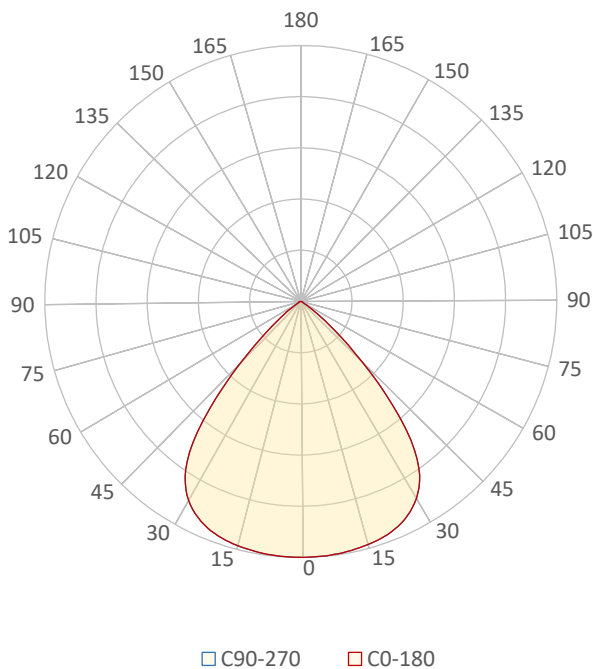


#### General Discription

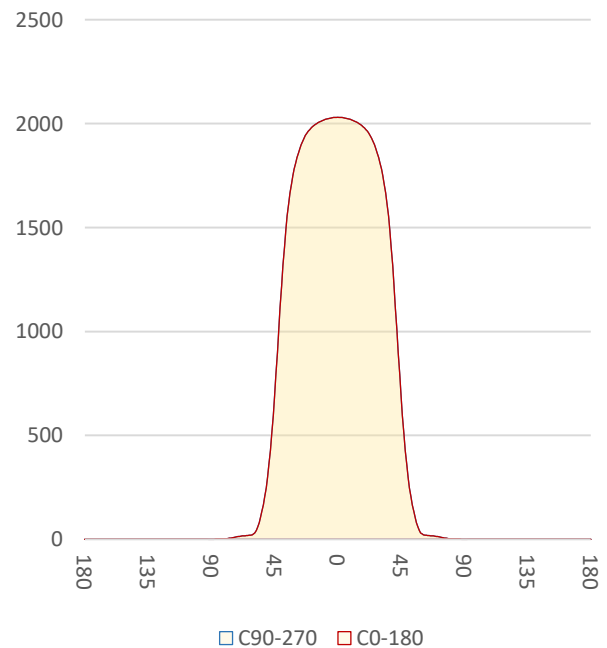
Item number	E-L7-X-X-3590
Date and time	2-12-2022 13:07:01
CCT (Kelvin)	3389 K
Beam angle	83,9°
Luminous flux	3304 lm
Efficiency	94 lm/watt
Weighted energy	35,1 kWh/1000h
Power factor	0,98
CRI (RA)	93,0
Fidelity index Rf	Rf 90,6
Gammut index Rg	Rg 103,4
Peak	2030 cd



*Polar diagram*



*Cartesian diagram*



# LM-79

## Test Report

### LM79-EMERALD-L7-3500K-CRI90

Beam details	1m	2m	3m	4m	5m																			
Lux*	2030 lx	508 lx	226 lx	127 lx	81 lx																			
*measured at center of beam																								
Footcandles*	188,6 fcd	47,2 fcd	21,0 fcd	11,8 fcd	7,5 fcd																			
Beam width (meter)	1,8 m	3,6 m	5,4 m	7,2 m	9 m																			
Beam width (Feet)	5,9 ft	11,8 ft	17,7 ft	23,6 ft	29,5 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					
2030lx	508lx	226lx	127lx	81lx	56lx	41lx	32lx	25lx	20lx	17lx	14lx	12lx	10lx	9lx	8lx	7lx	6lx	6lx	5lx					
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					
188,6fcd	47,2fcd	21fcd	11,8fcd	7,5fcd	5,2fcd	3,8fcd	2,9fcd	2,3fcd	1,9fcd	1,6fcd	1,3fcd	1,1fcd	1fcd	0,8fcd	0,7fcd	0,7fcd	0,6fcd	0,5fcd	0,5fcd					
<b>Intensities in 0° c-plane</b>																								
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°					
2030	2027	2017	2001	1972	1915	1811	1616	1220	692	299	105	25	18	14	8	2	1	0	0					
100%	100%	99%	99%	97%	94%	89%	80%	60%	34%	15%	5%	1%	1%	1%	0%	0%	0%	0%	0%					
<b>Intensities in 90° c-plane</b>																								
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°					
2030	2027	2017	2001	1972	1915	1811	1616	1220	692	299	105	25	18	14	8	2	1	0	0					
100%	100%	99%	99%	97%	94%	89%	80%	60%	34%	15%	5%	1%	1%	1%	0%	0%	0%	0%	0%					
<b>Intensities in 180° c-plane</b>																								
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°					
2030	2027	2017	2001	1972	1915	1811	1616	1220	692	299	105	25	18	14	8	2	1	0	0					
100%	100%	99%	99%	97%	94%	89%	80%	60%	34%	15%	5%	1%	1%	1%	0%	0%	0%	0%	0%					
<b>Intensities in 270° c-plane</b>																								
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°					
2030	2027	2017	2001	1972	1915	1811	1616	1220	692	299	105	25	18	14	8	2	1	0	0					
100%	100%	99%	99%	97%	94%	89%	80%	60%	34%	15%	5%	1%	1%	1%	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>				
83,9°					104°					115°					99,2%					90,1%				



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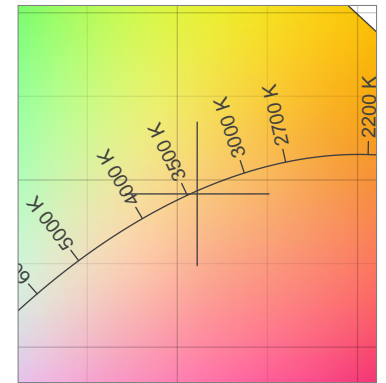
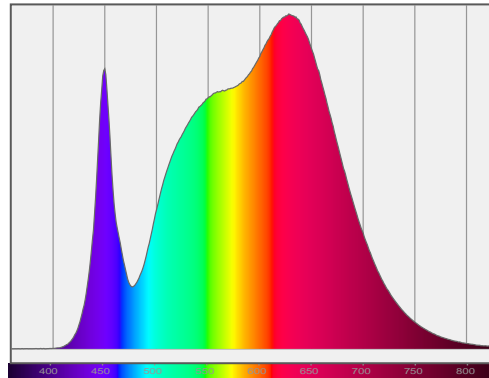
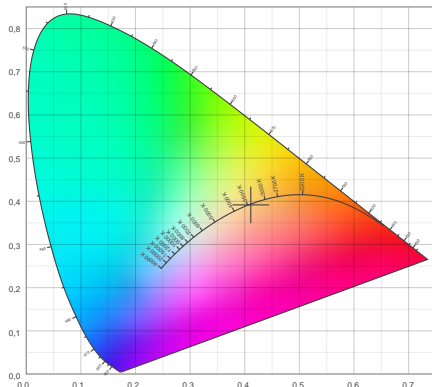
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# LM-79

## Test Report

# LM79-EMERALD-L7-3500K-CRI90

### Color details



CIE 1931

x: 0,411



Spectra

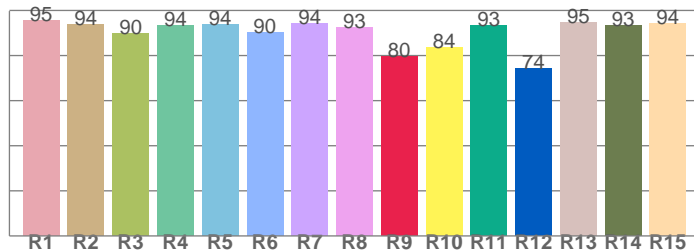
CIE 1931 ZOOM

3389 K

y: 0,392

$\Delta uv$ : -0,0008

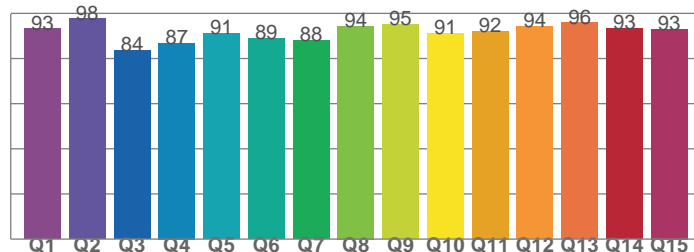
**CRI: 93,0 (R1-R8)**



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

R1	R2	R3	R4	R5	R6	R7	R8
95,4	93,8	89,8	93,6	93,7	90,5	94,4	92,6
R9	R10	R11	R12	R13	R14	R15	
79,7	83,6	93,3	74,2	94,7	93,4	94,5	

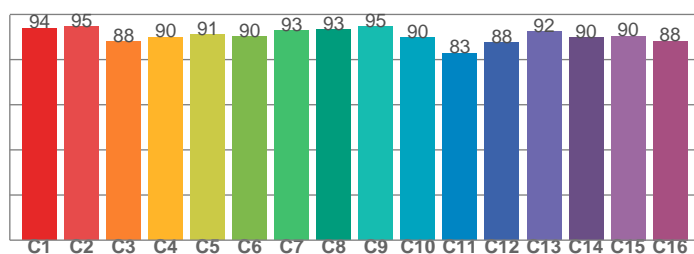
**CQS: 91,1**



*CQS values*

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
93,1	97,6	83,6	86,8	91,2	88,8	88,1	94,4
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
95,1	91,1	92,2	94,2	95,8	93,4	93,1	

**TM30: 90,6**



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

C1	C2	C3	C4	C5	C6	C7	C8
93,9	94,7	88,0	89,9	91,2	90,2	92,8	93,4
C9	C10	C11	C12	C13	C14	C15	
94,7	89,8	82,8	87,7	92,4	89,8	90,5	

### 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	$\Delta uv$
3389 K	93,0	79,7	90,6	103,4	91,1	0,411	0,392	0,239	0,342	-0,0008



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# LM-79

## Test Report

# LM79-EMERALD-L7-3500K-CRI90

### TM30 details

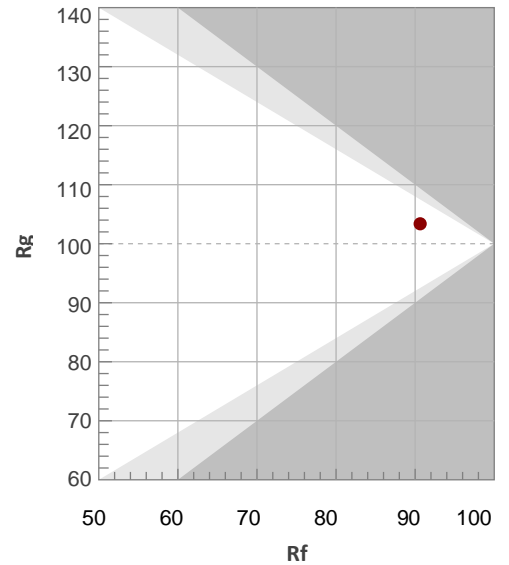
Rf 90,6

Fidelity index Rf

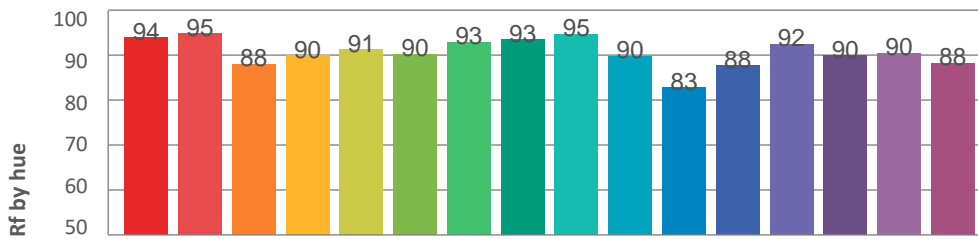
Rg 103,4

Gamut index Rg

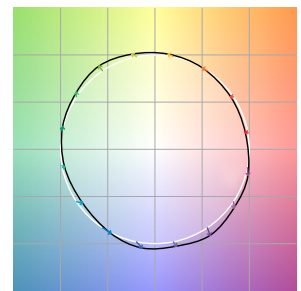
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	94	-3%	-2%
2	95	-2%	2%
3	88	0%	6%
4	90	2%	6%
5	91	4%	4%
6	90	6%	0%
7	93	3%	-4%
8	93	1%	-4%
9	95	-2%	-1%
10	90	-5%	5%
11	83	0%	11%
12	88	5%	7%
13	92	5%	2%
14	90	8%	-2%
15	90	4%	-5%
16	88	2%	-8%



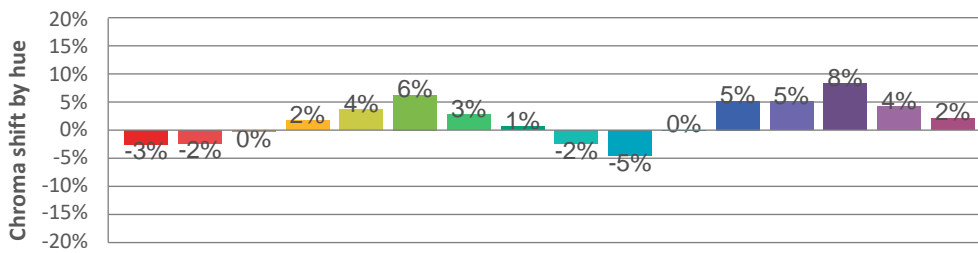
### Hue binH



### Color vector graphics



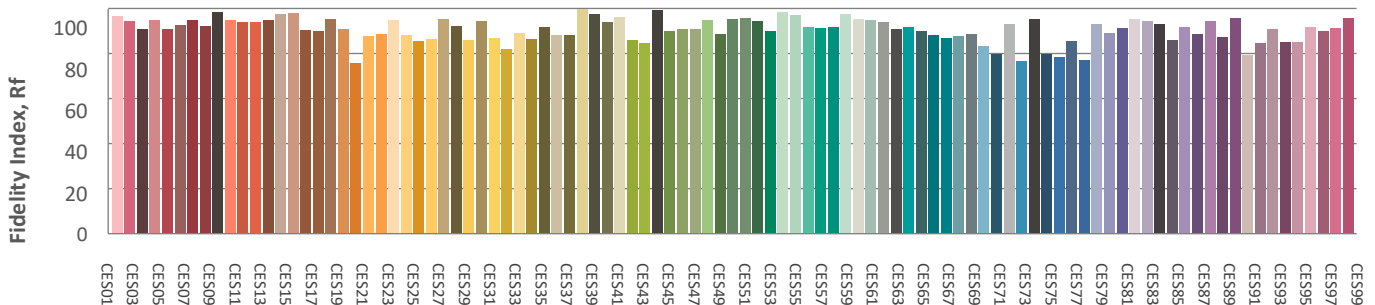
### Hue bin



### Color distortion graphics



### Color Evaluation Sample



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# LM-79

## Test Report

# LM79-EMERALD-L7-3500K-CRI90

### 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	29,0	29,8	29,1	30,1	30,3	29,0	29,8	29,1	30,1	30,3
	3H	28,7	29,6	29,1	29,8	30,0	28,7	29,6	29,1	29,8	30,0
	4H	28,6	29,5	29,0	29,7	30,0	28,6	29,5	29,0	29,7	30,0
	6H	28,6	29,4	28,9	29,6	30,0	28,6	29,4	28,9	29,6	30,0
	8H	28,6	29,3	28,9	29,6	30,0	28,6	29,3	28,9	29,6	30,0
	12H	28,5	29,2	28,9	29,6	30,0	28,5	29,2	28,9	29,6	30,0
4H	2H	28,6	29,5	29,0	29,7	30,0	28,6	29,5	29,0	29,7	30,0
	3H	28,5	29,2	28,9	29,6	30,0	28,5	29,2	28,9	29,6	30,0
	4H	28,4	29,0	28,8	29,4	30,0	28,4	29,0	28,8	29,4	30,0
	6H	28,3	29,0	28,8	29,3	29,6	28,3	29,0	28,8	29,3	29,6
	8H	28,3	28,8	28,8	29,2	29,6	28,3	28,8	28,8	29,2	29,6
	12H	28,2	28,7	28,7	29,1	29,5	28,2	28,7	28,7	29,1	29,5
8H	4H	28,3	28,9	28,8	29,2	29,6	28,3	28,9	28,8	29,2	29,6
	6H	28,2	28,6	28,7	29,1	29,6	28,2	28,6	28,7	29,1	29,6
	8H	28,2	28,5	28,7	29,1	29,7	28,2	28,5	28,7	29,1	29,7
	12H	28,2	28,4	28,7	28,9	29,5	28,2	28,4	28,7	28,9	29,5
12H	4H	28,2	28,7	28,7	29,1	29,5	28,2	28,7	28,7	29,1	29,5
	6H	28,2	28,5	28,7	29,1	29,7	28,2	28,5	28,7	29,1	29,7
	8H	28,2	28,4	28,7	28,9	29,5	28,2	28,4	28,7	28,9	29,5
Variation of the observer position for the luminaire distance S											
S = 1.0H	3,1 / -11,2					3,1 / -11,2					
S = 1.5H	5,5 / -18,1					5,5 / -18,1					
S = 2.0H	7,5 / -18,7					7,5 / -18,7					
Standard table	n/a					n/a					
Correction summand	n/a					n/a					
Corrected glare indices referring to 3304lm total luminous flux											



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