

LM-79

Test Report

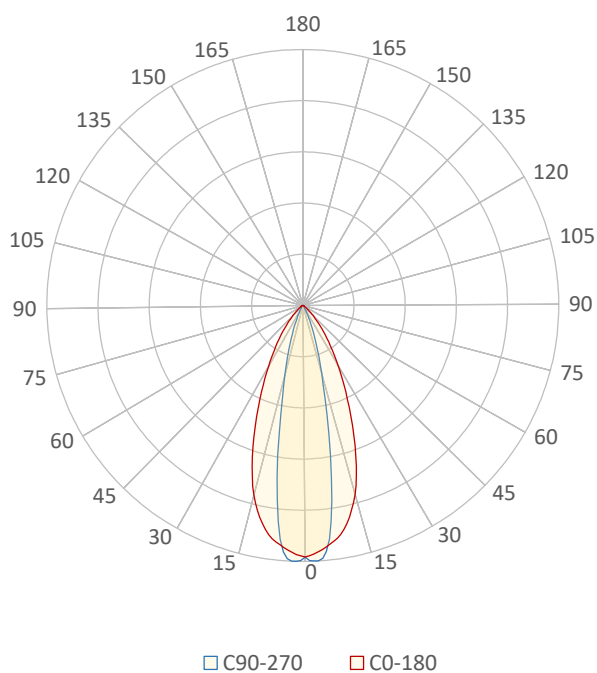
LM79-REVO-MICRO-BASIC-2700K-CRI80-20x42DEG

General Discription

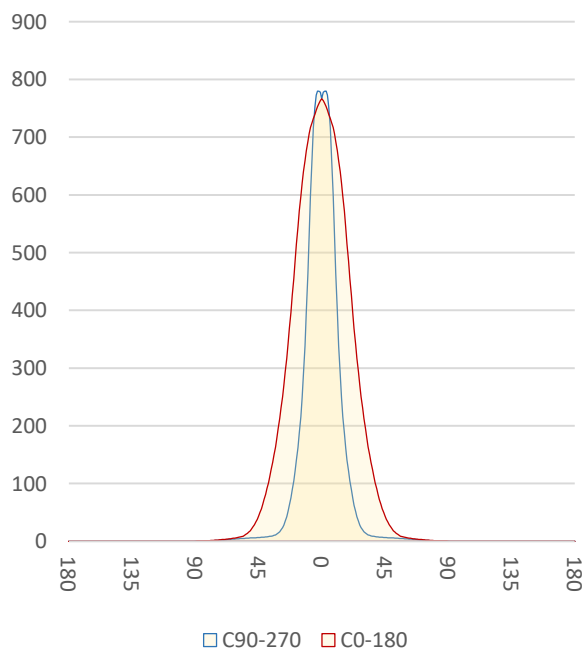
Item number	RM-2-X-03-2
Date and time	22-9-2021 09:46:02
CCT (Kelvin)	2644 K
Beam angle	22,3 x 45°
Luminous flux	305 lm
Efficiency	58 lm/watt
Weighted energy	5,2 kWh/1000h
Power factor	0,49
CRI (RA)	84,6
Fidelity index Rf	Rf 85,8
Gammut index Rg	Rg 98,4
Peak	780 cd



Polar diagram



Cartesian diagram



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Beam details	1m	2m	3m	4m	5m
Lux*	767 lx	192 lx	85 lx	48 lx	31 lx

32,2°

*measured at center of beam

Footcandles*	71,2 fcd	17,8 fcd	7,9 fcd	4,5 fcd	2,8 fcd
Beam width (meter)	0,6 m	1,2 m	1,7 m	2,3 m	2,9 m
Beam width 90° (meter)	0,4 m	0,8 m	1,2 m	1,6 m	2 m
Beam width (Feet)	1,9 ft	3,8 ft	5,7 ft	7,6 ft	9,5 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
767lx	192lx	85lx	48lx	31lx	21lx	16lx	12lx	9lx	8lx	6lx	5lx	5lx	4lx	3lx	3lx	3lx	2lx	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
71,2fcd	17,8fcd	7,9fcd	4,5fcd	2,8fcd	2fcd	1,5fcd	1,1fcd	0,9fcd	0,7fcd	0,6fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	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°
767	759	747	732	717	693	659	620	572	515	455	396	342	293	250	213	179	150	124	101
100%	99%	97%	96%	94%	90%	86%	81%	75%	67%	59%	52%	45%	38%	33%	28%	23%	20%	16%	13%

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°
767	779	773	717	600	464	339	249	187	141	105	75	52	35	24	17	12	10	9	8
100%	102%	101%	93%	78%	60%	44%	32%	24%	18%	14%	10%	7%	5%	3%	2%	2%	1%	1%	1%

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°
767	759	747	732	717	693	659	620	572	515	455	396	342	293	250	213	179	150	124	101
100%	99%	97%	96%	94%	90%	86%	81%	75%	67%	59%	52%	45%	38%	33%	28%	23%	20%	16%	13%

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°
767	779	773	717	600	464	339	249	187	141	105	75	52	35	24	17	12	10	9	8
100%	102%	101%	93%	78%	60%	44%	32%	24%	18%	14%	10%	7%	5%	3%	2%	2%	1%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
32,2°	58,3°	78,5°	98,0%	94,0%



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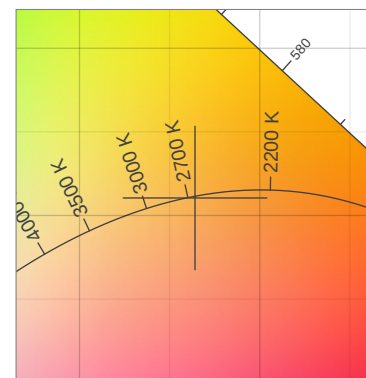
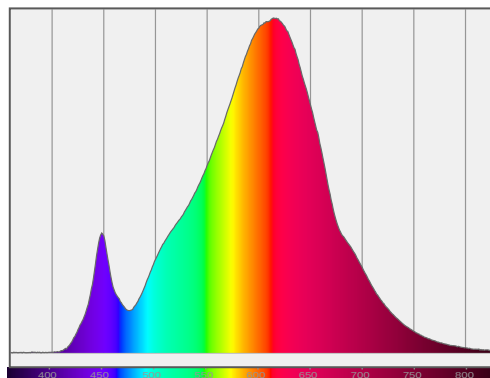
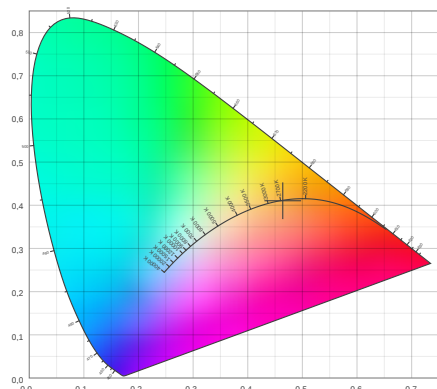
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Color details



CIE 1931

x: 0,464

2644 K

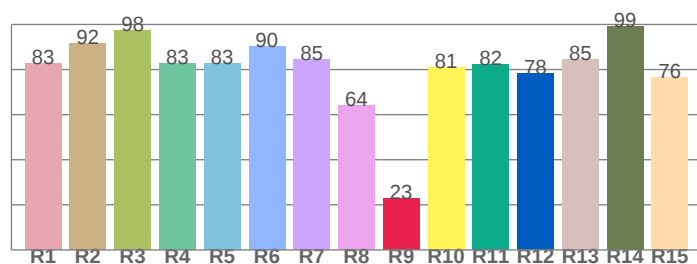
y: 0,410

Spectra

CIE 1931 ZOOM

Δuv : -0,0004

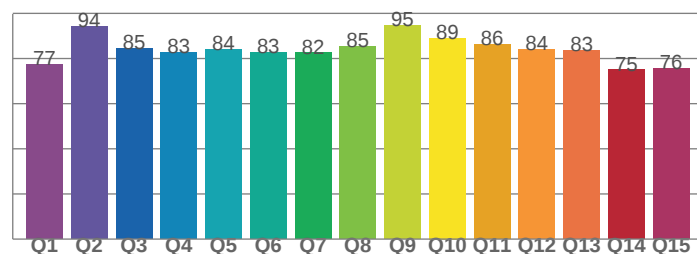
CRI: 84,6 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
82,9	91,5	97,6	82,9	82,8	90,1	84,7	64,3
R9	R10	R11	R12	R13	R14	R15	
22,8	80,9	82,3	78,3	84,7	99,0	76,5	

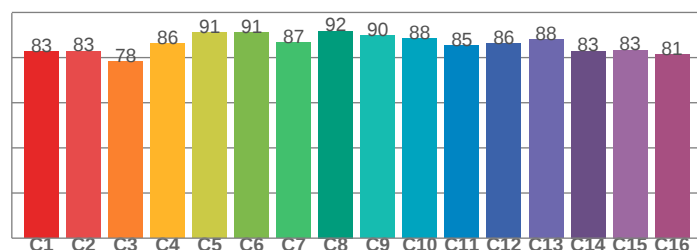
CQS: 83,0



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
77,5	94,2	84,6	82,7	83,9	82,7	82,5	85,2
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
94,6	89,1	86,3	84,0	83,5	75,0	75,5	

TM30: 85,8



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

C1	C2	C3	C4	C5	C6	C7	C8
82,7	82,8	78,2	86,2	91,0	91,0	86,5	91,8
C9	C10	C11	C12	C13	C14	C15	
89,9	88,4	85,4	86,2	88,1	83,0	83,4	

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
2644 K	84,6	22,8	85,8	98,4	83,0	0,464	0,410	0,265	0,352	-0,0004



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TM30 details

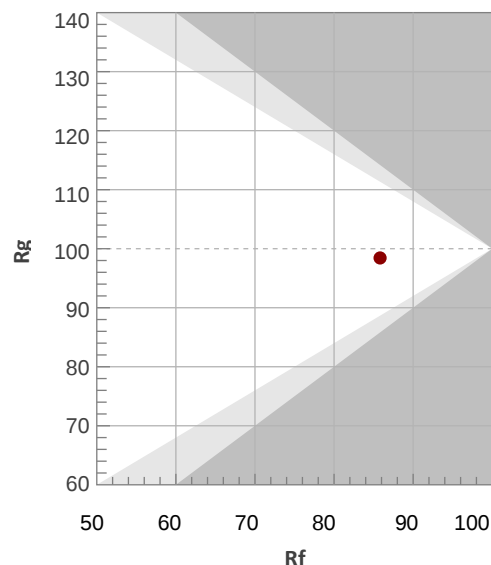
Rf 85,8

Fidelity index Rf

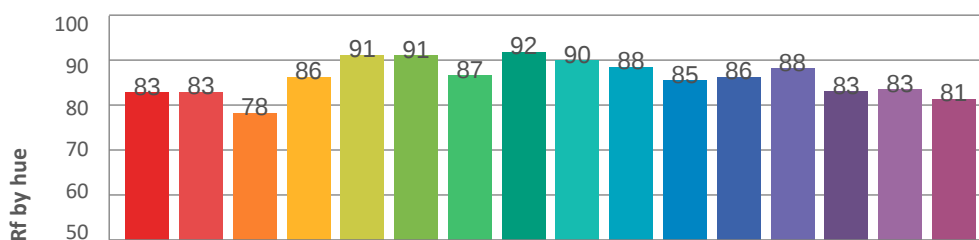
Rg 98,4

Gamut index Rg

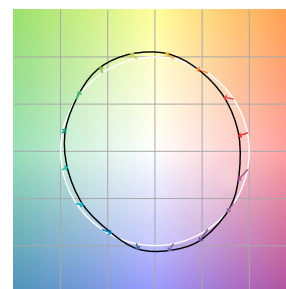
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	83	-10%	-1%
2	83	-7%	7%
3	78	-2%	12%
4	86	4%	9%
5	91	6%	5%
6	91	6%	-2%
7	87	1%	-9%
8	92	-3%	-4%
9	90	-6%	-2%
10	88	-5%	5%
11	85	-2%	10%
12	86	5%	3%
13	88	6%	-6%
14	83	5%	-13%
15	83	-1%	-10%
16	81	-7%	-13%



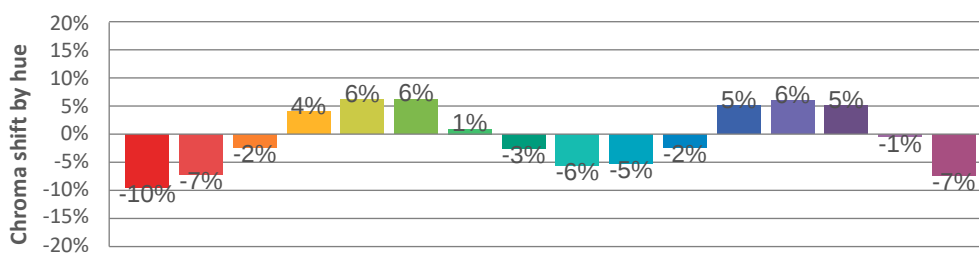
Hue binH



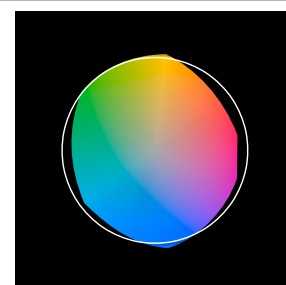
Color vector graphics



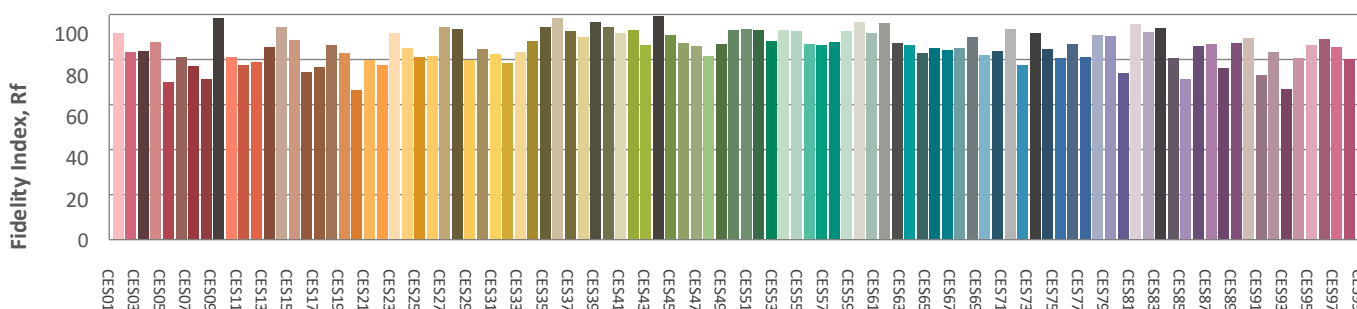
Hue bin



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
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n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	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 305lm total luminous flux										



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