

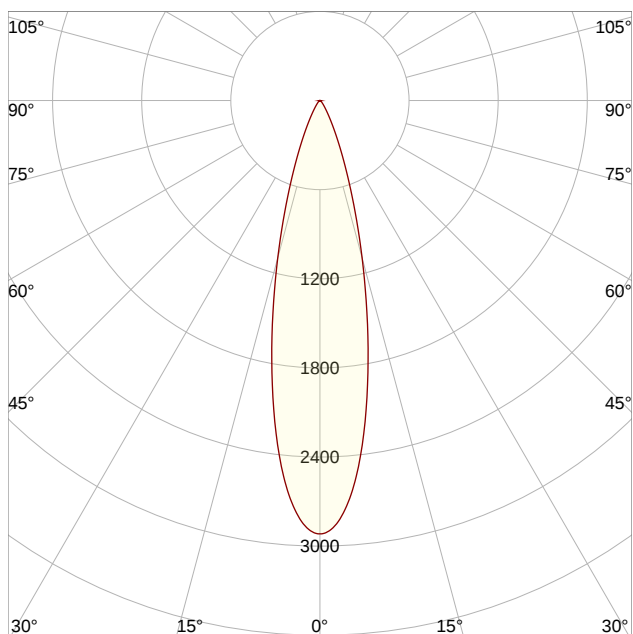
LM-79

Test Report

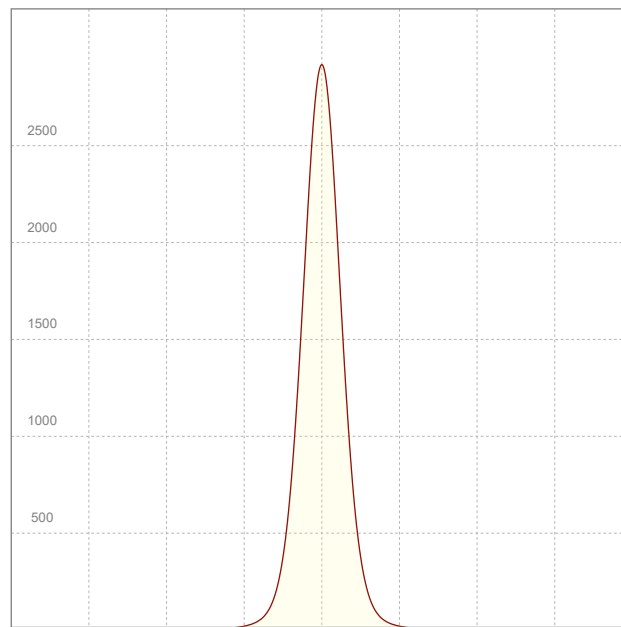
LM79-TOPAZ-COLOURFLOW-RGB3-MEDIUM [ALL]

General Discription

Item number	T-C-XCX-1C-N370-M
Date and time	8-12-2025 16:55:57
CCT (Kelvin)	12259 K
Beam angle	25°
Luminous flux	718 lm
Efficiency	50 lm/watt
Weighted energy	14,4 kWh/1000h
Power factor	0,47
CRI (RA)	69,9
Fidelity index Rf	Rf 76,9
Gammut index Rg	Rg 116,7
Peak	2915 cd



Polar curve



Linear distribution diagram



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Beam details	1m	2m	3m	4m	5m
Lux*	2915 lx	729 lx	324 lx	182 lx	117 lx

25°

*measured at center of beam

Footcandles*	270,8 fcd	67,7 fcd	30,1 fcd	16,9 fcd	10,8 fcd
Beam width (meter)	0,4 m	0,9 m	1,3 m	1,8 m	2,2 m
Beam width (Feet)	1,5 ft	2,9 ft	4,4 ft	5,8 ft	7,3 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
2915lx	729lx	324lx	182lx	117lx	81lx	59lx	46lx	36lx	29lx	24lx	20lx	17lx	15lx	13lx	11lx	10lx	9lx	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
270,8fcd	67,7fcd	30,1fcd	16,9fcd	10,8fcd	7,5fcd	5,5fcd	4,2fcd	3,3fcd	2,7fcd	2,2fcd	1,9fcd	1,6fcd	1,4fcd	1,2fcd	1,1fcd	0,9fcd	0,8fcd	0,8fcd	0,7fcd

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°
2915	2863	2711	2477	2182	1860	1540	1237	968	738	552	408	298	217	159	117	87	66	52	41
100%	98%	93%	85%	75%	64%	53%	42%	33%	25%	19%	14%	10%	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°
2915	2863	2711	2477	2182	1860	1540	1237	968	738	552	408	298	217	159	117	87	66	52	41
100%	98%	93%	85%	75%	64%	53%	42%	33%	25%	19%	14%	10%	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°
2915	2863	2711	2477	2182	1860	1540	1237	968	738	552	408	298	217	159	117	87	66	52	41
100%	98%	93%	85%	75%	64%	53%	42%	33%	25%	19%	14%	10%	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°
2915	2863	2711	2477	2182	1860	1540	1237	968	738	552	408	298	217	159	117	87	66	52	41
100%	98%	93%	85%	75%	64%	53%	42%	33%	25%	19%	14%	10%	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
25°	48,3°	66,6°	99,0%	97,1%



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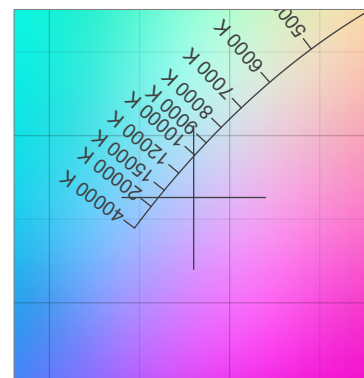
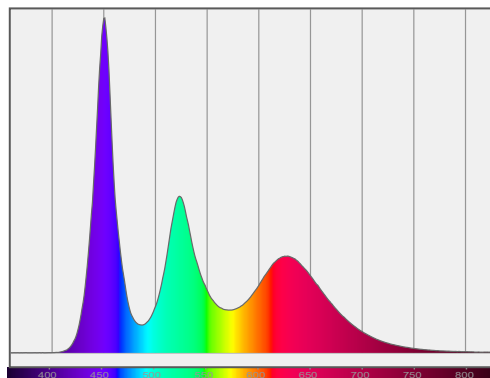
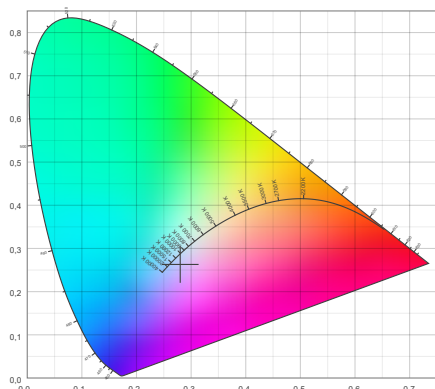
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Color details



CIE 1931

x: 0,280



Spectra

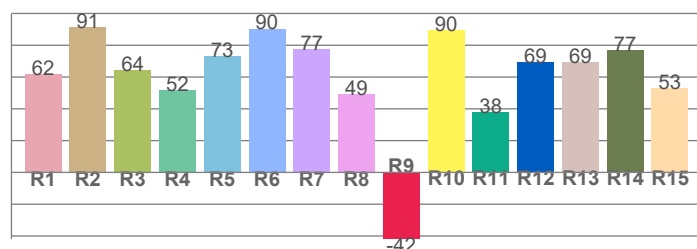
CIE 1931 ZOOM

12259 K

y: 0,263

 $\Delta uv: -0,0136$

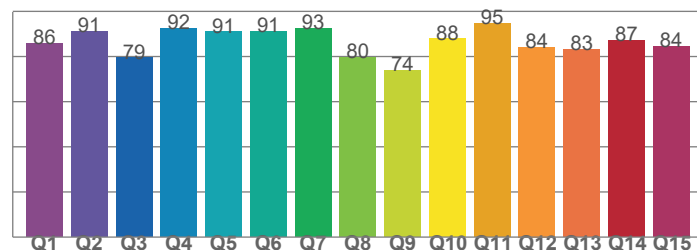
CRI: 69,9 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
62,0	91,5	64,4	51,7	73,0	90,5	77,3	49,2
R9	R10	R11	R12	R13	R14	R15	
-41,8	89,7	37,8	69,1	69,4	77,1	52,8	

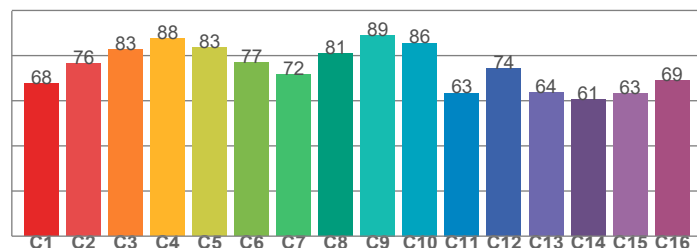
CQS: 85,4



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
85,8	91,1	79,4	92,4	91,0	91,3	92,5	79,7
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
73,7	87,9	94,8	84,2	83,1	87,0	84,5	

TM30: 76,9



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

C1	C2	C3	C4	C5	C6	C7	C8
67,6	76,4	82,7	87,6	83,5	76,9	71,7	81,0
C9	C10	C11	C12	C13	C14	C15	
89,1	85,6	63,4	74,3	63,8	60,7	63,3	

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
12259 K	69,9	-41,8	76,9	116,7	85,4	0,280	0,263	0,200	0,282	-0,0136



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TM30 details

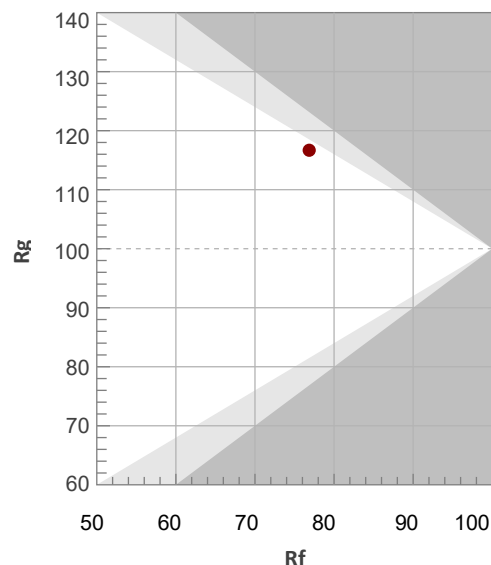
Rf 76,9

Fidelity index Rf

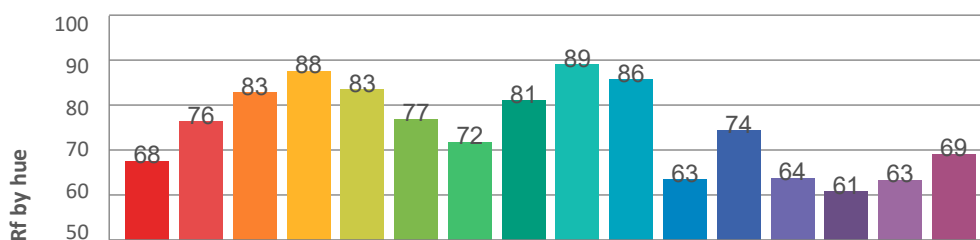
Rg 116,7

Gamut index Rg

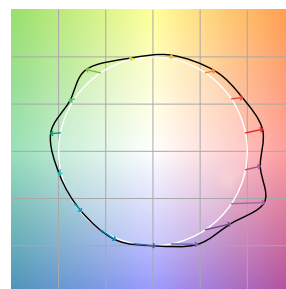
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	68	18%	0%
2	76	10%	-5%
3	83	7%	-7%
4	88	4%	1%
5	83	1%	5%
6	77	11%	11%
7	72	3%	5%
8	81	10%	3%
9	89	2%	5%
10	86	-2%	11%
11	63	0%	19%
12	74	-2%	22%
13	64	6%	27%
14	61	10%	25%
15	63	28%	21%
16	69	15%	7%



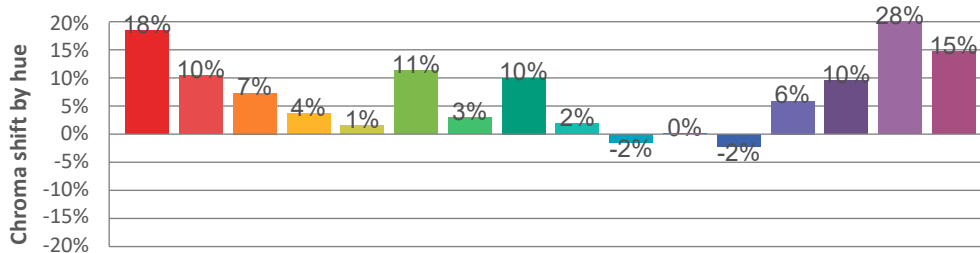
Hue binH



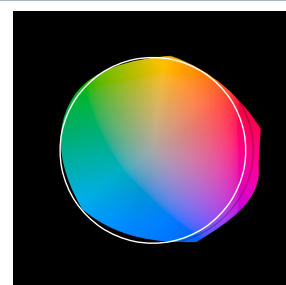
Color vector graphics



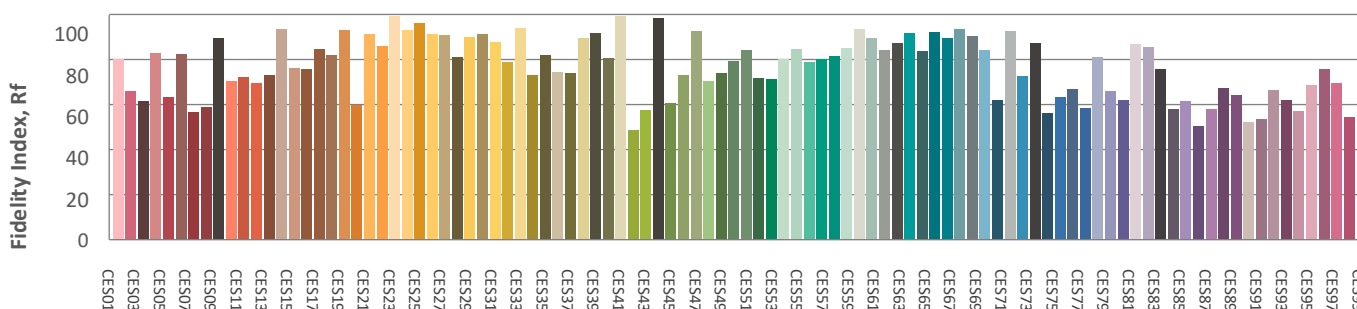
Hue bin



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

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 / -4,7	6,2 / -4,7
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 718lm total luminous flux