

Photometric Report

MAC Encore Wash CLD – Medium

Martin Professional R&D Optical Laboratory, 01-Nov-17 11:17:30

General Specifications:

Total Fixture Output: 11.1 klm

Light Engine Output: 39.4 klm

Efficacy: 19 Lumen/Watt

Lens Option: Fresnel Lens

Zoomrange: 14-60°

CRI: 80+

CQS: 80+

TM-30 Rf: 80+

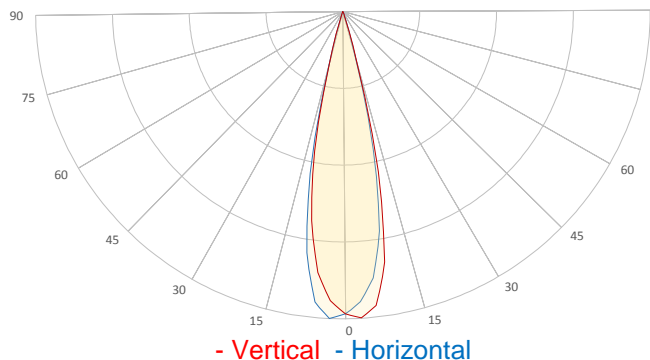
TM-30 Rg: 95+

TLCI: 70+

Color Temperature: 6000 K



Measurement



Catalog Number: 90234045

Measured Output: 11075 lm

Measured Peak: 80107 cd

Consumed Power: 590 W

Efficacy: 18.8 Lumen/Watt

Beam Angle (50%): 23.8°

Field Angle (10%): 32.7°

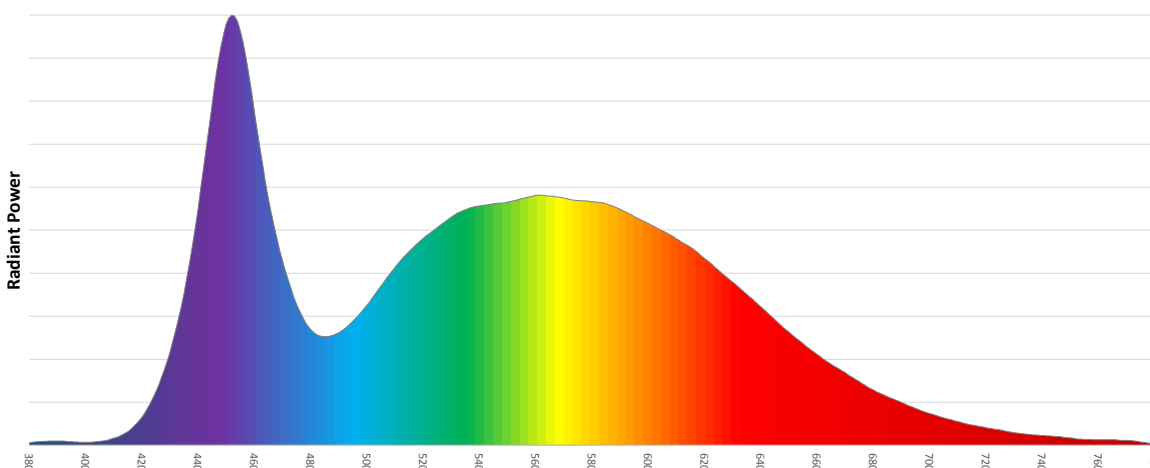
Cutoff Angle (3%): 36.1°

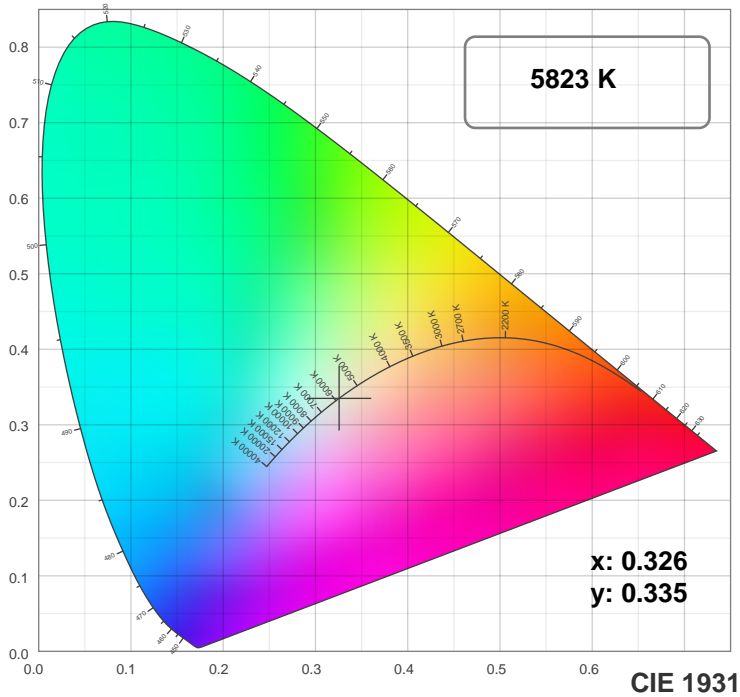
Measurement Condition:

Ambient Temperature: 25 +/- 5C

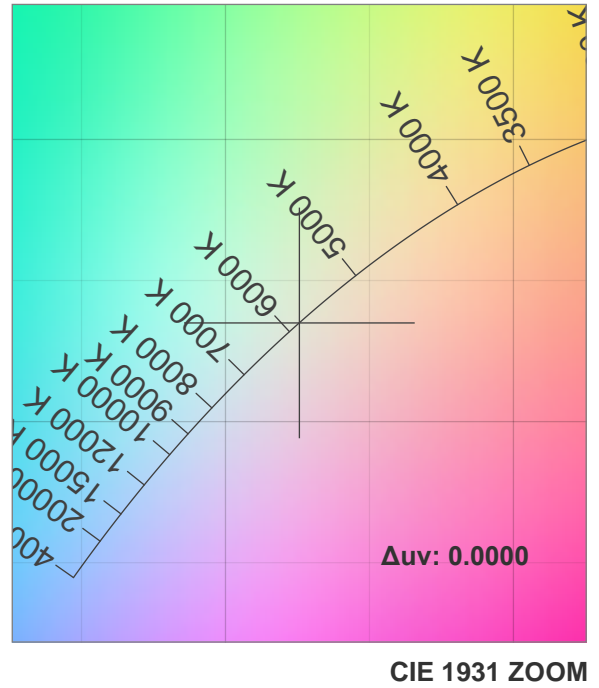
AC Supply: 230V/50Hz

Spectral distribution

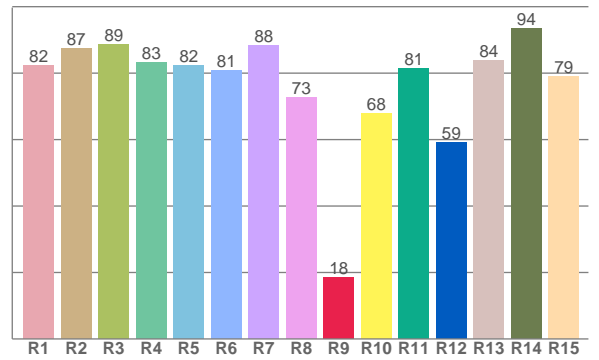
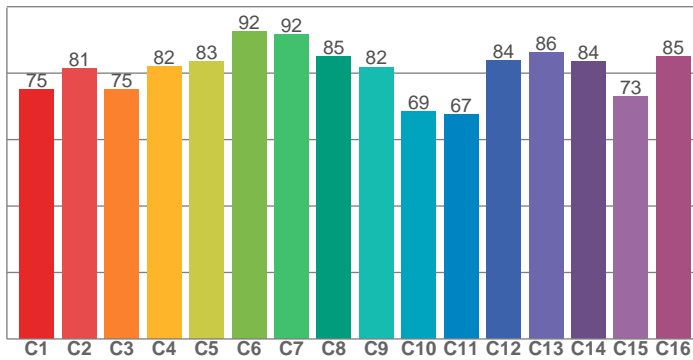




TM30: 80.5



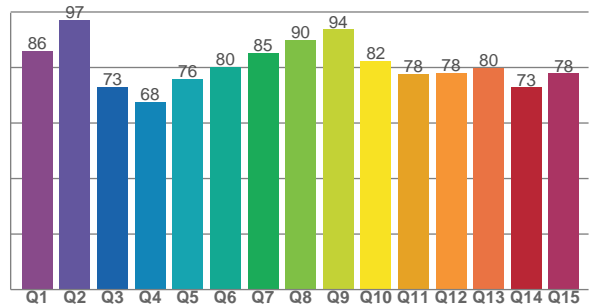
CRI: 83.3 (R1-R8)



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 – Medium

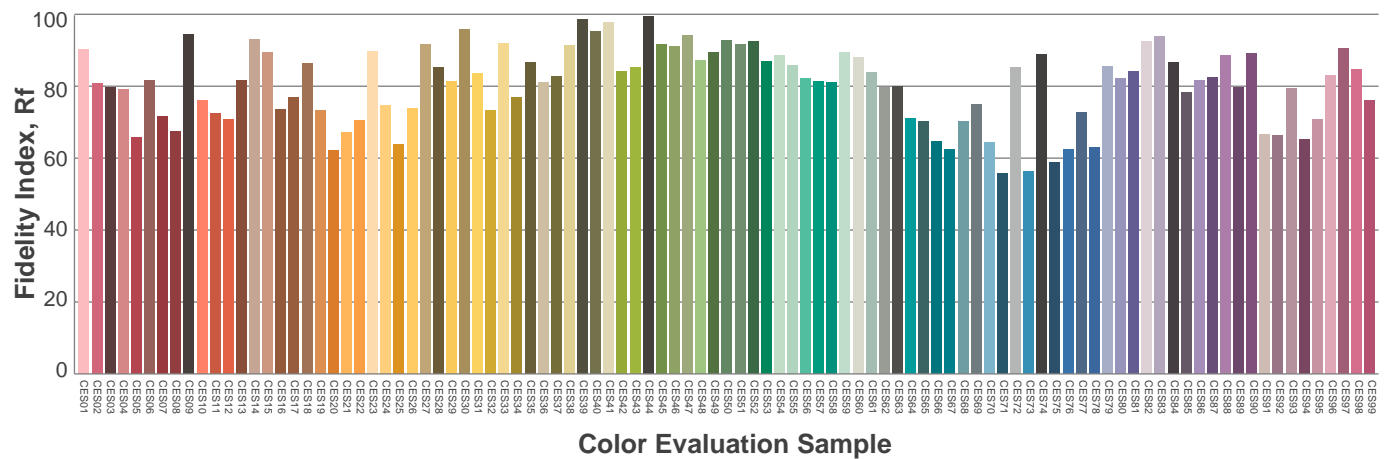
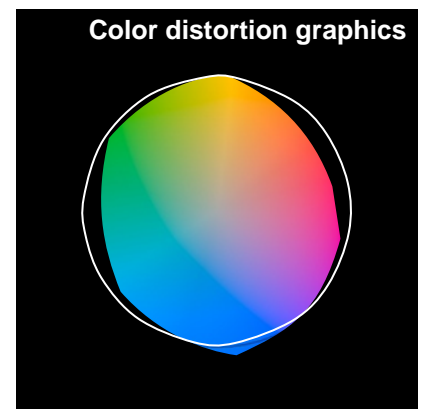
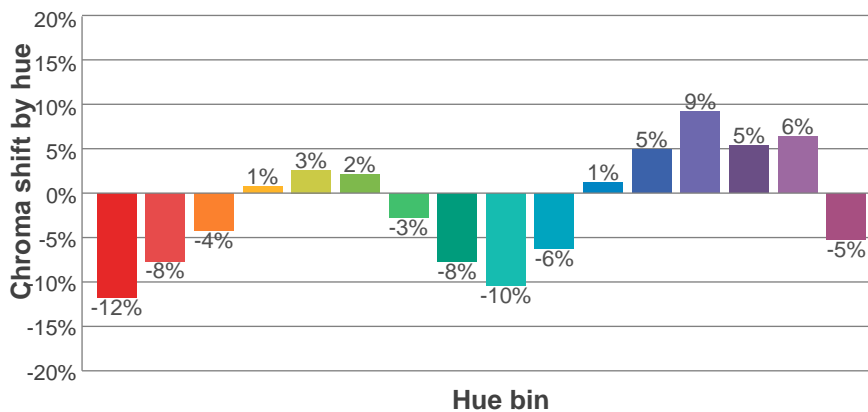
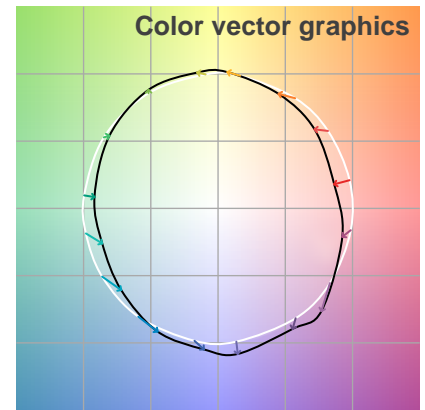
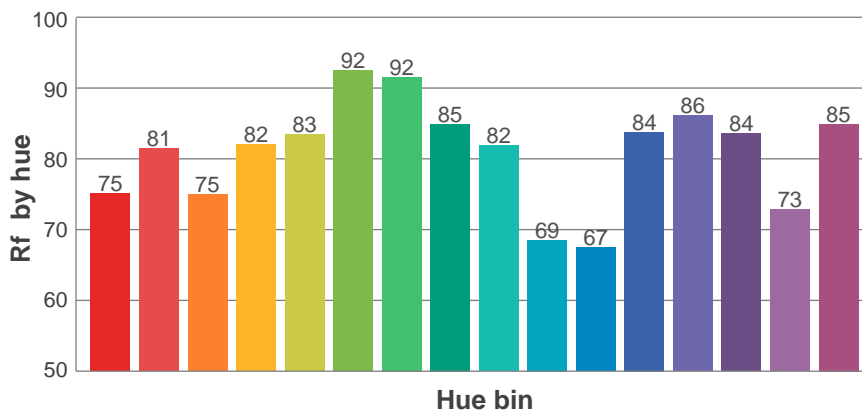
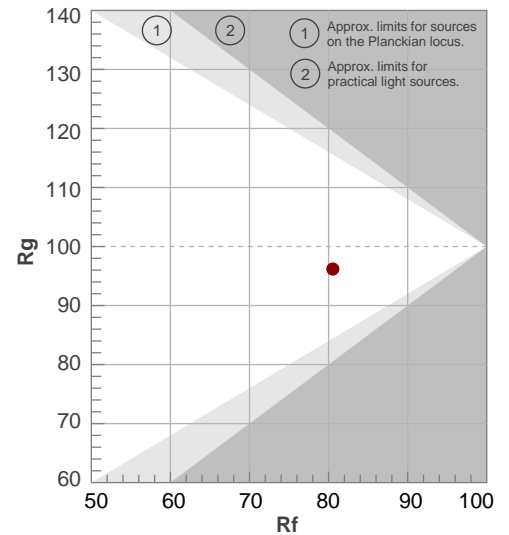
Rf 80.5

Fidelity index Rf

Rg 96.2

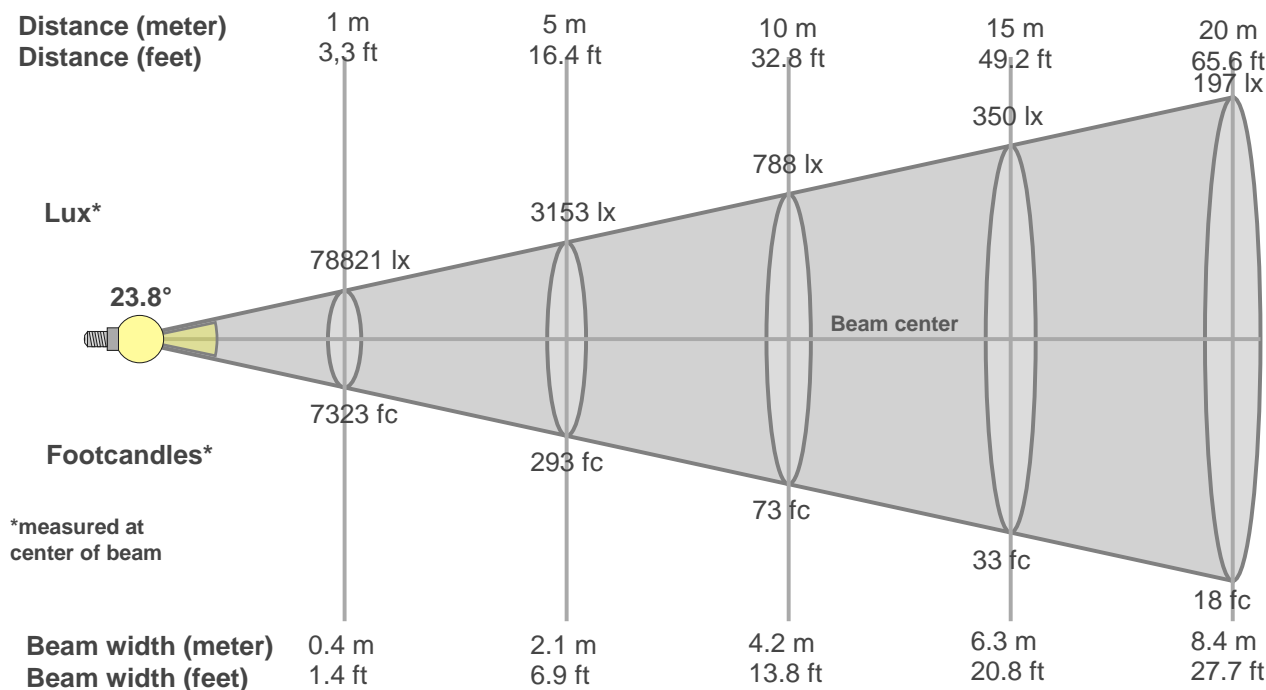
Gamut index Rg

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:

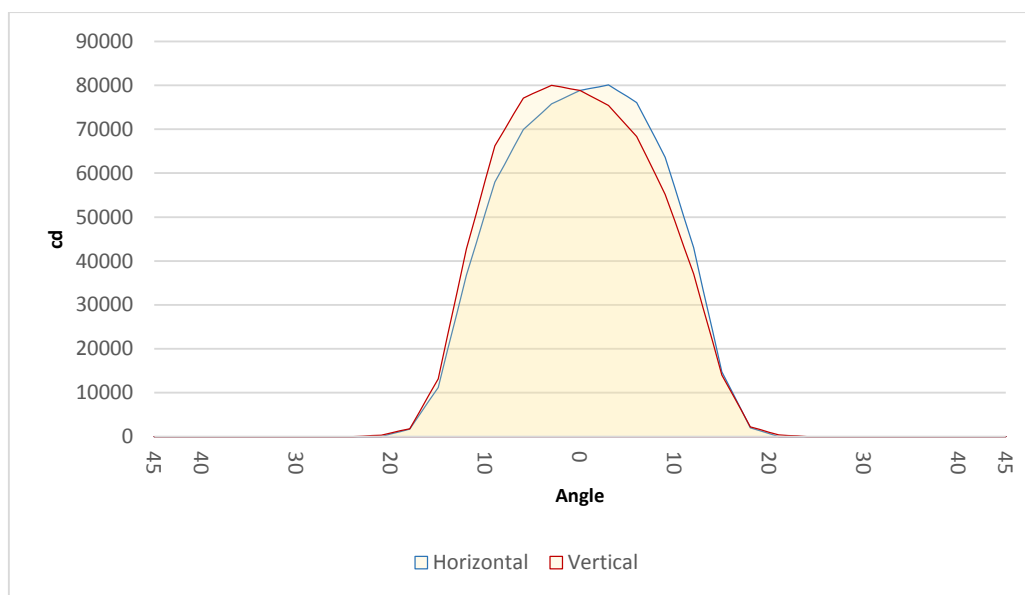
$$w = 0.4 * \text{distance}$$

$$\text{lux} = 78821 / (\text{distance}^2) \text{ (where distance is in meters)}$$

$$\text{fc} = 78821 / (\text{distance}^2) \text{ (where distance is in feet)}$$

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
78821lx	19705lx	8758lx	4926lx	3153lx	2189lx	1609lx	1232lx	973lx	788lx	651lx	547lx	466lx	402lx	350lx	308lx	273lx	243lx	218lx	197lx
7322.7fc	1830.7fc	813.6fc	457.7fc	292.9fc	203.4fc	149.4fc	114.4fc	90.4fc	73.2fc	60.5fc	50.9fc	43.3fc	37.4fc	32.5fc	28.6fc	25.3fc	22.6fc	20.3fc	18.3fc

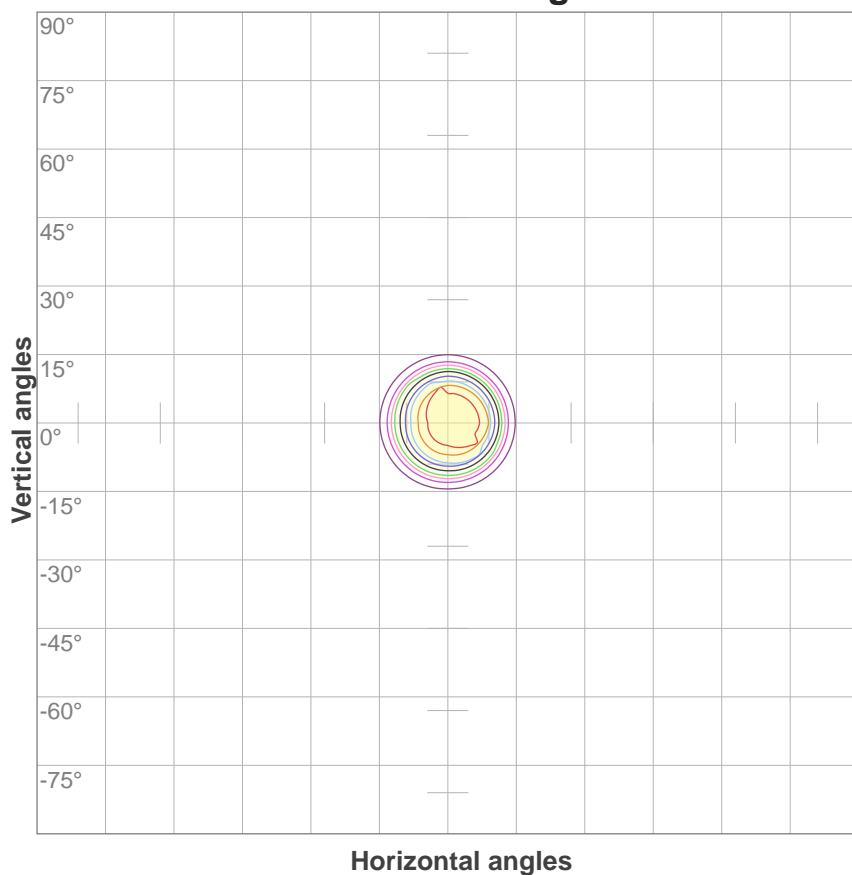


Beam angle 50%	Field angle 10%	Cutoff angle 3%
23.8°	32.7°	36.1°

ISO Diagrams

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ISO candela diagram



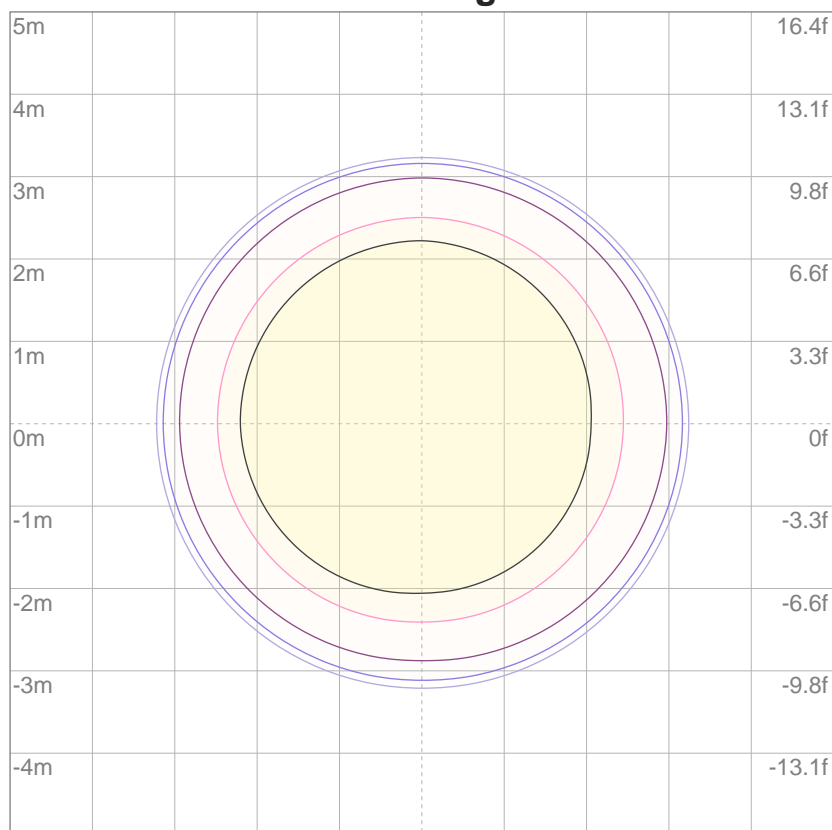
10%	7882 cd
20%	15764 cd
30%	23646 cd
40%	31528 cd
50%	39410 cd
60%	47293 cd
70%	55175 cd
80%	63057 cd
90%	70939 cd

Conditions:

Number of c-planes: 4

Candela at center: 78821 cd

ISO lux diagram



3%	23.6 lx
5%	39.4 lx
10%	78.8 lx
30%	236 lx
50%	394 lx

Conditions:

Number of c-planes: 4

Lux at center: 788 lx

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

Throw Distance: 10 meters (33 feet)