

LM-79

Test Report

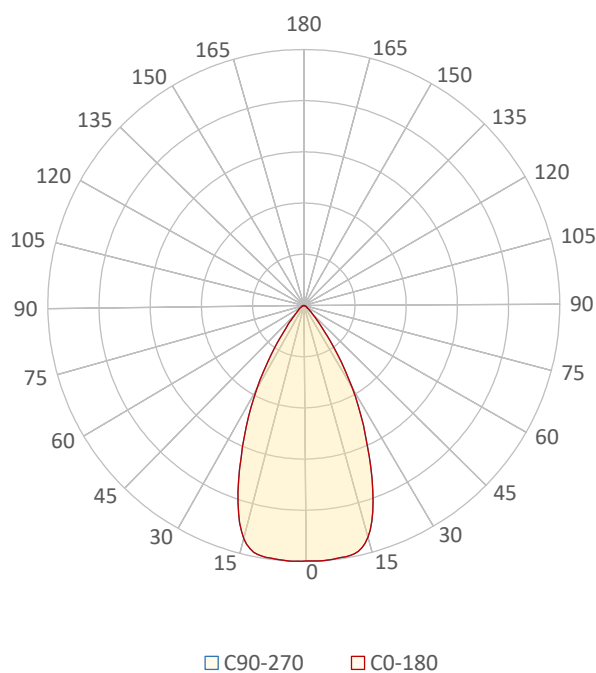
LM79-REVO-COMPACT-2200K-CRI80-DEG61

General Discription

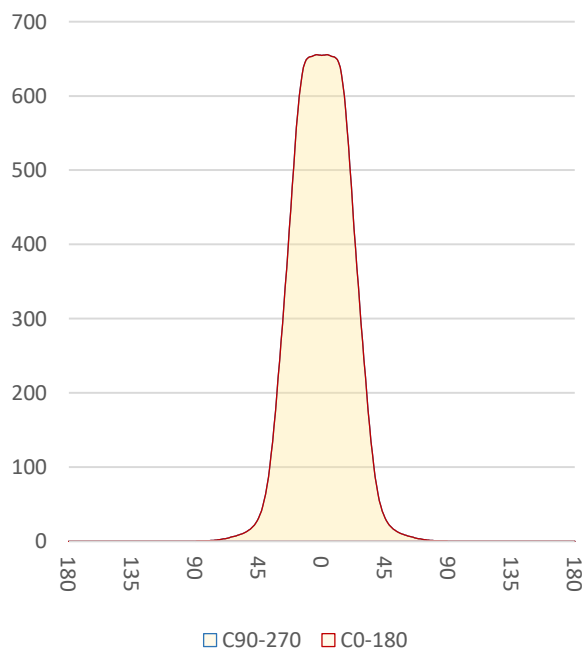
Item number	RC-X-X-08-4
Date and time	29-10-2021 11:49:21
CCT (Kelvin)	2191 K
Beam angle	53,2°
Luminous flux	530 lm
Efficiency	53 lm/watt
Weighted energy	10,0 kWh/1000h
Power factor	0,95
CRI (RA)	85,9
Fidelity index Rf	Rf 88,2
Gammut index Rg	Rg 96,5
Peak	656 cd



Polar diagram



Cartesian diagram



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Beam details	1m	2m	3m	4m	5m
Lux*	655 lx	164 lx	73 lx	41 lx	26 lx

*measured at center of beam

Footcandles*	60,8 fcd	15,2 fcd	6,8 fcd	3,8 fcd	2,4 fcd
Beam width (meter)	1 m	2 m	3 m	4 m	5 m
Beam width (Feet)	3,3 ft	6,6 ft	9,9 ft	13,1 ft	16,4 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
655lx	164lx	73lx	41lx	26lx	18lx	13lx	10lx	8lx	7lx	5lx	5lx	4lx	3lx	3lx	3lx	2lx	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
60,8fcd	15,2fcd	6,8fcd	3,8fcd	2,4fcd	1,7fcd	1,2fcd	1fcd	0,8fcd	0,6fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	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°
655	655	656	654	653	651	645	629	600	558	506	449	394	343	293	245	198	154	117	86
100%	100%	100%	100%	100%	99%	99%	96%	92%	85%	77%	69%	60%	52%	45%	37%	30%	24%	18%	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°
655	655	656	654	653	651	645	629	600	558	506	449	394	343	293	245	198	154	117	86
100%	100%	100%	100%	100%	99%	99%	96%	92%	85%	77%	69%	60%	52%	45%	37%	30%	24%	18%	13%

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°
655	655	656	654	653	651	645	629	600	558	506	449	394	343	293	245	198	154	117	86
100%	100%	100%	100%	100%	99%	99%	96%	92%	85%	77%	69%	60%	52%	45%	37%	30%	24%	18%	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°
655	655	656	654	653	651	645	629	600	558	506	449	394	343	293	245	198	154	117	86
100%	100%	100%	100%	100%	99%	99%	96%	92%	85%	77%	69%	60%	52%	45%	37%	30%	24%	18%	13%

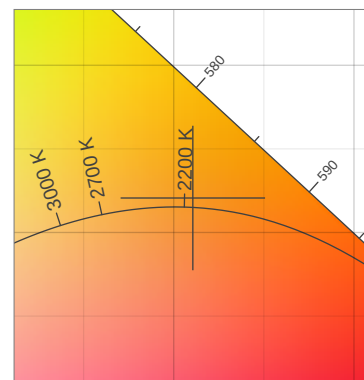
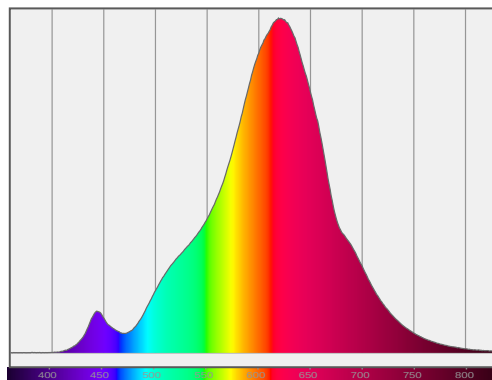
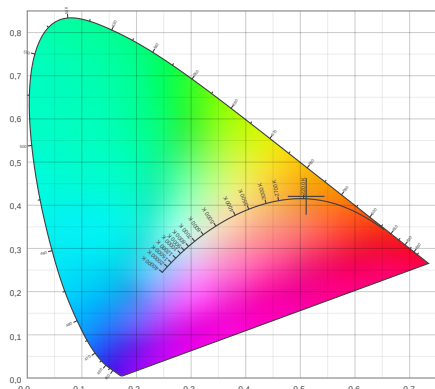
Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
53,2°	79,6°	101,9°	98,5%	94,7%

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Color details



CIE 1931

x: 0,511

y: 0,421

Spectra

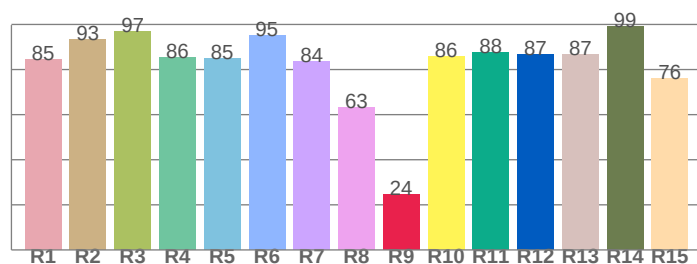
CIE 1931 ZOOM

2191 K

Δuv: 0,0017

CRI: 85,9 (R1-R8)

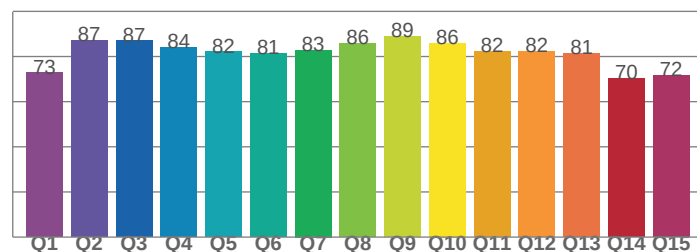
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
84,6	93,2	96,9	85,5	85,0	95,1	83,8	63,0
R9	R10	R11	R12	R13	R14	R15	
24,5	85,7	87,7	86,8	86,5	99,3	76,1	

CQS: 80,3

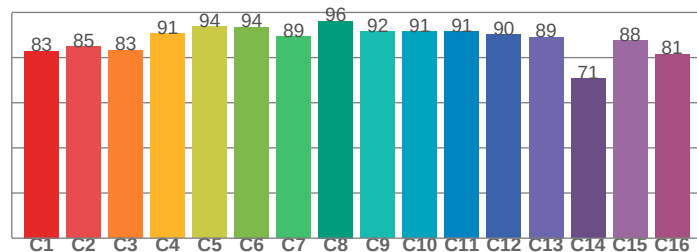
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
72,8	87,0	86,9	83,9	82,1	81,4	82,9	85,9
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
88,7	86,0	82,1	82,3	81,4	70,4	71,6	

TM30: 88,2

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



C1	C2	C3	C4	C5	C6	C7	C8
82,9	84,9	83,3	90,6	93,9	93,6	89,4	96,3
C9	C10	C11	C12	C13	C14	C15	
91,5	91,5	91,4	90,1	89,1	70,7	87,5	

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
2191 K	85,9	24,5	88,2	96,5	80,3	0,511	0,421	0,291	0,359	0,0017



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TM30 details

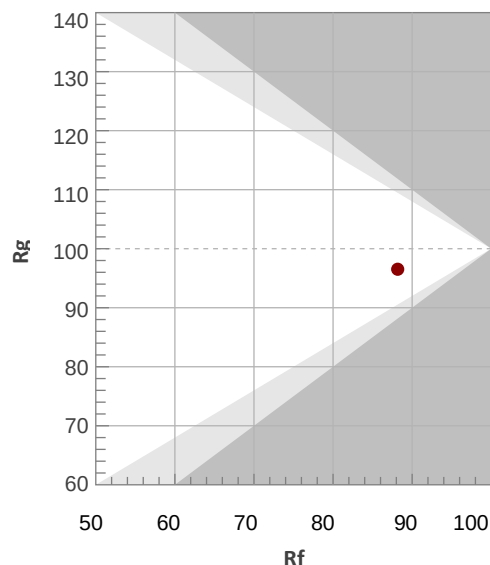
Rf 88,2

Fidelity index R_f

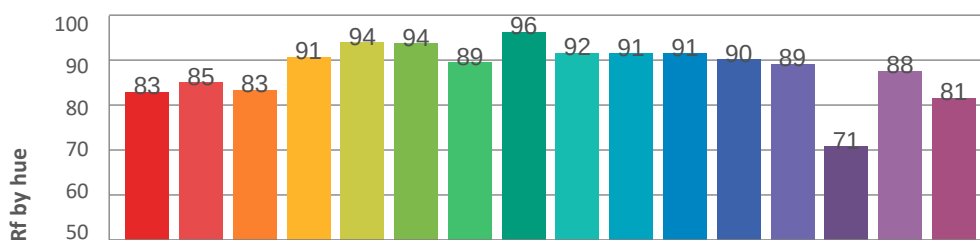
Rg 96,5

Gammut index Rg

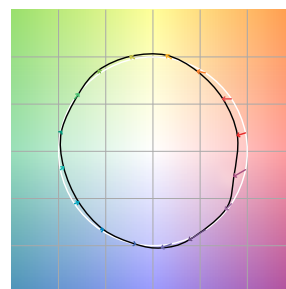
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	83	-9%	-1%
2	85	-8%	5%
3	83	-3%	8%
4	91	3%	6%
5	94	3%	4%
6	94	3%	0%
7	89	-1%	-7%
8	96	-1%	-2%
9	92	-4%	-2%
10	91	-5%	1%
11	91	-2%	2%
12	90	0%	1%
13	89	2%	-11%
14	71	-1%	-20%
15	88	-2%	-9%
16	81	-11%	-9%



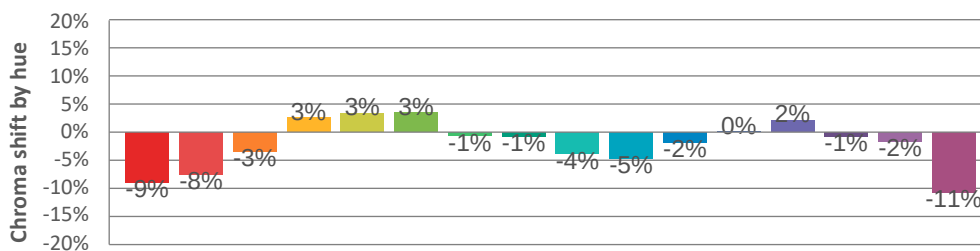
Hue binH



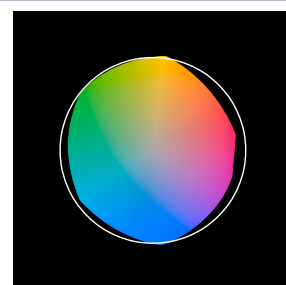
Color vector graphics



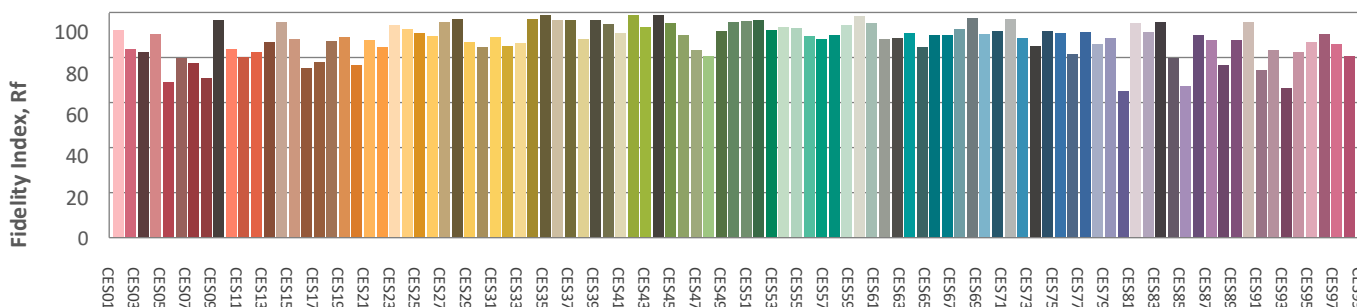
Hue bin



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	18,0	18,6	18,1	18,8	19,0	18,0	18,6	18,1	18,8	19,0
	3H	17,8	18,6	18,2	18,8	19,0	17,8	18,6	18,2	18,8	19,0
	4H	17,8	18,5	18,2	18,8	19,0	17,8	18,5	18,2	18,8	19,0
	6H	17,8	18,4	18,1	18,7	19,1	17,8	18,4	18,1	18,7	19,1
	8H	17,8	18,4	18,1	18,7	19,1	17,8	18,4	18,1	18,7	19,1
	12H	17,7	18,3	18,1	18,7	19,1	17,7	18,3	18,1	18,7	19,1
4H	2H	17,7	18,4	18,1	18,7	18,9	17,7	18,4	18,1	18,7	18,9
	3H	17,8	18,4	18,2	18,7	19,2	17,8	18,4	18,2	18,7	19,2
	4H	17,8	18,3	18,2	18,7	19,2	17,8	18,3	18,2	18,7	19,2
	6H	17,7	18,3	18,2	18,6	19,0	17,7	18,3	18,2	18,6	19,0
	8H	17,7	18,2	18,2	18,5	18,9	17,7	18,2	18,2	18,5	18,9
	12H	17,6	18,0	18,1	18,5	18,9	17,6	18,0	18,1	18,5	18,9
8H	4H	17,7	18,2	18,2	18,5	18,9	17,7	18,2	18,2	18,5	18,9
	6H	17,7	18,0	18,2	18,5	19,0	17,7	18,0	18,2	18,5	19,0
	8H	17,7	18,0	18,2	18,5	19,1	17,7	18,0	18,2	18,5	19,1
	12H	17,7	17,9	18,2	18,4	19,0	17,7	17,9	18,2	18,4	19,0
12H	4H	17,6	18,0	18,1	18,4	18,9	17,6	18,0	18,1	18,4	18,9
	6H	17,7	17,9	18,2	18,5	19,1	17,7	17,9	18,2	18,5	19,1
	8H	17,6	17,9	18,2	18,4	19,0	17,6	17,9	18,2	18,4	19,0
Variation of the observer position for the luminaire distance S											
S = 1.0H		4,3 / -4,2					4,3 / -4,2				
S = 1.5H		6,8 / -5,1					6,8 / -5,1				
S = 2.0H		8,7 / -6,2					8,7 / -6,2				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 530lm total luminous flux											