

LM-79

Test Report

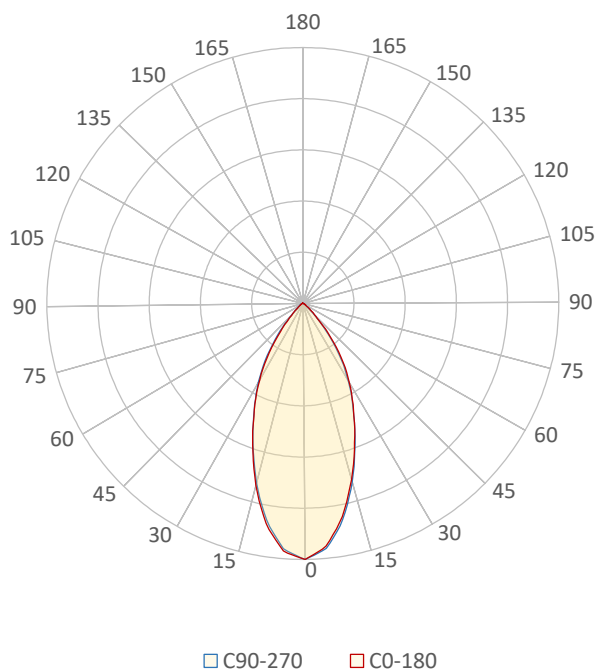
LM79-JADE-TW27-50-MEDIUM (2700K)

General Discription

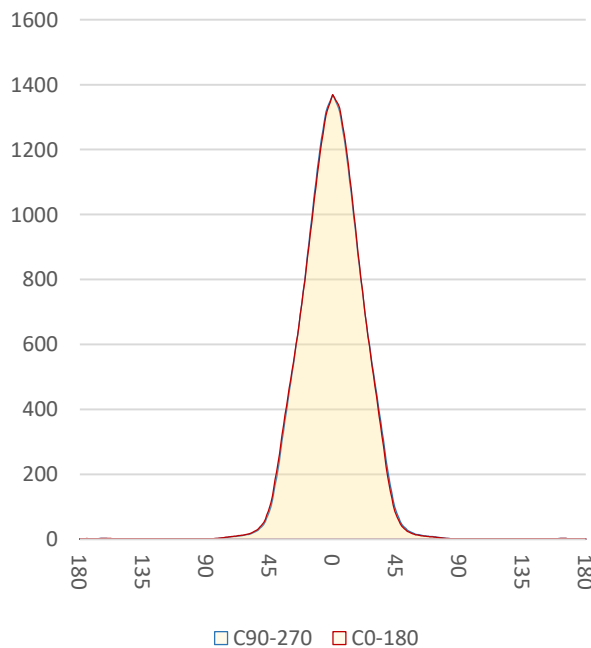
Item number	
Date and time	10-4-2018 09:24:45
CCT (Kelvin)	2706 K
Beam angle	46,2°
Luminous flux	1005 lm
Efficiency	63 lm/watt
Weighted energy	15,9 kWh/1000h
Power factor	0,57
CRI (RA)	82,5
Fidelity index Rf	Rf 85,1
Gammut index Rg	Rg 96,8
Peak	1375 cd



Polar diagram



Cartesian diagram



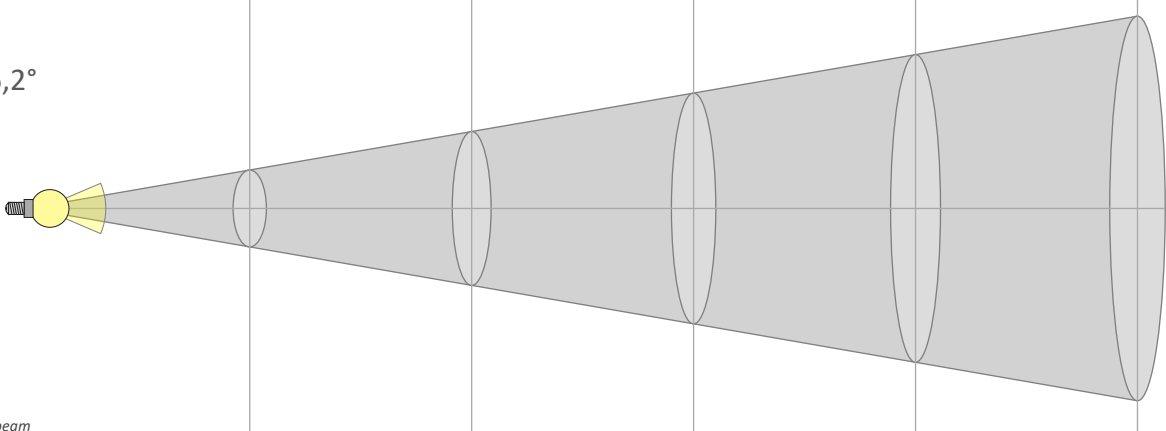
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Beam details				1m		2m		3m		4m		5m							
Lux*				1369 lx		342 lx		152 lx		86 lx		55 lx							
46,2° 																			
*measured at center of beam																			
Footcandles*				127,2 fcd		31,8 fcd		14,1 fcd		8,0 fcd		5,1 fcd							
Beam width (meter)				0,9 m		1,7 m		2,6 m		3,4 m		4,3 m							
Beam width (Feet)				2,8 ft		5,6 ft		8,4 ft		11,2 ft		14 ft							
Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
1369lx	342lx	152lx	86lx	55lx	38lx	28lx	21lx	17lx	14lx	11lx	10lx	8lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx
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
127,2fcd	31,8fcd	14,1fcd	8fcd	5,1fcd	3,5fcd	2,6fcd	2fcd	1,6fcd	1,3fcd	1,1fcd	0,9fcd	0,8fcd	0,6fcd	0,6fcd	0,5fcd	0,4fcd	0,4fcd	0,4fcd	0,3fcd
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°
1369	1365	1327	1284	1230	1160	1090	1014	938	864	792	721	660	599	544	494	443	384	325	264
100%	100%	97%	94%	90%	85%	80%	74%	68%	63%	58%	53%	48%	44%	40%	36%	32%	28%	24%	19%
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°
1369	1365	1327	1284	1230	1160	1090	1014	938	864	792	721	660	599	544	494	443	384	325	264
100%	100%	97%	94%	90%	85%	80%	74%	68%	63%	58%	53%	48%	44%	40%	36%	32%	28%	24%	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°
1369	1373	1348	1310	1264	1194	1124	1045	963	883	804	725	658	592	530	473	416	348	281	219
100%	100%	98%	96%	92%	87%	82%	76%	70%	64%	59%	53%	48%	43%	39%	35%	30%	25%	20%	16%
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°
1369	1373	1348	1310	1264	1194	1124	1045	963	883	804	725	658	592	530	473	416	348	281	219
100%	100%	98%	96%	92%	87%	82%	76%	70%	64%	59%	53%	48%	43%	39%	35%	30%	25%	20%	16%
Beam angle 50%				Field angle 10%				Cutoff angle 2,5%				Intensity ratio in 120° cone				Intensity ratio in 90° cone			
46,2°				83,4°				101,9°				97,3%				93,0%			



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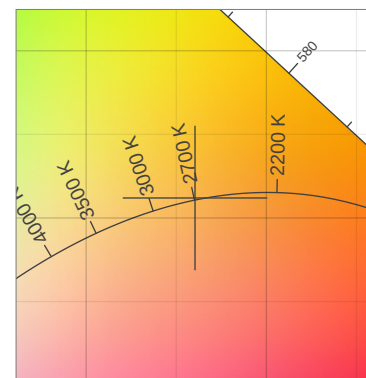
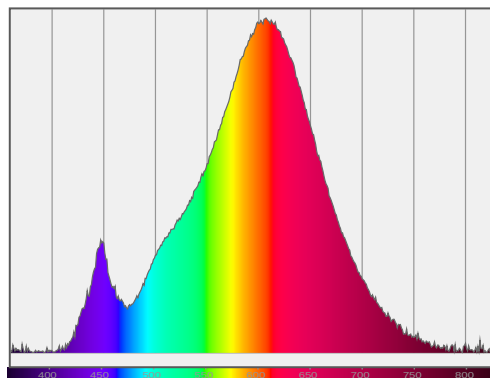
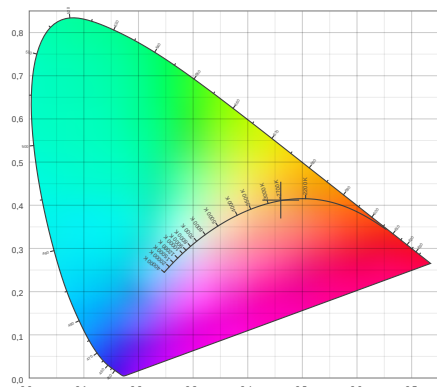
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Color details



CIE 1931

x: 0,460



Spectra

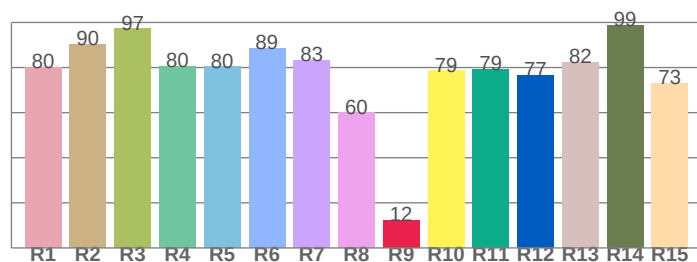
CIE 1931 ZOOM

2706 K

y: 0,412

Δuv : 0,0005

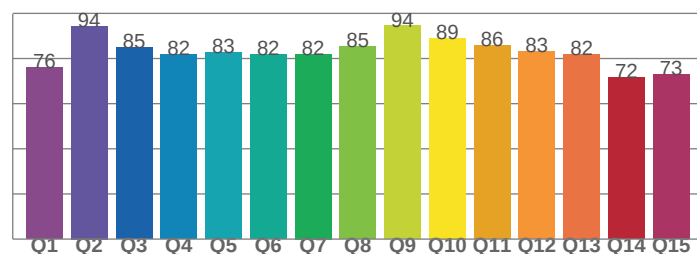
CRI: 82,5 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
80,2	90,3	97,1	80,3	80,3	88,5	83,3	59,9
R9	R10	R11	R12	R13	R14	R15	
12,1	78,5	79,1	76,6	82,2	98,9	73,0	

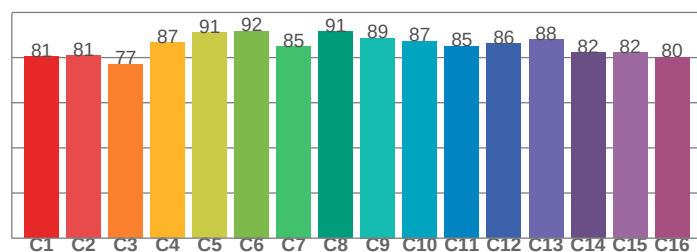
CQS: 81,9



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
75,9	94,4	85,0	81,9	82,7	81,9	82,0	85,4
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
94,5	89,1	85,8	83,1	82,0	71,8	73,0	

TM30: 85,1



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

C1	C2	C3	C4	C5	C6	C7	C8
80,6	80,9	77,1	86,6	91,0	91,8	84,9	91,4
C9	C10	C11	C12	C13	C14	C15	
88,7	87,4	85,0	86,3	88,1	82,3	82,1	

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
2706 K	82,5	12,1	85,1	96,8	81,9	0,460	0,412	0,262	0,352	0,0005



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TM30 details

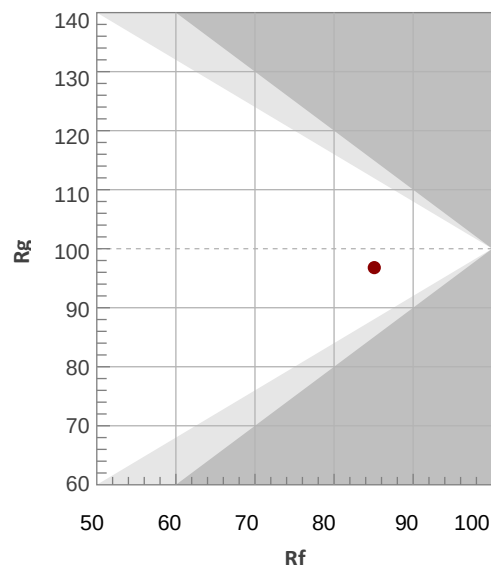
Rf 85,1

Fidelity index Rf

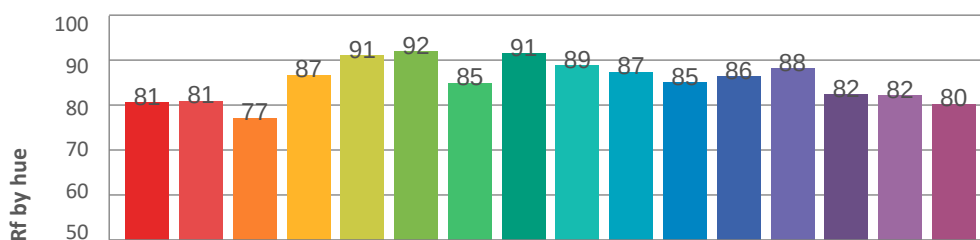
Rg 96,8

Gamut index Rg

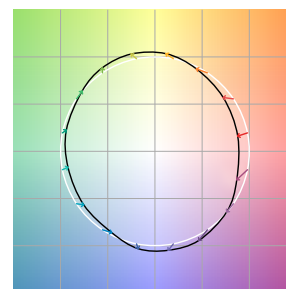
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	81	-11%	-1%
2	81	-8%	7%
3	77	-3%	12%
4	87	4%	9%
5	91	6%	5%
6	92	5%	-2%
7	85	0%	-10%
8	91	-4%	-4%
9	89	-6%	-1%
10	87	-6%	5%
11	85	-3%	10%
12	86	5%	3%
13	88	6%	-7%
14	82	4%	-14%
15	82	-1%	-11%
16	80	-9%	-13%



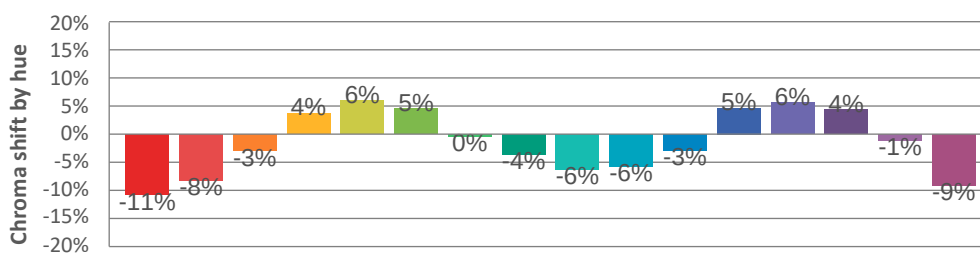
Hue binH



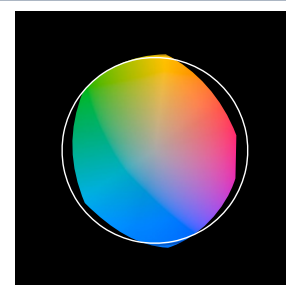
Color vector graphics



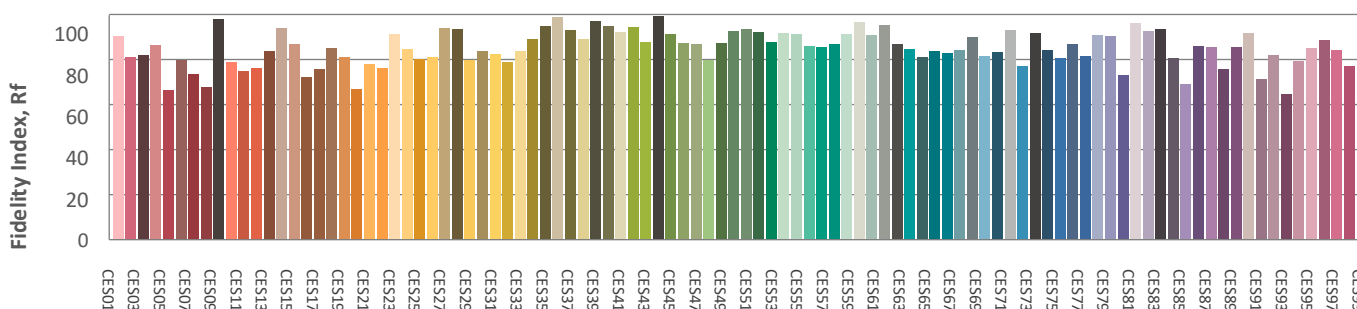
Hue bin



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				
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
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n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Variation of the observer position for the luminaire distance S										
n/a	n/a					n/a				
n/a	n/a					n/a				
n/a	n/a					n/a				
Standard table	n/a					n/a				
Correction summand	n/a					n/a				
Corrected glare indices referring to 1005lm total luminous flux										



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