

Light efficiency:



Output: 1149 lm

Light quality:

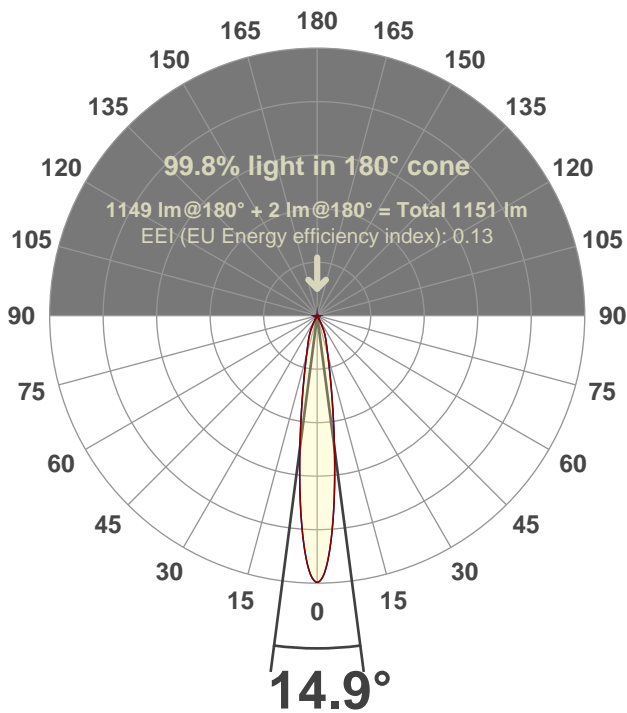


Peak: 9085 cd

Power: 14.5 W



Beam angle



Test number:

CR4D-R-DR-C14-30k-15 (GR-CZ20-SP-RD)

Luminaire Model:

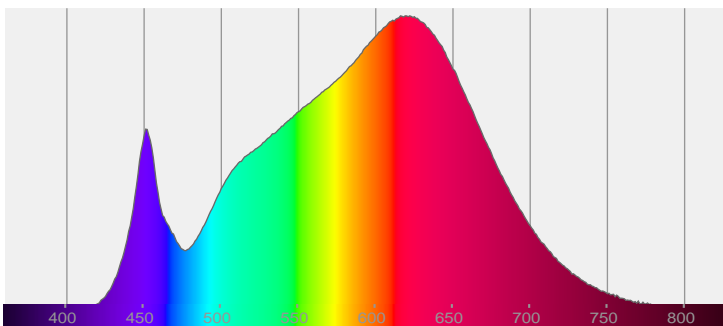
Core 4" Round Deep Regress C14 30K 15 deg

Date and time:

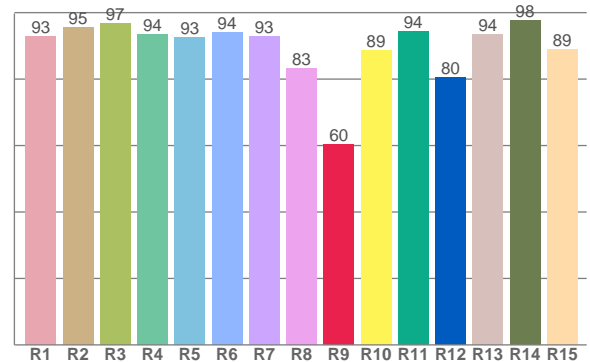
6/14/2017 2:02:08 PM

LUM: 1149

Spectra



CRI: 92.7 (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
	92.7	60.2	91.9	100.2	91.0	0.427	0.400	0.246	0.346	-0.0002

R_f 91.9

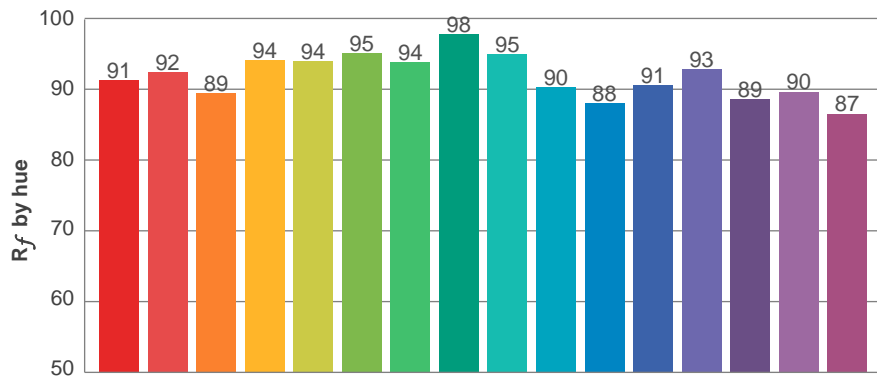
Fidelity index R_f

R_g 100.2

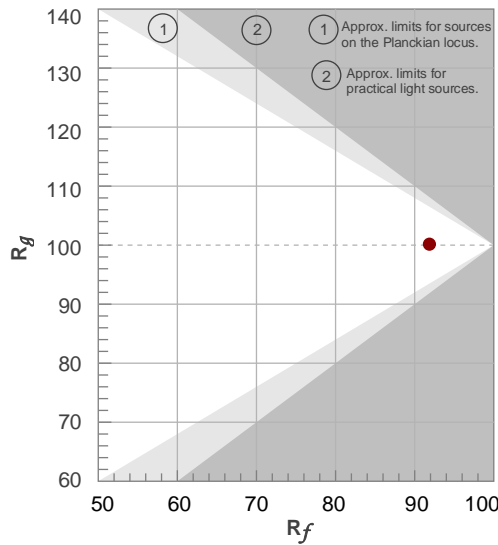
Gammut index R_g

TM30: 91.9

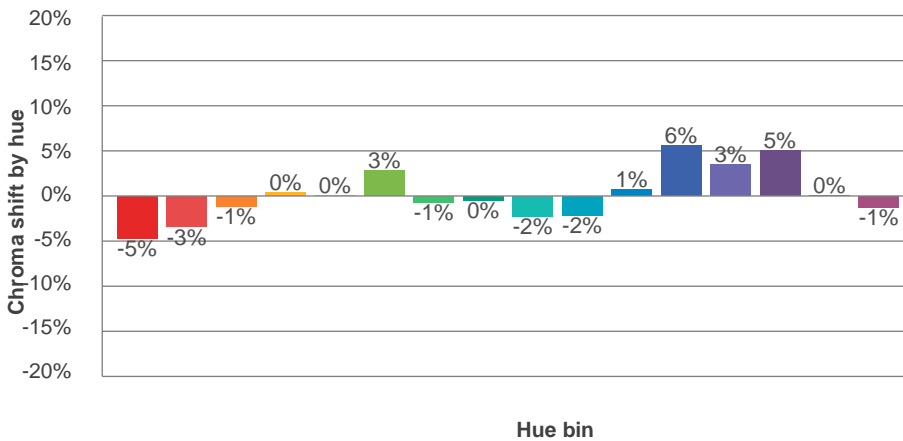
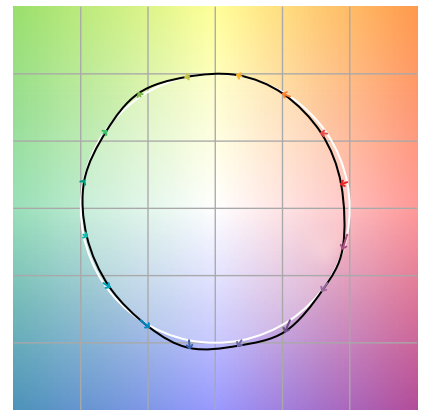
TM-30Color



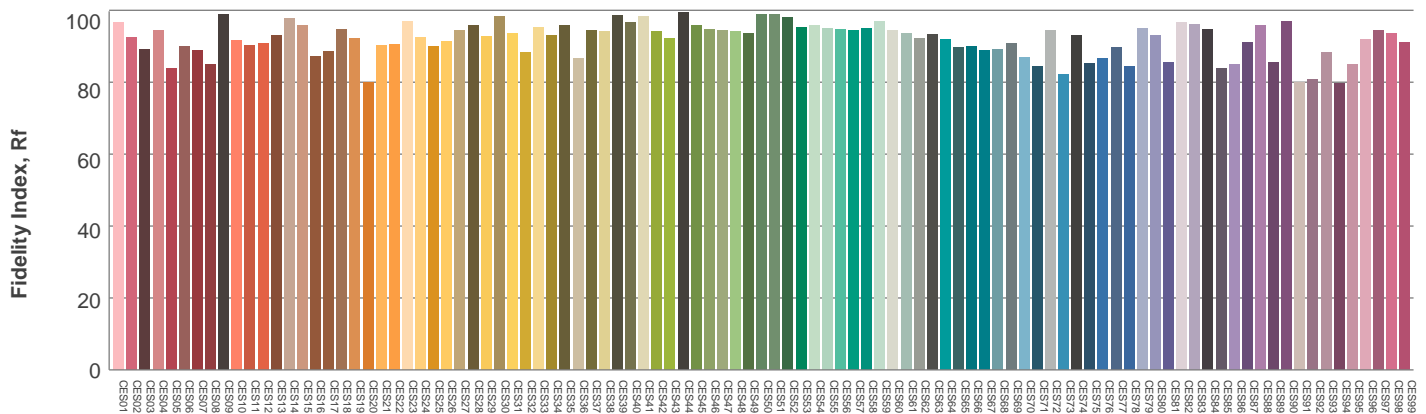
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	-1%
2	92	-3%	3%
3	89	-1%	5%
4	94	0%	3%
5	94	0%	3%
6	95	3%	0%
7	94	-1%	-3%
8	98	0%	-1%
9	95	-2%	2%
10	90	-2%	5%
11	88	1%	8%
12	91	6%	2%
13	93	3%	-3%
14	89	5%	-8%
15	90	0%	-7%
16	87	-1%	-11%



Color vector graphics

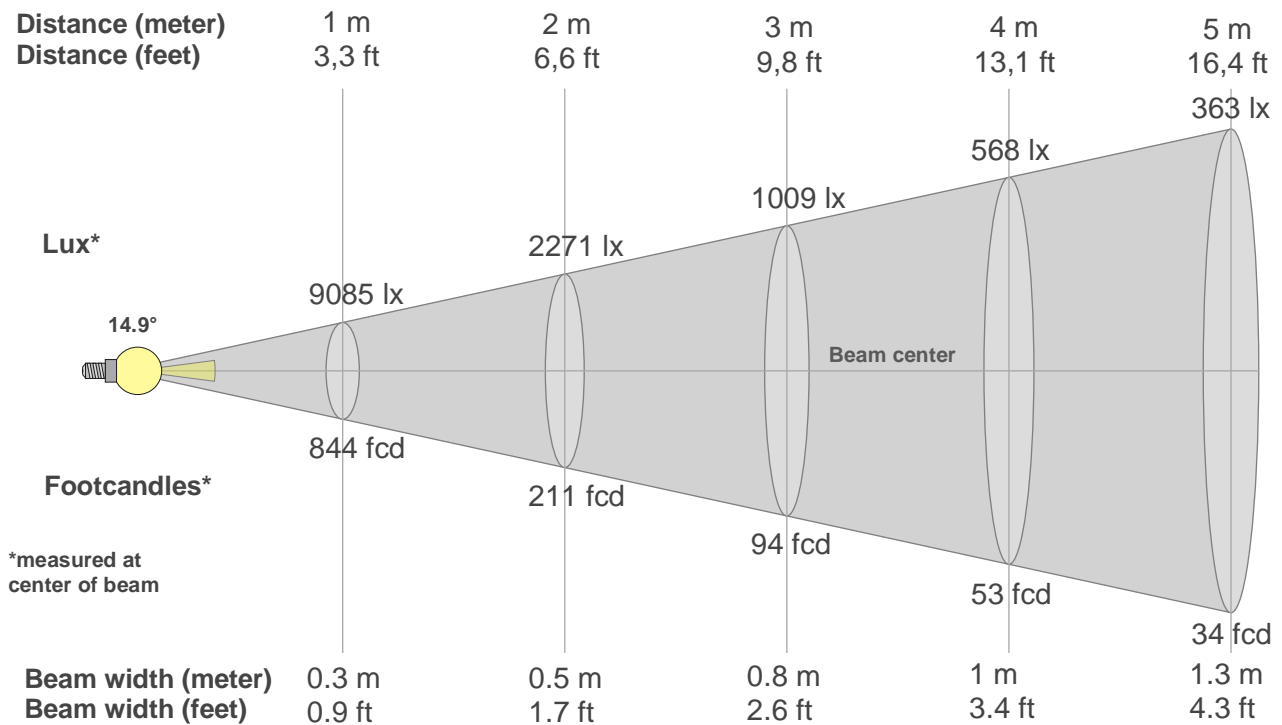


Color distortion



Color Evaluation Sample

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
9085lx	2271lx	1009lx	568lx	363lx	252lx	185lx	142lx	112lx	91lx	75lx	63lx	54lx	46lx	40lx	35lx	31lx	28lx	25lx	23lx
844fcd	211fcd	93.8fcd	52.7fcd	33.8fcd	23.4fcd	17.2fcd	13.2fcd	10.4fcd	8.4fcd	7fcd	5.9fcd	5fcd	4.3fcd	3.8fcd	3.3fcd	2.9fcd	2.6fcd	2.3fcd	2.1fcd

Intensities in 0° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
9085	8959	8606	8033	7323	6526	5694	4885	4150	3515	2974	2531	2159	1860	1619	1425	1266	1137	1030	939
100%	99%	95%	88%	81%	72%	63%	54%	46%	39%	33%	28%	24%	20%	18%	16%	14%	13%	11%	10%

Intensities in 90° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
9085	8959	8606	8033	7323	6526	5694	4885	4150	3515	2974	2531	2159	1860	1619	1425	1266	1137	1030	939
100%	99%	95%	88%	81%	72%	63%	54%	46%	39%	33%	28%	24%	20%	18%	16%	14%	13%	11%	10%

Intensities in 180° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
9085	8959	8606	8033	7323	6526	5694	4885	4150	3515	2974	2531	2159	1860	1619	1425	1266	1137	1030	939
100%	99%	95%	88%	81%	72%	63%	54%	46%	39%	33%	28%	24%	20%	18%	16%	14%	13%	11%	10%

Intensities in 270° c-plane

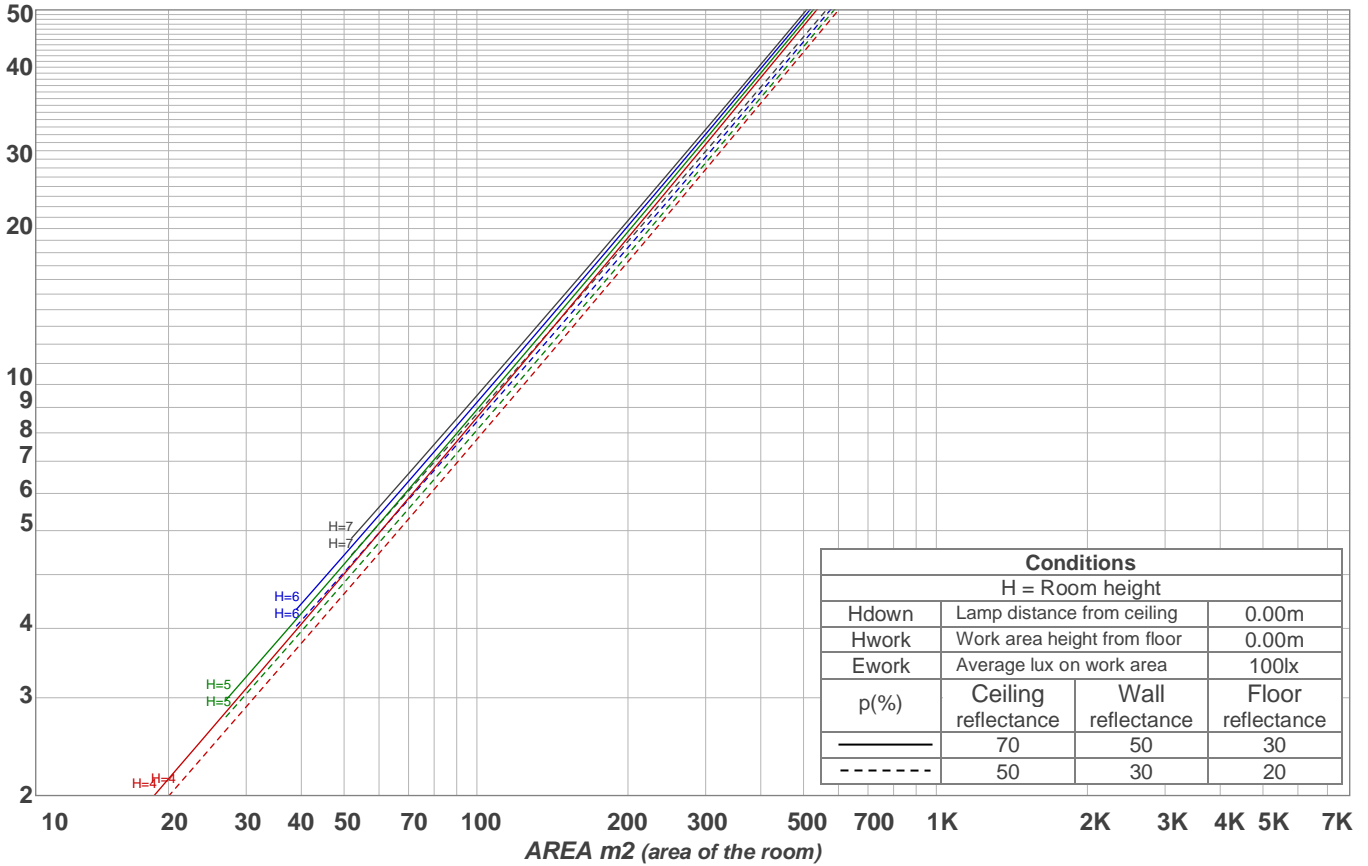
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
9085	8959	8606	8033	7323	6526	5694	4885	4150	3515	2974	2531	2159	1860	1619	1425	1266	1137	1030	939
100%	99%	95%	88%	81%	72%	63%	54%	46%	39%	33%	28%	24%	20%	18%	16%	14%	13%	11%	10%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
14.9°	38.8°	55.3°	99.1%	98.6%

Light planning

Luminaire budgetary diagram

LAMPS (number of lamps)



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	113	111	110	113	111	109	108	107	106	105	103	102	101	100	99	99	97
2	112	108	105	103	109	106	104	102	103	101	99	100	99	97	98	96	95	94
3	108	104	100	97	106	102	99	97	100	97	95	98	96	94	96	94	92	91
4	105	100	96	93	104	99	95	93	97	94	92	95	93	91	93	91	90	89
5	102	97	93	90	101	96	92	89	94	91	89	93	90	88	91	89	87	86
6	100	94	90	87	98	93	89	87	92	88	86	90	88	86	89	87	85	84
7	97	91	87	84	96	90	87	84	89	86	84	88	85	83	87	85	83	82
8	95	89	85	82	94	88	84	82	87	84	81	86	83	81	85	83	81	80
9	92	86	82	80	92	86	82	80	85	82	79	84	81	79	84	81	79	78
10	90	84	80	78	90	84	80	78	83	80	78	83	80	77	82	79	77	76

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
499 lm	419 lm	201 lm	14.4 lm	3.58 lm	3.91 lm	4.83 lm	2.05 lm	1.27 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	16.1	16.4	16.1	16.6	16.8	16.1	16.4	16.1	16.6	16.8
	3H	18.2	18.8	18.6	18.9	19.1	18.2	18.8	18.6	18.9	19.1
	4H	18.5	19.1	18.9	19.3	19.5	18.5	19.1	18.9	19.3	19.5
	6H	19.0	19.4	19.3	19.7	20.1	19.0	19.4	19.3	19.7	20.1
	8H	19.2	19.6	19.5	20.0	20.4	19.2	19.6	19.5	20.0	20.4
	12H	19.6	20.0	20.0	20.4	20.8	19.6	20.0	20.0	20.4	20.8
4H	2H	16.9	17.5	17.3	17.7	17.9	16.9	17.5	17.3	17.7	17.9
	3H	19.2	19.6	19.5	19.9	20.4	19.2	19.6	19.5	19.9	20.4
	4H	19.5	19.9	19.9	20.3	20.8	19.5	19.9	19.9	20.3	20.8
	6H	20.0	20.5	20.5	20.8	21.1	20.0	20.5	20.5	20.8	21.1
	8H	20.3	20.7	20.8	21.0	21.4	20.3	20.7	20.8	21.0	21.4
	12H	20.8	21.1	21.3	21.5	22.0	20.8	21.1	21.3	21.5	22.0
8H	4H	19.7	20.1	20.2	20.4	20.8	19.7	20.1	20.2	20.4	20.8
	6H	20.4	20.6	20.9	21.1	21.6	20.4	20.6	20.9	21.1	21.6
	8H	20.9	21.1	21.4	21.6	22.2	20.9	21.1	21.4	21.6	22.2
	12H	21.6	21.8	22.2	22.3	22.9	21.6	21.8	22.2	22.3	22.9
12H	4H	19.7	20.0	20.2	20.4	20.8	19.7	20.0	20.2	20.4	20.8
	6H	20.5	20.7	21.0	21.2	21.8	20.5	20.7	21.0	21.2	21.8
	8H	21.0	21.2	21.6	21.7	22.3	21.0	21.2	21.6	21.7	22.3
Corrected glare indices referring to 1149 lm total luminous flux											