

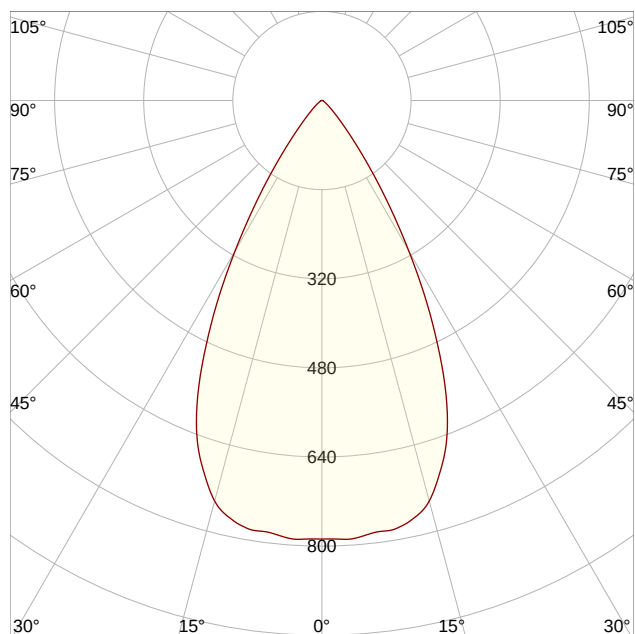
LM-79

Test Report

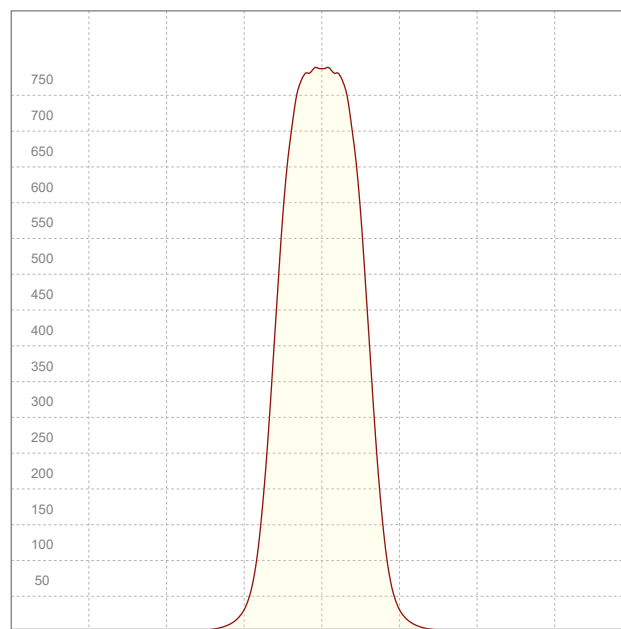
LM79-TOPAZ-COLOURFLOW-RGBA-FLOOD [ALL]

General Discription

Item number	T-C-XCX-1C-NA70-F
Date and time	8-12-2025 14:31:31
CCT (Kelvin)	10059 K
Beam angle	55,6°
Luminous flux	649 lm
Efficiency	47 lm/watt
Weighted energy	13,9 kWh/1000h
Power factor	0,47
CRI (RA)	53,8
Fidelity index Rf	Rf 68,9
Gammut index Rg	Rg 124,9
Peak	789 cd



Polar curve



Linear distribution diagram



CLS LED BV
info@cls-led.com
www.cls-led.com

2021 CLS-LED BV. All rights reserved. Information subject to change without notice, CLS-LED BV and all affiliated companies disclaim liability for injury, damage direct or indirect loss, consequential or economic loss or any other loss occasioned by the use of, inability to use or reliance on the information contained in this document. No part of this document may be reproduced, in any form or by any means, without permission in writing from CLS-LED BV. Other legal information can be found in our General conditions, found on the back of your CLS-LED BV invoice, inside the CLS catalogue or on our website www.cls-led.com/voorwaarden.pdf

LM-79

Test Report

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

Beam details	1m	2m	3m	4m	5m
Lux*	787 lx	197 lx	87 lx	49 lx	31 lx

55,6°

*measured at center of beam

Footcandles*	73,1 fcd	18,3 fcd	8,1 fcd	4,6 fcd	2,9 fcd
Beam width (meter)	1,1 m	2,1 m	3,2 m	4,2 m	5,3 m
Beam width (Feet)	3,5 ft	6,9 ft	10,4 ft	13,8 ft	17,3 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
787lx	197lx	87lx	49lx	31lx	22lx	16lx	12lx	10lx	8lx	7lx	5lx	5lx	4lx	3lx	3lx	3lx	2lx	2lx	2lx
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
73,1fcd	18,3fcd	8,1fcd	4,6fcd	2,9fcd	2fcd	1,5fcd	1,1fcd	0,9fcd	0,7fcd	0,6fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd

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°
787	788	788	784	781	779	770	756	729	693	653	600	534	461	387	312	244	185	136	97
100%	100%	100%	100%	99%	99%	98%	96%	93%	88%	83%	76%	68%	59%	49%	40%	31%	24%	17%	12%

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°
787	788	788	784	781	779	770	756	729	693	653	600	534	461	387	312	244	185	136	97
100%	100%	100%	100%	99%	99%	98%	96%	93%	88%	83%	76%	68%	59%	49%	40%	31%	24%	17%	12%

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°
787	788	788	784	781	779	770	756	729	693	653	600	534	461	387	312	244	185	136	97
100%	100%	100%	100%	99%	99%	98%	96%	93%	88%	83%	76%	68%	59%	49%	40%	31%	24%	17%	12%

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°
787	788	788	784	781	779	770	756	729	693	653	600	534	461	387	312	244	185	136	97
100%	100%	100%	100%	99%	99%	98%	96%	93%	88%	83%	76%	68%	59%	49%	40%	31%	24%	17%	12%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
55,6°	78,4°	96,9°	99,0%	96,3%



CLS LED BV
 info@cls-led.com
 www.cls-led.com

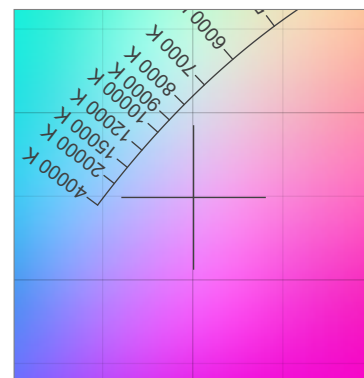
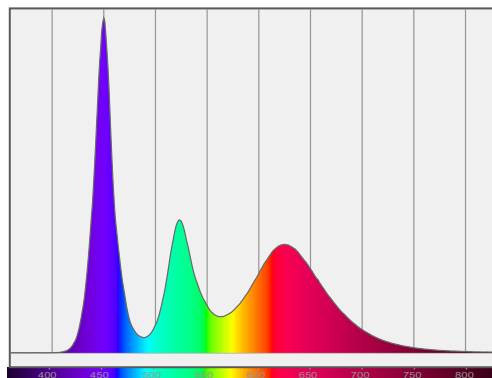
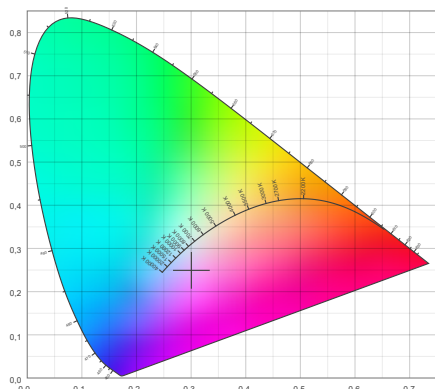
2021 CLS-LED BV. All rights reserved. Information subject to change without notice, CLS-LED BV and all affiliated companies disclaim liability for injury, damage direct or indirect loss, consequential or economic loss or any other loss occasioned by the use of, inability to use or reliance on the information contained in this document. No part of this document may be reproduced, in any form or by any means, without permission in writing from CLS-LED BV. Other legal information can be found in our General conditions, found on the back of your CLS-LED BV invoice, inside the CLS catalogue or on our website www.cls-led.com/voorwaarden.pdf

LM-79

Test Report

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

Color details



CIE 1931

x: 0,300



Spectra

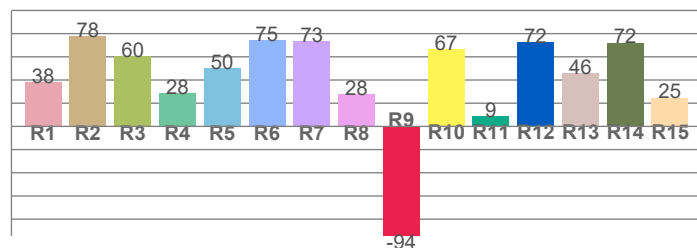
CIE 1931 ZOOM

10059 K

y: 0,249

Δuv : -0,0363

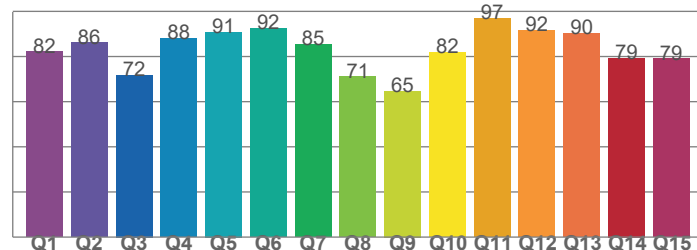
CRI: 53,8 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
37,8	77,6	60,4	28,3	50,2	74,6	73,2	27,9
R9	R10	R11	R12	R13	R14	R15	
-94,5	66,9	8,6	72,3	46,0	72,2	24,8	

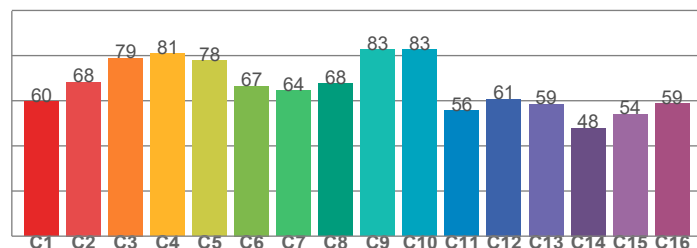
CQS: 81,3



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
82,1	86,1	71,8	88,1	90,9	92,4	85,3	71,0
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
64,7	81,8	97,0	91,6	90,2	79,4	79,0	

TM30: 68,9



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

C1	C2	C3	C4	C5	C6	C7	C8
59,6	68,3	79,0	80,9	77,7	66,6	64,4	67,6
C9	C10	C11	C12	C13	C14	C15	
82,8	82,8	55,6	60,8	58,6	48,0	54,1	

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
10059 K	53,8	-94,5	68,9	124,9	81,3	0,300	0,249	0,223	0,277	-0,0363



CLS LED BV
info@cls-led.com
www.cls-led.com

2021 CLS-LED BV. All rights reserved. Information subject to change without notice, CLS-LED BV and all affiliated companies disclaim liability for injury, damage direct or indirect loss, consequential or economic loss or any other loss occasioned by the use of, inability to use or reliance on the information contained in this document. No part of this document may be reproduced, in any form or by any means, without permission in writing from CLS-LED BV. Other legal information can be found in our General conditions, found on the back of your CLS-LED BV invoice, inside the CLS catalogue or on our website www.cls-led.com/voorwaarden.pdf

LM-79

Test Report

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

TM30 details

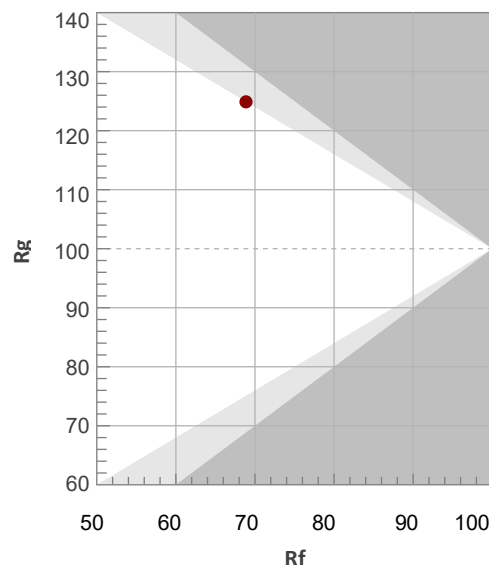
Rf 68,9

Fidelity index Rf

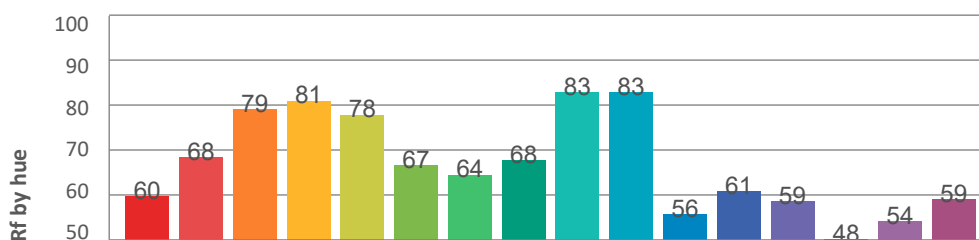
Rg 124,9

Gamut index Rg

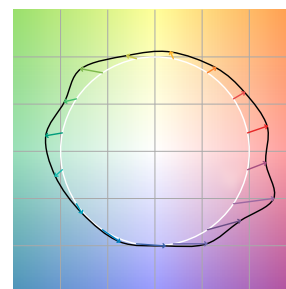
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	60	22%	3%
2	68	14%	-1%
3	79	9%	-4%
4	81	6%	4%
5	78	5%	9%
6	67	16%	17%
7	64	9%	10%
8	68	17%	6%
9	83	9%	5%
10	83	1%	11%
11	56	0%	22%
12	61	-4%	30%
13	59	7%	35%
14	48	11%	34%
15	54	32%	28%
16	59	18%	11%



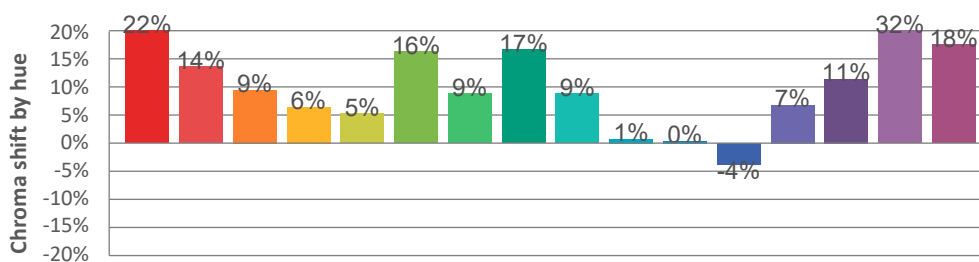
Hue binH



Color vector graphics



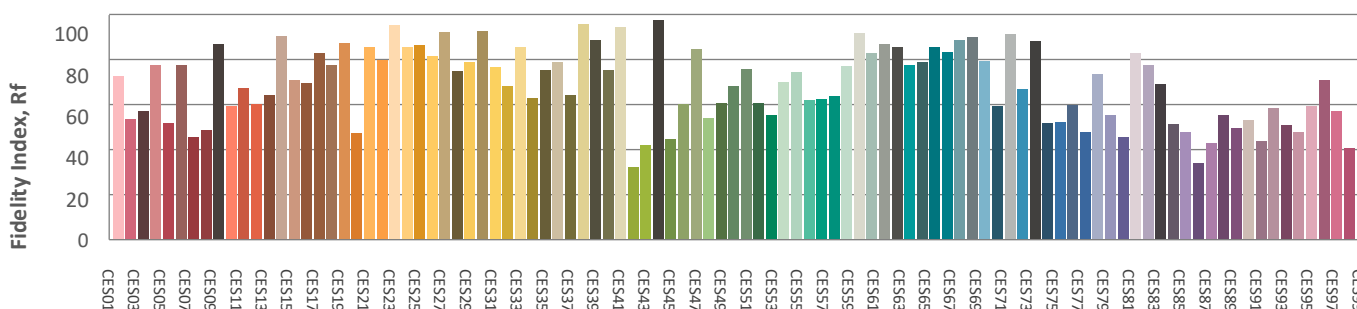
Hue bin



Color distortion graphics



Color Evaluation Sample



CLS LED BV
info@cls-led.com
www.cls-led.com

2021 CLS-LED BV. All rights reserved. Information subject to change without notice, CLS-LED BV and all affiliated companies disclaim liability for injury, damage direct or indirect loss, consequential or economic loss or any other loss occasioned by the use of, inability to use or reliance on the information contained in this document. No part of this document may be reproduced, in any form or by any means, without permission in writing from CLS-LED BV. Other legal information can be found in our General conditions, found on the back of your CLS-LED BV invoice, inside the CLS catalogue or on our website www.cls-led.com/voorwaarden.pdf

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	14,7	15,3	14,8	15,5	15,7	14,7	15,3	14,8	15,5	15,7
	3H	14,4	15,2	14,8	15,4	15,5	14,4	15,2	14,8	15,4	15,5
	4H	14,3	15,1	14,7	15,3	15,5	14,3	15,1	14,7	15,3	15,5
	6H	14,4	14,9	14,6	15,2	15,6	14,4	14,9	14,6	15,2	15,6
	8H	14,3	14,9	14,6	15,2	15,6	14,3	14,9	14,6	15,2	15,6
	12H	14,2	14,8	14,6	15,2	15,6	14,2	14,8	14,6	15,2	15,6
4H	2H	14,3	15,1	14,7	15,3	15,5	14,3	15,1	14,7	15,3	15,5
	3H	14,3	14,8	14,6	15,2	15,6	14,3	14,8	14,6	15,2	15,6
	4H	14,1	14,7	14,6	15,1	15,6	14,1	14,7	14,6	15,1	15,6
	6H	14,1	14,6	14,6	15,0	15,3	14,1	14,6	14,6	15,0	15,3
	8H	14,0	14,5	14,5	14,9	15,2	14,0	14,5	14,5	14,9	15,2
	12H	14,0	14,4	14,5	14,8	15,2	14,0	14,4	14,5	14,8	15,2
8H	4H	14,0	14,5	14,5	14,9	15,2	14,0	14,5	14,5	14,9	15,2
	6H	14,0	14,3	14,5	14,8	15,3	14,0	14,3	14,5	14,8	15,3
	8H	14,0	14,2	14,5	14,8	15,4	14,0	14,2	14,5	14,8	15,4
	12H	13,9	14,1	14,5	14,6	15,2	13,9	14,1	14,5	14,6	15,2
12H	4H	13,9	14,3	14,4	14,8	15,2	13,9	14,3	14,4	14,8	15,2
	6H	14,0	14,2	14,5	14,7	15,4	14,0	14,2	14,5	14,7	15,4
	8H	13,9	14,1	14,5	14,6	15,2	13,9	14,1	14,5	14,6	15,2
Variation of the observer position for the luminaire distance S											
S = 1.0H		5,5 / -8,7					5,5 / -8,7				
S = 1.5H		8,1 / -10,5					8,1 / -10,5				
S = 2.0H		10,1 / -11,4					10,1 / -11,4				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 649lm total luminous flux											