

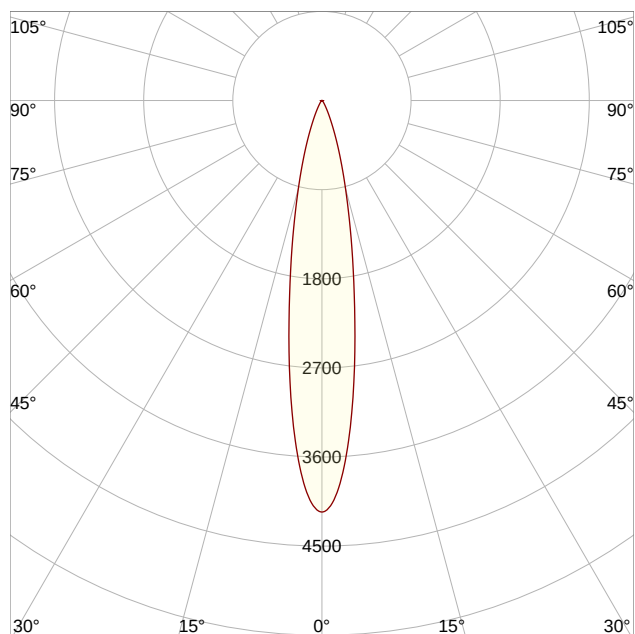
LM-79

Test Report

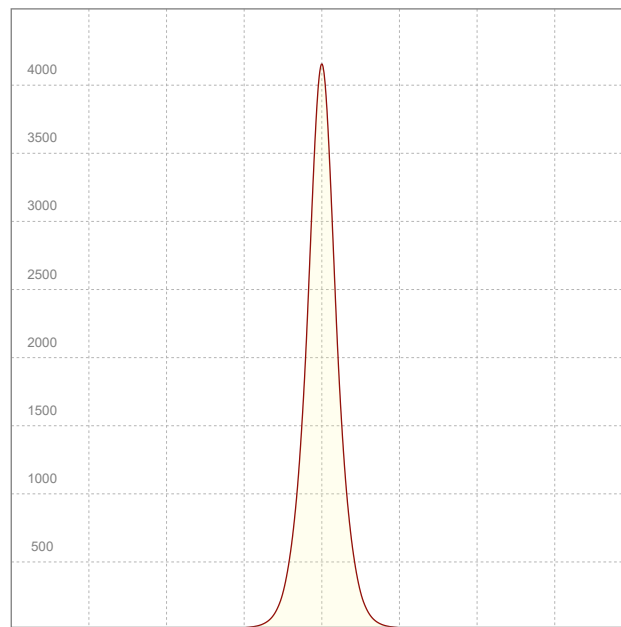
LM79-TOPAZ-COLOURFLOW-RGBA-SPOT [ALL]

General Discription

Item number	T-C-XCX-1C-NA70-S
Date and time	8-12-2025 13:47:10
CCT (Kelvin)	10041 K
Beam angle	18,3°
Luminous flux	668 lm
Efficiency	51 lm/watt
Weighted energy	13,0 kWh/1000h
Power factor	0,48
CRI (RA)	53,4
Fidelity index Rf	Rf 68,4
Gammut index Rg	Rg 125,4
Peak	4146 cd



Polar curve



Linear distribution diagram



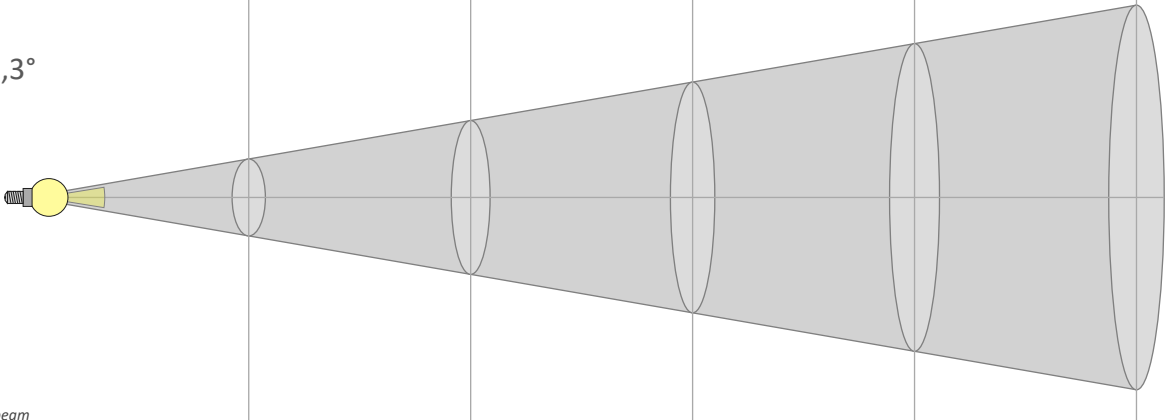
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Beam details					1m		2m		3m		4m		5m						
Lux*					4146 lx		1036 lx		461 lx		259 lx		166 lx						
18,3° 																			
*measured at center of beam																			
Footcandles*					385,1 fcd		96,3 fcd		42,8 fcd		24,1 fcd		15,4 fcd						
Beam width (meter)					0,3 m		0,6 m		1 m		1,3 m		1,6 m						
Beam width (Feet)					1,1 ft		2,1 ft		3,2 ft		4,2 ft		5,3 ft						
Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
4146lx	1036lx	461lx	259lx	166lx	115lx	85lx	65lx	51lx	41lx	34lx	29lx	25lx	21lx	18lx	16lx	14lx	13lx	11lx	10lx
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
385,1fcd	96,3fcd	42,8fcd	24,1fcd	15,4fcd	10,7fcd	7,9fcd	6fcd	4,8fcd	3,9fcd	3,2fcd	2,7fcd	2,3fcd	2fcd	1,7fcd	1,5fcd	1,3fcd	1,2fcd	1,1fcd	1fcd
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°
4146	3987	3568	3003	2397	1853	1417	1065	795	586	424	301	213	153	109	79	59	45	35	29
100%	96%	86%	72%	58%	45%	34%	26%	19%	14%	10%	7%	5%	4%	3%	2%	1%	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°
4146	3987	3568	3003	2397	1853	1417	1065	795	586	424	301	213	153	109	79	59	45	35	29
100%	96%	86%	72%	58%	45%	34%	26%	19%	14%	10%	7%	5%	4%	3%	2%	1%	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°
4146	3987	3568	3003	2397	1853	1417	1065	795	586	424	301	213	153	109	79	59	45	35	29
100%	96%	86%	72%	58%	45%	34%	26%	19%	14%	10%	7%	5%	4%	3%	2%	1%	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°
4146	3987	3568	3003	2397	1853	1417	1065	795	586	424	301	213	153	109	79	59	45	35	29
100%	96%	86%	72%	58%	45%	34%	26%	19%	14%	10%	7%	5%	4%	3%	2%	1%	1%	1%	1%
Beam angle 50%				Field angle 10%				Cutoff angle 2,5%				Intensity ratio in 120° cone				Intensity ratio in 90° cone			
18,3°				40,3°				56,6°				99,0%				97,1%			



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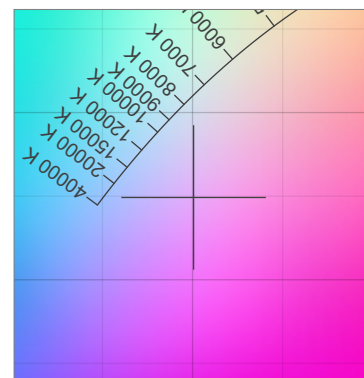
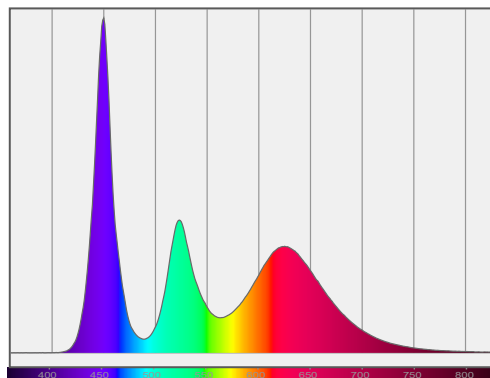
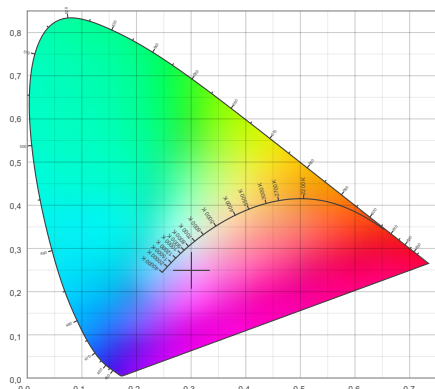
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Test Report

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Color details



CIE 1931

x: 0,301



Spectra

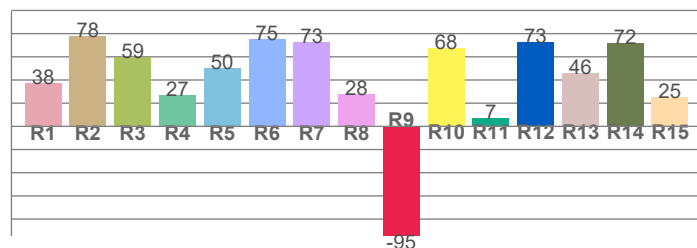
CIE 1931 ZOOM

10041 K

y: 0,249

 $\Delta uv: -0,0364$

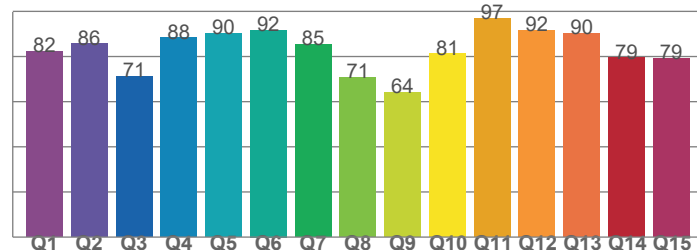
CRI: 53,4 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
37,7	78,0	59,5	27,1	50,1	74,9	72,5	27,6
R9	R10	R11	R12	R13	R14	R15	
-94,5	67,7	7,0	72,8	46,1	71,7	24,8	

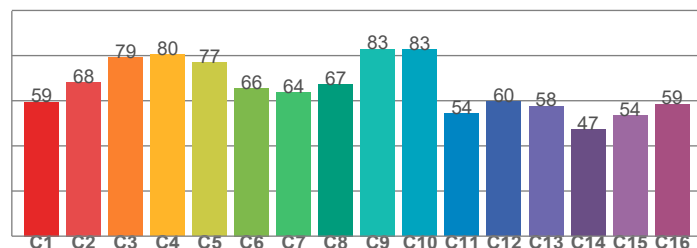
CQS: 81,0



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
82,2	85,7	71,3	88,2	90,2	91,8	85,4	70,7
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
64,2	81,2	97,0	91,7	90,1	79,4	79,2	

TM30: 68,4



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

C1	C2	C3	C4	C5	C6	C7	C8
59,5	68,2	79,1	80,3	77,0	65,6	63,7	67,3
C9	C10	C11	C12	C13	C14	C15	
82,9	82,8	54,3	59,8	57,7	47,3	53,6	

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
10041 K	53,4	-94,5	68,4	125,4	81,0	0,301	0,249	0,223	0,277	-0,0364



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Test Report

LM79-TOPAZ-COLOURFLOW-RGBA-SPOT [ALL]

TM30 details

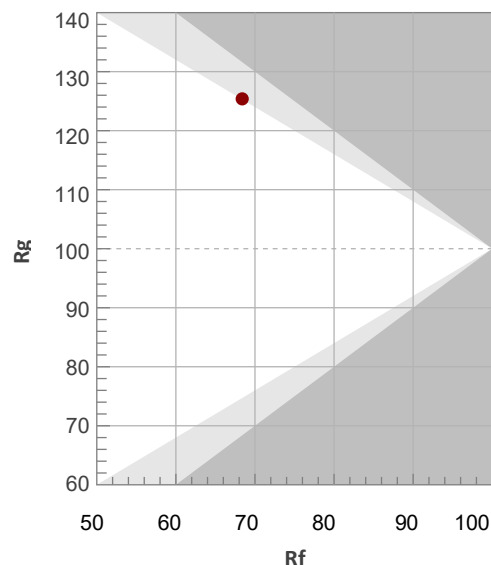
Rf 68,4

Fidelity index Rf

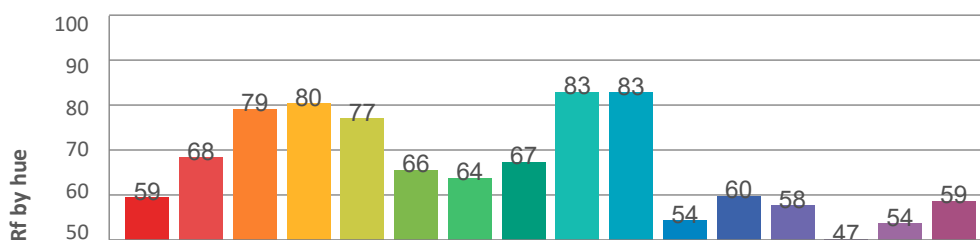
Rg 125,4

Gamut index Rg

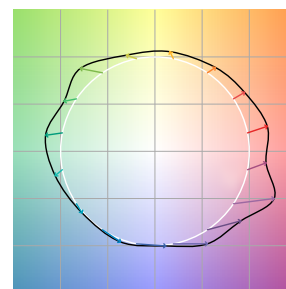
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	59	22%	3%
2	68	14%	-1%
3	79	9%	-4%
4	80	7%	5%
5	77	6%	10%
6	66	17%	17%
7	64	10%	9%
8	67	17%	6%
9	83	9%	5%
10	83	0%	11%
11	54	0%	23%
12	60	-4%	31%
13	58	7%	35%
14	47	12%	35%
15	54	33%	29%
16	59	18%	11%



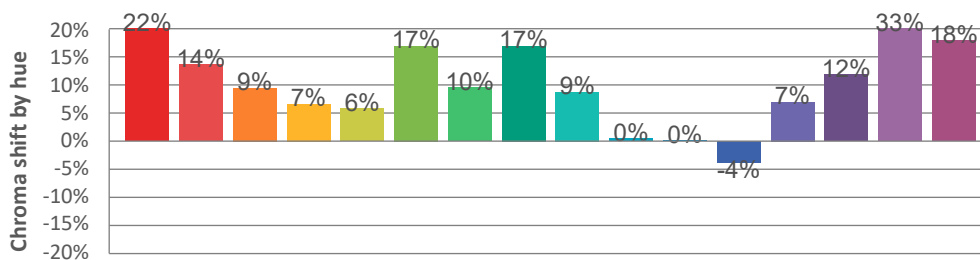
Hue binH



Color vector graphics



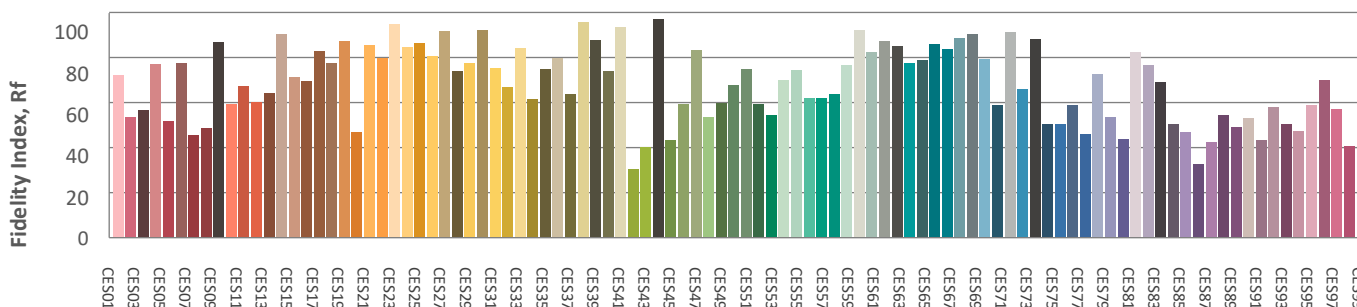
Hue bin



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	7,1	7,5	7,2	7,7	7,9	7,1	7,5	7,2	7,7	7,9
	3H	7,1	7,6	7,4	7,8	8,0	7,1	7,6	7,4	7,8	8,0
	4H	7,1	7,7	7,5	7,9	8,1	7,1	7,7	7,5	7,9	8,1
	6H	7,2	7,6	7,5	7,9	8,3	7,2	7,6	7,5	7,9	8,3
	8H	7,1	7,6	7,5	7,9	8,3	7,1	7,6	7,5	7,9	8,3
	12H	7,1	7,5	7,4	7,9	8,3	7,1	7,5	7,4	7,9	8,3
4H	2H	6,9	7,5	7,3	7,7	7,9	6,9	7,5	7,3	7,7	7,9
	3H	7,2	7,6	7,5	8,0	8,4	7,2	7,6	7,5	8,0	8,4
	4H	7,2	7,6	7,6	8,0	8,5	7,2	7,6	7,6	8,0	8,5
	6H	7,2	7,7	7,7	8,0	8,4	7,2	7,7	7,7	8,0	8,4
	8H	7,2	7,6	7,7	8,0	8,3	7,2	7,6	7,7	8,0	8,3
	12H	7,2	7,5	7,7	7,9	8,4	7,2	7,5	7,7	7,9	8,4
8H	4H	7,1	7,6	7,7	7,9	8,3	7,1	7,6	7,7	7,9	8,3
	6H	7,2	7,5	7,7	7,9	8,5	7,2	7,5	7,7	7,9	8,5
	8H	7,3	7,5	7,8	8,0	8,6	7,3	7,5	7,8	8,0	8,6
	12H	7,3	7,4	7,9	7,9	8,5	7,3	7,4	7,9	7,9	8,5
12H	4H	7,1	7,4	7,6	7,8	8,3	7,1	7,4	7,6	7,8	8,3
	6H	7,2	7,4	7,7	8,0	8,6	7,2	7,4	7,7	8,0	8,6
	8H	7,2	7,4	7,8	7,9	8,5	7,2	7,4	7,8	7,9	8,5
Variation of the observer position for the luminaire distance S											
S = 1.0H		3,0 / -2,3					3,0 / -2,3				
S = 1.5H		5,2 / -3,4					5,2 / -3,4				
S = 2.0H		7,0 / -4,2					7,0 / -4,2				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 668lm total luminous flux											