

Light efficiency:

128 Lumen/Watt

Light quality:

CRI: 95.0

Color temperature:

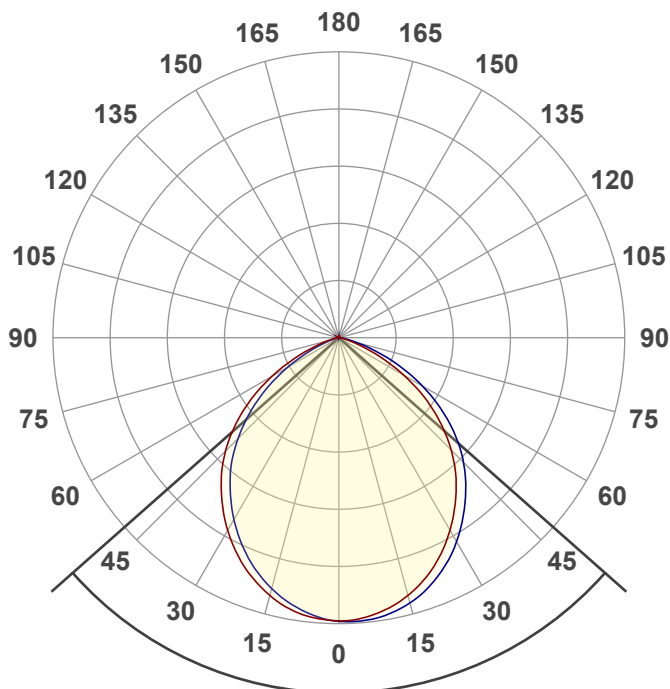
4230 K

Output: 3235 lm

Peak: 1475 cd

Power: 25.4 W

PF: 1.0



Beam angle

97.1°

Product name:

CDL6D-SW5A-SP27W (27 W)

Date and time:

6/13/2023 9:56:36 AM

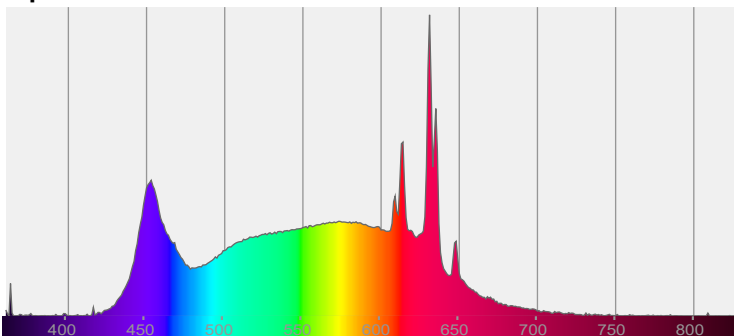


CIE 1931

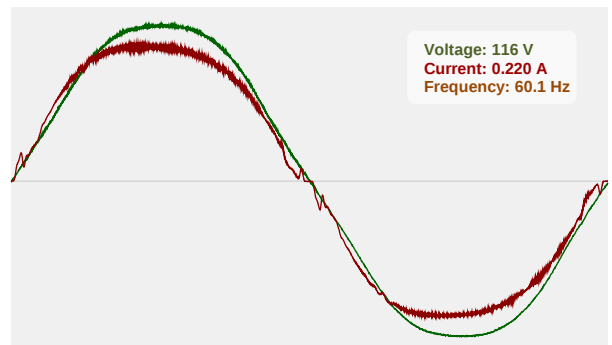
x: 0.370

y: 0.367

Spectra



Power



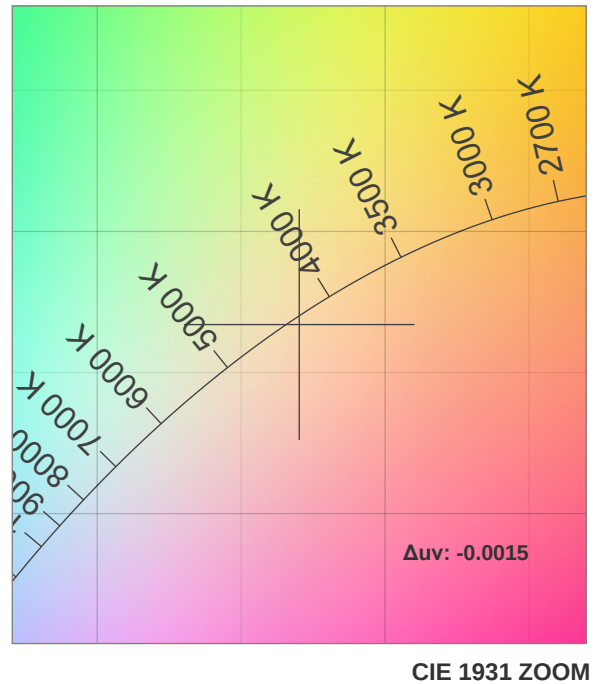
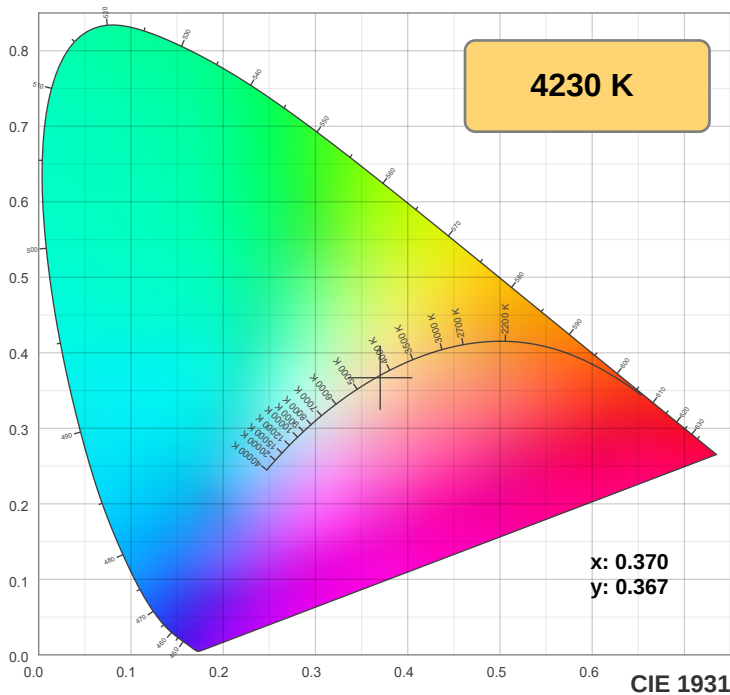
T 314.743.3067

F 314.972.6202

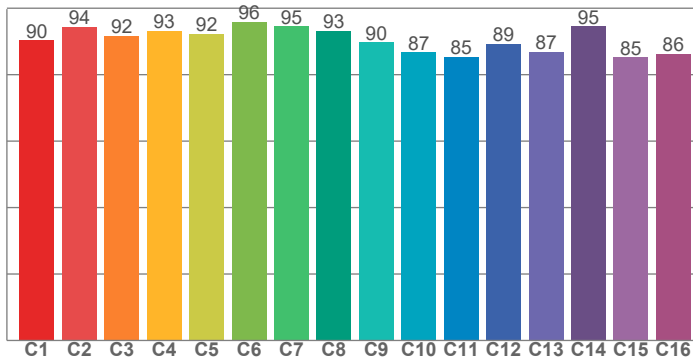
email: commercial-sales@superbrightleds.com

www.superbrightleds.com/

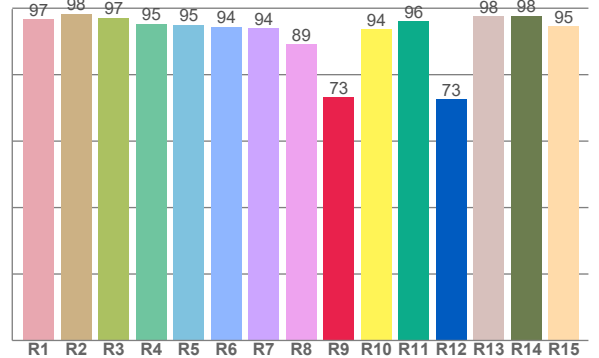
Color Specifications



TM30: 90.4



CRI: 95.0 (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
96.7	98.4	97.1	95.4	95.1	94.5	94.0	89.2	73.3	93.6	96.0	72.5	97.6	97.7	94.5

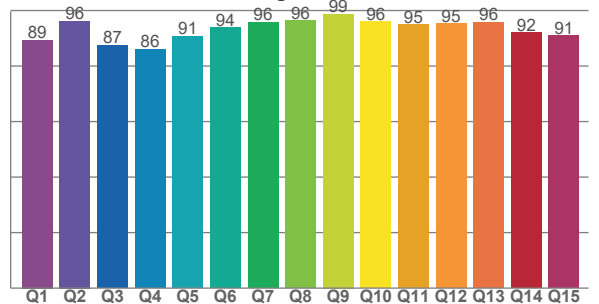
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
90.4	94.4	91.7	93.1	92.2	96.0	94.6	93.2	89.7	86.7	85.4	89.4	86.9	94.5	85.2	86.2

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89.4	96.2	87.5	86.0	90.7	93.8	95.7	96.3	98.7	96.1	94.9	95.3	95.8	92.1	90.9

CQS: 92.4



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
4230 K	95.0	73.3	90.4	98.7	92.4	0.370	0.367	0.222	0.330	-0.0015



TM30 Report

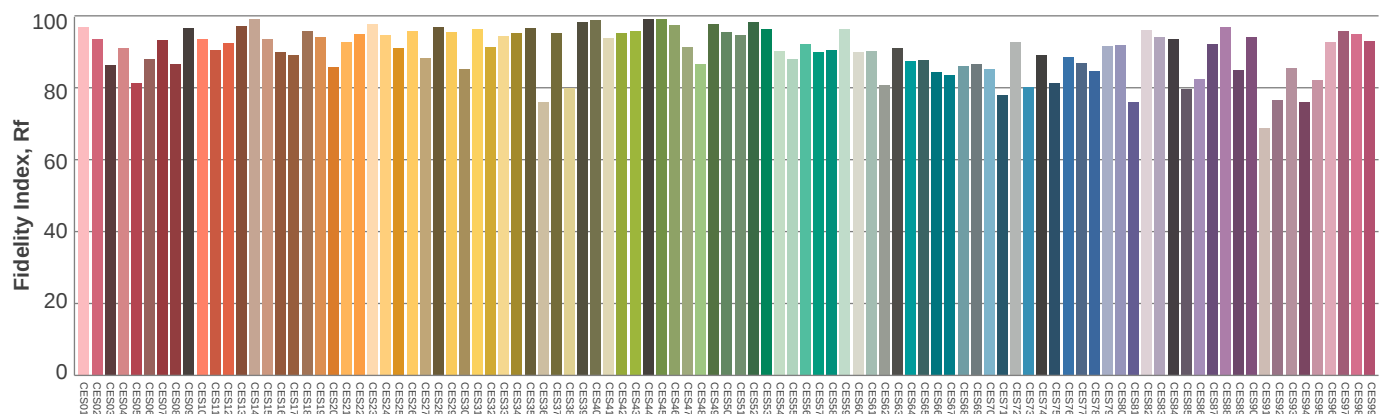
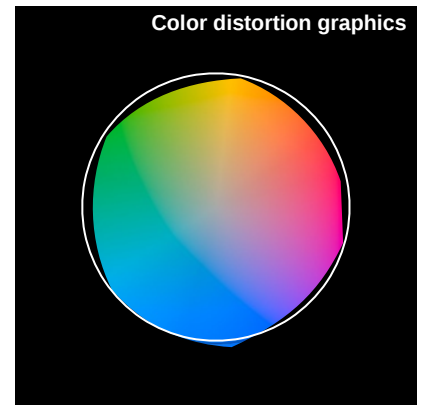
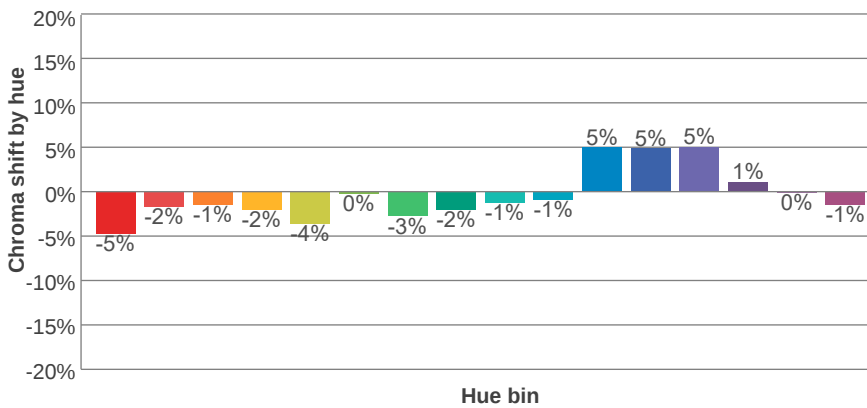
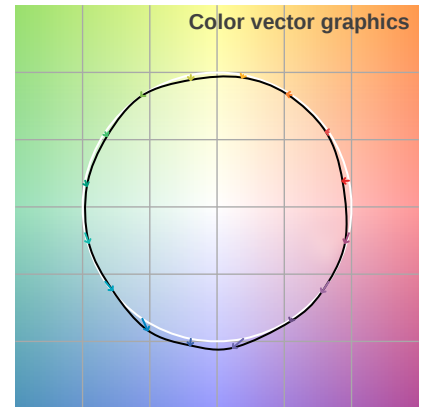
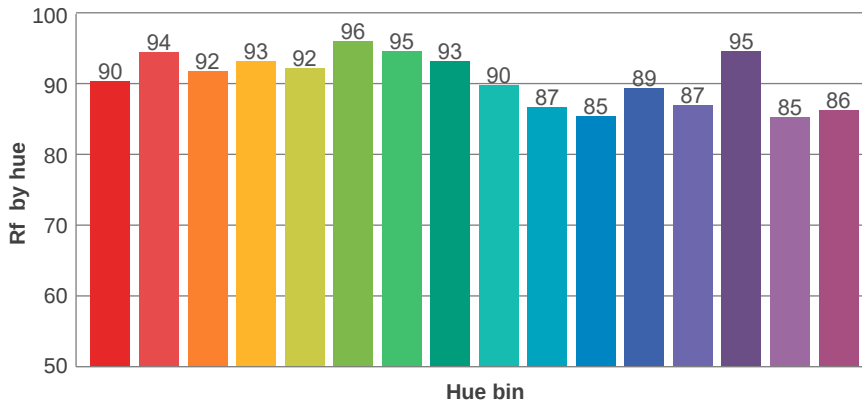
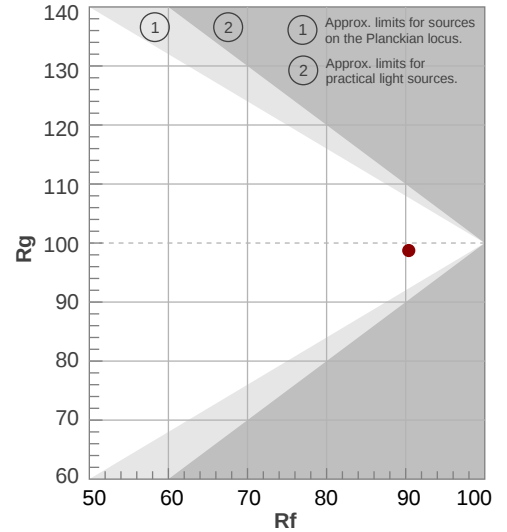
Rf 90.4

Fidelity index Rf

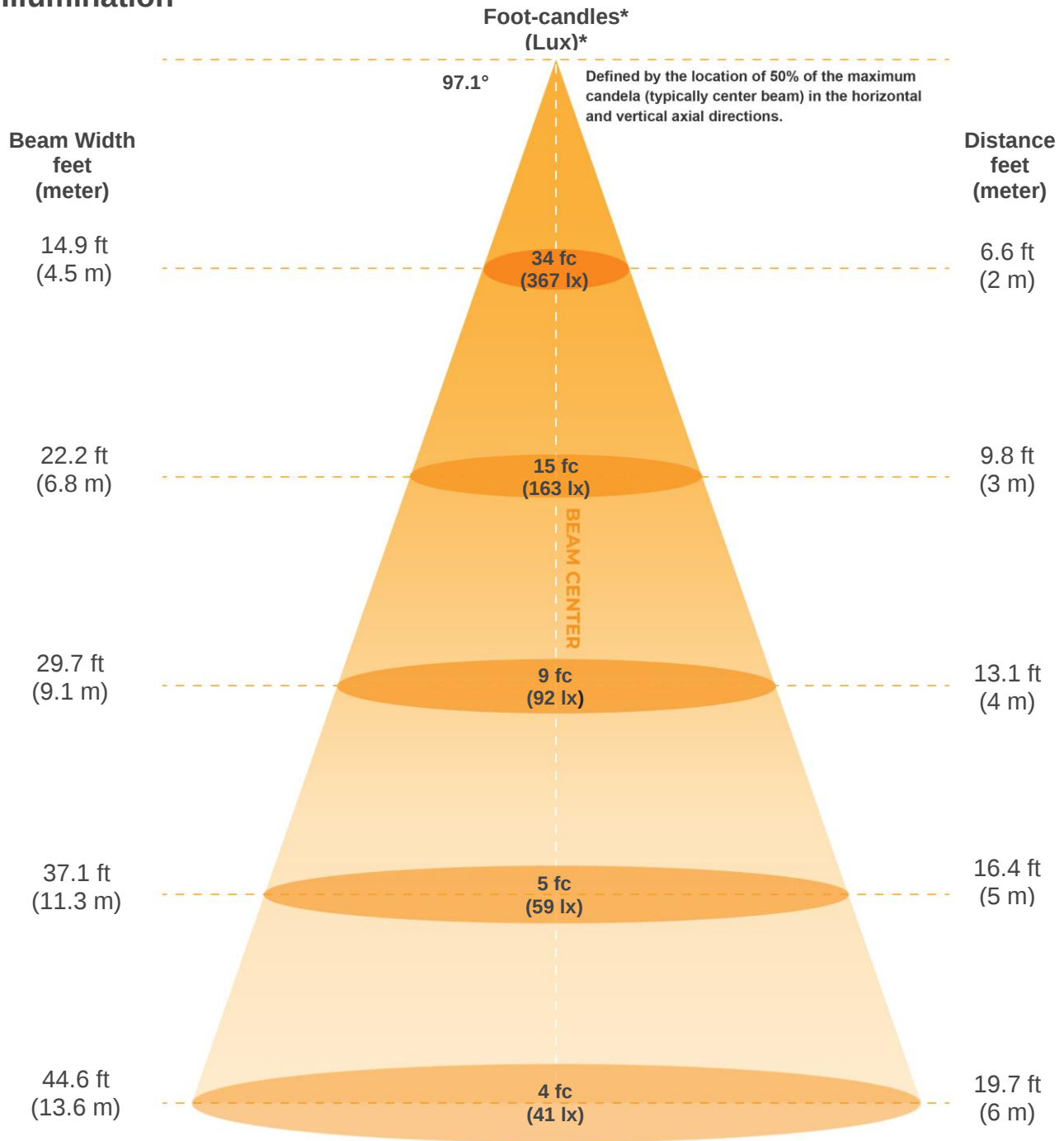
Rg 98.7

Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	90	-5%	1%
2	94	-2%	2%
3	92	-1%	3%
4	93	-2%	1%
5	92	-4%	1%
6	96	0%	1%
7	95	-3%	2%
8	93	-2%	3%
9	90	-1%	8%
10	87	-1%	8%
11	85	5%	8%
12	89	5%	0%
13	87	5%	-9%
14	95	1%	-2%
15	85	0%	-10%
16	86	-1%	-8%



Illumination



Beam intensities from 1-20m

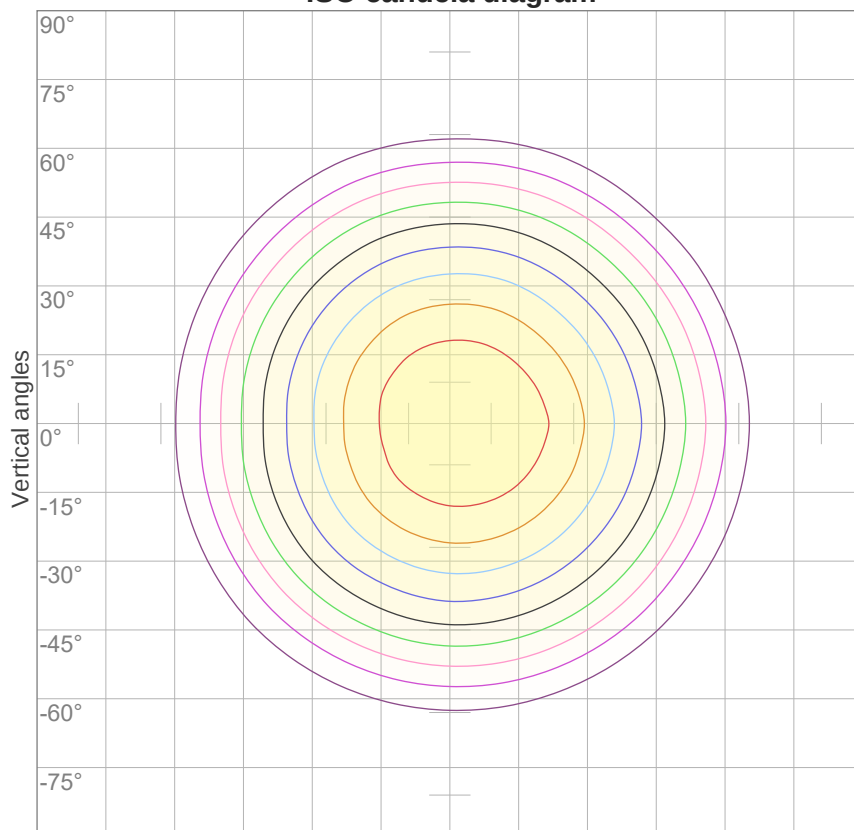
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
1467lx	367lx	163lx	92lx	59lx	41lx	30lx	23lx	18lx	15lx	12lx	10lx	9lx	7lx	7lx	6lx	5lx	5lx	4lx	4lx
136.3fc	34.1fcd	15.1fcd	8.5fcd	5.5fcd	3.8fcd	2.8fcd	2.1fcd	1.7fcd	1.4fcd	1.1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.5fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
97.1°	138.8°	154.9°	89.2%	64.5%



ISO Diagrams

ISO candela diagram



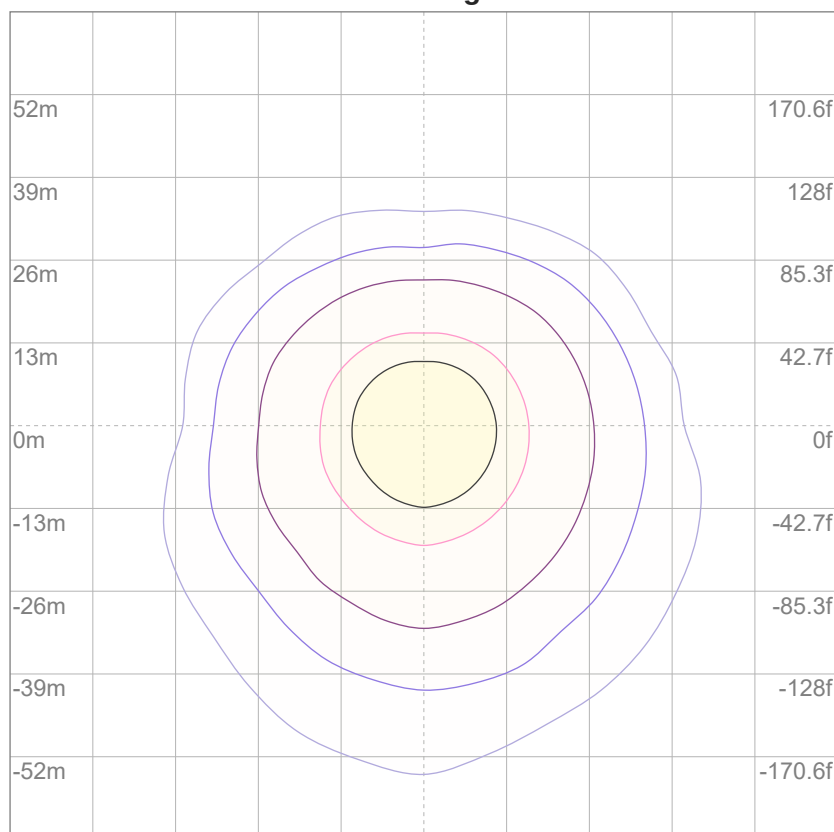
10%	147 cd
20%	293 cd
30%	440 cd
40%	587 cd
50%	734 cd
60%	880 cd
70%	1027 cd
80%	1174 cd
90%	1321 cd

Conditions:

Number of c-planes: 16

Candela at center: 1467 cd

ISO lux diagram



3%	0.440 lx
5%	0.734 lx
10%	1.47 lx
30%	4.40 lx
50%	7.34 lx

Conditions:

Number of c-planes: 16

Lux at center: 14.7 lx

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



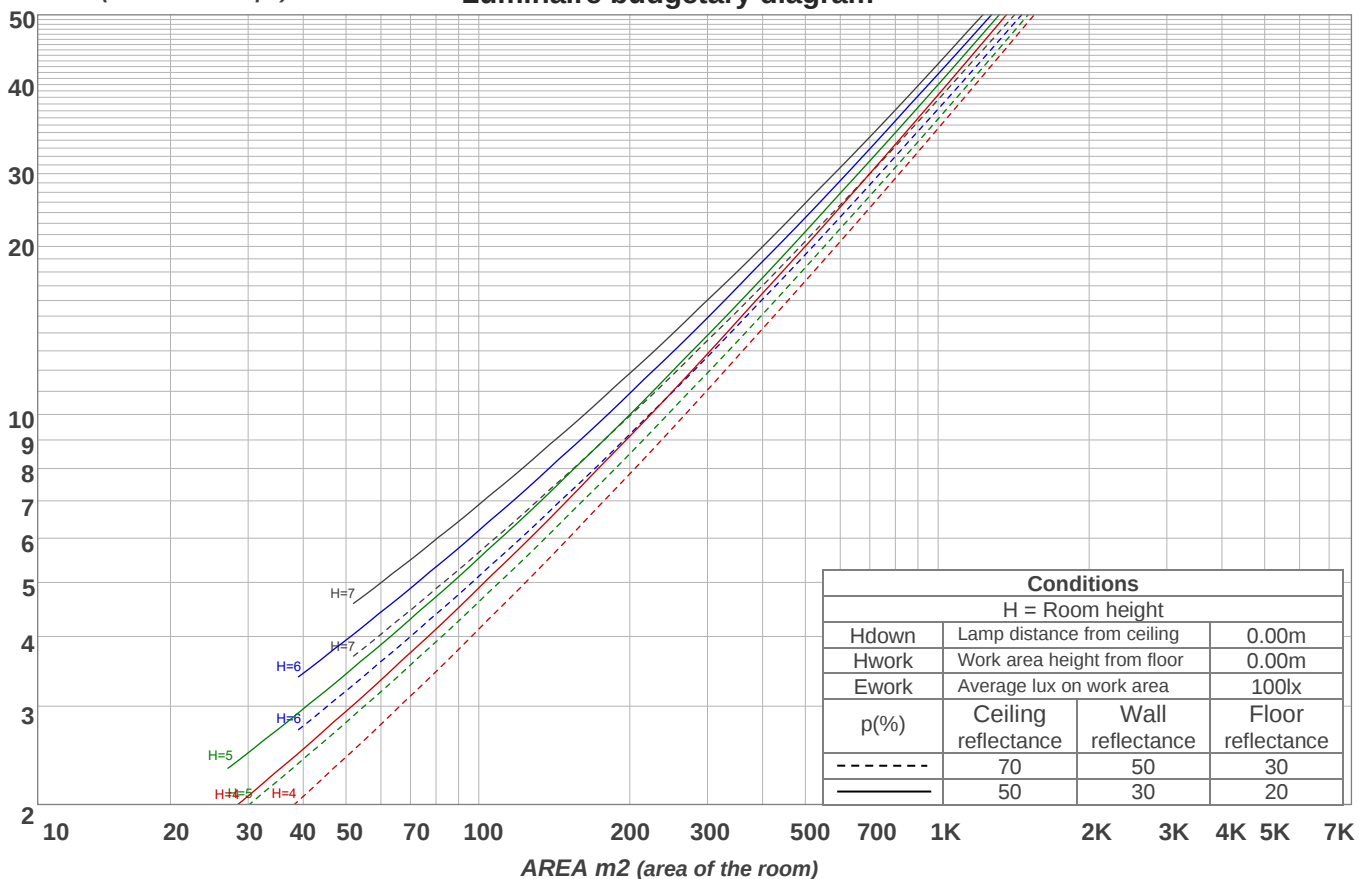
Light Planning

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	102	102	102	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	87
2	102	95	89	84	99	93	88	83	90	85	81	86	83	79	83	80	77	75
3	94	85	77	72	91	83	76	71	80	74	70	77	73	69	75	71	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44
7	69	56	48	42	67	56	48	42	54	47	42	53	46	42	51	46	41	39
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	35
9	60	47	40	34	59	47	39	34	46	39	34	45	38	34	44	38	34	32
10	57	44	36	31	55	43	36	31	42	36	31	42	35	31	41	35	31	29

LAMPS (number of lamps)

Luminaire budgetary diagram



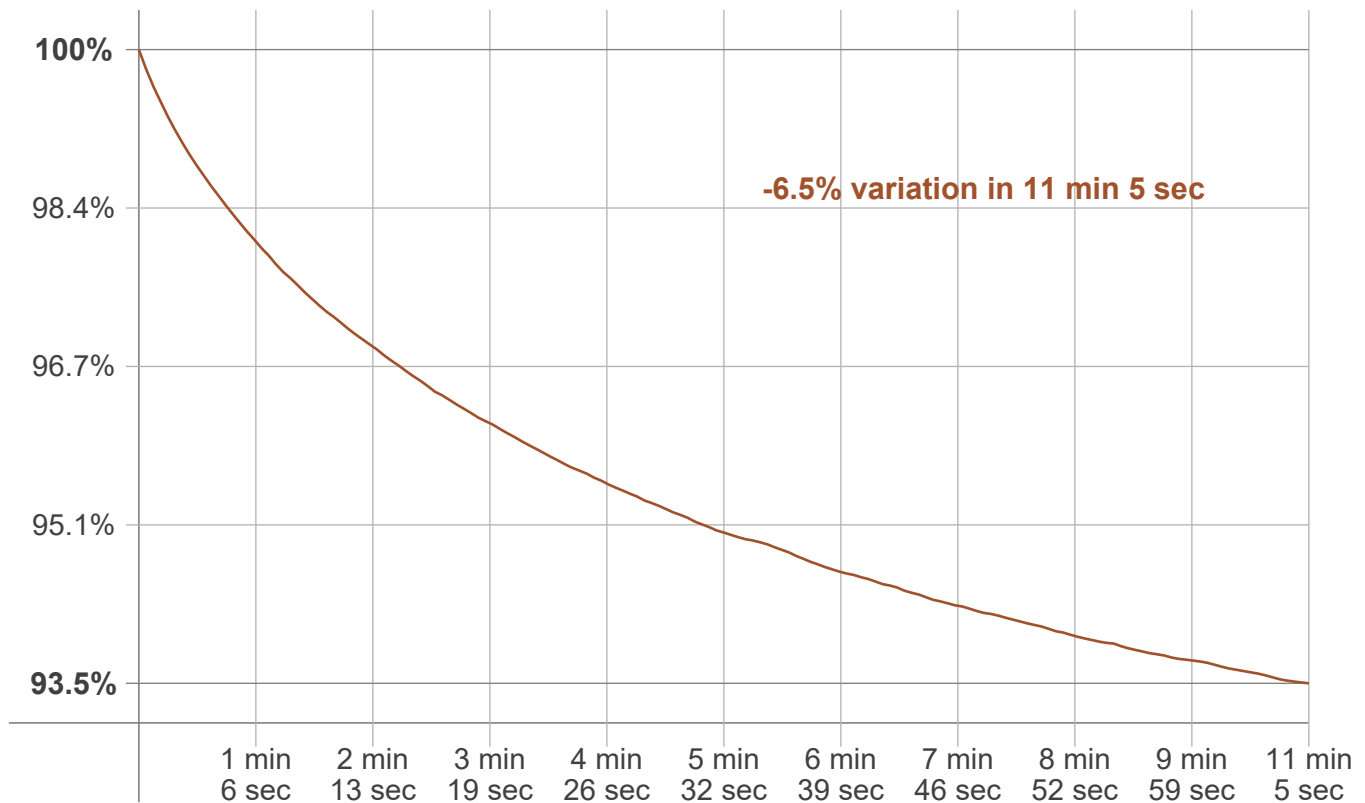
Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
138 lm	390 lm	573 lm	658 lm	636 lm	491 lm	258 lm	70.7 lm	11.9 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
1.22 lm	1.14 lm	1.24 lm	1.28 lm	1.24 lm	1.10 lm	0.935 lm	0.598 lm	0.208 lm



Stabilization

Warmup curve



Warmup result

Warmup time:	Not completed
Warmup variation	-6.5%

Warmup conditions

Stable period:	15 min
Stable change max:	2.0%
Minimum time:	15 min

Color temperature change

CCT start	CCT change	CCT end
4240 K	-10 K	4230 K

Output change

Output start	Output change	Output end
3444 lm	-208 lm	3235 lm

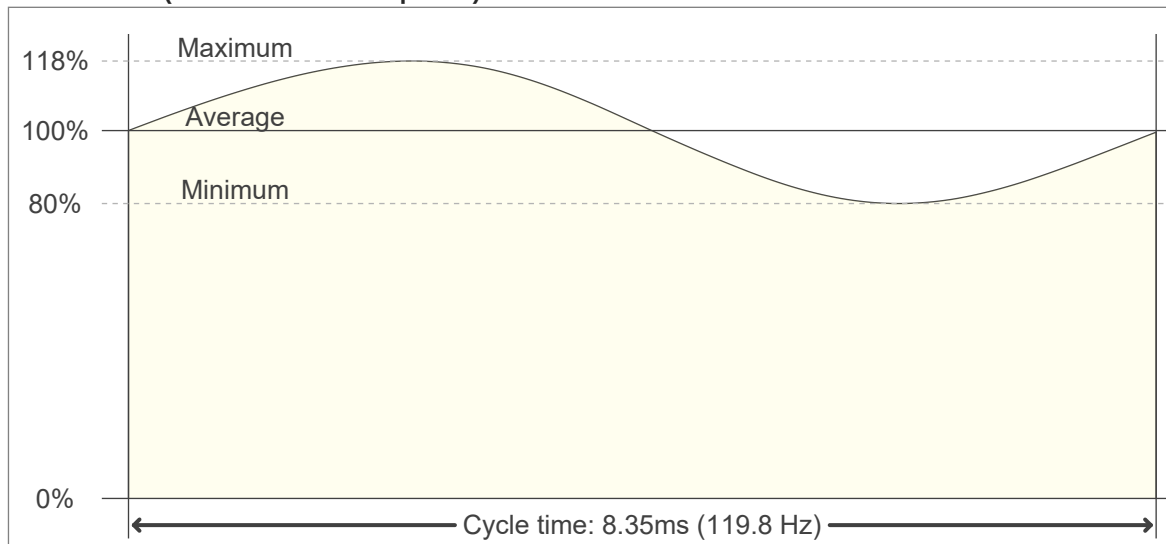


Flicker Specifications

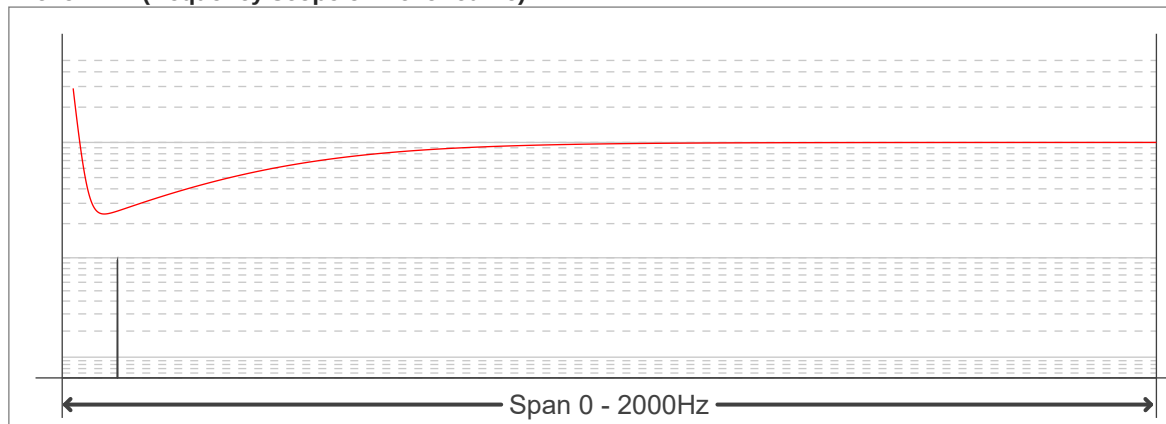
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	119.76 Hz
Flicker index:	0.06
Flicker percentage:	19.62 %
SVM: (Visual flicker)	0.69

Flicker conditions:

Sample rate:	20000 samples/second
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