

Light efficiency:

63 Lumen/Watt

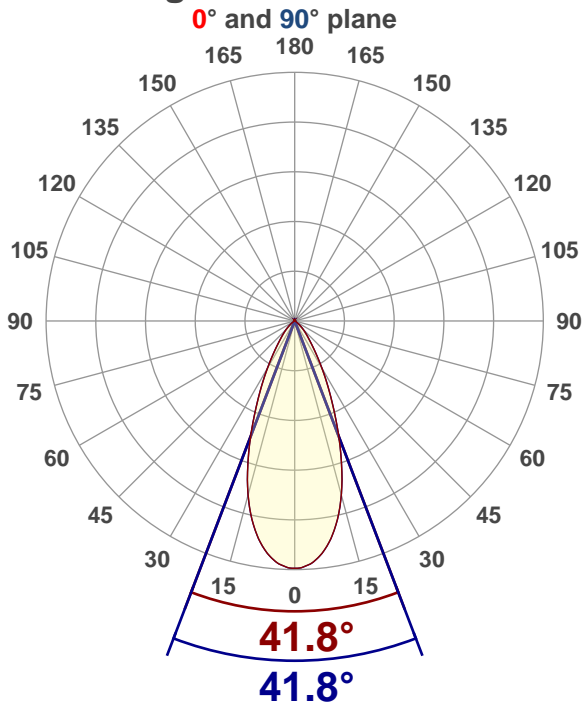
Color temperature:

2783 K

Light quality:

CRI:94.6, R_g:93.1, R_f:99.0**P: 2 / V: - / F: 2****Output: 739 lm****Peak: 1200 cd****Power: 11.8 W****Voltage: 119 V****Current: 0.100 A****PF: 0.98****THD: 7.61 %**

Angular Distribution



Product name:

RA4-12RG-90BK - 2700K

Test Date:

2021-09-03

Beam Angle (50% of the brightness of the centre):
41.8°

Field Angle (10% of the brightness of the centre):
75°

Cut Off Angle (2.5% of the brightness of the centre):
101.2°

Beam Details

*measured at centre of beam

| Mounting Height (feet)/(meter) | Lux* | Footcandles* | Beam width (feet) / (meter) |
|-----------------------------------|--------|--------------|--------------------------------|
| 4 ft / 1.2 m | 807 lx | 75 fc | 3.1 ft / 0.9 m |
| 8 ft / 2.4 m | 202 lx | 19 fc | 6.1 ft / 1.9 m |
| 12 ft / 3.7 m | 90 lx | 8 fc | 9.2 ft / 2.8 m |
| 16 ft / 4.9 m | 50 lx | 5 fc | 12.2 ft / 3.7 m |
| 20 ft / 6.1 m | 32 lx | 3 fc | 15.3 ft / 4.7 m |

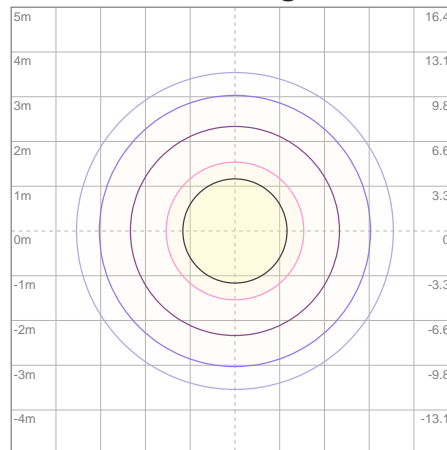
Beam center

Photometric Testing Report

Zonal Lumen Summary

| Zone | Lumen | %Luminaire |
|--------|-------|------------|
| 0-30 | 542 | 73.34% |
| 0-40 | 642 | 86.87% |
| 0-60 | 703 | 95.13% |
| 60-90 | 12.8 | 1.73% |
| 70-100 | 11.3 | 1.53% |
| 90-120 | 11.0 | 1.49% |
| 0-90 | 715 | 96.75% |
| 90-180 | 23.6 | 3.19% |
| 0-180 | 739 | 100.00% |

ISO Lux Diagram



| | |
|----------------|----------|
| Lux at center: | 129 lx |
| 3% | 3.87 lx |
| 5% | 6.45 lx |
| 10% | 12.90 lx |
| 30% | 38.70 lx |
| 50% | 64.50 lx |

Conditions:

Number of planes: 8

Lux distribution on a surface when lamp is mounted at 3.05 meters from the surface.

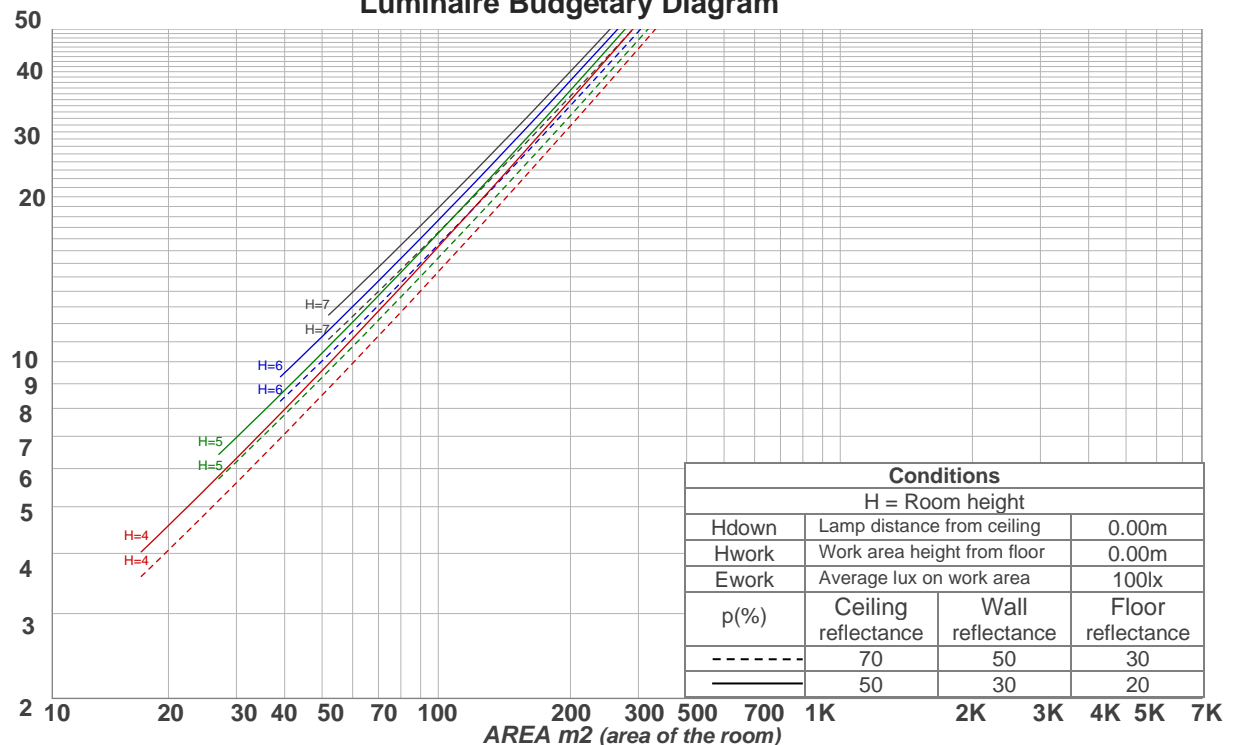
Mounting height: 3.05 meters (10 feet)

Coefficients of Utilization

| Ceiling reflectance | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 |
|---------------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|
| Wall reflectance | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| Floor reflectance | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 0 |
| RCR | (RCR: Room Cavity Ratio) Room Values are expressed as percentage of Lumens delivered to the task surface | | | | | | | | | | | | | | | | | |
| 0 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 104 | 104 | 104 | 99 | 99 | 99 | 97 |
| 1 | 113 | 110 | 107 | 105 | 110 | 107 | 105 | 103 | 103 | 101 | 99 | 98 | 97 | 96 | 95 | 93 | 92 | 90 |
| 2 | 107 | 102 | 98 | 95 | 105 | 100 | 97 | 94 | 97 | 94 | 91 | 93 | 91 | 89 | 90 | 88 | 86 | 84 |
| 3 | 102 | 96 | 91 | 87 | 100 | 94 | 89 | 86 | 91 | 87 | 84 | 88 | 85 | 82 | 85 | 83 | 81 | 79 |
| 4 | 97 | 90 | 84 | 80 | 95 | 88 | 83 | 79 | 86 | 82 | 78 | 83 | 80 | 77 | 81 | 78 | 76 | 74 |
| 5 | 92 | 84 | 79 | 74 | 91 | 83 | 78 | 74 | 81 | 77 | 73 | 79 | 75 | 72 | 77 | 74 | 71 | 70 |
| 6 | 88 | 80 | 74 | 70 | 86 | 79 | 73 | 69 | 77 | 72 | 69 | 75 | 71 | 68 | 74 | 70 | 67 | 66 |
| 7 | 84 | 75 | 69 | 65 | 83 | 74 | 69 | 65 | 73 | 68 | 65 | 71 | 67 | 64 | 70 | 66 | 63 | 62 |
| 8 | 80 | 71 | 66 | 62 | 79 | 71 | 65 | 61 | 69 | 64 | 61 | 68 | 64 | 61 | 67 | 63 | 60 | 59 |
| 9 | 77 | 68 | 62 | 58 | 76 | 67 | 62 | 58 | 66 | 61 | 58 | 65 | 61 | 57 | 64 | 60 | 57 | 56 |
| 10 | 74 | 65 | 59 | 55 | 73 | 64 | 59 | 55 | 63 | 58 | 55 | 62 | 58 | 55 | 61 | 57 | 54 | 53 |

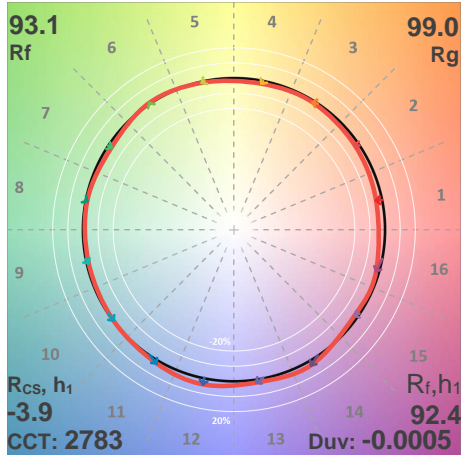
LAMPS (number of lamps)

Luminaire Budgetary Diagram

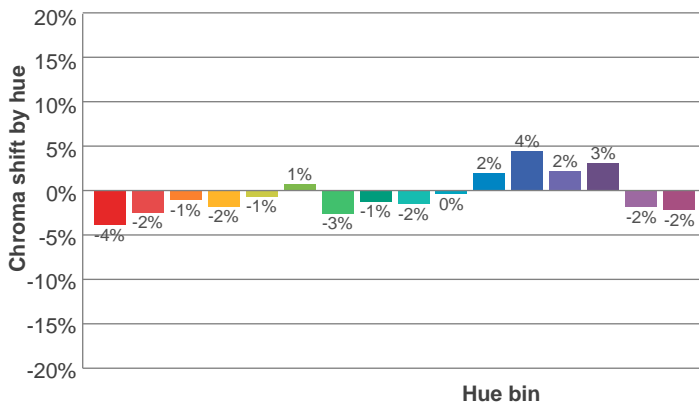
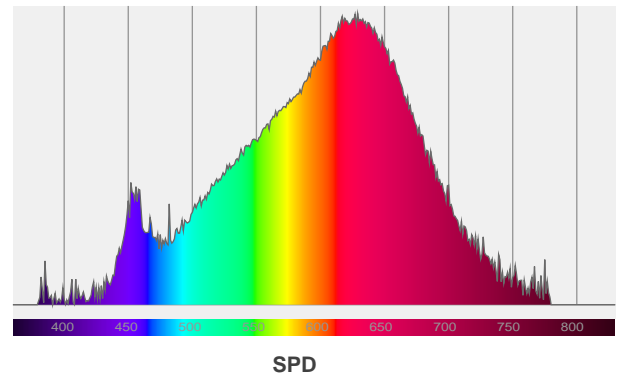
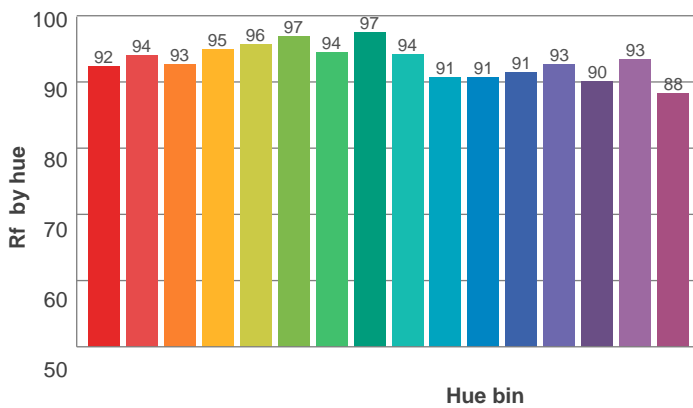
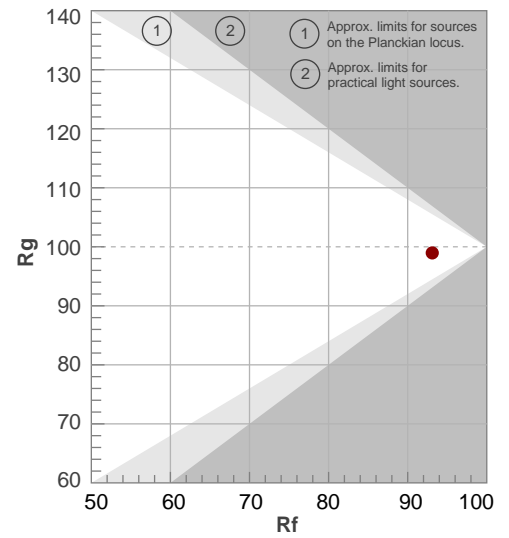


ANSI/IES TM-30-18

P: 2 / V: - / F: 2



| Hue Bin | R _f | Shifts (%) | |
|---------|----------------|------------|-----|
| | | Chroma | Hue |
| 1 | 92 | -4% | 1% |
| 2 | 94 | -2% | 2% |
| 3 | 93 | -1% | 4% |
| 4 | 95 | -2% | 1% |
| 5 | 96 | -1% | 2% |
| 6 | 97 | 1% | 0% |
| 7 | 94 | -3% | 0% |
| 8 | 97 | -1% | 0% |
| 9 | 94 | -2% | 3% |
| 10 | 91 | 0% | 6% |
| 11 | 91 | 2% | 7% |
| 12 | 91 | 4% | 0% |
| 13 | 93 | 2% | -5% |
| 14 | 90 | 3% | -7% |
| 15 | 93 | -2% | -3% |
| 16 | 88 | -2% | -9% |



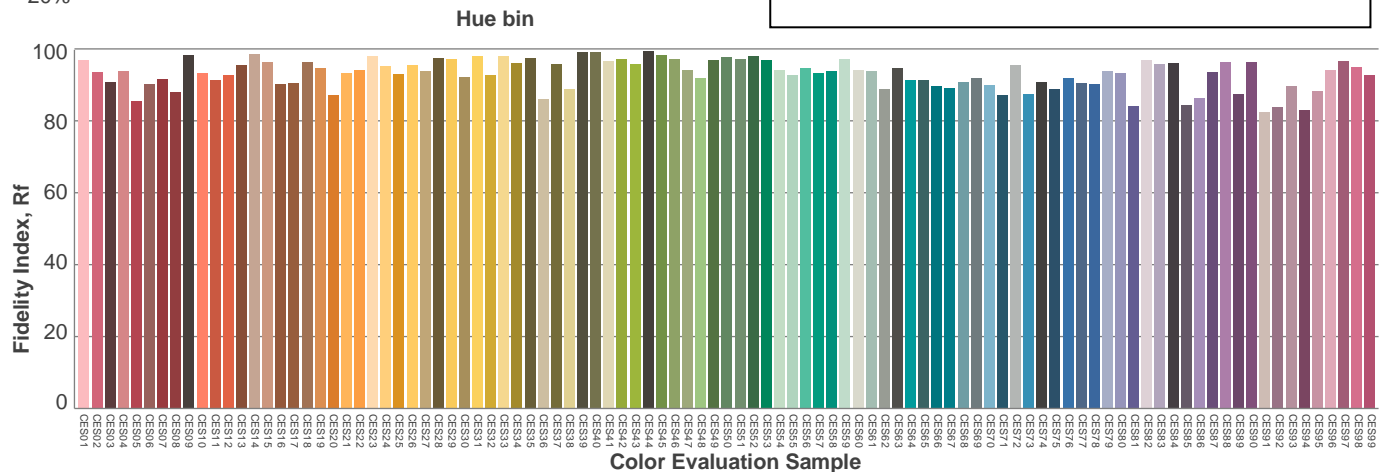
Red: 42.2%, Power=9.4mW

Blue: 7.6%, Power=3.7mW

Green: 22.2%, Power=8.3mW

UVA: 0.5%, Power=0.0mW

Dominant Wavelength: 584nm

1st Peak Wavelength: 629nm2nd Peak Wavelength: 618nm

Glare Evaluation According to UGR

| | | | | | | | | | | | |
|---|-----|---|------|------|------|------|---|------|------|------|------|
| p Ceiling | | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 |
| p Walls | | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 |
| p Floor | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Room size X Y | | Viewing direction at right angles to lamp axis | | | | | Viewing direction parallel to lamp axis | | | | |
| 2H | 2H | 17.8 | 18.4 | 17.9 | 18.6 | 18.9 | 17.8 | 18.4 | 17.9 | 18.6 | 18.9 |
| | 3H | 17.6 | 18.3 | 18.0 | 18.6 | 18.8 | 17.6 | 18.3 | 18.0 | 18.6 | 18.8 |
| | 4H | 17.6 | 18.3 | 18.1 | 18.6 | 18.9 | 17.6 | 18.3 | 18.1 | 18.6 | 18.9 |
| | 6H | 17.8 | 18.4 | 18.1 | 18.7 | 19.1 | 17.8 | 18.4 | 18.1 | 18.7 | 19.1 |
| | 8H | 17.9 | 18.4 | 18.2 | 18.8 | 19.2 | 17.9 | 18.4 | 18.2 | 18.8 | 19.2 |
| | 12H | 18.0 | 18.6 | 18.4 | 19.0 | 19.5 | 18.0 | 18.6 | 18.4 | 19.0 | 19.5 |
| 4H | 2H | 17.5 | 18.2 | 17.9 | 18.4 | 18.7 | 17.5 | 18.2 | 17.9 | 18.4 | 18.7 |
| | 3H | 17.5 | 18.1 | 17.9 | 18.5 | 19.0 | 17.5 | 18.1 | 17.9 | 18.5 | 19.0 |
| | 4H | 17.6 | 18.1 | 18.0 | 18.5 | 19.1 | 17.6 | 18.1 | 18.0 | 18.5 | 19.1 |
| | 6H | 17.8 | 18.3 | 18.3 | 18.7 | 19.1 | 17.8 | 18.3 | 18.3 | 18.7 | 19.1 |
| | 8H | 17.9 | 18.4 | 18.5 | 18.8 | 19.2 | 17.9 | 18.4 | 18.5 | 18.8 | 19.2 |
| | 12H | 18.3 | 18.6 | 18.8 | 19.1 | 19.6 | 18.3 | 18.6 | 18.8 | 19.1 | 19.6 |
| 8H | 4H | 17.5 | 18.0 | 18.1 | 18.4 | 18.8 | 17.5 | 18.0 | 18.1 | 18.4 | 18.8 |
| | 6H | 17.9 | 18.2 | 18.4 | 18.7 | 19.3 | 17.9 | 18.2 | 18.4 | 18.7 | 19.3 |
| | 8H | 18.2 | 18.5 | 18.8 | 19.1 | 19.7 | 18.2 | 18.5 | 18.8 | 19.1 | 19.7 |
| | 12H | 18.7 | 19.0 | 19.4 | 19.5 | 20.2 | 18.7 | 19.0 | 19.4 | 19.5 | 20.2 |
| 12H | 4H | 17.5 | 17.9 | 18.0 | 18.3 | 18.9 | 17.5 | 17.9 | 18.0 | 18.3 | 18.9 |
| | 6H | 17.9 | 18.2 | 18.5 | 18.8 | 19.4 | 17.9 | 18.2 | 18.5 | 18.8 | 19.4 |
| | 8H | 18.3 | 18.5 | 18.9 | 19.1 | 19.7 | 18.3 | 18.5 | 18.9 | 19.1 | 19.7 |
| Variation of the observer position for the luminaire distance S | | | | | | | | | | | |
| S = 1.0H | | 2.1 / -1.7 | | | | | 2.1 / -1.7 | | | | |
| S = 1.5H | | 4.0 / -2.1 | | | | | 4.0 / -2.1 | | | | |
| S = 2.0H | | 5.7 / -2.4 | | | | | 5.7 / -2.4 | | | | |
| Standard table | | n/a | | | | | n/a | | | | |
| Correction summand | | n/a | | | | | n/a | | | | |
| Corrected glare indices referring to 739 lm total luminous flux | | | | | | | | | | | |