

Light efficiency:



Output: 747 lm

Light quality:

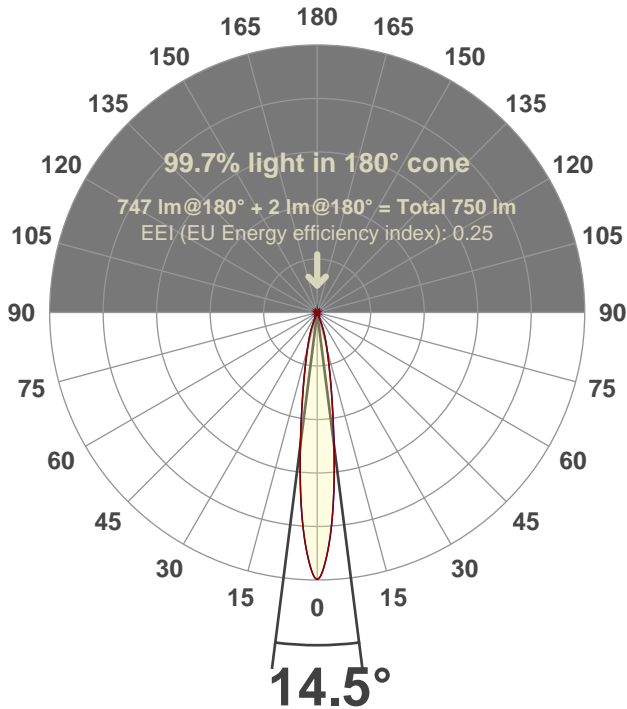


Peak: 7281 cd

Power: 14.9 W



Beam angle



Test number:

CR4D-R-FL-A14-30k-15 (GRF-AD-SP-RD)

Luminaire Model:

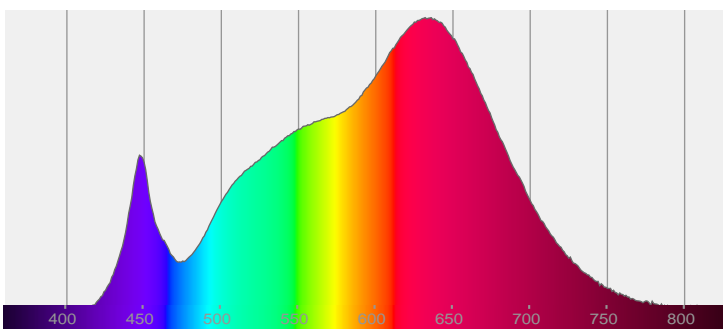
Core 4" Round Flat A14 30K 15°

Date and time:

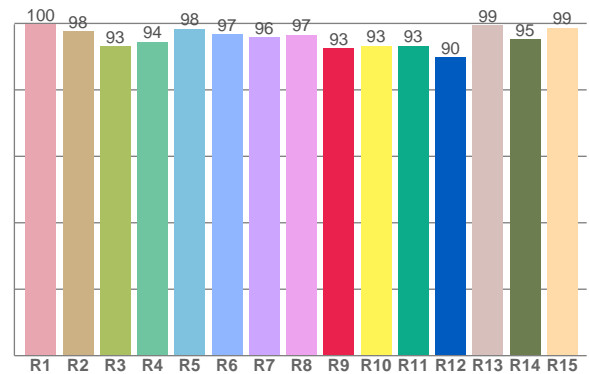
8/10/2017 1:22:36 PM

LUM: 747

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 <sub>f</sub>	TM30 R <sub>g</sub>	CQS	x	y	u	v	Δuv
96.6	92.5	93.4	104.4	93.3	0.432	0.397	0.250	0.345	-0.0019

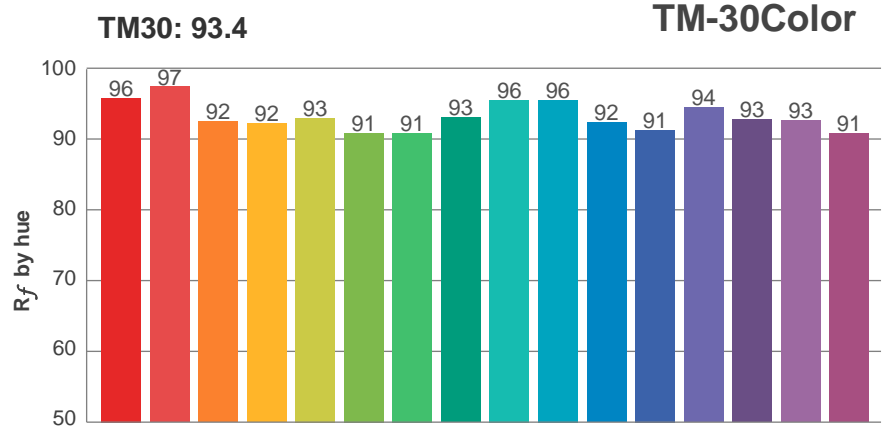
# R<sub>f</sub> 93.4

Fidelity index R<sub>f</sub>

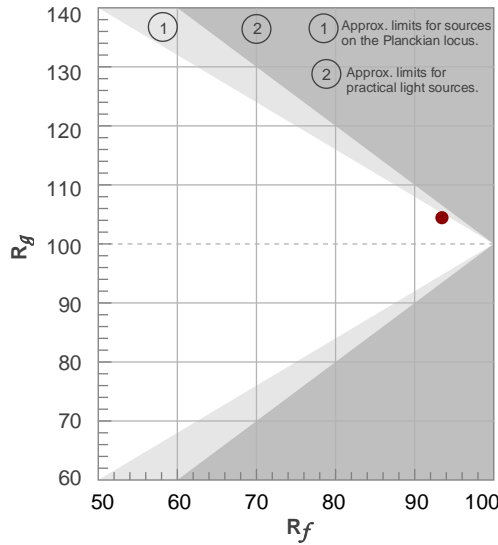
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# R<sub>g</sub> 104.4

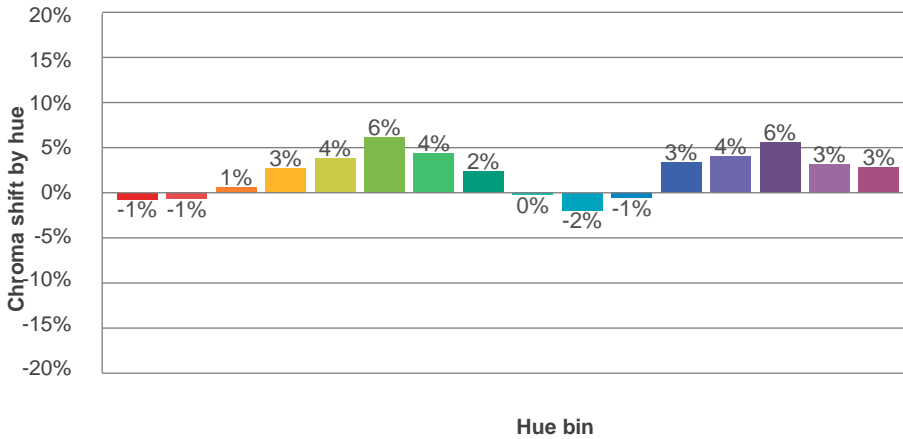
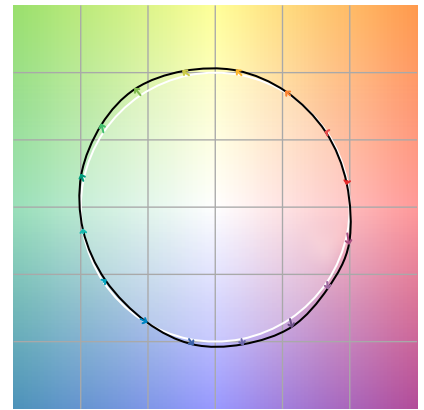
Gammut index R<sub>g</sub>



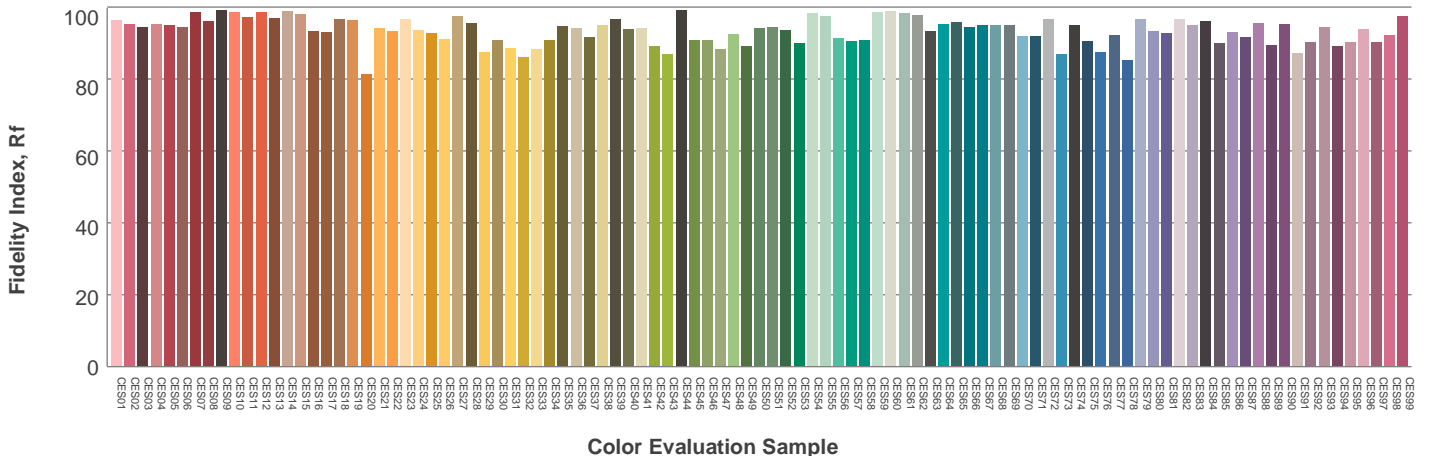
Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	96	-1%	-2%
2	97	-1%	1%
3	92	1%	4%
4	92	3%	4%
5	93	4%	4%
6	91	6%	1%
7	91	4%	-4%
8	93	2%	-4%
9	96	0%	-3%
10	96	-2%	0%
11	92	-1%	5%
12	91	3%	3%
13	94	4%	0%
14	93	6%	-2%
15	93	3%	-4%
16	91	3%	-7%



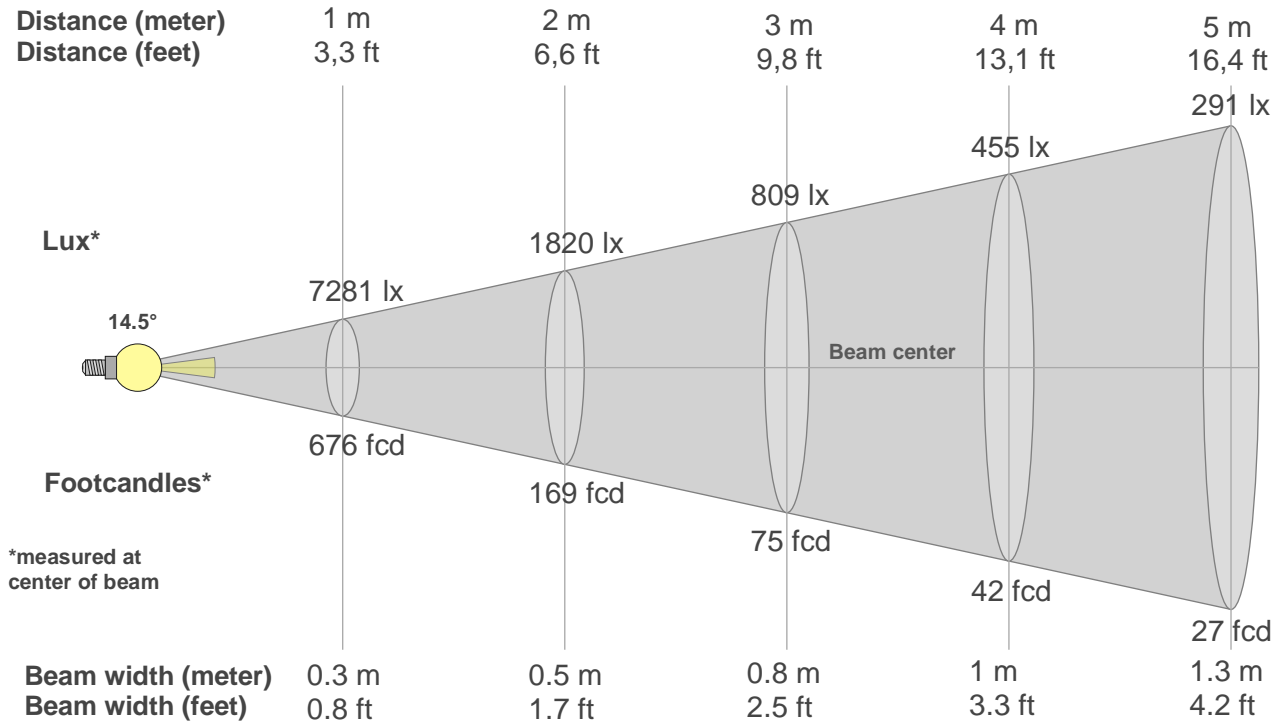
Color vector graphics



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
7281lx	1820lx	809lx	455lx	291lx	202lx	149lx	114lx	90lx	73lx	60lx	51lx	43lx	37lx	32lx	28lx	25lx	22lx	20lx	18lx
676.4fc	169.1fc	75.2fcd	42.3fcd	27.1fcd	18.8fcd	13.8fcd	10.6fcd	8.4fcd	6.8fcd	5.6fcd	4.7fcd	4fcd	3.5fcd	3fcd	2.6fcd	2.3fcd	2.1fcd	1.9fcd	1.7fcd

**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°
7281	7126	6759	6294	5743	5114	4449	3792	3202	2700	2279	1933	1642	1401	1202	1035	901	785	674	555
100%	98%	93%	86%	79%	70%	61%	52%	44%	37%	31%	27%	23%	19%	17%	14%	12%	11%	9%	8%

**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°
7281	7126	6759	6294	5743	5114	4449	3792	3202	2700	2279	1933	1642	1401	1202	1035	901	785	674	555
100%	98%	93%	86%	79%	70%	61%	52%	44%	37%	31%	27%	23%	19%	17%	14%	12%	11%	9%	8%

**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°
7281	7126	6759	6294	5743	5114	4449	3792	3202	2700	2279	1933	1642	1401	1202	1035	901	785	674	555
100%	98%	93%	86%	79%	70%	61%	52%	44%	37%	31%	27%	23%	19%	17%	14%	12%	11%	9%	8%

**Intensities in 270° c-plane**

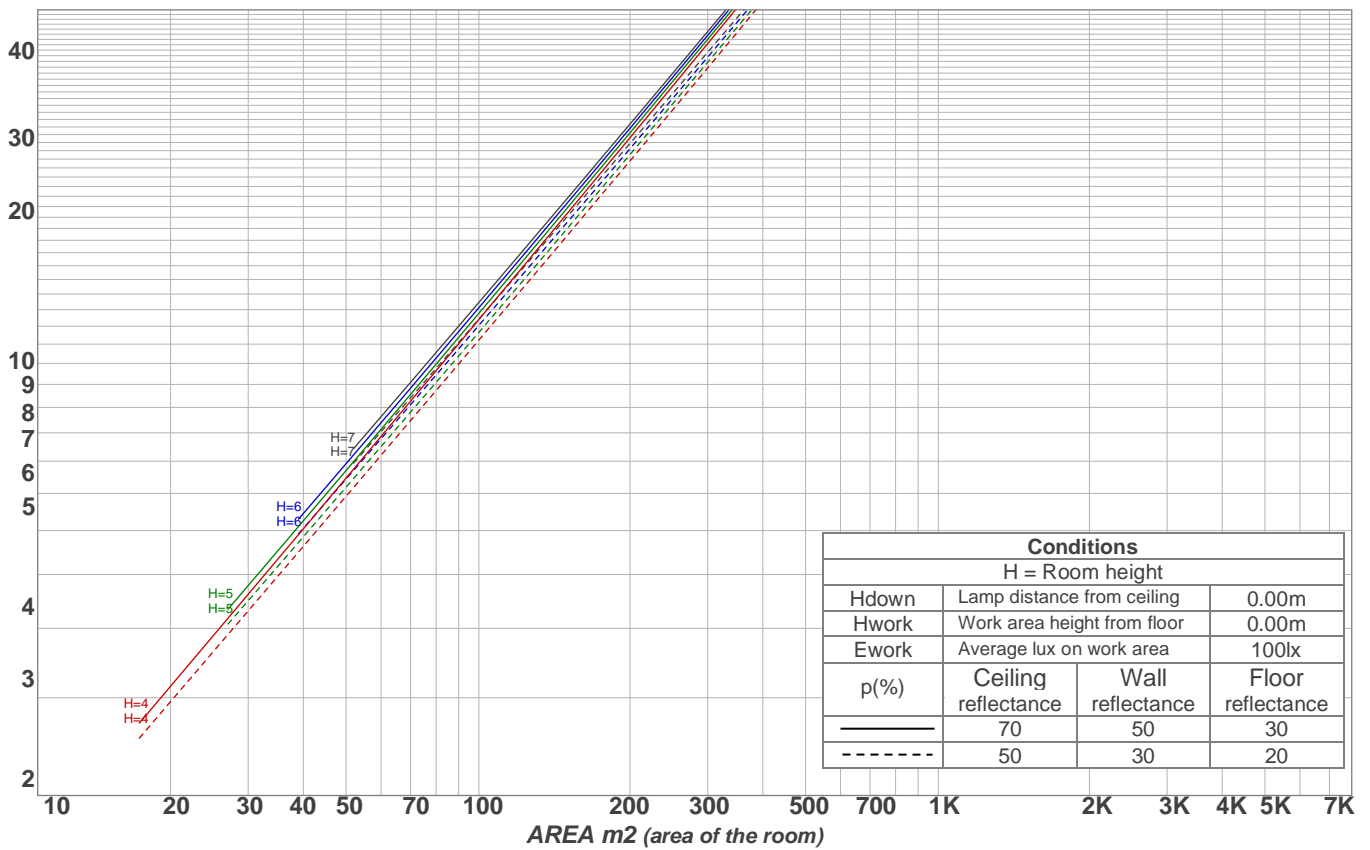
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
7281	7126	6759	6294	5743	5114	4449	3792	3202	2700	2279	1933	1642	1401	1202	1035	901	785	674	555
100%	98%	93%	86%	79%	70%	61%	52%	44%	37%	31%	27%	23%	19%	17%	14%	12%	11%	9%	8%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
14.5°	34.9°	45.1°	99.0%	98.7%

**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	50	30	10	0
Floor reflectance	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0
<b>RCR</b>	<b>(RCR: Room Cavity Ratio)</b>																				
	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	100	100	100
1	115	114	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97	97	97	97
2	112	109	106	104	110	107	105	103	104	102	101	101	100	99	99	98	97	96	96	96	96
3	109	105	102	100	108	104	101	99	102	99	97	99	97	96	97	96	95	94	94	94	94
4	107	102	99	96	105	101	98	95	99	96	94	97	95	93	96	94	92	91	91	91	91
5	104	99	96	93	103	98	95	93	97	94	92	95	93	91	94	92	90	89	89	89	89
6	102	97	93	91	101	96	93	90	95	92	90	94	91	89	93	90	88	87	87	87	87
7	100	95	91	89	99	94	91	88	93	90	88	92	89	88	91	89	87	86	86	86	86
8	98	92	89	87	97	92	89	86	91	88	86	90	88	86	90	87	85	84	84	84	84
9	96	91	87	85	95	90	87	85	89	87	85	89	86	84	88	86	84	83	83	83	83
10	94	89	86	83	94	89	85	83	88	85	83	87	85	83	87	84	83	82	82	82	82

**Zonal Lumen Summary**

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
388 lm	299 lm	43.9 lm	7.61 lm	1.54 lm	1.78 lm	2.01 lm	1.71 lm	1.46 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	12.3	12.6	12.3	12.8	13.0	12.3	12.6	12.3	12.8	13.0
	3H	13.8	14.3	14.2	14.5	14.7	13.8	14.3	14.2	14.5	14.7
	4H	15.0	15.5	15.4	15.7	15.9	15.0	15.5	15.4	15.7	15.9
	6H	16.7	17.1	17.0	17.4	17.7	16.7	17.1	17.0	17.4	17.7
	8H	17.5	17.9	17.9	18.2	18.6	17.5	17.9	17.9	18.2	18.6
	12H	18.6	18.9	18.9	19.3	19.7	18.6	18.9	18.9	19.3	19.7
4H	2H	12.8	13.3	13.2	13.5	13.7	12.8	13.3	13.2	13.5	13.7
	3H	14.9	15.2	15.2	15.6	16.0	14.9	15.2	15.2	15.6	16.0
	4H	16.2	16.6	16.6	17.0	17.5	16.2	16.6	16.6	17.0	17.5
	6H	18.0	18.5	18.5	18.8	19.1	18.0	18.5	18.5	18.8	19.1
	8H	19.0	19.4	19.5	19.7	20.1	19.0	19.4	19.5	19.7	20.1
	12H	20.2	20.4	20.7	20.8	21.3	20.2	20.4	20.7	20.8	21.3
8H	4H	16.8	17.2	17.4	17.6	17.9	16.8	17.2	17.4	17.6	17.9
	6H	19.0	19.3	19.5	19.7	20.2	19.0	19.3	19.5	19.7	20.2
	8H	20.2	20.4	20.7	20.9	21.5	20.2	20.4	20.7	20.9	21.5
	12H	21.6	21.7	22.2	22.2	22.8	21.6	21.7	22.2	22.2	22.8
12H	4H	17.0	17.3	17.5	17.7	18.2	17.0	17.3	17.5	17.7	18.2
	6H	19.4	19.5	19.9	20.0	20.7	19.4	19.5	19.9	20.0	20.7
	8H	20.6	20.8	21.2	21.3	21.9	20.6	20.8	21.2	21.3	21.9
Corrected glare indices referring to 747 lm total luminous flux											