

Light efficiency:

69 Lumen/Watt

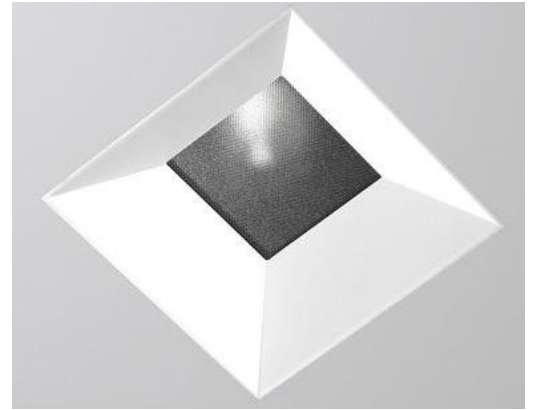
Output: 1037 lm

Light quality:

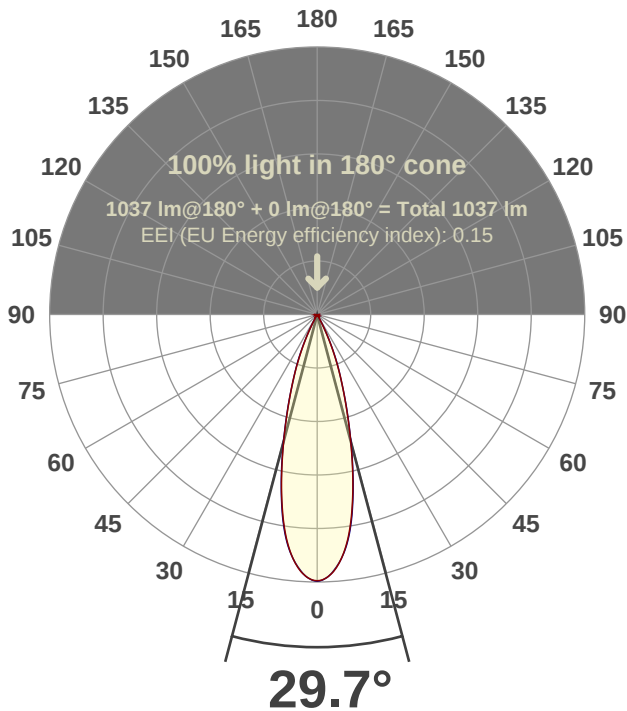
CRI: 92.4

Peak: 3429 cd

Power: 15.0 W



Beam angle



Test number:

CR4D-S-DR-C14-30k-40 (1009-CZ20-FL)

Luminaire Model:

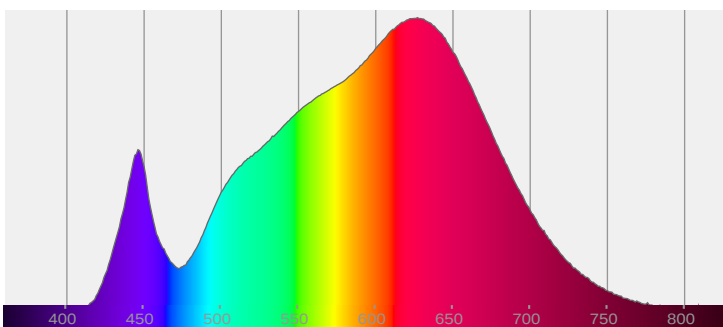
Core 4" Square Deep Regress C14 30K 40°

Date and time:

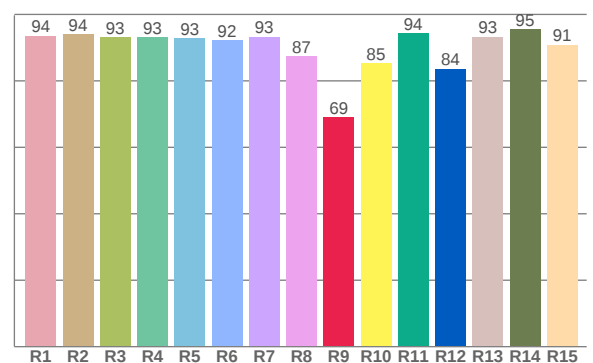
3/8/2017 2:25:35 PM

LUM: 1037

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	69.0	90.3	103.1	90.2	0.429	0.400	0.247	0.346	-0.0006

R_f 90.3

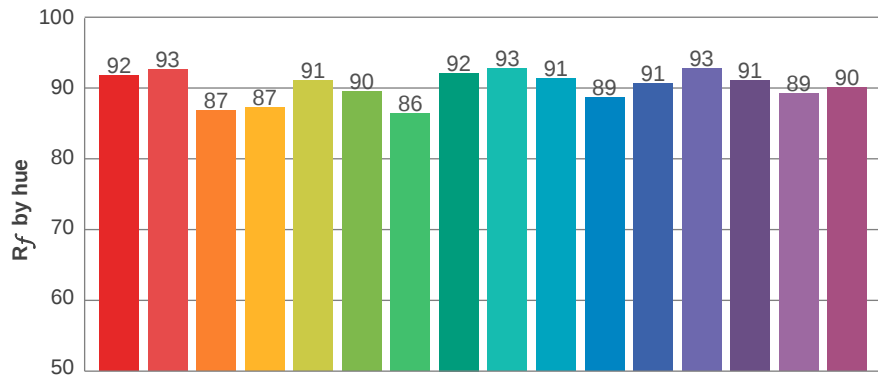
Fidelity index R_f

R_g 103.1

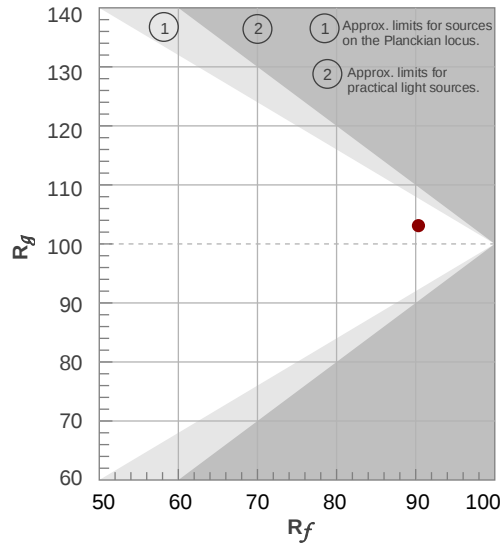
Gammut index R_g

TM30: 90.3

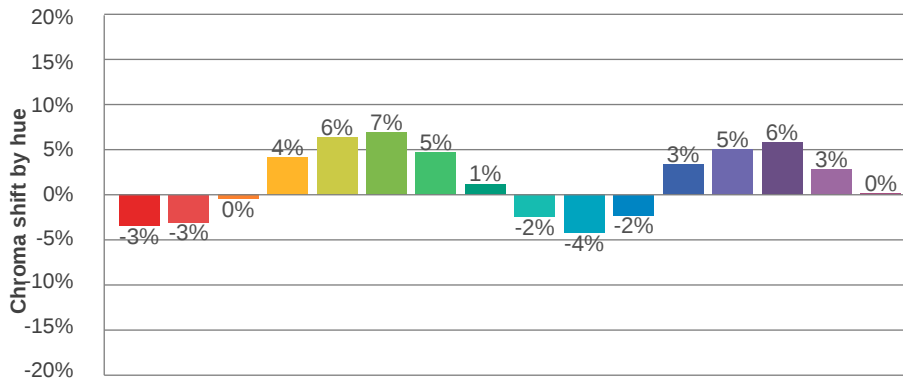
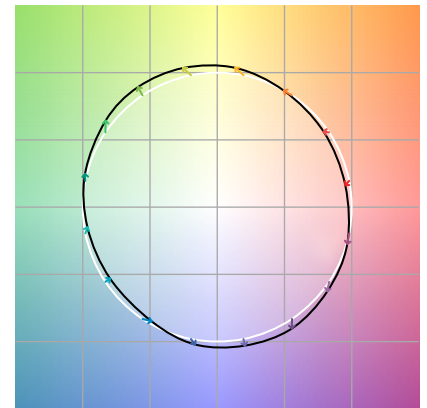
TM-30Color



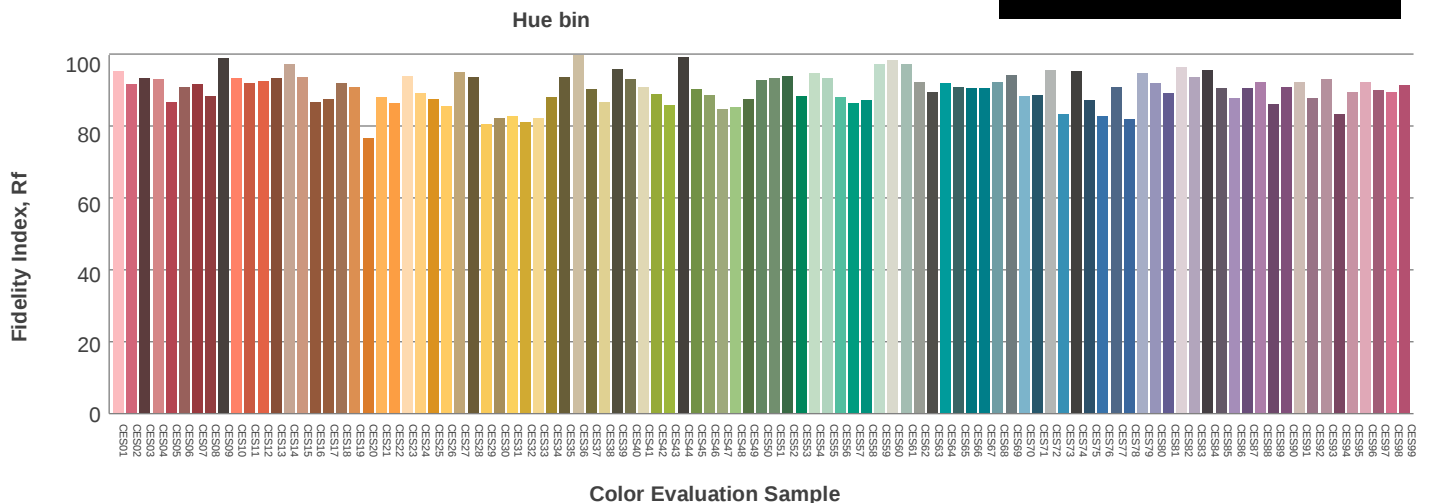
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	92	-3%	-3%
2	93	-3%	3%
3	87	0%	7%
4	87	4%	7%
5	91	6%	5%
6	90	7%	-1%
7	86	5%	-7%
8	92	1%	-5%
9	93	-2%	-4%
10	91	-4%	0%
11	89	-2%	7%
12	91	3%	4%
13	93	5%	0%
14	91	6%	-4%
15	89	3%	-6%
16	90	0%	-8%



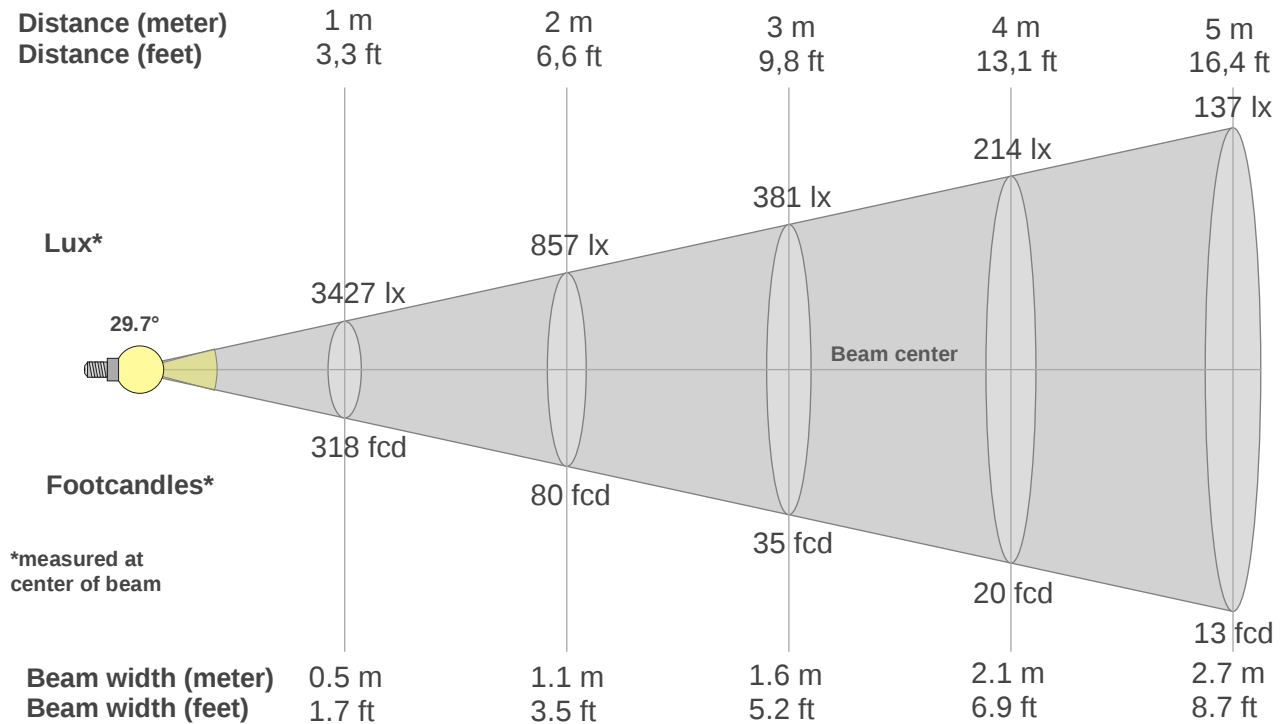
Color vector graphics



Color distortion



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
3427lx	857lx	381lx	214lx	137lx	95lx	70lx	54lx	42lx	34lx	28lx	24lx	20lx	17lx	15lx	13lx	12lx	11lx	9lx	9lx
318.4fc	79.6fcd	35.4fcd	19.9fcd	12.7fcd	8.8fcd	6.5fcd	5fcd	3.9fcd	3.2fcd	2.6fcd	2.2fcd	1.9fcd	1.6fcd	1.4fcd	1.2fcd	1.1fcd	1fcd	0.9fcd	0.8fcd

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°
3427	3390	3289	3122	2885	2572	2213	1841	1489	1179	924	694	485	300	151	68	40	31	26	22
100%	99%	96%	91%	84%	75%	65%	54%	43%	34%	27%	20%	14%	9%	4%	2%	1%	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°
3427	3388	3281	3122	2900	2593	2230	1853	1499	1187	911	704	497	306	149	59	40	31	26	22
100%	99%	96%	91%	85%	76%	65%	54%	44%	35%	27%	21%	14%	9%	4%	2%	1%	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°
3427	3390	3289	3122	2885	2572	2213	1841	1489	1179	924	694	485	300	151	68	40	31	26	22
100%	99%	96%	91%	84%	75%	65%	54%	43%	34%	27%	20%	14%	9%	4%	2%	1%	1%	1%	1%

Intensities in 270° c-plane

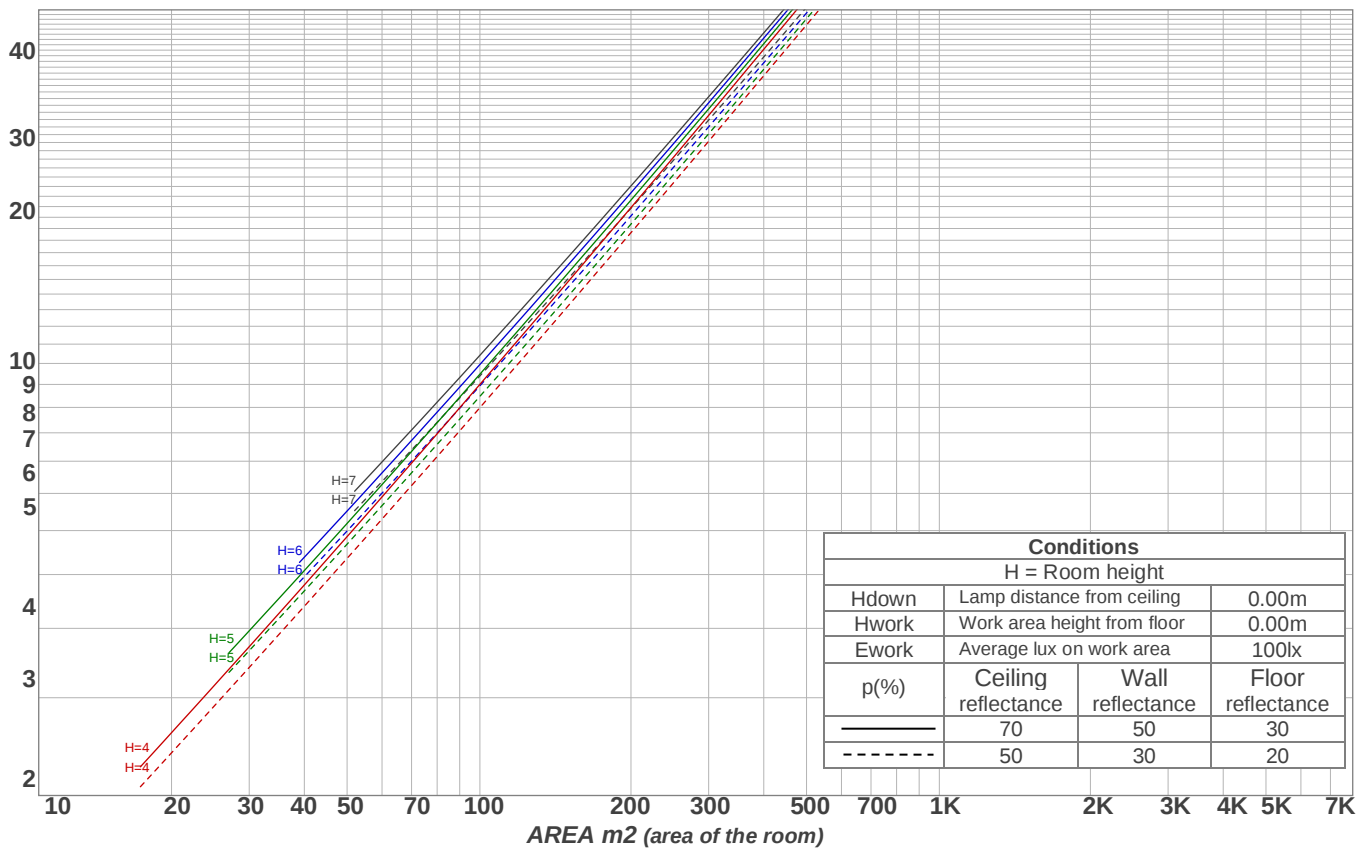
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
3427	3388	3281	3122	2900	2593	2230	1853	1499	1187	911	704	497	306	149	59	40	31	26	22
100%	99%	96%	91%	85%	76%	65%	54%	44%	35%	27%	21%	14%	9%	4%	2%	1%	1%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
29.7°	55.2°	64.4°	99.7%	99.1%

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	109	112	110	109	107	106	105	104	103	102	101	99	98	98	96
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	96	95	94	92
3	107	102	98	95	105	101	97	94	98	95	93	96	93	91	94	92	90	89
4	103	97	93	90	102	96	92	89	94	91	88	92	90	87	91	88	86	85
5	100	93	89	86	98	93	88	85	91	87	85	89	86	84	88	85	83	82
6	96	90	85	82	95	89	85	82	88	84	81	86	83	81	85	82	80	79
7	93	86	82	79	92	86	82	79	85	81	78	84	80	78	83	80	77	76
8	90	83	79	76	89	83	79	76	82	78	75	81	78	75	80	77	75	74
9	88	81	76	73	87	80	76	73	79	75	73	79	75	73	78	75	72	71
10	85	78	74	71	84	78	73	71	77	73	70	76	73	70	76	72	70	69

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
287 lm	462 lm	228 lm	45.3 lm	8.20 lm	3.44 lm	1.41 lm	0.734 lm	0.628 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	19.2	19.6	19.2	19.8	20.0	19.1	19.5	19.2	19.7	19.9
	3H	18.9	19.5	19.3	19.7	19.9	18.9	19.5	19.2	19.7	19.8
	4H	18.9	19.5	19.3	19.7	19.9	18.8	19.4	19.2	19.6	19.9
	6H	18.9	19.4	19.2	19.7	20.0	18.9	19.4	19.2	19.7	20.0
	8H	18.9	19.4	19.3	19.7	20.1	18.9	19.4	19.2	19.7	20.1
	12H	19.0	19.4	19.3	19.8	20.2	19.0	19.4	19.3	19.8	20.2
4H	2H	18.8	19.4	19.2	19.6	19.9	18.8	19.4	19.2	19.6	19.8
	3H	18.8	19.3	19.2	19.6	20.1	18.8	19.2	19.1	19.6	20.0
	4H	18.8	19.2	19.2	19.6	20.1	18.7	19.1	19.1	19.6	20.1
	6H	18.8	19.3	19.3	19.6	19.9	18.8	19.3	19.3	19.6	19.9
	8H	18.8	19.3	19.3	19.6	20.0	18.8	19.3	19.3	19.6	20.0
	12H	18.9	19.2	19.4	19.6	20.1	18.9	19.2	19.4	19.7	20.1
8H	4H	18.7	19.1	19.2	19.4	19.8	18.6	19.1	19.2	19.4	19.8
	6H	18.8	19.0	19.3	19.5	20.0	18.8	19.0	19.3	19.5	20.0
	8H	18.9	19.1	19.4	19.7	20.3	18.9	19.1	19.5	19.7	20.3
	12H	19.1	19.3	19.7	19.8	20.4	19.1	19.3	19.7	19.8	20.4
12H	4H	18.6	18.9	19.1	19.3	19.8	18.6	18.9	19.1	19.3	19.8
	6H	18.8	19.0	19.3	19.5	20.1	18.8	19.0	19.3	19.5	20.1
	8H	18.9	19.1	19.5	19.6	20.2	18.9	19.1	19.5	19.6	20.2
Corrected glare indices referring to 1037 lm total luminous flux											