

General Specifications:

Total Fixture Output: 9.2 klm

Light Engine Output: 31.5 klm

Efficacy: 16 Lumen/Watt

Lens Option: N/A

Zoomrange: 12-48°

CRI: 90+

CQS: 90+

TM-30 Rf: 90+

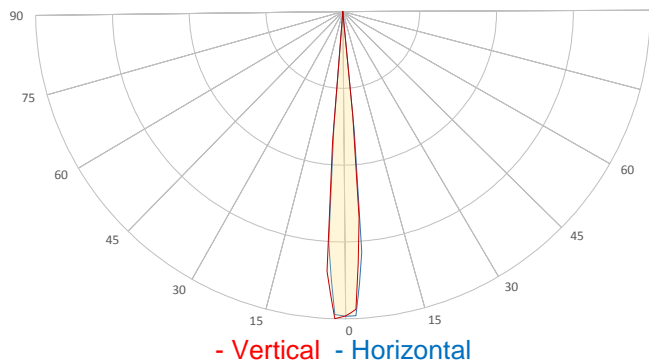
TM-30 Rg: 98+

TLCI: 90+

Color Temperature: 3000 K



Measurement



Catalog Number: 90234015

Measured Output: 7689 lm

Measured Peak: 350791 cd

Consumed Power: 582 W

Efficacy: 13.2 Lumen/Watt

Beam Angle (50%): 9.4°

Field Angle (10%): 11.5°

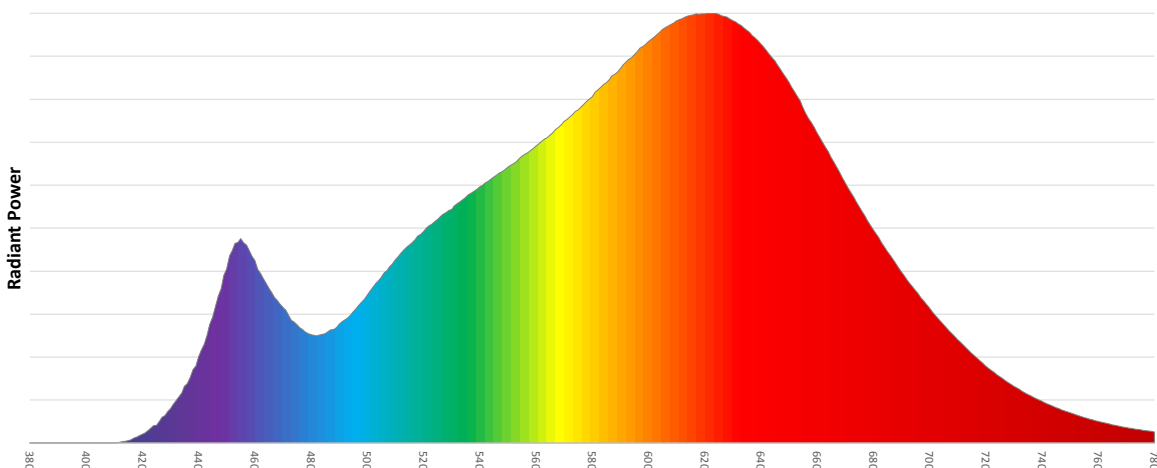
Cutoff Angle (3%): 11.9°

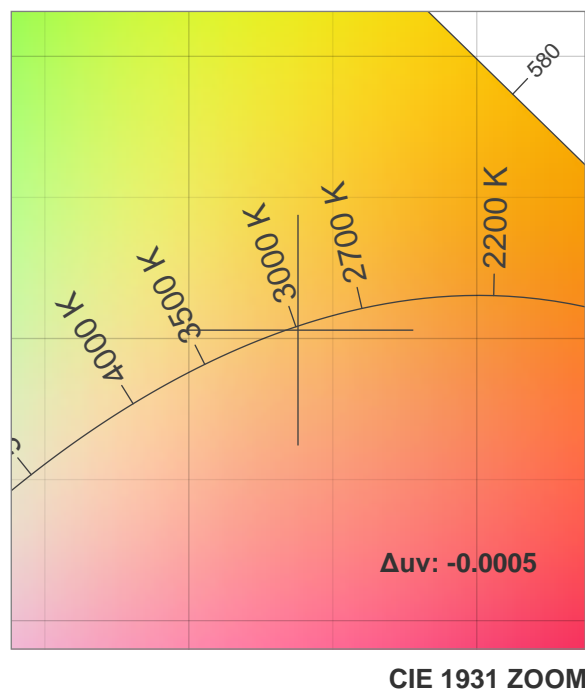
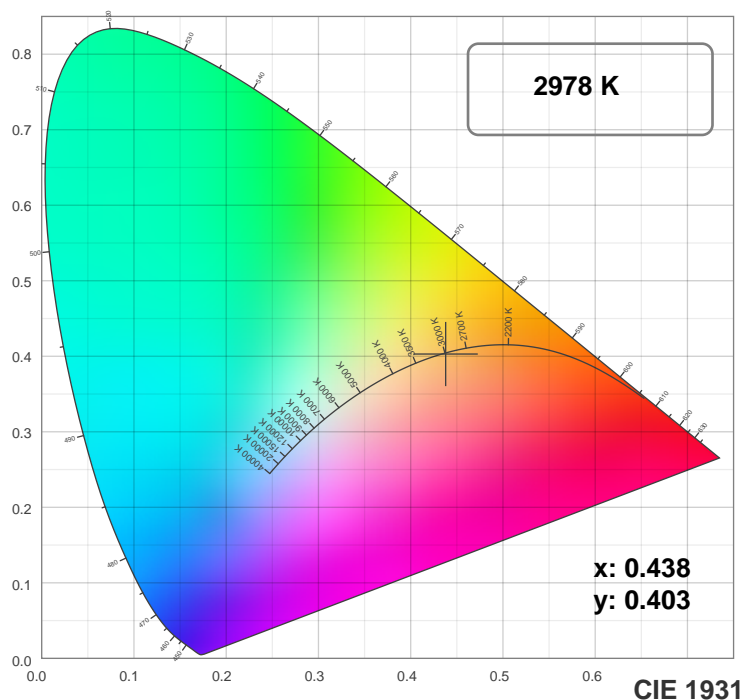
Measurement Condition:

Ambient Temperature: 25 +/- 5C

AC Supply: 230V/50Hz

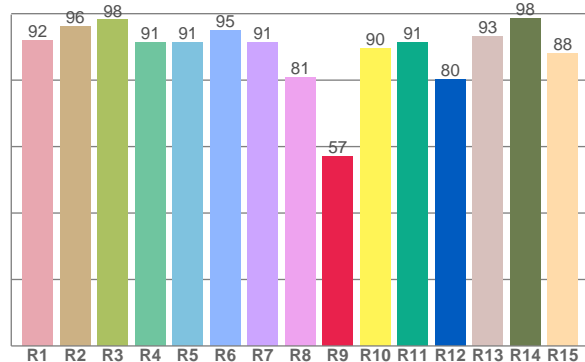
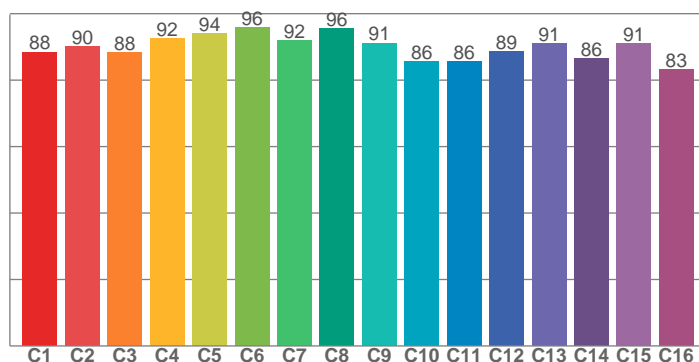
Spectral distribution





TM30: 89.8

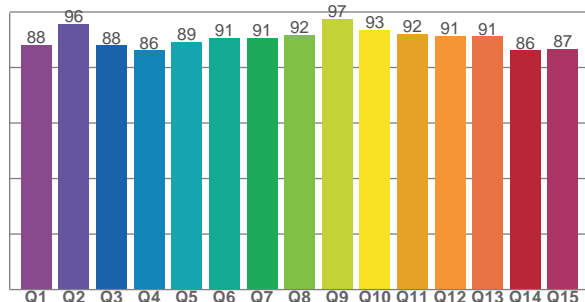
CRI: 92.0 (R1-R8)



Color Parameters

Color Temperature	Color Rendering Index	Red Component	Color Fidelity	Color Gamut
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg
2978 K	92.0	56.9	89.8	98.3

CQS: 89.9



Television Lighting Consistency Index	Color Quality Scale	Color Coordinate CIE 1931	Color Coordinate CIE 1931	Color Coordinate CIE 1964	Color Coordinate CIE 1964	Color Diviation from Black Body
TLCI	CQS	x	y	u	v	Δuv
90+	89.9	0.438	0.403	0.252	0.347	-0.0005

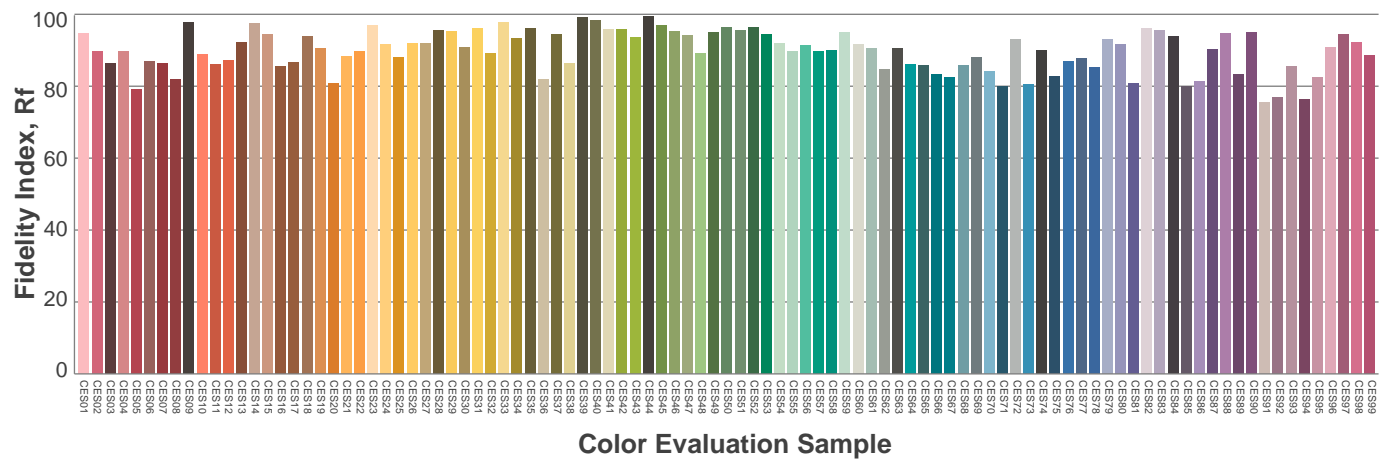
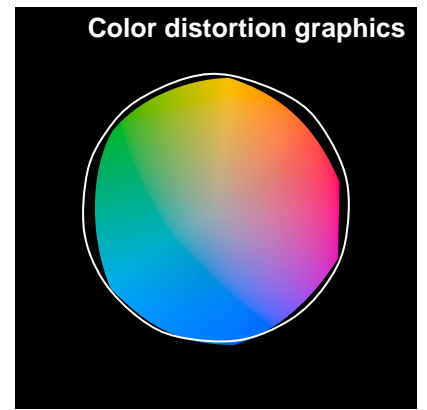
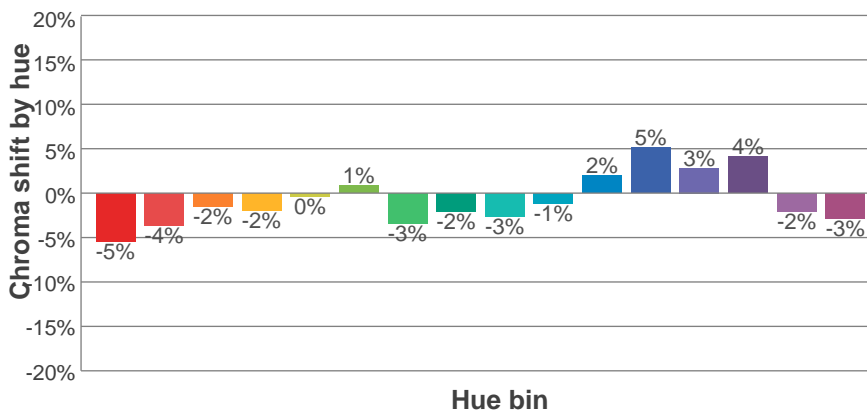
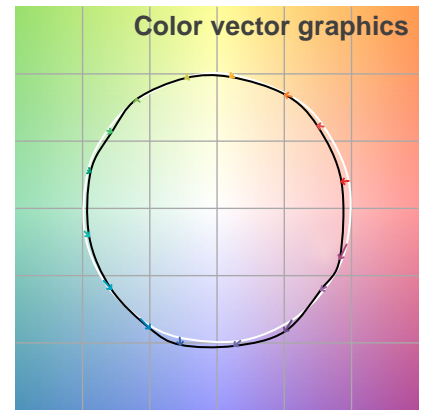
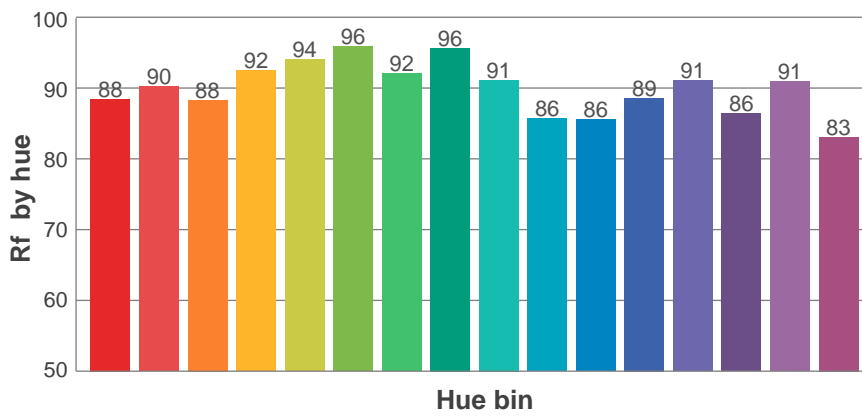
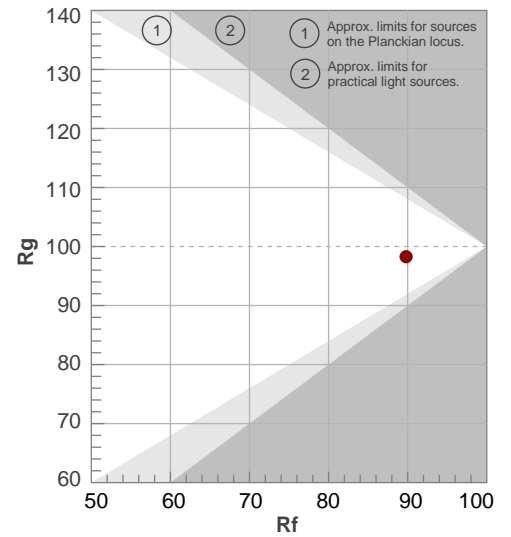
Rf 89.8

Fidelity index Rf

Rg 98.3

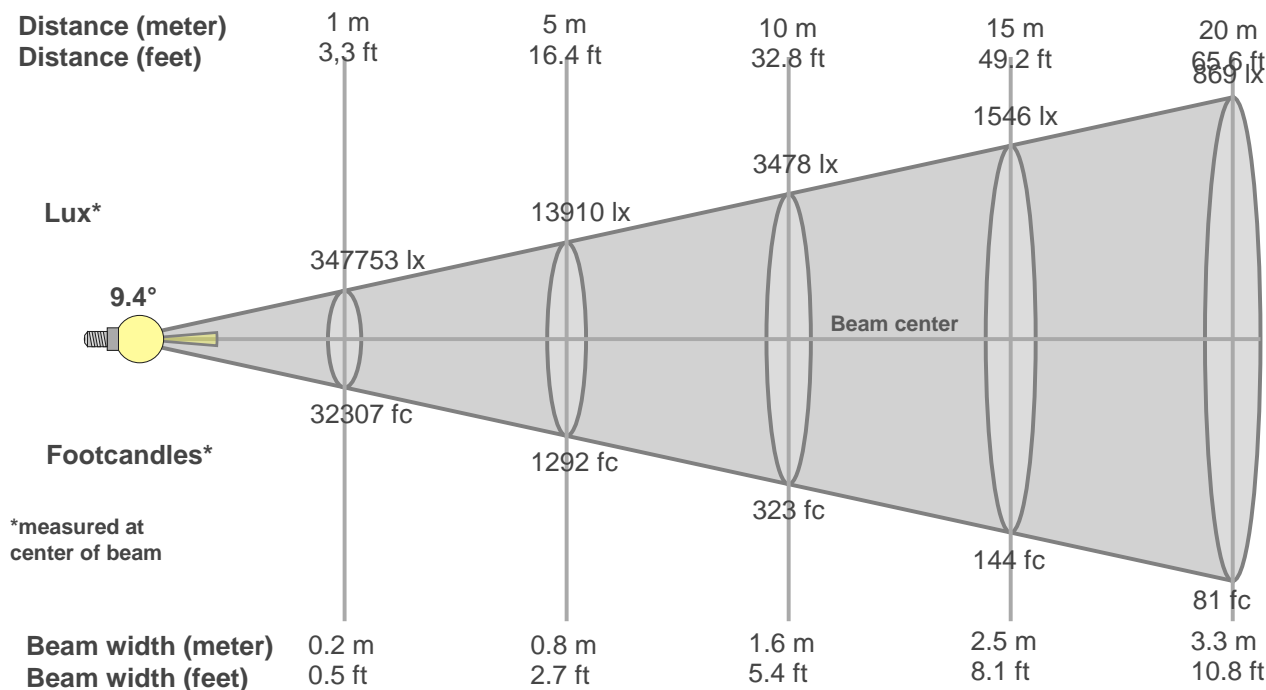
Gamut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	88	-5%	0%
2	90	-4%	3%
3	88	-2%	5%
4	92	-2%	2%
5	94	0%	2%
6	96	1%	0%
7	92	-3%	-1%
8	96	-2%	0%
9	91	-3%	4%
10	86	-1%	8%
11	86	2%	10%
12	89	5%	2%
13	91	3%	-5%
14	86	4%	-9%
15	91	-2%	-4%
16	83	-3%	-11%



Beam Details

MAC Encore Performance WRM – Narrow



Beam width:

Beam luminous intensity formula:

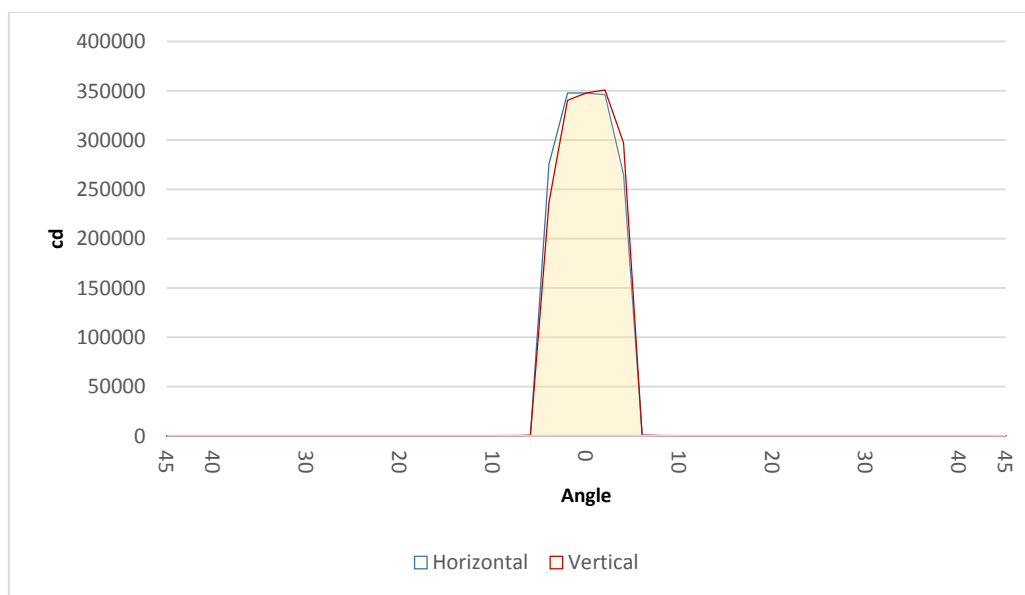
$$w = 0.2 * \text{distance}$$

$$\text{lux} = 347753 / (\text{distance}^2) \text{ (where distance is in meters)}$$

$$\text{fc} = 347753 / (\text{distance}^2) \text{ (where distance is in feet)}$$

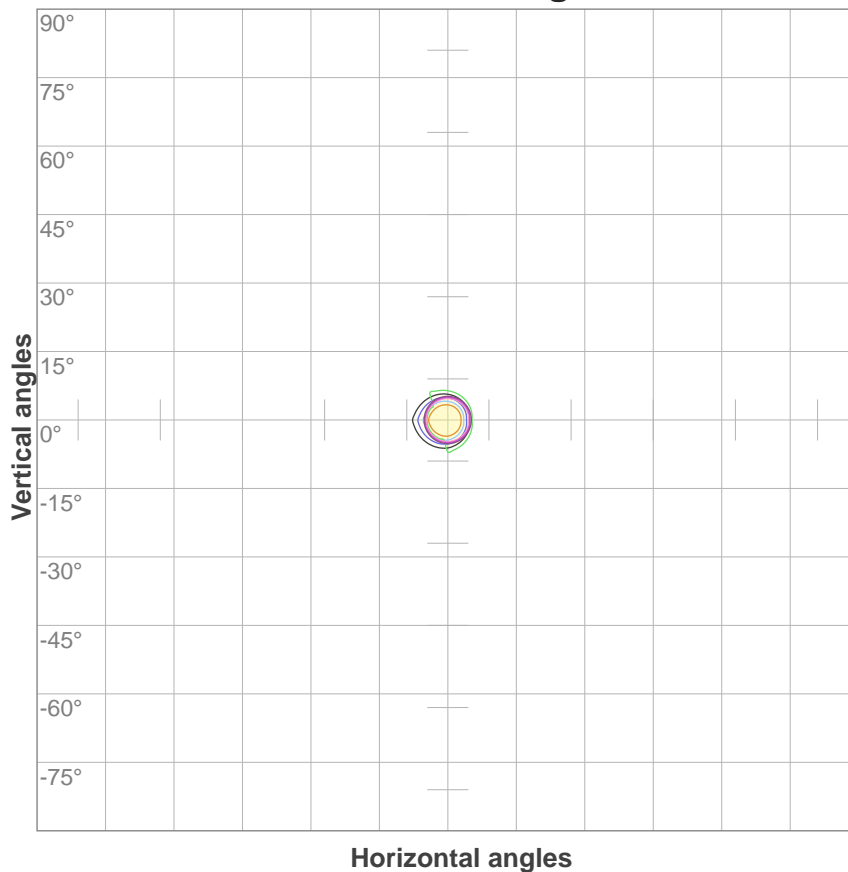
Beam illuminance from 1-20m

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
347753lx	86938lx	38639lx	21735lx	13910lx	9660lx	7097lx	5434lx	4293lx	3478lx	2874lx	2415lx	2058lx	1774lx	1546lx	1358lx	1203lx	1073lx	963lx	869lx
32307.3fc	8076.8fc	3589.7fc	2019.2fc	1292.3fc	897.4fc	659.3fc	504.8fc	398.9fc	323.1fc	267fc	224.4fc	191.2fc	164.8fc	143.6fc	126.2fc	111.8fc	99.7fc	89.5fc	80.8fc



Beam angle 50%	Field angle 10%	Cutoff angle 3%
9.4°	11.5°	11.9°

ISO candela diagram



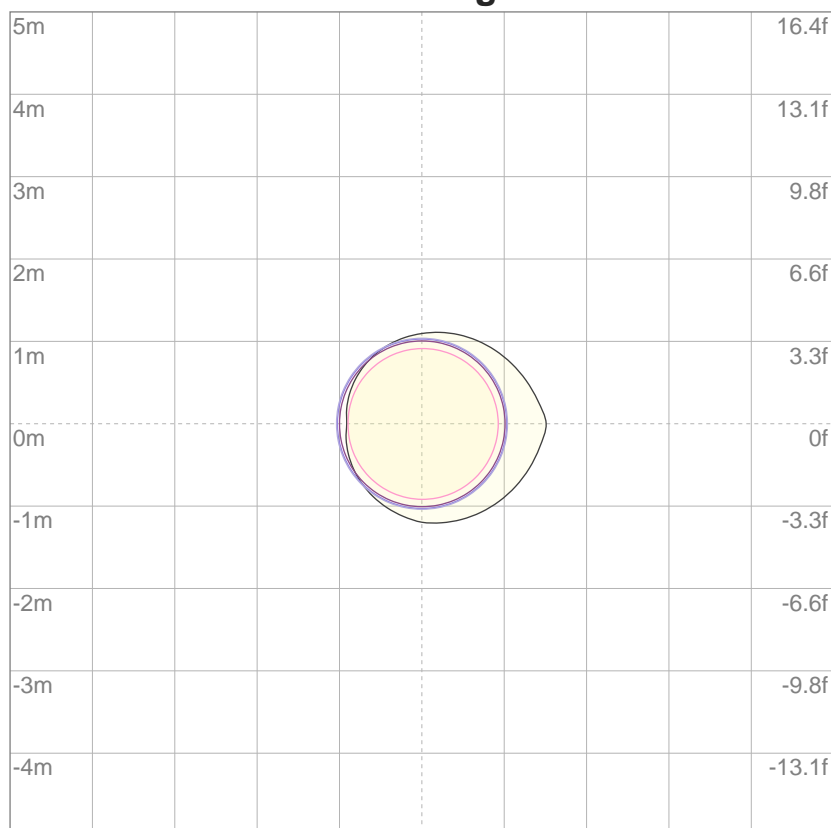
10%	34775 cd
20%	69551 cd
30%	104326 cd
40%	139101 cd
50%	173876 cd
60%	208652 cd
70%	243427 cd
80%	278202 cd
90%	312978 cd

Conditions:

Number of c-planes: 4

Candela at center: 347753 cd

ISO lux diagram



3%	104 lx
5%	174 lx
10%	348 lx
30%	1043 lx
50%	1739 lx

Conditions:

Number of c-planes: 4

Lux at center: 3478 lx

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