

LM-79

Test Report

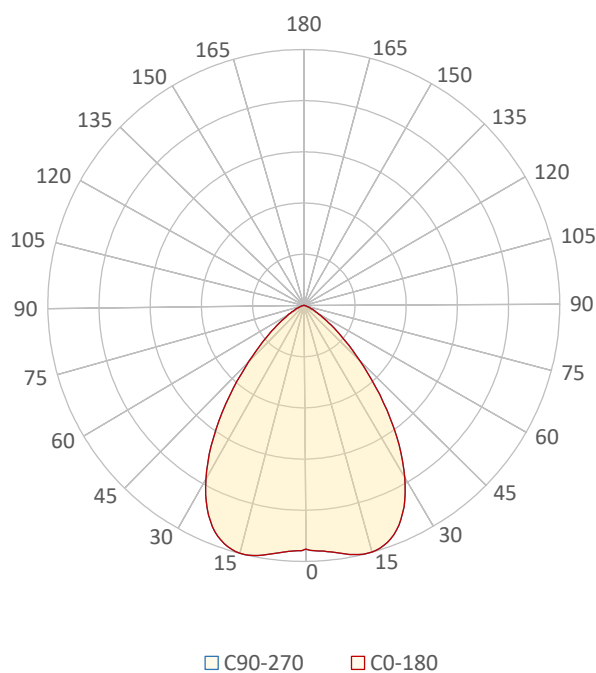
LM79-REVO-COMPACT-2700K-CRI80-DEG80

General Discription

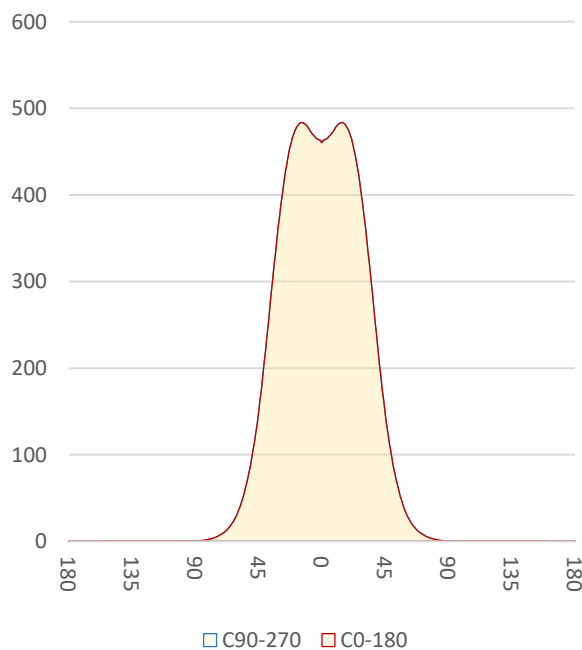
Item number	RC-1-X-04-4
Date and time	16-12-2020 12:57:31
CCT (Kelvin)	2740 K
Beam angle	77,4°
Luminous flux	762 lm
Efficiency	76 lm/watt
Weighted energy	10,1 kWh/1000h
Power factor	0,95
CRI (RA)	83,2
Fidelity index Rf	Rf 87,1
Gammut index Rg	Rg 94,0
Peak	484 cd



Polar diagram



Cartesian diagram



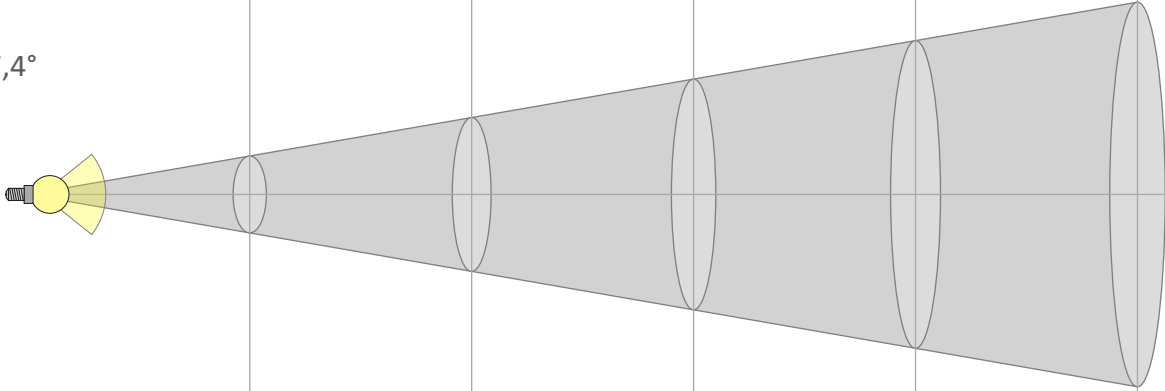
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Beam details				1m		2m		3m		4m		5m							
Lux*				460 lx		115 lx		51 lx		29 lx		18 lx							
77,4° 																			
*measured at center of beam																			
Footcandles*				42,8 fcd		10,7 fcd		4,8 fcd		2,7 fcd		1,7 fcd							
Beam width (meter)				1,6 m		3,2 m		4,8 m		6,4 m		8 m							
Beam width (Feet)				5,3 ft		10,5 ft		15,8 ft		21 ft		26,3 ft							
Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
460lx	115lx	51lx	29lx	18lx	13lx	9lx	7lx	6lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	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
42,8fcd	10,7fcd	4,8fcd	2,7fcd	1,7fcd	1,2fcd	0,9fcd	0,7fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	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°
460	467	478	483	470	435	376	302	221	149	95	57	33	18	10	5	2	1	0	0
100%	101%	104%	105%	102%	94%	82%	66%	48%	32%	21%	12%	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°
460	467	478	483	470	435	376	302	221	149	95	57	33	18	10	5	2	1	0	0
100%	101%	104%	105%	102%	94%	82%	66%	48%	32%	21%	12%	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°
460	467	478	483	470	435	376	302	221	149	95	57	33	18	10	5	2	1	0	0
100%	101%	104%	105%	102%	94%	82%	66%	48%	32%	21%	12%	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°
460	467	478	483	470	435	376	302	221	149	95	57	33	18	10	5	2	1	0	0
100%	101%	104%	105%	102%	94%	82%	66%	48%	32%	21%	12%	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			
77,4°				113°				136,6°				96,4%				83,2%			



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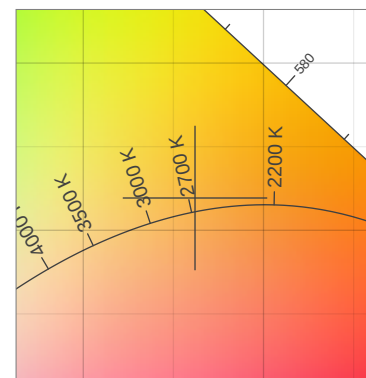
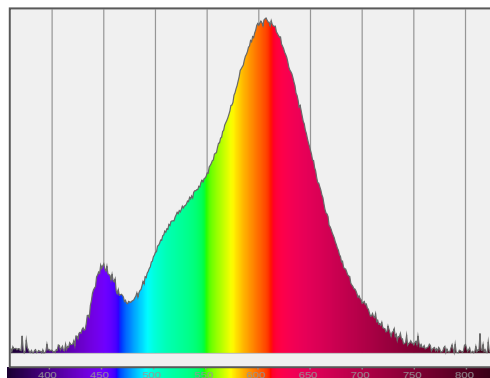
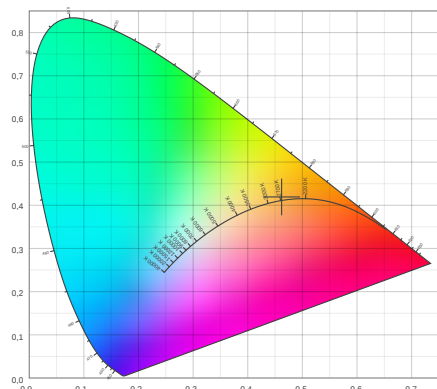
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Color details



CIE 1931

x: 0,462



Spectra

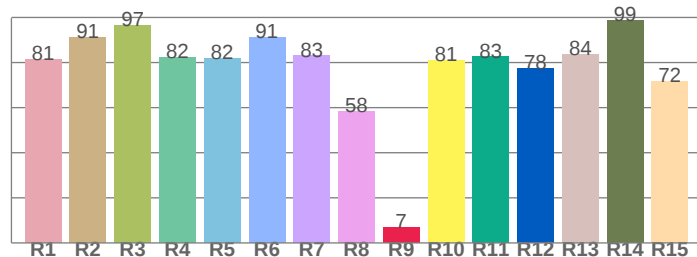
CIE 1931 ZOOM

2740 K

y: 0,419

Δuv : 0,0030

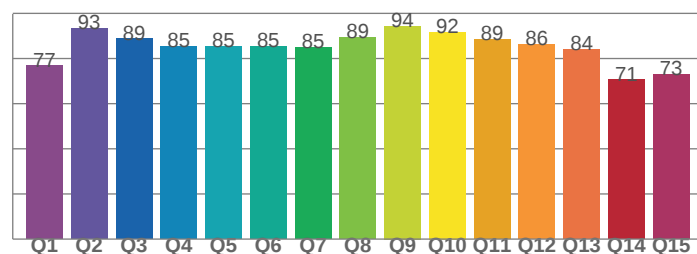
CRI: **83,2** (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
81,3	91,3	96,6	82,1	81,7	91,2	83,0	58,2
R9	R10	R11	R12	R13	R14	R15	
7,1	81,1	82,5	77,6	83,6	98,7	71,8	

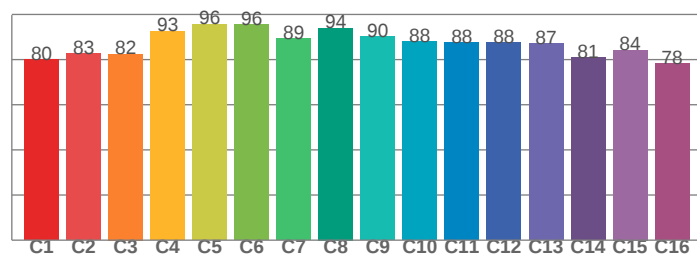
CQS: **83,5**



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
76,8	93,3	88,7	85,4	85,5	85,2	84,9	89,2
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
94,4	91,7	88,5	86,2	84,0	70,6	73,0	

TM30: **87,1**



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

C1	C2	C3	C4	C5	C6	C7	C8
80,0	82,6	82,4	92,6	95,7	95,6	89,4	94,0
C9	C10	C11	C12	C13	C14	C15	
90,1	88,0	87,5	87,6	87,1	80,9	84,2	

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
2740 K	83,2	7,1	87,1	94,0	83,5	0,462	0,419	0,260	0,354	0,0030



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TM30 details

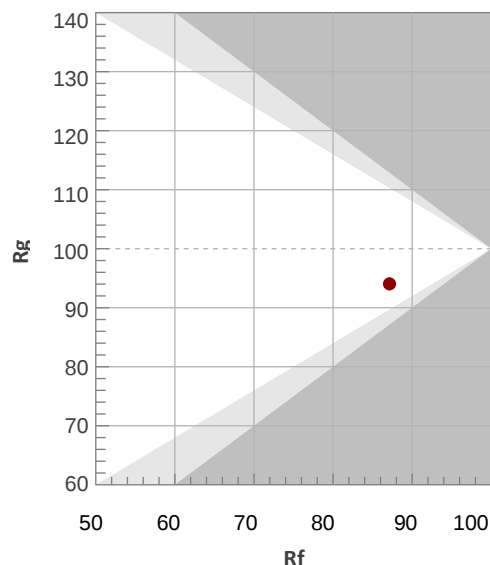
Rf 87,1

Fidelity index R_f

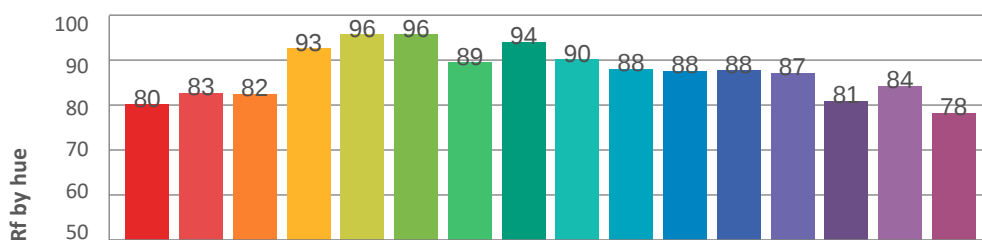
Rg 94,0

Gammut index Rg

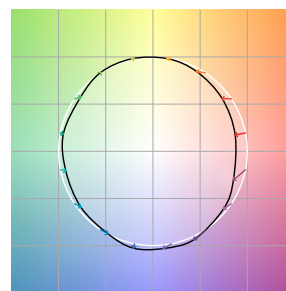
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	80	-11%	0%
2	83	-8%	6%
3	82	-4%	9%
4	93	-1%	4%
5	96	0%	3%
6	96	0%	-1%
7	89	-4%	-6%
8	94	-3%	1%
9	90	-5%	2%
10	88	-4%	7%
11	88	-1%	9%
12	88	5%	0%
13	87	3%	-9%
14	81	2%	-16%
15	84	-4%	-9%
16	78	-10%	-13%



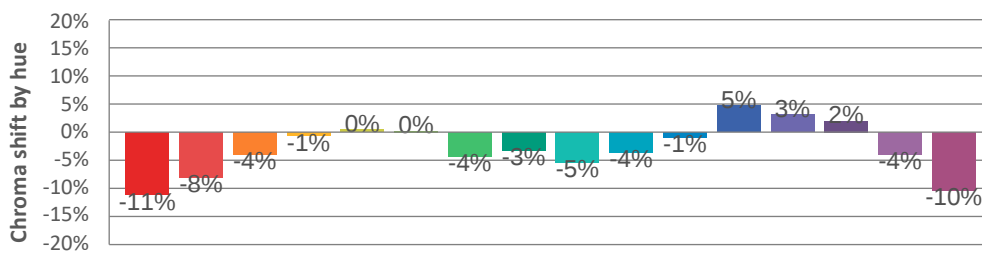
Hue binH



Color vector graphics



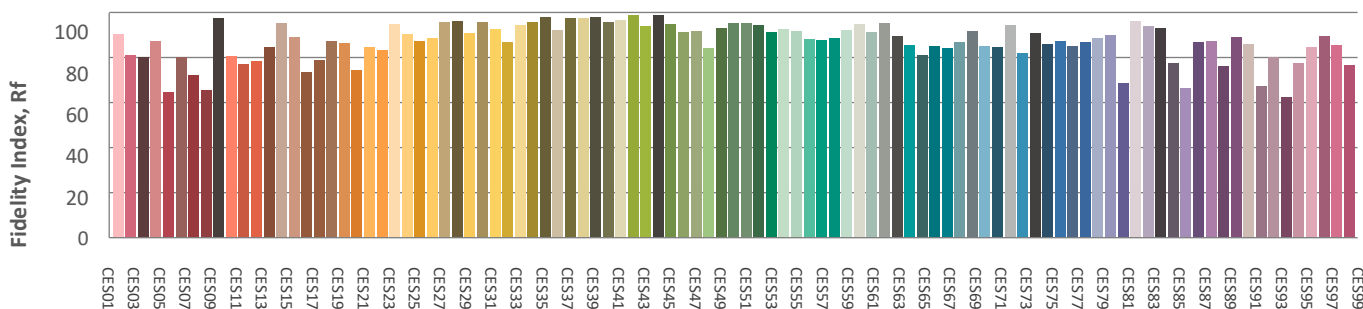
Hue bin



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	24,6	25,5	24,8	25,8	26,0	24,6	25,5	24,8	25,8	26,0
	3H	24,5	25,5	24,9	25,7	25,9	24,5	25,5	24,9	25,7	25,9
	4H	24,5	25,4	24,9	25,6	25,9	24,5	25,4	24,9	25,6	25,9
	6H	24,5	25,3	24,8	25,6	25,9	24,5	25,3	24,8	25,6	25,9
	8H	24,5	25,2	24,8	25,5	25,9	24,5	25,2	24,8	25,5	25,9
	12H	24,4	25,1	24,8	25,5	25,9	24,4	25,1	24,8	25,5	25,9
4H	2H	24,5	25,4	24,9	25,6	25,9	24,5	25,4	24,9	25,6	25,9
	3H	24,6	25,3	24,9	25,6	26,1	24,6	25,3	24,9	25,6	26,1
	4H	24,5	25,2	24,9	25,6	26,1	24,5	25,2	24,9	25,6	26,1
	6H	24,5	25,1	25,0	25,5	25,8	24,5	25,1	25,0	25,5	25,8
	8H	24,4	25,0	24,9	25,4	25,8	24,4	25,0	24,9	25,4	25,8
	12H	24,4	24,9	24,9	25,3	25,7	24,4	24,9	24,9	25,3	25,7
8H	4H	24,4	25,0	24,9	25,4	25,7	24,4	25,0	24,9	25,4	25,7
	6H	24,4	24,8	24,9	25,3	25,8	24,4	24,8	24,9	25,3	25,8
	8H	24,4	24,8	24,9	25,3	25,9	24,4	24,8	24,9	25,3	25,9
	12H	24,4	24,7	25,0	25,2	25,8	24,4	24,7	25,0	25,2	25,8
12H	4H	24,4	24,8	24,9	25,3	25,7	24,4	24,8	24,9	25,3	25,7
	6H	24,4	24,8	24,9	25,3	25,9	24,4	24,8	24,9	25,3	25,9
	8H	24,4	24,7	25,0	25,2	25,8	24,4	24,7	25,0	25,2	25,8
Variation of the observer position for the luminaire distance S											
S = 1.0H		1,5 / -2,4					1,5 / -2,4				
S = 1.5H		3,3 / -4,8					3,3 / -4,8				
S = 2.0H		4,9 / -6,6					4,9 / -6,6				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 762lm total luminous flux											