

Light efficiency:

66 Lumen/Watt

Output: 991 lm

Light quality:

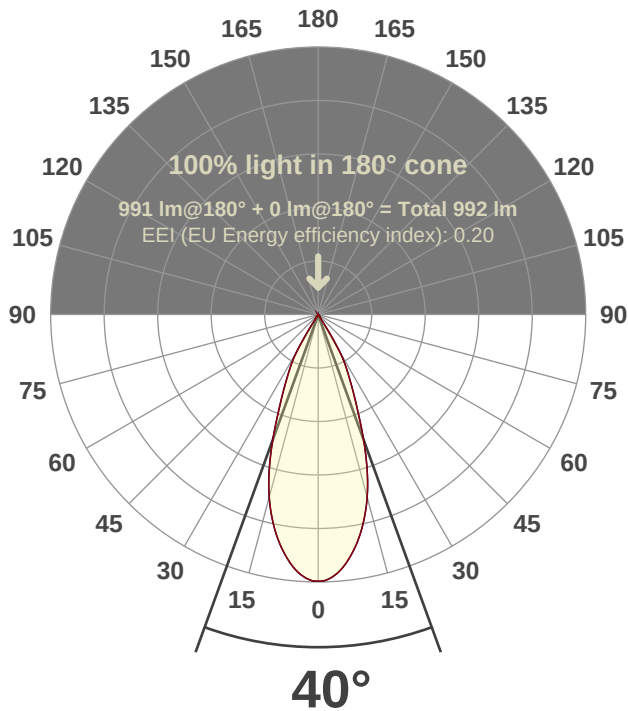
CRI: 96.5

Peak: 2235 cd

Power: 15.0 W



Beam angle



Test number:

CR4D-R-OR-A14-30k-40 (GRO-AD-FL-RD)

Luminaire Model:

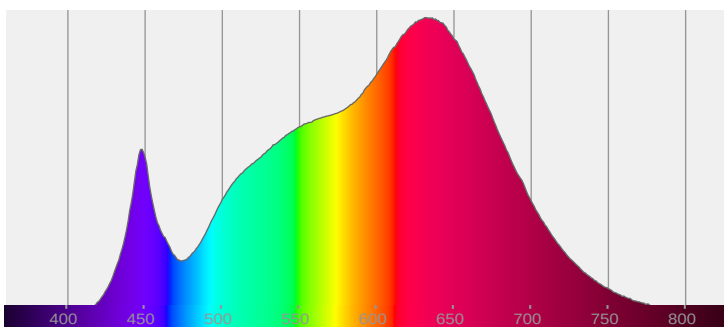
Core 4" Round Open Regress A14 30K 40°

Date and time:

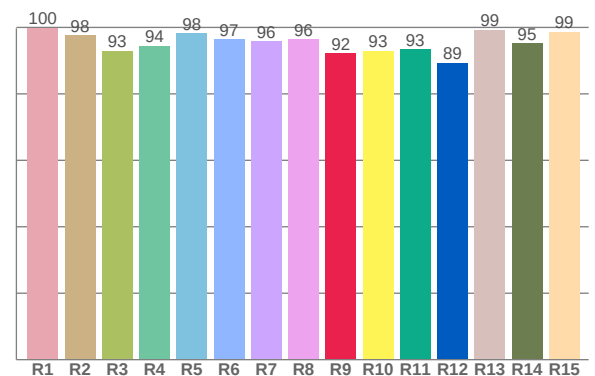
8/10/2017 11:54:49 AM

LUM: 991

Spectra



CRI: 96.5 (R1-R8)



Color parameters

	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	96.5	92.2	93.4	104.5	93.2	0.430	0.397	0.249	0.345	-0.0020

R_f 93.4

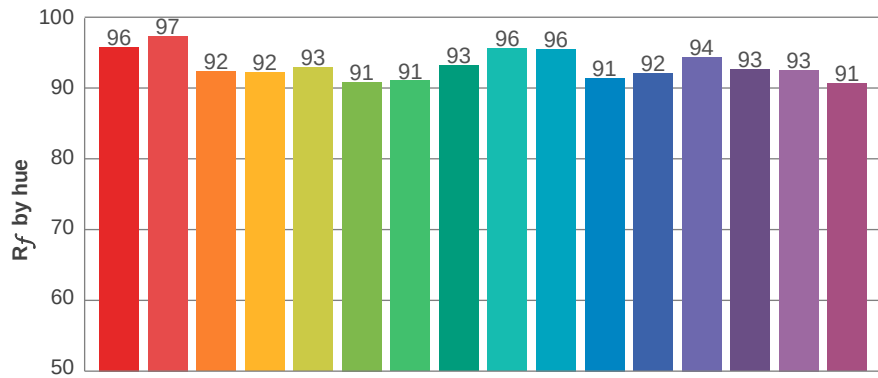
Fidelity index R_f

R_g 104.5

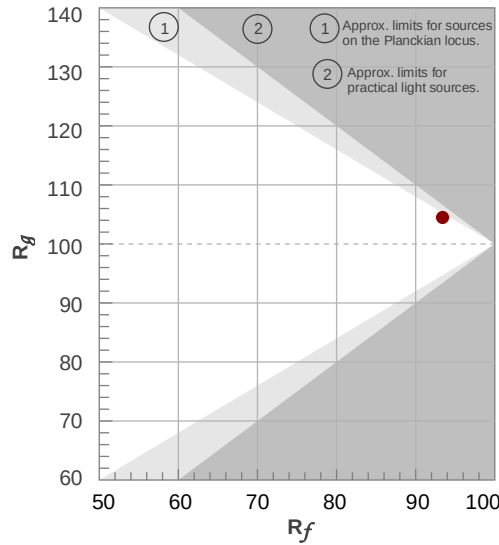
Gammut index R_g

TM30: 93.4

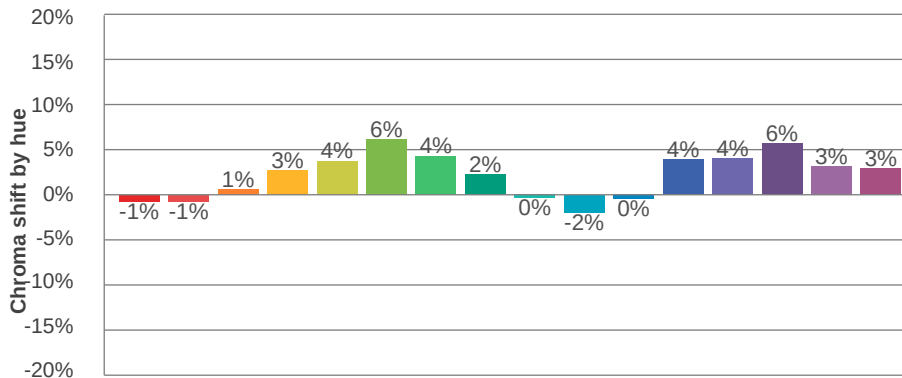
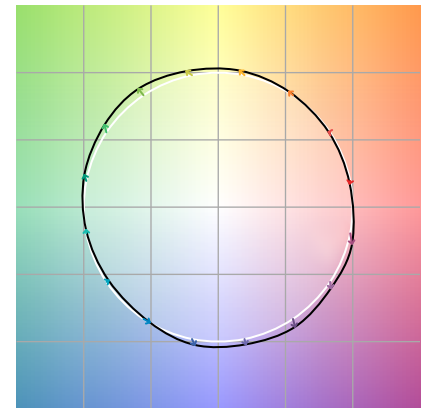
TM-30Color



Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	96	-1%	-2%
2	97	-1%	1%
3	92	1%	4%
4	92	3%	4%
5	93	4%	4%
6	91	6%	1%
7	91	4%	-4%
8	93	2%	-4%
9	96	0%	-3%
10	96	-2%	0%
11	91	0%	5%
12	92	4%	3%
13	94	4%	0%
14	93	6%	-2%
15	93	3%	-4%
16	91	3%	-7%



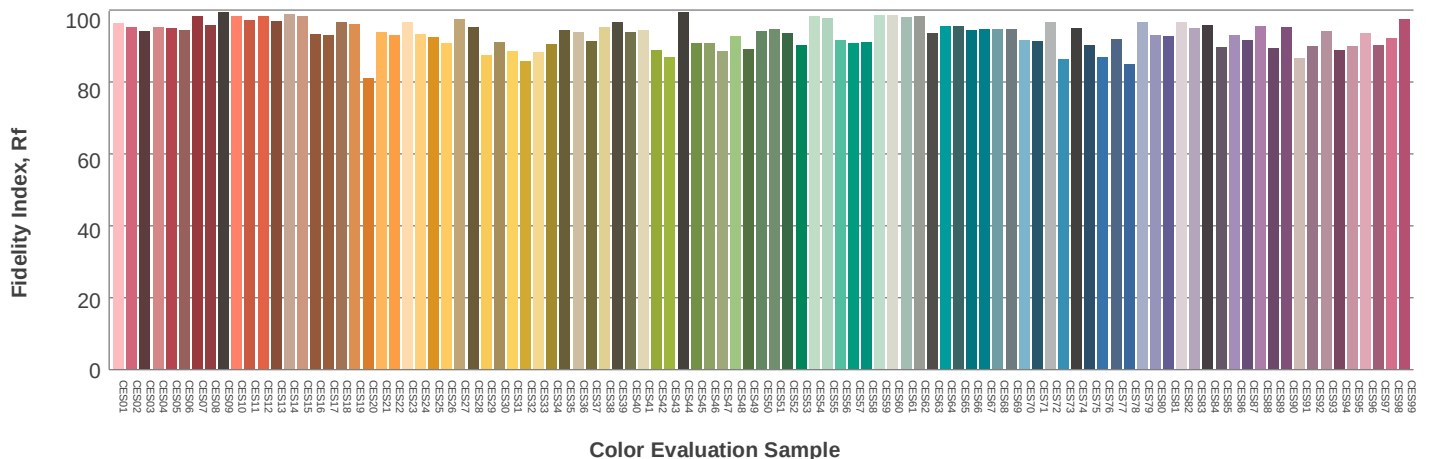
Color vector graphics



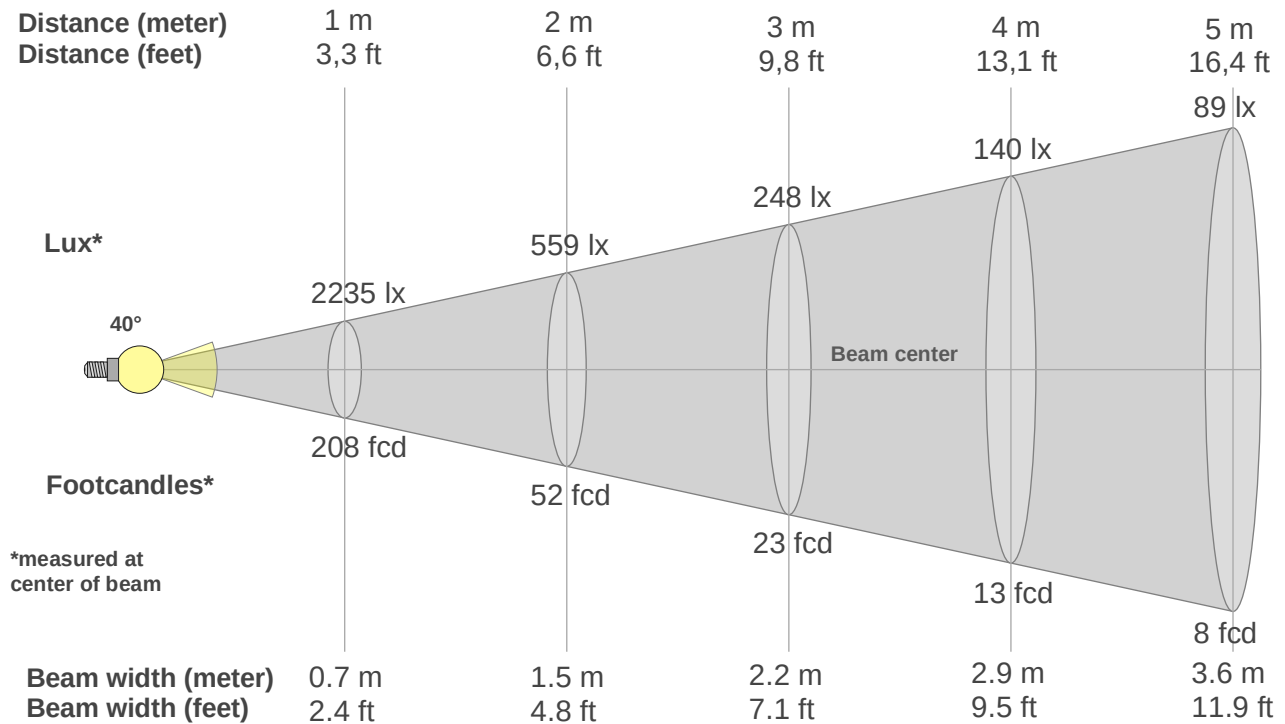
Color distortion



Hue bin



Beam details



Beam intensities 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
2235lx	559lx	248lx	140lx	89lx	62lx	46lx	35lx	28lx	22lx	18lx	16lx	13lx	11lx	10lx	9lx	8lx	7lx	6lx	6lx
207.6fcd	51.9fcd	23.1fcd	13fcd	8.3fcd	5.8fcd	4.2fcd	3.2fcd	2.6fcd	2.1fcd	1.7fcd	1.4fcd	1.2fcd	1.1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.6fcd	0.5fcd

Intensities in 0° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2235	2223	2181	2114	2026	1922	1802	1664	1506	1319	1115	911	744	610	500	381	189	35	2	1
100%	99%	98%	95%	91%	86%	81%	74%	67%	59%	50%	41%	33%	27%	22%	17%	8%	2%	0%	0%

Intensities in 90° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2235	2223	2181	2114	2026	1922	1802	1664	1506	1319	1115	911	744	610	500	381	189	35	2	1
100%	99%	98%	95%	91%	86%	81%	74%	67%	59%	50%	41%	33%	27%	22%	17%	8%	2%	0%	0%

Intensities in 180° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2235	2223	2181	2114	2026	1922	1802	1664	1506	1319	1115	911	744	610	500	381	189	35	2	1
100%	99%	98%	95%	91%	86%	81%	74%	67%	59%	50%	41%	33%	27%	22%	17%	8%	2%	0%	0%

Intensities in 270° c-plane

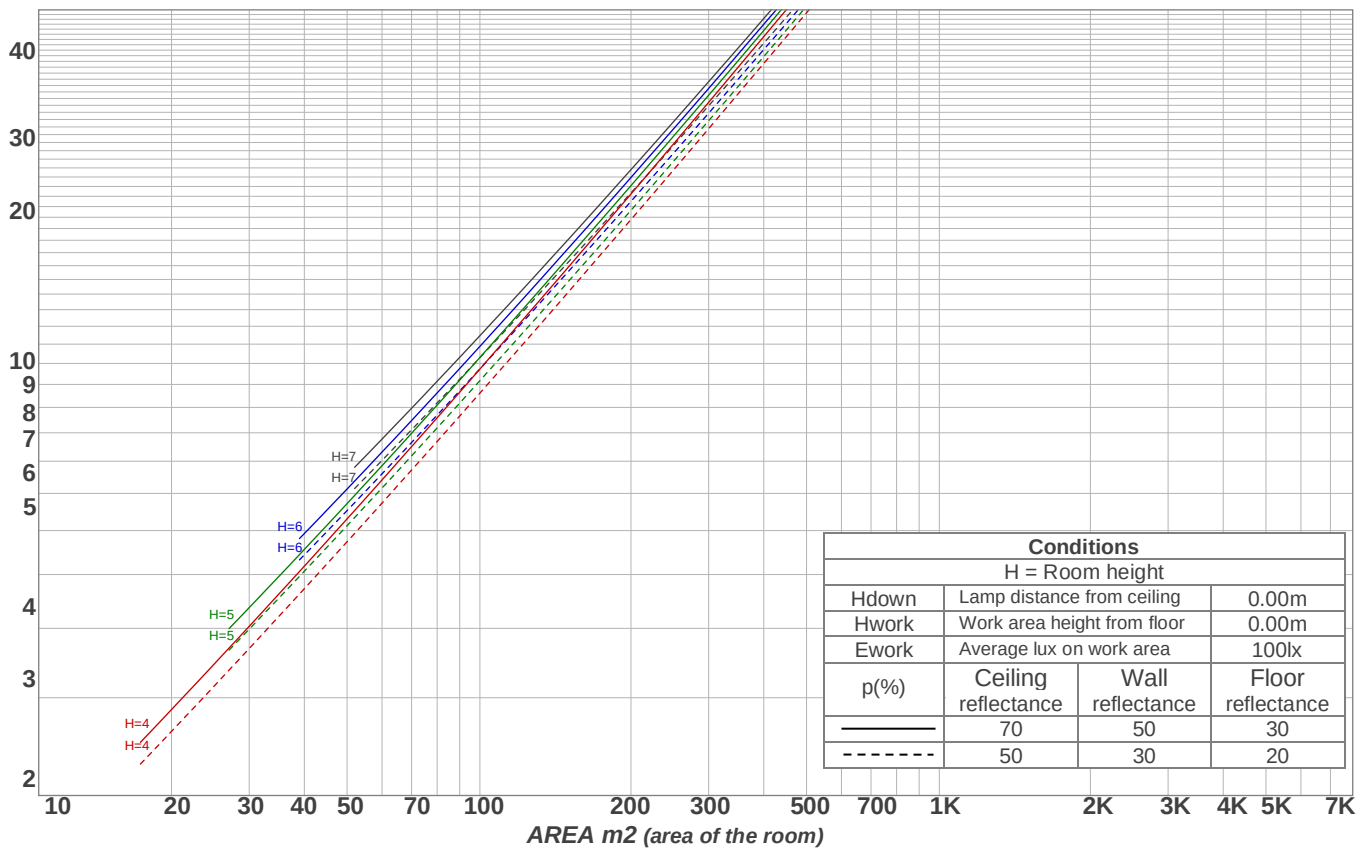
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2235	2223	2181	2114	2026	1922	1802	1664	1506	1319	1115	911	744	610	500	381	189	35	2	1
100%	99%	98%	95%	91%	86%	81%	74%	67%	59%	50%	41%	33%	27%	22%	17%	8%	2%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
40°	63.3°	67.3°	99.9%	99.8%

Light planning

Luminaire budgetary diagram

LAMPS (number of lamps)
50



Luminaire budgetary diagram

AREA m2 (area of the room)

Coefficients of Utilization

Ceiling reflectance	80				70				50			30			10			0
Wall reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Floor reflectance	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0
RCR	(RCR: Room Cavity Ratio) Room Values are expressed as percentage of Lumens delivered to the task surface																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96
2	110	106	103	100	108	105	102	99	101	99	97	98	97	95	96	94	93	91
3	106	101	97	94	104	100	96	93	97	94	91	95	92	90	93	90	89	87
4	102	96	92	88	100	95	91	88	93	89	87	91	88	86	89	87	85	83
5	98	92	87	84	97	91	86	83	89	85	82	88	84	82	86	83	81	80
6	95	88	83	79	93	87	82	79	86	82	79	84	81	78	83	80	78	77
7	91	84	79	76	90	83	79	76	82	78	75	81	78	75	80	77	75	73
8	88	81	76	72	87	80	76	72	79	75	72	78	74	72	77	74	72	70
9	85	77	73	69	84	77	72	69	76	72	69	75	72	69	75	71	69	68
10	82	74	70	67	81	74	70	67	73	69	66	73	69	66	72	69	66	65

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
198 lm	431 lm	314 lm	46.2 lm	0.291 lm	0.487 lm	0.587 lm	0.352 lm	0.221 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm

UGR

p Ceiling		70	70	50	50	30	70	70	50	50	30
p Walls		50	30	50	30	30	50	30	50	30	30
p Floor		20	20	20	20	20	20	20	20	20	20
Room size X Y		Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis				
2H	2H	21.4	21.9	21.5	22.1	22.3	21.4	21.9	21.5	22.1	22.3
	3H	21.1	21.8	21.5	21.9	22.1	21.1	21.8	21.5	21.9	22.1
	4H	21.1	21.7	21.4	21.9	22.1	21.1	21.7	21.4	21.9	22.1
	6H	21.1	21.6	21.4	21.9	22.2	21.1	21.6	21.4	21.9	22.2
	8H	21.0	21.5	21.3	21.8	22.2	21.0	21.5	21.3	21.8	22.2
	12H	21.0	21.4	21.3	21.8	22.2	21.0	21.4	21.3	21.8	22.2
4H	2H	21.0	21.7	21.4	21.9	22.1	21.0	21.7	21.4	21.9	22.1
	3H	20.9	21.4	21.3	21.8	22.2	20.9	21.4	21.3	21.8	22.2
	4H	20.8	21.2	21.2	21.7	22.2	20.8	21.2	21.2	21.7	22.2
	6H	20.7	21.2	21.2	21.6	21.9	20.7	21.2	21.2	21.6	21.9
	8H	20.7	21.1	21.2	21.5	21.8	20.7	21.1	21.2	21.5	21.8
	12H	20.6	21.0	21.1	21.4	21.8	20.6	21.0	21.1	21.4	21.8
8H	4H	20.7	21.1	21.2	21.5	21.8	20.7	21.1	21.2	21.5	21.8
	6H	20.6	20.9	21.1	21.4	21.9	20.6	20.9	21.1	21.4	21.9
	8H	20.7	20.9	21.2	21.4	22.0	20.7	20.9	21.2	21.4	22.0
	12H	20.6	20.8	21.2	21.3	21.9	20.6	20.8	21.2	21.3	21.9
12H	4H	20.6	21.0	21.1	21.4	21.8	20.6	21.0	21.1	21.4	21.8
	6H	20.6	20.9	21.1	21.4	22.0	20.6	20.9	21.1	21.4	22.0
	8H	20.6	20.8	21.2	21.3	21.9	20.6	20.8	21.2	21.3	21.9
Corrected glare indices referring to 991 lm total luminous flux											