

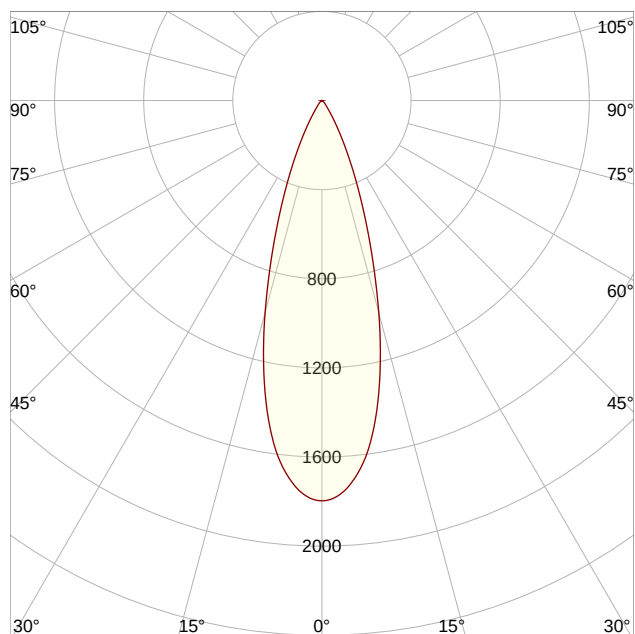
LM-79

Test Report

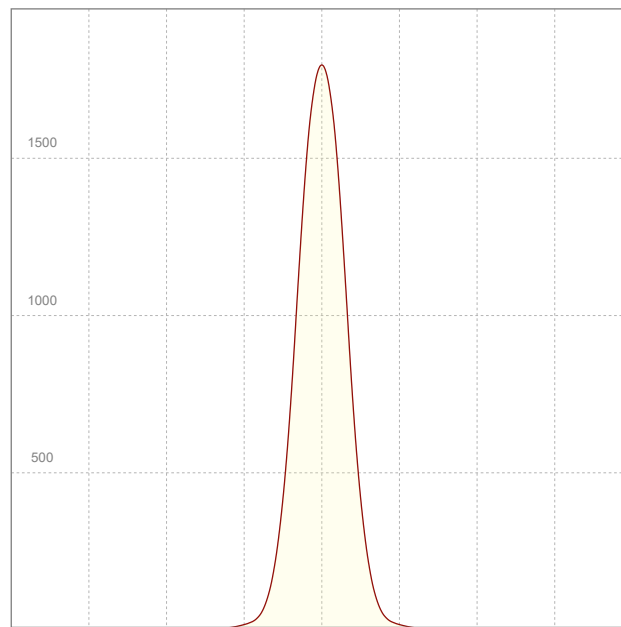
LM79-TOPAZ-COLOURFLOW-RGB3-WIDE [3000K]

General Discription

Item number	T-C-XCX-1C-N370-W
Date and time	8-12-2025 17:01:16
CCT (Kelvin)	3283 K
Beam angle	31,9°
Luminous flux	623 lm
Efficiency	55 lm/watt
Weighted energy	11,3 kWh/1000h
Power factor	0,5
CRI (RA)	86,5
Fidelity index Rf	Rf 86,7
Gammut index Rg	Rg 99,0
Peak	1796 cd



Polar curve



Linear distribution diagram



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Beam details	1m	2m	3m	4m	5m
Lux*	1796 lx	449 lx	200 lx	112 lx	72 lx

31,9°

*measured at center of beam

Footcandles*	166,8 fcd	41,7 fcd	18,5 fcd	10,4 fcd	6,7 fcd
Beam width (meter)	0,6 m	1,1 m	1,7 m	2,3 m	2,9 m
Beam width (Feet)	1,9 ft	3,8 ft	5,6 ft	7,5 ft	9,4 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
1796lx	449lx	200lx	112lx	72lx	50lx	37lx	28lx	22lx	18lx	15lx	12lx	11lx	9lx	8lx	7lx	6lx	6lx	5lx	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
166,8fcd	41,7fcd	18,5fcd	10,4fcd	6,7fcd	4,6fcd	3,4fcd	2,6fcd	2,1fcd	1,7fcd	1,4fcd	1,2fcd	1fcd	0,9fcd	0,7fcd	0,7fcd	0,6fcd	0,5fcd	0,5fcd	0,4fcd

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°
1796	1780	1734	1658	1553	1414	1253	1077	895	725	575	447	342	254	185	132	94	66	47	35
100%	99%	97%	92%	86%	79%	70%	60%	50%	40%	32%	25%	19%	14%	10%	7%	5%	4%	3%	2%

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°
1796	1780	1734	1658	1553	1414	1253	1077	895	725	575	447	342	254	185	132	94	66	47	35
100%	99%	97%	92%	86%	79%	70%	60%	50%	40%	32%	25%	19%	14%	10%	7%	5%	4%	3%	2%

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°
1796	1780	1734	1658	1553	1414	1253	1077	895	725	575	447	342	254	185	132	94	66	47	35
100%	99%	97%	92%	86%	79%	70%	60%	50%	40%	32%	25%	19%	14%	10%	7%	5%	4%	3%	2%

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°
1796	1780	1734	1658	1553	1414	1253	1077	895	725	575	447	342	254	185	132	94	66	47	35
100%	99%	97%	92%	86%	79%	70%	60%	50%	40%	32%	25%	19%	14%	10%	7%	5%	4%	3%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
31,9°	56,4°	72,6°	99,1%	97,2%



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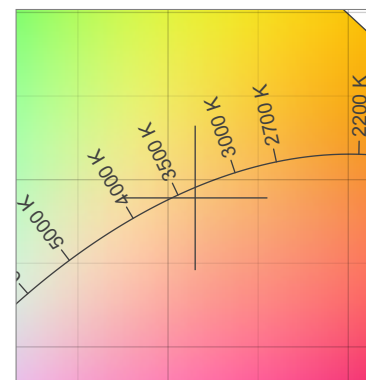
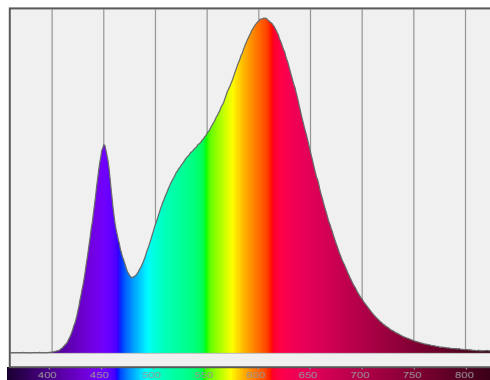
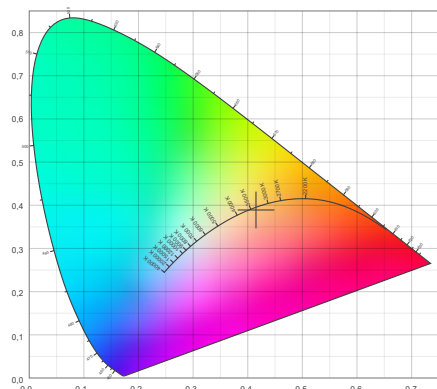
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Color details



CIE 1931

x: 0,415



Spectra

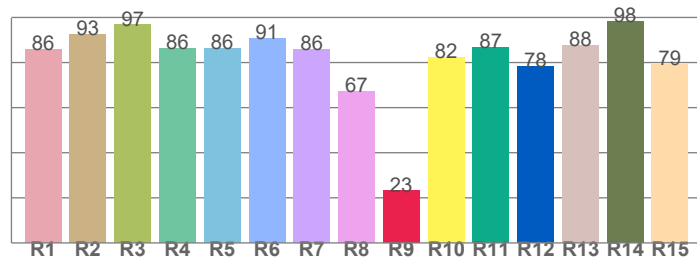
CIE 1931 ZOOM

3283 K

y: 0,389

Δuv : -0,0027

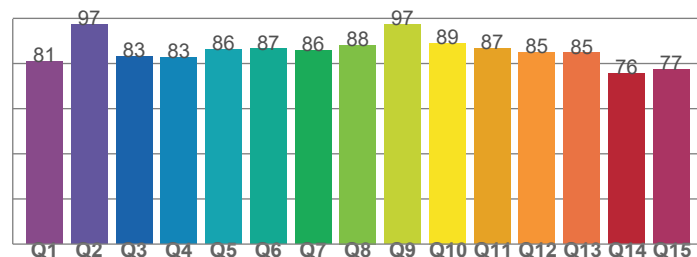
CRI: 86,5 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
85,9	92,6	96,7	86,3	86,3	90,9	85,7	67,2
R9	R10	R11	R12	R13	R14	R15	
23,1	82,4	86,9	78,4	87,7	98,4	79,2	

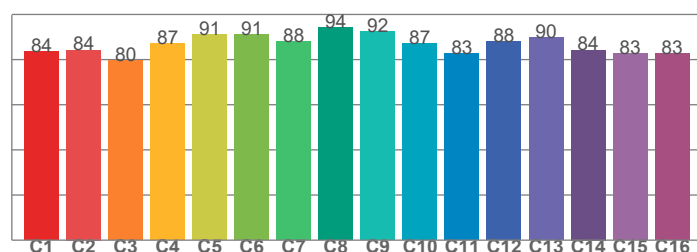
CQS: 84,6



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
80,9	97,4	83,1	82,8	86,3	86,5	85,8	88,2
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
97,3	89,1	86,7	84,9	84,8	75,7	77,3	

TM30: 86,7



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

C1	C2	C3	C4	C5	C6	C7	C8
83,6	84,3	79,6	87,2	91,2	91,2	88,0	94,1
C9	C10	C11	C12	C13	C14	C15	
92,3	87,0	82,8	87,9	89,8	84,2	82,8	

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
3283 K	86,5	23,1	86,7	99,0	84,6	0,415	0,389	0,243	0,341	-0,0027



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Test Report

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TM30 details

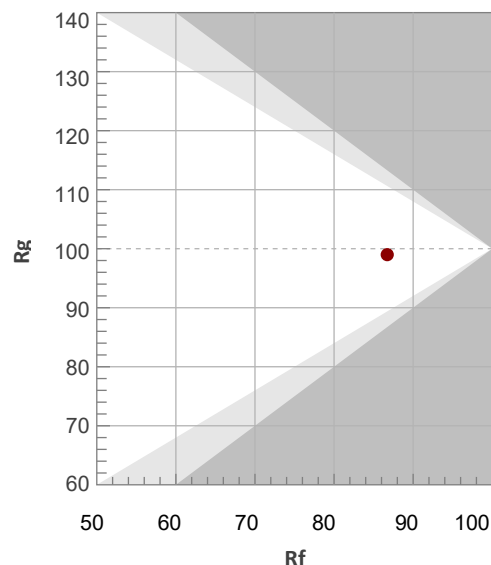
R_f 86,7

Fidelity index R_f

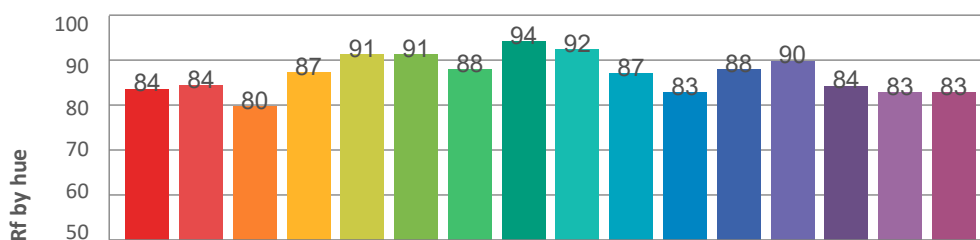
R_g 99,0

Gamut index R_g

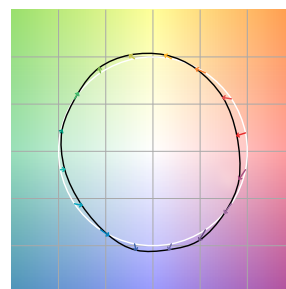
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	84	-10%	-1%
2	84	-7%	6%
3	80	-2%	11%
4	87	3%	8%
5	91	5%	5%
6	91	5%	-2%
7	88	0%	-7%
8	94	-1%	-3%
9	92	-5%	0%
10	87	-6%	6%
11	83	0%	11%
12	88	6%	3%
13	90	5%	-4%
14	84	6%	-11%
15	83	-1%	-12%
16	83	-5%	-11%



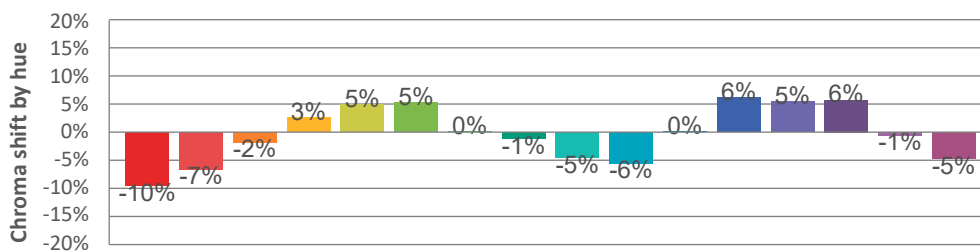
Hue binH



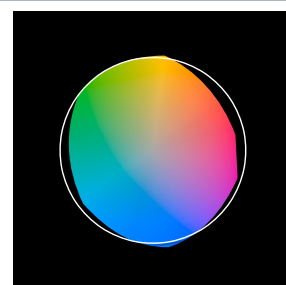
Color vector graphics



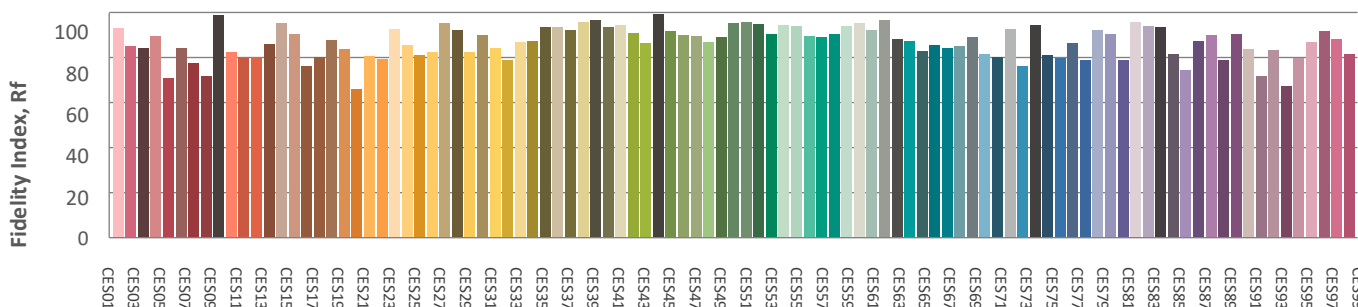
Hue bin



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

Variation of the observer position for the luminaire distance S

S = 1.0H	4,6 / -4,3	4,6 / -4,3
S = 1.5H	7,1 / -5,7	7,1 / -5,7
S = 2.0H	9,0 / -6,3	9,0 / -6,3
Standard table	n/a	n/a
Correction summand	n/a	n/a

Corrected glare indices referring to 623lm total luminous flux



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