LM-79
Test Report

LM79-REVO-COMPACT-TRACK-2700K-CRI80-DEG12x46

General Discription	
Item number	RC-X-X-04-2
Date and time	5-8-2016 11:23:47
CCT (Kelvin)	2708 K
Beam angle	30°
Luminous flux	967 lm
Efficiency	96 lm/watt
Weighted energy	10,1 kWh/1000h
Power factor	0,95
CRI (RA)	83,5
Fidelity index Rf	Rf 84,2
Gammut index Rg	Rg 96,9

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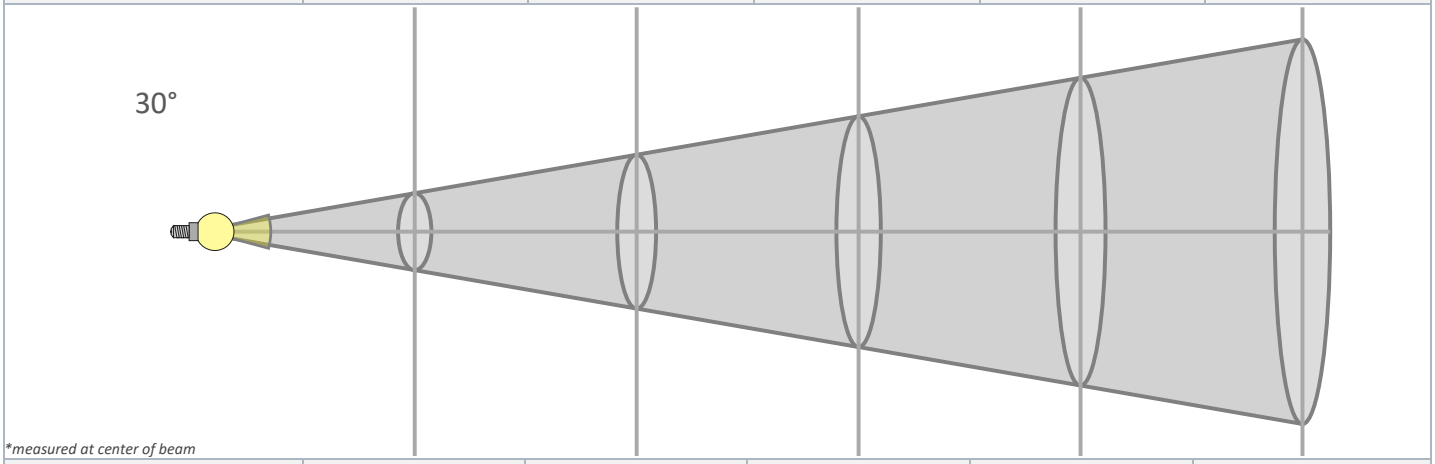
Beam details	1m	2m	3m	4m	5m
*Lux**	2696 lx	674 lx	300 lx	169 lx	108 lx



*measured at center of beam

*Footcandles**	250,5 fcd	62,6 fcd	27,8 fcd	15,7 fcd	10,0 fcd
Beam width (meter)	0,5 m	1,1 m	1,6 m	2,1 m	2,7 m
Beam width (Feet)	1,8 ft	3,5 ft	5,3 ft	7 ft	8,8 ft

Beam intensities

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
2696lx	674lx	300lx	169lx	108lx	75lx	55lx	42lx	33lx	27lx	22lx	19lx	16lx	14lx	12lx	11lx	9lx	8lx	7lx	7lx
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
250,5fcd	62,6fcd	27,8fcd	15,7fcd	10fcd	7fcd	5,1fcd	3,9fcd	3,1fcd	2,5fcd	2,1fcd	1,7fcd	1,5fcd	1,3fcd	1,1fcd	1fcd	0,9fcd	0,8fcd	0,7fcd	0,6fcd

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°
2696	2683	2655	2642	2564	2476	2365	2230	2066	1878	1673	1466	1259	1048	852	678	528	401	302	223
100%	100%	98%	98%	95%	92%	88%	83%	77%	70%	62%	54%	47%	39%	32%	25%	20%	15%	11%	8%

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°
2696	2352	1972	1550	1097	668	475	283	176	118	69	53	38	31	26	22	19	16	15	13
100%	87%	73%	57%	41%	25%	18%	10%	7%	4%	3%	2%	1%	1%	1%	1%	1%	1%	1%	0%

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°
2696	2683	2655	2642	2564	2476	2365	2230	2066	1878	1673	1466	1259	1048	852	678	528	401	302	223
100%	100%	98%	98%	95%	92%	88%	83%	77%	70%	62%	54%	47%	39%	32%	25%	20%	15%	11%	8%

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°
2696	2352	1972	1550	1097	668	475	283	176	118	69	53	38	31	26	22	19	16	15	13
100%	87%	73%	57%	41%	25%	18%	10%	7%	4%	3%	2%	1%	1%	1%	1%	1%	1%	1%	0%

Beam angle 50%	*Field angle 10%*	*Cutoff angle 2,5%*	*Intensity ratio in 120° cone*	*Intensity ratio in 90° cone*
30°	51°	{C_ANG}°	98,5%	96,2%

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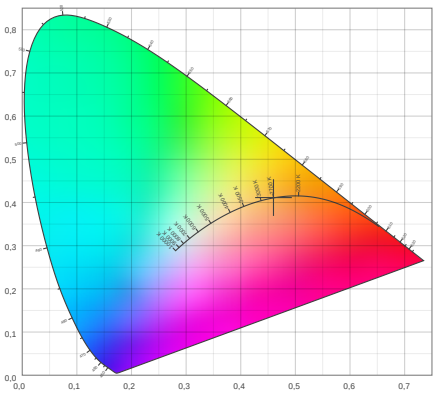
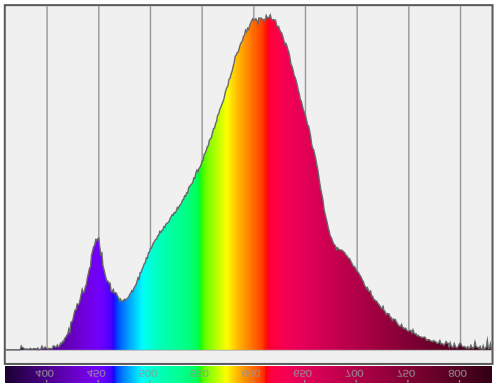
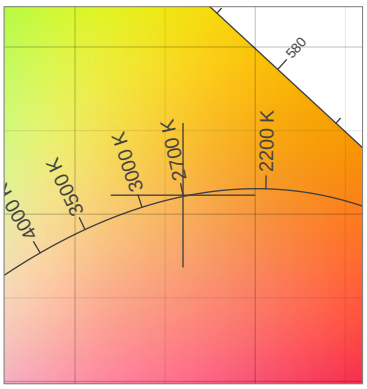
Color details

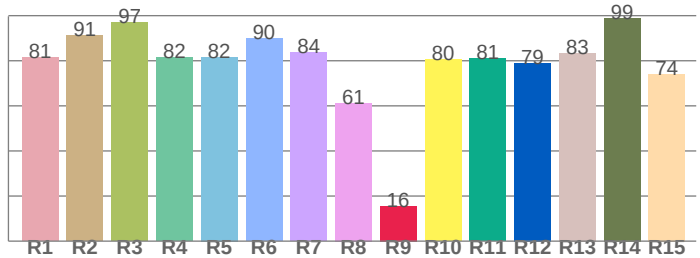






CIE 1931	x: 0,460		Spectra	*CIE 1931 ZOOM*
2708 K	y: 0,411			Δuv: 0,0003

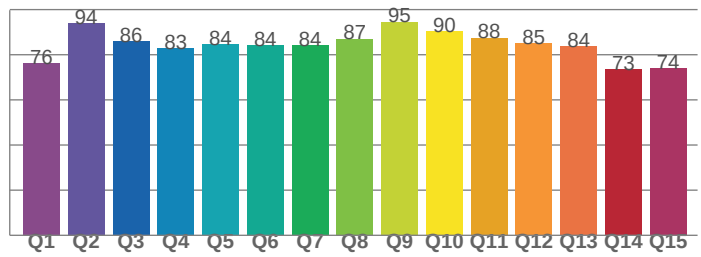
CRI: **83,5** (R1-R8)



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

R1	R2	R3	R4	R5	R6	R7	R8
81,4	**91,1**	**97,1**	**81,6**	**81,7**	**90,0**	**83,6**	**61,3**
R9	R10	R11	R12	R13	R14	R15	
15,6	**80,4**	**80,9**	**79,0**	**83,4**	**98,9**	**74,2**	

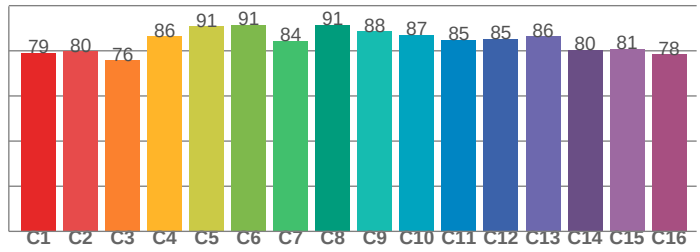
CQS: **83,2**



CQS values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8
76,3	**94,0**	**85,9**	**83,0**	**84,4**	**84,3**	**84,1**	**87,0**
Q9	Q10	Q11	Q12	Q13	Q14	Q15	
94,6	**90,4**	**87,5**	**85,0**	**83,7**	**73,4**	**74,2**	

TM30: **84,2**



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

C1	C2	C3	C4	C5	C6	C7	C8
79,1	**79,7**	**75,8**	**86,3**	**90,8**	**91,4**	**84,3**	**91,5**
C9	C10	C11	C12	C13	C14	C15	
88,5	**87,0**	**84,7**	**85,2**	**86,4**	**80,5**	**80,8**	

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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
2708 K	**83,5**	**15,6**	**84,2**	**96,9**	**83,2**	**0,460**	**0,411**	**0,262**	**0,352**	**0,0003**

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TM30 details

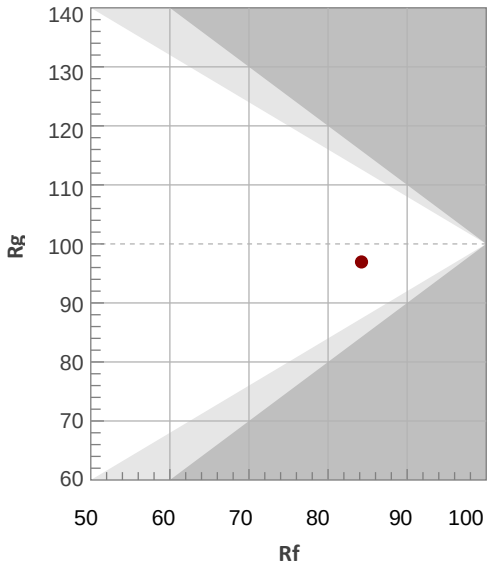
Rf 84,2

Fidelity index Rf

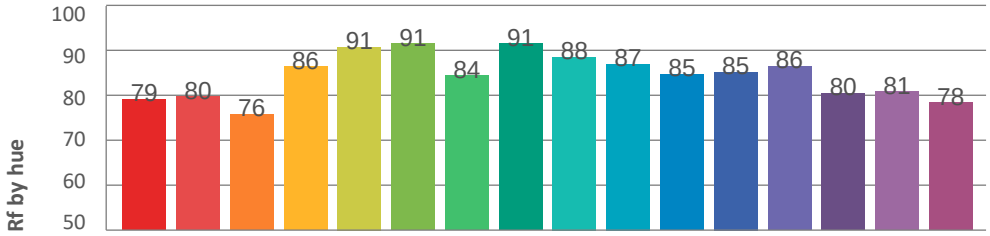
Rg 96,9

Gammut index Rg

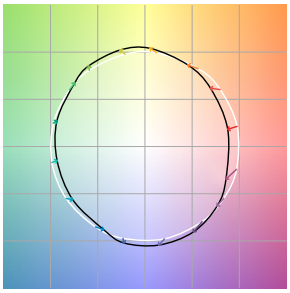
		Graphic shifts (%)	
Hue Bin	R_f	Chroma	Hue
1	79	-10%	-1%
2	80	-8%	7%
3	76	-3%	11%
4	86	3%	8%
5	91	5%	4%
6	91	4%	-2%
7	84	-1%	-9%
8	91	-3%	-3%
9	88	-6%	-1%
10	87	-5%	5%
11	85	-2%	9%
12	85	5%	2%
13	86	5%	-7%
14	80	4%	-14%
15	81	-1%	-11%
16	78	-9%	-12%



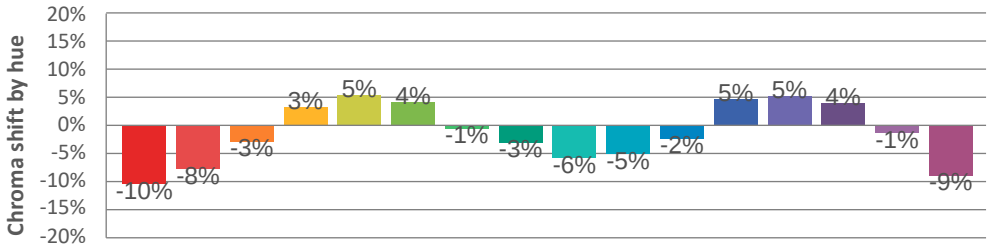
Hue binH



Color vector graphics

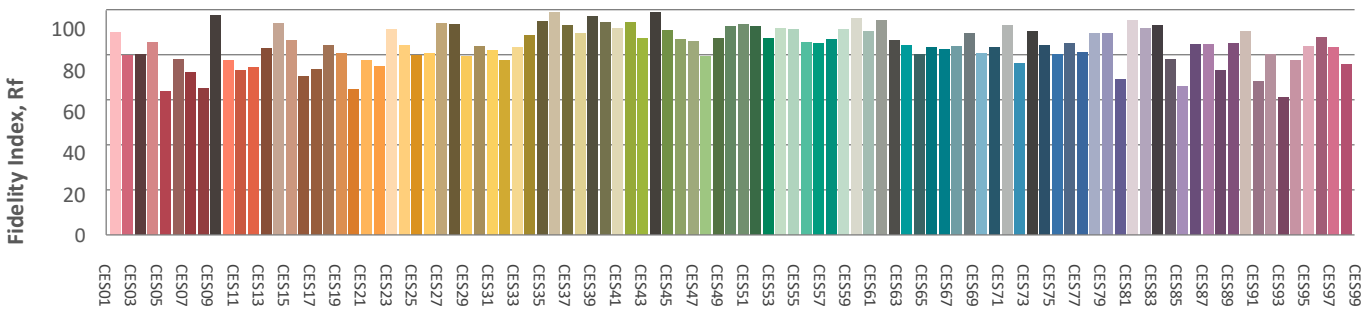


Hue bin



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				
2H	2H	20,7	21,4	20,9	21,6	21,8	13,5	14,1	13,7	14,3	14,5
	3H	20,6	21,2	20,9	21,5	21,7	13,6	14,2	13,9	14,4	14,7
	4H	20,6	21,2	20,9	21,4	21,7	13,6	14,2	13,9	14,5	14,7
	6H	20,5	21,1	20,9	21,3	21,6	13,6	14,2	14,0	14,5	14,8
	8H	20,5	21,0	20,8	21,3	21,6	13,6	14,2	14,0	14,5	14,8
	12H	20,5	21,0	20,8	21,3	21,6	13,7	14,1	14,0	14,5	14,8
4H	2H	20,5	21,1	20,8	21,3	21,6	13,5	14,1	13,8	14,3	14,6
	3H	20,4	20,9	20,8	21,2	21,6	13,7	14,2	14,1	14,5	14,8
	4H	20,4	20,8	20,8	21,2	21,5	13,8	14,2	14,2	14,6	14,9
	6H	20,4	20,7	20,8	21,1	21,5	13,9	14,2	14,3	14,6	15,0
	8H	20,4	20,7	20,8	21,1	21,5	13,9	14,2	14,4	14,6	15,0
	12H	20,3	20,6	20,8	21,0	21,4	14,0	14,3	14,4	14,7	15,1
8H	4H	20,3	20,6	20,7	21,0	21,4	13,9	14,2	14,3	14,6	15,0
	6H	20,3	20,5	20,7	21,0	21,4	14,0	14,2	14,4	14,6	15,1
	8H	20,3	20,5	20,7	20,9	21,4	14,1	14,2	14,5	14,7	15,2
	12H	20,3	20,4	20,7	20,9	21,4	14,2	14,3	14,6	14,8	15,3
12H	4H	20,3	20,6	20,7	21,0	21,4	13,8	14,1	14,3	14,5	14,9
	6H	20,3	20,4	20,7	20,9	21,4	14,0	14,2	14,4	14,6	15,1
	8H	20,2	20,4	20,7	20,9	21,4	14,1	14,2	14,6	14,7	15,2

Variation of the observer position for the luminaire distance S

S = 1,0H	+5,1 / -6,5	+3,8 / -2,8
S = 1,5H	+7,9 / -7,5	+5,3 / -3,4
S = 2,0H	+9,9 / -8,5	+7,1 / -4,1
Standard table	BK00	BK01
Correction summand	2,2	-4,1

Corrected glare indices referring to 967lm total luminous flux

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