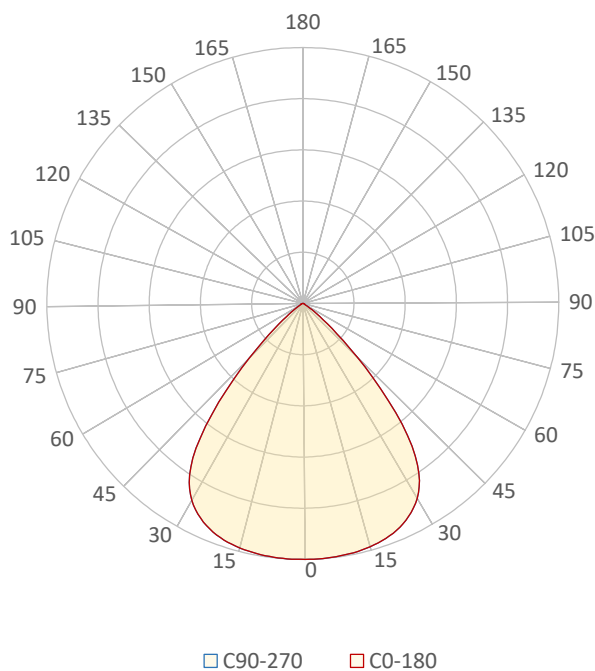


#### General Description

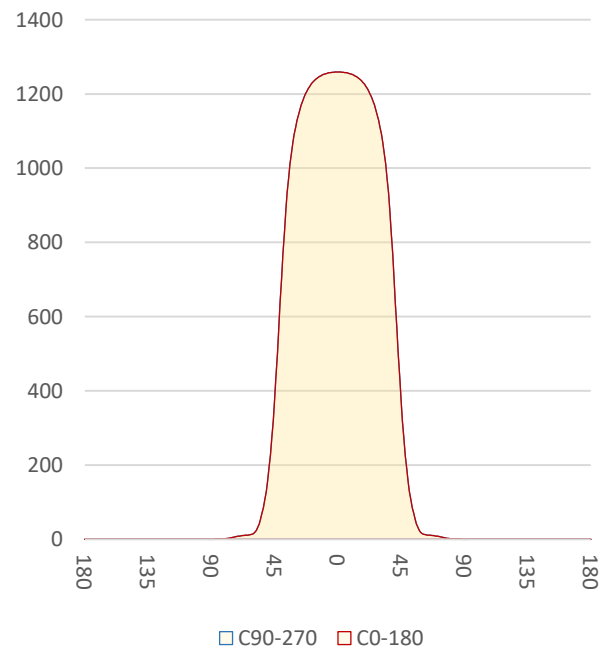
Item number	E-L5-X-X-4090
Date and time	2-12-2022 14:38:48
CCT (Kelvin)	3938 K
Beam angle	82,2°
Luminous flux	1980 lm
Efficiency	104 lm/watt
Weighted energy	19,0 kWh/1000h
Power factor	0,94
CRI (RA)	92,8
Fidelity index Rf	Rf 90,3
Gammut index Rg	Rg 100,1
Peak	1259 cd



*Polar diagram*



*Cartesian diagram*



# LM-79

## Test Report

### LM79-EMERALD-L5-4000K-CRI90

Beam details	1m	2m	3m	4m	5m														
Lux*	1259 lx	315 lx	140 lx	79 lx	50 lx														
*measured at center of beam																			
Footcandles*	117,0 fcd	29,2 fcd	13,0 fcd	7,3 fcd	4,7 fcd														
Beam width (meter)	1,7 m	3,5 m	5,2 m	7 m	8,7 m														
Beam width (Feet)	5,7 ft	11,5 ft	17,2 ft	22,9 ft	28,6 ft														
<b>Beam intensities</b>																			
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
1259lx	315lx	140lx	79lx	50lx	35lx	26lx	20lx	16lx	13lx	10lx	9lx	7lx	6lx	6lx	5lx	4lx	4lx	3lx	3lx
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
117fcd	29,2fcd	13fcd	7,3fcd	4,7fcd	3,2fcd	2,4fcd	1,8fcd	1,4fcd	1,2fcd	1fcd	0,8fcd	0,7fcd	0,6fcd	0,5fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd
<b>Intensities in 0° c-plane</b>																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1259	1258	1253	1242	1221	1181	1111	975	704	376	156	54	15	11	9	5	2	0	0	0
100%	100%	100%	99%	97%	94%	88%	77%	56%	30%	12%	4%	1%	1%	1%	0%	0%	0%	0%	0%
<b>Intensities in 90° c-plane</b>																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1259	1258	1253	1242	1221	1181	1111	975	704	376	156	54	15	11	9	5	2	0	0	0
100%	100%	100%	99%	97%	94%	88%	77%	56%	30%	12%	4%	1%	1%	1%	0%	0%	0%	0%	0%
<b>Intensities in 180° c-plane</b>																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1259	1258	1253	1242	1221	1181	1111	975	704	376	156	54	15	11	9	5	2	0	0	0
100%	100%	100%	99%	97%	94%	88%	77%	56%	30%	12%	4%	1%	1%	1%	0%	0%	0%	0%	0%
<b>Intensities in 270° c-plane</b>																			
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1259	1258	1253	1242	1221	1181	1111	975	704	376	156	54	15	11	9	5	2	0	0	0
100%	100%	100%	99%	97%	94%	88%	77%	56%	30%	12%	4%	1%	1%	1%	0%	0%	0%	0%	0%
Beam angle 50%		Field angle 10%				Cutoff angle 2,5%				Intensity ratio in 120° cone				Intensity ratio in 90° cone					
82,2°		102,2°				114°				99,1%				91,1%					



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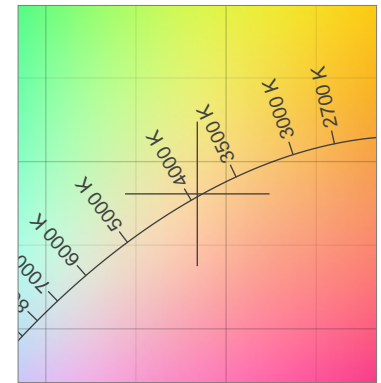
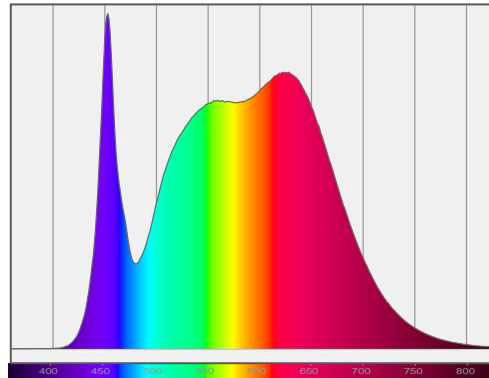
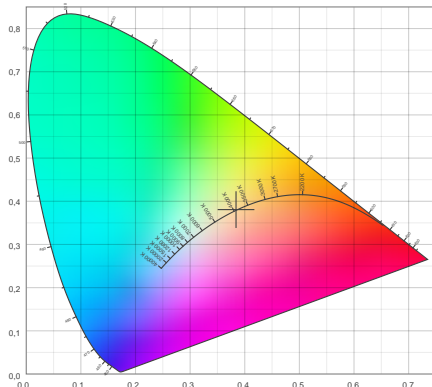
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# LM-79

## Test Report

# LM79-EMERALD-L5-4000K-CRI90

### Color details



CIE 1931

x: 0,384



Spectra

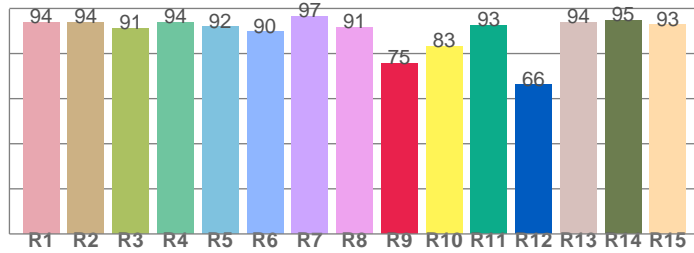
CIE 1931 ZOOM

3938 K

y: 0,381

$\Delta uv$ : 0,0008

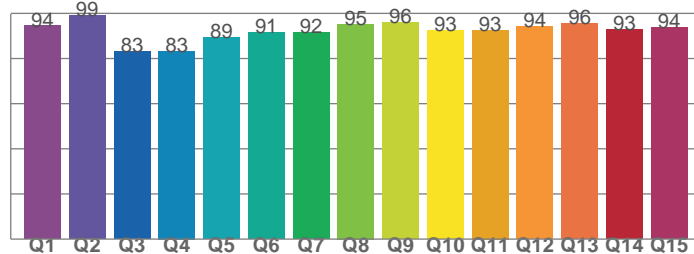
**CRI: 92,8 (R1-R8)**



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

R1	R2	R3	R4	R5	R6	R7	R8
93,7	93,8	91,4	93,8	91,8	89,6	96,6	91,4
R9	R10	R11	R12	R13	R14	R15	
75,5	83,2	92,5	66,1	93,6	94,6	92,7	

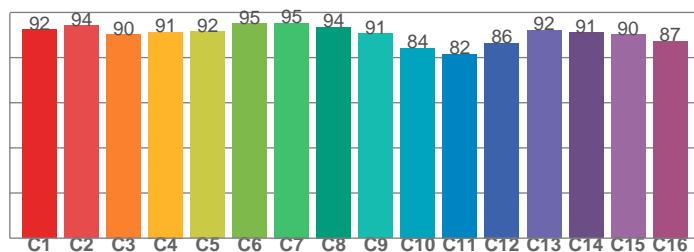
**CQS: 91,3**



*CQS values*

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
94,5	99,0	83,1	83,4	89,3	91,5	91,5	95,3
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
96,0	92,6	92,7	94,3	95,5	92,9	93,6	

**TM30: 90,3**



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

C1	C2	C3	C4	C5	C6	C7	C8
92,4	94,3	90,3	91,4	91,5	95,2	95,4	93,6
C9	C10	C11	C12	C13	C14	C15	
90,7	84,2	81,6	86,4	92,1	91,1	90,3	

### 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	$\Delta uv$
3938 K	92,8	75,5	90,3	100,1	91,3	0,384	0,381	0,226	0,336	0,0008



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# LM-79

## Test Report

### LM79-EMERALD-L5-4000K-CRI90

#### 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	27,0	27,8	27,1	28,0	28,2	27,0	27,8	27,1	28,0	28,2
	3H	26,7	27,6	27,1	27,8	28,0	26,7	27,6	27,1	27,8	28,0
	4H	26,6	27,5	27,0	27,7	28,0	26,6	27,5	27,0	27,7	28,0
	6H	26,6	27,3	26,9	27,6	28,0	26,6	27,3	26,9	27,6	28,0
	8H	26,6	27,3	26,9	27,6	28,0	26,6	27,3	26,9	27,6	28,0
	12H	26,5	27,2	26,9	27,5	28,0	26,5	27,2	26,9	27,5	28,0
4H	2H	26,6	27,5	27,0	27,7	28,0	26,6	27,5	27,0	27,7	28,0
	3H	26,5	27,2	26,9	27,5	28,0	26,5	27,2	26,9	27,5	28,0
	4H	26,4	27,0	26,8	27,4	27,9	26,4	27,0	26,8	27,4	27,9
	6H	26,3	26,9	26,8	27,3	27,6	26,3	26,9	26,8	27,3	27,6
	8H	26,3	26,8	26,8	27,2	27,5	26,3	26,8	26,8	27,2	27,5
	12H	26,2	26,7	26,7	27,1	27,5	26,2	26,7	26,7	27,1	27,5
8H	4H	26,3	26,8	26,8	27,2	27,5	26,3	26,8	26,8	27,2	27,5
	6H	26,2	26,6	26,7	27,1	27,6	26,2	26,6	26,7	27,1	27,6
	8H	26,2	26,5	26,7	27,0	27,7	26,2	26,5	26,7	27,0	27,7
	12H	26,1	26,4	26,7	26,9	27,5	26,1	26,4	26,7	26,9	27,5
12H	4H	26,2	26,7	26,7	27,1	27,5	26,2	26,7	26,7	27,1	27,5
	6H	26,2	26,5	26,7	27,0	27,7	26,2	26,5	26,7	27,0	27,7
	8H	26,1	26,4	26,7	26,9	27,5	26,1	26,4	26,7	26,9	27,5
Variation of the observer position for the luminaire distance S											
S = 1.0H	3,5 / -11,8					3,5 / -11,8					
S = 1.5H	5,9 / -17,6					5,9 / -17,6					
S = 2.0H	7,8 / -18,1					7,8 / -18,1					
Standard table	n/a					n/a					
Correction summand	n/a					n/a					
Corrected glare indices referring to 1980lm total luminous flux											



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