

Light efficiency:

161 Lumen/Watt

Light quality:

CRI: 96.3

Color temperature:

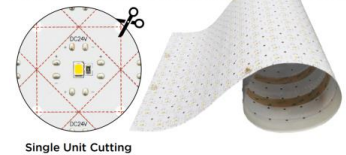
2986 K

Output: 1808 lm

Peak: 610 cd

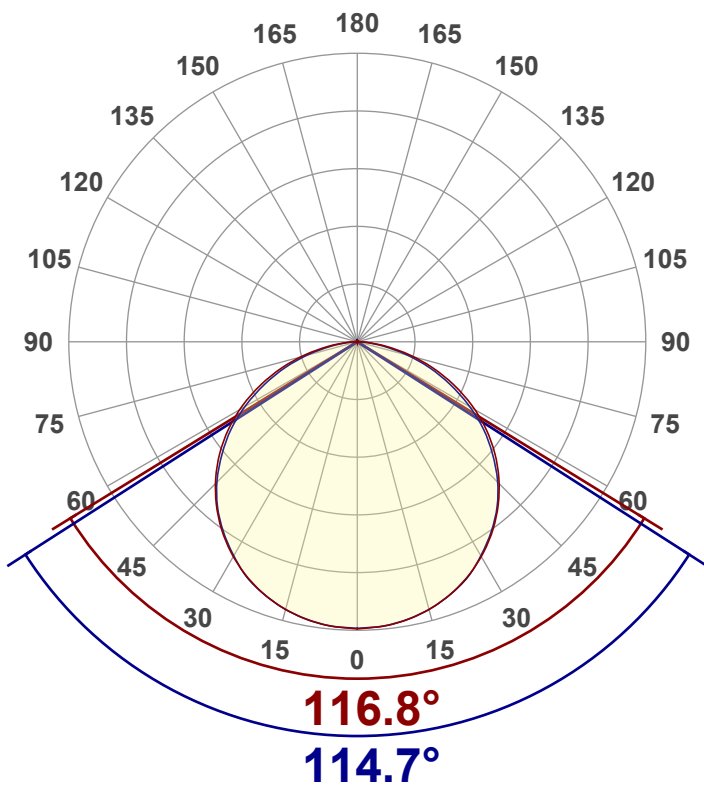
Power: 11.2 W

PF: 1.0



RoHS

IP20



Tracking number: [n/a](#)

Product name:
FBL24201130

Item number:

Date and time:
8/25/2025 5:12:04 PM

Operator:
BOB

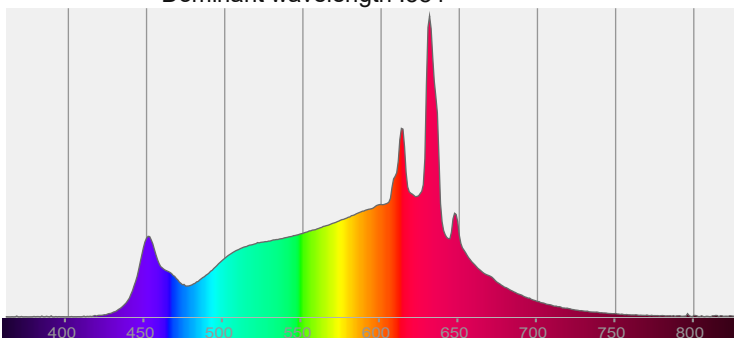
Description:
SIZE:609.6*304.8MM
SW 3000K



CIE 1931
x: 0.436
y: 0.401

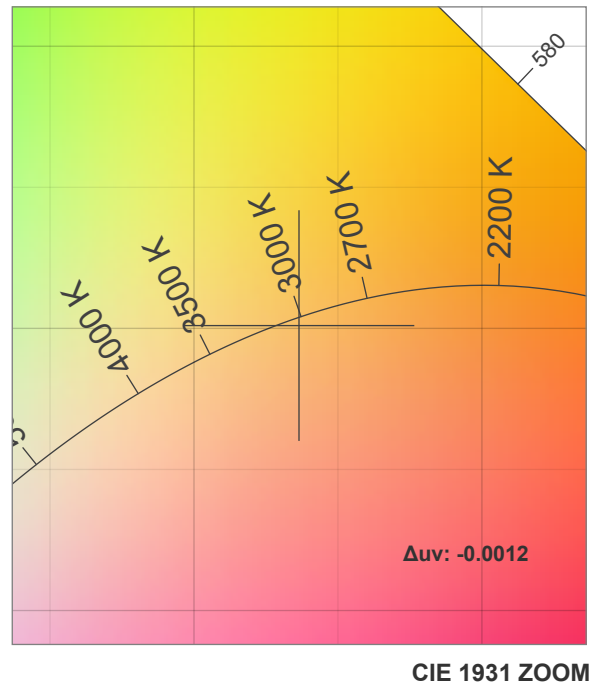
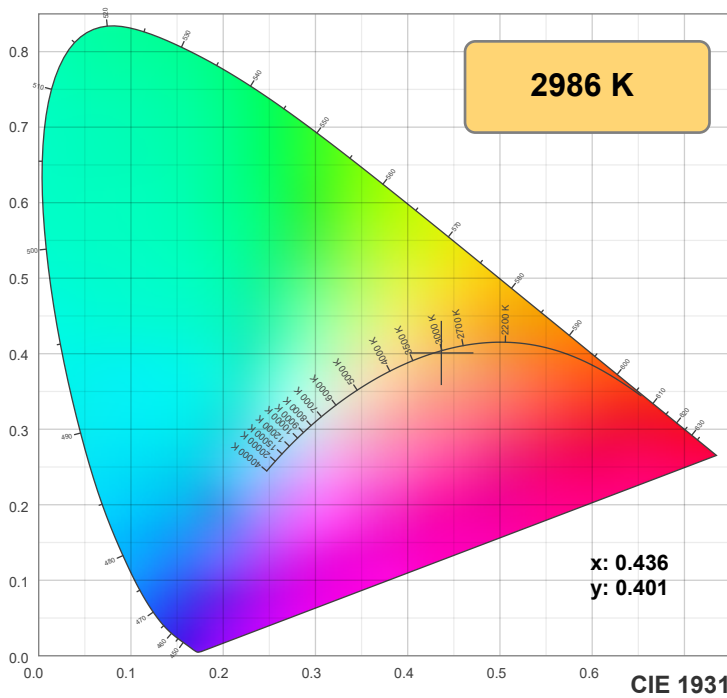
Spectra: Peak wavelength :631

Dominant wavelength :584

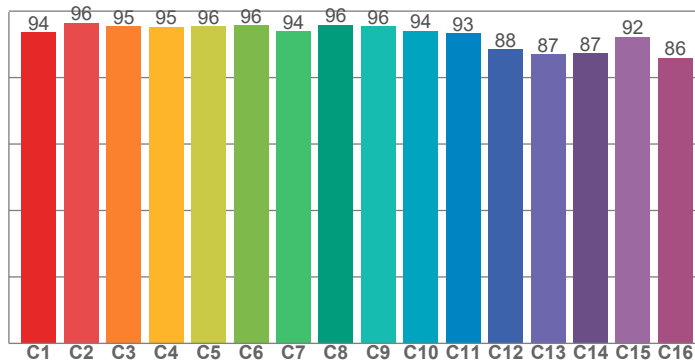


Power

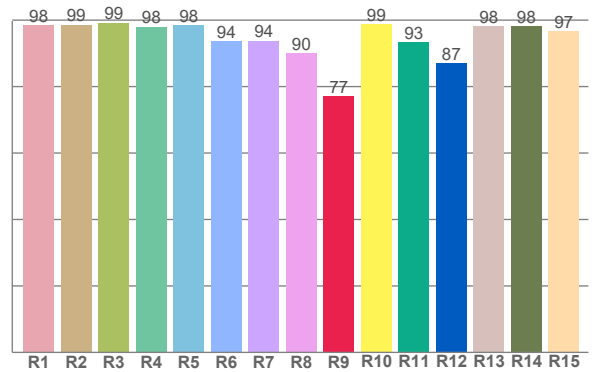
Voltage: 24.0 V
Current: 0.467 A
Frequency: 0 Hz



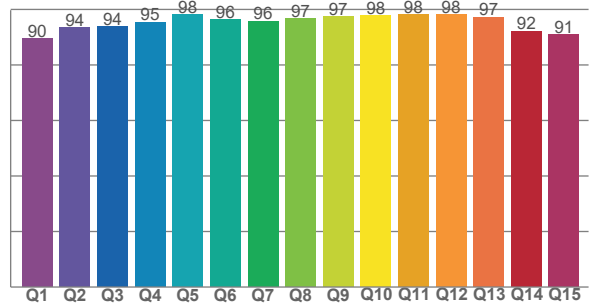
TM-30: 93.3



CRI: 96.3 (R1-R8)



CQS: 94.3



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
98.4	98.6	99.2	98.0	98.4	93.6	93.8	90.0	77.2	98.9	93.5	87.0	98.3	98.2	96.6

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
93.7	96.4	95.5	95.3	95.5	95.7	93.9	95.9	95.5	94.1	93.3	88.5	87.0	87.4	92.2	86.0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89.5	93.5	93.7	95.4	98.1	96.2	95.8	96.8	97.5	97.9	98.1	98.3	97.3	92.2	90.9

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
2986 K	96.3	77.2	93.3	100.4	94.3	0.436	0.401	0.252	0.347	-0.0012

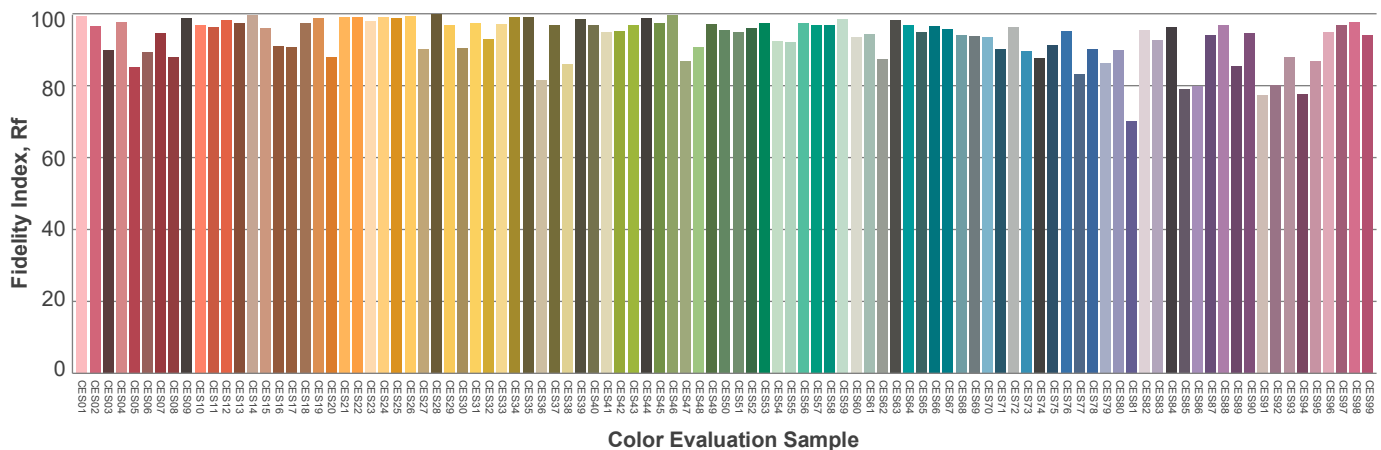
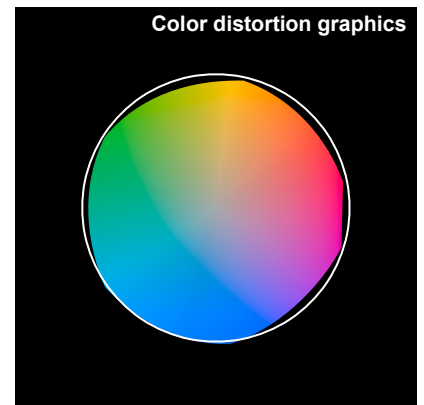
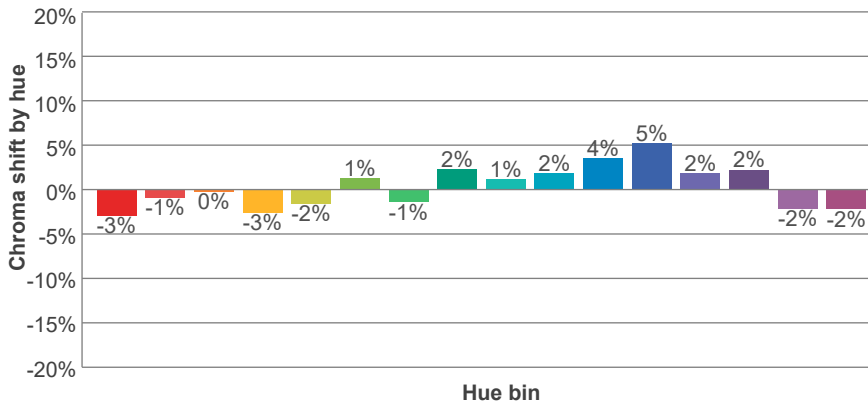
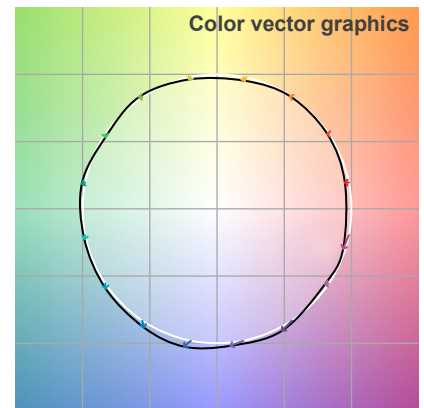
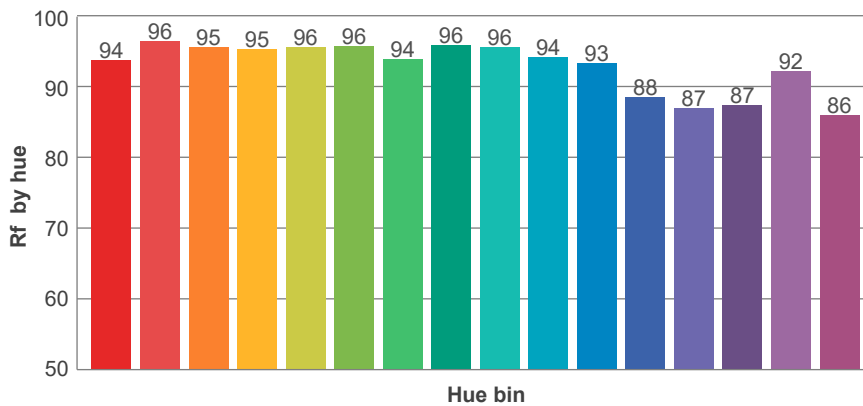
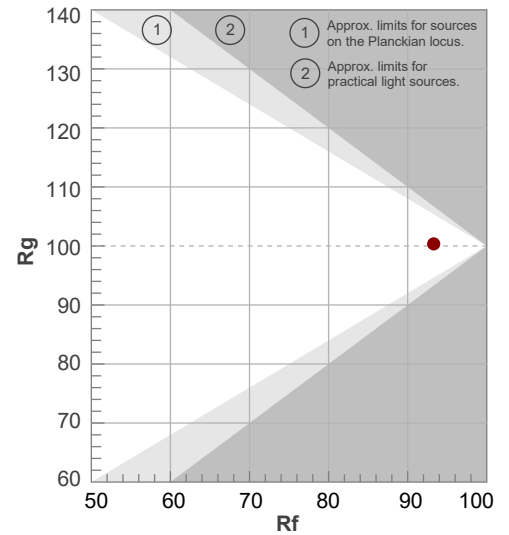
Rf 93.3

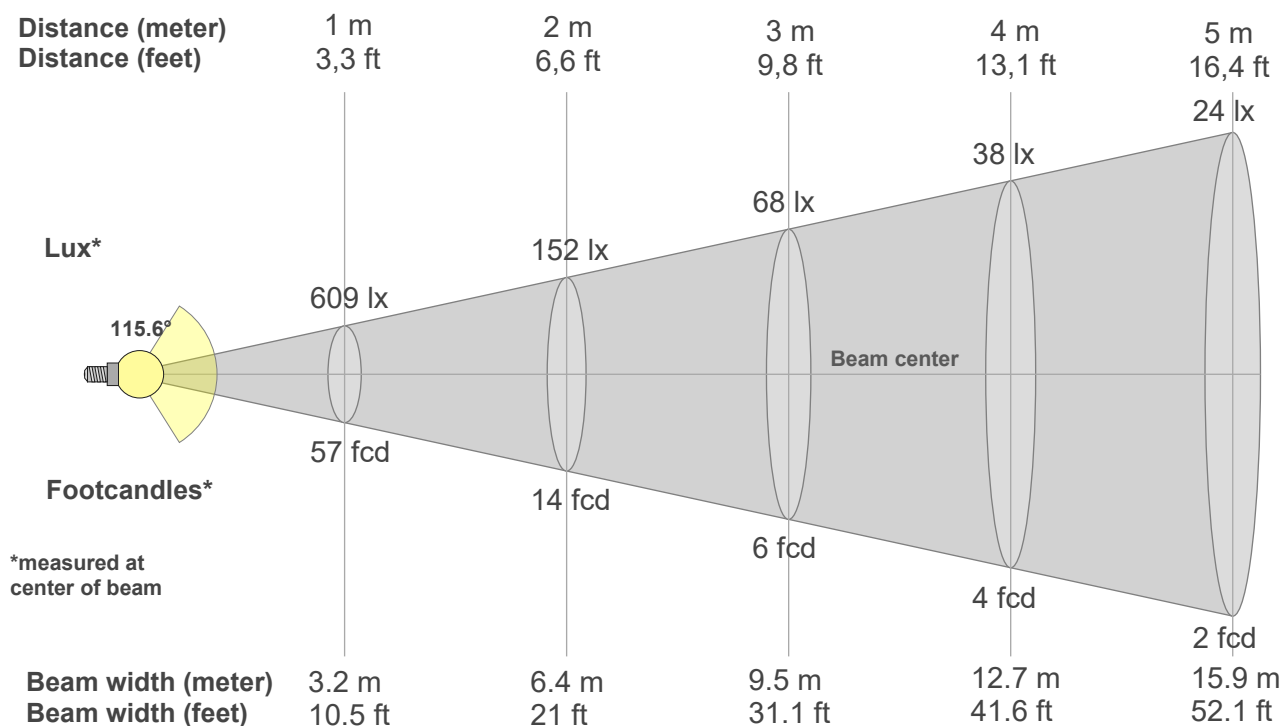
Fidelity index Rf

Rg 100.4

Gamut index Rg

Hue Bin	R _f	Shifts (%)	
		Chroma	Hue
1	94	-3%	1%
2	96	-1%	1%
3	95	0%	1%
4	95	-3%	-2%
5	96	-2%	2%
6	96	1%	2%
7	94	-1%	2%
8	96	2%	1%
9	96	1%	3%
10	94	2%	3%
11	93	4%	4%
12	88	5%	-4%
13	87	2%	-10%
14	87	2%	-10%
15	92	-2%	-2%
16	86	-2%	-11%





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
609lx	152lx	68lx	38lx	24lx	17lx	12lx	10lx	8lx	6lx	5lx	4lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	2lx
56.6fcd	14.1fcd	6.3fcd	3.5fcd	2.3fcd	1.6fcd	1.2fcd	0.9fcd	0.7fcd	0.6fcd	0.5fcd	0.4fcd	0.3fcd	0.3fcd	0.3fcd	0.2fcd	0.2fcd	0.2fcd	0.2fcd	0.1fcd

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°
609	607	600	589	573	552	527	498	464	426	385	339	289	235	180	125	73	31	7	1
100%	100%	99%	97%	94%	91%	87%	82%	76%	70%	63%	56%	47%	39%	30%	21%	12%	5%	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°
609	607	600	589	573	553	525	495	462	422	377	329	276	221	166	111	61	24	6	2
100%	100%	99%	97%	94%	91%	86%	81%	76%	69%	62%	54%	45%	36%	27%	18%	10%	4%	1%	0%

Intensities in 180° c-plane

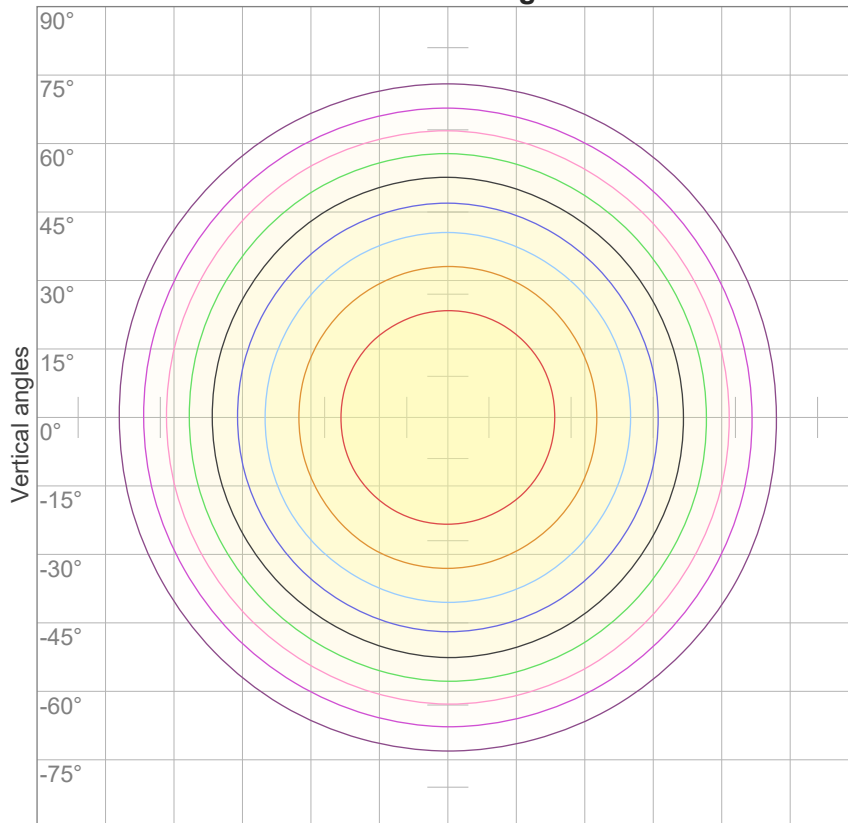
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
609	607	600	589	573	552	527	498	464	426	385	339	289	235	180	125	73	31	7	1
100%	100%	99%	97%	94%	91%	87%	82%	76%	70%	63%	56%	47%	39%	30%	21%	12%	5%	1%	0%

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°
609	607	600	589	573	553	525	495	462	422	377	329	276	221	166	111	61	24	6	2
100%	100%	99%	97%	94%	91%	86%	81%	76%	69%	62%	54%	45%	36%	27%	18%	10%	4%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
115.6°	161.4°	175.3°	78.2%	52.8%

iso-candela diagram



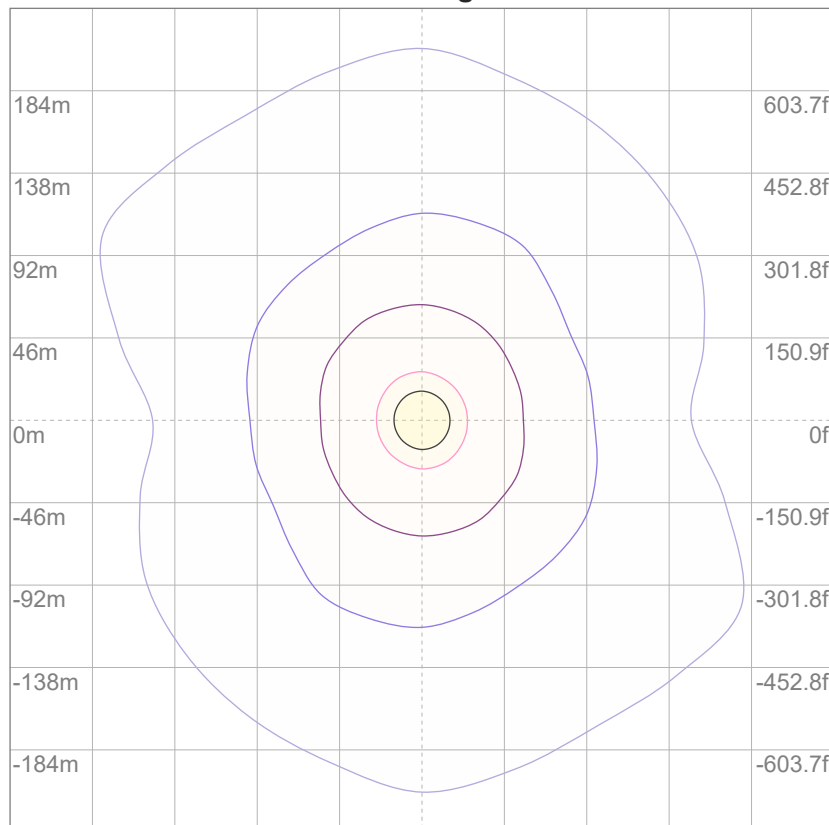
10%	61 cd
20%	122 cd
30%	183 cd
40%	244 cd
50%	304 cd
60%	365 cd
70%	426 cd
80%	487 cd
90%	548 cd

Conditions:

Number of c-planes: 12

Candela at center: 609 cd

iso-lux diagram



3%	0.183 lx
5%	0.304 lx
10%	0.609 lx
30%	1.83 lx
50%	3.04 lx

Conditions:

Number of c-planes: 12

Lux at center: 6.09 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
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 1808 lm total luminous flux										

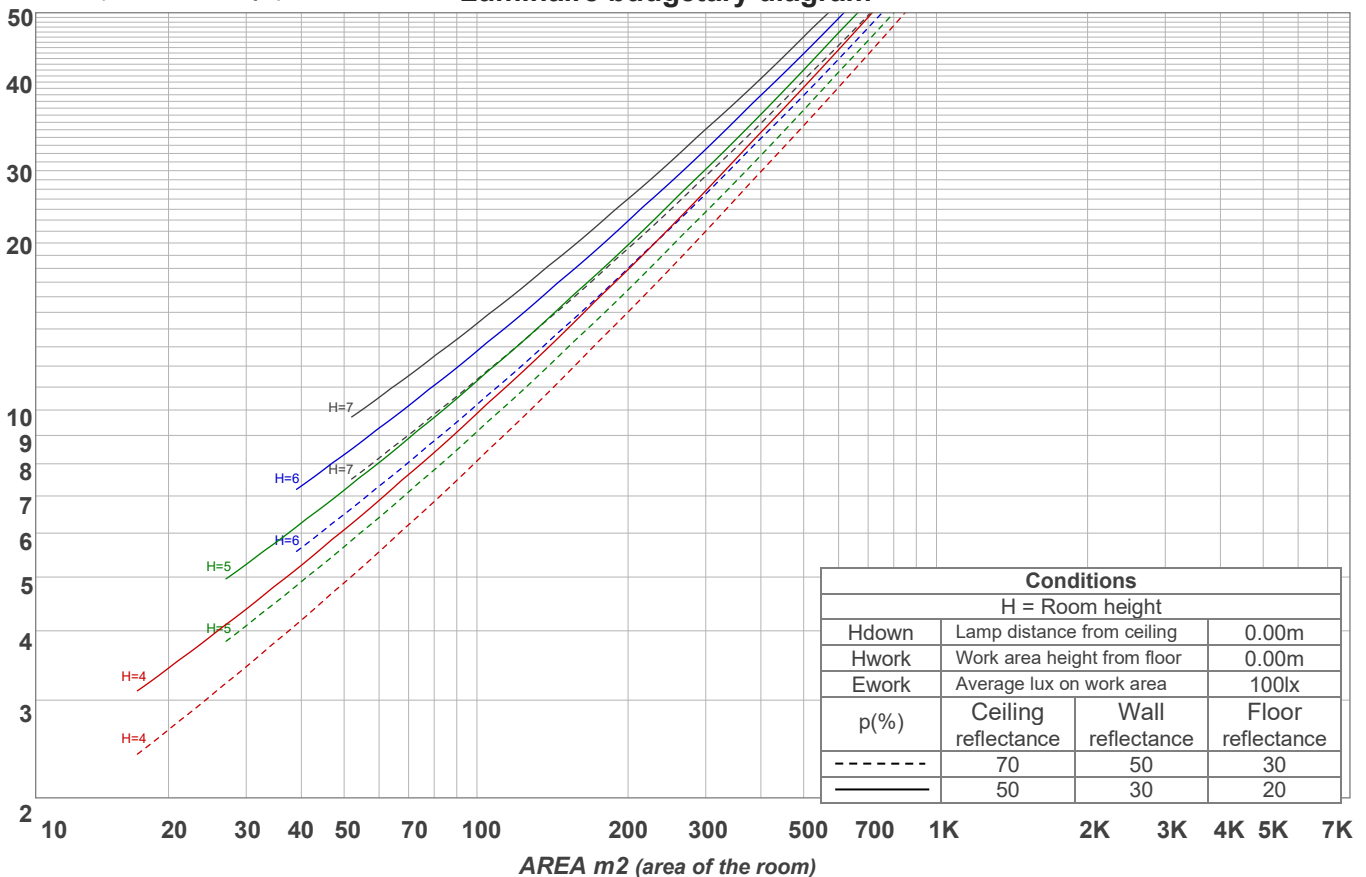
UGR data could not be calculated due to missing/wrong symmetry. Go to Edit -> Photometric -> Corrections and select Correct asymmetry (UGR not defined for asymmetrical distributions)..

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	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	109	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	78	96	88	82	77	85	79	75	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	47	73	61	53	46	59	52	46	57	50	45	55	49	45	42
6	70	56	47	41	68	55	47	40	53	46	40	51	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	29	55	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	25	36	30	25	24

LAMPS (number of lamps)

Luminaire budgetary diagram



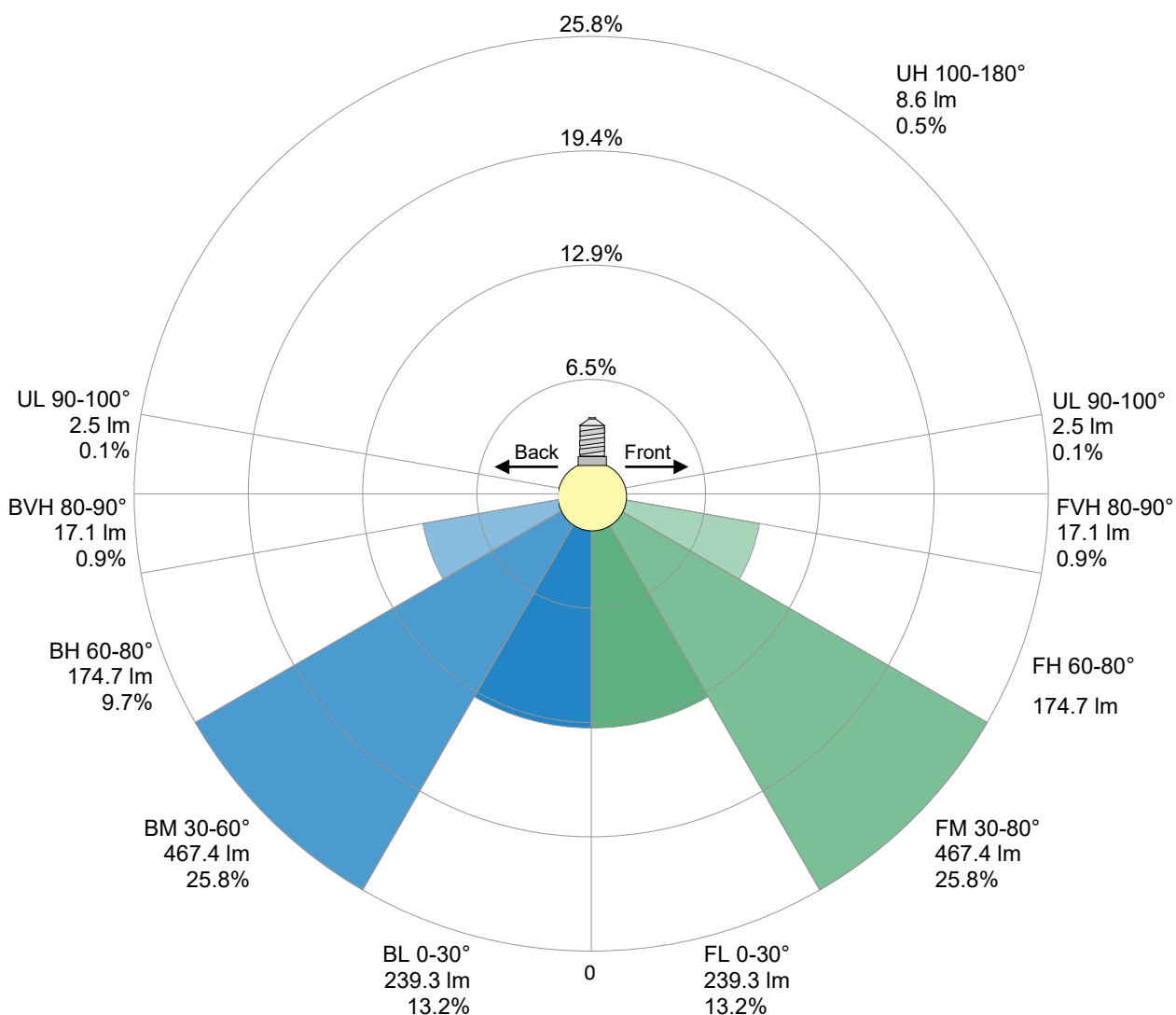
Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
57.8 lm	166 lm	255 lm	311 lm	327 lm	297 lm	225 lm	125 lm	33.9 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
2.34 lm	1.22 lm	1.37 lm	1.46 lm	1.44 lm	1.32 lm	0.993 lm	0.633 lm	0.208 lm

LCS table

BUG rating:	B1 U1 G1	
Forward light	Lumens	Lumens %
Low(0-30):	239.3	13.2%
Medium(30-60):	467.4	25.8%
High(60-80):	174.7	9.7%
Very high(80-90):	17.1	0.9%
Back light		
Low(0-30):	239.3	13.2%
Medium(30-60):	467.4	25.8%
High(60-80):	174.7	9.7%
Very high(80-90):	17.1	0.9%
Uplight		
Low(90-100):	2.5	0.1%
High(100-180):	8.6	0.5%

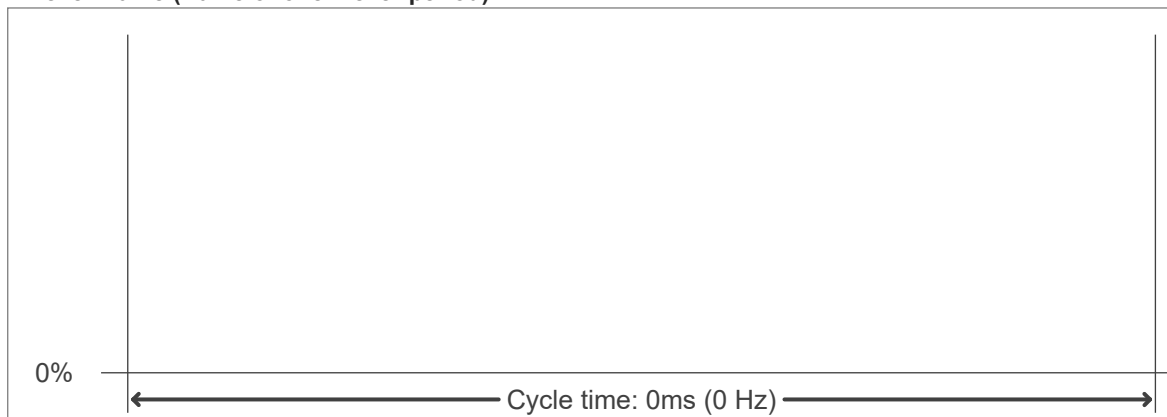
LCS graph



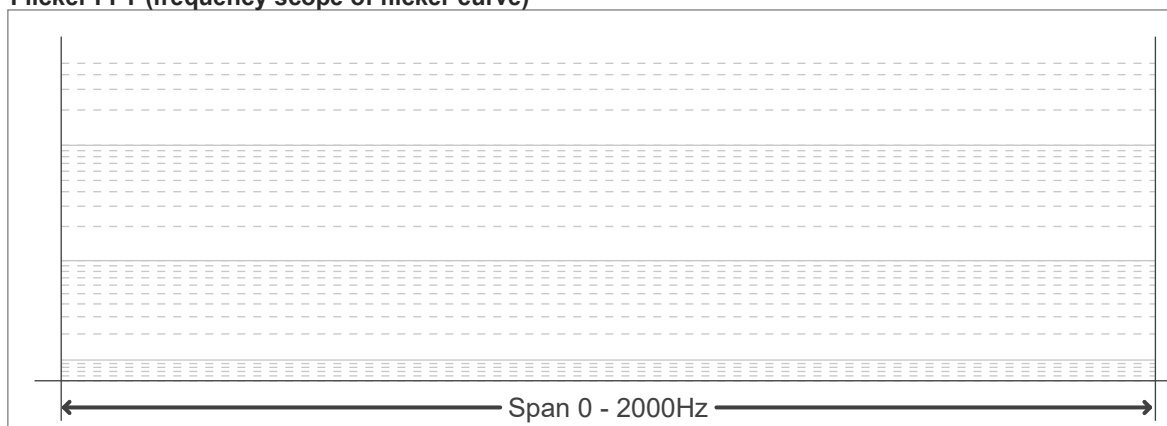
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:		n/a Hz	
Flicker index:	n/a	JA8/10 40Hz	n/a %
Flicker percentage:	n/a %	JA8/10 90Hz	n/a %
SVM: (Visual flicker)	n/a	JA8/10 200Hz	n/a %
PstLM	n/a	JA8/10 400Hz	n/a %
Mp	n/a	JA8/10 1000Hz	n/a %

Flicker conditions:

Sample rate:	n/a samples/second
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