

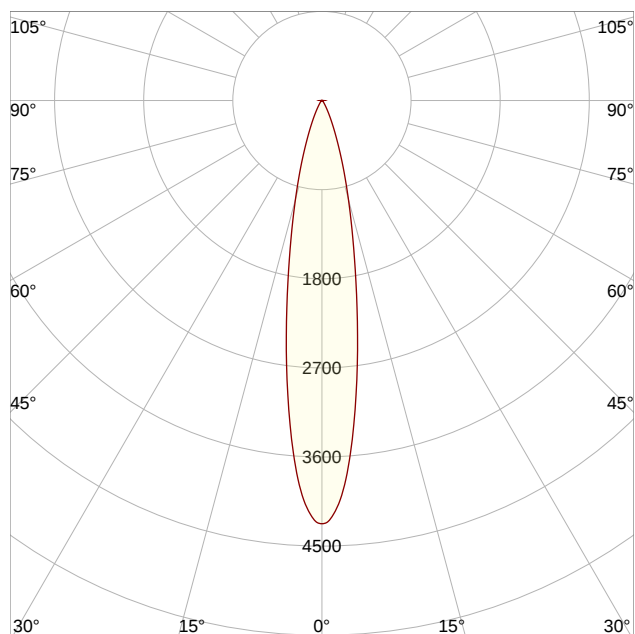
LM-79

Test Report

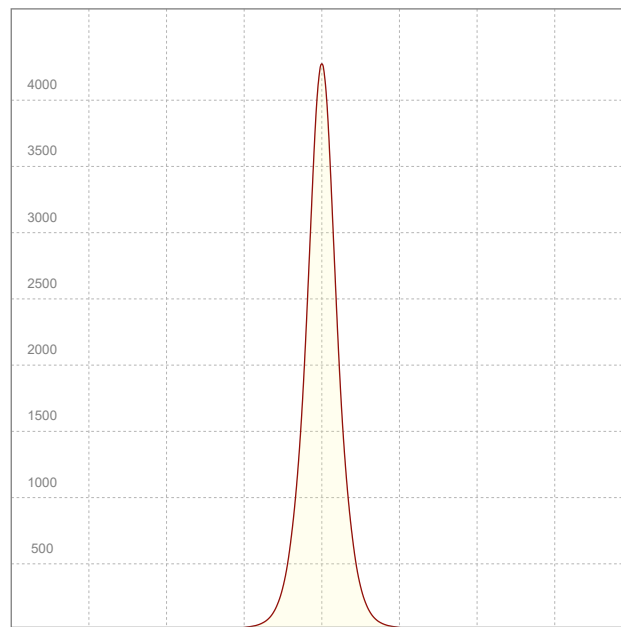
LM79-TOPAZ-COLOURFLOW-RGB4-SPOT [ALL]

General Discription

Item number	T-C-XCX-1C-N470-S
Date and time	8-12-2025 15:56:44
CCT (Kelvin)	15597 K
Beam angle	19,2°
Luminous flux	743 lm
Efficiency	51 lm/watt
Weighted energy	14,4 kWh/1000h
Power factor	0,5
CRI (RA)	72,1
Fidelity index Rf	Rf 77,1
Gammut index Rg	Rg 115,6
Peak	4263 cd



Polar curve



Linear distribution diagram



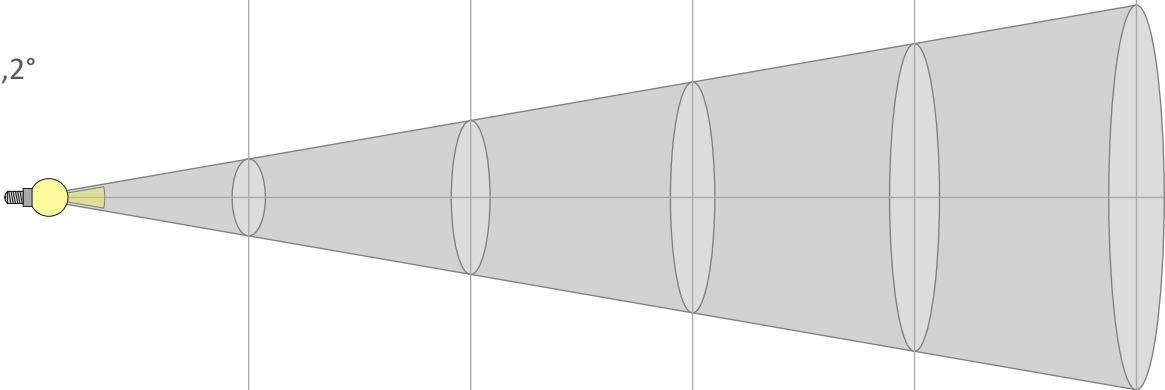
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Beam details					1m		2m		3m		4m		5m								
Lux*					4263 lx		1066 lx		474 lx		266 lx		171 lx								
19,2° 																					
*measured at center of beam																					
Footcandles*					396,1 fcd		99,0 fcd		44,0 fcd		24,8 fcd		15,8 fcd								
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		3,3 ft		4,4 ft		5,5 ft								
Beam intensities																					
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m		
4263lx	1066lx	474lx	266lx	171lx	118lx	87lx	67lx	53lx	43lx	35lx	30lx	25lx	22lx	19lx	17lx	15lx	13lx	12lx	11lx		
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		
396,1fcd	99fcd	44fcd	24,8fcd	15,8fcd	11fcd	8,1fcd	6,2fcd	4,9fcd	4fcd	3,3fcd	2,8fcd	2,3fcd	2fcd	1,8fcd	1,5fcd	1,4fcd	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°		
4263	4124	3734	3174	2582	2023	1555	1189	900	671	488	354	256	185	134	98	73	56	44	35		
100%	97%	88%	74%	61%	47%	36%	28%	21%	16%	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°		
4263	4124	3734	3174	2582	2023	1555	1189	900	671	488	354	256	185	134	98	73	56	44	35		
100%	97%	88%	74%	61%	47%	36%	28%	21%	16%	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°		
4263	4124	3734	3174	2582	2023	1555	1189	900	671	488	354	256	185	134	98	73	56	44	35		
100%	97%	88%	74%	61%	47%	36%	28%	21%	16%	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°		
4263	4124	3734	3174	2582	2023	1555	1189	900	671	488	354	256	185	134	98	73	56	44	35		
100%	97%	88%	74%	61%	47%	36%	28%	21%	16%	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			
19,2°					41,7°					58,9°				98,9%				97,0%			



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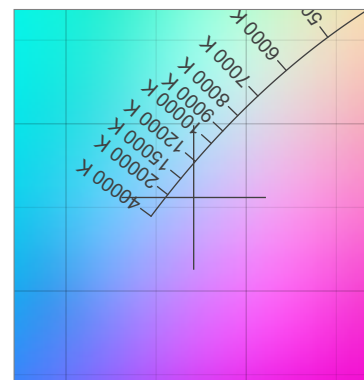
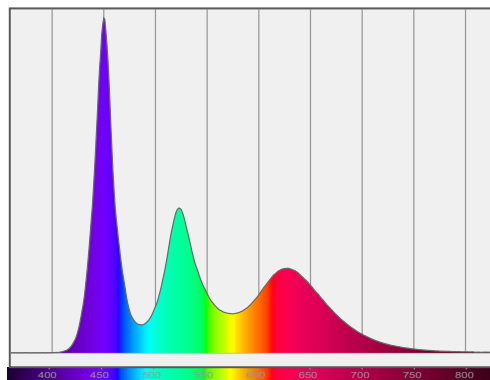
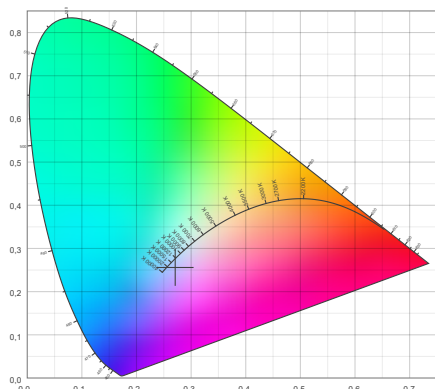
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Color details



CIE 1931

x: 0,271



Spectra

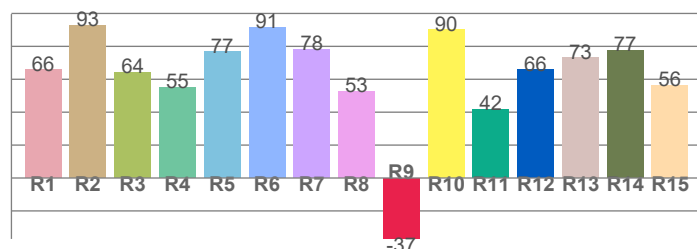
CIE 1931 ZOOM

15597 K

y: 0,256

 $\Delta uv: -0,0112$

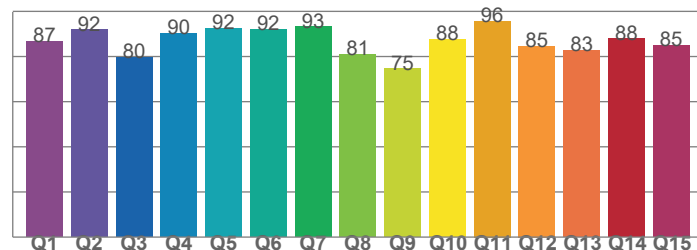
CRI: 72,1 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
65,8	92,9	64,1	55,1	76,6	91,4	78,2	52,5
R9	R10	R11	R12	R13	R14	R15	
-37,0	90,1	41,6	65,8	73,0	77,5	56,3	

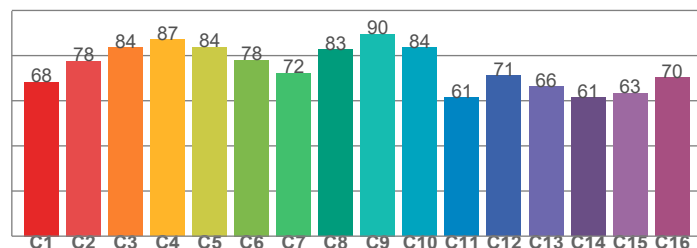
CQS: 85,8



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
86,6	91,8	79,7	90,4	92,4	92,0	93,1	80,9
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
74,6	87,7	95,7	84,7	82,7	87,8	85,0	

TM30: 77,1



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

C1	C2	C3	C4	C5	C6	C7	C8
68,3	77,6	83,6	87,1	83,8	78,1	72,3	82,7
C9	C10	C11	C12	C13	C14	C15	
89,6	83,5	61,3	71,2	66,3	61,4	63,4	

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
15597 K	72,1	-37,0	77,1	115,6	85,8	0,271	0,256	0,196	0,278	-0,0112



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Test Report

LM79-TOPAZ-COLOURFLOW-RGB4-SPOT [ALL]

TM30 details

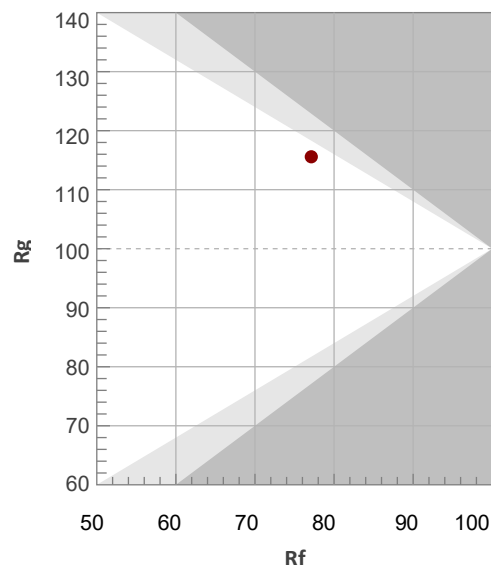
Rf 77,1

Fidelity index Rf

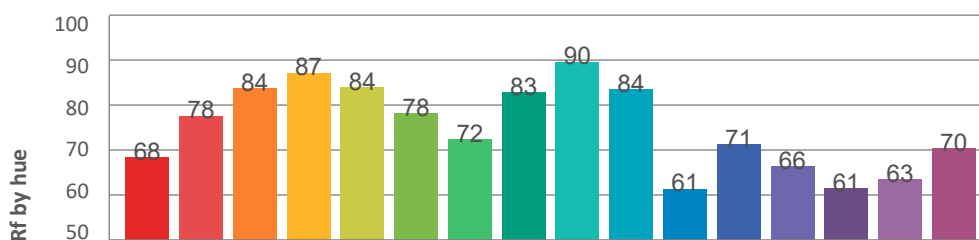
Rg 115,6

Gamut index Rg

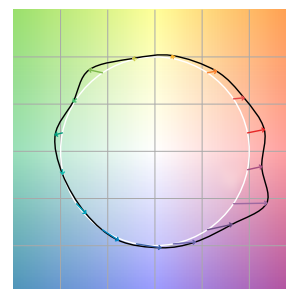
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	68	18%	0%
2	78	10%	-5%
3	84	7%	-7%
4	87	3%	2%
5	84	1%	4%
6	78	10%	10%
7	72	1%	4%
8	83	7%	3%
9	90	1%	4%
10	84	-2%	14%
11	61	0%	20%
12	71	-1%	26%
13	66	3%	23%
14	61	10%	25%
15	63	29%	20%
16	70	14%	6%



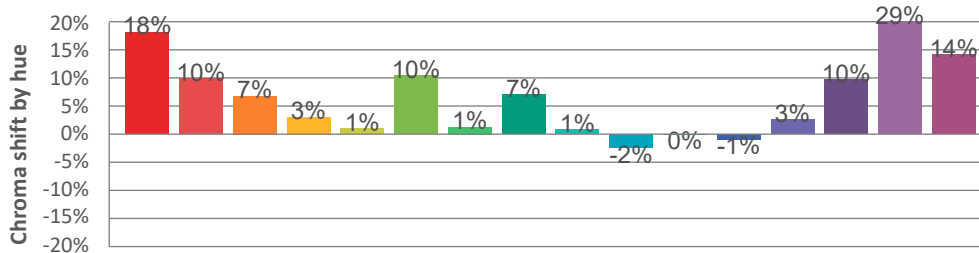
Hue binH



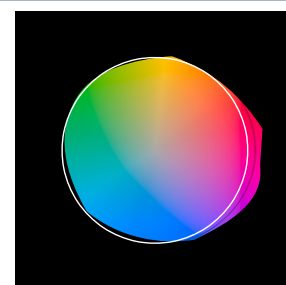
Color vector graphics



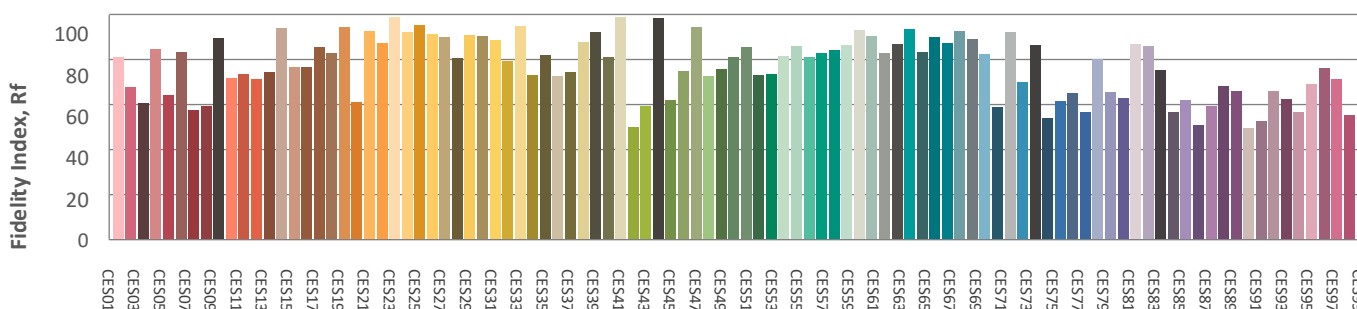
Hue bin



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	8,0	8,4	8,0	8,6	8,8	8,0	8,4	8,0	8,6	8,8
	3H	7,9	8,5	8,3	8,7	8,9	7,9	8,5	8,3	8,7	8,9
	4H	8,0	8,6	8,4	8,8	9,0	8,0	8,6	8,4	8,8	9,0
	6H	8,1	8,5	8,3	8,8	9,2	8,1	8,5	8,3	8,8	9,2
	8H	8,0	8,5	8,3	8,8	9,2	8,0	8,5	8,3	8,8	9,2
	12H	8,0	8,4	8,3	8,8	9,2	8,0	8,4	8,3	8,8	9,2
4H	2H	7,8	8,3	8,2	8,6	8,8	7,8	8,3	8,2	8,6	8,8
	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	9,3	8,1	8,6	8,6	8,9	9,3
	8H	8,1	8,5	8,6	8,9	9,2	8,1	8,5	8,6	8,9	9,2
	12H	8,1	8,4	8,6	8,8	9,2	8,1	8,4	8,6	8,8	9,2
8H	4H	8,0	8,5	8,6	8,8	9,2	8,0	8,5	8,6	8,8	9,2
	6H	8,1	8,4	8,6	8,8	9,4	8,1	8,4	8,6	8,8	9,4
	8H	8,2	8,4	8,7	8,9	9,5	8,2	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	8,0	8,3	8,5	8,7	9,2	8,0	8,3	8,5	8,7	9,2
	6H	8,1	8,3	8,6	8,9	9,5	8,1	8,3	8,6	8,9	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		3,2 / -2,5					3,2 / -2,5				
S = 1.5H		5,4 / -3,5					5,4 / -3,5				
S = 2.0H		7,2 / -3,9					7,2 / -3,9				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 743lm total luminous flux											