

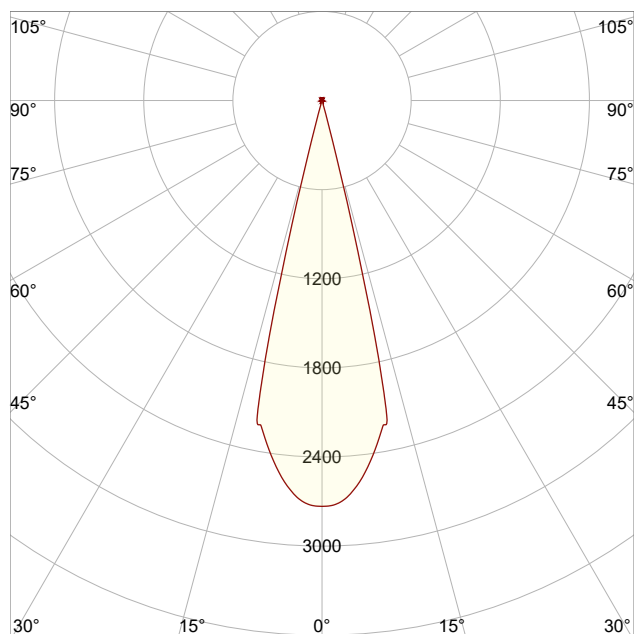
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Test Report

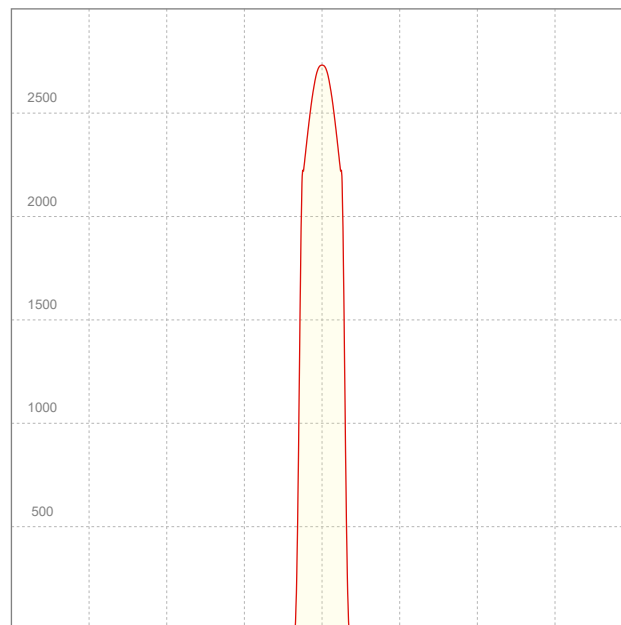
LM79-TOPAZ-PROFILE-4000K-CRI98-SPOT

General Description

Item number	T-P-XLX-1B-4098-Z
Date and time	17-6-2025 13:53:19
CCT (Kelvin)	4084 K
Beam angle	25,9°
Luminous flux	407 lm
Efficiency	37 lm/watt
Weighted energy	11,1 kWh/1000h
Power factor	0,99
CRI (RA)	97,6
Fidelity index Rf	Rf 97,0
Gammut index Rg	Rg 100,9
Peak	2731 cd



Polar curve



Linear distribution diagram



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Beam details	1m	2m	3m	4m	5m																			
Lux*	2731 lx	683 lx	303 lx	171 lx	109 lx																			
*measured at center of beam																								
Footcandles*	253,7 fcd	63,4 fcd	28,2 fcd	15,9 fcd	10,1 fcd																			
Beam width (meter)	0,5 m	0,9 m	1,4 m	1,8 m	2,3 m																			
Beam width (Feet)	1,5 ft	3 ft	4,5 ft	6 ft	7,5 ft																			
Beam intensities																								
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m					
2731lx	683lx	303lx	171lx	109lx	76lx	56lx	43lx	34lx	27lx	23lx	19lx	16lx	14lx	12lx	11lx	9lx	8lx	8lx	7lx					
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					
253,7fcd	63,4fcd	28,2fcd	15,9fcd	10,1fcd	7fcd	5,2fcd	4fcd	3,1fcd	2,5fcd	2,1fcd	1,8fcd	1,5fcd	1,3fcd	1,1fcd	1fcd	0,9fcd	0,8fcd	0,7fcd	0,6fcd					
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°					
2731	2729	2717	2694	2659	2612	2556	2493	2423	2350	2274	2203	1950	1325	635	169	1	1	1	1					
100%	100%	100%	99%	97%	96%	94%	91%	89%	86%	83%	81%	71%	48%	23%	6%	0%	0%	0%	0%					
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°					
2731	2729	2717	2694	2659	2612	2556	2493	2423	2350	2274	2203	1950	1325	635	169	1	1	1	1					
100%	100%	100%	99%	97%	96%	94%	91%	89%	86%	83%	81%	71%	48%	23%	6%	0%	0%	0%	0%					
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°					
2731	2729	2717	2694	2659	2612	2556	2493	2423	2350	2274	2203	1950	1325	635	169	1	1	1	1					
100%	100%	100%	99%	97%	96%	94%	91%	89%	86%	83%	81%	71%	48%	23%	6%	0%	0%	0%	0%					
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°					
2731	2729	2717	2694	2659	2612	2556	2493	2423	2350	2274	2203	1950	1325	635	169	1	1	1	1					
100%	100%	100%	99%	97%	96%	94%	91%	89%	86%	83%	81%	71%	48%	23%	6%	0%	0%	0%	0%					
Beam angle 50%					Field angle 10%					Cutoff angle 2,5%					Intensity ratio in 120° cone					Intensity ratio in 90° cone				
25,9°					29,2°					30,7°					99,8%					99,7%				



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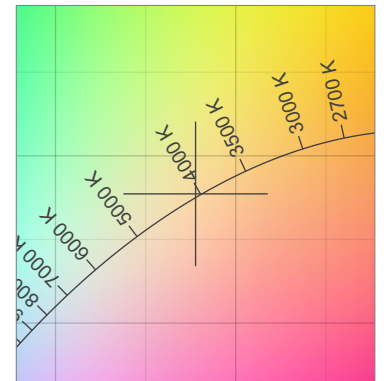
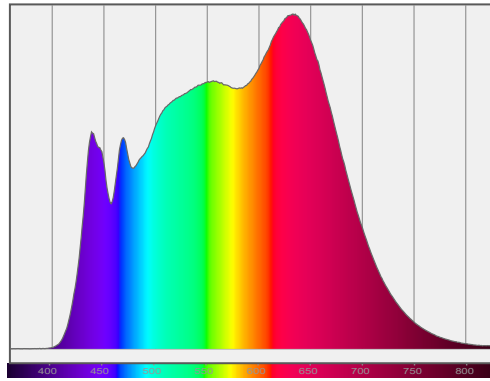
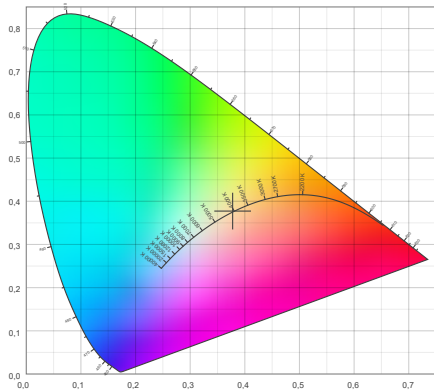
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Color details



CIE 1931

x: 0,378



Spectra

CIE 1931 ZOOM

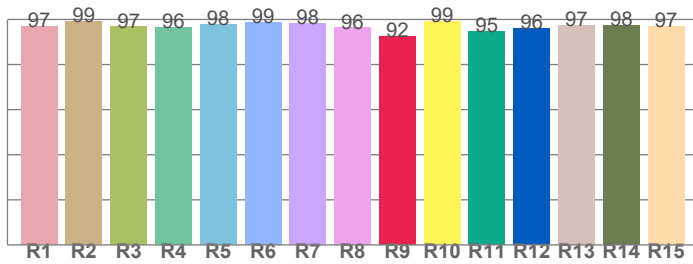
4084 K

y: 0,377

Δuv : 0,0011

CRI: 97,6 (R1-R8)

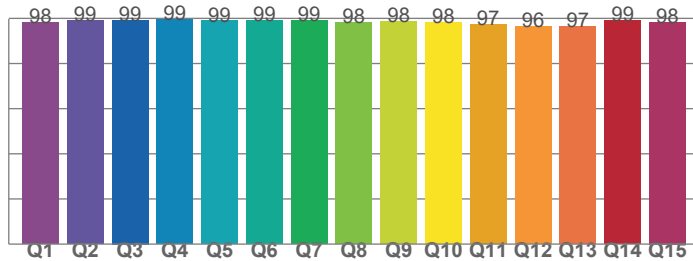
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
97,0	99,3	96,7	96,4	97,7	98,8	98,3	96,2
R9	R10	R11	R12	R13	R14	R15	
92,4	99,3	94,8	96,1	97,4	97,5	96,9	

CQS: 98,1

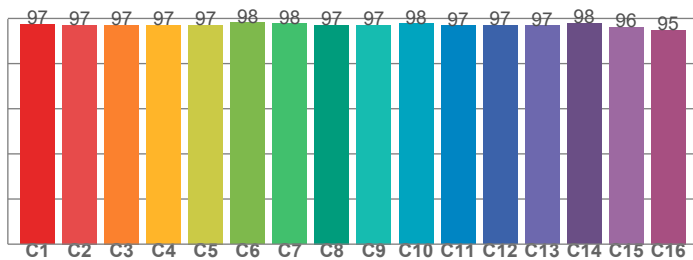
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
98,3	99,1	99,3	99,4	98,9	99,1	99,1	98,1
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
98,5	98,1	97,3	96,3	96,5	99,0	98,4	

TM30: 97,0

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



C1	C2	C3	C4	C5	C6	C7	C8
97,5	97,1	97,1	97,0	97,2	98,2	97,6	97,1
C9	C10	C11	C12	C13	C14	C15	
97,1	97,7	96,7	97,0	96,8	97,9	96,2	

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
4084 K	97,6	92,4	97,0	100,9	98,1	0,378	0,377	0,223	0,334	0,0011



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TM30 details

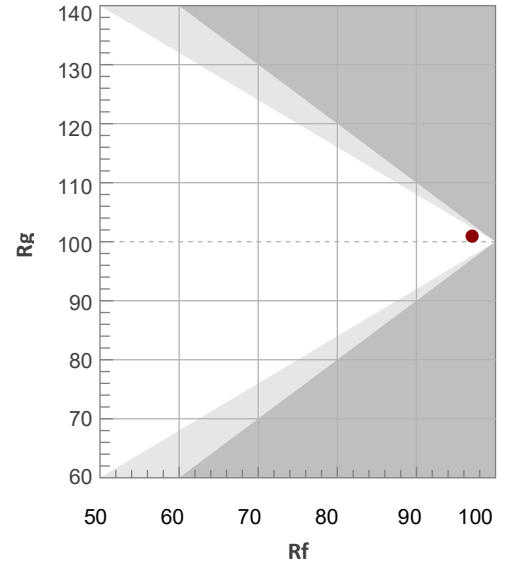
Rf 97,0

Fidelity index Rf

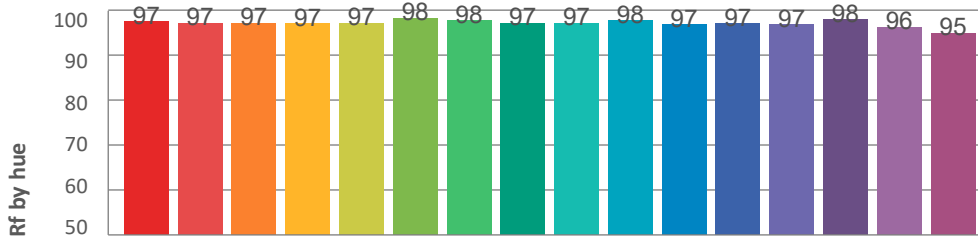
Rg 100,9

Gamut index Rg

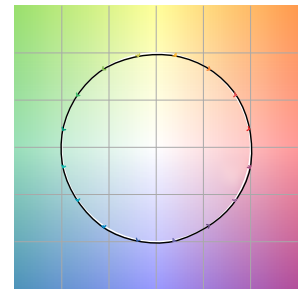
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	97	1%	0%
2	97	1%	-1%
3	97	0%	-1%
4	97	-1%	-2%
5	97	-2%	0%
6	98	0%	1%
7	98	0%	1%
8	97	1%	1%
9	97	1%	2%
10	98	1%	1%
11	97	2%	1%
12	97	1%	0%
13	97	1%	-2%
14	98	0%	1%
15	96	1%	-1%
16	95	2%	-2%



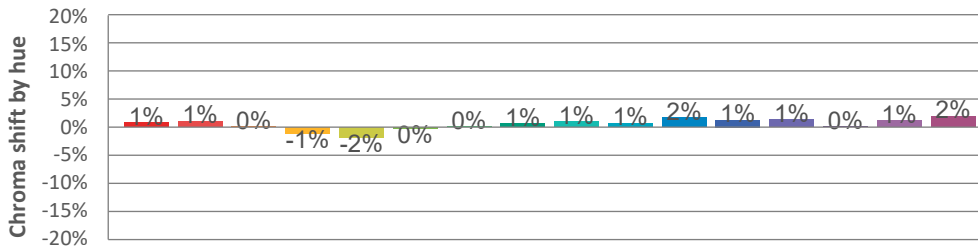
Hue binH



Color vector graphics



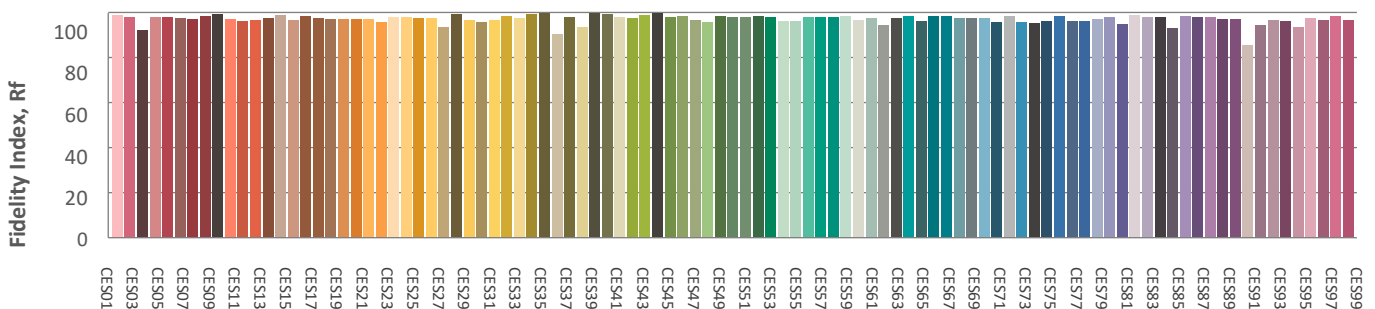
Hue bin



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					
2H	2H	-15,7	-15,4	-15,7	-15,3	-15,1	-15,7	-15,4	-15,7	-15,3	-15,1
	3H	-13,8	-13,3	-13,4	-13,1	-13,0	-13,8	-13,3	-13,4	-13,1	-13,0
	4H	-12,8	-12,3	-12,4	-12,1	-11,9	-12,8	-12,3	-12,4	-12,1	-11,9
	6H	-11,7	-11,4	-11,4	-11,1	-10,7	-11,7	-11,4	-11,4	-11,1	-10,7
	8H	-11,2	-10,9	-10,9	-10,5	-10,2	-11,2	-10,9	-10,9	-10,5	-10,2
	12H	-10,6	-10,2	-10,2	-9,9	-9,5	-10,6	-10,2	-10,2	-9,9	-9,5
4H	2H	-15,0	-14,6	-14,7	-14,4	-14,2	-15,0	-14,6	-14,7	-14,4	-14,2
	3H	-12,6	-12,2	-12,2	-11,9	-11,5	-12,6	-12,2	-12,2	-11,9	-11,5
	4H	-11,6	-11,3	-11,2	-10,8	-10,3	-11,6	-11,3	-11,2	-10,8	-10,3
	6H	-10,5	-10,1	-10,0	-9,7	-9,4	-10,5	-10,1	-10,0	-9,7	-9,4
	8H	-9,9	-9,5	-9,3	-9,2	-8,8	-9,9	-9,5	-9,3	-9,2	-8,8
	12H	-9,1	-8,8	-8,6	-8,4	-8,0	-9,1	-8,8	-8,6	-8,4	-8,0
8H	4H	-11,2	-10,8	-10,6	-10,5	-10,1	-11,2	-10,8	-10,6	-10,5	-10,1
	6H	-9,8	-9,5	-9,2	-9,1	-8,6	-9,8	-9,5	-9,2	-9,1	-8,6
	8H	-8,9	-8,7	-8,4	-8,2	-7,6	-8,9	-8,7	-8,4	-8,2	-7,6
	12H	-8,0	-7,8	-7,4	-7,3	-6,7	-8,0	-7,8	-7,4	-7,3	-6,7
12H	4H	-11,1	-10,8	-10,6	-10,4	-10,0	-11,1	-10,8	-10,6	-10,4	-10,0
	6H	-9,5	-9,4	-9,0	-8,9	-8,2	-9,5	-9,4	-9,0	-8,9	-8,2
	8H	-8,6	-8,5	-8,0	-8,0	-7,4	-8,6	-8,5	-8,0	-8,0	-7,4
Variation of the observer position for the luminaire distance S											
S = 1.0H	0,1 / -0,1					0,1 / -0,1					
S = 1.5H	0,2 / -0,1					0,2 / -0,1					
S = 2.0H	0,3 / -0,2					0,3 / -0,2					
Standard table	n/a					n/a					
Correction summand	n/a					n/a					
Corrected glare indices referring to 407lm total luminous flux											



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