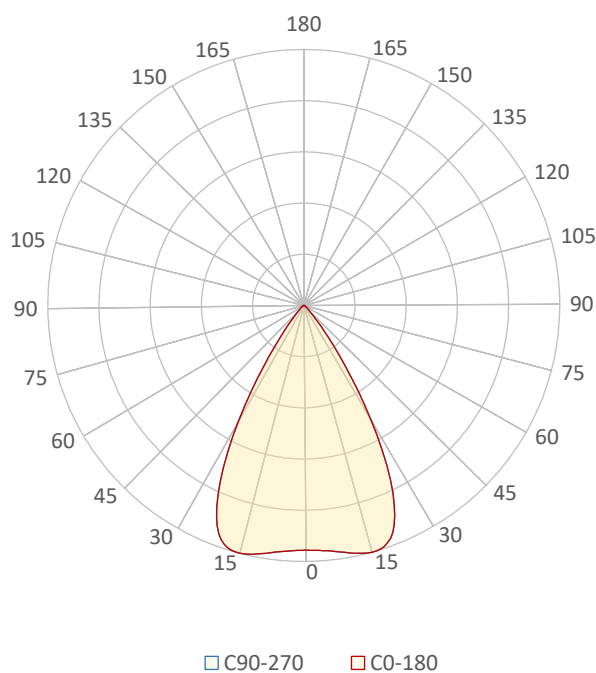


General Discription

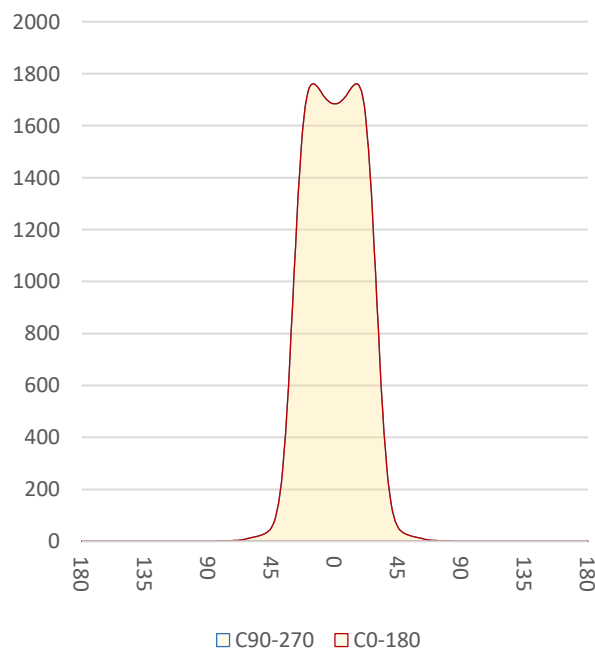
Item number	E-OM5-X-X-2790
Date and time	2-12-2022 12:05:42
CCT (Kelvin)	2648 K
Beam angle	60,7°
Luminous flux	1645 lm
Efficiency	86 lm/watt
Weighted energy	19,1 kWh/1000h
Power factor	0,94
CRI (RA)	93,1
Fidelity index Rf	Rf 90,2
Gammut index Rg	Rg 103,7
Peak	1761 cd



Polar diagram



Cartesian diagram



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LM79-EMERALD-OFFICE-M5-2700K-CRI90

Beam details	1m	2m	3m	4m	5m
Lux*	1684 lx	421 lx	187 lx	105 lx	67 lx

*measured at center of beam

Footcandles*	156,4 fcd	39,1 fcd	17,4 fcd	9,8 fcd	6,3 fcd
Beam width (meter)	1,2 m	2,3 m	3,5 m	4,7 m	5,9 m
Beam width (Feet)	3,8 ft	7,7 ft	11,5 ft	15,4 ft	19,2 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
1684lx	421lx	187lx	105lx	67lx	47lx	34lx	26lx	21lx	17lx	14lx	12lx	10lx	9lx	7lx	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
156,4fcd	39,1fcd	17,4fcd	9,8fcd	6,3fcd	4,3fcd	3,2fcd	2,4fcd	1,9fcd	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°
1684	1686	1692	1701	1715	1731	1747	1758	1760	1747	1708	1630	1505	1336	1136	917	699	504	346	228
100%	100%	100%	101%	102%	103%	104%	104%	105%	104%	101%	97%	89%	79%	67%	54%	42%	30%	21%	14%

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°
1684	1686	1692	1701	1715	1731	1747	1758	1760	1747	1708	1630	1505	1336	1136	917	699	504	346	228
100%	100%	100%	101%	102%	103%	104%	104%	105%	104%	101%	97%	89%	79%	67%	54%	42%	30%	21%	14%

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°
1684	1686	1692	1701	1715	1731	1747	1758	1760	1747	1708	1630	1505	1336	1136	917	699	504	346	228
100%	100%	100%	101%	102%	103%	104%	104%	105%	104%	101%	97%	89%	79%	67%	54%	42%	30%	21%	14%

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°
1684	1686	1692	1701	1715	1731	1747	1758	1760	1747	1708	1630	1505	1336	1136	917	699	504	346	228
100%	100%	100%	101%	102%	103%	104%	104%	105%	104%	101%	97%	89%	79%	67%	54%	42%	30%	21%	14%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
60,7°	78,4°	92,6°	99,3%	97,3%



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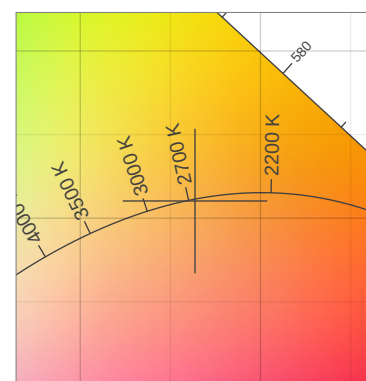
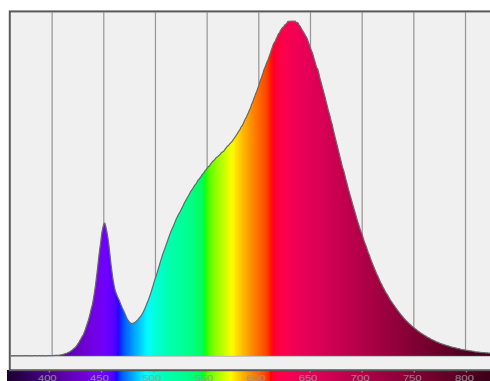
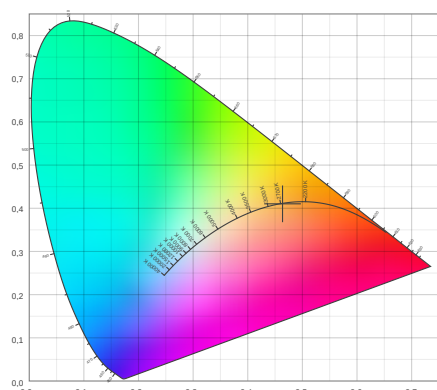
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Test Report

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Color details



CIE 1931

x: 0,464



Spectra

CIE 1931 ZOOM

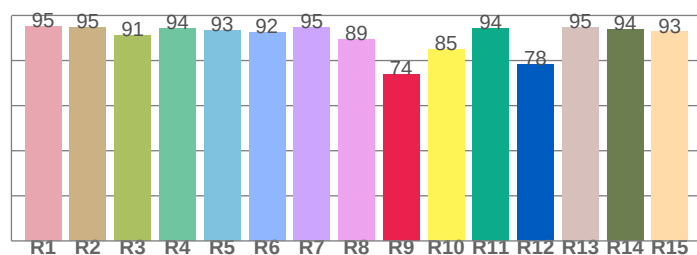
2648 K

y: 0,410

 $\Delta uv: -0,0004$

CRI: 93,1 (R1-R8)

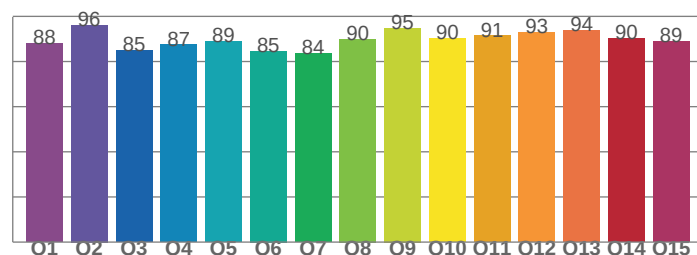
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
95,1	94,6	91,2	94,3	93,4	92,5	94,7	89,3
R9	R10	R11	R12	R13	R14	R15	
73,9	85,1	94,4	78,4	94,8	93,7	92,7	

CQS: 88,9

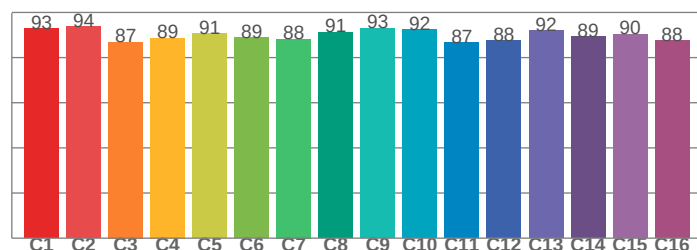
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
87,9	96,2	84,8	87,4	88,8	84,6	83,5	90,0
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
94,8	90,3	91,4	92,7	93,9	90,1	88,9	

TM30: 90,2

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



C1	C2	C3	C4	C5	C6	C7	C8
92,8	93,6	86,9	88,7	90,7	88,8	88,2	91,2
C9	C10	C11	C12	C13	C14	C15	
93,0	92,5	86,8	87,6	91,9	89,4	90,4	

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
2648 K	93,1	73,9	90,2	103,7	88,9	0,464	0,410	0,265	0,352	-0,0004



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Test Report

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TM30 details

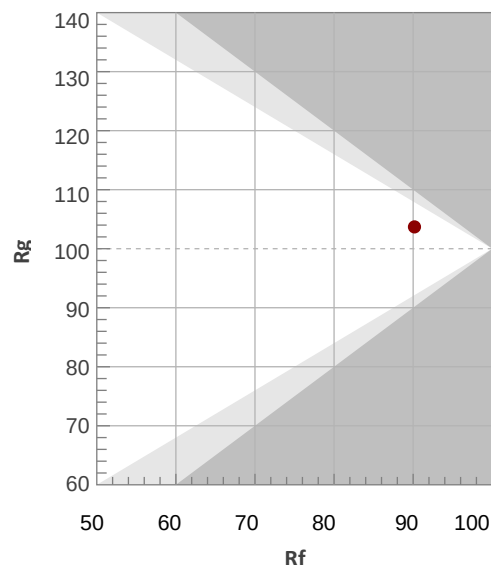
Rf 90,2

Fidelity index Rf

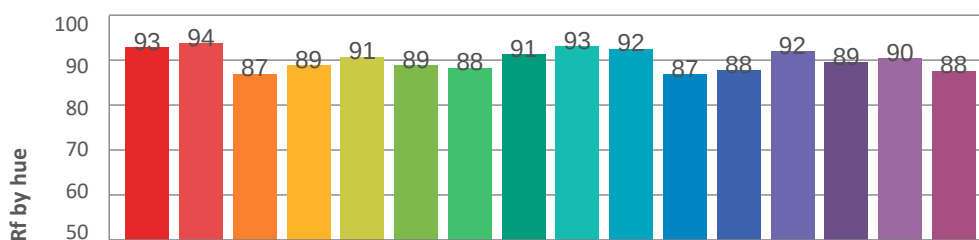
Rg 103,7

Gamut index Rg

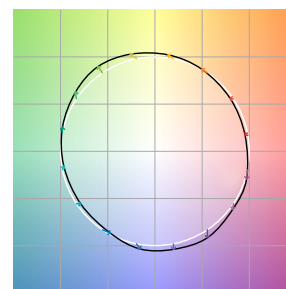
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	93	-3%	-2%
2	94	-3%	2%
3	87	0%	7%
4	89	3%	6%
5	91	6%	6%
6	89	8%	0%
7	88	5%	-6%
8	91	1%	-6%
9	93	-2%	-3%
10	92	-4%	3%
11	87	-2%	9%
12	88	5%	5%
13	92	6%	-1%
14	89	7%	-5%
15	90	3%	-5%
16	88	1%	-10%



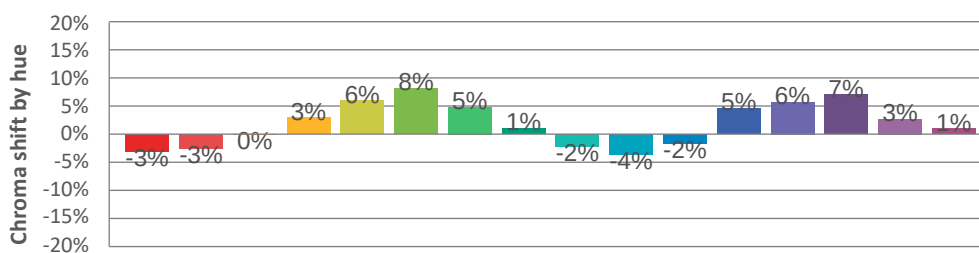
Hue binH



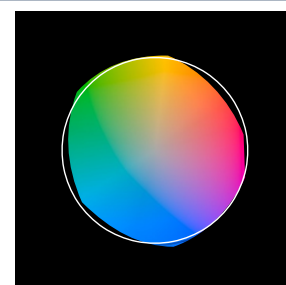
Color vector graphics



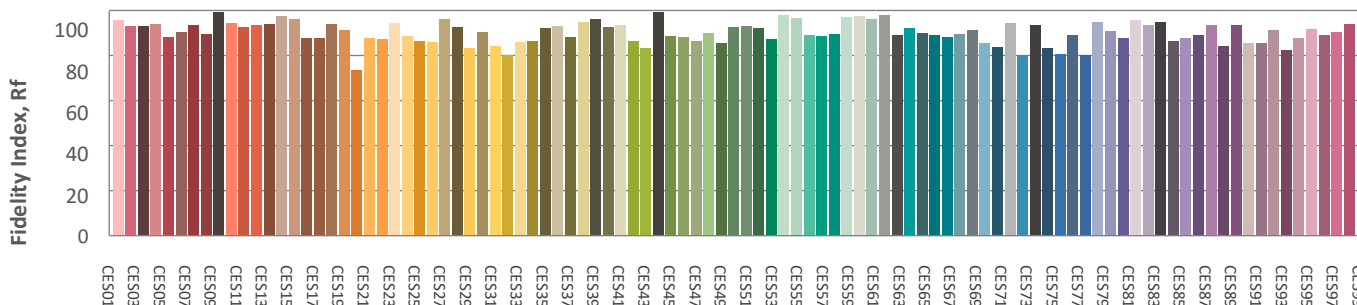
Hue bin



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	22,3	22,9	22,4	23,2	23,4	22,3	22,9	22,4	23,2	23,4
	3H	22,0	22,8	22,4	23,0	23,2	22,0	22,8	22,4	23,0	23,2
	4H	21,9	22,7	22,3	22,9	23,1	21,9	22,7	22,3	22,9	23,1
	6H	21,9	22,5	22,2	22,8	23,2	21,9	22,5	22,2	22,8	23,2
	8H	21,9	22,5	22,2	22,8	23,2	21,9	22,5	22,2	22,8	23,2
	12H	21,8	22,4	22,2	22,7	23,2	21,8	22,4	22,2	22,7	23,2
4H	2H	21,9	22,7	22,3	22,9	23,1	21,9	22,7	22,3	22,9	23,1
	3H	21,8	22,4	22,2	22,8	23,2	21,8	22,4	22,2	22,8	23,2
	4H	21,7	22,2	22,1	22,6	23,2	21,7	22,2	22,1	22,6	23,2
	6H	21,6	22,2	22,1	22,5	22,9	21,6	22,2	22,1	22,5	22,9
	8H	21,6	22,1	22,1	22,4	22,8	21,6	22,1	22,1	22,4	22,8
	12H	21,5	21,9	22,0	22,3	22,8	21,5	21,9	22,0	22,3	22,8
8H	4H	21,6	22,1	22,1	22,4	22,8	21,6	22,1	22,1	22,4	22,8
	6H	21,5	21,8	22,0	22,3	22,8	21,5	21,8	22,0	22,3	22,8
	8H	21,5	21,8	22,0	22,3	22,9	21,5	21,8	22,0	22,3	22,9
	12H	21,4	21,7	22,0	22,2	22,8	21,4	21,7	22,0	22,2	22,8
12H	4H	21,5	21,9	22,0	22,3	22,8	21,5	21,9	22,0	22,3	22,8
	6H	21,5	21,8	22,0	22,3	22,9	21,5	21,8	22,0	22,3	22,9
	8H	21,4	21,7	22,0	22,2	22,8	21,4	21,7	22,0	22,2	22,8
Variation of the observer position for the luminaire distance S											
S = 1.0H		6,1 / -11,8					6,1 / -11,8				
S = 1.5H		8,8 / -14,5					8,8 / -14,5				
S = 2.0H		10,8 / -17,2					10,8 / -17,2				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 1645lm total luminous flux											