

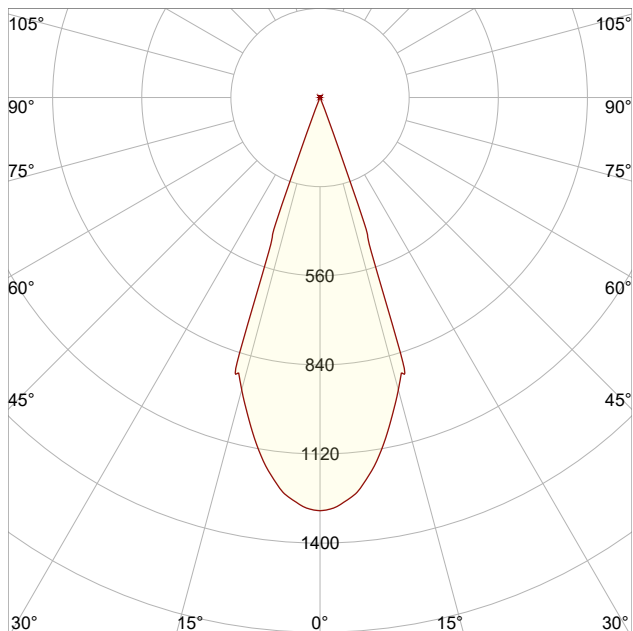
# LM-79

## Test Report

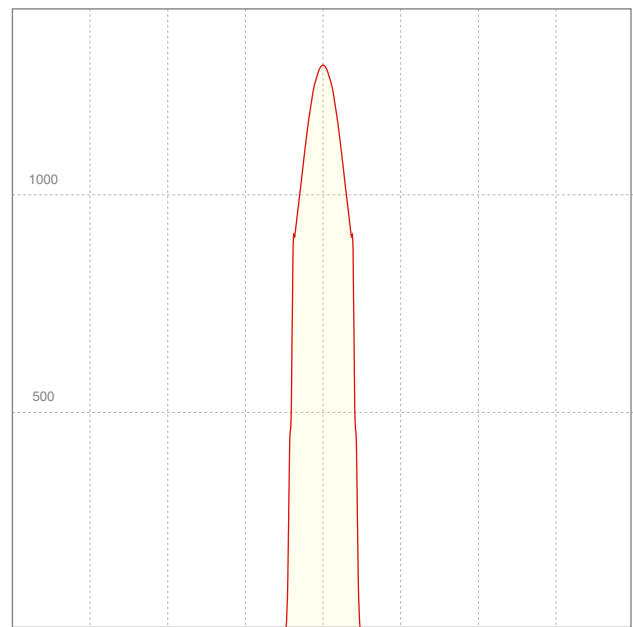
### LM79-TOPAZ-PROFILE-2700K-CRI98-WIDE

#### General Description

Item number	T-P-XLX-1B-2795-Z
Date and time	27-5-2025 14:26:31
CCT (Kelvin)	2766 K
Beam angle	36°
Luminous flux	357 lm
Efficiency	33 lm/watt
Weighted energy	10,9 kWh/1000h
Power factor	0,99
CRI (RA)	94,0
Fidelity index Rf	Rf 95,4
Gammut index Rg	Rg 101,7
Peak	1297 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](http://www.cls-led.com/voorwaarden.pdf)

# LM-79

## Test Report

### LM79-TOPAZ-PROFILE-2700K-CRI98-WIDE

Beam details	1m	2m	3m	4m	5m																			
Lux*	1297 lx	324 lx	144 lx	81 lx	52 lx																			
*measured at center of beam																								
Footcandles*	120,5 fcd	30,1 fcd	13,4 fcd	7,5 fcd	4,8 fcd																			
Beam width (meter)	0,6 m	1,3 m	1,9 m	2,6 m	3,2 m																			
Beam width (Feet)	2,1 ft	4,3 ft	6,4 ft	8,5 ft	10,7 ft																			
<b>Beam intensities</b>																								
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m					
1297lx	324lx	144lx	81lx	52lx	36lx	26lx	20lx	16lx	13lx	11lx	9lx	8lx	7lx	6lx	5lx	4lx	4lx	4lx	3lx					
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					
120,5fcd	30,1fcd	13,4fcd	7,5fcd	4,8fcd	3,3fcd	2,5fcd	1,9fcd	1,5fcd	1,2fcd	1fcd	0,8fcd	0,7fcd	0,6fcd	0,5fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd					
<b>Intensities in 0° c-plane</b>																								
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°					
1297	1289	1265	1231	1180	1119	1052	984	917	643	230	3	1	0	0	0	0	0	0	0					
100%	99%	98%	95%	91%	86%	81%	76%	71%	50%	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%					
<b>Intensities in 90° c-plane</b>																								
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°					
1297	1289	1265	1231	1180	1119	1052	984	917	643	230	3	1	0	0	0	0	0	0	0					
100%	99%	98%	95%	91%	86%	81%	76%	71%	50%	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%					
<b>Intensities in 180° c-plane</b>																								
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°					
1297	1289	1265	1231	1180	1119	1052	984	917	643	230	3	1	0	0	0	0	0	0	0					
100%	99%	98%	95%	91%	86%	81%	76%	71%	50%	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%					
<b>Intensities in 270° c-plane</b>																								
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°					
1297	1289	1265	1231	1180	1119	1052	984	917	643	230	3	1	0	0	0	0	0	0	0					
100%	99%	98%	95%	91%	86%	81%	76%	71%	50%	18%	0%	0%	0%	0%	0%	0%	0%	0%	0%					
<b>Beam angle 50%</b>					<b>Field angle 10%</b>					<b>Cutoff angle 2,5%</b>					<b>Intensity ratio in 120° cone</b>					<b>Intensity ratio in 90° cone</b>				
36°					40,7°					42,3°					99,8%					99,7%				



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

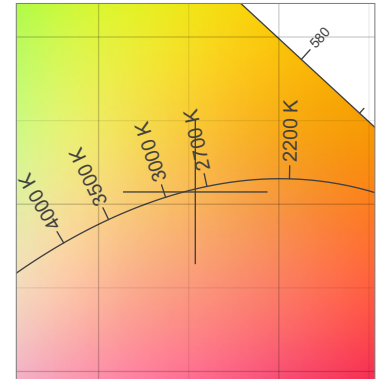
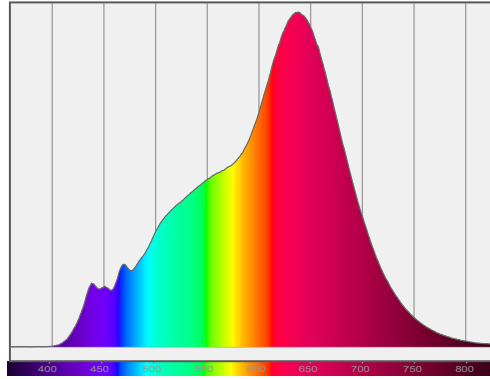
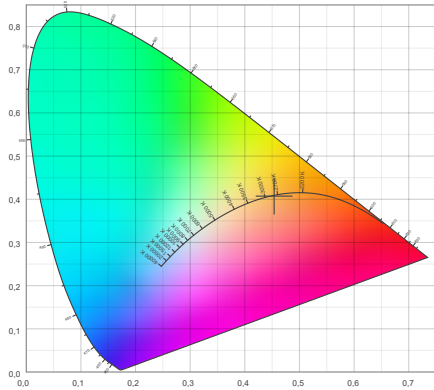
2021 CLS-LED BV. All rights reserved. Information subject to change without notice, CLS-LED BV and all affiliated companies disclaim liability for injury, damage direct or indirect loss, consequential or economic loss or any other loss occasioned by the use of, inability to use or reliance on the information 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](http://www.cls-led.com/voorwaarden.pdf)

# LM-79

## Test Report

# LM79-TOPAZ-PROFILE-2700K-CRI98-WIDE

### Color details



CIE 1931

x: 0,454



Spectra

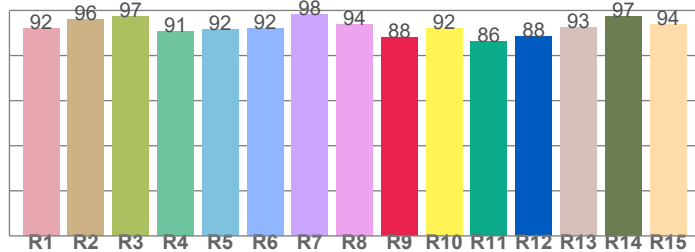
CIE 1931 ZOOM

2766 K

y: 0,407

$\Delta uv$ : -0,0007

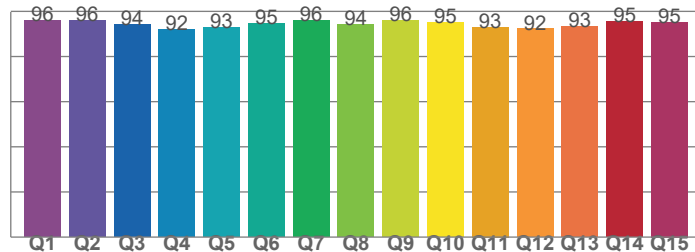
CRI: 94,0 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
92,2	95,9	97,4	90,8	91,6	92,2	98,3	93,8
R9	R10	R11	R12	R13	R14	R15	
88,0	92,2	86,3	88,5	92,6	97,3	93,7	

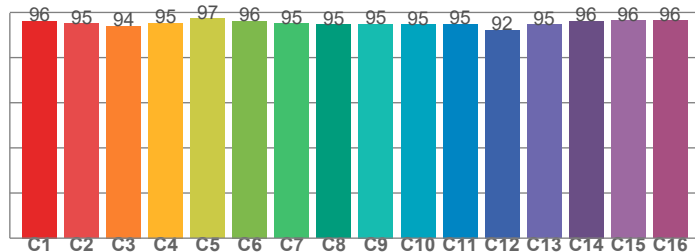
CQS: 94,1



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
96,0	96,0	94,3	91,9	92,7	94,6	96,0	94,2
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
96,0	95,0	93,1	92,3	93,3	95,5	95,3	

TM30: 95,4



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

C1	C2	C3	C4	C5	C6	C7	C8
96,2	95,1	93,9	95,3	97,4	96,2	95,0	94,6
C9	C10	C11	C12	C13	C14	C15	
94,9	94,6	94,9	92,2	94,6	96,3	96,4	

### 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	$\Delta uv$
2766 K	94,0	88,0	95,4	101,7	94,1	0,454	0,407	0,260	0,350	-0,0007



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](http://www.cls-led.com/voorwaarden.pdf)

# LM-79

## Test Report

# LM79-TOPAZ-PROFILE-2700K-CRI98-WIDE

### TM30 details

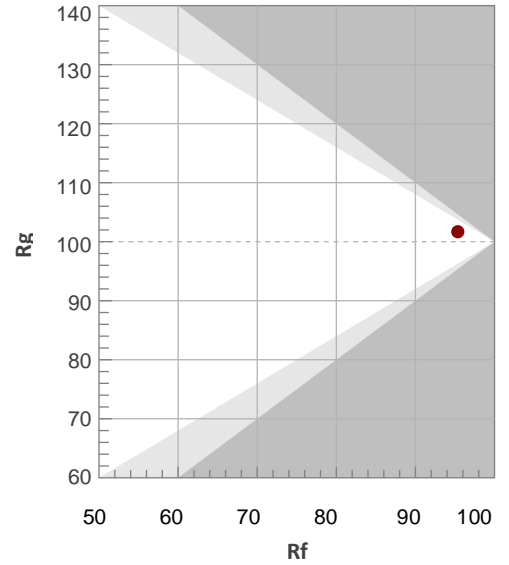
Rf 95,4

Fidelity index Rf

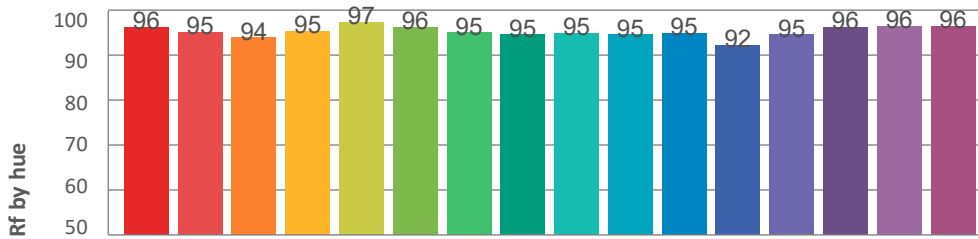
Rg 101,7

Gamut index Rg

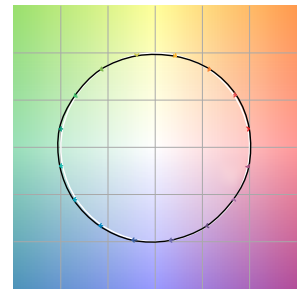
Hue Bin	Rt	Graphic shifts (%)	
		Chroma	Hue
1	96	2%	0%
2	95	2%	-2%
3	94	1%	-3%
4	95	-1%	-3%
5	97	-1%	0%
6	96	1%	3%
7	95	1%	3%
8	95	3%	1%
9	95	3%	0%
10	95	3%	-2%
11	95	2%	-3%
12	92	1%	-5%
13	95	0%	-4%
14	96	0%	-2%
15	96	0%	1%
16	96	1%	-2%



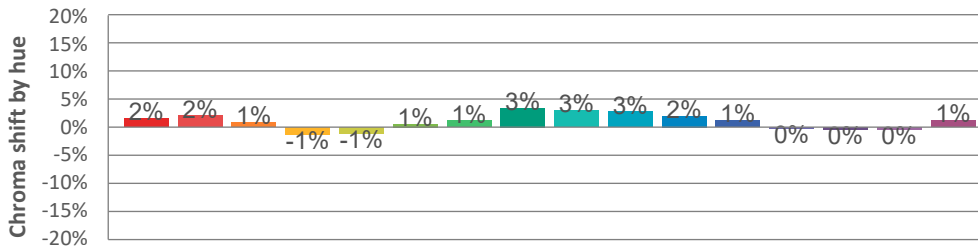
### Hue binH



### Color vector graphics



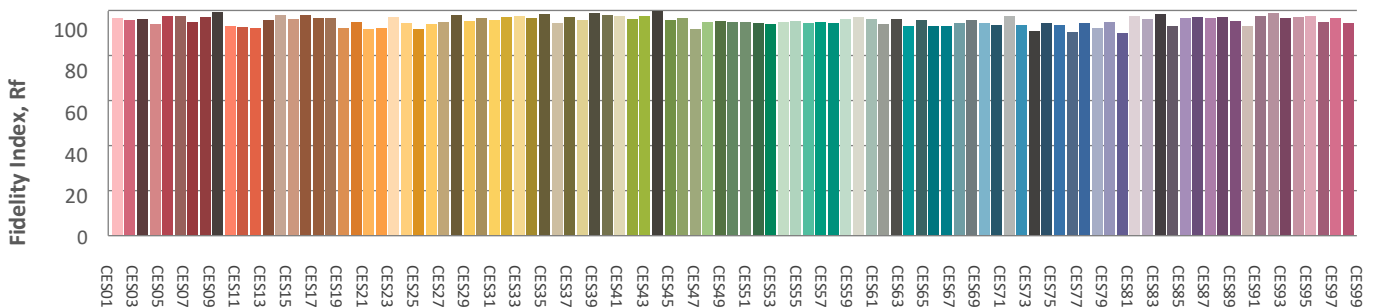
### Hue bin



### 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](http://www.cls-led.com/voorwaarden.pdf)

# LM-79

## Test Report

### LM79-TOPAZ-PROFILE-2700K-CRI98-WIDE

#### 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	-16,9	-16,6	-16,9	-16,4	-16,2	-16,9	-16,6	-16,9	-16,4	-16,2
	3H	-15,1	-14,6	-14,7	-14,4	-14,2	-15,1	-14,6	-14,7	-14,4	-14,2
	4H	-13,8	-13,3	-13,4	-13,1	-12,8	-13,8	-13,3	-13,4	-13,1	-12,8
	6H	-12,2	-11,8	-11,9	-11,5	-11,2	-12,2	-11,8	-11,9	-11,5	-11,2
	8H	-11,7	-11,3	-11,3	-10,9	-10,6	-11,7	-11,3	-11,3	-10,9	-10,6
	12H	-10,9	-10,5	-10,5	-10,1	-9,7	-10,9	-10,5	-10,5	-10,1	-9,7
4H	2H	-16,2	-15,7	-15,8	-15,5	-15,2	-16,2	-15,7	-15,8	-15,5	-15,2
	3H	-13,9	-13,5	-13,6	-13,2	-12,8	-13,9	-13,5	-13,6	-13,2	-12,8
	4H	-12,5	-12,2	-12,1	-11,7	-11,2	-12,5	-12,2	-12,1	-11,7	-11,2
	6H	-10,8	-10,4	-10,3	-10,0	-9,7	-10,8	-10,4	-10,3	-10,0	-9,7
	8H	-10,2	-9,8	-9,7	-9,5	-9,1	-10,2	-9,8	-9,7	-9,5	-9,1
	12H	-9,3	-9,0	-8,8	-8,6	-8,1	-9,3	-9,0	-8,8	-8,6	-8,1
8H	4H	-11,9	-11,5	-11,4	-11,2	-10,8	-11,9	-11,5	-11,4	-11,2	-10,8
	6H	-9,9	-9,6	-9,4	-9,2	-8,7	-9,9	-9,6	-9,4	-9,2	-8,7
	8H	-9,2	-9,0	-8,6	-8,5	-7,8	-9,2	-9,0	-8,6	-8,5	-7,8
	12H	-8,0	-7,9	-7,4	-7,4	-6,8	-8,0	-7,9	-7,4	-7,4	-6,8
12H	4H	-11,8	-11,5	-11,3	-11,1	-10,6	-11,8	-11,5	-11,3	-11,1	-10,6
	6H	-9,6	-9,5	-9,1	-8,9	-8,3	-9,6	-9,5	-9,1	-8,9	-8,3
	8H	-8,9	-8,7	-8,3	-8,2	-7,6	-8,9	-8,7	-8,3	-8,2	-7,6
Variation of the observer position for the luminaire distance S											
S = 1.0H		0,0 / -0,1					0,0 / -0,1				
S = 1.5H		0,1 / -0,2					0,1 / -0,2				
S = 2.0H		0,2 / -0,2					0,2 / -0,2				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 357lm total luminous flux											



**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](http://www.cls-led.com/voorwaarden.pdf)