

Light efficiency:

36 Lumen/Watt

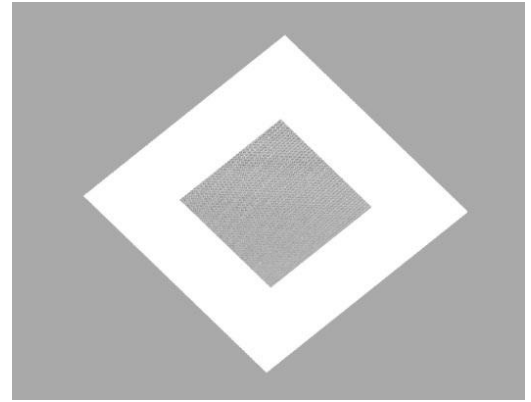
Output: 539 lm

Light quality:

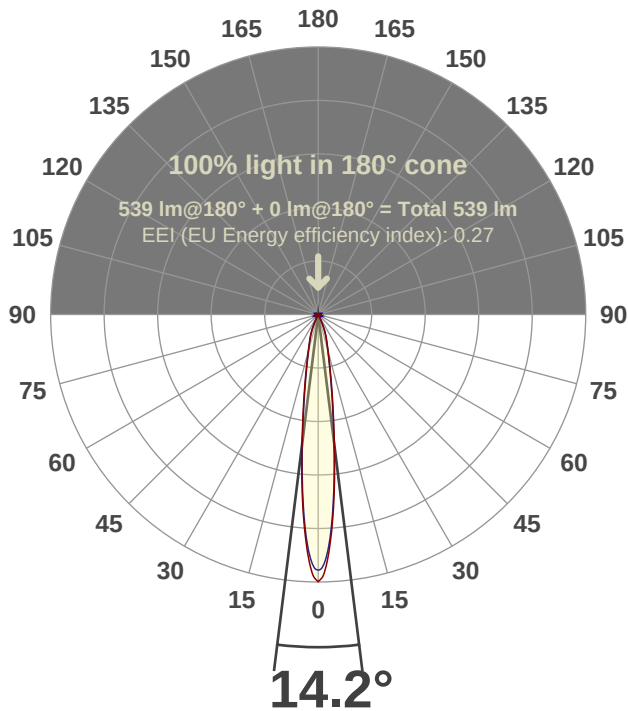
CRI: 96.0

Peak: 4828 cd

Power: 15.0 W



Beam angle



Test number:

CR4D-S-FL-A14-30k-15 (GR-AD-SP-SQ)

Luminaire Model:

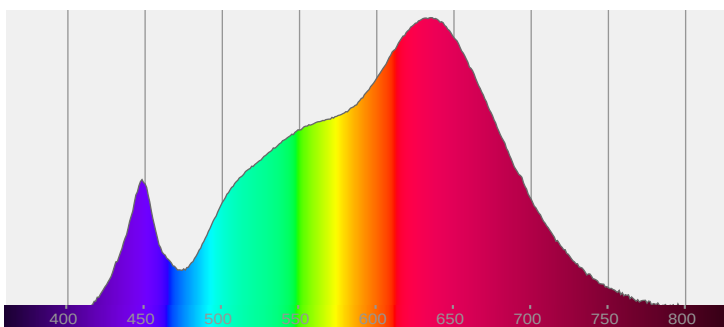
Core 4" Square Flat A14 30 to 19k 15°

Date and time:

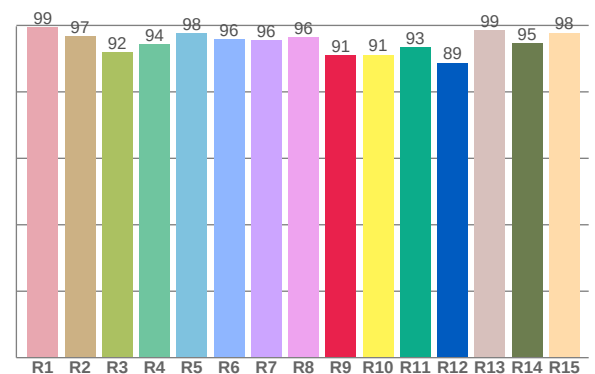
5/4/2017 4:09:58 PM

LUM: 539

Spectra



CRI: 96.0 (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
	96.0	91.1	93.4	104.0	93.3	0.437	0.404	0.251	0.348	-0.0001

R_f 93.4

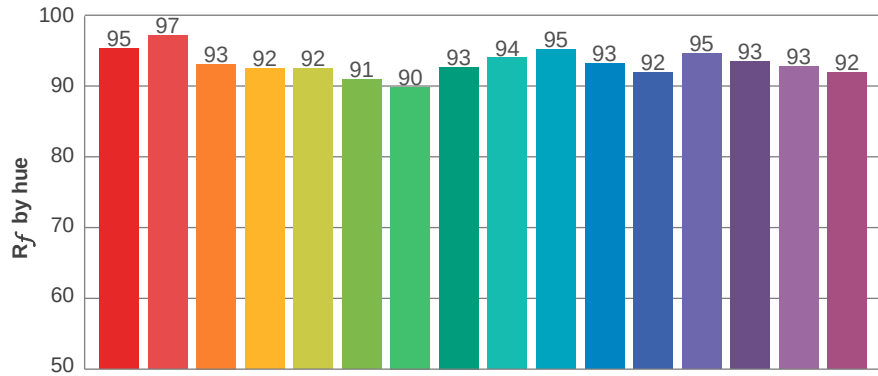
Fidelity index R_f

R_g 104.0

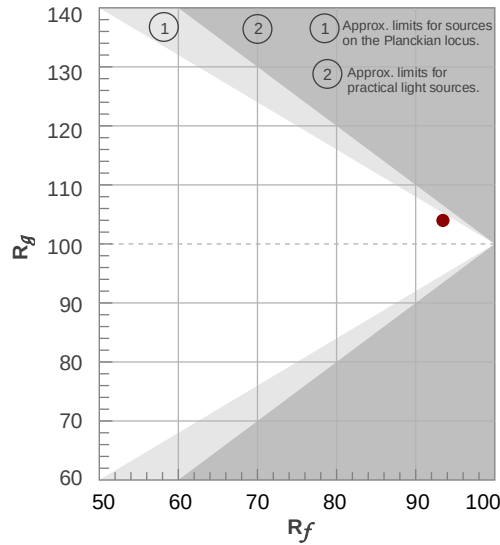
Gammut index R_g

TM30: 93.4

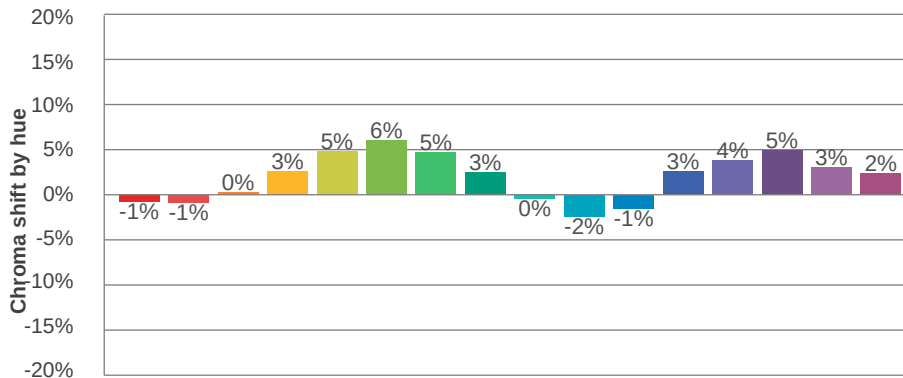
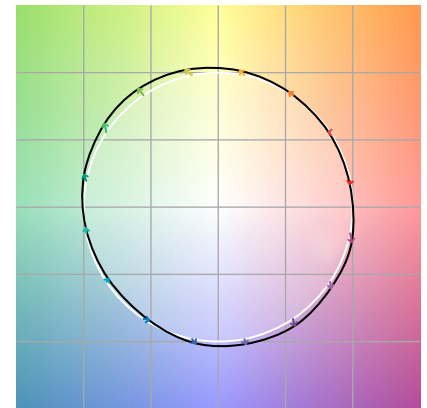
TM-30Color



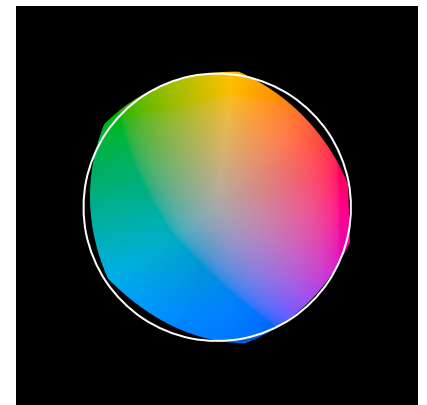
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	-2%
2	97	-1%	1%
3	93	0%	4%
4	92	3%	4%
5	92	5%	4%
6	91	6%	1%
7	90	5%	-4%
8	93	3%	-4%
9	94	0%	-4%
10	95	-2%	-1%
11	93	-1%	4%
12	92	3%	3%
13	95	4%	0%
14	93	5%	-2%
15	93	3%	-4%
16	92	2%	-6%



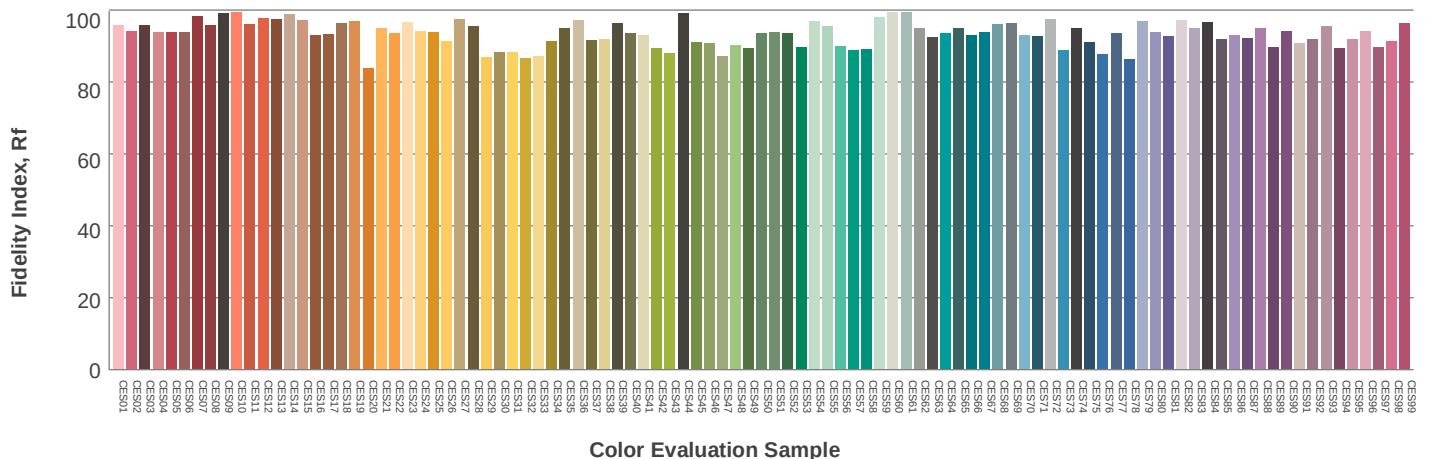
Color vector graphics



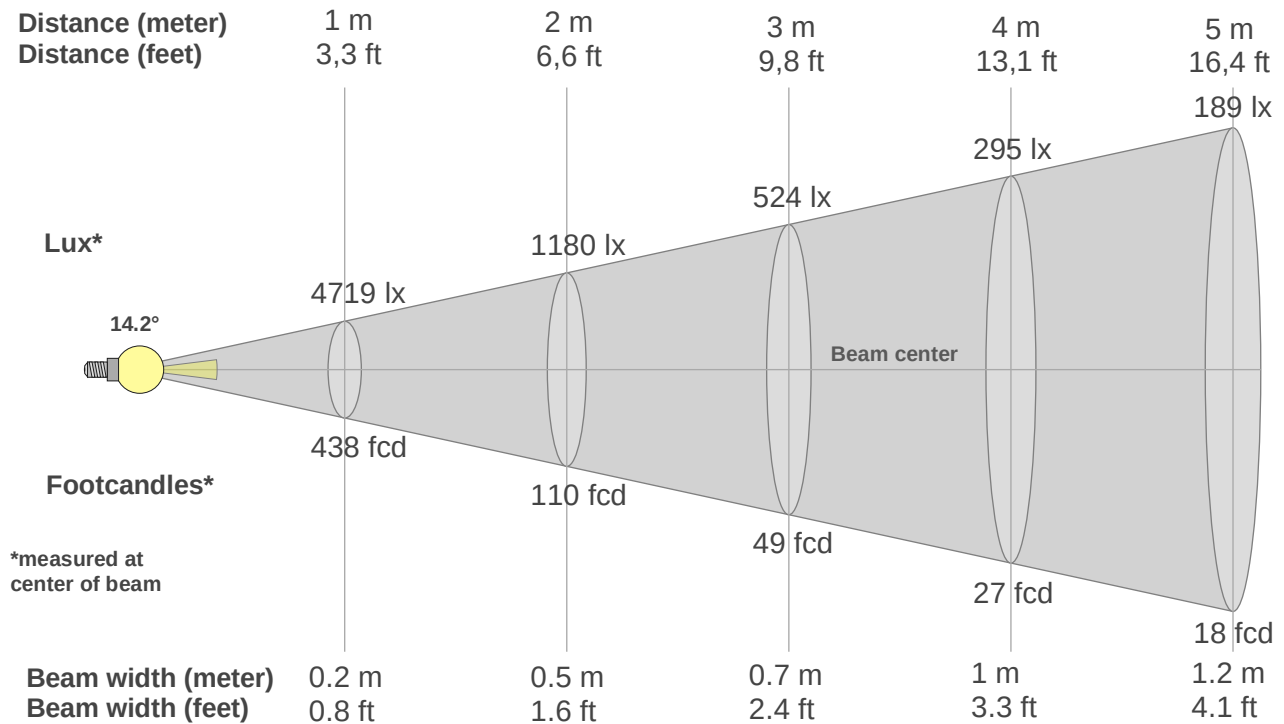
Color distortion



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
4719lx	1180lx	524lx	295lx	189lx	131lx	96lx	74lx	58lx	47lx	39lx	33lx	28lx	24lx	21lx	18lx	16lx	15lx	13lx	12lx
438.4fcd	109.6fcd	48.7fcd	27.4fcd	17.5fcd	12.2fcd	8.9fcd	6.9fcd	5.4fcd	4.4fcd	3.6fcd	3fcd	2.6fcd	2.2fcd	1.9fcd	1.7fcd	1.5fcd	1.4fcd	1.2fcd	1.1fcd

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°
4719	4739	4497	4147	3740	3303	2849	2417	2041	1729	1468	1252	1072	923	801	705	630	564	511	462
100%	100%	95%	88%	79%	70%	60%	51%	43%	37%	31%	27%	23%	20%	17%	15%	13%	12%	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°
4719	4553	4360	4054	3664	3230	2787	2364	1986	1669	1409	1196	1024	885	771	678	602	538	484	436
100%	96%	92%	86%	78%	68%	59%	50%	42%	35%	30%	25%	22%	19%	16%	14%	13%	11%	10%	9%

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°
4719	4739	4497	4147	3740	3303	2849	2417	2041	1729	1468	1252	1072	923	801	705	630	564	511	462
100%	100%	95%	88%	79%	70%	60%	51%	43%	37%	31%	27%	23%	20%	17%	15%	13%	12%	11%	10%

Intensities in 270° c-plane

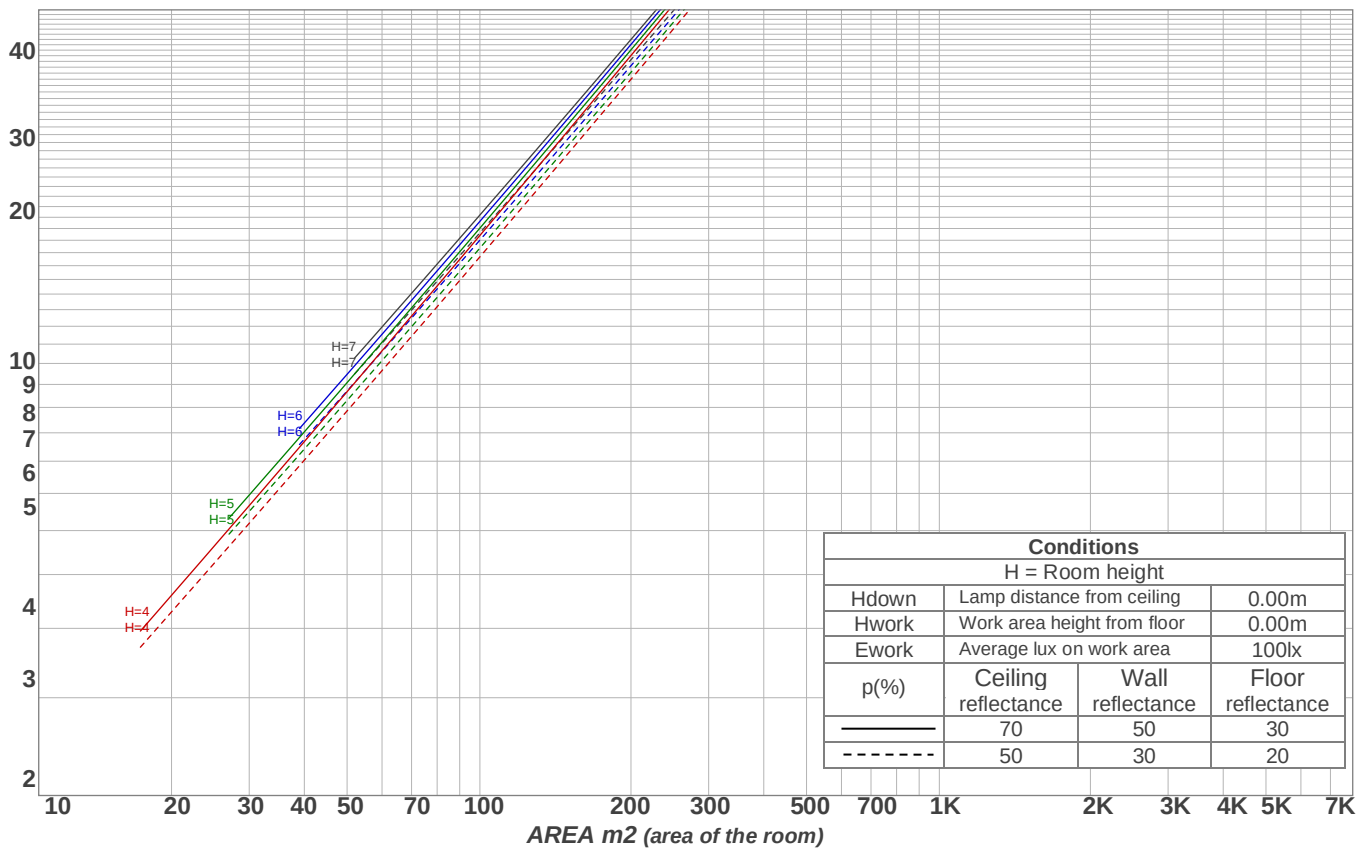
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
4719	4553	4360	4054	3664	3230	2787	2364	1986	1669	1409	1196	1024	885	771	678	602	538	484	436
100%	96%	92%	86%	78%	68%	59%	50%	42%	35%	30%	25%	22%	19%	16%	14%	13%	11%	10%	9%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
14.2°	37°	51.7°	99.2%	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	102	100	99	99	97
2	112	108	105	103	110	107	104	102	103	101	100	101	99	98	98	97	96	94
3	108	104	101	98	107	103	100	97	100	98	96	98	96	94	96	94	93	92
4	105	100	97	94	104	99	96	93	97	95	92	96	93	91	94	92	90	89
5	103	97	93	91	101	96	93	90	95	92	90	93	91	89	92	90	88	87
6	100	94	91	88	99	94	90	88	92	89	87	91	89	87	90	88	86	85
7	98	92	88	85	97	91	88	85	90	87	85	89	86	84	88	86	84	83
8	96	90	86	83	95	89	86	83	88	85	83	87	85	82	87	84	82	81
9	93	87	84	81	93	87	84	81	86	83	81	86	83	81	85	82	80	80
10	91	85	82	79	91	85	82	79	84	81	79	84	81	79	83	81	79	78

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
248 lm	202 lm	73.7 lm	6.47 lm	2.00 lm	2.35 lm	2.01 lm	1.32 lm	1.10 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	13.7	14.1	13.8	14.3	14.5	13.5	13.8	13.5	14.0	14.2
	3H	15.0	15.6	15.4	15.8	15.9	14.8	15.4	15.2	15.5	15.7
	4H	15.8	16.3	16.1	16.5	16.7	15.6	16.1	15.9	16.3	16.5
	6H	16.8	17.2	17.1	17.5	17.8	16.7	17.1	17.0	17.4	17.7
	8H	17.4	17.9	17.8	18.2	18.6	17.3	17.7	17.6	18.0	18.4
	12H	18.3	18.7	18.7	19.1	19.5	18.1	18.5	18.4	18.8	19.2
4H	2H	14.2	14.8	14.6	15.0	15.2	14.0	14.6	14.4	14.8	15.0
	3H	15.9	16.3	16.3	16.7	17.1	15.8	16.2	16.1	16.5	16.9
	4H	16.8	17.1	17.2	17.6	18.1	16.6	17.0	17.0	17.4	17.9
	6H	17.9	18.3	18.4	18.7	19.0	17.9	18.3	18.3	18.6	19.0
	8H	18.7	19.1	19.2	19.5	19.8	18.6	19.0	19.1	19.3	19.7
	12H	19.7	20.1	20.2	20.5	20.9	19.5	19.8	20.0	20.2	20.7
8H	4H	17.1	17.5	17.6	17.9	18.2	17.0	17.4	17.5	17.7	18.1
	6H	18.6	18.9	19.1	19.3	19.8	18.6	18.9	19.1	19.3	19.8
	8H	19.7	19.9	20.2	20.4	21.1	19.6	19.8	20.1	20.3	21.0
	12H	21.0	21.2	21.6	21.7	22.3	20.8	21.0	21.4	21.5	22.1
12H	4H	17.2	17.5	17.7	17.9	18.4	17.1	17.4	17.6	17.8	18.2
	6H	18.9	19.1	19.4	19.6	20.2	18.9	19.1	19.4	19.6	20.2
	8H	20.1	20.2	20.6	20.7	21.3	19.9	20.1	20.5	20.6	21.2
Corrected glare indices referring to 539 lm total luminous flux											