

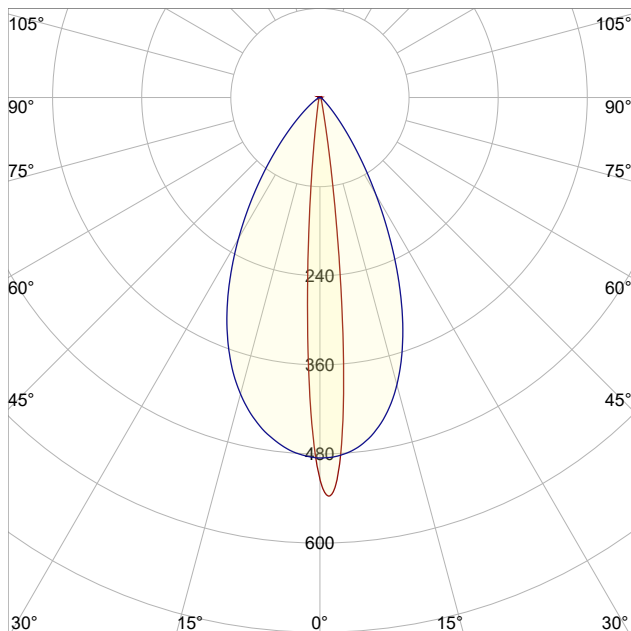
# LM-79

## Test Report

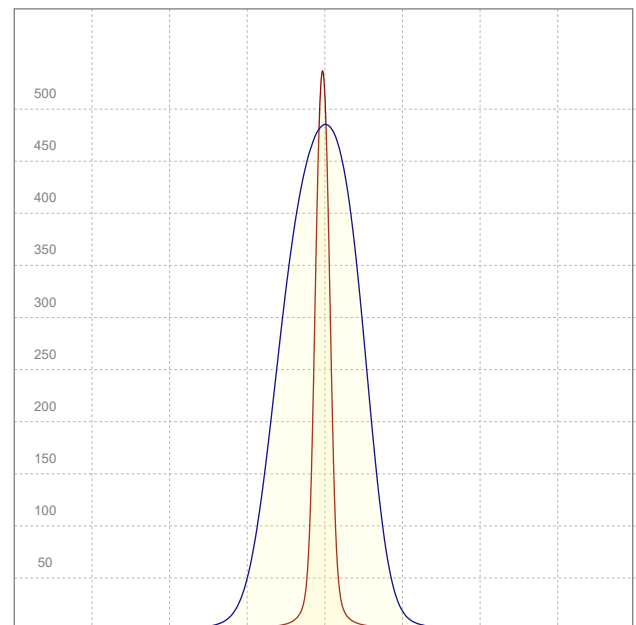
# LM79-FOCUS-G4-2700K-CRI95-SPOT-ELLIPTICAL BEAMSHAPER

### General Description

Item number	FS-XX-X-3595-Z
Date and time	27-9-2022 17:16:06
CCT (Kelvin)	2751 K
Beam angle	53,1°
Luminous flux	103 lm
Efficiency	15 lm/watt
Weighted energy	6,7 kWh/1000h
Power factor	0,8
CRI (RA)	93,8
Fidelity index Rf	Rf 92,2
Gammut index Rg	Rg 100,5
Peak	542 cd



*Polar curve*



*Linear distribution diagram*



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Beam details	1m	2m	3m	4m	5m																			
Lux*	508 lx	127 lx	56 lx	32 lx	20 lx																			
*measured at center of beam																								
Footcandles*	47,2 fcd	11,8 fcd	5,2 fcd	2,9 fcd	1,9 fcd																			
Beam width (meter)	0,4 m	0,7 m	1,1 m	1,4 m	1,8 m																			
Beam width (Feet)	1,2 ft	2,3 ft	3,5 ft	4,6 ft	5,8 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					
508lx	127lx	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					
47,2fcd	11,8fcd	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°					
508	533	527	495	438	364	282	203	138	91	59	40	28	22	17	14	12	11	9	8					
100%	105%	104%	97%	86%	72%	56%	40%	27%	18%	12%	8%	6%	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°					
508	485	484	483	481	478	474	470	464	458	451	443	434	423	412	400	387	373	358	342					
100%	96%	95%	95%	95%	94%	93%	93%	91%	90%	89%	87%	85%	83%	81%	79%	76%	73%	71%	67%					
<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°					
508	464	396	316	236	165	109	71	48	33	24	19	16	13	11	10	9	8	7	6					
100%	91%	78%	62%	46%	32%	22%	14%	9%	7%	5%	4%	3%	3%	2%	2%	2%	2%	1%	1%					
<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°					
508	485	483	481	479	476	472	468	463	458	452	445	438	430	422	413	404	394	383	371					
100%	95%	95%	95%	94%	94%	93%	92%	91%	90%	89%	88%	86%	85%	83%	81%	79%	78%	75%	73%					
<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>				
20°					35,1°					49,3°					98,4%					94,8%				



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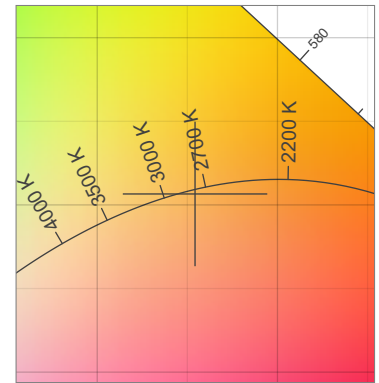
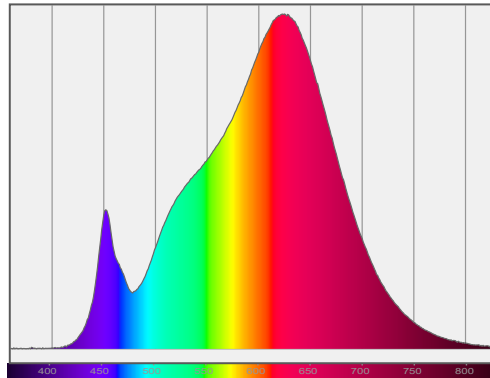
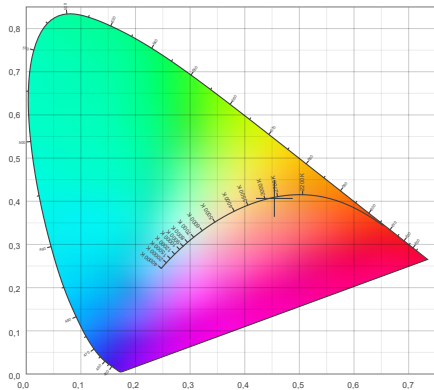
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# LM-79

## Test Report

# LM79-FOCUS-G4-2700K-CRI95-SPOT-ELLIPTICAL BEAMSHAPER

### Color details



CIE 1931

x: 0,454



Spectra

CIE 1931 ZOOM

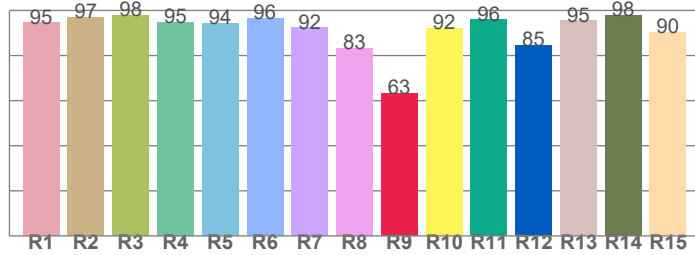
2751 K

y: 0,407

$\Delta uv: -0,0010$

**CRI: 93,8 (R1-R8)**

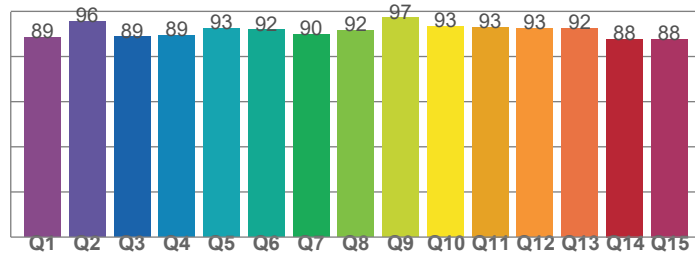
*CRI values, R1-R8 are used to calculate final CRI value*



R1	R2	R3	R4	R5	R6	R7	R8
94,5	97,0	97,8	94,6	94,3	96,5	92,3	83,3
R9	R10	R11	R12	R13	R14	R15	
63,2	91,9	95,9	84,6	95,4	97,9	90,2	

**CQS: 90,9**

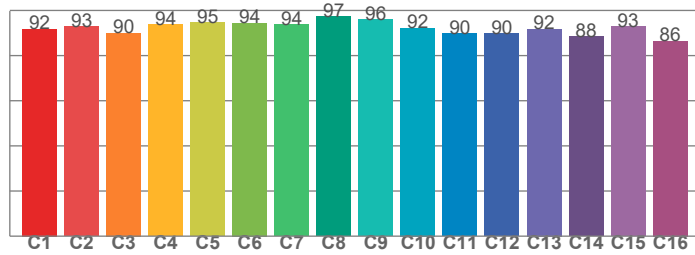
*CQS values*



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
88,6	95,5	88,7	89,5	92,5	91,8	89,7	91,6
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
97,1	93,4	93,1	92,5	92,4	87,7	87,8	

**TM30: 92,2**

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



C1	C2	C3	C4	C5	C6	C7	C8
91,8	92,8	90,0	93,9	94,8	94,4	93,8	97,3
C9	C10	C11	C12	C13	C14	C15	
96,0	92,2	89,8	89,9	91,8	88,4	92,8	

### 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	$\Delta uv$
2751 K	93,8	63,2	92,2	100,5	90,9	0,454	0,407	0,261	0,350	-0,0010



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# LM-79

## Test Report

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### TM30 details

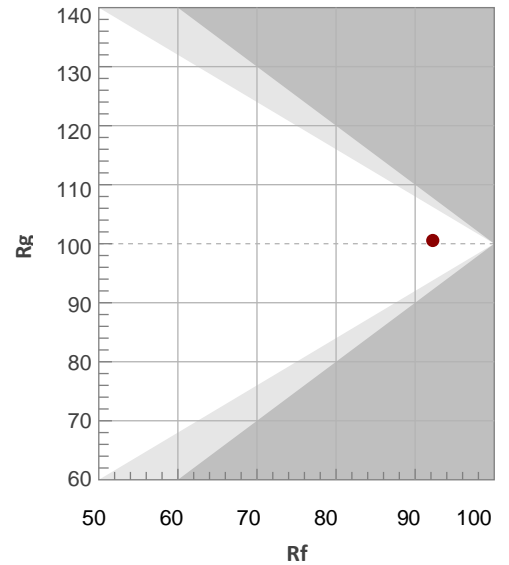
Rf 92,2

Fidelity index Rf

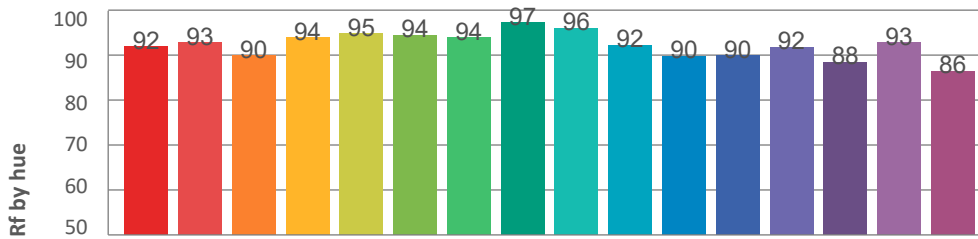
Rg 100,5

Gamut index Rg

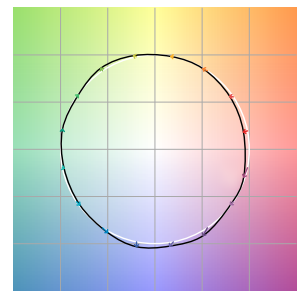
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	0%
2	93	-3%	3%
3	90	-1%	5%
4	94	0%	2%
5	95	2%	3%
6	94	3%	0%
7	94	0%	-3%
8	97	0%	-2%
9	96	-2%	1%
10	92	-1%	5%
11	90	1%	7%
12	90	5%	1%
13	92	4%	-5%
14	88	4%	-8%
15	93	-1%	-4%
16	86	-2%	-10%



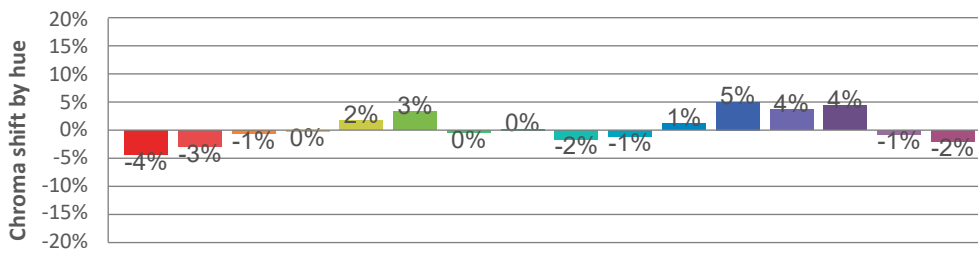
### Hue binH



### Color vector graphics



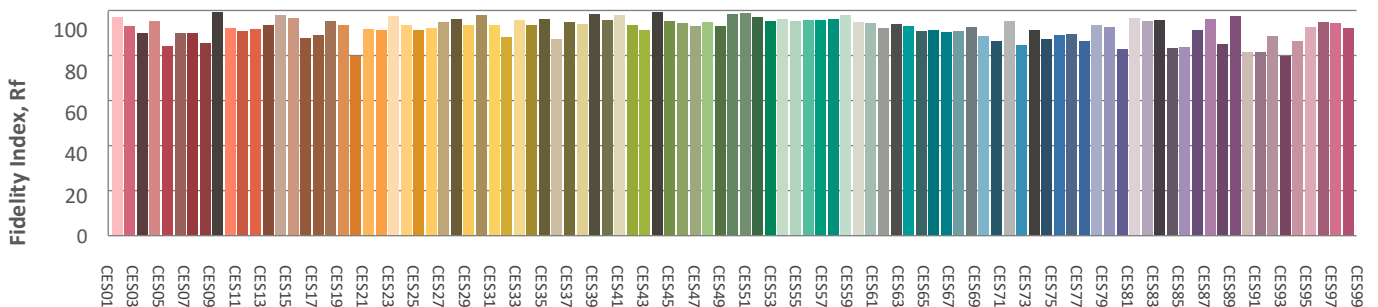
### Hue bin



### Color distortion graphics



### Color Evaluation Sample



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# LM-79

## Test Report

# LM79-FOCUS-G4-2700K-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
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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
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 103lm total luminous flux										



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