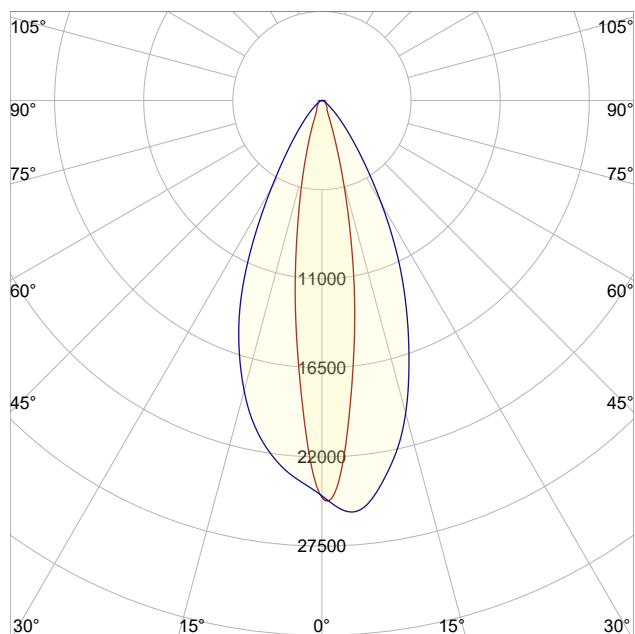
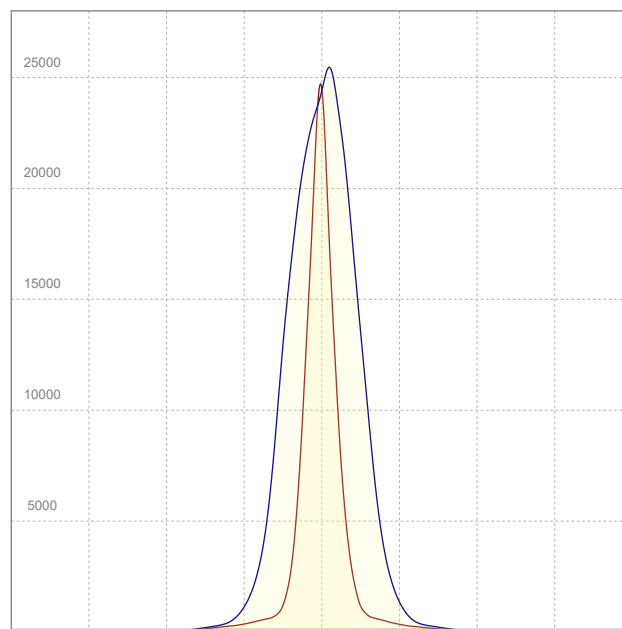


General Discription

Item number	Q-BXX-4080-E
Date and time	5-1-2024 15:10:03
CCT (Kelvin)	4166 K
Beam angle	46,2°
Luminous flux	10556 lm
Efficiency	138 lm/watt
Weighted energy	76,7 kWh/1000h
Power factor	0,53
CRI (RA)	88,4
Fidelity index Rf	Rf 87,4
Gammut index Rg	Rg 99,9
Peak	25459 cd



Polar curve

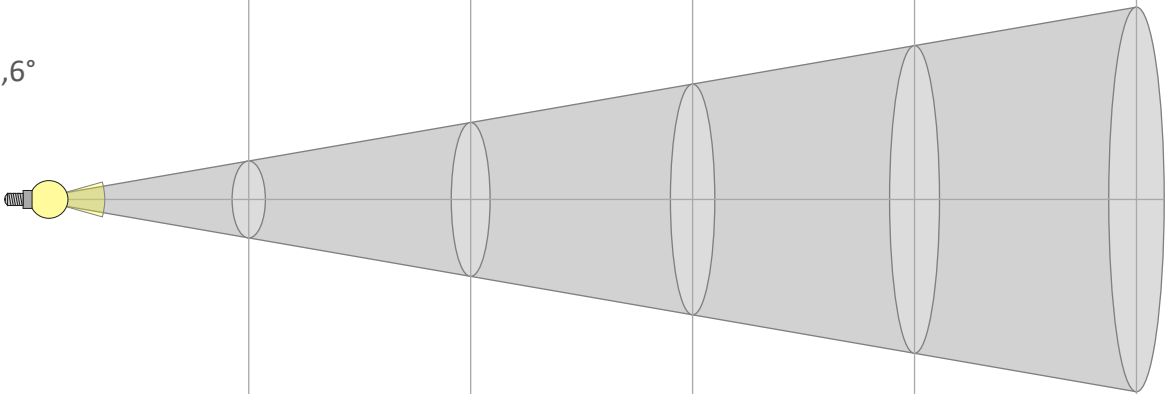


Linear distribution diagram

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Test Report

LM79-QUARTZ-4000K-CRI80-ELLIPTICAL

Beam details					1m		2m		3m		4m		5m						
Lux*					24398 lx		6100 lx		2711 lx		1525 lx		976 lx						
31,6° 																			
*measured at center of beam																			
Footcandles*					2266,7 fcd		566,7 fcd		251,9 fcd		141,7 fcd		90,7 fcd						
Beam width (meter)					0,6 m		1,1 m		1,7 m		2,3 m		2,8 m						
Beam width (Feet)					1,9 ft		3,7 ft		5,6 ft		7,4 ft		9,3 ft						
Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
24398lx	6100lx	2711lx	1525lx	976lx	678lx	498lx	381lx	301lx	244lx	202lx	169lx	144lx	124lx	108lx	95lx	84lx	75lx	68lx	61lx
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
2266,7fcd	566,7fcd	251,9fcd	141,7fcd	90,7fcd	63fcd	46,3fcd	35,4fcd	28fcd	22,7fcd	18,7fcd	15,7fcd	13,4fcd	11,6fcd	10,1fcd	8,9fcd	7,8fcd	7fcd	6,3fcd	5,7fcd
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°
24,4K	24,0K	21,2K	17,7K	14,5K	11,4K	8,5K	6,0K	4,1K	2,7K	1,9K	1,3K	1,0K	0,8K	0,7K	0,6K	0,6K	0,6K	0,5K	0,5K
100%	98%	87%	72%	59%	47%	35%	25%	17%	11%	8%	5%	4%	3%	3%	3%	2%	2%	2%	2%
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°
24,4K	25,0K	25,4K	25,2K	24,4K	23,3K	22,1K	20,7K	19,1K	17,4K	15,6K	13,9K	12,3K	10,6K	8,9K	7,3K	5,9K	4,7K	3,8K	3,0K
100%	103%	104%	103%	100%	95%	91%	85%	78%	71%	64%	57%	50%	43%	37%	30%	24%	19%	16%	12%
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°
24,4K	21,9K	18,2K	14,8K	11,9K	9,1K	6,8K	5,0K	3,6K	2,6K	1,8K	1,3K	1,0K	0,8K	0,7K	0,6K	0,6K	0,6K	0,5K	0,5K
100%	90%	75%	61%	49%	37%	28%	20%	15%	10%	7%	5%	4%	3%	3%	3%	2%	2%	2%	2%
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°
24,4K	23,8K	23,4K	22,8K	22,1K	21,3K	20,3K	19,2K	17,9K	16,5K	15,0K	13,4K	11,6K	9,7K	7,8K	6,2K	4,9K	3,9K	3,1K	2,5K
100%	98%	96%	93%	91%	87%	83%	79%	73%	67%	61%	55%	47%	40%	32%	26%	20%	16%	13%	10%
Beam angle 50%				Field angle 10%				Cutoff angle 2,5%				Intensity ratio in 120° cone				Intensity ratio in 90° cone			
31,6°				56,9°				81,5°				96,9%				91,6%			



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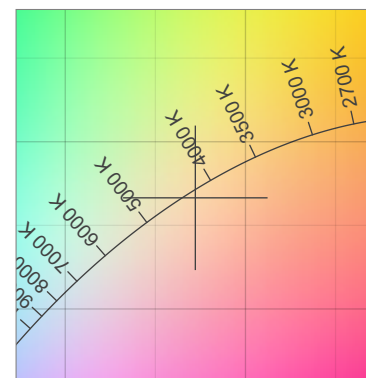
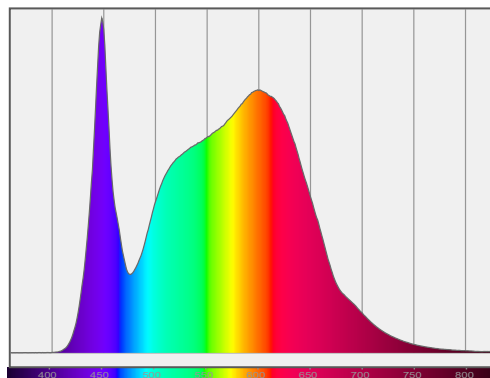
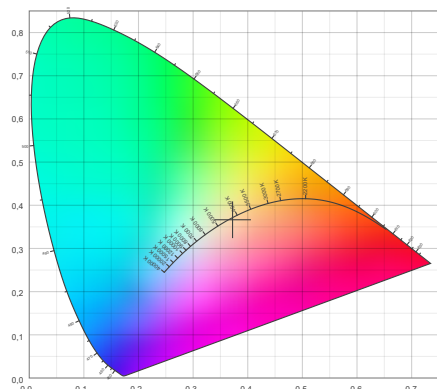
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Test Report

LM79-QUARTZ-4000K-CRI80-ELLIPTICAL

Color details



CIE 1931

x: 0,372

4166 K

y: 0,366

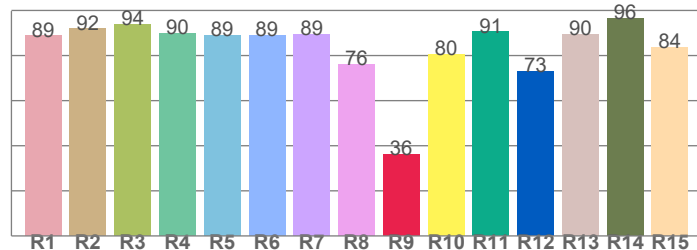
Spectra

CIE 1931 ZOOM

Δuv : -0,0024

CRI: 88,4 (R1-R8)

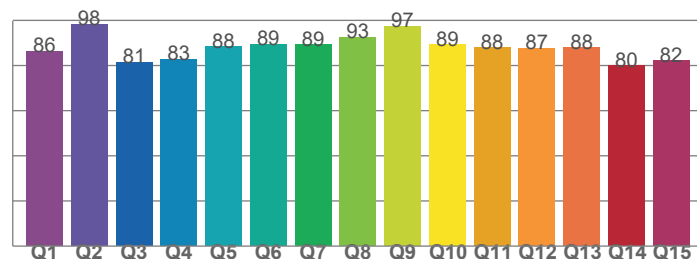
CRI values, R1-R8 are used to calculate final CRI value



R1	R2	R3	R4	R5	R6	R7	R8
88,7	91,9	93,8	89,7	88,9	88,9	89,4	76,0
R9	R10	R11	R12	R13	R14	R15	
36,3	80,5	90,6	73,2	89,5	96,4	83,6	

CQS: 86,9

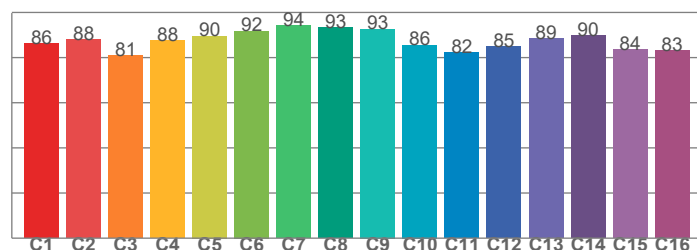
CQS values



Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
86,4	98,2	81,4	82,6	88,2	89,2	89,2	92,6
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
97,4	89,2	87,9	87,5	87,9	79,9	82,1	

TM30: 87,4

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



C1	C2	C3	C4	C5	C6	C7	C8
86,4	88,1	81,1	87,7	89,6	91,8	94,1	93,4
C9	C10	C11	C12	C13	C14	C15	
92,7	85,6	82,2	85,1	88,6	89,9	83,5	

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
4166 K	88,4	36,3	87,4	99,9	86,9	0,372	0,366	0,224	0,330	-0,0024



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LM-79

Test Report

LM79-QUARTZ-4000K-CRI80-ELLIPTICAL

TM30 details

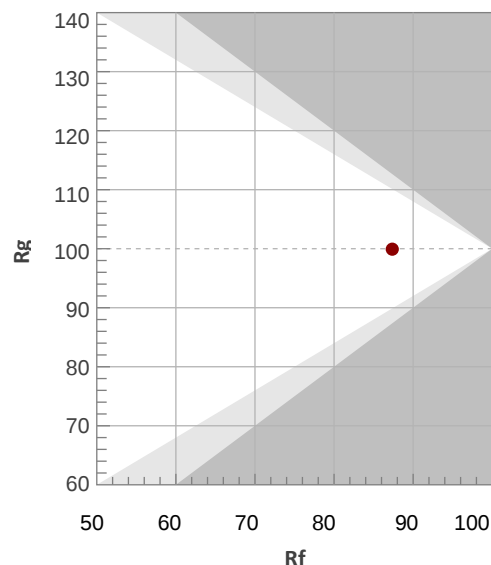
Rf 87,4

Fidelity index Rf

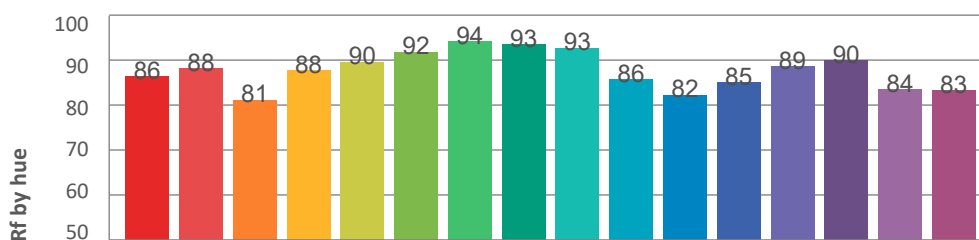
Rg 99,9

Gamut index Rg

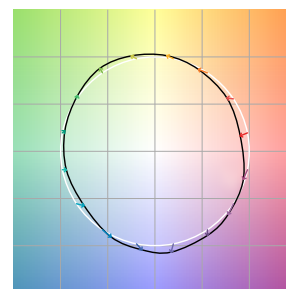
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	86	-8%	-2%
2	88	-5%	5%
3	81	-2%	10%
4	88	2%	7%
5	90	4%	5%
6	92	5%	0%
7	94	1%	-4%
8	93	-2%	-3%
9	93	-4%	1%
10	86	-6%	6%
11	82	1%	12%
12	85	5%	7%
13	89	8%	-4%
14	90	5%	-3%
15	84	2%	-12%
16	83	-2%	-11%



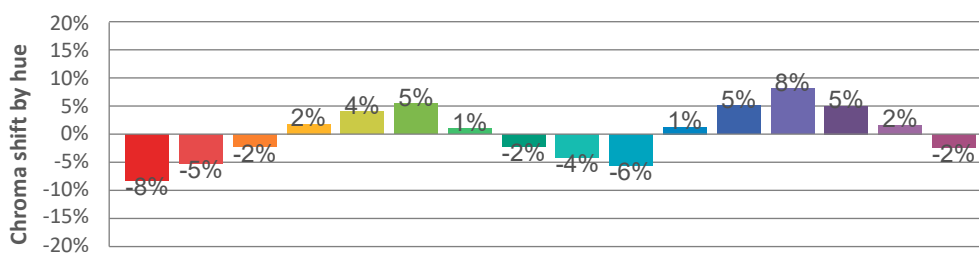
Hue binH



Color vector graphics



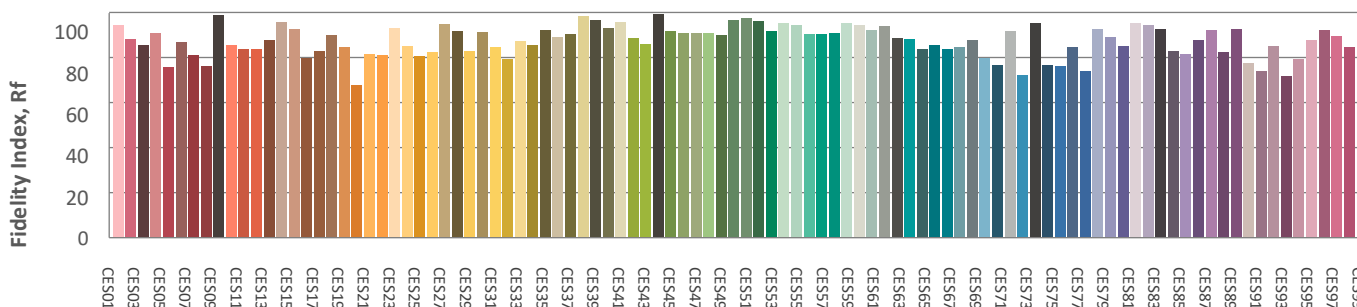
Hue bin



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				
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Variation of the observer position for the luminaire distance S										
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 10556lm total luminous flux										