

LM-79

Test Report

LM79-REVO-COMPACT-3000K-CRI80-DEG54

General Discription

Item number	RC-1-X-03-4
Date and time	5-8-2016 11:42:54
CCT (Kelvin)	3015 K
Beam angle	58°
Luminous flux	623 lm
Efficiency	62 lm/watt
Weighted energy	10,0 kWh/1000h
Power factor	0,95
CRI (RA)	84,1
Fidelity index Rf	Rf 85,0
Gammut index Rg	Rg 96,6



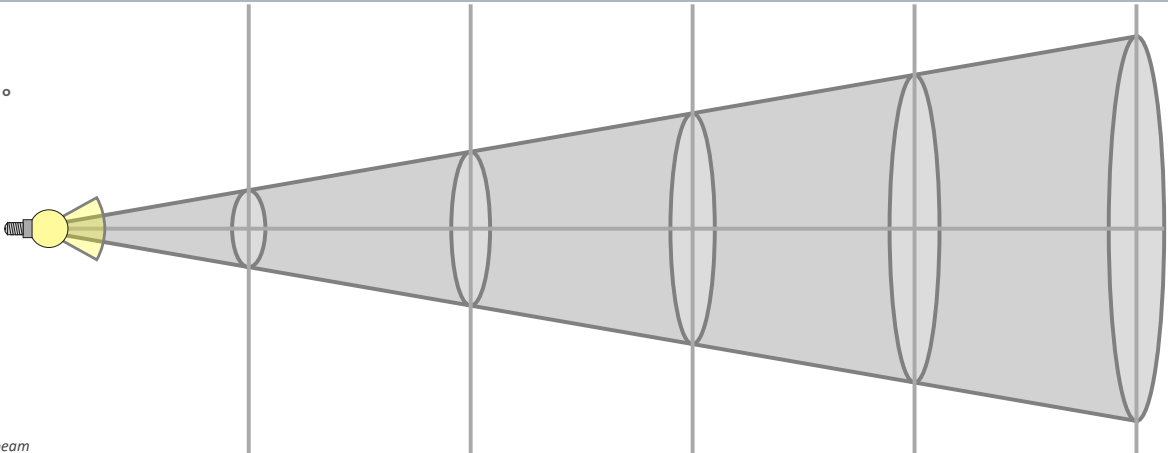
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Beam details		1m		2m		3m		4m		5m									
Lux*		667 lx		167 lx		74 lx		42 lx		27 lx									
58° 																			
*measured at center of beam																			
Footcandles*		61,9 fcd		15,5 fcd		6,9 fcd		3,9 fcd		2,5 fcd									
Beam width (meter)		1,1 m		2,2 m		3,3 m		4,4 m		5,5 m									
Beam width (Feet)		3,6 ft		7,3 ft		10,9 ft		14,5 ft		18,2 ft									
Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
667lx	167lx	74lx	42lx	27lx	19lx	14lx	10lx	8lx	7lx	6lx	5lx	4lx	3lx	3lx	3lx	2lx	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
61,9fcd	15,5fcd	6,9fcd	3,9fcd	2,5fcd	1,7fcd	1,3fcd	1fcd	0,8fcd	0,6fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	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°
667	666	666	663	658	649	634	615	589	557	521	479	436	389	341	293	246	198	156	121
100%	100%	100%	100%	99%	97%	95%	92%	88%	84%	78%	72%	65%	58%	51%	44%	37%	30%	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°
667	667	665	663	659	653	646	632	612	592	555	518	477	428	379	323	267	217	170	128
100%	100%	100%	99%	99%	98%	97%	95%	92%	89%	83%	78%	71%	64%	57%	48%	40%	33%	26%	19%
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°
667	666	666	663	658	649	634	615	589	557	521	479	436	389	341	293	246	198	156	121
100%	100%	100%	100%	99%	97%	95%	92%	88%	84%	78%	72%	65%	58%	51%	44%	37%	30%	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°
667	667	665	663	659	653	646	632	612	592	555	518	477	428	379	323	267	217	170	128
100%	100%	100%	99%	99%	98%	97%	95%	92%	89%	83%	78%	71%	64%	57%	48%	40%	33%	26%	19%
Beam angle 50%				Field angle 10%				Cutoff angle 2,5%				Intensity ratio in 120° cone				Intensity ratio in 90° cone			
58°				85,2°				{C_ANG}°				97,3%				92,3%			



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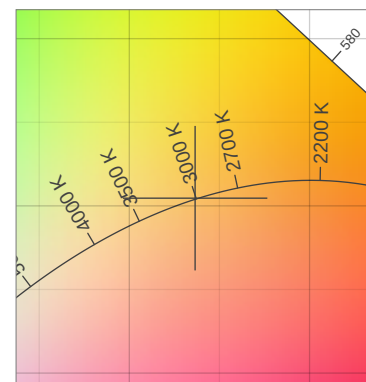
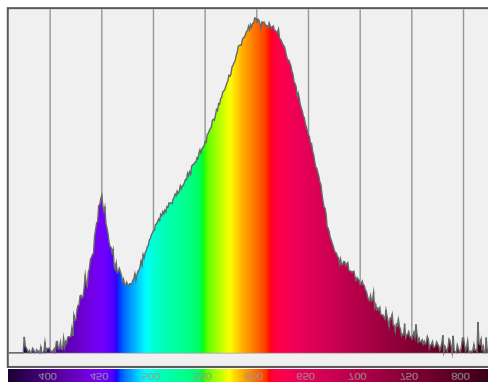
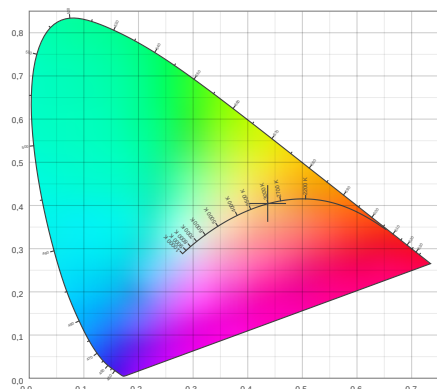
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Color details



CIE 1931

x: 0,437



Spectra

CIE 1931 ZOOM

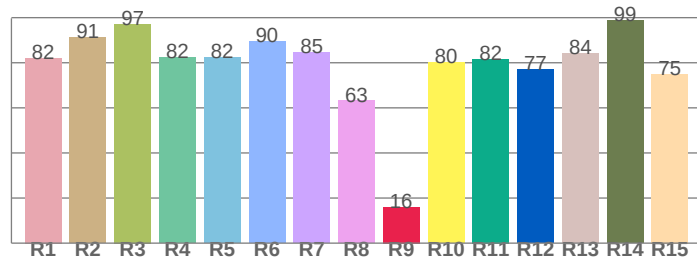
3015 K

y: 0,405

Δuv : 0,0003

CRI: **84,1** (R1-R8)

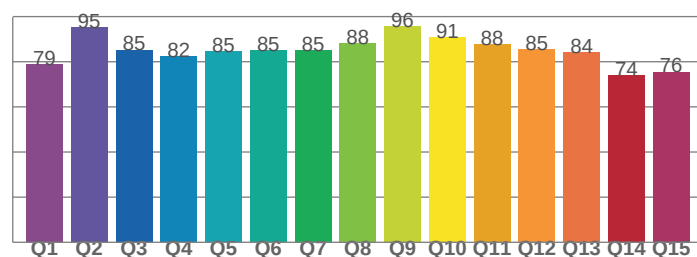
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
82,1	91,2	97,2	82,4	82,5	89,5	84,6	63,1
R9	R10	R11	R12	R13	R14	R15	
16,1	80,2	81,6	77,1	84,1	98,9	75,0	

CQS: **84,0**

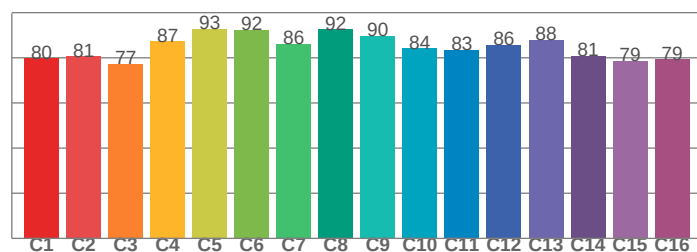
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
79,0	95,4	85,3	82,3	84,6	85,1	85,2	88,2
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
95,7	90,8	87,7	85,4	84,2	74,0	75,5	

TM30: **85,0**

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



C1	C2	C3	C4	C5	C6	C7	C8
79,7	80,7	77,2	87,3	92,7	92,4	86,1	92,5
C9	C10	C11	C12	C13	C14	C15	
89,8	84,2	83,4	85,7	87,8	80,9	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
3015 K	84,1	16,1	85,0	96,6	84,0	0,437	0,405	0,250	0,348	0,0003



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TM30 details

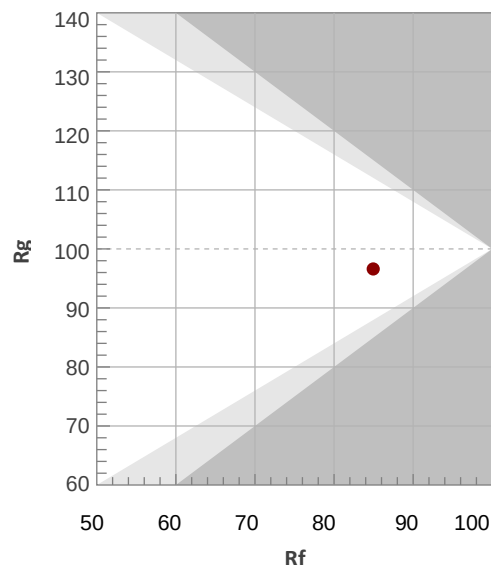
Rf 85,0

Fidelity index Rf

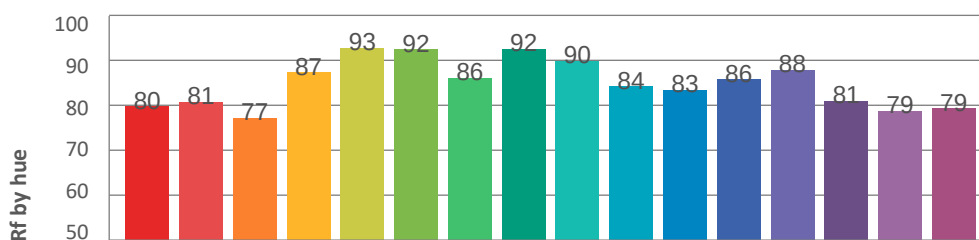
Rg 96,6

Gamut index Rg

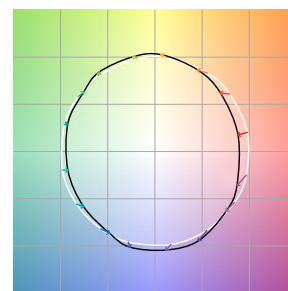
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	80	-10%	-1%
2	81	-8%	6%
3	77	-3%	10%
4	87	2%	7%
5	93	3%	4%
6	92	3%	-2%
7	86	-2%	-8%
8	92	-3%	-2%
9	90	-6%	2%
10	84	-5%	6%
11	83	-1%	10%
12	86	5%	3%
13	88	5%	-6%
14	81	4%	-13%
15	79	-2%	-12%
16	79	-8%	-13%



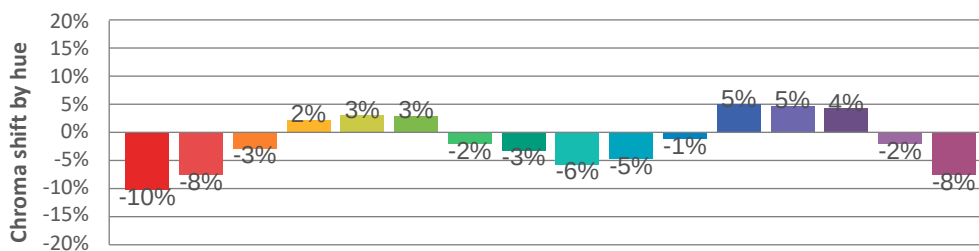
Hue binH



Color vector graphics



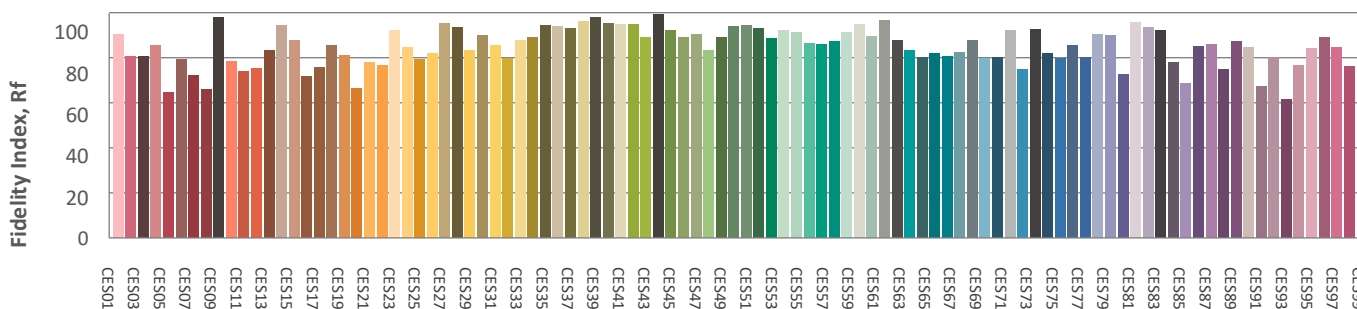
Hue bin



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	19,6	20,3	19,8	20,5	20,7	19,8	20,6	20,1	20,8	21,0
	3H	19,6	20,2	19,9	20,5	20,7	19,8	20,5	20,1	20,8	21,0
	4H	19,5	20,2	19,9	20,4	20,7	19,8	20,4	20,1	20,7	21,0
	6H	19,5	20,1	19,8	20,4	20,7	19,8	20,4	20,1	20,6	21,0
	8H	19,5	20,0	19,8	20,3	20,7	19,7	20,3	20,1	20,6	20,9
	12H	19,5	20,0	19,8	20,3	20,6	19,7	20,2	20,1	20,6	20,9
4H	2H	19,5	20,1	19,8	20,4	20,7	19,8	20,4	20,1	20,7	20,9
	3H	19,5	20,0	19,9	20,4	20,7	19,8	20,3	20,2	20,6	21,0
	4H	19,5	20,0	19,9	20,3	20,7	19,8	20,2	20,2	20,6	21,0
	6H	19,5	19,9	19,9	20,3	20,7	19,8	20,1	20,2	20,5	20,9
	8H	19,5	19,8	19,9	20,2	20,7	19,7	20,1	20,2	20,5	20,9
	12H	19,5	19,8	19,9	20,2	20,6	19,7	20,0	20,2	20,4	20,9
8H	4H	19,4	19,8	19,9	20,2	20,6	19,7	20,0	20,1	20,4	20,9
	6H	19,4	19,7	19,9	20,1	20,6	19,7	19,9	20,2	20,4	20,8
	8H	19,4	19,7	19,9	20,1	20,6	19,7	19,9	20,2	20,4	20,8
	12H	19,4	19,6	19,9	20,1	20,6	19,7	19,8	20,2	20,3	20,8
12H	4H	19,4	19,7	19,9	20,1	20,6	19,7	20,0	20,1	20,4	20,8
	6H	19,4	19,6	19,9	20,1	20,6	19,7	19,9	20,1	20,3	20,8
	8H	19,4	19,6	19,9	20,1	20,6	19,6	19,8	20,1	20,3	20,8
Variation of the observer position for the luminaire distance S											
S = 1,0H		+3,6 / -3,9					+3,7 / -4,1				
S = 1,5H		+6,1 / -5,0					+6,3 / -5,4				
S = 2,0H		+8,0 / -6,2					+8,2 / -6,5				
Standard table		BK01					BK01				
Correction summand		1,6					1,9				
Corrected glare indices referring to 623lm total luminous flux											

