

LM-79

Test Report

LM79-JADE-S-4000K-CRI90-SPOT

General Discription

Item number	J-SX-X-3-1-40-90-1
Date and time	27-1-2017 14:17:11
CCT (Kelvin)	3954 K
Beam angle	19,3°
Luminous flux	2843 lm
Efficiency	101 lm/watt
Weighted energy	28,1 kWh/1000h
Power factor	0,95
CRI (RA)	93,0
Fidelity index Rf	Rf 89,8
Gammut index Rg	Rg 98,3

NEW



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Beam details		1m		2m		3m		4m		5m	
Lux*		12412 lx		3103 lx		1379 lx		776 lx		496 lx	
<											



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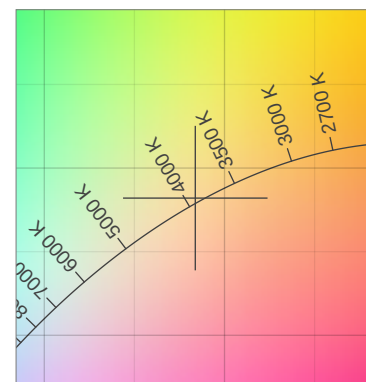
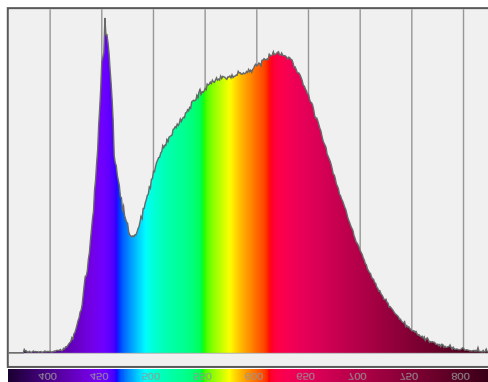
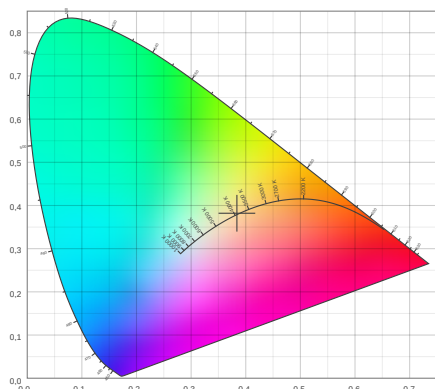
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Color details



CIE 1931

x: 0,384

3954 K

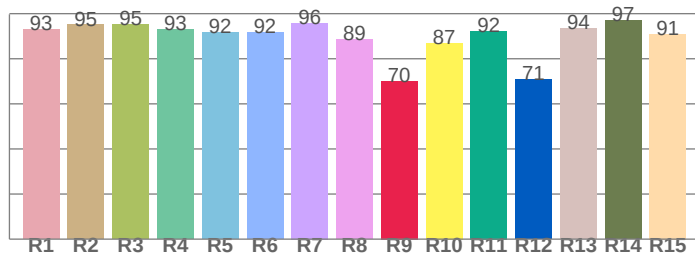
y: 0,382

Spectra

CIE 1931 ZOOM

Δuv : 0,0015

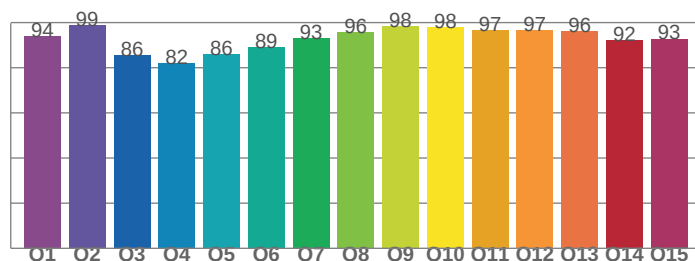
CRI: 93,0 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
93,0	95,0	95,2	92,9	91,7	91,8	95,9	88,5
R9	R10	R11	R12	R13	R14	R15	
70,1	87,0	92,3	70,8	93,5	97,0	91,0	

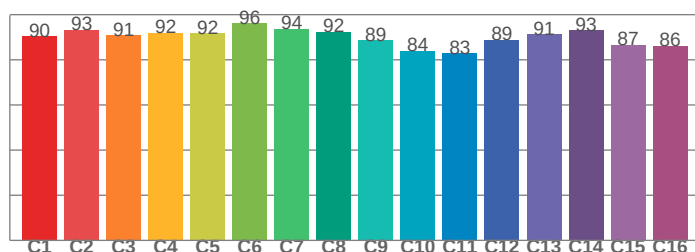
CQS: 91,4



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
94,0	98,8	85,6	82,0	85,9	89,1	93,2	95,6
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
98,4	97,9	96,7	96,6	96,3	92,2	92,8	

TM30: 89,8



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

C1	C2	C3	C4	C5	C6	C7	C8
90,3	93,1	90,8	91,8	91,7	96,1	93,7	92,3
C9	C10	C11	C12	C13	C14	C15	
88,6	83,8	82,8	88,8	91,3	93,0	86,6	

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
3954 K	93,0	70,1	89,8	98,3	91,4	0,384	0,382	0,225	0,336	0,0015



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TM30 details

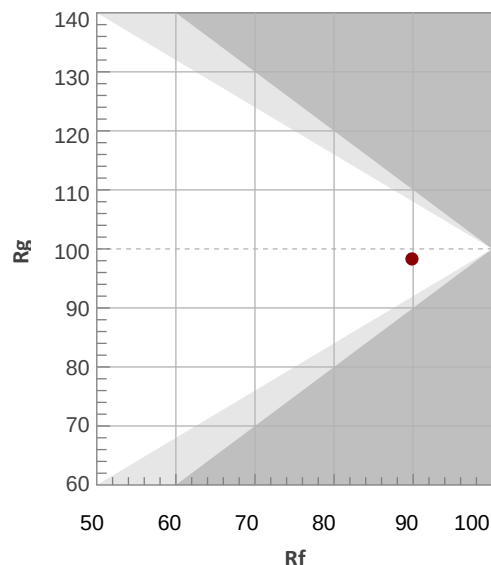
Rf 89,8

Fidelity index R_f

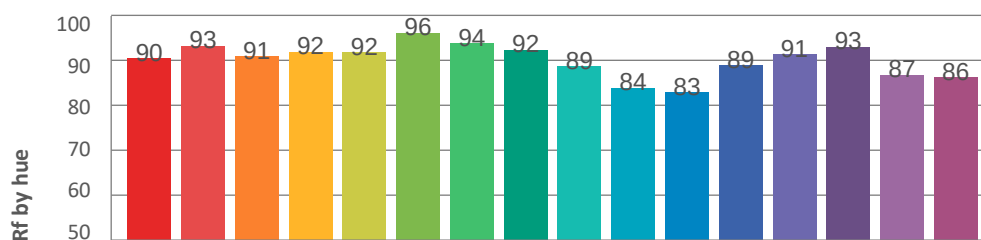
Rg 98,3

Gammut index Rg

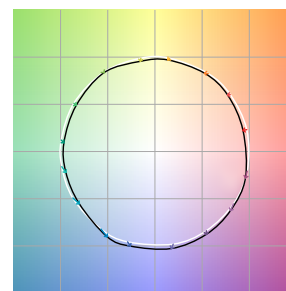
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	90	-4%	0%
2	93	-3%	1%
3	91	-2%	4%
4	92	-2%	2%
5	92	-3%	1%
6	96	-1%	0%
7	94	-3%	0%
8	92	-3%	2%
9	89	-3%	7%
10	84	-2%	9%
11	83	3%	10%
12	89	4%	4%
13	91	4%	-3%
14	93	3%	-2%
15	87	1%	-8%
16	86	0%	-7%



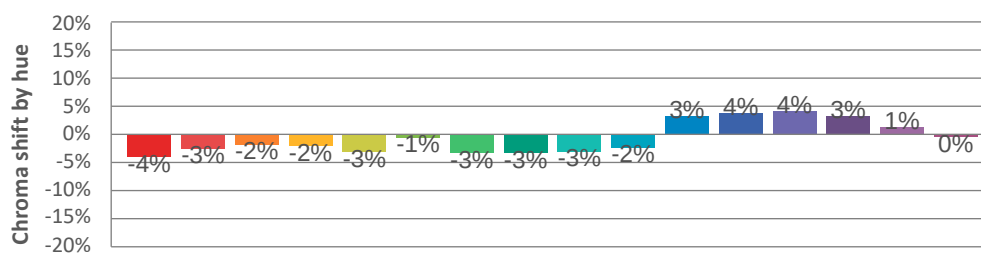
Hue binH



Color vector graphics



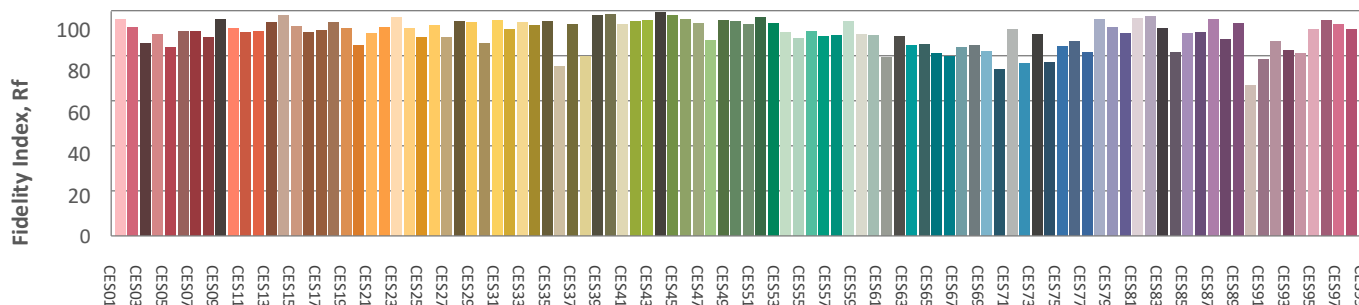
Hue bin



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	20,8	21,5	21,1	21,7	21,9	20,8	21,5	21,1	21,7	21,9
	3H	20,9	21,6	21,2	21,8	22,0	20,9	21,6	21,2	21,8	22,0
	4H	21,0	21,6	21,3	21,9	22,1	21,0	21,6	21,3	21,9	22,1
	6H	21,0	21,6	21,4	21,9	22,2	21,0	21,6	21,4	21,9	22,2
	8H	21,0	21,5	21,4	21,8	22,2	21,0	21,5	21,4	21,8	22,2
	12H	21,0	21,5	21,4	21,8	22,1	21,0	21,5	21,4	21,8	22,1
4H	2H	20,7	21,3	21,0	21,6	21,8	20,7	21,3	21,0	21,6	21,8
	3H	20,9	21,4	21,3	21,7	22,1	20,9	21,4	21,3	21,7	22,1
	4H	21,1	21,5	21,5	21,8	22,2	21,1	21,5	21,5	21,8	22,2
	6H	21,2	21,5	21,6	21,9	22,3	21,2	21,5	21,6	21,9	22,3
	8H	21,2	21,5	21,6	21,9	22,3	21,2	21,5	21,6	21,9	22,3
	12H	21,2	21,5	21,6	21,9	22,3	21,2	21,5	21,6	21,9	22,3
8H	4H	21,1	21,4	21,5	21,8	22,2	21,1	21,4	21,5	21,8	22,2
	6H	21,2	21,5	21,7	21,9	22,3	21,2	21,5	21,7	21,9	22,3
	8H	21,2	21,4	21,7	21,9	22,4	21,2	21,4	21,7	21,9	22,4
	12H	21,3	21,4	21,7	21,9	22,4	21,3	21,4	21,7	21,9	22,4
12H	4H	21,1	21,3	21,5	21,7	22,2	21,1	21,3	21,5	21,7	22,2
	6H	21,2	21,4	21,7	21,8	22,3	21,2	21,4	21,7	21,8	22,3
	8H	21,2	21,4	21,7	21,9	22,4	21,2	21,4	21,7	21,9	22,4
Variation of the observer position for the luminaire distance S											
S = 1,0H		+3,7 / -3,4					+3,7 / -3,4				
S = 1,5H		+6,3 / -3,8					+6,3 / -3,8				
S = 2,0H		+8,2 / -4,2					+8,2 / -4,2				
Standard table		BK01					BK01				
Correction summand		3,0					3,0				
Corrected glare indices referring to 2843lm total luminous flux											

