

LM-79

Test Report

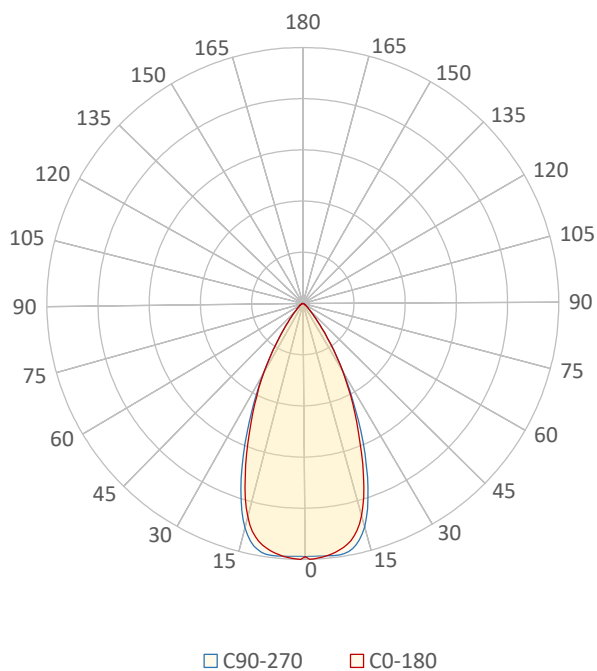
LM79-REVO-2200K-CRI80-DEG54

General Discription

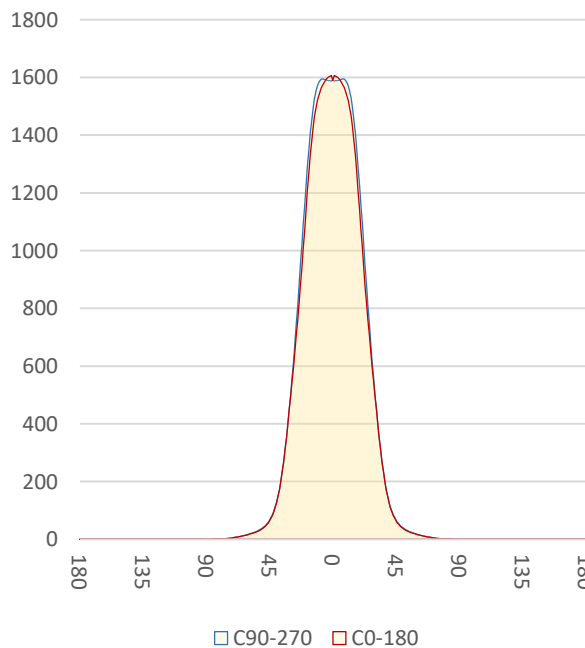
Item number	R-X-X-10-4
Date and time	11-6-2021 15:33:16
CCT (Kelvin)	2193 K
Beam angle	50,4 x 48,4°
Luminous flux	1162 lm
Efficiency	62 lm/watt
Weighted energy	18,8 kWh/1000h
Power factor	0,95
CRI (RA)	84,8
Fidelity index Rf	Rf 87,8
Gammut index Rg	Rg 96,1
Peak	1607 cd



Polar diagram



Cartesian diagram



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Beam details	1m	2m	3m	4m	5m
Lux*	1590 lx	397 lx	177 lx	99 lx	64 lx

*measured at center of beam

Footcandles*	147,7 fcd	36,9 fcd	16,4 fcd	9,2 fcd	5,9 fcd
Beam width (meter)	0,9 m	1,8 m	2,8 m	3,7 m	4,6 m
Beam width 90° (meter)	0,9 m	1,9 m	2,8 m	3,8 m	4,7 m
Beam width (Feet)	3 ft	6 ft	9,1 ft	12,1 ft	15,1 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
1590lx	397lx	177lx	99lx	64lx	44lx	32lx	25lx	20lx	16lx	13lx	11lx	9lx	8lx	7lx	6lx	6lx	5lx	4lx	4lx
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
147,7fcd	36,9fcd	16,4fcd	9,2fcd	5,9fcd	4,1fcd	3fcd	2,3fcd	1,8fcd	1,5fcd	1,2fcd	1fcd	0,9fcd	0,8fcd	0,7fcd	0,6fcd	0,5fcd	0,5fcd	0,4fcd	0,4fcd

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°
1590	1605	1597	1584	1565	1538	1495	1427	1332	1211	1076	941	816	704	599	497	400	311	233	173
100%	101%	100%	100%	98%	97%	94%	90%	84%	76%	68%	59%	51%	44%	38%	31%	25%	20%	15%	11%

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°
1590	1589	1590	1593	1594	1583	1552	1494	1407	1292	1162	1021	879	744	618	502	397	306	231	172
100%	100%	100%	100%	100%	100%	98%	94%	89%	81%	73%	64%	55%	47%	39%	32%	25%	19%	15%	11%

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°
1590	1605	1597	1584	1565	1538	1495	1427	1332	1211	1076	941	816	704	599	497	400	311	233	173
100%	101%	100%	100%	98%	97%	94%	90%	84%	76%	68%	59%	51%	44%	38%	31%	25%	20%	15%	11%

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°
1590	1589	1590	1593	1594	1583	1552	1494	1407	1292	1162	1021	879	744	618	502	397	306	231	172
100%	100%	100%	100%	100%	100%	98%	94%	89%	81%	73%	64%	55%	47%	39%	32%	25%	19%	15%	11%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
49,4°	77°	99,1°	98,7%	95,0%



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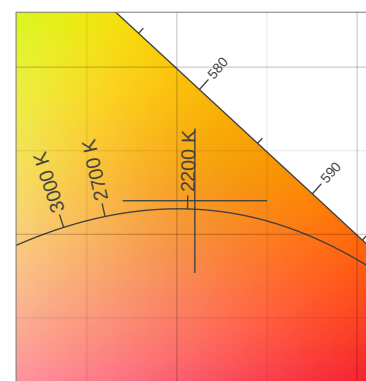
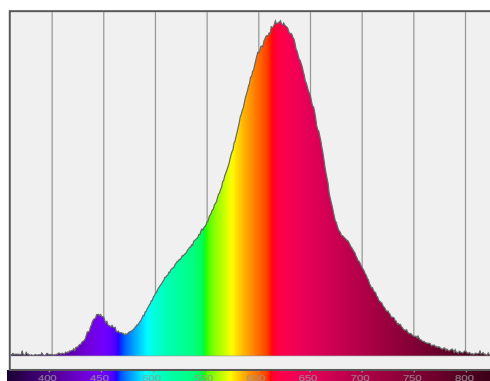
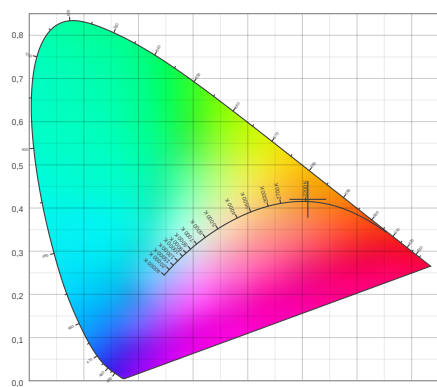
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Color details



CIE 1931

x: 0,510

2193 K

y: 0,420

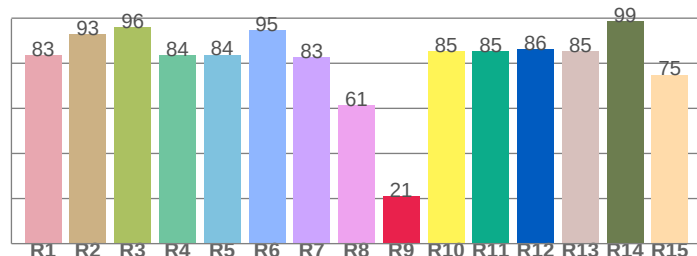
Spectra

CIE 1931 ZOOM

Δuv : 0,0016

CRI: 84,8 (R1-R8)

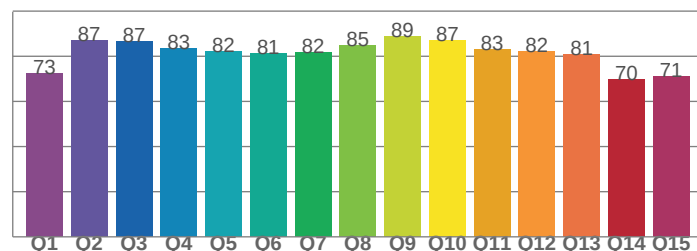
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
83,4	92,9	96,1	83,7	83,7	94,6	82,9	61,2
R9	R10	R11	R12	R13	R14	R15	
21,2	85,2	85,3	86,1	85,5	98,8	74,9	

CQS: 80,1

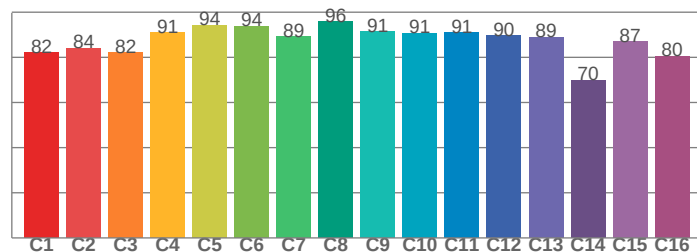
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
72,6	86,9	86,5	83,5	82,0	81,3	81,8	85,0
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
88,9	86,9	83,0	82,2	80,8	69,8	71,1	

TM30: 87,8

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



C1	C2	C3	C4	C5	C6	C7	C8
82,1	84,0	82,1	91,0	94,4	93,8	89,3	95,9
C9	C10	C11	C12	C13	C14	C15	
91,5	90,8	90,9	89,7	89,0	69,9	87,1	

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



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2193 K

84,8

21,2

87,8

96,1

80,1

0,510

0,420

0,291

0,359

0,0016

TM30 details

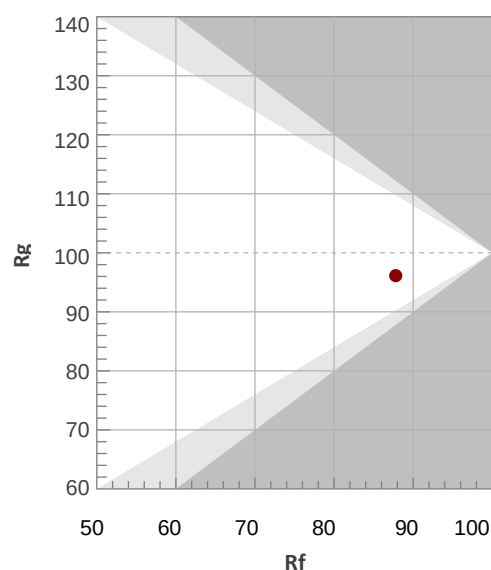
Rf 87,8

Fidelity index Rf

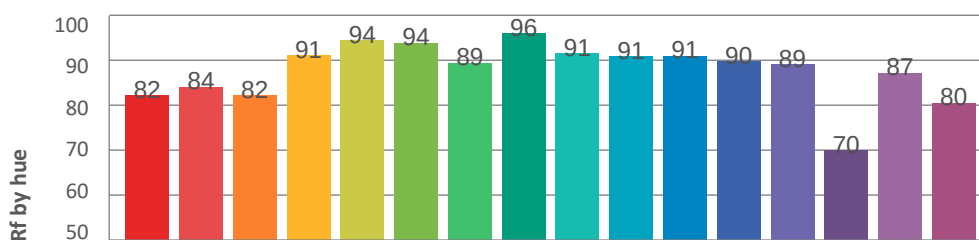
Rg 96,1

Gammut index Rg

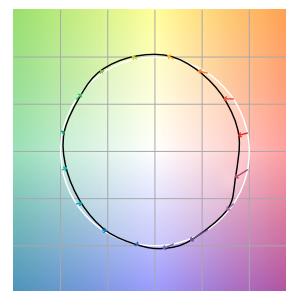
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	82	-9%	-1%
2	84	-8%	6%
3	82	-4%	9%
4	91	2%	6%
5	94	3%	4%
6	94	3%	0%
7	89	-1%	-7%
8	96	-2%	-1%
9	91	-4%	-1%
10	91	-5%	2%
11	91	-1%	4%
12	90	1%	2%
13	89	3%	-11%
14	70	-1%	-21%
15	87	-2%	-9%
16	80	-11%	-10%



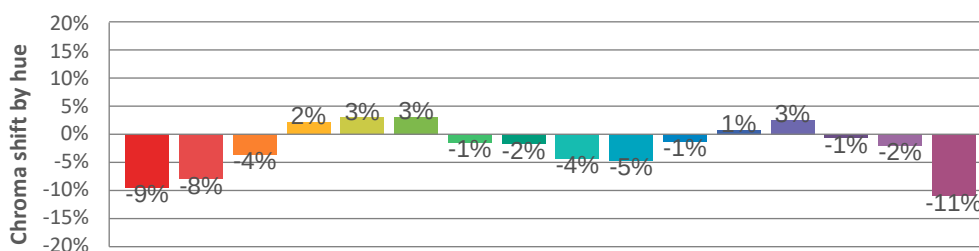
Hue binH



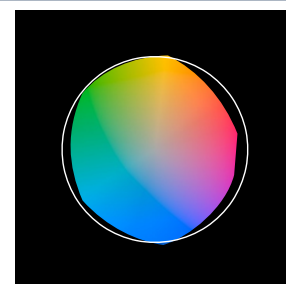
Color vector graphics



Hue bin



Color distortion graphics



Color Evaluation Sample

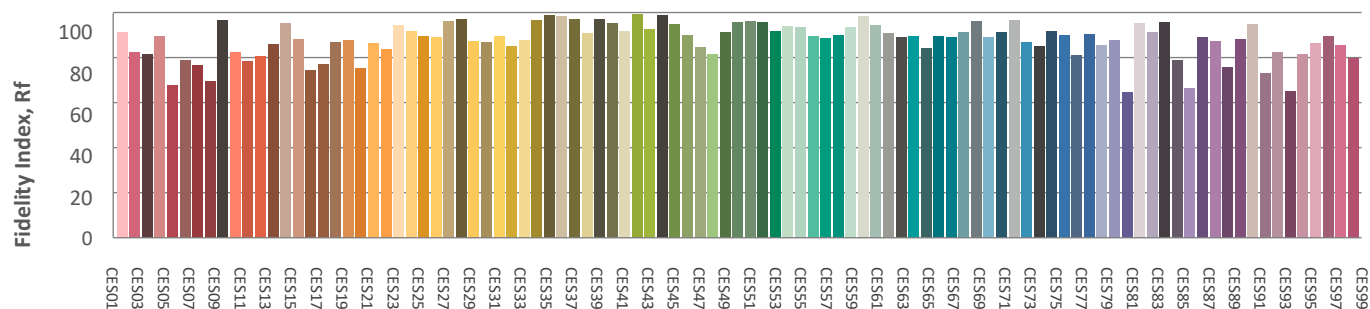
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Glare Evaluation According to UGR

[illegible]

Variation of the observer position for the luminaire distance S



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n/a	n/a	n/a
n/a	n/a	n/a
n/a	n/a	n/a
Standard table	n/a	n/a
Correction summand	n/a	n/a
Corrected glare indices referring to 1162lm total luminous flux		



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