

Photometric Report

MAC Encore Wash CLD – Wide

Martin Professional R&D Optical Laboratory, 01-Nov-17 11:19:05

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+

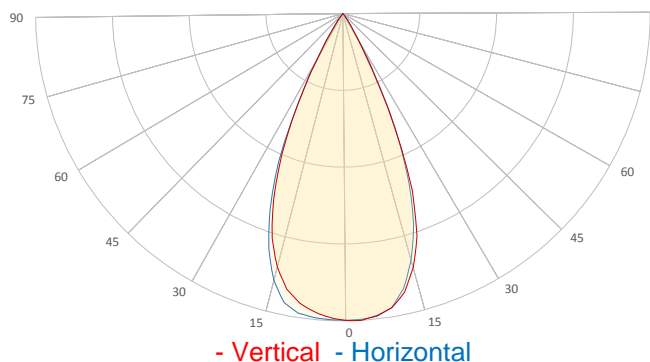
TM-30 Rg: 95+

TLCI: 70+

Color Temperature: 6000 K



Measurement

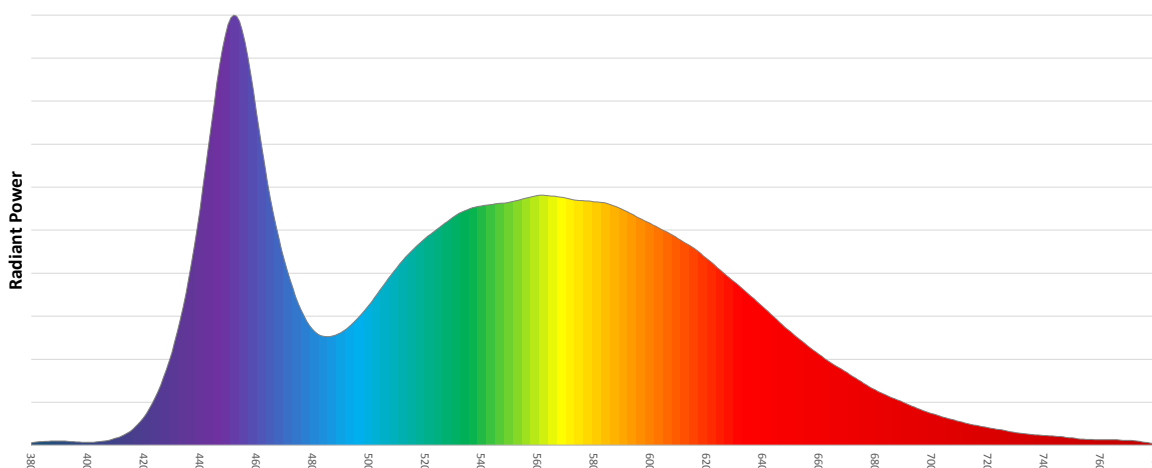


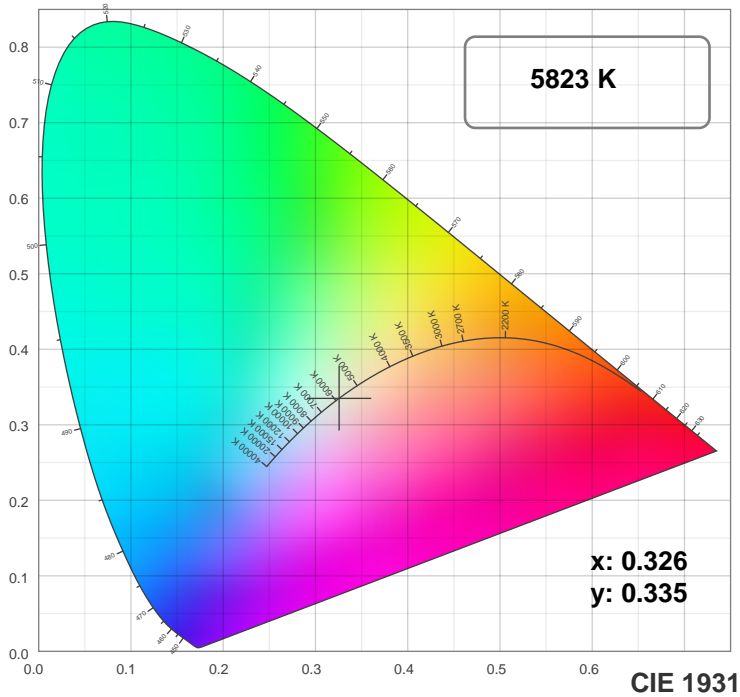
Catalog Number: 90234045
Measured Output: 10951 lm
Measured Peak: 20656 cd
Consumed Power: 590 W
Efficacy: 18.6 Lumen/Watt

Beam Angle (50%): 46.8°
Field Angle (10%): 61.8°
Cutoff Angle (3%): 70.7°

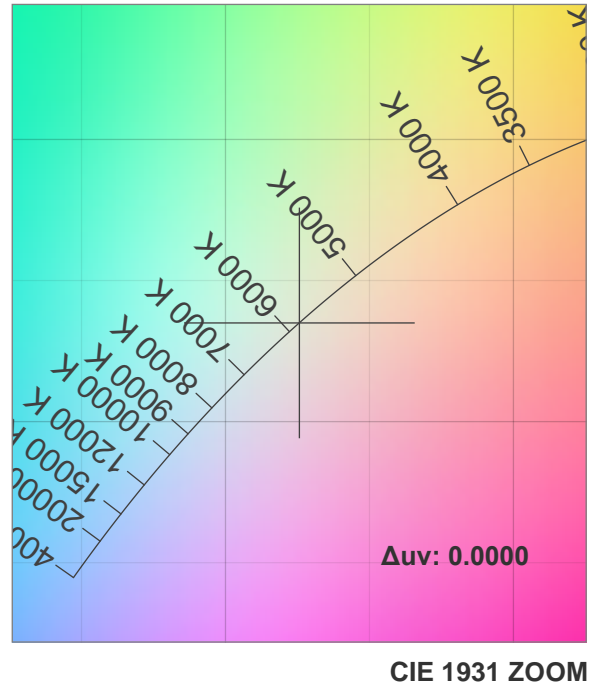
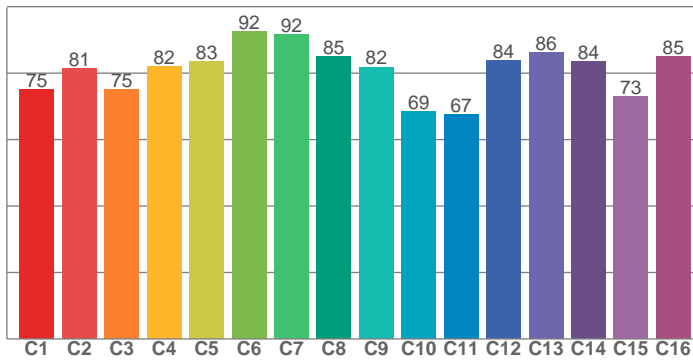
Measurement Condition:
Ambient Temperature: 25 +/- 5C
AC Supply: 230V/50Hz

Spectral distribution

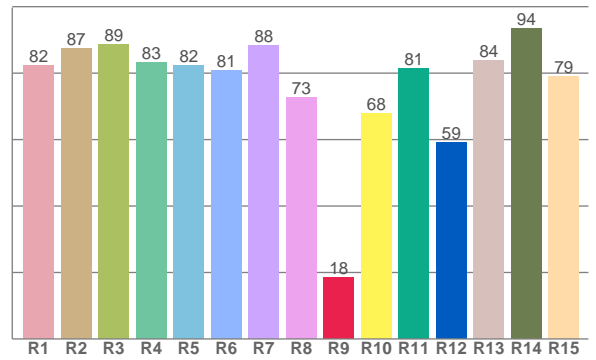




TM30: 80.5



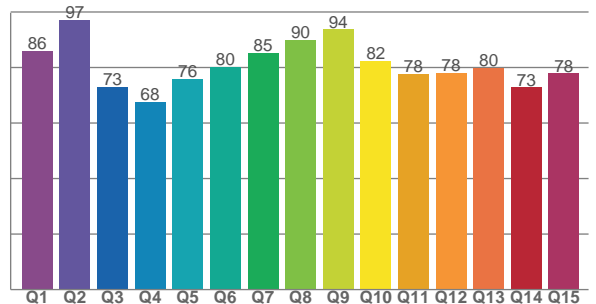
CRI: 83.3 (R1-R8)



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 – Wide

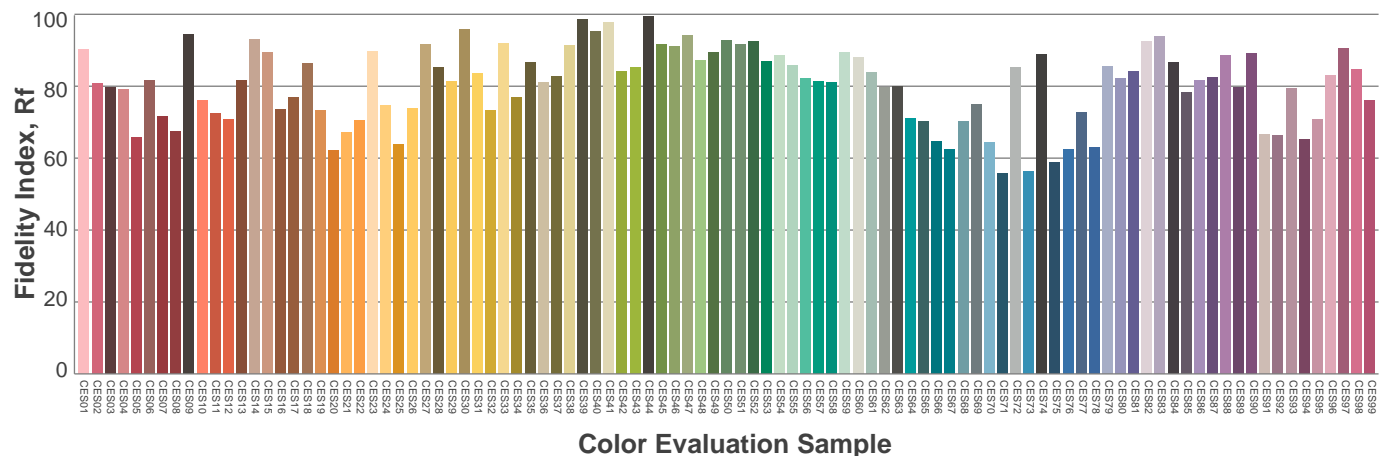
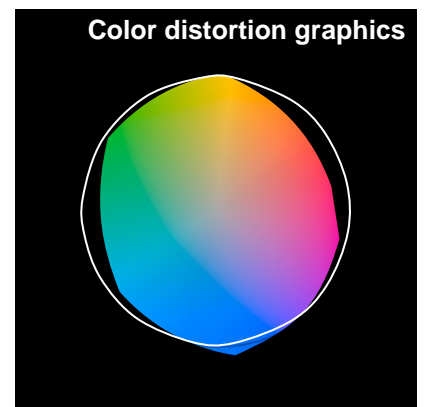
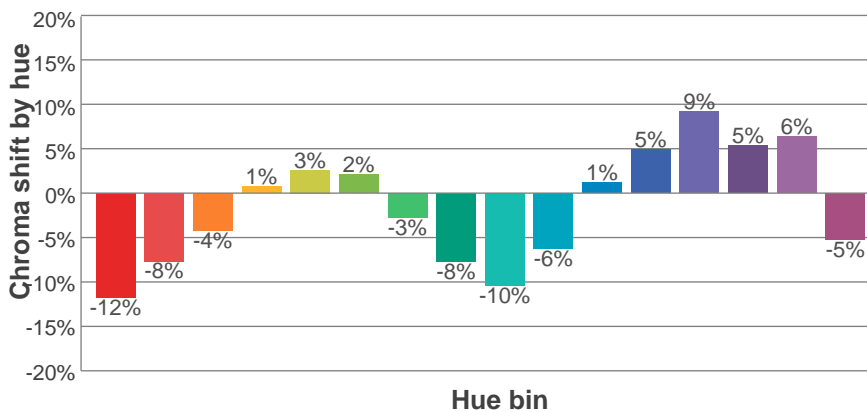
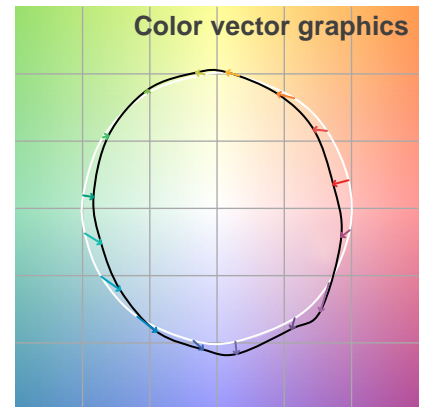
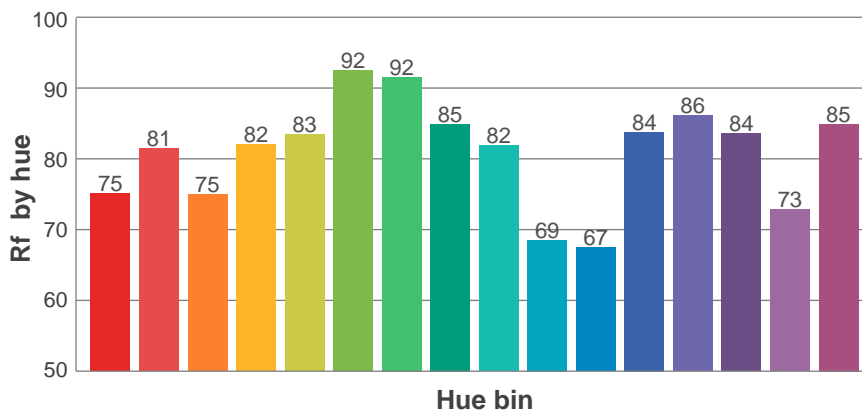
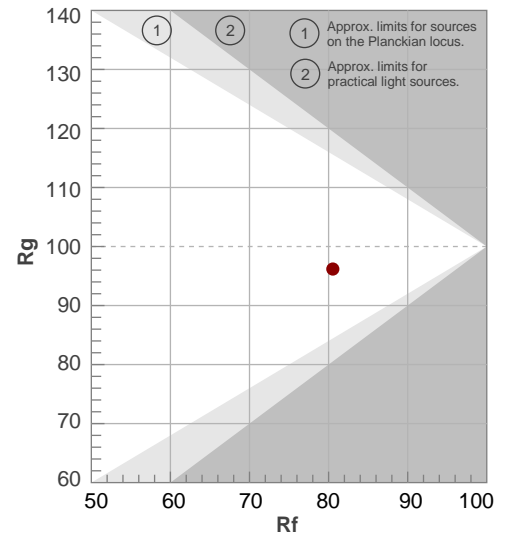
Rf 80.5

Fidelity index Rf

Rg 96.2

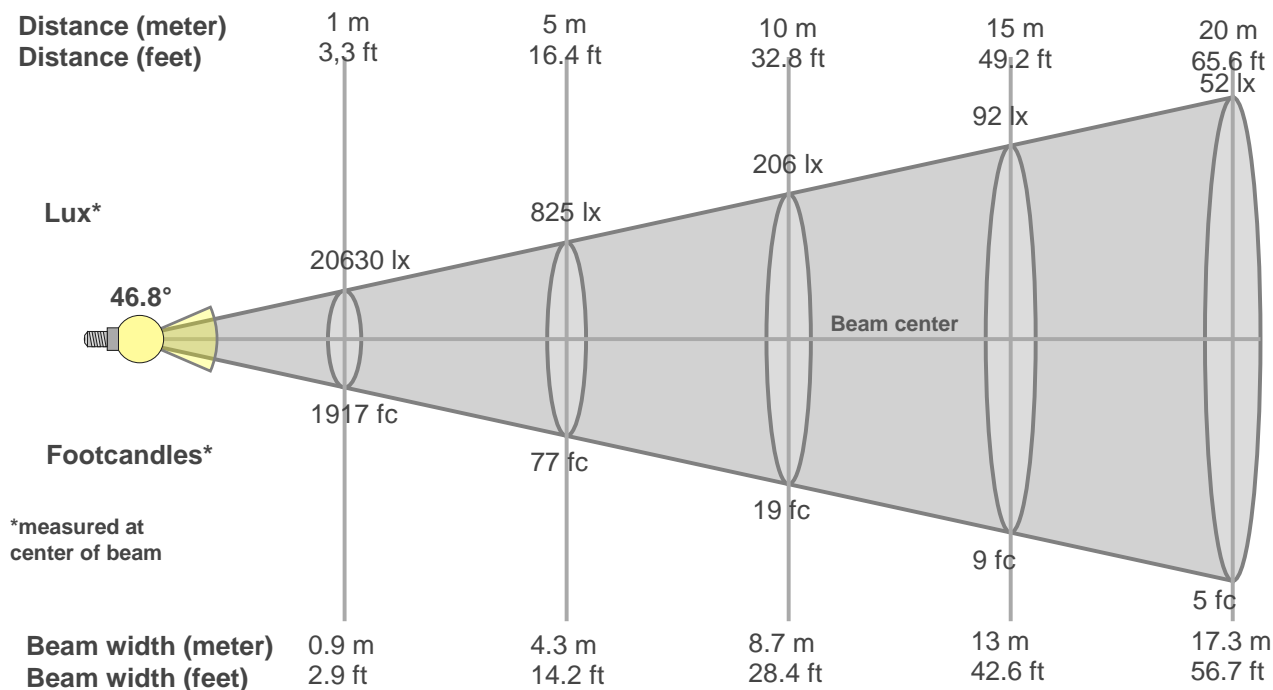
Gamut index Rg

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:

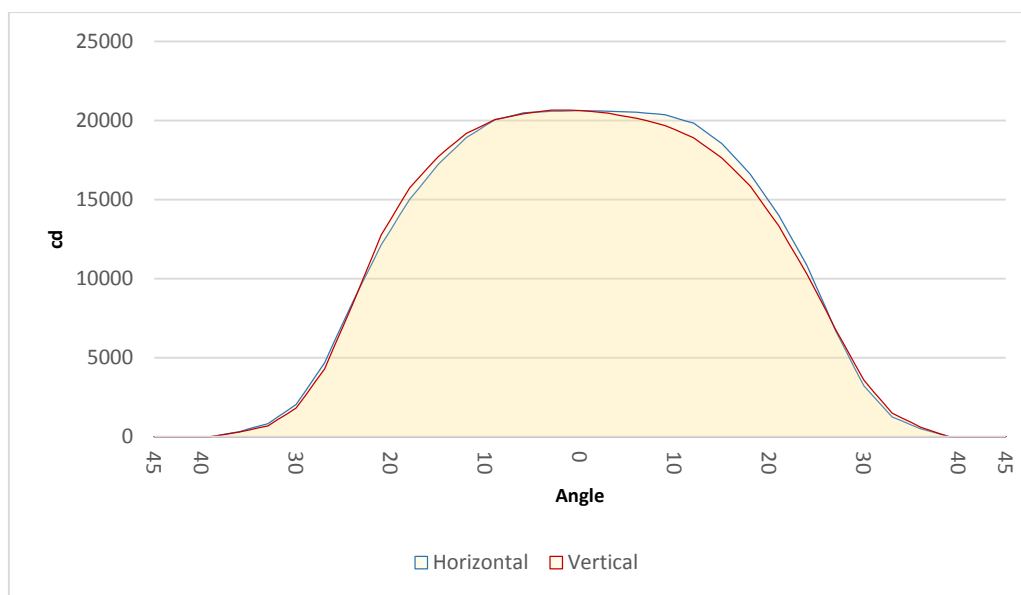
$$w = 0.9 * \text{distance}$$

$$\text{lux} = 20630 / (\text{distance}^2) \text{ (where distance is in meters)}$$

$$\text{fc} = 20630 / (\text{distance}^2) \text{ (where distance is in feet)}$$

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
20630lx	5158lx	2292lx	1289lx	825lx	573lx	421lx	322lx	255lx	206lx	170lx	143lx	122lx	105lx	92lx	81lx	71lx	64lx	57lx	52lx
1916.6fc	479.2fc	213fc	119.8fc	76.7fc	53.2fc	39.1fc	29.9fc	23.7fc	19.2fc	15.8fc	13.3fc	11.3fc	9.8fc	8.5fc	7.5fc	6.6fc	5.9fc	5.3fc	4.8fc

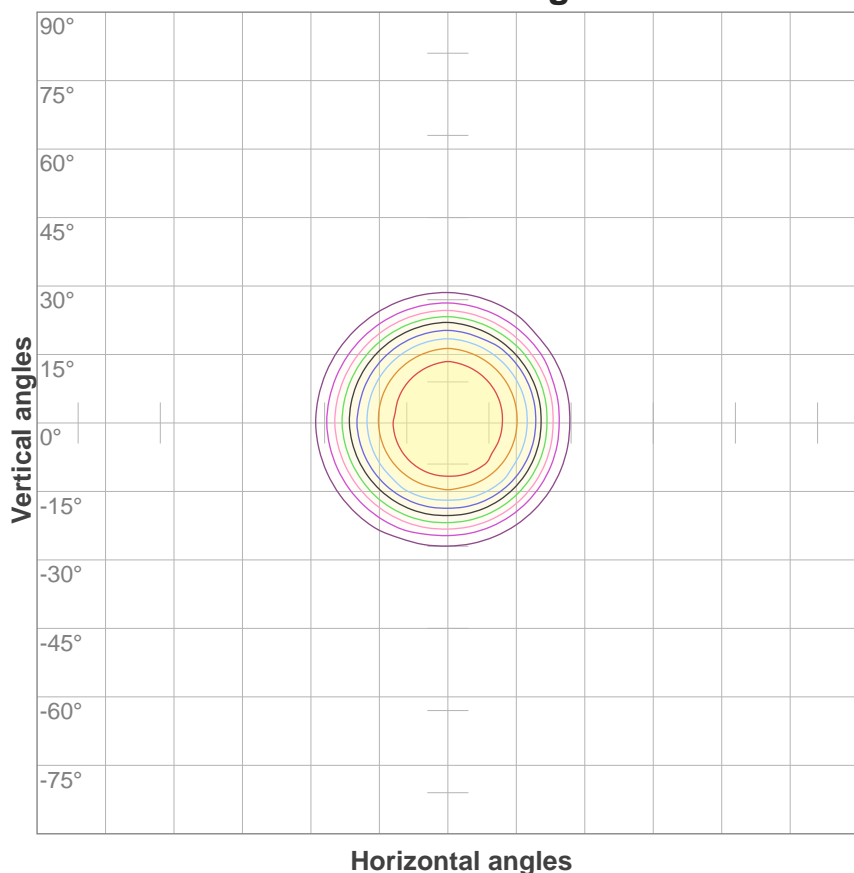


Beam angle 50%	Field angle 10%	Cutoff angle 3%
46.8°	61.8°	70.7°

ISO Diagrams

MAC Encore Wash CLD – Wide

ISO candela diagram



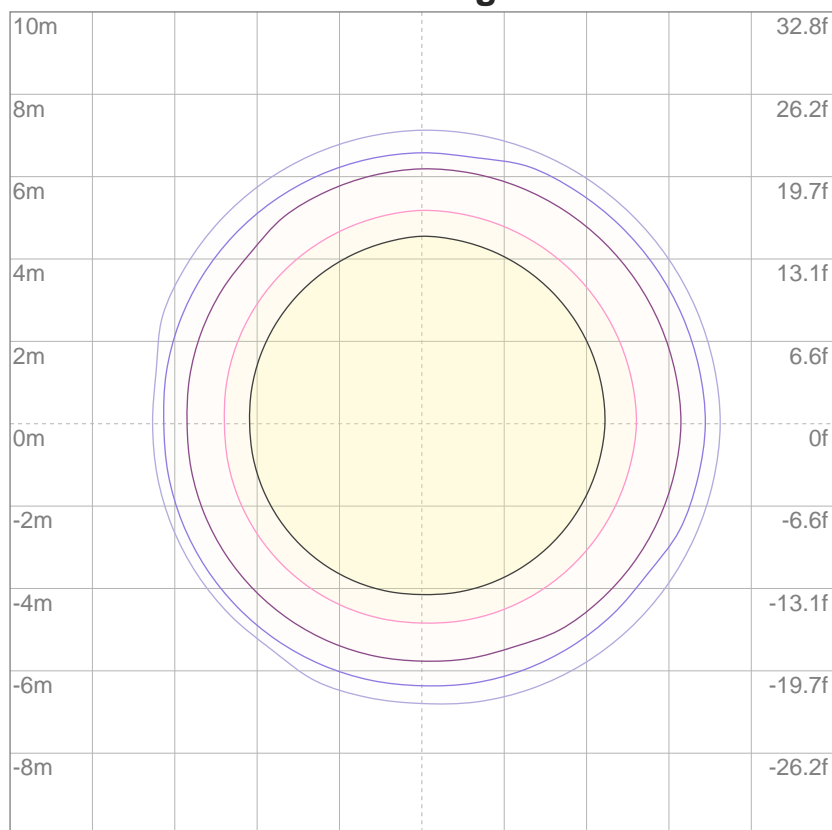
10%	2063 cd
20%	4126 cd
30%	6189 cd
40%	8252 cd
50%	10315 cd
60%	12378 cd
70%	14441 cd
80%	16504 cd
90%	18567 cd

Conditions:

Number of c-planes: 4

Candela at center: 20630 cd

ISO lux diagram



3%	6.19 lx
5%	10.3 lx
10%	20.6 lx
30%	61.9 lx
50%	103 lx

Conditions:

Number of c-planes: 4

Lux at center: 206 lx

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

Throw Distance: 10 meters (33 feet)