

Light efficiency:



Output: 1183 lm

Light quality:

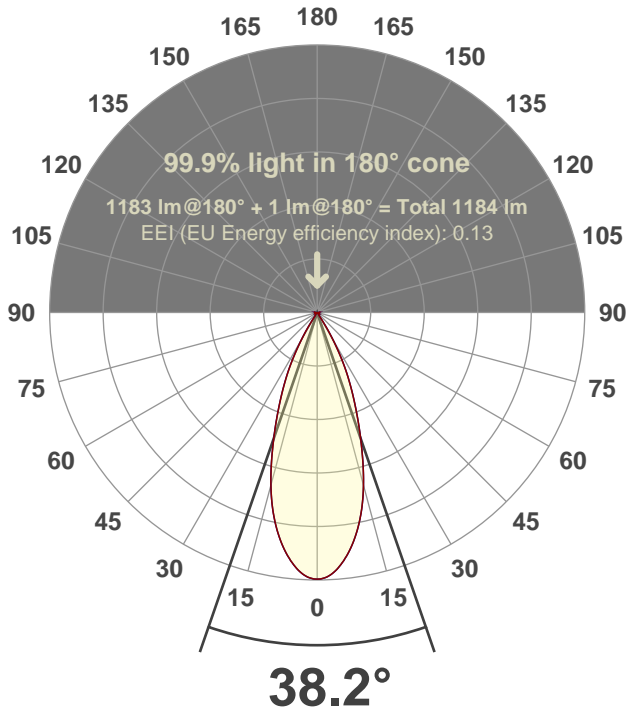


Peak: 2762 cd

Power: 15.0 W



Beam angle



Test number:

CR4D-R-OR-C14-30k-40 (GRO-CZ20-FL-RD)

Luminaire Model:

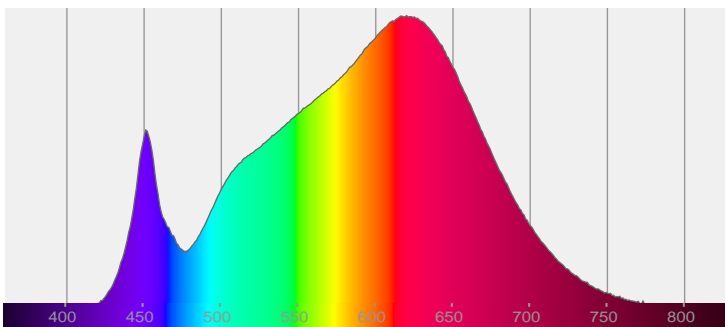
Core 4" Open Deep Regress C14 30K 40°

Date and time:

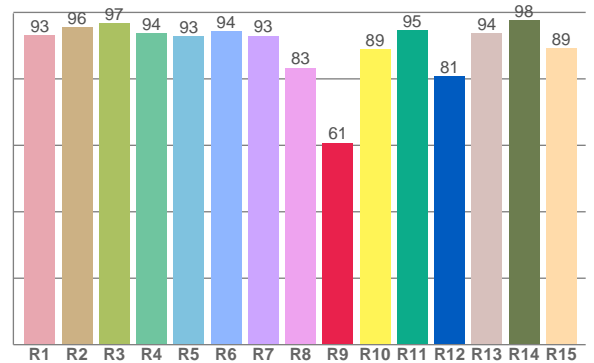
6/14/2017 5:17:09 PM

LUM: 1183

Spectra



CRI: 92.8 (R1-R8)



Color parameters

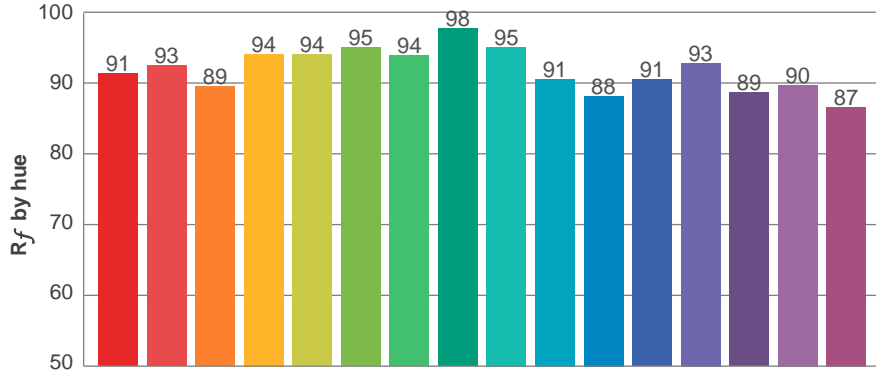
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	92.8	60.7	91.9	100.3	91.1	0.428	0.401	0.247	0.346	-0.0002

R_f 91.9
Fidelity index R_f

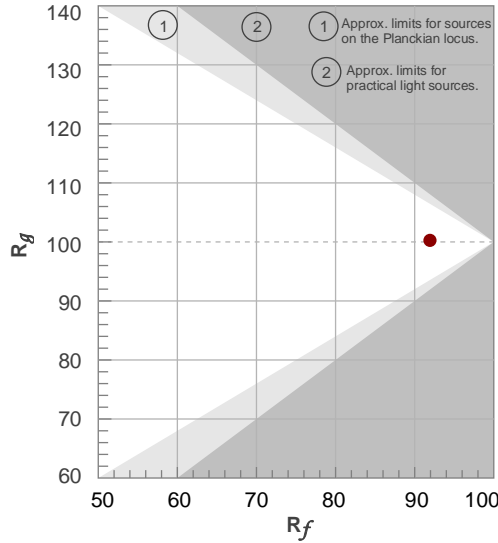
R_g 100.3
Gammut index R_g

TM30: 91.9

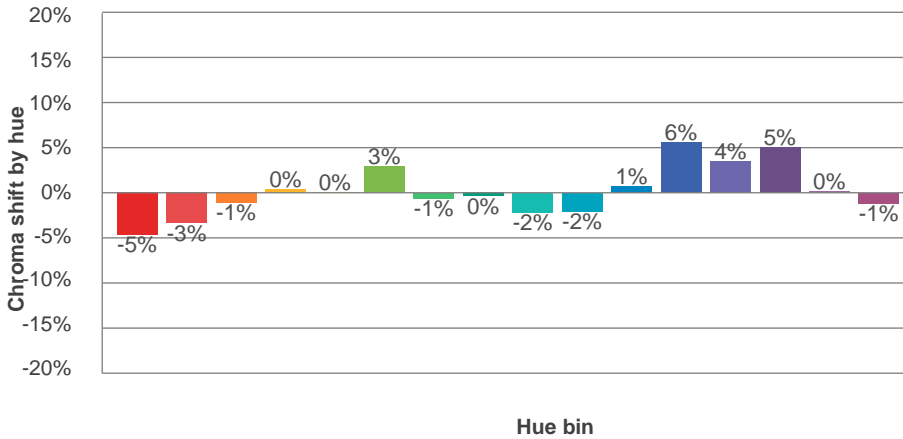
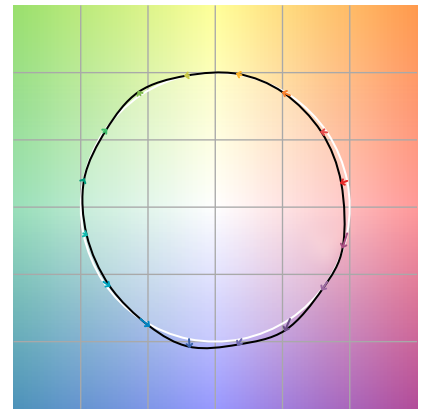
TM-30Color



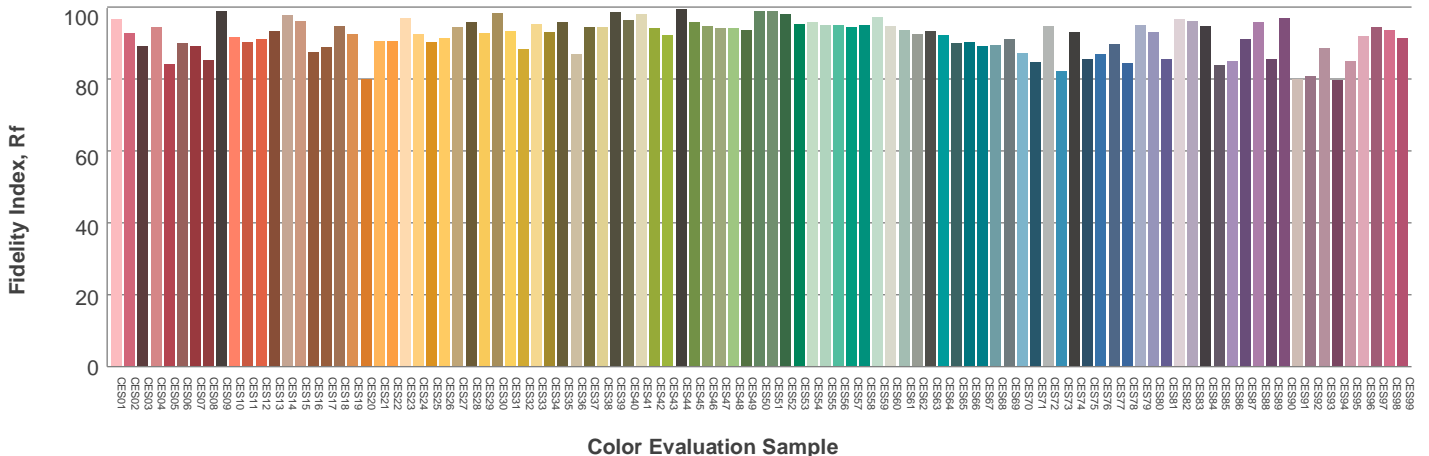
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	-1%
2	93	-3%	3%
3	89	-1%	5%
4	94	0%	3%
5	94	0%	3%
6	95	3%	0%
7	94	-1%	-3%
8	98	0%	-1%
9	95	-2%	2%
10	91	-2%	5%
11	88	1%	8%
12	91	6%	2%
13	93	4%	-3%
14	89	5%	-8%
15	90	0%	-7%
16	87	-1%	-11%



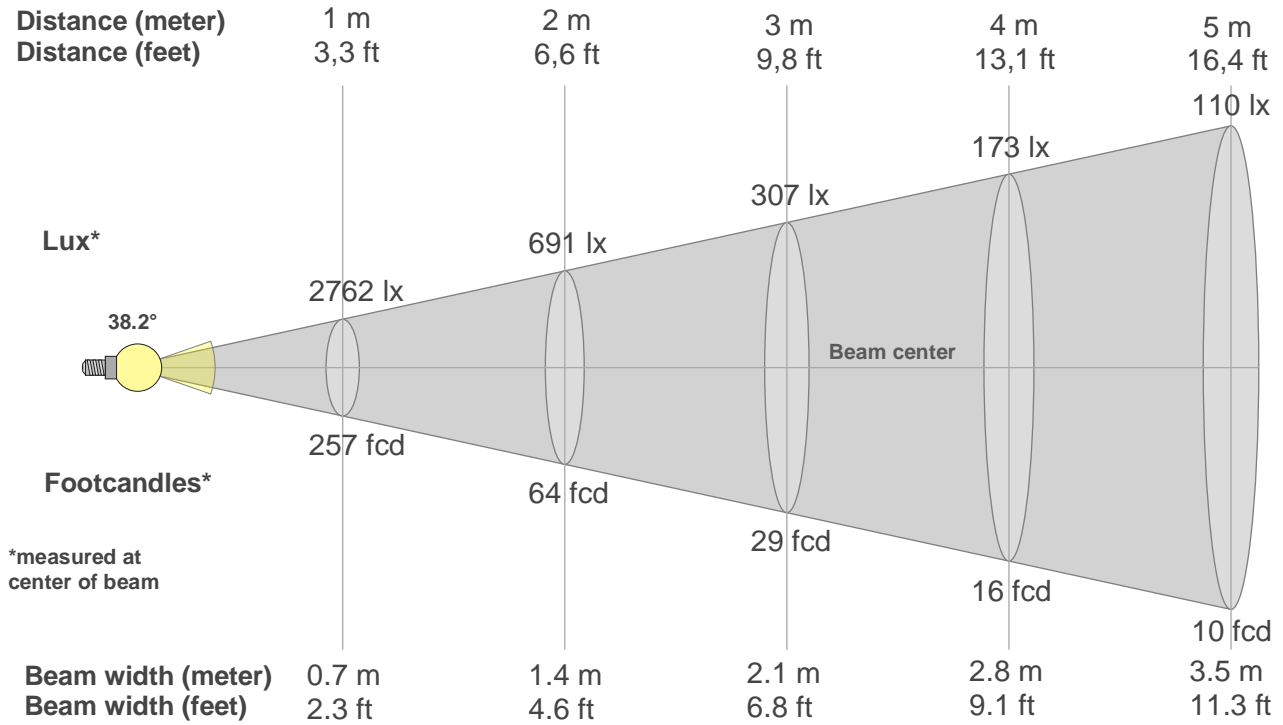
Color vector graphics



Color distortion



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
2762lx	691lx	307lx	173lx	110lx	77lx	56lx	43lx	34lx	28lx	23lx	19lx	16lx	14lx	12lx	11lx	10lx	9lx	8lx	7lx
256.6fcd	64.2fcd	28.5fcd	16fcd	10.3fcd	7.1fcd	5.2fcd	4fcd	3.2fcd	2.6fcd	2.1fcd	1.8fcd	1.5fcd	1.3fcd	1.1fcd	1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd

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°
2762	2744	2685	2592	2473	2329	2160	1965	1743	1506	1280	1070	883	710	532	357	203	73	33	27
100%	99%	97%	94%	90%	84%	78%	71%	63%	55%	46%	39%	32%	26%	19%	13%	7%	3%	1%	1%

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°
2762	2744	2685	2592	2473	2329	2160	1965	1743	1506	1280	1070	883	710	532	357	203	73	33	27
100%	99%	97%	94%	90%	84%	78%	71%	63%	55%	46%	39%	32%	26%	19%	13%	7%	3%	1%	1%

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°
2762	2744	2685	2592	2473	2329	2160	1965	1743	1506	1280	1070	883	710	532	357	203	73	33	27
100%	99%	97%	94%	90%	84%	78%	71%	63%	55%	46%	39%	32%	26%	19%	13%	7%	3%	1%	1%

Intensities in 270° c-plane

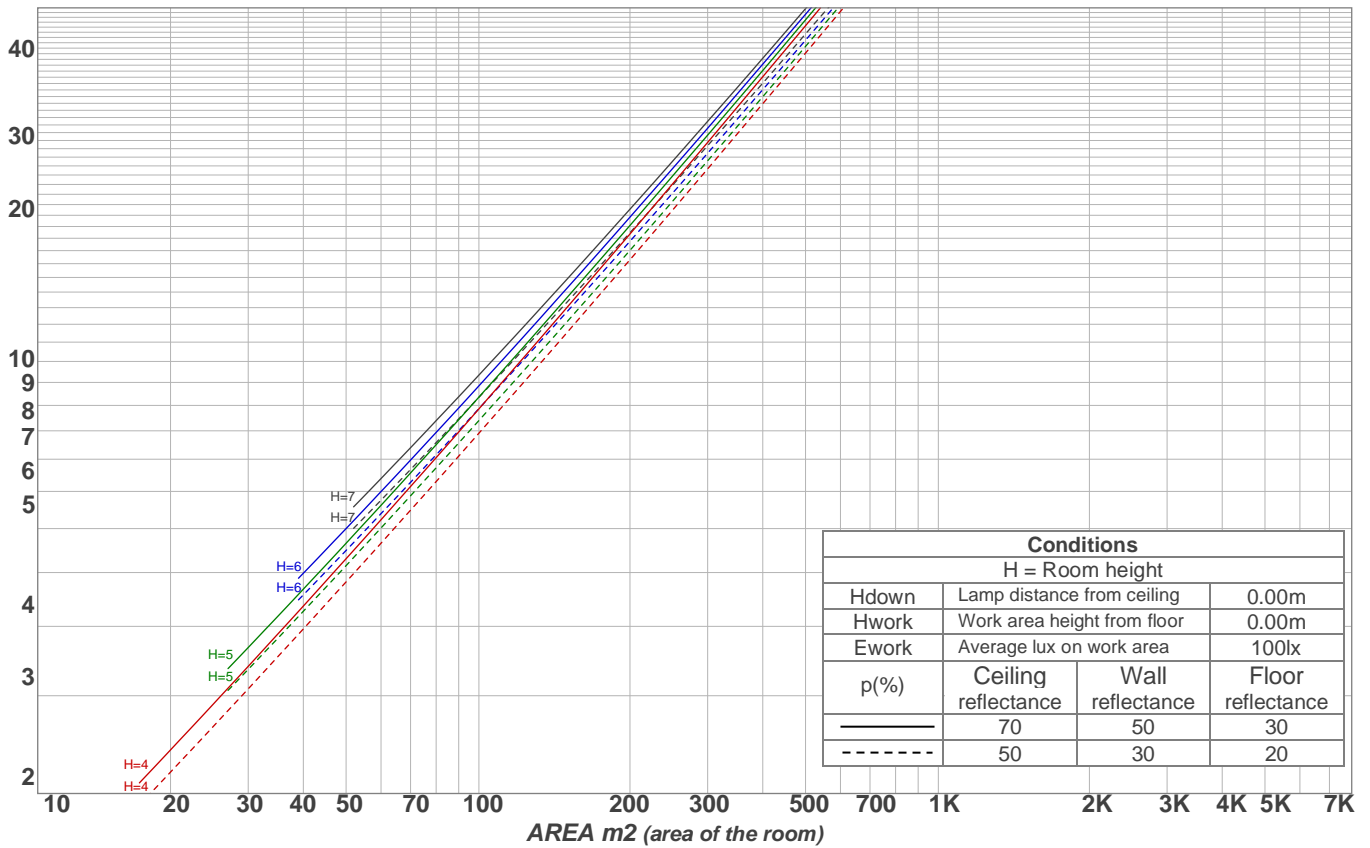
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2762	2744	2685	2592	2473	2329	2160	1965	1743	1506	1280	1070	883	710	532	357	203	73	33	27
100%	99%	97%	94%	90%	84%	78%	71%	63%	55%	46%	39%	32%	26%	19%	13%	7%	3%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
38.2°	62°	68.2°	99.7%	98.9%

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	50	30	10	0
Floor reflectance	20	20	20	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	100	100	100
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95	95	95	95
2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91	91	91	91
3	106	101	96	93	104	99	95	92	97	94	91	94	92	90	92	90	88	87	87	87	87
4	102	96	91	88	100	95	90	87	93	89	86	91	88	85	89	86	84	83	83	83	83
5	98	91	87	83	97	90	86	83	89	85	82	87	84	81	86	83	81	79	79	79	79
6	94	87	82	79	93	87	82	79	85	81	78	84	80	78	83	80	77	76	76	76	76
7	91	84	79	75	90	83	78	75	82	78	75	81	77	74	80	76	74	73	73	73	73
8	88	80	75	72	87	80	75	72	79	75	72	78	74	71	77	74	71	70	70	70	70
9	85	77	72	69	84	77	72	69	76	72	69	75	71	68	74	71	68	67	67	67	67
10	82	74	69	66	81	74	69	66	73	69	66	72	68	66	72	68	66	65	65	65	65

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
242 lm	504 lm	358 lm	60.1 lm	11.4 lm	4.54 lm	1.12 lm	0.825 lm	0.678 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	22.9	23.4	23.0	23.6	23.8	22.9	23.4	23.0	23.6	23.8
	3H	22.6	23.3	23.0	23.5	23.6	22.6	23.3	23.0	23.5	23.6
	4H	22.6	23.2	23.0	23.4	23.6	22.6	23.2	23.0	23.4	23.6
	6H	22.6	23.1	22.9	23.4	23.8	22.6	23.1	22.9	23.4	23.8
	8H	22.6	23.1	22.9	23.4	23.8	22.6	23.1	22.9	23.4	23.8
	12H	22.6	23.0	22.9	23.4	23.8	22.6	23.0	22.9	23.4	23.8
4H	2H	22.6	23.2	22.9	23.4	23.6	22.6	23.2	22.9	23.4	23.6
	3H	22.5	23.0	22.8	23.3	23.7	22.5	23.0	22.8	23.3	23.7
	4H	22.4	22.8	22.8	23.2	23.7	22.4	22.8	22.8	23.2	23.7
	6H	22.3	22.8	22.8	23.2	23.5	22.3	22.8	22.8	23.2	23.5
	8H	22.3	22.8	22.8	23.1	23.5	22.3	22.8	22.8	23.1	23.5
	12H	22.3	22.7	22.8	23.1	23.6	22.3	22.7	22.8	23.1	23.6
8H	4H	22.3	22.7	22.8	23.0	23.4	22.3	22.7	22.8	23.0	23.4
	6H	22.3	22.6	22.8	23.0	23.5	22.3	22.6	22.8	23.0	23.5
	8H	22.4	22.6	22.9	23.1	23.7	22.4	22.6	22.9	23.1	23.7
	12H	22.4	22.6	23.0	23.1	23.7	22.4	22.6	23.0	23.1	23.7
12H	4H	22.2	22.5	22.7	22.9	23.4	22.2	22.5	22.7	22.9	23.4
	6H	22.3	22.5	22.8	23.0	23.6	22.3	22.5	22.8	23.0	23.6
	8H	22.3	22.5	22.9	23.0	23.6	22.3	22.5	22.9	23.0	23.6
Corrected glare indices referring to 1183 lm total luminous flux											