

LM-79

Test Report

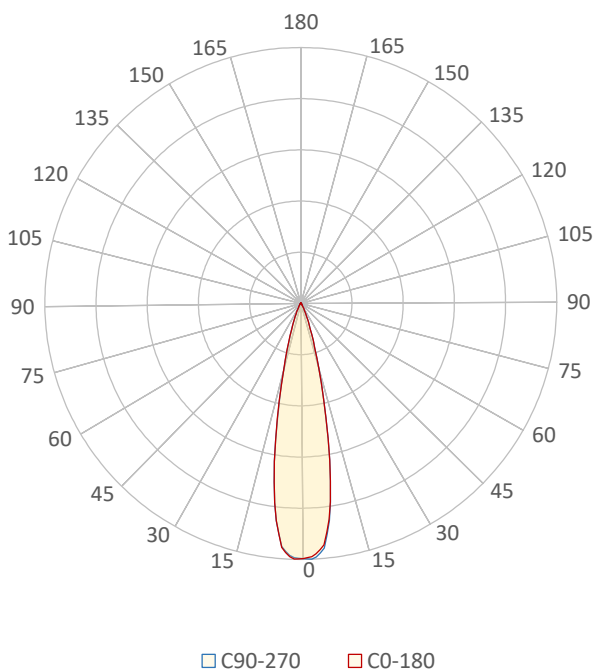
LM79-CLS-KRYPTON-RGBW30-90-SPOT [RGBW]

General Discription

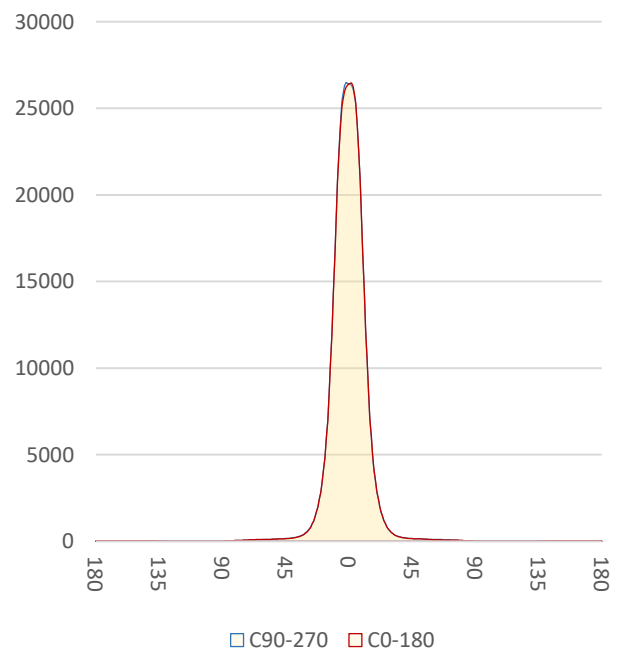
Item number	
Date and time	16-12-2019 16:00:07
CCT (Kelvin)	3917 K
Beam angle	22,8°
Luminous flux	5377 lm
Efficiency	58 lm/watt
Weighted energy	92,3 kWh/1000h
Power factor	0,91
CRI (RA)	62,0
Fidelity index Rf	Rf 0,0
Gammut index Rg	Rg n/a
Peak	26529 cd



Polar diagram



Cartesian diagram



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Beam details	1m	2m	3m	4m	5m														
Lux*	26410 lx	6602 lx	2934 lx	1651 lx	1056 lx														
<i>*measured at center of beam</i>																			
Footcandles*	2453,5 fcd	613,4 fcd	272,6 fcd	153,3 fcd	98,1 fcd														
Beam width (meter)	0,4 m	0,8 m	1,2 m	1,6 m	2 m														
Beam width (Feet)	1,3 ft	2,6 ft	4 ft	5,3 ft	6,6 ft														
Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
26410lx	6602lx	2934lx	1651lx	1056lx	734lx	539lx	413lx	326lx	264lx	218lx	183lx	156lx	135lx	117lx	103lx	91lx	82lx	73lx	66lx
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
2453,5fcd	613,4fcd	272,6fcd	153,3fcd	98,1fcd	68,2fcd	50,1fcd	38,3fcd	30,3fcd	24,5fcd	20,3fcd	17fcd	14,5fcd	12,5fcd	10,9fcd	9,6fcd	8,5fcd	7,6fcd	6,8fcd	6,1fcd
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°
26,4K	26,2K	25,8K	24,4K	21,0K	16,5K	12,0K	8,3K	5,6K	3,9K	2,8K	2,0K	1,4K	1,0K	0,7K	0,5K	0,4K	0,3K	0,2K	0,2K
100%	99%	98%	93%	79%	62%	46%	31%	21%	15%	11%	7%	5%	4%	3%	2%	1%	1%	1%	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°
26,4K	26,5K	26,2K	24,7K	21,0K	16,4K	12,0K	8,3K	5,6K	3,9K	2,8K	2,0K	1,4K	1,0K	0,7K	0,5K	0,4K	0,3K	0,3K	0,2K
100%	100%	99%	94%	80%	62%	46%	31%	21%	15%	11%	7%	5%	4%	3%	2%	2%	1%	1%	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°
26,4K	26,5K	26,3K	24,4K	20,9K	16,5K	12,1K	8,4K	5,8K	4,1K	2,9K	2,0K	1,4K	1,0K	0,7K	0,5K	0,4K	0,3K	0,3K	0,2K
100%	100%	100%	92%	79%	63%	46%	32%	22%	15%	11%	8%	5%	4%	3%	2%	1%	1%	1%	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°
26,4K	26,4K	26,1K	24,4K	20,9K	16,5K	12,1K	8,3K	5,7K	4,0K	2,8K	2,0K	1,4K	1,0K	0,7K	0,5K	0,4K	0,3K	0,3K	0,2K
100%	100%	99%	93%	79%	63%	46%	31%	21%	15%	11%	7%	5%	4%	3%	2%	1%	1%	1%	1%
Beam angle 50%		Field angle 10%				Cutoff angle 2,5%				Intensity ratio in 120° cone				Intensity ratio in 90° cone					
22,8°		40,6°				56,7°				95,8%				92,7%					



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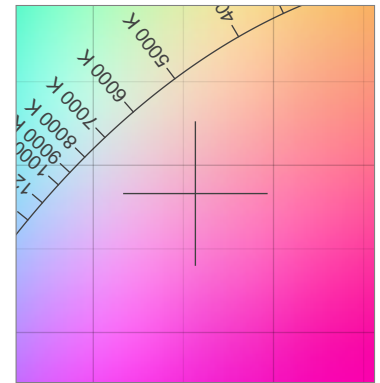
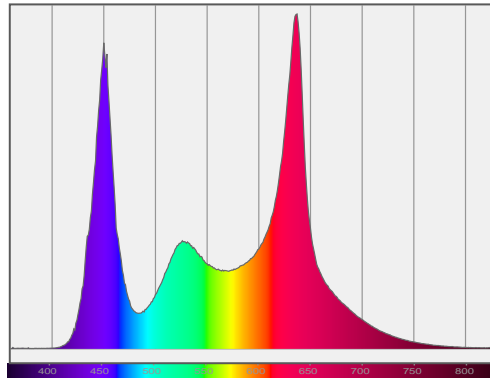
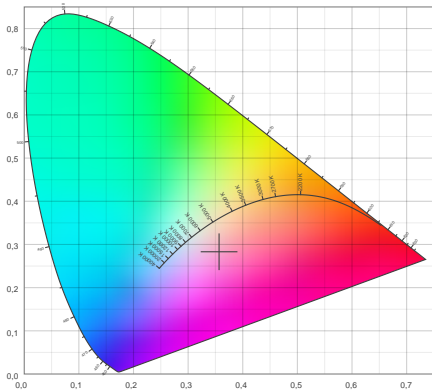
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Color details



CIE 1931

x: 0,357



Spectra

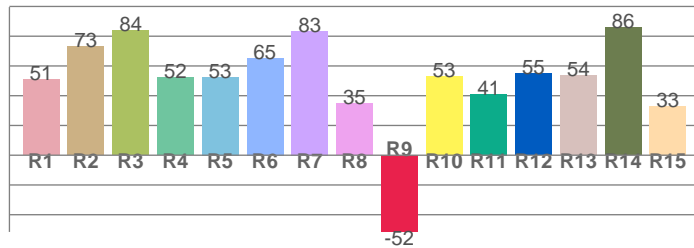
CIE 1931 ZOOM

3917 K

y: 0,283

Δuv : -0,0440

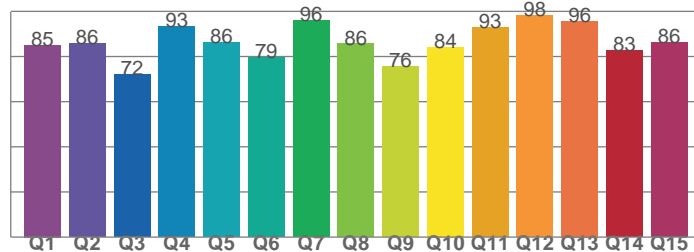
CRI: 62,0 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
50,7	73,1	84,0	52,4	52,6	65,4	83,5	34,6
R9	R10	R11	R12	R13	R14	R15	
-51,6	53,1	41,0	55,0	53,7	86,0	33,0	

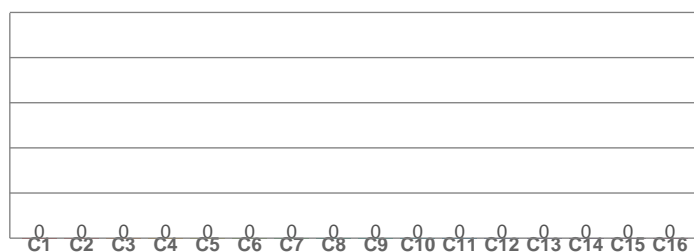
CQS: 84,7



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
85,1	85,8	71,9	93,4	86,1	79,5	95,8	85,6
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
75,6	84,2	92,8	98,1	95,7	82,8	86,2	

TM30: 0,0



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

C1	C2	C3	C4	C5	C6	C7	C8
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
C9	C10	C11	C12	C13	C14	C15	
0,0	0,0	0,0	0,0	0,0	0,0	0,0	

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
3917 K	62,0	-51,6	0,0	n/a	84,7	0,357	0,283	0,251	0,299	-0,0440



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TM30 details

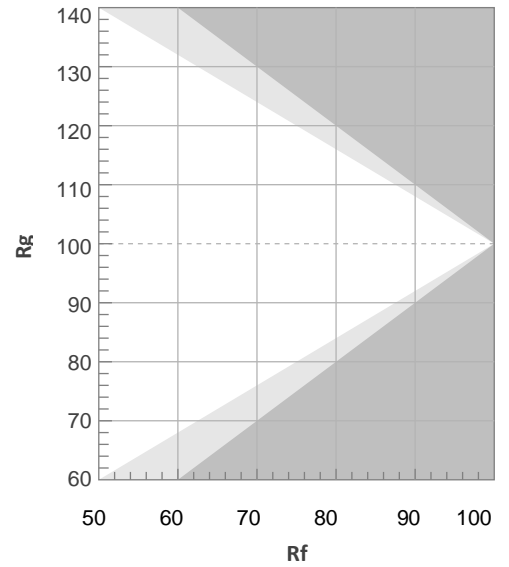
Rf 0,0

Fidelity index Rf

Rg n/a

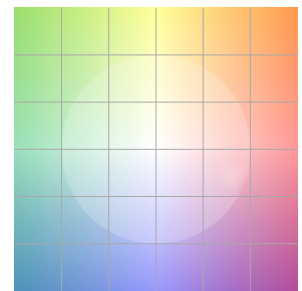
Gamut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	0	0%	0%
2	0	0%	0%
3	0	0%	0%
4	0	0%	0%
5	0	0%	0%
6	0	0%	0%
7	0	0%	0%
8	0	0%	0%
9	0	0%	0%
10	0	0%	0%
11	0	0%	0%
12	0	0%	0%
13	0	0%	0%
14	0	0%	0%
15	0	0%	0%
16	0	0%	0%



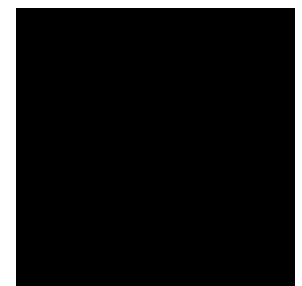
Hue binH

Color vector graphics

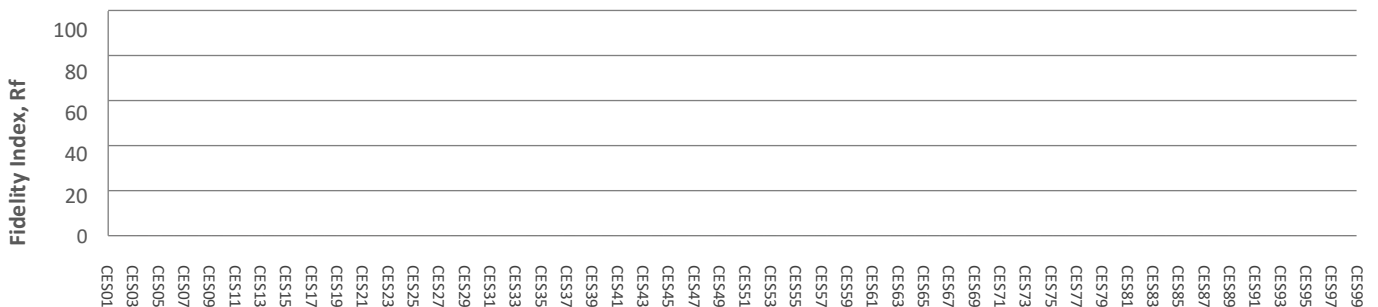


Hue bin

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	4,5	5,2	4,8	5,4	5,6	4,5	5,2	4,8	5,4	5,6
	3H	4,4	5,0	4,7	5,3	5,5	4,4	5,0	4,7	5,3	5,5
	4H	4,3	4,9	4,6	5,2	5,5	4,3	4,9	4,6	5,2	5,5
	6H	4,2	4,8	4,6	5,1	5,4	4,2	4,8	4,6	5,1	5,4
	8H	4,2	4,7	4,5	5,0	5,3	4,2	4,7	4,5	5,0	5,3
	12H	4,1	4,7	4,5	5,0	5,3	4,1	4,7	4,5	5,0	5,3
4H	2H	4,3	4,9	4,6	5,2	5,5	4,3	4,9	4,6	5,2	5,5
	3H	4,1	4,7	4,5	5,0	5,3	4,1	4,7	4,5	5,0	5,3
	4H	4,1	4,5	4,4	4,9	5,2	4,1	4,5	4,4	4,9	5,2
	6H	4,0	4,4	4,4	4,7	5,1	4,0	4,4	4,4	4,7	5,1
	8H	3,9	4,3	4,4	4,7	5,1	3,9	4,3	4,4	4,7	5,1
	12H	3,9	4,2	4,4	4,6	5,1	3,9	4,2	4,4	4,6	5,1
8H	4H	3,9	4,3	4,4	4,7	5,1	3,9	4,3	4,4	4,7	5,1
	6H	3,9	4,1	4,3	4,6	5,0	3,9	4,1	4,3	4,6	5,0
	8H	3,8	4,0	4,3	4,5	5,0	3,8	4,0	4,3	4,5	5,0
	12H	3,8	3,9	4,3	4,4	4,9	3,8	3,9	4,3	4,4	4,9
12H	4H	3,9	4,2	4,4	4,6	5,1	3,9	4,2	4,4	4,6	5,1
	6H	3,8	4,0	4,3	4,5	5,0	3,8	4,0	4,3	4,5	5,0
	8H	3,8	3,9	4,3	4,4	4,9	3,8	3,9	4,3	4,4	4,9
Variation of the observer position for the luminaire distance S											
S = 1,0H	+0,0 / 0,0					+0,0 / 0,0					
S = 1,5H	+0,0 / 0,0					+0,0 / 0,0					
S = 2,0H	+0,0 / 0,0					+0,0 / 0,0					
Standard table	BK00					BK00					
Correction summand	-14,2					-14,2					
Corrected glare indices referring to 5377lm total luminous flux											



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