

LM-79

Test Report

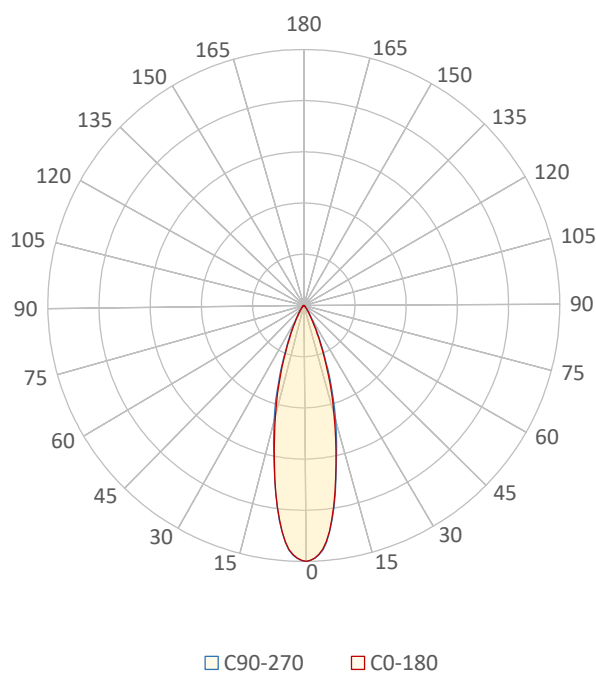
LM79-REVO-2200K-CRI80-DEG30

General Discription

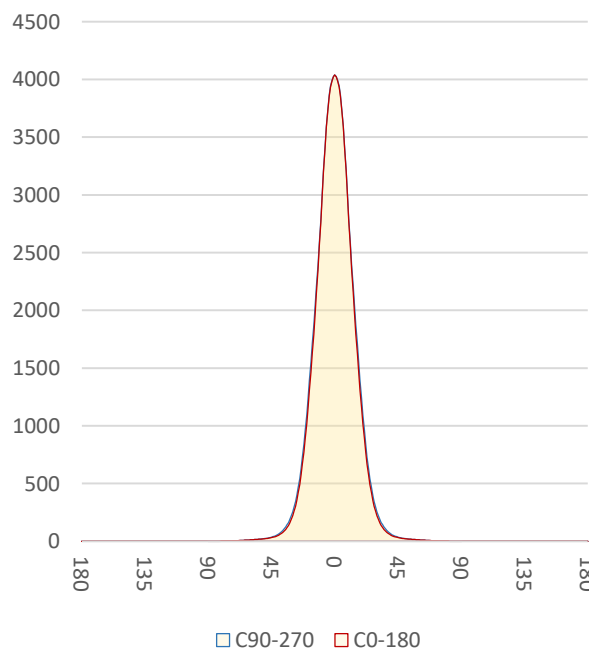
Item number	R-X-X-10-3
Date and time	11-6-2021 15:30:13
CCT (Kelvin)	2192 K
Beam angle	28,3 x 27,5°
Luminous flux	1205 lm
Efficiency	63 lm/watt
Weighted energy	19,0 kWh/1000h
Power factor	0,95
CRI (RA)	85,0
Fidelity index Rf	Rf 87,9
Gammut index Rg	Rg 96,1
Peak	4041 cd



Polar diagram



Cartesian diagram



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Beam details	1m	2m	3m	4m	5m
Lux*	4039 lx	1010 lx	449 lx	252 lx	162 lx

27,9°

*measured at center of beam

Footcandles*	375,3 fcd	93,8 fcd	41,7 fcd	23,5 fcd	15,0 fcd
Beam width (meter)	0,5 m	1 m	1,5 m	2 m	2,5 m
Beam width 90° (meter)	0,5 m	1 m	1,5 m	2 m	2,5 m
Beam width (Feet)	1,6 ft	3,3 ft	4,9 ft	6,5 ft	8,1 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
4039lx	1010lx	449lx	252lx	162lx	112lx	82lx	63lx	50lx	40lx	33lx	28lx	24lx	21lx	18lx	16lx	14lx	12lx	11lx	10lx
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
375,3fcd	93,8fcd	41,7fcd	23,5fcd	15fcd	10,4fcd	7,7fcd	5,9fcd	4,6fcd	3,8fcd	3,1fcd	2,6fcd	2,2fcd	1,9fcd	1,7fcd	1,5fcd	1,3fcd	1,2fcd	1fcd	0,9fcd

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°
4039	3988	3854	3587	3203	2769	2349	1969	1628	1308	1019	773	574	420	306	221	161	118	89	68
100%	99%	95%	89%	79%	69%	58%	49%	40%	32%	25%	19%	14%	10%	8%	5%	4%	3%	2%	2%

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°
4039	3995	3866	3595	3216	2791	2392	2043	1714	1396	1098	841	629	467	345	255	190	142	107	82
100%	99%	96%	89%	80%	69%	59%	51%	42%	35%	27%	21%	16%	12%	9%	6%	5%	4%	3%	2%

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°
4039	3988	3854	3587	3203	2769	2349	1969	1628	1308	1019	773	574	420	306	221	161	118	89	68
100%	99%	95%	89%	79%	69%	58%	49%	40%	32%	25%	19%	14%	10%	8%	5%	4%	3%	2%	2%

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°
4039	3995	3866	3595	3216	2791	2392	2043	1714	1396	1098	841	629	467	345	255	190	142	107	82
100%	99%	96%	89%	80%	69%	59%	51%	42%	35%	27%	21%	16%	12%	9%	6%	5%	4%	3%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
27,9°	53,2°	71,5°	99,0%	96,8%



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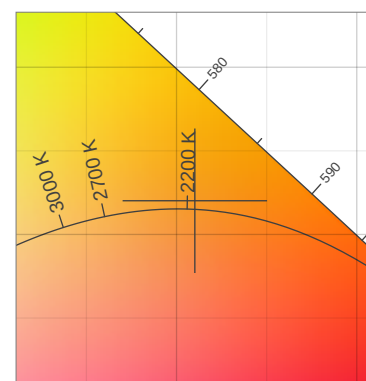
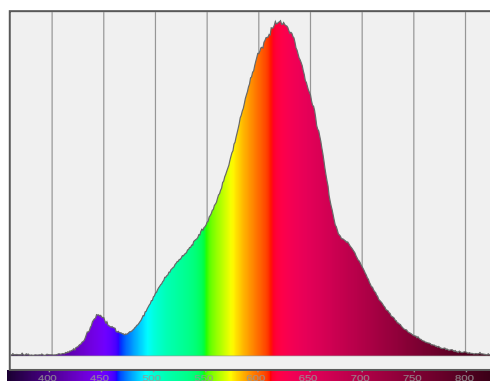
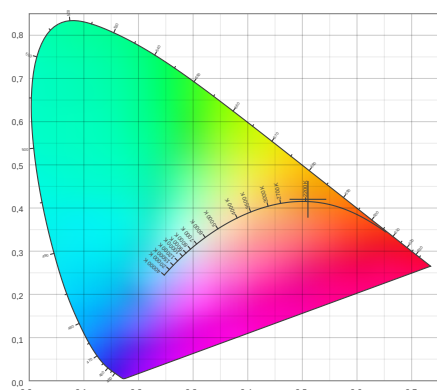
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Color details



CIE 1931

x: 0,510



Spectra

CIE 1931 ZOOM

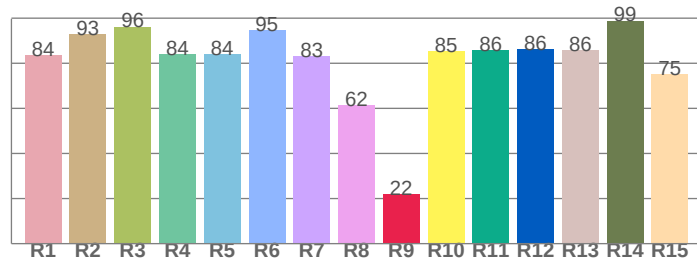
2192 K

y: 0,420

Δuv : 0,0016

CRI: 85,0 (R1-R8)

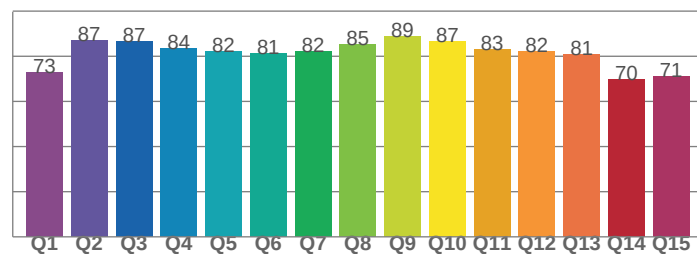
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
83,6	93,0	96,2	84,0	84,0	94,7	83,0	61,5
R9	R10	R11	R12	R13	R14	R15	
21,8	85,3	85,7	86,3	85,7	98,9	75,1	

CQS: 80,1

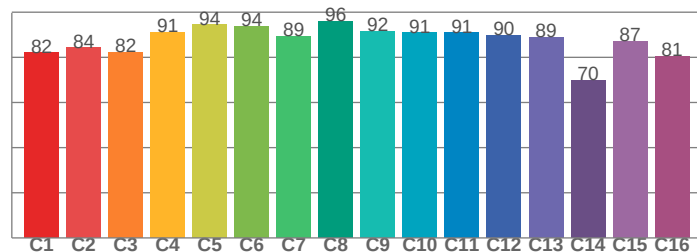
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
72,7	86,9	86,6	83,6	82,1	81,4	82,0	85,2
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
88,8	86,7	82,9	82,2	80,9	69,9	71,2	

TM30: 87,9

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



C1	C2	C3	C4	C5	C6	C7	C8
82,2	84,2	82,3	91,2	94,4	93,8	89,5	96,0
C9	C10	C11	C12	C13	C14	C15	
91,6	91,0	91,0	89,9	88,9	69,9	87,2	

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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2192 K

85,0

21,8

87,9

96,1

80,1

0,510

0,420

0,291

0,359

0,0016

TM30 details

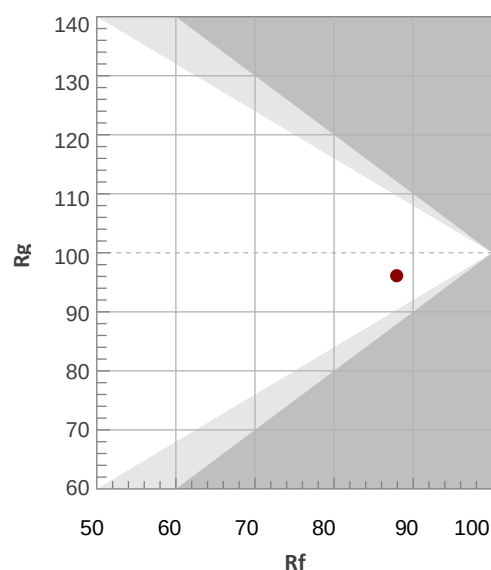
Rf 87,9

Fidelity index Rf

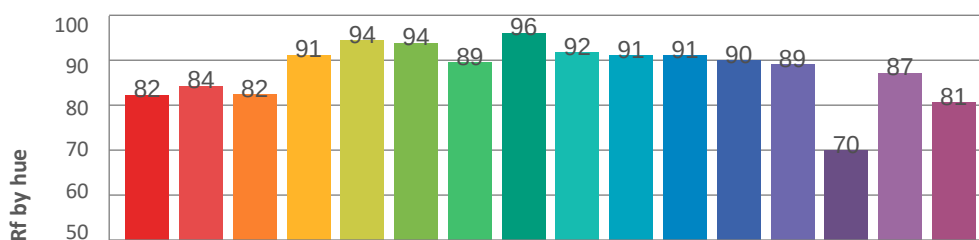
Rg 96,1

Gammut index Rg

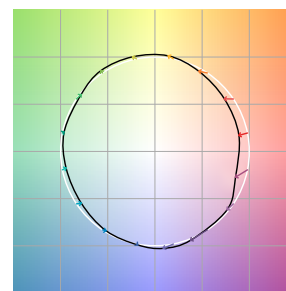
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	82	-9%	-1%
2	84	-8%	5%
3	82	-4%	8%
4	91	2%	6%
5	94	3%	4%
6	94	3%	0%
7	89	-1%	-7%
8	96	-2%	-1%
9	92	-4%	-1%
10	91	-5%	2%
11	91	-1%	4%
12	90	1%	1%
13	89	2%	-11%
14	70	-1%	-21%
15	87	-2%	-9%
16	81	-11%	-10%



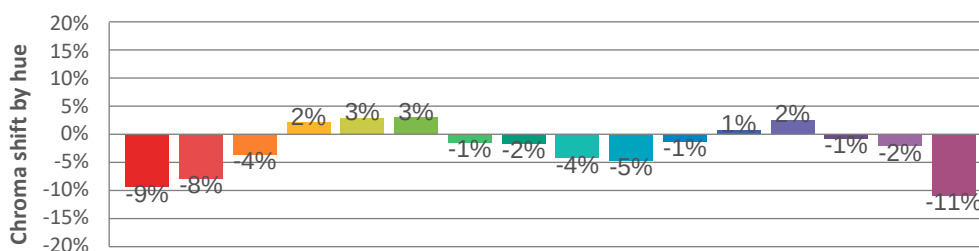
Hue binH



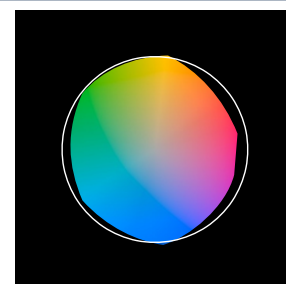
Color vector graphics



Hue bin



Color distortion graphics

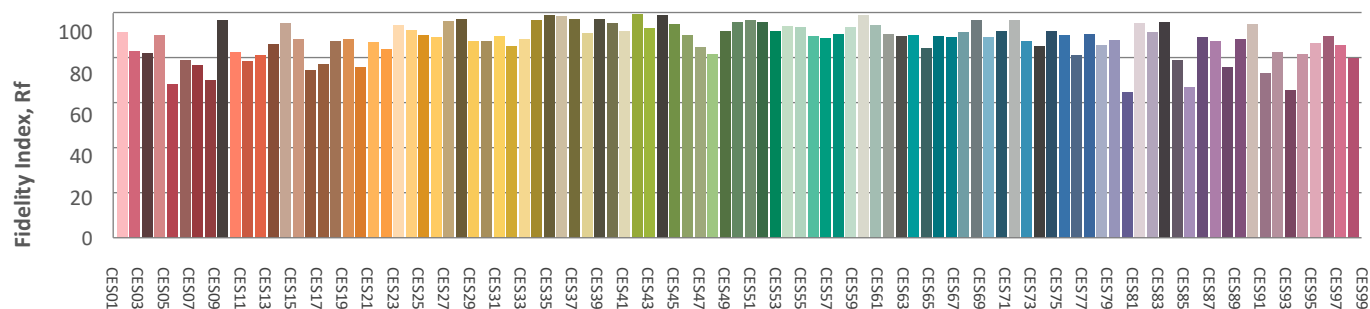


Color Evaluation Sample

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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				
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	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
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 1205lm total luminous flux		



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