

LM-79

Test Report

LM79-REVO-COMPACT-TRACK-amber-DEG54

General Discription

Item number	RC-X-X-31-4
Date and time	5-8-2016 12:20:09
CCT (Kelvin)	1831 K
Beam angle	59,4°
Luminous flux	436 lm
Efficiency	41 lm/watt
Weighted energy	10,7 kWh/1000h
Power factor	0,96
CRI (RA)	37,9
Fidelity index Rf	Rf 43,2
Gammut index Rg	Rg 50,7



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Beam details	1m	2m	3m	4m	5m																			
Lux*	447 lx	112 lx	50 lx	28 lx	18 lx																			
*measured at center of beam																								
Footcandles*	41,6 fcd	10,4 fcd	4,6 fcd	2,6 fcd	1,7 fcd																			
Beam width (meter)	1,1 m	2,3 m	3,4 m	4,6 m	5,7 m																			
Beam width (Feet)	3,7 ft	7,5 ft	11,2 ft	15 ft	18,7 ft																			
Beam intensities																								
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m					
447lx	112lx	50lx	28lx	18lx	12lx	9lx	7lx	6lx	4lx	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					
41,6fcd	10,4fcd	4,6fcd	2,6fcd	1,7fcd	1,2fcd	0,8fcd	0,6fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd	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°					
447	448	448	449	448	446	442	434	420	401	376	348	317	284	251	216	180	146	115	88					
100%	100%	100%	100%	100%	100%	99%	97%	94%	90%	84%	78%	71%	64%	56%	48%	40%	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°					
447	448	449	450	450	450	445	440	426	408	387	357	327	294	260	224	187	151	120	91					
100%	100%	100%	100%	101%	101%	100%	98%	95%	91%	86%	80%	73%	66%	58%	50%	42%	34%	27%	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°					
447	448	448	449	448	446	442	434	420	401	376	348	317	284	251	216	180	146	115	88					
100%	100%	100%	100%	100%	100%	99%	97%	94%	90%	84%	78%	71%	64%	56%	48%	40%	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°					
447	448	449	450	450	450	445	440	426	408	387	357	327	294	260	224	187	151	120	91					
100%	100%	100%	100%	101%	101%	100%	98%	95%	91%	86%	80%	73%	66%	58%	50%	42%	34%	27%	20%					
Beam angle 50%					Field angle 10%					Cutoff angle 2,5%					Intensity ratio in 120° cone					Intensity ratio in 90° cone				
59,4°					85,9°					{C_ANG}°					97,0%					92,2%				



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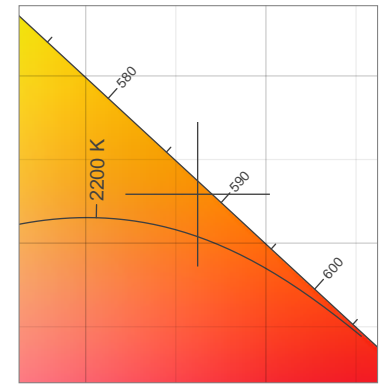
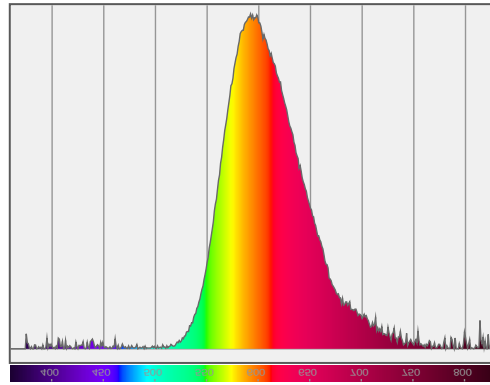
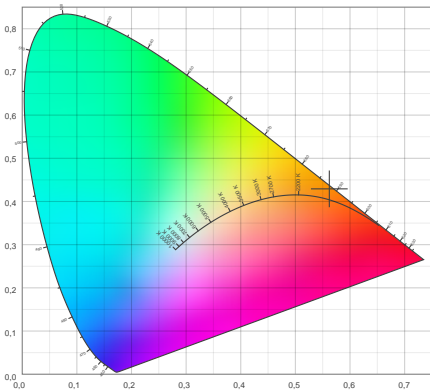
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Color details



CIE 1931

x: 0,562



Spectra

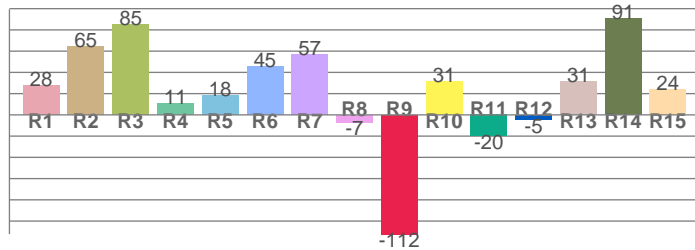
CIE 1931 ZOOM

1831 K

y: 0,429

Δuv : 0,0065

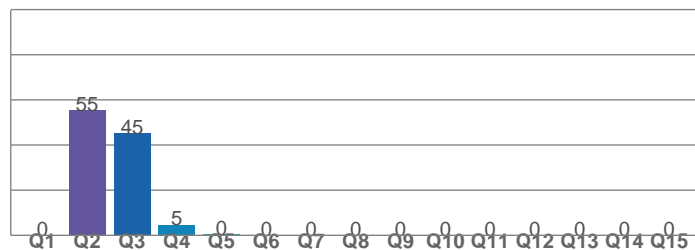
CRI: 37,9 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
28,1	65,0	84,8	11,3	18,4	45,4	57,2	-6,9
R9	R10	R11	R12	R13	R14	R15	
-112,3	31,4	-19,8	-4,5	31,1	90,7	24,3	

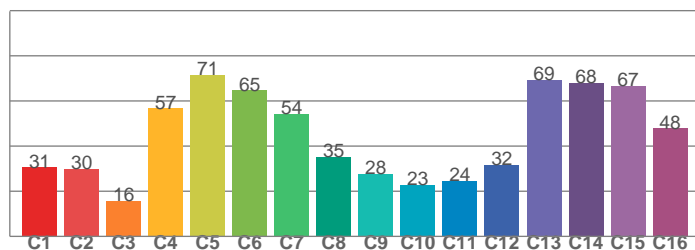
CQS: 0,0



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
0,0	55,5	45,3	4,6	0,3	0,0	0,0	0,0
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
0,0	0,0	0,0	0,0	0,0	0,0	0,0	

TM30: 43,2



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

C1	C2	C3	C4	C5	C6	C7	C8
30,5	29,8	15,8	56,8	71,4	64,7	54,2	35,2
C9	C10	C11	C12	C13	C14	C15	
27,7	22,8	24,4	31,8	69,3	68,0	66,7	

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
1831 K	37,9	-112,3	43,2	50,7	0,0	0,562	0,429	0,320	0,367	0,0065



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TM30 details

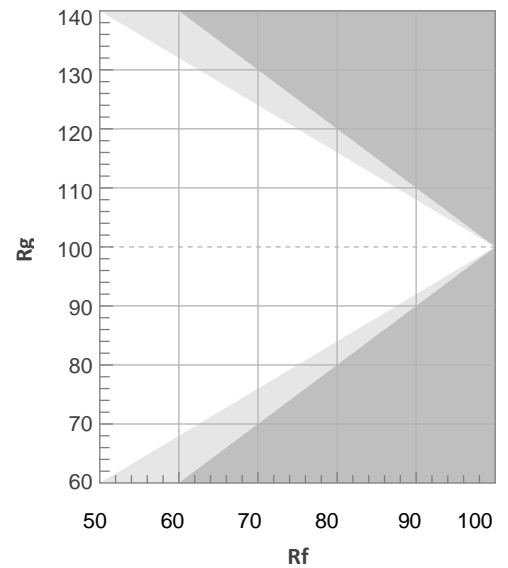
Rf 43,2

Fidelity index Rf

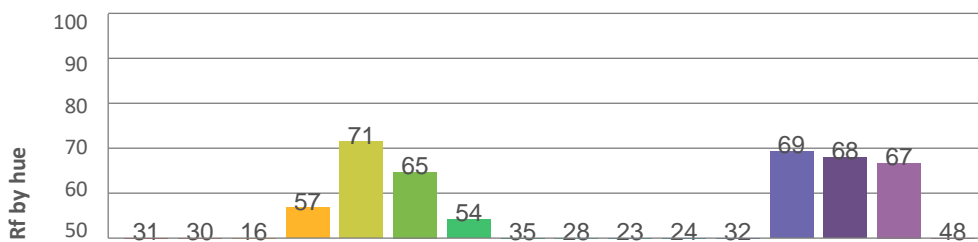
Rg 50,7

Gamut index Rg

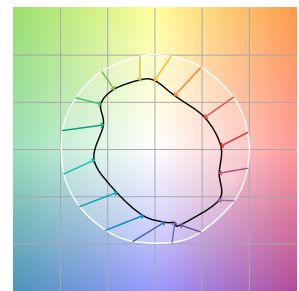
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	31	-31%	-9%
2	30	-37%	-1%
3	16	-41%	7%
4	57	-28%	12%
5	71	-25%	5%
6	65	-23%	0%
7	54	-26%	-9%
8	35	-41%	-14%
9	28	-34%	-8%
10	23	-41%	9%
11	24	-35%	24%
12	32	-26%	29%
13	69	-20%	7%
14	68	-18%	-14%
15	67	-14%	-8%
16	48	-28%	-11%



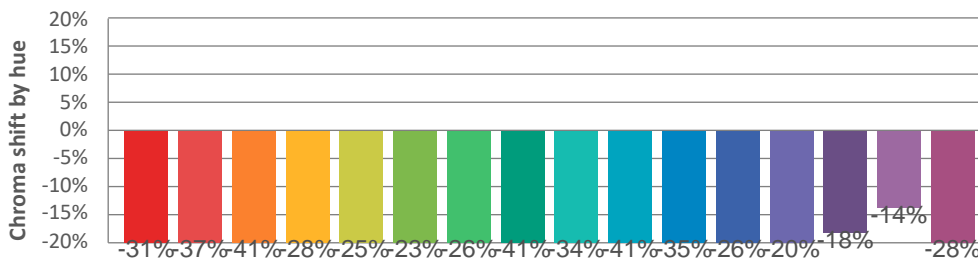
Hue binH



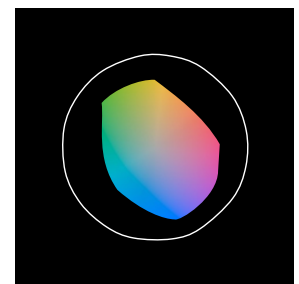
Color vector graphics



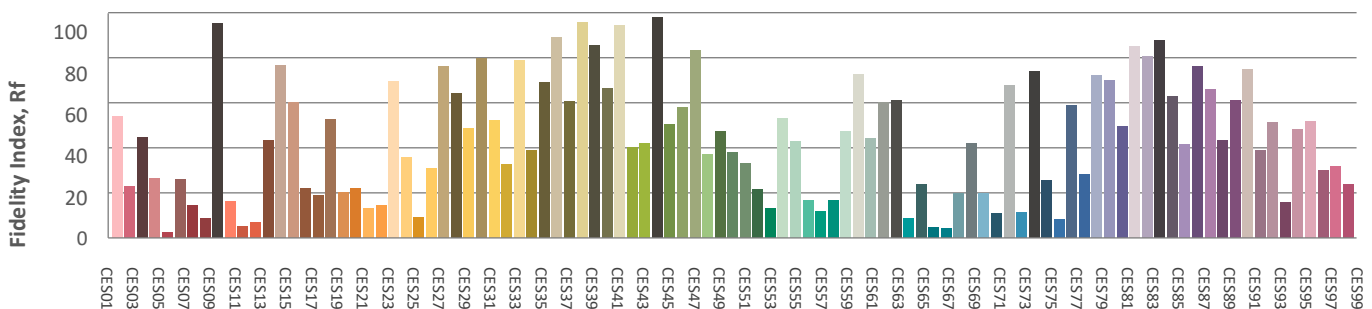
Hue bin



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	18,4	19,1	18,7	19,4	19,6	18,5	19,3	18,8	19,5	19,7
	3H	18,4	19,1	18,7	19,3	19,6	18,6	19,2	18,9	19,5	19,7
	4H	18,4	19,0	18,7	19,3	19,6	18,5	19,2	18,9	19,4	19,7
	6H	18,4	18,9	18,7	19,2	19,5	18,5	19,1	18,9	19,4	19,7
	8H	18,3	18,9	18,7	19,2	19,5	18,5	19,1	18,9	19,4	19,7
	12H	18,3	18,9	18,7	19,2	19,5	18,5	19,0	18,9	19,3	19,7
4H	2H	18,3	18,9	18,6	19,2	19,5	18,4	19,1	18,8	19,3	19,6
	3H	18,4	18,9	18,7	19,2	19,5	18,5	19,0	18,9	19,3	19,7
	4H	18,4	18,8	18,8	19,2	19,5	18,5	19,0	18,9	19,3	19,7
	6H	18,4	18,7	18,8	19,1	19,5	18,5	18,9	18,9	19,3	19,7
	8H	18,4	18,7	18,8	19,1	19,5	18,5	18,9	19,0	19,3	19,7
	12H	18,4	18,7	18,8	19,1	19,5	18,5	18,8	19,0	19,3	19,7
8H	4H	18,3	18,6	18,7	19,0	19,5	18,4	18,8	18,9	19,2	19,6
	6H	18,3	18,6	18,8	19,0	19,5	18,5	18,7	18,9	19,2	19,6
	8H	18,3	18,6	18,8	19,0	19,5	18,5	18,7	19,0	19,2	19,7
	12H	18,4	18,6	18,9	19,0	19,6	18,5	18,7	19,0	19,2	19,7
12H	4H	18,3	18,6	18,7	19,0	19,4	18,4	18,7	18,9	19,1	19,6
	6H	18,3	18,5	18,8	19,0	19,5	18,4	18,7	18,9	19,1	19,6
	8H	18,3	18,5	18,8	19,0	19,5	18,5	18,7	19,0	19,1	19,7
Variation of the observer position for the luminaire distance S											
S = 1,0H	+3,6 / -3,9					+3,7 / -3,9					
S = 1,5H	+6,2 / -4,9					+6,2 / -4,9					
S = 2,0H	+8,1 / -5,8					+8,2 / -5,8					
Standard table	BK01					BK01					
Correction summand	0,5					0,6					
Corrected glare indices referring to 436lm total luminous flux											

