

Photometric Report

MAC Encore Wash CLD – Wide

Martin Professional R&D Optical Laboratory, 01-Nov-17 11:14:14

General Specifications:

Total Fixture Output: 12.4 klm

Light Engine Output: 39.4 klm

Efficacy: 21 Lumen/Watt

Lens Option: PC Lens

Zoomrange: 11-58°

CRI: 80+

CQS: 80+

TM-30 Rf: 80+

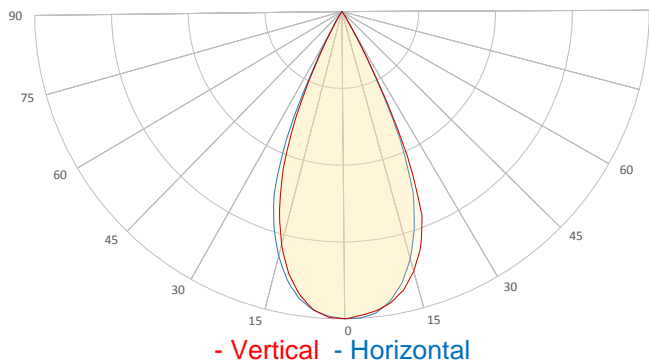
TM-30 Rg: 95+

TLCI: 70+

Color Temperature: 6000 K



Measurement



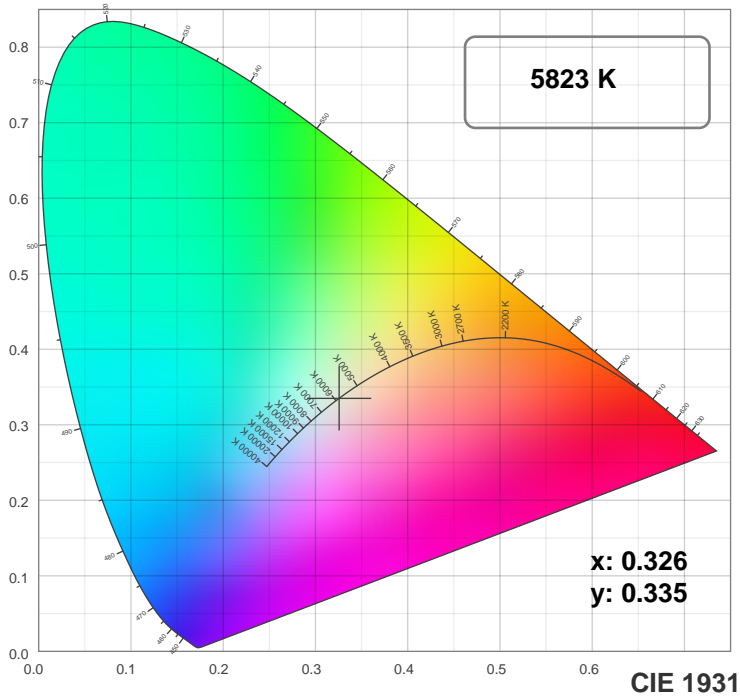
Catalog Number: 90234045
Measured Output: 12231 lm
Measured Peak: 24932 cd
Consumed Power: 590 W
Efficacy: 20.7 Lumen/Watt

Beam Angle (50%): 46.3°
Field Angle (10%): 58.5°
Cutoff Angle (3%): 65.2°

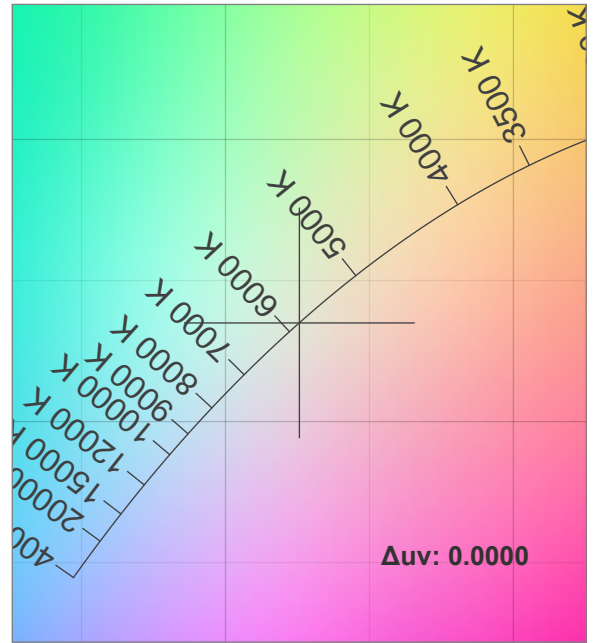
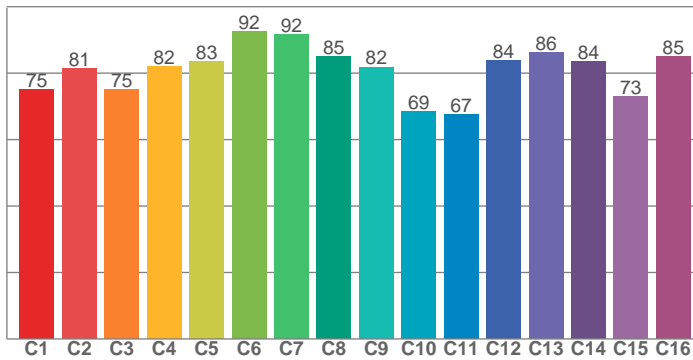
Measurement Condition:
Ambient Temperature: 25 +/- 5C
AC Supply: 230V/50Hz

Spectral distribution



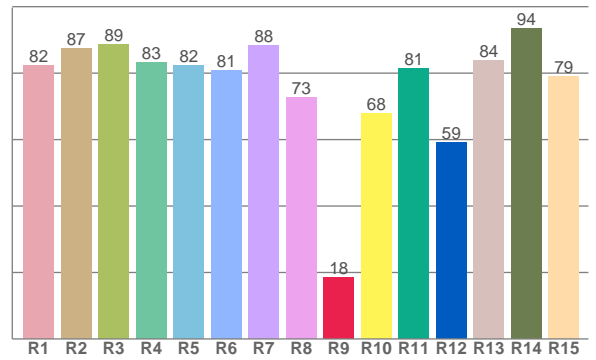


TM30: 80.5



CIE 1931 ZOOM

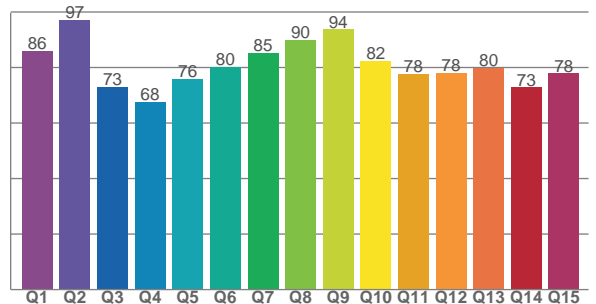
CRI: 83.3 (R1-R8)



Color Parameters

Color Temperature	Color Rendering Index	Red Component	Color Fidelity	Color Gamut
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg
5823 K	83.3	18.4	80.5	96.2

CQS: 79.6



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
70+	79.6	0.326	0.335	0.205	0.316	0.0000

TM30 MAC Encore Wash CLD – Wide

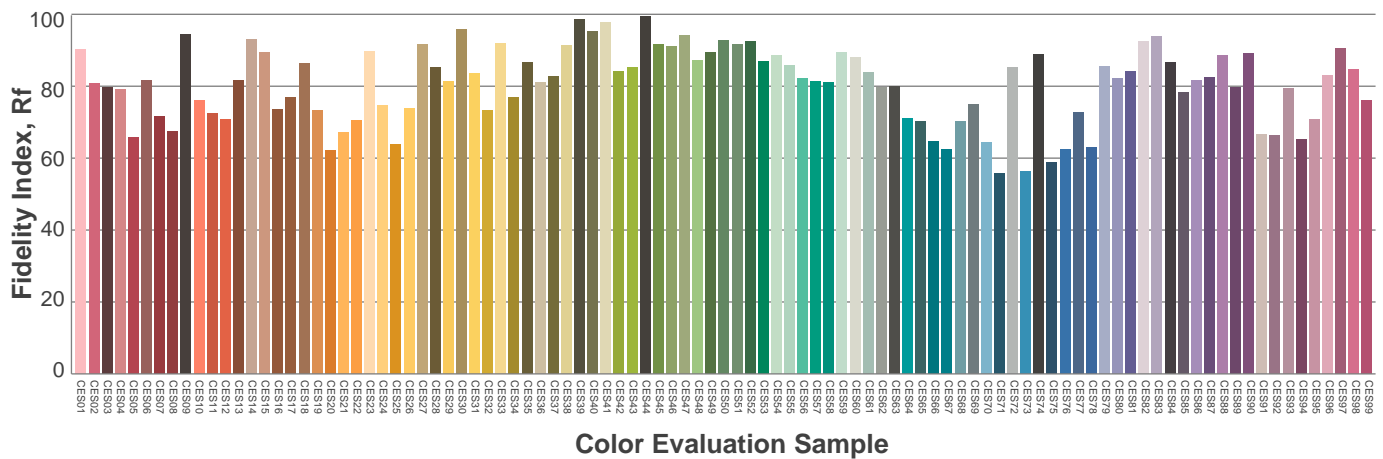
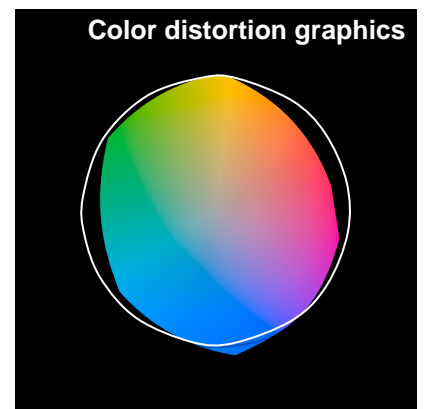
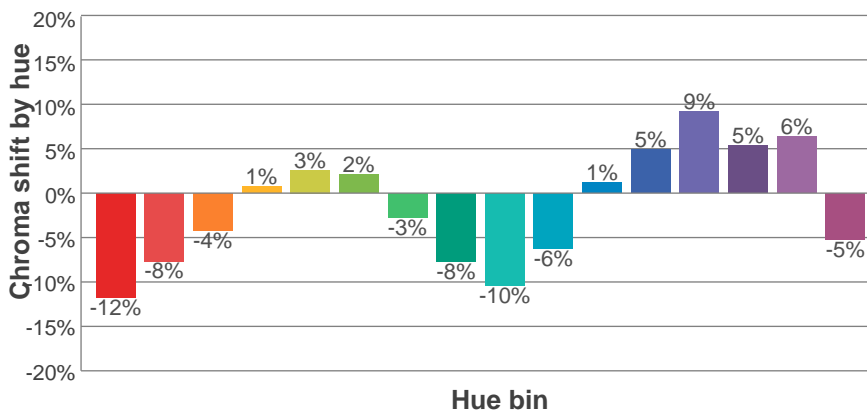
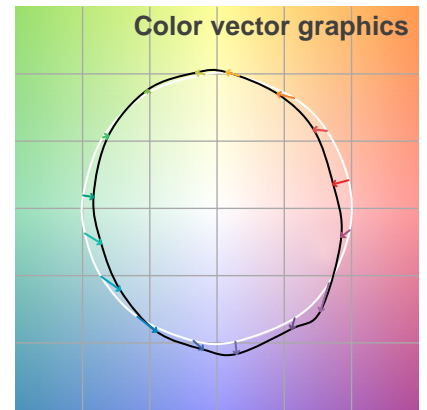
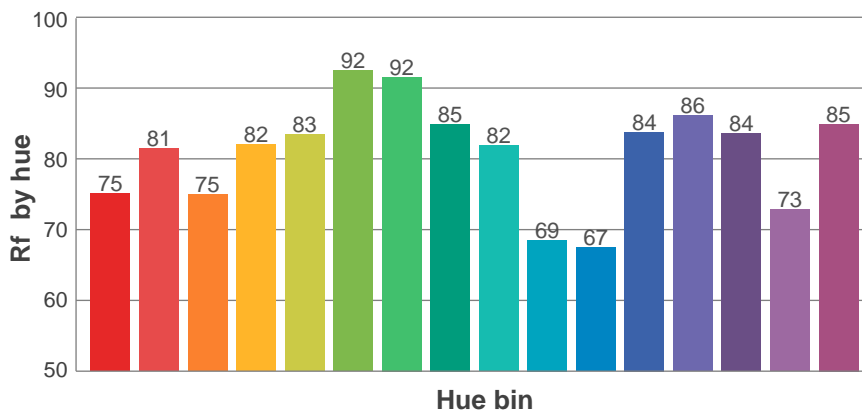
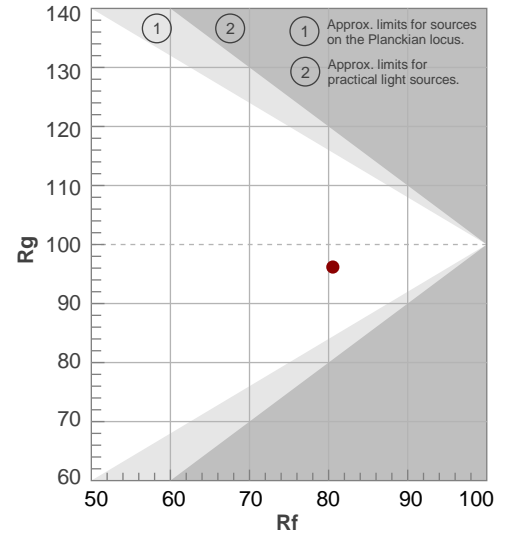
Rf 80.5

Fidelity index Rf

Rg 96.2

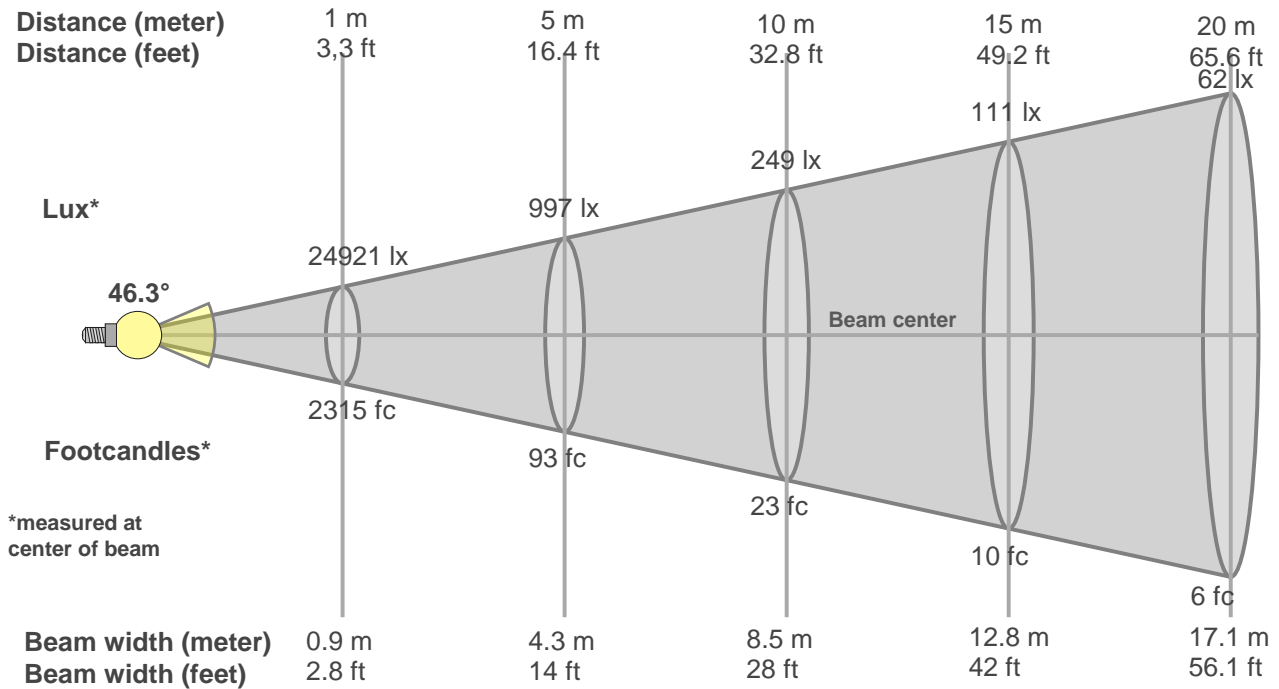
Gamut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	75	-12%	-1%
2	81	-8%	7%
3	75	-4%	12%
4	82	1%	10%
5	83	3%	6%
6	92	2%	-1%
7	92	-3%	-3%
8	85	-8%	0%
9	82	-10%	10%
10	69	-6%	16%
11	67	1%	18%
12	84	5%	8%
13	86	9%	-1%
14	84	5%	-6%
15	73	6%	-21%
16	85	-5%	-6%



Beam Details

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Beam width:

Beam luminous intensity formula:

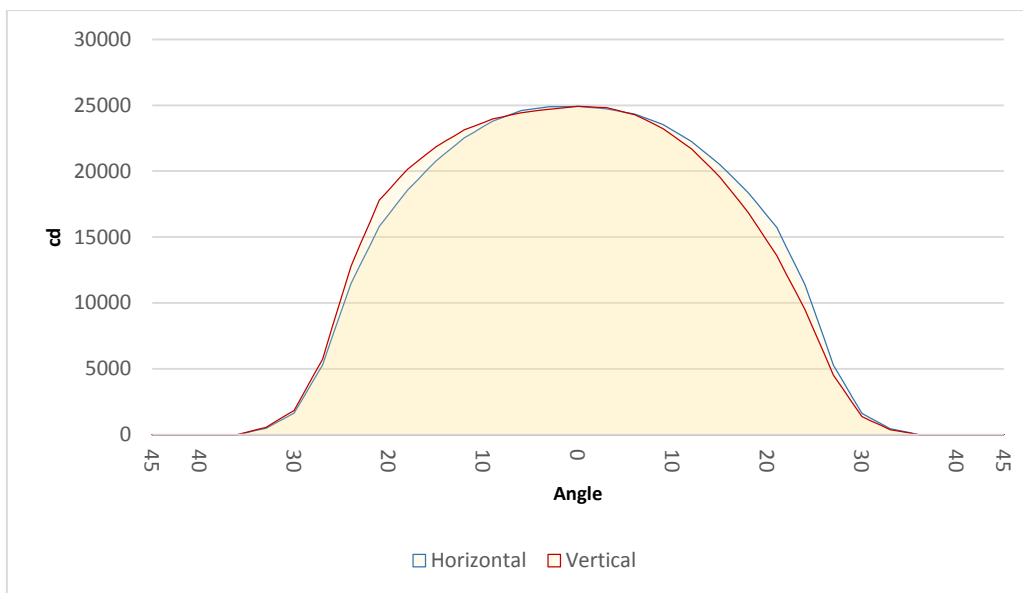
$$w = 0.9 * \text{distance}$$

$$\text{lux} = 24921 / (\text{distance}^2) \text{ (where distance is in meters)}$$

$$\text{fc} = 24921 / (\text{distance}^2) \text{ (where distance is in feet)}$$

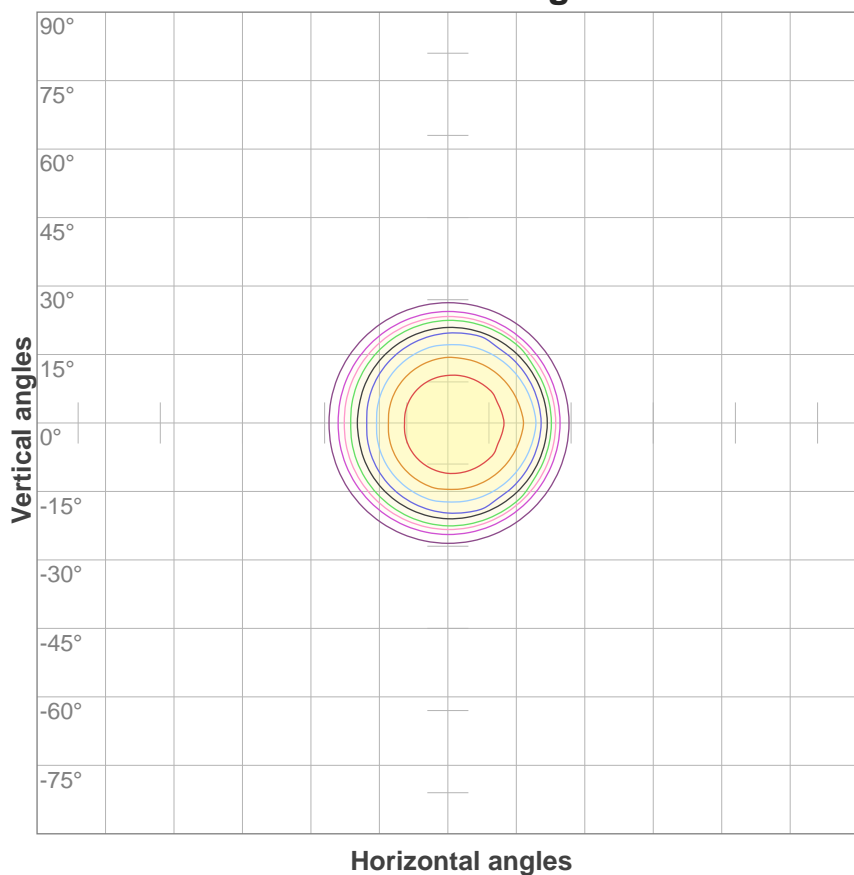
Beam illuminance from 1-20m

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
24921lx	6230lx	2769lx	1558lx	997lx	692lx	509lx	389lx	308lx	249lx	206lx	173lx	147lx	127lx	111lx	97lx	86lx	77lx	69lx	62lx
2315.3fc	578.8fc	257.3fc	144.7fc	92.6fc	64.3fc	47.3fc	36.2fc	28.6fc	23.2fc	19.1fc	16.1fc	13.7fc	11.8fc	10.3fc	9fc	8fc	7.1fc	6.4fc	5.8fc



Beam angle 50%	Field angle 10%	Cutoff angle 3%
46.3°	58.5°	65.2°

ISO candela diagram



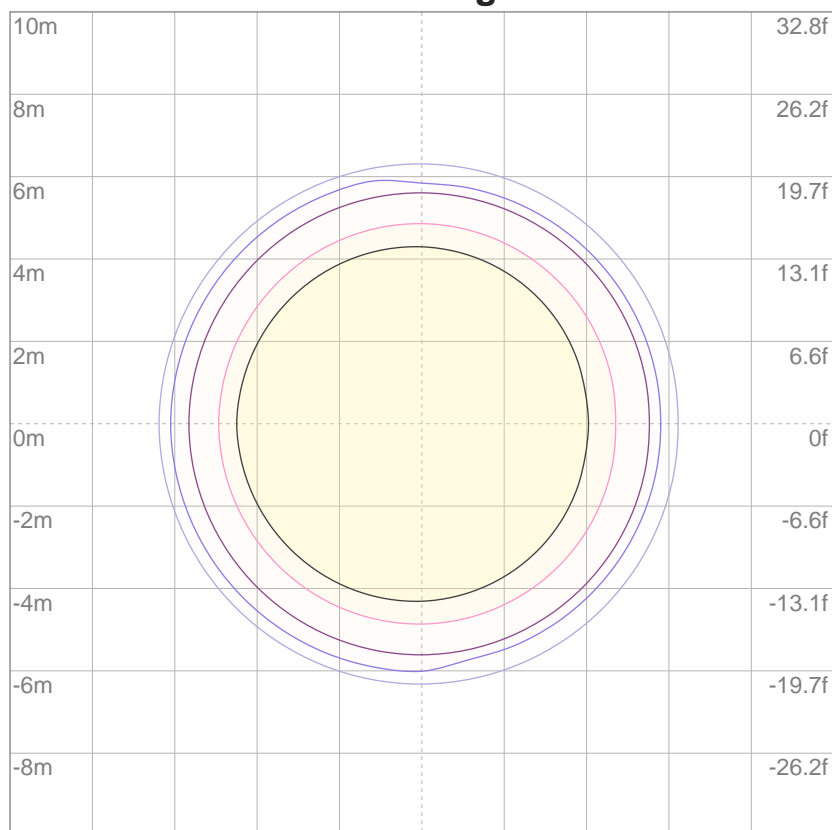
10%	2492 cd
20%	4984 cd
30%	7476 cd
40%	9969 cd
50%	12461 cd
60%	14953 cd
70%	17445 cd
80%	19937 cd
90%	22429 cd

Conditions:

Number of c-planes: 4

Candela at center: 24921 cd

ISO lux diagram



3%	7.48 lx
5%	12.5 lx
10%	24.9 lx
30%	74.8 lx
50%	125 lx

Conditions:

Number of c-planes: 4

Lux at center: 249 lx

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

Throw Distance: 10 meters (33 feet)