

Light efficiency:



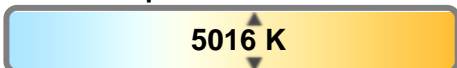
Output: 21996 lm

Light quality:



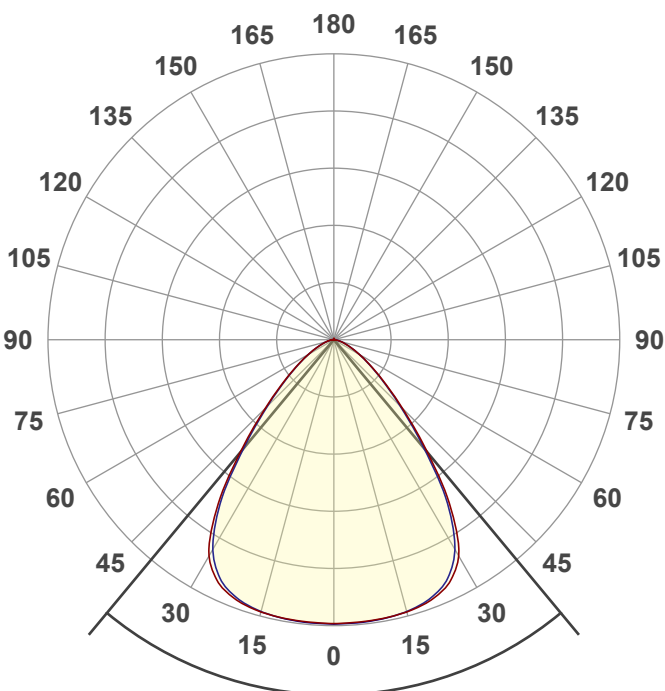
Peak: 12626 cd

Color temperature:



Power: 149.4 W

PF: 1.0



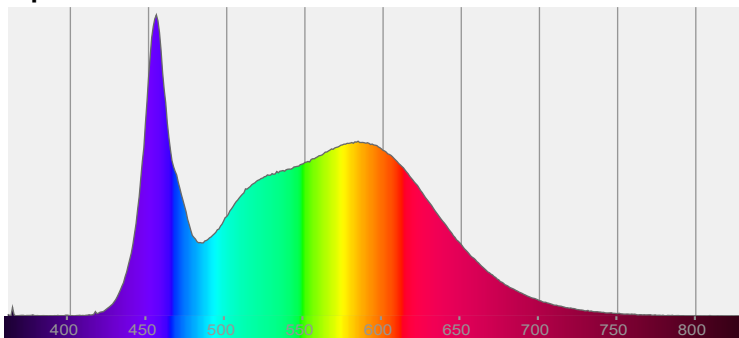
Product name:
UHBDT-S1-50K150-80H
Date and time:
8/10/2023 1:48:03 PM

Beam angle **79.4°**

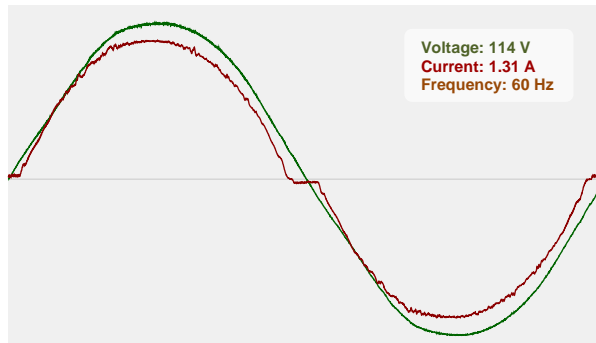


CIE 1931
x: 0.345
y: 0.357

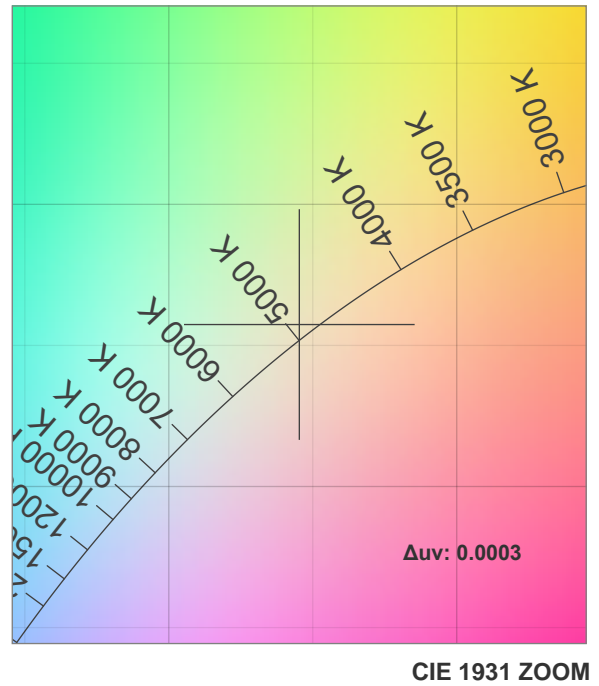
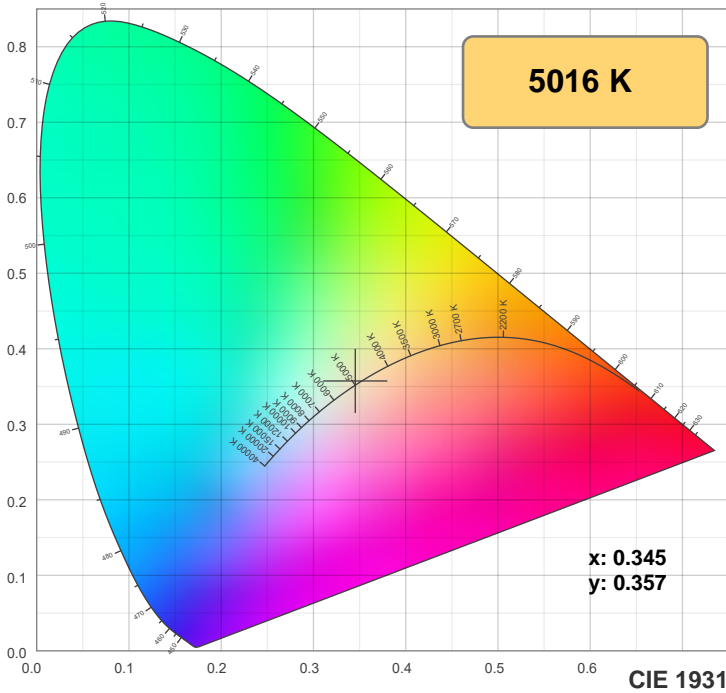
Spectra



Power

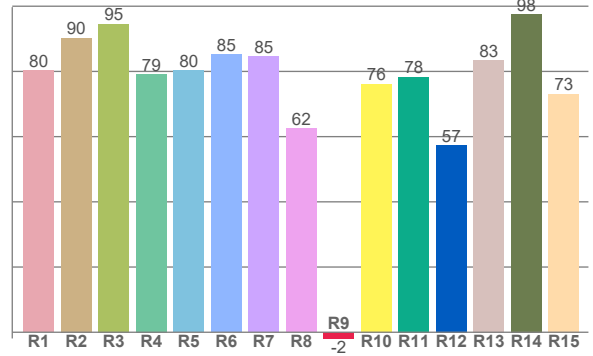
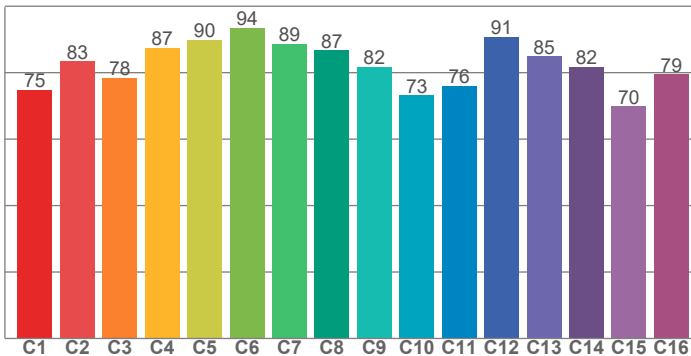


Color Specifications



TM30: 82.3

CRI: 82.1 (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
80.2	90.3	94.6	79.2	80.2	85.2	84.6	62.4	-1.9	76.2	78.3	57.4	83.5	97.6	73.1

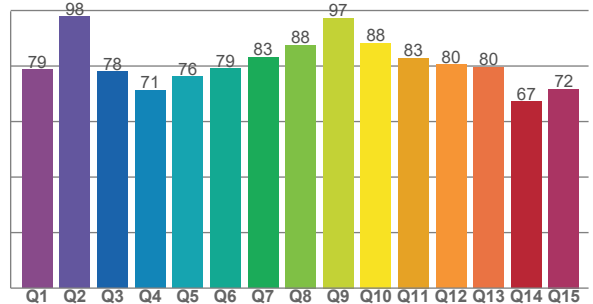
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
74.8	83.4	78.4	87.4	89.9	93.6	88.7	86.7	81.7	73.1	76.1	90.7	85.0	81.7	69.8	79.5

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
78.7	97.7	78.0	71.3	76.2	79.0	83.2	87.6	97.3	88.3	82.9	80.5	79.6	67.2	71.8

CQS: 79.5



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 division from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
5016 K	82.1	-1.9	82.3	93.0	79.5	0.345	0.357	0.209	0.325	0.0003

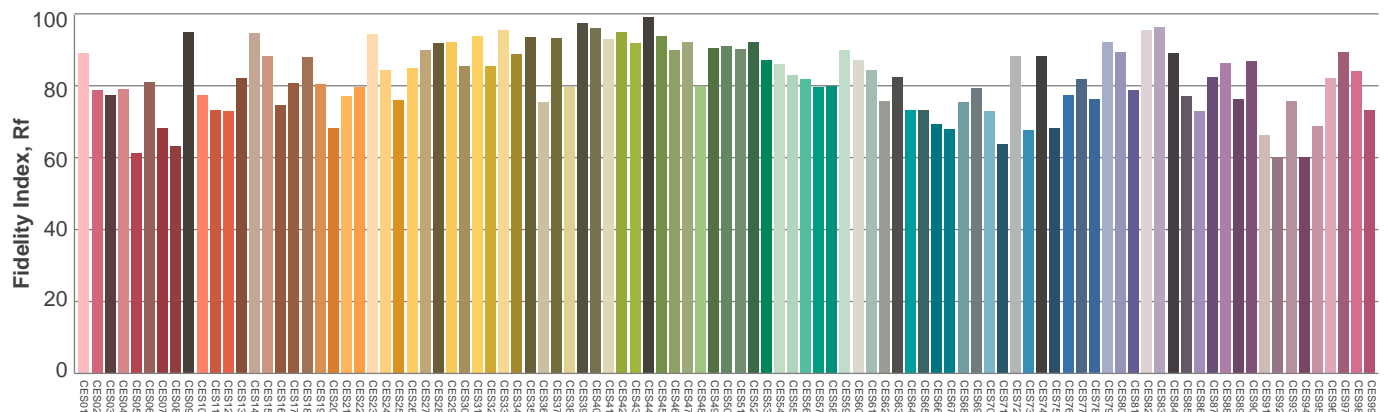
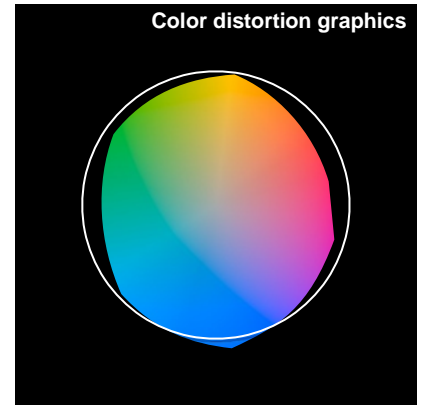
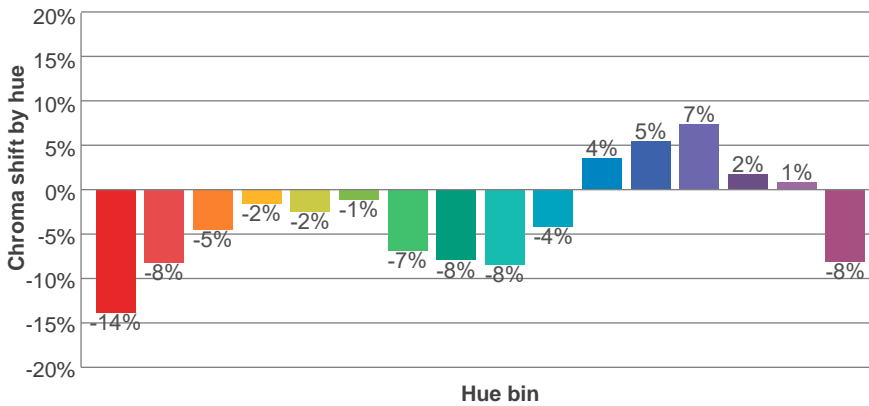
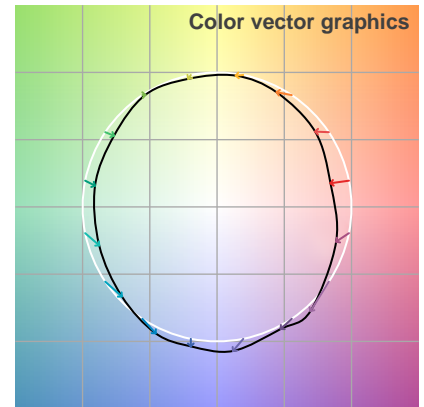
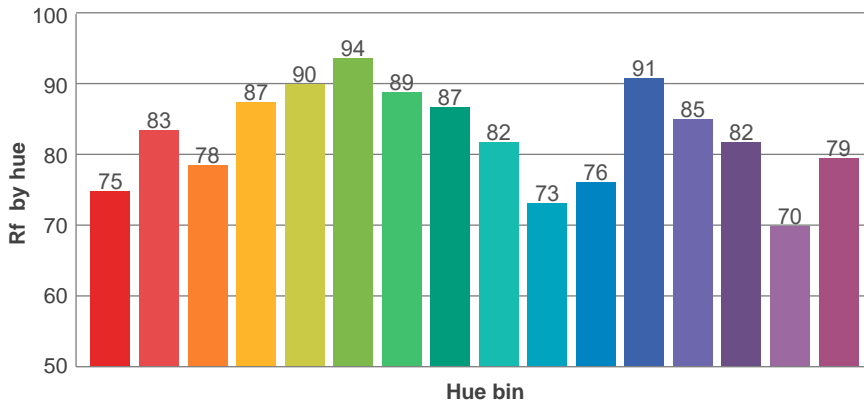
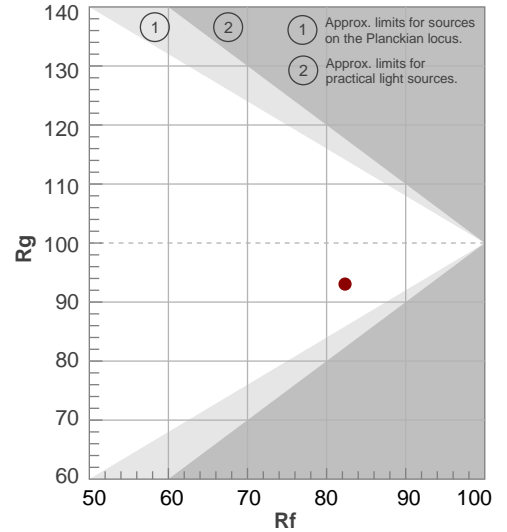


TM30 Report

Rf 82.3
Fidelity index Rf

Rg 93.0
Gammut index Rg

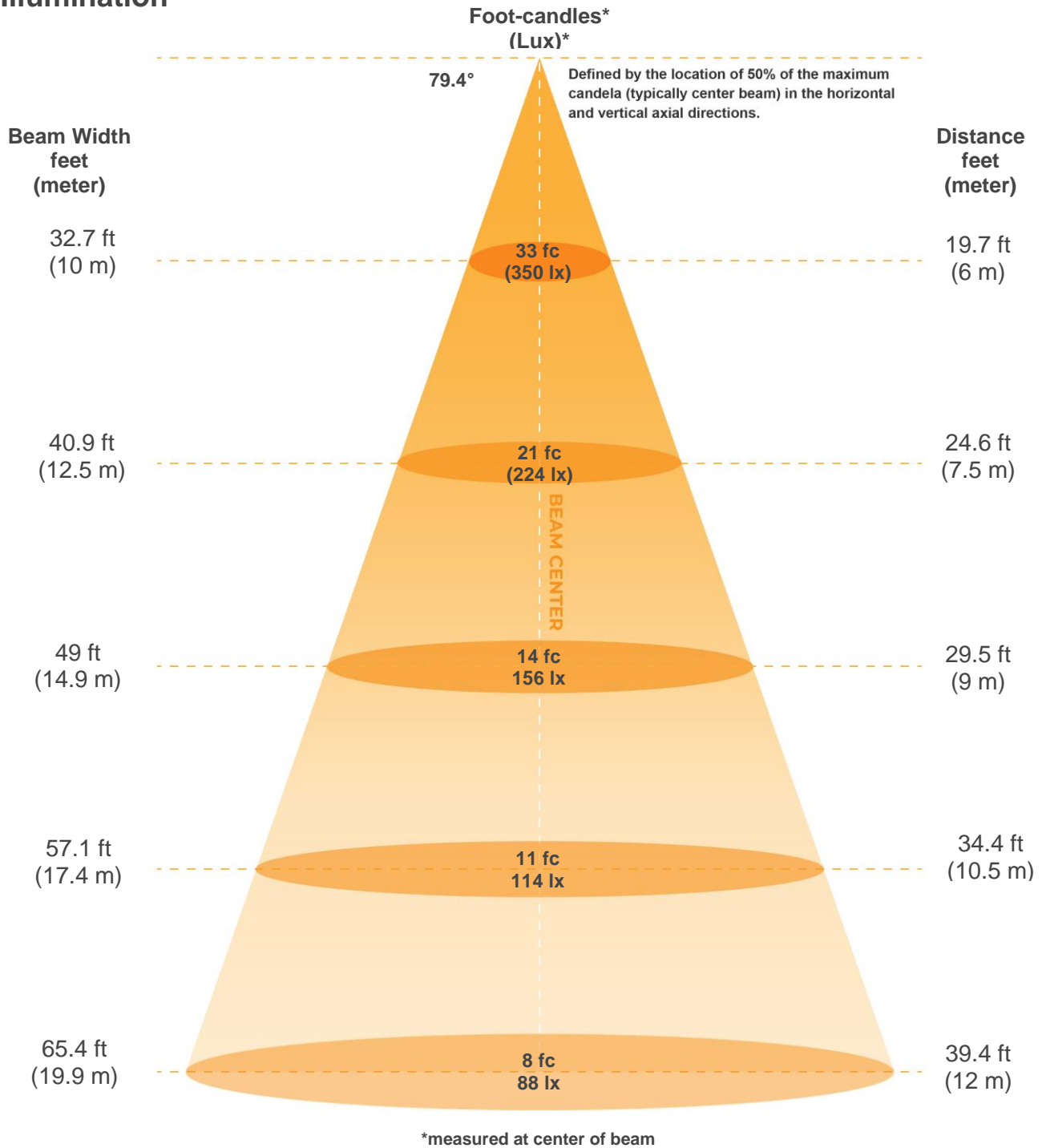
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	75	-14%	1%
2	83	-8%	6%
3	78	-5%	11%
4	87	-2%	5%
5	90	-2%	2%
6	94	-1%	-2%
7	89	-7%	-1%
8	87	-8%	2%
9	82	-8%	11%
10	73	-4%	16%
11	76	4%	14%
12	91	5%	1%
13	85	7%	-9%
14	82	2%	-11%
15	70	1%	-26%
16	79	-8%	-8%



Color Evaluation Sample



Illumination



Beam intensities from 1-20m

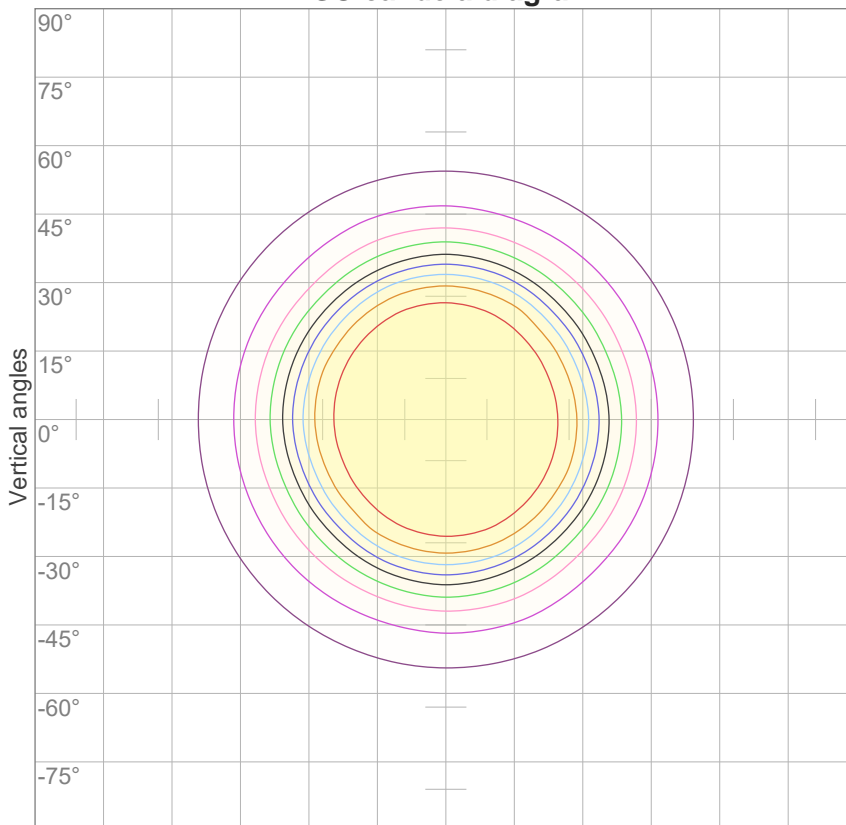
1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m
3.3ft	6.6ft	9.8ft	13.1ft	16.4ft	19.7ft	23ft	26.2ft	29.5ft	32.8ft	36.1ft	39.4ft	42.7ft	45.9ft	49.2ft	52.5ft	55.8ft	59.1ft	62.3ft	65.6ft
12606lx	3152lx	1401lx	788lx	504lx	350lx	257lx	197lx	156lx	126lx	104lx	88lx	75lx	64lx	56lx	49lx	44lx	39lx	35lx	32lx
1171.2f	292.8fc	130.1fc	73.2fcd	46.8fcd	32.5fcd	23.9fcd	18.3fcd	14.5fcd	11.7fcd	9.7fcd	8.1fcd	6.9fcd	6fcd	5.2fcd	4.6fcd	4.1fcd	3.6fcd	3.2fcd	2.9fcd

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
79.4°	121°	151.4°	93.7%	79.2%



ISO Diagrams

ISO candela diagram



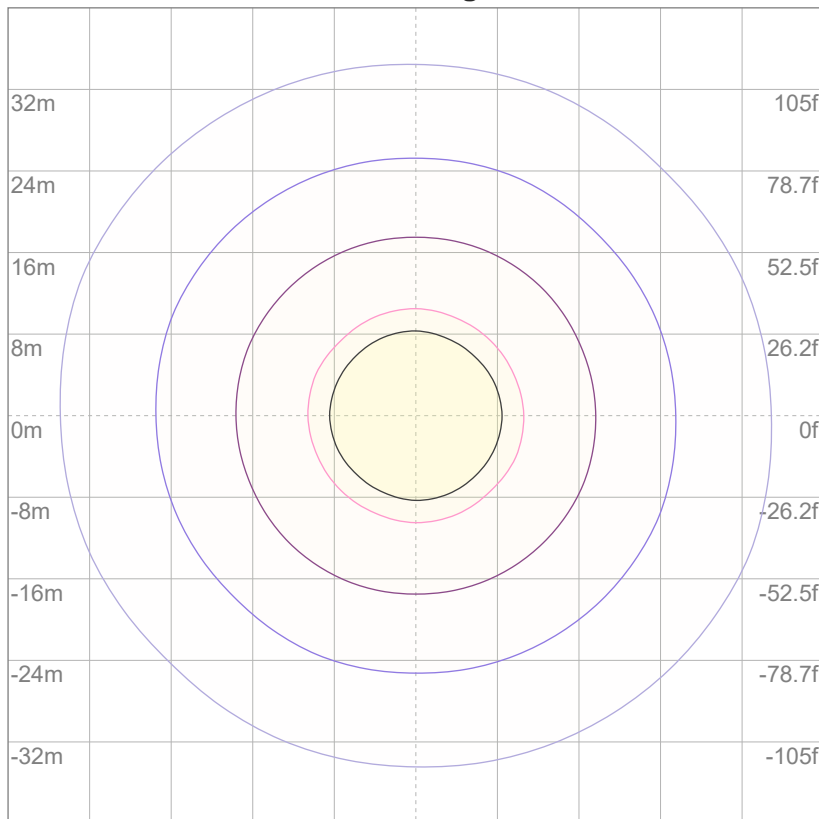
10%	1261 cd
20%	2521 cd
30%	3782 cd
40%	5042 cd
50%	6303 cd
60%	7564 cd
70%	8824 cd
80%	10085 cd
90%	11346 cd

Conditions:

Number of c-planes: 16

Candela at center: 12606 cd

Horizontal angles
ISO lux diagram



3%	3.78 lx
5%	6.30 lx
10%	12.6 lx
30%	37.8 lx
50%	63.0 lx

Conditions:

Number of c-planes: 16

Lux at center: 126 lx

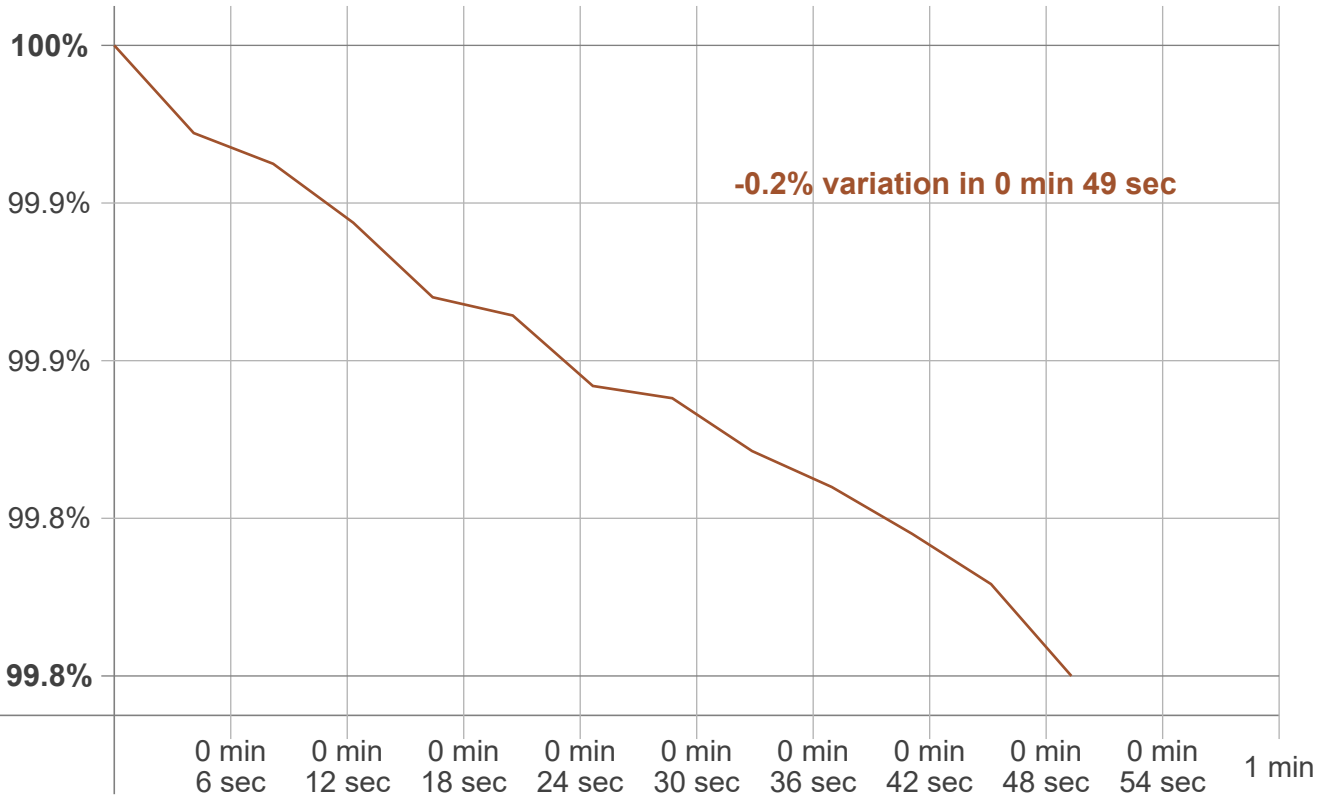
Lux distribution on a surface when lamp is mounted at 10 meters from the surface.

Mounting height: 10 meters (33 feet) **UGR**



Stabilization

Warmup curve



Warmup result

Warmup time:	Not completed
Warmup variation	-0.2%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
5010 K	+6 K	5016 K

Output change

Output start	Output change	Output end
22024 lm	-28 lm	21996 lm

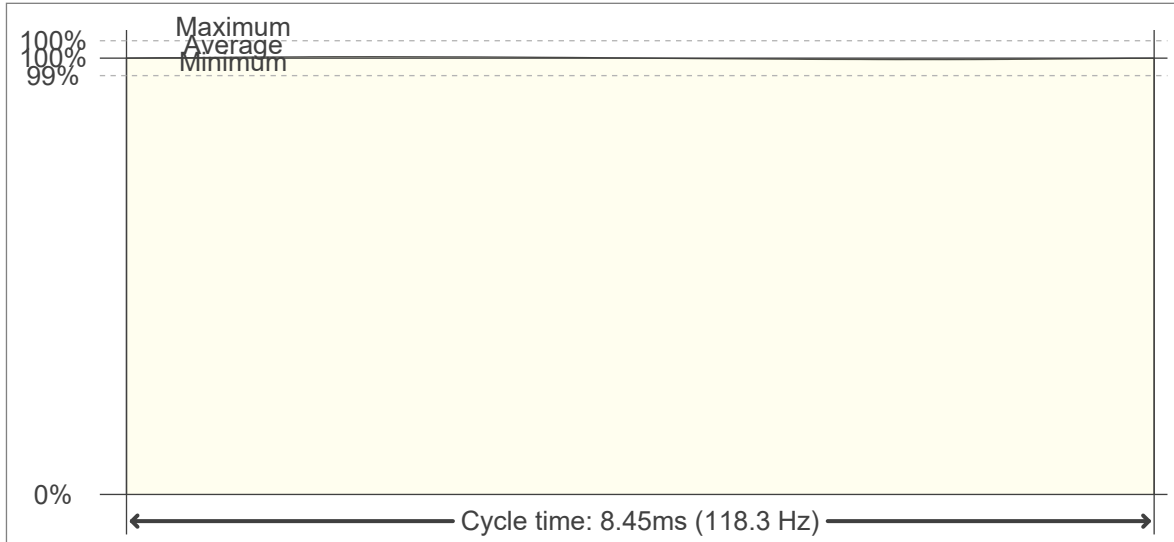


Flicker Specifications

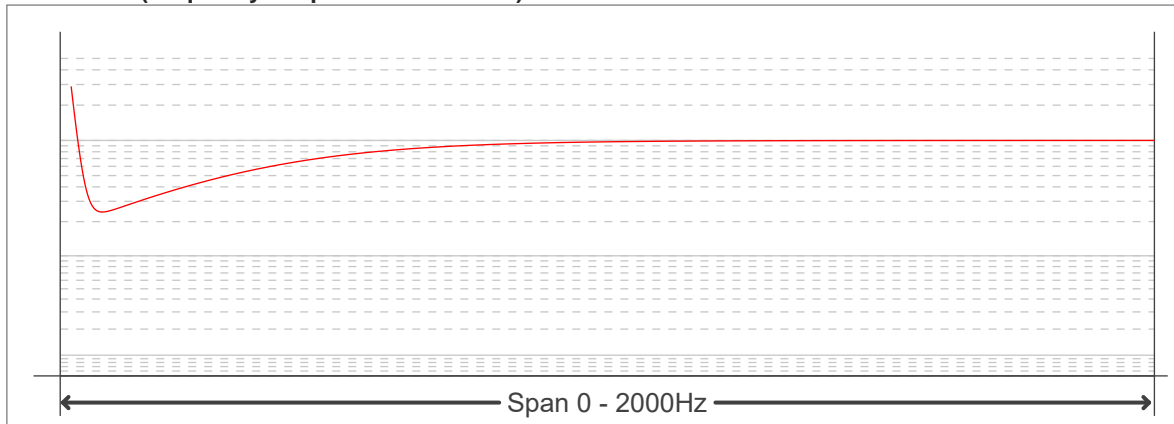
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	118.34 Hz
Flicker index:	0
Flicker percentage:	0.34 %
SVM: (Visual flicker)	0.01

Flicker conditions:

Sample rate:	20000 samples/second
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