

Light efficiency:



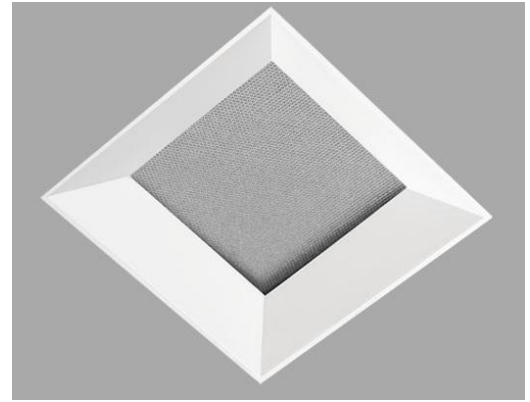
Output: 810 lm

Light quality:

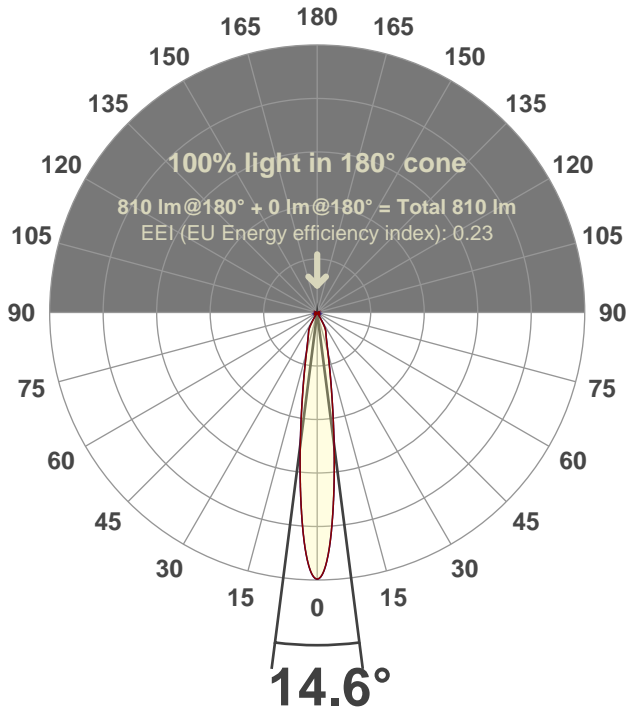


Peak: 5857 cd

Power: 15.1 W



Beam angle



Test number:

CR4D-S-OR-A14-30k-15 (GRO-AD-15-SQ)

Luminaire Model:

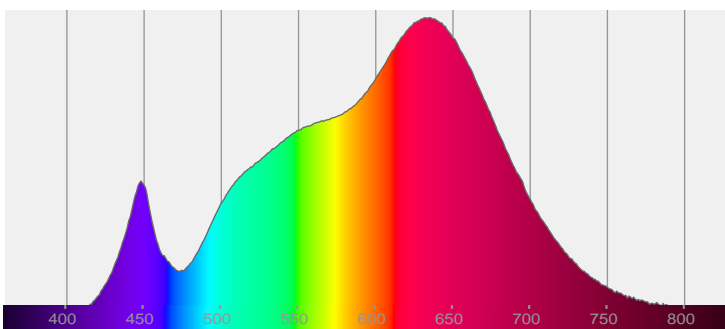
Core 4" Square Open Regress A14 30 to 19k 15°

Date and time:

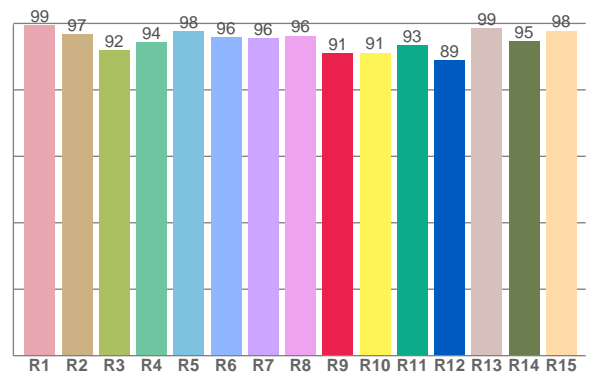
3/2/2017 12:17:37 PM

LUM: 810

Spectra



CRI: 96.0 (R1-R8)



Color parameters

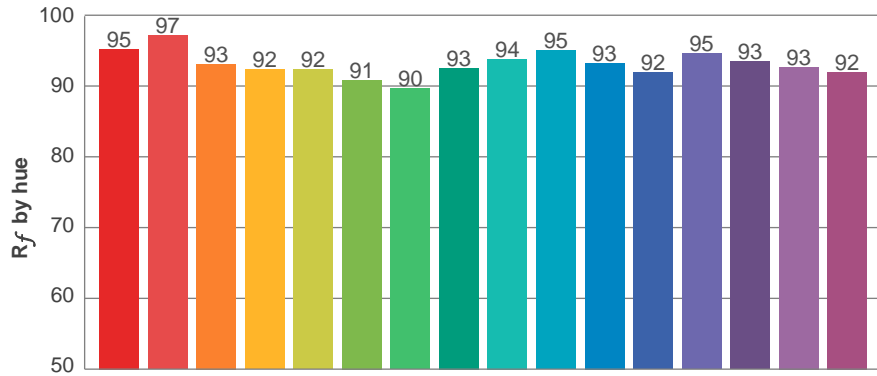
	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
	CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
	96.0	91.1	93.4	104.0	93.2	0.438	0.404	0.251	0.348	-0.0001

R_f 93.4
Fidelity index R_f

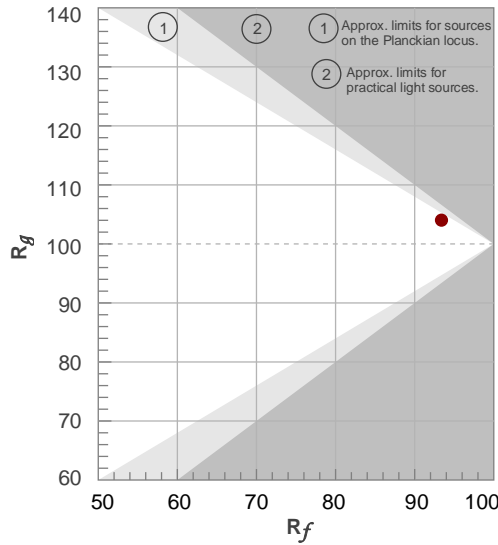
R_g 104.0
Gammut index R_g

TM30: 93.4

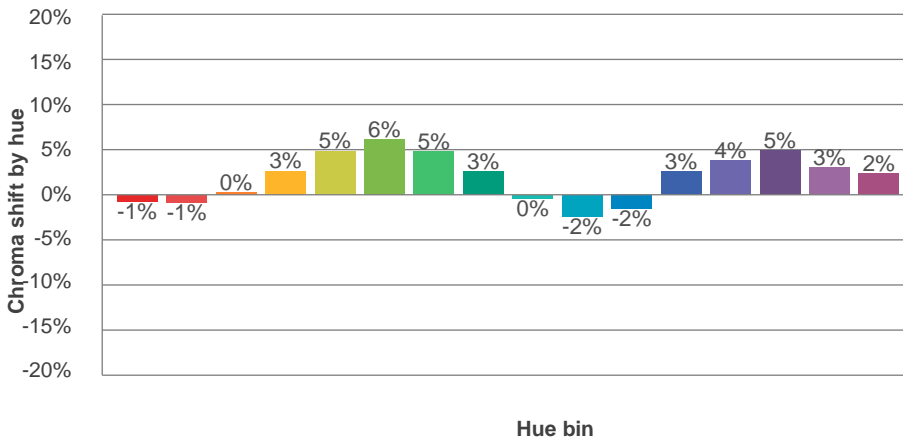
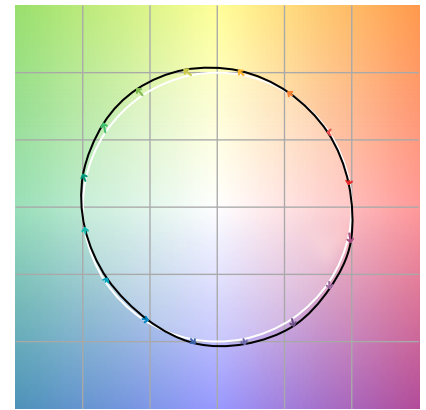
TM-30Color



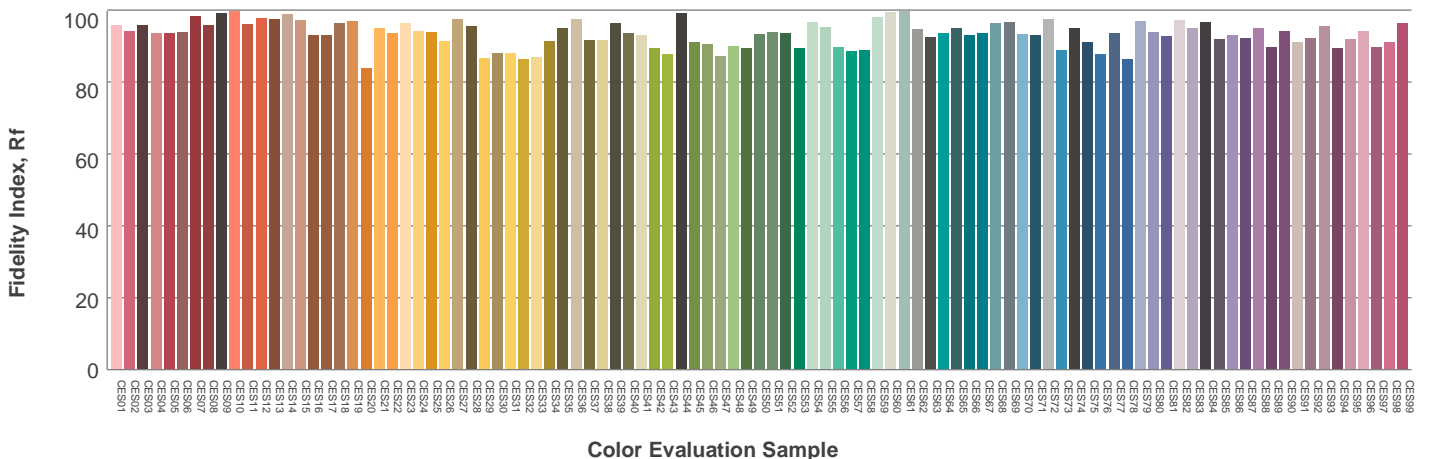
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	95	-1%	-2%
2	97	-1%	1%
3	93	0%	4%
4	92	3%	4%
5	92	5%	4%
6	91	6%	1%
7	90	5%	-5%
8	93	3%	-4%
9	94	0%	-4%
10	95	-2%	-1%
11	93	-2%	4%
12	92	3%	3%
13	95	4%	0%
14	93	5%	-2%
15	93	3%	-4%
16	92	2%	-6%



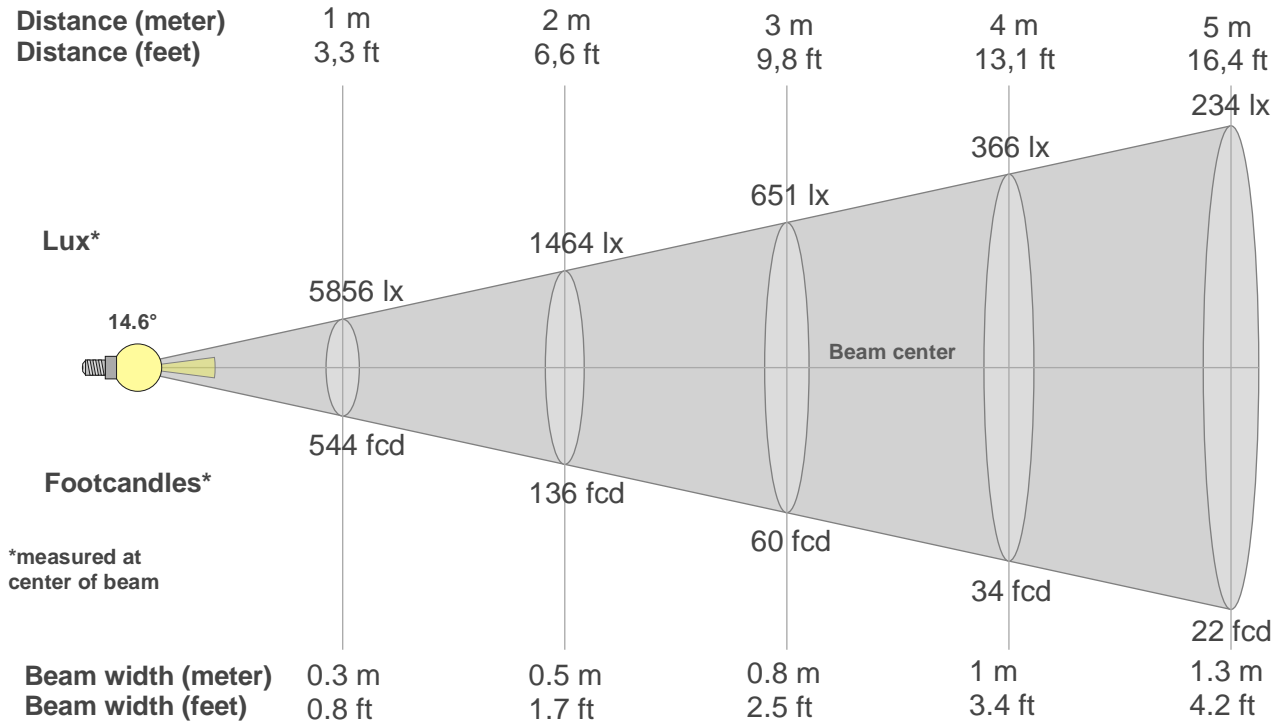
Color vector graphics



Color distortion



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
5856lx	1464lx	651lx	366lx	234lx	163lx	120lx	91lx	72lx	59lx	48lx	41lx	35lx	30lx	26lx	23lx	20lx	18lx	16lx	15lx
544fcd	136fcd	60.4fcd	34fcd	21.8fcd	15.1fcd	11.1fcd	8.5fcd	6.7fcd	5.4fcd	4.5fcd	3.8fcd	3.2fcd	2.8fcd	2.4fcd	2.1fcd	1.9fcd	1.7fcd	1.5fcd	1.4fcd

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°
5856	5536	4668	3585	2607	1869	1376	1043	826	685	587	518	466	417	332	191	63	19	15	11
100%	95%	80%	61%	45%	32%	23%	18%	14%	12%	10%	9%	8%	7%	6%	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°
5856	5536	4666	3582	2609	1868	1381	1046	829	686	588	519	467	417	333	194	66	19	15	11
100%	95%	80%	61%	45%	32%	24%	18%	14%	12%	10%	9%	8%	7%	6%	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°
5856	5536	4668	3585	2607	1869	1376	1043	826	685	587	518	466	417	332	191	63	19	15	11
100%	95%	80%	61%	45%	32%	23%	18%	14%	12%	10%	9%	8%	7%	6%	3%	1%	0%	0%	0%

Intensities in 270° c-plane

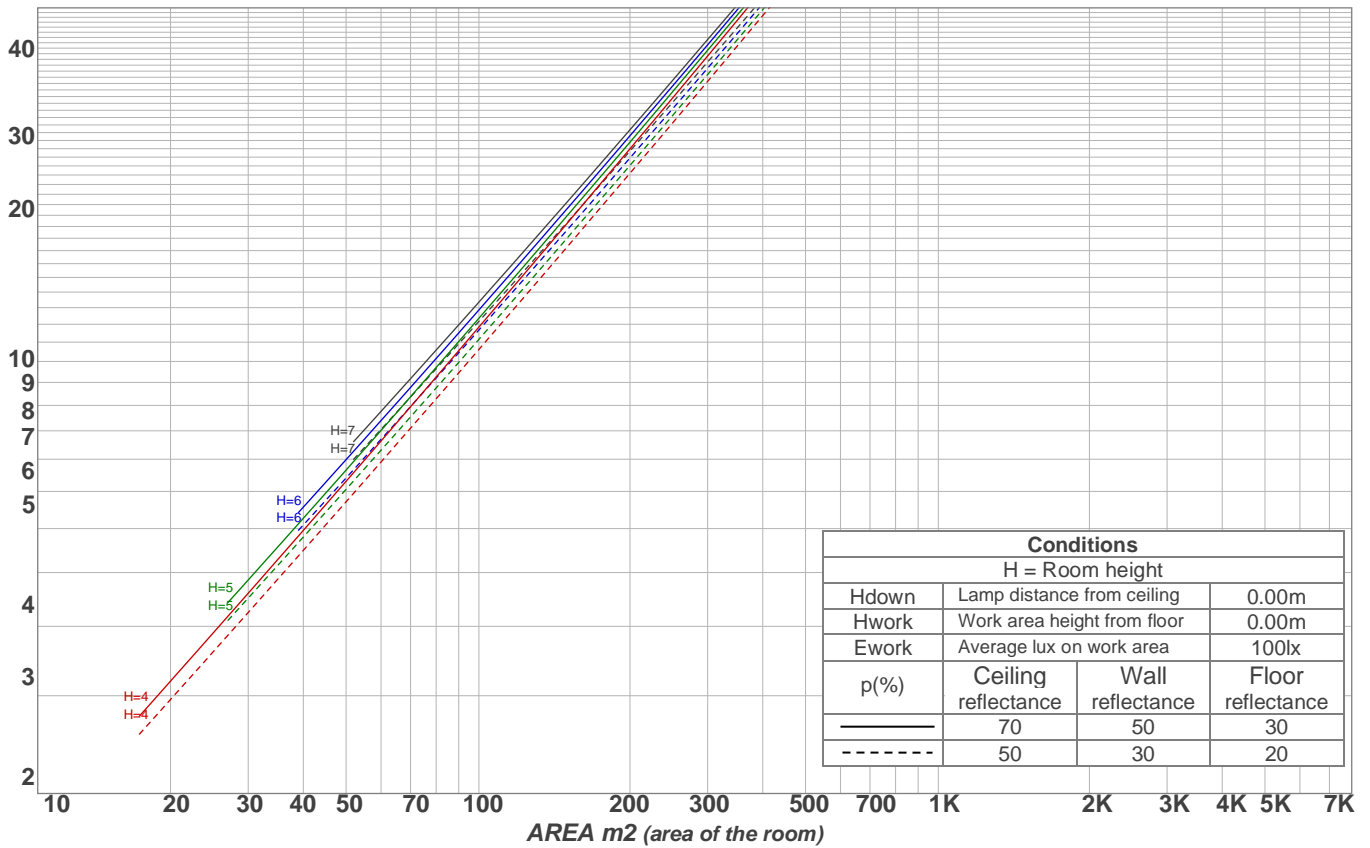
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
5856	5536	4666	3582	2609	1868	1381	1046	829	686	588	519	467	417	333	194	66	19	15	11
100%	95%	80%	61%	45%	32%	24%	18%	14%	12%	10%	9%	8%	7%	6%	3%	1%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
14.6°	40.1°	61.3°	99.5%	99.3%

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	109	113	111	109	107	107	105	104	103	102	101	100	99	98	97	96	95	93
2	111	108	104	102	109	106	103	101	103	101	99	100	98	97	97	96	95	93	92	91	89
3	108	103	99	96	106	102	98	96	99	96	94	97	95	93	95	93	91	89	87	85	83
4	104	99	95	92	103	98	94	91	96	93	90	94	91	89	92	90	88	86	84	82	80
5	101	95	91	88	100	94	91	88	93	90	87	91	88	86	90	88	86	84	82	80	78
6	98	92	88	85	97	91	87	85	90	87	84	89	86	83	88	85	83	81	79	77	75
7	95	89	85	82	94	88	85	82	87	84	81	86	83	81	85	83	81	79	77	75	73
8	93	86	82	79	92	86	82	79	85	81	79	84	81	79	83	80	78	76	74	72	70
9	90	84	80	77	90	83	79	77	83	79	77	82	79	76	81	78	76	74	72	70	68
10	88	81	77	75	87	81	77	75	80	77	75	80	77	74	79	76	74	72	70	68	66

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
316 lm	272 lm	192 lm	23.0 lm	2.00 lm	1.39 lm	1.72 lm	1.40 lm	0.705 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	15.0	15.4	15.0	15.6	15.7	15.1	15.5	15.1	15.7	15.8
	3H	15.5	16.1	15.8	16.2	16.4	15.6	16.2	15.9	16.3	16.5
	4H	16.0	16.5	16.4	16.7	17.0	16.0	16.6	16.4	16.8	17.1
	6H	16.6	17.0	16.8	17.3	17.7	16.7	17.1	17.0	17.4	17.8
	8H	16.7	17.2	17.1	17.5	17.9	16.8	17.2	17.1	17.6	17.9
	12H	17.0	17.4	17.3	17.8	18.2	17.0	17.4	17.4	17.8	18.2
4H	2H	14.9	15.4	15.3	15.6	15.9	15.0	15.5	15.3	15.7	16.0
	3H	15.9	16.3	16.2	16.7	17.1	16.0	16.4	16.3	16.8	17.2
	4H	16.5	16.9	16.9	17.4	17.9	16.6	17.0	17.0	17.4	17.9
	6H	17.2	17.7	17.7	18.0	18.4	17.4	17.8	17.9	18.1	18.5
	8H	17.5	17.9	18.0	18.3	18.6	17.5	18.0	18.1	18.3	18.7
	12H	17.8	18.2	18.3	18.6	19.0	17.9	18.2	18.4	18.6	19.0
8H	4H	16.8	17.2	17.3	17.6	17.9	16.9	17.3	17.4	17.6	18.0
	6H	17.7	18.0	18.2	18.4	19.0	17.8	18.1	18.3	18.5	19.1
	8H	18.1	18.3	18.7	18.9	19.5	18.1	18.3	18.7	18.9	19.5
	12H	18.6	18.8	19.2	19.3	19.9	18.6	18.8	19.2	19.3	19.9
12H	4H	16.8	17.1	17.3	17.5	18.0	16.9	17.2	17.4	17.6	18.1
	6H	17.8	18.0	18.3	18.5	19.2	17.9	18.1	18.4	18.6	19.3
	8H	18.3	18.4	18.8	18.9	19.5	18.2	18.4	18.8	18.9	19.5
Corrected glare indices referring to 810 lm total luminous flux											