

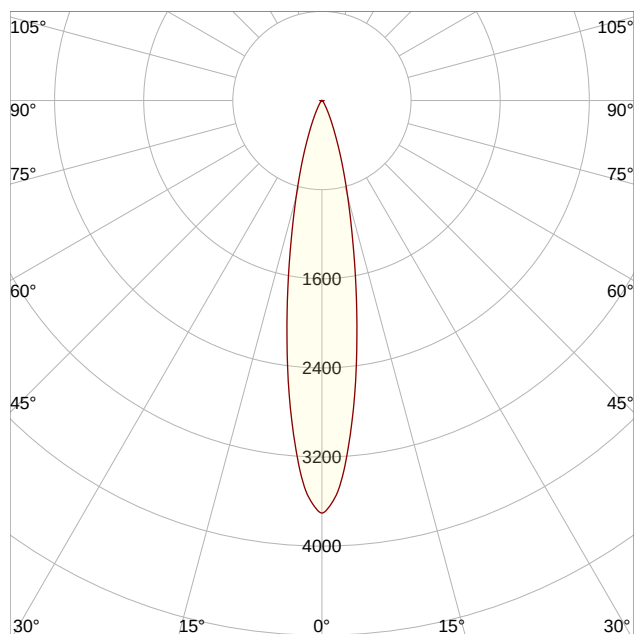
LM-79

Test Report

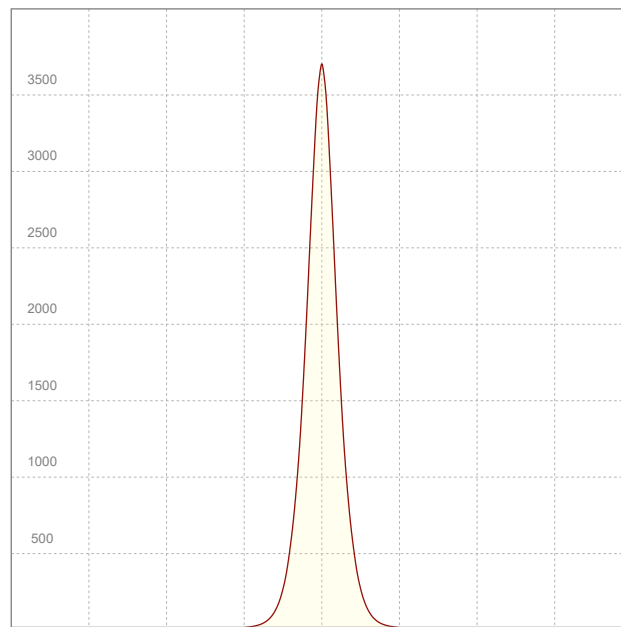
LM79-TOPAZ-COLOURFLOW-RGB3-SPOT [3000K]

General Discription

Item number	T-C-XCX-1C-N370-S
Date and time	8-12-2025 16:46:37
CCT (Kelvin)	3276 K
Beam angle	19,4°
Luminous flux	635 lm
Efficiency	57 lm/watt
Weighted energy	11,2 kWh/1000h
Power factor	0,48
CRI (RA)	86,4
Fidelity index Rf	Rf 86,7
Gammut index Rg	Rg 99,2
Peak	3694 cd



Polar curve



Linear distribution diagram



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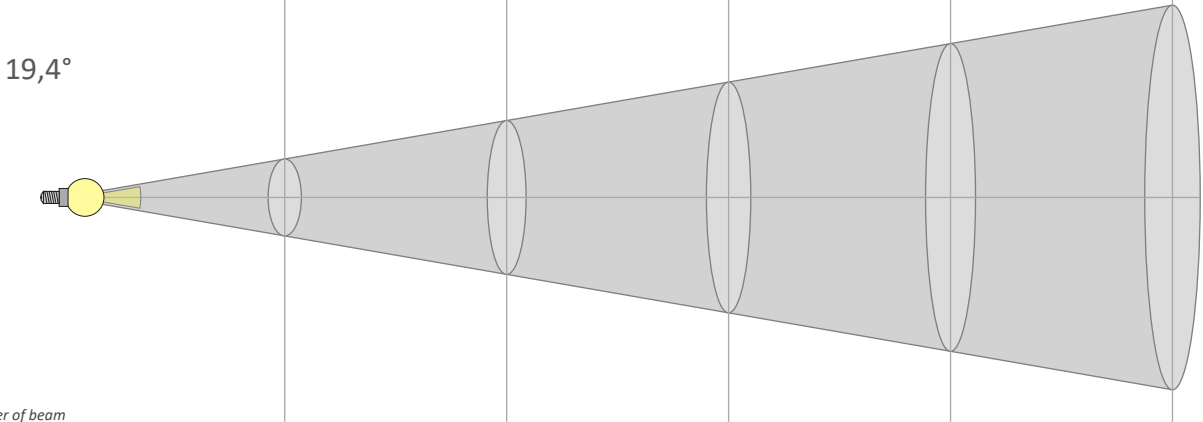
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Beam details	1m	2m	3m	4m	5m
Lux*	3694 lx	923 lx	410 lx	231 lx	148 lx



*measured at center of beam

Footcandles*	343,2 fcd	85,8 fcd	38,1 fcd	21,4 fcd	13,7 fcd
Beam width (meter)	0,3 m	0,7 m	1 m	1,4 m	1,7 m
Beam width (Feet)	1,1 ft	2,2 ft	3,4 ft	4,5 ft	5,6 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3694lx	923lx	410lx	231lx	148lx	103lx	75lx	58lx	46lx	37lx	31lx	26lx	22lx	19lx	16lx	14lx	13lx	11lx	10lx	9lx
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
343,2fcd	85,8fcd	38,1fcd	21,4fcd	13,7fcd	9,5fcd	7fcd	5,4fcd	4,2fcd	3,4fcd	2,8fcd	2,4fcd	2fcd	1,8fcd	1,5fcd	1,3fcd	1,2fcd	1,1fcd	1fcd	0,9fcd

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°
3694	3547	3197	2740	2247	1778	1364	1031	772	569	409	293	209	150	108	79	59	45	35	29
100%	96%	87%	74%	61%	48%	37%	28%	21%	15%	11%	8%	6%	4%	3%	2%	2%	1%	1%	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°
3694	3547	3197	2740	2247	1778	1364	1031	772	569	409	293	209	150	108	79	59	45	35	29
100%	96%	87%	74%	61%	48%	37%	28%	21%	15%	11%	8%	6%	4%	3%	2%	2%	1%	1%	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°
3694	3547	3197	2740	2247	1778	1364	1031	772	569	409	293	209	150	108	79	59	45	35	29
100%	96%	87%	74%	61%	48%	37%	28%	21%	15%	11%	8%	6%	4%	3%	2%	2%	1%	1%	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°
3694	3547	3197	2740	2247	1778	1364	1031	772	569	409	293	209	150	108	79	59	45	35	29
100%	96%	87%	74%	61%	48%	37%	28%	21%	15%	11%	8%	6%	4%	3%	2%	2%	1%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
19,4°	41,2°	58°	99,0%	97,2%



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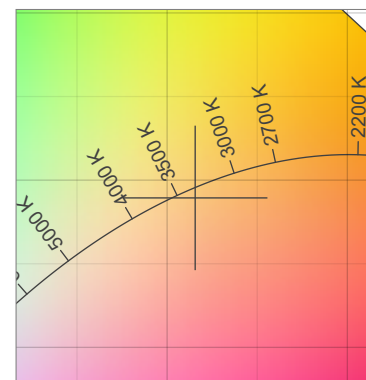
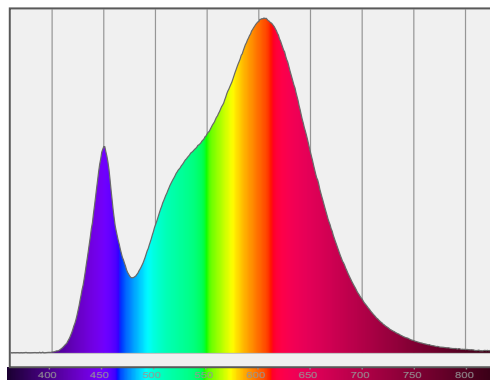
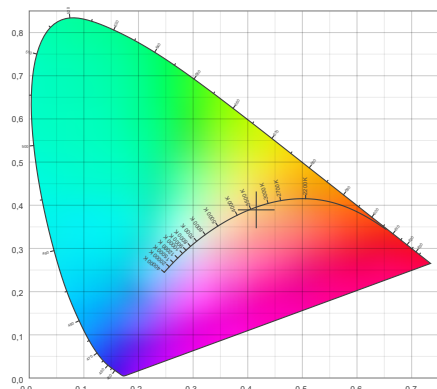
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Color details



CIE 1931

x: 0,416



Spectra

CIE 1931 ZOOM

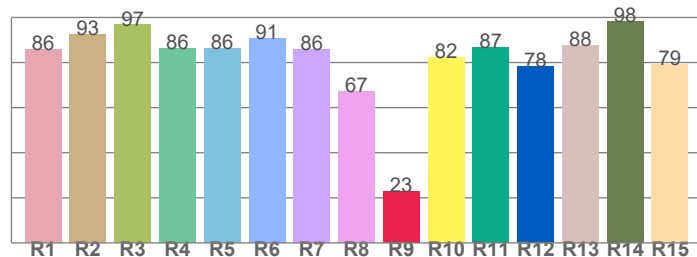
3276 K

y: 0,389

Δuv : -0,0027

CRI: 86,4 (R1-R8)

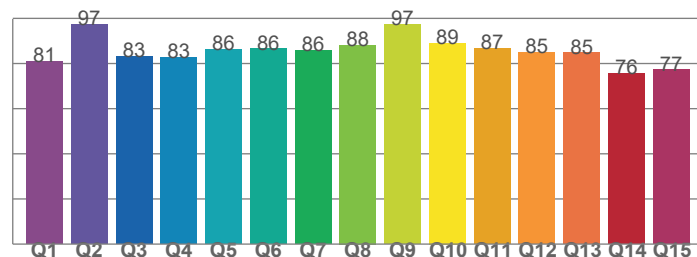
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
85,9	92,5	96,8	86,3	86,3	90,9	85,7	67,2
R9	R10	R11	R12	R13	R14	R15	
22,9	82,4	86,9	78,4	87,7	98,4	79,1	

CQS: 84,5

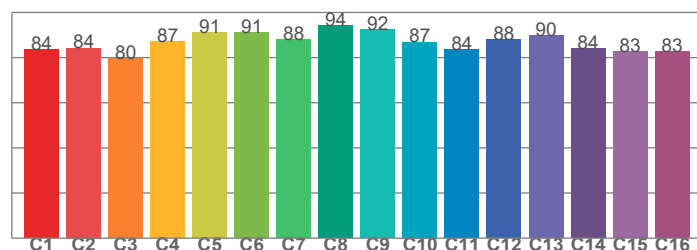
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
80,8	97,4	83,2	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	84,7	75,6	77,2	

TM30: 86,7

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



C1	C2	C3	C4	C5	C6	C7	C8
83,5	84,2	79,6	87,2	91,2	91,2	87,9	94,1
C9	C10	C11	C12	C13	C14	C15	
92,3	86,9	83,5	87,9	89,7	84,2	82,7	

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
3276 K	86,4	22,9	86,7	99,2	84,5	0,416	0,389	0,243	0,341	-0,0027



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

TM30 details

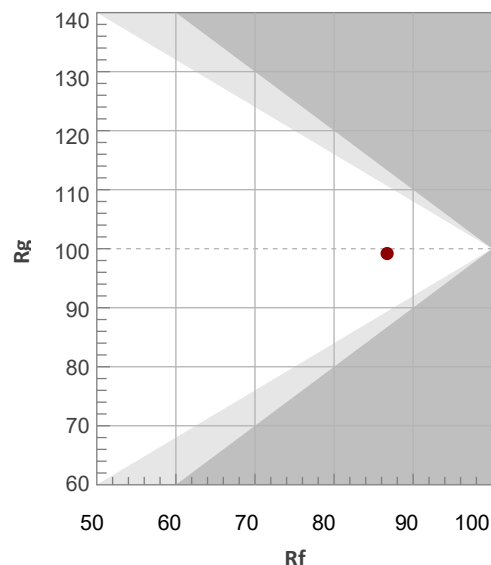
Rf 86,7

Fidelity index Rf

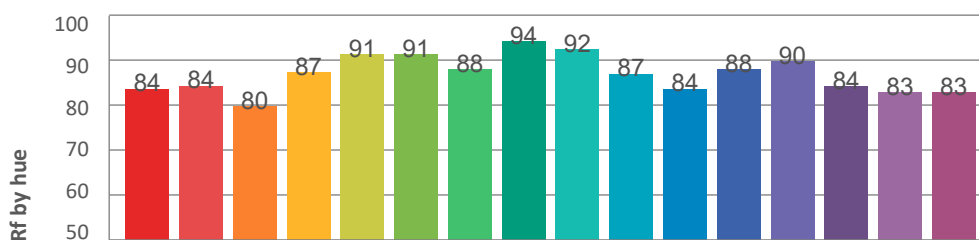
Rg 99,2

Gamut index Rg

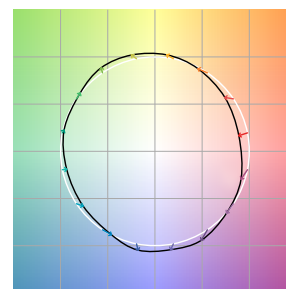
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	84	-10%	-1%
2	84	-7%	6%
3	80	-2%	11%
4	87	3%	8%
5	91	5%	5%
6	91	5%	-2%
7	88	0%	-7%
8	94	-1%	-3%
9	92	-5%	0%
10	87	-5%	6%
11	84	-1%	11%
12	88	6%	3%
13	90	5%	-4%
14	84	6%	-12%
15	83	-1%	-12%
16	83	-5%	-11%



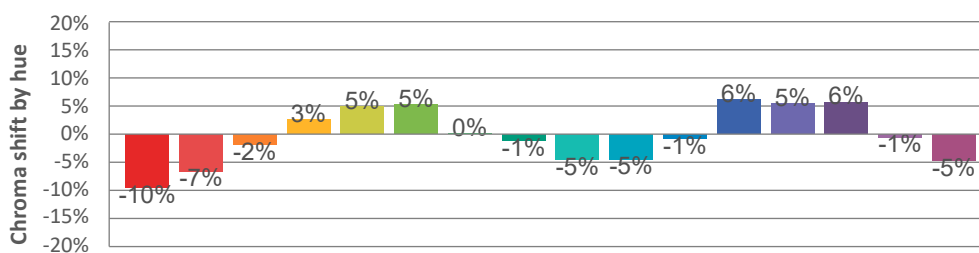
Hue binH



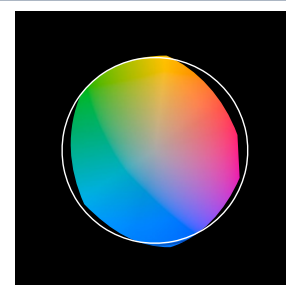
Color vector graphics



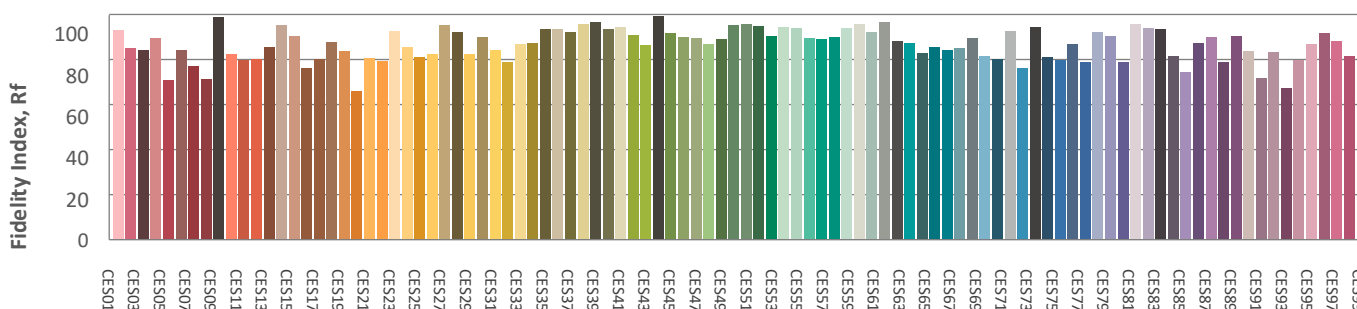
Hue bin



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	7,0	7,5	7,1	7,6	7,8	7,0	7,5	7,1	7,6	7,8
	3H	7,0	7,6	7,3	7,8	7,9	7,0	7,6	7,3	7,8	7,9
	4H	7,0	7,6	7,4	7,8	8,0	7,0	7,6	7,4	7,8	8,0
	6H	7,1	7,5	7,4	7,8	8,2	7,1	7,5	7,4	7,8	8,2
	8H	7,0	7,5	7,4	7,8	8,2	7,0	7,5	7,4	7,8	8,2
	12H	7,0	7,4	7,3	7,8	8,2	7,0	7,4	7,3	7,8	8,2
4H	2H	6,8	7,4	7,2	7,6	7,8	6,8	7,4	7,2	7,6	7,8
	3H	7,1	7,5	7,4	7,9	8,3	7,1	7,5	7,4	7,9	8,3
	4H	7,1	7,5	7,5	7,9	8,4	7,1	7,5	7,5	7,9	8,4
	6H	7,1	7,6	7,6	7,9	8,2	7,1	7,6	7,6	7,9	8,2
	8H	7,1	7,5	7,6	7,8	8,2	7,1	7,5	7,6	7,8	8,2
	12H	7,0	7,4	7,5	7,8	8,2	7,0	7,4	7,5	7,8	8,2
8H	4H	7,0	7,4	7,5	7,8	8,1	7,0	7,4	7,5	7,8	8,1
	6H	7,1	7,3	7,6	7,8	8,3	7,1	7,3	7,6	7,8	8,3
	8H	7,1	7,3	7,6	7,8	8,5	7,1	7,3	7,6	7,8	8,5
	12H	7,1	7,3	7,7	7,8	8,4	7,1	7,3	7,7	7,8	8,4
12H	4H	7,0	7,3	7,5	7,7	8,1	7,0	7,3	7,5	7,7	8,1
	6H	7,1	7,3	7,6	7,8	8,4	7,1	7,3	7,6	7,8	8,4
	8H	7,1	7,2	7,7	7,7	8,3	7,1	7,2	7,7	7,7	8,3
Variation of the observer position for the luminaire distance S											
S = 1.0H		3,2 / -2,6					3,2 / -2,6				
S = 1.5H		5,4 / -3,9					5,4 / -3,9				
S = 2.0H		7,2 / -4,4					7,2 / -4,4				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 635lm total luminous flux											



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