

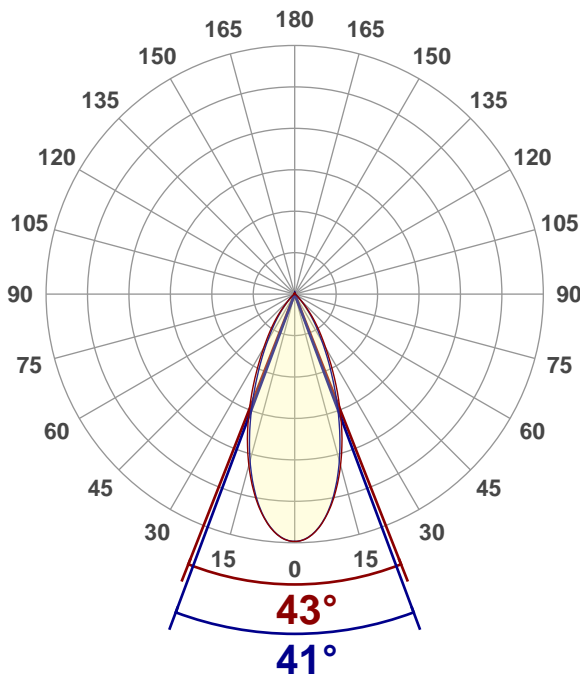
## Light efficiency:

**73 Lumen/Watt**

## Light quality:

**CRI: 96.2**

## Color temperature:

**3138 K****Output: 1143 lm****Peak: 1909 cd****Power: 15.7 W****Voltage: 121 V****Current: 0.132 A****PF: 0.98****THD: 19.56 %**

Product name:

**RA56-17F-90WHWH - 3000K**

Driver Used:

**SLM-DVR-17W**

Test Date:

**2019-05-07**

Beam Angle:

**42°**

Field Angle:

**76.3°**

Cut Off Angle:

**93.8°****Beam details**

\*measured at center of beam

Mounting Height (feet)\(meter)	Lux*	Footcandles*	Beam width (feet) / (meter)
4 ft / 1.2 m	1283 lx	119 fcd	3.1 ft / 0.9 m
8 ft / 2.4 m	321 lx	30 fcd	6.1 ft / 1.9 m
12 ft / 3.7 m	143 lx	13 fcd	9.2 ft / 2.8 m
16 ft / 4.9 m	80 lx	7 fcd	12.3 ft / 3.7 m
20 ft / 6.1 m	51 lx	5 fcd	15.3 ft / 4.7 m

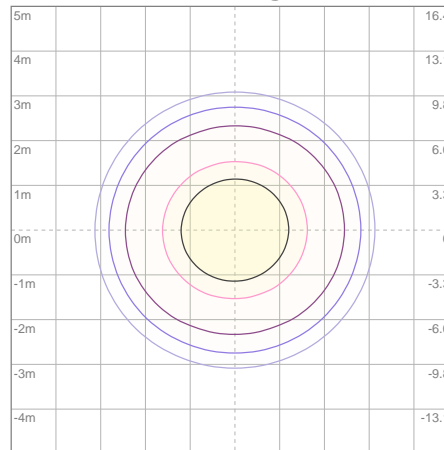
Beam center

# Light planning Photometric Testing Report

## Zonal Lumen Summary

Zone	Lumen	%Luminaire
0-30	861	75.33%
0-40	1036	90.64%
0-60	1106	96.76%
60-90	12.7	1.11%
70-100	10.7	0.94%
90-120	10.8	0.94%
0-90	1119	97.90%
90-180	24.0	2.10%
0-180	1143	100.00%

## ISO lux diagram



Mounting height: 3.05 meters (10 feet)

Lux at center:	205 lx
3%	6.15 lx
5%	10.25 lx
10%	20.50 lx
30%	61.50 lx
50%	102.50 lx

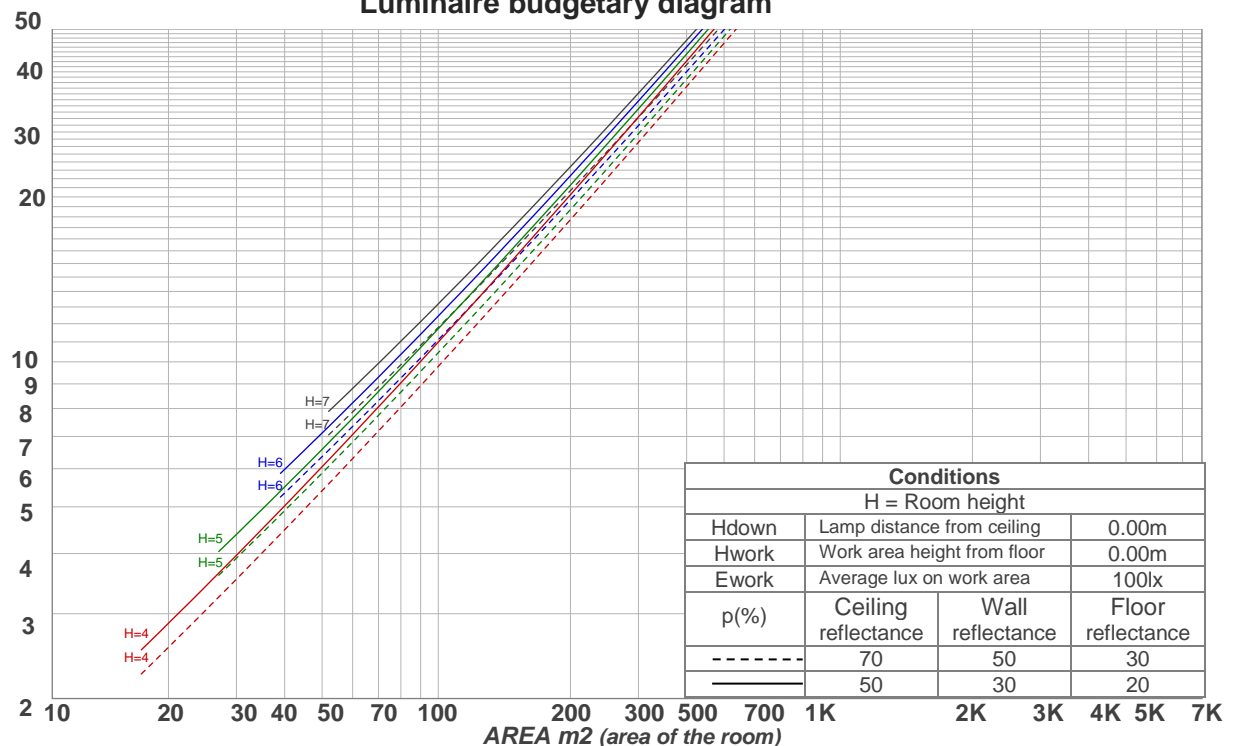
Conditions:  
Number of planes: 8  
Lux distribution on a surface when lamp is mounted at 3.05 meters from the surface.

## 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	119	119	119	119	116	116	116	116	110	110	110	105	105	105	100	100	100	98
1	113	110	108	106	110	108	106	104	104	102	100	100	98	97	96	95	94	92
2	108	103	99	96	105	101	98	95	98	95	92	94	92	90	91	89	88	86
3	103	96	92	88	101	95	91	87	92	88	85	89	86	84	87	84	82	81
4	98	91	85	81	96	89	85	81	87	83	80	85	81	78	83	80	77	76
5	93	85	80	76	92	84	79	75	82	78	74	80	77	74	79	75	73	71
6	89	81	75	71	87	80	74	71	78	73	70	76	72	69	75	71	69	67
7	85	76	71	67	84	76	70	66	74	69	66	73	69	65	72	68	65	64
8	81	72	67	63	80	72	66	63	70	66	62	69	65	62	68	64	62	60
9	78	69	63	59	77	68	63	59	67	62	59	66	62	59	65	61	58	57
10	75	66	60	56	74	65	60	56	64	59	56	63	59	56	62	58	56	54

LAMPS (number of lamps)

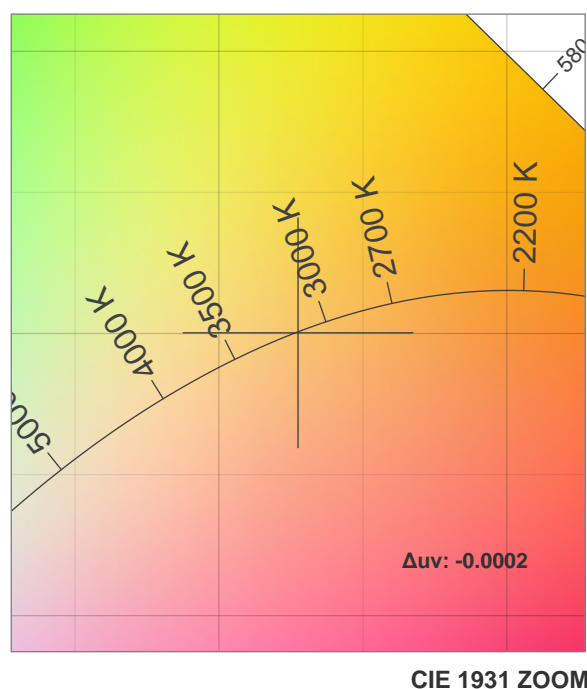
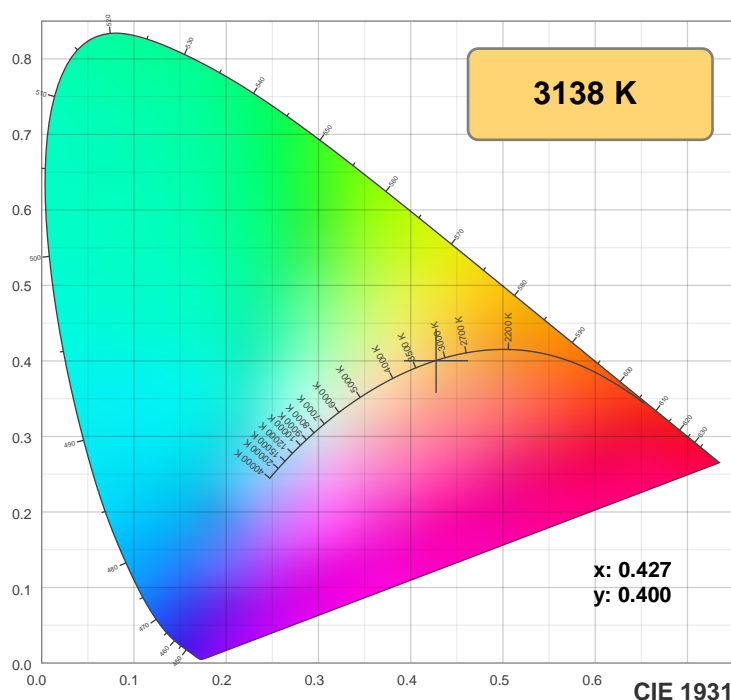
## Luminaire budgetary diagram



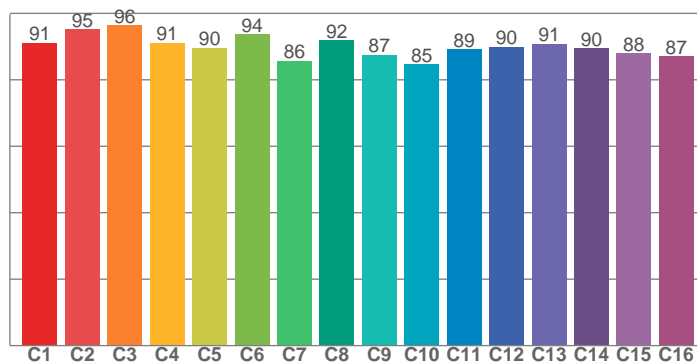
Conditions			
H = Room height			
Hdown	Lamp distance from ceiling	0.00m	
Hwork	Work area height from floor	0.00m	
Ework	Average lux on work area	100lx	
p(%)	Ceiling reflectance	Wall reflectance	Floor reflectance
-----	70	50	30
-----	50	30	20

## Color details

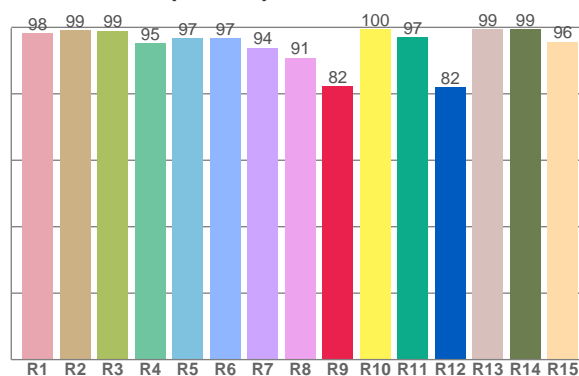
## Photometric Testing Report



TM30: 90.3



CRI: 96.2 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
98.2	99.2	99.0	95.3	96.7	96.7	93.8	90.9	82.2	99.5	96.9	81.9	99.4	99.5	95.7

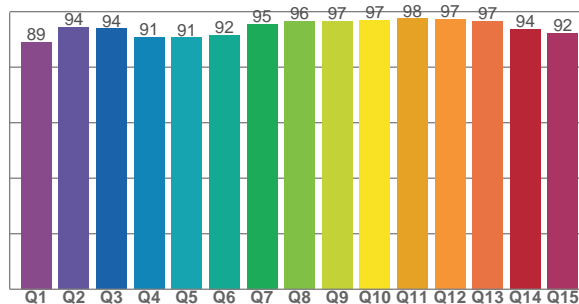
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
91.2	95.2	96.4	91.2	89.6	93.7	85.8	91.9	87.5	84.7	89.1	89.9	90.8	89.5	88.0	87.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89.1	94.4	93.9	90.8	90.7	91.6	95.5	96.5	96.6	97.0	97.6	97.2	96.7	93.6	92.3

CQS: 93.5



## Color parameters

Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3138 K	96.2	82.2	90.3	97.2	93.5	0.427	0.400	0.246	0.346	-0.0002

## UGR Photometric Testing Report

## 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	16.9	17.6	17.2	17.9	18.1	16.3	17.0	16.5	17.2	17.4
	3H	16.8	17.5	17.2	17.7	18.0	16.2	16.8	16.5	17.1	17.3
	4H	16.8	17.4	17.1	17.7	18.0	16.1	16.7	16.5	17.0	17.3
	6H	16.8	17.3	17.2	17.7	18.0	16.1	16.7	16.5	17.0	17.3
	8H	16.8	17.4	17.2	17.7	18.0	16.2	16.7	16.5	17.0	17.3
	12H	16.9	17.4	17.3	17.7	18.1	16.2	16.7	16.6	17.1	17.4
4H	2H	16.8	17.4	17.1	17.6	17.9	16.1	16.7	16.4	17.0	17.3
	3H	16.7	17.2	17.1	17.5	17.9	16.0	16.5	16.4	16.9	17.2
	4H	16.7	17.1	17.1	17.4	17.8	16.0	16.4	16.4	16.8	17.2
	6H	16.7	17.1	17.1	17.5	17.9	16.1	16.4	16.5	16.8	17.3
	8H	16.8	17.1	17.2	17.5	18.0	16.2	16.5	16.6	16.9	17.3
	12H	17.0	17.2	17.4	17.7	18.1	16.3	16.6	16.8	17.0	17.5
8H	4H	16.6	16.9	17.0	17.3	17.8	15.9	16.3	16.4	16.7	17.1
	6H	16.7	16.9	17.2	17.4	17.9	16.1	16.3	16.6	16.8	17.3
	8H	16.8	17.0	17.3	17.5	18.0	16.2	16.5	16.7	16.9	17.4
	12H	17.1	17.3	17.6	17.8	18.3	16.6	16.7	17.1	17.2	17.8
12H	4H	16.5	16.8	17.0	17.3	17.7	15.9	16.2	16.4	16.6	17.1
	6H	16.7	16.9	17.2	17.4	17.9	16.1	16.3	16.6	16.8	17.3
	8H	16.9	17.0	17.4	17.5	18.1	16.3	16.5	16.8	17.0	17.5
Variation of the observer position for the luminaire distance S											
S = 1.0H	+3.7 / -4.1					+3.5 / -3.7					
S = 1.5H	+6.3 / -4.9					+6.0 / -4.7					
S = 2.0H	+8.3 / -5.7					+8.0 / -5.4					
Standard table	BK01					BK01					
Correction summand	-1.0					-1.6					
Corrected glare indices referring to 1143 lm total luminous flux											