

LM-79

Test Report

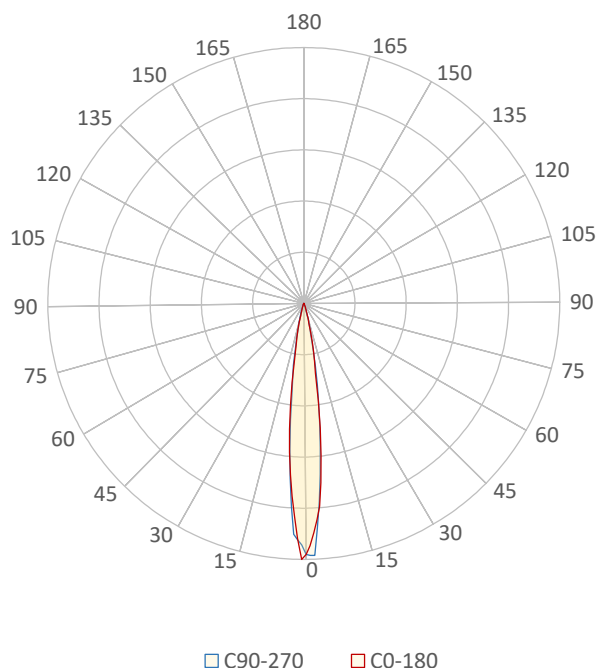
LM79-REVO-XXL-4000K-CRI80-8DEG

General Discription

Item number	RXX-1N-X-2222-5555
Date and time	29-6-2018 15:09:05
CCT (Kelvin)	3947 K
Beam angle	13,2°
Luminous flux	6430 lm
Efficiency	86 lm/watt
Weighted energy	74,9 kWh/1000h
Power factor	0,95
CRI (RA)	85,5
Fidelity index Rf	Rf 84,4
Gammut index Rg	Rg 99,6
Peak	90518 cd



Polar diagram



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info@cls-led.com
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Beam details	1m	2m	3m	4m	5m
Lux*	86212 lx	21553 lx	9579 lx	5388 lx	3448 lx

13,4°

*measured at center of beam

Footcandles*	8009,3 fcd	2002,3 fcd	889,9 fcd	500,6 fcd	320,4 fcd
Beam width (meter)	0,2 m	0,5 m	0,7 m	0,9 m	1,2 m
Beam width (Feet)	0,8 ft	1,5 ft	2,3 ft	3,1 ft	3,9 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
86212lx	21553lx	9579lx	5388lx	3448lx	2395lx	1759lx	1347lx	1064lx	862lx	712lx	599lx	510lx	440lx	383lx	337lx	298lx	266lx	239lx	216lx
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
8009,3fcd	2002,3fcd	889,9fcd	500,6fcd	320,4fcd	222,5fcd	163,5fcd	125,1fcd	98,9fcd	80,1fcd	66,2fcd	55,6fcd	47,4fcd	40,9fcd	35,6fcd	31,3fcd	27,7fcd	24,7fcd	22,2fcd	20fcd

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°
86,2K	83,2K	78,8K	74,3K	69,9K	61,8K	52,5K	43,1K	33,8K	24,4K	20,0K	16,7K	13,4K	10,1K	6,9K	5,7K	4,8K	3,9K	3,0K	2,1K
100%	97%	91%	86%	81%	72%	61%	50%	39%	28%	23%	19%	16%	12%	8%	7%	6%	5%	3%	2%

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°
86,2K	86,5K	86,6K	77,4K	68,2K	58,9K	49,7K	41,3K	34,8K	28,4K	22,0K	15,6K	10,8K	9,0K	7,3K	5,5K	3,8K	2,6K	2,2K	1,8K
100%	100%	100%	90%	79%	68%	58%	48%	40%	33%	26%	18%	13%	10%	8%	6%	4%	3%	3%	2%

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°
86,2K	87,9K	80,7K	73,5K	66,3K	59,0K	51,5K	43,4K	35,4K	27,3K	19,3K	14,4K	11,8K	9,3K	6,8K	4,3K	3,1K	2,6K	2,1K	1,7K
100%	102%	94%	85%	77%	68%	60%	50%	41%	32%	22%	17%	14%	11%	8%	5%	4%	3%	2%	2%

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°
86,2K	82,9K	81,1K	79,3K	70,0K	60,1K	50,2K	40,3K	30,5K	26,0K	21,5K	17,0K	12,5K	8,4K	7,2K	6,0K	4,8K	3,7K	2,7K	2,3K
100%	96%	94%	92%	81%	70%	58%	47%	35%	30%	25%	20%	14%	10%	8%	7%	6%	4%	3%	3%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
13,4°	26,2°	36,9°	99,0%	98,1%



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 info@cls-led.com
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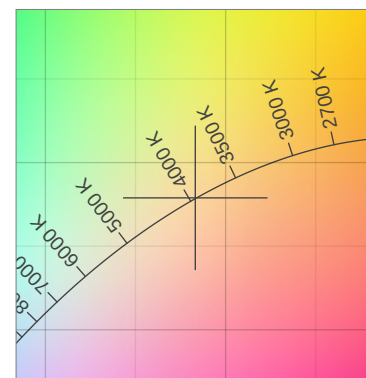
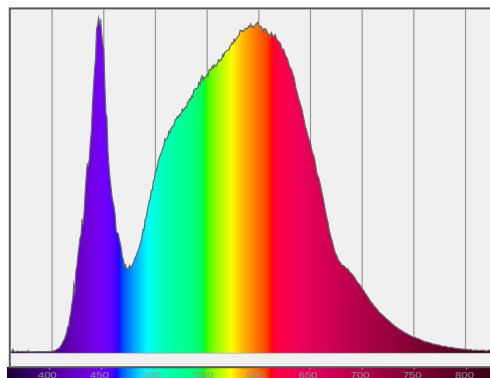
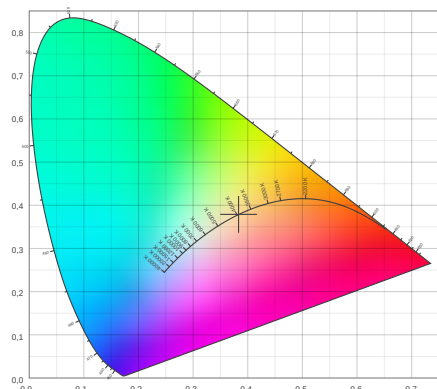
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Color details



CIE 1931

x: 0,383

3947 K

y: 0,379

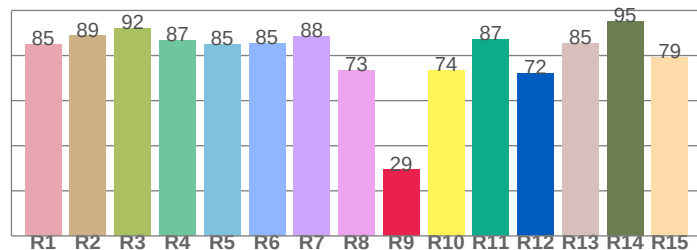
Spectra

CIE 1931 ZOOM

Δuv : 0,0002

CRI: 85,5 (R1-R8)

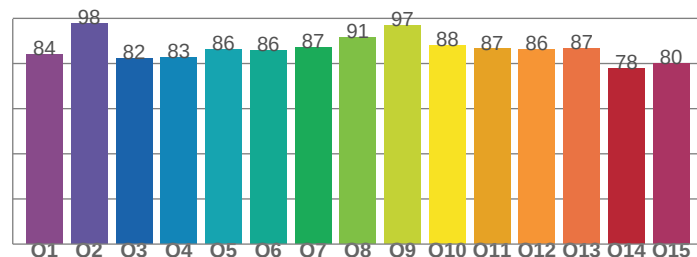
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
84,8	88,7	91,9	86,8	85,0	85,3	88,4	73,4
R9	R10	R11	R12	R13	R14	R15	
29,3	73,6	87,2	72,3	85,3	95,3	79,4	

CQS: 85,6

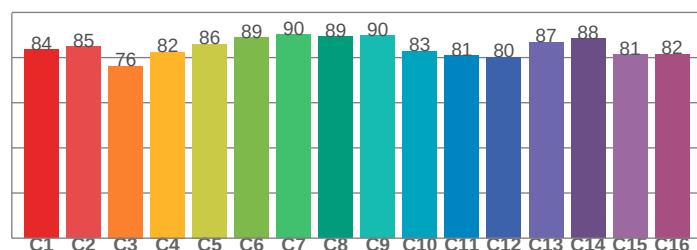
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
83,9	97,8	82,1	82,6	86,2	85,8	87,0	91,4
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
97,0	87,9	86,5	86,3	86,7	77,9	80,0	

TM30: 84,4

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



C1	C2	C3	C4	C5	C6	C7	C8
83,5	85,0	76,3	82,5	86,0	88,8	90,2	89,4
C9	C10	C11	C12	C13	C14	C15	
89,8	82,9	80,9	80,3	86,8	88,5	81,3	

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
3947 K	85,5	29,3	84,4	99,6	85,6	0,383	0,379	0,226	0,335	0,0002



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info@cls-led.com
www.cls-led.com

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TM30 details

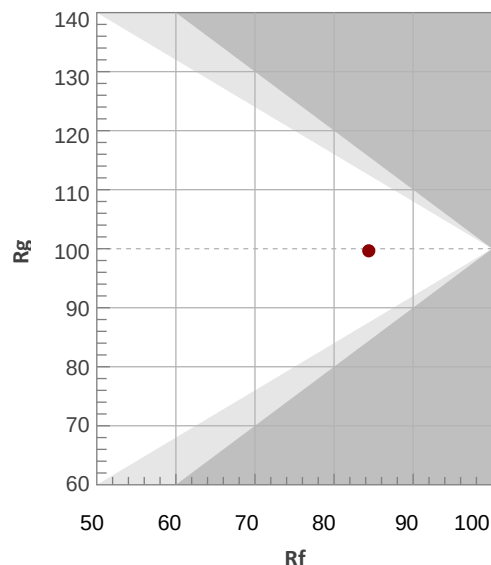
Rf 84,4

Fidelity index Rf

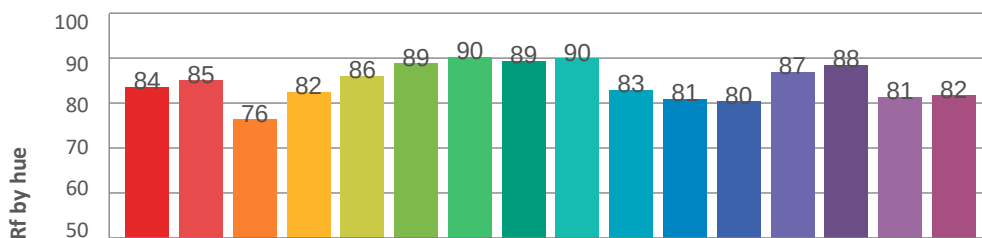
Rg 99,6

Gamut index Rg

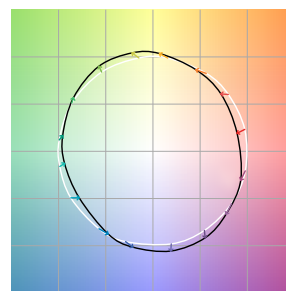
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	84	-9%	-2%
2	85	-6%	5%
3	76	-3%	11%
4	82	3%	10%
5	86	7%	6%
6	89	7%	-1%
7	90	2%	-6%
8	89	-3%	-5%
9	90	-6%	-2%
10	83	-7%	5%
11	81	-1%	11%
12	80	4%	9%
13	87	7%	-2%
14	88	7%	-4%
15	81	1%	-12%
16	82	-3%	-11%



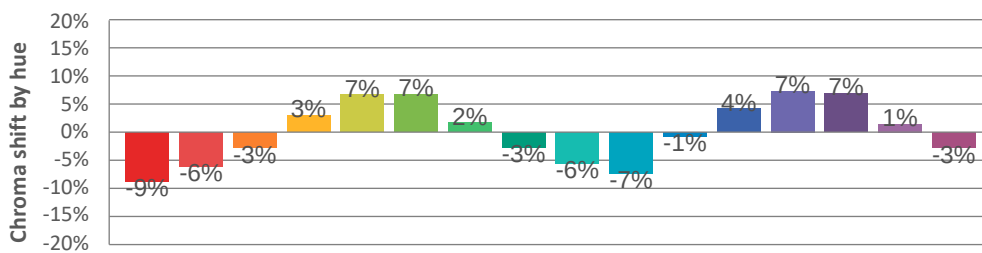
Hue binH



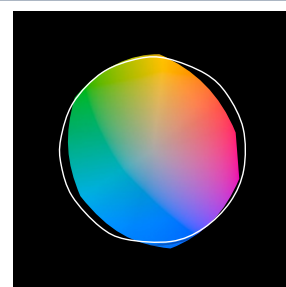
Color vector graphics



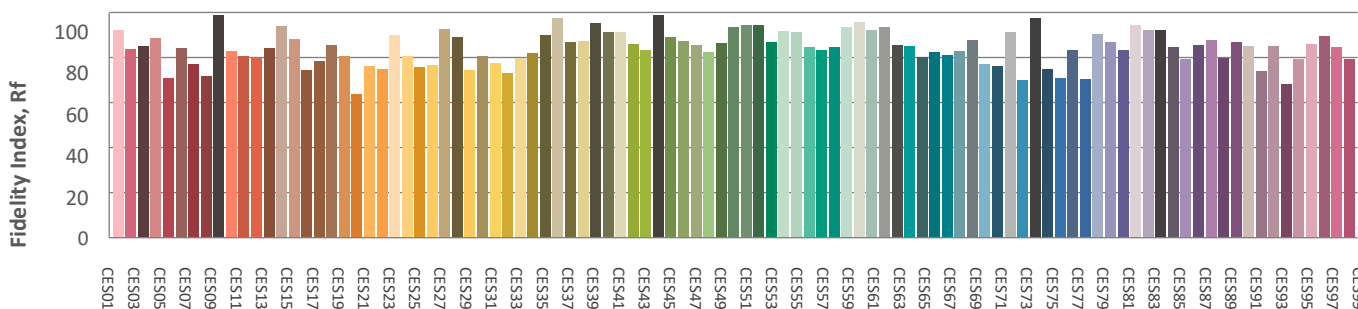
Hue bin



Color distortion graphics



Color Evaluation Sample



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info@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	4,0	4,7	4,3	4,9	5,1	4,1	4,8	4,4	5,0	5,2
	3H	4,6	5,2	4,9	5,5	5,7	4,8	5,4	5,1	5,6	5,9
	4H	4,8	5,3	5,1	5,6	5,9	4,9	5,4	5,2	5,7	6,0
	6H	4,8	5,3	5,1	5,6	5,9	4,9	5,4	5,2	5,7	6,0
	8H	4,8	5,3	5,2	5,6	5,9	4,9	5,4	5,2	5,7	6,0
	12H	4,8	5,3	5,2	5,6	5,9	4,9	5,4	5,3	5,7	6,0
4H	2H	4,4	4,9	4,7	5,2	5,4	4,5	5,0	4,8	5,3	5,5
	3H	5,1	5,6	5,4	5,9	6,2	5,2	5,7	5,6	6,0	6,3
	4H	5,3	5,7	5,6	6,0	6,3	5,4	5,8	5,7	6,1	6,5
	6H	5,3	5,7	5,7	6,0	6,4	5,4	5,7	5,8	6,1	6,5
	8H	5,4	5,7	5,8	6,1	6,5	5,4	5,7	5,8	6,1	6,5
	12H	5,4	5,7	5,8	6,1	6,5	5,5	5,8	6,0	6,2	6,6
8H	4H	5,3	5,5	5,7	5,9	6,3	5,4	5,7	5,8	6,0	6,5
	6H	5,4	5,6	5,8	6,0	6,5	5,4	5,6	5,9	6,0	6,5
	8H	5,4	5,6	5,9	6,1	6,6	5,5	5,6	5,9	6,1	6,6
	12H	5,5	5,7	6,0	6,1	6,7	5,7	5,8	6,2	6,3	6,8
12H	4H	5,2	5,5	5,7	5,9	6,3	5,3	5,6	5,8	6,0	6,4
	6H	5,4	5,5	5,8	6,0	6,5	5,4	5,6	5,9	6,0	6,5
	8H	5,5	5,6	5,9	6,1	6,6	5,5	5,6	6,0	6,1	6,6
Variation of the observer position for the luminaire distance S											
S = 1,0H		+0,7 / -0,8					+0,7 / -0,8				
S = 1,5H		+1,6 / -1,2					+1,8 / -1,2				
S = 2,0H		+2,7 / -2,2					+2,9 / -2,0				
Standard table		BK02					BK02				
Correction summand		-12,5					-12,4				
Corrected glare indices referring to 6430lm total luminous flux											