

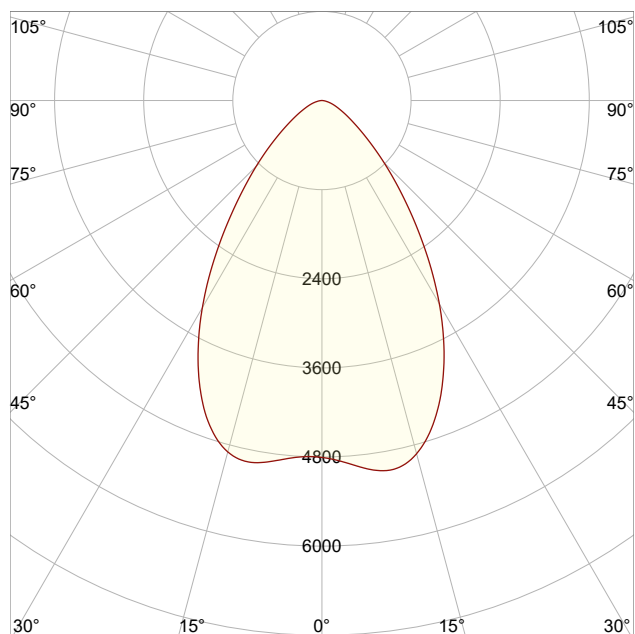
LM-79

Test Report

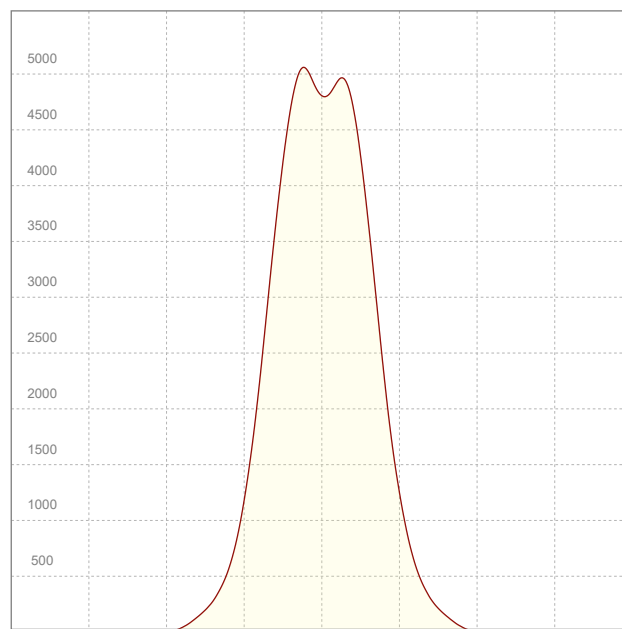
LM79-QUARTZ-1800K-CRI80-FLOOD

General Discription

Item number	Q-BXX-2280-F
Date and time	5-1-2024 16:40:21
CCT (Kelvin)	1850 K
Beam angle	68,6°
Luminous flux	6966 lm
Efficiency	90 lm/watt
Weighted energy	77,2 kWh/1000h
Power factor	0,57
CRI (RA)	72,8
Fidelity index Rf	Rf 79,0
Gammut index Rg	Rg 91,7
Peak	5060 cd



Polar curve



Linear distribution diagram



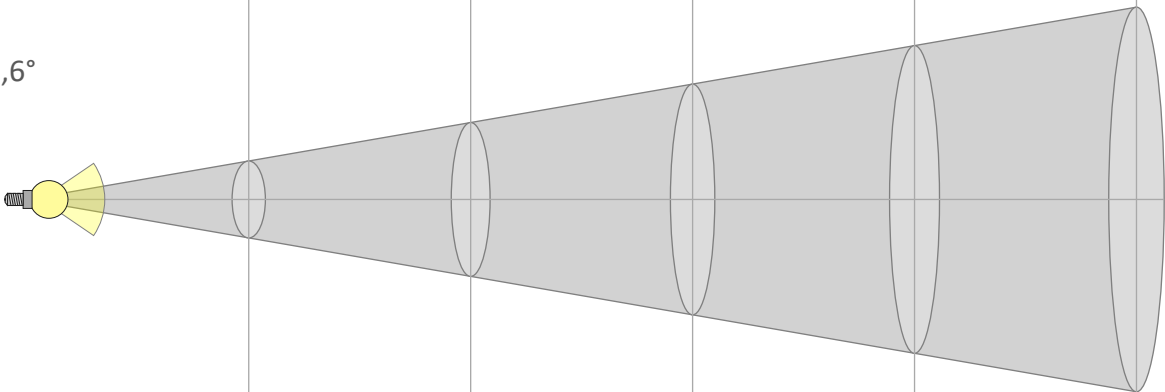
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Beam details					1m		2m		3m		4m		5m						
Lux*					4806 lx		1202 lx		534 lx		300 lx		192 lx						
68,6° 																			
*measured at center of beam																			
Footcandles*					446,5 fcd		111,6 fcd		49,6 fcd		27,9 fcd		17,9 fcd						
Beam width (meter)					1,4 m		2,7 m		4,1 m		5,5 m		6,8 m						
Beam width (Feet)					4,5 ft		9 ft		13,4 ft		17,9 ft		22,4 ft						
Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
4806lx	1202lx	534lx	300lx	192lx	134lx	98lx	75lx	59lx	48lx	40lx	33lx	28lx	25lx	21lx	19lx	17lx	15lx	13lx	12lx
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
446,5fcd	111,6fcd	49,6fcd	27,9fcd	17,9fcd	12,4fcd	9,1fcd	7fcd	5,5fcd	4,5fcd	3,7fcd	3,1fcd	2,6fcd	2,3fcd	2fcd	1,7fcd	1,5fcd	1,4fcd	1,2fcd	1,1fcd
Intensities in 0° c-plane																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
4806	4927	5057	4921	4499	3887	3161	2395	1715	1181	783	520	354	240	162	99	49	16	2	0
100%	103%	105%	102%	94%	81%	66%	50%	36%	25%	16%	11%	7%	5%	3%	2%	1%	0%	0%	0%
Intensities in 90° c-plane																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
4806	4927	5057	4921	4499	3887	3161	2395	1715	1181	783	520	354	240	162	99	49	16	2	0
100%	103%	105%	102%	94%	81%	66%	50%	36%	25%	16%	11%	7%	5%	3%	2%	1%	0%	0%	0%
Intensities in 180° c-plane																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
4806	4833	4950	4896	4538	3941	3218	2454	1773	1249	847	564	382	257	174	109	56	20	4	0
100%	101%	103%	102%	94%	82%	67%	51%	37%	26%	18%	12%	8%	5%	4%	2%	1%	0%	0%	0%
Intensities in 270° c-plane																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
4806	4833	4950	4896	4538	3941	3218	2454	1773	1249	847	564	382	257	174	109	56	20	4	0
100%	101%	103%	102%	94%	82%	67%	51%	37%	26%	18%	12%	8%	5%	4%	2%	1%	0%	0%	0%
Beam angle 50%				Field angle 10%				Cutoff angle 2,5%				Intensity ratio in 120° cone				Intensity ratio in 90° cone			
68,6°				111,7°				146,4°				94,5%				81,5%			



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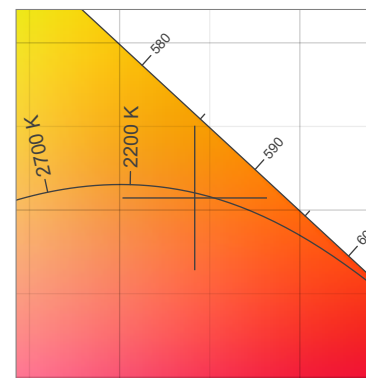
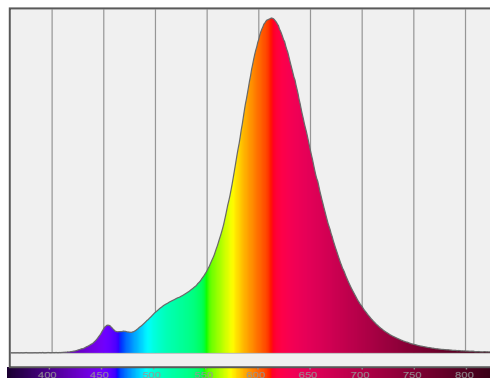
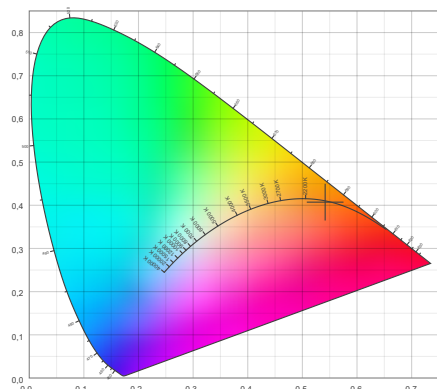
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LM79-QUARTZ-1800K-CRI80-FLOOD

Color details



CIE 1931

x: 0,542



Spectra

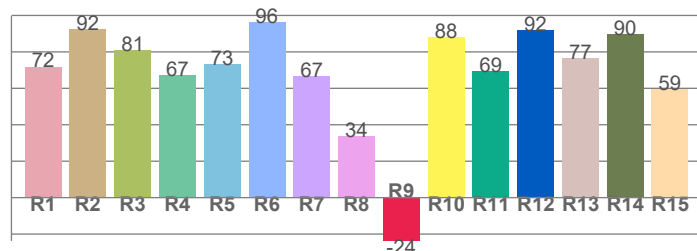
CIE 1931 ZOOM

1850 K

y: 0,407

Δuv : -0,0009

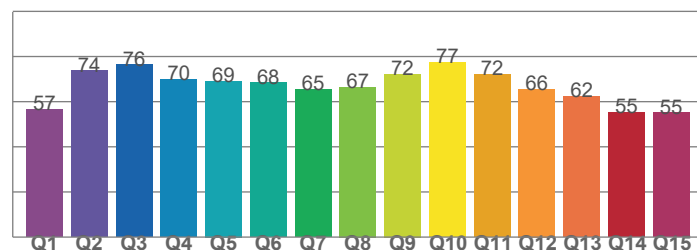
CRI: 72,8 (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
71,9	92,3	80,9	67,3	73,5	96,1	66,8	33,7
R9	R10	R11	R12	R13	R14	R15	
-23,8	88,0	69,3	91,8	76,7	89,9	59,5	

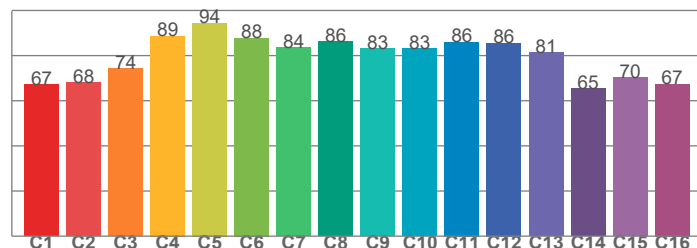
CQS: 65,5



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
56,6	73,6	76,3	69,9	69,1	68,4	65,3	66,5
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
72,3	77,3	72,0	65,6	62,4	55,4	55,1	

TM30: 79,0



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

C1	C2	C3	C4	C5	C6	C7	C8
67,3	68,1	74,3	88,7	94,4	87,7	83,6	86,2
C9	C10	C11	C12	C13	C14	C15	
83,2	83,2	86,0	85,6	81,5	65,4	70,3	

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
1850 K	72,8	-23,8	79,0	91,7	65,5	0,542	0,407	0,318	0,359	-0,0009



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Test Report

LM79-QUARTZ-1800K-CRI80-FLOOD

TM30 details

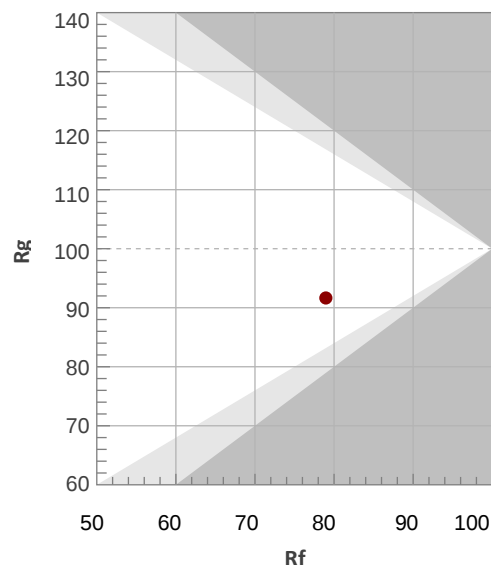
Rf 79,0

Fidelity index Rf

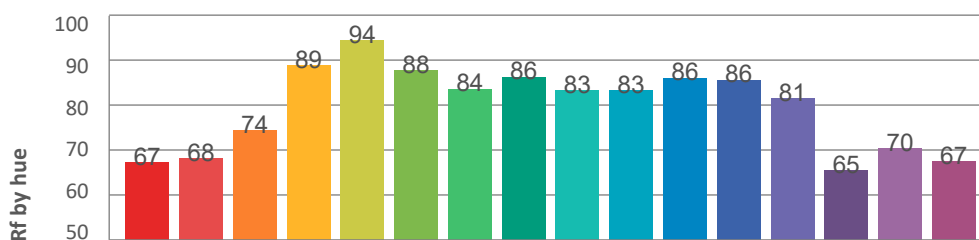
Rg 91,7

Gamut index Rg

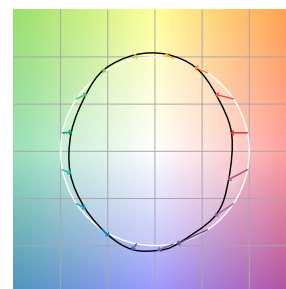
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	67	-17%	3%
2	68	-13%	14%
3	74	-2%	14%
4	89	3%	9%
5	94	4%	1%
6	88	2%	-4%
7	84	-6%	-10%
8	86	-9%	-2%
9	83	-7%	5%
10	83	-5%	9%
11	86	1%	9%
12	86	7%	-3%
13	81	4%	-17%
14	65	-5%	-35%
15	70	-9%	-21%
16	67	-18%	-14%



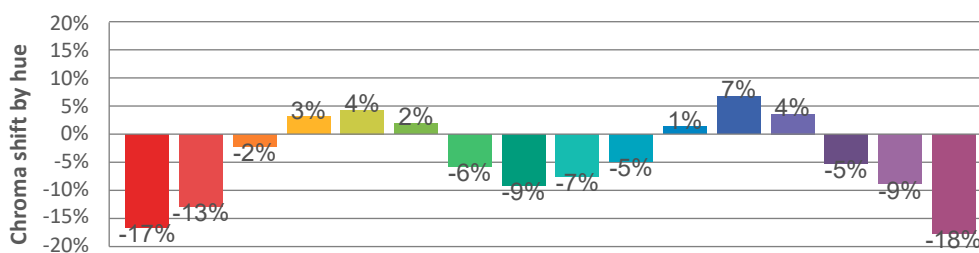
Hue binH



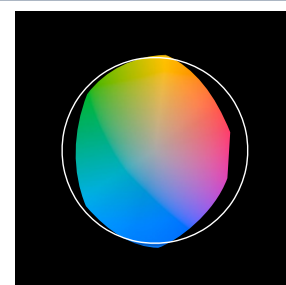
Color vector graphics



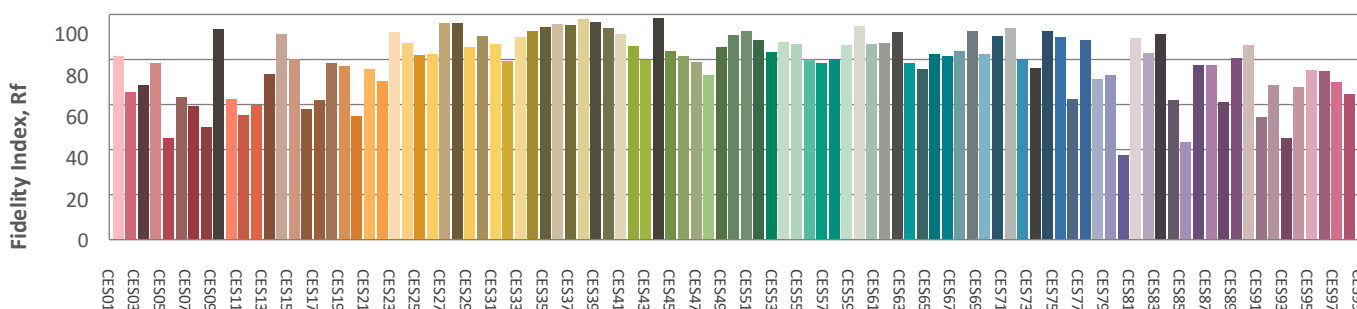
Hue bin



Color distortion graphics



Color Evaluation Sample



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Test Report

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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
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 6966lm total luminous flux										



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