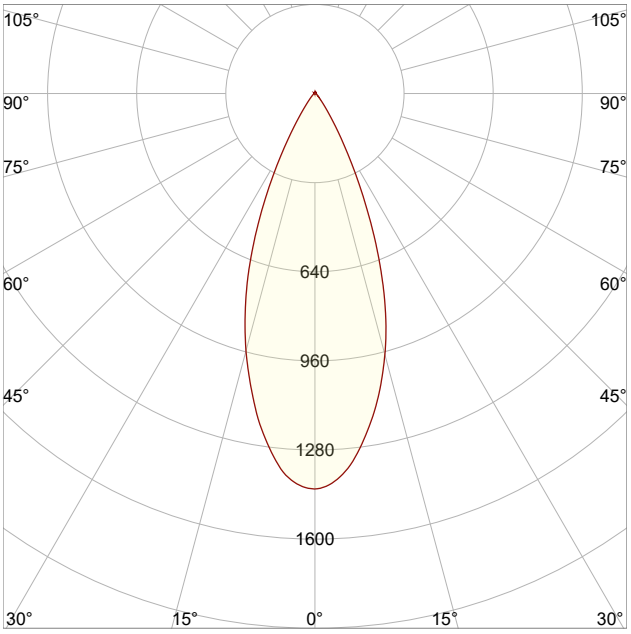
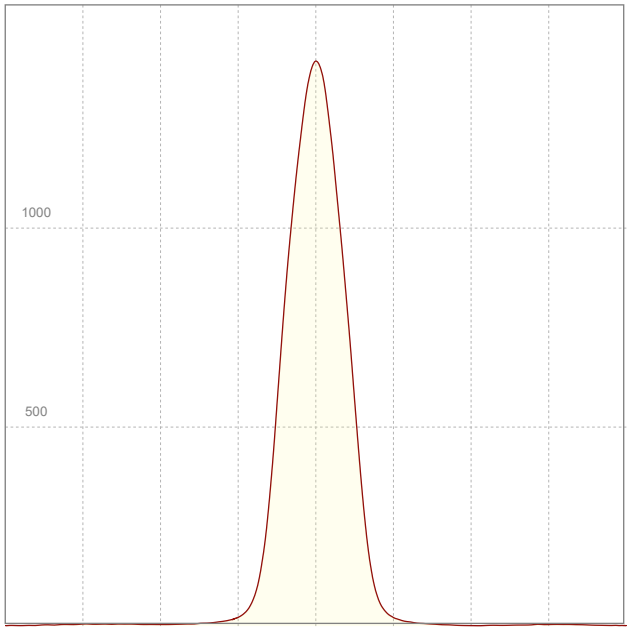
LM-79
Test Report

LM79-LINA-HP-2700K-30CM-44DEG

General Discription	
Item number	LC-2-030-21-4
Date and time	13-1-2015 13:51:14
CCT (Kelvin)	2651 K
Beam angle	39,8°
Luminous flux	699 lm
Efficiency	57 lm/watt
Weighted energy	12,3 kWh/1000h
Power factor	0,89
CRI (RA)	82,6
Fidelity index Rf	Rf 85,8
Gammut index Rg	Rg 94,0
Peak	1419 cd



Polar curve



Linear distribution diagram

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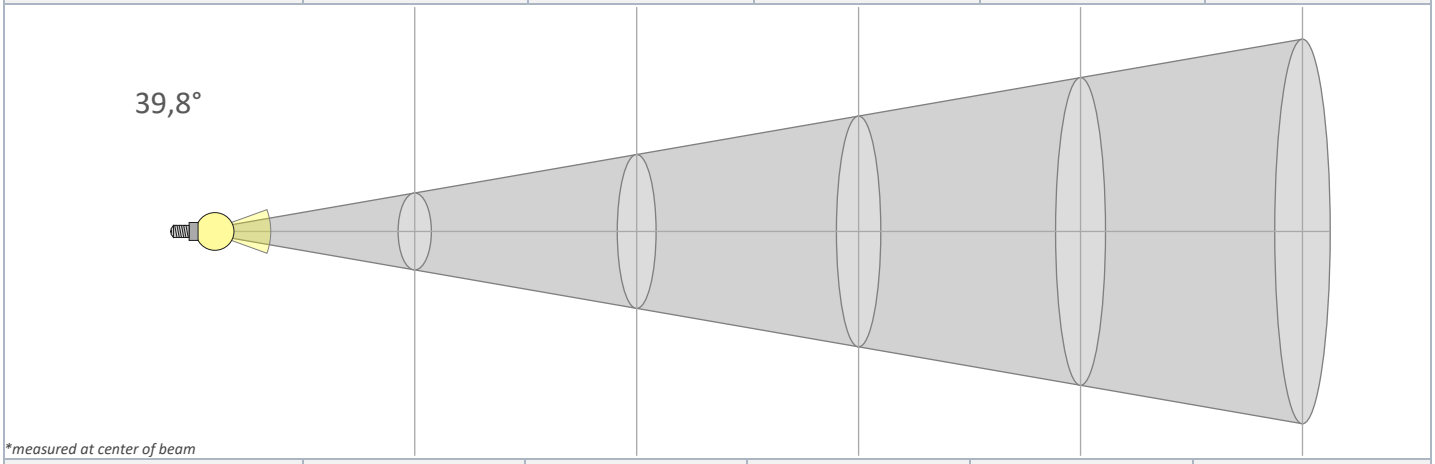
Beam details	1m	2m	3m	4m	5m
*Lux**	1418 lx	355 lx	158 lx	89 lx	57 lx



*measured at center of beam

*Footcandles**	131,8 fcd	32,9 fcd	14,6 fcd	8,2 fcd	5,3 fcd
Beam width (meter)	0,7 m	1,4 m	2,2 m	2,9 m	3,6 m
Beam width (Feet)	2,4 ft	4,8 ft	7,1 ft	9,5 ft	11,9 ft

Beam intensities

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
1418lx	355lx	158lx	89lx	57lx	39lx	29lx	22lx	18lx	14lx	12lx	10lx	8lx	7lx	6lx	6lx	5lx	4lx	4lx	4lx
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
131,8fcd	32,9fcd	14,6fcd	8,2fcd	5,3fcd	3,7fcd	2,7fcd	2,1fcd	1,6fcd	1,3fcd	1,1fcd	0,9fcd	0,8fcd	0,7fcd	0,6fcd	0,5fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd

Intensities in 0° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1418	1407	1373	1322	1256	1183	1103	1015	922	818	704	586	467	361	269	195	139	98	70	51
100%	99%	97%	93%	89%	83%	78%	72%	65%	58%	50%	41%	33%	25%	19%	14%	10%	7%	5%	4%

Intensities in 90° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1418	1407	1373	1322	1256	1183	1103	1015	922	818	704	586	467	361	269	195	139	98	70	51
100%	99%	97%	93%	89%	83%	78%	72%	65%	58%	50%	41%	33%	25%	19%	14%	10%	7%	5%	4%

Intensities in 180° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1418	1408	1379	1327	1258	1181	1092	1001	907	807	704	594	484	380	286	206	145	101	71	52
100%	99%	97%	94%	89%	83%	77%	71%	64%	57%	50%	42%	34%	27%	20%	15%	10%	7%	5%	4%

Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1418	1408	1379	1327	1258	1181	1092	1001	907	807	704	594	484	380	286	206	145	101	71	52
100%	99%	97%	94%	89%	83%	77%	71%	64%	57%	50%	42%	34%	27%	20%	15%	10%	7%	5%	4%

Beam angle 50%	*Field angle 10%*	*Cutoff angle 2,5%*	*Intensity ratio in 120° cone*	*Intensity ratio in 90° cone*
39,8°	64°	81,3°	95,1%	92,7%

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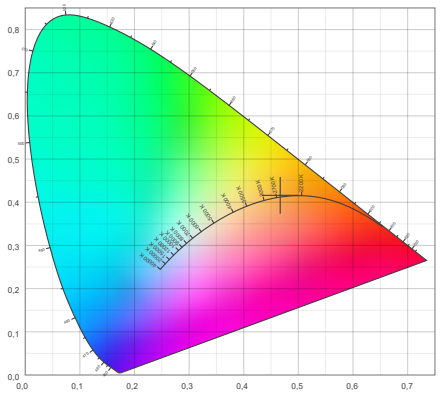
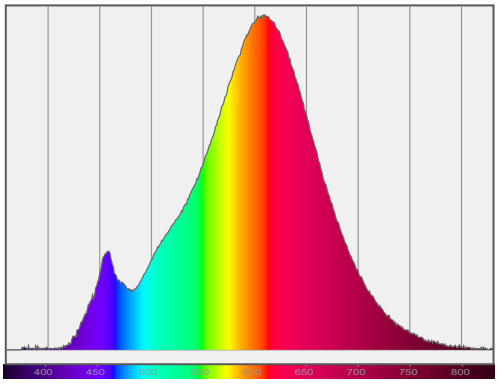
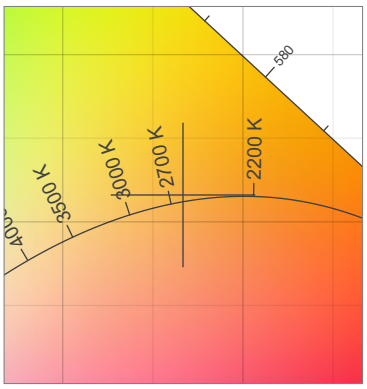
Color details

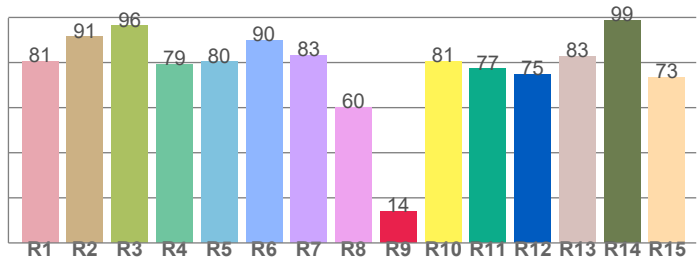






CIE 1931	x: 0,467		Spectra	*CIE 1931 ZOOM*
2651 K	y: 0,416			Δuv: 0,0015

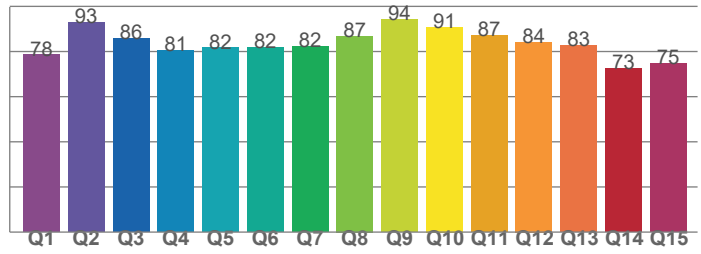
CRI: **82,6** (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
80,6	**91,4**	**96,3**	**79,2**	**80,3**	**89,9**	**83,1**	**60,1**
R9	R10	R11	R12	R13	R14	R15	
14,2	**80,6**	**77,2**	**74,9**	**82,9**	**98,6**	**73,5**	

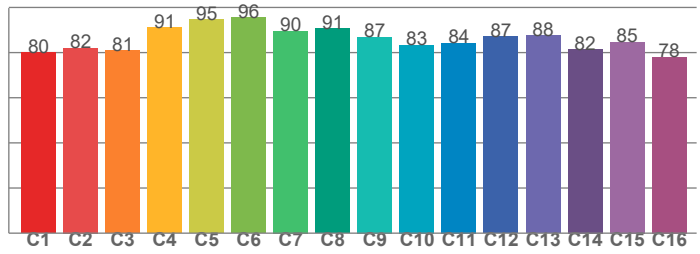
CQS: **82,6**



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
78,5	**93,0**	**85,7**	**80,5**	**81,7**	**81,9**	**82,2**	**86,9**
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
94,2	**90,9**	**87,2**	**84,3**	**82,6**	**72,6**	**74,8**	

TM30: **85,8**



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

C1	C2	C3	C4	C5	C6	C7	C8
80,1	**82,0**	**80,9**	**91,0**	**94,6**	**95,5**	**89,6**	**90,6**
C9	C10	C11	C12	C13	C14	C15	
86,9	**83,4**	**84,2**	**87,0**	**87,7**	**81,5**	**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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
2651 K	**82,6**	**14,2**	**85,8**	**94,0**	**82,6**	**0,467**	**0,416**	**0,264**	**0,354**	**0,0015**

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TM30 details

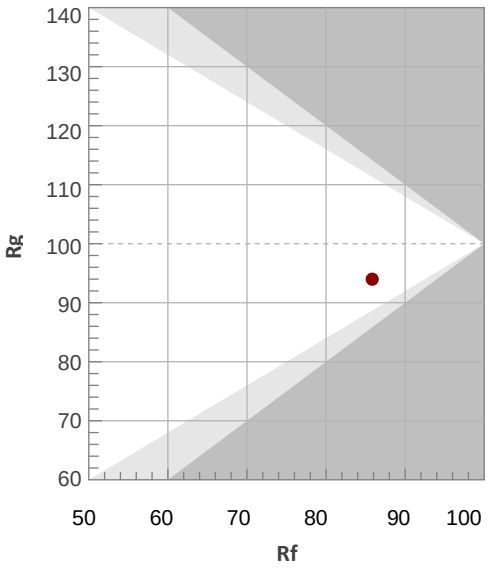
Rf 85,8

Fidelity index Rf

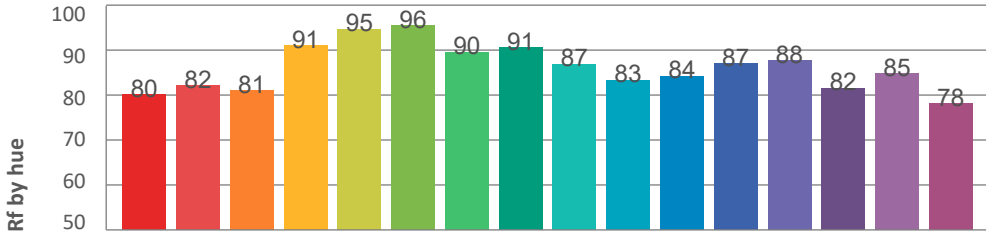
Rg 94,0

Gammut index Rg

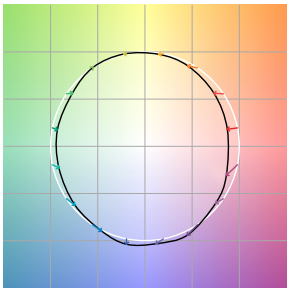
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	80	-11%	1%
2	82	-8%	6%
3	81	-4%	9%
4	91	-2%	5%
5	95	0%	3%
6	96	0%	-1%
7	90	-5%	-4%
8	91	-6%	1%
9	87	-6%	5%
10	83	-4%	10%
11	84	0%	12%
12	87	6%	1%
13	88	4%	-9%
14	82	3%	-15%
15	85	-4%	-8%
16	78	-9%	-13%



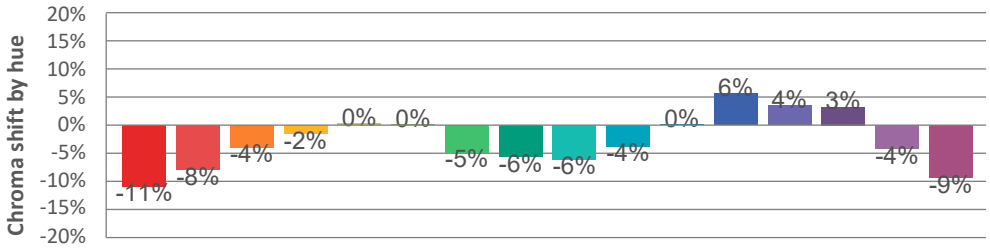
Hue binH



Color vector graphics

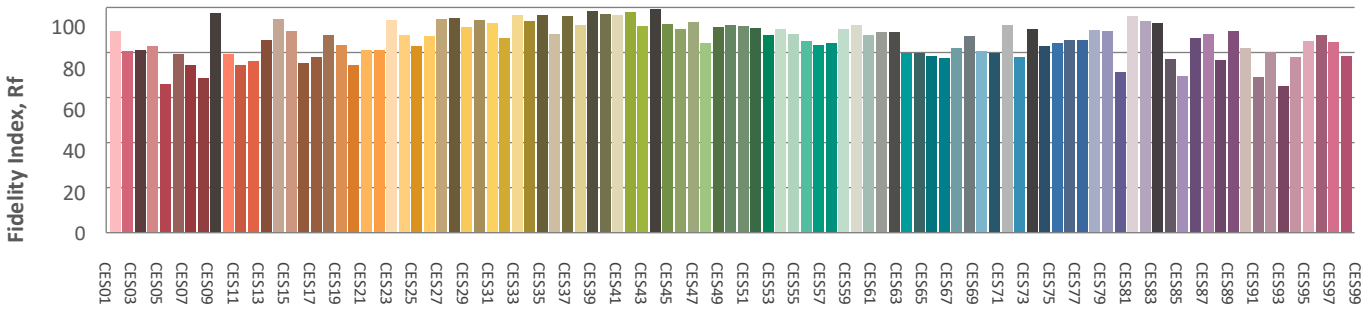


Hue bin



Color distortion graphics

Color Evaluation Sample



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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
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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 699lm total luminous flux										

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