

# LM-79

## Test Report

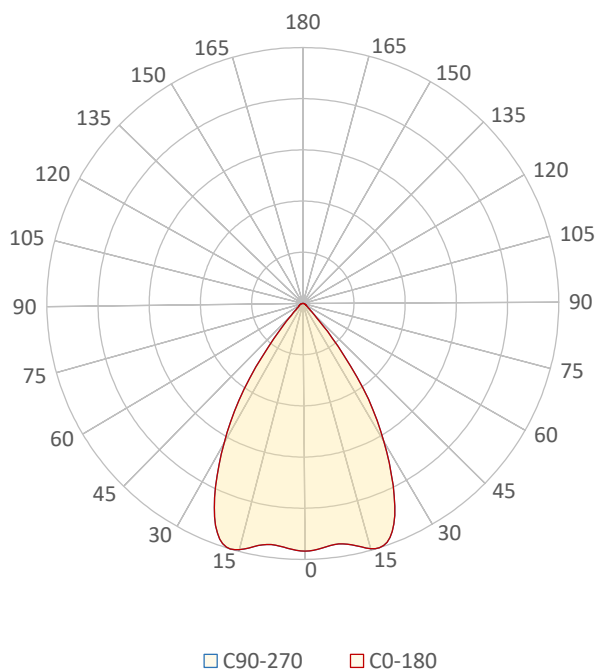
LM79-JADE-HP-3500K-CRI95-WIDE

### General Discription

Item number	
Date and time	22-1-2021 16:34:10
CCT (Kelvin)	3374 K
Beam angle	66°
Luminous flux	3136 lm
Efficiency	80 lm/watt
Weighted energy	39,3 kWh/1000h
Power factor	0,97
CRI (RA)	97,0
Fidelity index Rf	Rf 94,9
Gammut index Rg	Rg 103,5
Peak	2865 cd



Polar diagram



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Beam details	1m	2m	3m	4m	5m																			
Lux*	2772 lx	693 lx	308 lx	173 lx	111 lx																			
*measured at center of beam																								
Footcandles*	257,5 fcd	64,4 fcd	28,6 fcd	16,1 fcd	10,3 fcd																			
Beam width (meter)	1,3 m	2,6 m	3,9 m	5,2 m	6,5 m																			
Beam width (Feet)	4,3 ft	8,5 ft	12,8 ft	17 ft	21,3 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					
2772lx	693lx	308lx	173lx	111lx	77lx	57lx	43lx	34lx	28lx	23lx	19lx	16lx	14lx	12lx	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					
257,5fcd	64,4fcd	28,6fcd	16,1fcd	10,3fcd	7,2fcd	5,3fcd	4fcd	3,2fcd	2,6fcd	2,1fcd	1,8fcd	1,5fcd	1,3fcd	1,1fcd	1fcd	0,9fcd	0,8fcd	0,7fcd	0,6fcd					
<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°					
2772	2764	2745	2727	2721	2739	2778	2826	2860	2856	2795	2670	2489	2271	2034	1794	1552	1300	1024	749					
100%	100%	99%	98%	98%	99%	100%	102%	103%	103%	101%	96%	90%	82%	73%	65%	56%	47%	37%	27%					
<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°					
2772	2764	2745	2727	2721	2739	2778	2826	2860	2856	2795	2670	2489	2271	2034	1794	1552	1300	1024	749					
100%	100%	99%	98%	98%	99%	100%	102%	103%	103%	101%	96%	90%	82%	73%	65%	56%	47%	37%	27%					
<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°					
2772	2764	2745	2727	2721	2739	2778	2826	2860	2856	2795	2670	2489	2271	2034	1794	1552	1300	1024	749					
100%	100%	99%	98%	98%	99%	100%	102%	103%	103%	101%	96%	90%	82%	73%	65%	56%	47%	37%	27%					
<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°					
2772	2764	2745	2727	2721	2739	2778	2826	2860	2856	2795	2670	2489	2271	2034	1794	1552	1300	1024	749					
100%	100%	99%	98%	98%	99%	100%	102%	103%	103%	101%	96%	90%	82%	73%	65%	56%	47%	37%	27%					
<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>				
66°					85,6°					104,7°					97,8%					94,5%				



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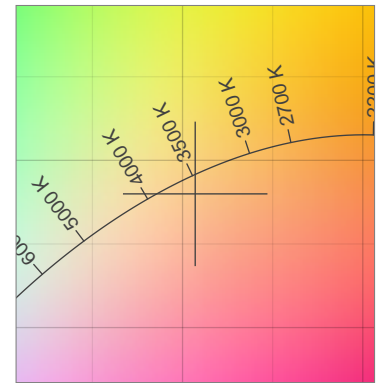
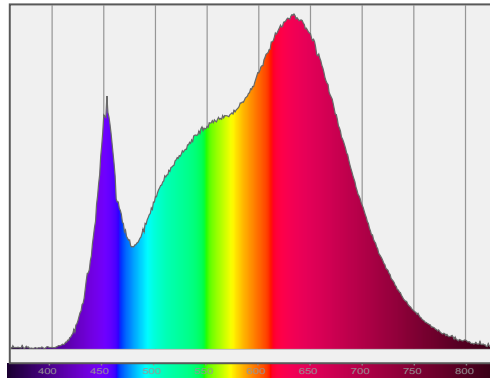
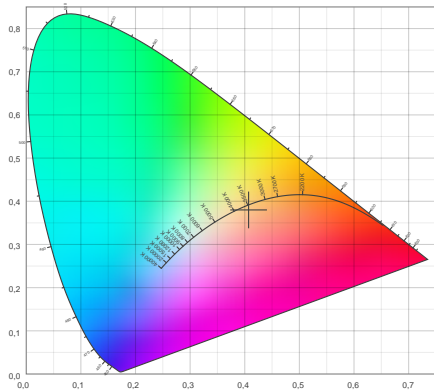
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# LM79-JADE-HP-3500K-CRI95-WIDE

### Color details



CIE 1931

x: 0,407



Spectra

CIE 1931 ZOOM

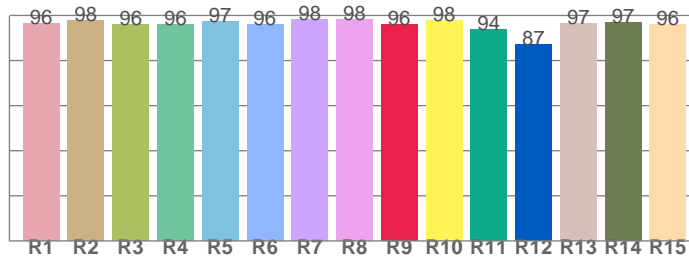
3374 K

y: 0,380

$\Delta uv$ : -0,0051

CRI: 97,0 (R1-R8)

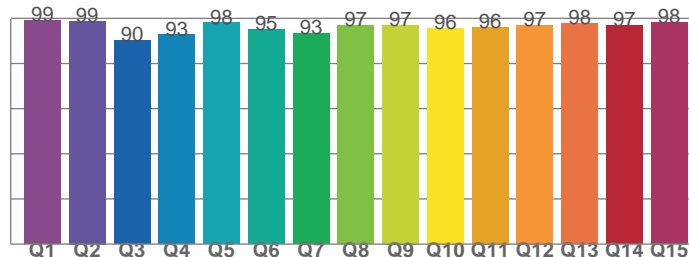
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
96,4	98,0	96,2	96,0	97,2	95,9	98,2	98,4
R9	R10	R11	R12	R13	R14	R15	
96,0	97,8	93,7	87,0	96,6	97,0	95,9	

CQS: 95,4

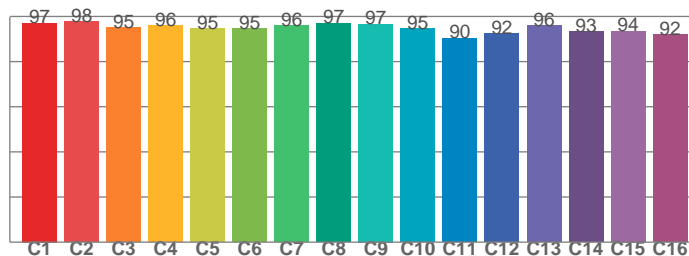
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
98,9	98,8	90,2	92,7	98,0	95,1	93,4	97,0
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
97,1	95,7	96,2	97,0	97,7	96,7	98,2	

TM30: 94,9

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



C1	C2	C3	C4	C5	C6	C7	C8
97,1	97,9	95,1	96,1	94,6	94,8	95,9	97,0
C9	C10	C11	C12	C13	C14	C15	
96,7	94,6	90,4	92,3	96,0	93,3	93,6	

### 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	$\Delta uv$
3374 K	97,0	96,0	94,9	103,5	95,4	0,407	0,380	0,241	0,338	-0,0051



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# LM79-JADE-HP-3500K-CRI95-WIDE

### TM30 details

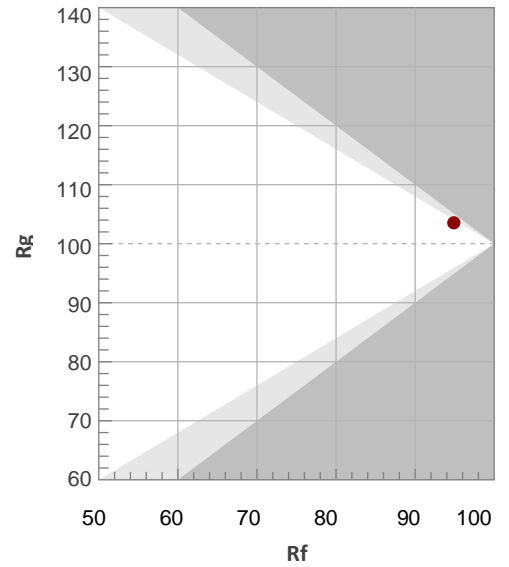
Rf 94,9

Fidelity index Rf

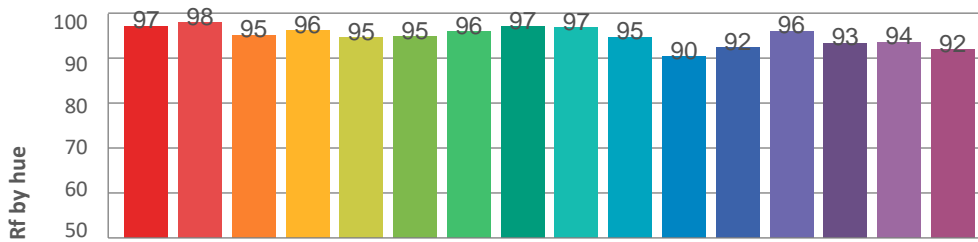
Rg 103,5

Gamut index Rg

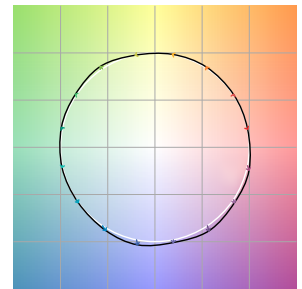
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	97	0%	0%
2	98	0%	0%
3	95	1%	2%
4	96	0%	1%
5	95	0%	1%
6	95	3%	1%
7	96	1%	0%
8	97	1%	-1%
9	97	1%	2%
10	95	0%	3%
11	90	2%	6%
12	92	5%	2%
13	96	3%	-1%
14	93	5%	-2%
15	94	3%	-2%
16	92	3%	-4%



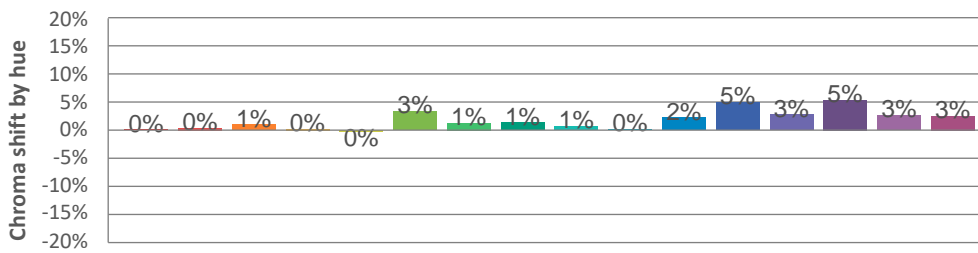
### Hue binH



### Color vector graphics



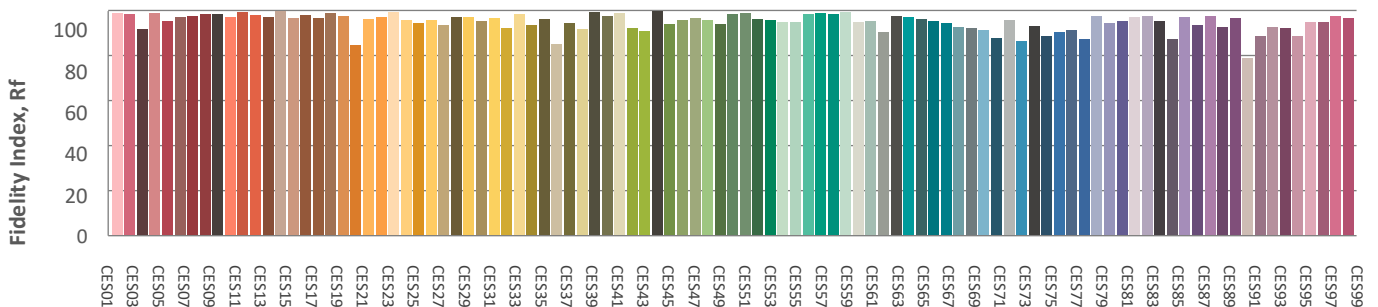
### Hue bin



### 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	24,3	25,0	24,4	25,2	25,4	24,3	25,0	24,4	25,2	25,4
	3H	24,2	25,0	24,6	25,2	25,4	24,2	25,0	24,6	25,2	25,4
	4H	24,2	25,0	24,6	25,2	25,5	24,2	25,0	24,6	25,2	25,5
	6H	24,3	25,0	24,6	25,3	25,6	24,3	25,0	24,6	25,3	25,6
	8H	24,3	24,9	24,6	25,2	25,6	24,3	24,9	24,6	25,2	25,6
	12H	24,3	24,9	24,6	25,2	25,6	24,3	24,9	24,6	25,2	25,6
4H	2H	24,0	24,8	24,4	25,0	25,3	24,0	24,8	24,4	25,0	25,3
	3H	24,2	24,8	24,5	25,2	25,6	24,2	24,8	24,5	25,2	25,6
	4H	24,2	24,8	24,6	25,2	25,7	24,2	24,8	24,6	25,2	25,7
	6H	24,3	24,9	24,8	25,2	25,6	24,3	24,9	24,8	25,2	25,6
	8H	24,3	24,8	24,8	25,2	25,5	24,3	24,8	24,8	25,2	25,5
	12H	24,2	24,7	24,7	25,1	25,5	24,2	24,7	24,7	25,1	25,5
8H	4H	24,2	24,7	24,7	25,1	25,4	24,2	24,7	24,7	25,1	25,4
	6H	24,3	24,7	24,8	25,1	25,7	24,3	24,7	24,8	25,1	25,7
	8H	24,4	24,7	24,9	25,2	25,8	24,4	24,7	24,9	25,2	25,8
	12H	24,4	24,6	24,9	25,1	25,7	24,4	24,6	24,9	25,1	25,7
12H	4H	24,1	24,6	24,6	25,0	25,4	24,1	24,6	24,6	25,0	25,4
	6H	24,3	24,6	24,8	25,1	25,8	24,3	24,6	24,8	25,1	25,8
	8H	24,3	24,6	24,9	25,1	25,7	24,3	24,6	24,9	25,1	25,7
Variation of the observer position for the luminaire distance S											
S = 1.0H	4,3 / -4,1					4,3 / -4,1					
S = 1.5H	6,8 / -4,5					6,8 / -4,5					
S = 2.0H	8,7 / -4,7					8,7 / -4,7					
Standard table	n/a					n/a					
Correction summand	n/a					n/a					
Corrected glare indices referring to 3136lm total luminous flux											



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