

Light efficiency:

71 Lumen/Watt

Output: 1490 lm

Light quality:

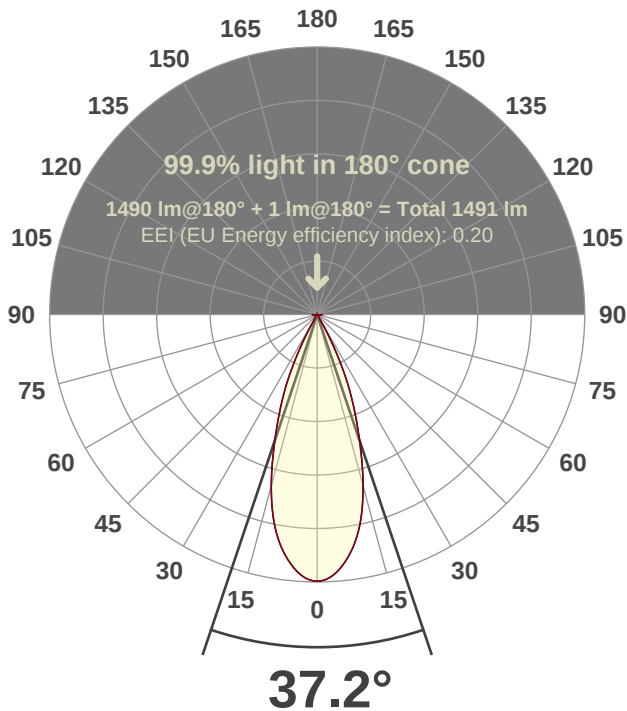
CRI: 92.8

Peak: 3821 cd

Power: 21.1 W



Beam angle



Test number:

CR4D-R-DR-C20-30k-40 (GR-CZ20-FL-RD)

Luminaire Model:

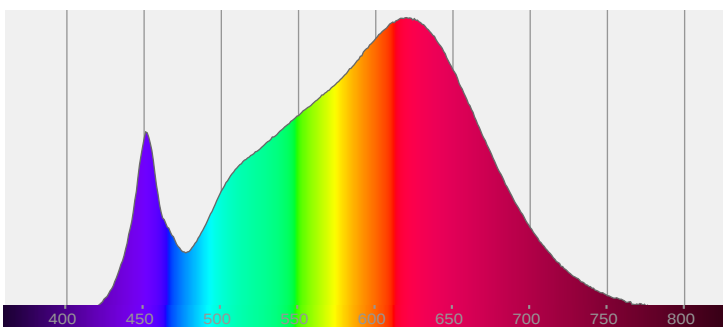
Core 4" Round Deep Regress C20 30K 40°

Date and time:

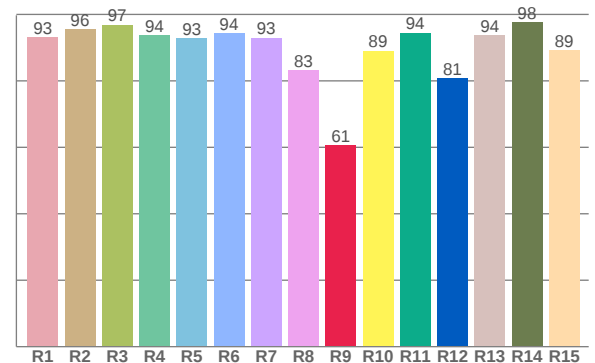
6/14/2017 11:54:40 AM

LUM: 1490

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	60.5	91.9	100.2	91.0	0.428	0.400	0.247	0.346	-0.0002

R_f 91.9

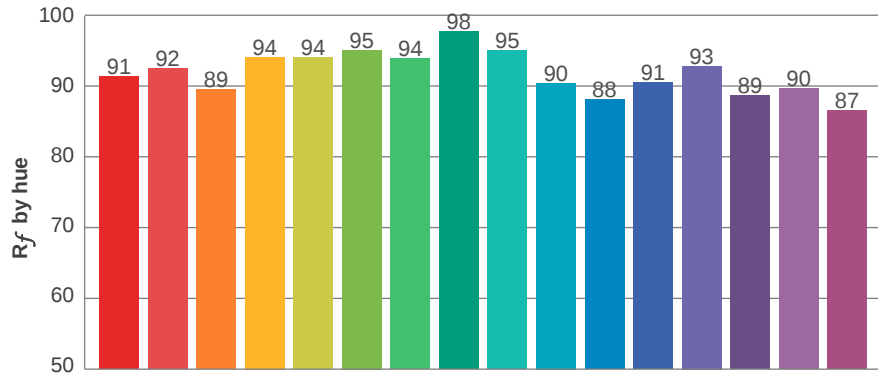
Fidelity index R_f

R_g 100.2

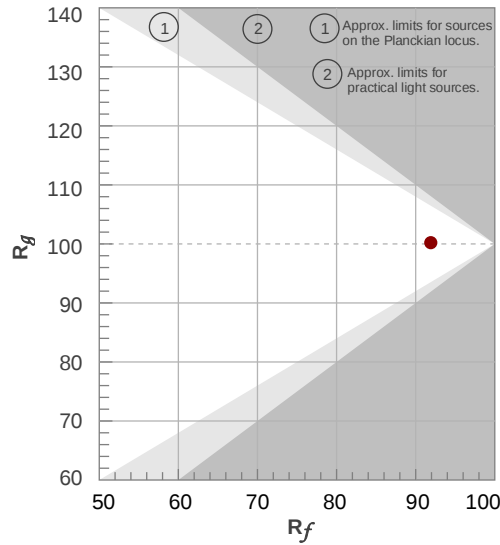
Gammut index R_g

TM30: 91.9

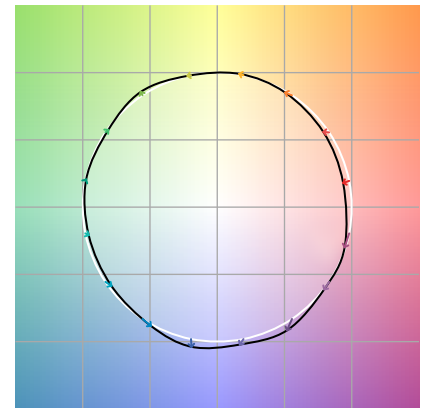
TM-30Color



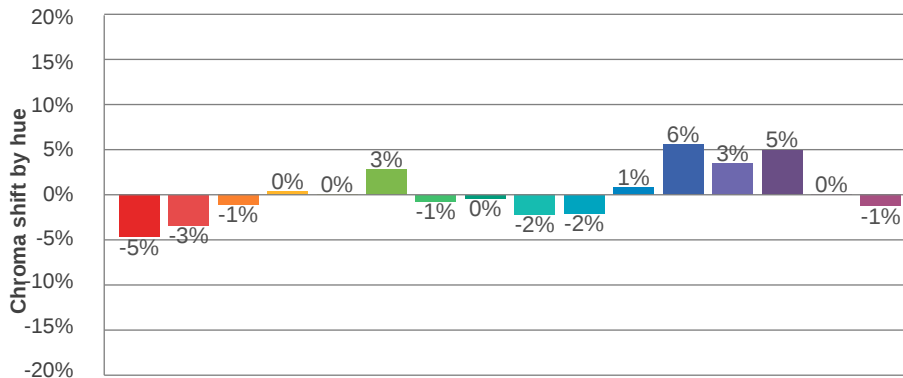
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	-1%
2	92	-3%	3%
3	89	-1%	5%
4	94	0%	3%
5	94	0%	3%
6	95	3%	0%
7	94	-1%	-3%
8	98	0%	-1%
9	95	-2%	2%
10	90	-2%	5%
11	88	1%	8%
12	91	6%	2%
13	93	3%	-3%
14	89	5%	-8%
15	90	0%	-7%
16	87	-1%	-11%



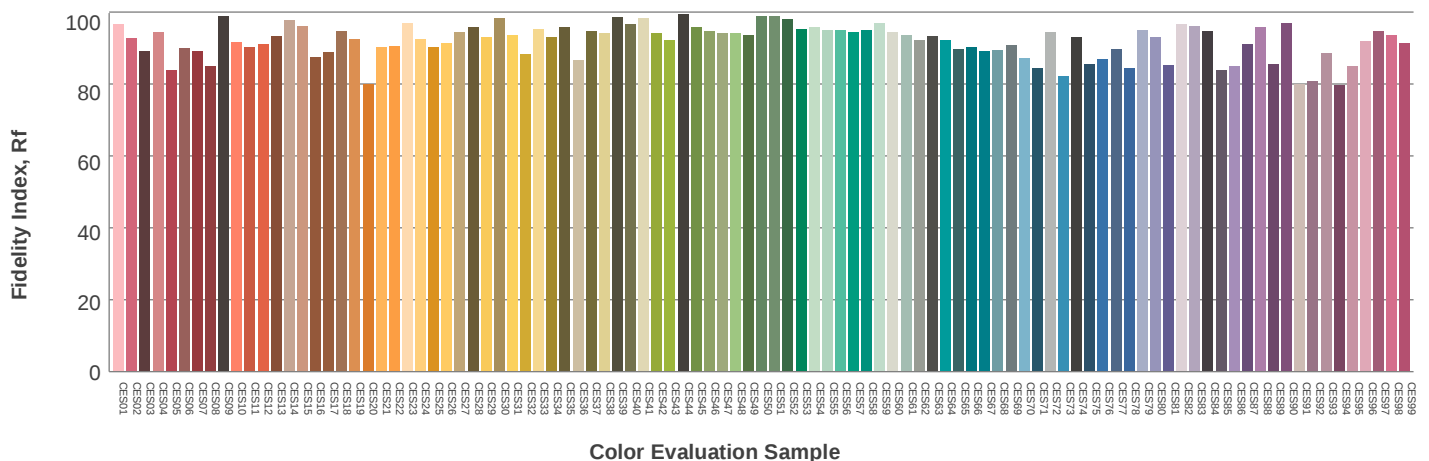
Color vector graphics



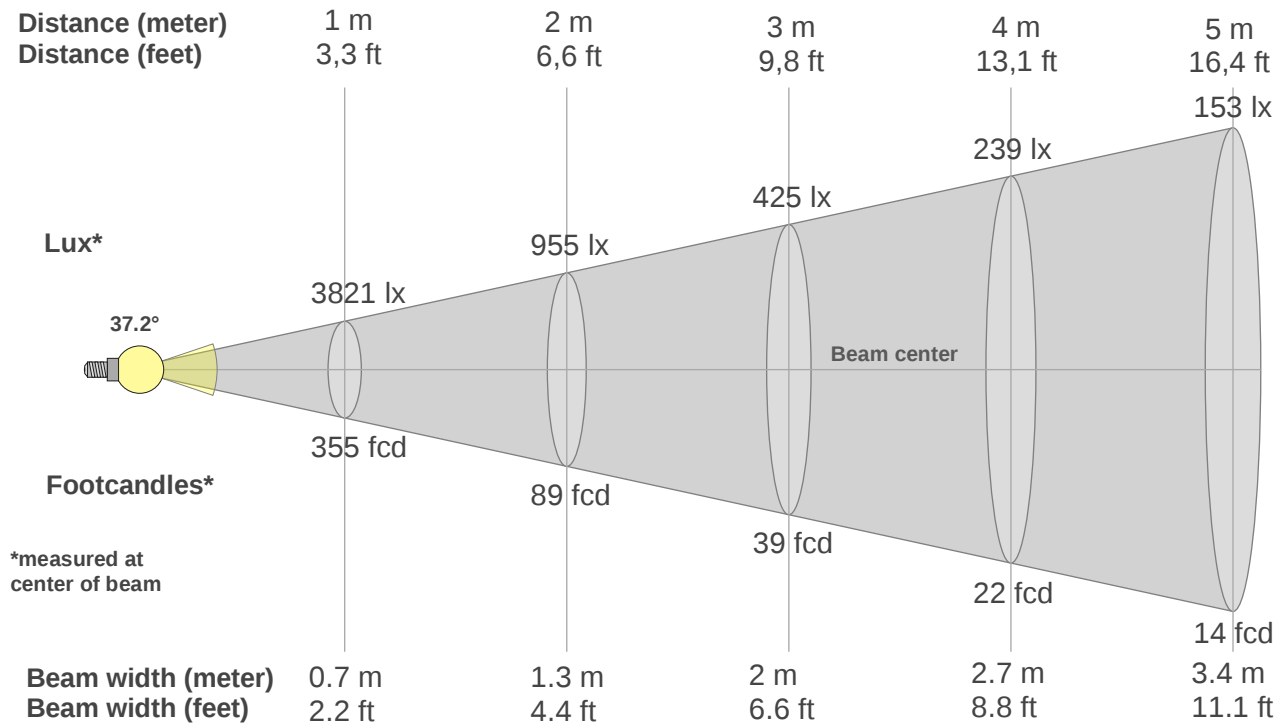
Color distortion



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
3821lx	955lx	425lx	239lx	153lx	106lx	78lx	60lx	47lx	38lx	32lx	27lx	23lx	19lx	17lx	15lx	13lx	12lx	11lx	10lx
355fcd	88.7fcd	39.4fcd	22.2fcd	14.2fcd	9.9fcd	7.2fcd	5.5fcd	4.4fcd	3.5fcd	2.9fcd	2.5fcd	2.1fcd	1.8fcd	1.6fcd	1.4fcd	1.2fcd	1.1fcd	1fcd	0.9fcd

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°
3821	3796	3719	3598	3443	3249	3007	2711	2375	2014	1679	1371	1068	738	427	186	71	50	43	37
100%	99%	97%	94%	90%	85%	79%	71%	62%	53%	44%	36%	28%	19%	11%	5%	2%	1%	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°
3821	3796	3719	3598	3443	3249	3007	2711	2375	2014	1679	1371	1068	738	427	186	71	50	43	37
100%	99%	97%	94%	90%	85%	79%	71%	62%	53%	44%	36%	28%	19%	11%	5%	2%	1%	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°
3821	3796	3719	3598	3443	3249	3007	2711	2375	2014	1679	1371	1068	738	427	186	71	50	43	37
100%	99%	97%	94%	90%	85%	79%	71%	62%	53%	44%	36%	28%	19%	11%	5%	2%	1%	1%	1%

Intensities in 270° c-plane

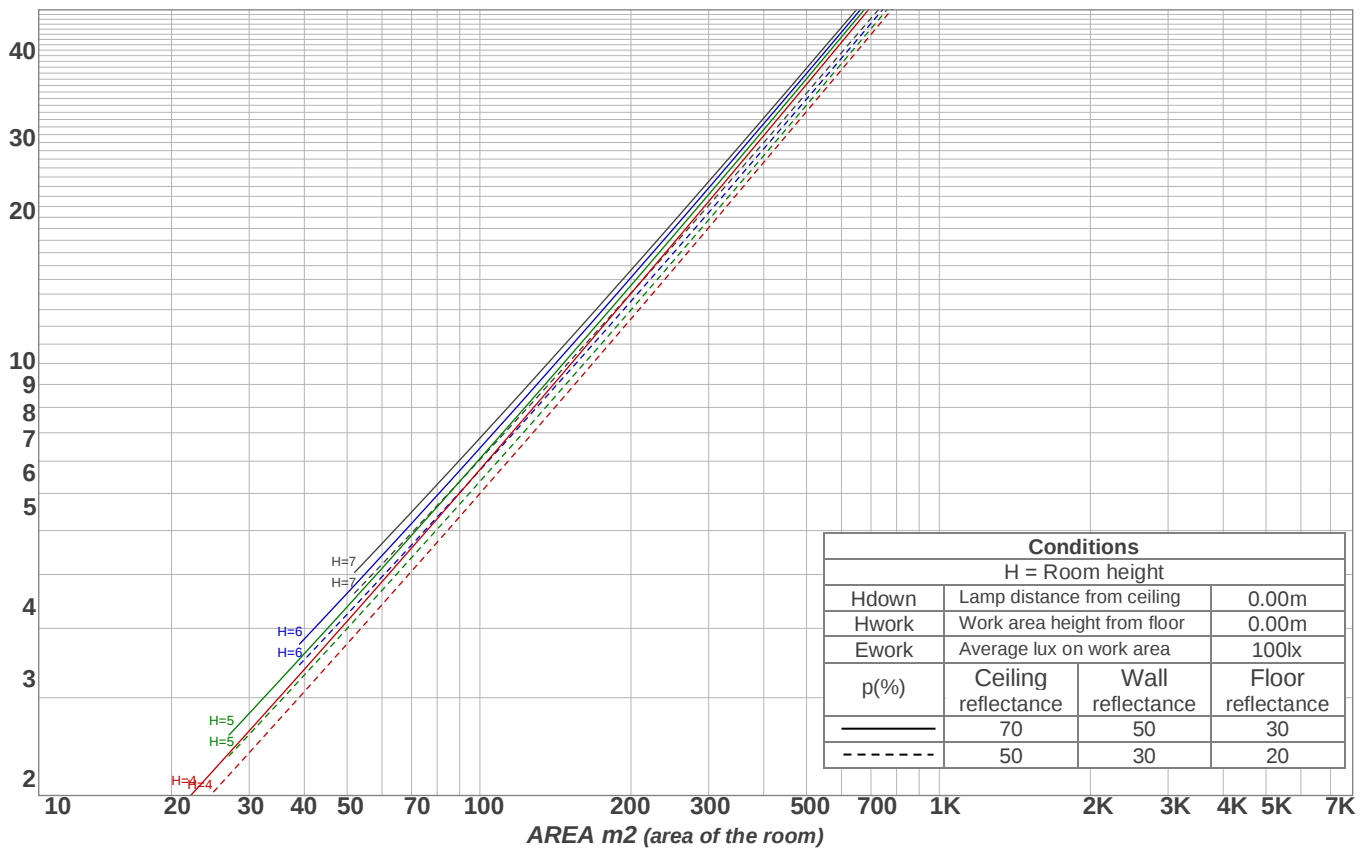
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3821	3796	3719	3598	3443	3249	3007	2711	2375	2014	1679	1371	1068	738	427	186	71	50	43	37
100%	99%	97%	94%	90%	85%	79%	71%	62%	53%	44%	36%	28%	19%	11%	5%	2%	1%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
37.2°	56.6°	62.5°	99.5%	98.4%

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	102	99	97	99	97	95	96	94	93	92
3	106	101	97	94	104	100	96	93	97	94	92	95	92	90	93	91	89	88
4	102	96	92	89	101	95	91	88	93	90	87	91	89	86	90	87	85	84
5	99	92	88	84	97	91	87	84	90	86	83	88	85	83	87	84	82	81
6	95	88	84	80	94	88	83	80	86	83	80	85	82	79	84	81	79	77
7	92	85	80	77	91	84	80	77	83	79	76	82	79	76	81	78	76	75
8	89	82	77	74	88	81	77	74	80	76	73	79	76	73	78	75	73	72
9	86	79	74	71	85	78	74	71	77	73	71	77	73	70	76	73	70	69
10	83	76	71	68	83	76	71	68	75	71	68	74	71	68	73	70	68	67

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
337 lm	688 lm	396 lm	35.8 lm	17.7 lm	8.95 lm	4.19 lm	1.42 lm	0.784 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	20.6	21.1	20.7	21.3	21.5	20.6	21.1	20.7	21.3	21.5
	3H	20.7	21.3	21.1	21.5	21.7	20.7	21.3	21.1	21.5	21.7
	4H	20.7	21.3	21.1	21.5	21.8	20.7	21.3	21.1	21.5	21.8
	6H	20.8	21.3	21.1	21.6	21.9	20.8	21.3	21.1	21.6	21.9
	8H	20.8	21.3	21.1	21.6	22.0	20.8	21.3	21.1	21.6	22.0
	12H	20.8	21.3	21.2	21.6	22.1	20.8	21.3	21.2	21.6	22.1
4H	2H	20.5	21.2	20.9	21.4	21.6	20.5	21.2	20.9	21.4	21.6
	3H	20.9	21.4	21.2	21.7	22.1	20.9	21.4	21.2	21.7	22.1
	4H	20.9	21.3	21.3	21.7	22.2	20.9	21.3	21.3	21.7	22.2
	6H	20.9	21.4	21.4	21.7	22.1	20.9	21.4	21.4	21.7	22.1
	8H	21.0	21.4	21.5	21.7	22.1	21.0	21.4	21.5	21.7	22.1
	12H	21.0	21.4	21.5	21.8	22.2	21.0	21.4	21.5	21.8	22.2
8H	4H	20.8	21.3	21.3	21.6	21.9	20.8	21.3	21.3	21.6	21.9
	6H	21.0	21.2	21.5	21.7	22.2	21.0	21.2	21.5	21.7	22.2
	8H	21.1	21.3	21.6	21.8	22.4	21.1	21.3	21.6	21.8	22.4
	12H	21.2	21.4	21.8	21.9	22.5	21.2	21.4	21.8	21.9	22.5
12H	4H	20.8	21.1	21.3	21.5	22.0	20.8	21.1	21.3	21.5	22.0
	6H	21.0	21.2	21.5	21.7	22.3	21.0	21.2	21.5	21.7	22.3
	8H	21.1	21.3	21.7	21.8	22.4	21.1	21.3	21.7	21.8	22.4
Corrected glare indices referring to 1490 lm total luminous flux											