

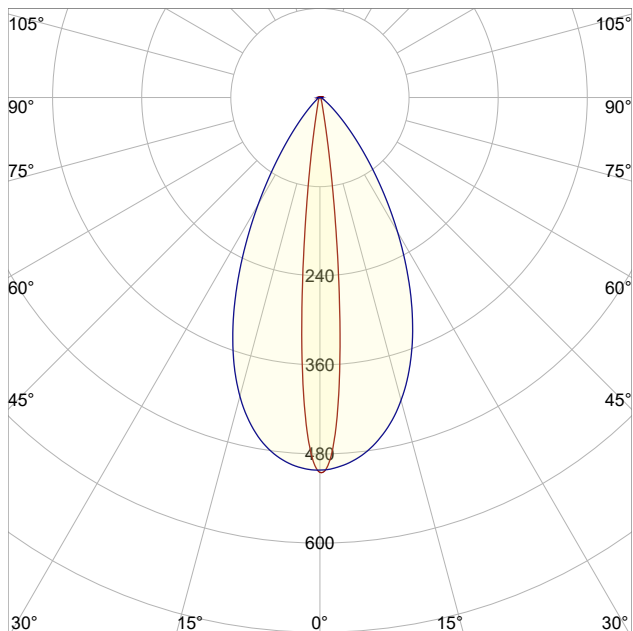
# LM-79

## Test Report

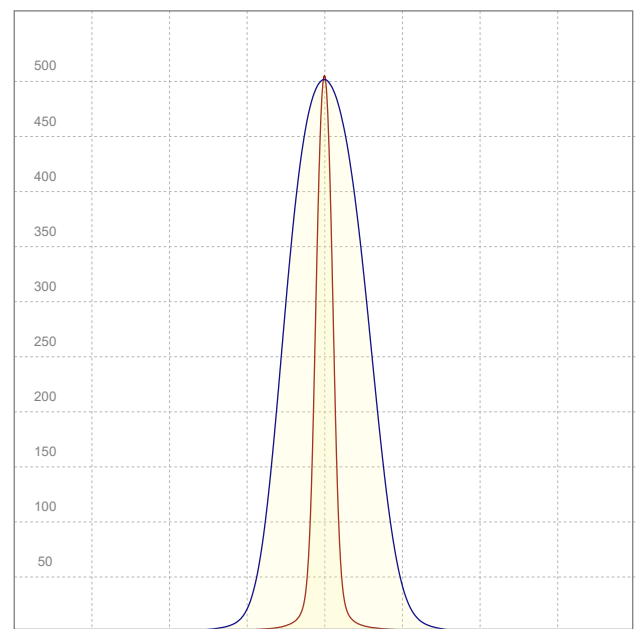
# LM79-FOCUS-G4-3500K-CRI95-SPOT-ELLIPTICAL BEAMSHAPER

### General Description

Item number	FS-XX-X-3595-Z
Date and time	26-9-2022 14:37:13
CCT (Kelvin)	3446 K
Beam angle	52,5°
Luminous flux	111 lm
Efficiency	17 lm/watt
Weighted energy	6,6 kWh/1000h
Power factor	0,8
CRI (RA)	93,3
Fidelity index Rf	Rf 91,3
Gammut index Rg	Rg 102,6
Peak	513 cd



*Polar curve*



*Linear distribution diagram*



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## Test Report

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Beam details	1m	2m	3m	4m	5m																			
Lux*	506 lx	126 lx	56 lx	32 lx	20 lx																			
*measured at center of beam																								
Footcandles*	47,0 fcd	11,7 fcd	5,2 fcd	2,9 fcd	1,9 fcd																			
Beam width (meter)	0,4 m	0,8 m	1,2 m	1,5 m	1,9 m																			
Beam width (Feet)	1,3 ft	2,5 ft	3,8 ft	5,1 ft	6,3 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					
506lx	126lx	56lx	32lx	20lx	14lx	10lx	8lx	6lx	5lx	4lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx					
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					
47fcd	11,7fcd	5,2fcd	2,9fcd	1,9fcd	1,3fcd	1fcd	0,7fcd	0,6fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd					
<b>Intensities in 0° c-plane</b>																								
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°					
506	498	475	433	376	309	239	174	121	82	55	38	27	21	17	14	12	10	9	8					
100%	99%	94%	86%	74%	61%	47%	34%	24%	16%	11%	7%	5%	4%	3%	3%	2%	2%	2%	2%					
<b>Intensities in 90° c-plane</b>																								
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°					
506	501	500	498	495	492	488	483	478	472	465	458	450	442	432	422	411	400	388	375					
100%	99%	99%	98%	98%	97%	96%	96%	95%	93%	92%	91%	89%	87%	85%	83%	81%	79%	77%	74%					
<b>Intensities in 180° c-plane</b>																								
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°					
506	490	457	408	346	276	207	147	101	68	46	32	24	19	15	13	11	10	9	8					
100%	97%	90%	81%	68%	55%	41%	29%	20%	13%	9%	6%	5%	4%	3%	3%	2%	2%	2%	2%					
<b>Intensities in 270° c-plane</b>																								
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°					
506	501	501	499	497	494	490	485	480	474	467	458	449	439	428	416	403	390	375	359					
100%	99%	99%	99%	98%	98%	97%	96%	95%	94%	92%	91%	89%	87%	85%	82%	80%	77%	74%	71%					
<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>				
21,9°					37,8°					52,2°					98,5%					95,1%				



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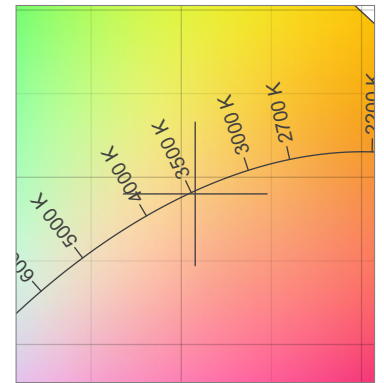
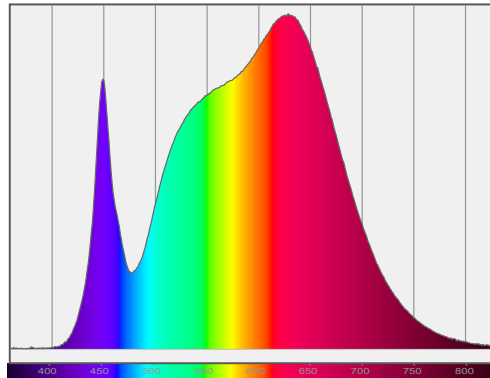
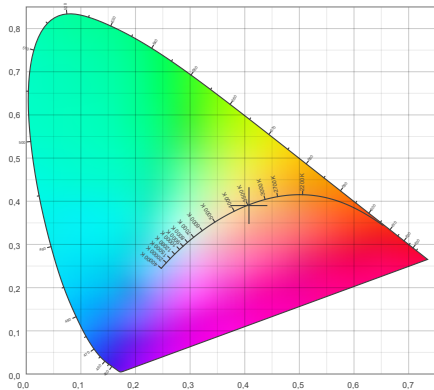
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# LM-79

## Test Report

# LM79-FOCUS-G4-3500K-CRI95-SPOT-ELLIPTICAL BEAMSHAPER

### Color details



CIE 1931

x: 0,408



Spectra

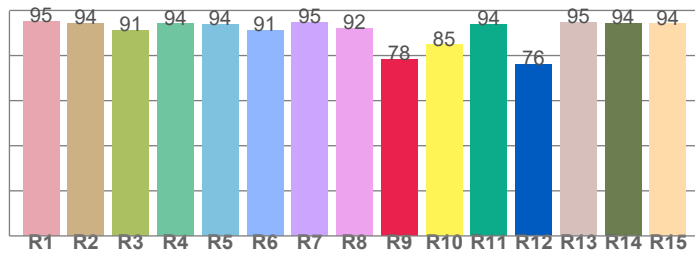
CIE 1931 ZOOM

3446 K

y: 0,390

$\Delta uv: -0,0008$

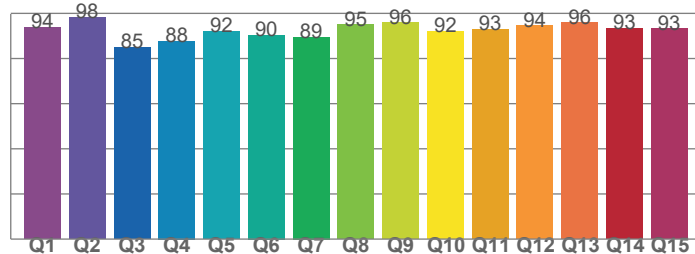
**CRI: 93,3 (R1-R8)**



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

R1	R2	R3	R4	R5	R6	R7	R8
95,3	94,2	91,1	94,1	93,9	91,3	94,8	92,0
R9	R10	R11	R12	R13	R14	R15	
78,3	84,8	93,8	76,1	94,8	94,2	94,1	

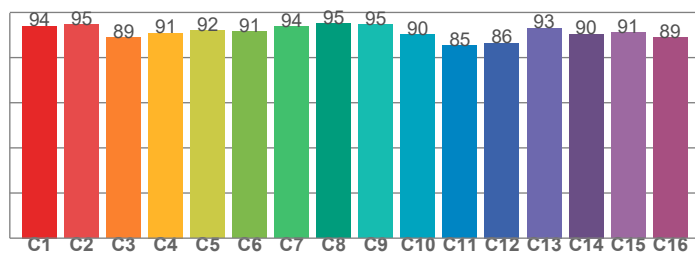
**CQS: 91,9**



*CQS values*

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
93,7	98,1	85,0	87,8	92,0	90,4	89,5	95,0
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
95,9	91,9	92,8	94,5	95,9	93,2	93,2	

**TM30: 91,3**



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

C1	C2	C3	C4	C5	C6	C7	C8
94,0	94,7	88,8	90,9	92,0	91,4	93,9	95,2
C9	C10	C11	C12	C13	C14	C15	
94,7	90,2	85,4	86,4	93,1	90,5	91,1	

### 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	$\Delta uv$
3446 K	93,3	78,3	91,3	102,6	91,9	0,408	0,390	0,238	0,341	-0,0008



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# LM-79

## Test Report

# LM79-FOCUS-G4-3500K-CRI95-SPOT-ELLIPTICAL BEAMSHAPER

### TM30 details

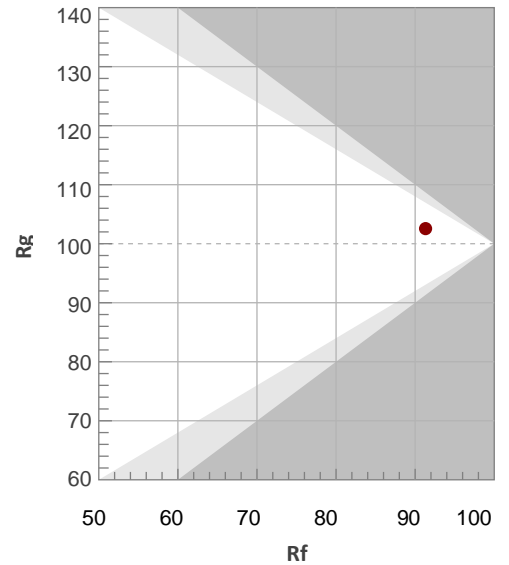
Rf 91,3

Fidelity index Rf

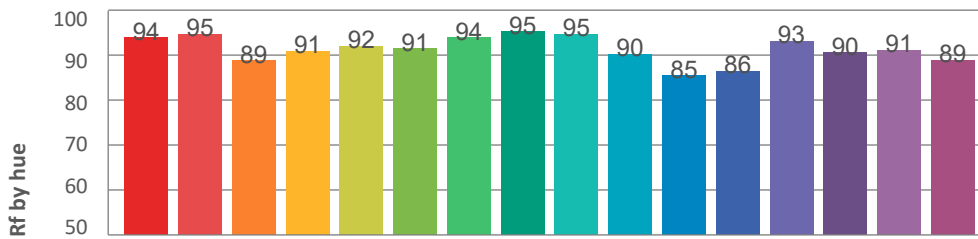
Rg 102,6

Gamut index Rg

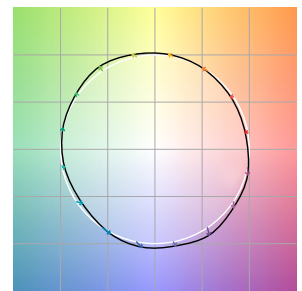
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	94	-3%	-2%
2	95	-2%	2%
3	89	0%	6%
4	91	1%	5%
5	92	3%	4%
6	91	5%	0%
7	94	2%	-3%
8	95	0%	-3%
9	95	-2%	0%
10	90	-4%	5%
11	85	1%	10%
12	86	4%	7%
13	93	5%	2%
14	90	8%	-2%
15	91	4%	-5%
16	89	2%	-7%



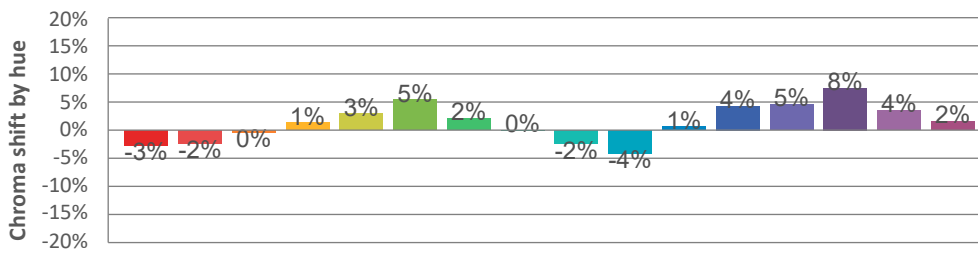
### Hue binH



### Color vector graphics



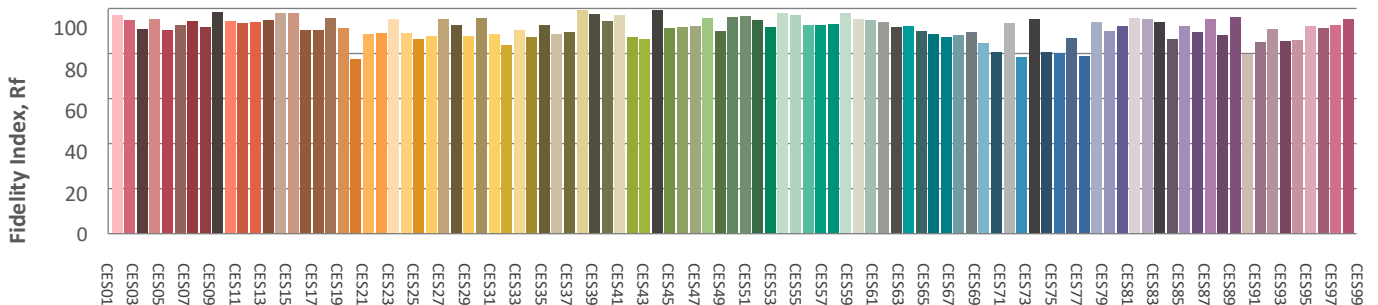
### Hue bin



### Color distortion graphics



### Color Evaluation Sample



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# LM-79

## Test Report

### LM79-FOCUS-G4-3500K-CRI95-SPOT-ELLIPTICAL BEAMSHAPER

**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
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
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 111lm total luminous flux**

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