

LM-79

Test Report

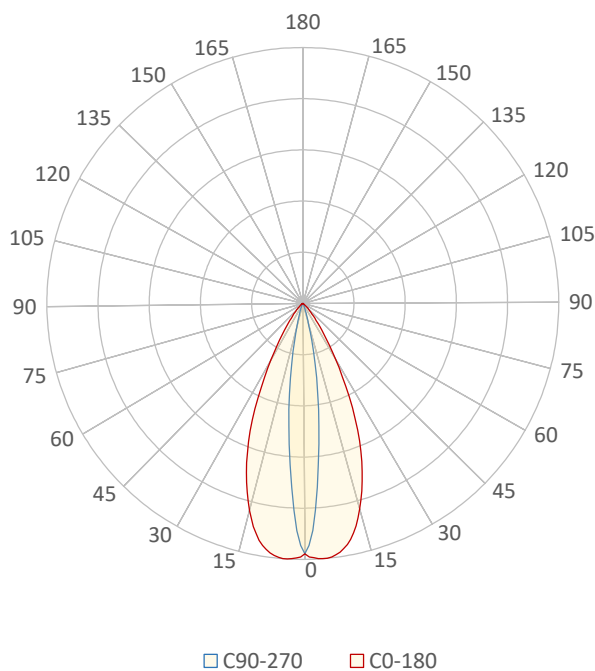
LM79-REVO-2200K-CRI80-DEG12x46

General Discription

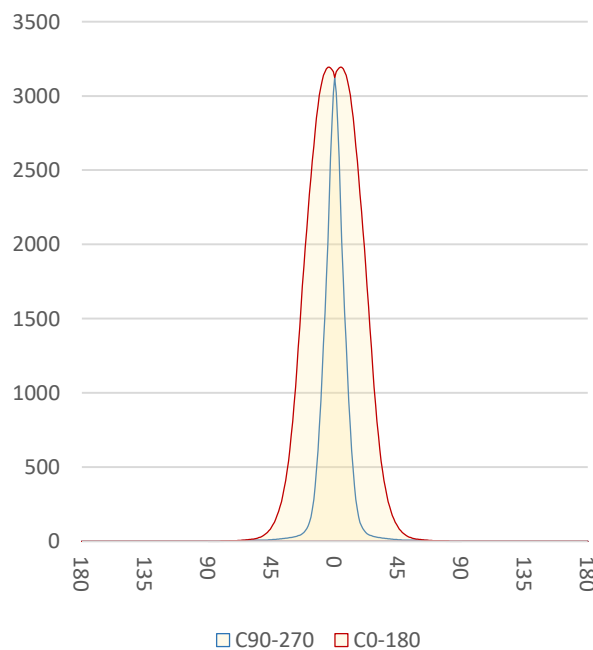
Item number	R-X-X-10-2
Date and time	11-6-2021 15:46:42
CCT (Kelvin)	2202 K
Beam angle	14 x 47,7°
Luminous flux	1185 lm
Efficiency	63 lm/watt
Weighted energy	18,9 kWh/1000h
Power factor	0,95
CRI (RA)	84,7
Fidelity index Rf	Rf 87,6
Gammut index Rg	Rg 96,4
Peak	3197 cd



Polar diagram



Cartesian diagram



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Beam details	1m	2m	3m	4m	5m
Lux*	3123 lx	781 lx	347 lx	195 lx	125 lx

*measured at center of beam

Footcandles*	290,2 fcd	72,5 fcd	32,2 fcd	18,1 fcd	11,6 fcd
Beam width (meter)	0,6 m	1,1 m	1,7 m	2,2 m	2,8 m
Beam width 90° (meter)	0,2 m	0,5 m	0,7 m	1 m	1,2 m
Beam width (Feet)	1,8 ft	3,6 ft	5,4 ft	7,2 ft	9,1 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3123lx	781lx	347lx	195lx	125lx	87lx	64lx	49lx	39lx	31lx	26lx	22lx	18lx	16lx	14lx	12lx	11lx	10lx	9lx	8lx
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
290,2fcd	72,5fcd	32,2fcd	18,1fcd	11,6fcd	8,1fcd	5,9fcd	4,5fcd	3,6fcd	2,9fcd	2,4fcd	2fcd	1,7fcd	1,5fcd	1,3fcd	1,1fcd	1fcd	0,9fcd	0,8fcd	0,7fcd

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°
3123	3176	3194	3183	3139	3061	2932	2762	2561	2339	2104	1855	1581	1302	1038	807	619	470	356	268
100%	102%	102%	102%	100%	98%	94%	88%	82%	75%	67%	59%	51%	42%	33%	26%	20%	15%	11%	9%

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°
3123	2837	2299	1765	1335	944	612	370	214	128	85	60	46	38	32	28	25	22	19	18
100%	91%	74%	57%	43%	30%	20%	12%	7%	4%	3%	2%	1%	1%	1%	1%	1%	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°
3123	3176	3194	3183	3139	3061	2932	2762	2561	2339	2104	1855	1581	1302	1038	807	619	470	356	268
100%	102%	102%	102%	100%	98%	94%	88%	82%	75%	67%	59%	51%	42%	33%	26%	20%	15%	11%	9%

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°
3123	2837	2299	1765	1335	944	612	370	214	128	85	60	46	38	32	28	25	22	19	18
100%	91%	74%	57%	43%	30%	20%	12%	7%	4%	3%	2%	1%	1%	1%	1%	1%	1%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
30,9°	51,5°	66,7°	99,2%	96,7%



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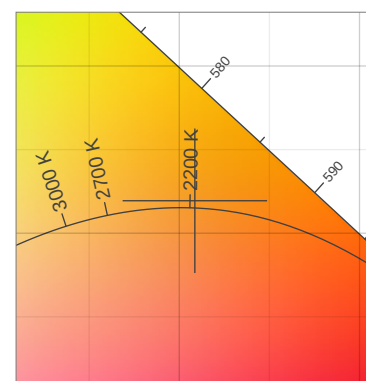
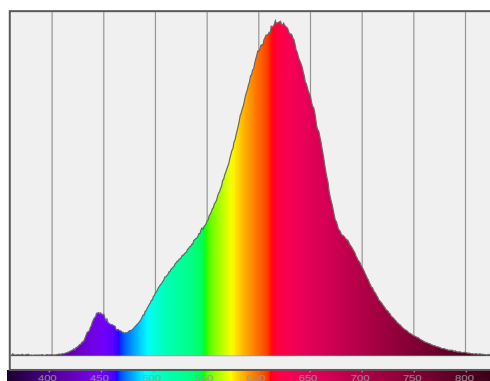
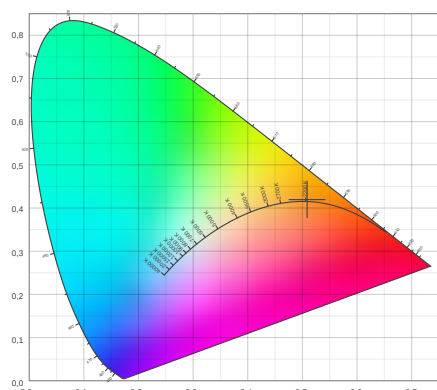
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Color details



CIE 1931

x: 0,509

2202 K

y: 0,419

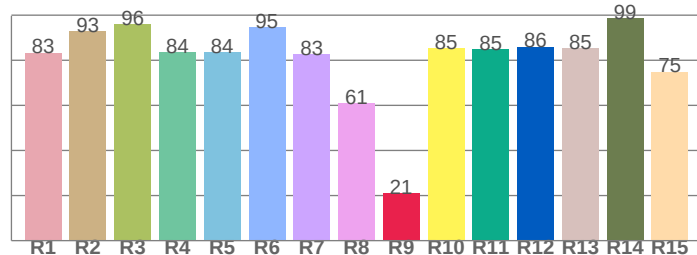
Spectra

CIE 1931 ZOOM

Δuv : 0,0014

CRI: 84,7 (R1-R8)

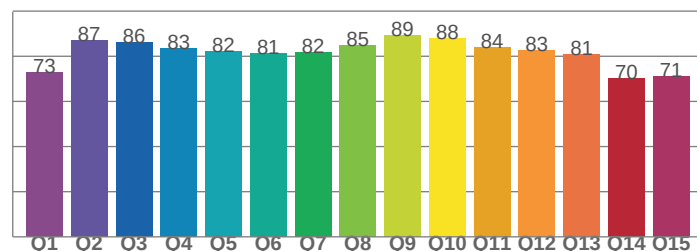
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
83,3	93,0	96,0	83,5	83,7	94,5	82,7	61,1
R9	R10	R11	R12	R13	R14	R15	
20,9	85,2	85,0	86,0	85,4	98,7	74,9	

CQS: 80,2

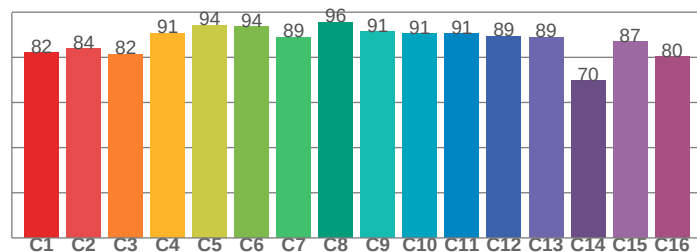
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
72,7	87,1	86,3	83,5	82,1	81,3	81,6	84,7
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
89,1	87,8	84,1	82,7	81,0	70,1	71,2	

TM30: 87,6

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



C1	C2	C3	C4	C5	C6	C7	C8
82,0	83,8	81,5	90,8	94,2	93,6	89,0	95,7
C9	C10	C11	C12	C13	C14	C15	
91,4	90,6	90,6	89,5	89,0	69,7	86,8	

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



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2202 K

84,7

20,9

87,6

96,4

80,2

0,509

0,419

0,290

0,359

0,0014

TM30 details

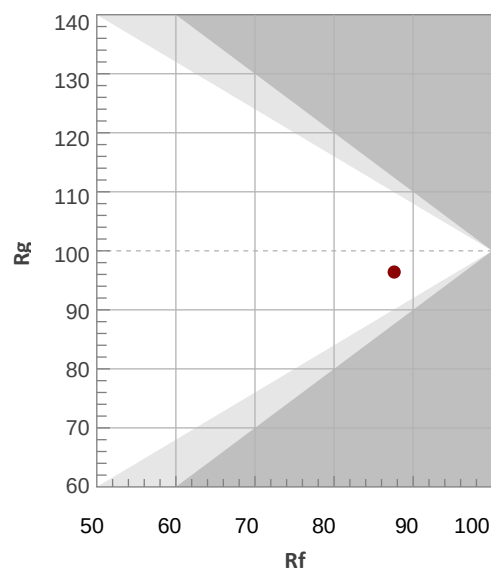
Rf 87,6

Fidelity index Rf

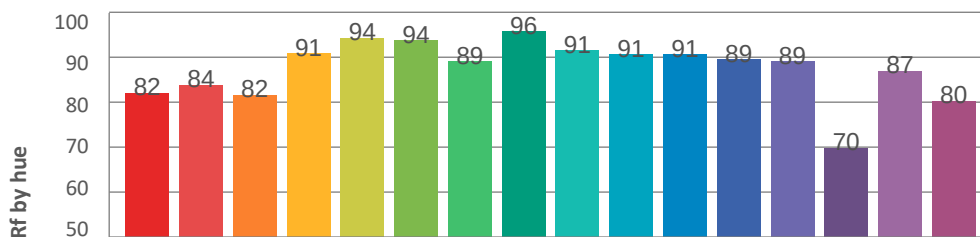
Rg 96,4

Gammut index Rg

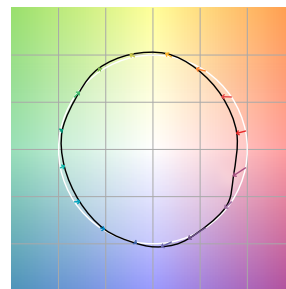
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	82	-10%	-1%
2	84	-8%	6%
3	82	-3%	9%
4	91	2%	6%
5	94	3%	4%
6	94	3%	0%
7	89	-1%	-7%
8	96	-2%	-2%
9	91	-4%	-1%
10	91	-5%	3%
11	91	-1%	4%
12	89	1%	2%
13	89	3%	-11%
14	70	0%	-21%
15	87	-2%	-9%
16	80	-11%	-11%



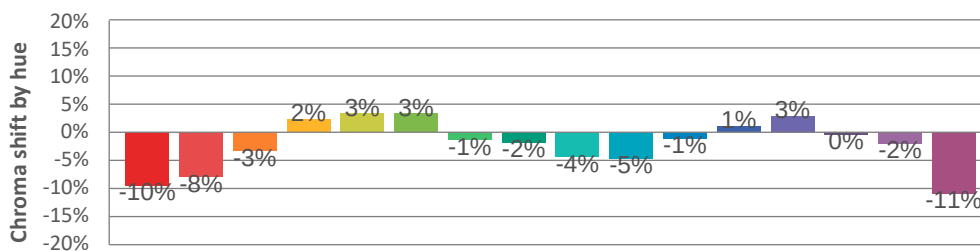
Hue binH



Color vector graphics



Hue bin



Color distortion graphics

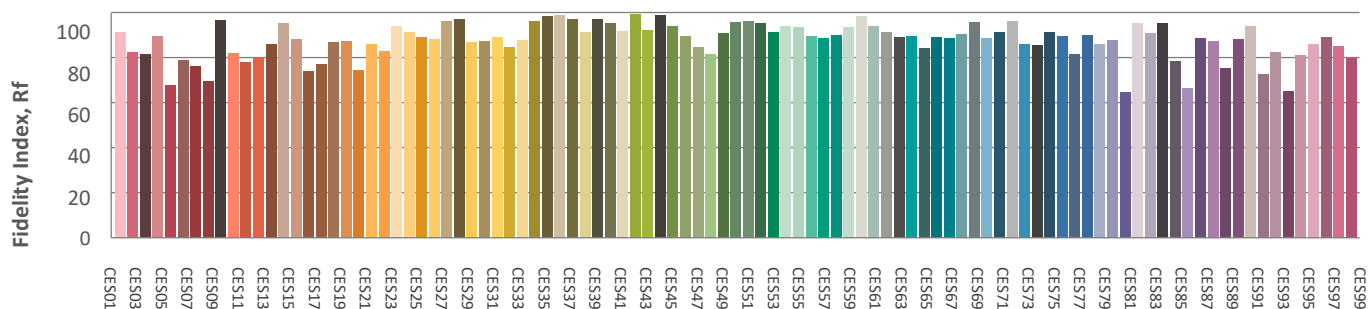


Color Evaluation Sample

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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				
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	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

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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 1185lm total luminous flux		



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