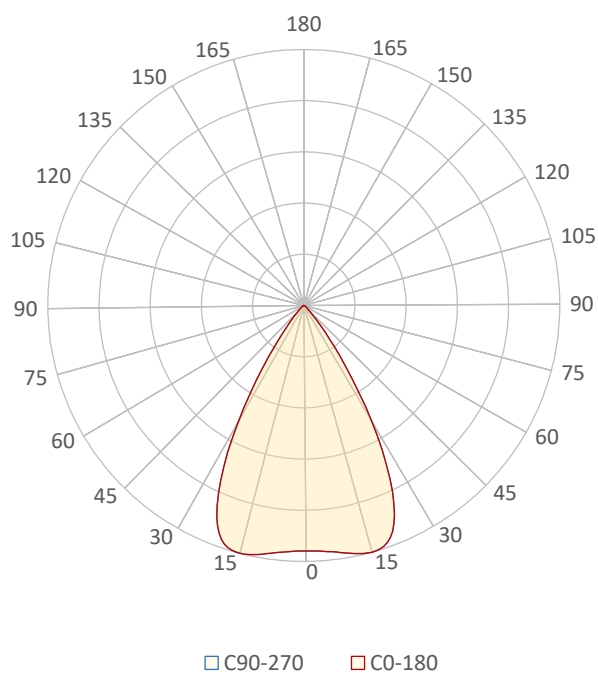


General Discription

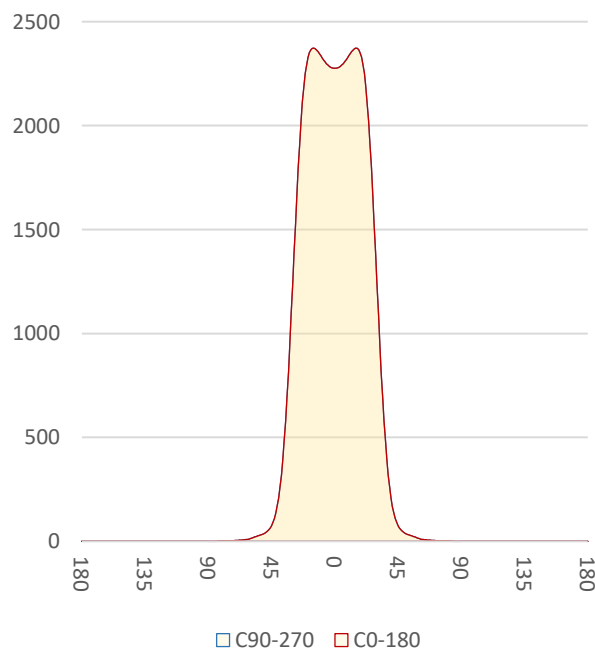
Item number	E-OL6-X-X-2790
Date and time	2-12-2022 11:53:28
CCT (Kelvin)	2643 K
Beam angle	60,7°
Luminous flux	2219 lm
Efficiency	83 lm/watt
Weighted energy	26,9 kWh/1000h
Power factor	0,97
CRI (RA)	92,9
Fidelity index Rf	Rf 89,8
Gammut index Rg	Rg 103,7
Peak	2373 cd



Polar diagram



Cartesian diagram



LM-79

Test Report

LM79-EMERALD-OFFICE-L6-2700K-CRI90

Beam details	1m	2m	3m	4m	5m
Lux*	2276 lx	569 lx	253 lx	142 lx	91 lx

*measured at center of beam

Footcandles*	211,4 fcd	52,9 fcd	23,5 fcd	13,2 fcd	8,5 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
2276lx	569lx	253lx	142lx	91lx	63lx	46lx	36lx	28lx	23lx	19lx	16lx	13lx	12lx	10lx	9lx	8lx	7lx	6lx	6lx
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
211,4fcd	52,9fcd	23,5fcd	13,2fcd	8,5fcd	5,9fcd	4,3fcd	3,3fcd	2,6fcd	2,1fcd	1,7fcd	1,5fcd	1,3fcd	1,1fcd	0,9fcd	0,8fcd	0,7fcd	0,7fcd	0,6fcd	0,5fcd

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°
2276	2278	2285	2298	2316	2336	2356	2370	2372	2352	2297	2190	2022	1797	1529	1239	951	692	480	320
100%	100%	100%	101%	102%	103%	104%	104%	104%	103%	101%	96%	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°
2276	2278	2285	2298	2316	2336	2356	2370	2372	2352	2297	2190	2022	1797	1529	1239	951	692	480	320
100%	100%	100%	101%	102%	103%	104%	104%	104%	103%	101%	96%	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°
2276	2278	2285	2298	2316	2336	2356	2370	2372	2352	2297	2190	2022	1797	1529	1239	951	692	480	320
100%	100%	100%	101%	102%	103%	104%	104%	104%	103%	101%	96%	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°
2276	2278	2285	2298	2316	2336	2356	2370	2372	2352	2297	2190	2022	1797	1529	1239	951	692	480	320
100%	100%	100%	101%	102%	103%	104%	104%	104%	103%	101%	96%	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°	78,7°	92,9°	99,5%	97,5%



CLS LED BV
 info@cls-led.com
 www.cls-led.com

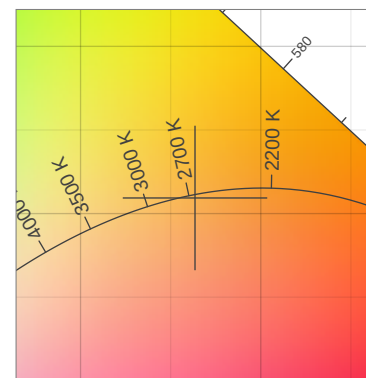
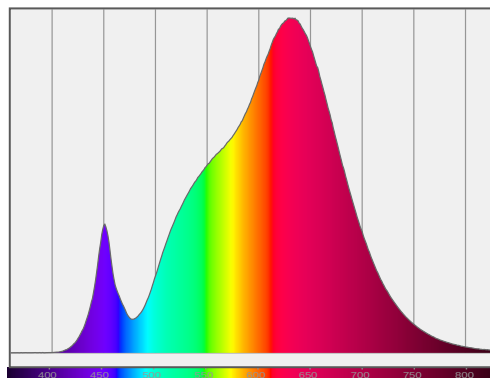
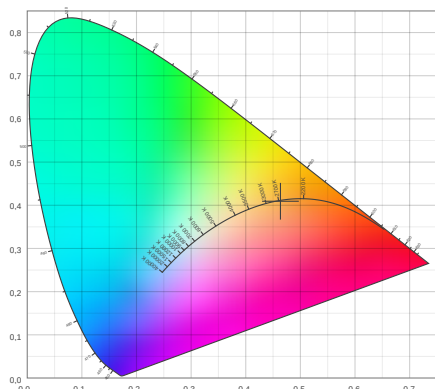
2021 CLS-LED BV. All rights reserved. Information subject to change without notice, CLS-LED BV and all affiliated companies disclaim liability for injury, damage direct or indirect loss, consequential or economic loss or any other loss occasioned by the use of, inability to use or reliance on the information contained in this document. No part of this document may be reproduced, in any form or by any means, without permission in writing from CLS-LED BV. Other legal information can be found in our General conditions, found on the back of your CLS-LED BV invoice, inside the CLS catalogue or on our website www.cls-led.com/voorwaarden.pdf

LM-79

Test Report

LM79-EMERALD-OFFICE-L6-2700K-CRI90

Color details



CIE 1931

x: 0,464



Spectra

CIE 1931 ZOOM

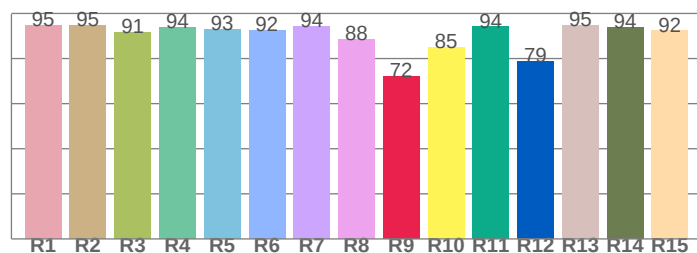
2643 K

y: 0,409

 $\Delta uv: -0,0008$

CRI: 92,9 (R1-R8)

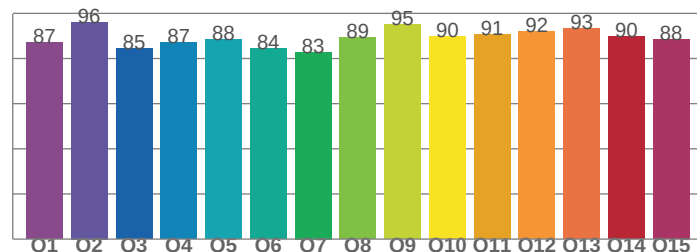
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
94,8	94,6	91,4	93,9	93,1	92,5	94,3	88,4
R9	R10	R11	R12	R13	R14	R15	
72,1	85,0	94,0	78,8	94,6	93,9	92,3	

CQS: 88,5

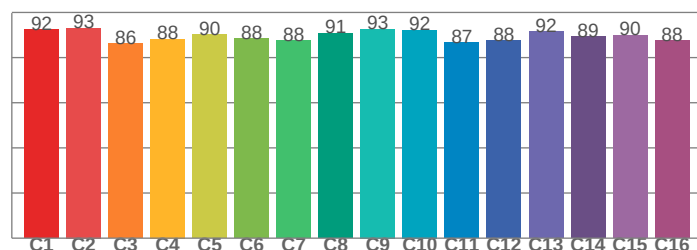
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
87,2	96,2	84,6	87,0	88,5	84,3	82,9	89,4
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
94,9	89,9	90,8	92,0	93,3	89,6	88,3	

TM30: 89,8

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



C1	C2	C3	C4	C5	C6	C7	C8
92,4	93,1	86,1	88,2	90,2	88,4	87,6	90,8
C9	C10	C11	C12	C13	C14	C15	
92,7	92,3	86,6	87,5	91,7	89,3	89,9	

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
2643 K	92,9	72,1	89,8	103,7	88,5	0,464	0,409	0,265	0,352	-0,0008



CLS LED BV
info@cls-led.com
www.cls-led.com

2021 CLS-LED BV. All rights reserved. Information subject to change without notice, CLS-LED BV and all affiliated companies disclaim liability for injury, damage direct or indirect loss, consequential or economic loss or any other loss occasioned by the use of, inability to use or reliance on the information contained in this document. No part of this document may be reproduced, in any form or by any means, without permission in writing from CLS-LED BV. Other legal information can be found in our General conditions, found on the back of your CLS-LED BV invoice, inside the CLS catalogue or on our website www.cls-led.com/voorwaarden.pdf

LM-79

Test Report

LM79-EMERALD-OFFICE-L6-2700K-CRI90

TM30 details

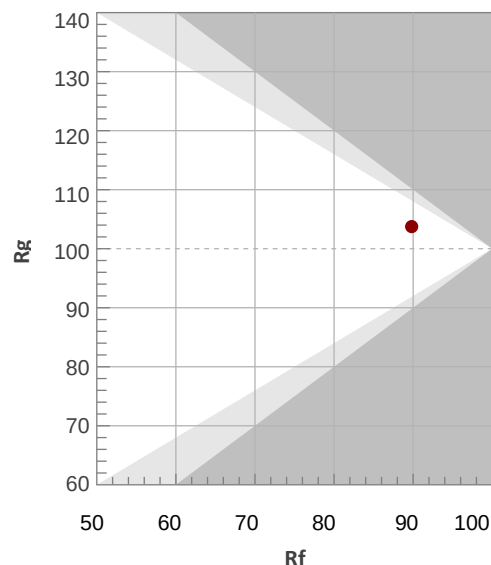
Rf 89,8

Fidelity index Rf

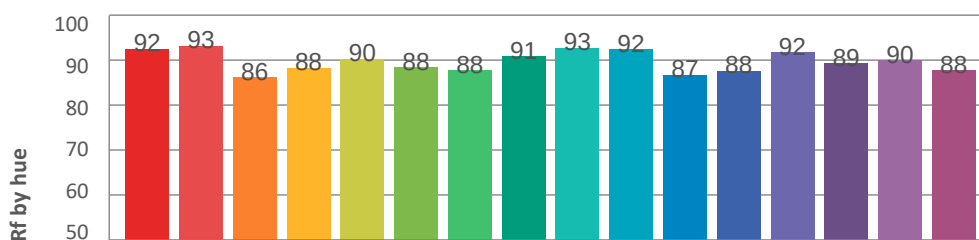
Rg 103,7

Gamut index Rg

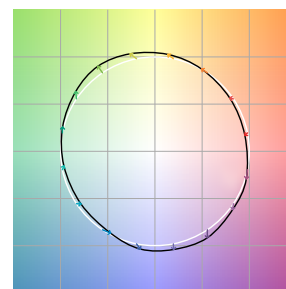
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	92	-3%	-2%
2	93	-3%	3%
3	86	0%	7%
4	88	3%	7%
5	90	6%	6%
6	88	8%	0%
7	88	5%	-6%
8	91	1%	-6%
9	93	-2%	-4%
10	92	-4%	3%
11	87	-2%	9%
12	88	5%	5%
13	92	6%	-1%
14	89	7%	-5%
15	90	3%	-6%
16	88	1%	-10%



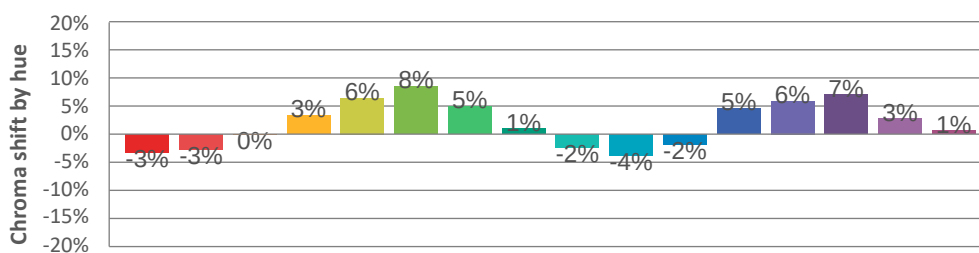
Hue binH



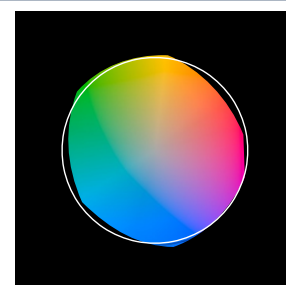
Color vector graphics



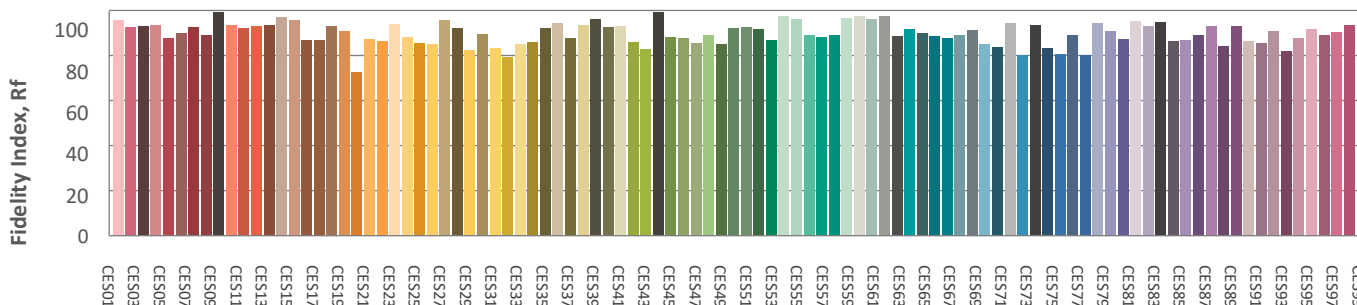
Hue bin



Color distortion graphics



Color Evaluation Sample



CLS LED BV
info@cls-led.com
www.cls-led.com

2021 CLS-LED BV. All rights reserved. Information subject to change without notice, CLS-LED BV and all affiliated companies disclaim liability for injury, damage direct or indirect loss, consequential or economic loss or any other loss occasioned by the use of, inability to use or reliance on the information contained in this document. No part of this document may be reproduced, in any form or by any means, without permission in writing from CLS-LED BV. Other legal information can be found in our General conditions, found on the back of your CLS-LED BV invoice, inside the CLS catalogue or on our website www.cls-led.com/voorwaarden.pdf

LM-79

Test Report

LM79-EMERALD-OFFICE-L6-2700K-CRI90

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	22,4	23,1	22,6	23,3	23,5	22,4	23,1	22,6	23,3	23,5
	3H	22,1	22,9	22,5	23,1	23,3	22,1	22,9	22,5	23,1	23,3
	4H	22,1	22,8	22,5	23,0	23,3	22,1	22,8	22,5	23,0	23,3
	6H	22,1	22,7	22,4	23,0	23,3	22,1	22,7	22,4	23,0	23,3
	8H	22,0	22,6	22,3	22,9	23,3	22,0	22,6	22,3	22,9	23,3
	12H	22,0	22,5	22,3	22,9	23,3	22,0	22,5	22,3	22,9	23,3
4H	2H	22,1	22,8	22,5	23,0	23,3	22,1	22,8	22,5	23,0	23,3
	3H	22,0	22,5	22,3	22,9	23,3	22,0	22,5	22,3	22,9	23,3
	4H	21,8	22,3	22,3	22,8	23,3	21,8	22,3	22,3	22,8	23,3
	6H	21,8	22,3	22,2	22,6	23,0	21,8	22,3	22,2	22,6	23,0
	8H	21,7	22,2	22,2	22,5	22,9	21,7	22,2	22,2	22,5	22,9
	12H	21,6	22,0	22,1	22,4	22,9	21,6	22,0	22,1	22,4	22,9
8H	4H	21,7	22,2	22,2	22,5	22,9	21,7	22,2	22,2	22,5	22,9
	6H	21,6	22,0	22,1	22,4	23,0	21,6	22,0	22,1	22,4	23,0
	8H	21,6	21,9	22,1	22,4	23,0	21,6	21,9	22,1	22,4	23,0
	12H	21,6	21,8	22,2	22,3	22,9	21,6	21,8	22,2	22,3	22,9
12H	4H	21,6	22,0	22,1	22,4	22,9	21,6	22,0	22,1	22,4	22,9
	6H	21,6	21,9	22,1	22,4	23,0	21,6	21,9	22,1	22,4	23,0
	8H	21,6	21,8	22,2	22,3	22,9	21,6	21,8	22,2	22,3	22,9
Variation of the observer position for the luminaire distance S											
S = 1.0H		6,1 / -12,6					6,1 / -12,6				
S = 1.5H		8,8 / -16,6					8,8 / -16,6				
S = 2.0H		10,8 / -18,4					10,8 / -18,4				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 2219lm total luminous flux											



CLS LED BV
info@cls-led.com
www.cls-led.com

2021 CLS-LED BV. All rights reserved. Information subject to change without notice, CLS-LED BV and all affiliated companies disclaim liability for injury, damage direct or indirect loss, consequential or economic loss or any other loss occasioned by the use of, inability to use or reliance on the information contained in this document. No part of this document may be reproduced, in any form or by any means, without permission in writing from CLS-LED BV. Other legal information can be found in our General conditions, found on the back of your CLS-LED BV invoice, inside the CLS catalogue or on our website www.cls-led.com/voorwaarden.pdf