

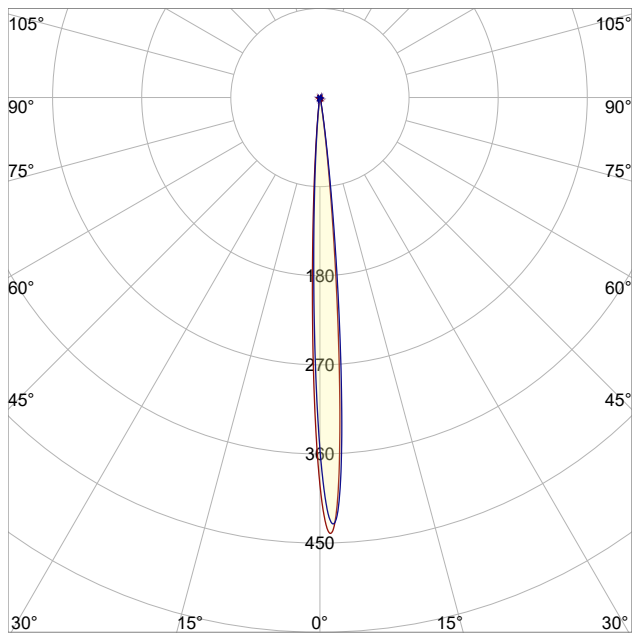
# LM-79

## Test Report

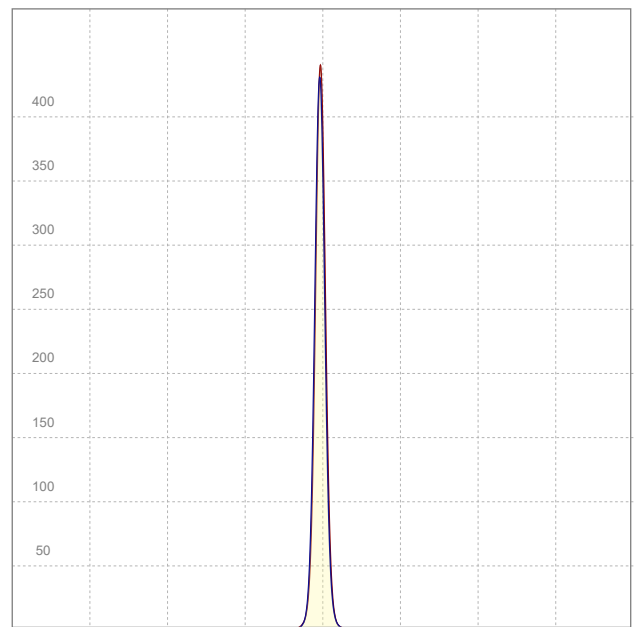
### LM79-FOCUS-MICRO-G2-3000K-CRI95-SPOT

#### General Description

Item number	FM-X-X-3095-Z
Date and time	16-10-2020 13:55:44
CCT (Kelvin)	3064 K
Beam angle	6,6°
Luminous flux	9,49 lm
Efficiency	9 lm/watt
Weighted energy	1,1 kWh/1000h
Power factor	1,0
CRI (RA)	93,0
Fidelity index Rf	Rf 89,3
Gammut index Rg	Rg 105,2
Peak	440 cd



*Polar curve*



*Linear distribution diagram*



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Beam details	1m	2m	3m	4m	5m																			
Lux*	372 lx	93 lx	41 lx	23 lx	15 lx																			
*measured at center of beam																								
Footcandles*	34,6 fcd	8,6 fcd	3,8 fcd	2,2 fcd	1,4 fcd																			
Beam width (meter)	0,1 m	0,2 m	0,3 m	0,5 m	0,6 m																			
Beam width (Feet)	0,4 ft	0,8 ft	1,1 ft	1,5 ft	1,9 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					
372lx	93lx	41lx	23lx	15lx	10lx	8lx	6lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	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					
34,6fcd	8,6fcd	3,8fcd	2,2fcd	1,4fcd	1fcd	0,7fcd	0,5fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	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°					
372	436	430	373	282	188	113	63	34	18	10	6	4	3	2	2	1	1	1	1					
100%	117%	115%	100%	76%	51%	30%	17%	9%	5%	3%	2%	1%	1%	1%	0%	0%	0%	0%	0%					
<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°					
372	415	429	392	315	222	139	79	42	21	11	6	4	2	2	1	1	1	1	1					
100%	111%	115%	105%	84%	60%	37%	21%	11%	6%	3%	2%	1%	1%	0%	0%	0%	0%	0%	0%					
<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°					
372	309	215	135	78	42	22	12	6	4	3	2	1	1	1	1	0	0	0	0					
100%	83%	58%	36%	21%	11%	6%	3%	2%	1%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%					
<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°					
372	266	178	109	62	34	19	10	6	4	3	2	1	1	1	1	1	1	0	1					
100%	71%	48%	29%	17%	9%	5%	3%	2%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%					
<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>				
6,6°					12,5°					17°					97,6%					95,9%				



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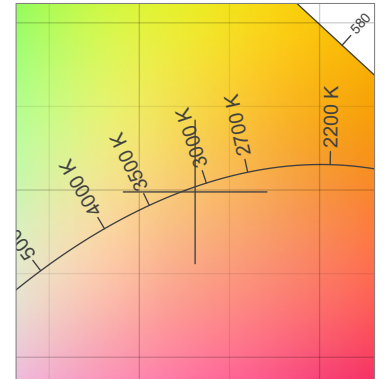
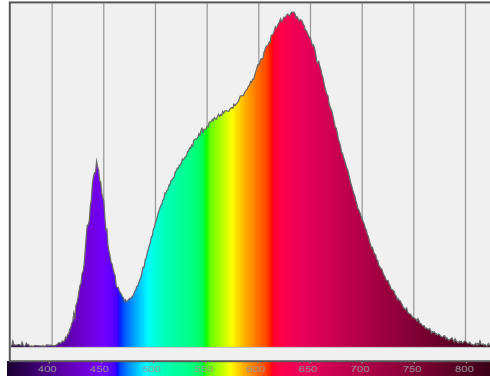
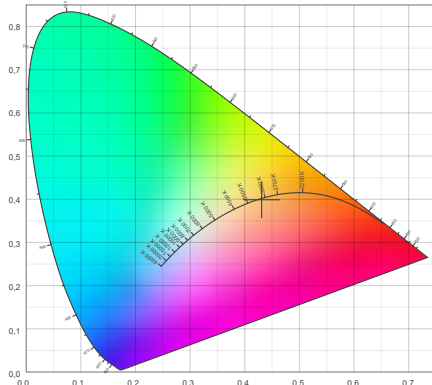
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# LM-79

## Test Report

# LM79-FOCUS-MICRO-G2-3000K-CRI95-SPOT

### Color details

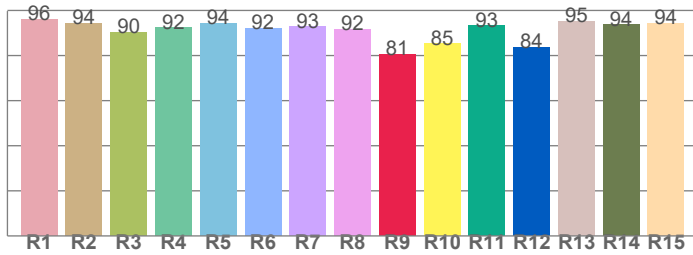


CIE 1931	x: 0,431	
3064 K	y: 0,399	

Spectra
---------

CIE 1931 ZOOM
$\Delta uv: -0,0013$

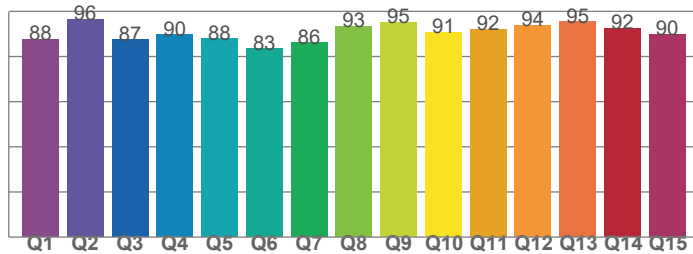
### CRI: 93,0 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
96,1	94,2	90,2	92,3	94,4	92,2	92,7	91,7
R9	R10	R11	R12	R13	R14	R15	
80,6	85,2	93,2	83,5	95,3	93,6	94,1	

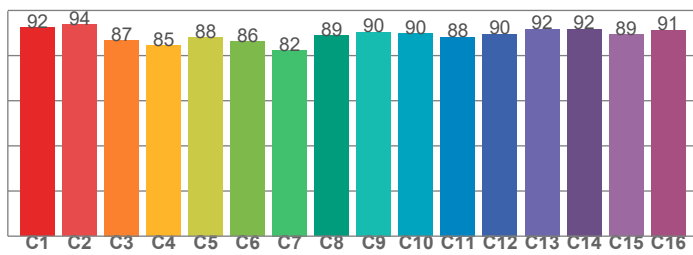
### CQS: 89,9



### CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
87,6	96,4	87,4	89,6	87,9	83,4	86,1	93,5
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
95,1	90,6	92,2	93,8	95,4	92,4	90,0	

### TM30: 89,3



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

C1	C2	C3	C4	C5	C6	C7	C8
92,4	93,8	86,8	84,6	88,0	86,3	82,4	88,8
C9	C10	C11	C12	C13	C14	C15	
90,4	89,9	88,3	89,6	91,8	91,7	89,3	

### 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	$\Delta uv$
3064 K	93,0	80,6	89,3	105,2	89,9	0,431	0,399	0,249	0,346	-0,0013



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### TM30 details

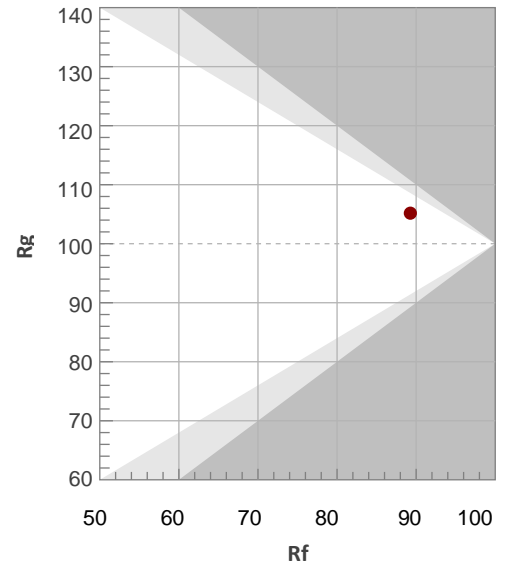
Rf 89,3

Fidelity index Rf

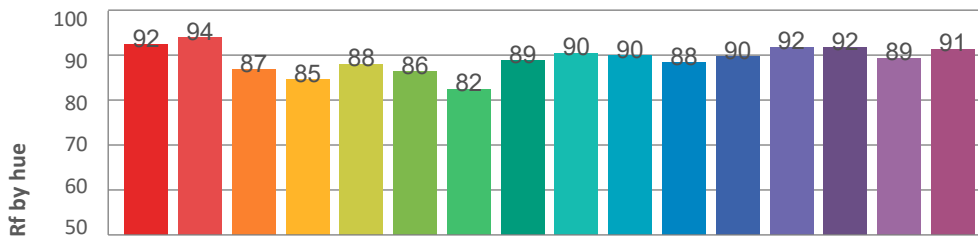
Rg 105,2

Gamut index Rg

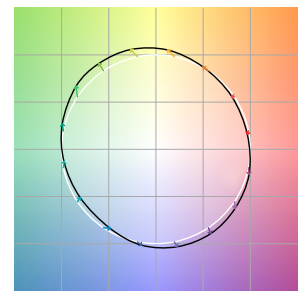
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	92	-2%	-3%
2	94	-2%	2%
3	87	0%	7%
4	85	6%	8%
5	88	9%	6%
6	86	9%	0%
7	82	7%	-9%
8	89	3%	-7%
9	90	-2%	-6%
10	90	-5%	-2%
11	88	-3%	6%
12	90	3%	5%
13	92	6%	2%
14	92	7%	-1%
15	89	4%	-5%
16	91	2%	-7%



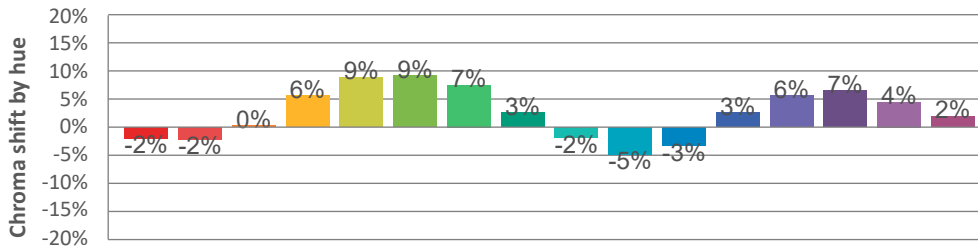
### Hue binH



### Color vector graphics



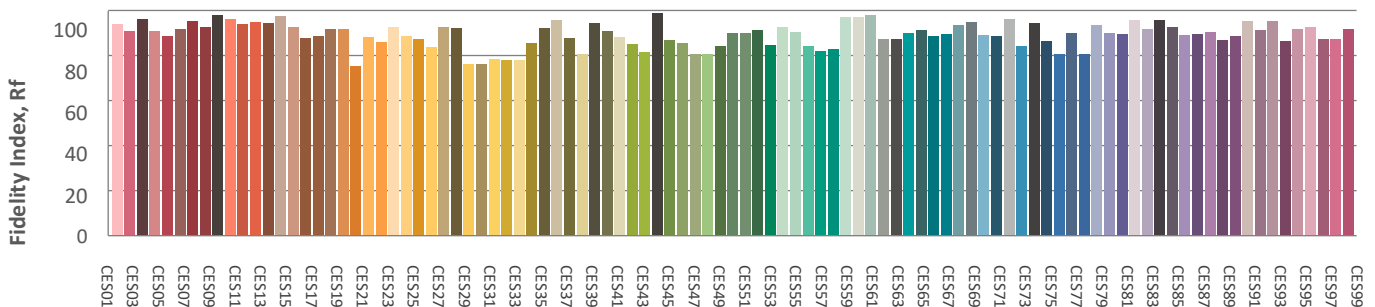
### Hue bin



### Color distortion graphics



### Color Evaluation Sample



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