

Photometric Report

MAC Encore Wash WRM – Wide

Martin Professional R&D Optical Laboratory, 01-Nov-17 11:03:10

General Specifications:

Total Fixture Output: 8.5 klm

Light Engine Output: 31.5 klm

Efficacy: 15 Lumen/Watt

Lens Option: Fresnel Lens

Zoomrange: 14-60°

CRI: 90+

CQS: 90+

TM-30 Rf: 90+

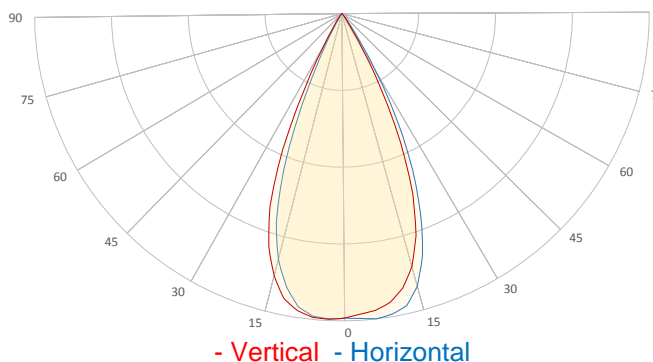
TM-30 Rg: 98+

TLCI: 90+

Color Temperature: 3000 K



Measurement



Catalog Number: 90234030

Measured Output: 8323 lm

Measured Peak: 15612 cd

Consumed Power: 582 W

Efficacy: 14.3 Lumen/Watt

Beam Angle (50%): 46.9°

Field Angle (10%): 61.5°

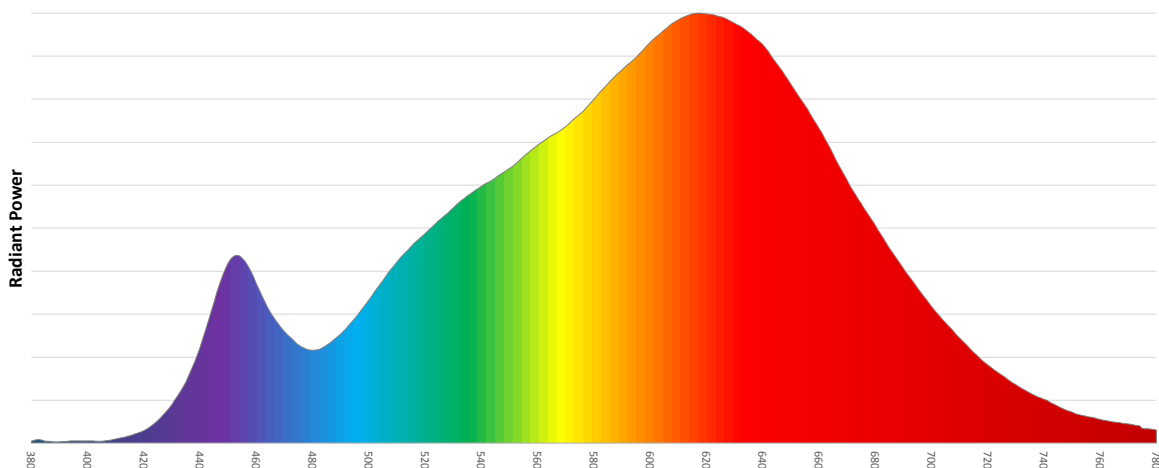
Cutoff Angle (3%): 70.2°

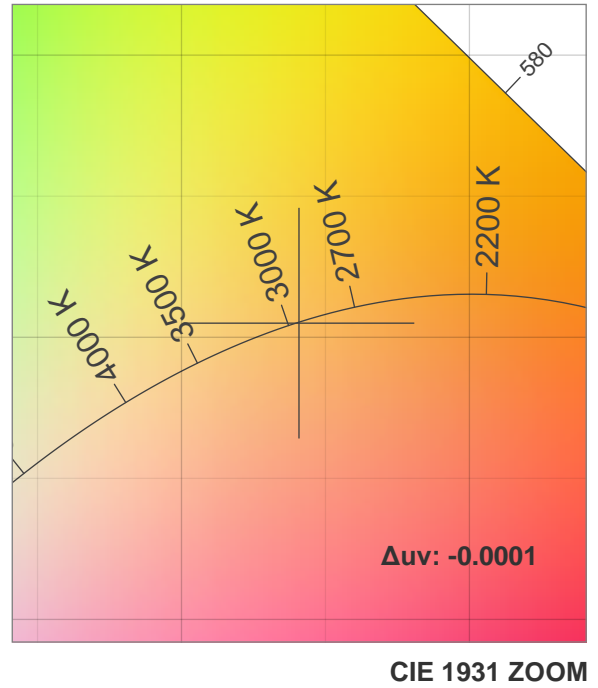
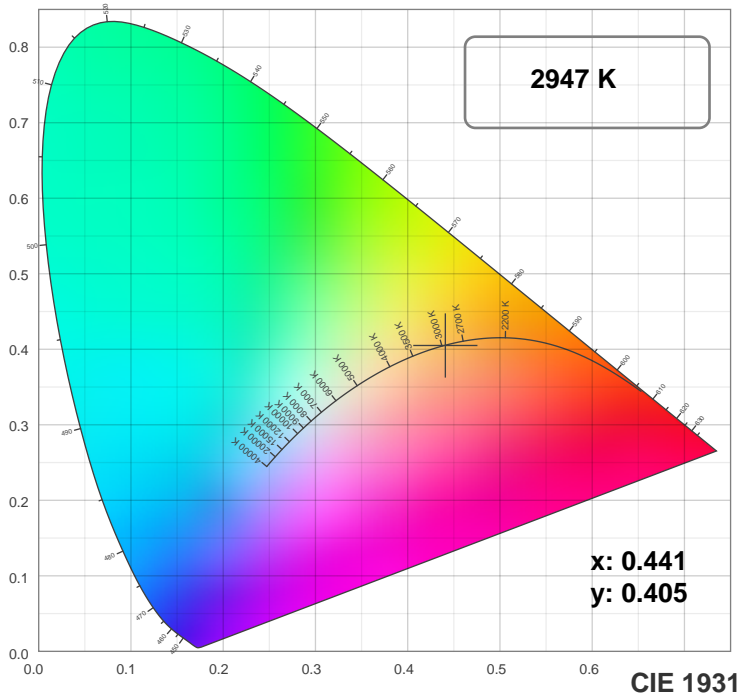
Measurement Condition:

Ambient Temperature: 25 +/- 5C

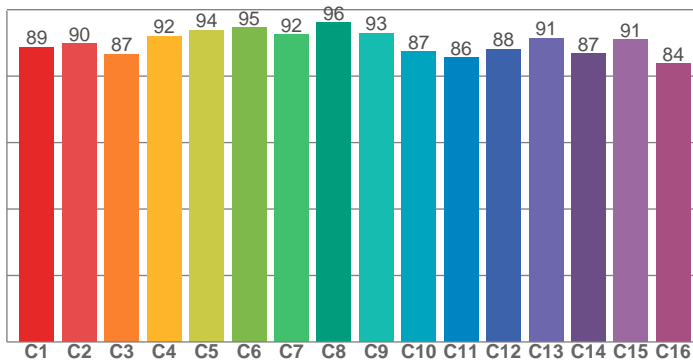
AC Supply: 230V/50Hz

Spectral distribution

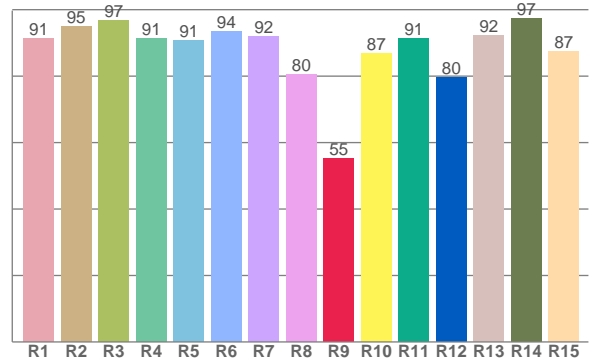




TM30: 89.9



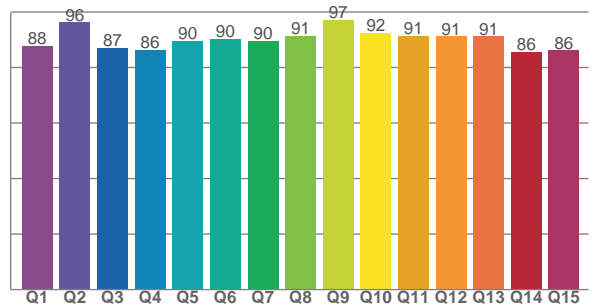
CRI: 91.4 (R1-R8)



Color Parameters

Color Temperature	Color Rendering Index	Red Component	Color Fidelity	Color Gamut
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg
2947 K	91.4	55.3	89.9	99.2

CQS: 89.6



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
90+	89.6	0.441	0.405	0.253	0.348	-0.0001

TM30 MAC Encore Wash WRM – Wide

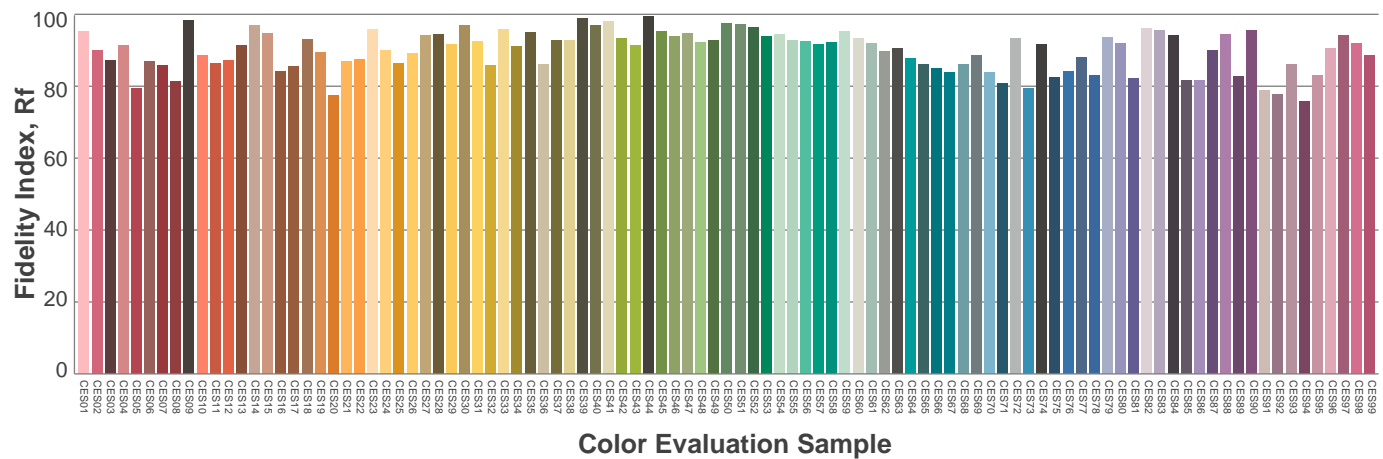
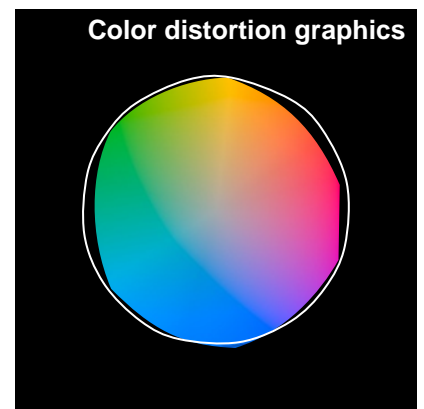
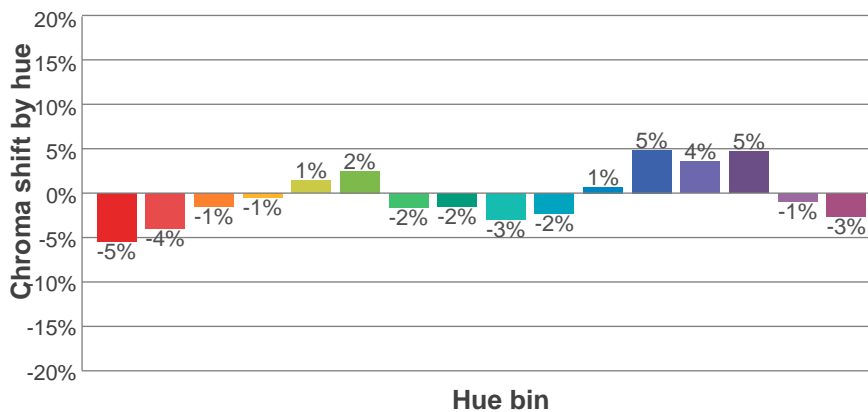
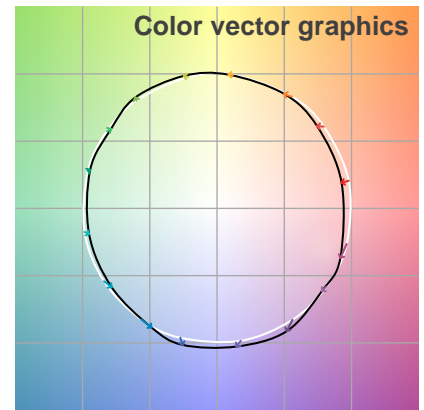
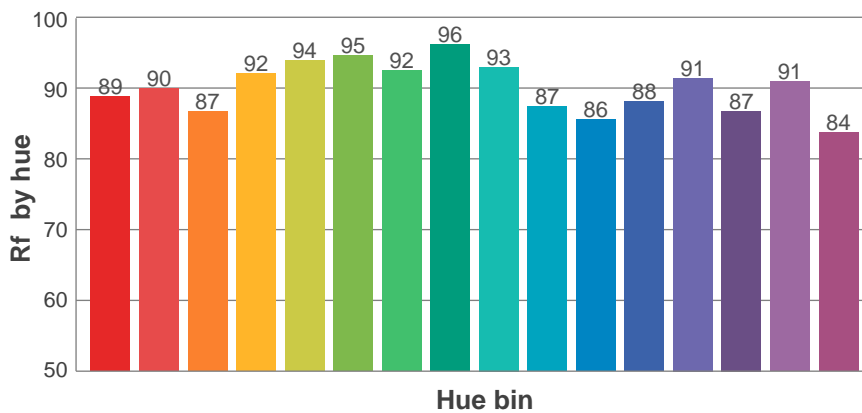
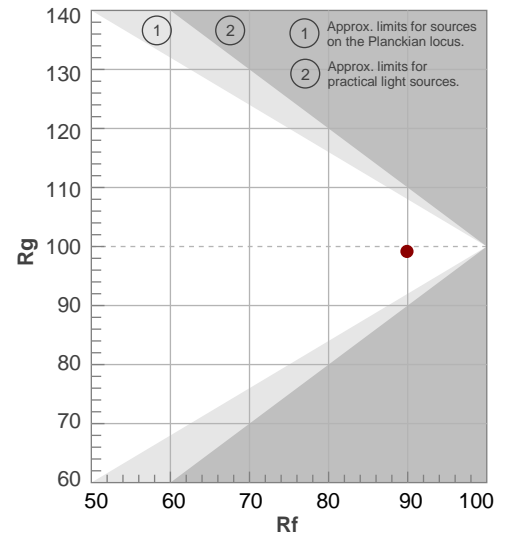
Rf 89.9

Fidelity index Rf

Rg 99.2

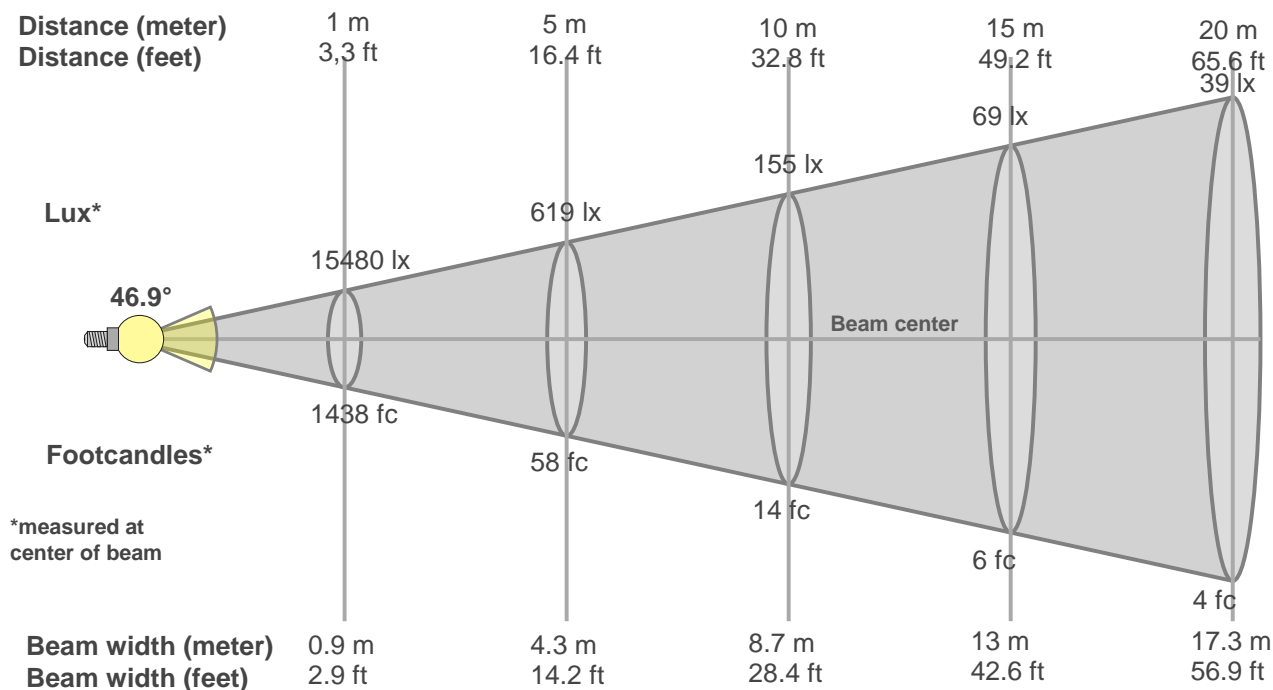
Gamut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	89	-5%	0%
2	90	-4%	3%
3	87	-1%	6%
4	92	-1%	3%
5	94	1%	3%
6	95	2%	-1%
7	92	-2%	-3%
8	96	-2%	-1%
9	93	-3%	2%
10	87	-2%	7%
11	86	1%	10%
12	88	5%	3%
13	91	4%	-4%
14	87	5%	-8%
15	91	-1%	-5%
16	84	-3%	-11%



Beam Details

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Beam width:

Beam luminous intensity formula:

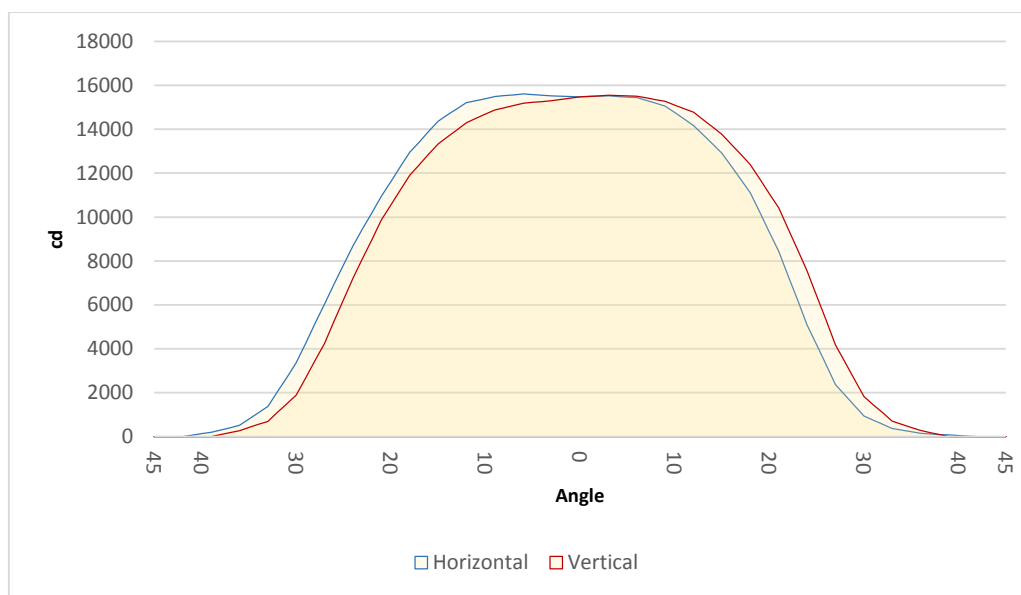
$$w = 0.9 * \text{distance}$$

$$\text{lux} = 15480 / (\text{distance}^2) \text{ (where distance is in meters)}$$

$$\text{fc} = 15480 / (\text{distance}^2) \text{ (where distance is in feet)}$$

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
15480lx	3870lx	1720lx	968lx	619lx	430lx	316lx	242lx	191lx	155lx	128lx	108lx	92lx	79lx	69lx	60lx	54lx	48lx	43lx	39lx
1438.2fc	359.5fc	159.8fc	89.9fc	57.5fc	39.9fc	29.4fc	22.5fc	17.8fc	14.4fc	11.9fc	10fc	8.5fc	7.3fc	6.4fc	5.6fc	5fc	4.4fc	4fc	3.6fc

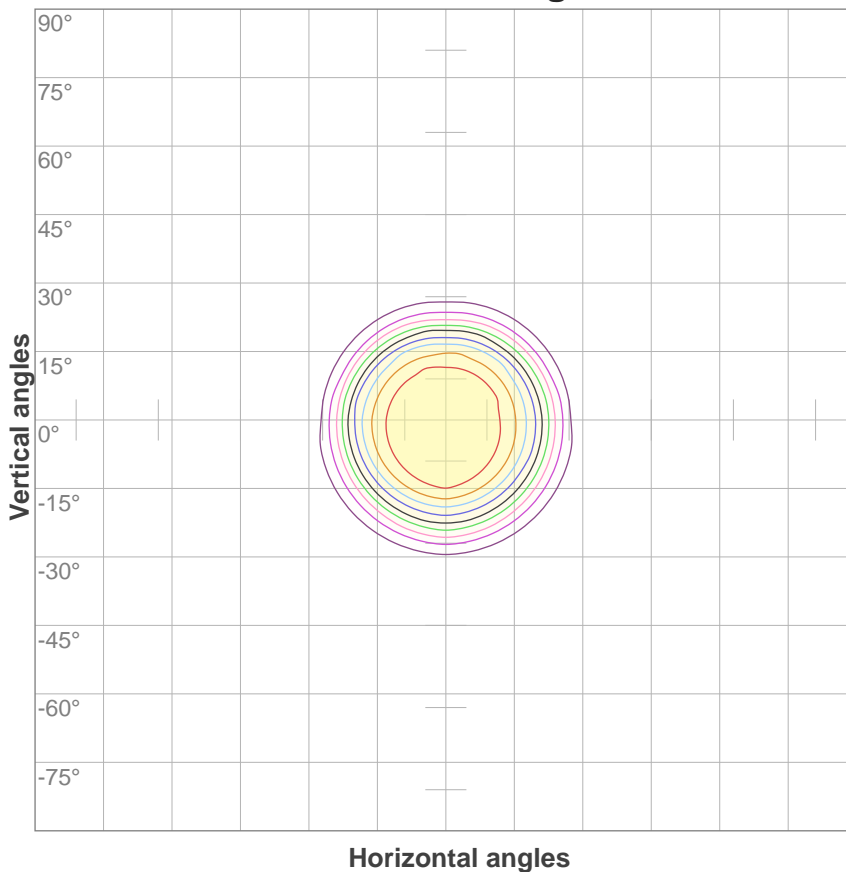


Beam angle 50%	Field angle 10%	Cutoff angle 3%
46.9°	61.5°	70.2°

ISO Diagrams

MAC Encore Wash WRM – Wide

ISO candela diagram



ISO lux diagram

