

## Light efficiency:

**73 Lumen/Watt**

## Color temperature:

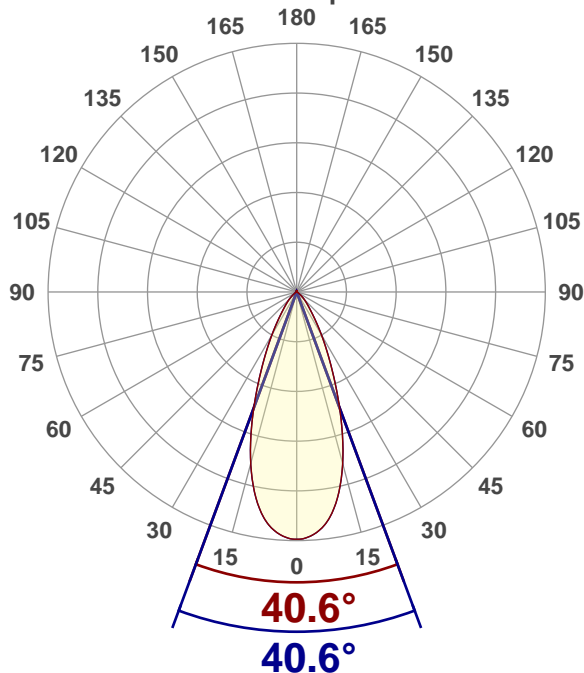
**3486 K**

## Light quality:

**CRI:97.1, R<sub>g</sub>:92.7, R<sub>f</sub>:98.9****P: 2 / V: - / F: 2****Output: 816 lm****Peak: 1397 cd****Power: 11.2 W****Voltage: 120 V****Current: 0.095 A****PF: 0.98****THD: 7.78 %**

## Angular Distribution

0° and 90° plane



Product name:

**RA4-12RG-90BK - 3500K**

Test Date:

**2021-09-03**

Beam Angle (50% of the brightness of the centre):  
**40.6°**

Field Angle (10% of the brightness of the centre):  
**72.7°**

Cut Off Angle (2.5% of the brightness of the centre):  
**99.6°**

## Beam Details

\*measured at centre of beam

Mounting Height (feet)/(meter)	Lux*	Footcandles*	Beam width (feet) / (meter)
4 ft / 1.2 m	940 lx	87 fc	3 ft / 0.9 m
8 ft / 2.4 m	235 lx	22 fc	5.9 ft / 1.8 m
12 ft / 3.7 m	104 lx	10 fc	8.9 ft / 2.7 m
16 ft / 4.9 m	59 lx	5 fc	11.8 ft / 3.6 m
20 ft / 6.1 m	38 lx	3 fc	14.8 ft / 4.5 m

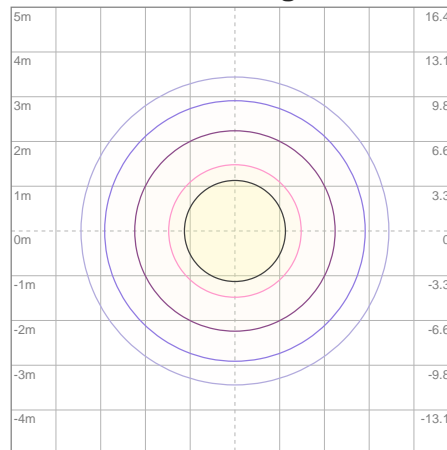
Beam center

# Photometric Testing Report

## Zonal Lumen Summary

Zone	Lumen	%Luminaire
0-30	611	74.88%
0-40	716	87.75%
0-60	780	95.59%
60-90	12.6	1.54%
70-100	11.1	1.36%
90-120	11.0	1.35%
0-90	792	97.06%
90-180	24.0	2.94%
0-180	816	100.00%

## ISO Lux Diagram



Lux at center:	150 lx
3%	4.50 lx
5%	7.50 lx
10%	15.00 lx
30%	45.00 lx
50%	75.00 lx

**Conditions:**  
 Number of planes: 8  
 Lux distribution on a surface when lamp is mounted at 3.05 meters from the surface.

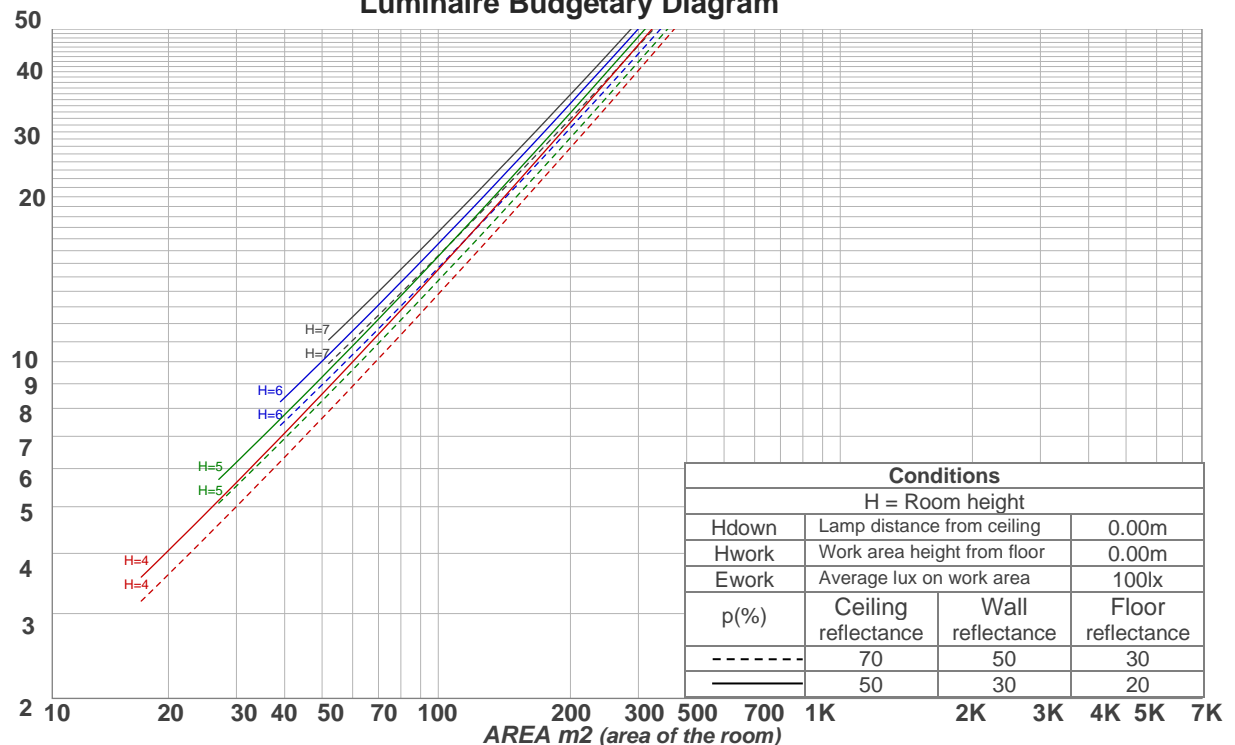
Mounting height: 3.05 meters (10 feet)

## 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	113	110	108	105	110	108	105	103	103	101	100	99	97	96	95	94	93	91
2	107	103	99	95	105	101	97	94	97	94	92	94	91	89	90	89	87	85
3	102	96	91	87	100	94	90	86	91	88	85	89	86	83	86	84	81	80
4	97	90	85	81	95	89	84	80	86	82	79	84	81	78	82	79	77	75
5	93	85	79	75	91	84	79	75	82	77	74	80	76	73	78	75	72	71
6	89	80	75	71	87	79	74	70	78	73	69	76	72	69	74	71	68	67
7	85	76	70	66	83	75	70	66	74	69	66	72	68	65	71	67	64	63
8	81	72	67	63	80	72	66	62	70	65	62	69	65	62	68	64	61	60
9	78	69	63	59	77	68	63	59	67	62	59	66	62	59	65	61	58	57
10	75	65	60	56	73	65	60	56	64	59	56	63	59	56	62	58	55	54

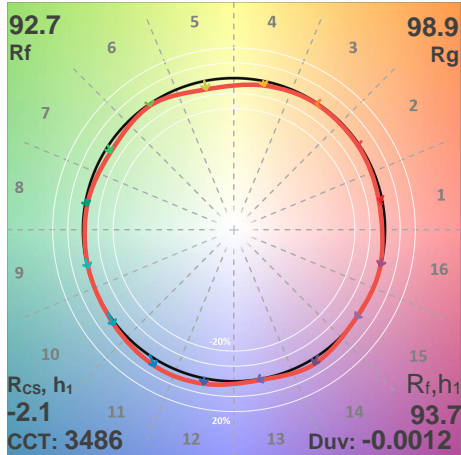
LAMPS (number of lamps)

## Luminaire Budgetary Diagram

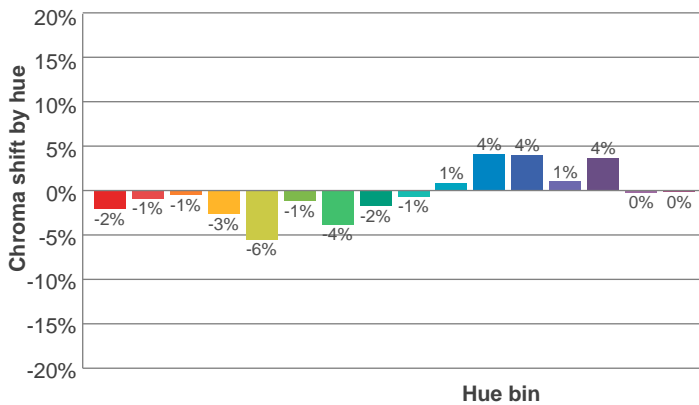
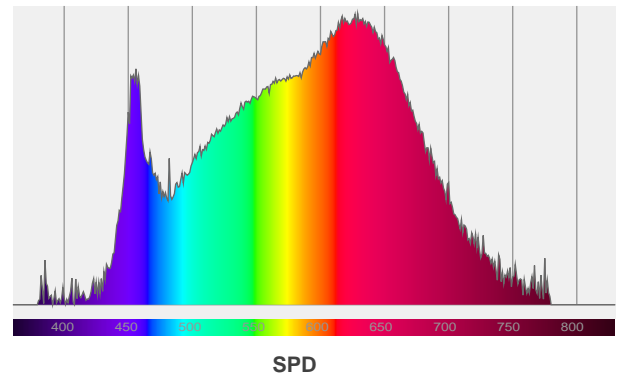
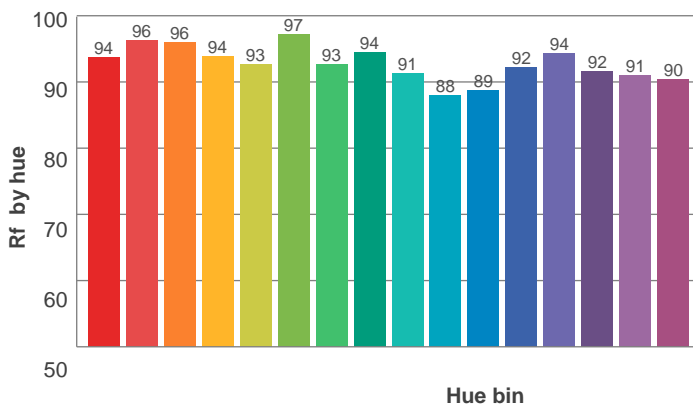
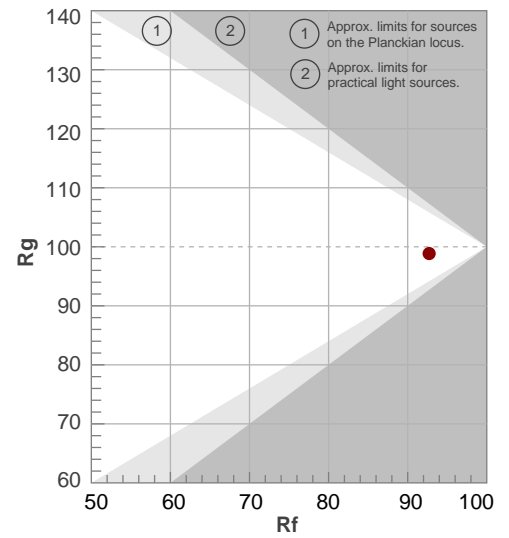


ANSI/IES TM-30-18

P: 2 / V: - / F: 2



Hue Bin	R <sub>f</sub>	Shifts (%)	
		Chroma	Hue
1	94	-2%	1%
2	96	-1%	0%
3	96	-1%	1%
4	94	-3%	-1%
5	93	-6%	0%
6	97	-1%	0%
7	93	-4%	3%
8	94	-2%	3%
9	91	-1%	6%
10	88	1%	8%
11	89	4%	7%
12	92	4%	0%
13	94	1%	-4%
14	92	4%	-5%
15	91	0%	-4%
16	90	0%	-5%



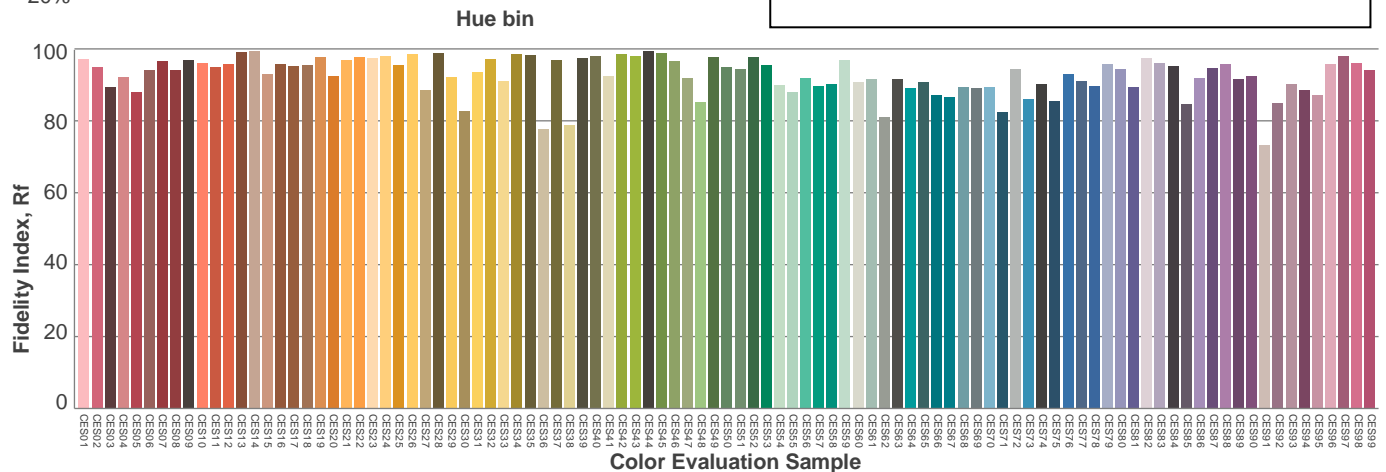
Red: 36.6%, Power=9.0mW

Blue: 12.1%, Power=6.8mW

Green: 25.1%, Power=10.3mW

UVA: 0.4%, Power=0.0mW

Dominant Wavelength: 583nm

1<sup>st</sup> Peak Wavelength: 629nm2<sup>nd</sup> Peak Wavelength: 614nm

### 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	17.7	18.3	17.9	18.6	18.8	17.7	18.3	17.9	18.6	18.8
	3H	17.5	18.3	18.0	18.5	18.8	17.5	18.3	18.0	18.5	18.8
	4H	17.6	18.2	18.0	18.5	18.8	17.6	18.2	18.0	18.5	18.8
	6H	17.7	18.3	18.0	18.6	19.0	17.7	18.3	18.0	18.6	19.0
	8H	17.8	18.3	18.1	18.7	19.1	17.8	18.3	18.1	18.7	19.1
	12H	17.9	18.5	18.3	18.9	19.3	17.9	18.5	18.3	18.9	19.3
4H	2H	17.4	18.1	17.9	18.4	18.7	17.4	18.1	17.9	18.4	18.7
	3H	17.5	18.0	17.9	18.4	18.9	17.5	18.0	17.9	18.4	18.9
	4H	17.5	18.0	17.9	18.5	19.0	17.5	18.0	17.9	18.5	19.0
	6H	17.7	18.2	18.2	18.6	19.0	17.7	18.2	18.2	18.6	19.0
	8H	17.8	18.3	18.4	18.7	19.1	17.8	18.3	18.4	18.7	19.1
	12H	18.1	18.5	18.7	19.0	19.5	18.1	18.5	18.7	19.0	19.5
8H	4H	17.4	17.9	18.0	18.3	18.7	17.4	17.9	18.0	18.3	18.7
	6H	17.8	18.1	18.3	18.6	19.2	17.8	18.1	18.3	18.6	19.2
	8H	18.1	18.4	18.6	18.9	19.6	18.1	18.4	18.6	18.9	19.6
	12H	18.6	18.8	19.2	19.4	20.0	18.6	18.8	19.2	19.4	20.0
12H	4H	17.4	17.8	17.9	18.2	18.7	17.4	17.8	17.9	18.2	18.7
	6H	17.8	18.1	18.4	18.7	19.3	17.8	18.1	18.4	18.7	19.3
	8H	18.2	18.4	18.8	18.9	19.6	18.2	18.4	18.8	18.9	19.6
Variation of the observer position for the luminaire distance S											
S = 1.0H		2.2 / -1.8					2.2 / -1.8				
S = 1.5H		4.2 / -2.2					4.2 / -2.2				
S = 2.0H		5.9 / -2.5					5.9 / -2.5				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 816 lm total luminous flux											