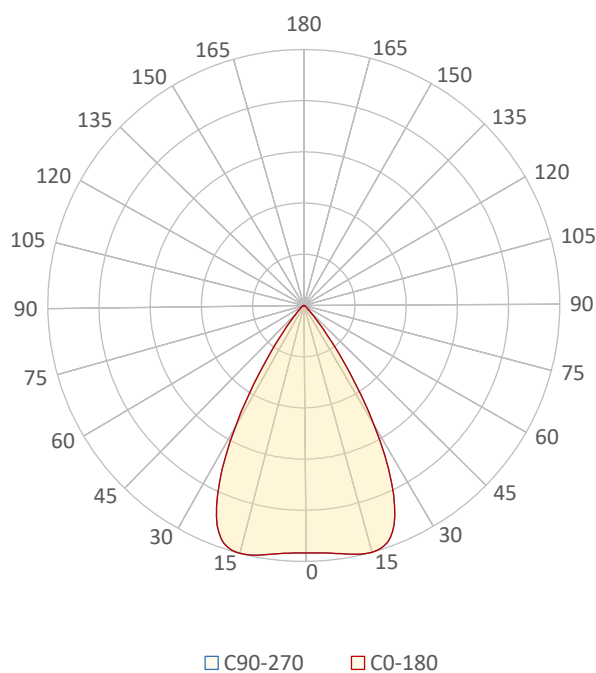


General Discription

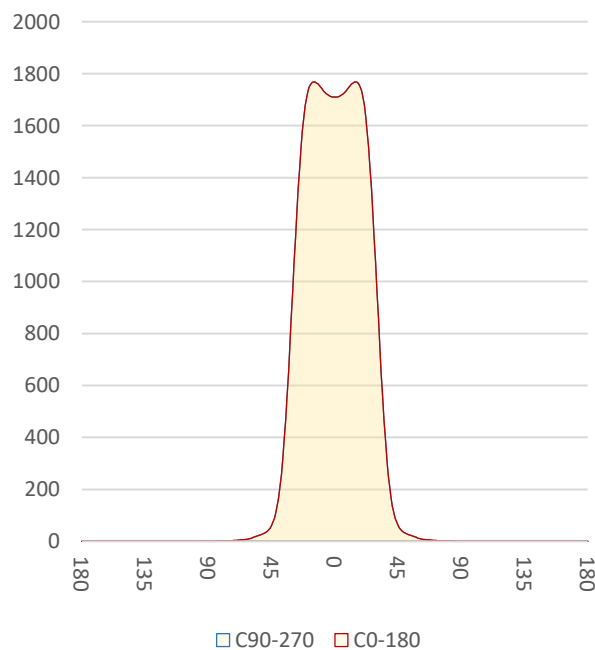
Item number	E-OL5-X-X-3090
Date and time	2-12-2022 11:26:39
CCT (Kelvin)	2963 K
Beam angle	61,5°
Luminous flux	1690 lm
Efficiency	89 lm/watt
Weighted energy	19,1 kWh/1000h
Power factor	0,94
CRI (RA)	93,0
Fidelity index Rf	Rf 90,5
Gammut index Rg	Rg 103,2
Peak	1768 cd



Polar diagram



Cartesian diagram



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LM79-EMERALD-OFFICE-L5-3000K-CRI90

Beam details	1m	2m	3m	4m	5m
Lux*	1710 lx	427 lx	190 lx	107 lx	68 lx

61,5°

*measured at center of beam

Footcandles*	158,8 fcd	39,7 fcd	17,6 fcd	9,9 fcd	6,4 fcd
Beam width (meter)	1,2 m	2,4 m	3,6 m	4,8 m	5,9 m
Beam width (Feet)	3,9 ft	7,8 ft	11,7 ft	15,6 ft	19,5 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
1710lx	427lx	190lx	107lx	68lx	47lx	35lx	27lx	21lx	17lx	14lx	12lx	10lx	9lx	8lx	7lx	6lx	5lx	5lx	4lx
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
158,8fcd	39,7fcd	17,6fcd	9,9fcd	6,4fcd	4,4fcd	3,2fcd	2,5fcd	2fcd	1,6fcd	1,3fcd	1,1fcd	0,9fcd	0,8fcd	0,7fcd	0,6fcd	0,5fcd	0,5fcd	0,4fcd	0,4fcd

Intensities in 0° c-plane																			
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1710	1711	1715	1722	1734	1747	1760	1767	1766	1751	1711	1635	1516	1359	1172	964	751	554	388	259
100%	100%	100%	101%	101%	102%	103%	103%	103%	102%	100%	96%	89%	79%	69%	56%	44%	32%	23%	15%

Intensities in 90° c-plane																			
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1710	1711	1715	1722	1734	1747	1760	1767	1766	1751	1711	1635	1516	1359	1172	964	751	554	388	259
100%	100%	100%	101%	101%	102%	103%	103%	103%	102%	100%	96%	89%	79%	69%	56%	44%	32%	23%	15%

Intensities in 180° c-plane																			
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1710	1711	1715	1722	1734	1747	1760	1767	1766	1751	1711	1635	1516	1359	1172	964	751	554	388	259
100%	100%	100%	101%	101%	102%	103%	103%	103%	102%	100%	96%	89%	79%	69%	56%	44%	32%	23%	15%

Intensities in 270° c-plane																			
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1710	1711	1715	1722	1734	1747	1760	1767	1766	1751	1711	1635	1516	1359	1172	964	751	554	388	259
100%	100%	100%	101%	101%	102%	103%	103%	103%	102%	100%	96%	89%	79%	69%	56%	44%	32%	23%	15%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
61,5°	79,6°	94,1°	99,5%	97,3%



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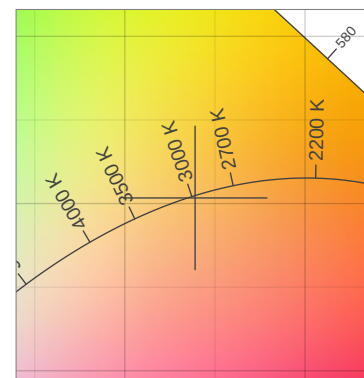
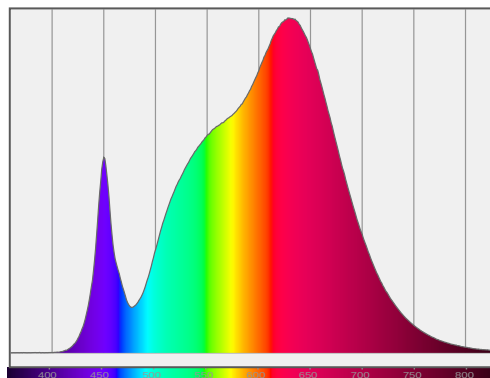
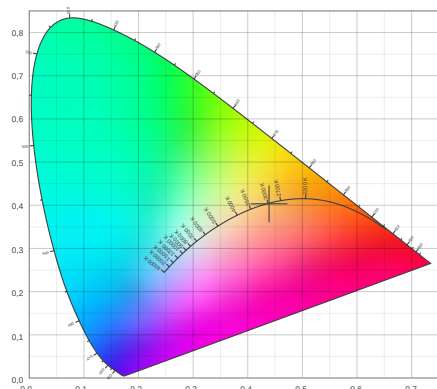
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Color details



CIE 1931

x: 0,439



Spectra

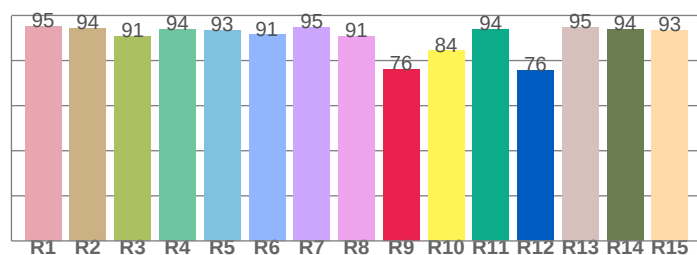
CIE 1931 ZOOM

2963 K

y: 0,403

 $\Delta uv: -0,0006$

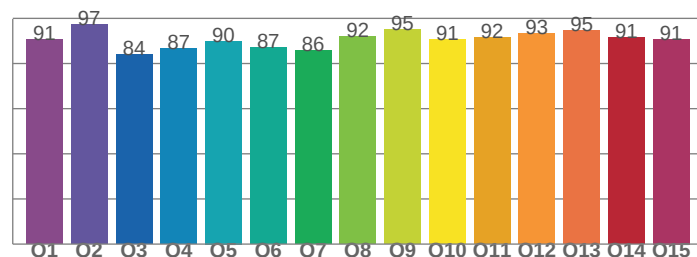
CRI: 93,0 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
95,1	94,2	90,6	94,0	93,4	91,4	94,8	90,8
R9	R10	R11	R12	R13	R14	R15	
76,1	84,3	93,8	75,5	94,7	93,7	93,4	

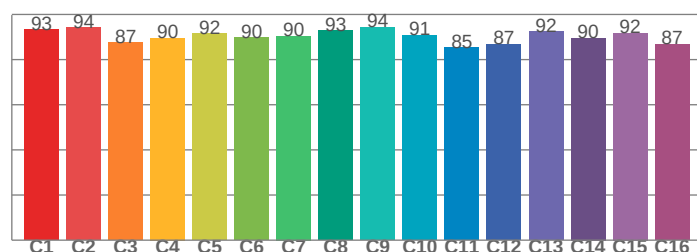
CQS: 89,9



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
90,7	97,2	83,9	86,7	90,0	87,0	85,8	92,0
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
94,9	90,6	91,6	93,3	94,6	91,5	90,9	

TM30: 90,5



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

C1	C2	C3	C4	C5	C6	C7	C8
93,3	94,2	87,5	89,6	91,6	89,9	90,5	93,0
C9	C10	C11	C12	C13	C14	C15	
94,3	90,8	85,3	86,8	92,5	89,6	91,7	

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
2963 K	93,0	76,1	90,5	103,2	89,9	0,439	0,403	0,252	0,348	-0,0006



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Test Report

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TM30 details

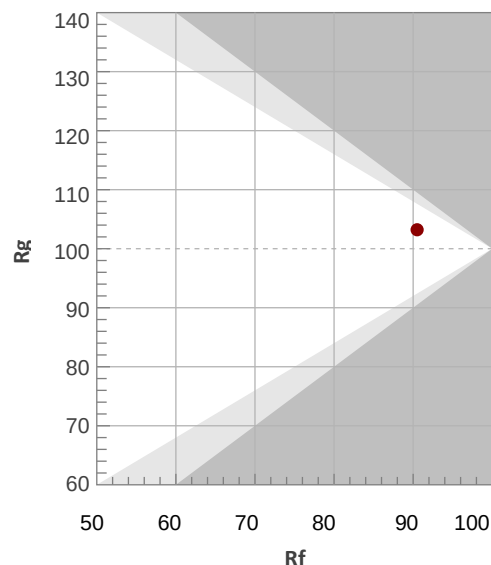
Rf 90,5

Fidelity index Rf

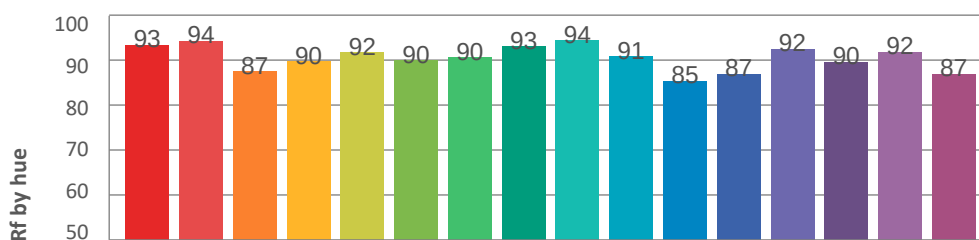
Rg 103,2

Gamut index Rg

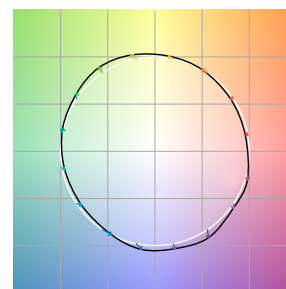
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	93	-3%	-2%
2	94	-3%	2%
3	87	0%	6%
4	90	2%	6%
5	92	5%	5%
6	90	7%	0%
7	90	3%	-5%
8	93	1%	-5%
9	94	-2%	-2%
10	91	-4%	4%
11	85	-1%	11%
12	87	5%	6%
13	92	5%	1%
14	90	8%	-4%
15	92	3%	-4%
16	87	2%	-11%



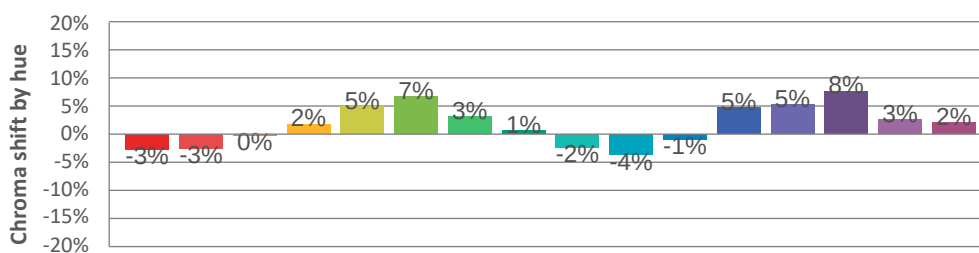
Hue binH



Color vector graphics



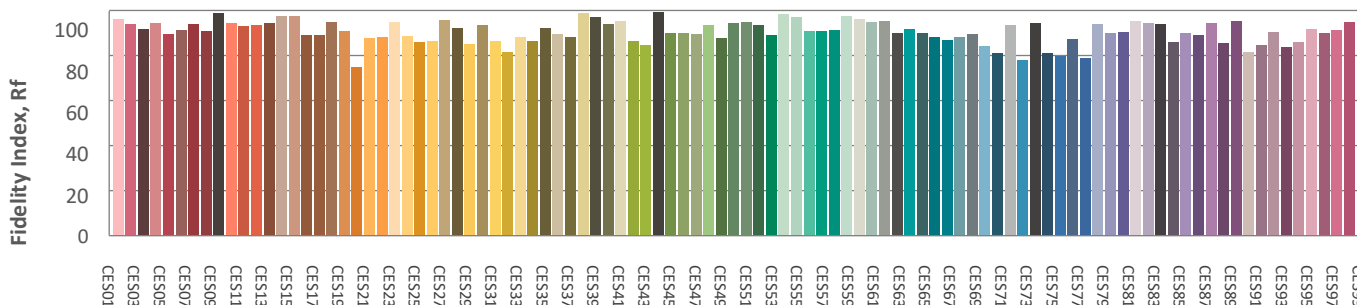
Hue bin



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				
2H	2H	21,8	22,4	21,9	22,7	22,9	21,8	22,4	21,9	22,7	22,9
	3H	21,5	22,3	21,9	22,5	22,7	21,5	22,3	21,9	22,5	22,7
	4H	21,4	22,2	21,8	22,4	22,6	21,4	22,2	21,8	22,4	22,6
	6H	21,4	22,0	21,7	22,3	22,7	21,4	22,0	21,7	22,3	22,7
	8H	21,4	22,0	21,7	22,3	22,7	21,4	22,0	21,7	22,3	22,7
	12H	21,3	21,9	21,7	22,3	22,7	21,3	21,9	21,7	22,3	22,7
4H	2H	21,4	22,2	21,8	22,4	22,6	21,4	22,2	21,8	22,4	22,6
	3H	21,3	21,9	21,7	22,3	22,7	21,3	21,9	21,7	22,3	22,7
	4H	21,2	21,7	21,6	22,2	22,7	21,2	21,7	21,6	22,2	22,7
	6H	21,1	21,7	21,6	22,0	22,4	21,1	21,7	21,6	22,0	22,4
	8H	21,1	21,6	21,6	21,9	22,3	21,1	21,6	21,6	21,9	22,3
	12H	21,0	21,4	21,5	21,8	22,3	21,0	21,4	21,5	21,8	22,3
8H	4H	21,1	21,6	21,6	21,9	22,3	21,1	21,6	21,6	21,9	22,3
	6H	21,0	21,3	21,5	21,8	22,3	21,0	21,3	21,5	21,8	22,3
	8H	21,0	21,3	21,5	21,8	22,4	21,0	21,3	21,5	21,8	22,4
	12H	20,9	21,2	21,5	21,7	22,3	20,9	21,2	21,5	21,7	22,3
12H	4H	21,0	21,4	21,5	21,8	22,3	21,0	21,4	21,5	21,8	22,3
	6H	21,0	21,3	21,5	21,8	22,4	21,0	21,3	21,5	21,8	22,4
	8H	20,9	21,2	21,5	21,7	22,3	20,9	21,2	21,5	21,7	22,3
Variation of the observer position for the luminaire distance S											
S = 1.0H		6,0 / -12,3					6,0 / -12,3				
S = 1.5H		8,8 / -15,9					8,8 / -15,9				
S = 2.0H		10,8 / -17,5					10,8 / -17,5				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 1690lm total luminous flux											