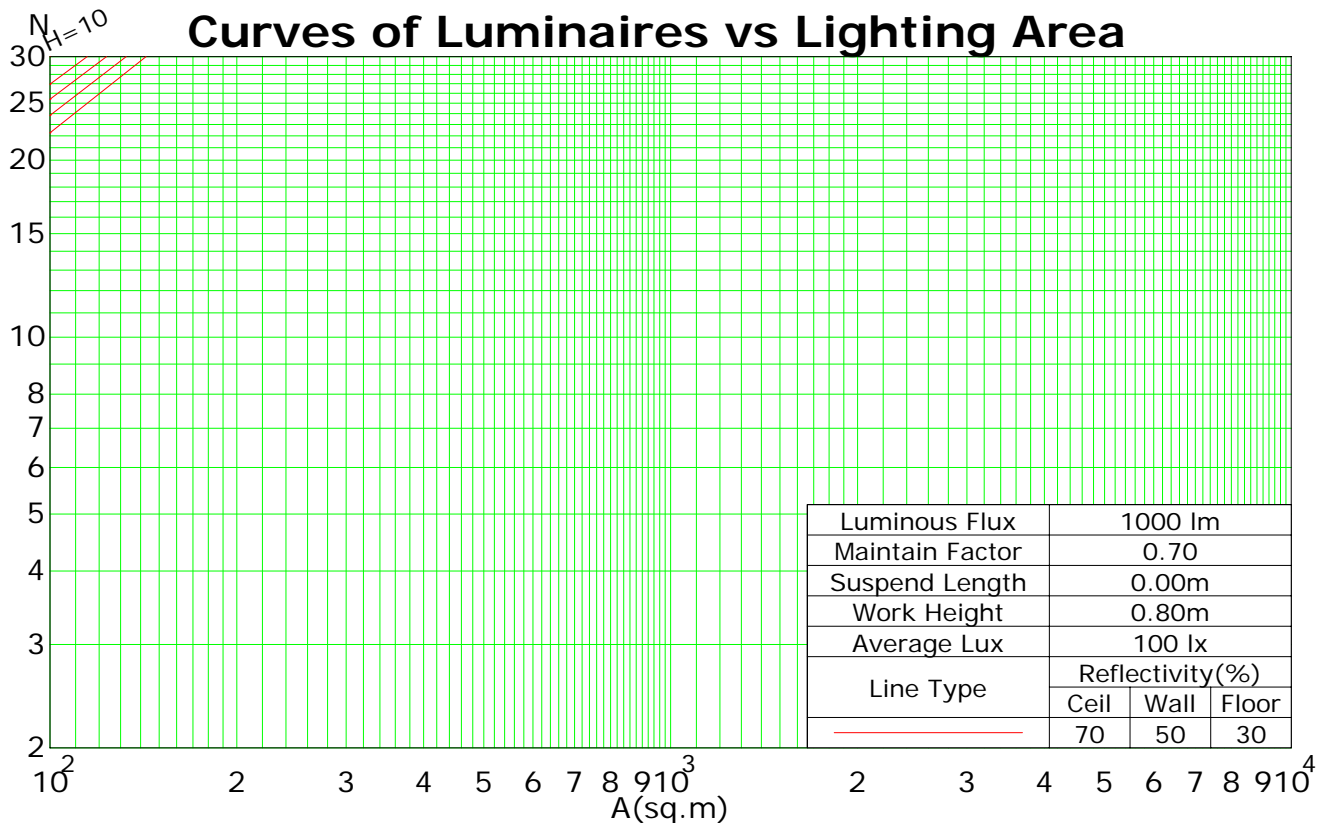
Humidity:

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  |
| RCCR | RF = 0.2 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
| 0    | 94       | 94  | 94  | 94  | 91  | 91  | 91  | 91  | 87  | 87  | 87  | 84  | 84  | 84  | 80  | 80  | 80  | 79 |
| 1    | 88       | 86  | 83  | 81  | 86  | 84  | 82  | 80  | 81  | 79  | 78  | 78  | 76  | 75  | 75  | 74  | 73  | 72 |
| 2    | 83       | 79  | 75  | 72  | 81  | 77  | 74  | 71  | 75  | 72  | 69  | 72  | 70  | 68  | 70  | 68  | 66  | 65 |
| 3    | 78       | 73  | 68  | 65  | 77  | 71  | 67  | 64  | 69  | 66  | 63  | 67  | 64  | 62  | 65  | 63  | 61  | 60 |
| 4    | 74       | 67  | 62  | 59  | 72  | 66  | 62  | 58  | 65  | 61  | 58  | 63  | 60  | 57  | 61  | 59  | 56  | 55 |
| 5    | 70       | 63  | 58  | 54  | 69  | 62  | 57  | 54  | 61  | 56  | 53  | 59  | 56  | 53  | 58  | 55  | 52  | 51 |
| 6    | 66       | 59  | 54  | 50  | 65  | 58  | 53  | 50  | 57  | 53  | 49  | 56  | 52  | 49  | 55  | 51  | 49  | 48 |
| 7    | 63       | 55  | 50  | 47  | 62  | 55  | 50  | 47  | 54  | 49  | 46  | 53  | 49  | 46  | 52  | 48  | 46  | 45 |
| 8    | 60       | 52  | 47  | 44  | 59  | 52  | 47  | 44  | 51  | 47  | 44  | 50  | 46  | 43  | 49  | 46  | 43  | 42 |
| 9    | 57       | 49  | 45  | 41  | 57  | 49  | 44  | 41  | 48  | 44  | 41  | 48  | 44  | 41  | 47  | 43  | 41  | 40 |
| 10   | 55       | 47  | 42  | 39  | 54  | 47  | 42  | 39  | 46  | 42  | 39  | 45  | 42  | 39  | 45  | 41  | 39  | 38 |

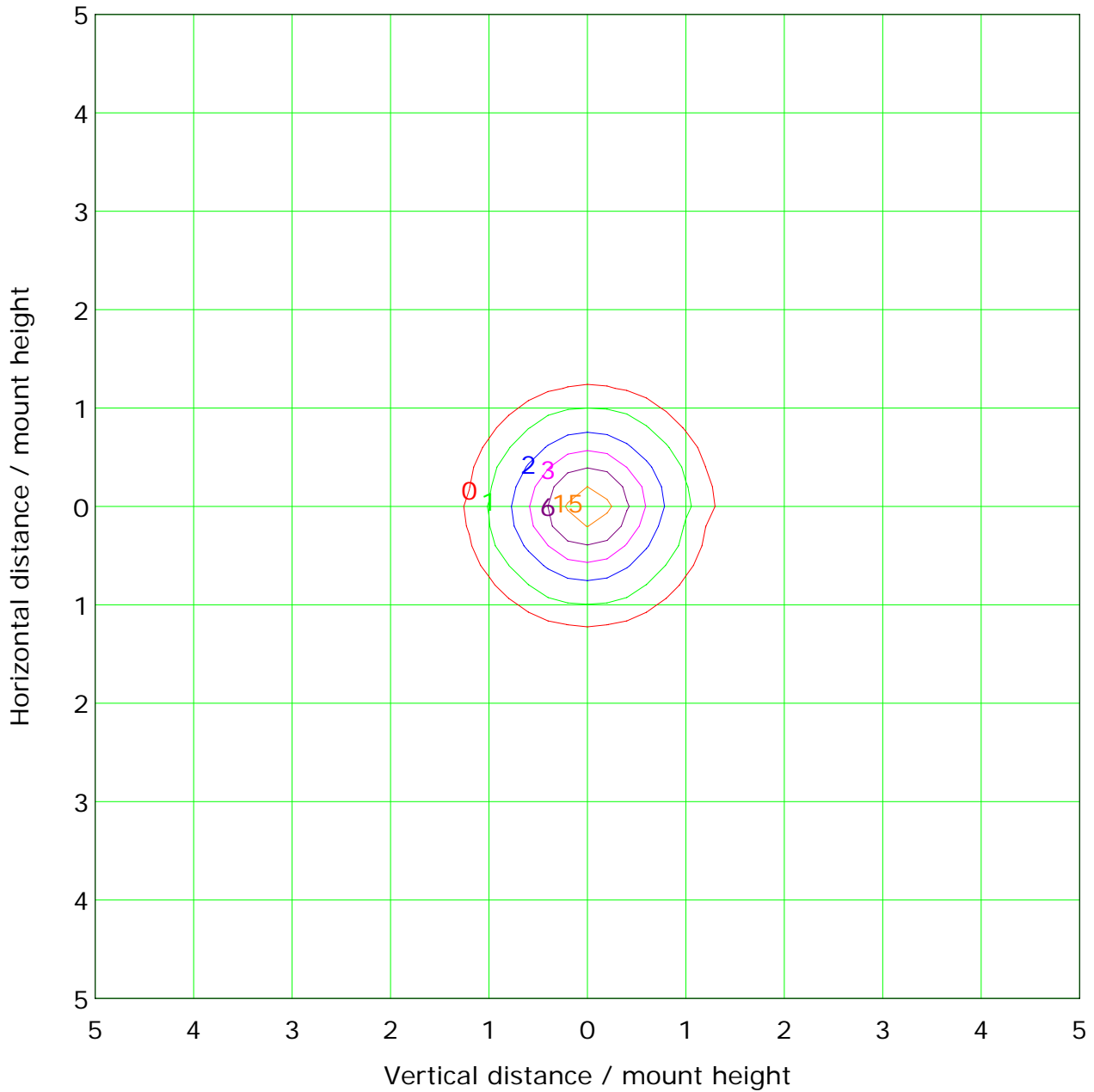
Spacing Criteria (0-180): 0.45  
 Spacing Criteria (90-270): 0.44  
 Spacing Criteria (Diagonal): 0.48



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%): 30.6 lx |         |
| — ( 1%):               | 0.3 lx  | — ( 2%):               | 0.6 lx  |
| — ( 5%):               | 1.5 lx  | — ( 10%):              | 3.1 lx  |
| — ( 20%):              | 6.1 lx  | — ( 50%):              | 15.3 lx |
| — (100%):              | 30.6 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:

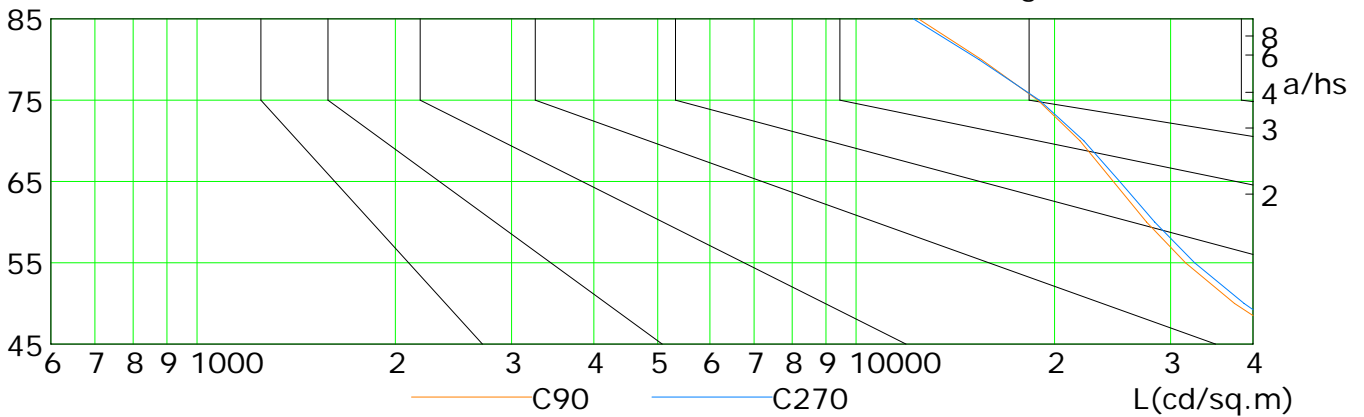
### Lum Limit Curve

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

a b c d e f g h

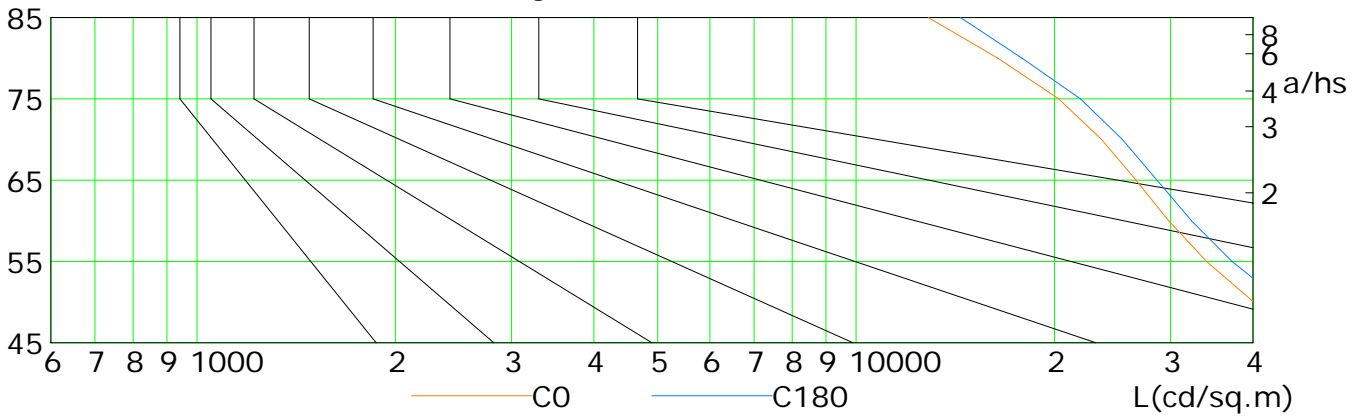
Gamma

a b c d e f g h



Gamma

a b c d e f g h



| L(cd/sq.m) | G45   | G50   | G55   | G60   | G65   | G70   | G75   | G80   | G85   |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C0         | 49791 | 40130 | 34025 | 29800 | 26584 | 23569 | 20292 | 16404 | 12872 |
| C90        | 46641 | 37489 | 31604 | 27585 | 24558 | 21861 | 18871 | 15487 | 12432 |
| C180       | 55016 | 44449 | 37190 | 32281 | 28609 | 25347 | 21896 | 17850 | 14397 |
| C270       | 47754 | 38788 | 32626 | 28379 | 25111 | 22160 | 18966 | 15354 | 12212 |

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

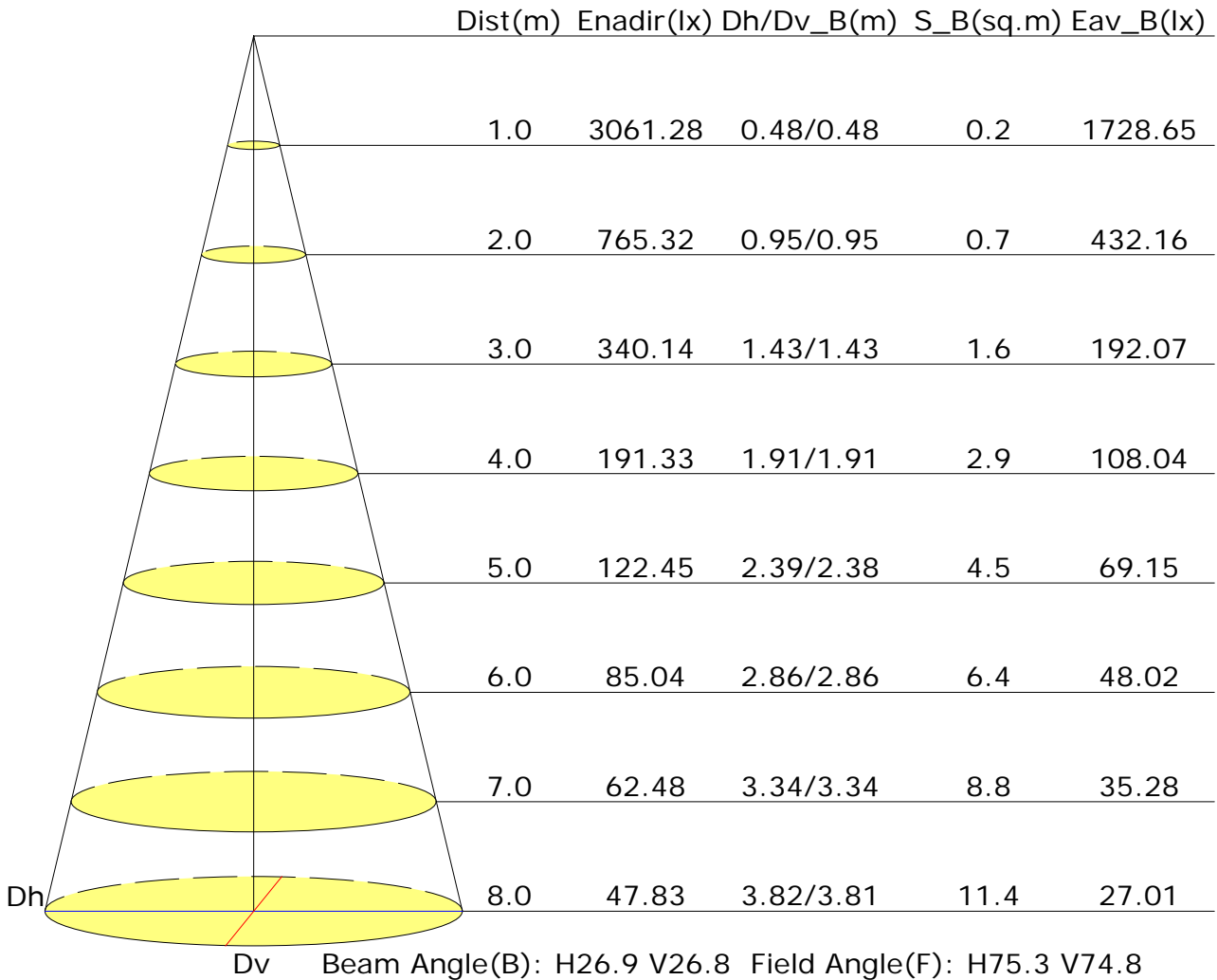
Test Device: GPM-1600L

Distance: 8.961 m

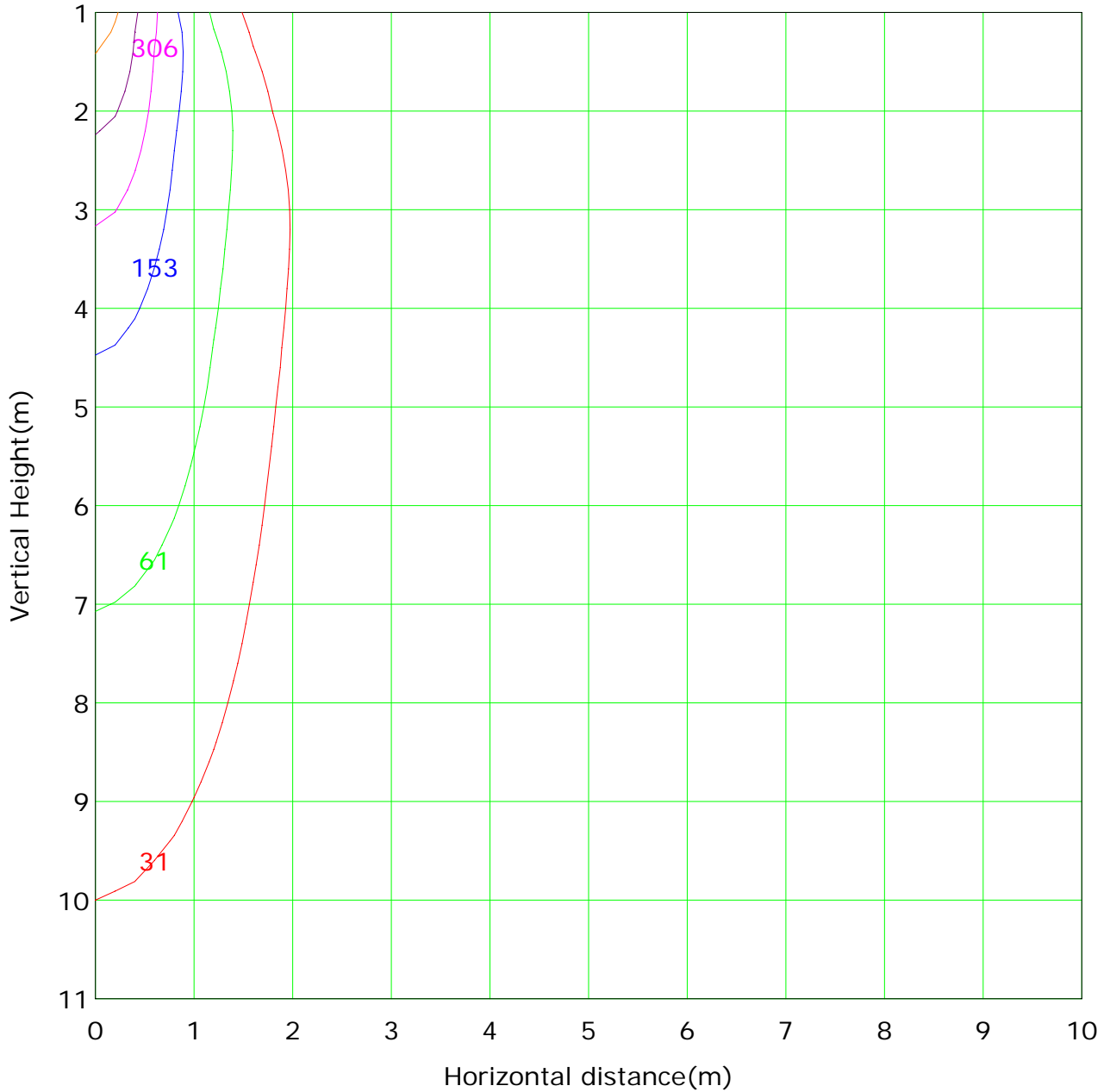
Humidity:

Inspector:

## Illuminance at a Distance



### Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 3061.3 lx  
— ( 1%): 30.6 lx — ( 2%): 61.2 lx  
— ( 5%): 153.1 lx — ( 10%): 306.1 lx  
— ( 20%): 612.3 lx — ( 50%): 1530.6 lx  
— (100%): 3061.3 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: