

LM-79

Test Report

LM79-REVO-COMPACT-amber-DEG12

General Discription

Item number	RC-1-X-31-1
Date and time	5-8-2016 12:15:31
CCT (Kelvin)	1825 K
Beam angle	14,9°
Luminous flux	491 lm
Efficiency	46 lm/watt
Weighted energy	10,7 kWh/1000h
Power factor	0,96
CRI (RA)	37,9
Fidelity index Rf	Rf 35,2
Gammut index Rg	Rg 40,1



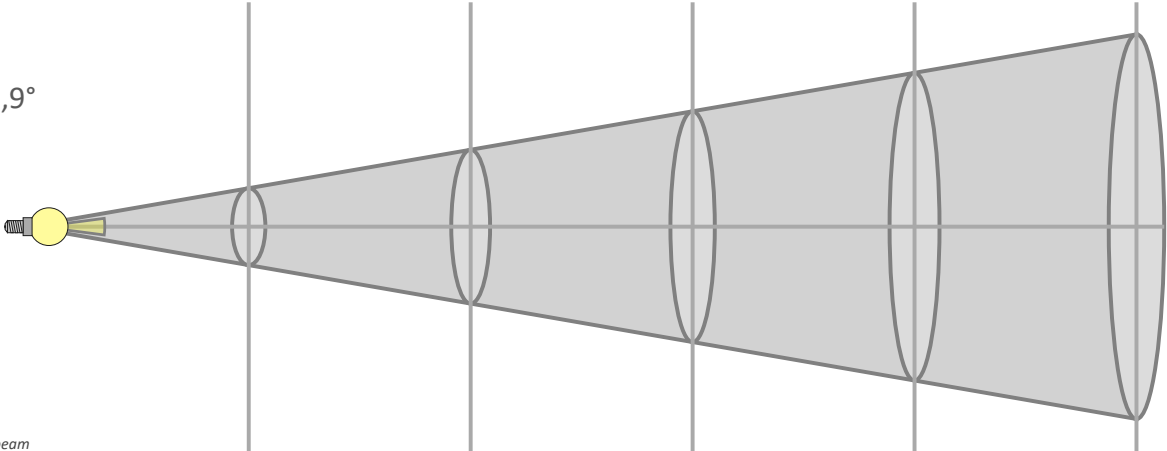
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Beam details				1m		2m		3m		4m		5m							
Lux*				5642 lx		1411 lx		627 lx		353 lx		226 lx							
14,9° 																			
*measured at center of beam																			
Footcandles*				524,2 fcd		131,1 fcd		58,2 fcd		32,8 fcd		21,0 fcd							
Beam width (meter)				0,3 m		0,5 m		0,8 m		1 m		1,3 m							
Beam width (Feet)				0,9 ft		1,7 ft		2,6 ft		3,4 ft		4,3 ft							
Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
5642lx	1411lx	627lx	353lx	226lx	157lx	115lx	88lx	70lx	56lx	47lx	39lx	33lx	29lx	25lx	22lx	20lx	17lx	16lx	14lx
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
524,2fcd	131,1fcd	58,2fcd	32,8fcd	21fcd	14,6fcd	10,7fcd	8,2fcd	6,5fcd	5,2fcd	4,3fcd	3,6fcd	3,1fcd	2,7fcd	2,3fcd	2fcd	1,8fcd	1,6fcd	1,5fcd	1,3fcd
Intensities in 0° c-plane																			
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
5642	5642	5394	5061	4671	4140	3608	3078	2549	2065	1667	1269	1010	773	581	456	332	263	200	152
100%	100%	96%	90%	83%	73%	64%	55%	45%	37%	30%	22%	18%	14%	10%	8%	6%	5%	4%	3%
Intensities in 90° c-plane																			
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
5642	5622	5283	4945	4607	4089	3569	3039	2508	1984	1599	1239	1011	782	564	442	332	271	209	152
100%	100%	94%	88%	82%	72%	63%	54%	44%	35%	28%	22%	18%	14%	10%	8%	6%	5%	4%	3%
Intensities in 180° c-plane																			
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
5642	5642	5394	5061	4671	4140	3608	3078	2549	2065	1667	1269	1010	773	581	456	332	263	200	152
100%	100%	96%	90%	83%	73%	64%	55%	45%	37%	30%	22%	18%	14%	10%	8%	6%	5%	4%	3%
Intensities in 270° c-plane																			
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
5642	5622	5283	4945	4607	4089	3569	3039	2508	1984	1599	1239	1011	782	564	442	332	271	209	152
100%	100%	94%	88%	82%	72%	63%	54%	44%	35%	28%	22%	18%	14%	10%	8%	6%	5%	4%	3%
Beam angle 50%				Field angle 10%				Cutoff angle 2,5%				Intensity ratio in 120° cone				Intensity ratio in 90° cone			
14,9°				28,1°				{C_ANG}°				98,6%				97,7%			



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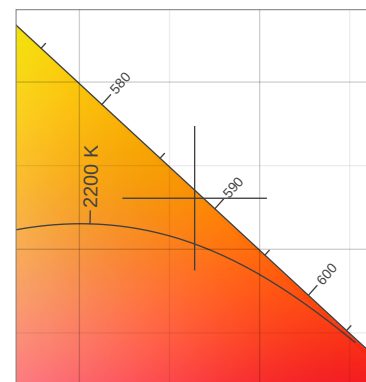
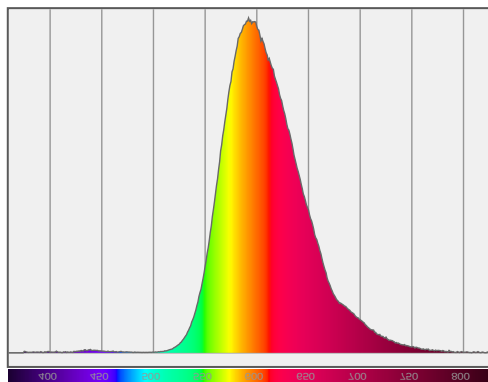
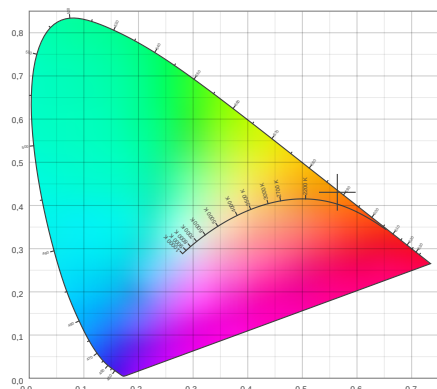
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Color details



CIE 1931

x: 0,564



Spectra

CIE 1931 ZOOM

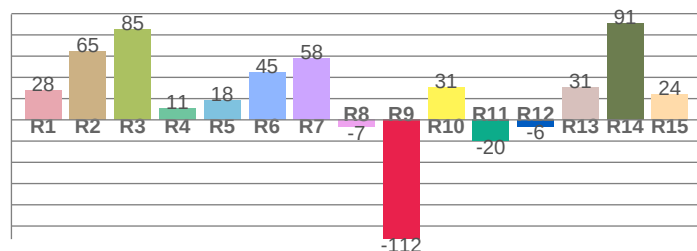
1825 K

y: 0,431

Δuv : 0,0069

CRI: 37,9 (R1-R8)

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



R1	R2	R3	R4	R5	R6	R7	R8
27,9	64,6	85,0	11,2	18,1	45,0	57,7	-6,6
R9	R10	R11	R12	R13	R14	R15	
-112,3	30,7	-20,0	-5,9	30,8	90,8	24,0	

CQS: 0,0

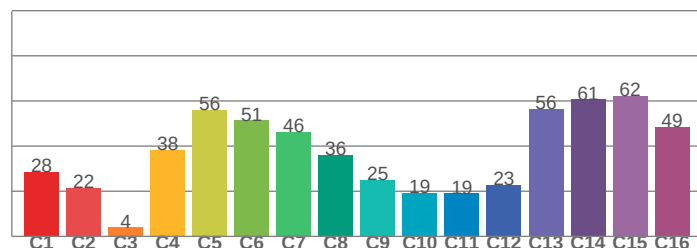
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
0,0	51,8	43,6	2,3	0,1	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: 35,2

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



C1	C2	C3	C4	C5	C6	C7	C8
28,5	21,6	4,0	38,4	56,1	51,4	46,2	36,1
C9	C10	C11	C12	C13	C14	C15	
25,1	19,4	19,0	22,8	56,4	60,7	62,2	

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
1825 K	37,9	-112,3	35,2	40,1	0,0	0,564	0,431	0,321	0,367	0,0069



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TM30 details

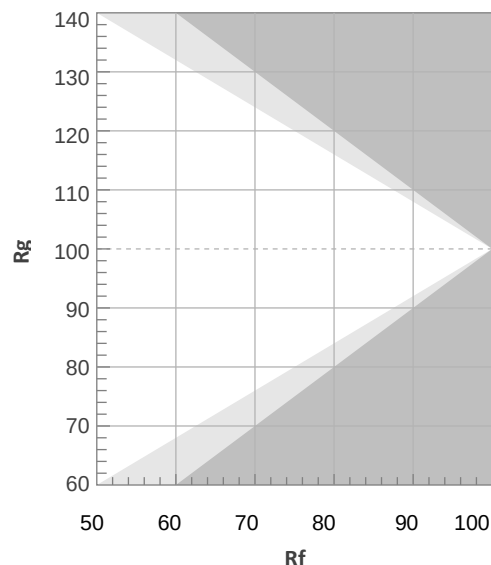
Rf 35,2

Fidelity index Rf

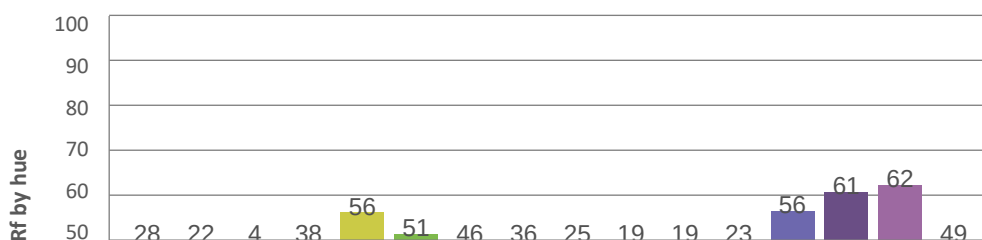
Rg 40,1

Gamut index Rg

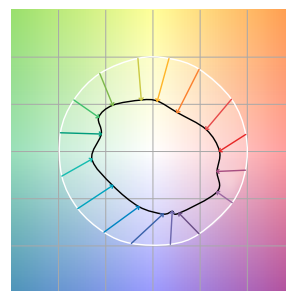
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	28	-31%	-12%
2	22	-40%	-12%
3	4	-51%	-6%
4	38	-47%	3%
5	56	-44%	5%
6	51	-36%	7%
7	46	-32%	1%
8	36	-43%	-7%
9	25	-35%	-11%
10	19	-44%	0%
11	19	-43%	16%
12	23	-37%	27%
13	56	-34%	9%
14	61	-30%	-6%
15	62	-20%	0%
16	49	-29%	-7%



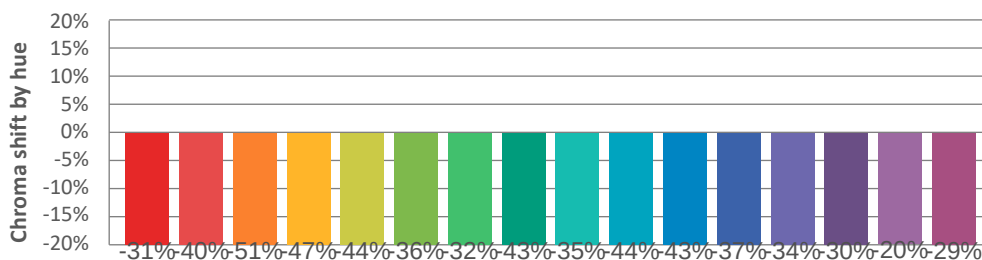
Hue binH



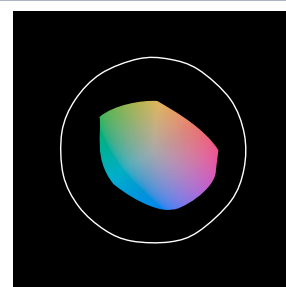
Color vector graphics



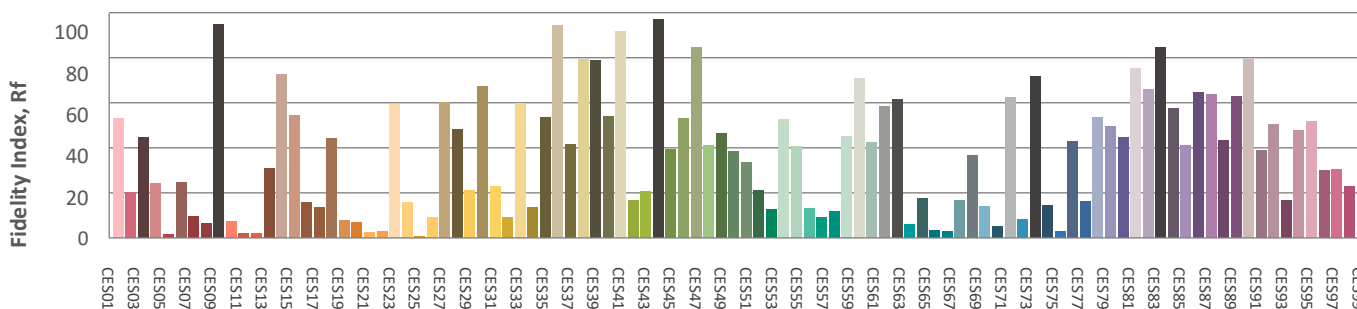
Hue bin



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	4,6	5,2	4,8	5,4	5,6	4,9	5,6	5,2	5,8	6,0
	3H	5,4	6,0	5,7	6,3	6,5	5,7	6,3	6,0	6,6	6,8
	4H	5,8	6,4	6,1	6,6	6,9	6,1	6,7	6,4	6,9	7,2
	6H	6,2	6,7	6,5	7,0	7,3	6,5	7,0	6,8	7,3	7,6
	8H	6,4	6,9	6,8	7,2	7,5	6,8	7,3	7,1	7,6	7,9
	12H	6,8	7,3	7,2	7,6	7,9	7,1	7,6	7,5	7,9	8,2
4H	2H	4,9	5,5	5,2	5,7	6,0	5,2	5,8	5,5	6,0	6,3
	3H	6,0	6,5	6,4	6,8	7,1	6,3	6,7	6,6	7,0	7,4
	4H	6,5	6,9	6,9	7,2	7,6	6,8	7,2	7,1	7,5	7,9
	6H	7,0	7,4	7,4	7,7	8,1	7,3	7,6	7,7	8,0	8,4
	8H	7,4	7,7	7,8	8,0	8,5	7,7	8,0	8,1	8,4	8,8
	12H	7,9	8,2	8,4	8,6	9,0	8,2	8,4	8,6	8,8	9,3
8H	4H	6,7	7,0	7,1	7,4	7,8	6,9	7,2	7,4	7,6	8,0
	6H	7,4	7,6	7,9	8,1	8,5	7,7	7,9	8,1	8,3	8,8
	8H	7,9	8,1	8,4	8,5	9,0	8,2	8,4	8,7	8,9	9,3
	12H	8,7	8,9	9,2	9,3	9,8	8,9	9,1	9,4	9,5	10,1
12H	4H	6,7	7,0	7,2	7,4	7,8	7,0	7,2	7,4	7,6	8,1
	6H	7,5	7,7	8,0	8,2	8,6	7,8	7,9	8,2	8,4	8,9
	8H	8,1	8,3	8,6	8,7	9,2	8,4	8,6	8,9	9,0	9,5

Variation of the observer position for the luminaire distance S

S = 1,0H	+0,6 / -0,5	+0,7 / -0,5
S = 1,5H	+1,5 / -0,8	+1,5 / -0,8
S = 2,0H	+2,5 / -1,2	+2,6 / -1,2
Standard table	BK05	BK05
Correction summand	-9,5	-9,3

Corrected glare indices referring to 491lm total luminous flux

