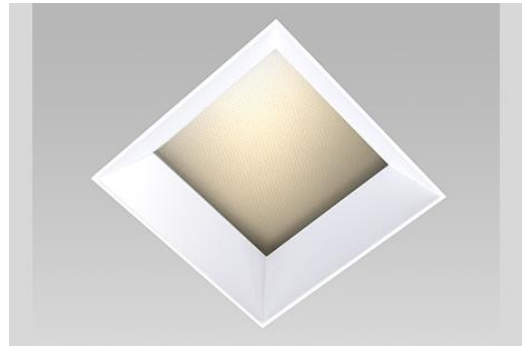


Light efficiency:



Output: 1173 lm



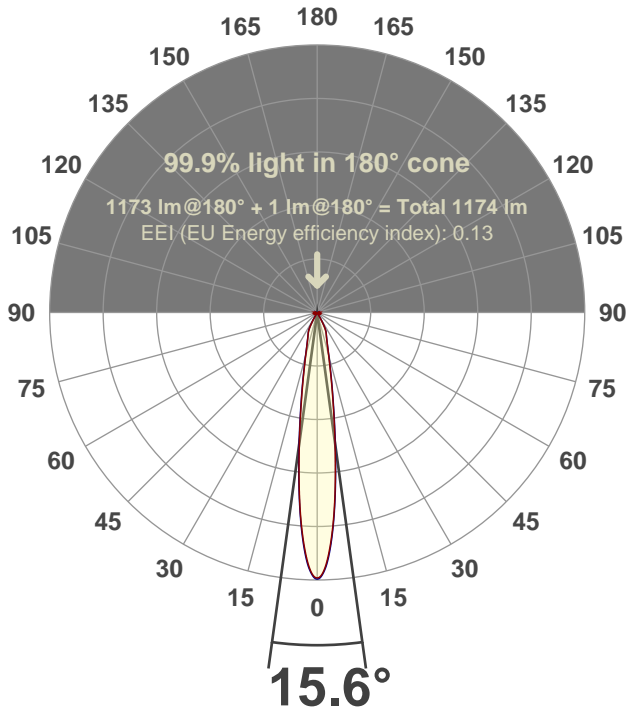
Light quality:



Peak: 7776 cd

Power: 15.0 W

Beam angle



Test number:

CR4D-S-OR-C14-30k-15 (1017-CZ20-SP)

Luminaire Model:

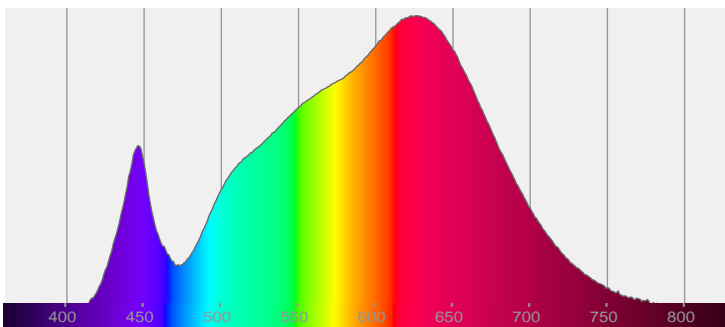
Core 4" Square Open Regress C14 30K 15°

Date and time:

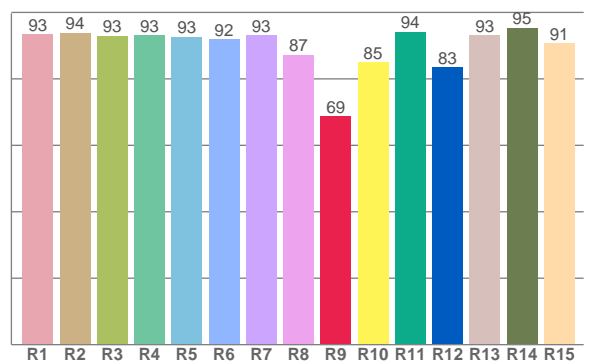
3/31/2017 5:34:10 PM

LUM: 1173

Spectra



CRI: 92.3 (R1-R8)



Color parameters

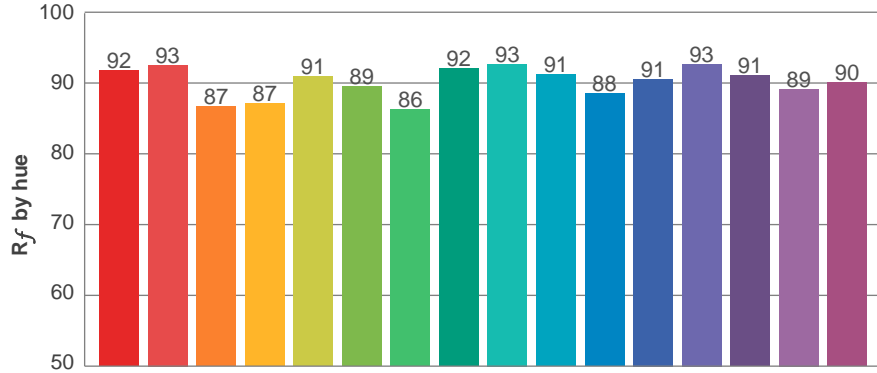
Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CRI	CRI R9	TM30 R <sub>f</sub>	TM30 R <sub>g</sub>	CQS	x	y	u	v	Δuv
92.3	68.8	90.3	103.1	90.1	0.428	0.399	0.247	0.345	-0.0006

**$R_f$  90.3**  
Fidelity index  $R_f$

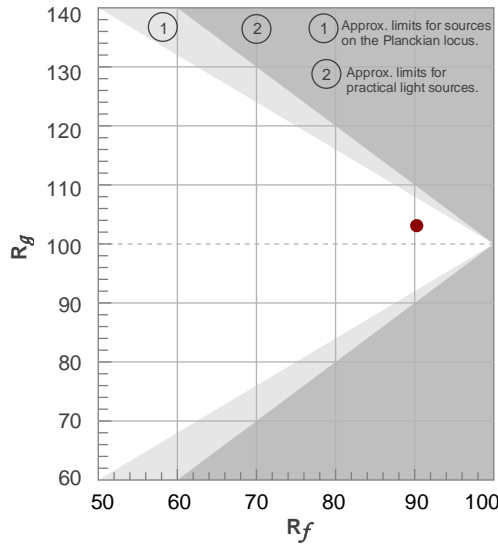
**$R_g$  103.1**  
Gammut index  $R_g$

TM30: 90.3

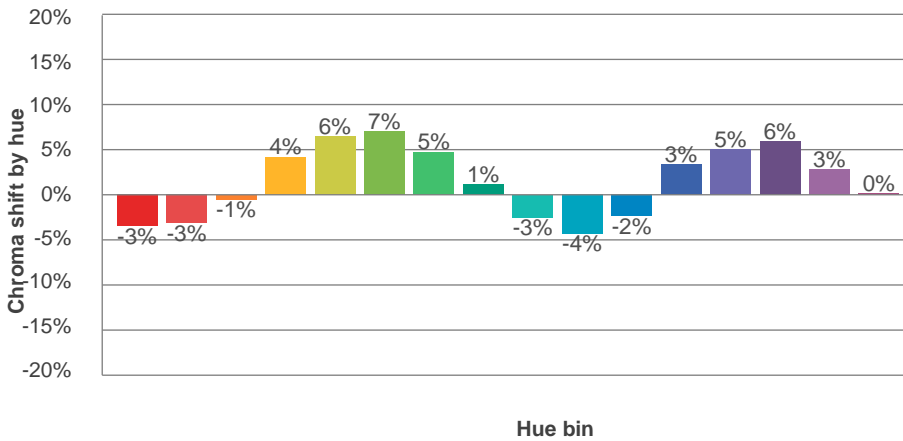
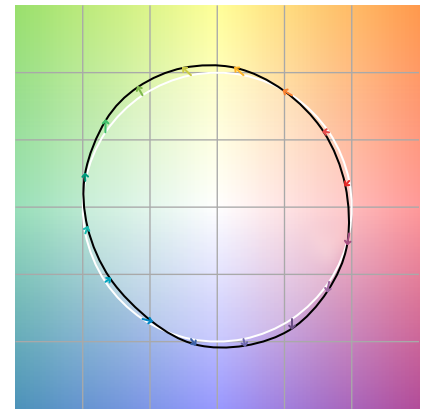
TM-30Color



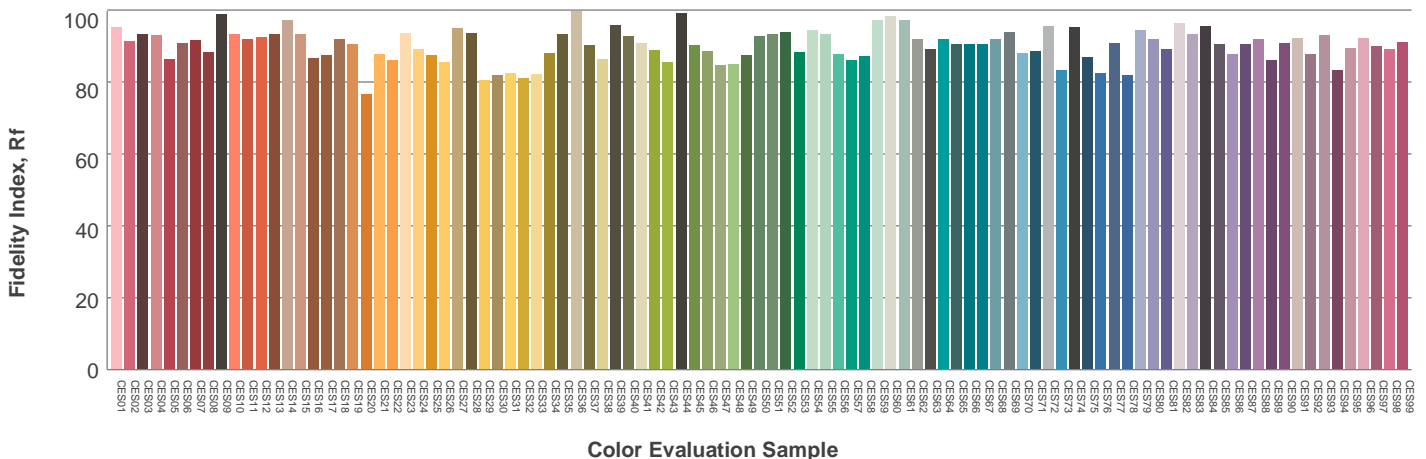
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	92	-3%	-3%
2	93	-3%	3%
3	87	-1%	7%
4	87	4%	7%
5	91	6%	5%
6	89	7%	-1%
7	86	5%	-7%
8	92	1%	-5%
9	93	-3%	-4%
10	91	-4%	0%
11	88	-2%	7%
12	91	3%	4%
13	93	5%	0%
14	91	6%	-4%
15	89	3%	-6%
16	90	0%	-8%



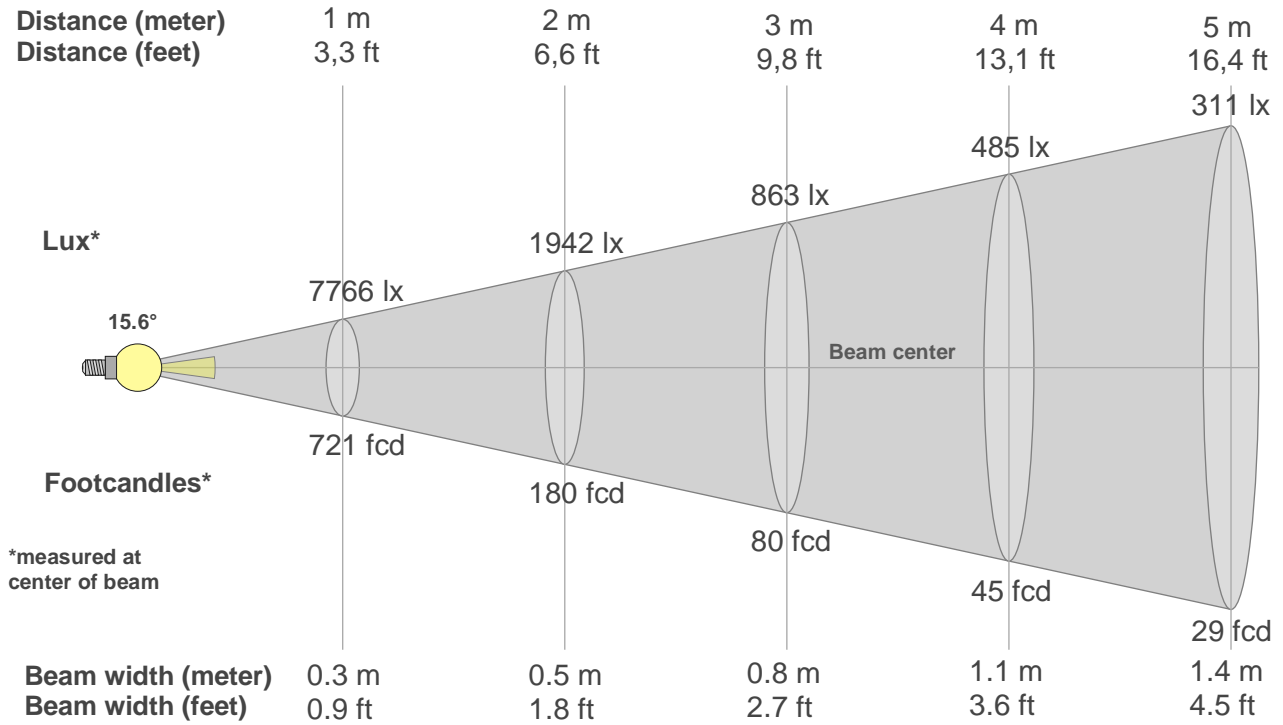
Color vector graphics



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
7766lx	1942lx	863lx	485lx	311lx	216lx	158lx	121lx	96lx	78lx	64lx	54lx	46lx	40lx	35lx	30lx	27lx	24lx	22lx	19lx
721.5fcd	180.4fcd	80.2fcd	45.1fcd	28.9fcd	20fcd	14.7fcd	11.3fcd	8.9fcd	7.2fcd	6fcd	5fcd	4.3fcd	3.7fcd	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°
7766	7362	6373	5047	3729	2687	1969	1482	1163	955	815	718	642	551	390	203	60	22	18	14
100%	95%	82%	65%	48%	35%	25%	19%	15%	12%	10%	9%	8%	7%	5%	3%	1%	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°
7766	7413	6427	5104	3796	2740	2015	1508	1180	962	818	718	641	552	389	197	55	21	18	13
100%	95%	83%	66%	49%	35%	26%	19%	15%	12%	11%	9%	8%	7%	5%	3%	1%	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°
7766	7362	6373	5047	3729	2687	1969	1482	1163	955	815	718	642	551	390	203	60	22	18	14
100%	95%	82%	65%	48%	35%	25%	19%	15%	12%	10%	9%	8%	7%	5%	3%	1%	0%	0%	0%

Intensities in 270° c-plane

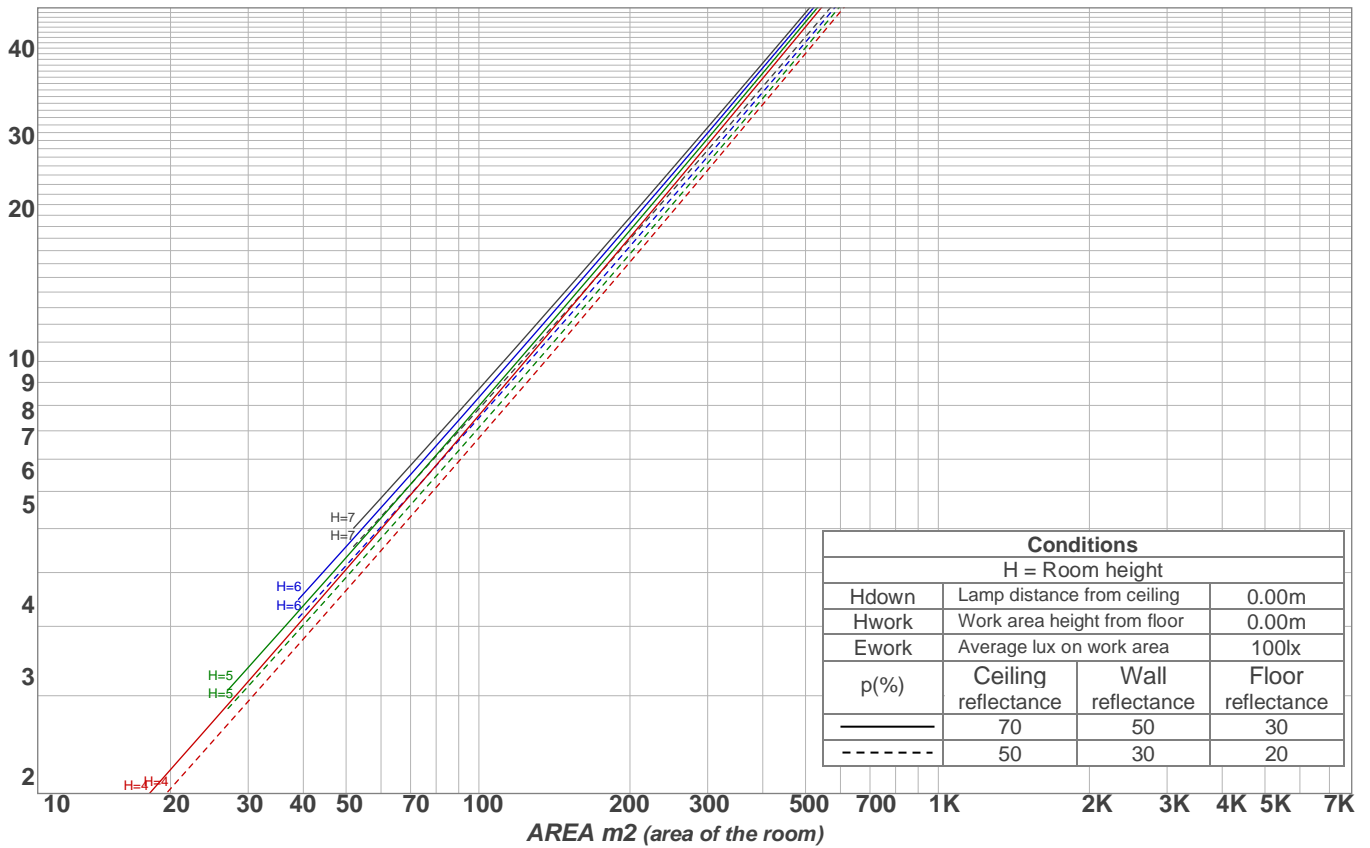
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
7766	7413	6427	5104	3796	2740	2015	1508	1180	962	818	718	641	552	389	197	55	21	18	13
100%	95%	83%	66%	49%	35%	26%	19%	15%	12%	11%	9%	8%	7%	5%	3%	1%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15.6°	41.4°	64.3°	99.4%	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	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	113	111	109	112	111	109	107	107	105	104	103	102	101	100	99	98	98	96	94	96
2	111	107	104	102	109	106	103	100	102	100	98	100	98	96	97	96	94	94	92	91	93
3	107	102	99	96	105	101	98	95	99	96	94	96	94	92	94	92	91	91	89	88	90
4	104	98	94	91	102	97	94	91	95	92	90	93	91	89	92	89	88	88	86	85	86
5	101	95	90	87	99	94	90	87	92	89	86	91	88	85	89	87	85	86	84	83	84
6	98	91	87	84	96	91	86	84	89	86	83	88	85	83	87	84	82	84	82	81	81
7	95	88	84	81	94	88	84	81	86	83	80	85	82	80	84	82	79	81	79	78	78
8	92	85	81	78	91	85	81	78	84	80	78	83	80	77	82	79	77	79	77	76	76
9	90	83	79	76	89	82	78	76	82	78	75	81	78	75	80	77	75	77	75	74	74
10	87	80	76	74	86	80	76	73	79	76	73	79	75	73	78	75	73	75	73	72	72

**Zonal Lumen Summary**

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
444 lm	387 lm	266 lm	64.3 lm	2.58 lm	2.57 lm	3.21 lm	2.04 lm	1.06 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	21.2	21.6	21.3	21.8	22.0	20.9	21.3	21.0	21.5	21.7
	3H	21.2	21.8	21.6	22.0	22.2	21.0	21.5	21.3	21.7	21.9
	4H	21.3	21.9	21.7	22.1	22.4	21.1	21.7	21.5	21.9	22.1
	6H	21.6	22.0	21.8	22.3	22.7	21.3	21.8	21.6	22.1	22.4
	8H	21.6	22.0	21.9	22.4	22.7	21.4	21.8	21.7	22.2	22.5
	12H	21.6	22.1	22.0	22.4	22.9	21.4	21.9	21.8	22.2	22.7
4H	2H	20.9	21.5	21.3	21.7	21.9	20.7	21.2	21.0	21.4	21.7
	3H	21.3	21.7	21.6	22.1	22.5	21.0	21.5	21.4	21.8	22.3
	4H	21.4	21.8	21.8	22.3	22.8	21.2	21.6	21.7	22.1	22.6
	6H	21.7	22.2	22.2	22.5	22.8	21.5	22.0	22.0	22.3	22.7
	8H	21.8	22.2	22.3	22.6	22.9	21.6	22.0	22.1	22.4	22.7
	12H	21.9	22.2	22.4	22.6	23.1	21.7	22.1	22.2	22.5	22.9
8H	4H	21.5	21.9	22.0	22.2	22.6	21.3	21.7	21.8	22.0	22.4
	6H	21.8	22.1	22.3	22.6	23.1	21.7	22.0	22.2	22.4	22.9
	8H	22.1	22.3	22.6	22.8	23.4	21.9	22.1	22.4	22.6	23.2
	12H	22.3	22.5	22.9	23.0	23.6	22.2	22.3	22.7	22.8	23.4
12H	4H	21.4	21.8	21.9	22.2	22.6	21.2	21.6	21.7	22.0	22.4
	6H	21.9	22.1	22.4	22.6	23.2	21.7	21.9	22.3	22.5	23.1
	8H	22.1	22.3	22.7	22.8	23.4	21.9	22.1	22.5	22.6	23.2

Corrected glare indices referring to 1173 lm total luminous flux