

Light efficiency:



Light quality:



Color temperature:

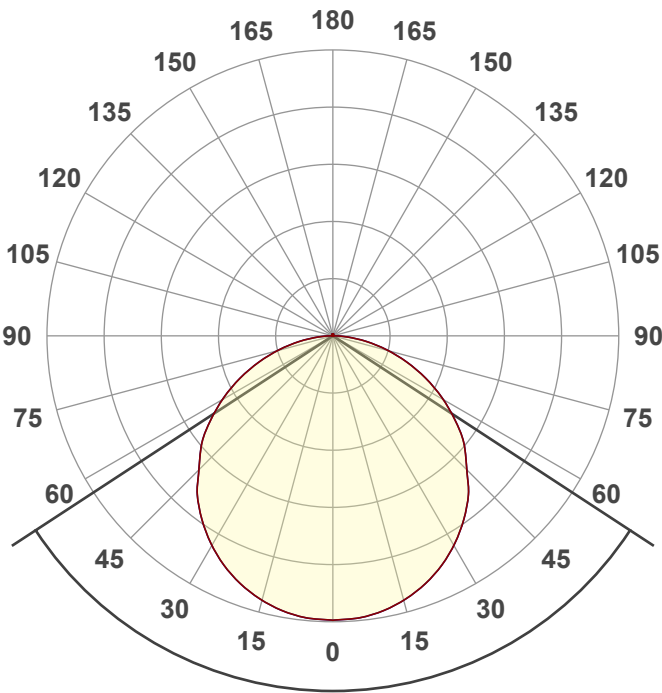
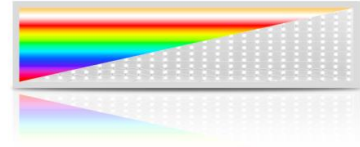


Output: 4446 lm

Peak: 1511 cd

Power: 40,8 W

PF: 0,96



Tracking number: [VT240930-004819](#)

Product name:  
**804398-6500K**

Item number:  
**804398-6500K**

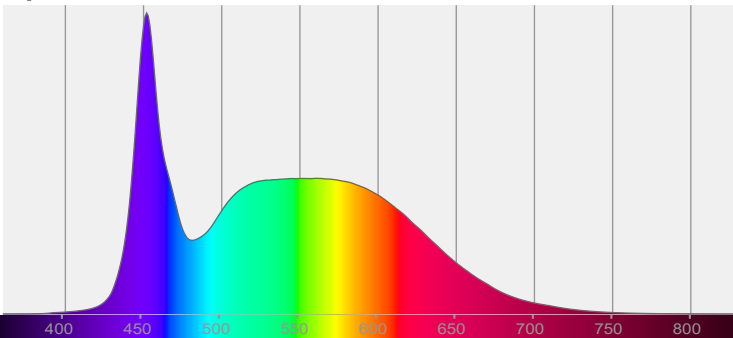
Date and time:  
**30-9-2024 12:54:21**

Description:  
**BACK-LIT LED PANEEL | DOVER | 120x30CM | RGB+CCT | 40W**

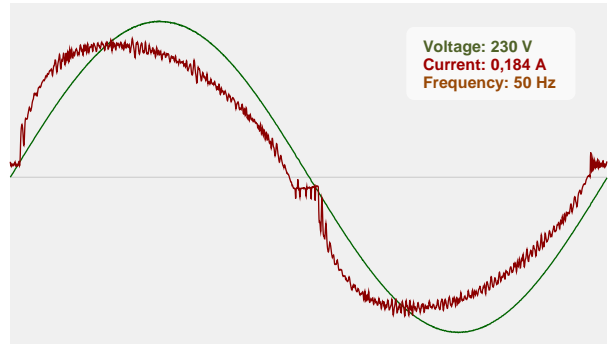


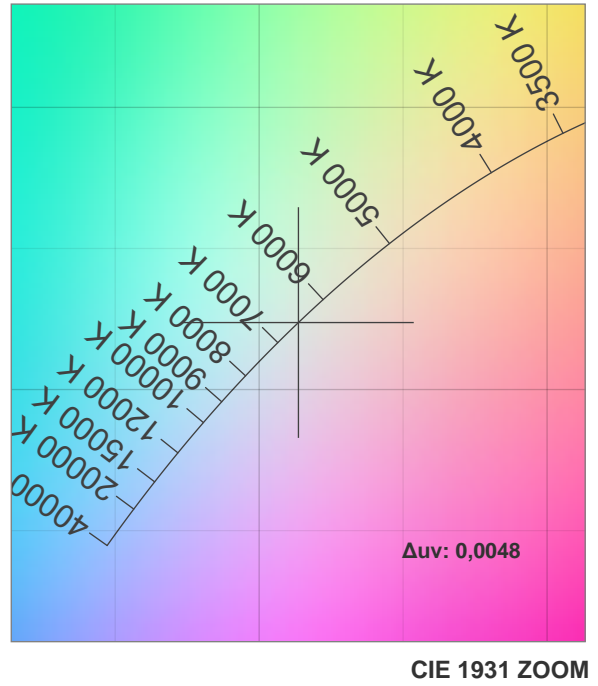
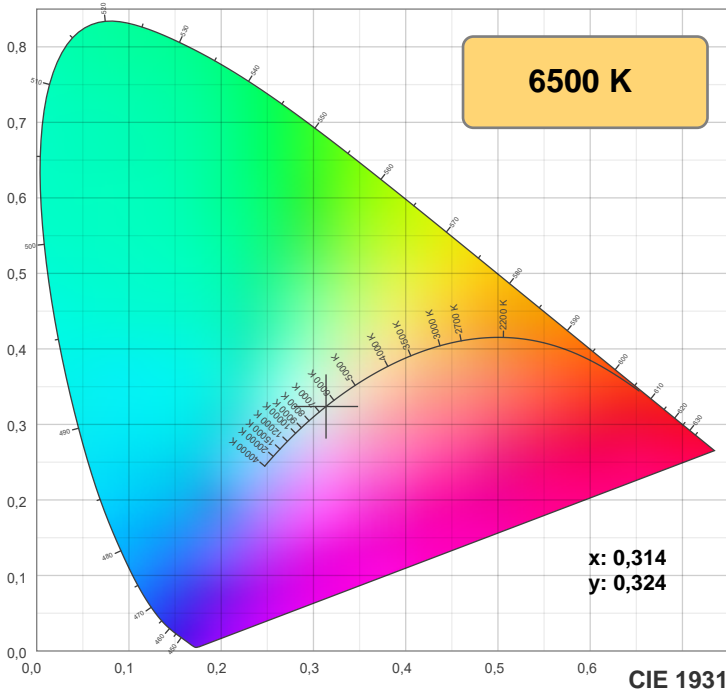
CIE 1931  
x: 0,314  
y: 0,324

Spectra

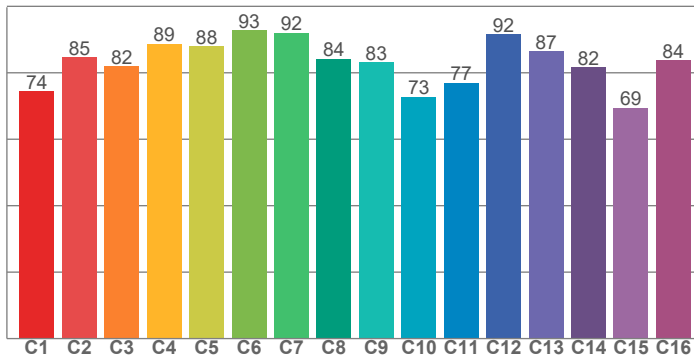


Power

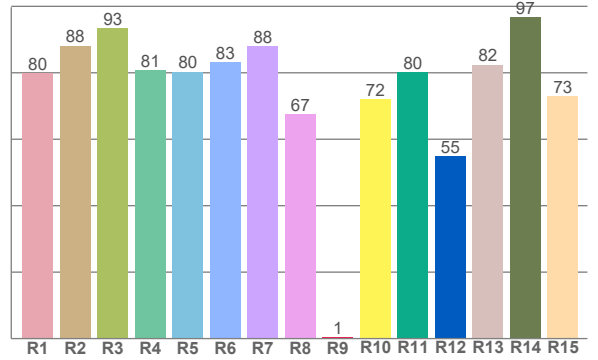




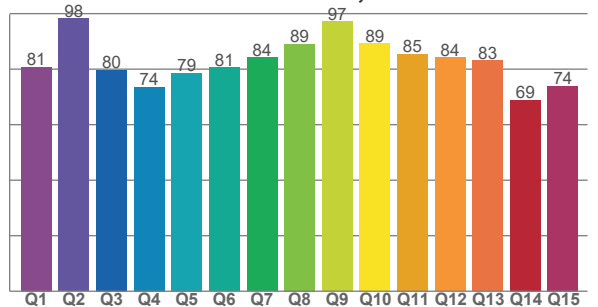
**TM-30: 83,1**



**CRI: 82,7 (R1-R8)**



**CQS: 81,4**



**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
79,8	88,2	93,4	80,8	80,3	83,3	88,1	67,5	0,5	72,1	80,3	54,9	82,4	96,7	72,9

**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
74,4	84,6	81,9	88,8	88,0	92,7	92,0	84,2	83,1	72,7	77,0	91,6	86,5	81,7	69,4	83,8

**CQS Q values**

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
80,8	98,2	79,8	73,5	78,6	80,6	84,3	89,0	97,2	89,3	85,5	84,1	83,0	69,0	74,0

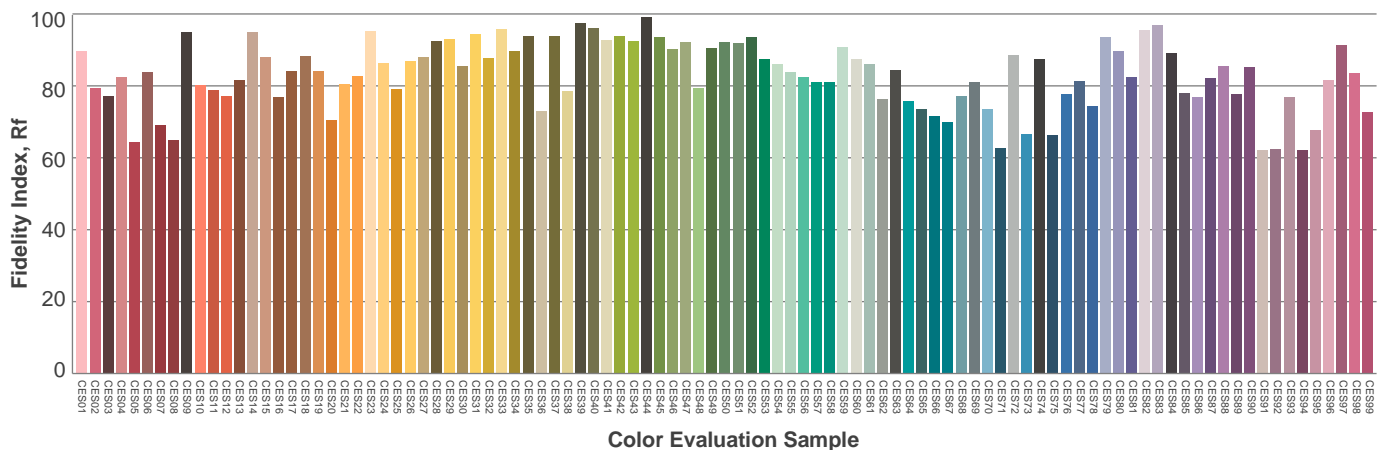
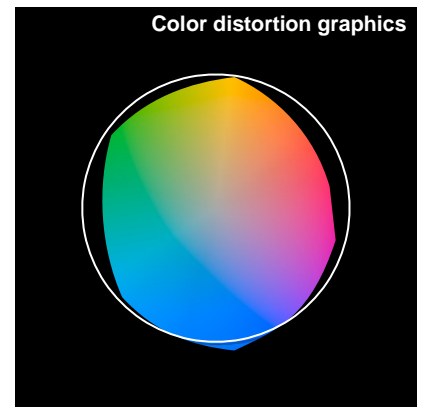
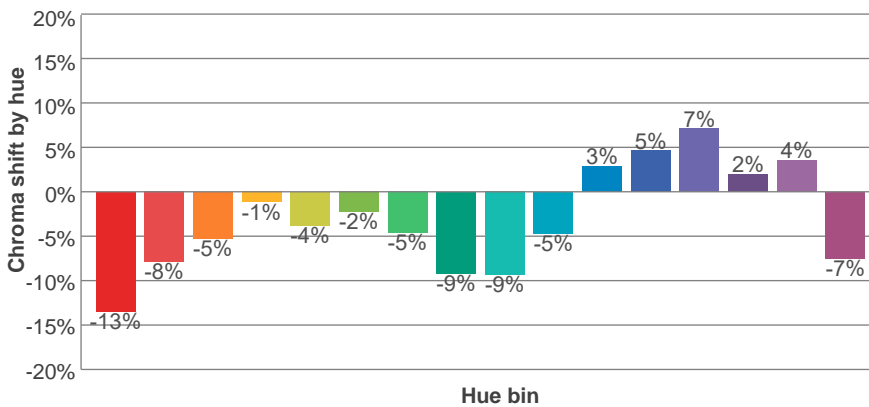
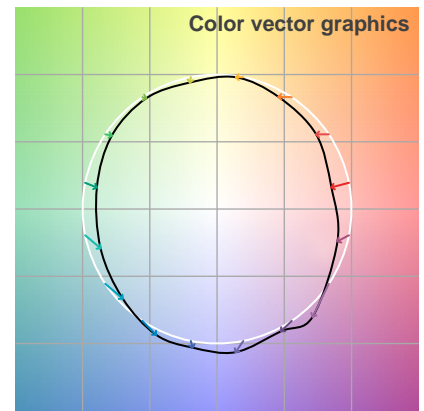
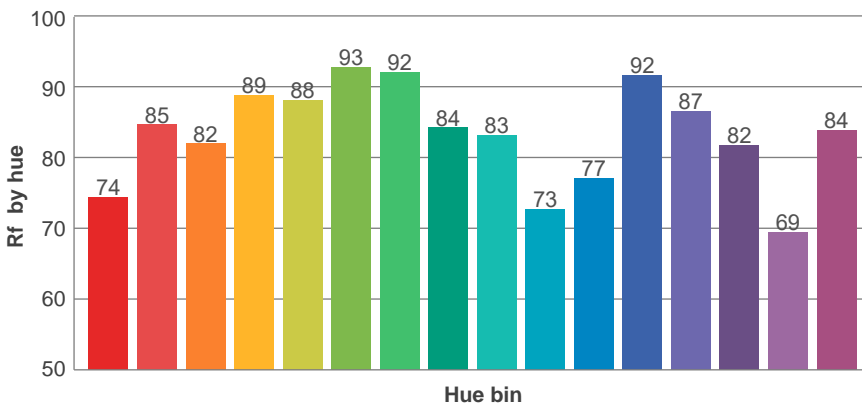
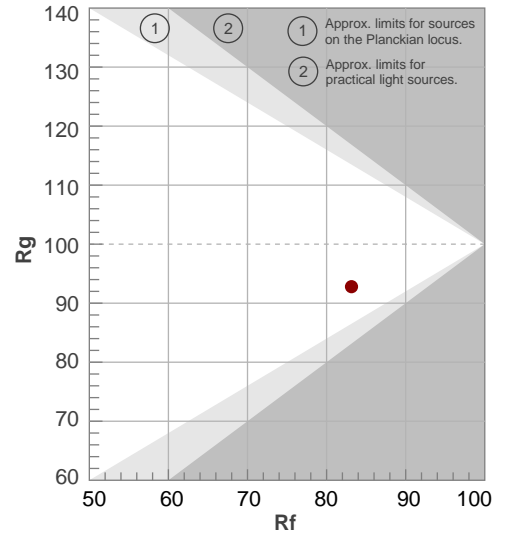
**Color parameters**

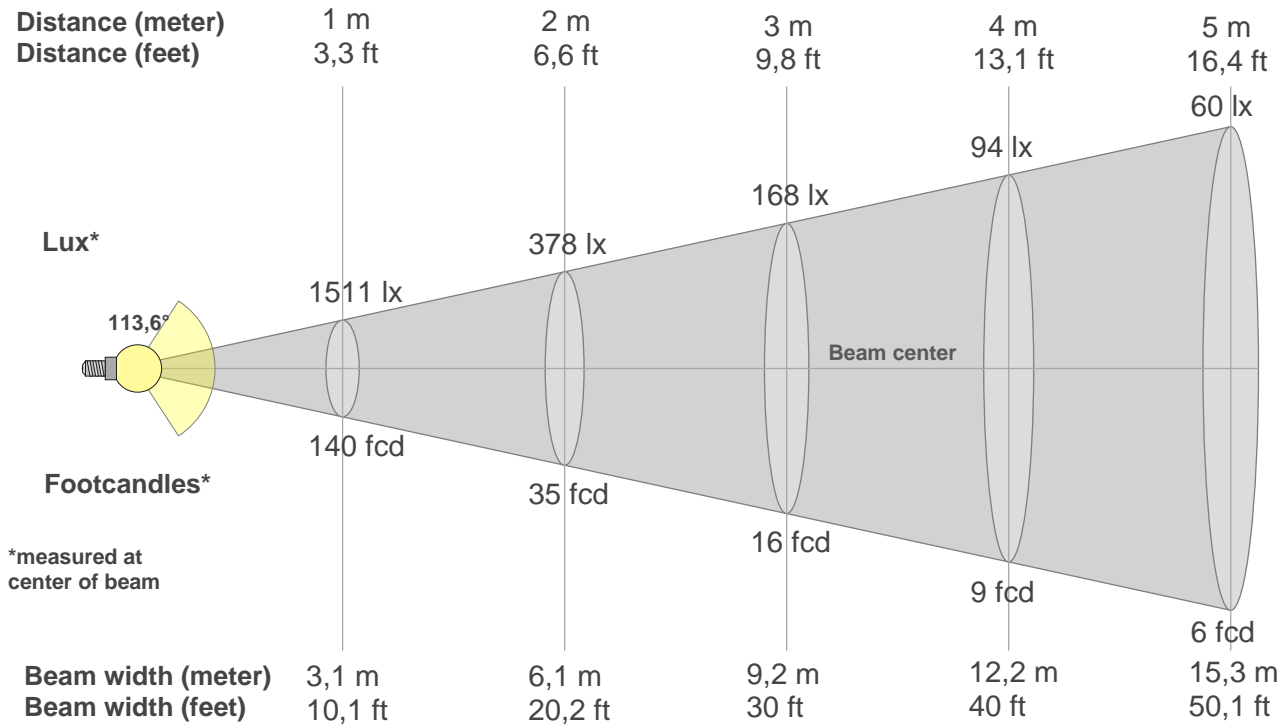
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
6500 K	82,7	0,5	83,1	92,8	81,4	0,314	0,324	0,200	0,310	0,0048

**Rf 83,1**  
Fidelity index Rf

**Rg 92,8**  
Gamut index Rg

Hue Bin	R <sub>f</sub>	Shifts (%)	
		Chroma	Hue
1	74	-13%	-1%
2	85	-8%	5%
3	82	-5%	8%
4	89	-1%	5%
5	88	-4%	1%
6	93	-2%	-2%
7	92	-5%	-2%
8	84	-9%	2%
9	83	-9%	12%
10	73	-5%	16%
11	77	3%	14%
12	92	5%	2%
13	87	7%	-7%
14	82	2%	-11%
15	69	4%	-27%
16	84	-7%	-6%





**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
1511lx	378lx	168lx	94lx	60lx	42lx	31lx	24lx	19lx	15lx	12lx	10lx	9lx	8lx	7lx	6lx	5lx	5lx	4lx	4lx
140,4fc	35,1fcd	15,6fcd	8,8fcd	5,6fcd	3,9fcd	2,9fcd	2,2fcd	1,7fcd	1,4fcd	1,2fcd	1fcd	0,8fcd	0,7fcd	0,6fcd	0,5fcd	0,5fcd	0,4fcd	0,4fcd	0,4fcd

**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°
1511	1507	1488	1455	1411	1355	1286	1207	1119	1009	914	799	678	554	429	307	192	89	18	5
100%	100%	98%	96%	93%	90%	85%	80%	74%	67%	60%	53%	45%	37%	28%	20%	13%	6%	1%	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°
1511	1507	1488	1455	1411	1355	1286	1207	1119	1009	914	799	678	554	429	307	192	89	18	5
100%	100%	98%	96%	93%	90%	85%	80%	74%	67%	60%	53%	45%	37%	28%	20%	13%	6%	1%	0%

**Intensities in 180° c-plane**

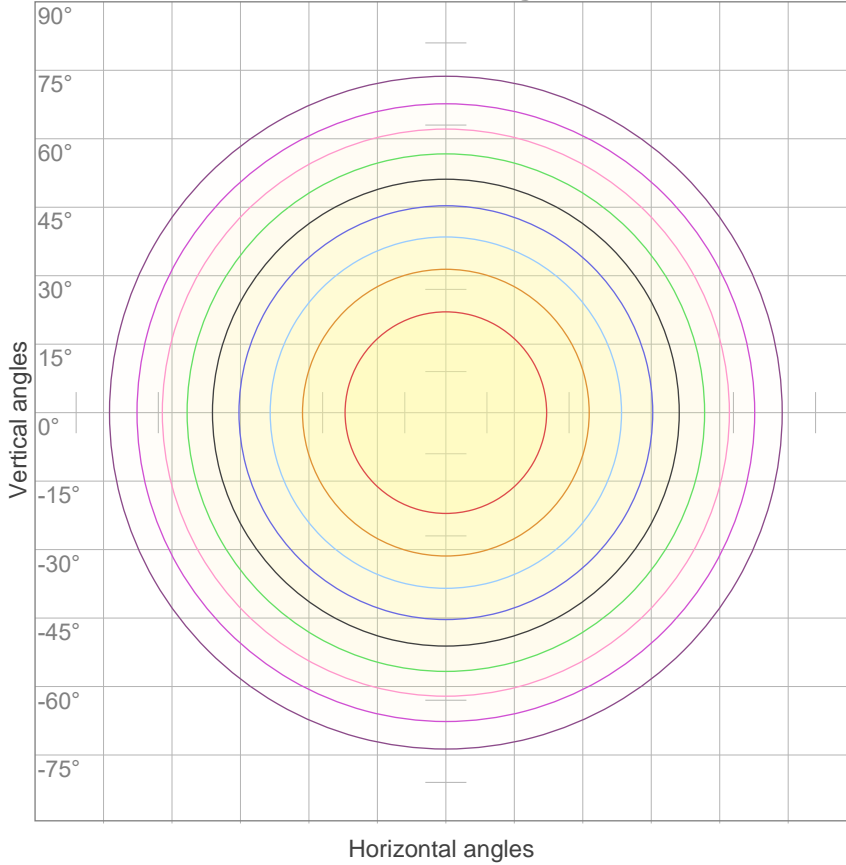
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1511	1507	1488	1455	1411	1355	1286	1207	1119	1009	914	799	678	554	429	307	192	89	18	5
100%	100%	98%	96%	93%	90%	85%	80%	74%	67%	60%	53%	45%	37%	28%	20%	13%	6%	1%	0%

**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°
1511	1507	1488	1455	1411	1355	1286	1207	1119	1009	914	799	678	554	429	307	192	89	18	5
100%	100%	98%	96%	93%	90%	85%	80%	74%	67%	60%	53%	45%	37%	28%	20%	13%	6%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
<b>113,6°</b>	<b>163,9°</b>	<b>177,1°</b>	<b>77,1%</b>	<b>52,3%</b>

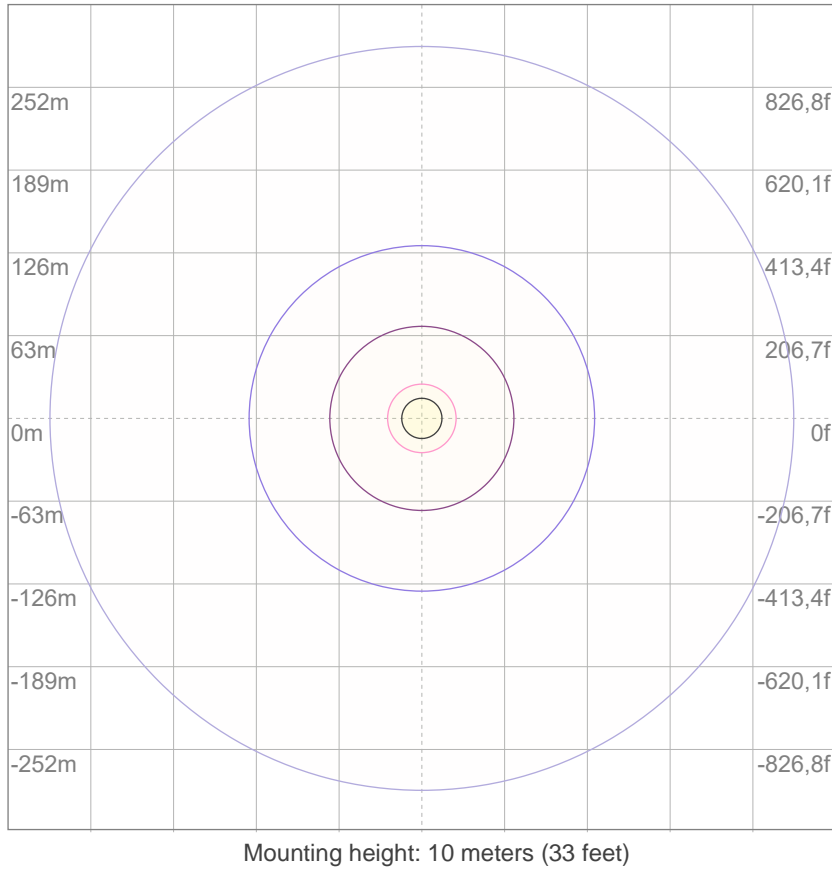
**iso-candela diagram**



10%	151 cd
20%	302 cd
30%	453 cd
40%	604 cd
50%	756 cd
60%	907 cd
70%	1058 cd
80%	1209 cd
90%	1360 cd

**Conditions:**  
 Number of c-planes: 12  
 Candela at center: 1511 cd

**iso-lux diagram**



3%	0,453 lx
5%	0,756 lx
10%	1,51 lx
30%	4,53 lx
50%	7,56 lx

**Conditions:**  
 Number of c-planes: 12  
 Lux at center: 15,1 lx

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

**Glare evaluation according to UGR**

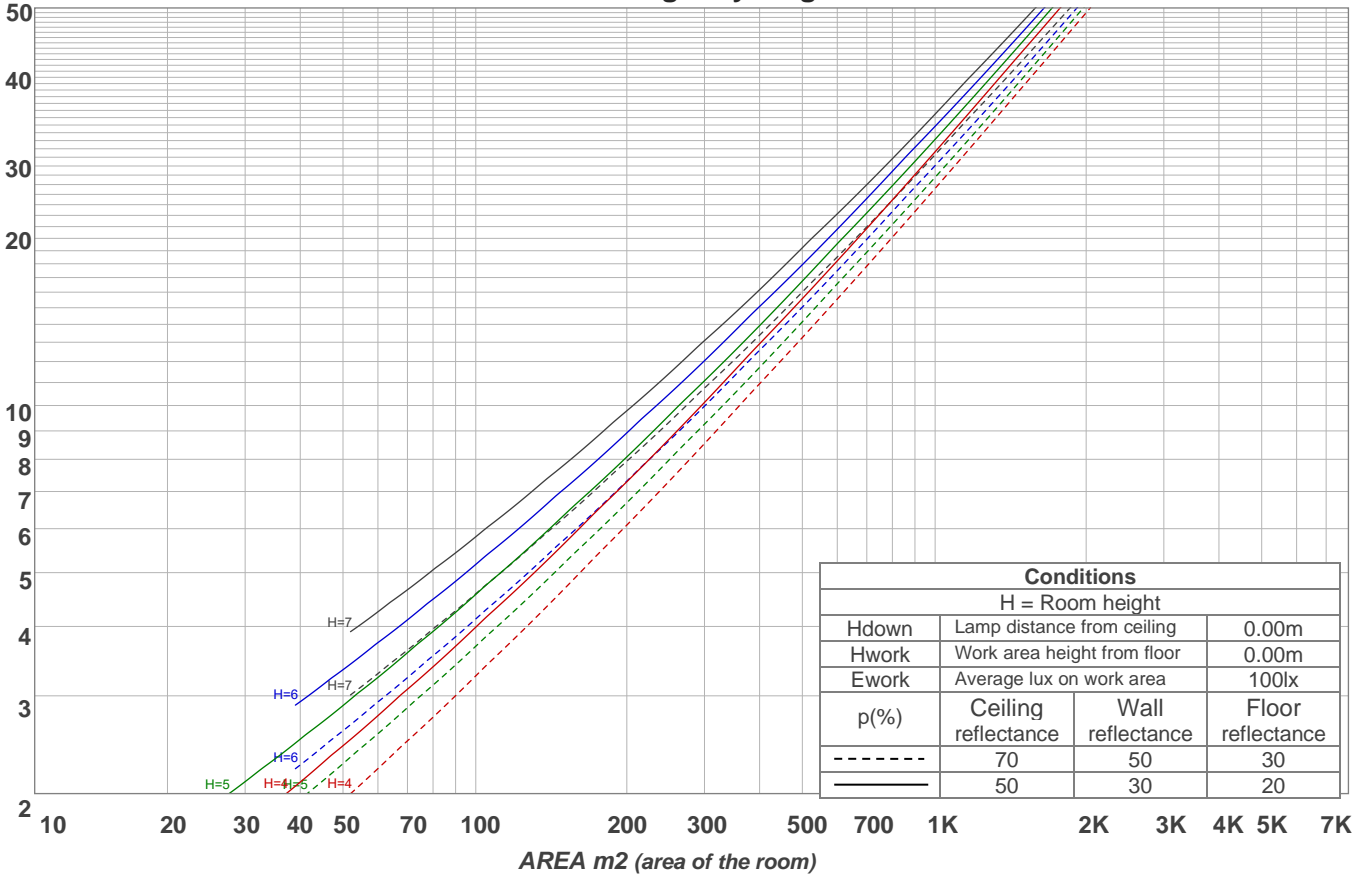
p Ceiling	70	70	50	50	30	70	70	50	50	30	
p Walls	50	30	50	30	30	50	30	50	30	30	
p Floor	20	20	20	20	20	20	20	20	20	20	
Room size X Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	18,1	19,3	18,4	19,7	19,9	18,0	19,2	18,3	19,6	19,8
	3H	19,6	20,9	20,0	21,2	21,4	19,5	20,7	19,9	21,0	21,3
	4H	20,3	21,5	20,7	21,8	22,1	20,1	21,3	20,5	21,6	21,9
	6H	20,9	21,9	21,2	22,2	22,6	20,6	21,7	21,0	22,0	22,4
	8H	21,0	22,0	21,4	22,4	22,8	20,8	21,8	21,1	22,1	22,6
12H	21,1	22,1	21,5	22,5	22,9	20,9	21,9	21,2	22,2	22,7	
4H	2H	18,7	19,9	19,1	20,2	20,5	18,6	19,8	19,1	20,1	20,4
	3H	20,5	21,5	20,9	21,9	22,3	20,4	21,4	20,8	21,8	22,2
	4H	21,2	22,2	21,7	22,6	23,1	21,1	22,0	21,5	22,4	23,0
	6H	21,9	22,7	22,4	23,1	23,5	21,7	22,5	22,2	22,9	23,3
	8H	22,1	22,9	22,6	23,3	23,7	21,9	22,7	22,4	23,0	23,4
12H	22,2	22,9	22,7	23,3	23,8	22,0	22,7	22,5	23,1	23,6	
8H	4H	21,5	22,3	22,0	22,7	23,1	21,4	22,2	21,9	22,6	23,0
	6H	22,3	22,9	22,8	23,4	24,0	22,1	22,7	22,6	23,2	23,8
	8H	22,6	23,2	23,2	23,7	24,4	22,4	23,0	22,9	23,5	24,2
	12H	22,9	23,3	23,5	23,8	24,5	22,6	23,1	23,2	23,6	24,2
12H	4H	21,5	22,2	22,0	22,6	23,1	21,4	22,1	21,9	22,5	23,0
	6H	22,4	22,9	22,9	23,5	24,1	22,2	22,7	22,7	23,3	23,9
	8H	22,7	23,2	23,3	23,7	24,3	22,5	23,0	23,1	23,5	24,1
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 / -0,5					
CIE 117-1995. Corrected glare indices referring to 4446 lm total luminous flux											

**Coefficients of Utilization**

Ceiling reflectance	80				70				50			30			10			0			
Wall reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0			
Floor reflectance	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0
<b>RCR</b>	<b>(RCR: Room Cavity Ratio)</b>																				
	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	96	93	90	92	90	87	89	86	84	82			
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	77	74	70	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	36	62	50	41	35	48	41	35	47	40	35	45	39	34	32			
8	60	46	38	32	58	45	37	32	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	39	31	26	37	30	26	36	30	25	35	30	25	23			

LAMPS (number of lamps)

**Luminaire budgetary diagram**



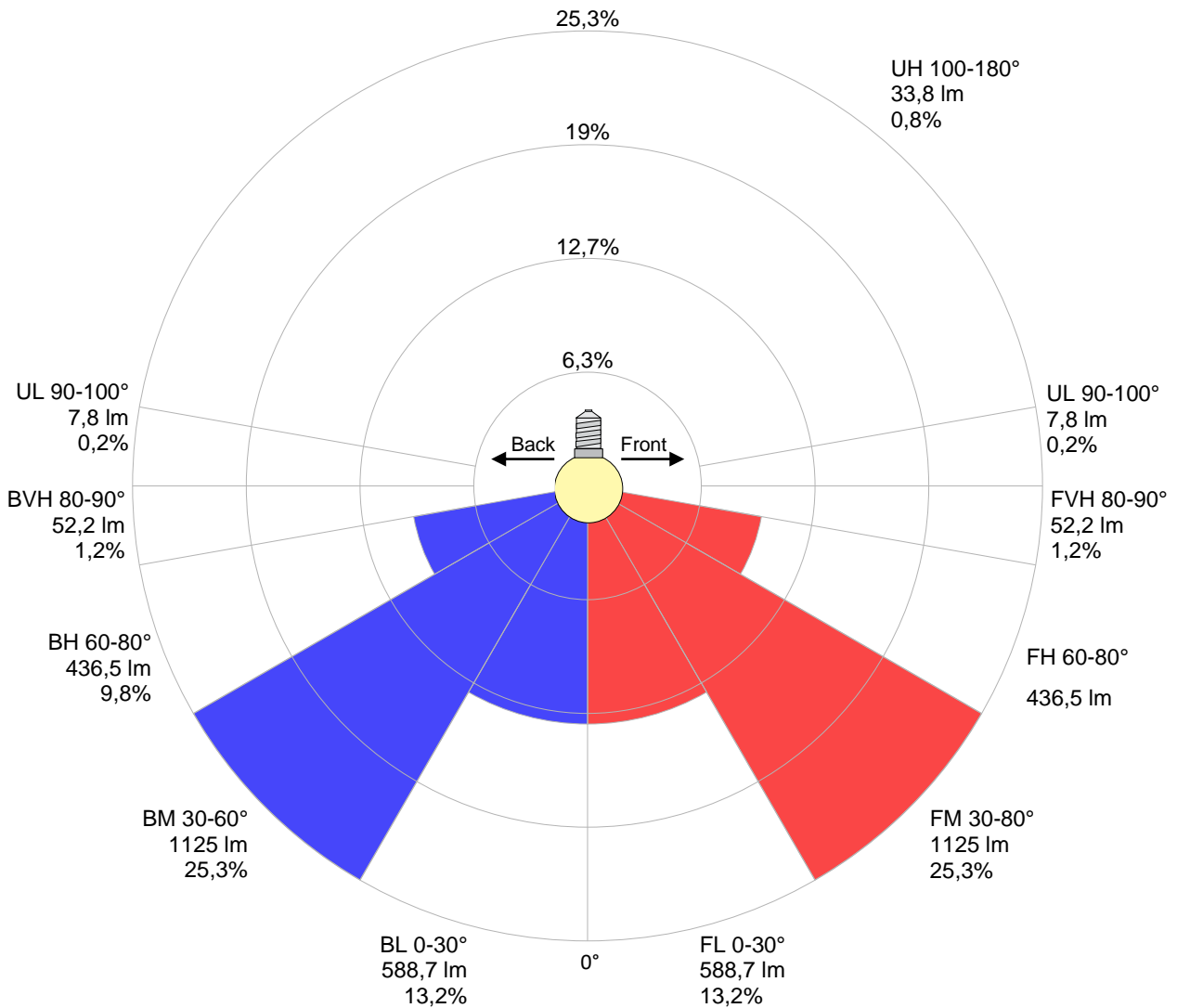
**Zonal Lumen Summary**

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
{LUM0-10}	411 lm	624 lm	755 lm	782 lm	714 lm	548 lm	325 lm	104 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
7,44 lm	5,41 lm	5,89 lm	5,83 lm	5,26 lm	4,66 lm	3,56 lm	2,34 lm	0,824 lm

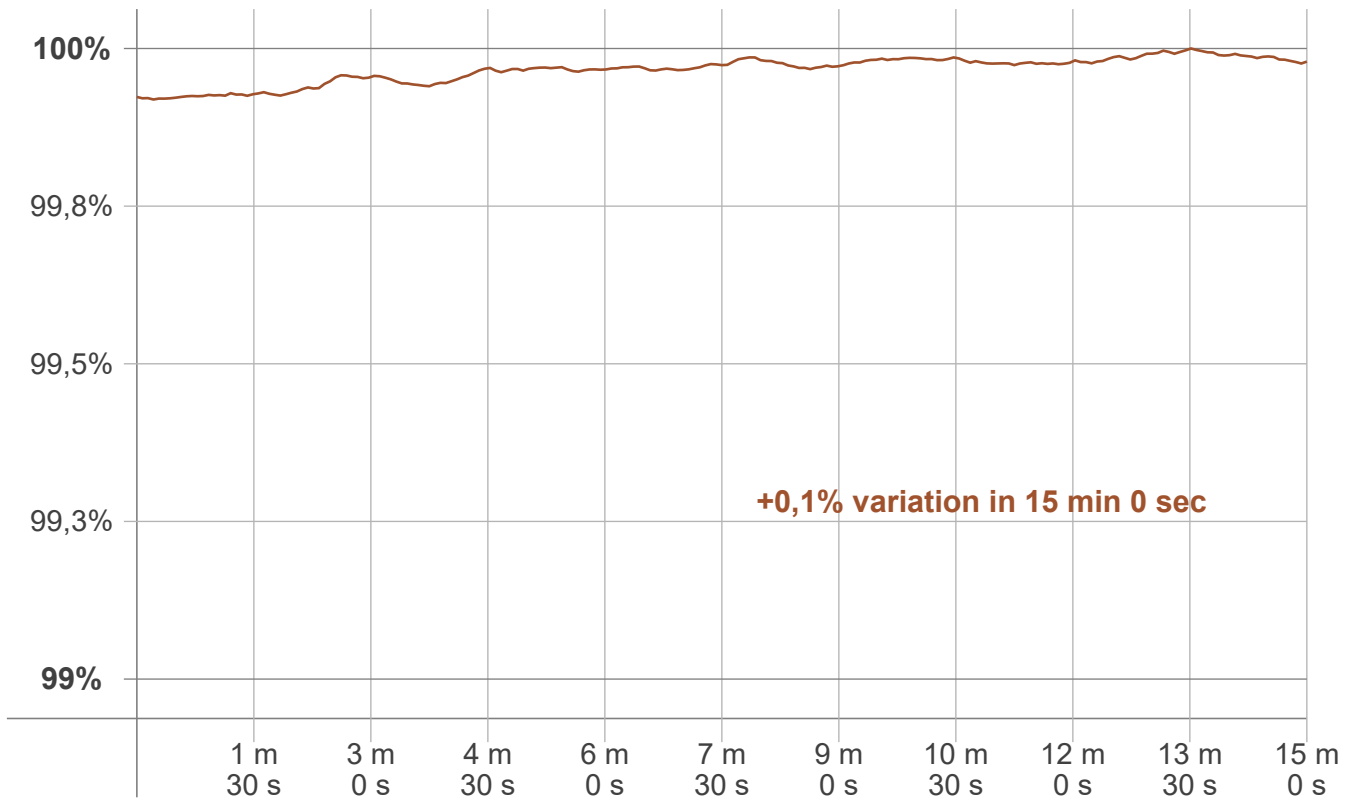
LCS table

BUG rating:	B2 U2 G1	
<b>Forward light</b>	Lumens	Lumens %
Low(0-30):	588,7	13,2%
Medium(30-60):	1125	25,3%
High(60-80):	436,5	9,8%
Very high(80-90):	52,2	1,2%
<b>Back light</b>		
Low(0-30):	588,7	13,2%
Medium(30-60):	1125	25,3%
High(60-80):	436,5	9,8%
Very high(80-90):	52,2	1,2%
<b>Uplight</b>		
Low(90-100):	7,8	0,2%
High(100-180):	33,8	0,8%

LCS graph



**Warmup curve**



**Warmup result**

<b>Warmup time:</b>	<b>Lamp stabilized in 15 min 0 sec</b>
<b>Warmup variation</b>	<b>+0,1%</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**

CCT start	CCT change	CCT end
6496 K	+4 K	6500 K

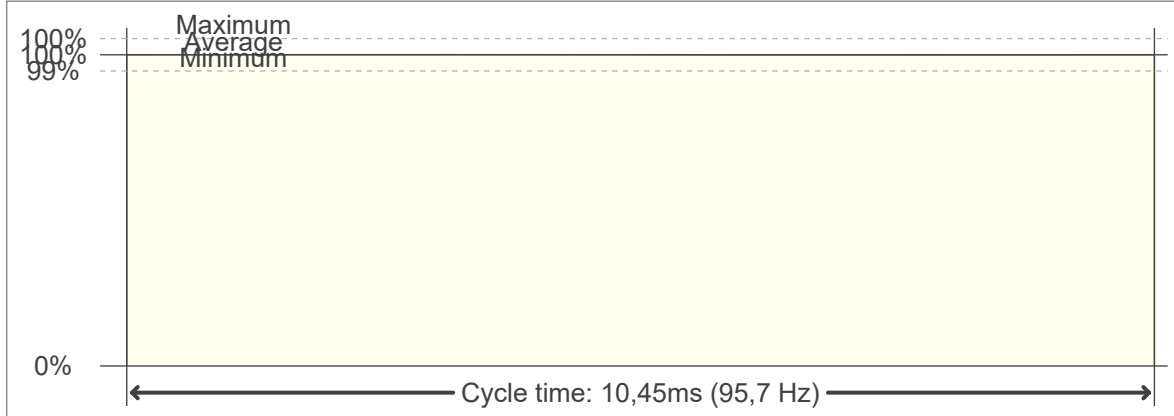
**Output change**

Output start	Output change	Output end
4444 lm	+3 lm	4446 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:		95,69 Hz	
Flicker index:	0	JA8/10 40Hz	0,02 %
Flicker percentage:	0,08 %	JA8/10 90Hz	0,02 %
SVM: (Visual flicker)	0	JA8/10 200Hz	0,07 %
PstLM	0,01	JA8/10 400Hz	0,08 %
Mp	0,01	JA8/10 1000Hz	0,08 %

**Flicker conditions:**

Sample rate:	20000 samples/second
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