

LM-79

Test Report

LM79-REVO-TRACK-3000K-CRI80-DEG12x46

General Discription

Item number	R-X-X-X-03-2
Date and time	22-4-2016 10:54:52
CCT (Kelvin)	3010 K
Beam angle	30,5°
Luminous flux	2265 lm
Efficiency	118 lm/watt
Weighted energy	19,3 kWh/1000h
Power factor	0,94
CRI (RA)	83,3
Fidelity index Rf	Rf 84,5
Gammut index Rg	Rg 96,4



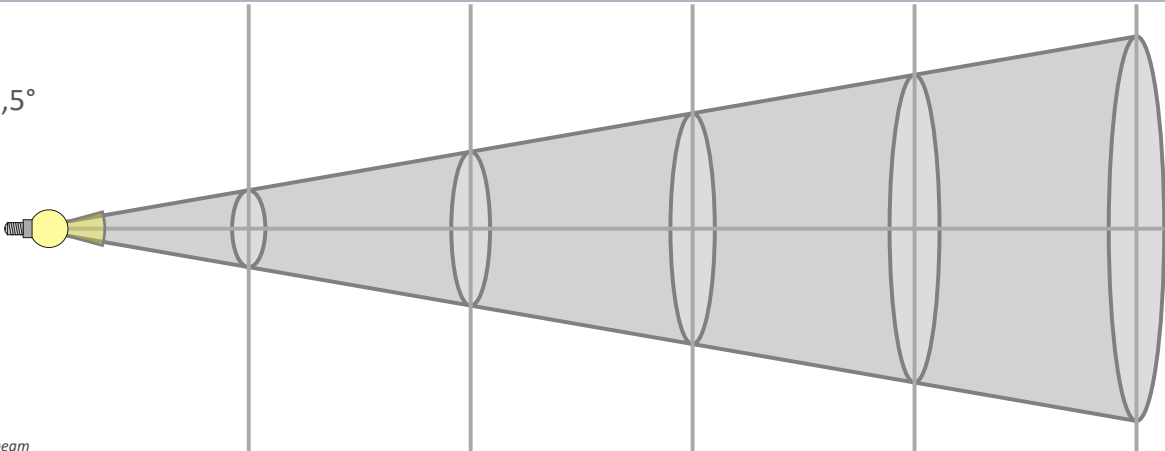
CLS LED BV
info@cls-led.com
www.cls-led.com

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Beam details				1m		2m		3m		4m		5m							
Lux*				6307 lx		1577 lx		701 lx		394 lx		252 lx							
30,5° 																			
*measured at center of beam																			
Footcandles*				586,0 fcd		146,5 fcd		65,1 fcd		36,6 fcd		23,4 fcd							
Beam width (meter)				0,5 m		1,1 m		1,6 m		2,2 m		2,7 m							
Beam width (Feet)				1,8 ft		3,6 ft		5,4 ft		7,1 ft		8,9 ft							
Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
6307lx	1577lx	701lx	394lx	252lx	175lx	129lx	99lx	78lx	63lx	52lx	44lx	37lx	32lx	28lx	25lx	22lx	19lx	17lx	16lx
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
586fcd	146,5fcd	65,1fcd	36,6fcd	23,4fcd	16,3fcd	12fcd	9,2fcd	7,2fcd	5,9fcd	4,8fcd	4,1fcd	3,5fcd	3fcd	2,6fcd	2,3fcd	2fcd	1,8fcd	1,6fcd	1,5fcd
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°
6307	6284	6208	6043	5837	5594	5348	5094	4804	4463	4063	3616	3127	2624	2128	1678	1283	963	710	519
100%	100%	98%	96%	93%	89%	85%	81%	76%	71%	64%	57%	50%	42%	34%	27%	20%	15%	11%	8%
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°
6307	6049	4810	3482	2358	1474	944	583	361	234	147	104	73	60	50	44	38	34	30	26
100%	96%	76%	55%	37%	23%	15%	9%	6%	4%	2%	2%	1%	1%	1%	1%	1%	1%	0%	0%
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°
6307	6284	6208	6043	5837	5594	5348	5094	4804	4463	4063	3616	3127	2624	2128	1678	1283	963	710	519
100%	100%	98%	96%	93%	89%	85%	81%	76%	71%	64%	57%	50%	42%	34%	27%	20%	15%	11%	8%
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°
6307	6049	4810	3482	2358	1474	944	583	361	234	147	104	73	60	50	44	38	34	30	26
100%	96%	76%	55%	37%	23%	15%	9%	6%	4%	2%	2%	1%	1%	1%	1%	1%	1%	0%	0%
Beam angle 50%				Field angle 10%				Cutoff angle 2,5%				Intensity ratio in 120° cone				Intensity ratio in 90° cone			
30,5°				50,5°				{C_ANG}°				98,9%				96,8%			



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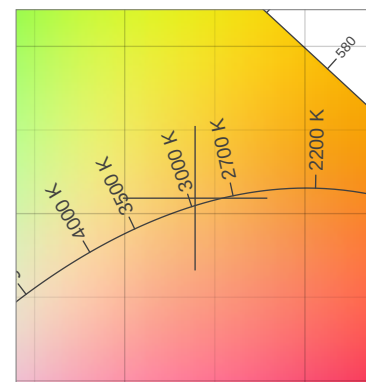
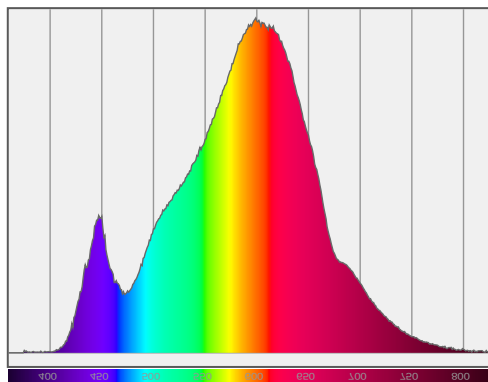
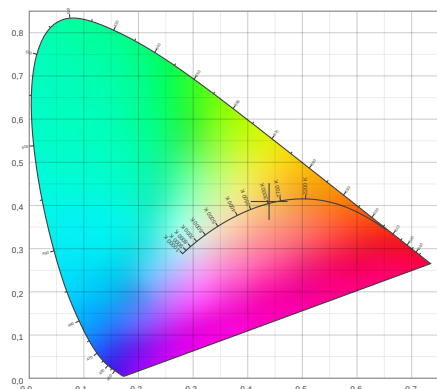
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Color details



CIE 1931

x: 0,439

3010 K

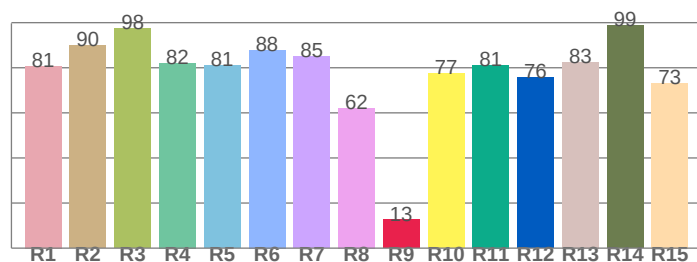
y: 0,409

Spectra

CIE 1931 ZOOM

Δuv : 0,0018

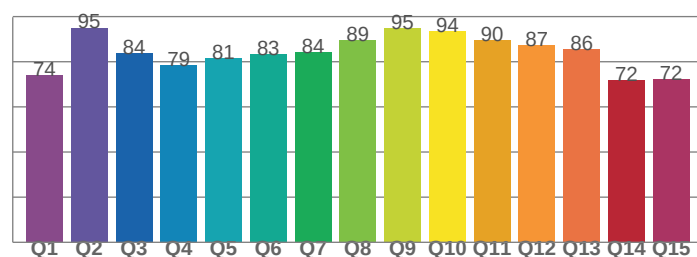
CRI: 83,3 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
80,8	89,8	97,6	82,1	81,2	87,9	84,9	62,2
R9	R10	R11	R12	R13	R14	R15	
12,5	77,4	81,3	75,7	82,6	98,8	73,3	

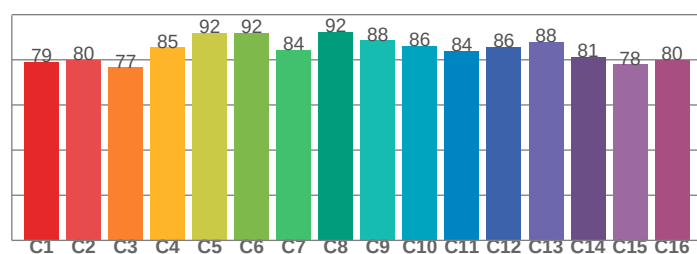
CQS: 82,5



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
73,9	95,0	83,9	78,6	81,4	83,4	84,2	89,3
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
94,8	93,6	89,5	87,4	85,5	72,0	72,4	

TM30: 84,5



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

C1	C2	C3	C4	C5	C6	C7	C8
79,0	80,0	76,5	85,5	92,0	92,0	84,3	92,3
C9	C10	C11	C12	C13	C14	C15	
88,5	86,1	83,8	85,8	88,0	81,3	78,0	

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
3010 K	83,3	12,5	84,5	96,4	82,5	0,439	0,409	0,250	0,349	0,0018



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TM30 details

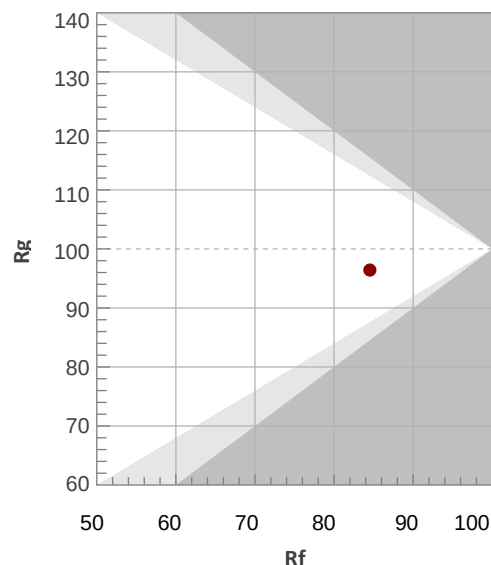
Rf 84,5

Fidelity index Rf

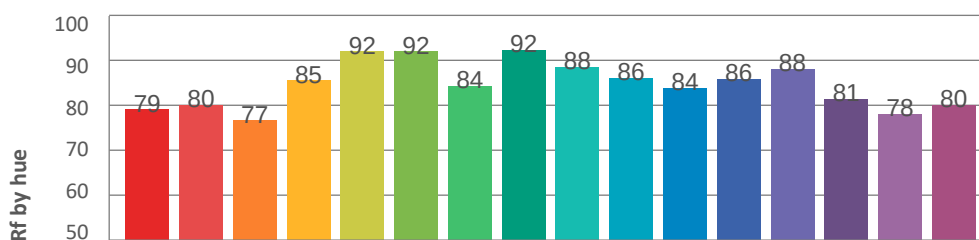
Rg 96,4

Gamut index Rg

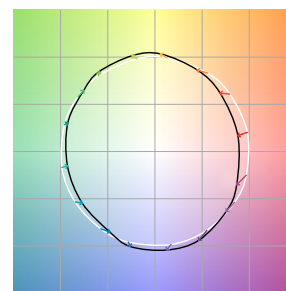
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	79	-11%	-2%
2	80	-8%	6%
3	77	-3%	11%
4	85	3%	8%
5	92	4%	4%
6	92	3%	-2%
7	84	-1%	-9%
8	92	-3%	-3%
9	88	-6%	0%
10	86	-6%	5%
11	84	-3%	10%
12	86	4%	3%
13	88	5%	-6%
14	81	4%	-13%
15	78	-2%	-13%
16	80	-8%	-12%



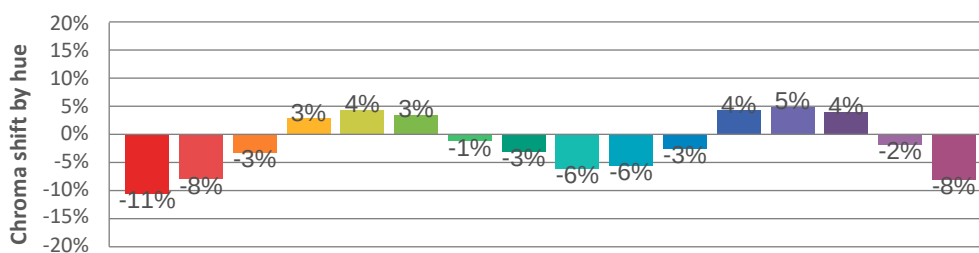
Hue binH



Color vector graphics



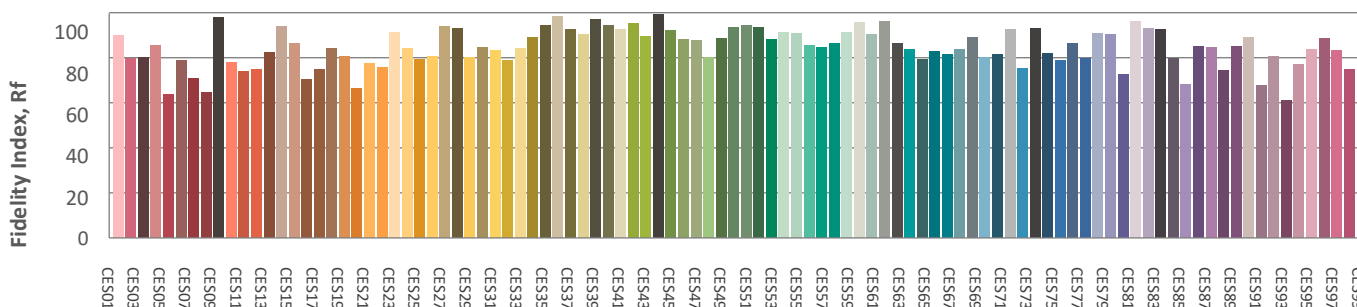
Hue bin



Color distortion graphics



Color Evaluation Sample



CLS LED BV
info@cls-led.com
www.cls-led.com

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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	21,5	12,8	13,5	13,1	13,7	13,9
	3H	20,3	21,0	20,6	21,2	21,4	12,9	13,5	13,2	13,8	14,0
	4H	20,3	20,9	20,6	21,1	21,4	12,9	13,5	13,2	13,8	14,0
	6H	20,2	20,8	20,6	21,1	21,3	12,9	13,4	13,2	13,7	14,0
	8H	20,2	20,7	20,5	21,0	21,3	12,9	13,4	13,2	13,7	14,0
	12H	20,2	20,7	20,5	21,0	21,3	12,9	13,3	13,2	13,6	14,0
4H	2H	20,2	20,8	20,5	21,1	21,3	12,8	13,4	13,1	13,7	13,9
	3H	20,2	20,7	20,5	21,0	21,3	13,0	13,5	13,4	13,8	14,1
	4H	20,1	20,5	20,5	20,9	21,2	13,1	13,5	13,5	13,8	14,2
	6H	20,1	20,4	20,5	20,8	21,2	13,1	13,4	13,5	13,8	14,2
	8H	20,0	20,4	20,5	20,7	21,1	13,1	13,4	13,5	13,8	14,2
	12H	20,0	20,3	20,4	20,7	21,1	13,0	13,3	13,5	13,7	14,1
8H	4H	20,0	20,3	20,4	20,7	21,1	13,1	13,4	13,5	13,8	14,2
	6H	20,0	20,2	20,4	20,6	21,1	13,1	13,3	13,6	13,8	14,2
	8H	19,9	20,1	20,4	20,6	21,0	13,1	13,3	13,6	13,7	14,2
	12H	19,9	20,0	20,4	20,5	21,0	13,1	13,2	13,5	13,7	14,2
12H	4H	20,0	20,3	20,4	20,7	21,1	13,1	13,3	13,5	13,7	14,2
	6H	19,9	20,1	20,4	20,6	21,0	13,1	13,3	13,5	13,7	14,2
	8H	19,9	20,0	20,4	20,5	21,0	13,1	13,2	13,5	13,7	14,2
Variation of the observer position for the luminaire distance S											
S = 1,0H		+5,4 / -7,7					+4,3 / -3,7				
S = 1,5H		+8,2 / -8,8					+5,9 / -4,6				
S = 2,0H		+10,2 / -9,5					+7,8 / -4,9				
Standard table		BK00					BK01				
Correction summand		1,8					-5,0				
Corrected glare indices referring to 2265lm total luminous flux											

