

Light efficiency:



Output: 1531 lm

Light quality:

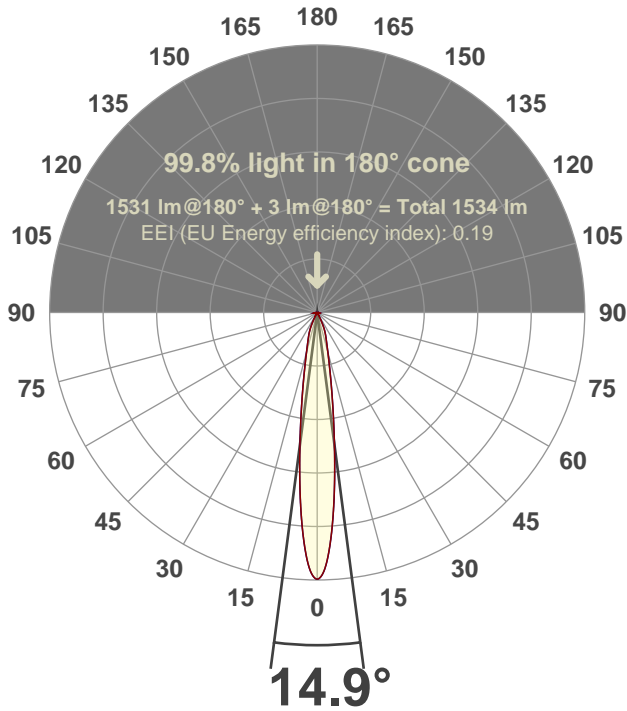


Peak: 12105 cd

Power: 21.0 W



Beam angle



Test number:

CR4D-R-DR-C20-30k-15 (GR-CZ20-SP-RD)

Luminaire Model:

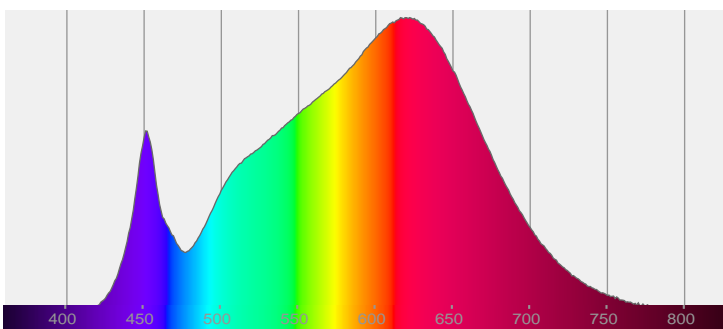
Core 4" Round Deep Regress C20 30K 15°

Date and time:

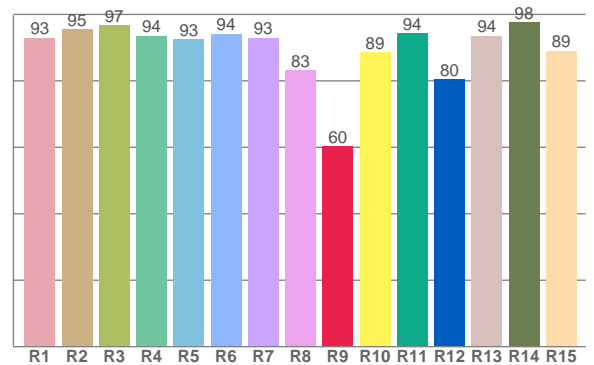
6/14/2017 2:02:08 PM

LUM: 1531

Spectra



CRI: 92.7 (R1-R8)



Color parameters

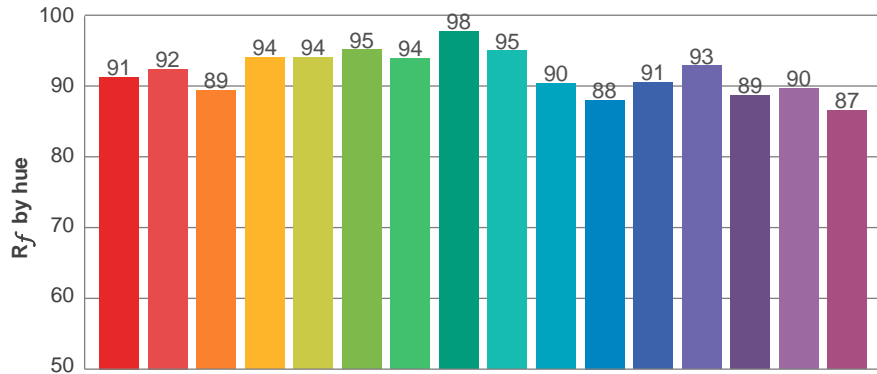
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	92.7	60.2	91.9	100.2	91.0	0.427	0.400	0.246	0.346	-0.0002

R_f 91.9
Fidelity index R_f

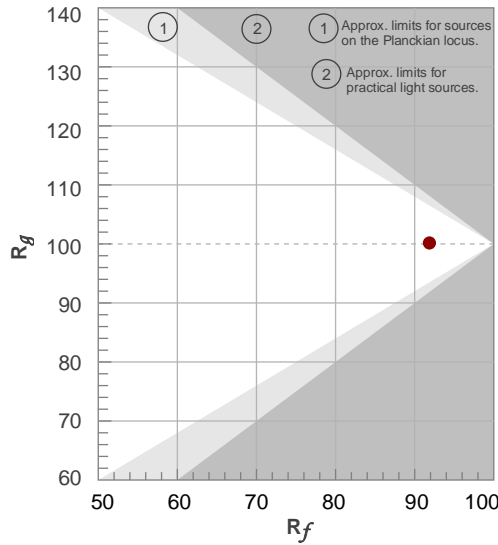
R_g 100.2
Gammut index R_g

TM30: 91.9

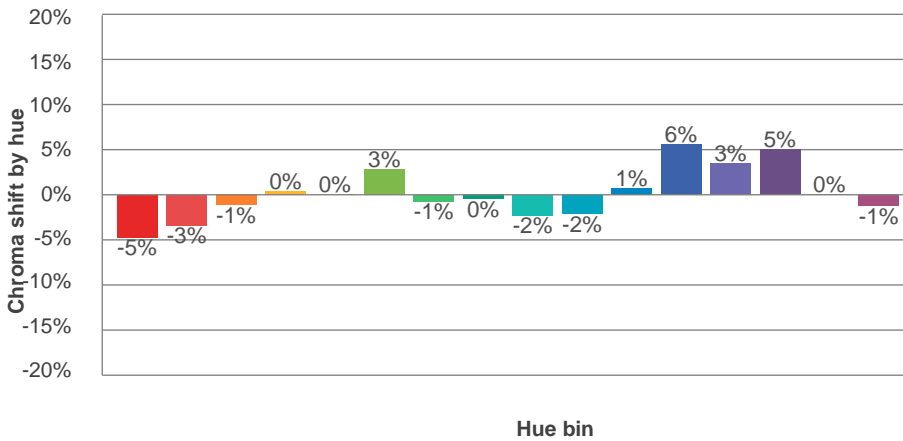
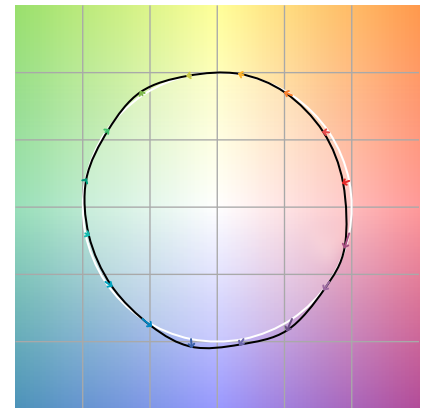
TM-30Color



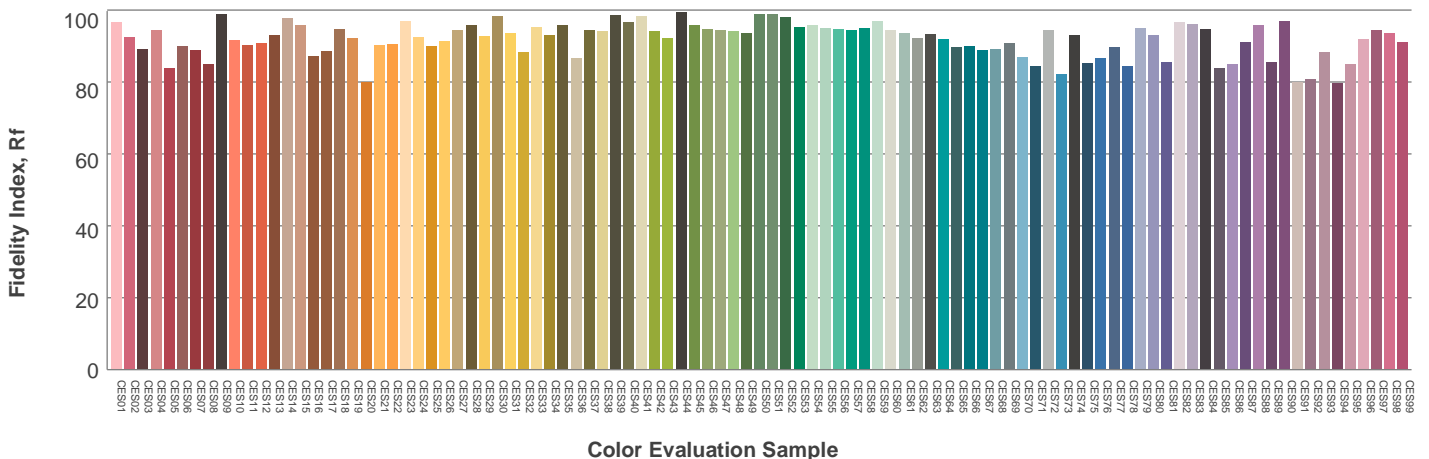
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	91	-5%	-1%
2	92	-3%	3%
3	89	-1%	5%
4	94	0%	3%
5	94	0%	3%
6	95	3%	0%
7	94	-1%	-3%
8	98	0%	-1%
9	95	-2%	2%
10	90	-2%	5%
11	88	1%	8%
12	91	6%	2%
13	93	3%	-3%
14	89	5%	-8%
15	90	0%	-7%
16	87	-1%	-11%



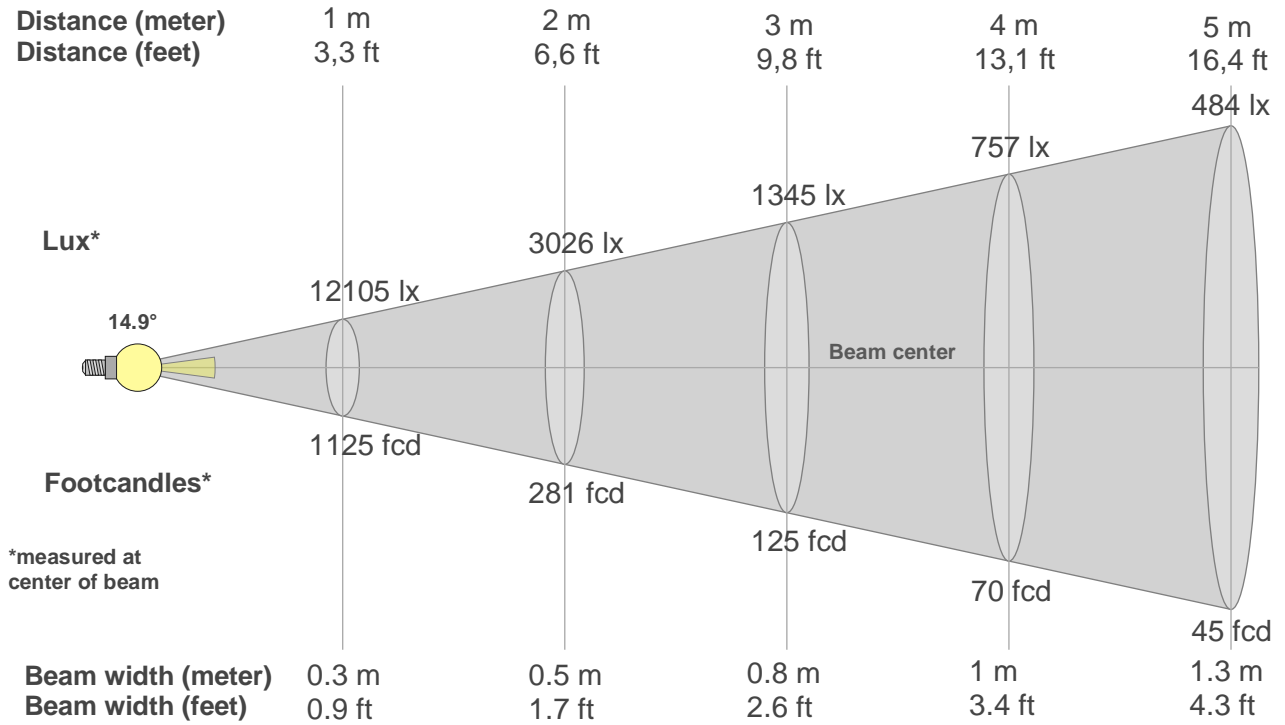
Color vector graphics



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
12105lx	3026lx	1345lx	757lx	484lx	336lx	247lx	189lx	149lx	121lx	100lx	84lx	72lx	62lx	54lx	47lx	42lx	37lx	34lx	30lx
1124.6fcd	281.1fcd	125fcd	70.3fcd	45fcd	31.2fcd	23fcd	17.6fcd	13.9fcd	11.2fcd	9.3fcd	7.8fcd	6.7fcd	5.7fcd	5fcd	4.4fcd	3.9fcd	3.5fcd	3.1fcd	2.8fcd

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°
12.1K	11.9K	11.5K	10.7K	9.8K	8.7K	7.6K	6.5K	5.5K	4.7K	4.0K	3.4K	2.9K	2.5K	2.2K	1.9K	1.7K	1.5K	1.4K	1.3K
100%	99%	95%	88%	81%	72%	63%	54%	46%	39%	33%	28%	24%	20%	18%	16%	14%	13%	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°
12.1K	11.9K	11.5K	10.7K	9.8K	8.7K	7.6K	6.5K	5.5K	4.7K	4.0K	3.4K	2.9K	2.5K	2.2K	1.9K	1.7K	1.5K	1.4K	1.3K
100%	99%	95%	88%	81%	72%	63%	54%	46%	39%	33%	28%	24%	20%	18%	16%	14%	13%	11%	10%

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°
12.1K	11.9K	11.5K	10.7K	9.8K	8.7K	7.6K	6.5K	5.5K	4.7K	4.0K	3.4K	2.9K	2.5K	2.2K	1.9K	1.7K	1.5K	1.4K	1.3K
100%	99%	95%	88%	81%	72%	63%	54%	46%	39%	33%	28%	24%	20%	18%	16%	14%	13%	11%	10%

Intensities in 270° c-plane

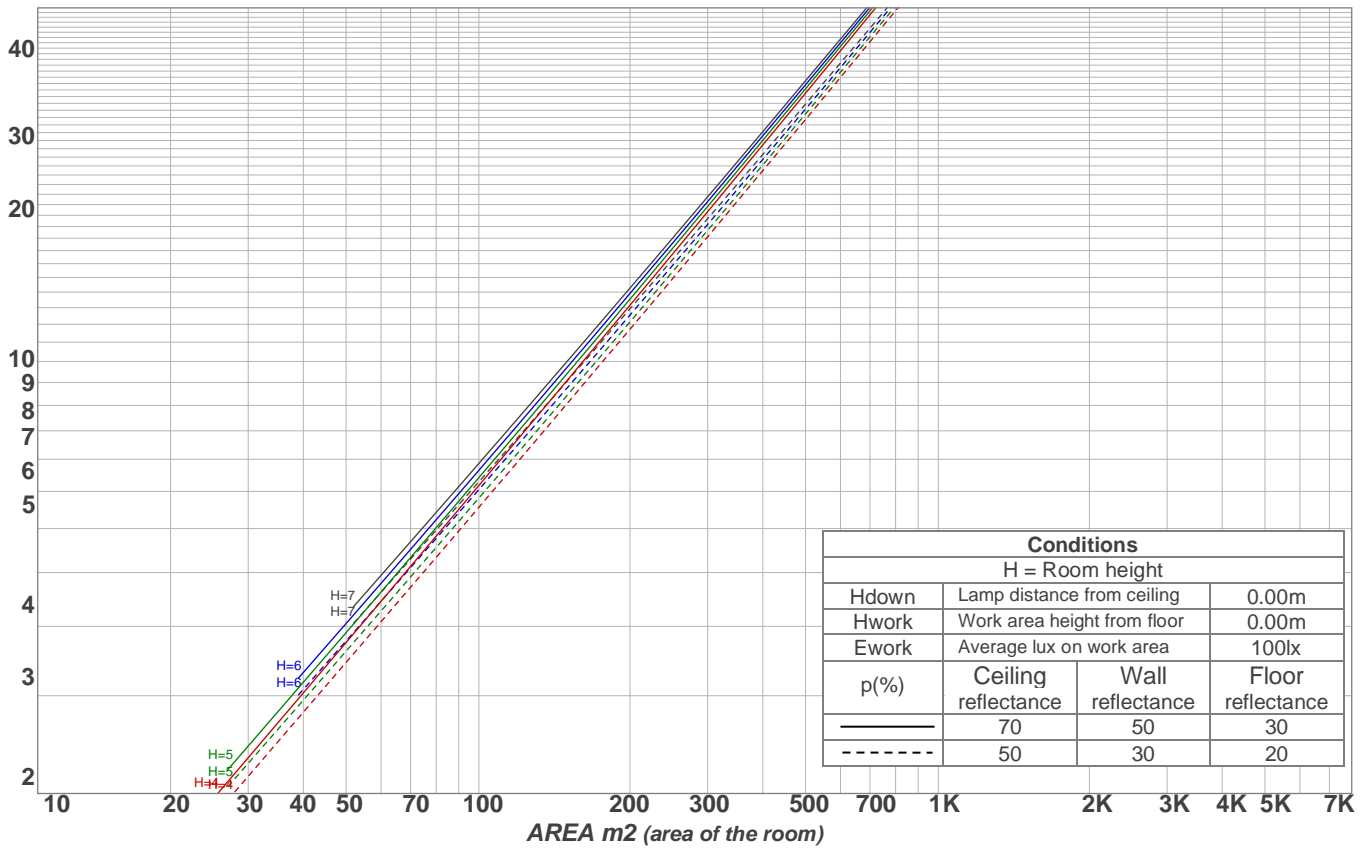
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
12.1K	11.9K	11.5K	10.7K	9.8K	8.7K	7.6K	6.5K	5.5K	4.7K	4.0K	3.4K	2.9K	2.5K	2.2K	1.9K	1.7K	1.5K	1.4K	1.3K
100%	99%	95%	88%	81%	72%	63%	54%	46%	39%	33%	28%	24%	20%	18%	16%	14%	13%	11%	10%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
14.9°	38.8°	56.3°	99.1%	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	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
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	100	100	100
1	115	113	111	110	113	111	109	108	107	106	105	103	102	101	100	99	99	99	99	99	97
2	112	108	105	103	109	106	104	102	103	101	99	100	99	97	98	96	95	95	94	94	94
3	108	104	100	97	106	102	99	97	100	97	95	98	96	94	96	94	92	92	91	91	91
4	105	100	96	93	104	99	95	93	97	94	92	95	93	91	93	91	90	89	89	89	89
5	102	97	93	90	101	96	92	89	94	91	89	93	90	88	91	89	87	86	86	86	86
6	100	94	90	87	98	93	89	87	92	88	86	90	88	86	89	87	85	84	84	84	84
7	97	91	87	84	96	90	87	84	89	86	84	88	85	83	87	85	83	82	82	82	82
8	95	89	85	82	94	88	84	82	87	84	81	86	83	81	85	83	81	80	80	80	80
9	92	86	82	80	92	86	82	80	85	82	79	84	81	79	84	81	79	78	78	78	78
10	90	84	80	78	90	84	80	78	83	80	78	83	80	77	82	79	77	76	76	76	76

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
665 lm	558 lm	268 lm	19.3 lm	4.77 lm	5.21 lm	6.43 lm	2.73 lm	1.70 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	17.1	17.4	17.1	17.6	17.8	17.1	17.4	17.1	17.6	17.8
	3H	19.2	19.8	19.6	19.9	20.1	19.2	19.8	19.6	19.9	20.1
	4H	19.5	20.1	19.9	20.3	20.5	19.5	20.1	19.9	20.3	20.5
	6H	20.0	20.4	20.3	20.7	21.1	20.0	20.4	20.3	20.7	21.1
	8H	20.2	20.6	20.5	21.0	21.4	20.2	20.6	20.5	21.0	21.4
	12H	20.6	21.0	21.0	21.4	21.8	20.6	21.0	21.0	21.4	21.8
4H	2H	17.9	18.5	18.3	18.7	18.9	17.9	18.5	18.3	18.7	18.9
	3H	20.2	20.6	20.5	20.9	21.4	20.2	20.6	20.5	20.9	21.4
	4H	20.5	20.9	20.9	21.3	21.8	20.5	20.9	20.9	21.3	21.8
	6H	21.0	21.5	21.5	21.8	22.1	21.0	21.5	21.5	21.8	22.1
	8H	21.3	21.7	21.8	22.0	22.4	21.3	21.7	21.8	22.0	22.4
	12H	21.8	22.1	22.3	22.5	23.0	21.8	22.1	22.3	22.5	23.0
8H	4H	20.7	21.1	21.2	21.4	21.8	20.7	21.1	21.2	21.4	21.8
	6H	21.4	21.6	21.9	22.1	22.6	21.4	21.6	21.9	22.1	22.6
	8H	21.9	22.0	22.4	22.6	23.2	21.9	22.0	22.4	22.6	23.2
	12H	22.6	22.8	23.2	23.3	23.9	22.6	22.8	23.2	23.3	23.9
12H	4H	20.7	21.0	21.2	21.4	21.8	20.7	21.0	21.2	21.4	21.8
	6H	21.5	21.7	22.0	22.2	22.8	21.5	21.7	22.0	22.2	22.8
	8H	22.0	22.2	22.6	22.7	23.3	22.0	22.2	22.6	22.7	23.3
Corrected glare indices referring to 1531 lm total luminous flux											