

Light efficiency:



Light quality:



Color temperature:

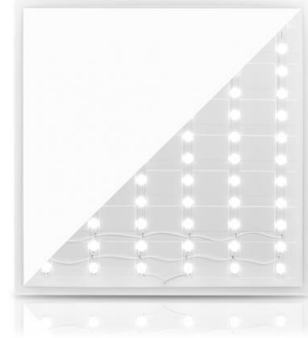


**Output: 3838 lm**

**Peak: 1297 cd**

**Power: 38,6 W**

**PF: 0,96**



Tracking number: [VT240926-051697](#)

Product name:

**273429-4000K**

Item number:

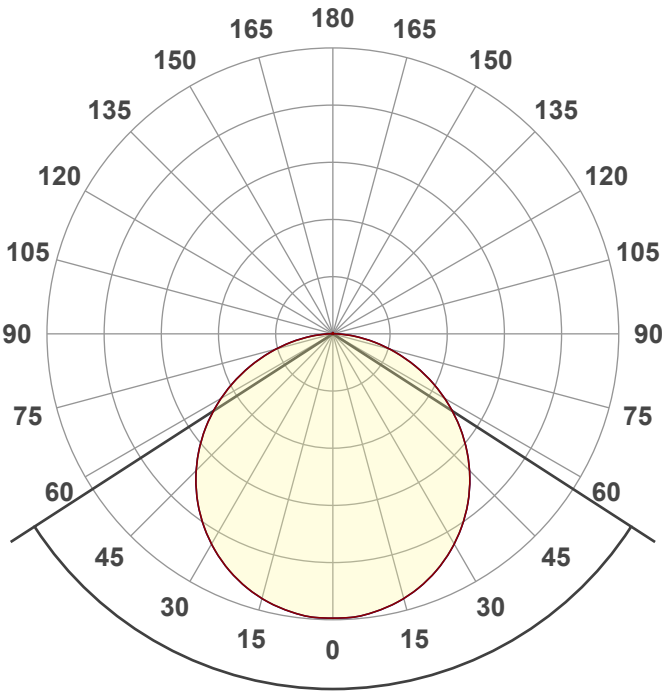
**273429-4000K**

Date and time:

**26-9-2024 17:10:40**

Description:

**BACK-LIT LED PANEEL | LEDA |  
62X62CM | 40W**



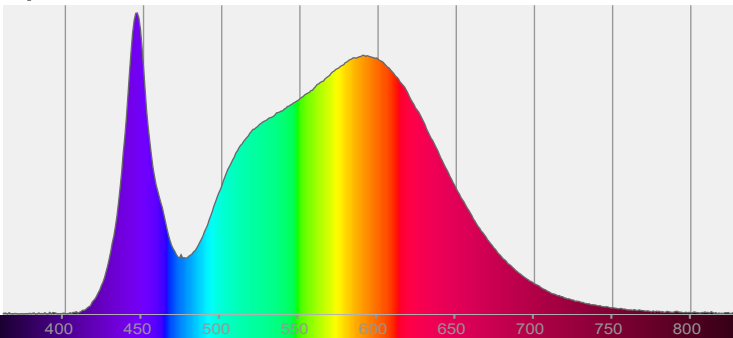
Beam angle

**114,3°**

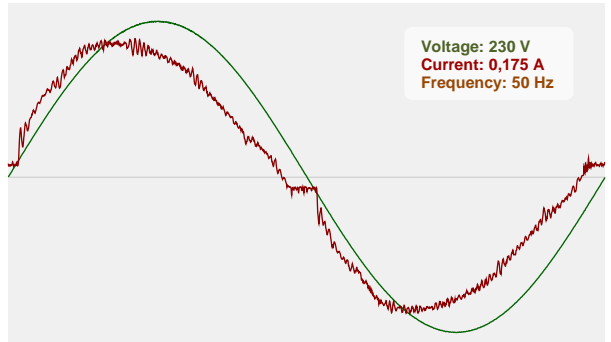


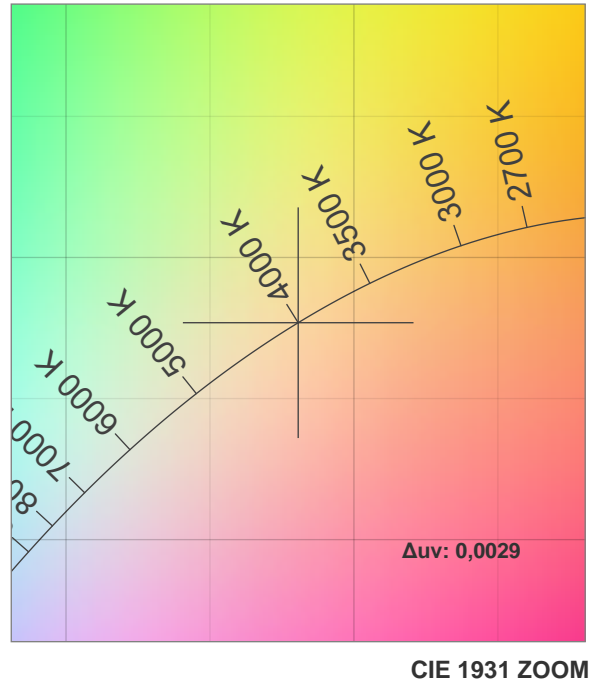
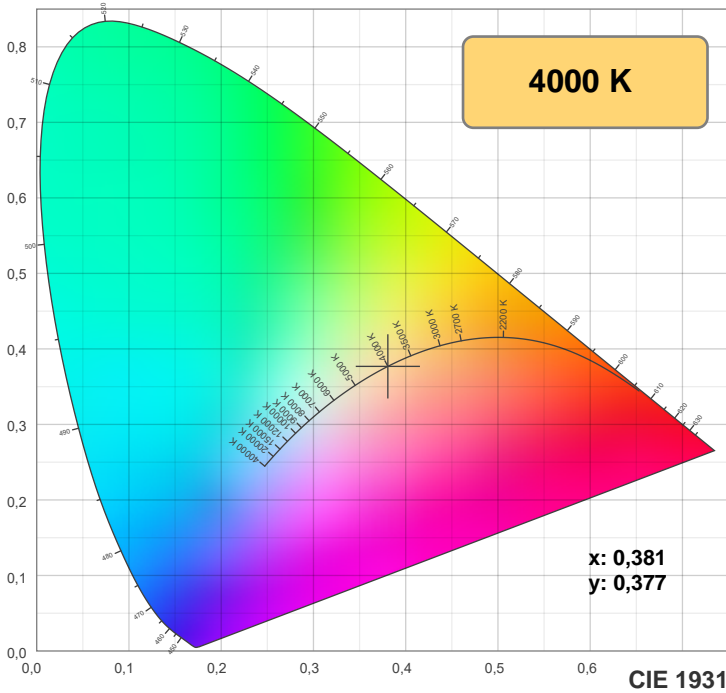
CIE 1931  
x: 0,381  
y: 0,377

Spectra



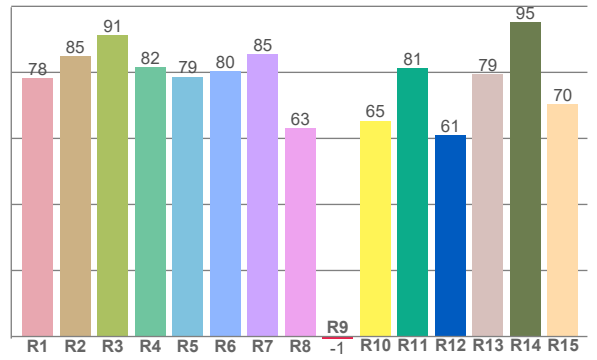
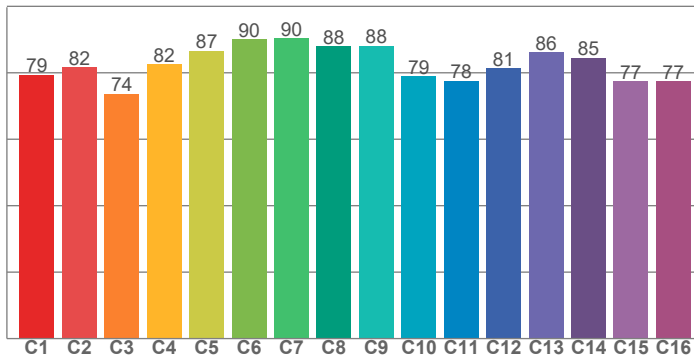
Power





**TM-30: 82,5**

**CRI: 80,5 (R1-R8)**



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

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
78,3	84,9	91,4	81,6	78,7	80,3	85,5	63,1	-0,6	65,4	81,2	60,9	79,5	95,2	70,4

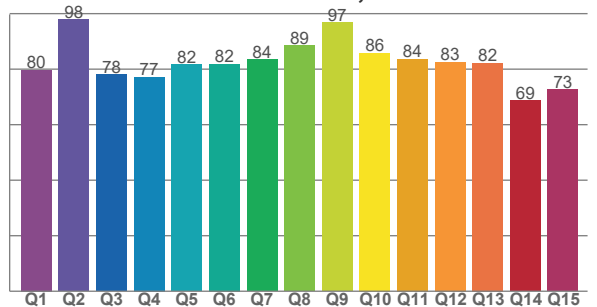
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
79,3	81,7	73,7	82,5	86,6	90,0	90,4	88,0	88,2	79,0	77,6	81,3	86,2	84,5	77,5	77,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
79,7	97,8	78,0	77,1	81,7	81,8	83,5	88,6	96,8	85,8	83,6	82,5	82,2	68,6	72,6

**CQS: 81,1**



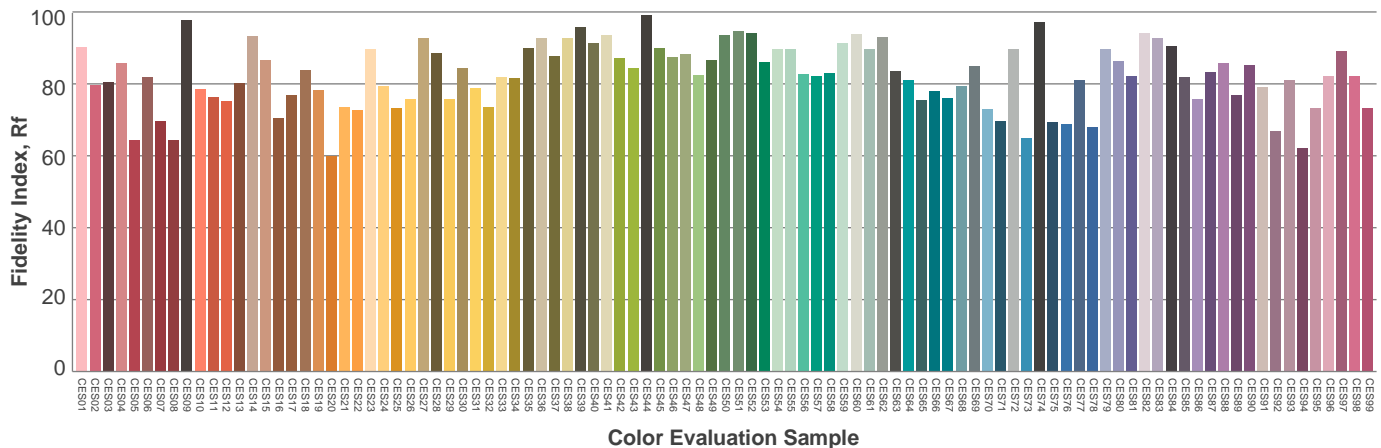
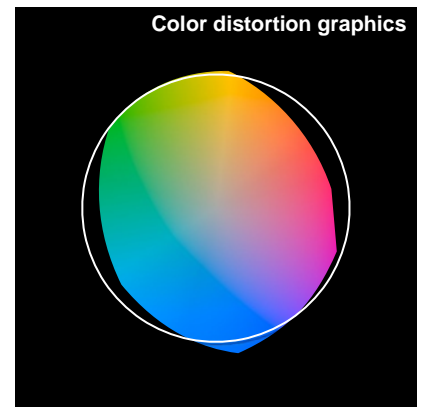
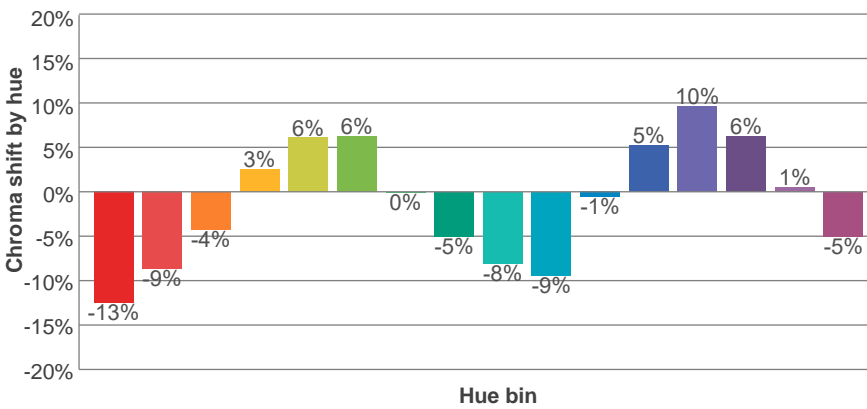
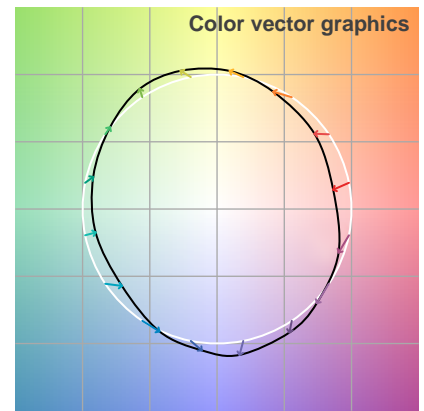
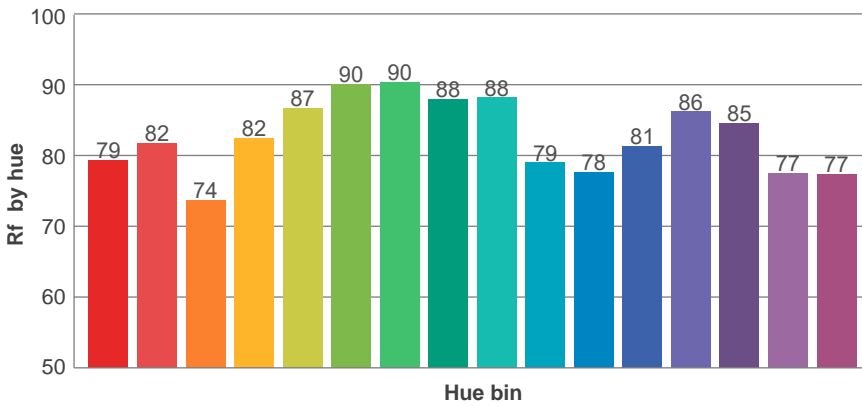
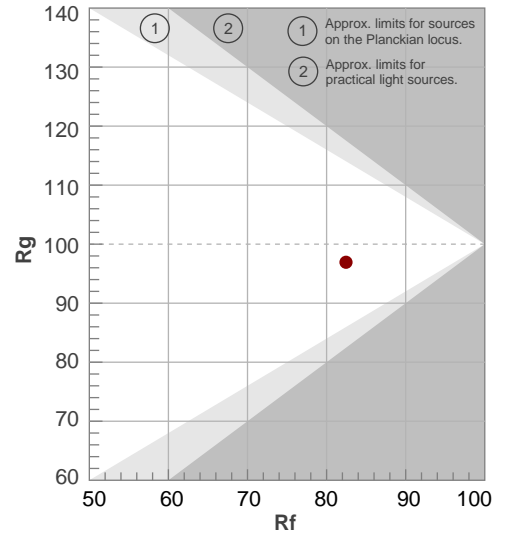
**Color parameters**

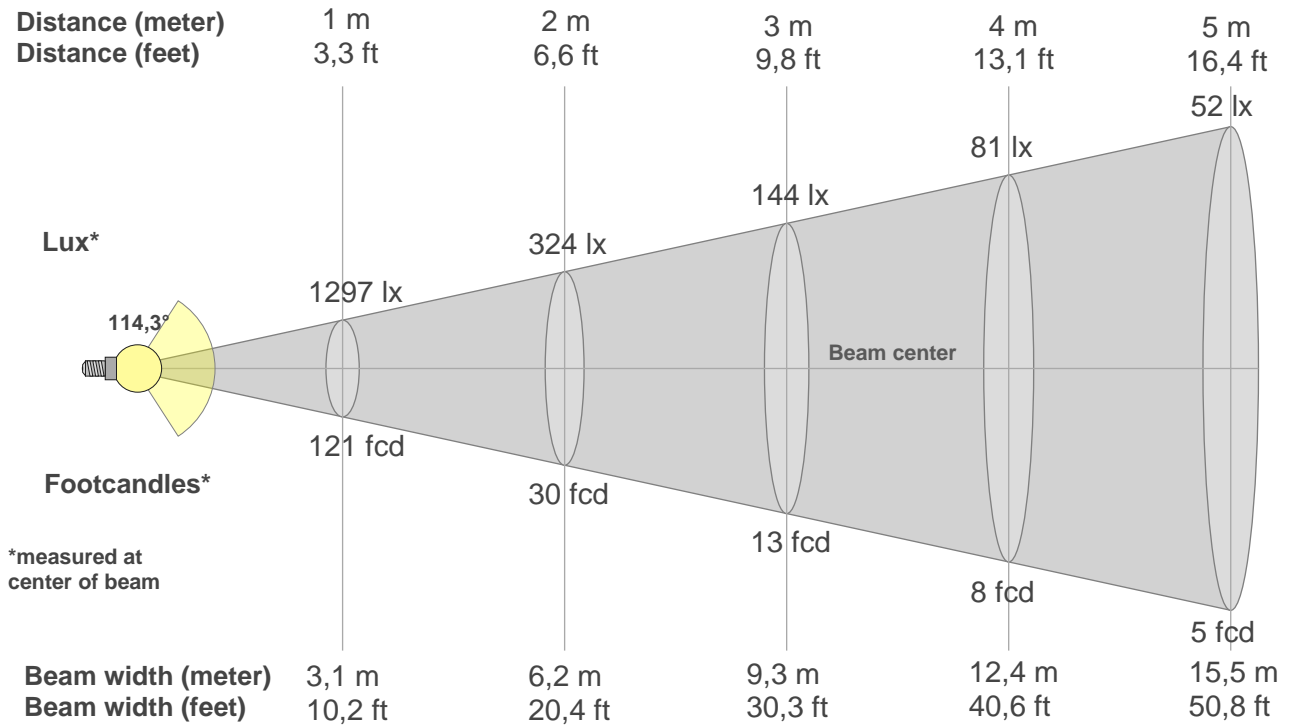
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
4000 K	80,5	-0,6	82,5	96,9	81,1	0,381	0,377	0,225	0,334	0,0029

**Rf 82,5**  
Fidelity index Rf

**Rg 96,9**  
Gamut index Rg

Hue Bin	R <sub>f</sub>	Shifts (%)	
		Chroma	Hue
1	79	-13%	-3%
2	82	-9%	6%
3	74	-4%	14%
4	82	3%	11%
5	87	6%	7%
6	90	6%	-2%
7	90	0%	-6%
8	88	-5%	-5%
9	88	-8%	0%
10	79	-9%	8%
11	78	-1%	15%
12	81	5%	9%
13	86	10%	-5%
14	85	6%	-6%
15	77	1%	-17%
16	77	-5%	-14%





**Beam intensities from 1-20m**

1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
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
1297lx	324lx	144lx	81lx	52lx	36lx	26lx	20lx	16lx	13lx	11lx	9lx	8lx	7lx	6lx	5lx	4lx	4lx	4lx	3lx
120,5fc	30,1fcd	13,4fcd	7,5fcd	4,8fcd	3,3fcd	2,5fcd	1,9fcd	1,5fcd	1,2fcd	1fcd	0,8fcd	0,7fcd	0,6fcd	0,5fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd

**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°
1297	1293	1276	1250	1212	1164	1107	1040	965	882	790	692	589	483	375	269	169	81	21	3
100%	100%	98%	96%	93%	90%	85%	80%	74%	68%	61%	53%	45%	37%	29%	21%	13%	6%	2%	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°
1297	1293	1276	1250	1212	1164	1107	1040	965	882	790	692	589	483	375	269	169	81	21	3
100%	100%	98%	96%	93%	90%	85%	80%	74%	68%	61%	53%	45%	37%	29%	21%	13%	6%	2%	0%

**Intensities in 180° c-plane**

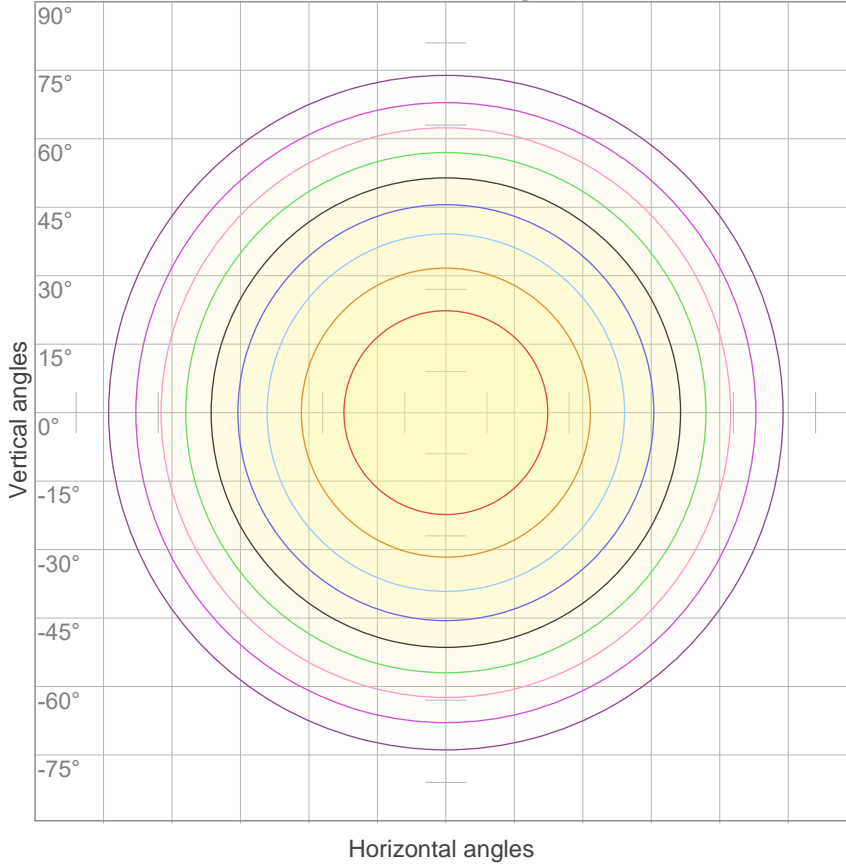
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1297	1293	1276	1250	1212	1164	1107	1040	965	882	790	692	589	483	375	269	169	81	21	3
100%	100%	98%	96%	93%	90%	85%	80%	74%	68%	61%	53%	45%	37%	29%	21%	13%	6%	2%	0%

**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°
1297	1293	1276	1250	1212	1164	1107	1040	965	882	790	692	589	483	375	269	169	81	21	3
100%	100%	98%	96%	93%	90%	85%	80%	74%	68%	61%	53%	45%	37%	29%	21%	13%	6%	2%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
<b>114,3°</b>	<b>164,2°</b>	<b>176,7°</b>	<b>77,2%</b>	<b>52,3%</b>

**iso-candela diagram**



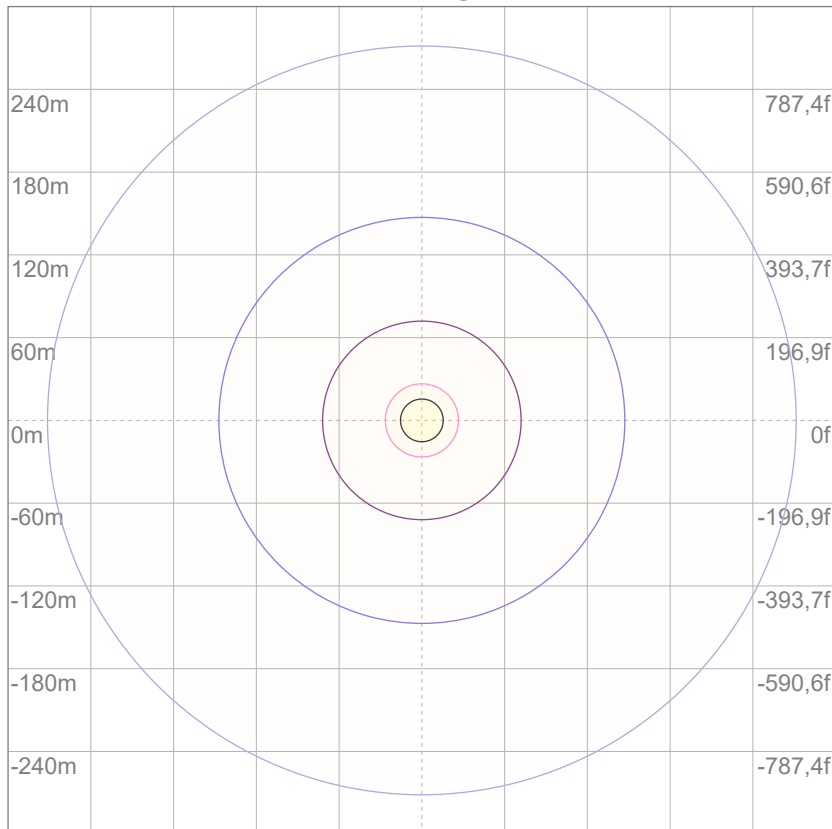
10%	130 cd
20%	259 cd
30%	389 cd
40%	519 cd
50%	649 cd
60%	778 cd
70%	908 cd
80%	1038 cd
90%	1167 cd

Conditions:

Number of c-planes: 12

Candela at center: 1297 cd

**iso-lux diagram**



Mounting height: 10 meters (33 feet)

3%	0,389 lx
5%	0,649 lx
10%	1,30 lx
30%	3,89 lx
50%	6,49 lx

Conditions:

Number of c-planes: 12

Lux at center: 13,0 lx

*Lux distribution on a surface when lamp is mounted at 10 meters from the surface.*

**Glare evaluation according to UGR**

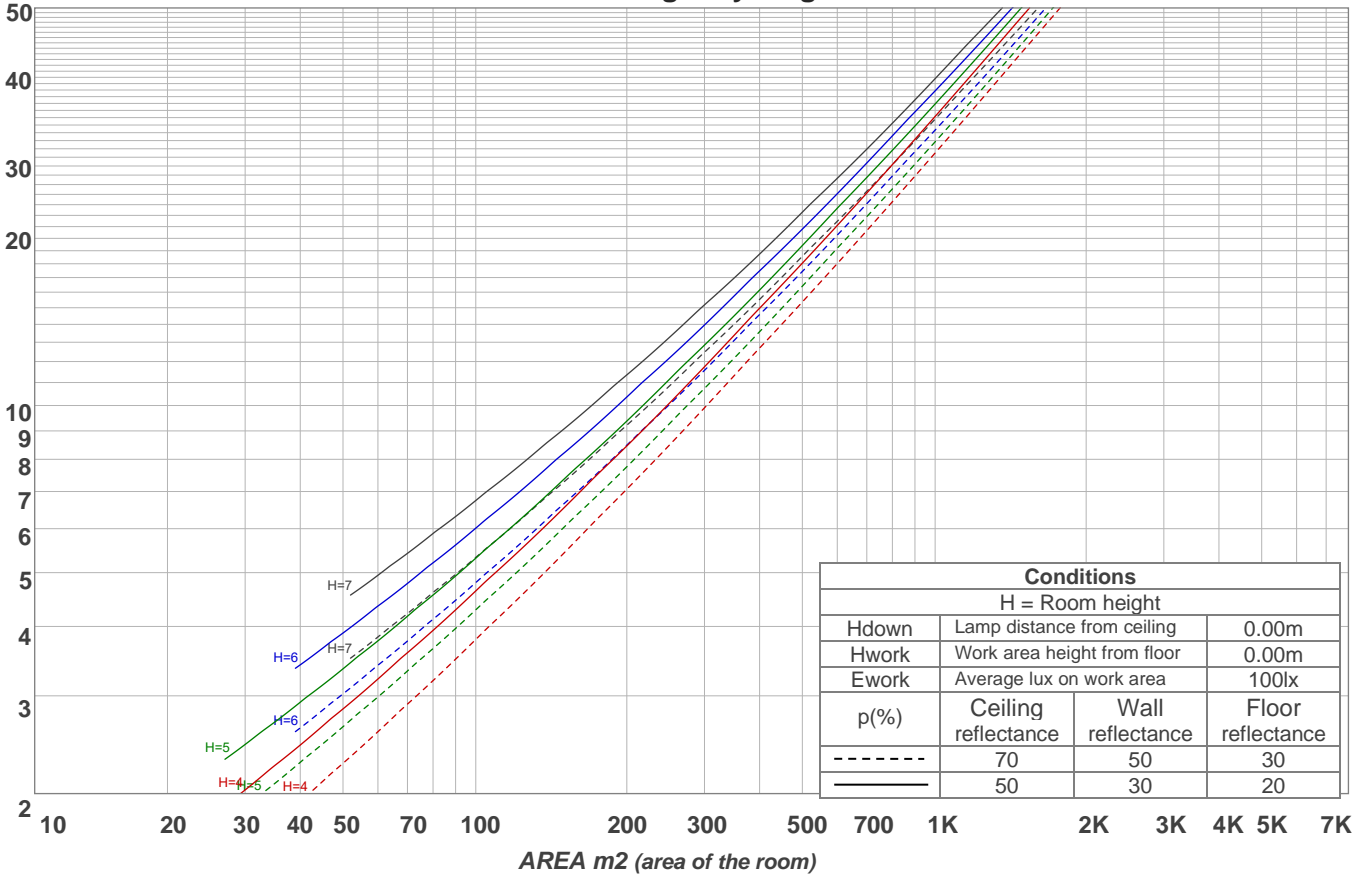
p Ceiling	70	70	50	50	30	70	70	50	50	30	
p Walls	50	30	50	30	30	50	30	50	30	30	
p Floor	20	20	20	20	20	20	20	20	20	20	
Room size X Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	17,0	18,2	17,2	18,5	18,8	17,0	18,2	17,2	18,5	18,8
	3H	18,5	19,8	18,9	20,1	20,3	18,5	19,8	18,9	20,1	20,3
	4H	19,2	20,4	19,6	20,7	20,9	19,2	20,4	19,6	20,7	20,9
	6H	19,7	20,8	20,0	21,1	21,5	19,7	20,8	20,0	21,1	21,5
	8H	19,9	20,9	20,2	21,2	21,7	19,9	20,9	20,2	21,2	21,7
12H	20,0	21,0	20,4	21,4	21,8	20,0	21,0	20,4	21,4	21,8	
4H	2H	17,6	18,8	18,0	19,1	19,4	17,6	18,8	18,0	19,1	19,4
	3H	19,4	20,4	19,8	20,8	21,2	19,4	20,4	19,8	20,8	21,2
	4H	20,1	21,1	20,6	21,5	22,0	20,1	21,1	20,6	21,5	22,0
	6H	20,8	21,6	21,3	22,0	22,4	20,8	21,6	21,3	22,0	22,4
	8H	21,0	21,8	21,5	22,2	22,6	21,0	21,8	21,5	22,2	22,6
12H	21,1	21,8	21,6	22,3	22,7	21,1	21,8	21,6	22,3	22,7	
8H	4H	20,4	21,2	21,0	21,6	22,0	20,4	21,2	21,0	21,6	22,0
	6H	21,2	21,8	21,7	22,3	22,9	21,2	21,8	21,7	22,3	22,9
	8H	21,6	22,1	22,1	22,6	23,3	21,6	22,1	22,1	22,6	23,3
	12H	21,8	22,3	22,4	22,8	23,4	21,8	22,3	22,4	22,8	23,4
12H	4H	20,5	21,1	21,0	21,6	22,1	20,5	21,1	21,0	21,6	22,1
	6H	21,3	21,9	21,8	22,4	23,0	21,3	21,9	21,8	22,4	23,0
	8H	21,7	22,1	22,3	22,6	23,3	21,7	22,1	22,3	22,6	23,3
Variation of the observer position for the luminaire distance S											
S = 1.0H	0,1 / -0,1					0,1 / -0,1					
S = 1.5H	0,1 / -0,2					0,1 / -0,2					
S = 2.0H	0,4 / -0,4					0,4 / -0,4					
CIE 117-1995. Corrected glare indices referring to 3838 lm total luminous flux											

**Coefficients of Utilization**

Ceiling reflectance	80				70				50			30			10			0	
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0	
Wall reflectance																			
Floor reflectance	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0
RCR	(RCR: Room Cavity Ratio) Room Values are expressed as percentage of Lumens delivered to the task surface																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	101	101	101	99	
1	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	82	
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68	
3	89	79	70	64	87	77	69	63	74	67	62	71	65	61	68	64	60	57	
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	55	51	49	
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42	
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37	
7	64	51	42	35	62	50	41	35	48	41	35	47	40	35	45	39	34	32	
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	41	35	31	29	
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26	
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	30	25	23	

LAMPS (number of lamps)

**Luminaire budgetary diagram**



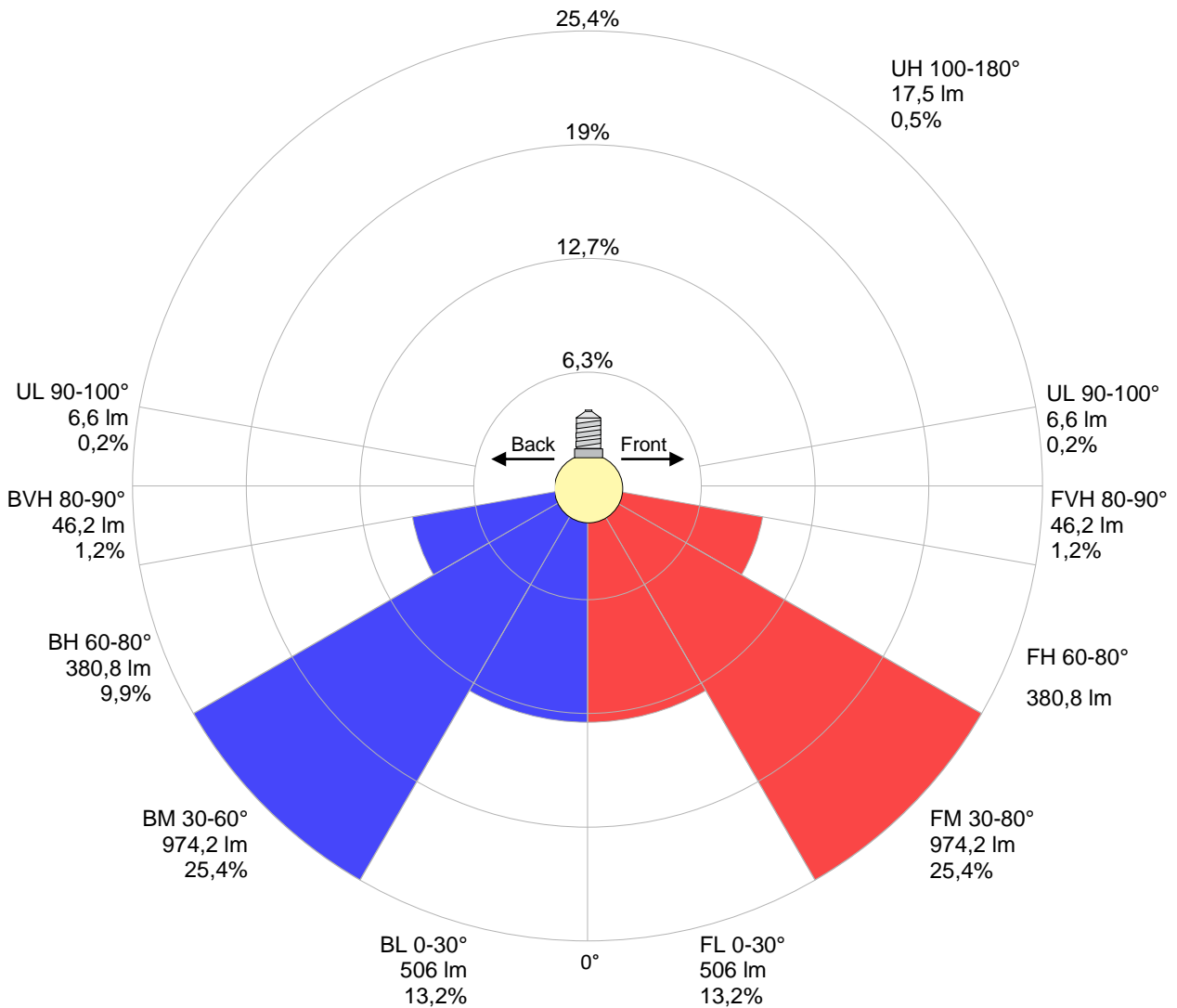
**Zonal Lumen Summary**

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
{LUM0-10}	353 lm	537 lm	651 lm	680 lm	619 lm	477 lm	284 lm	90,7 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
5,93 lm	2,54 lm	2,79 lm	2,76 lm	2,82 lm	2,58 lm	2,12 lm	1,40 lm	0,465 lm

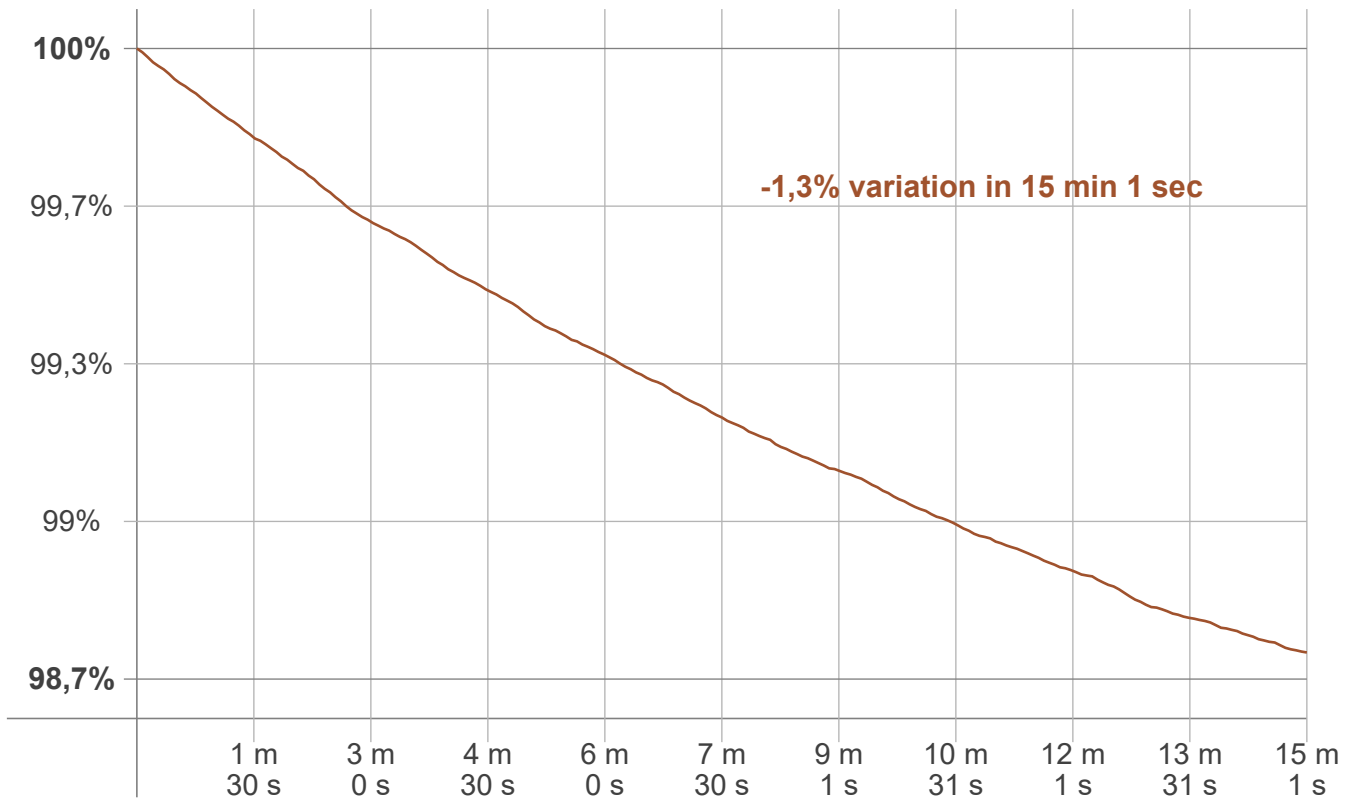
LCS table

BUG rating:	B2 U2 G1	
<b>Forward light</b>	Lumens	Lumens %
Low(0-30):	506	13,2%
Medium(30-60):	974,2	25,4%
High(60-80):	380,8	9,9%
Very high(80-90):	46,2	1,2%
<b>Back light</b>		
Low(0-30):	506	13,2%
Medium(30-60):	974,2	25,4%
High(60-80):	380,8	9,9%
Very high(80-90):	46,2	1,2%
<b>Uplight</b>		
Low(90-100):	6,6	0,2%
High(100-180):	17,5	0,5%

LCS graph



**Warmup curve**



**Warmup result**

<b>Warmup time:</b>	<b>Lamp stabilized in 15 min 1 sec</b>
<b>Warmup variation</b>	<b>-1,3%</b>

**Warmup conditions**

<b>Stable period:</b>	<b>15 min</b>
<b>Stable change max:</b>	<b>2,0%</b>
<b>Minimum time:</b>	<b>15 min</b>

**Color temperature change**

<b>CCT start</b>	<b>CCT change</b>	<b>CCT end</b>
4001 K	-1 K	4000 K

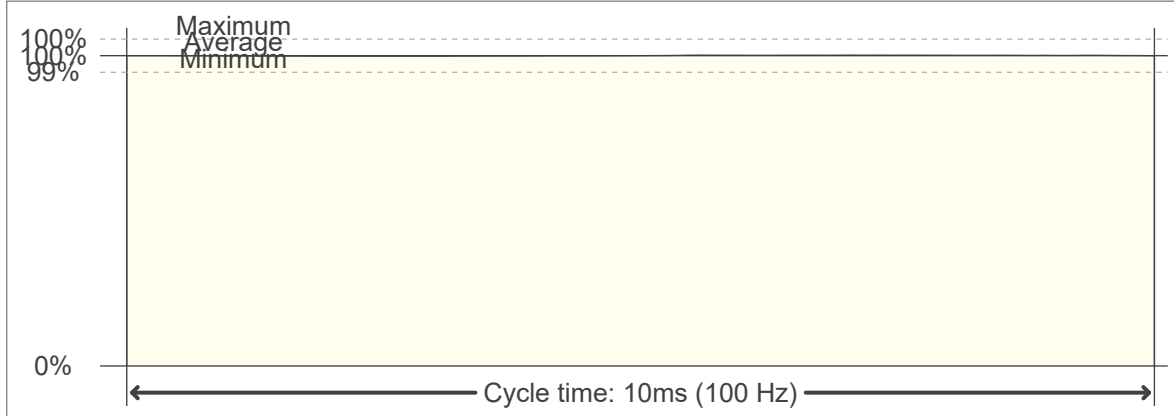
**Output change**

<b>Output start</b>	<b>Output change</b>	<b>Output end</b>
3889 lm	-50 lm	3838 lm

**Flicker curve (complete sampled flicker signal)**



**Flicker frame (frame of one flicker period)**



**Flicker FFT (frequency scope of flicker curve)**



**Flicker results:**

Flicker frequency:		100 Hz	
Flicker index:	0	JA8/10 40Hz	0,02 %
Flicker percentage:	0,3 %	JA8/10 90Hz	0,04 %
SVM: (Visual flicker)	0,01	JA8/10 200Hz	0,22 %
PstLM	0,02	JA8/10 400Hz	0,24 %
Mp	0,01	JA8/10 1000Hz	0,27 %

**Flicker conditions:**

Sample rate:	20000 samples/second
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