

Light efficiency:

68 Lumen/Watt

Output: 2046 lm

Light quality:

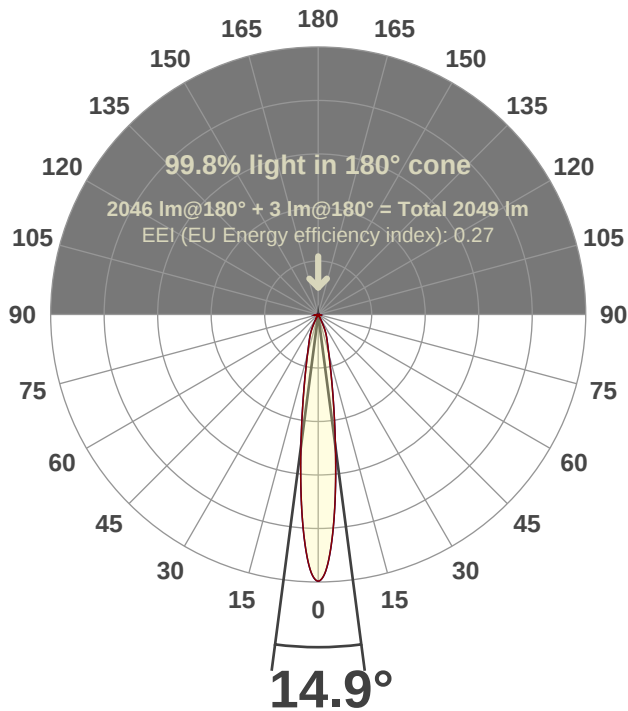
CRI: 92.7

Peak: 16177 cd

Power: 30.0 W



Beam angle



Test number:

CR4D-R-DR-C28-30k-15 (GR-CZ20-SP-RD)

Luminaire Model:

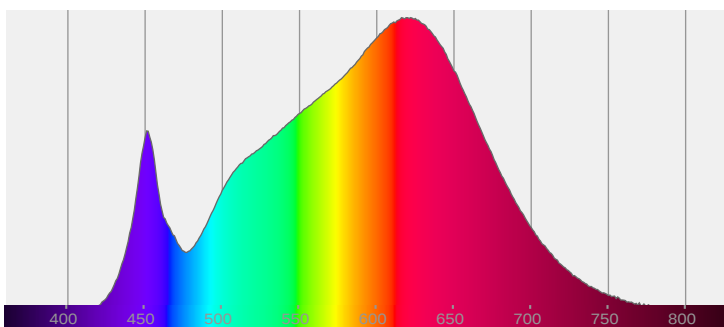
Core 4" Round Deep Regress C28 30K 15°

Date and time:

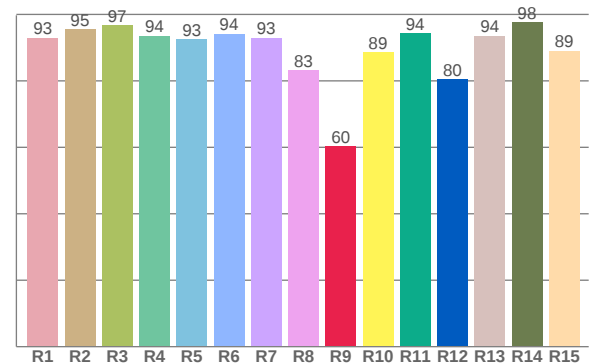
6/14/2017 2:02:08 PM

LUM: 2046

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

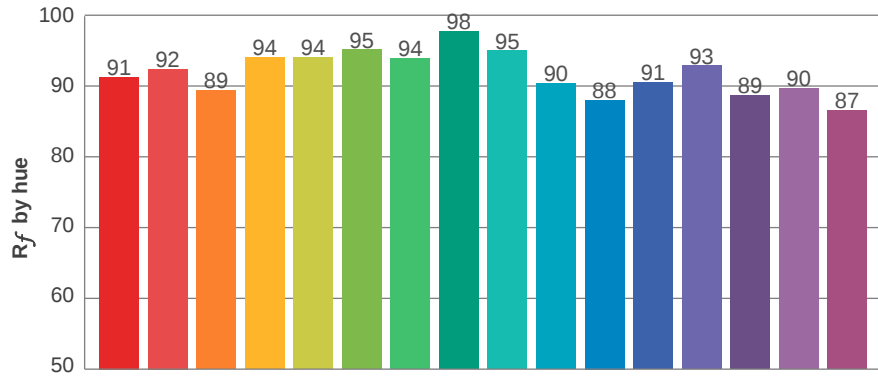
Fidelity index R_f

R_g 100.2

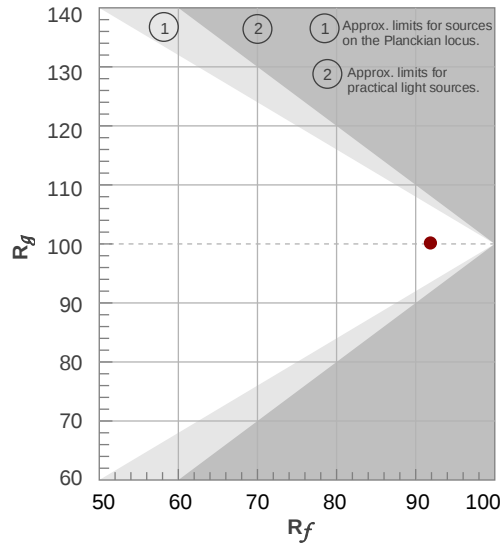
Gammut index R_g

TM30: 91.9

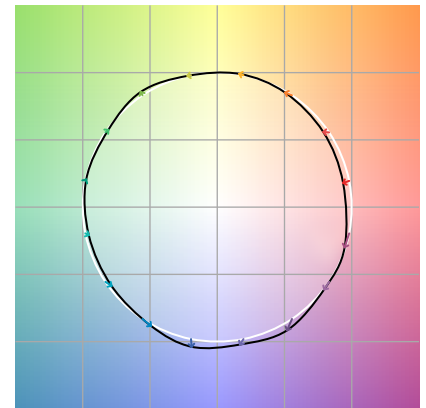
TM-30Color



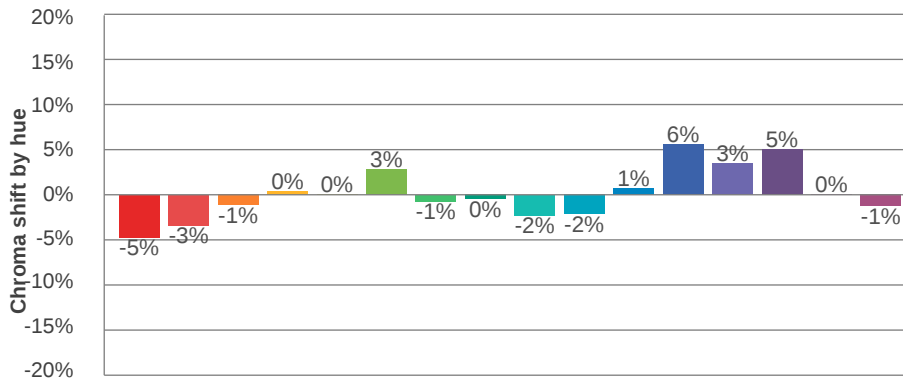
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	-1%
2	92	-3%	3%
3	89	-1%	5%
4	94	0%	3%
5	94	0%	3%
6	95	3%	0%
7	94	-1%	-3%
8	98	0%	-1%
9	95	-2%	2%
10	90	-2%	5%
11	88	1%	8%
12	91	6%	2%
13	93	3%	-3%
14	89	5%	-8%
15	90	0%	-7%
16	87	-1%	-11%



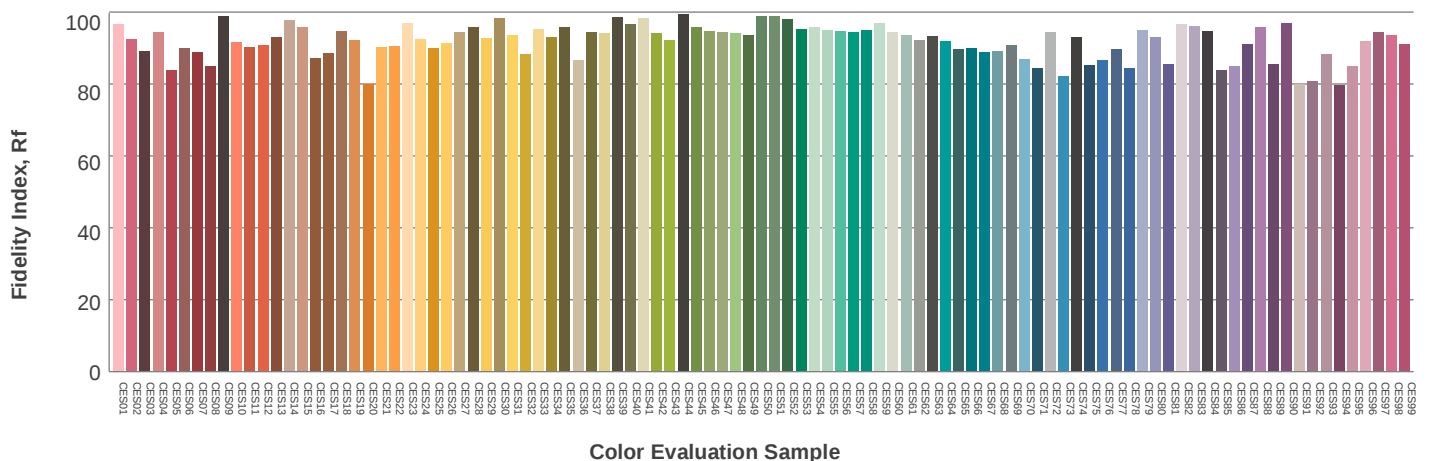
Color vector graphics



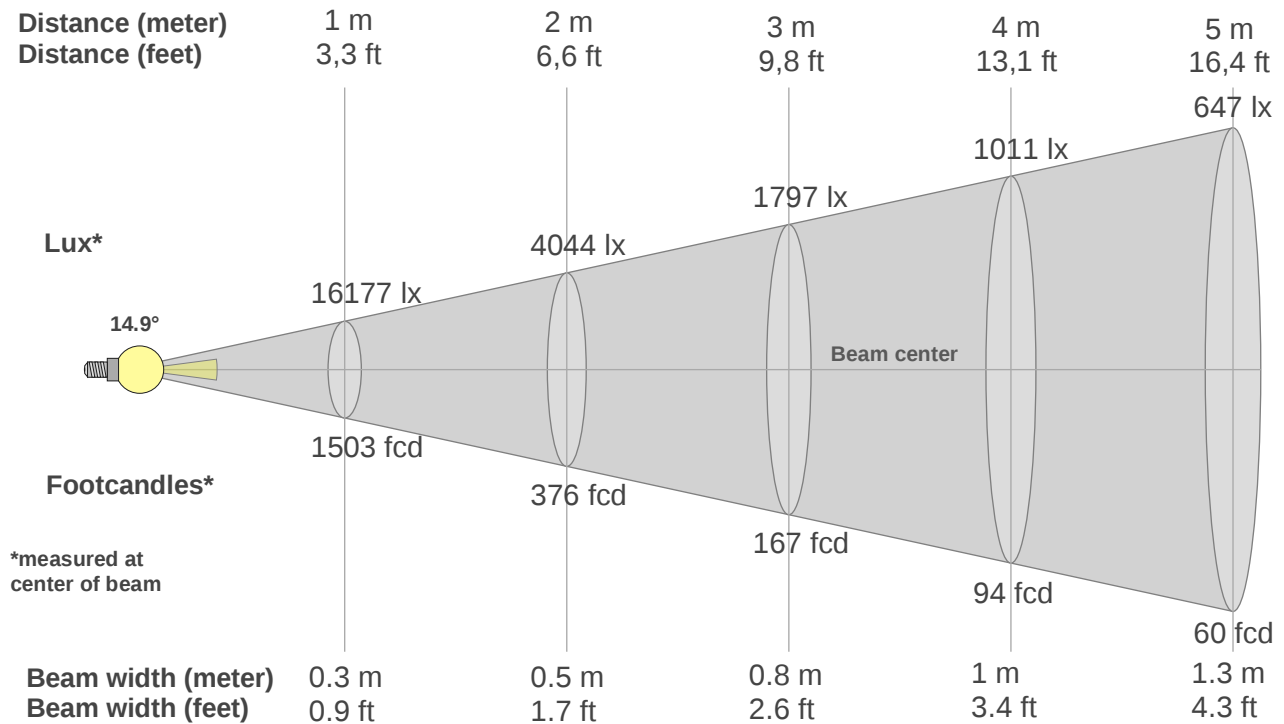
Color distortion



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
16177lx	4044lx	1797lx	1011lx	647lx	449lx	330lx	253lx	200lx	162lx	134lx	112lx	96lx	83lx	72lx	63lx	56lx	50lx	45lx	40lx
1502.9fcd	375.7fcd	167fcd	93.9fcd	60.1fcd	41.7fcd	30.7fcd	23.5fcd	18.6fcd	15fcd	12.4fcd	10.4fcd	8.9fcd	7.7fcd	6.7fcd	5.9fcd	5.2fcd	4.6fcd	4.2fcd	3.8fcd

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°
16.2K	16.0K	15.3K	14.3K	13.0K	11.6K	10.1K	8.7K	7.4K	6.3K	5.3K	4.5K	3.8K	3.3K	2.9K	2.5K	2.3K	2.0K	1.8K	1.7K
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°
16.2K	16.0K	15.3K	14.3K	13.0K	11.6K	10.1K	8.7K	7.4K	6.3K	5.3K	4.5K	3.8K	3.3K	2.9K	2.5K	2.3K	2.0K	1.8K	1.7K
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°
16.2K	16.0K	15.3K	14.3K	13.0K	11.6K	10.1K	8.7K	7.4K	6.3K	5.3K	4.5K	3.8K	3.3K	2.9K	2.5K	2.3K	2.0K	1.8K	1.7K
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

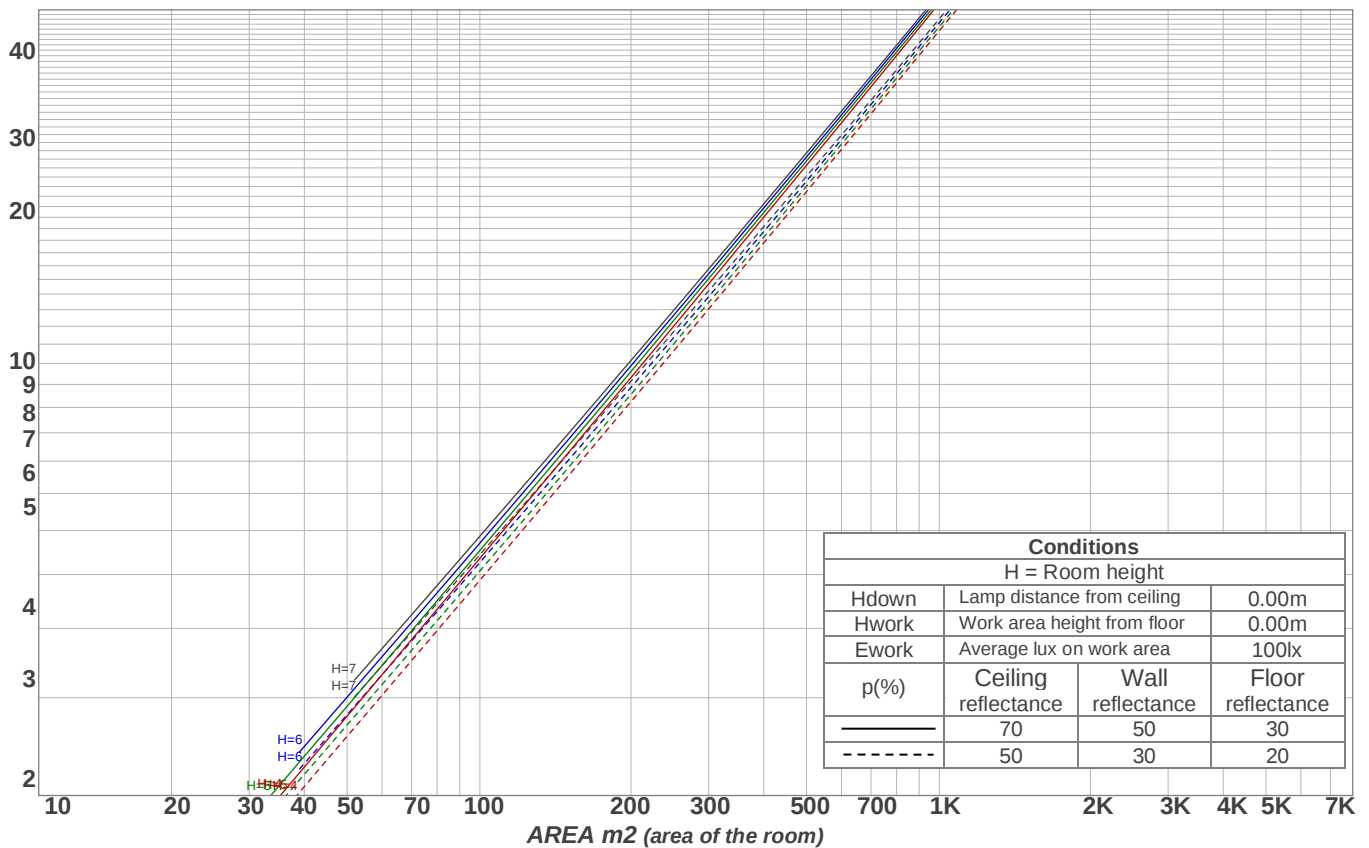
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
16.2K	16.0K	15.3K	14.3K	13.0K	11.6K	10.1K	8.7K	7.4K	6.3K	5.3K	4.5K	3.8K	3.3K	2.9K	2.5K	2.3K	2.0K	1.8K	1.7K
100%	99%	95%	88%	81%	72%	63%	54%	46%	39%	33%	28%	24%	20%	18%	16%	14%	13%	11%	10%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
14.9°	38.8°	56.3°	99.1%	98.6%

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	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°
888 lm	746 lm	358 lm	25.7 lm	6.38 lm	6.97 lm	8.59 lm	3.65 lm	2.27 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	18.1	18.5	18.1	18.6	18.8	18.1	18.5	18.1	18.6	18.8
	3H	20.2	20.8	20.6	20.9	21.1	20.2	20.8	20.6	20.9	21.1
	4H	20.5	21.1	20.9	21.3	21.5	20.5	21.1	20.9	21.3	21.5
	6H	21.0	21.4	21.3	21.7	22.1	21.0	21.4	21.3	21.7	22.1
	8H	21.2	21.7	21.6	22.0	22.4	21.2	21.7	21.6	22.0	22.4
	12H	21.6	22.0	22.0	22.4	22.8	21.6	22.0	22.0	22.4	22.8
4H	2H	19.0	19.5	19.3	19.7	19.9	19.0	19.5	19.3	19.7	19.9
	3H	21.2	21.6	21.5	22.0	22.4	21.2	21.6	21.5	22.0	22.4
	4H	21.5	21.9	21.9	22.3	22.8	21.5	21.9	21.9	22.3	22.8
	6H	22.0	22.5	22.5	22.8	23.1	22.0	22.5	22.5	22.8	23.1
	8H	22.3	22.7	22.8	23.0	23.4	22.3	22.7	22.8	23.0	23.4
	12H	22.8	23.1	23.3	23.5	24.0	22.8	23.1	23.3	23.5	24.0
8H	4H	21.7	22.1	22.2	22.4	22.8	21.7	22.1	22.2	22.4	22.8
	6H	22.4	22.6	22.9	23.1	23.6	22.4	22.6	22.9	23.1	23.6
	8H	22.9	23.1	23.4	23.6	24.2	22.9	23.1	23.4	23.6	24.2
	12H	23.6	23.8	24.2	24.3	24.9	23.6	23.8	24.2	24.3	24.9
12H	4H	21.7	22.0	22.2	22.4	22.9	21.7	22.0	22.2	22.4	22.9
	6H	22.5	22.7	23.0	23.2	23.8	22.5	22.7	23.0	23.2	23.8
	8H	23.0	23.2	23.6	23.7	24.3	23.0	23.2	23.6	23.7	24.3
Corrected glare indices referring to 2046 lm total luminous flux											