

Light efficiency:



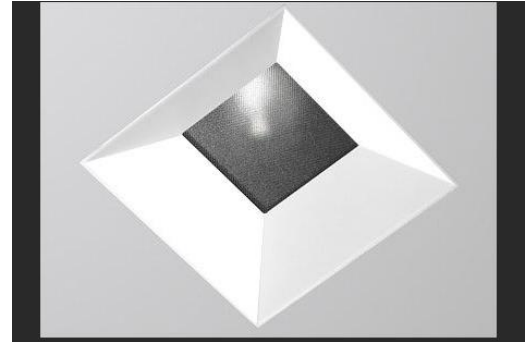
Output: 1848 lm

Light quality:

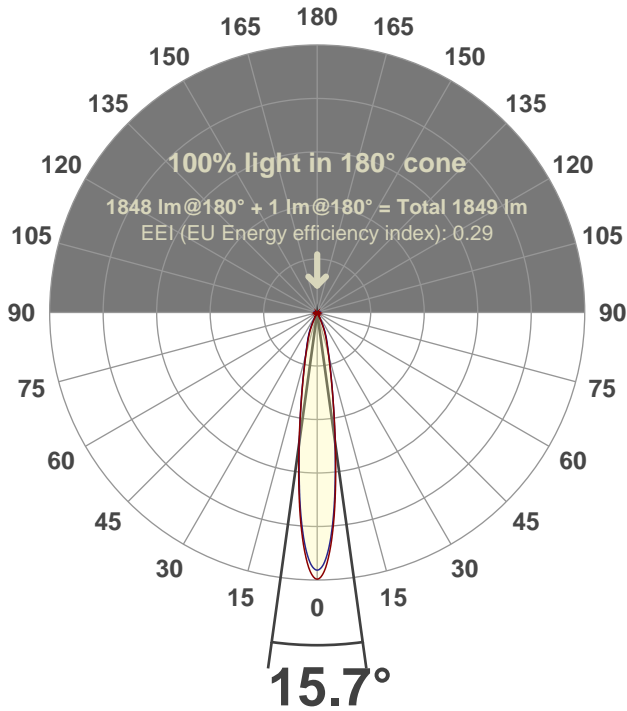


Peak: 13223 cd

Power: 30.0 W



Beam angle



Test number:

CR4D-S-DR-C28-30k-15 (1009-CZ20-SP)

Luminaire Model:

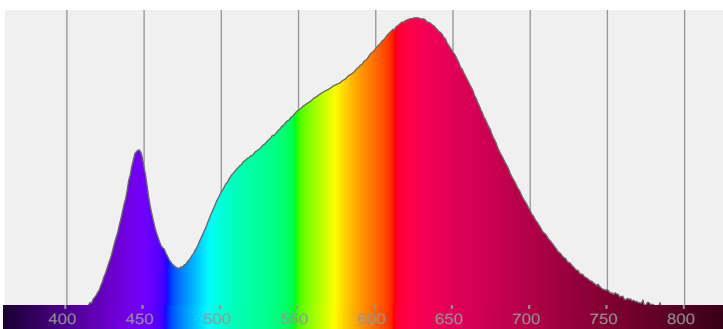
Core 4" Square Deep Regress C28 30K 15°

Date and time:

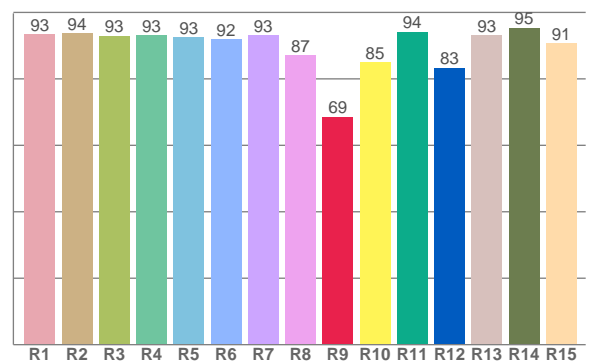
3/8/2017 4:59:36 PM

LUM: 1848

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	68.6	90.2	103.1	90.1	0.429	0.400	0.247	0.346	-0.0005

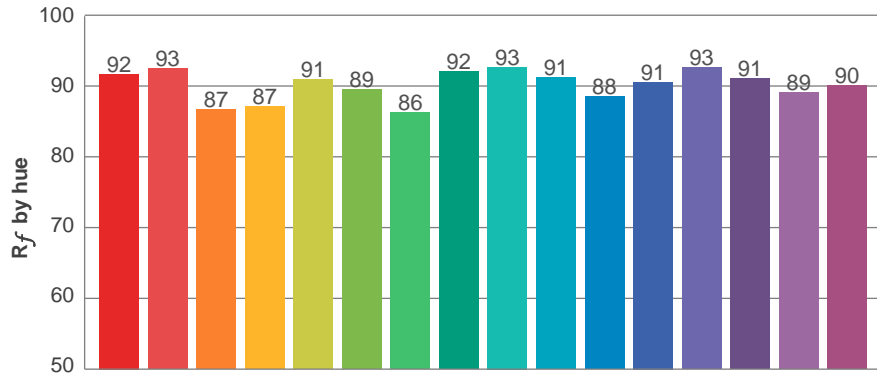
**$R_f$  90.2**  
Fidelity index  $R_f$

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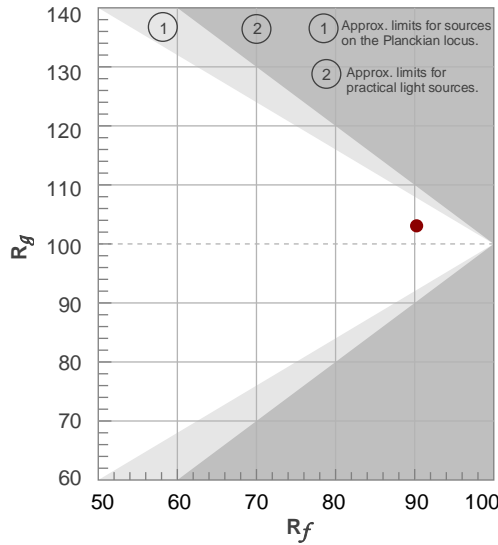
**$R_g$  103.1**  
Gammut index  $R_g$

TM30: 90.2

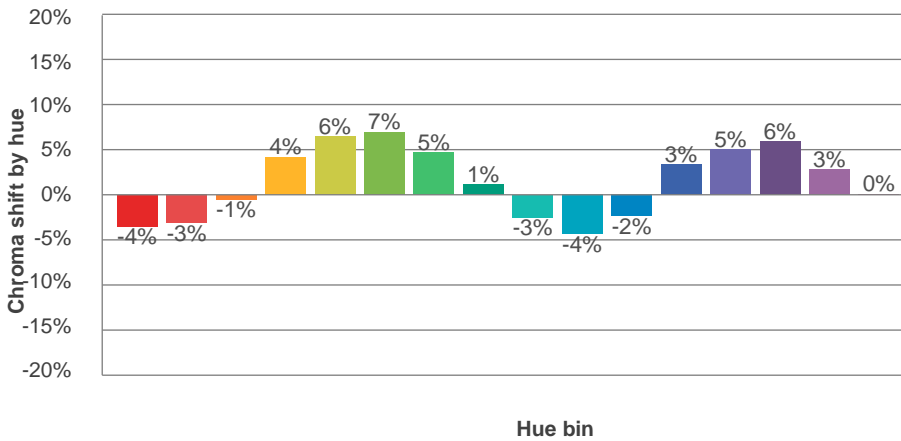
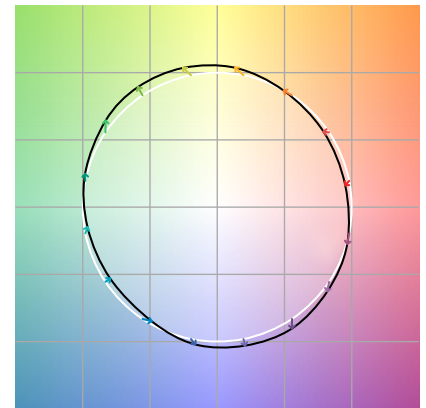
TM-30Color



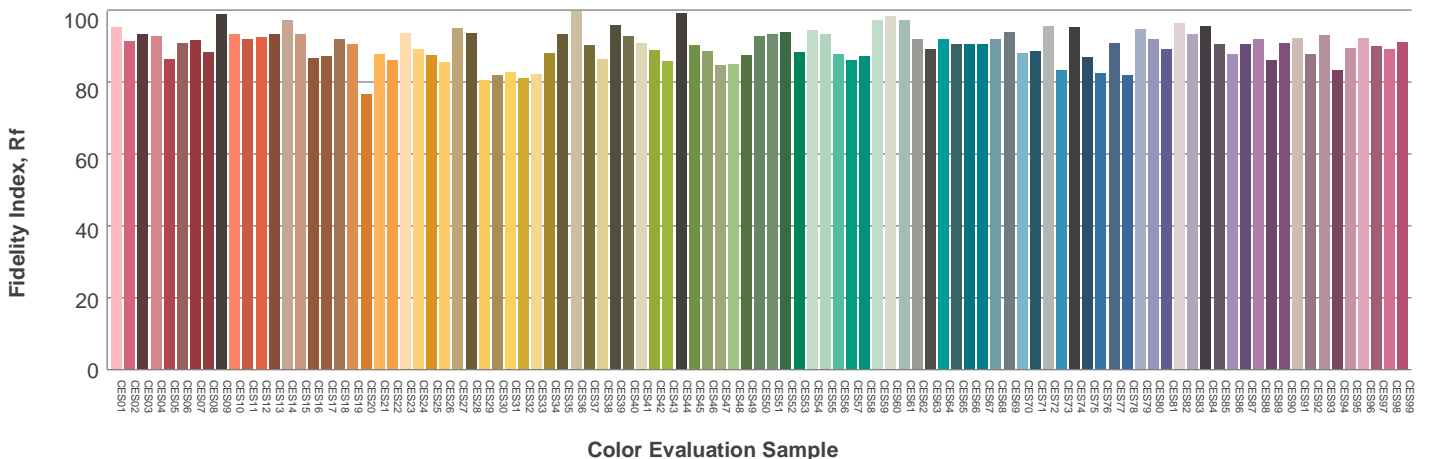
Hue Bin	$R_f$	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-3%
2	93	-3%	3%
3	87	-1%	7%
4	87	4%	7%
5	91	6%	5%
6	89	7%	-1%
7	86	5%	-7%
8	92	1%	-5%
9	93	-3%	-4%
10	91	-4%	0%
11	88	-2%	7%
12	91	3%	4%
13	93	5%	0%
14	91	6%	-4%
15	89	3%	-7%
16	90	0%	-8%



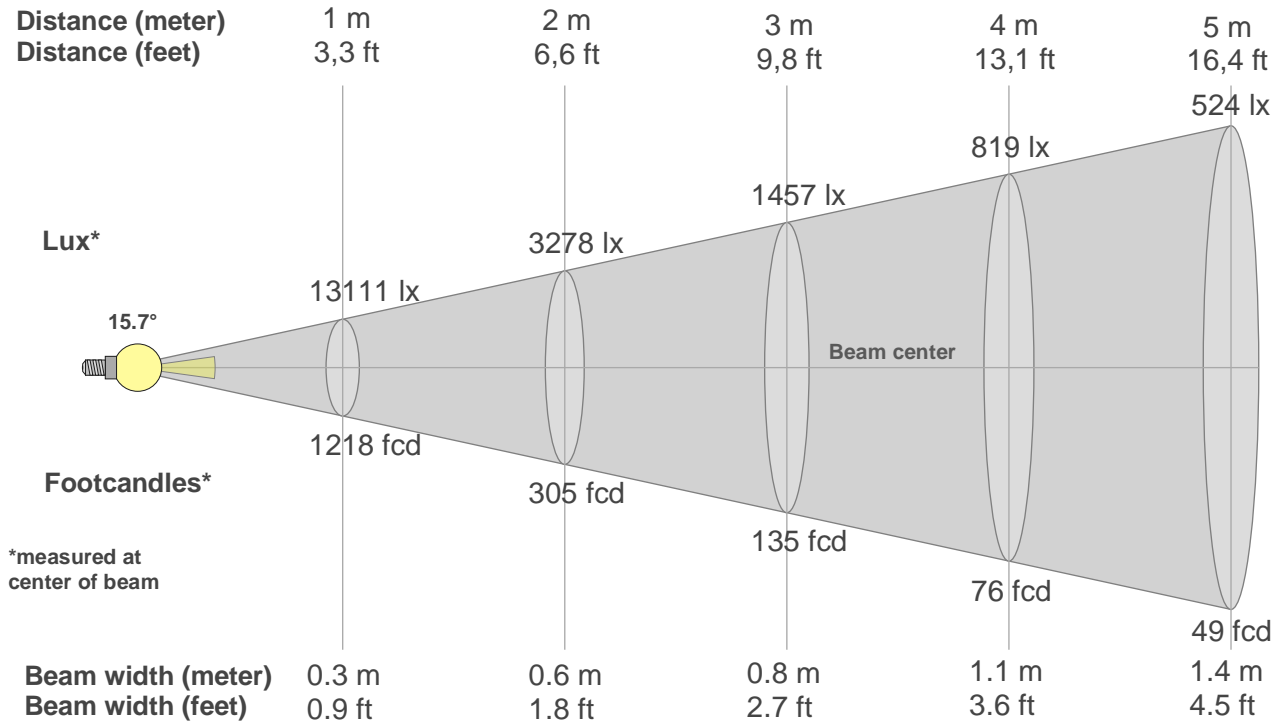
Color vector graphics



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
13111lx	3278lx	1457lx	819lx	524lx	364lx	268lx	205lx	162lx	131lx	108lx	91lx	78lx	67lx	58lx	51lx	45lx	40lx	36lx	33lx
1218fcd	304.5fcd	135.3fcd	76.1fcd	48.7fcd	33.8fcd	24.9fcd	19fcd	15fcd	12.2fcd	10.1fcd	8.5fcd	7.2fcd	6.2fcd	5.4fcd	4.8fcd	4.2fcd	3.8fcd	3.4fcd	3fcd

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°
13.1K	12.6K	10.9K	8.7K	6.5K	4.6K	3.4K	2.5K	1.9K	1.5K	1.2K	0.9K	0.6K	0.3K	0.1K	0.0K	0.0K	0.0K	0.0K	0.0K
100%	96%	83%	66%	49%	35%	26%	19%	15%	12%	9%	7%	5%	2%	1%	0%	0%	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°
13.1K	12.2K	10.7K	8.5K	6.3K	4.6K	3.4K	2.6K	2.0K	1.6K	1.3K	1.0K	0.7K	0.4K	0.2K	0.0K	0.0K	0.0K	0.0K	0.0K
100%	93%	82%	65%	48%	35%	26%	20%	15%	12%	10%	8%	6%	3%	1%	0%	0%	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°
13.1K	12.6K	10.9K	8.7K	6.5K	4.6K	3.4K	2.5K	1.9K	1.5K	1.2K	0.9K	0.6K	0.3K	0.1K	0.0K	0.0K	0.0K	0.0K	0.0K
100%	96%	83%	66%	49%	35%	26%	19%	15%	12%	9%	7%	5%	2%	1%	0%	0%	0%	0%	0%

Intensities in 270° c-plane

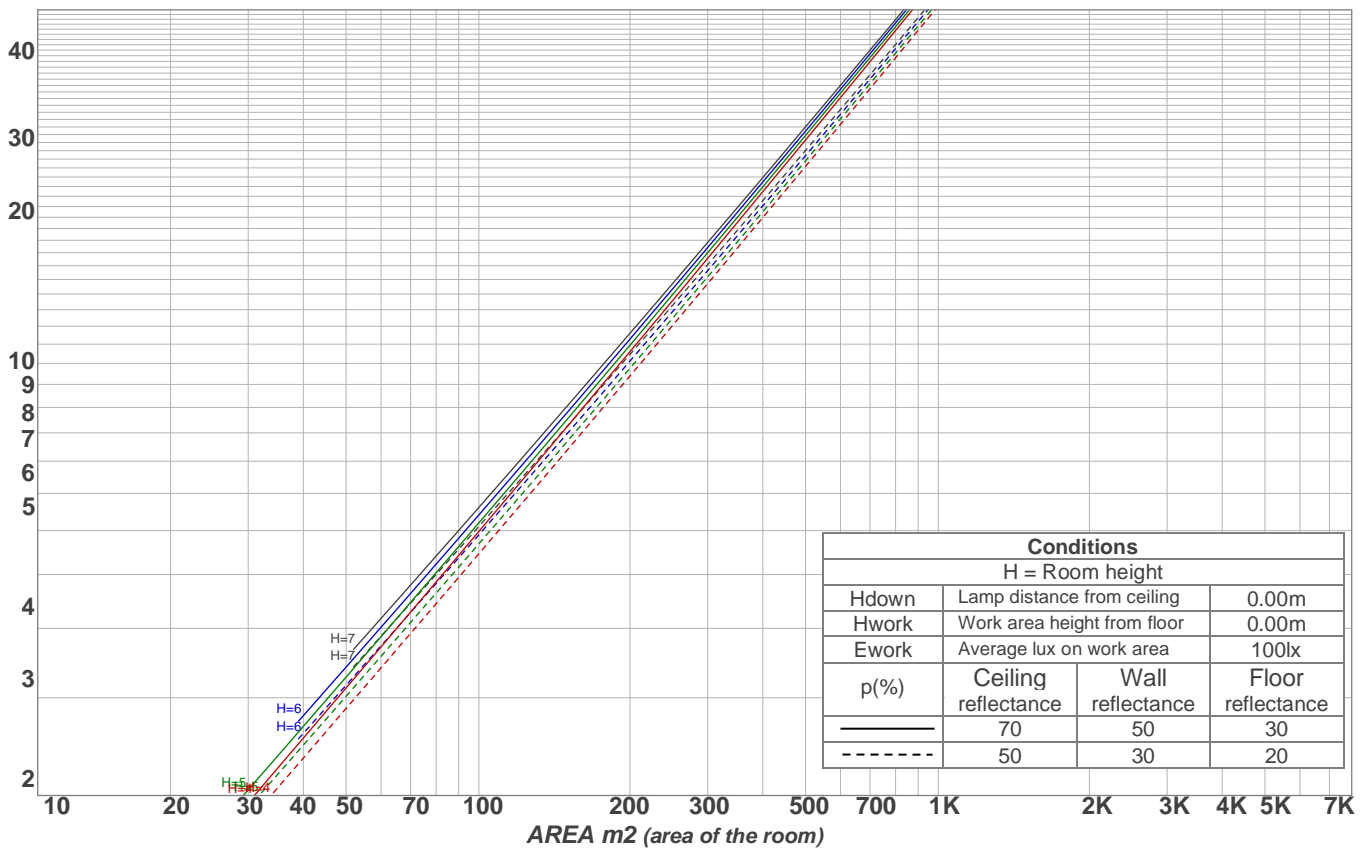
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
13.1K	12.2K	10.7K	8.5K	6.3K	4.6K	3.4K	2.6K	2.0K	1.6K	1.3K	1.0K	0.7K	0.4K	0.2K	0.0K	0.0K	0.0K	0.0K	0.0K
100%	93%	82%	65%	48%	35%	26%	20%	15%	12%	10%	8%	6%	3%	1%	0%	0%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
15.7°	40.6°	59.2°	99.6%	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
<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	113	111	109	108	107	106	104	103	102	101	100	99	98	97	96	95	94
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	97	96	95	95	93	92	91
3	108	103	100	97	106	102	99	96	100	97	95	97	95	93	95	93	92	91	89	88	87
4	105	99	95	92	103	98	95	92	96	93	91	94	92	90	93	91	89	88	86	85	84
5	102	96	92	89	100	95	91	88	93	90	88	92	89	87	91	88	86	85	83	82	81
6	99	93	89	86	98	92	88	85	91	87	85	89	87	84	88	86	84	83	81	80	79
7	96	90	86	83	95	89	85	83	88	85	82	87	84	82	86	84	81	80	78	77	76
8	94	87	83	80	93	87	83	80	86	82	80	85	82	80	84	81	79	78	76	75	74
9	91	85	81	78	90	84	81	78	84	80	78	83	80	78	82	79	77	76	74	73	72
10	89	83	79	76	88	82	78	76	81	78	76	81	78	76	80	77	75	74	72	71	70

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
756 lm	654 lm	351 lm	72.4 lm	4.66 lm	3.78 lm	3.48 lm	2.27 lm	1.63 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	19.5	19.8	19.5	20.0	20.2	19.5	19.9	19.6	20.1	20.3
	3H	19.5	20.0	19.8	20.2	20.4	19.6	20.2	20.0	20.4	20.6
	4H	19.6	20.1	20.0	20.3	20.6	19.8	20.4	20.2	20.6	20.8
	6H	19.8	20.2	20.1	20.5	20.9	20.2	20.6	20.5	20.9	21.2
	8H	19.9	20.3	20.2	20.7	21.0	20.3	20.8	20.6	21.1	21.5
	12H	20.1	20.5	20.4	20.9	21.3	20.6	21.0	20.9	21.3	21.7
4H	2H	19.2	19.7	19.6	20.0	20.2	19.3	19.8	19.7	20.0	20.3
	3H	19.6	20.0	19.9	20.3	20.7	19.7	20.1	20.1	20.5	20.9
	4H	19.7	20.1	20.1	20.5	21.0	20.0	20.3	20.4	20.8	21.3
	6H	20.0	20.4	20.5	20.7	21.1	20.4	20.8	20.9	21.2	21.5
	8H	20.2	20.6	20.7	20.9	21.3	20.7	21.1	21.2	21.4	21.8
	12H	20.5	20.8	21.0	21.2	21.7	21.0	21.4	21.5	21.8	22.2
8H	4H	19.7	20.2	20.3	20.5	20.8	20.0	20.4	20.5	20.7	21.1
	6H	20.2	20.4	20.7	20.9	21.4	20.6	20.9	21.1	21.3	21.8
	8H	20.5	20.7	21.1	21.3	21.9	21.1	21.3	21.6	21.8	22.4
	12H	21.1	21.2	21.7	21.7	22.3	21.6	21.8	22.2	22.3	22.9
12H	4H	19.7	20.0	20.2	20.4	20.9	20.0	20.3	20.5	20.7	21.1
	6H	20.3	20.5	20.8	21.0	21.6	20.7	20.9	21.2	21.4	22.0
	8H	20.6	20.8	21.2	21.3	21.9	21.1	21.3	21.7	21.8	22.4
Corrected glare indices referring to 1848 lm total luminous flux											