

LM-79

Test Report

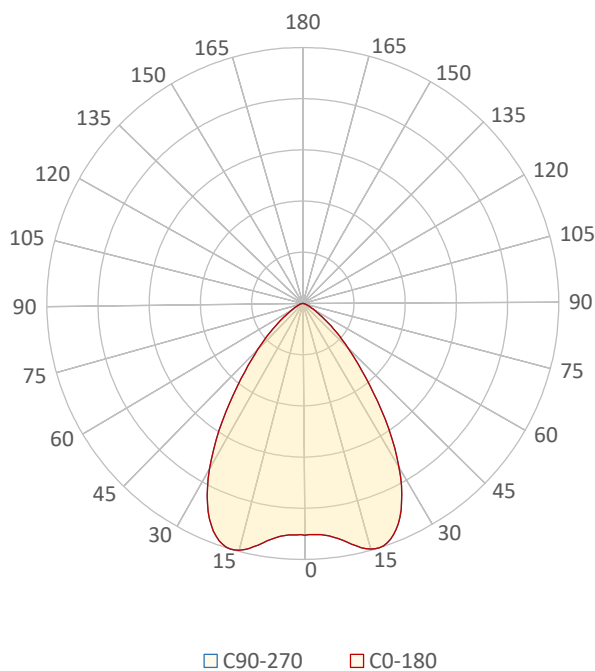
LM79-REVO-COMPACT-2200K-CRI80-DEG80

General Discription

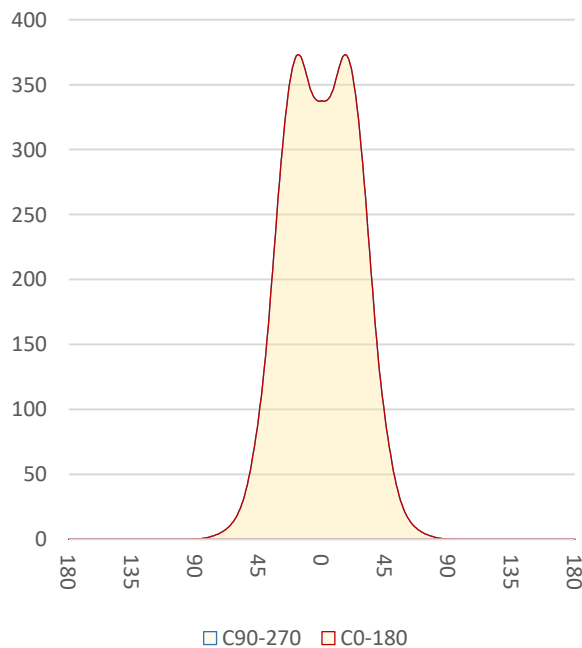
Item number	RC-X-X-08-6
Date and time	29-10-2021 11:35:17
CCT (Kelvin)	2204 K
Beam angle	72,9°
Luminous flux	538 lm
Efficiency	54 lm/watt
Weighted energy	10,0 kWh/1000h
Power factor	0,95
CRI (RA)	85,2
Fidelity index Rf	Rf 87,9
Gammut index Rg	Rg 95,7
Peak	373 cd



Polar diagram



Cartesian diagram



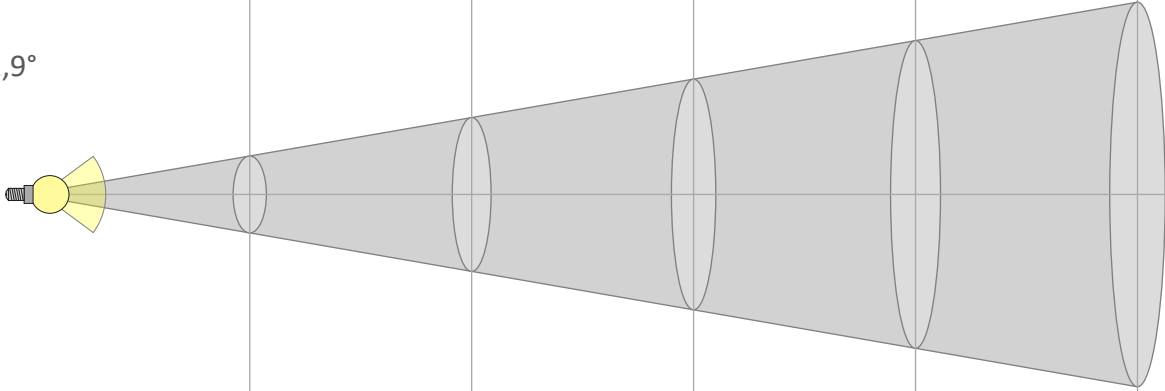
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Beam details		1m		2m		3m		4m		5m									
Lux*		338 lx		84 lx		38 lx		21 lx		14 lx									
72,9° 																			
*measured at center of beam																			
Footcandles*		31,4 fcd		7,8 fcd		3,5 fcd		2,0 fcd		1,3 fcd									
Beam width (meter)		1,5 m		3 m		4,4 m		5,9 m		7,4 m									
Beam width (Feet)		4,9 ft		9,7 ft		14,6 ft		19,4 ft		24,3 ft									
Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
338lx	84lx	38lx	21lx	14lx	9lx	7lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx
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
31,4fcd	7,8fcd	3,5fcd	2fcd	1,3fcd	0,9fcd	0,6fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd
Intensities in 0° c-plane																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
338	339	354	372	367	334	277	207	141	94	58	34	19	11	6	4	2	1	0	0
100%	100%	105%	110%	109%	99%	82%	61%	42%	28%	17%	10%	6%	3%	2%	1%	1%	0%	0%	0%
Intensities in 90° c-plane																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
338	339	354	372	367	334	277	207	141	94	58	34	19	11	6	4	2	1	0	0
100%	100%	105%	110%	109%	99%	82%	61%	42%	28%	17%	10%	6%	3%	2%	1%	1%	0%	0%	0%
Intensities in 180° c-plane																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
338	339	354	372	367	334	277	207	141	94	58	34	19	11	6	4	2	1	0	0
100%	100%	105%	110%	109%	99%	82%	61%	42%	28%	17%	10%	6%	3%	2%	1%	1%	0%	0%	0%
Intensities in 270° c-plane																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
338	339	354	372	367	334	277	207	141	94	58	34	19	11	6	4	2	1	0	0
100%	100%	105%	110%	109%	99%	82%	61%	42%	28%	17%	10%	6%	3%	2%	1%	1%	0%	0%	0%
Beam angle 50%		Field angle 10%			Cutoff angle 2,5%			Intensity ratio in 120° cone			Intensity ratio in 90° cone								
72,9°		108,2°			132,9°			97,0%			85,5%								



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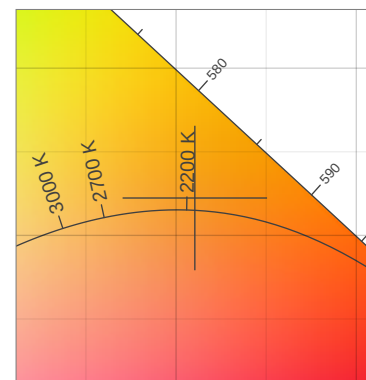
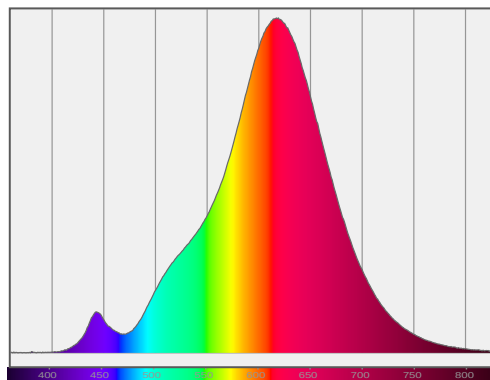
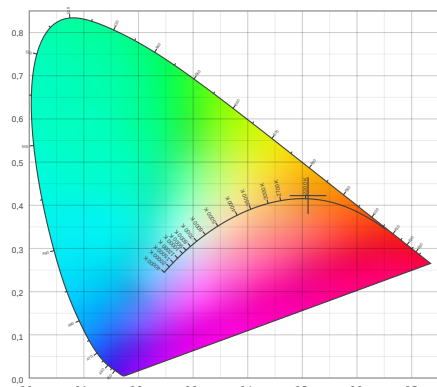
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Color details



CIE 1931

x: 0,510



Spectra

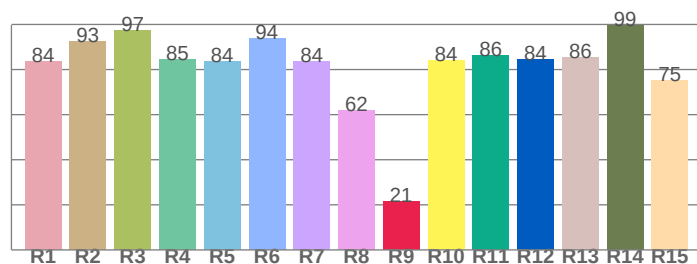
CIE 1931 ZOOM

2204 K

y: 0,422

Δuv : 0,0023

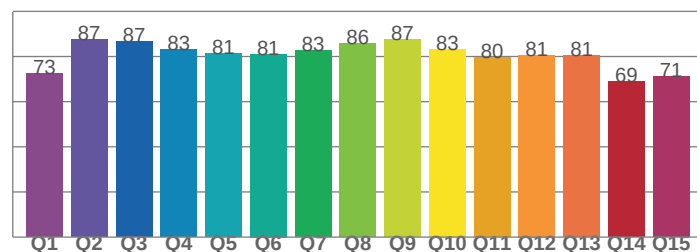
CRI: 85,2 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
83,6	92,5	97,3	84,6	83,8	93,9	83,7	61,9
R9	R10	R11	R12	R13	R14	R15	
21,5	84,1	86,3	84,4	85,5	99,5	75,0	

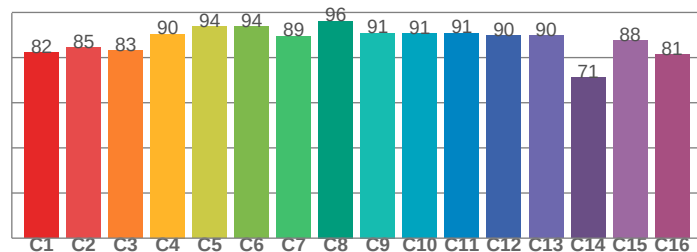
CQS: 79,5



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
72,6	87,5	86,5	83,3	81,5	81,1	82,6	85,9
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
87,5	83,4	79,5	80,7	80,5	69,1	71,0	

TM30: 87,9



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

C1	C2	C3	C4	C5	C6	C7	C8
82,3	84,5	83,1	90,4	93,9	93,8	89,5	96,1
C9	C10	C11	C12	C13	C14	C15	
91,0	90,7	90,8	89,7	89,7	71,2	87,6	

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
2204 K	85,2	21,5	87,9	95,7	79,5	0,510	0,422	0,290	0,360	0,0023



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TM30 details

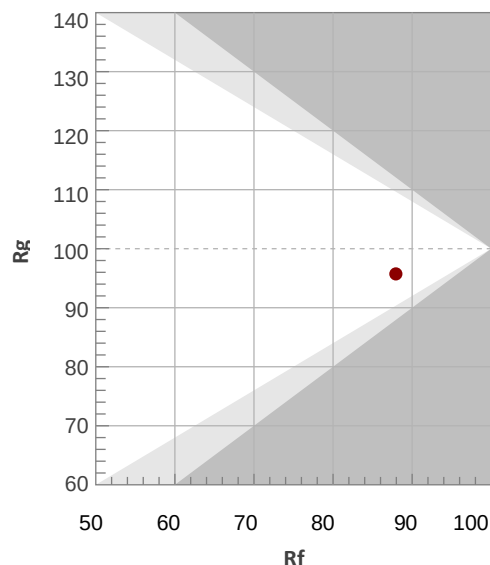
Rf 87,9

Fidelity index R_f

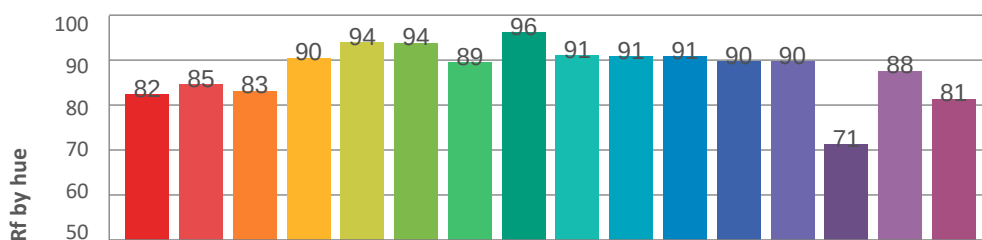
Rg 95,7

Gammut index Rg

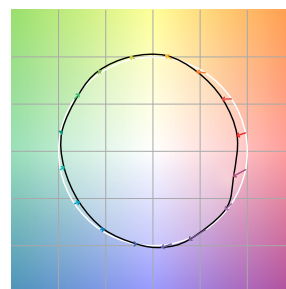
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	82	-9%	-1%
2	85	-8%	5%
3	83	-4%	8%
4	90	2%	6%
5	94	3%	4%
6	94	3%	0%
7	89	-1%	-7%
8	96	-1%	-2%
9	91	-4%	-2%
10	91	-5%	1%
11	91	-2%	3%
12	90	0%	2%
13	90	2%	-10%
14	71	-1%	-20%
15	88	-2%	-9%
16	81	-11%	-9%



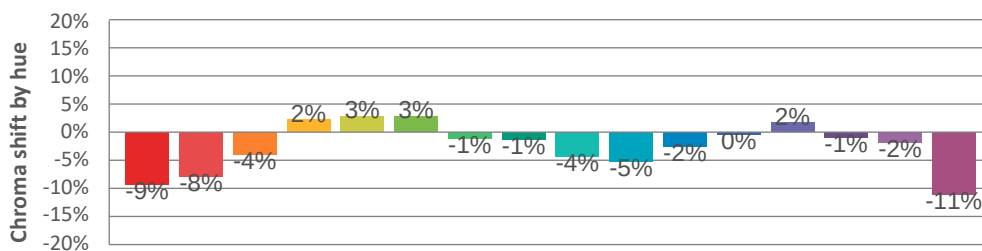
Hue binH



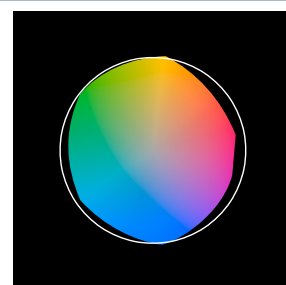
Color vector graphics



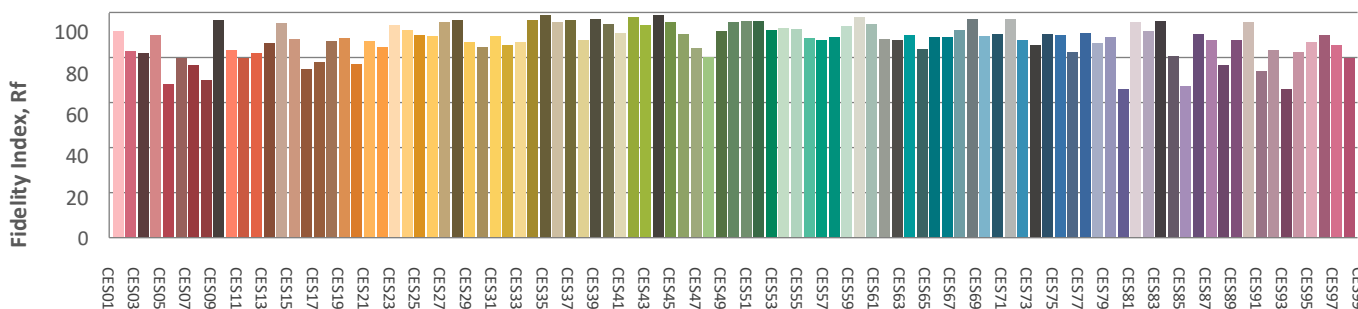
Hue bin



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				
2H	2H	22,7	23,5	22,9	23,8	24,0	22,7	23,5	22,9	23,8	24,0
	3H	22,6	23,5	23,0	23,7	23,9	22,6	23,5	23,0	23,7	23,9
	4H	22,6	23,4	23,0	23,7	23,9	22,6	23,4	23,0	23,7	23,9
	6H	22,6	23,3	22,9	23,6	24,0	22,6	23,3	22,9	23,6	24,0
	8H	22,6	23,3	22,9	23,6	24,0	22,6	23,3	22,9	23,6	24,0
	12H	22,5	23,2	22,9	23,6	24,0	22,5	23,2	22,9	23,6	24,0
4H	2H	22,5	23,4	22,9	23,7	23,9	22,5	23,4	22,9	23,7	23,9
	3H	22,6	23,3	23,0	23,7	24,1	22,6	23,3	23,0	23,7	24,1
	4H	22,6	23,2	23,0	23,6	24,1	22,6	23,2	23,0	23,6	24,1
	6H	22,5	23,2	23,0	23,5	23,9	22,5	23,2	23,0	23,5	23,9
	8H	22,5	23,1	23,0	23,4	23,8	22,5	23,1	23,0	23,4	23,8
	12H	22,5	22,9	23,0	23,3	23,8	22,5	22,9	23,0	23,3	23,8
8H	4H	22,5	23,1	23,0	23,4	23,8	22,5	23,1	23,0	23,4	23,8
	6H	22,5	22,9	23,0	23,4	23,9	22,5	22,9	23,0	23,4	23,9
	8H	22,5	22,8	23,0	23,4	24,0	22,5	22,8	23,0	23,4	24,0
	12H	22,5	22,8	23,1	23,3	23,9	22,5	22,8	23,1	23,3	23,9
12H	4H	22,4	22,9	22,9	23,3	23,8	22,4	22,9	22,9	23,3	23,8
	6H	22,5	22,8	23,0	23,4	24,0	22,5	22,8	23,0	23,4	24,0
	8H	22,5	22,8	23,1	23,3	23,9	22,5	22,8	23,1	23,3	23,9
Variation of the observer position for the luminaire distance S											
S = 1.0H		2,0 / -2,7					2,0 / -2,7				
S = 1.5H		4,0 / -4,9					4,0 / -4,9				
S = 2.0H		5,7 / -6,4					5,7 / -6,4				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 538lm total luminous flux											