

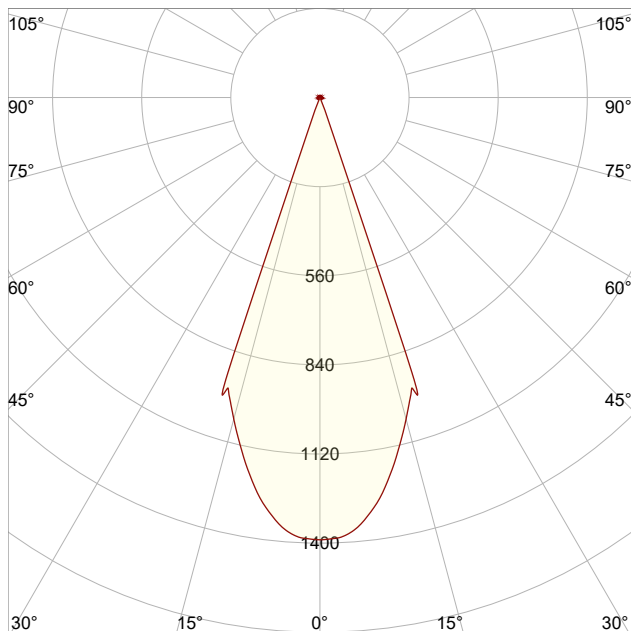
# LM-79

## Test Report

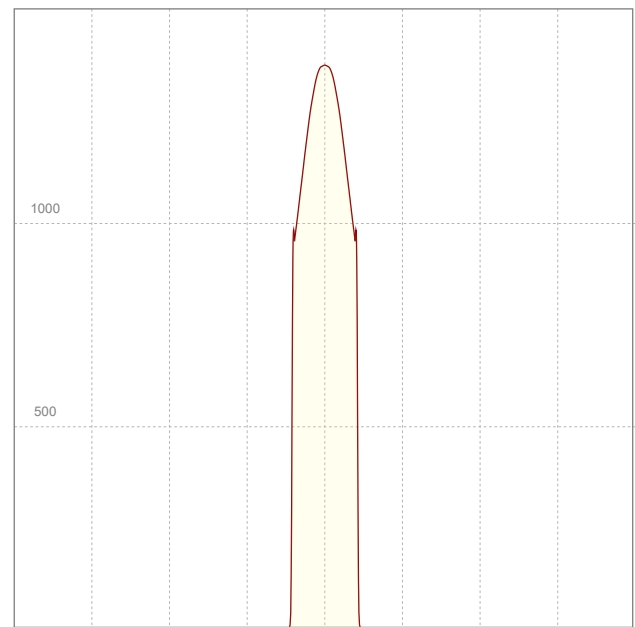
### LM79-TOPAZ-PROFILE-3500K-CRI98-WIDE

#### General Discription

Item number	T-P-XLX-1B-3598-Z
Date and time	24-9-2024 10:17:40
CCT (Kelvin)	3514 K
Beam angle	37,5°
Luminous flux	389 lm
Efficiency	35 lm/watt
Weighted energy	11,2 kWh/1000h
Power factor	0,89
CRI (RA)	95,0
Fidelity index Rf	Rf 96,8
Gammut index Rg	Rg 102,8
Peak	1389 cd



*Polar curve*



*Linear distribution diagram*



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## Test Report

### LM79-TOPAZ-PROFILE-3500K-CRI98-WIDE

Beam details	1m	2m	3m	4m	5m																			
Lux*	1389 lx	347 lx	154 lx	87 lx	56 lx																			
*measured at center of beam																								
Footcandles*	129,0 fcd	32,3 fcd	14,3 fcd	8,1 fcd	5,2 fcd																			
Beam width (meter)	0,7 m	1,4 m	2 m	2,7 m	3,4 m																			
Beam width (Feet)	2,2 ft	4,5 ft	6,7 ft	8,9 ft	11,1 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					
1389lx	347lx	154lx	87lx	56lx	39lx	28lx	22lx	17lx	14lx	11lx	10lx	8lx	7lx	6lx	5lx	5lx	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					
129fcd	32,3fcd	14,3fcd	8,1fcd	5,2fcd	3,6fcd	2,6fcd	2fcd	1,6fcd	1,3fcd	1,1fcd	0,9fcd	0,8fcd	0,7fcd	0,6fcd	0,5fcd	0,4fcd	0,4fcd	0,4fcd	0,3fcd					
<b>Intensities in 0° c-plane</b>																								
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°					
1389	1388	1385	1380	1370	1355	1334	1311	1286	1257	1224	1189	1154	1117	1082	1046	1010	975	935	512					
100%	100%	100%	99%	99%	98%	96%	94%	93%	90%	88%	86%	83%	80%	78%	75%	73%	70%	67%	37%					
<b>Intensities in 90° c-plane</b>																								
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°					
1389	1388	1385	1380	1370	1355	1334	1311	1286	1257	1224	1189	1154	1117	1082	1046	1010	975	935	512					
100%	100%	100%	99%	99%	98%	96%	94%	93%	90%	88%	86%	83%	80%	78%	75%	73%	70%	67%	37%					
<b>Intensities in 180° c-plane</b>																								
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°					
1389	1388	1385	1380	1370	1355	1334	1311	1286	1257	1224	1189	1154	1117	1082	1046	1010	975	935	512					
100%	100%	100%	99%	99%	98%	96%	94%	93%	90%	88%	86%	83%	80%	78%	75%	73%	70%	67%	37%					
<b>Intensities in 270° c-plane</b>																								
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°					
1389	1388	1385	1380	1370	1355	1334	1311	1286	1257	1224	1189	1154	1117	1082	1046	1010	975	935	512					
100%	100%	100%	99%	99%	98%	96%	94%	93%	90%	88%	86%	83%	80%	78%	75%	73%	70%	67%	37%					
<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>				
37,5°					39°					40,5°					99,8%					99,8%				



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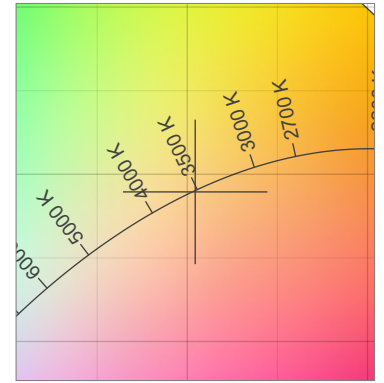
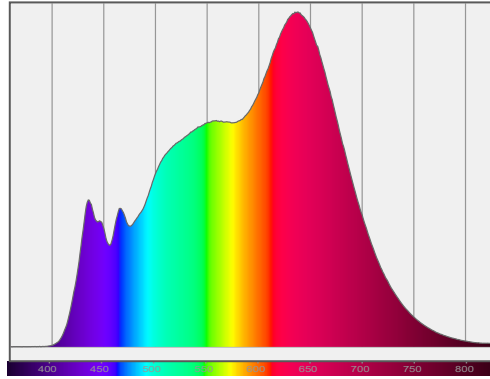
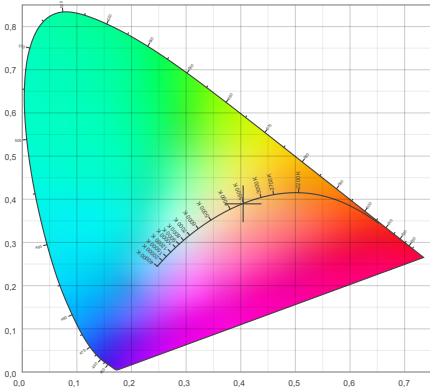
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# LM-79

## Test Report

# LM79-TOPAZ-PROFILE-3500K-CRI98-WIDE

### Color details



CIE 1931

x: 0,404



Spectra

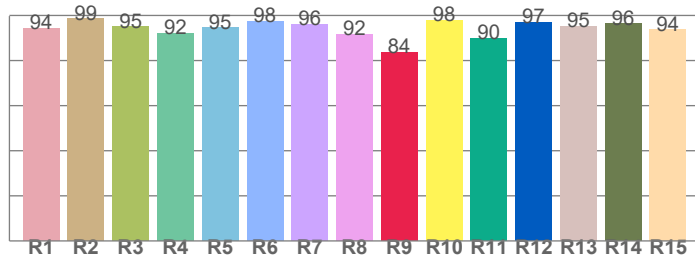
CIE 1931 ZOOM

3514 K

y: 0,389

$\Delta uv$ : -0,0004

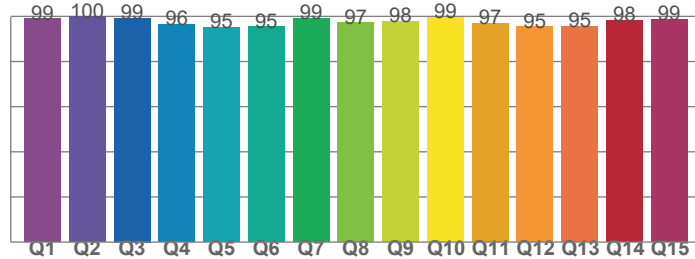
**CRI: 95,0 (R1-R8)**



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

R1	R2	R3	R4	R5	R6	R7	R8
94,1	98,6	94,9	92,2	94,5	97,5	96,1	91,7
R9	R10	R11	R12	R13	R14	R15	
83,5	98,0	89,7	96,8	95,2	96,3	93,7	

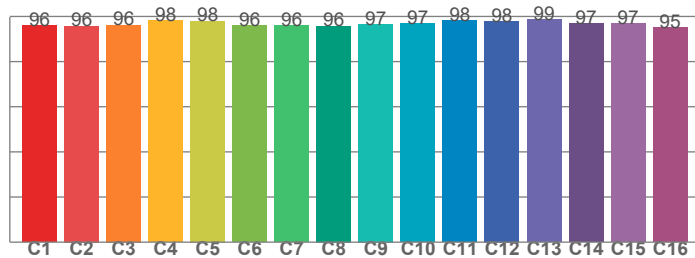
**CQS: 97,0**



*CQS values*

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
98,9	99,8	99,3	96,4	95,1	95,4	99,2	97,1
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
97,9	99,5	96,9	95,4	95,5	98,2	98,6	

**TM30: 96,8**



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

C1	C2	C3	C4	C5	C6	C7	C8
95,9	95,8	96,3	98,3	98,0	96,0	96,0	95,8
C9	C10	C11	C12	C13	C14	C15	
96,6	96,9	98,1	97,9	98,6	96,9	96,9	

### 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	$\Delta uv$
3514 K	95,0	83,5	96,8	102,8	97,0	0,404	0,389	0,236	0,340	-0,0004



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# LM-79

## Test Report

### LM79-TOPAZ-PROFILE-3500K-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	-19,3	-19,0	-19,3	-18,8	-18,6	-19,3	-19,0	-19,3	-18,8	-18,6
	3H	-16,5	-16,0	-16,2	-15,8	-15,7	-16,5	-16,0	-16,2	-15,8	-15,7
	4H	-14,9	-14,4	-14,5	-14,2	-14,0	-14,9	-14,4	-14,5	-14,2	-14,0
	6H	-13,7	-13,3	-13,4	-13,0	-12,6	-13,7	-13,3	-13,4	-13,0	-12,6
	8H	-12,9	-12,5	-12,6	-12,2	-11,8	-12,9	-12,5	-12,6	-12,2	-11,8
	12H	-12,0	-11,7	-11,7	-11,3	-10,9	-12,0	-11,7	-11,7	-11,3	-10,9
4H	2H	-18,5	-18,0	-18,1	-17,8	-17,6	-18,5	-18,0	-18,1	-17,8	-17,6
	3H	-15,2	-14,8	-14,8	-14,5	-14,1	-15,2	-14,8	-14,8	-14,5	-14,1
	4H	-13,5	-13,1	-13,1	-12,7	-12,2	-13,5	-13,1	-13,1	-12,7	-12,2
	6H	-12,2	-11,8	-11,7	-11,5	-11,1	-12,2	-11,8	-11,7	-11,5	-11,1
	8H	-11,4	-11,0	-10,8	-10,6	-10,3	-11,4	-11,0	-10,8	-10,6	-10,3
	12H	-10,4	-10,1	-9,9	-9,7	-9,3	-10,4	-10,1	-9,9	-9,7	-9,3
8H	4H	-12,9	-12,5	-12,3	-12,1	-11,8	-12,9	-12,5	-12,3	-12,1	-11,8
	6H	-11,3	-11,1	-10,8	-10,6	-10,1	-11,3	-11,1	-10,8	-10,6	-10,1
	8H	-10,2	-10,1	-9,7	-9,6	-8,9	-10,2	-10,1	-9,7	-9,6	-8,9
	12H	-9,1	-9,0	-8,5	-8,5	-7,9	-9,1	-9,0	-8,5	-8,5	-7,9
12H	4H	-12,8	-12,5	-12,3	-12,1	-11,6	-12,8	-12,5	-12,3	-12,1	-11,6
	6H	-11,0	-10,9	-10,5	-10,4	-9,7	-11,0	-10,9	-10,5	-10,4	-9,7
	8H	-9,9	-9,8	-9,3	-9,3	-8,7	-9,9	-9,8	-9,3	-9,3	-8,7

#### Variation of the observer position for the luminaire distance S

S = 1.0H	0,1 / -0,1	0,1 / -0,1
S = 1.5H	0,1 / -0,1	0,1 / -0,1
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 389lm total luminous flux



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