

Light efficiency:



Light quality:



Color temperature:



Output: 880 lm

Peak: 239 cd

Power: 11,7 W

PF: 0,91



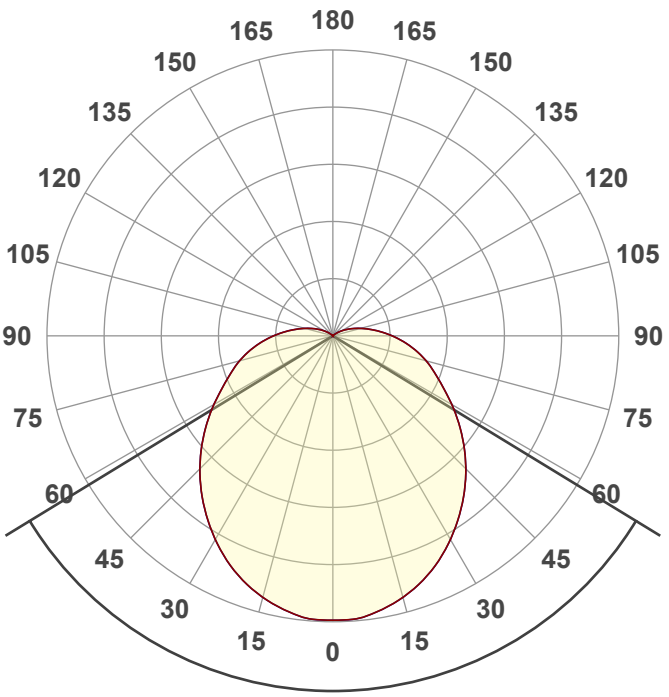
Tracking number: [VT240919-004687](#)

Product name:
802363-3000K

Item number:
802363-3000K

Date and time:
19-9-2024 15:13:31

Description:
LED BULKHEAD | JULIET | 12W

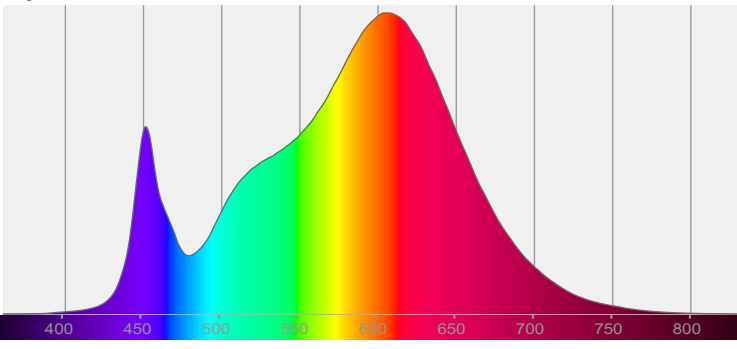


Beam angle **117,2°**

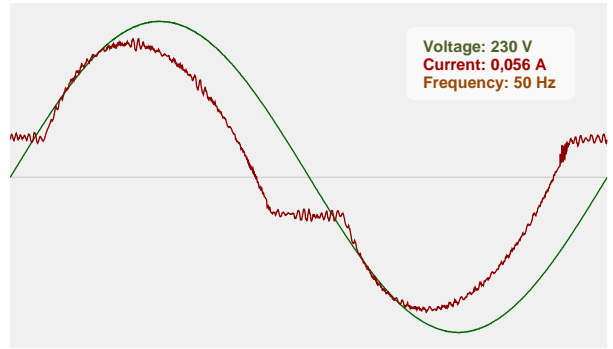


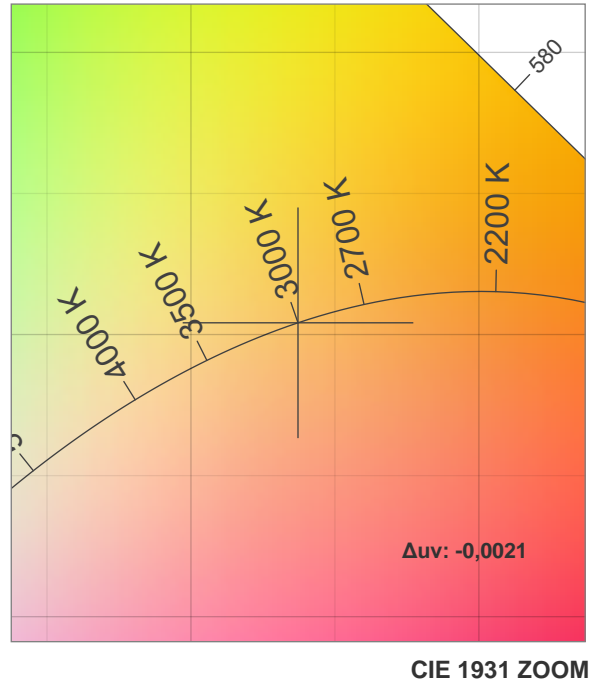
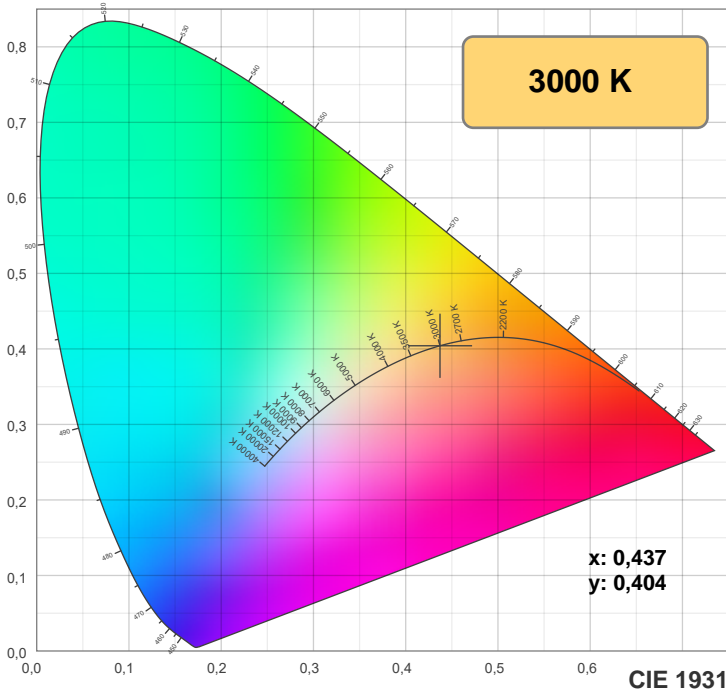
CIE 1931
x: 0,437
y: 0,404

Spectra

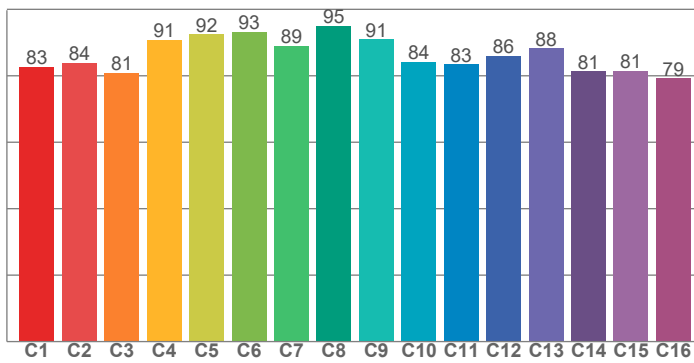


Power

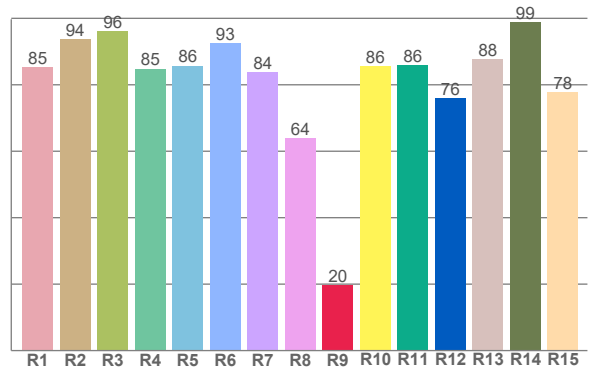




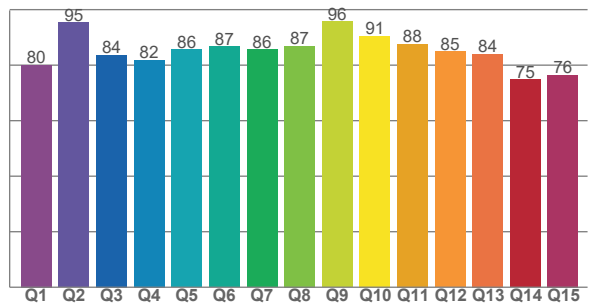
TM-30: 86,5



CRI: 85,8 (R1-R8)



CQS: 84,2



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
85,4	93,7	96,1	84,9	85,8	92,5	83,8	64,0	19,7	85,5	85,8	76,0	87,7	98,8	77,8

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
82,7	83,9	80,9	90,9	92,5	93,3	89,1	95,0	90,9	84,1	83,4	86,0	88,3	81,4	81,5	79,2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
80,1	95,4	83,6	81,9	85,7	86,7	85,7	86,9	95,7	90,5	87,6	84,9	84,1	74,9	76,4

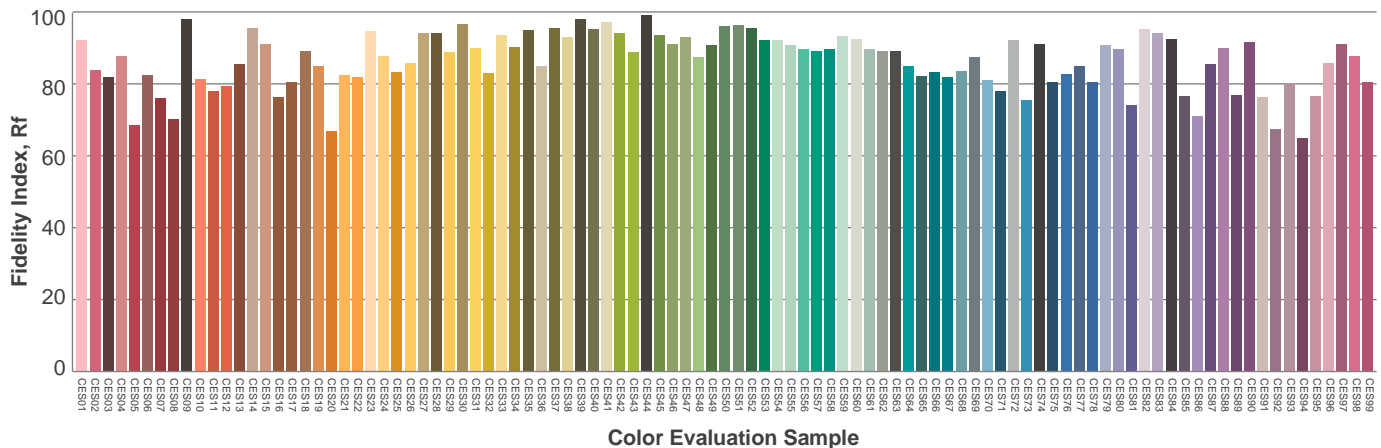
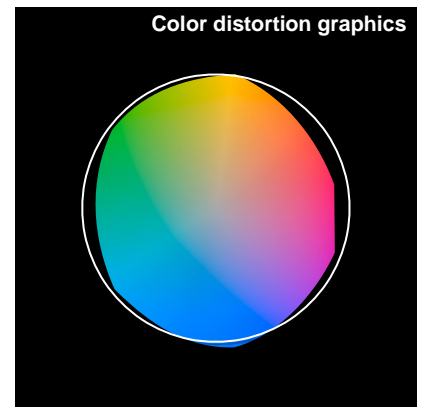
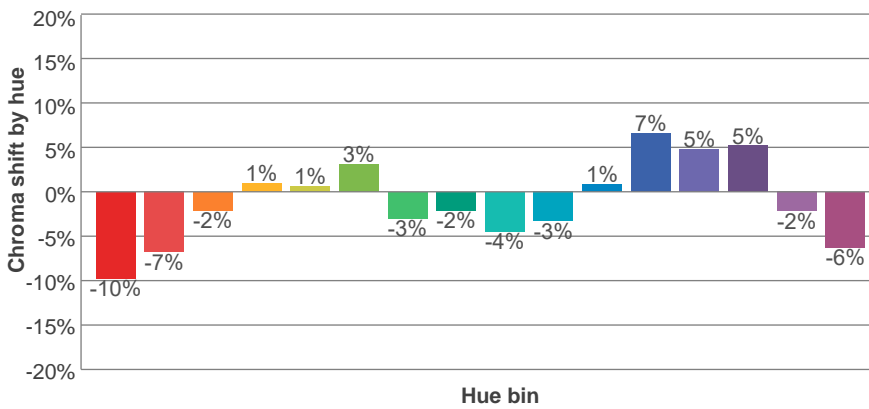
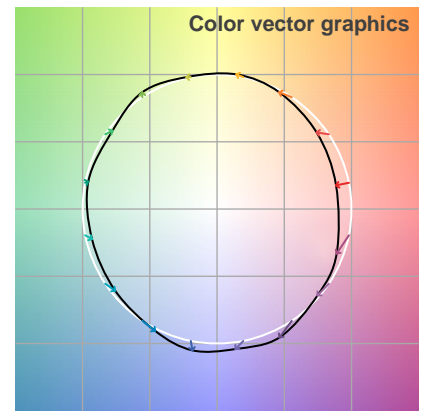
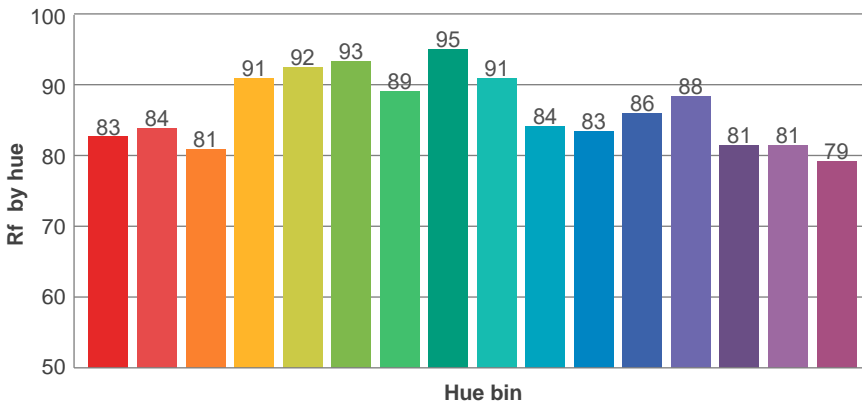
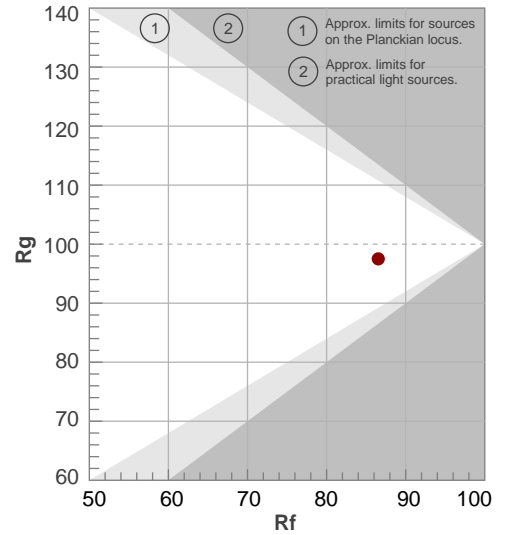
Color parameters

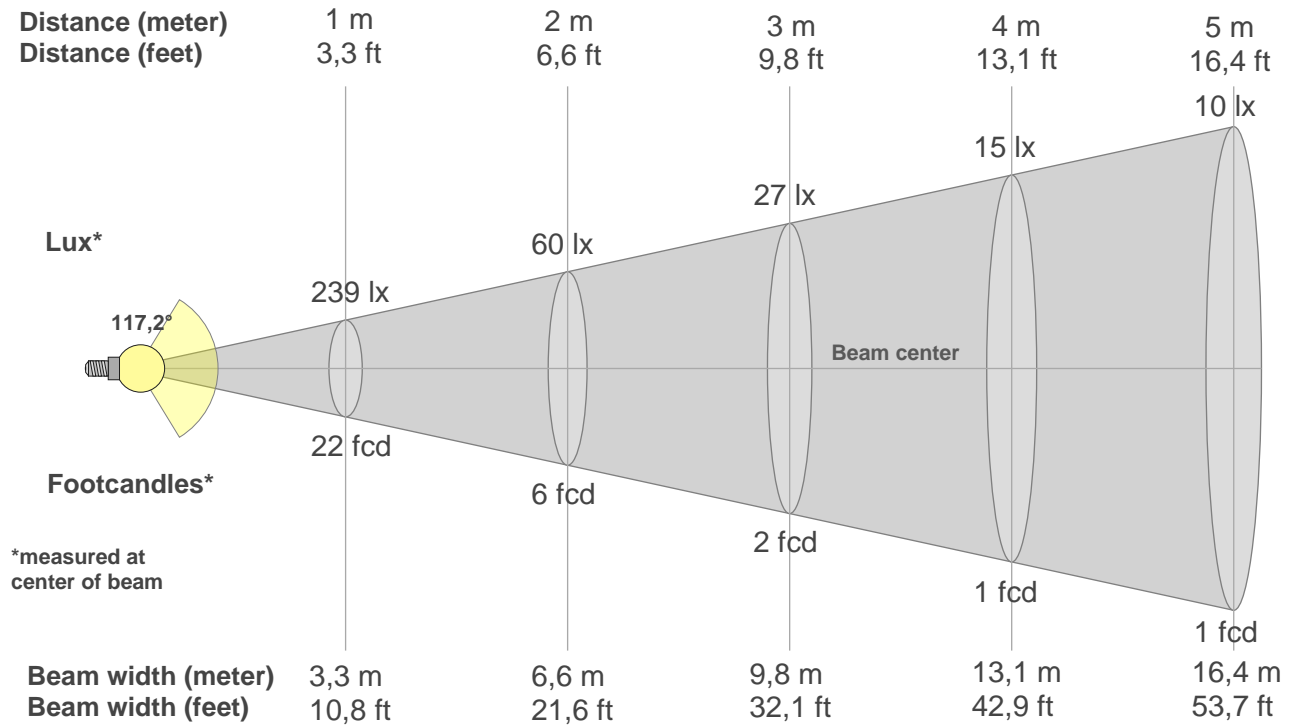
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3000 K	85,8	19,7	86,5	97,5	84,2	0,437	0,404	0,251	0,348	-0,0021

Rf 86,5
Fidelity index Rf

Rg 97,5
Gamut index Rg

Hue Bin	R _f	Shifts (%)	
		Chroma	Hue
1	83	-10%	0%
2	84	-7%	6%
3	81	-2%	10%
4	91	1%	5%
5	92	1%	3%
6	93	3%	-2%
7	89	-3%	-5%
8	95	-2%	-1%
9	91	-4%	4%
10	84	-3%	8%
11	83	1%	12%
12	86	7%	3%
13	88	5%	-7%
14	81	5%	-14%
15	81	-2%	-12%
16	79	-6%	-15%





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
239lx	60lx	27lx	15lx	10lx	7lx	5lx	4lx	3lx	2lx	2lx	2lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx	1lx
22,2fcd	5,6fcd	2,5fcd	1,4fcd	0,9fcd	0,6fcd	0,5fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd	0,1fcd

Intensities in 0° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
239	235	223	205	183	158	133	108	87	69	50	33	20	11	4	1	0	0	0	0
100%	98%	93%	86%	76%	66%	55%	45%	37%	29%	21%	14%	9%	5%	2%	0%	0%	0%	0%	0%

Intensities in 90° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
239	235	223	205	183	158	133	108	87	69	50	33	20	11	4	1	0	0	0	0
100%	98%	93%	86%	76%	66%	55%	45%	37%	29%	21%	14%	9%	5%	2%	0%	0%	0%	0%	0%

Intensities in 180° c-plane

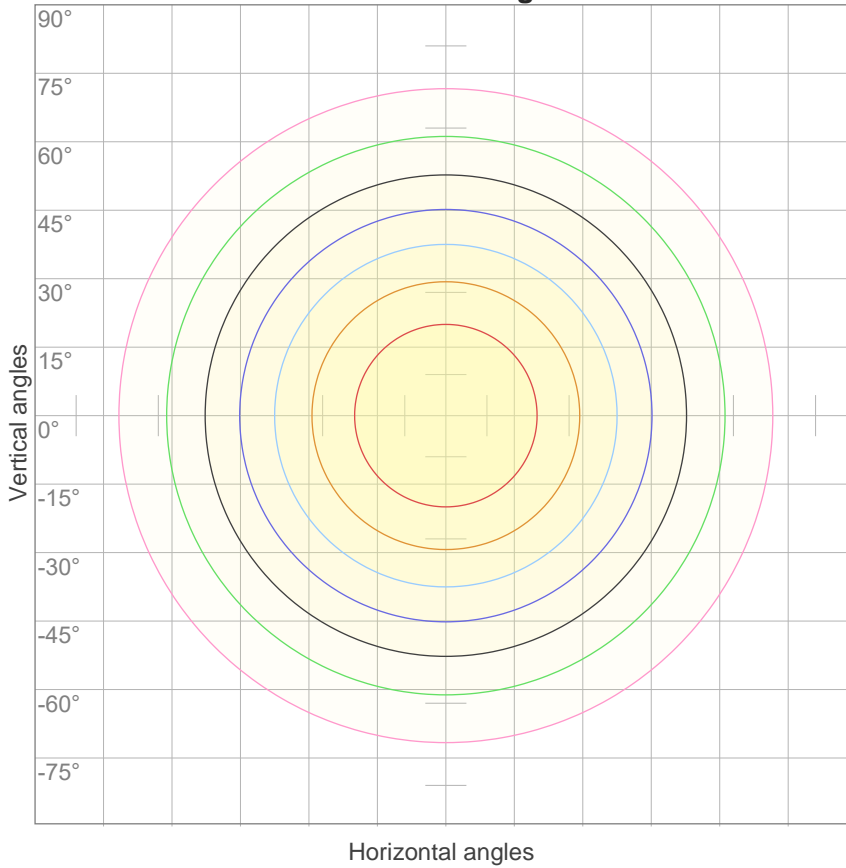
0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
239	235	223	205	183	158	133	108	87	69	50	33	20	11	4	1	0	0	0	0
100%	98%	93%	86%	76%	66%	55%	45%	37%	29%	21%	14%	9%	5%	2%	0%	0%	0%	0%	0%

Intensities in 270° c-plane

0°	9°	18°	27°	36°	45°	54°	63°	72°	81°	90°	99°	108°	117°	126°	135°	144°	153°	162°	171°
239	235	223	205	183	158	133	108	87	69	50	33	20	11	4	1	0	0	0	0
100%	98%	93%	86%	76%	66%	55%	45%	37%	29%	21%	14%	9%	5%	2%	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
117,2°	210,6°	245,8°	61,2%	41,0%

iso-candela diagram



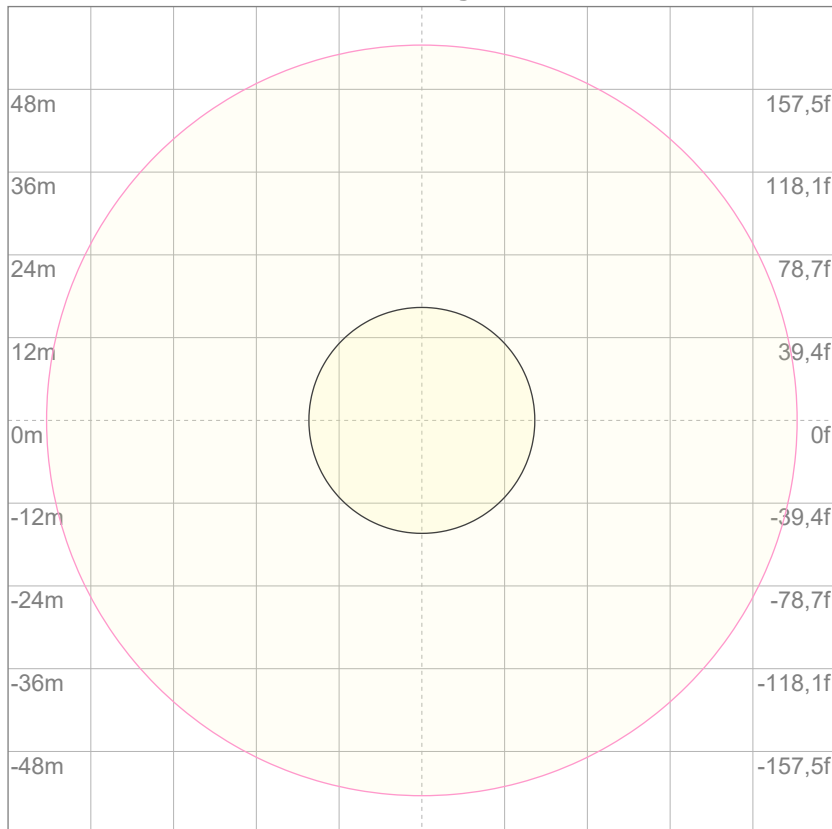
10%	24 cd
20%	48 cd
30%	72 cd
40%	96 cd
50%	120 cd
60%	144 cd
70%	168 cd
80%	191 cd
90%	215 cd

Conditions:

Number of c-planes: 72

Candela at center: 239 cd

iso-lux diagram



Mounting height: 10 meters (33 feet)

3%	71,8m lx
5%	0,120 lx
10%	0,239 lx
30%	0,718 lx
50%	1,20 lx

Conditions:

Number of c-planes: 72

Lux at center: 2,39 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				
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Variation of the observer position for the luminaire distance S										
n/a	n/a					n/a				
n/a	n/a					n/a				
n/a	n/a					n/a				
CIE 117-1995. Corrected glare indices referring to 880 lm total luminous flux										

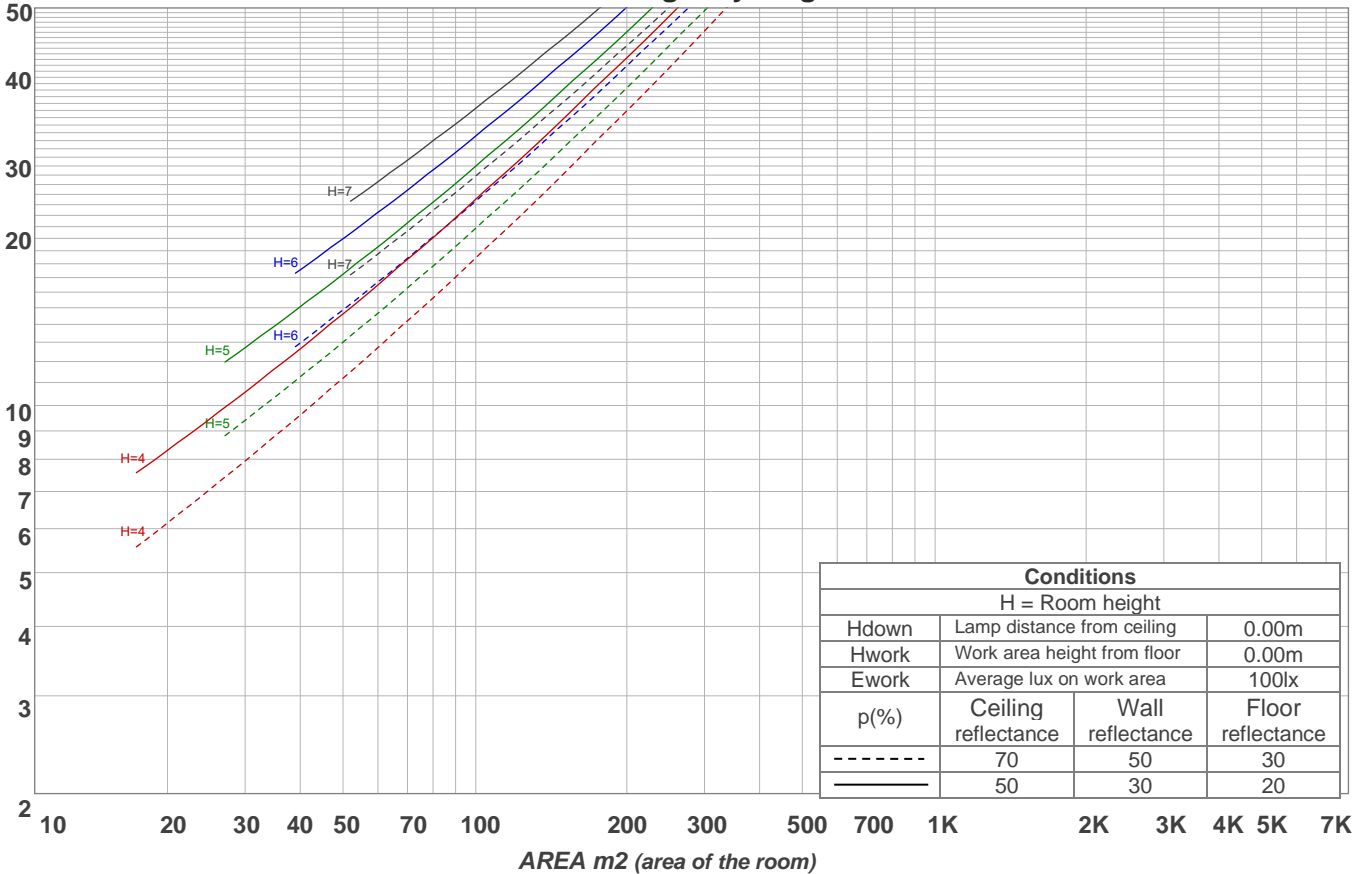
UGR data could not be calculated due to missing dimensions. Goto Edit->Photometric->Dimensions and set the fixture/lamp dimensions.

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	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	0
RCR	(RCR: Room Cavity Ratio) Room Values are expressed as percentage of Lumens delivered to the task surface																	
0	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	90
1	104	98	92	88	100	94	90	85	88	84	81	82	79	76	77	75	72	69
2	93	84	76	69	90	81	74	68	76	70	65	71	66	62	66	62	59	56
3	85	73	64	57	81	71	62	56	66	59	53	62	56	51	58	53	49	46
4	77	64	55	48	74	62	53	47	58	51	45	55	48	43	51	46	42	39
5	71	57	48	41	68	55	47	40	52	44	39	49	42	37	46	40	36	33
6	65	51	42	35	63	50	41	35	47	39	34	44	38	33	42	36	31	29
7	60	46	37	31	58	45	37	31	43	35	30	40	34	29	38	32	28	26
8	56	42	34	28	54	41	33	27	39	32	26	37	30	26	35	29	25	23
9	53	39	30	25	51	38	30	24	36	29	24	34	28	23	32	27	22	20
10	49	36	28	22	47	35	27	22	33	26	21	32	25	21	30	24	20	18

LAMPS (number of lamps)

Luminaire budgetary diagram



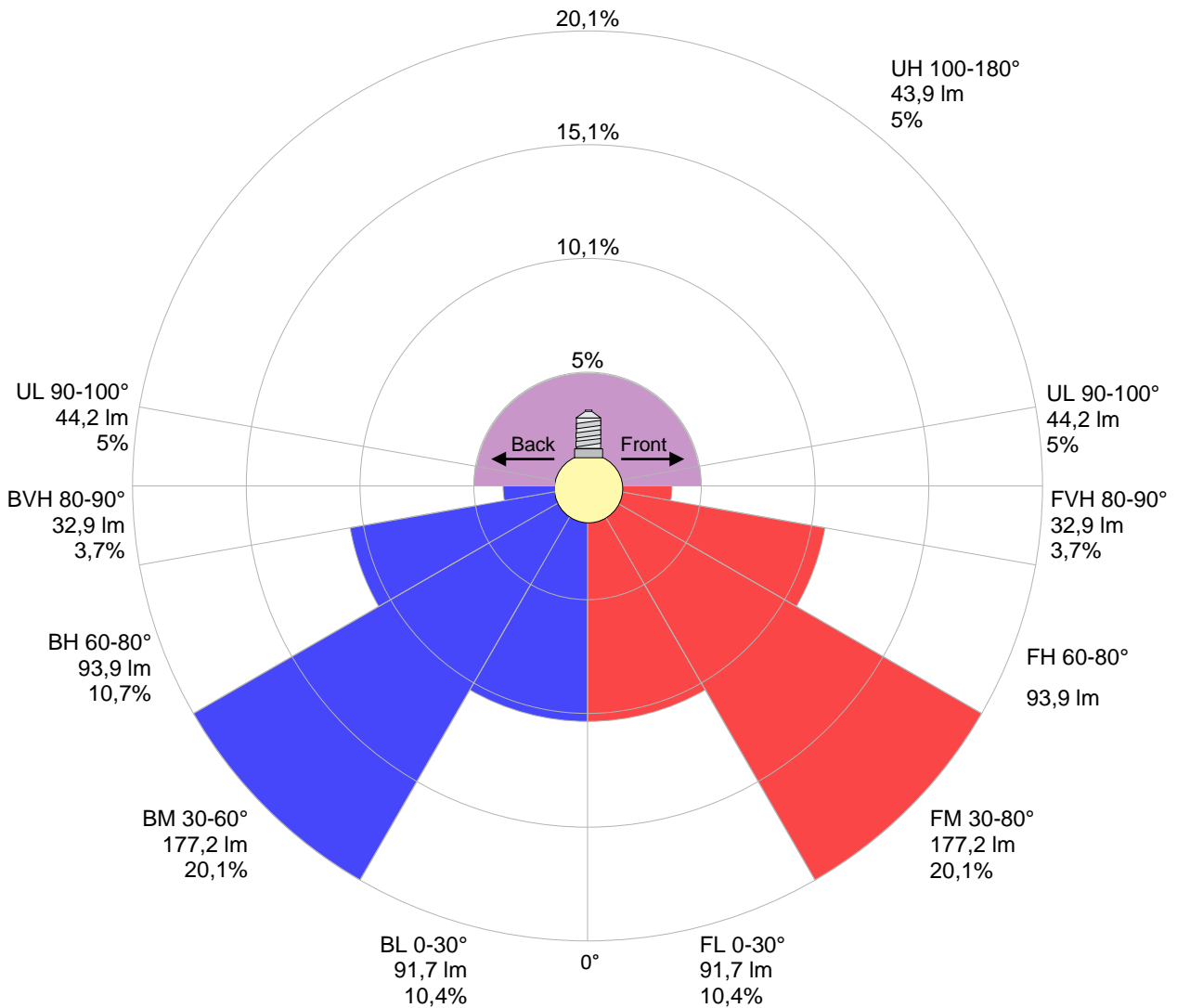
Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
{LUM0-10}	64,3 lm	96,6 lm	116 lm	122 lm	116 lm	102 lm	85,9 lm	65,8 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
44,2 lm	25,9 lm	12,7 lm	4,30 lm	0,595 lm	0,117 lm	0,084 lm	0,055 lm	0,018 lm

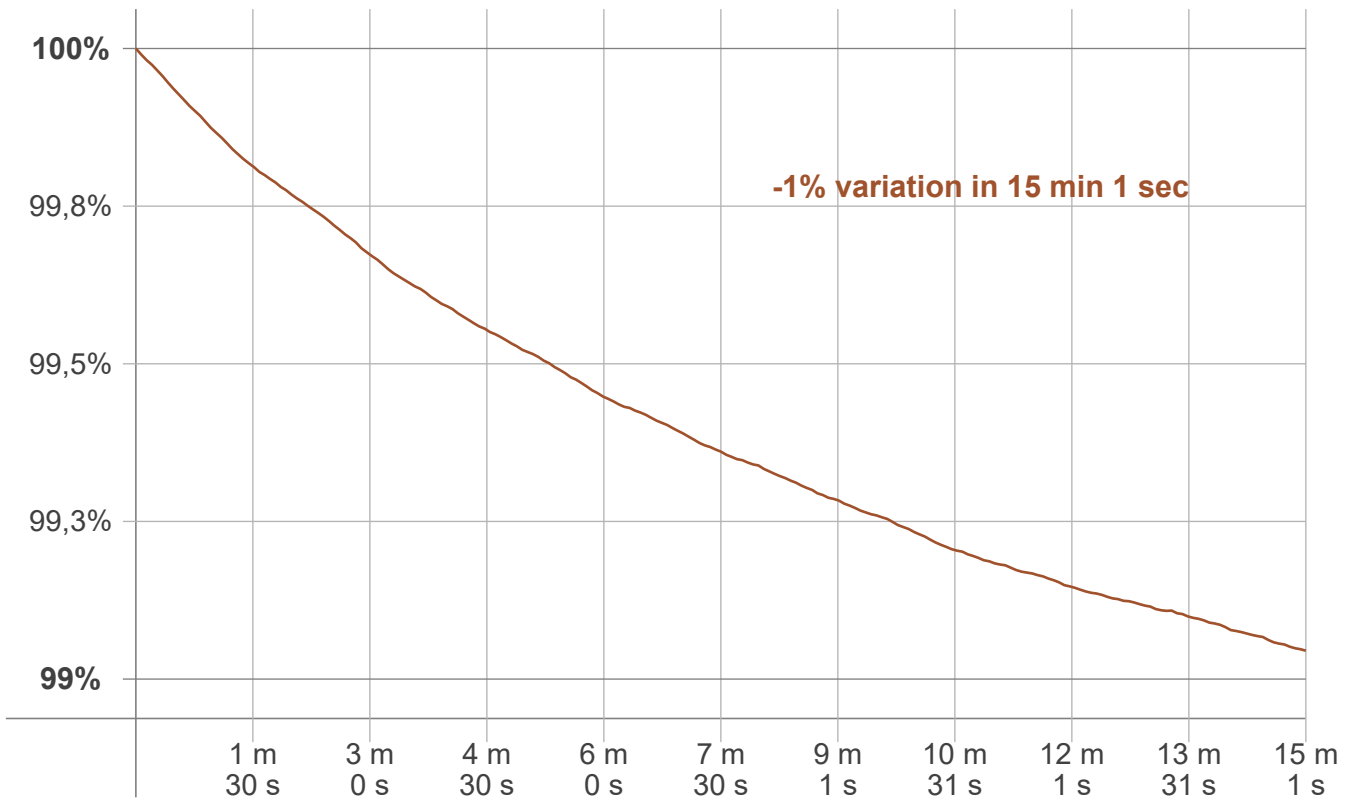
LCS table

BUG rating:	B0 U2 G1	
Forward light	Lumens	Lumens %
Low(0-30):	91,7	10,4%
Medium(30-60):	177,2	20,1%
High(60-80):	93,9	10,7%
Very high(80-90):	32,9	3,7%
Back light		
Low(0-30):	91,7	10,4%
Medium(30-60):	177,2	20,1%
High(60-80):	93,9	10,7%
Very high(80-90):	32,9	3,7%
Uplight		
Low(90-100):	44,2	5%
High(100-180):	43,9	5%

LCS graph



Warmup curve



Warmup result

Warmup time:	Lamp stabilized in 15 min 1 sec
Warmup variation	-1,0%

Warmup conditions

Stable period:	15 min
Stable change max:	2,0%
Minimum time:	15 min

Color temperature change

CCT start	CCT change	CCT end
2996 K	+4 K	3000 K

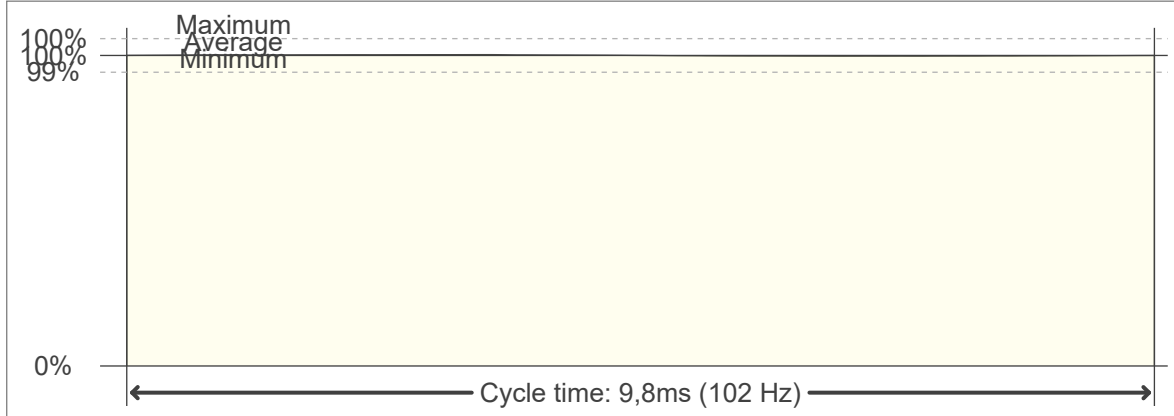
Output change

Output start	Output change	Output end
888 lm	-9 lm	880 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:		102,04 Hz	
Flicker index:	0	JA8/10 40Hz	0,01 %
Flicker percentage:	0,29 %	JA8/10 90Hz	0,02 %
SVM: (Visual flicker)	0,01	JA8/10 200Hz	0,28 %
PstLM	0,01	JA8/10 400Hz	0,28 %
Mp	0,01	JA8/10 1000Hz	0,29 %

Flicker conditions:

Sample rate:	20000 samples/second
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