

Photometric Report

MAC Encore Wash CLD – Narrow

Martin Professional R&D Optical Laboratory, 01-Nov-17 11:10:44

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+

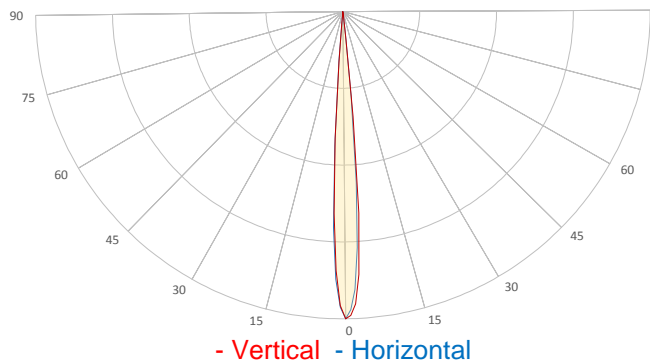
TM-30 Rg: 95+

TLCI: 70+

Color Temperature: 6000 K



Measurement



Catalog Number: 90234045

Measured Output: 12321 lm

Measured Peak: 742423 cd

Consumed Power: 590 W

Efficacy: 20.9 Lumen/Watt

Beam Angle (50%): 8.1°

Field Angle (10%): 11.4°

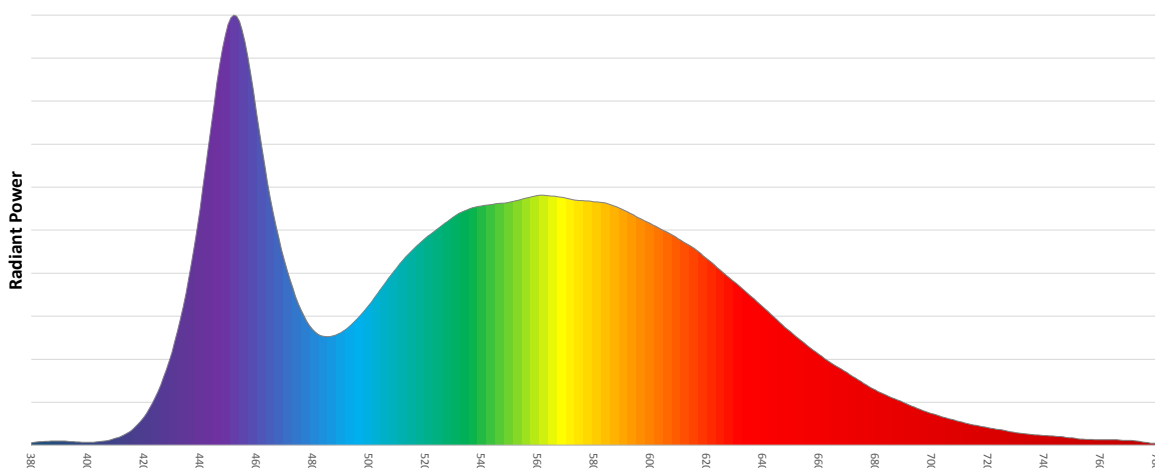
Cutoff Angle (3%): 13°

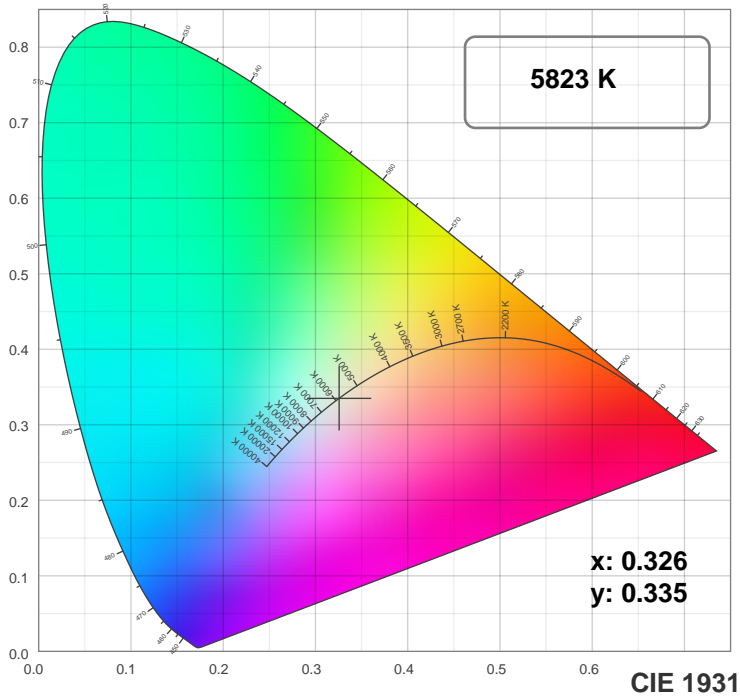
Measurement Condition:

Ambient Temperature: 25 +/- 5C

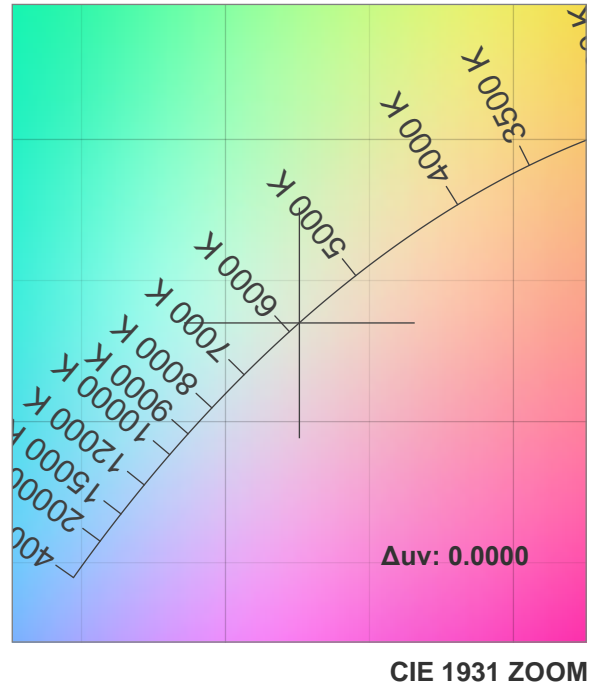
AC Supply: 230V/50Hz

Spectral distribution

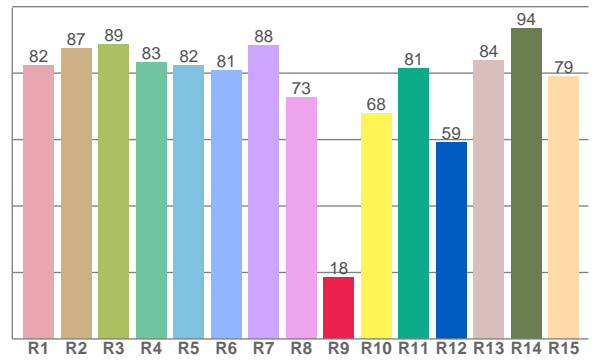
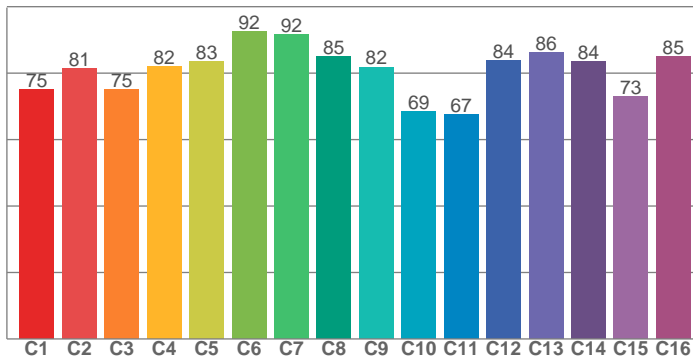




TM30: 80.5



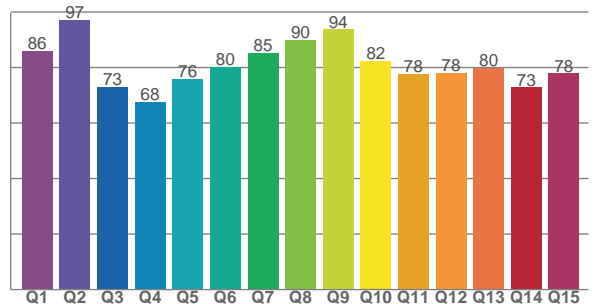
CRI: 83.3 (R1-R8)



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 – Narrow

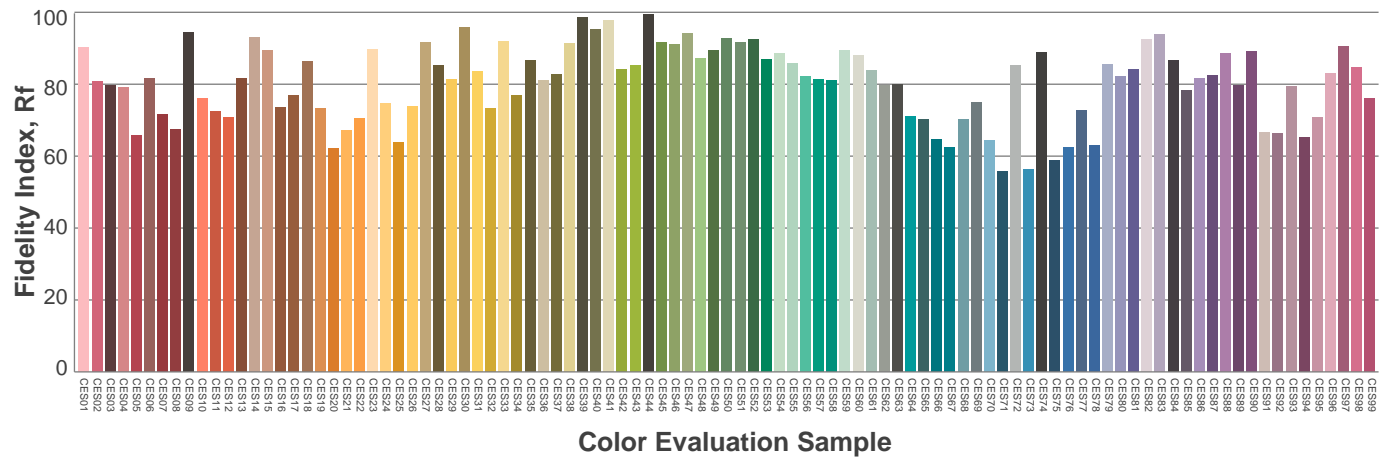
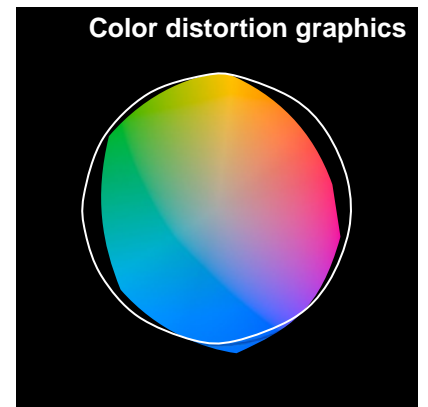
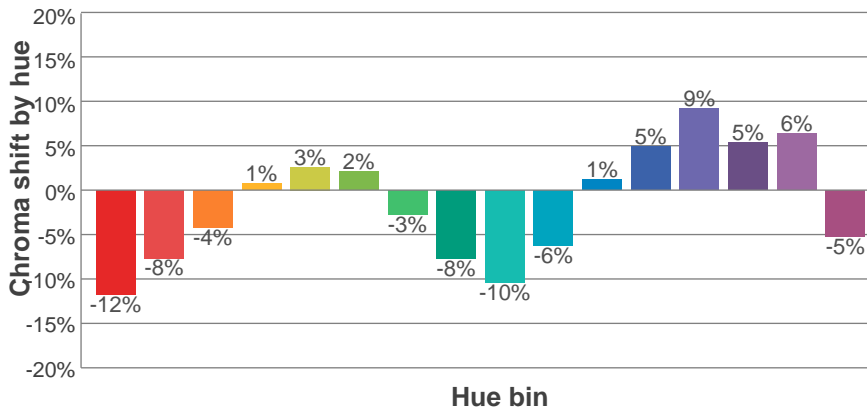
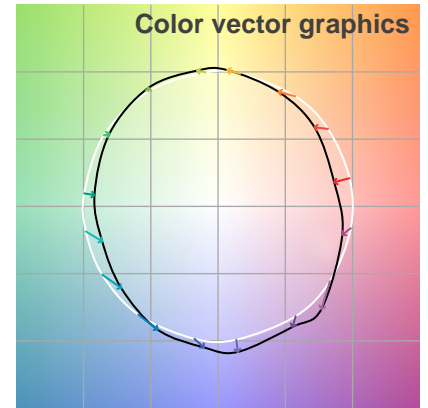
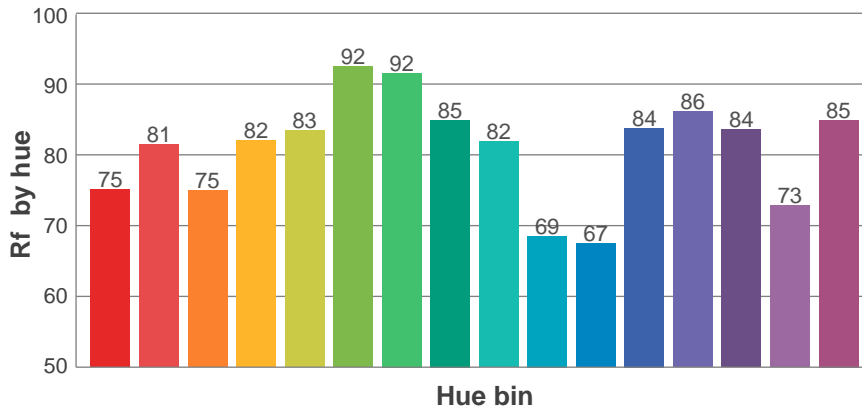
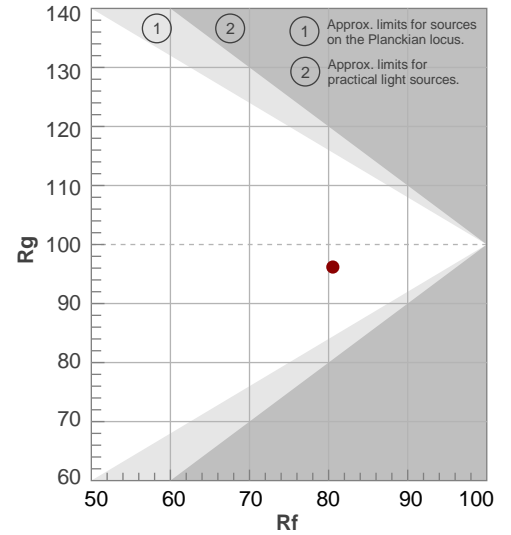
Rf 80.5

Fidelity index Rf

Rg 96.2

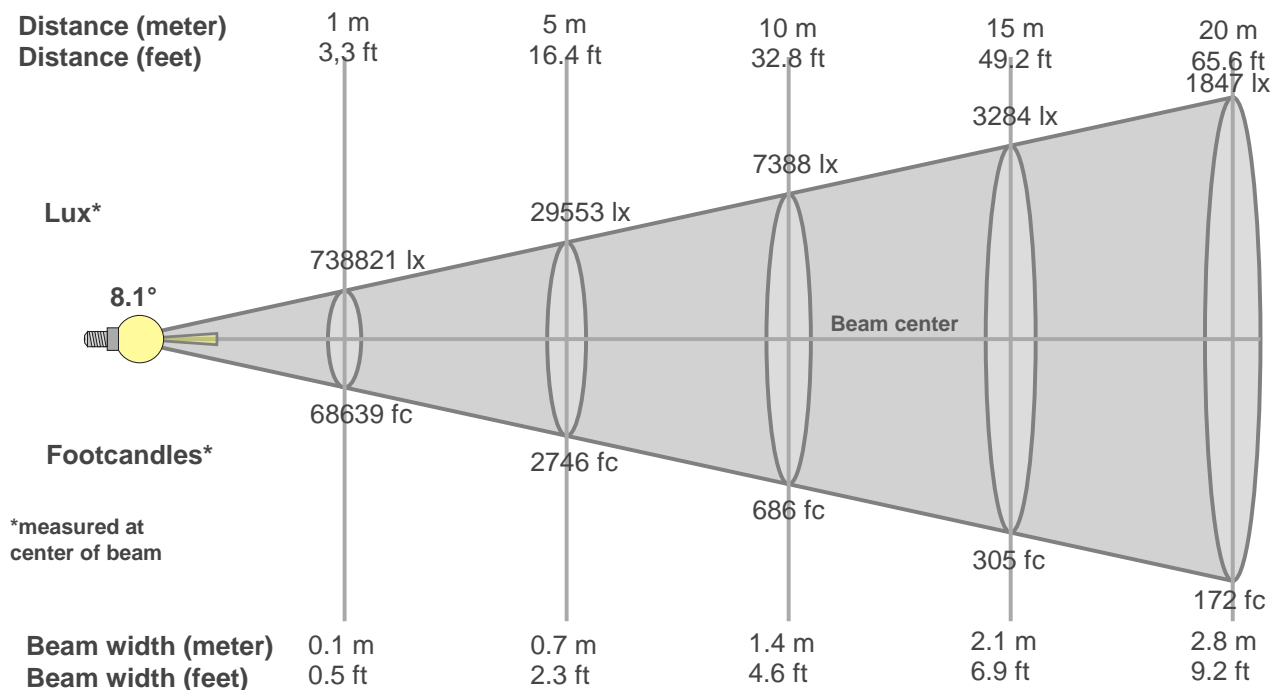
Gamut index Rg

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:

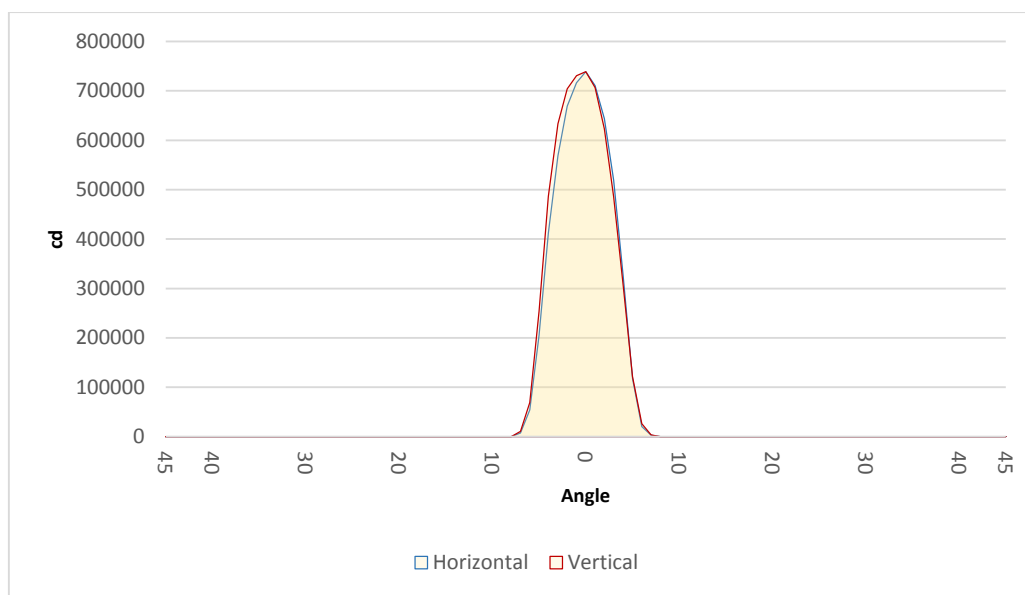
$$w = 0.1 * \text{distance}$$

$$\text{lux} = 738821 / (\text{distance}^2) \text{ (where distance is in meters)}$$

$$\text{fc} = 738821 / (\text{distance}^2) \text{ (where distance is in feet)}$$

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
738821lx	184705lx	82091lx	46176lx	29553lx	20523lx	15078lx	11544lx	9121lx	7388lx	6106lx	5131lx	4372lx	3769lx	3284lx	2886lx	2556lx	2280lx	2047lx	1847lx
68638.8fc	17159.7fc	7626.5fc	4289.9fc	2745.6fc	1906.6fc	1400.8fc	1072.5fc	847.4fc	686.4fc	567.3fc	476.7fc	406.1fc	350.2fc	305.1fc	268.1fc	237.5fc	211.8fc	190.1fc	171.6fc

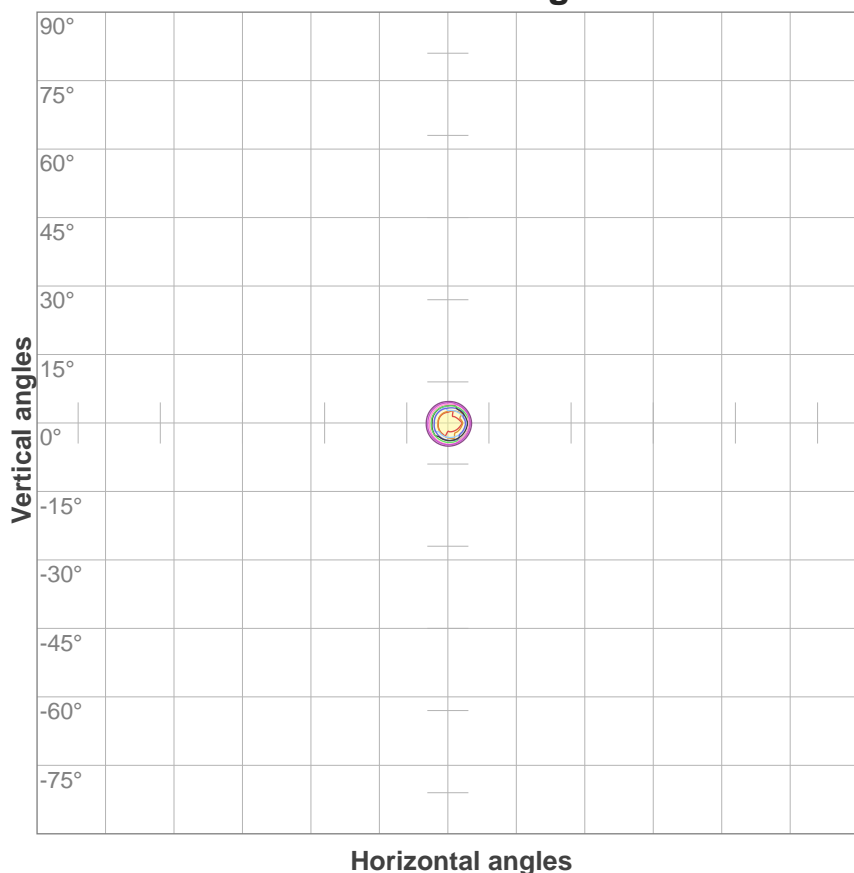


Beam angle 50%	Field angle 10%	Cutoff angle 3%
8.1°	11.4°	13°

ISO Diagrams

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ISO candela diagram



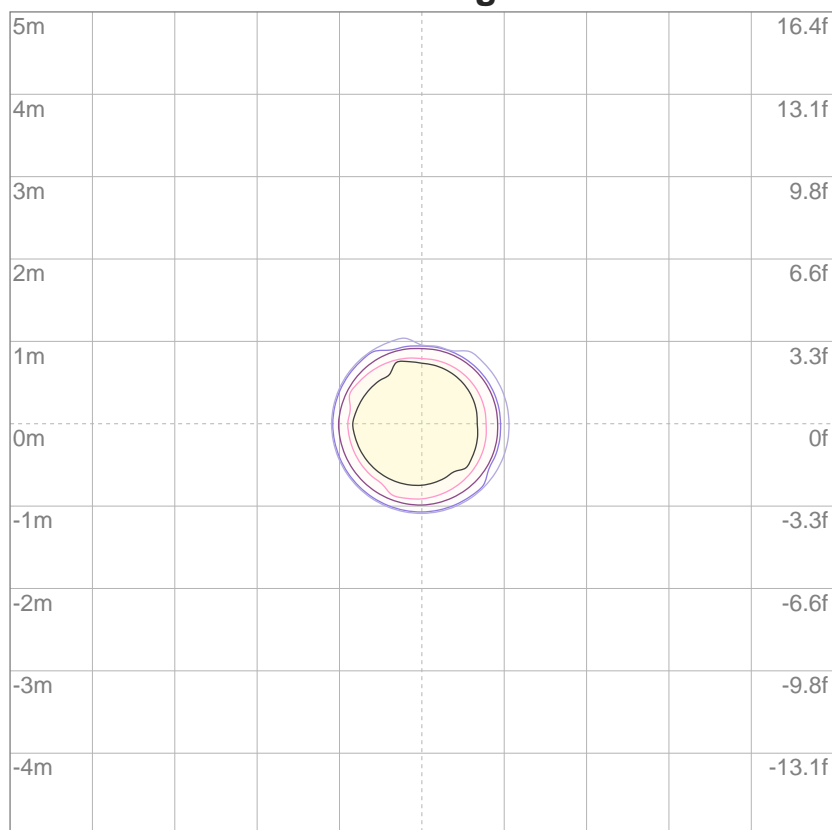
10%	73882 cd
20%	147764 cd
30%	221646 cd
40%	295529 cd
50%	369411 cd
60%	443293 cd
70%	517175 cd
80%	591057 cd
90%	664939 cd

Conditions:

Number of c-planes: 4

Candela at center: 738821 cd

ISO lux diagram



3%	222 lx
5%	369 lx
10%	739 lx
30%	2216 lx
50%	3694 lx

Conditions:

Number of c-planes: 4

Lux at center: 7388 lx

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

Throw Distance: 10 meters (33 feet)