

LM-79

Test Report

LM79-REVO-COMPACT-4000K-CRI80-DEG54

General Discription

Item number	RC-1-X-02-4
Date and time	5-8-2016 10:44:12
CCT (Kelvin)	3862 K
Beam angle	57,7°
Luminous flux	688 lm
Efficiency	68 lm/watt
Weighted energy	10,2 kWh/1000h
Power factor	0,95
CRI (RA)	83,4
Fidelity index Rf	Rf 84,1
Gammut index Rg	Rg 97,4



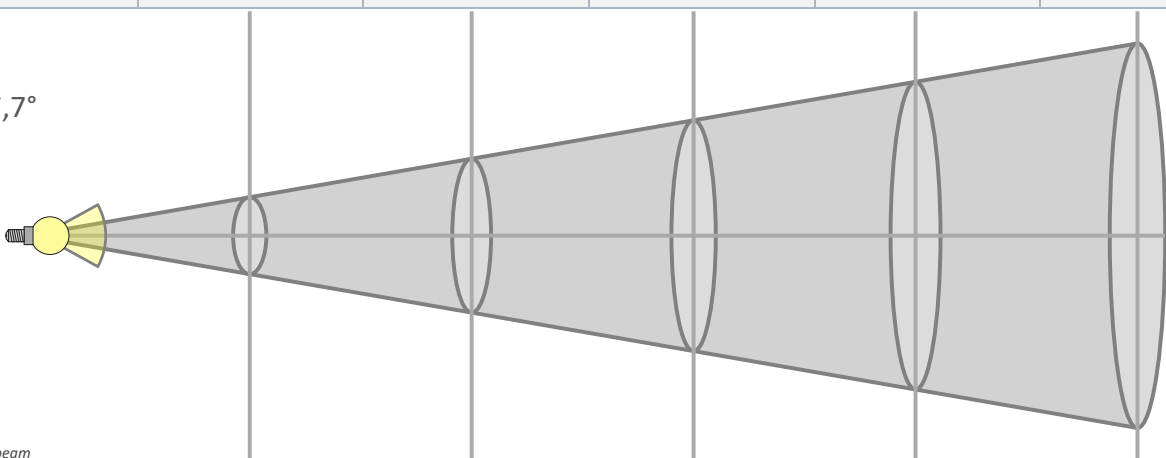
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Beam details		1m		2m		3m		4m		5m									
Lux*		746 lx		187 lx		83 lx		47 lx		30 lx									
57,7° 																			
*measured at center of beam																			
Footcandles*		69,4 fcd		17,3 fcd		7,7 fcd		4,3 fcd		2,8 fcd									
Beam width (meter)		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		14,5 ft		18,1 ft									
Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
746lx	187lx	83lx	47lx	30lx	21lx	15lx	12lx	9lx	7lx	6lx	5lx	4lx	4lx	3lx	3lx	3lx	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
69,4fcd	17,3fcd	7,7fcd	4,3fcd	2,8fcd	1,9fcd	1,4fcd	1,1fcd	0,9fcd	0,7fcd	0,6fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd	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°
746	747	748	748	747	741	728	713	687	659	620	578	530	477	422	363	304	248	194	150
100%	100%	100%	100%	100%	99%	98%	96%	92%	88%	83%	77%	71%	64%	57%	49%	41%	33%	26%	20%
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°
746	747	748	749	746	740	726	707	681	643	602	549	493	435	377	323	272	223	185	146
100%	100%	100%	100%	100%	99%	97%	95%	91%	86%	81%	73%	66%	58%	50%	43%	36%	30%	25%	20%
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°
746	747	748	748	747	741	728	713	687	659	620	578	530	477	422	363	304	248	194	150
100%	100%	100%	100%	100%	99%	98%	96%	92%	88%	83%	77%	71%	64%	57%	49%	41%	33%	26%	20%
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°
746	747	748	749	746	740	726	707	681	643	602	549	493	435	377	323	272	223	185	146
100%	100%	100%	100%	100%	99%	97%	95%	91%	86%	81%	73%	66%	58%	50%	43%	36%	30%	25%	20%
Beam angle 50%		Field angle 10%				Cutoff angle 2,5%				Intensity ratio in 120° cone				Intensity ratio in 90° cone					
57,7°		86,7°				{C_ANG}°				97,4%				92,2%					



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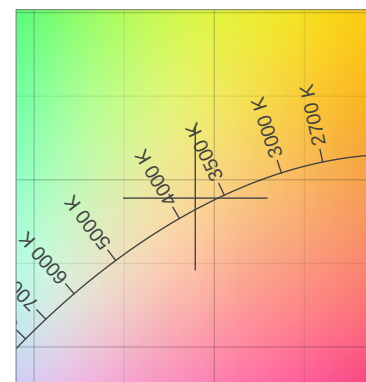
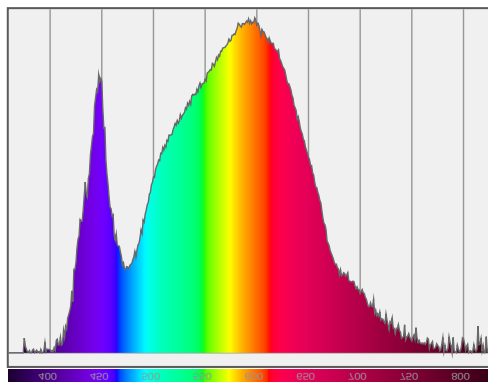
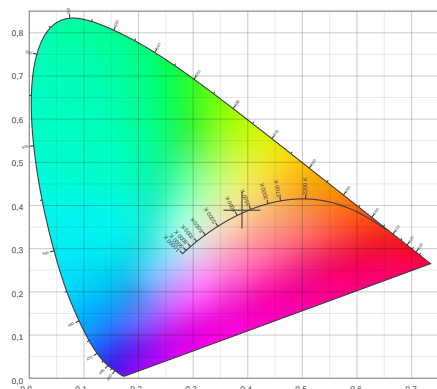
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Color details



CIE 1931

x: 0,389

3862 K

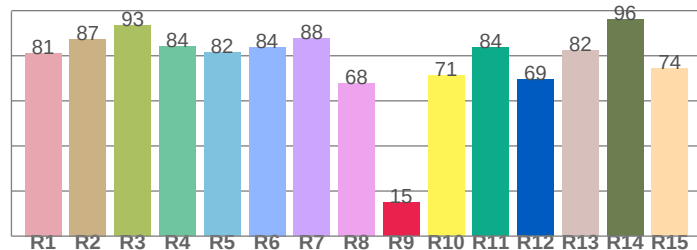
y: 0,389

Spectra

CIE 1931 ZOOM

Δuv : 0,0031

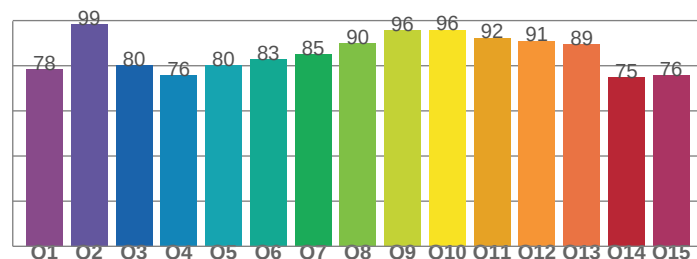
CRI: 83,4 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
81,2	87,4	93,4	84,2	81,6	83,8	87,7	67,9
R9	R10	R11	R12	R13	R14	R15	
15,0	71,1	83,6	69,4	82,2	96,2	74,4	

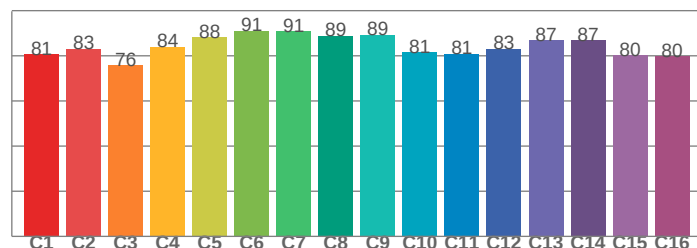
CQS: 83,8



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
78,3	98,5	80,4	75,6	80,1	83,0	85,2	90,1
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
95,8	95,9	92,4	91,1	89,4	75,1	75,8	

TM30: 84,1



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

C1	C2	C3	C4	C5	C6	C7	C8
80,5	82,9	75,8	84,0	88,1	91,1	90,7	88,8
C9	C10	C11	C12	C13	C14	C15	
89,2	81,4	80,8	83,0	86,9	86,8	80,1	

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
3862 K	83,4	15,0	84,1	97,4	83,8	0,389	0,389	0,226	0,339	0,0031



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TM30 details

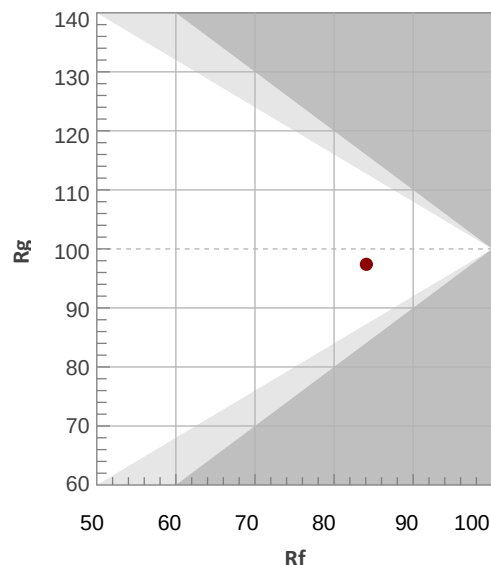
Rf 84,1

Fidelity index Rf

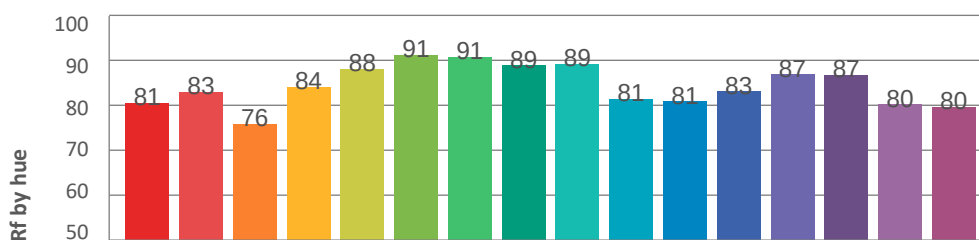
Rg 97,4

Gamut index Rg

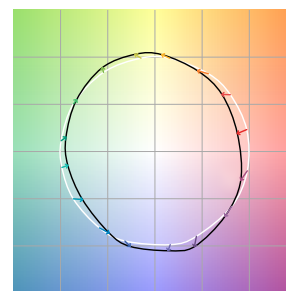
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	81	-11%	-2%
2	83	-7%	5%
3	76	-4%	11%
4	84	2%	9%
5	88	5%	5%
6	91	5%	-2%
7	91	0%	-5%
8	89	-4%	-5%
9	89	-7%	-1%
10	81	-8%	6%
11	81	-1%	11%
12	83	5%	6%
13	87	6%	-4%
14	87	8%	-8%
15	80	0%	-13%
16	80	-5%	-11%



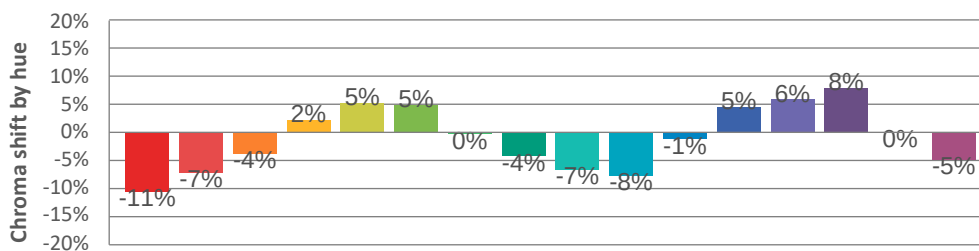
Hue binH



Color vector graphics



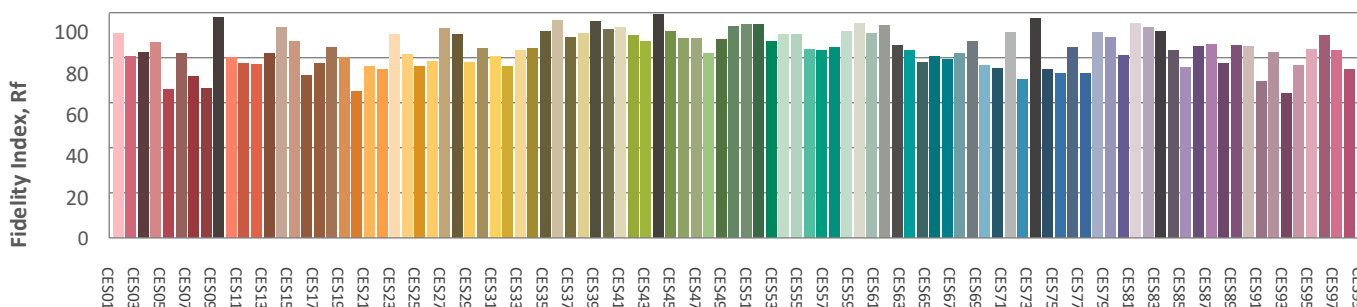
Hue bin



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	20,4	21,1	20,7	21,3	21,6	20,2	21,0	20,5	21,2	21,4
	3H	20,4	21,1	20,7	21,3	21,6	20,2	20,9	20,5	21,2	21,4
	4H	20,4	21,0	20,7	21,3	21,5	20,2	20,8	20,5	21,1	21,4
	6H	20,3	20,9	20,7	21,2	21,5	20,2	20,7	20,5	21,0	21,3
	8H	20,3	20,9	20,6	21,2	21,5	20,1	20,7	20,5	21,0	21,3
	12H	20,3	20,8	20,6	21,1	21,4	20,1	20,6	20,5	21,0	21,3
4H	2H	20,3	20,9	20,6	21,2	21,5	20,1	20,8	20,5	21,0	21,3
	3H	20,3	20,9	20,7	21,2	21,5	20,2	20,7	20,5	21,0	21,4
	4H	20,3	20,8	20,7	21,1	21,5	20,2	20,6	20,6	21,0	21,3
	6H	20,3	20,7	20,7	21,1	21,5	20,1	20,5	20,6	20,9	21,3
	8H	20,3	20,6	20,7	21,0	21,4	20,1	20,5	20,6	20,9	21,3
	12H	20,3	20,6	20,7	21,0	21,4	20,1	20,4	20,6	20,8	21,3
8H	4H	20,3	20,6	20,7	21,0	21,4	20,1	20,4	20,5	20,8	21,3
	6H	20,2	20,5	20,7	20,9	21,4	20,1	20,3	20,5	20,8	21,2
	8H	20,2	20,4	20,7	20,9	21,4	20,1	20,3	20,5	20,7	21,2
	12H	20,2	20,4	20,7	20,9	21,4	20,1	20,2	20,6	20,7	21,2
12H	4H	20,2	20,5	20,7	20,9	21,4	20,1	20,4	20,5	20,8	21,2
	6H	20,2	20,4	20,7	20,9	21,4	20,0	20,3	20,5	20,7	21,2
	8H	20,2	20,4	20,7	20,8	21,4	20,0	20,2	20,5	20,7	21,2

Variation of the observer position for the luminaire distance S

S = 1,0H	+3,7 / -4,1	+3,3 / -4,0
S = 1,5H	+6,2 / -5,3	+5,8 / -5,3
S = 2,0H	+8,1 / -6,3	+7,7 / -6,5
Standard table	BK01	BK01
Correction summand	2,5	2,4

Corrected glare indices referring to 688lm total luminous flux

