

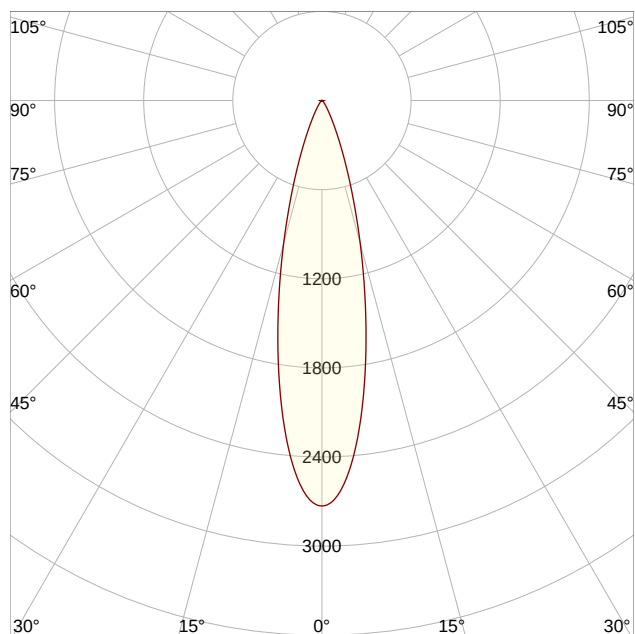
LM-79

Test Report

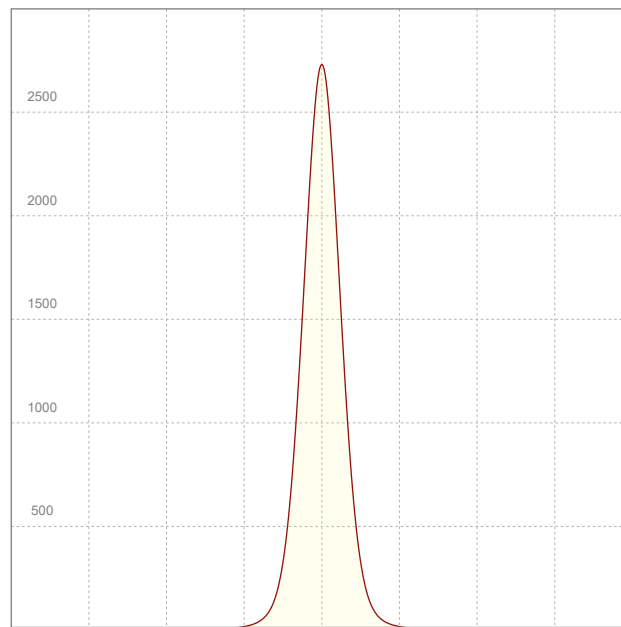
LM79-TOPAZ-COLOURFLOW-RGBA-MEDIUM [ALL]

General Discription

Item number	T-C-XCX-1C-NA70-M
Date and time	8-12-2025 13:51:51
CCT (Kelvin)	10218 K
Beam angle	24,6°
Luminous flux	644 lm
Efficiency	48 lm/watt
Weighted energy	13,3 kWh/1000h
Power factor	0,48
CRI (RA)	54,3
Fidelity index Rf	Rf 69,0
Gammut index Rg	Rg 124,9
Peak	2726 cd



Polar curve



Linear distribution diagram



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Beam details	1m	2m	3m	4m	5m
Lux*	2726 lx	682 lx	303 lx	170 lx	109 lx

24,6°

*measured at center of beam

Footcandles*	253,3 fcd	63,3 fcd	28,1 fcd	15,8 fcd	10,1 fcd
Beam width (meter)	0,4 m	0,9 m	1,3 m	1,7 m	2,2 m
Beam width (Feet)	1,4 ft	2,9 ft	4,3 ft	5,7 ft	7,2 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
2726lx	682lx	303lx	170lx	109lx	76lx	56lx	43lx	34lx	27lx	23lx	19lx	16lx	14lx	12lx	11lx	9lx	8lx	8lx	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
253,3fcd	63,3fcd	28,1fcd	15,8fcd	10,1fcd	7fcd	5,2fcd	4fcd	3,1fcd	2,5fcd	2,1fcd	1,8fcd	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°
2726	2673	2518	2286	2006	1705	1406	1126	875	662	490	356	257	184	133	98	73	56	43	34
100%	98%	92%	84%	74%	63%	52%	41%	32%	24%	18%	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°
2726	2673	2518	2286	2006	1705	1406	1126	875	662	490	356	257	184	133	98	73	56	43	34
100%	98%	92%	84%	74%	63%	52%	41%	32%	24%	18%	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°
2726	2673	2518	2286	2006	1705	1406	1126	875	662	490	356	257	184	133	98	73	56	43	34
100%	98%	92%	84%	74%	63%	52%	41%	32%	24%	18%	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°
2726	2673	2518	2286	2006	1705	1406	1126	875	662	490	356	257	184	133	98	73	56	43	34
100%	98%	92%	84%	74%	63%	52%	41%	32%	24%	18%	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
24,6°	47,3°	64,9°	99,1%	97,3%



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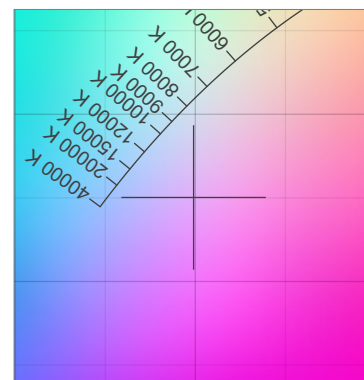
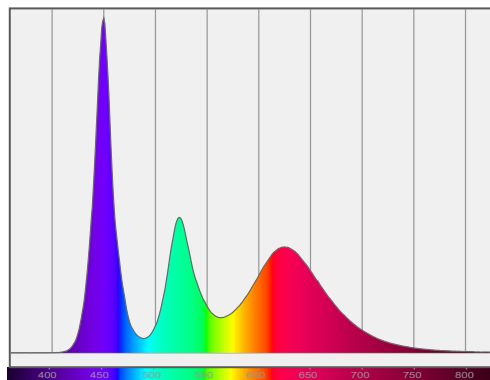
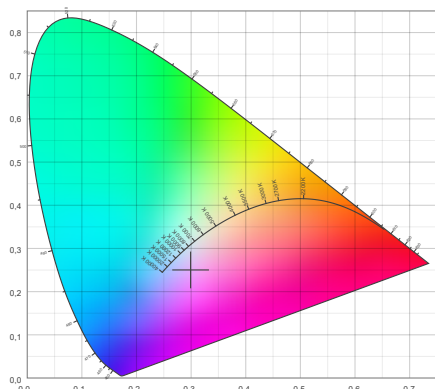
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Color details



CIE 1931

x: 0,299



Spectra

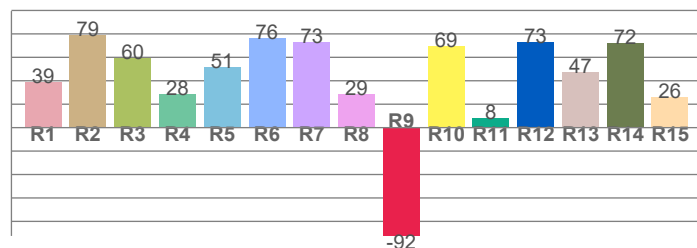
CIE 1931 ZOOM

10218 K

y: 0,250

 $\Delta uv: -0,0346$

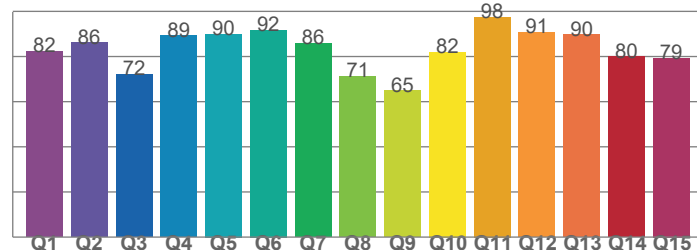
CRI: 54,3 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
38,9	78,8	59,6	28,3	51,4	76,0	72,6	28,6
R9	R10	R11	R12	R13	R14	R15	
-92,4	69,1	8,5	72,9	47,3	72,0	26,4	

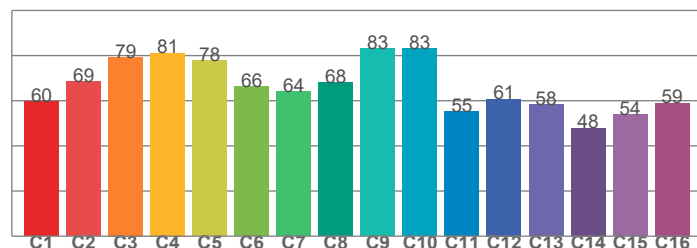
CQS: 81,4



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
82,3	86,1	72,2	89,1	90,0	91,8	85,7	71,1
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
64,8	82,0	97,5	90,7	89,6	79,9	79,4	

TM30: 69,0



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

C1	C2	C3	C4	C5	C6	C7	C8
59,7	68,5	79,3	81,1	77,7	66,3	64,1	68,0
C9	C10	C11	C12	C13	C14	C15	
83,2	83,3	55,4	60,7	58,4	48,0	54,0	

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
10218 K	54,3	-92,4	69,0	124,9	81,4	0,299	0,250	0,221	0,278	-0,0346



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TM30 details

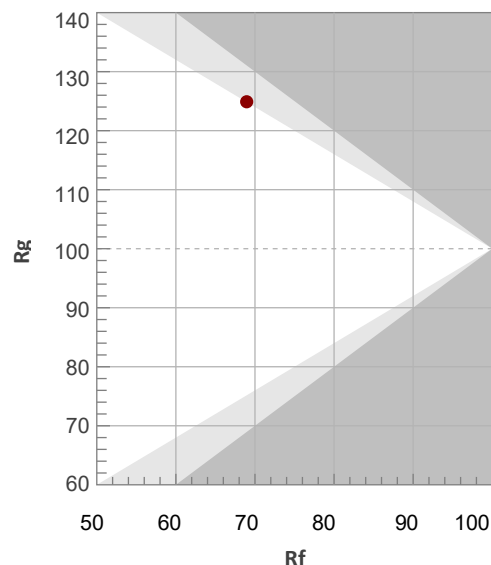
Rf 69,0

Fidelity index Rf

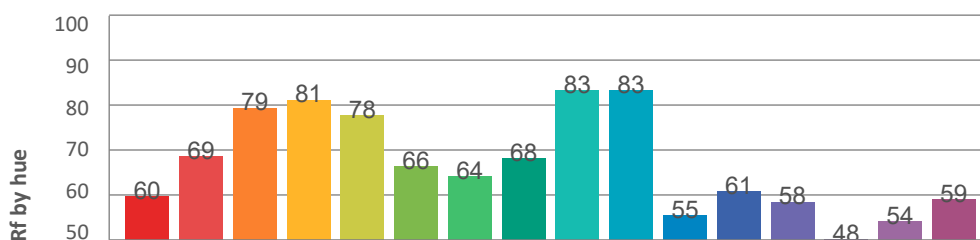
Rg 124,9

Gamut index Rg

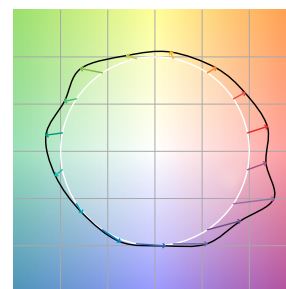
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	60	22%	3%
2	69	14%	-1%
3	79	9%	-5%
4	81	6%	4%
5	78	5%	9%
6	66	17%	17%
7	64	9%	9%
8	68	17%	6%
9	83	9%	5%
10	83	0%	11%
11	55	0%	22%
12	61	-4%	30%
13	58	7%	35%
14	48	12%	34%
15	54	33%	28%
16	59	18%	11%



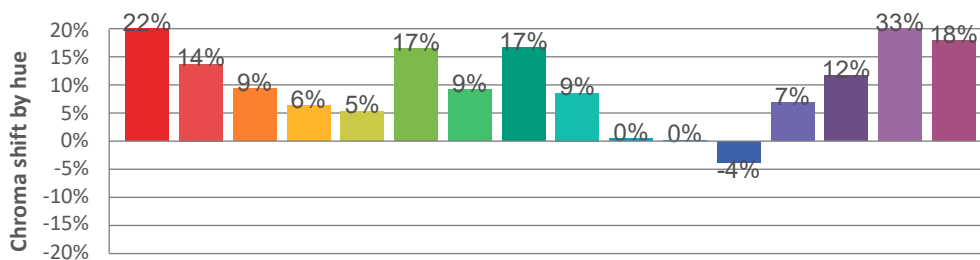
Hue binH



Color vector graphics



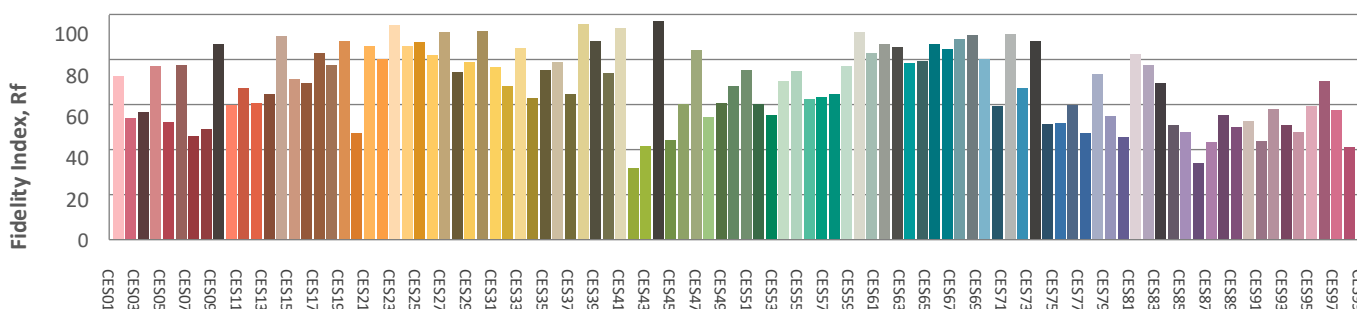
Hue bin



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	7,8	8,2	7,8	8,4	8,6	7,8	8,2	7,8	8,4	8,6
	3H	7,6	8,2	8,0	8,4	8,6	7,6	8,2	8,0	8,4	8,6
	4H	7,7	8,2	8,0	8,5	8,7	7,7	8,2	8,0	8,5	8,7
	6H	7,7	8,2	8,0	8,5	8,8	7,7	8,2	8,0	8,5	8,8
	8H	7,7	8,1	8,0	8,5	8,9	7,7	8,1	8,0	8,5	8,9
	12H	7,6	8,1	8,0	8,4	8,9	7,6	8,1	8,0	8,4	8,9
4H	2H	7,5	8,1	7,9	8,3	8,5	7,5	8,1	7,9	8,3	8,5
	3H	7,6	8,1	8,0	8,4	8,9	7,6	8,1	8,0	8,4	8,9
	4H	7,6	8,1	8,1	8,5	9,0	7,6	8,1	8,1	8,5	9,0
	6H	7,7	8,1	8,2	8,5	8,8	7,7	8,1	8,2	8,5	8,8
	8H	7,6	8,1	8,2	8,4	8,8	7,6	8,1	8,2	8,4	8,8
	12H	7,6	7,9	8,1	8,3	8,8	7,6	7,9	8,1	8,3	8,8
8H	4H	7,6	8,0	8,1	8,3	8,7	7,6	8,0	8,1	8,3	8,7
	6H	7,6	7,9	8,2	8,4	8,9	7,6	7,9	8,2	8,4	8,9
	8H	7,7	7,9	8,2	8,4	9,0	7,7	7,9	8,2	8,4	9,0
	12H	7,7	7,8	8,3	8,4	8,9	7,7	7,8	8,3	8,4	8,9
12H	4H	7,5	7,8	8,0	8,3	8,7	7,5	7,8	8,0	8,3	8,7
	6H	7,7	7,9	8,2	8,4	9,0	7,7	7,9	8,2	8,4	9,0
	8H	7,6	7,8	8,2	8,3	8,9	7,6	7,8	8,2	8,3	8,9
Variation of the observer position for the luminaire distance S											
S = 1.0H		3,8 / -3,4					3,8 / -3,4				
S = 1.5H		6,2 / -4,6					6,2 / -4,6				
S = 2.0H		8,1 / -5,2					8,1 / -5,2				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 644lm total luminous flux											