

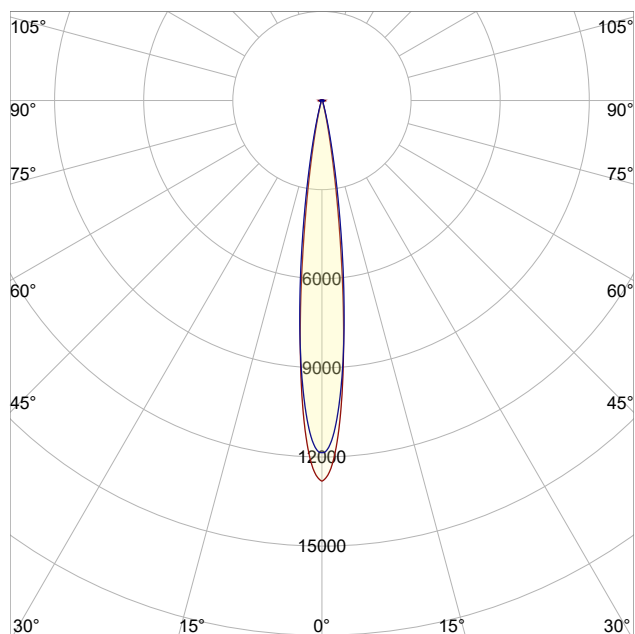
LM-79

Test Report

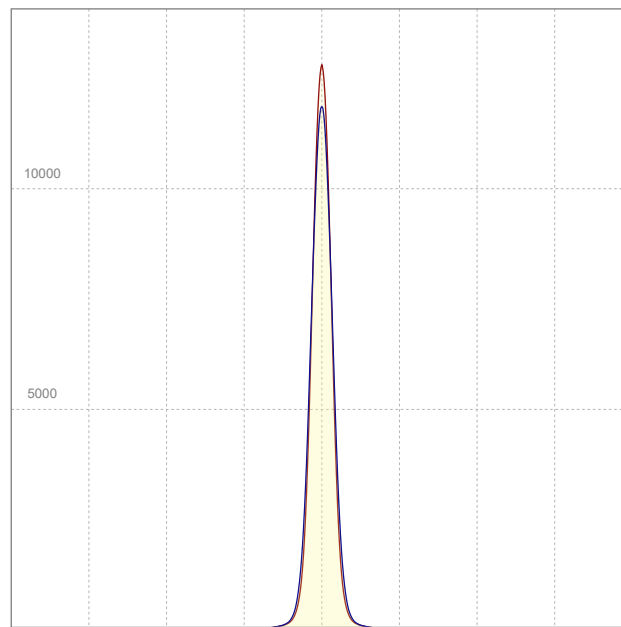
LM79-TOPAZ-EXPO-3000K-CRI98-THRIVE [NARROW]

General Discription

Item number	T-E-XLX-1B-3098-N
Date and time	11-9-2024 16:43:33
CCT (Kelvin)	3047 K
Beam angle	14°
Luminous flux	849 lm
Efficiency	75 lm/watt
Weighted energy	11,3 kWh/1000h
Power factor	0,88
CRI (RA)	95,3
Fidelity index Rf	Rf 96,0
Gammut index Rg	Rg 100,9
Peak	12795 cd



Polar curve



Linear distribution diagram



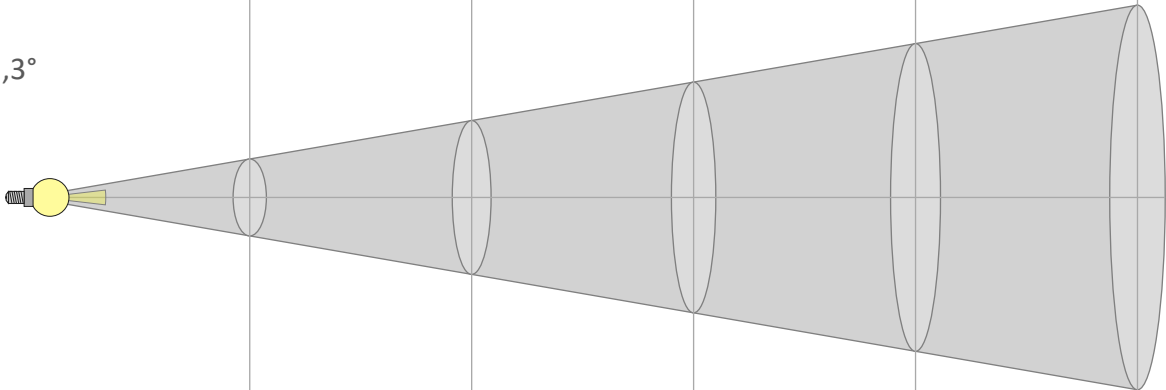
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info@cls-led.com
www.cls-led.com

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Beam details				1m			2m			3m			4m			5m			
Lux*				12319 lx			3080 lx			1369 lx			770 lx			493 lx			
13,3° 																			
*measured at center of beam																			
Footcandles*				1144,5 fcd			286,1 fcd			127,2 fcd			71,5 fcd			45,8 fcd			
Beam width (meter)				0,2 m			0,5 m			0,7 m			0,9 m			1,2 m			
Beam width (Feet)				0,8 ft			1,5 ft			2,3 ft			3,1 ft			3,8 ft			
Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
12319lx	3080lx	1369lx	770lx	493lx	342lx	251lx	192lx	152lx	123lx	102lx	86lx	73lx	63lx	55lx	48lx	43lx	38lx	34lx	31lx
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
1144,5fcd	286,1fcd	127,2fcd	71,5fcd	45,8fcd	31,8fcd	23,4fcd	17,9fcd	14,1fcd	11,4fcd	9,5fcd	7,9fcd	6,8fcd	5,8fcd	5,1fcd	4,5fcd	4fcd	3,5fcd	3,2fcd	2,9fcd
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°
12,3K	12,6K	12,0K	11,0K	9,8K	8,3K	6,8K	5,3K	4,0K	3,0K	2,1K	1,5K	1,0K	0,8K	0,5K	0,4K	0,3K	0,2K	0,2K	0,2K
100%	102%	97%	89%	79%	68%	55%	43%	33%	24%	17%	12%	9%	6%	4%	3%	3%	2%	2%	1%
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°
12,3K	11,7K	11,2K	10,4K	9,5K	8,3K	7,1K	5,9K	4,7K	3,6K	2,8K	2,0K	1,5K	1,1K	0,8K	0,6K	0,4K	0,3K	0,2K	0,2K
100%	95%	91%	85%	77%	68%	58%	48%	38%	30%	22%	17%	12%	9%	6%	4%	3%	2%	2%	2%
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°
12,3K	12,6K	12,0K	11,0K	9,8K	8,3K	6,8K	5,3K	4,0K	3,0K	2,1K	1,5K	1,0K	0,8K	0,5K	0,4K	0,3K	0,2K	0,2K	0,2K
100%	102%	97%	89%	79%	68%	55%	43%	33%	24%	17%	12%	9%	6%	4%	3%	3%	2%	2%	1%
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°
12,3K	11,7K	11,2K	10,4K	9,5K	8,3K	7,1K	5,9K	4,7K	3,6K	2,8K	2,0K	1,5K	1,1K	0,8K	0,6K	0,4K	0,3K	0,2K	0,2K
100%	95%	91%	85%	77%	68%	58%	48%	38%	30%	22%	17%	12%	9%	6%	4%	3%	2%	2%	2%
Beam angle 50%				Field angle 10%				Cutoff angle 2,5%				Intensity ratio in 120° cone				Intensity ratio in 90° cone			
13,3°				24,1°				33°				99,3%				98,1%			



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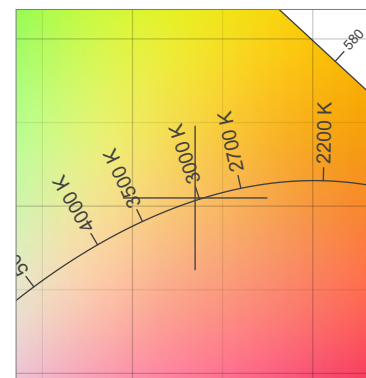
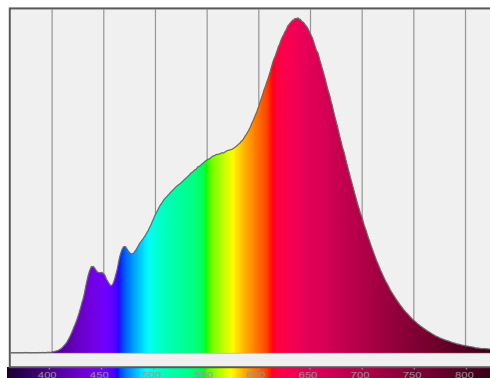
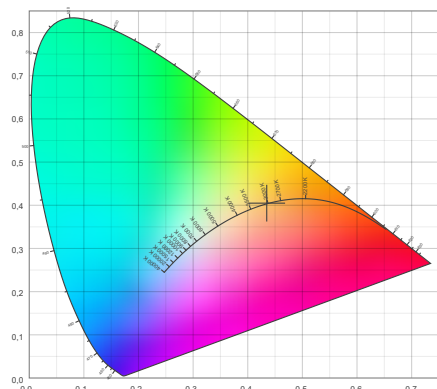
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Test Report

LM79-TOPAZ-EXPO-3000K-CRI98-THRIVE [NARROW]

Color details



CIE 1931

x: 0,435



Spectra

CIE 1931 ZOOM

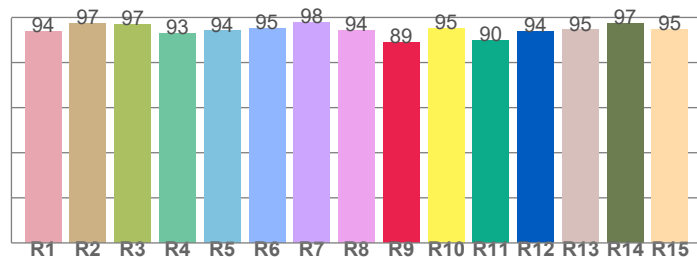
3047 K

y: 0,405

$\Delta uv: 0,0006$

CRI: 95,3 (R1-R8)

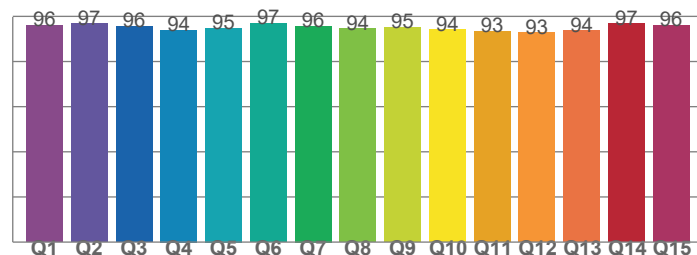
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
94,0	97,4	96,8	92,8	94,0	95,1	97,8	94,2
R9	R10	R11	R12	R13	R14	R15	
89,0	95,3	89,8	93,8	94,5	97,2	94,9	

CQS: 94,8

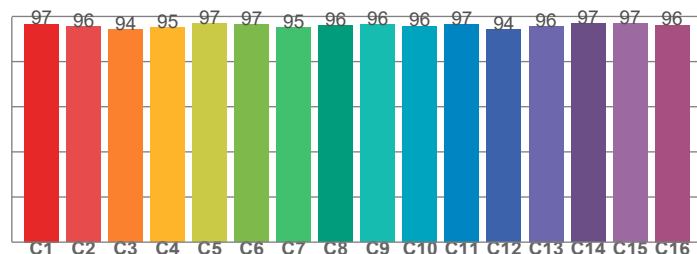
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
96,1	96,7	95,6	94,0	94,9	96,8	95,7	94,5
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
95,1	94,0	93,4	92,7	93,6	96,8	96,1	

TM30: 96,0

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



C1	C2	C3	C4	C5	C6	C7	C8
96,7	95,5	94,3	95,2	96,8	96,5	95,2	95,9
C9	C10	C11	C12	C13	C14	C15	
96,3	95,8	96,6	94,2	95,7	96,8	96,7	

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
3047 K	95,3	89,0	96,0	100,9	94,8	0,435	0,405	0,249	0,348	0,0006



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info@cls-led.com
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Test Report

LM79-TOPAZ-EXPO-3000K-CRI98-THRIVE [NARROW]

TM30 details

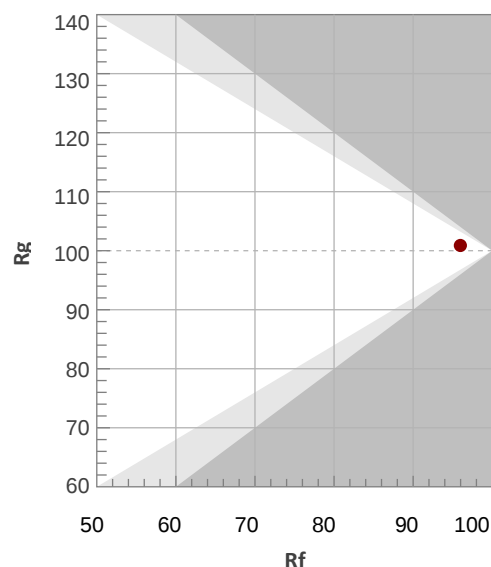
Rf 96,0

Fidelity index Rf

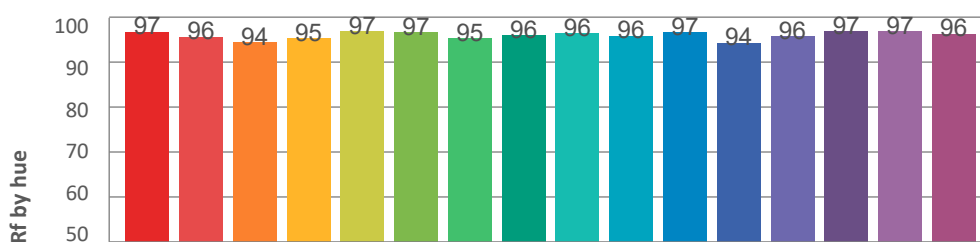
Rg 100,9

Gamut index Rg

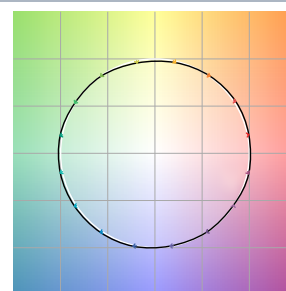
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	97	1%	0%
2	96	2%	-2%
3	94	0%	-3%
4	95	-2%	-3%
5	97	-2%	0%
6	97	0%	2%
7	95	0%	3%
8	96	2%	1%
9	96	2%	1%
10	96	2%	-1%
11	97	2%	-2%
12	94	1%	-4%
13	96	0%	-3%
14	97	0%	-1%
15	97	0%	1%
16	96	2%	-2%



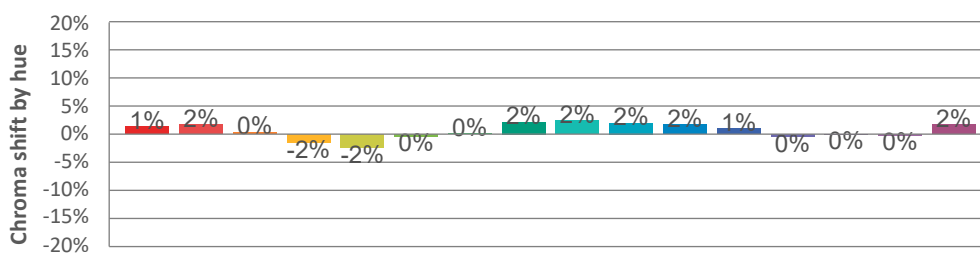
Hue binH



Color vector graphics



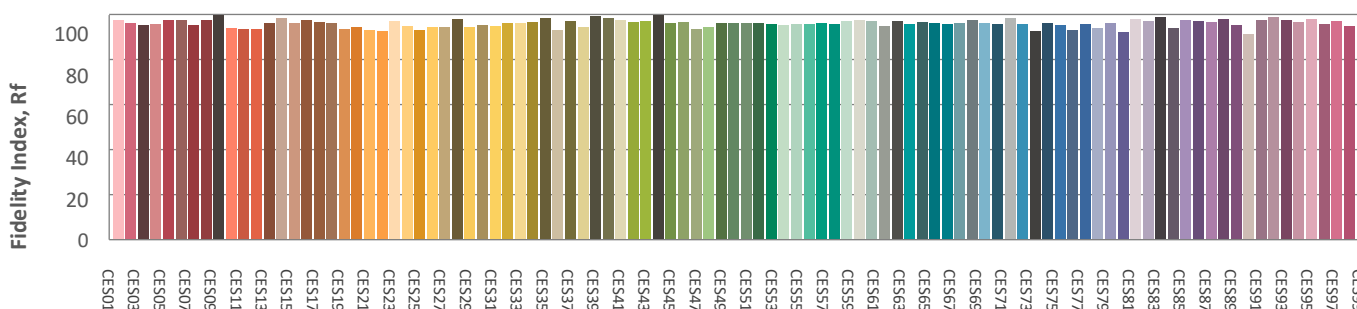
Hue bin



Color distortion graphics



Color Evaluation Sample



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LM79-TOPAZ-EXPO-3000K-CRI98-THRIVE
[NARROW]

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
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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
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 849lm total luminous flux										



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