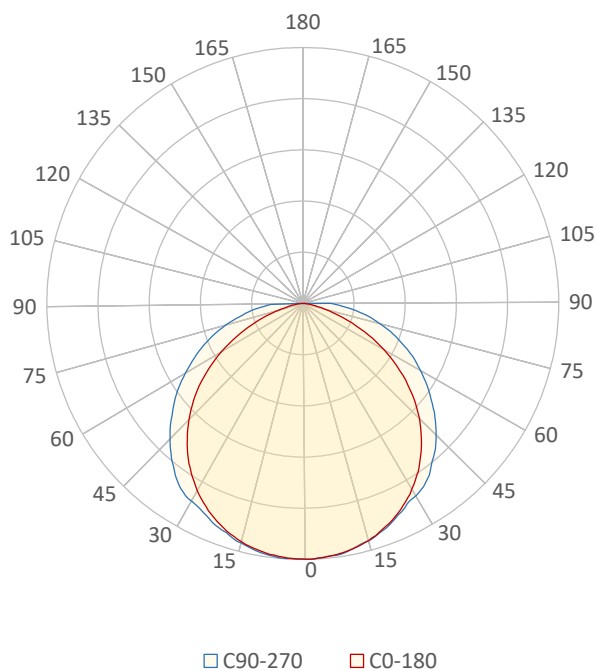


General Discription

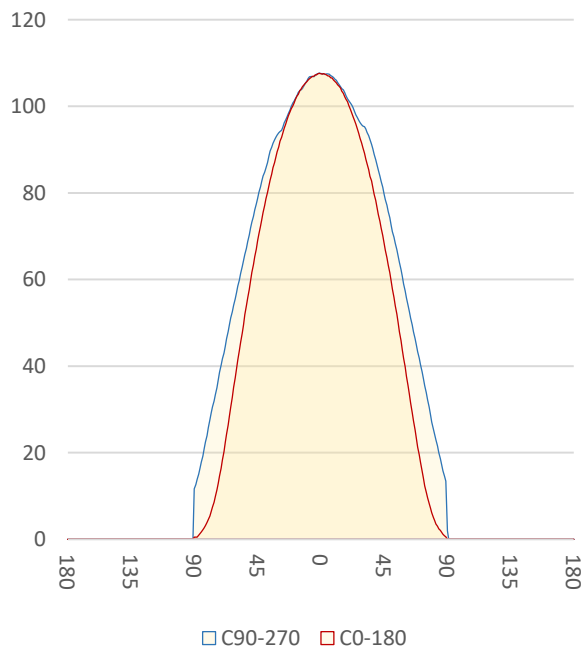
Item number	
Date and time	11-2-2022 14:36:23
CCT (Kelvin)	2714 K
Beam angle	124,3°
Luminous flux	321 lm
Efficiency	59 lm/watt
Weighted energy	5,4 kWh/1000h
Power factor	1,0
CRI (RA)	91,8
Fidelity index Rf	Rf 90,7
Gammut index Rg	Rg 99,1
Peak	108 cd



Polar diagram



Cartesian diagram



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Beam details	1m	2m	3m	4m	5m
Lux*	108 lx	27 lx	12 lx	7 lx	4 lx

*measured at center of beam

Footcandles*	10,0 fcd	2,5 fcd	1,1 fcd	0,6 fcd	0,4 fcd
Beam width (meter)	3,2 m	6,3 m	9,5 m	12,6 m	15,8 m
Beam width (Feet)	10,3 ft	20,7 ft	31 ft	41,4 ft	51,7 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
108lx	27lx	12lx	7lx	4lx	3lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	0lx	0lx	0lx	0lx	0lx	0lx
3,3ft	6,6ft	9,8ft	13,1ft	16,4ft	19,7ft	23ft	26,2ft	29,5ft	32,8ft	36,1ft	39,4ft	42,7ft	45,9ft	49,2ft	52,5ft	55,8ft	59,1ft	62,3ft	65,6ft
10fcd	2,5fcd	1,1fcd	0,6fcd	0,4fcd	0,3fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0fcd	0fcd	0fcd	0fcd	0fcd	0fcd

Intensities in 0° c-plane																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
108	107	106	104	100	96	91	84	77	69	60	50	39	28	18	10	5	2	1	0
100%	99%	98%	96%	93%	89%	84%	78%	72%	64%	56%	46%	37%	26%	17%	9%	4%	2%	0%	0%

Intensities in 90° c-plane																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
108	107	106	104	101	97	94	91	85	79	72	64	57	50	42	33	26	18	12	0
100%	99%	98%	96%	94%	90%	87%	84%	79%	73%	67%	60%	53%	46%	39%	31%	24%	17%	11%	0%

Intensities in 180° c-plane																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
108	107	106	104	100	96	90	84	77	68	60	50	40	29	20	11	5	2	0	0
100%	100%	98%	96%	93%	89%	84%	78%	71%	64%	56%	47%	37%	27%	18%	10%	5%	2%	0%	0%

Intensities in 270° c-plane																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
108	107	106	104	101	98	95	92	86	80	73	65	57	50	42	34	26	19	2	0
100%	100%	99%	97%	94%	91%	89%	86%	80%	74%	67%	61%	53%	46%	39%	31%	24%	17%	2%	0%

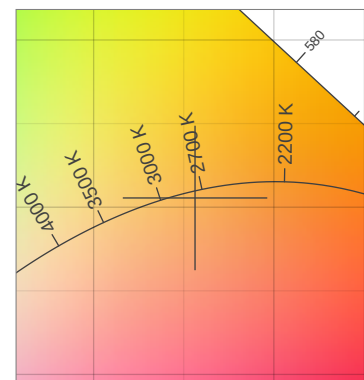
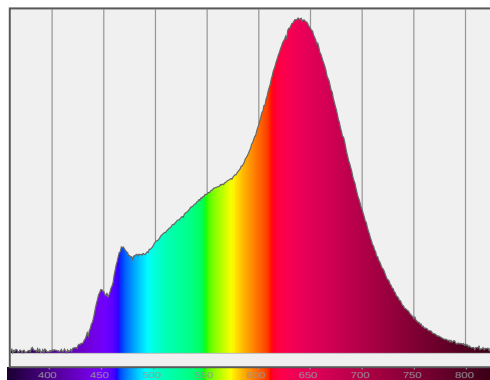
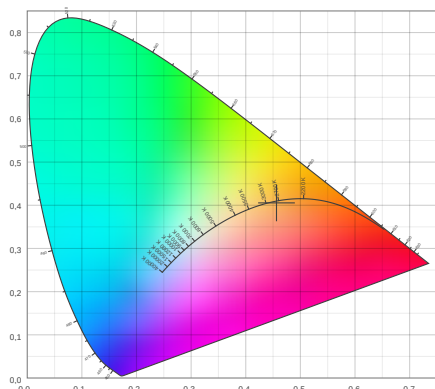
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
115,2°	164,8°	173,3°	77,1%	52,3%

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Color details



CIE 1931

x: 0,456



Spectra

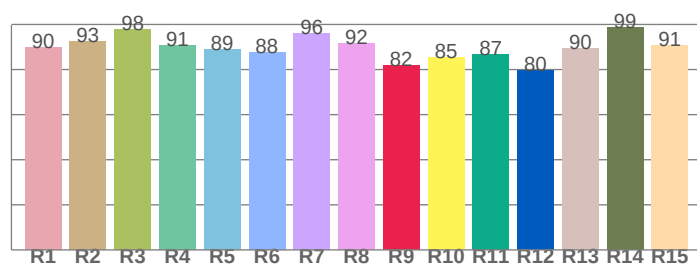
CIE 1931 ZOOM

2714 K

y: 0,406

 $\Delta uv: -0,0016$

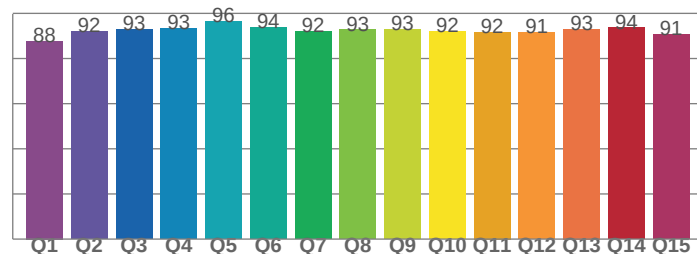
CRI: 91,8 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
89,7	92,6	97,9	90,5	88,9	87,5	96,0	91,6
R9	R10	R11	R12	R13	R14	R15	
81,8	85,3	86,5	79,5	89,6	98,6	90,8	

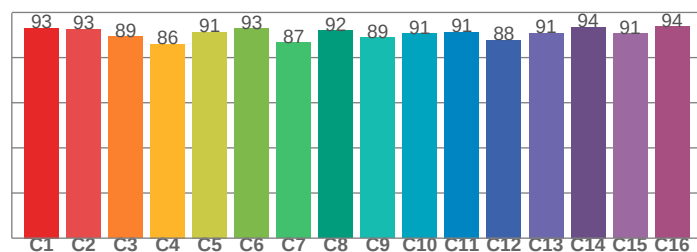
CQS: 92,1



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
87,8	92,1	92,8	93,5	96,5	93,6	92,0	92,7
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
92,9	91,9	91,7	91,4	93,1	93,6	90,6	

TM30: 90,7



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

C1	C2	C3	C4	C5	C6	C7	C8
93,1	92,6	89,3	86,1	91,3	92,8	86,6	91,9
C9	C10	C11	C12	C13	C14	C15	
88,9	90,7	91,3	87,7	91,0	93,5	90,7	

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
2714 K	91,8	81,8	90,7	99,1	92,1	0,456	0,406	0,262	0,350	-0,0016



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TM30 details

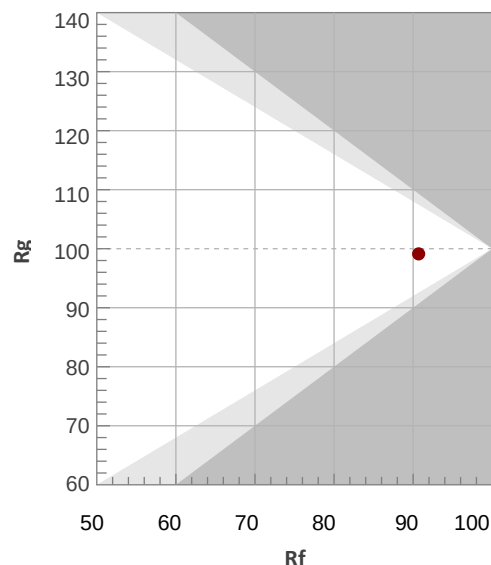
Rf 90,7

Fidelity index Rf

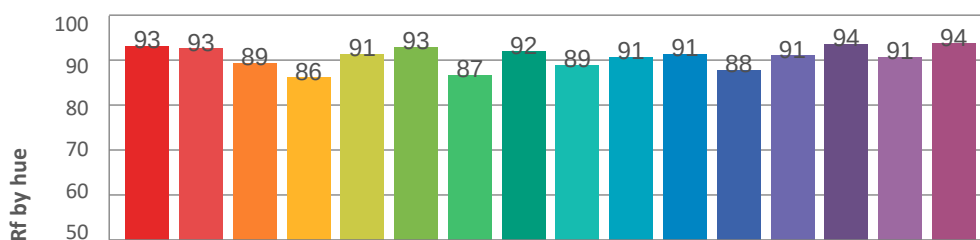
Rg 99,1

Gamut index Rg

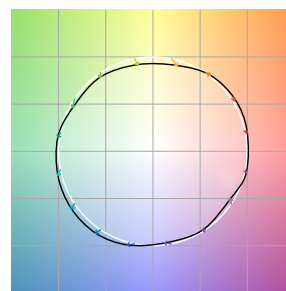
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	93	2%	2%
2	93	3%	-3%
3	89	1%	-6%
4	86	-6%	-8%
5	91	-7%	-2%
6	93	-4%	3%
7	87	-4%	8%
8	92	2%	5%
9	89	4%	5%
10	91	6%	2%
11	91	6%	-2%
12	88	3%	-7%
13	91	-2%	-7%
14	94	-1%	-3%
15	91	-4%	4%
16	94	1%	-3%



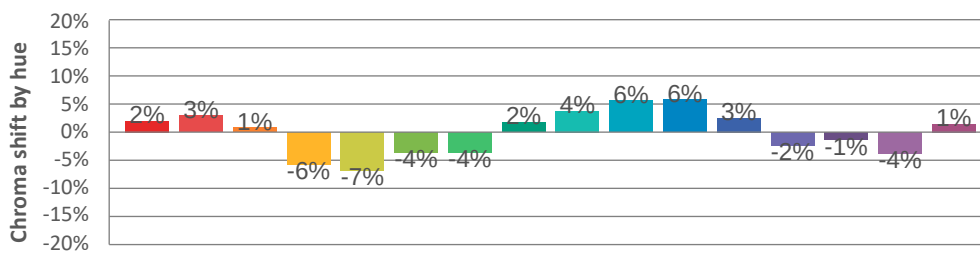
Hue binH



Color vector graphics



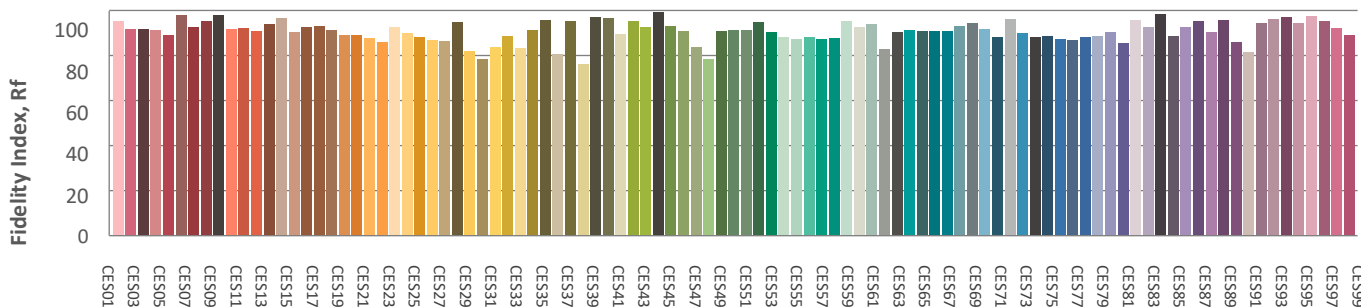
Hue bin



Color distortion graphics



Color Evaluation Sample



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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				
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Variation of the observer position for the luminaire distance S										
n/a	n/a					n/a				
n/a	n/a					n/a				
n/a	n/a					n/a				
Standard table	n/a					n/a				
Correction summand	n/a					n/a				
Corrected glare indices referring to 321lm total luminous flux										