

LM-79

Test Report

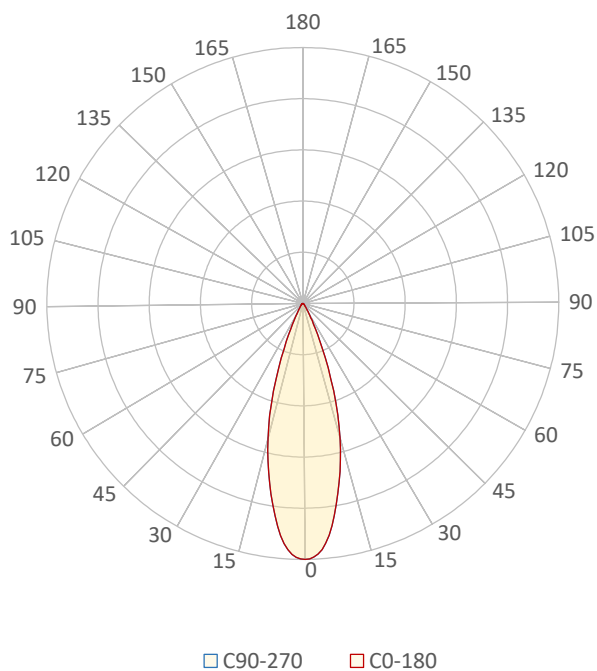
LM79-QUARTZ-RGBA-30DEG [ALL]

General Discription

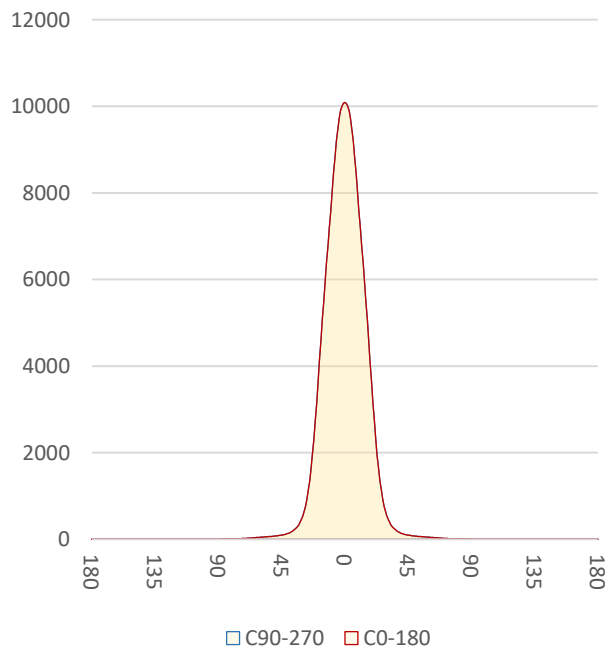
Item number	Q-XXX-CA70-M
Date and time	15-4-2024 15:06:29
CCT (Kelvin)	0 K
Beam angle	32,1°
Luminous flux	3343 lm
Efficiency	45 lm/watt
Weighted energy	75,0 kWh/1000h
Power factor	0,57
CRI (RA)	0,0
Fidelity index Rf	Rf 0,0
Gammut index Rg	Rg 0,0
Peak	10090 cd



Polar diagram



Cartesian diagram



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Beam details	1m	2m	3m	4m	5m
Lux*	10090 lx	2523 lx	1121 lx	631 lx	404 lx

32,1°

*measured at center of beam

Footcandles*	937,4 fcd	234,4 fcd	104,2 fcd	58,6 fcd	37,5 fcd
Beam width (meter)	0,6 m	1,2 m	1,7 m	2,3 m	2,9 m
Beam width (Feet)	1,9 ft	3,8 ft	5,7 ft	7,5 ft	9,4 ft

Beam intensities																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
10090lx	2523lx	1121lx	631lx	404lx	280lx	206lx	158lx	125lx	101lx	83lx	70lx	60lx	51lx	45lx	39lx	35lx	31lx	28lx	25lx
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
937,4fcd	234,4fcd	104,2fcd	58,6fcd	37,5fcd	26fcd	19,1fcd	14,6fcd	11,6fcd	9,4fcd	7,7fcd	6,5fcd	5,5fcd	4,8fcd	4,2fcd	3,7fcd	3,2fcd	2,9fcd	2,6fcd	2,3fcd

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°
10,1K	10,0K	9,7K	9,2K	8,4K	7,6K	6,8K	5,9K	5,1K	4,1K	3,2K	2,3K	1,6K	1,1K	0,8K	0,5K	0,4K	0,3K	0,2K	0,2K
100%	99%	96%	91%	84%	75%	67%	59%	50%	41%	31%	23%	16%	11%	8%	5%	4%	3%	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°
10,1K	10,0K	9,7K	9,2K	8,4K	7,6K	6,8K	5,9K	5,1K	4,1K	3,2K	2,3K	1,6K	1,1K	0,8K	0,5K	0,4K	0,3K	0,2K	0,2K
100%	99%	96%	91%	84%	75%	67%	59%	50%	41%	31%	23%	16%	11%	8%	5%	4%	3%	2%	2%

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°
10,1K	10,0K	9,7K	9,2K	8,4K	7,6K	6,8K	5,9K	5,1K	4,1K	3,2K	2,3K	1,6K	1,1K	0,8K	0,5K	0,4K	0,3K	0,2K	0,2K
100%	99%	96%	91%	84%	75%	67%	59%	50%	41%	31%	23%	16%	11%	8%	5%	4%	3%	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°
10,1K	10,0K	9,7K	9,2K	8,4K	7,6K	6,8K	5,9K	5,1K	4,1K	3,2K	2,3K	1,6K	1,1K	0,8K	0,5K	0,4K	0,3K	0,2K	0,2K
100%	99%	96%	91%	84%	75%	67%	59%	50%	41%	31%	23%	16%	11%	8%	5%	4%	3%	2%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
32,1°	53°	69,7°	98,4%	95,8%



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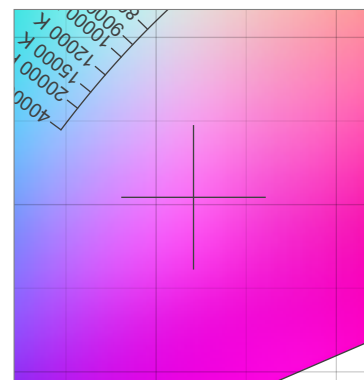
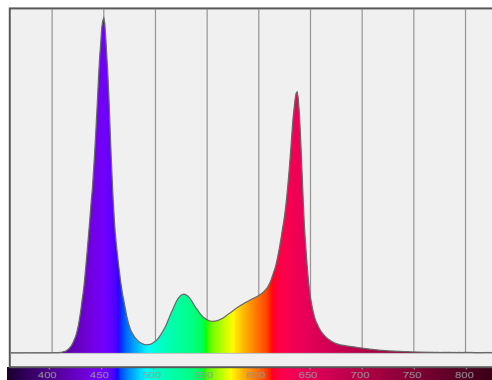
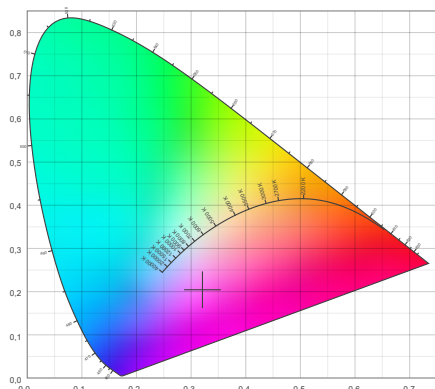
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Color details



CIE 1931

x: 0,321



Spectra

CIE 1931 ZOOM

0 K

y: 0,204

 Δuv : n/a

CRI: 0,0 (R1-R8)

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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15

R1	R2	R3	R4	R5	R6	R7	R8
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
R9	R10	R11	R12	R13	R14	R15	
0,0	0,0	0,0	0,0	0,0	0,0	0,0	

CQS: 0,0

CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
0,0	0,0	0,0	0,0	0,0	0,0	0,0	

TM30: 0,0

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

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

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
0 K	0,0	0,0	0,0	0,0	0,0	0,321	0,204	0,267	0,255	n/a



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TM30 details

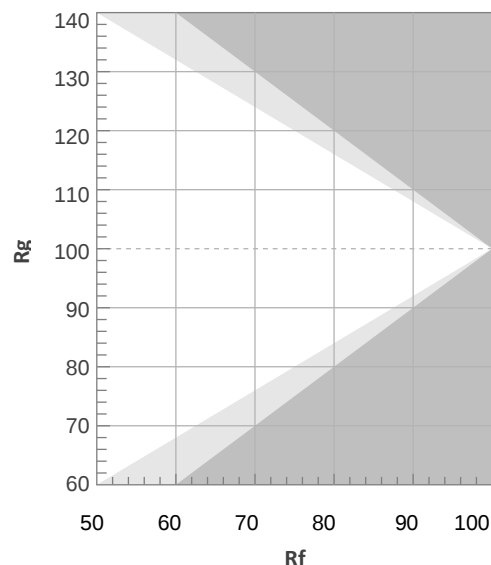
Rf 0,0

Fidelity index Rf

Rg 0,0

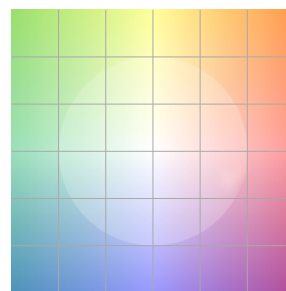
Gammut index Rg

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%



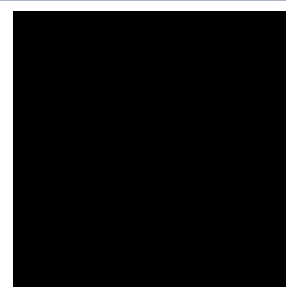
Hue binH

Color vector graphics

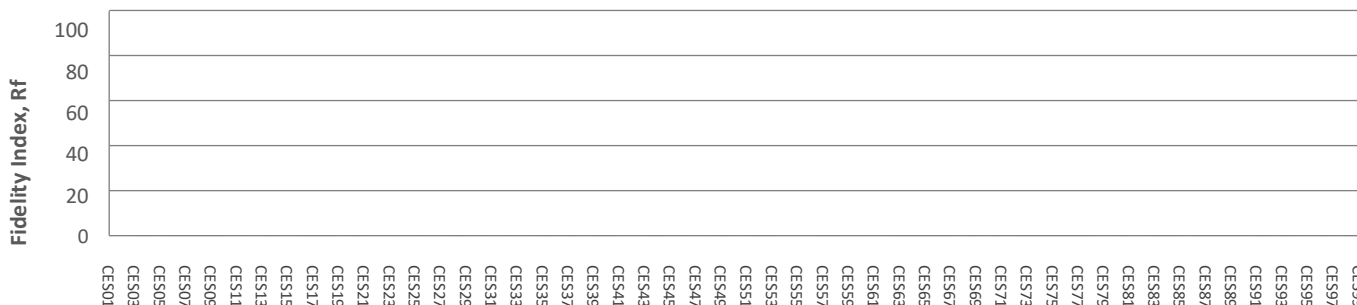


Hue bin

Color distortion graphics



Color Evaluation Sample



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	8,3	8,8	8,4	9,0	9,2	8,3	8,8	8,4	9,0	9,2
	3H	8,7	9,3	9,1	9,5	9,7	8,7	9,3	9,1	9,5	9,7
	4H	8,8	9,4	9,2	9,7	9,9	8,8	9,4	9,2	9,7	9,9
	6H	8,9	9,4	9,2	9,7	10,1	8,9	9,4	9,2	9,7	10,1
	8H	8,9	9,4	9,2	9,7	10,1	8,9	9,4	9,2	9,7	10,1
	12H	8,9	9,3	9,2	9,7	10,1	8,9	9,3	9,2	9,7	10,1
4H	2H	8,4	9,0	8,7	9,2	9,4	8,4	9,0	8,7	9,2	9,4
	3H	9,1	9,6	9,4	9,9	10,3	9,1	9,6	9,4	9,9	10,3
	4H	9,2	9,7	9,6	10,1	10,6	9,2	9,7	9,6	10,1	10,6
	6H	9,3	9,8	9,8	10,1	10,4	9,3	9,8	9,8	10,1	10,4
	8H	9,2	9,7	9,8	10,0	10,4	9,2	9,7	9,8	10,0	10,4
	12H	9,2	9,6	9,7	10,0	10,4	9,2	9,6	9,7	10,0	10,4
8H	4H	9,2	9,7	9,7	10,0	10,4	9,2	9,7	9,7	10,0	10,4
	6H	9,3	9,6	9,8	10,0	10,6	9,3	9,6	9,8	10,0	10,6
	8H	9,3	9,6	9,9	10,1	10,7	9,3	9,6	9,9	10,1	10,7
	12H	9,3	9,5	9,9	10,0	10,6	9,3	9,5	9,9	10,0	10,6
12H	4H	9,1	9,5	9,6	9,9	10,4	9,1	9,5	9,6	9,9	10,4
	6H	9,3	9,5	9,8	10,1	10,7	9,3	9,5	9,8	10,1	10,7
	8H	9,3	9,5	9,9	10,0	10,6	9,3	9,5	9,9	10,0	10,6
Variation of the observer position for the luminaire distance S											
S = 1.0H		2,0 / -1,0					2,0 / -1,0				
S = 1.5H		3,8 / -1,5					3,8 / -1,5				
S = 2.0H		5,3 / -2,5					5,3 / -2,5				
Standard table		n/a					n/a				
Correction summand		n/a					n/a				
Corrected glare indices referring to 3343lm total luminous flux											