

# LM-79

## Test Report

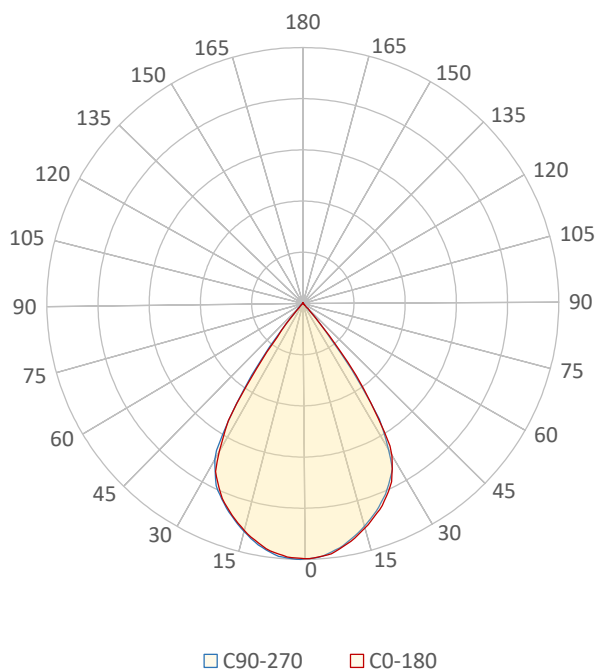
LM79-JADE-ZOOM-XICATO-3000K-CRI98-WIDE

### General Description

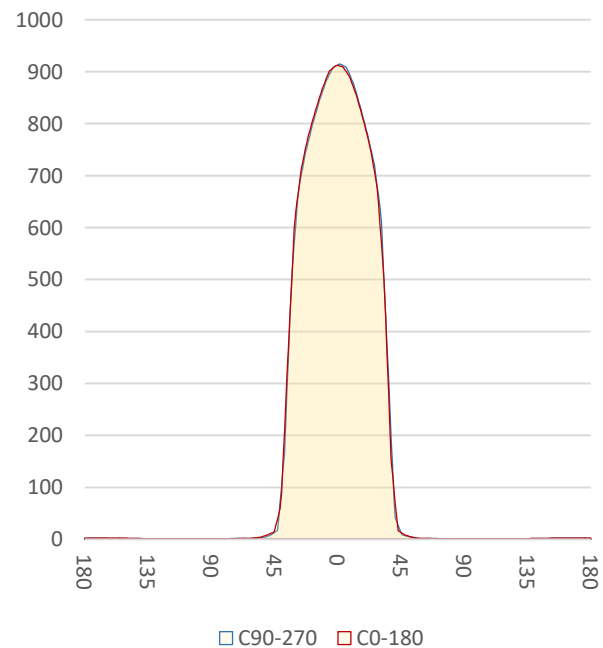
Item number	
Date and time	13-5-2019 11:43:04
CCT (Kelvin)	2970 K
Beam angle	67,1°
Luminous flux	901 lm
Efficiency	40 lm/watt
Weighted energy	22,7 kWh/1000h
Power factor	0,96
CRI (RA)	97,0
Fidelity index Rf	Rf 95,3
Gammut index Rg	Rg 103,3
Peak	915 cd



Polar diagram



Cartesian diagram



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Beam details	1m	2m	3m	4m	5m																			
<b>Lux*</b>	912 lx	228 lx	101 lx	57 lx	36 lx																			
<small>*measured at center of beam</small>																								
<b>Footcandles*</b>	84,8 fcd	21,2 fcd	9,4 fcd	5,3 fcd	3,4 fcd																			
<b>Beam width (meter)</b>	1,3 m	2,7 m	4 m	5,3 m	6,6 m																			
<b>Beam width (Feet)</b>	4,4 ft	8,7 ft	13,1 ft	17,4 ft	21,8 ft																			
<b>Beam intensities</b>																								
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m					
912lx	228lx	101lx	57lx	36lx	25lx	19lx	14lx	11lx	9lx	8lx	6lx	5lx	5lx	4lx	4lx	3lx	3lx	3lx	2lx					
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					
84,8fcd	21,2fcd	9,4fcd	5,3fcd	3,4fcd	2,4fcd	1,7fcd	1,3fcd	1fcd	0,8fcd	0,7fcd	0,6fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd					
<b>Intensities in 0° c-plane</b>																								
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°					
912	910	906	901	888	874	859	841	824	805	786	764	739	712	671	630	542	433	322	206					
100%	100%	99%	99%	97%	96%	94%	92%	90%	88%	86%	84%	81%	78%	74%	69%	59%	47%	35%	23%					
<b>Intensities in 90° c-plane</b>																								
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°					
912	910	906	895	883	869	852	835	817	798	776	754	730	701	673	604	534	429	293	164					
100%	100%	99%	98%	97%	95%	93%	92%	90%	87%	85%	83%	80%	77%	74%	66%	58%	47%	32%	18%					
<b>Intensities in 180° c-plane</b>																								
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°					
912	910	908	900	892	878	863	847	828	809	787	765	740	709	677	606	533	426	287	151					
100%	100%	100%	99%	98%	96%	95%	93%	91%	89%	86%	84%	81%	78%	74%	66%	58%	47%	31%	17%					
<b>Intensities in 270° c-plane</b>																								
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°					
912	914	911	908	897	884	869	851	832	812	791	769	746	721	680	640	550	433	315	195					
100%	100%	100%	100%	98%	97%	95%	93%	91%	89%	87%	84%	82%	79%	75%	70%	60%	47%	34%	21%					
<b>Beam angle 50%</b>					<b>Field angle 10%</b>					<b>Cutoff angle 2,5%</b>					<b>Intensity ratio in 120° cone</b>					<b>Intensity ratio in 90° cone</b>				
67,2°					80,1°					86,6°					98,8%					98,0%				



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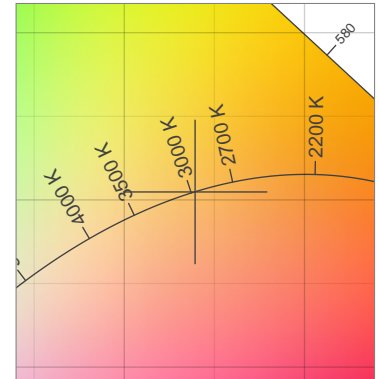
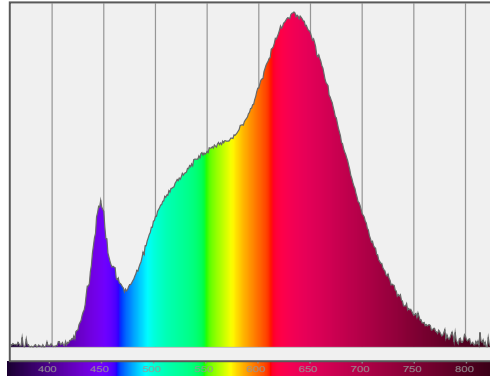
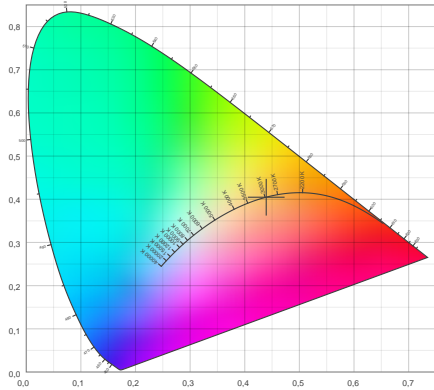
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# LM-79

## Test Report

### LM79-JADE-ZOOM-XICATO-3000K-CRI98-WIDE

#### Color details



CIE 1931

x: 0,439



Spectra

CIE 1931 ZOOM

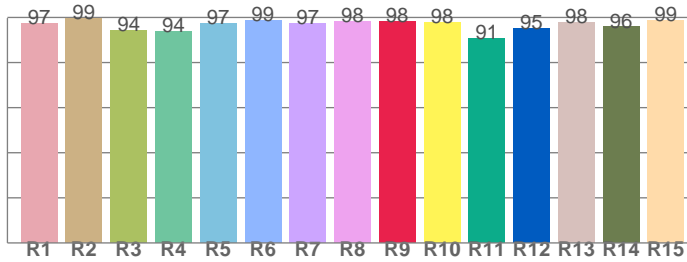
2970 K

y: 0,405

$\Delta uv$ : 0,0002

CRI: 97,0 (R1-R8)

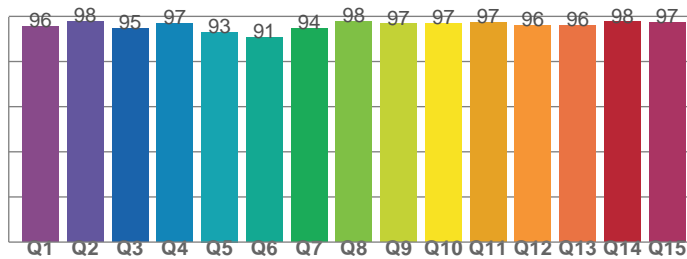
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
97,2	99,5	94,3	93,7	97,3	98,6	97,4	98,2
R9	R10	R11	R12	R13	R14	R15	
98,5	97,6	90,8	95,1	97,9	95,8	98,6	

CQS: 95,2

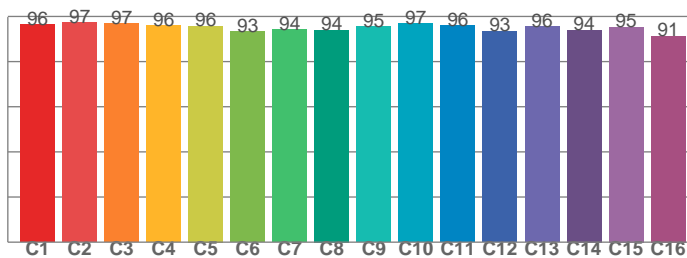
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
95,6	97,7	94,7	97,0	93,1	90,6	94,5	97,9
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
96,7	97,0	97,2	96,1	96,1	97,6	97,2	

TM30: 95,3

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



C1	C2	C3	C4	C5	C6	C7	C8
96,3	97,4	96,9	96,0	95,8	93,2	94,2	93,9
C9	C10	C11	C12	C13	C14	C15	
95,5	96,8	96,0	93,4	95,6	94,0	95,4	

#### 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	$\Delta uv$
2970 K	97,0	98,5	95,3	103,3	95,2	0,439	0,405	0,252	0,348	0,0002



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# LM-79

## Test Report

### LM79-JADE-ZOOM-XICATO-3000K-CRI98-WIDE

#### TM30 details

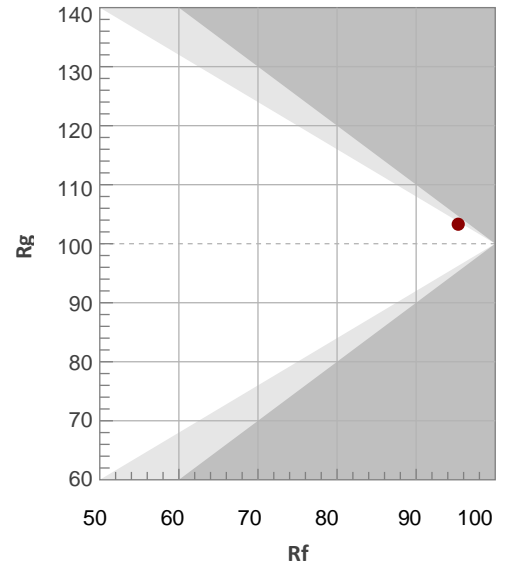
Rf 95,3

Fidelity index Rf

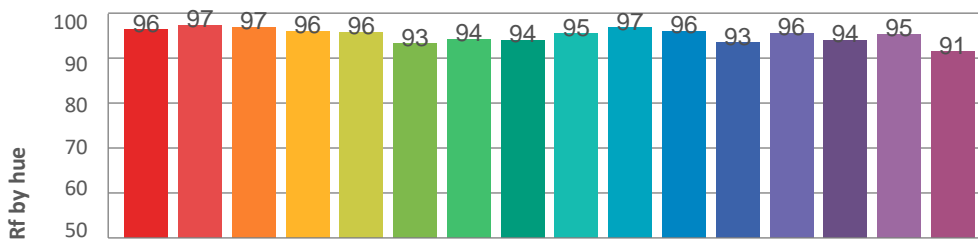
Rg 103,3

Gamut index Rg

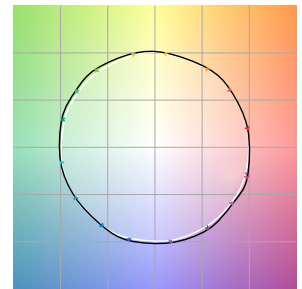
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	96	0%	-1%
2	97	0%	-1%
3	97	1%	1%
4	96	1%	1%
5	96	2%	2%
6	93	4%	2%
7	94	3%	-1%
8	94	3%	-2%
9	95	1%	-2%
10	97	0%	-1%
11	96	0%	2%
12	93	3%	1%
13	96	2%	-2%
14	94	4%	-2%
15	95	2%	-1%
16	91	2%	-6%



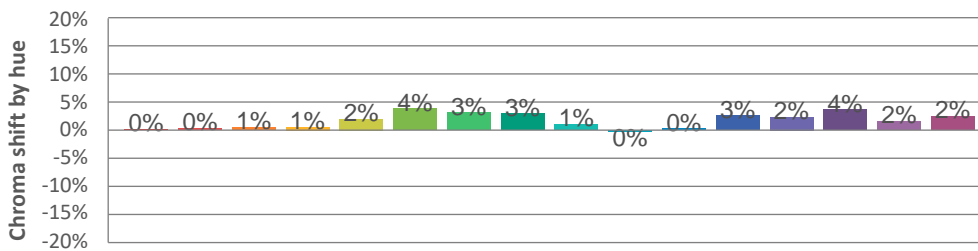
#### Hue binH



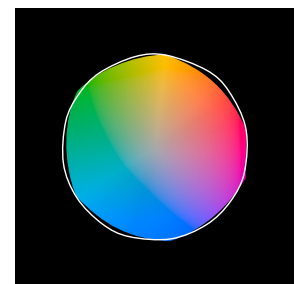
#### Color vector graphics



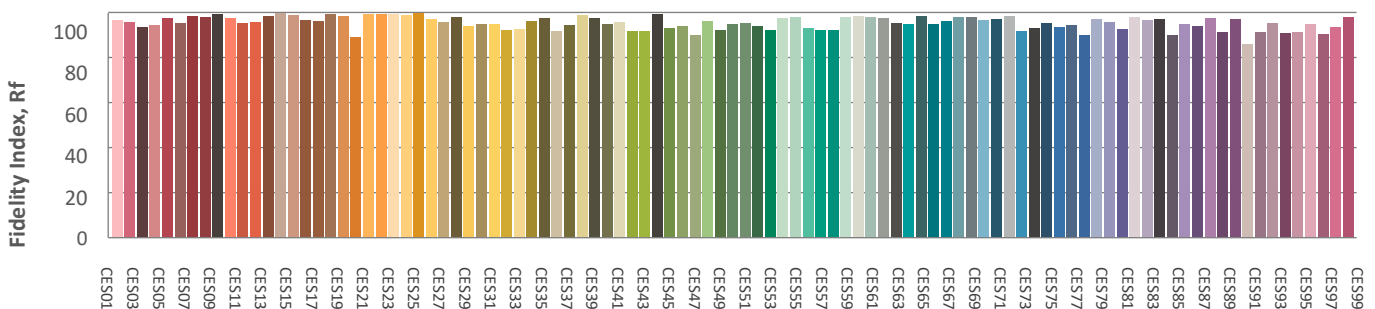
#### Hue bin



#### Color distortion graphics



#### Color Evaluation Sample



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### LM79-JADE-ZOOM-XICATO-3000K-CRI98-WIDE

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

#### Variation of the observer position for the luminaire distance S

S = 1,0H	+0,0 / 0,0	+0,0 / 0,0
S = 1,5H	+0,0 / 0,0	+0,0 / 0,0
S = 2,0H	+0,0 / 0,0	+0,0 / 0,0
Standard table	BK00	BK00
Correction summand	-20,4	-20,4

Corrected glare indices referring to 901lm total luminous flux



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