

Light efficiency:

47 Lumen/Watt

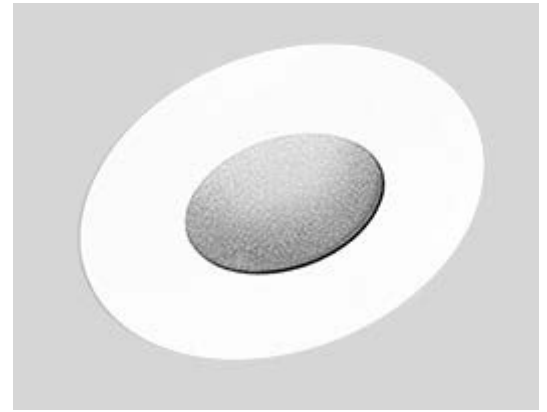
Output: 702 lm

Light quality:

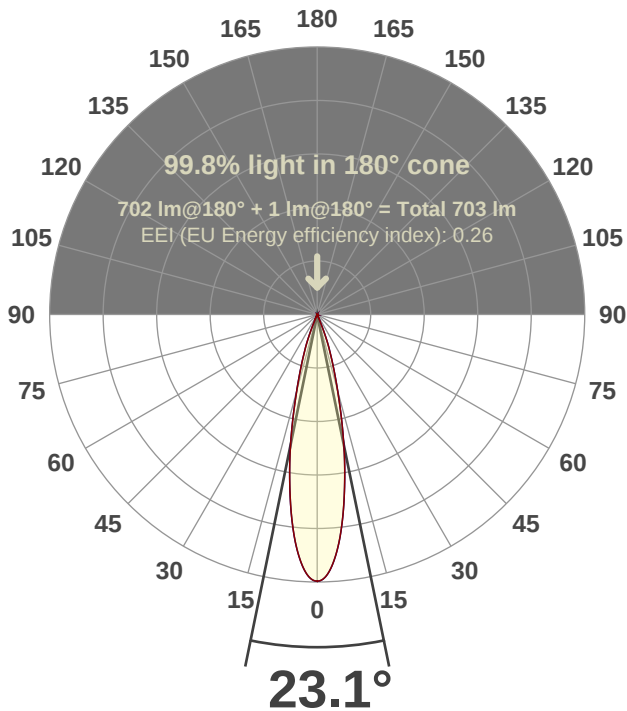
CRI: 96.6

Peak: 4077 cd

Power: 14.9 W



Beam angle



Test number:

CR4D-R-FL-A14-30k-24 (GRF-AD-NF-RD)

Luminaire Model:

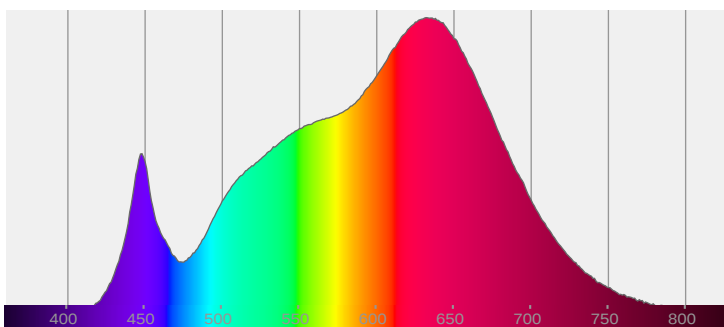
Core 4" Round Flat A14 30K 24°

Date and time:

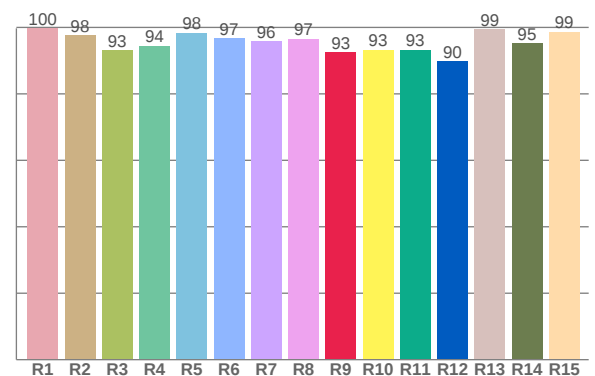
8/10/2017 12:57:57 PM

LUM: 702

Spectra



CRI: 96.6 (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
	96.6	92.6	93.4	104.5	93.3	0.431	0.397	0.250	0.345	-0.0020

R_f 93.4

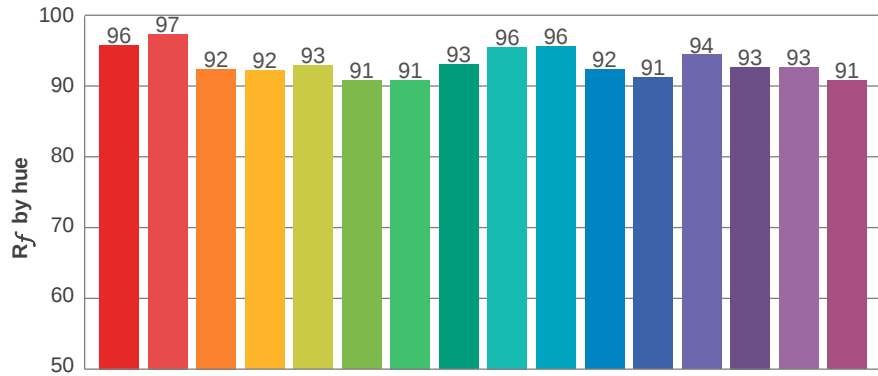
Fidelity index R_f

R_g 104.5

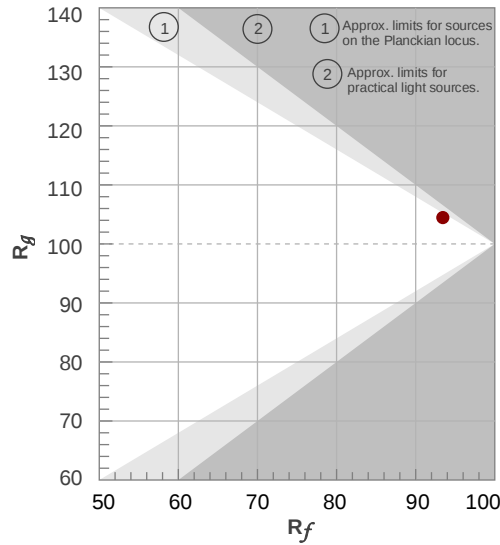
Gammut index R_g

TM30: 93.4

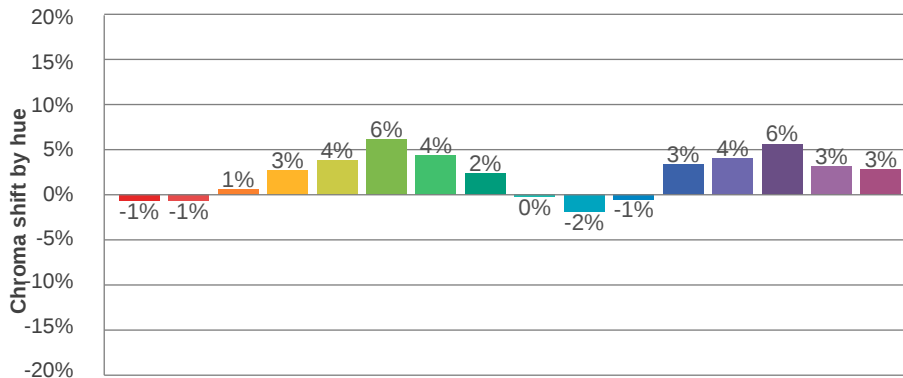
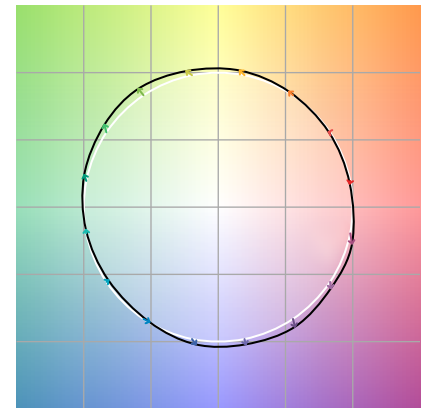
TM-30Color



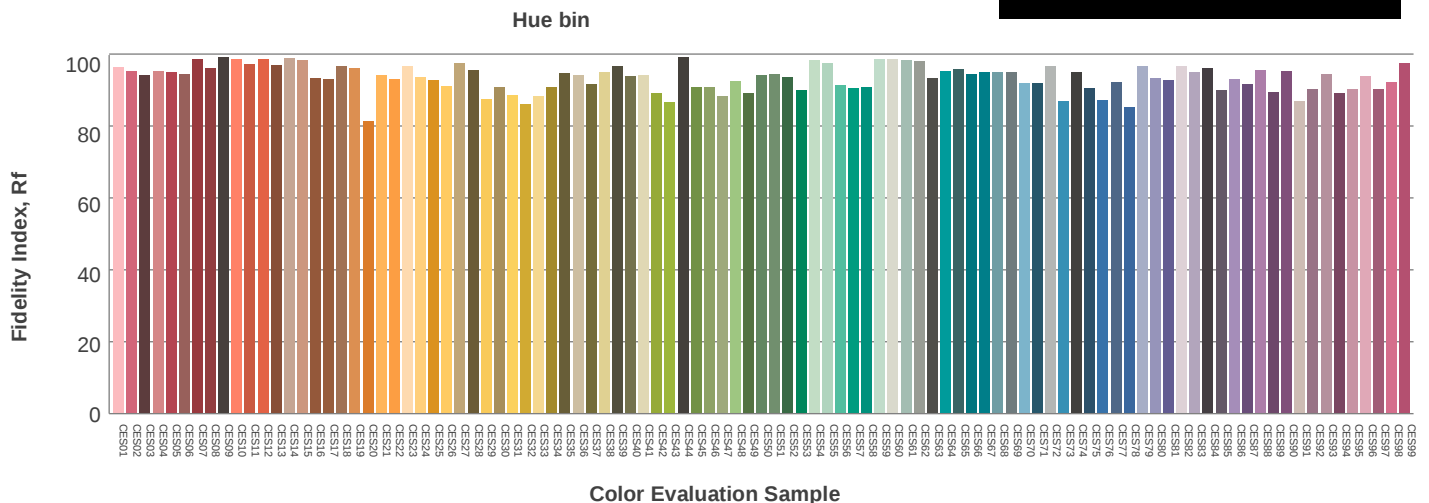
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	96	-1%	-2%
2	97	-1%	1%
3	92	1%	4%
4	92	3%	4%
5	93	4%	4%
6	91	6%	1%
7	91	4%	-4%
8	93	2%	-4%
9	96	0%	-3%
10	96	-2%	0%
11	92	-1%	5%
12	91	3%	3%
13	94	4%	0%
14	93	6%	-2%
15	93	3%	-4%
16	91	3%	-7%



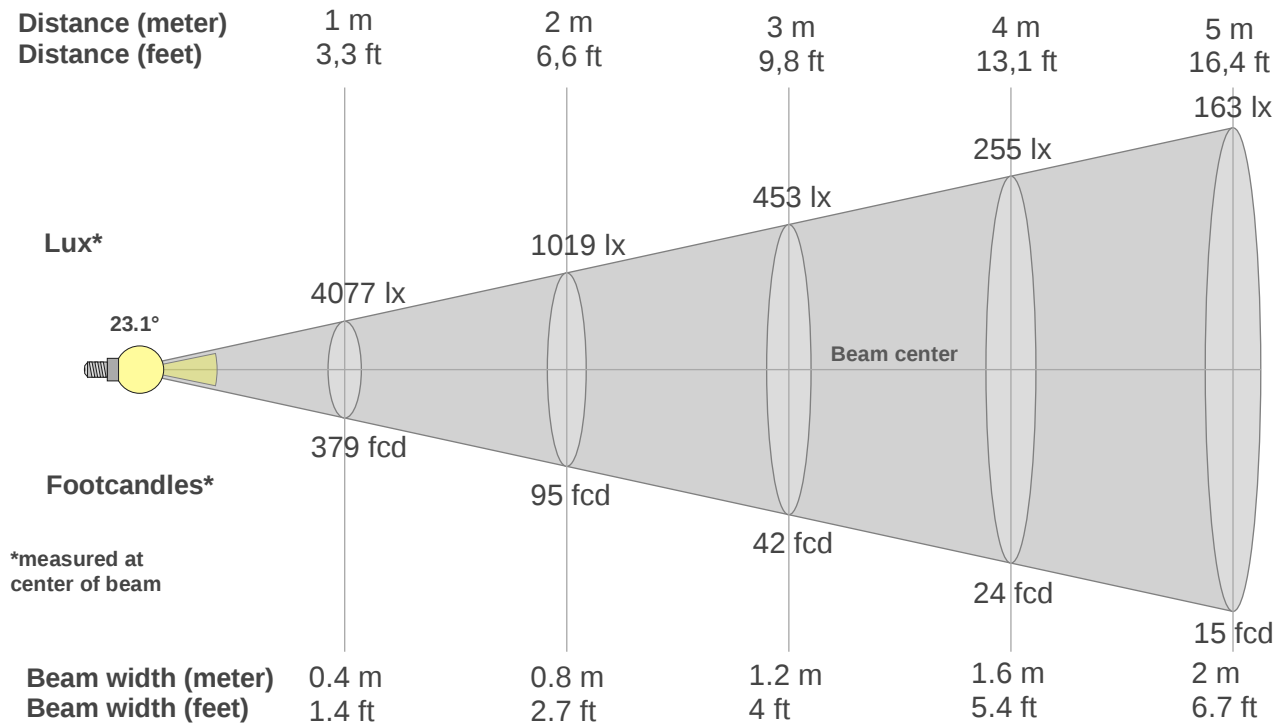
Color vector graphics



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
4077lx	1019lx	453lx	255lx	163lx	113lx	83lx	64lx	50lx	41lx	34lx	28lx	24lx	21lx	18lx	16lx	14lx	13lx	11lx	10lx
378.7fc	94.7fcd	42.1fcd	23.7fcd	15.1fcd	10.5fcd	7.7fcd	5.9fcd	4.7fcd	3.8fcd	3.1fcd	2.6fcd	2.2fcd	1.9fcd	1.7fcd	1.5fcd	1.3fcd	1.2fcd	1fcd	0.9fcd

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°
4077	3998	3757	3391	2929	2431	1926	1439	1037	731	497	256	68	7	5	5	6	6	6	5
100%	98%	92%	83%	72%	60%	47%	35%	25%	18%	12%	6%	2%	0%	0%	0%	0%	0%	0%	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°
4077	3998	3757	3391	2929	2431	1926	1439	1037	731	497	256	68	7	5	5	6	6	6	5
100%	98%	92%	83%	72%	60%	47%	35%	25%	18%	12%	6%	2%	0%	0%	0%	0%	0%	0%	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°
4077	3998	3757	3391	2929	2431	1926	1439	1037	731	497	256	68	7	5	5	6	6	6	5
100%	98%	92%	83%	72%	60%	47%	35%	25%	18%	12%	6%	2%	0%	0%	0%	0%	0%	0%	0%

Intensities in 270° c-plane

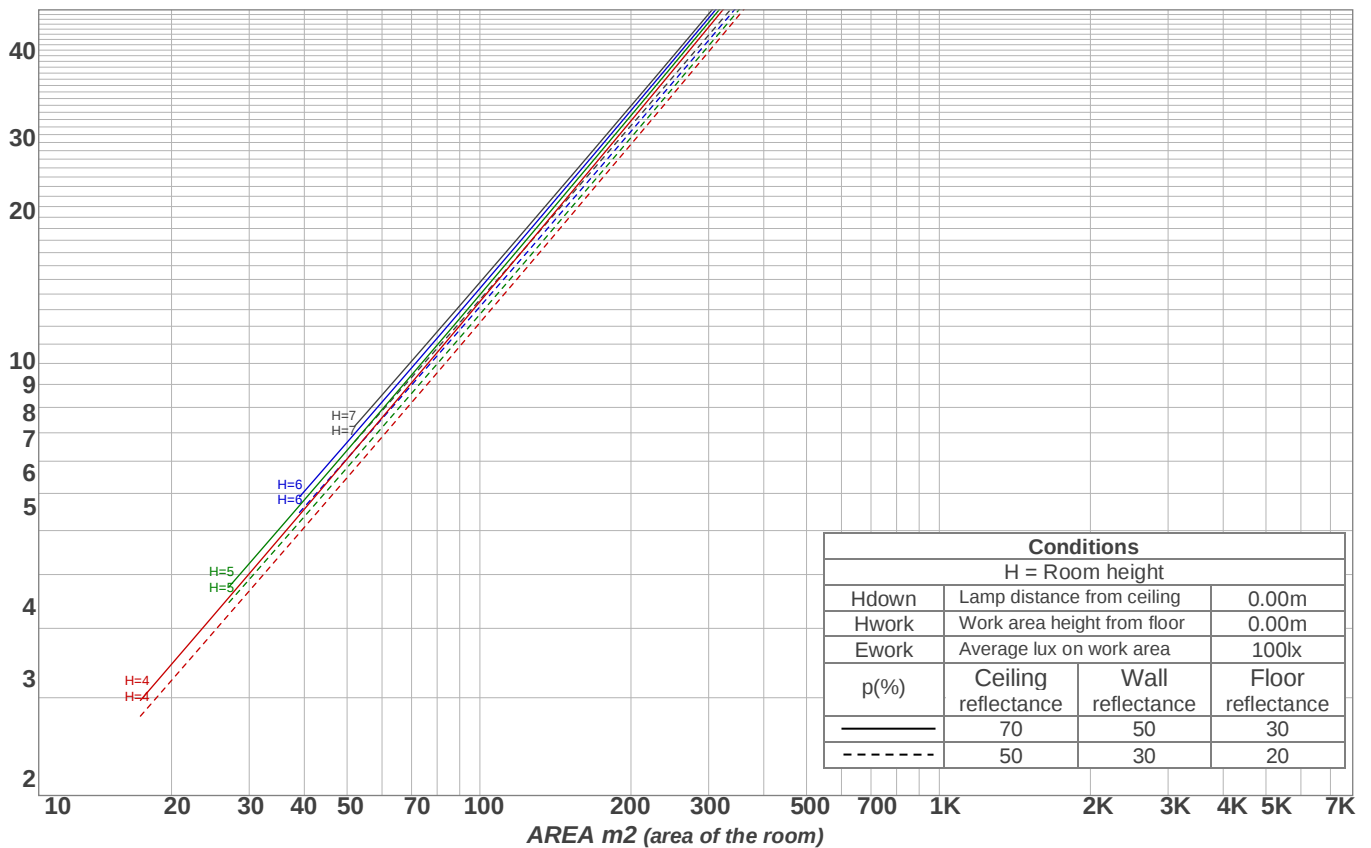
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
4077	3998	3757	3391	2929	2431	1926	1439	1037	731	497	256	68	7	5	5	6	6	6	5
100%	98%	92%	83%	72%	60%	47%	35%	25%	18%	12%	6%	2%	0%	0%	0%	0%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
23.1°	41.5°	47.1°	99.3%	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	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97
2	112	109	106	104	110	107	105	102	104	102	100	101	100	98	98	97	96	95
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92
4	106	101	98	95	105	100	97	94	98	96	93	96	94	92	95	93	91	90
5	103	98	95	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88
6	101	95	92	89	100	95	91	89	94	91	88	92	90	88	91	89	87	86
7	99	93	89	87	98	92	89	87	91	88	86	90	88	86	90	87	85	84
8	97	91	87	85	96	90	87	84	89	86	84	89	86	84	88	85	84	83
9	94	89	85	83	94	88	85	83	88	84	82	87	84	82	86	84	82	81
10	93	87	83	81	92	86	83	81	86	83	81	85	82	80	85	82	80	79

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
304 lm	342 lm	45.9 lm	3.15 lm	1.13 lm	1.29 lm	1.38 lm	1.20 lm	1.09 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	9.1	9.4	9.1	9.6	9.8	9.1	9.4	9.1	9.6	9.8
	3H	11.1	11.6	11.5	11.8	12.0	11.1	11.6	11.5	11.8	12.0
	4H	12.5	13.0	12.8	13.2	13.4	12.5	13.0	12.8	13.2	13.4
	6H	14.1	14.5	14.4	14.8	15.2	14.1	14.5	14.4	14.8	15.2
	8H	15.3	15.7	15.6	16.0	16.4	15.3	15.7	15.6	16.0	16.4
	12H	16.6	16.9	16.9	17.3	17.7	16.6	16.9	16.9	17.3	17.7
4H	2H	9.8	10.3	10.2	10.5	10.7	9.8	10.3	10.2	10.5	10.7
	3H	12.3	12.7	12.7	13.1	13.5	12.3	12.7	12.7	13.1	13.5
	4H	13.8	14.1	14.2	14.6	15.1	13.8	14.1	14.2	14.6	15.1
	6H	15.6	16.0	16.1	16.3	16.7	15.6	16.0	16.1	16.3	16.7
	8H	16.9	17.3	17.4	17.6	18.0	16.9	17.3	17.4	17.6	18.0
	12H	18.3	18.5	18.8	18.9	19.4	18.3	18.5	18.8	18.9	19.4
8H	4H	14.4	14.8	14.9	15.1	15.5	14.4	14.8	14.9	15.1	15.5
	6H	16.6	16.9	17.1	17.3	17.8	16.6	16.9	17.1	17.3	17.8
	8H	18.2	18.4	18.7	18.9	19.5	18.2	18.4	18.7	18.9	19.5
	12H	19.8	19.9	20.4	20.4	21.0	19.8	19.9	20.4	20.4	21.0
12H	4H	14.6	14.9	15.1	15.3	15.7	14.6	14.9	15.1	15.3	15.7
	6H	17.0	17.2	17.6	17.7	18.4	17.0	17.2	17.6	17.7	18.4
	8H	18.7	18.8	19.3	19.3	19.9	18.7	18.8	19.3	19.3	19.9
Corrected glare indices referring to 702 lm total luminous flux											