

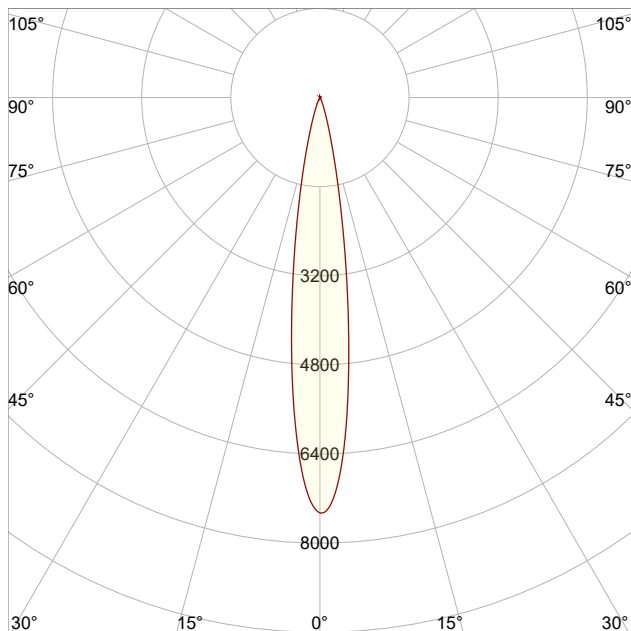
# LM-79

## Test Report

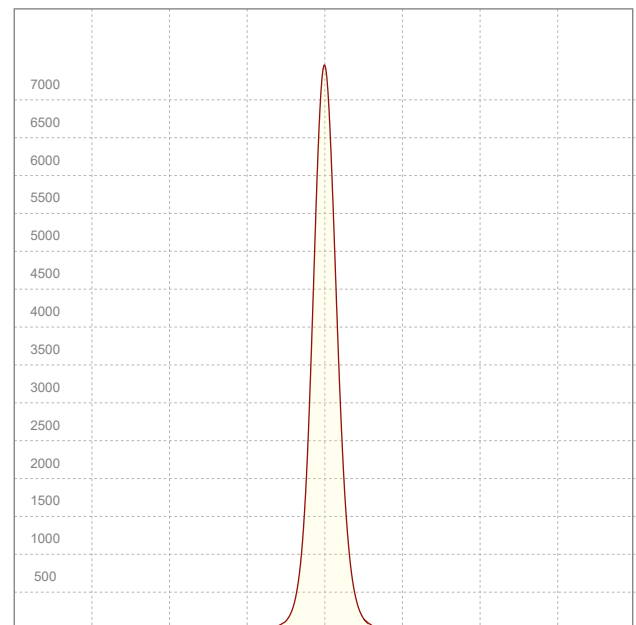
LM79-LINA-HP-2700K-30CM-15DEG

### General Description

Item number	LC-2-030-21-2
Date and time	13-1-2015 13:58:11
CCT (Kelvin)	2649 K
Beam angle	15,4°
Luminous flux	764 lm
Efficiency	62 lm/watt
Weighted energy	12,3 kWh/1000h
Power factor	0,89
CRI (RA)	82,5
Fidelity index Rf	Rf 85,8
Gammut index Rg	Rg 94,0
Peak	7455 cd



*Polar curve*



*Linear distribution diagram*



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## Test Report

### LM79-LINA-HP-2700K-30CM-15DEG

Beam details	1m	2m	3m	4m	5m														
Lux*	7455 lx	1864 lx	828 lx	466 lx	298 lx														
*measured at center of beam																			
Footcandles*	692,5 fcd	173,1 fcd	76,9 fcd	43,3 fcd	27,7 fcd														
Beam width (meter)	0,3 m	0,5 m	0,8 m	1,1 m	1,4 m														
Beam width (Feet)	0,9 ft	1,8 ft	2,7 ft	3,6 ft	4,4 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
7455lx	1864lx	828lx	466lx	298lx	207lx	152lx	116lx	92lx	75lx	62lx	52lx	44lx	38lx	33lx	29lx	26lx	23lx	21lx	19lx
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
692,5fcd	173,1fcd	76,9fcd	43,3fcd	27,7fcd	19,2fcd	14,1fcd	10,8fcd	8,5fcd	6,9fcd	5,7fcd	4,8fcd	4,1fcd	3,5fcd	3,1fcd	2,7fcd	2,4fcd	2,1fcd	1,9fcd	1,7fcd
<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°
7455	7393	7167	6777	6250	5622	4923	4219	3540	2906	2340	1866	1467	1148	893	695	544	421	331	260
100%	99%	96%	91%	84%	75%	66%	57%	47%	39%	31%	25%	20%	15%	12%	9%	7%	6%	4%	3%
<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°
7455	7393	7167	6777	6250	5622	4923	4219	3540	2906	2340	1866	1467	1148	893	695	544	421	331	260
100%	99%	96%	91%	84%	75%	66%	57%	47%	39%	31%	25%	20%	15%	12%	9%	7%	6%	4%	3%
<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°
7455	7315	7029	6597	6058	5461	4820	4175	3558	2990	2476	2022	1636	1320	1054	836	665	526	420	333
100%	98%	94%	88%	81%	73%	65%	56%	48%	40%	33%	27%	22%	18%	14%	11%	9%	7%	6%	4%
<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°
7455	7315	7029	6597	6058	5461	4820	4175	3558	2990	2476	2022	1636	1320	1054	836	665	526	420	333
100%	98%	94%	88%	81%	73%	65%	56%	48%	40%	33%	27%	22%	18%	14%	11%	9%	7%	6%	4%
Beam angle 50%		Field angle 10%				Cutoff angle 2,5%				Intensity ratio in 120° cone				Intensity ratio in 90° cone					
15,4°		30,2°				42°				95,6%				94,4%					



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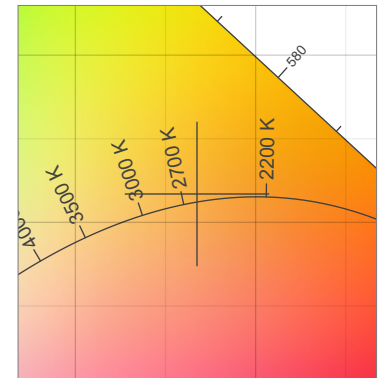
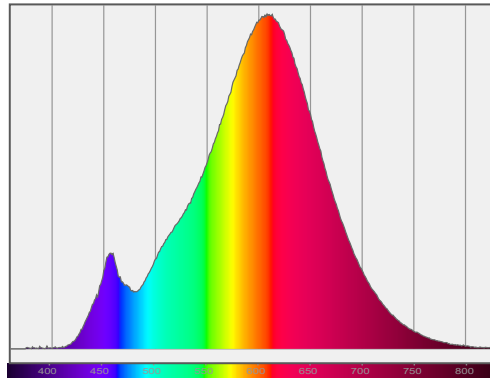
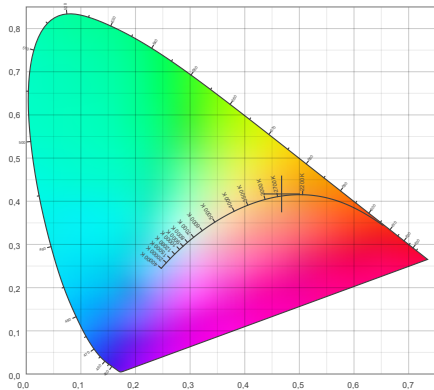
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# LM-79

## Test Report

# LM79-LINA-HP-2700K-30CM-15DEG

### Color details



CIE 1931

x: 0,467



Spectra

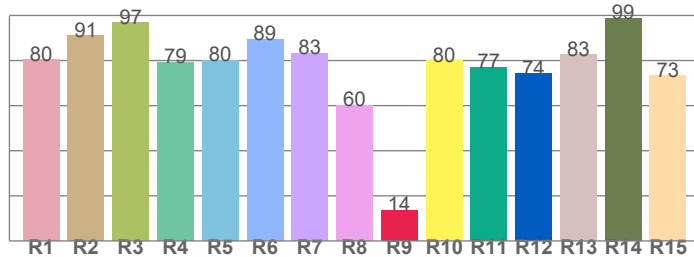
CIE 1931 ZOOM

2649 K

y: 0,417

$\Delta uv$ : 0,0017

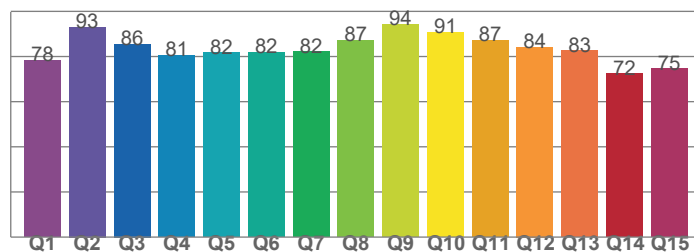
CRI: 82,5 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
80,3	91,0	96,7	79,1	80,0	89,4	83,3	60,0
R9	R10	R11	R12	R13	R14	R15	
13,6	79,8	77,1	74,1	82,6	98,8	73,2	

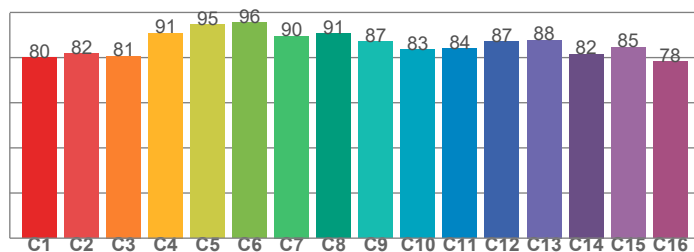
CQS: 82,5



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
78,4	93,1	85,6	80,6	81,7	81,8	82,1	87,0
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
94,4	90,8	87,1	84,2	82,6	72,4	74,6	

TM30: 85,8



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

C1	C2	C3	C4	C5	C6	C7	C8
80,1	81,9	80,7	90,9	94,7	95,7	89,6	90,7
C9	C10	C11	C12	C13	C14	C15	
87,1	83,5	84,1	87,0	87,9	81,6	84,7	

### 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	$\Delta uv$
2649 K	82,5	13,6	85,8	94,0	82,5	0,467	0,417	0,265	0,354	0,0017



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# LM-79

## Test Report

LM79-LINA-HP-2700K-30CM-15DEG

### TM30 details

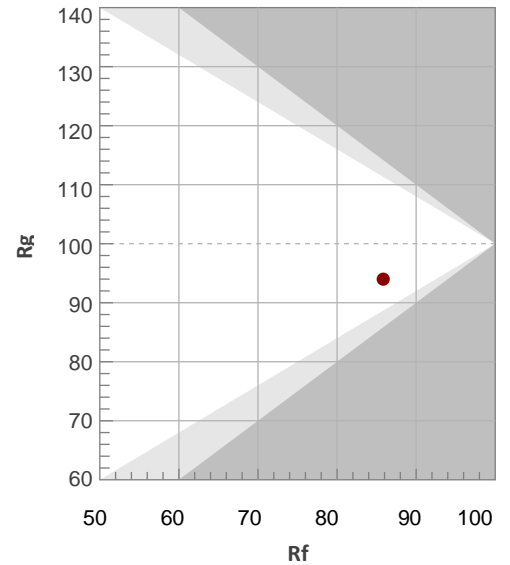
Rf 85,8

Fidelity index Rf

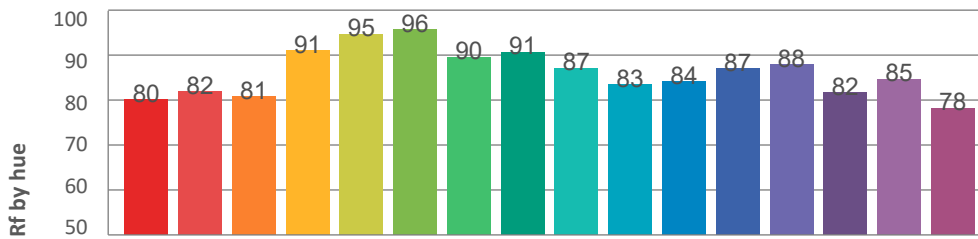
Rg 94,0

Gamut index Rg

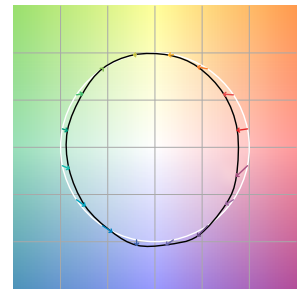
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	80	-11%	1%
2	82	-8%	6%
3	81	-4%	9%
4	91	-1%	5%
5	95	0%	3%
6	96	0%	-1%
7	90	-5%	-5%
8	91	-6%	1%
9	87	-6%	4%
10	83	-4%	10%
11	84	0%	12%
12	87	5%	1%
13	88	4%	-8%
14	82	3%	-15%
15	85	-4%	-9%
16	78	-9%	-13%



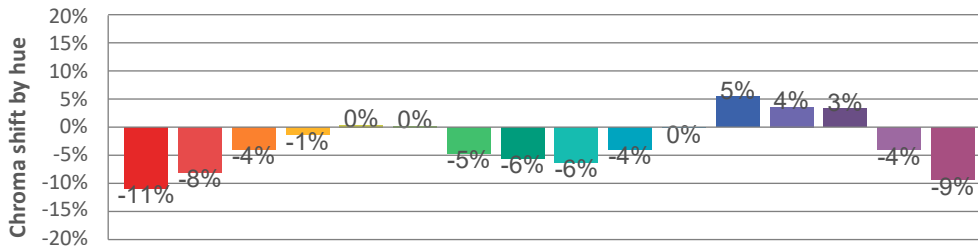
### Hue binH



### Color vector graphics



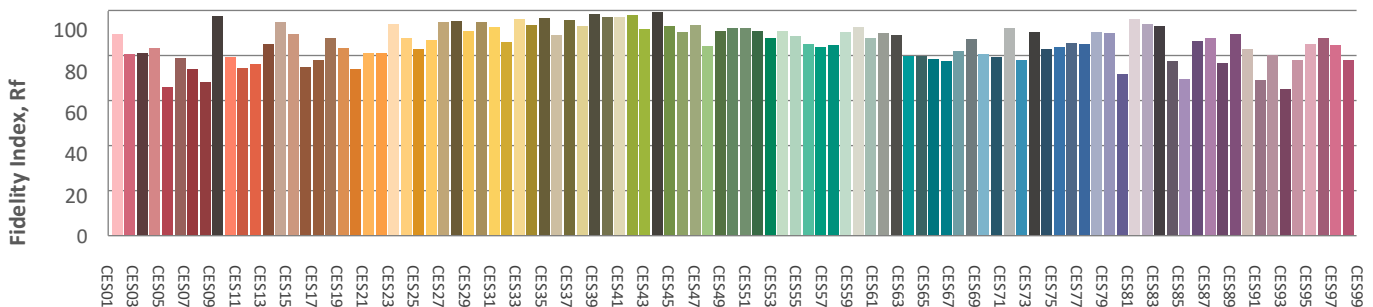
### Hue bin



### Color distortion graphics



### Color Evaluation Sample



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LM79-LINA-HP-2700K-30CM-15DEG

### 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
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 764lm total luminous flux										



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