

LM-79

Test Report

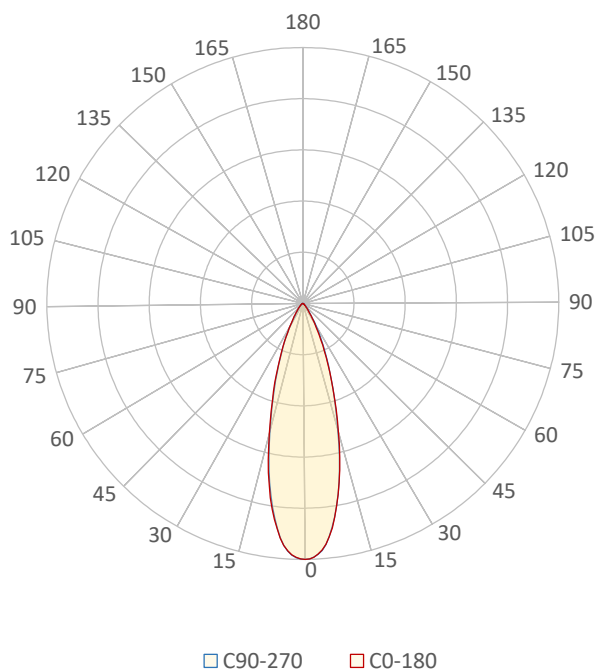
LM79-REVO-MICRO-BASIC-2700K-CRI80-30DEG

General Discription

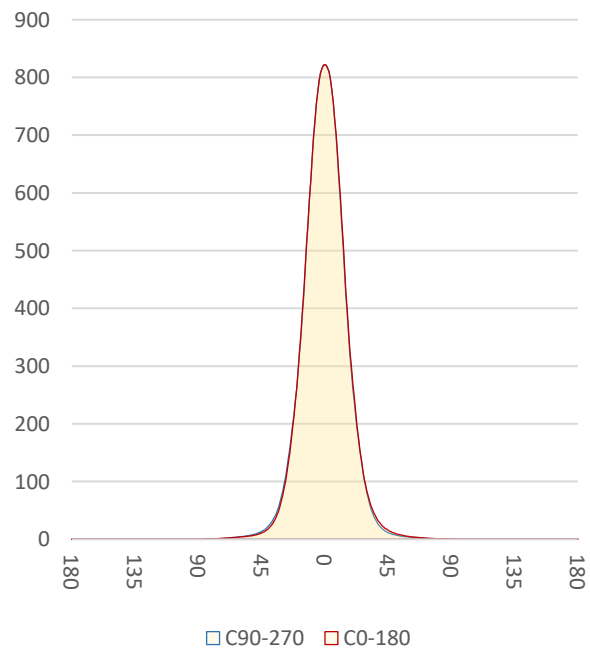
Item number	
Date and time	21-9-2021 17:09:51
CCT (Kelvin)	2644 K
Beam angle	30,6°
Luminous flux	306 lm
Efficiency	59 lm/watt
Weighted energy	5,2 kWh/1000h
Power factor	0,48
CRI (RA)	84,8
Fidelity index Rf	Rf 86,0
Gammut index Rg	Rg 98,5
Peak	823 cd



Polar diagram



Cartesian diagram



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Beam details	1m	2m	3m	4m	5m																			
Lux*	822 lx	206 lx	91 lx	51 lx	33 lx																			
*measured at center of beam																								
Footcandles*	76,4 fcd	19,1 fcd	8,5 fcd	4,8 fcd	3,1 fcd																			
Beam width (meter)	0,6 m	1,1 m	1,7 m	2,2 m	2,8 m																			
Beam width (Feet)	1,8 ft	3,6 ft	5,4 ft	7,2 ft	9 ft																			
Beam intensities																								
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m					
822lx	206lx	91lx	51lx	33lx	23lx	17lx	13lx	10lx	8lx	7lx	6lx	5lx	4lx	4lx	3lx	3lx	3lx	2lx	2lx					
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					
76,4fcd	19,1fcd	8,5fcd	4,8fcd	3,1fcd	2,1fcd	1,6fcd	1,2fcd	0,9fcd	0,8fcd	0,6fcd	0,5fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd					
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°					
822	816	795	755	696	625	548	470	393	324	263	212	168	131	100	76	56	42	32	24					
100%	99%	97%	92%	85%	76%	67%	57%	48%	39%	32%	26%	20%	16%	12%	9%	7%	5%	4%	3%					
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°					
822	816	796	753	694	623	545	463	386	319	263	216	175	139	108	83	63	48	37	29					
100%	99%	97%	92%	84%	76%	66%	56%	47%	39%	32%	26%	21%	17%	13%	10%	8%	6%	5%	4%					
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°					
822	816	797	757	701	633	556	473	393	326	270	220	175	137	107	83	65	51	40	32					
100%	99%	97%	92%	85%	77%	68%	57%	48%	40%	33%	27%	21%	17%	13%	10%	8%	6%	5%	4%					
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°					
822	817	797	756	695	624	545	463	385	317	260	212	171	135	104	80	60	45	34	26					
100%	99%	97%	92%	85%	76%	66%	56%	47%	39%	32%	26%	21%	16%	13%	10%	7%	5%	4%	3%					
Beam angle 50%					Field angle 10%					Cutoff angle 2,5%					Intensity ratio in 120° cone					Intensity ratio in 90° cone				
30,8°					59,7°					81,2°					98,3%					95,2%				



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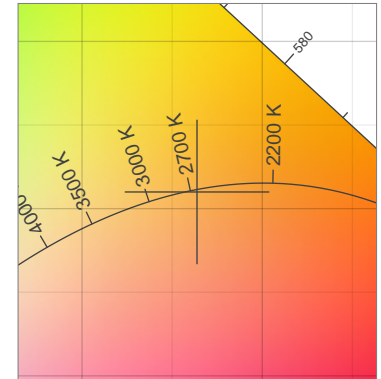
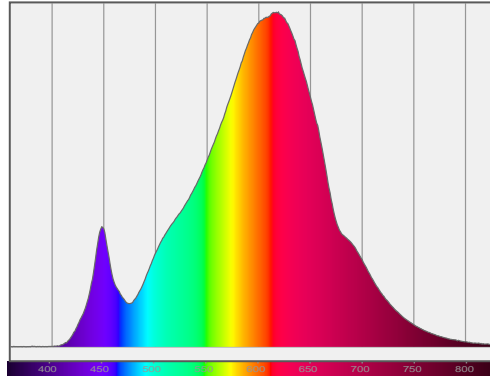
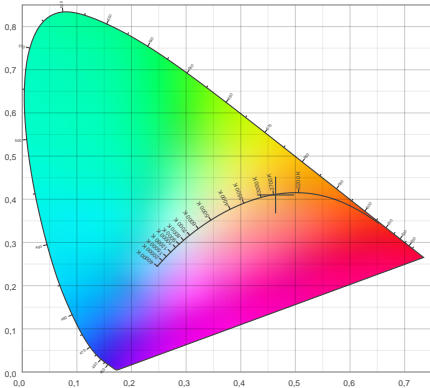
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Color details



CIE 1931

x: 0,464



Spectra

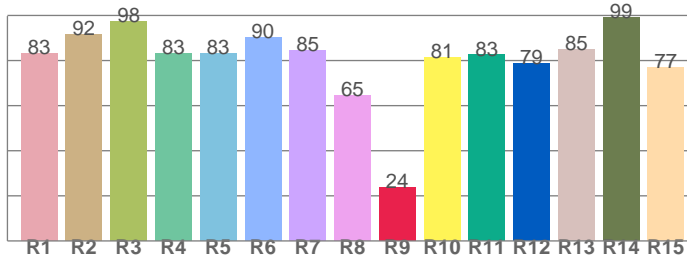
CIE 1931 ZOOM

2644 K

y: 0,410

Δuv : -0,0006

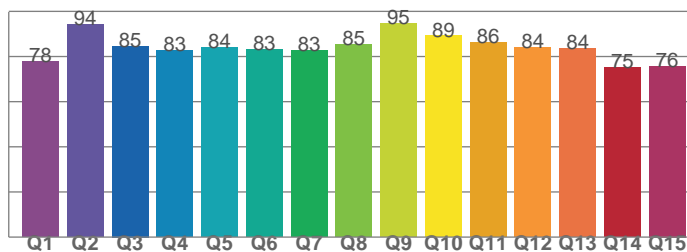
CRI: **84,8** (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
83,2	91,7	97,5	83,1	83,1	90,4	84,7	64,6
R9	R10	R11	R12	R13	R14	R15	
23,7	81,4	82,5	78,8	84,9	99,0	76,8	

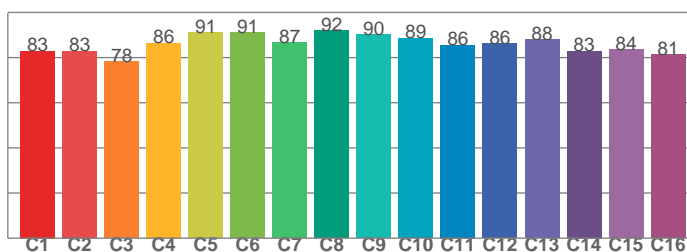
CQS: **83,1**



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
77,7	94,2	84,7	82,8	84,2	83,0	82,6	85,2
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
94,5	89,2	86,3	84,0	83,5	75,3	75,8	

TM30: **86,0**



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

C1	C2	C3	C4	C5	C6	C7	C8
82,9	83,0	78,4	86,4	91,2	91,1	86,8	92,0
C9	C10	C11	C12	C13	C14	C15	
90,1	88,6	85,5	86,3	88,0	83,0	83,6	

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
2644 K	84,8	23,7	86,0	98,5	83,1	0,464	0,410	0,265	0,352	-0,0006



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TM30 details

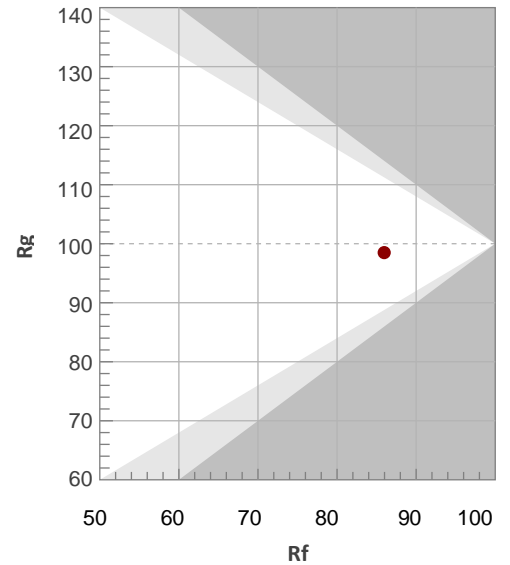
Rf 86,0

Fidelity index Rf

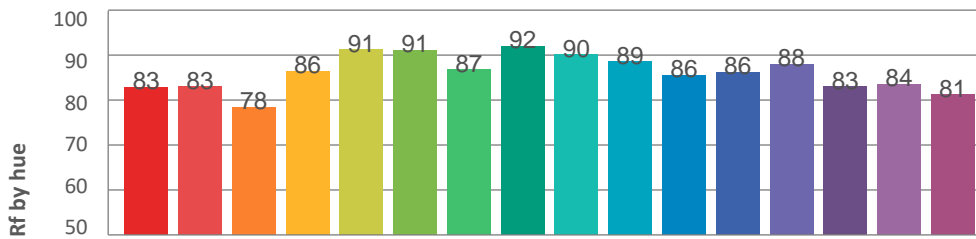
Rg 98,5

Gamut index Rg

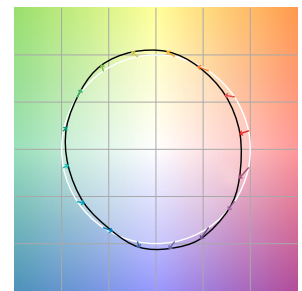
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	83	-9%	-1%
2	83	-7%	7%
3	78	-2%	11%
4	86	4%	8%
5	91	6%	5%
6	91	6%	-2%
7	87	1%	-8%
8	92	-3%	-4%
9	90	-5%	-2%
10	89	-5%	5%
11	86	-2%	10%
12	86	5%	3%
13	88	6%	-7%
14	83	5%	-13%
15	84	-1%	-10%
16	81	-7%	-13%



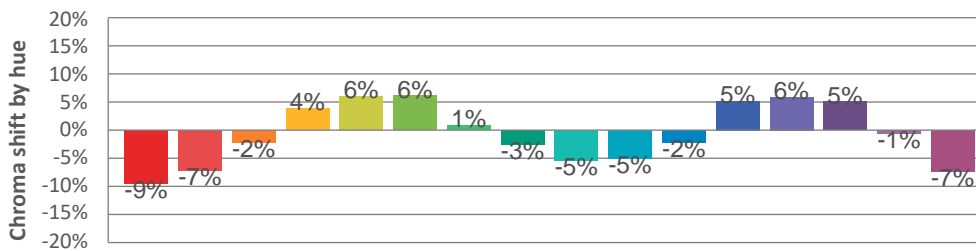
Hue binH



Color vector graphics



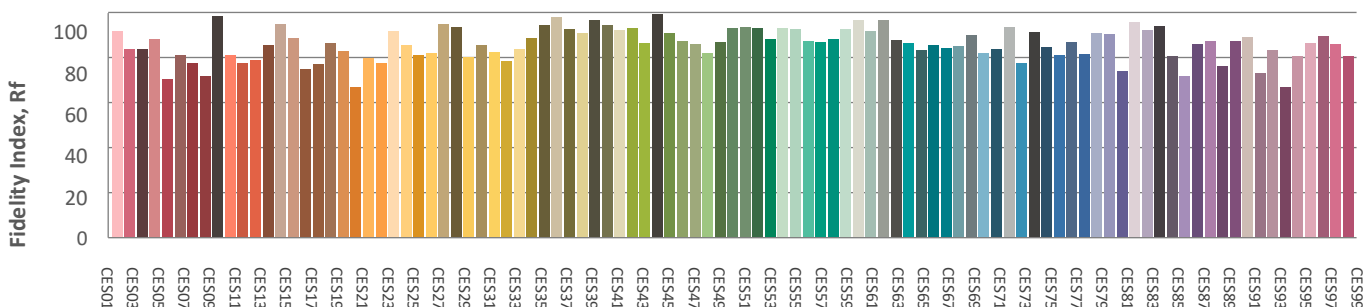
Hue bin



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 306lm total luminous flux										