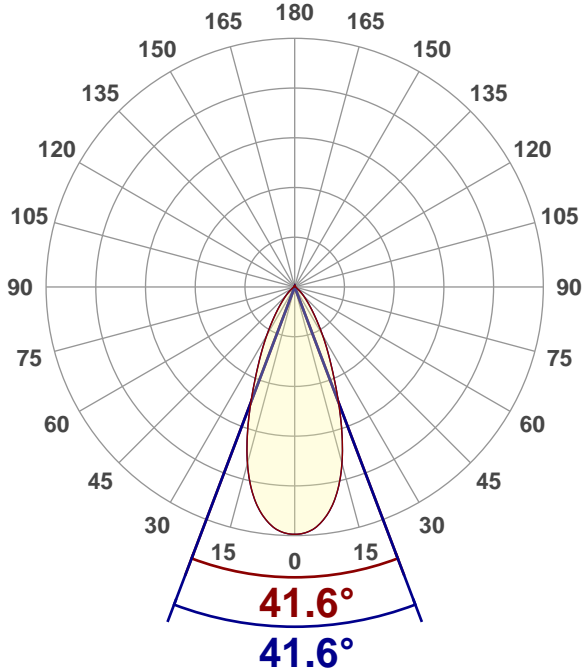


Light efficiency:**76 Lumen/Watt****Color temperature:****4040 K****Light quality:****CRI:96.7, R_g:90.9, R_f:97.5****P: 2 / V: - / F: 2****Output: 709 lm****Peak: 1118 cd****Power: 9.3 W****Voltage: 121 V****Current: 0.079 A****PF: 0.98****THD: 17.17 %****Angular Distribution****0° and 90° plane****Product name:****RA35x-9RG-90WH - 40K****Test Date:****2019-06-28****Beam Angle (50% of the brightness of the centre):****41.6°****Field Angle (10% of the brightness of the centre):****76.5°****Cut Off Angle (2.5% of the brightness of the centre):****103.1°****Beam Details*****measured at centre of beam**

| Mounting Height (feet)/(meter) | Lux* | Footcandles* | Beam width (feet) / (meter) |
|-----------------------------------|--------|--------------|--------------------------------|
| 4 ft / 1.2 m | 752 lx | 70 fc | 3 ft / 0.9 m |
| 8 ft / 2.4 m | 188 lx | 17 fc | 6.1 ft / 1.9 m |
| 12 ft / 3.7 m | 84 lx | 8 fc | 9.1 ft / 2.8 m |
| 16 ft / 4.9 m | 47 lx | 4 fc | 12.2 ft / 3.7 m |
| 20 ft / 6.1 m | 30 lx | 3 fc | 15.2 ft / 4.6 m |

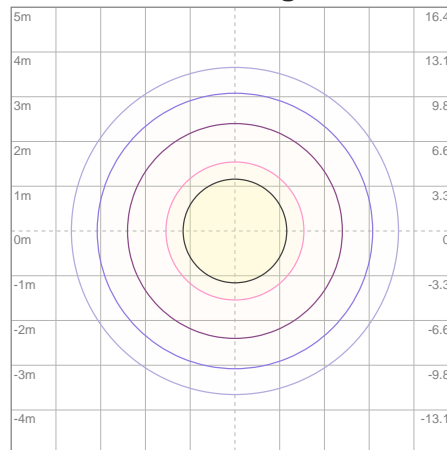
Beam center

Photometric Testing Report

Zonal Lumen Summary

| Zone | Lumen | %Luminaire |
|--------|-------|------------|
| 0-30 | 507 | 71.51% |
| 0-40 | 606 | 85.47% |
| 0-60 | 669 | 94.36% |
| 60-90 | 18.4 | 2.60% |
| 70-100 | 12.9 | 1.82% |
| 90-120 | 10.3 | 1.45% |
| 0-90 | 687 | 96.90% |
| 90-180 | 22.2 | 3.13% |
| 0-180 | 709 | 100.00% |

ISO Lux Diagram



| | |
|----------------|----------|
| Lux at center: | 120 lx |
| 3% | 3.60 lx |
| 5% | 6.00 lx |
| 10% | 12.00 lx |
| 30% | 36.00 lx |
| 50% | 60.00 lx |

Conditions:

Number of planes: 8

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

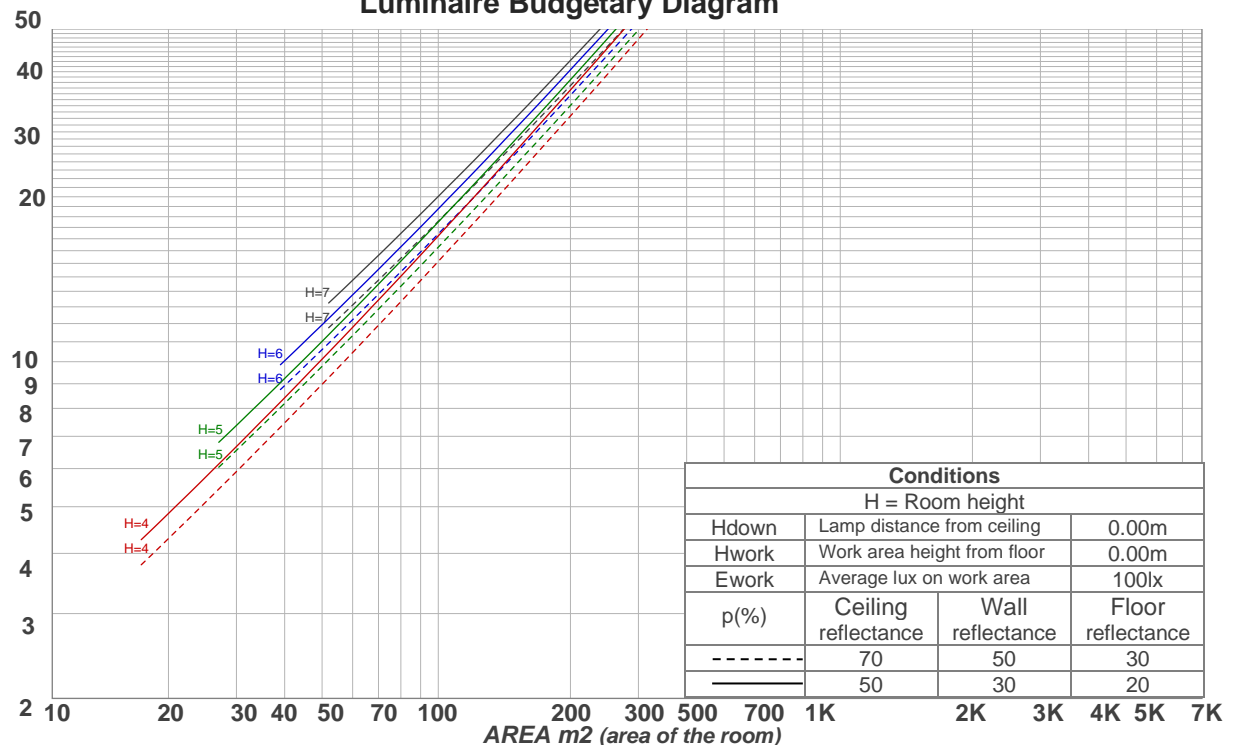
Mounting height: 3.05 meters (10 feet)

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 | 112 | 110 | 107 | 105 | 110 | 107 | 105 | 103 | 102 | 101 | 99 | 98 | 97 | 95 | 94 | 93 | 92 | 90 |
| 2 | 107 | 102 | 98 | 94 | 104 | 100 | 96 | 93 | 96 | 93 | 90 | 93 | 90 | 88 | 89 | 87 | 86 | 84 |
| 3 | 101 | 95 | 90 | 86 | 99 | 93 | 89 | 85 | 90 | 86 | 83 | 87 | 84 | 82 | 85 | 82 | 80 | 78 |
| 4 | 96 | 89 | 83 | 79 | 94 | 88 | 82 | 79 | 85 | 81 | 77 | 83 | 79 | 76 | 80 | 77 | 75 | 73 |
| 5 | 92 | 84 | 78 | 73 | 90 | 82 | 77 | 73 | 80 | 76 | 72 | 78 | 74 | 71 | 76 | 73 | 70 | 69 |
| 6 | 87 | 79 | 73 | 69 | 86 | 78 | 72 | 68 | 76 | 71 | 68 | 74 | 70 | 67 | 73 | 69 | 66 | 65 |
| 7 | 83 | 74 | 68 | 64 | 82 | 74 | 68 | 64 | 72 | 67 | 64 | 71 | 66 | 63 | 69 | 65 | 62 | 61 |
| 8 | 80 | 70 | 65 | 61 | 78 | 70 | 64 | 60 | 68 | 63 | 60 | 67 | 63 | 60 | 66 | 62 | 59 | 58 |
| 9 | 76 | 67 | 61 | 57 | 75 | 66 | 61 | 57 | 65 | 60 | 57 | 64 | 60 | 56 | 63 | 59 | 56 | 55 |
| 10 | 73 | 64 | 58 | 54 | 72 | 63 | 58 | 54 | 62 | 57 | 54 | 61 | 57 | 54 | 60 | 56 | 53 | 52 |

LAMPS (number of lamps)

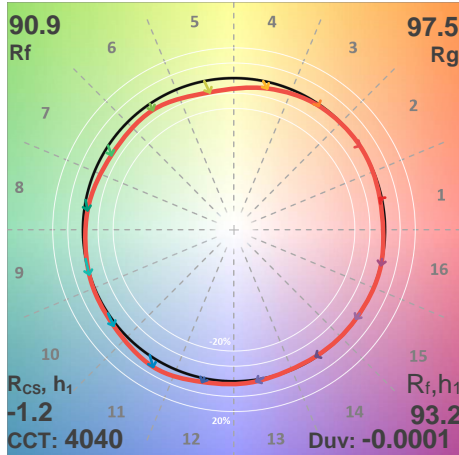
Luminaire Budgetary Diagram



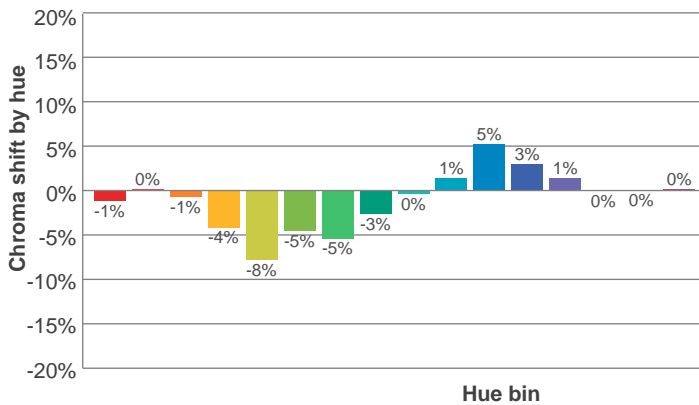
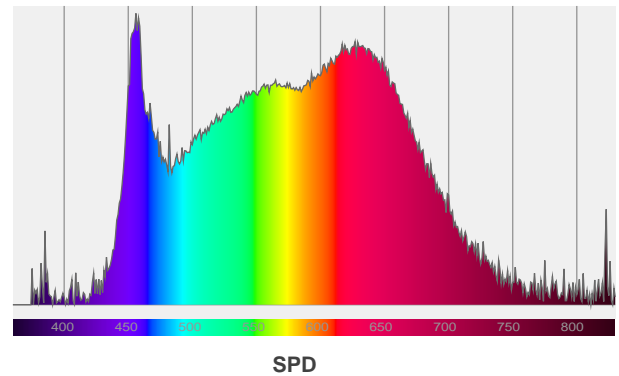
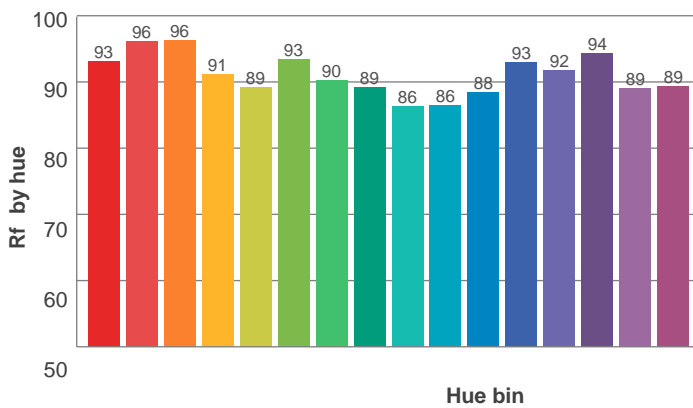
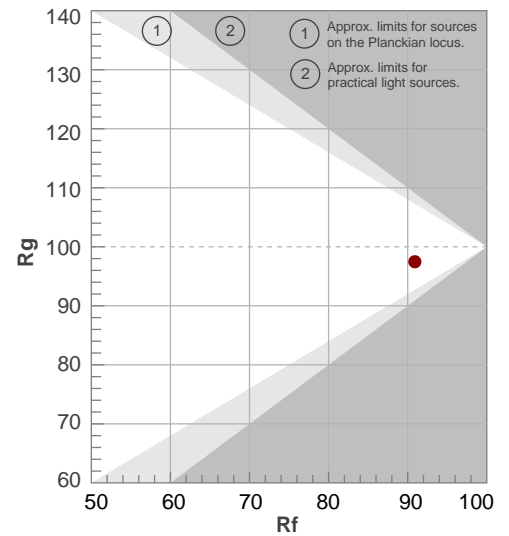
Photometric Testing Report

ANSI/IES TM-30-18

P: 2 / V: - / F: 2



| Hue Bin | R_f | Shifts (%) | |
|---------|-------|------------|-----|
| | | Chroma | Hue |
| 1 | 93 | -1% | 2% |
| 2 | 96 | 0% | 0% |
| 3 | 96 | -1% | -1% |
| 4 | 91 | -4% | -4% |
| 5 | 89 | -8% | -2% |
| 6 | 93 | -5% | 1% |
| 7 | 90 | -5% | 4% |
| 8 | 89 | -3% | 6% |
| 9 | 86 | 0% | 10% |
| 10 | 86 | 1% | 9% |
| 11 | 88 | 5% | 6% |
| 12 | 93 | 3% | -1% |
| 13 | 92 | 1% | -5% |
| 14 | 94 | 0% | -1% |
| 15 | 89 | 0% | -4% |
| 16 | 89 | 0% | -4% |



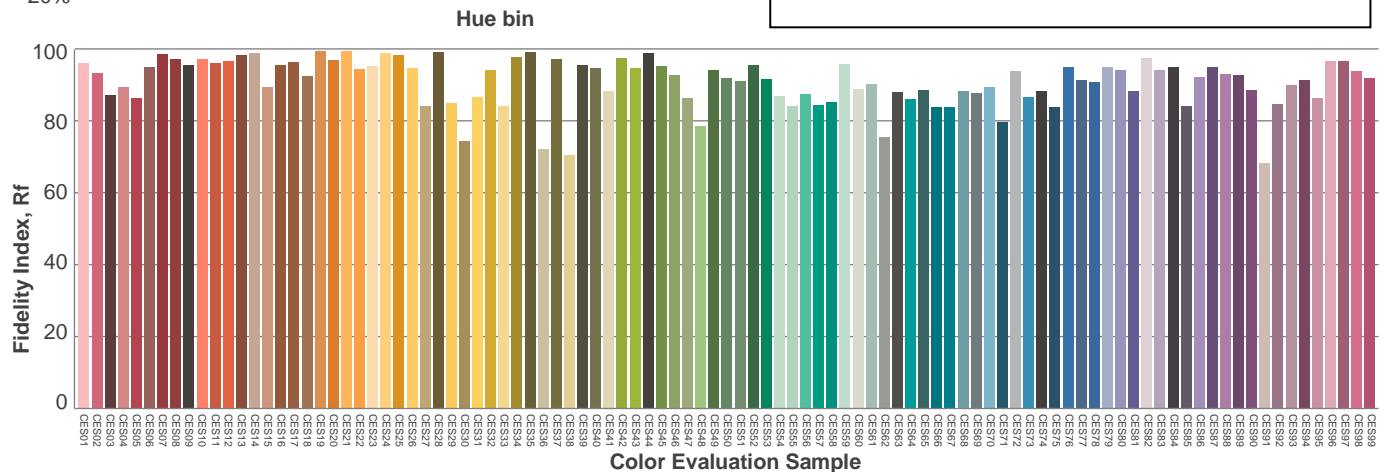
Red: 32.7%, Power=7.1mW

Blue: 15.1%, Power=7.9mW

Green: 26.1%, Power=9.3mW

UVA: 0.6%, Power=1.7mW

Dominant Wavelength: 581nm

1st Peak Wavelength: 456nm2nd Peak Wavelength: 627nm

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 | 19.7 | 20.4 | 19.9 | 20.7 | 20.9 | 19.7 | 20.4 | 19.9 | 20.7 | 20.9 |
| | 3H | 19.8 | 20.5 | 20.2 | 20.8 | 21.0 | 19.8 | 20.5 | 20.2 | 20.8 | 21.0 |
| | 4H | 19.9 | 20.7 | 20.4 | 20.9 | 21.2 | 19.9 | 20.7 | 20.4 | 20.9 | 21.2 |
| | 6H | 20.1 | 20.7 | 20.5 | 21.1 | 21.5 | 20.1 | 20.7 | 20.5 | 21.1 | 21.5 |
| | 8H | 20.2 | 20.8 | 20.6 | 21.2 | 21.6 | 20.2 | 20.8 | 20.6 | 21.2 | 21.6 |
| | 12H | 20.4 | 21.0 | 20.8 | 21.3 | 21.8 | 20.4 | 21.0 | 20.8 | 21.3 | 21.8 |
| 4H | 2H | 19.5 | 20.3 | 20.0 | 20.6 | 20.8 | 19.5 | 20.3 | 20.0 | 20.6 | 20.8 |
| | 3H | 19.9 | 20.5 | 20.3 | 20.9 | 21.4 | 19.9 | 20.5 | 20.3 | 20.9 | 21.4 |
| | 4H | 20.1 | 20.7 | 20.6 | 21.1 | 21.6 | 20.1 | 20.7 | 20.6 | 21.1 | 21.6 |
| | 6H | 20.3 | 20.9 | 20.9 | 21.3 | 21.7 | 20.3 | 20.9 | 20.9 | 21.3 | 21.7 |
| | 8H | 20.5 | 21.0 | 21.1 | 21.4 | 21.8 | 20.5 | 21.0 | 21.1 | 21.4 | 21.8 |
| | 12H | 20.8 | 21.2 | 21.3 | 21.6 | 22.2 | 20.8 | 21.2 | 21.3 | 21.6 | 22.2 |
| 8H | 4H | 20.1 | 20.6 | 20.7 | 21.0 | 21.5 | 20.1 | 20.6 | 20.7 | 21.0 | 21.5 |
| | 6H | 20.5 | 20.9 | 21.1 | 21.4 | 22.0 | 20.5 | 20.9 | 21.1 | 21.4 | 22.0 |
| | 8H | 20.9 | 21.1 | 21.4 | 21.7 | 22.4 | 20.9 | 21.1 | 21.4 | 21.7 | 22.4 |
| | 12H | 21.3 | 21.5 | 21.9 | 22.1 | 22.7 | 21.3 | 21.5 | 21.9 | 22.1 | 22.7 |
| 12H | 4H | 20.1 | 20.5 | 20.6 | 21.0 | 21.5 | 20.1 | 20.5 | 20.6 | 21.0 | 21.5 |
| | 6H | 20.6 | 20.9 | 21.2 | 21.4 | 22.1 | 20.6 | 20.9 | 21.2 | 21.4 | 22.1 |
| | 8H | 20.9 | 21.2 | 21.6 | 21.7 | 22.4 | 20.9 | 21.2 | 21.6 | 21.7 | 22.4 |
| Variation of the observer position for the luminaire distance S | | | | | | | | | | | |
| S = 1.0H | | 1.7 / -1.2 | | | | | 1.7 / -1.2 | | | | |
| S = 1.5H | | 3.5 / -1.6 | | | | | 3.5 / -1.6 | | | | |
| S = 2.0H | | 5.1 / -1.9 | | | | | 5.1 / -1.9 | | | | |
| Standard table | | n/a | | | | | n/a | | | | |
| Correction summand | | n/a | | | | | n/a | | | | |
| Corrected glare indices referring to 709 lm total luminous flux | | | | | | | | | | | |