

Light efficiency:



Output: 1267 lm

Light quality:

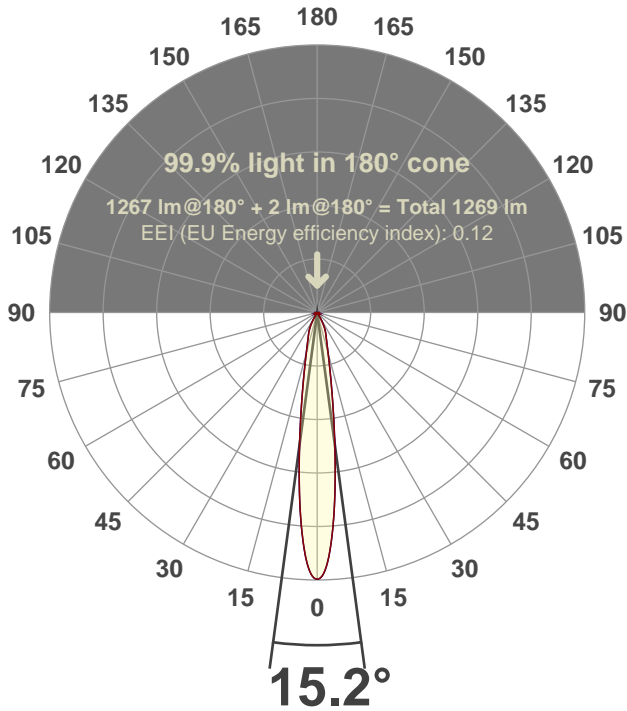


Peak: 9129 cd

Power: 14.5 W



Beam angle



Test number:

CR4D-R-OR-C14-30k-15 (GRO-CZ20-SP-RD)

Luminaire Model:

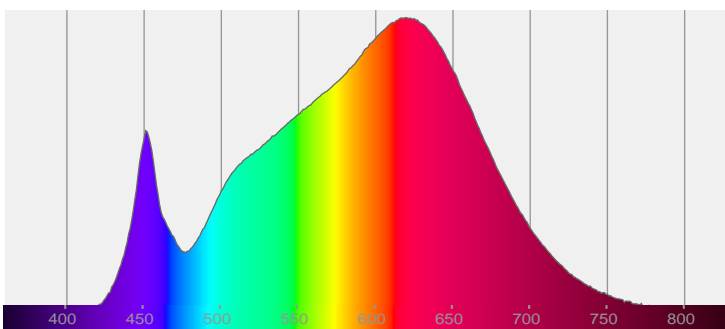
Core 4" Open Deep Regress C14 30K 15°

Date and time:

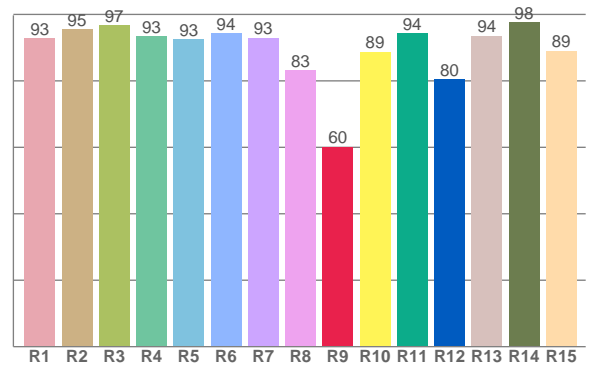
6/14/2017 4:32:19 PM

LUM: 1267

Spectra



CRI: 92.7 (R1-R8)

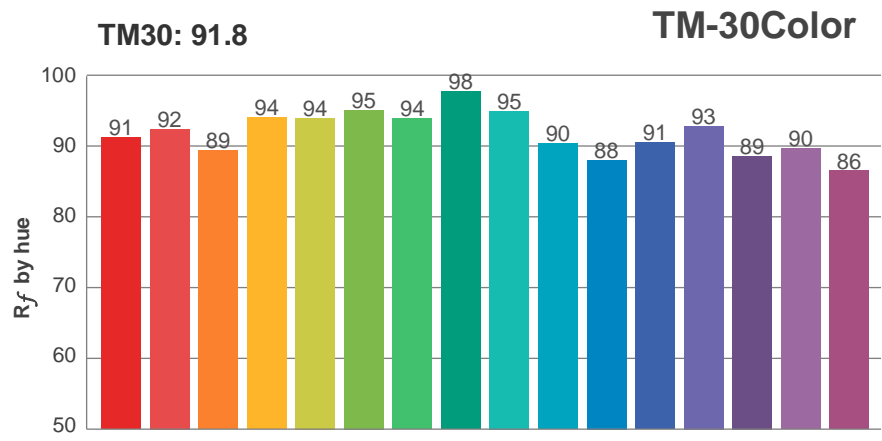


Color parameters

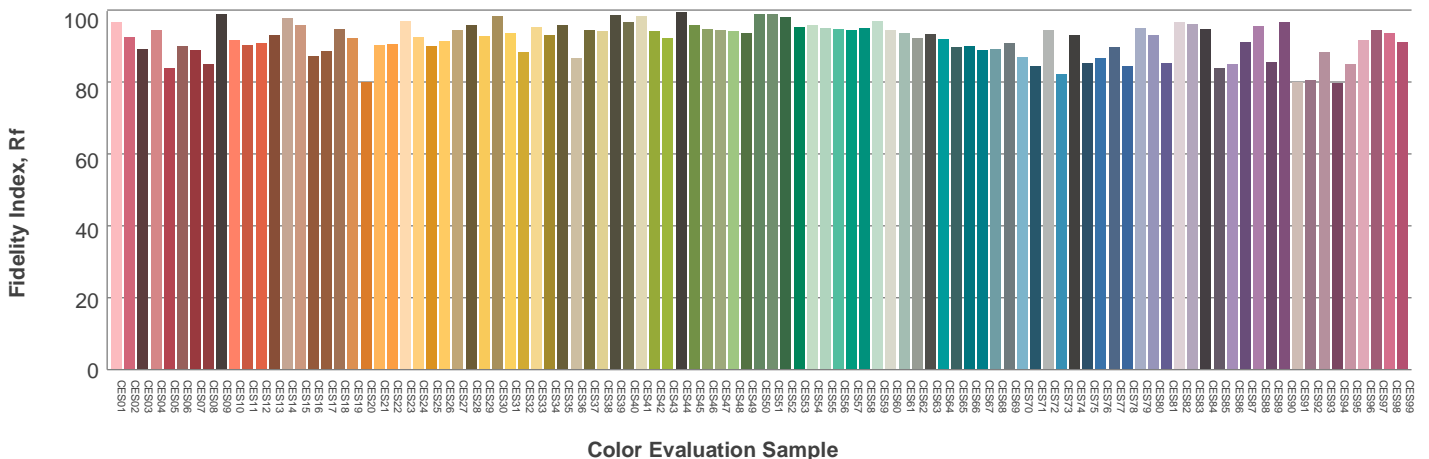
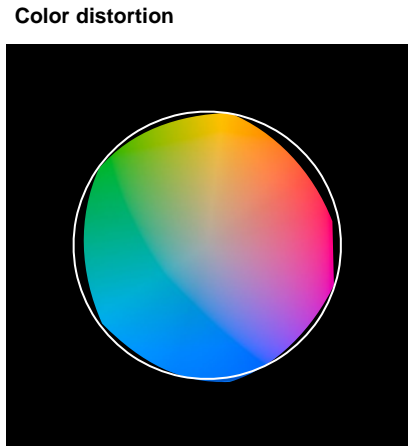
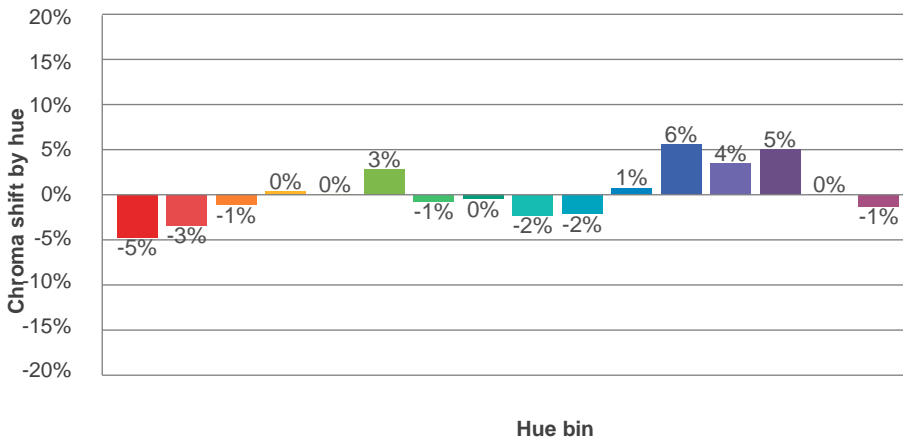
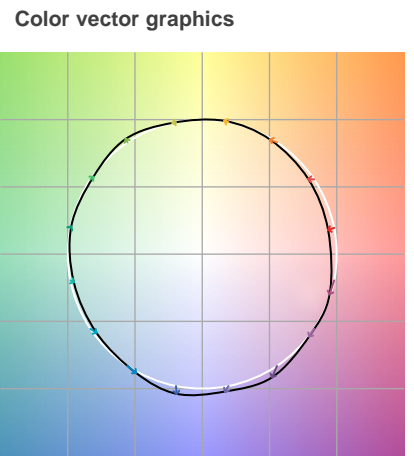
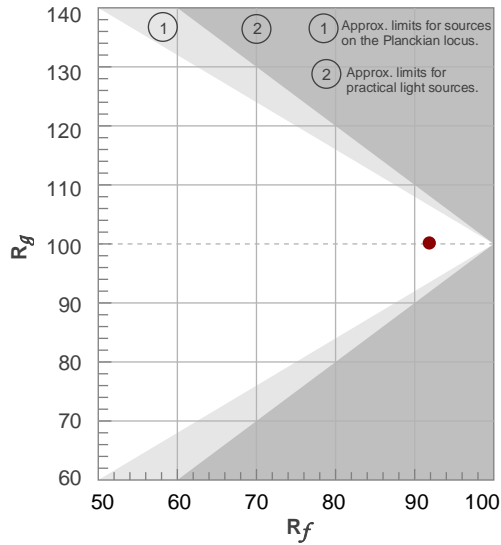
Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CRI	CRI R9	TM30 R _f	TM30 R _g	CQS	x	y	u	v	Δuv
92.7	60.1	91.8	100.2	91.0	0.428	0.400	0.246	0.346	-0.0002

R_f 91.8
Fidelity index R_f

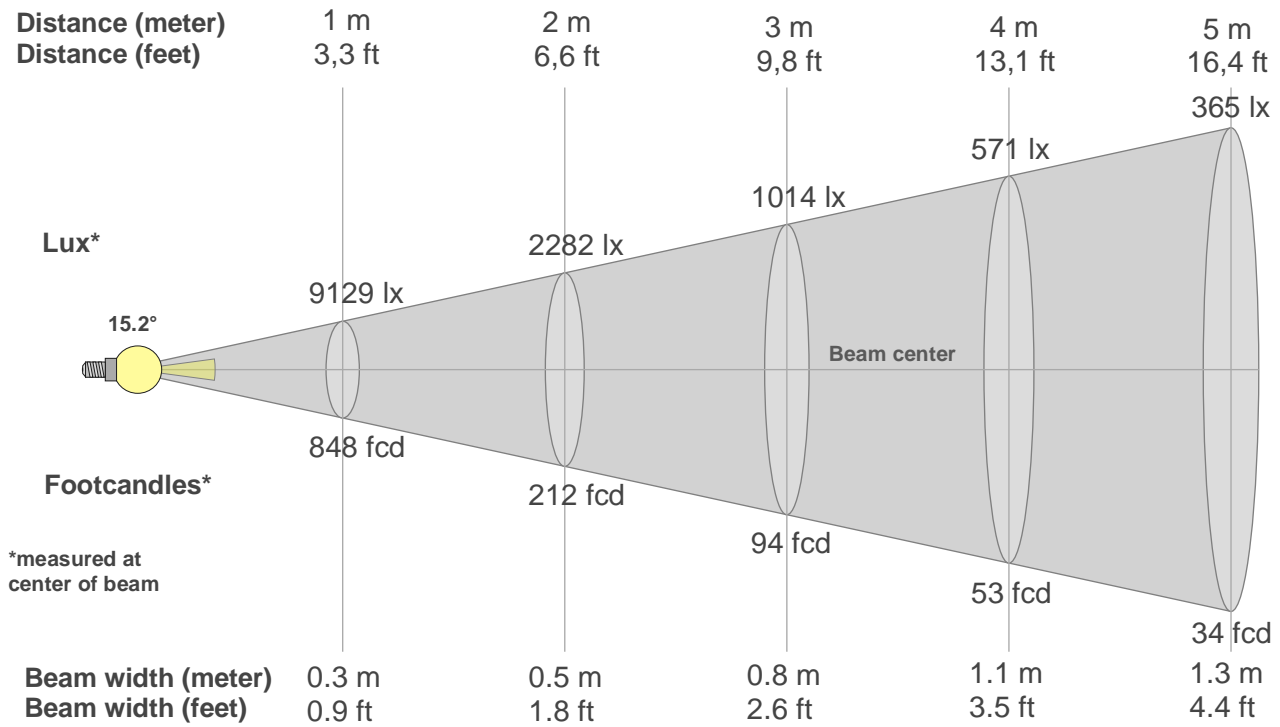
R_g 100.2
Gammut index R_g



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	4%	-3%
14	89	5%	-8%
15	90	0%	-7%
16	86	-1%	-11%



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
9129lx	2282lx	1014lx	571lx	365lx	254lx	186lx	143lx	113lx	91lx	75lx	63lx	54lx	47lx	41lx	36lx	32lx	28lx	25lx	23lx
848.1fc	212fcd	94.2fcd	53fcd	33.9fcd	23.6fcd	17.3fcd	13.3fcd	10.5fcd	8.5fcd	7fcd	5.9fcd	5fcd	4.3fcd	3.8fcd	3.3fcd	2.9fcd	2.6fcd	2.3fcd	2.1fcd

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°
9129	9038	8731	8204	7516	6731	5880	5047	4276	3602	3035	2571	2198	1894	1655	1463	1303	1175	1072	984
100%	99%	96%	90%	82%	74%	64%	55%	47%	39%	33%	28%	24%	21%	18%	16%	14%	13%	12%	11%

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°
9129	9038	8731	8204	7516	6731	5880	5047	4276	3602	3035	2571	2198	1894	1655	1463	1303	1175	1072	984
100%	99%	96%	90%	82%	74%	64%	55%	47%	39%	33%	28%	24%	21%	18%	16%	14%	13%	12%	11%

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°
9129	9038	8731	8204	7516	6731	5880	5047	4276	3602	3035	2571	2198	1894	1655	1463	1303	1175	1072	984
100%	99%	96%	90%	82%	74%	64%	55%	47%	39%	33%	28%	24%	21%	18%	16%	14%	13%	12%	11%

Intensities in 270° c-plane

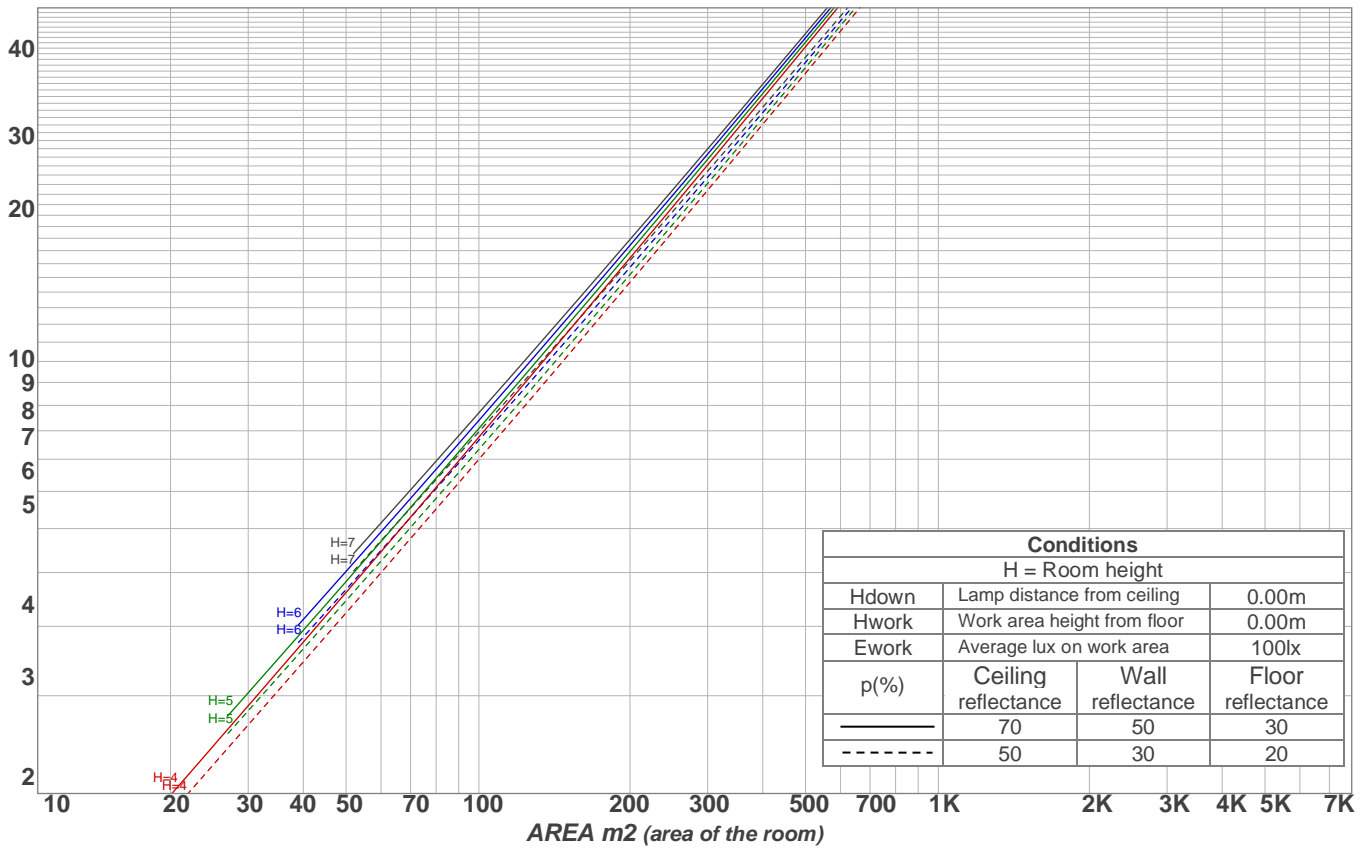
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
9129	9038	8731	8204	7516	6731	5880	5047	4276	3602	3035	2571	2198	1894	1655	1463	1303	1175	1072	984
100%	99%	96%	90%	82%	74%	64%	55%	47%	39%	33%	28%	24%	21%	18%	16%	14%	13%	12%	11%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15.2°	39.9°	61.6°	99.6%	99.4%

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

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
512 lm	430 lm	274 lm	42.8 lm	2.81 lm	1.89 lm	1.10 lm	1.10 lm	0.961 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	20.2	20.6	20.3	20.8	21.0	20.2	20.6	20.3	20.8	21.0
	3H	19.9	20.5	20.3	20.7	20.9	19.9	20.5	20.3	20.7	20.9
	4H	19.9	20.5	20.3	20.7	20.9	19.9	20.5	20.3	20.7	20.9
	6H	20.1	20.5	20.4	20.8	21.2	20.1	20.5	20.4	20.8	21.2
	8H	20.1	20.5	20.4	20.9	21.2	20.1	20.5	20.4	20.9	21.2
	12H	20.2	20.6	20.6	21.0	21.4	20.2	20.6	20.6	21.0	21.4
4H	2H	19.8	20.4	20.2	20.6	20.8	19.8	20.4	20.2	20.6	20.8
	3H	19.8	20.2	20.2	20.6	21.0	19.8	20.2	20.2	20.6	21.0
	4H	19.8	20.2	20.2	20.6	21.1	19.8	20.2	20.2	20.6	21.1
	6H	19.9	20.4	20.4	20.7	21.1	19.9	20.4	20.4	20.7	21.1
	8H	20.1	20.5	20.6	20.8	21.2	20.1	20.5	20.6	20.8	21.2
	12H	20.3	20.6	20.8	21.0	21.4	20.3	20.6	20.8	21.0	21.4
8H	4H	19.7	20.1	20.2	20.5	20.8	19.7	20.1	20.2	20.5	20.8
	6H	20.0	20.3	20.5	20.7	21.3	20.0	20.3	20.5	20.7	21.3
	8H	20.3	20.5	20.8	21.0	21.6	20.3	20.5	20.8	21.0	21.6
	12H	20.6	20.8	21.2	21.3	21.9	20.6	20.8	21.2	21.3	21.9
12H	4H	19.7	20.0	20.2	20.4	20.9	19.7	20.0	20.2	20.4	20.9
	6H	20.1	20.3	20.6	20.8	21.4	20.1	20.3	20.6	20.8	21.4
	8H	20.3	20.5	20.9	21.0	21.6	20.3	20.5	20.9	21.0	21.6
Corrected glare indices referring to 1267 lm total luminous flux											