

Light efficiency:

70 Lumen/Watt

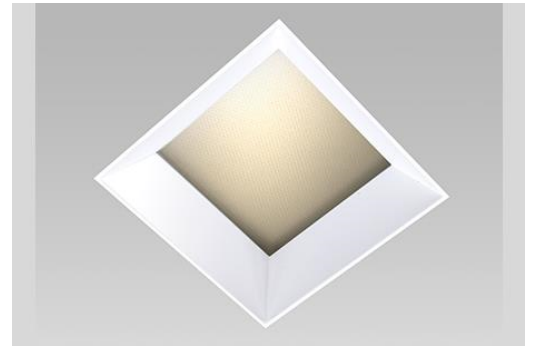
Output: 1482 lm

Light quality:

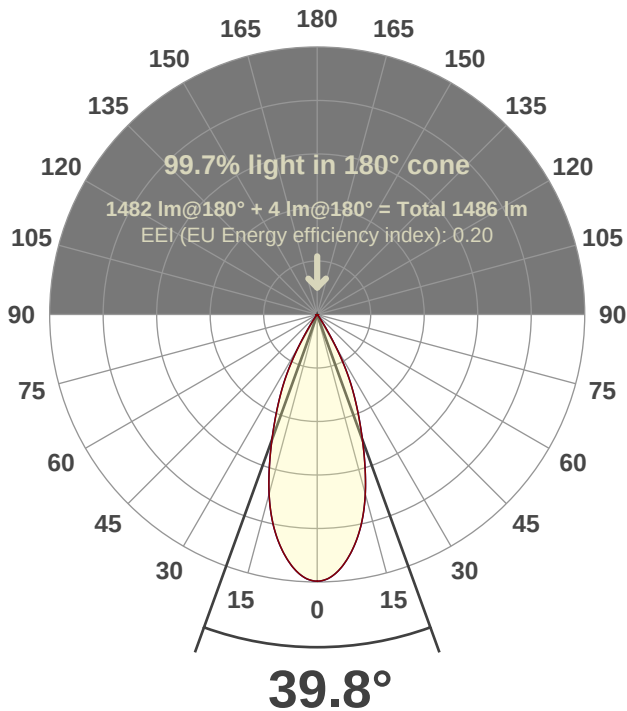
CRI: 92.4

Peak: 3199 cd

Power: 21.2 W



Beam angle



Test number:

CR4D-S-OR-C20-30k-40 (1017-CZ20-FL)

Luminaire Model:

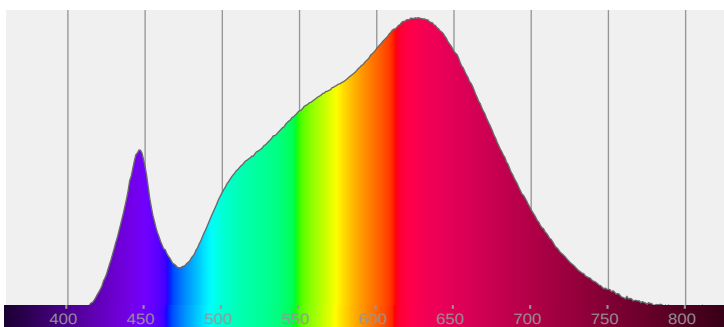
Core 4" Square Open Regress C20 30K 40°

Date and time:

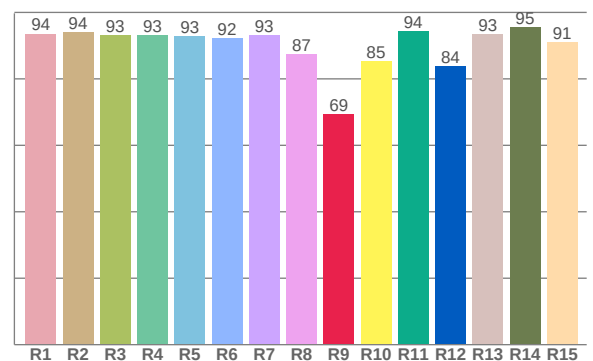
3/31/2017 1:48:55 PM

LUM: 1482

Spectra



CRI: 92.4 (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
	92.4	69.3	90.3	103.1	90.2	0.429	0.400	0.247	0.346	-0.0006

R_f 90.3

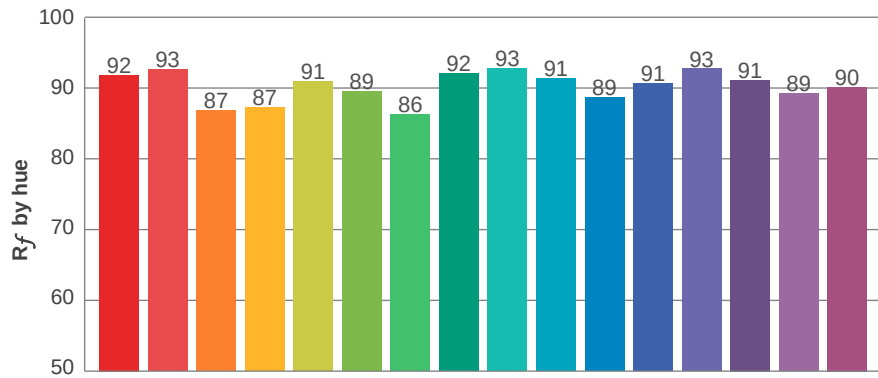
Fidelity index R_f

R_g 103.1

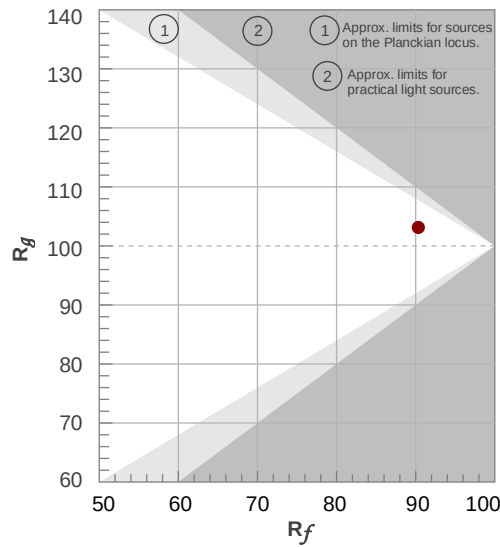
Gammut index R_g

TM30: 90.3

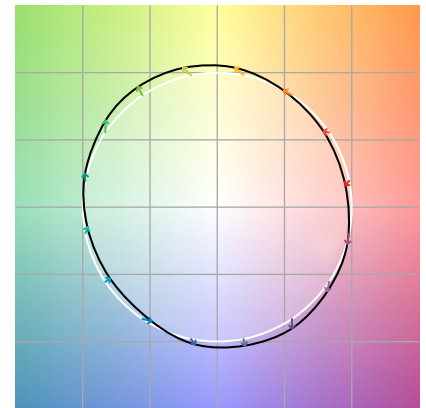
TM-30Color



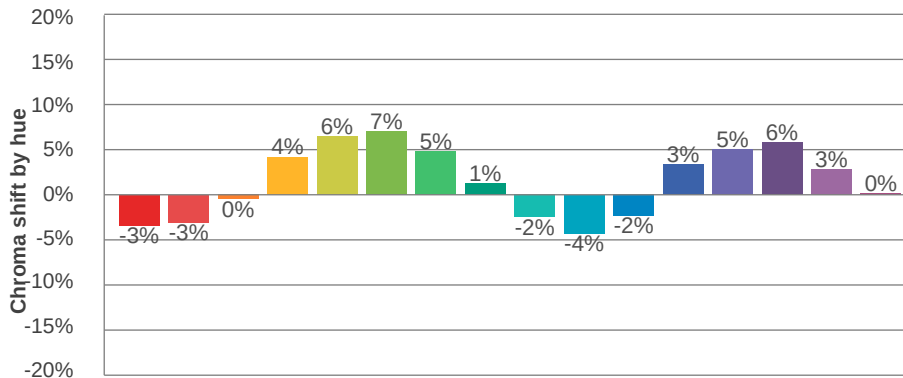
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	92	-3%	-3%
2	93	-3%	3%
3	87	0%	7%
4	87	4%	7%
5	91	6%	5%
6	89	7%	-1%
7	86	5%	-7%
8	92	1%	-5%
9	93	-2%	-4%
10	91	-4%	0%
11	89	-2%	6%
12	91	3%	4%
13	93	5%	0%
14	91	6%	-4%
15	89	3%	-6%
16	90	0%	-8%



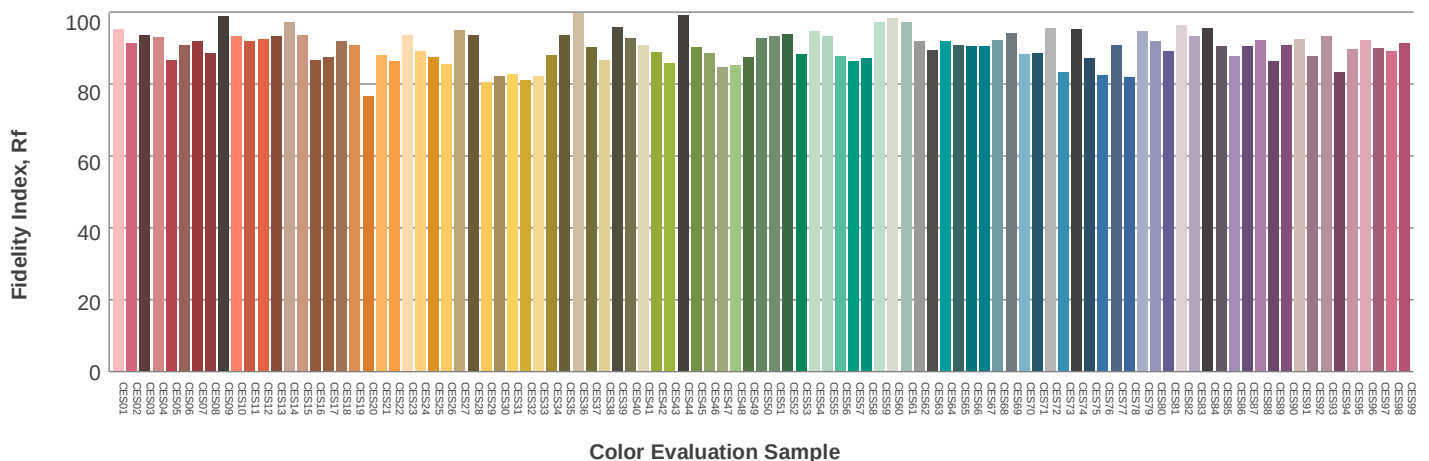
Color vector graphics



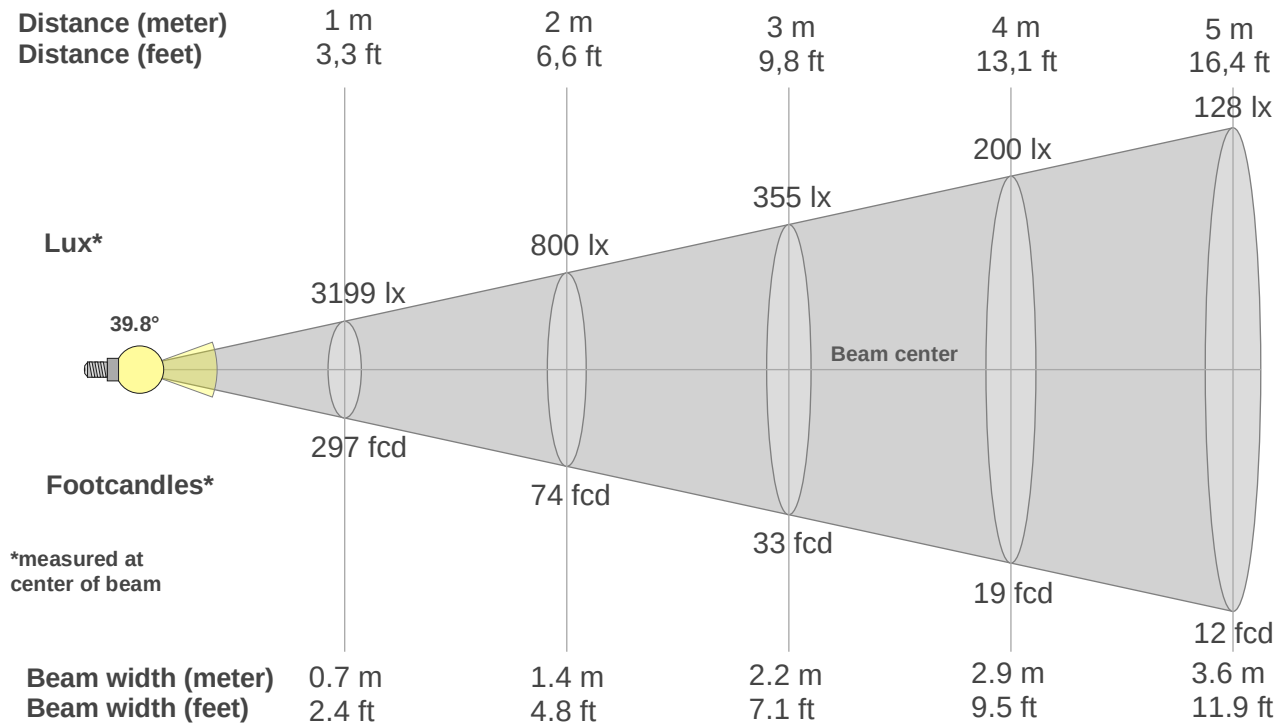
Color distortion



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
3199lx	800lx	355lx	200lx	128lx	89lx	65lx	50lx	39lx	32lx	26lx	22lx	19lx	16lx	14lx	12lx	11lx	10lx	9lx	8lx
297.2fcd	74.3fcd	33fcd	18.6fcd	11.9fcd	8.3fcd	6.1fcd	4.6fcd	3.7fcd	3fcd	2.5fcd	2.1fcd	1.8fcd	1.5fcd	1.3fcd	1.2fcd	1fcd	0.9fcd	0.8fcd	0.7fcd

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°
3199	3179	3117	3019	2892	2740	2561	2351	2109	1846	1588	1349	1130	924	704	477	279	157	88	56
100%	99%	97%	94%	90%	86%	80%	73%	66%	58%	50%	42%	35%	29%	22%	15%	9%	5%	3%	2%

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°
3199	3179	3117	3019	2892	2740	2561	2351	2109	1846	1588	1349	1130	924	704	477	279	157	88	56
100%	99%	97%	94%	90%	86%	80%	73%	66%	58%	50%	42%	35%	29%	22%	15%	9%	5%	3%	2%

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°
3199	3179	3117	3019	2892	2740	2561	2351	2109	1846	1588	1349	1130	924	704	477	279	157	88	56
100%	99%	97%	94%	90%	86%	80%	73%	66%	58%	50%	42%	35%	29%	22%	15%	9%	5%	3%	2%

Intensities in 270° c-plane

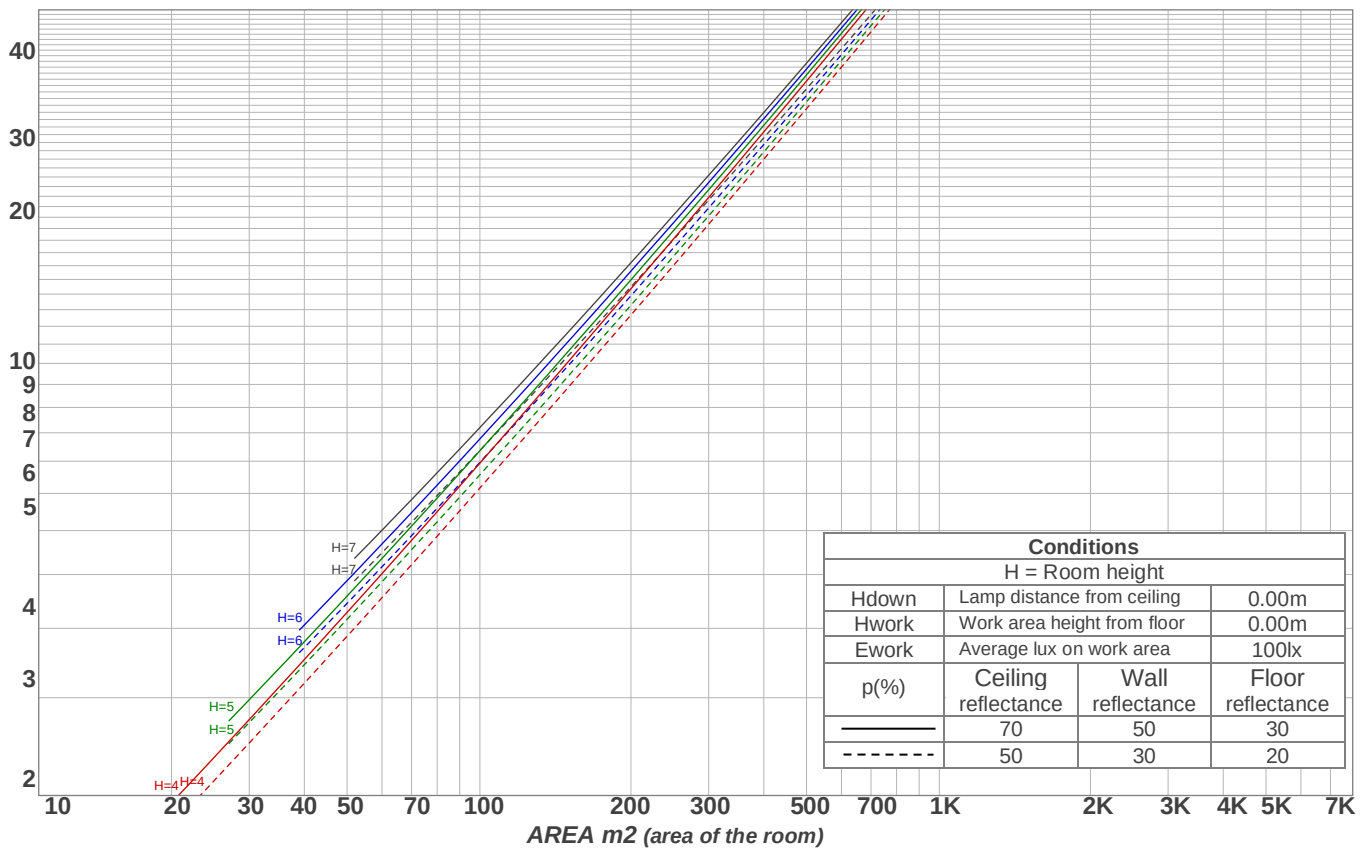
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3199	3179	3117	3019	2892	2740	2561	2351	2109	1846	1588	1349	1130	924	704	477	279	157	88	56
100%	99%	97%	94%	90%	86%	80%	73%	66%	58%	50%	42%	35%	29%	22%	15%	9%	5%	3%	2%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
39.8°	63.1°	72.7°	99.2%	98.2%

Light planning

Luminaire budgetary diagram

LAMPS (number of lamps)
50



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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90
3	105	100	96	92	103	99	95	92	96	93	90	94	91	89	92	89	87	86
4	101	95	90	87	100	94	89	86	92	88	85	90	87	84	88	85	83	82
5	97	90	85	82	96	89	85	81	88	84	81	86	83	80	85	82	79	78
6	94	86	81	78	92	85	81	77	84	80	77	83	79	76	81	78	76	75
7	90	82	77	74	89	82	77	74	81	76	73	79	76	73	78	75	73	71
8	87	79	74	70	86	78	74	70	77	73	70	76	73	70	75	72	69	68
9	84	76	71	67	83	75	70	67	74	70	67	73	70	67	73	69	67	65
10	81	73	68	65	80	72	68	64	71	67	64	71	67	64	70	67	64	63

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
282 lm	608 lm	460 lm	98.1 lm	17.8 lm	8.03 lm	4.41 lm	2.78 lm	1.37 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	25.3	25.8	25.3	26.0	26.2	25.3	25.8	25.3	26.0	26.2
	3H	25.1	25.7	25.5	25.9	26.1	25.1	25.7	25.5	25.9	26.1
	4H	25.1	25.7	25.5	26.0	26.2	25.1	25.7	25.5	26.0	26.2
	6H	25.2	25.7	25.5	26.0	26.4	25.2	25.7	25.5	26.0	26.4
	8H	25.2	25.7	25.5	26.0	26.4	25.2	25.7	25.5	26.0	26.4
	12H	25.2	25.7	25.6	26.1	26.5	25.2	25.7	25.6	26.1	26.5
4H	2H	25.0	25.6	25.3	25.8	26.0	25.0	25.6	25.3	25.8	26.0
	3H	25.0	25.5	25.4	25.9	26.3	25.0	25.5	25.4	25.9	26.3
	4H	25.1	25.5	25.5	25.9	26.5	25.1	25.5	25.5	25.9	26.5
	6H	25.2	25.7	25.6	26.0	26.3	25.2	25.7	25.6	26.0	26.3
	8H	25.2	25.6	25.7	26.0	26.3	25.2	25.6	25.7	26.0	26.3
	12H	25.2	25.6	25.7	26.0	26.4	25.2	25.6	25.7	26.0	26.4
8H	4H	25.0	25.5	25.5	25.8	26.2	25.0	25.5	25.5	25.8	26.2
	6H	25.2	25.5	25.7	25.9	26.5	25.2	25.5	25.7	25.9	26.5
	8H	25.3	25.5	25.8	26.0	26.7	25.3	25.5	25.8	26.0	26.7
	12H	25.4	25.6	26.0	26.1	26.7	25.4	25.6	26.0	26.1	26.7
12H	4H	25.0	25.3	25.5	25.7	26.2	25.0	25.3	25.5	25.7	26.2
	6H	25.2	25.4	25.7	26.0	26.6	25.2	25.4	25.7	26.0	26.6
	8H	25.3	25.5	25.9	26.0	26.6	25.3	25.5	25.9	26.0	26.6
Corrected glare indices referring to 1482 lm total luminous flux											