

LM-79

Test Report

LM79-REVO-COMPACT-5000K-CRI80-DEG54

General Discription

Item number	RC-1-X-06-4
Date and time	5-8-2016 13:25:22
CCT (Kelvin)	4839 K
Beam angle	58,2°
Luminous flux	475 lm
Efficiency	47 lm/watt
Weighted energy	10,1 kWh/1000h
Power factor	0,95
CRI (RA)	86,4
Fidelity index Rf	Rf 85,7
Gammut index Rg	Rg 97,6



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Beam details	1m	2m	3m	4m	5m
Lux*	495 lx	124 lx	55 lx	31 lx	20 lx

*measured at center of beam

Footcandles*	46,0 fcd	11,5 fcd	5,1 fcd	2,9 fcd	1,8 fcd
Beam width (meter)	1,1 m	2,2 m	3,3 m	4,5 m	5,6 m
Beam width (Feet)	3,7 ft	7,3 ft	11 ft	14,6 ft	18,3 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
495lx	124lx	55lx	31lx	20lx	14lx	10lx	8lx	6lx	5lx	4lx	3lx	3lx	3lx	2lx	2lx	2lx	2lx	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
46fcd	11,5fcd	5,1fcd	2,9fcd	1,8fcd	1,3fcd	0,9fcd	0,7fcd	0,6fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd

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°
495	496	498	499	499	498	488	478	460	436	411	376	340	304	265	227	192	158	128	103
100%	100%	101%	101%	101%	101%	99%	96%	93%	88%	83%	76%	69%	61%	54%	46%	39%	32%	26%	21%

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°
495	496	497	497	496	492	484	473	456	433	409	379	346	312	275	237	200	163	129	102
100%	100%	100%	100%	100%	99%	98%	95%	92%	88%	82%	76%	70%	63%	56%	48%	40%	33%	26%	21%

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°
495	496	498	499	499	498	488	478	460	436	411	376	340	304	265	227	192	158	128	103
100%	100%	101%	101%	101%	101%	99%	96%	93%	88%	83%	76%	69%	61%	54%	46%	39%	32%	26%	21%

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°
495	496	497	497	496	492	484	473	456	433	409	379	346	312	275	237	200	163	129	102
100%	100%	100%	100%	100%	99%	98%	95%	92%	88%	82%	76%	70%	63%	56%	48%	40%	33%	26%	21%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
58,2°	87,2°	{C_ANG}°	97,2%	91,9%



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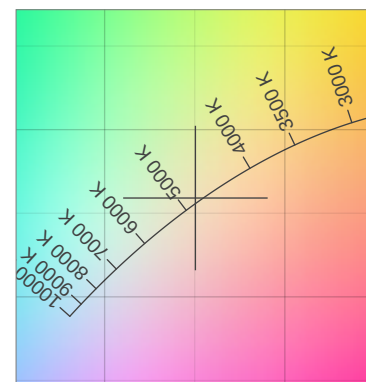
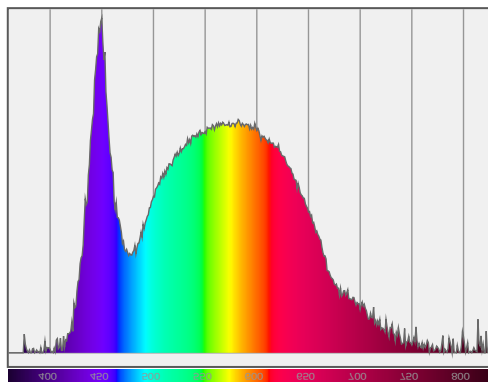
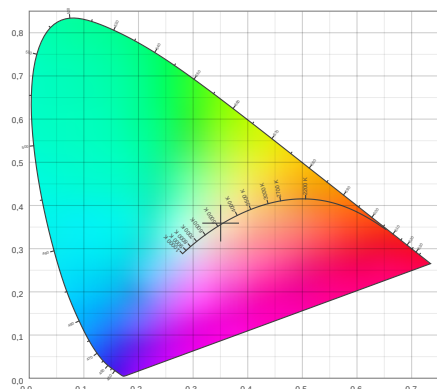
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Color details



CIE 1931

x: 0,350

4839 K

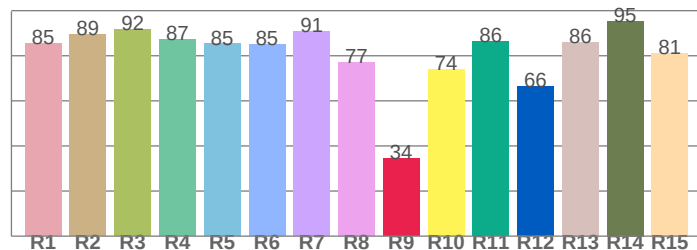
y: 0,359

Spectra

CIE 1931 ZOOM

Δuv : 0,0017

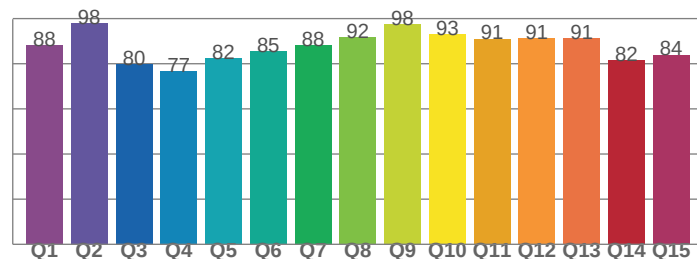
CRI: 86,4 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
85,3	89,3	91,8	87,1	85,3	84,9	90,8	77,1
R9	R10	R11	R12	R13	R14	R15	
34,5	74,2	86,2	66,5	86,1	95,4	81,2	

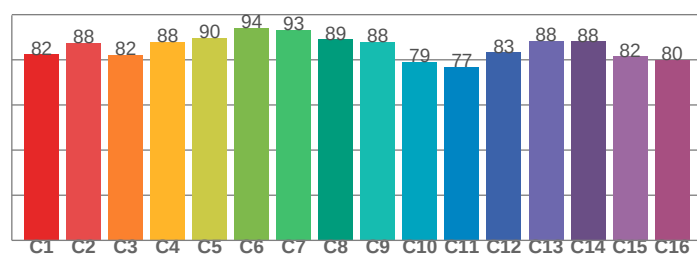
CQS: 86,6



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
88,0	98,1	79,9	76,8	82,5	85,4	88,3	91,6
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
97,6	93,0	91,1	91,3	91,1	81,7	83,9	

TM30: 85,7



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

C1	C2	C3	C4	C5	C6	C7	C8
82,4	87,5	82,1	87,9	89,7	94,2	93,3	89,0
C9	C10	C11	C12	C13	C14	C15	
87,9	79,0	76,9	83,3	88,4	88,1	81,6	

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
4839 K	86,4	34,5	85,7	97,6	86,6	0,350	0,359	0,212	0,326	0,0017



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TM30 details

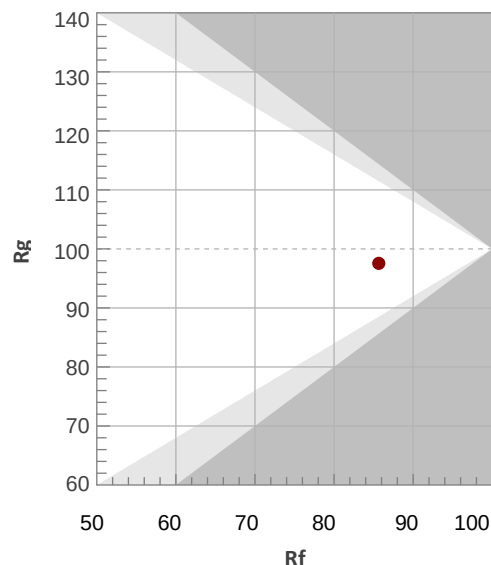
R_f 85,7

Fidelity index R_f

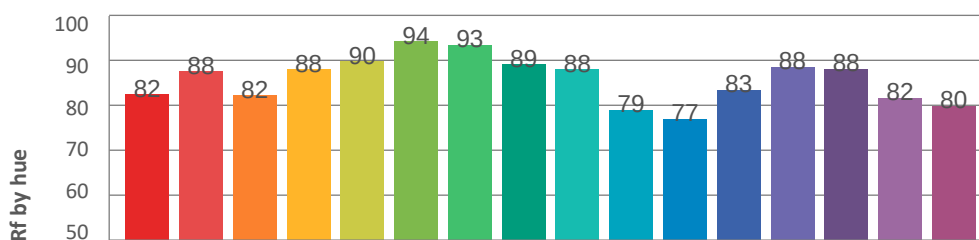
R_g 97,6

Gamut index R_g

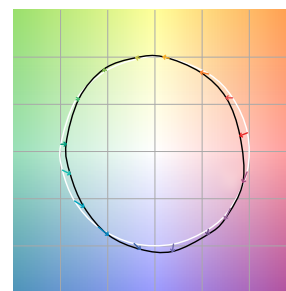
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	82	-8%	-2%
2	88	-6%	4%
3	82	-3%	8%
4	88	0%	6%
5	90	1%	4%
6	94	3%	-1%
7	93	-2%	-3%
8	89	-5%	-1%
9	88	-7%	6%
10	79	-5%	11%
11	77	1%	13%
12	83	5%	7%
13	88	7%	-3%
14	88	4%	-4%
15	82	2%	-12%
16	80	-2%	-12%



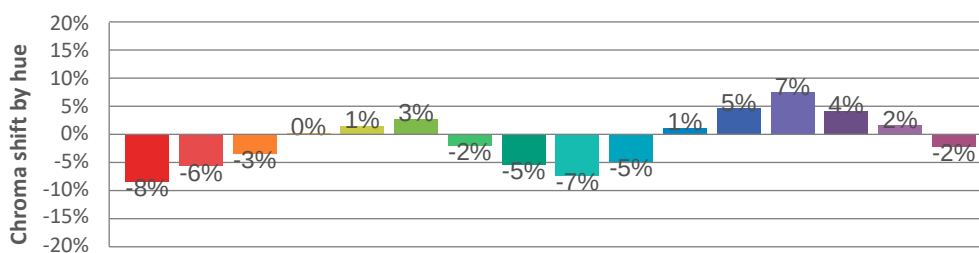
Hue binH



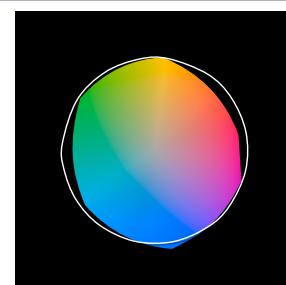
Color vector graphics



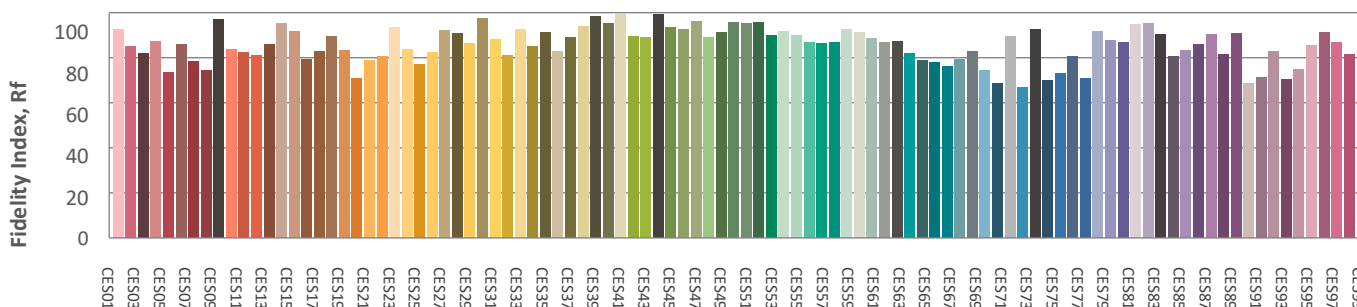
Hue bin



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	19,0	19,8	19,3	20,0	20,2	19,0	19,8	19,3	20,0	20,2
	3H	19,0	19,7	19,3	19,9	20,2	19,0	19,7	19,3	19,9	20,2
	4H	19,0	19,6	19,3	19,9	20,2	19,0	19,6	19,3	19,9	20,1
	6H	18,9	19,5	19,3	19,8	20,1	18,9	19,5	19,3	19,8	20,1
	8H	18,9	19,5	19,3	19,8	20,1	18,9	19,5	19,3	19,8	20,1
	12H	18,9	19,4	19,3	19,7	20,1	18,9	19,4	19,3	19,7	20,1
4H	2H	18,9	19,6	19,2	19,8	20,1	18,9	19,5	19,2	19,8	20,1
	3H	18,9	19,5	19,3	19,8	20,1	18,9	19,4	19,3	19,8	20,1
	4H	18,9	19,4	19,3	19,7	20,1	18,9	19,4	19,3	19,7	20,1
	6H	18,9	19,3	19,3	19,7	20,1	18,9	19,3	19,3	19,7	20,1
	8H	18,9	19,3	19,3	19,7	20,1	18,9	19,2	19,3	19,6	20,1
	12H	18,9	19,2	19,4	19,6	20,1	18,9	19,2	19,4	19,6	20,1
8H	4H	18,8	19,2	19,3	19,6	20,0	18,8	19,2	19,3	19,6	20,0
	6H	18,9	19,1	19,3	19,6	20,0	18,8	19,1	19,3	19,5	20,0
	8H	18,9	19,1	19,3	19,5	20,0	18,8	19,1	19,3	19,5	20,0
	12H	18,9	19,0	19,4	19,5	20,0	18,9	19,1	19,4	19,5	20,1
12H	4H	18,8	19,1	19,3	19,5	20,0	18,8	19,1	19,2	19,5	20,0
	6H	18,8	19,0	19,3	19,5	20,0	18,8	19,0	19,3	19,5	20,0
	8H	18,8	19,0	19,3	19,5	20,0	18,8	19,0	19,3	19,5	20,0
Variation of the observer position for the luminaire distance S											
S = 1,0H		+3,4 / -3,9					+3,5 / -4,1				
S = 1,5H		+5,9 / -5,3					+6,1 / -5,3				
S = 2,0H		+7,8 / -6,4					+8,0 / -6,4				
Standard table		BK01					BK01				
Correction summand		1,1					1,0				
Corrected glare indices referring to 475lm total luminous flux											

