

Light efficiency:

67 Lumen/Watt

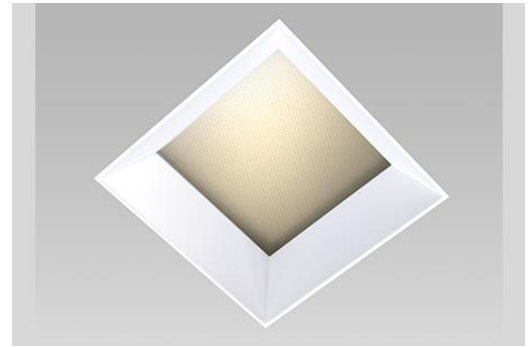
Output: 2008 lm

Light quality:

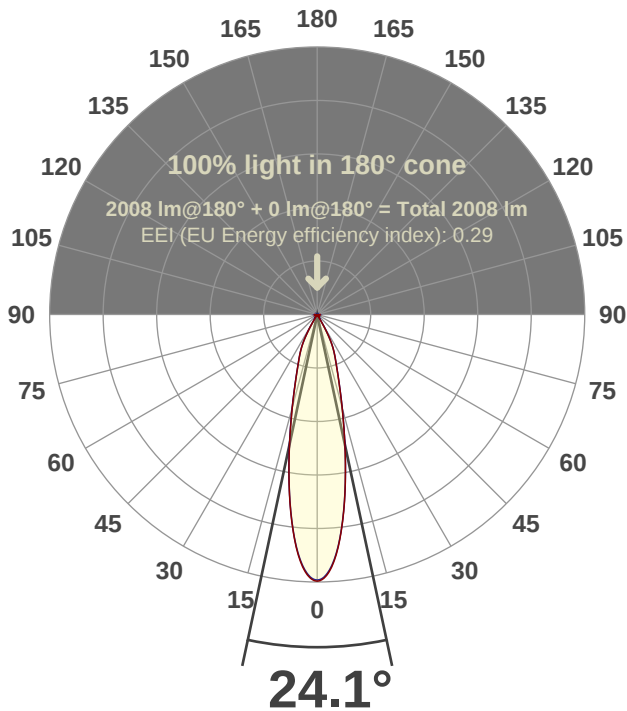
CRI: 92.4

Peak: 7669 cd

Power: 30.1 W



Beam angle



Test number:

CR4D-S-OR-C28-30k-24 (1017-CZ20-NF)

Luminaire Model:

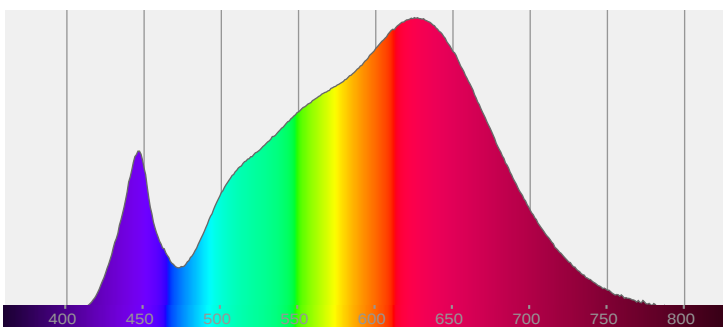
Core 4" Square Open Regress C28 30K 24°

Date and time:

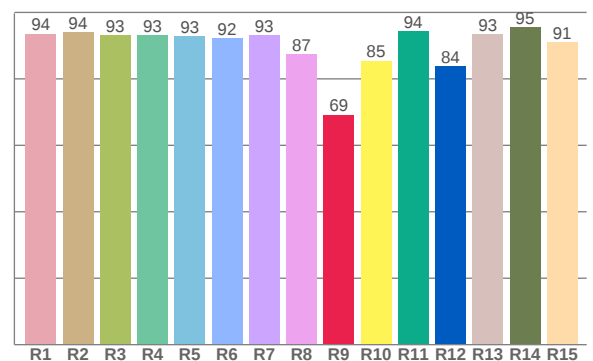
3/31/2017 12:52:28 PM

LUM: 2008

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	69.2	90.3	103.1	90.2	0.429	0.400	0.248	0.346	-0.0007

R_f 90.3

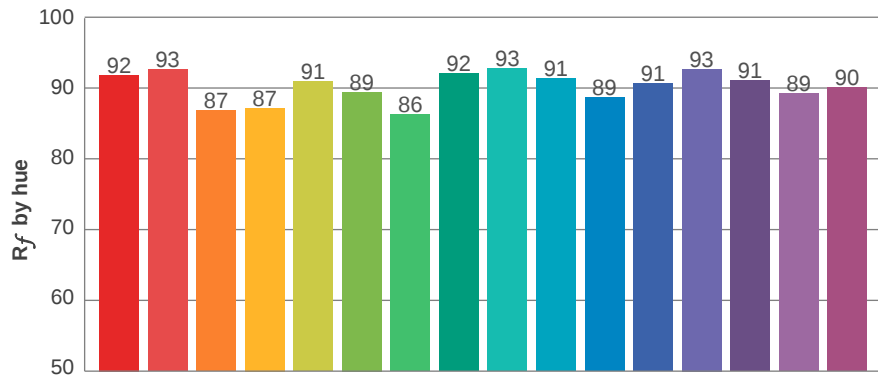
Fidelity index R_f

R_g 103.1

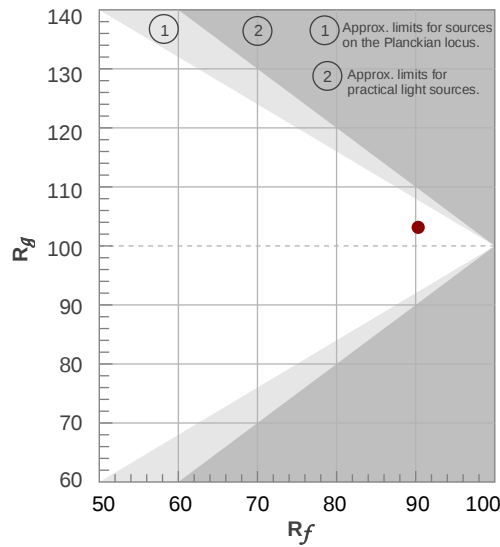
Gammut index R_g

TM30: 90.3

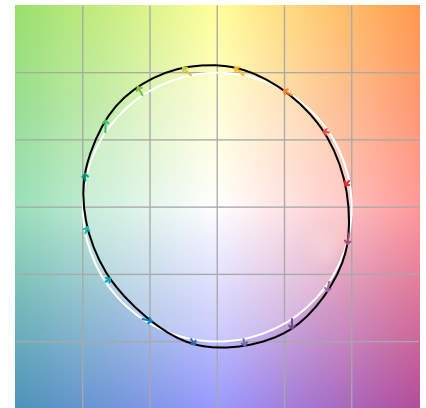
TM-30Color



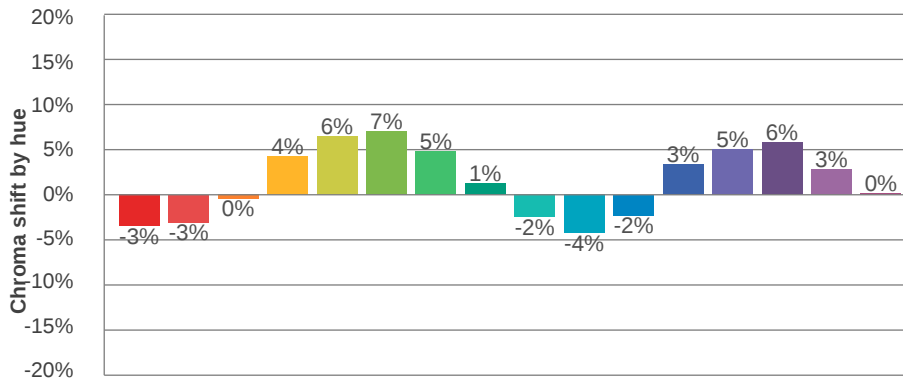
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	92	-3%	-3%
2	93	-3%	3%
3	87	0%	7%
4	87	4%	7%
5	91	6%	5%
6	89	7%	-1%
7	86	5%	-7%
8	92	1%	-5%
9	93	-2%	-4%
10	91	-4%	0%
11	89	-2%	7%
12	91	3%	4%
13	93	5%	0%
14	91	6%	-4%
15	89	3%	-6%
16	90	0%	-8%



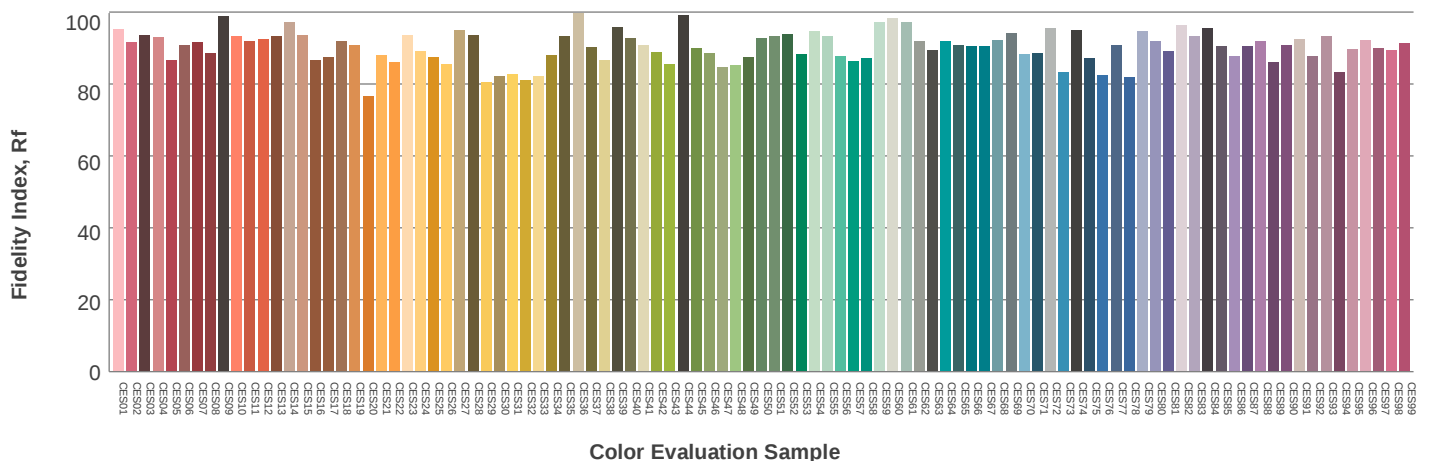
Color vector graphics



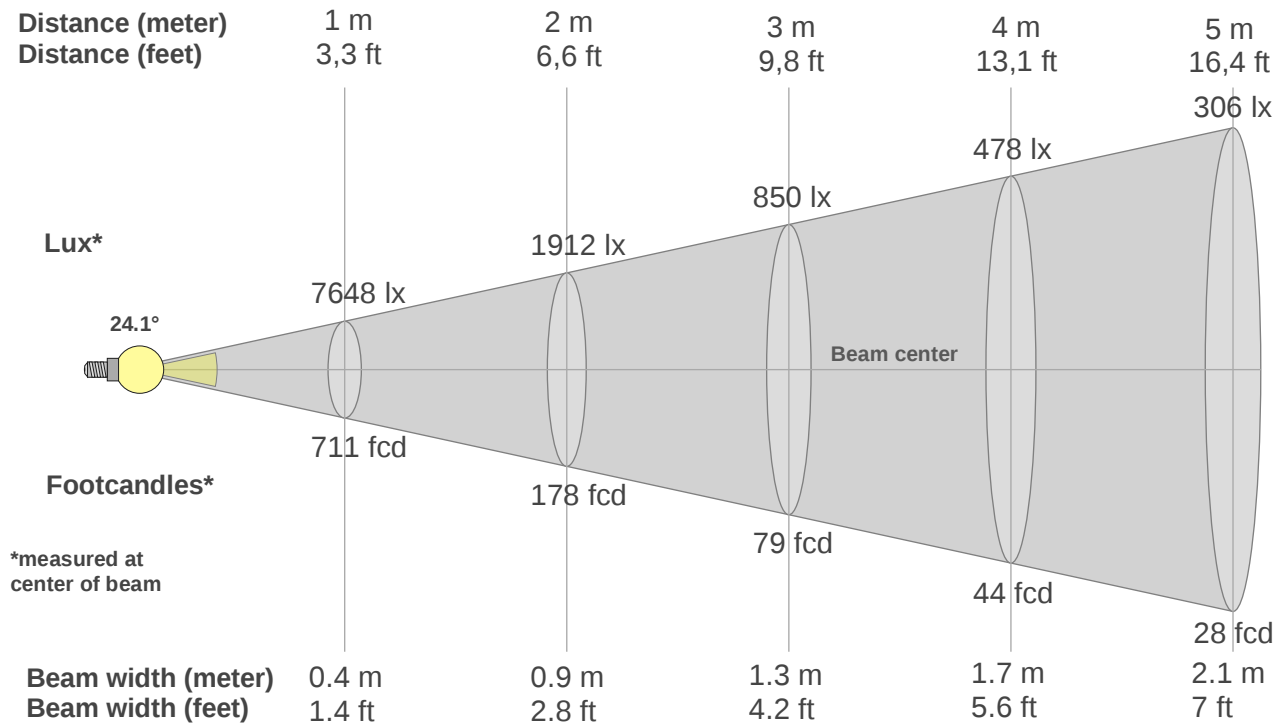
Color distortion



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
7648lx	1912lx	850lx	478lx	306lx	212lx	156lx	120lx	94lx	76lx	63lx	53lx	45lx	39lx	34lx	30lx	26lx	24lx	21lx	19lx
710.5fcd	177.6fcd	78.9fcd	44.4fcd	28.4fcd	19.7fcd	14.5fcd	11.1fcd	8.8fcd	7.1fcd	5.9fcd	4.9fcd	4.2fcd	3.6fcd	3.2fcd	2.8fcd	2.5fcd	2.2fcd	2fcd	1.8fcd

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°
7648	7520	7089	6403	5577	4687	3847	3101	2499	2029	1680	1425	1221	1006	736	411	144	61	46	37
100%	98%	93%	84%	73%	61%	50%	41%	33%	27%	22%	19%	16%	13%	10%	5%	2%	1%	1%	0%

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°
7648	7486	7058	6386	5561	4685	3856	3113	2508	2032	1678	1417	1206	995	723	412	158	63	47	37
100%	98%	92%	84%	73%	61%	50%	41%	33%	27%	22%	19%	16%	13%	9%	5%	2%	1%	1%	0%

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°
7648	7520	7089	6403	5577	4687	3847	3101	2499	2029	1680	1425	1221	1006	736	411	144	61	46	37
100%	98%	93%	84%	73%	61%	50%	41%	33%	27%	22%	19%	16%	13%	10%	5%	2%	1%	1%	0%

Intensities in 270° c-plane

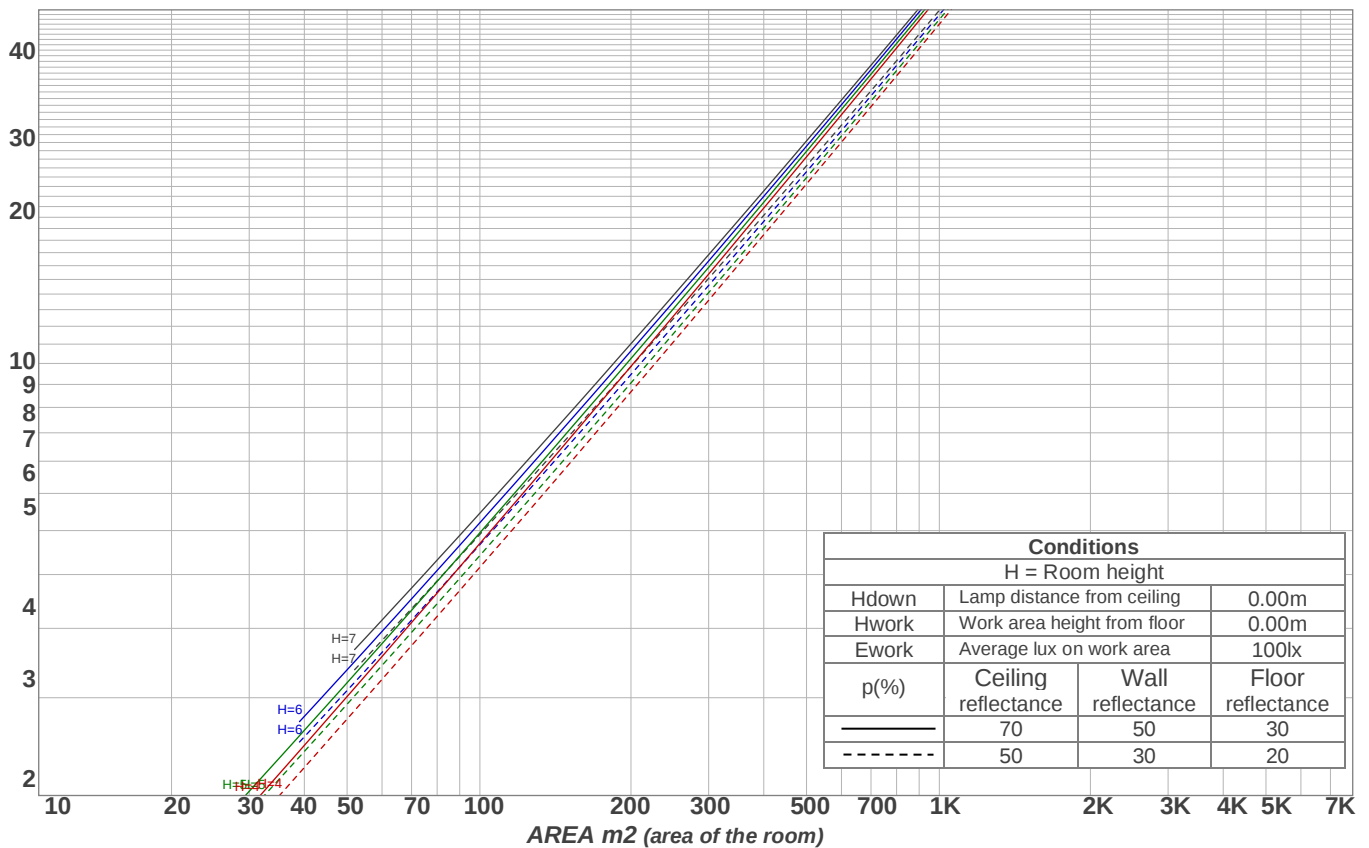
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
7648	7486	7058	6386	5561	4685	3856	3113	2508	2032	1678	1417	1206	995	723	412	158	63	47	37
100%	98%	92%	84%	73%	61%	50%	41%	33%	27%	22%	19%	16%	13%	9%	5%	2%	1%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
24.1°	56.9°	67.1°	99.4%	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	112	110	108	112	110	108	107	106	105	103	103	101	100	99	98	97	96
2	110	106	103	100	108	105	102	99	102	99	97	99	97	95	96	95	93	92
3	106	101	97	94	105	100	96	94	97	95	92	95	93	91	93	91	89	88
4	103	97	92	89	101	96	92	89	94	90	88	92	89	87	90	88	86	84
5	99	93	88	85	98	92	88	84	90	87	84	89	85	83	87	85	82	81
6	96	89	84	81	95	88	84	81	87	83	80	86	82	80	84	82	79	78
7	93	86	81	78	92	85	81	78	84	80	77	83	79	77	82	79	76	75
8	90	82	78	75	89	82	78	75	81	77	74	80	77	74	79	76	74	73
9	87	80	75	72	86	79	75	72	78	74	72	78	74	71	77	74	71	70
10	84	77	72	70	83	77	72	69	76	72	69	75	72	69	75	71	69	68

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
576 lm	781 lm	499 lm	113 lm	16.8 lm	9.08 lm	7.28 lm	3.93 lm	1.62 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	23.8	24.2	23.8	24.4	24.6	24.1	24.5	24.1	24.7	24.9
	3H	23.7	24.3	24.1	24.5	24.7	24.1	24.8	24.5	25.0	25.1
	4H	23.8	24.4	24.2	24.6	24.8	24.3	24.9	24.7	25.1	25.3
	6H	23.9	24.4	24.2	24.7	25.1	24.5	25.0	24.8	25.3	25.6
	8H	23.9	24.4	24.3	24.7	25.1	24.5	25.0	24.8	25.3	25.7
	12H	23.9	24.4	24.3	24.7	25.2	24.5	25.0	24.9	25.4	25.8
4H	2H	23.6	24.2	24.0	24.4	24.7	23.9	24.5	24.3	24.7	24.9
	3H	23.9	24.4	24.2	24.7	25.1	24.3	24.8	24.7	25.1	25.6
	4H	24.0	24.4	24.4	24.8	25.3	24.5	24.9	24.9	25.4	25.9
	6H	24.2	24.7	24.7	25.0	25.3	24.8	25.2	25.3	25.6	25.9
	8H	24.2	24.6	24.7	25.0	25.3	24.8	25.3	25.3	25.6	25.9
	12H	24.2	24.5	24.7	24.9	25.4	24.9	25.2	25.4	25.6	26.1
8H	4H	24.0	24.5	24.6	24.8	25.2	24.5	25.0	25.0	25.3	25.7
	6H	24.3	24.6	24.8	25.1	25.6	24.9	25.2	25.4	25.6	26.2
	8H	24.4	24.7	25.0	25.2	25.8	25.0	25.3	25.6	25.8	26.4
	12H	24.5	24.7	25.1	25.2	25.8	25.1	25.3	25.7	25.8	26.4
12H	4H	24.0	24.3	24.5	24.7	25.2	24.5	24.8	25.0	25.2	25.7
	6H	24.4	24.6	24.9	25.1	25.7	24.9	25.1	25.4	25.7	26.3
	8H	24.5	24.6	25.0	25.1	25.7	25.0	25.2	25.6	25.7	26.3
Corrected glare indices referring to 2008 lm total luminous flux											