

Light efficiency:

57 Lumen/Watt

Light quality:

CRI: 94.8

Color temperature:

2981 K

Output: 1056 lm

Peak: 20677 cd

Power: 18.5 W

PF: 0.90



Product name:

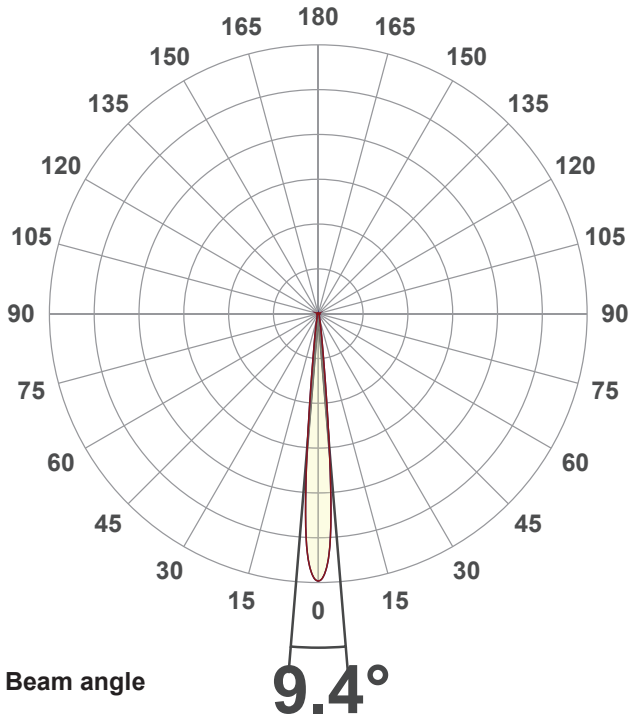
SORAA VIVID PAR30S

Item number:

SP30SW-18-09D-930-03-S3

Date and time:

5/4/2021 1:22:05 PM



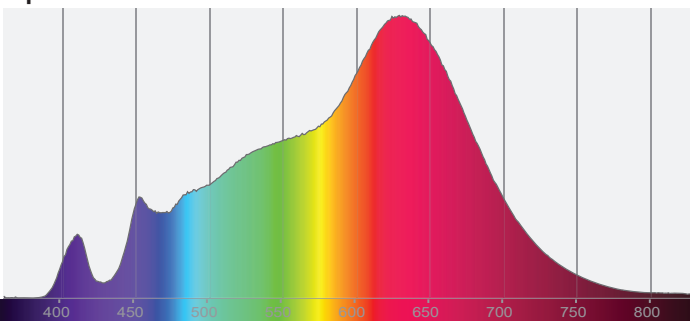
Beam angle

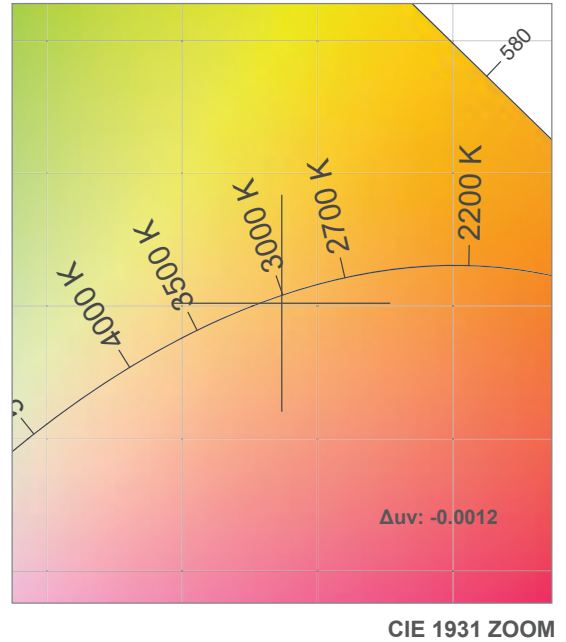
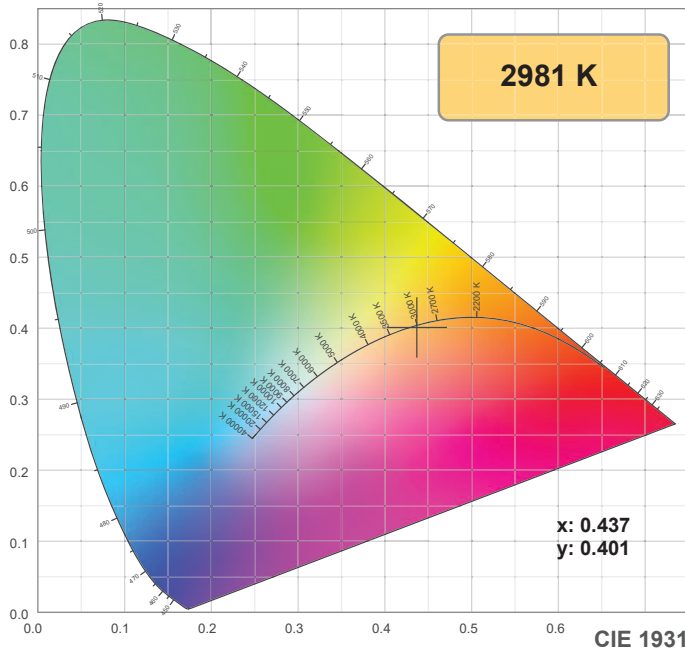
9.4°



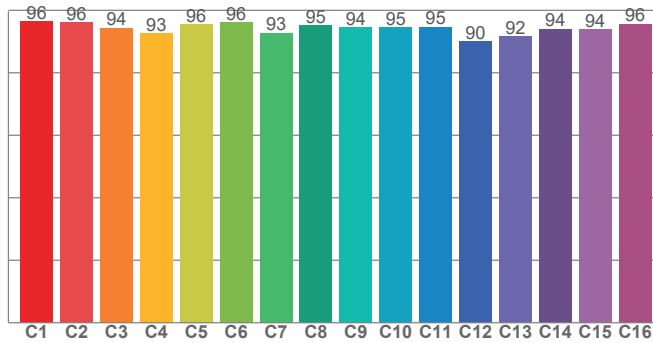
CIE 1931
x: 0.437
y: 0.401

Spectra

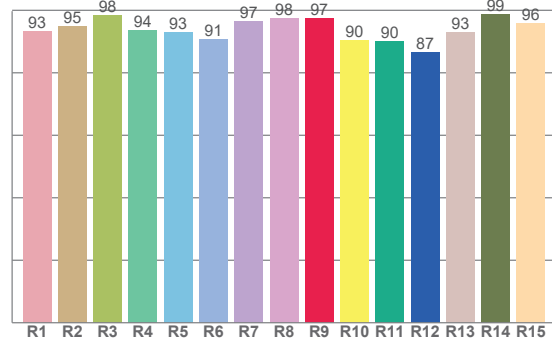




TM30: 94.5



CRI: 94.8 (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
93.4	95.0	98.3	93.8	92.9	90.6	96.6	97.5	97.3	90.3	90.1	86.7	93.1	98.8	95.9

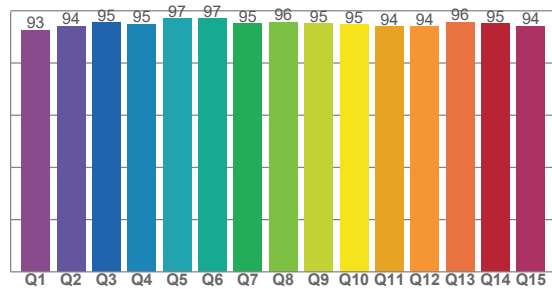
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
96.4	96.2	94.4	92.7	95.6	96.1	92.8	95.2	94.5	94.6	94.7	90.1	91.7	94.0	94.0	95.6

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92.6	94.1	95.4	95.0	96.9	96.9	95.1	95.6	95.2	94.6	94.0	94.0	95.6	95.0	94.2

CQS: 94.8



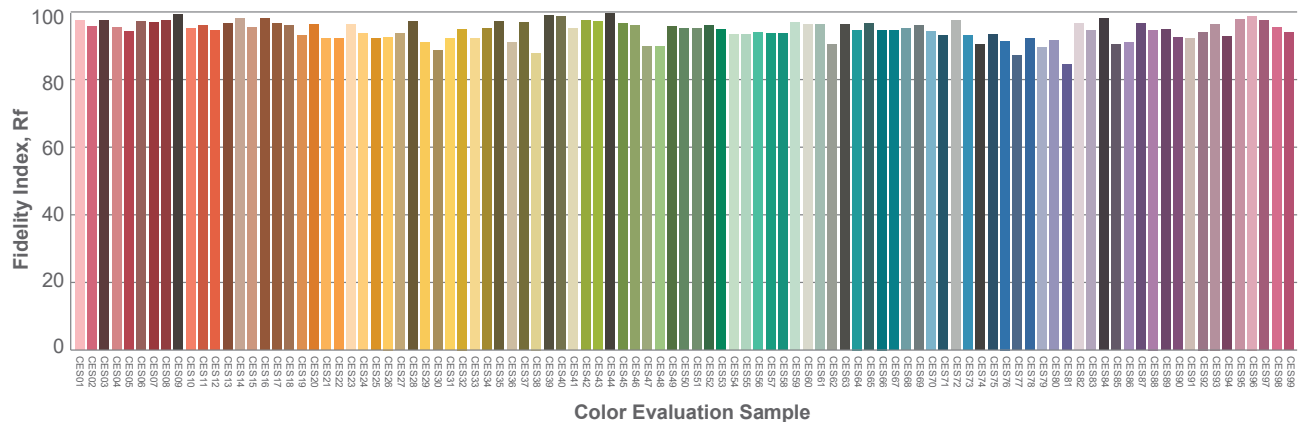
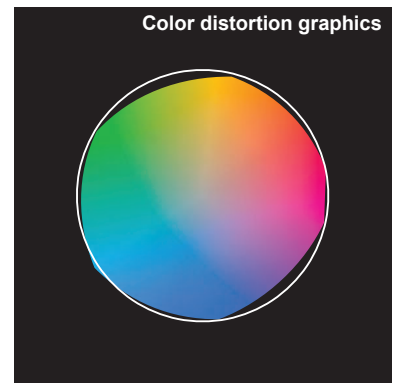
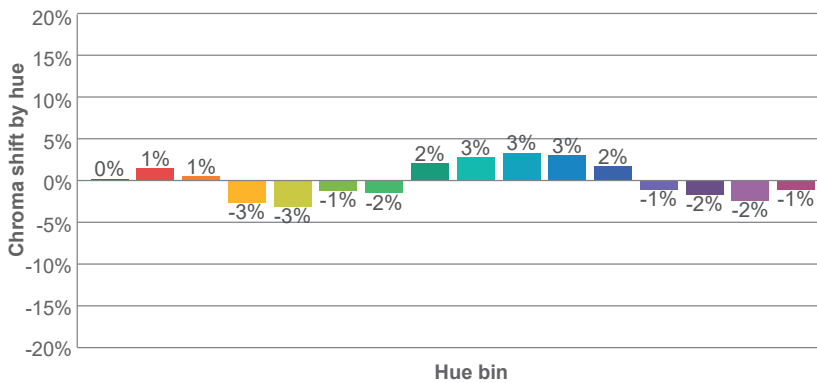
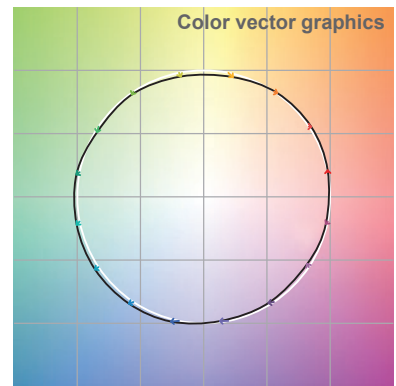
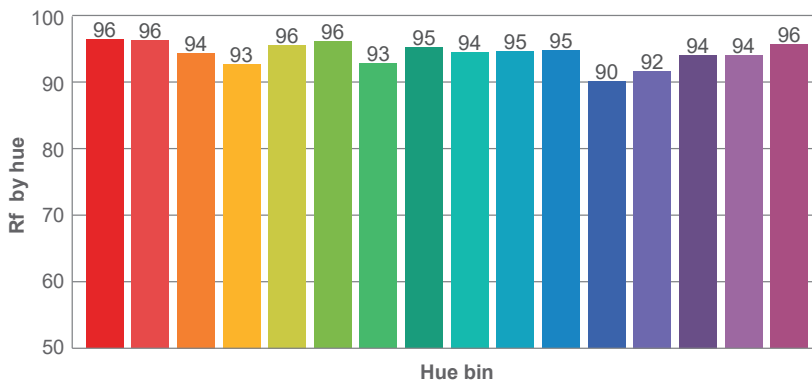
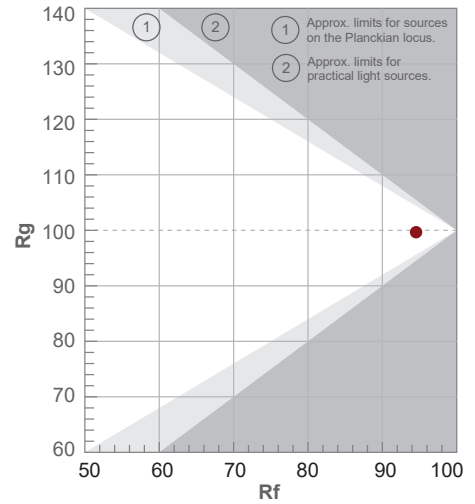
Color parameters

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
2981 K	94.8	97.3	94.5	99.7	94.8	0.437	0.401	0.252	0.347	-0.0012

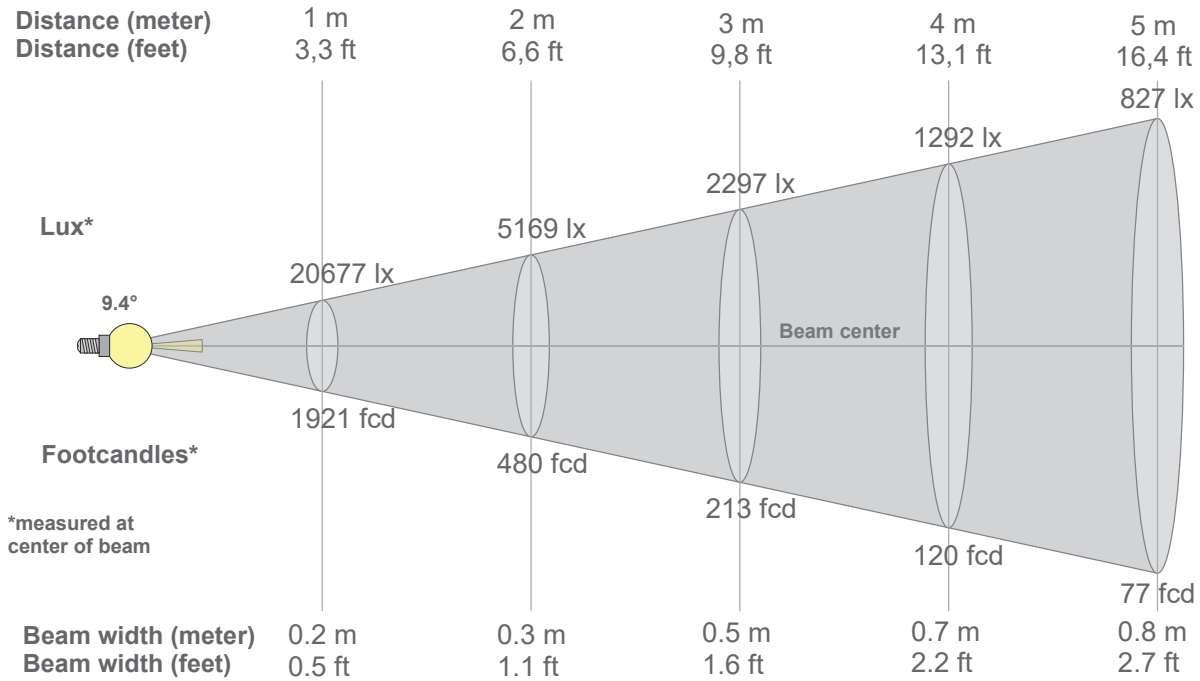
Rf 94.5
Fidelity index Rf

Rg 99.7
Gammut index Rg

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



Beam details



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
20677lx	5169lx	2297lx	1292lx	827lx	574lx	422lx	323lx	255lx	207lx	171lx	144lx	122lx	105lx	92lx	81lx	72lx	64lx	57lx	52lx
1921fcd	480.2fcd	213.4fcd	120.1fcd	76.8fcd	53.4fcd	39.2fcd	30fcd	23.7fcd	19.2fcd	15.9fcd	13.3fcd	11.4fcd	9.8fcd	8.5fcd	7.5fcd	6.6fcd	5.9fcd	5.3fcd	4.8fcd

Intensities in 0° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
20.7K	20.4K	19.5K	17.6K	13.9K	9.0K	5.1K	3.1K	2.1K	1.5K	1.2K	0.9K	0.7K	0.6K	0.5K	0.4K	0.4K	0.4K	0.3K	0.3K
100%	99%	94%	85%	67%	43%	25%	15%	10%	7%	6%	4%	3%	3%	2%	2%	2%	2%	2%	1%

Intensities in 90° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
20.7K	20.4K	19.5K	17.6K	13.9K	9.0K	5.1K	3.1K	2.1K	1.5K	1.2K	0.9K	0.7K	0.6K	0.5K	0.4K	0.4K	0.4K	0.3K	0.3K
100%	99%	94%	85%	67%	43%	25%	15%	10%	7%	6%	4%	3%	3%	2%	2%	2%	2%	2%	1%

Intensities in 180° c-plane

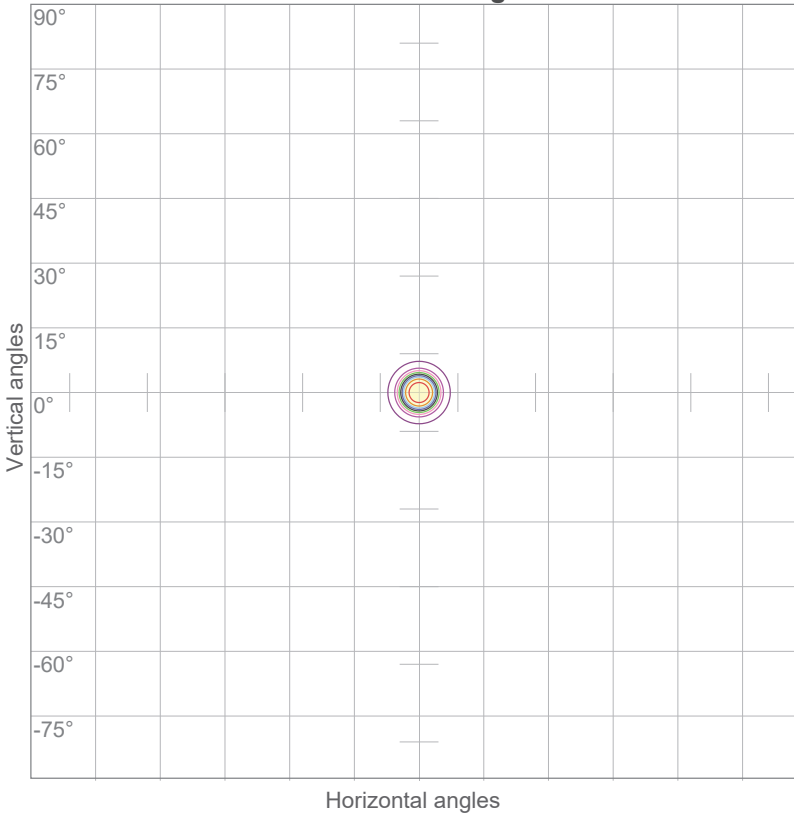
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
20.7K	20.4K	19.5K	17.6K	13.9K	9.0K	5.1K	3.1K	2.1K	1.5K	1.2K	0.9K	0.7K	0.6K	0.5K	0.4K	0.4K	0.4K	0.3K	0.3K
100%	99%	94%	85%	67%	43%	25%	15%	10%	7%	6%	4%	3%	3%	2%	2%	2%	2%	2%	1%

Intensities in 270° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
20.7K	20.4K	19.5K	17.6K	13.9K	9.0K	5.1K	3.1K	2.1K	1.5K	1.2K	0.9K	0.7K	0.6K	0.5K	0.4K	0.4K	0.4K	0.3K	0.3K
100%	99%	94%	85%	67%	43%	25%	15%	10%	7%	6%	4%	3%	3%	2%	2%	2%	2%	2%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
9.4°	16.1°	27.5°	92.2%	86.7%

ISO candela diagram

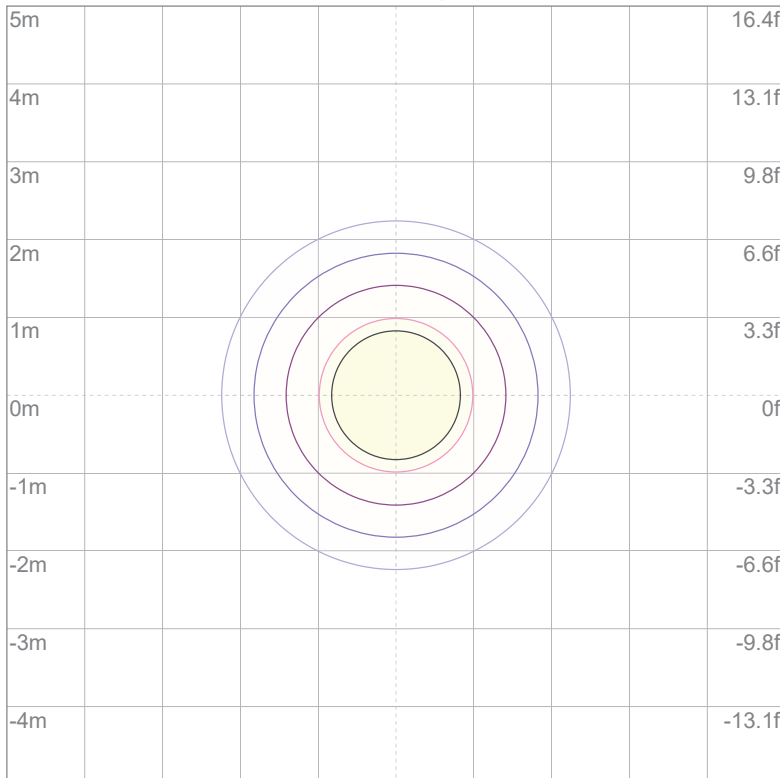


- 10% 2068 cd
- 20% 4135 cd
- 30% 6203 cd
- 40% 8271 cd
- 50% 10339 cd
- 60% 12406 cd
- 70% 14474 cd
- 80% 16542 cd
- 90% 18610 cd

Conditions:

Number of c-planes: 16
Candela at center: 20677 cd

ISO lux diagram



- 3% 6.20 lx
- 5% 10.3 lx
- 10% 20.7 lx
- 30% 62.0 lx
- 50% 103 lx

Conditions:

Number of c-planes: 16
Lux at center: 207 lx

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