

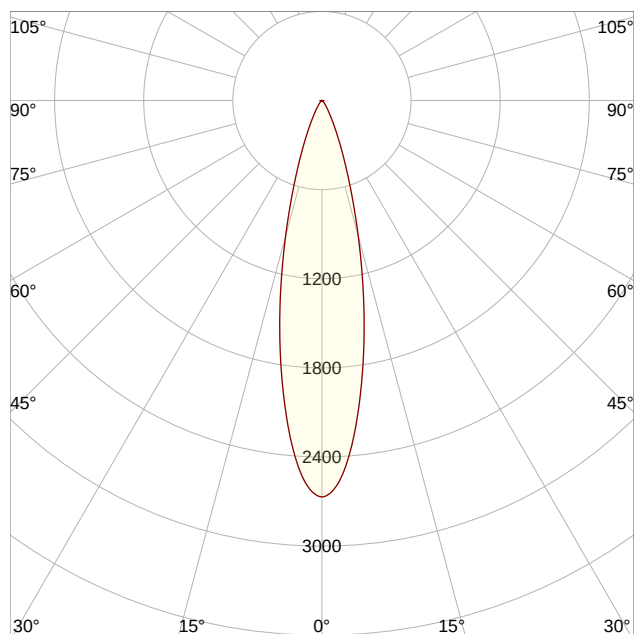
LM-79

Test Report

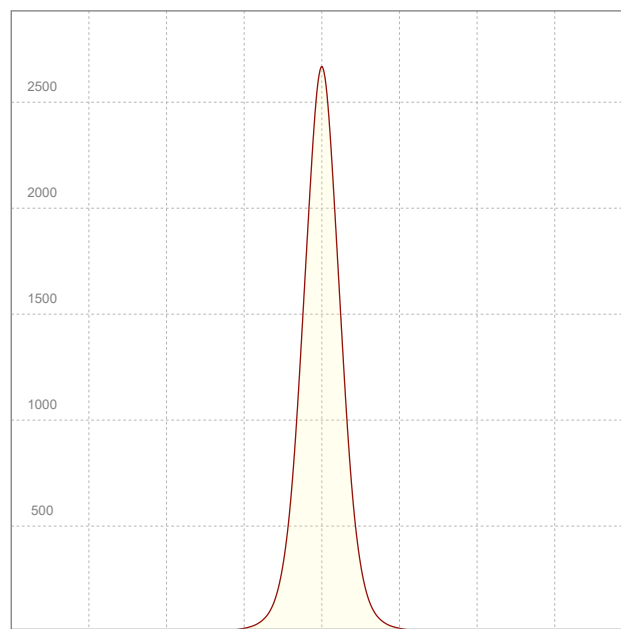
LM79-TOPAZ-COLOURFLOW-RGB4-MEDIUM [4000K]

General Discription

Item number	T-C-XCX-1C-N470-M
Date and time	8-12-2025 15:43:22
CCT (Kelvin)	4328 K
Beam angle	24,2°
Luminous flux	624 lm
Efficiency	56 lm/watt
Weighted energy	11,2 kWh/1000h
Power factor	0,49
CRI (RA)	88,4
Fidelity index Rf	Rf 86,9
Gammut index Rg	Rg 99,8
Peak	2665 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*	2665 lx	666 lx	296 lx	167 lx	107 lx

24,2°

*measured at center of beam

Footcandles*	247,6 fcd	61,9 fcd	27,5 fcd	15,5 fcd	9,9 fcd
Beam width (meter)	0,4 m	0,9 m	1,3 m	1,7 m	2,1 m
Beam width (Feet)	1,4 ft	2,8 ft	4,2 ft	5,6 ft	7 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
2665lx	666lx	296lx	167lx	107lx	74lx	54lx	42lx	33lx	27lx	22lx	19lx	16lx	14lx	12lx	10lx	9lx	8lx	7lx	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
247,6fcd	61,9fcd	27,5fcd	15,5fcd	9,9fcd	6,9fcd	5,1fcd	3,9fcd	3,1fcd	2,5fcd	2fcd	1,7fcd	1,5fcd	1,3fcd	1,1fcd	1fcd	0,9fcd	0,8fcd	0,7fcd	0,6fcd

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°
2665	2603	2436	2194	1918	1631	1345	1072	829	626	466	344	251	184	135	100	76	58	46	36
100%	98%	91%	82%	72%	61%	50%	40%	31%	23%	17%	13%	9%	7%	5%	4%	3%	2%	2%	1%

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°
2665	2603	2436	2194	1918	1631	1345	1072	829	626	466	344	251	184	135	100	76	58	46	36
100%	98%	91%	82%	72%	61%	50%	40%	31%	23%	17%	13%	9%	7%	5%	4%	3%	2%	2%	1%

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°
2665	2603	2436	2194	1918	1631	1345	1072	829	626	466	344	251	184	135	100	76	58	46	36
100%	98%	91%	82%	72%	61%	50%	40%	31%	23%	17%	13%	9%	7%	5%	4%	3%	2%	2%	1%

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°
2665	2603	2436	2194	1918	1631	1345	1072	829	626	466	344	251	184	135	100	76	58	46	36
100%	98%	91%	82%	72%	61%	50%	40%	31%	23%	17%	13%	9%	7%	5%	4%	3%	2%	2%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
24,2°	47,2°	66°	99,0%	97,1%



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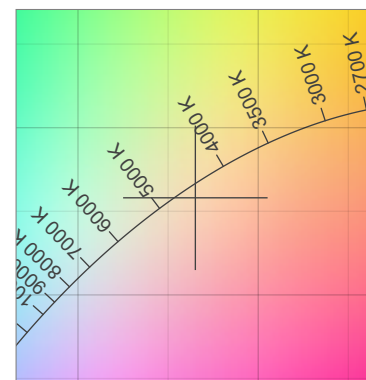
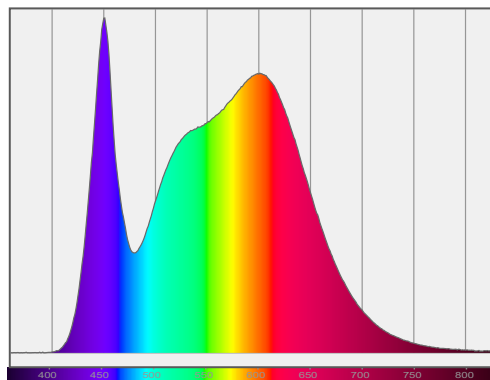
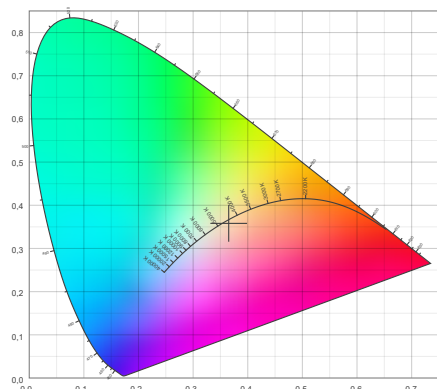
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Color details



CIE 1931

x: 0,365



Spectra

CIE 1931 ZOOM

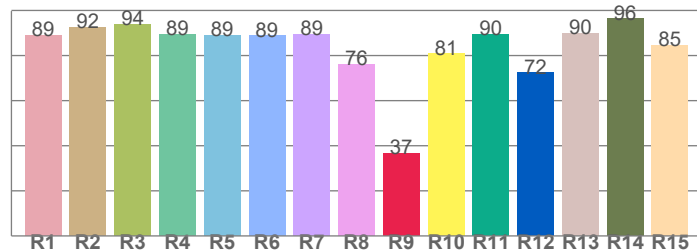
4328 K

y: 0,358

Δuv : -0,0042

CRI: 88,4 (R1-R8)

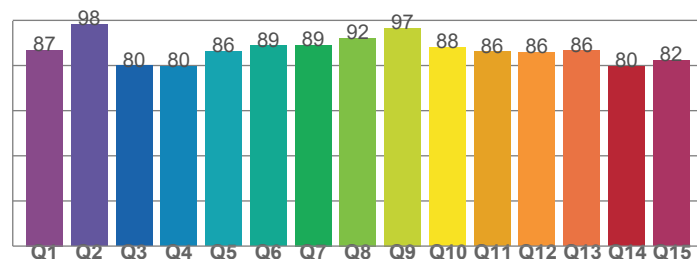
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
89,0	92,4	93,7	89,3	88,9	88,7	89,3	76,0
R9	R10	R11	R12	R13	R14	R15	
36,6	80,8	89,5	72,4	90,0	96,3	84,7	

CQS: 86,0

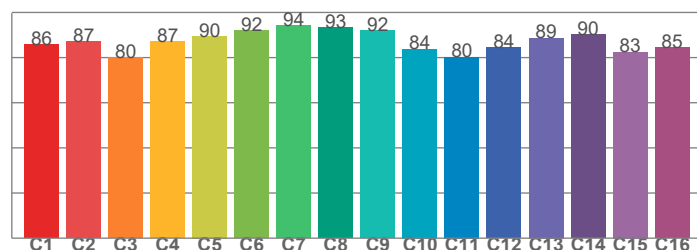
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
86,9	98,1	79,9	79,7	86,2	88,8	89,1	92,2
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
96,6	88,1	86,0	85,7	86,5	79,6	82,2	

TM30: 86,9

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



C1	C2	C3	C4	C5	C6	C7	C8
85,9	87,0	80,0	87,0	89,5	92,1	94,2	93,4
C9	C10	C11	C12	C13	C14	C15	
92,0	83,8	80,2	84,4	88,6	90,1	82,5	

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
4328 K	88,4	36,6	86,9	99,8	86,0	0,365	0,358	0,222	0,327	-0,0042



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[4000K]

TM30 details

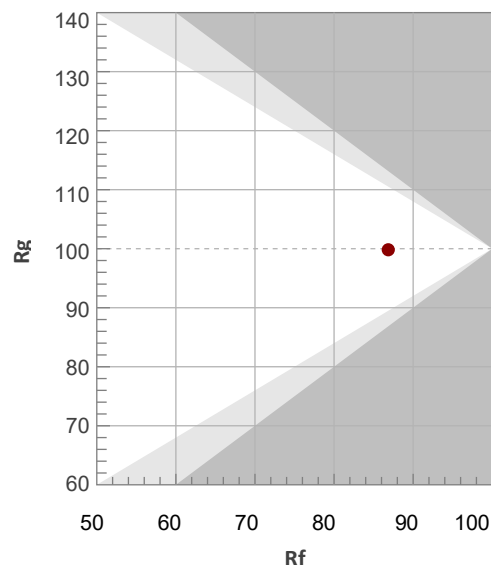
Rf 86,9

Fidelity index Rf

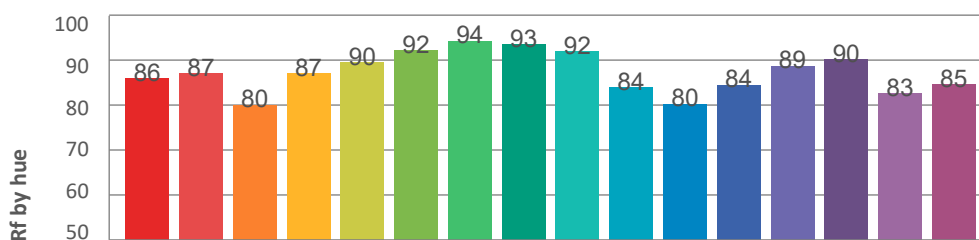
Rg 99,8

Gamut index Rg

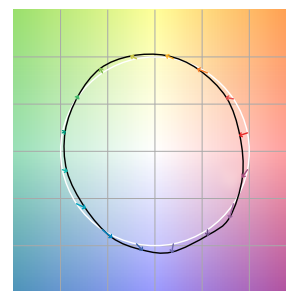
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	86	-9%	-1%
2	87	-5%	5%
3	80	-2%	11%
4	87	2%	8%
5	90	4%	5%
6	92	5%	0%
7	94	0%	-3%
8	93	-3%	-2%
9	92	-4%	2%
10	84	-5%	9%
11	80	1%	12%
12	84	5%	7%
13	89	8%	-3%
14	90	5%	-3%
15	83	5%	-15%
16	85	-4%	-8%



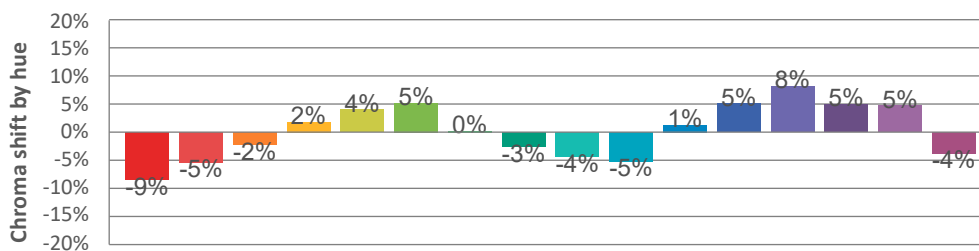
Hue binH



Color vector graphics



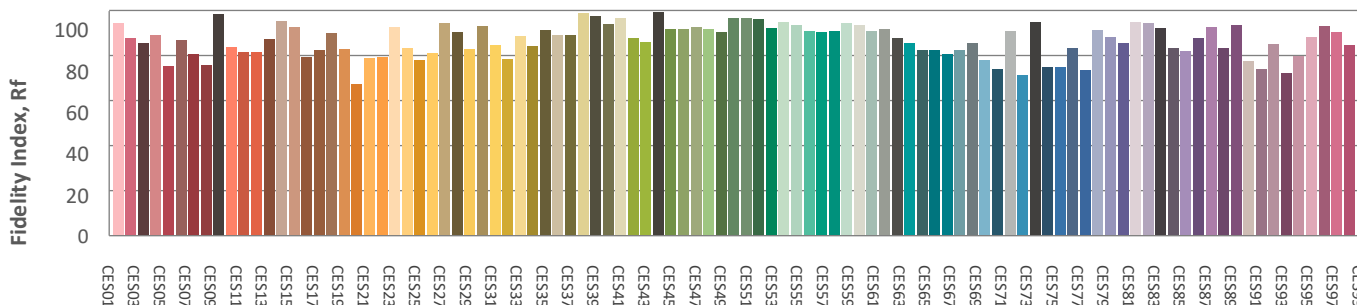
Hue bin



Color distortion graphics



Color Evaluation Sample



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[4000K]

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	8,2	8,7	8,3	8,9	9,0	8,2	8,7	8,3	8,9	9,0
	3H	8,1	8,7	8,4	8,9	9,0	8,1	8,7	8,4	8,9	9,0
	4H	8,1	8,7	8,5	8,9	9,1	8,1	8,7	8,5	8,9	9,1
	6H	8,2	8,6	8,4	8,9	9,3	8,2	8,6	8,4	8,9	9,3
	8H	8,1	8,6	8,4	8,9	9,3	8,1	8,6	8,4	8,9	9,3
	12H	8,1	8,5	8,4	8,9	9,3	8,1	8,5	8,4	8,9	9,3
4H	2H	7,9	8,5	8,3	8,8	9,0	7,9	8,5	8,3	8,8	9,0
	3H	8,1	8,5	8,4	8,9	9,3	8,1	8,5	8,4	8,9	9,3
	4H	8,1	8,5	8,5	8,9	9,4	8,1	8,5	8,5	8,9	9,4
	6H	8,1	8,6	8,6	8,9	9,2	8,1	8,6	8,6	8,9	9,2
	8H	8,1	8,5	8,6	8,9	9,2	8,1	8,5	8,6	8,9	9,2
	12H	8,0	8,4	8,5	8,8	9,2	8,0	8,4	8,5	8,8	9,2
8H	4H	8,0	8,4	8,5	8,8	9,1	8,0	8,4	8,5	8,8	9,1
	6H	8,1	8,4	8,6	8,8	9,3	8,1	8,4	8,6	8,8	9,3
	8H	8,1	8,4	8,7	8,9	9,5	8,1	8,4	8,7	8,9	9,5
	12H	8,1	8,3	8,7	8,8	9,4	8,1	8,3	8,7	8,8	9,4
12H	4H	7,9	8,3	8,4	8,7	9,1	7,9	8,3	8,4	8,7	9,1
	6H	8,1	8,3	8,6	8,8	9,5	8,1	8,3	8,6	8,8	9,5
	8H	8,1	8,3	8,7	8,8	9,4	8,1	8,3	8,7	8,8	9,4

Variation of the observer position for the luminaire distance S

S = 1.0H	3,8 / -3,3	3,8 / -3,3
S = 1.5H	6,2 / -4,6	6,2 / -4,6
S = 2.0H	8,0 / -5,1	8,0 / -5,1
Standard table	n/a	n/a
Correction summand	n/a	n/a

Corrected glare indices referring to 624lm total luminous flux



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