

LM-79

Test Report

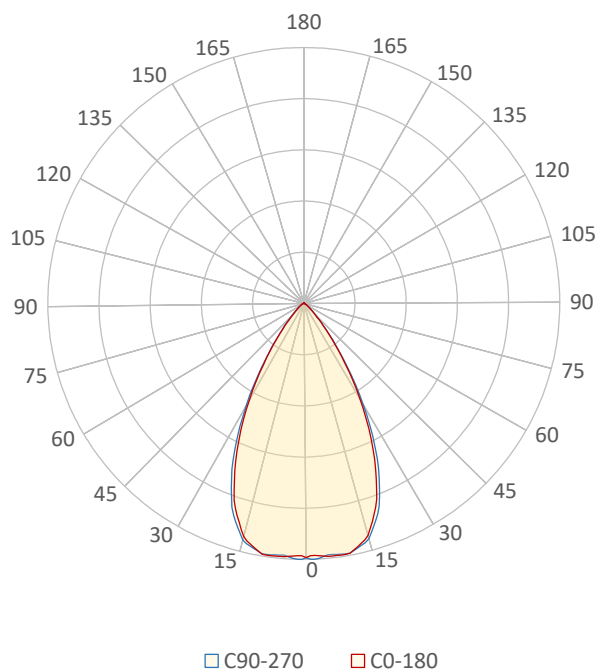
LM79-REVO-XXL-4000K-CRI80-60DEG

General Discription

Item number	RXX-1N-X-2222-4444
Date and time	29-6-2018 15:31:32
CCT (Kelvin)	3868 K
Beam angle	58°
Luminous flux	5964 lm
Efficiency	81 lm/watt
Weighted energy	73,2 kWh/1000h
Power factor	0,96
CRI (RA)	82,8
Fidelity index Rf	Rf 82,4
Gammut index Rg	Rg 98,2
Peak	6591 cd



Polar diagram



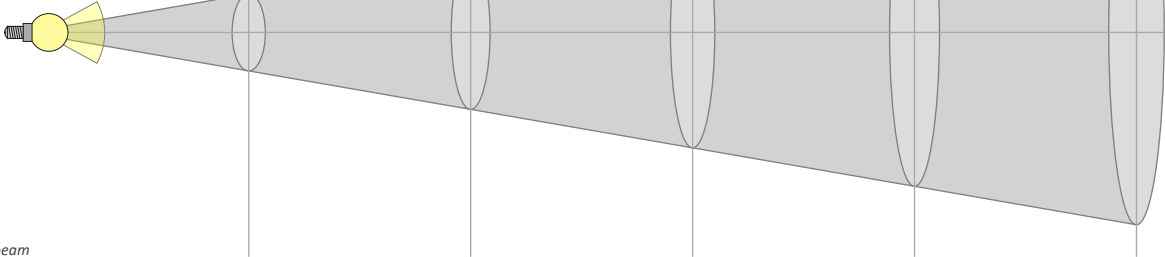
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Beam details				1m		2m		3m		4m		5m							
Lux*				6544 lx		1636 lx		727 lx		409 lx		262 lx							
57,3° 																			
*measured at center of beam																			
Footcandles*				608,0 fcd		152,0 fcd		67,6 fcd		38,0 fcd		24,3 fcd							
Beam width (meter)				1,1 m		2,2 m		3,3 m		4,4 m		5,5 m							
Beam width (Feet)				3,6 ft		7,2 ft		10,8 ft		14,3 ft		17,9 ft							
Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
6544lx	1636lx	727lx	409lx	262lx	182lx	134lx	102lx	81lx	65lx	54lx	45lx	39lx	33lx	29lx	26lx	23lx	20lx	18lx	16lx
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
608fcd	152fcd	67,6fcd	38fcd	24,3fcd	16,9fcd	12,4fcd	9,5fcd	7,5fcd	6,1fcd	5fcd	4,2fcd	3,6fcd	3,1fcd	2,7fcd	2,4fcd	2,1fcd	1,9fcd	1,7fcd	1,5fcd
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°
6544	6497	6526	6545	6549	6541	6414	6287	6041	5724	5378	4895	4412	3897	3369	2853	2369	1886	1505	1150
100%	99%	100%	100%	100%	100%	98%	96%	92%	87%	82%	75%	67%	60%	51%	44%	36%	29%	23%	18%
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°
6544	6591	6532	6507	6526	6536	6446	6356	6149	5872	5565	5111	4656	4127	3568	3018	2493	1968	1565	1194
100%	101%	100%	99%	100%	100%	99%	97%	94%	90%	85%	78%	71%	63%	55%	46%	38%	30%	24%	18%
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°
6544	6497	6526	6545	6549	6541	6414	6287	6041	5724	5378	4895	4412	3897	3369	2853	2369	1886	1505	1150
100%	99%	100%	100%	100%	100%	98%	96%	92%	87%	82%	75%	67%	60%	51%	44%	36%	29%	23%	18%
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°
6544	6591	6532	6507	6526	6536	6446	6356	6149	5872	5565	5111	4656	4127	3568	3018	2493	1968	1565	1194
100%	101%	100%	99%	100%	100%	99%	97%	94%	90%	85%	78%	71%	63%	55%	46%	38%	30%	24%	18%
Beam angle 50%				Field angle 10%				Cutoff angle 2,5%				Intensity ratio in 120° cone				Intensity ratio in 90° cone			
57,3°				84,3°				106,4°				98,0%				93,8%			



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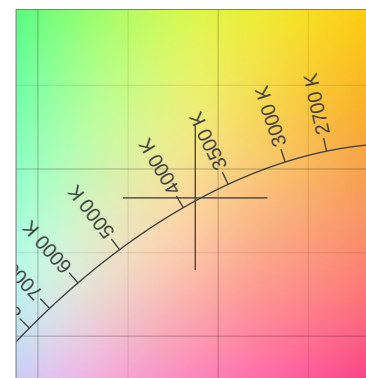
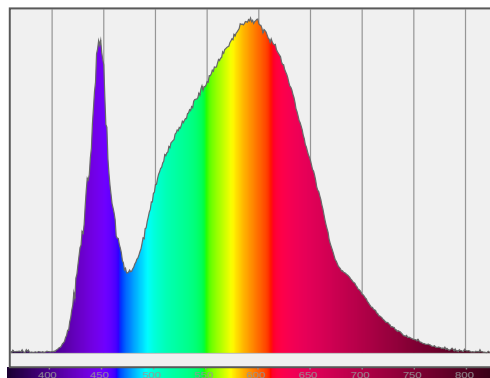
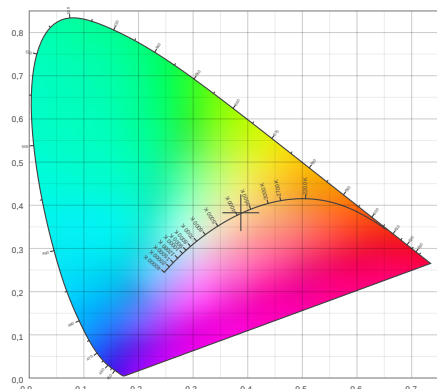
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Color details



CIE 1931

x: 0,387

3868 K

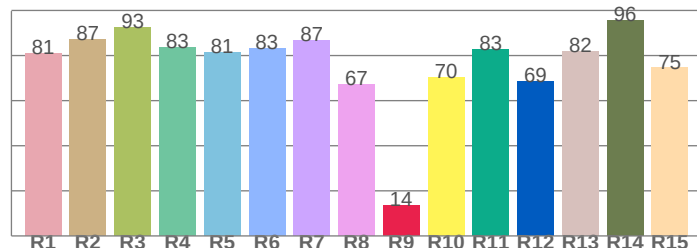
y: 0,383

Spectra

CIE 1931 ZOOM

Δuv : 0,0008

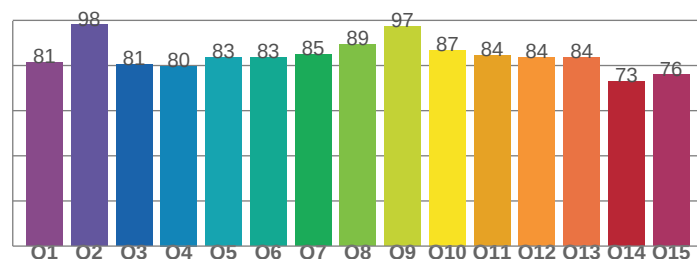
CRI: 82,8 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
81,0	87,1	92,6	83,5	81,4	83,1	86,6	67,1
R9	R10	R11	R12	R13	R14	R15	
13,7	70,3	82,9	68,6	82,0	95,8	74,6	

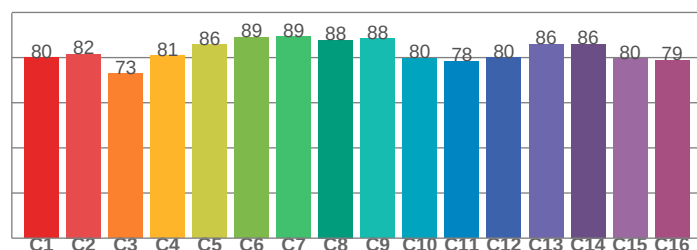
CQS: 83,0



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
81,2	98,0	80,6	79,8	83,5	83,5	84,8	89,4
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
97,2	86,9	84,4	83,5	83,5	73,0	75,9	

TM30: 82,4



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

C1	C2	C3	C4	C5	C6	C7	C8
80,0	81,6	72,9	81,0	85,7	89,0	89,3	87,8
C9	C10	C11	C12	C13	C14	C15	
88,3	79,8	78,4	80,1	85,9	86,0	79,6	

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
3868 K	82,8	13,7	82,4	98,2	83,0	0,387	0,383	0,227	0,337	0,0008



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TM30 details

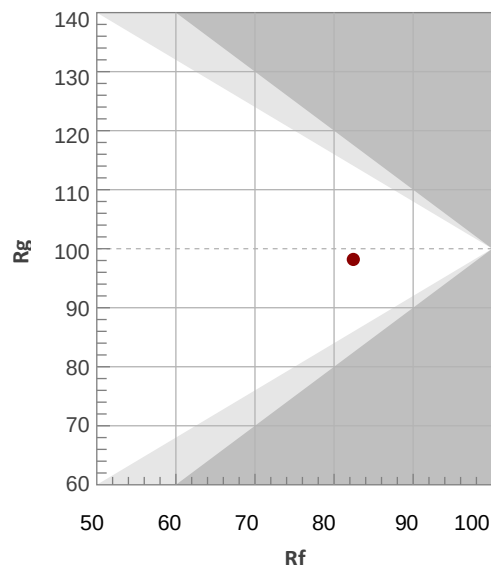
Rf 82,4

Fidelity index Rf

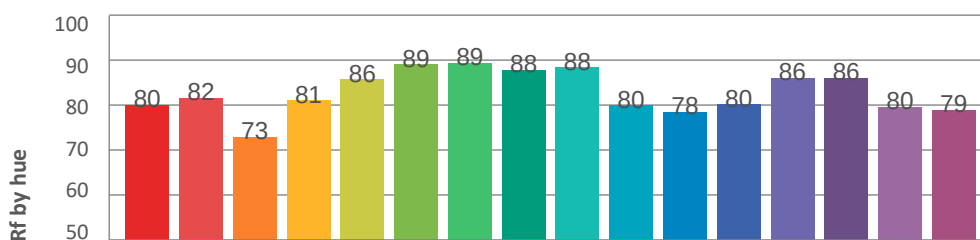
Rg 98,2

Gamut index Rg

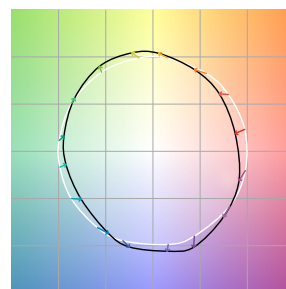
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	80	-11%	-2%
2	82	-8%	6%
3	73	-4%	13%
4	81	3%	10%
5	86	7%	6%
6	89	6%	-2%
7	89	0%	-6%
8	88	-4%	-5%
9	88	-7%	-1%
10	80	-8%	6%
11	78	-1%	13%
12	80	5%	8%
13	86	7%	-2%
14	86	9%	-7%
15	80	1%	-13%
16	79	-5%	-12%



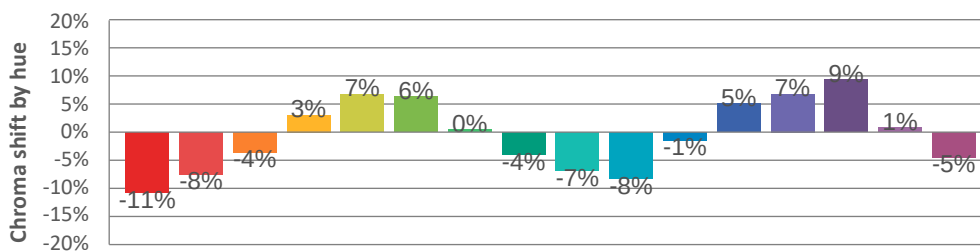
Hue binH



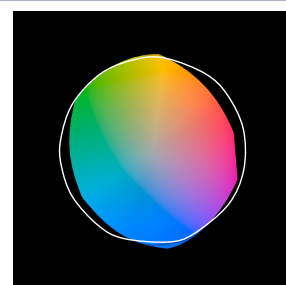
Color vector graphics



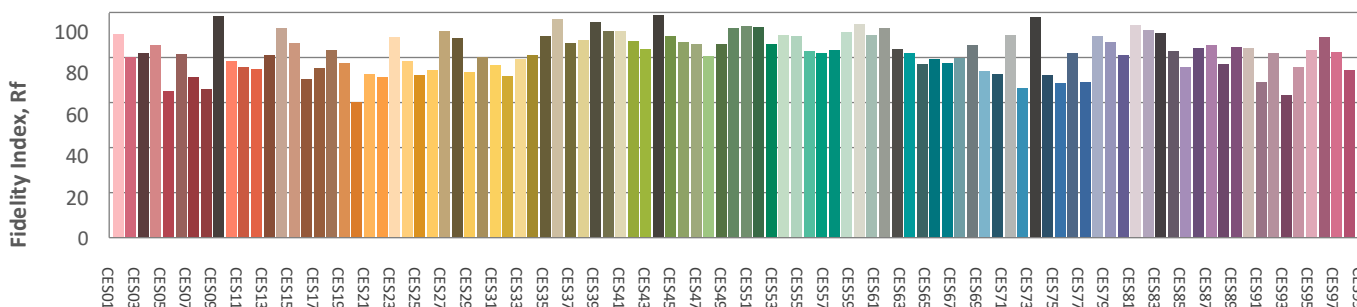
Hue bin



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	18,2	18,9	18,5	19,1	19,3	18,4	19,1	18,6	19,3	19,5
	3H	18,2	18,8	18,5	19,1	19,3	18,3	19,0	18,6	19,2	19,5
	4H	18,1	18,8	18,5	19,0	19,3	18,3	18,9	18,6	19,2	19,5
	6H	18,1	18,7	18,4	18,9	19,2	18,3	18,8	18,6	19,1	19,4
	8H	18,1	18,6	18,4	18,9	19,2	18,2	18,8	18,6	19,1	19,4
	12H	18,0	18,5	18,4	18,8	19,2	18,2	18,7	18,5	19,0	19,3
4H	2H	18,1	18,7	18,4	19,0	19,2	18,3	18,9	18,6	19,1	19,4
	3H	18,1	18,6	18,5	18,9	19,3	18,3	18,8	18,6	19,1	19,4
	4H	18,1	18,5	18,5	18,9	19,2	18,3	18,7	18,6	19,0	19,4
	6H	18,0	18,4	18,4	18,8	19,2	18,2	18,6	18,6	18,9	19,3
	8H	18,0	18,3	18,4	18,7	19,1	18,2	18,5	18,6	18,9	19,3
	12H	18,0	18,3	18,4	18,7	19,1	18,1	18,4	18,6	18,8	19,3
8H	4H	18,0	18,3	18,4	18,7	19,1	18,2	18,5	18,6	18,9	19,3
	6H	18,0	18,2	18,4	18,6	19,1	18,1	18,4	18,6	18,8	19,3
	8H	17,9	18,1	18,4	18,6	19,1	18,1	18,3	18,6	18,7	19,2
	12H	17,9	18,1	18,4	18,5	19,0	18,0	18,2	18,5	18,7	19,2
12H	4H	18,0	18,3	18,4	18,7	19,1	18,1	18,4	18,6	18,8	19,3
	6H	17,9	18,1	18,4	18,6	19,1	18,1	18,3	18,6	18,7	19,2
	8H	17,9	18,1	18,4	18,5	19,0	18,0	18,2	18,5	18,7	19,2
Variation of the observer position for the luminaire distance S											
S = 1,0H		+4,0 / -4,9					+4,0 / -4,9				
S = 1,5H		+6,6 / -6,1					+6,7 / -6,1				
S = 2,0H		+8,5 / -7,1					+8,6 / -7,2				
Standard table		BK00					BK00				
Correction summand		-0,3					-0,1				
Corrected glare indices referring to 5964lm total luminous flux											



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