

LM-79

Test Report

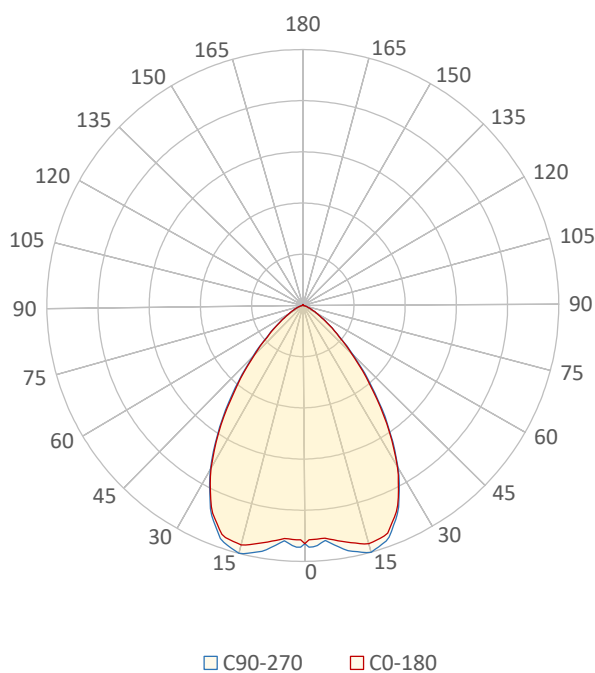
LM79-REVO-XXL-4000K-CRI80-80DEG

General Discription

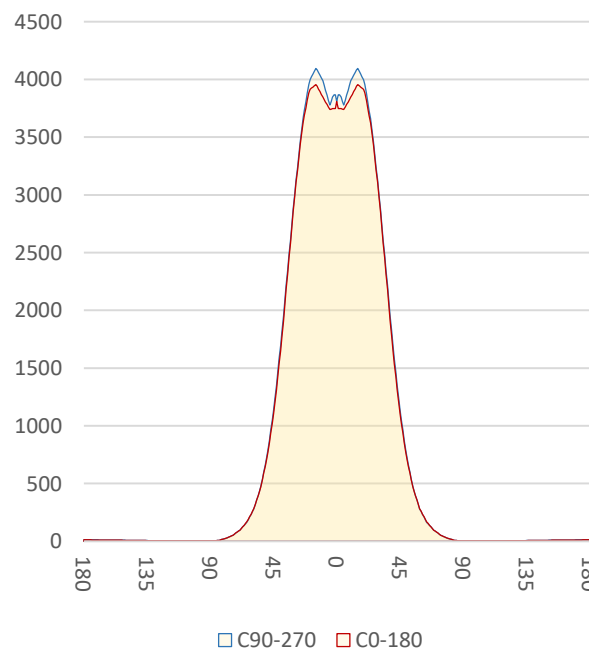
Item number	RXX-1N-X-2222-6666
Date and time	29-6-2018 15:36:29
CCT (Kelvin)	3879 K
Beam angle	74,5°
Luminous flux	6080 lm
Efficiency	83 lm/watt
Weighted energy	73,5 kWh/1000h
Power factor	0,95
CRI (RA)	81,7
Fidelity index Rf	Rf 81,7
Gammut index Rg	Rg 97,7
Peak	4101 cd



Polar diagram



Cartesian diagram



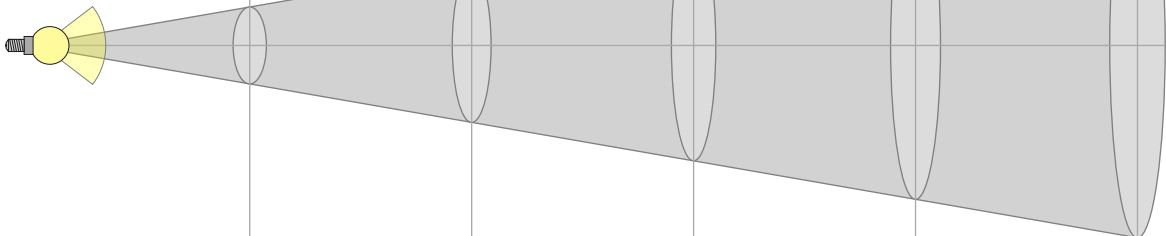
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Beam details				1m		2m		3m		4m		5m							
Lux*				3808 lx		952 lx		423 lx		238 lx		152 lx							
74,7° 																			
*measured at center of beam																			
Footcandles*				353,8 fcd		88,5 fcd		39,3 fcd		22,1 fcd		14,2 fcd							
Beam width (meter)				1,5 m		3,1 m		4,6 m		6,1 m		7,6 m							
Beam width (Feet)				5 ft		10 ft		15 ft		20 ft		25 ft							
Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3808lx	952lx	423lx	238lx	152lx	106lx	78lx	60lx	47lx	38lx	31lx	26lx	23lx	19lx	17lx	15lx	13lx	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
353,8fcd	88,5fcd	39,3fcd	22,1fcd	14,2fcd	9,8fcd	7,2fcd	5,5fcd	4,4fcd	3,5fcd	2,9fcd	2,5fcd	2,1fcd	1,8fcd	1,6fcd	1,4fcd	1,2fcd	1,1fcd	1fcd	0,9fcd
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°
3808	3741	3847	3956	3885	3540	2987	2318	1649	1106	706	433	259	154	88	48	22	7	2	2
100%	98%	101%	104%	102%	93%	78%	61%	43%	29%	19%	11%	7%	4%	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°
3808	3777	3989	4095	3956	3571	3008	2350	1697	1140	723	436	257	150	88	47	22	8	2	2
100%	99%	105%	108%	104%	94%	79%	62%	45%	30%	19%	11%	7%	4%	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°
3808	3741	3847	3956	3885	3540	2987	2318	1649	1106	706	433	259	154	88	48	22	7	2	2
100%	98%	101%	104%	102%	93%	78%	61%	43%	29%	19%	11%	7%	4%	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°
3808	3777	3989	4095	3956	3571	3008	2350	1697	1140	723	436	257	150	88	47	22	8	2	2
100%	99%	105%	108%	104%	94%	79%	62%	45%	30%	19%	11%	7%	4%	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			
74,7°				111,6°				137,3°				95,9%				83,3%			



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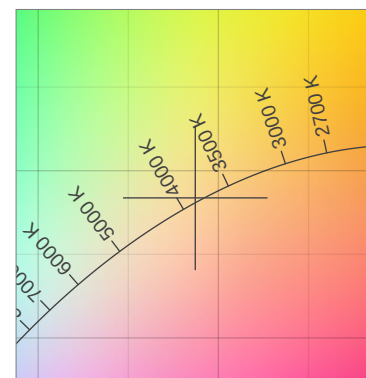
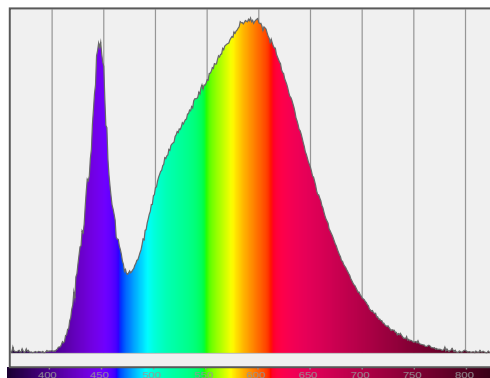
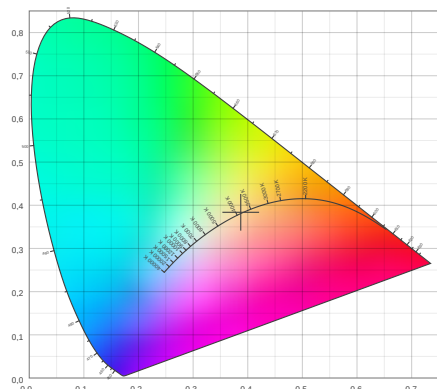
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Color details



CIE 1931

x: 0,387

3879 K

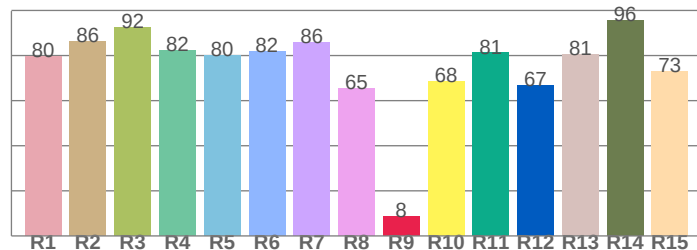
y: 0,384

Spectra

CIE 1931 ZOOM

Δuv : 0,0013

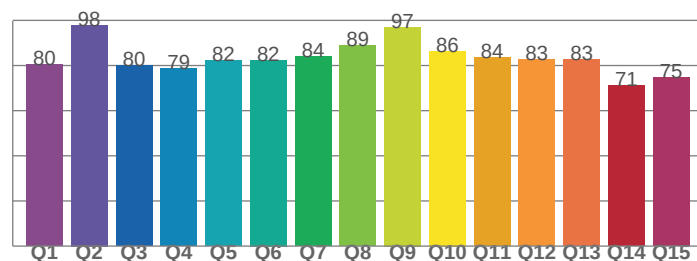
CRI: **81,7** (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
79,6	86,3	92,4	82,2	80,0	81,9	86,0	65,3
R9	R10	R11	R12	R13	R14	R15	
8,5	68,4	81,2	66,7	80,7	95,7	72,9	

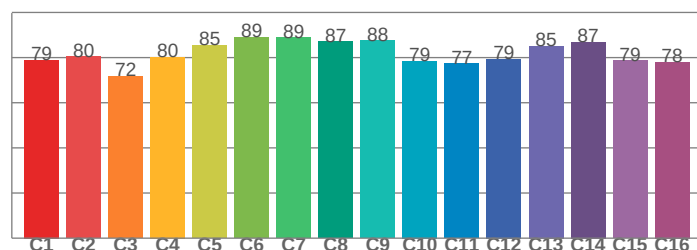
CQS: **82,1**



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
80,4	98,0	80,0	78,6	82,3	82,4	83,9	88,8
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
97,1	86,4	83,6	82,6	82,6	71,3	74,6	

TM30: **81,7**



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

C1	C2	C3	C4	C5	C6	C7	C8
78,9	80,5	71,8	80,3	85,5	89,0	88,8	87,0
C9	C10	C11	C12	C13	C14	C15	
87,5	78,5	77,4	79,4	85,1	86,9	78,7	

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
3879 K	81,7	8,5	81,7	97,7	82,1	0,387	0,384	0,227	0,337	0,0013



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TM30 details

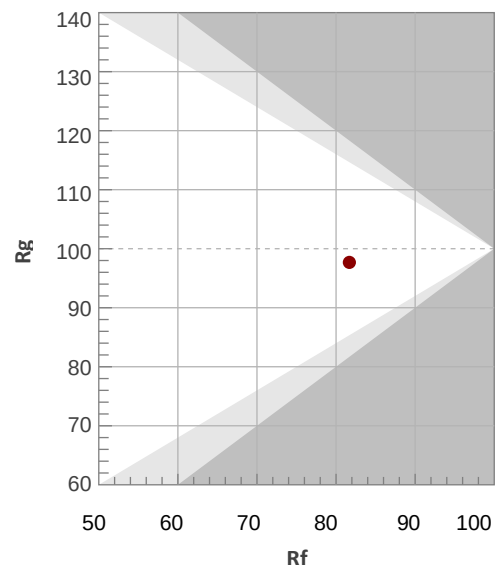
Rf 81,7

Fidelity index R_f

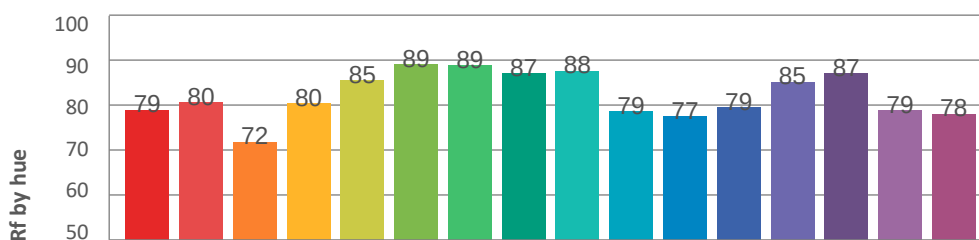
Rg 97,7

Gammut index Rg

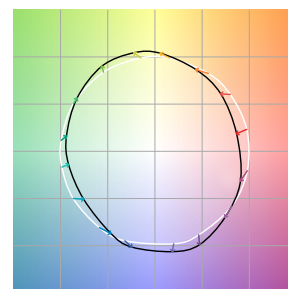
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	79	-11%	-2%
2	80	-8%	6%
3	72	-4%	13%
4	80	3%	11%
5	85	7%	6%
6	89	6%	-2%
7	89	0%	-7%
8	87	-5%	-6%
9	88	-8%	-1%
10	79	-9%	7%
11	77	-2%	14%
12	79	5%	9%
13	85	8%	-3%
14	87	9%	-5%
15	79	1%	-13%
16	78	-5%	-12%



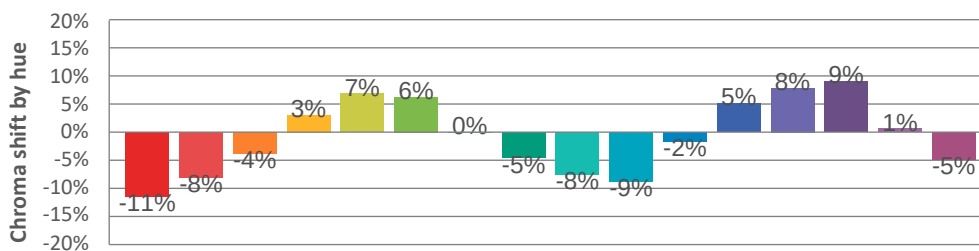
Hue binH



Color vector graphics



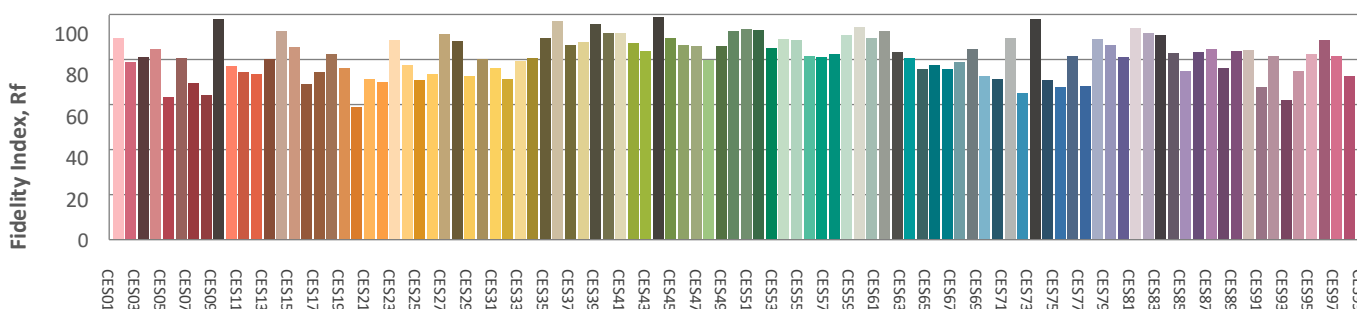
Hue bin



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	22,6	23,5	22,9	23,7	23,9	22,7	23,6	22,9	23,8	24,0
	3H	22,7	23,5	23,0	23,7	24,0	22,7	23,6	23,0	23,8	24,1
	4H	22,7	23,4	23,0	23,7	24,0	22,7	23,5	23,1	23,8	24,0
	6H	22,6	23,3	23,0	23,6	23,9	22,7	23,4	23,0	23,7	24,0
	8H	22,6	23,3	23,0	23,6	23,9	22,7	23,3	23,0	23,6	23,9
	12H	22,6	23,2	22,9	23,5	23,9	22,6	23,3	23,0	23,6	23,9
4H	2H	22,6	23,4	22,9	23,6	23,9	22,7	23,4	23,0	23,7	24,0
	3H	22,7	23,4	23,1	23,7	24,0	22,8	23,4	23,2	23,7	24,1
	4H	22,8	23,3	23,2	23,7	24,0	22,8	23,4	23,2	23,7	24,1
	6H	22,8	23,2	23,2	23,6	24,0	22,8	23,3	23,2	23,6	24,0
	8H	22,7	23,2	23,2	23,5	24,0	22,8	23,2	23,2	23,6	24,0
	12H	22,7	23,1	23,1	23,5	23,9	22,7	23,1	23,2	23,5	24,0
8H	4H	22,7	23,1	23,1	23,5	23,9	22,8	23,2	23,2	23,6	24,0
	6H	22,7	23,0	23,2	23,5	23,9	22,7	23,1	23,2	23,5	24,0
	8H	22,7	23,0	23,2	23,4	23,9	22,7	23,0	23,2	23,5	23,9
	12H	22,6	22,9	23,1	23,4	23,9	22,7	22,9	23,2	23,4	23,9
12H	4H	22,7	23,1	23,1	23,5	23,9	22,7	23,1	23,2	23,5	23,9
	6H	22,7	23,0	23,1	23,4	23,9	22,7	23,0	23,2	23,4	23,9
	8H	22,6	22,9	23,1	23,4	23,9	22,7	22,9	23,2	23,4	23,9
Variation of the observer position for the luminaire distance S											
S = 1,0H		+1,3 / -2,4					+1,3 / -2,4				
S = 1,5H		+3,1 / -4,1					+3,1 / -4,2				
S = 2,0H		+4,9 / -5,5					+4,9 / -5,5				
Standard table		BK01					BK01				
Correction summand		4,8					4,9				
Corrected glare indices referring to 6080lm total luminous flux											



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