

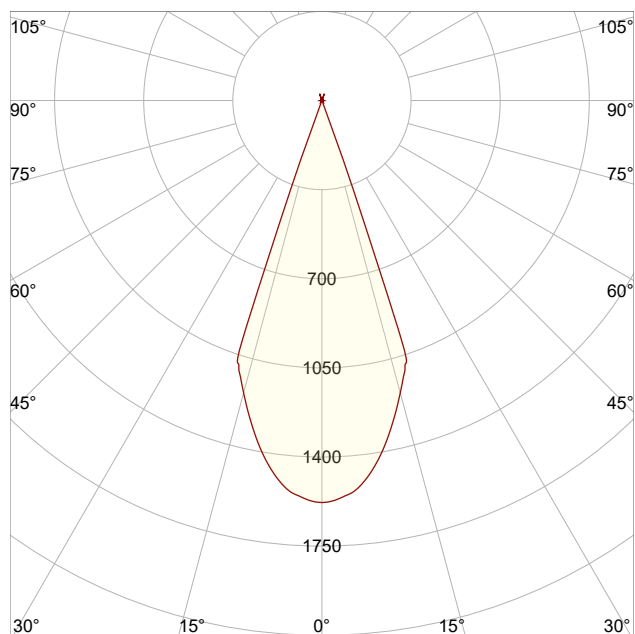
LM-79

Test Report

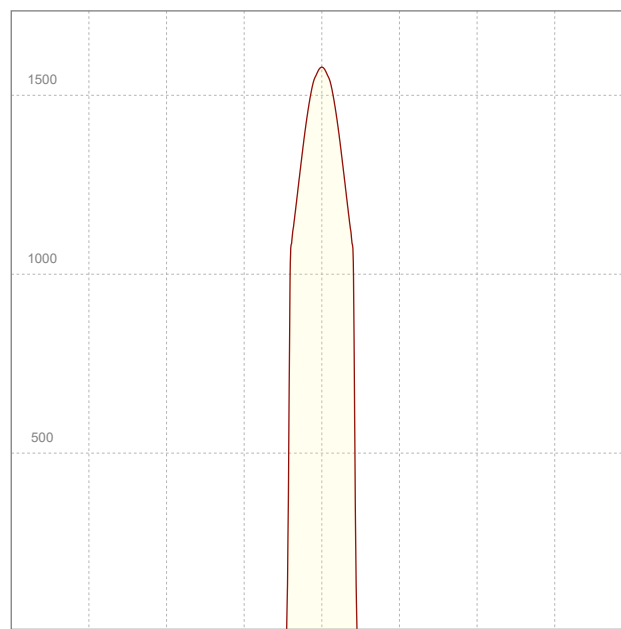
LM79-TOPAZ-PROFILE-3500K-CRI90-WIDE

General Discription

Item number	T-P-XLX-1B-3595-Z
Date and time	24-9-2024 10:28:51
CCT (Kelvin)	3483 K
Beam angle	37,4°
Luminous flux	444 lm
Efficiency	41 lm/watt
Weighted energy	10,9 kWh/1000h
Power factor	0,99
CRI (RA)	95,4
Fidelity index Rf	Rf 92,3
Gammut index Rg	Rg 101,9
Peak	1578 cd



Polar curve



Linear distribution diagram



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LM-79

Test Report

LM79-TOPAZ-PROFILE-3500K-CRI90-WIDE

Beam details	1m	2m	3m	4m	5m
Lux*	1578 lx	395 lx	175 lx	99 lx	63 lx

37,4°

*measured at center of beam

Footcandles*	146,6 fcd	36,7 fcd	16,3 fcd	9,2 fcd	5,9 fcd
Beam width (meter)	0,7 m	1,4 m	2 m	2,7 m	3,4 m
Beam width (Feet)	2,2 ft	4,4 ft	6,7 ft	8,9 ft	11,1 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
1578lx	395lx	175lx	99lx	63lx	44lx	32lx	25lx	19lx	16lx	13lx	11lx	9lx	8lx	7lx	6lx	5lx	5lx	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
146,6fcd	36,7fcd	16,3fcd	9,2fcd	5,9fcd	4,1fcd	3fcd	2,3fcd	1,8fcd	1,5fcd	1,2fcd	1fcd	0,9fcd	0,7fcd	0,7fcd	0,6fcd	0,5fcd	0,5fcd	0,4fcd	0,4fcd

Intensities in 0° c-plane																			
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
1578	1576	1569	1559	1549	1534	1512	1486	1457	1424	1388	1350	1311	1270	1229	1188	1148	1108	1030	599
100%	100%	99%	99%	98%	97%	96%	94%	92%	90%	88%	86%	83%	80%	78%	75%	73%	70%	65%	38%

Intensities in 90° c-plane																			
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
1578	1576	1569	1559	1549	1534	1512	1486	1457	1424	1388	1350	1311	1270	1229	1188	1148	1108	1030	599
100%	100%	99%	99%	98%	97%	96%	94%	92%	90%	88%	86%	83%	80%	78%	75%	73%	70%	65%	38%

Intensities in 180° c-plane																			
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
1578	1576	1569	1559	1549	1534	1512	1486	1457	1424	1388	1350	1311	1270	1229	1188	1148	1108	1030	599
100%	100%	99%	99%	98%	97%	96%	94%	92%	90%	88%	86%	83%	80%	78%	75%	73%	70%	65%	38%

Intensities in 270° c-plane																			
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
1578	1576	1569	1559	1549	1534	1512	1486	1457	1424	1388	1350	1311	1270	1229	1188	1148	1108	1030	599
100%	100%	99%	99%	98%	97%	96%	94%	92%	90%	88%	86%	83%	80%	78%	75%	73%	70%	65%	38%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
37,4°	39,9°	40,5°	99,8%	99,8%



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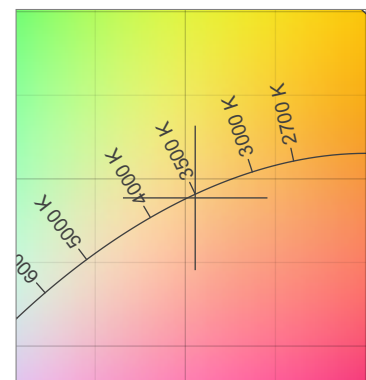
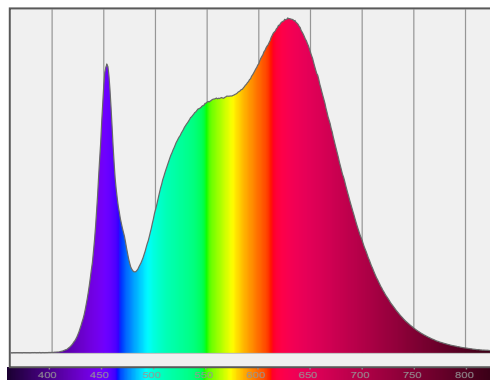
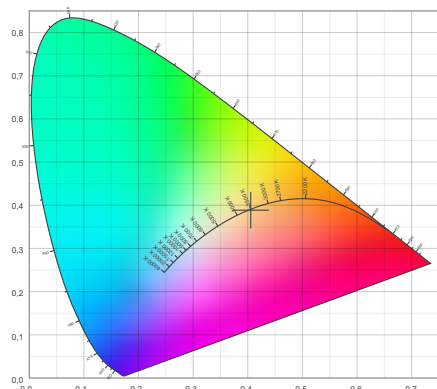
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LM-79

Test Report

LM79-TOPAZ-PROFILE-3500K-CRI90-WIDE

Color details



CIE 1931

x: 0,405



Spectra

CIE 1931 ZOOM

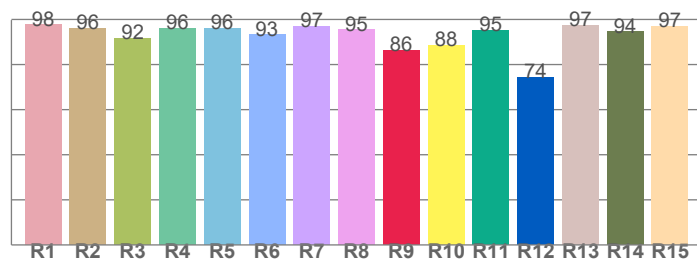
3483 K

y: 0,389

Δuv : -0,0010

CRI: 95,4 (R1-R8)

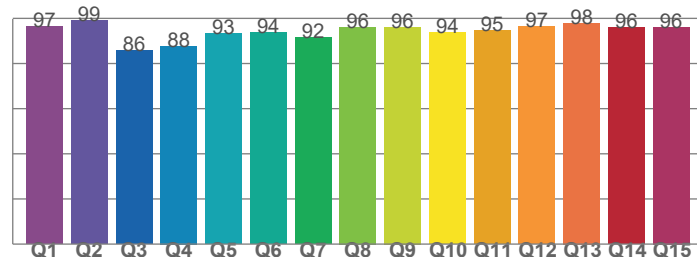
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
97,6	96,1	91,8	96,2	95,9	93,2	97,1	95,4
R9	R10	R11	R12	R13	R14	R15	
86,4	88,4	95,0	74,2	97,3	94,5	97,0	

CQS: 93,4

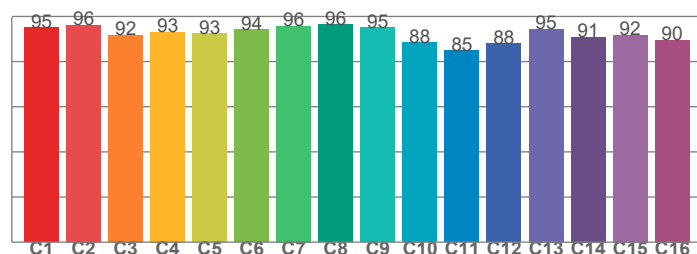
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
96,6	99,1	85,8	87,8	93,4	93,7	91,6	96,2
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
96,2	93,7	94,7	96,5	98,0	96,1	96,2	

TM30: 92,3

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



C1	C2	C3	C4	C5	C6	C7	C8
95,0	96,2	91,8	93,1	92,5	94,2	95,7	96,3
C9	C10	C11	C12	C13	C14	C15	
95,1	88,5	84,9	87,9	94,5	90,8	91,7	

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	Δuv
3483 K	95,4	86,4	92,3	101,9	93,4	0,405	0,389	0,237	0,340	-0,0010



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LM-79

Test Report

LM79-TOPAZ-PROFILE-3500K-CRI90-WIDE

TM30 details

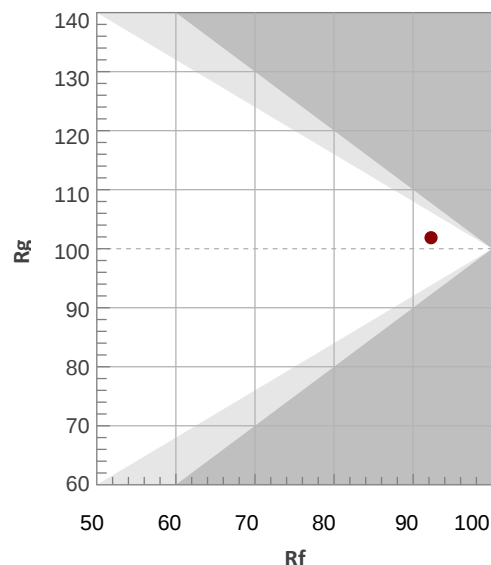
Rf 92,3

Fidelity index Rf

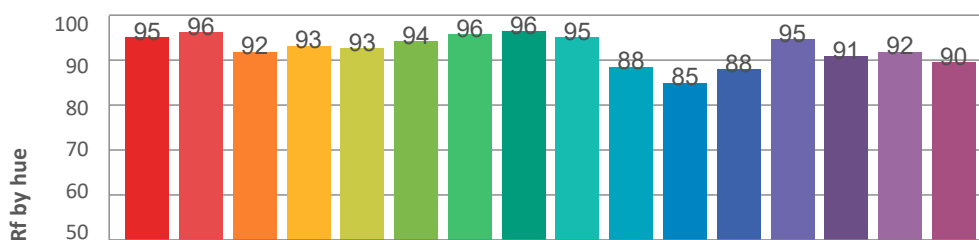
Rg 101,9

Gamut index Rg

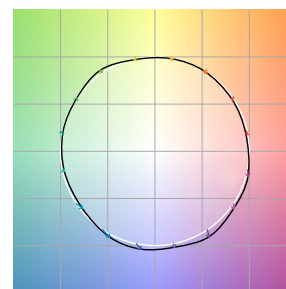
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-2%	-1%
2	96	-2%	1%
3	92	0%	4%
4	93	0%	3%
5	93	-1%	3%
6	94	4%	1%
7	96	0%	-1%
8	96	0%	-1%
9	95	-2%	2%
10	88	-2%	7%
11	85	2%	10%
12	88	5%	5%
13	95	4%	0%
14	91	7%	-3%
15	92	3%	-4%
16	90	2%	-7%



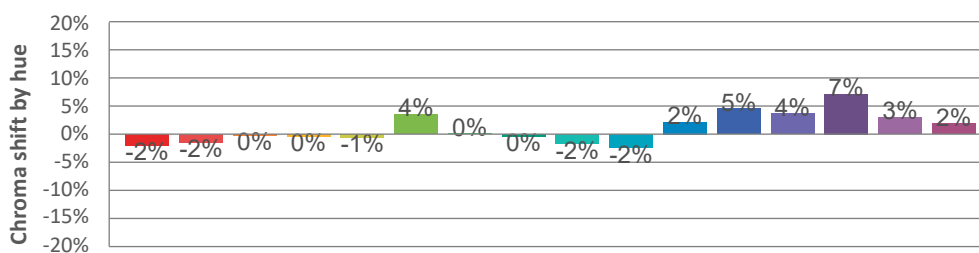
Hue binH



Color vector graphics



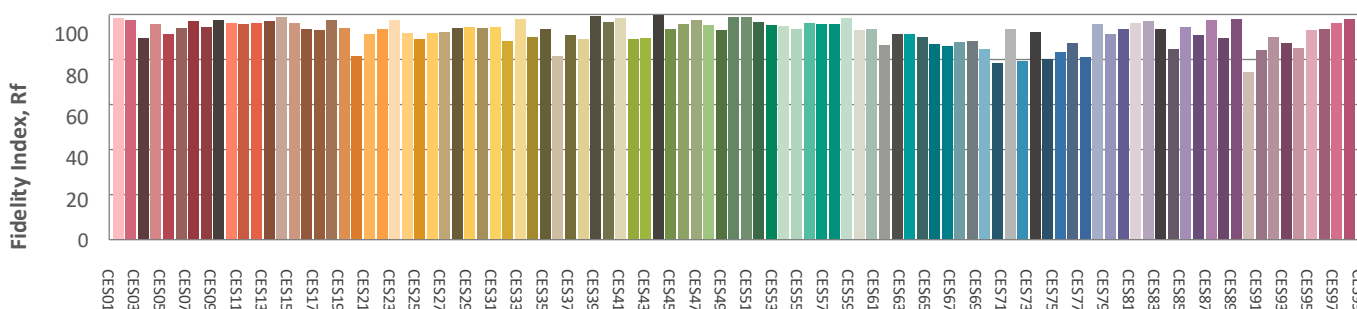
Hue bin



Color distortion graphics



Color Evaluation Sample



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LM-79

Test Report

LM79-TOPAZ-PROFILE-3500K-CRI90-WIDE

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	-19,1	-18,8	-19,1	-18,6	-18,4	-19,1	-18,8	-19,1	-18,6	-18,4
	3H	-16,5	-16,0	-16,2	-15,9	-15,7	-16,5	-16,0	-16,2	-15,9	-15,7
	4H	-15,2	-14,7	-14,8	-14,5	-14,2	-15,2	-14,7	-14,8	-14,5	-14,2
	6H	-13,3	-12,9	-13,0	-12,6	-12,2	-13,3	-12,9	-13,0	-12,6	-12,2
	8H	-12,6	-12,2	-12,3	-11,9	-11,5	-12,6	-12,2	-12,3	-11,9	-11,5
	12H	-12,0	-11,6	-11,6	-11,3	-10,9	-12,0	-11,6	-11,6	-11,3	-10,9
4H	2H	-18,2	-17,7	-17,8	-17,5	-17,3	-18,2	-17,7	-17,8	-17,5	-17,3
	3H	-15,3	-14,9	-15,0	-14,6	-14,2	-15,3	-14,9	-15,0	-14,6	-14,2
	4H	-13,7	-13,4	-13,3	-13,0	-12,5	-13,7	-13,4	-13,3	-13,0	-12,5
	6H	-11,8	-11,4	-11,3	-11,1	-10,7	-11,8	-11,4	-11,3	-11,1	-10,7
	8H	-11,1	-10,7	-10,6	-10,4	-10,0	-11,1	-10,7	-10,6	-10,4	-10,0
	12H	-10,4	-10,1	-9,9	-9,7	-9,2	-10,4	-10,1	-9,9	-9,7	-9,2
8H	4H	-12,9	-12,5	-12,4	-12,2	-11,9	-12,9	-12,5	-12,4	-12,2	-11,9
	6H	-10,9	-10,7	-10,4	-10,2	-9,7	-10,9	-10,7	-10,4	-10,2	-9,7
	8H	-9,9	-9,8	-9,4	-9,3	-8,6	-9,9	-9,8	-9,4	-9,3	-8,6
	12H	-9,1	-9,0	-8,5	-8,5	-7,9	-9,1	-9,0	-8,5	-8,5	-7,9
12H	4H	-12,8	-12,5	-12,3	-12,1	-11,7	-12,8	-12,5	-12,3	-12,1	-11,7
	6H	-10,6	-10,5	-10,1	-10,0	-9,3	-10,6	-10,5	-10,1	-10,0	-9,3
	8H	-9,7	-9,5	-9,1	-9,0	-8,4	-9,7	-9,5	-9,1	-9,0	-8,4
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,1 / -0,1					0,1 / -0,1				
S = 1.5H		0,1 / -0,1					0,1 / -0,1				
S = 2.0H		0,2 / -0,2					0,2 / -0,2				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 444lm total luminous flux											



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