

Light efficiency:

67 Lumen/Watt

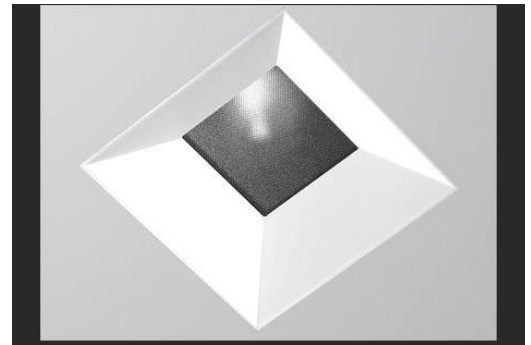
Output: 1424 lm

Light quality:

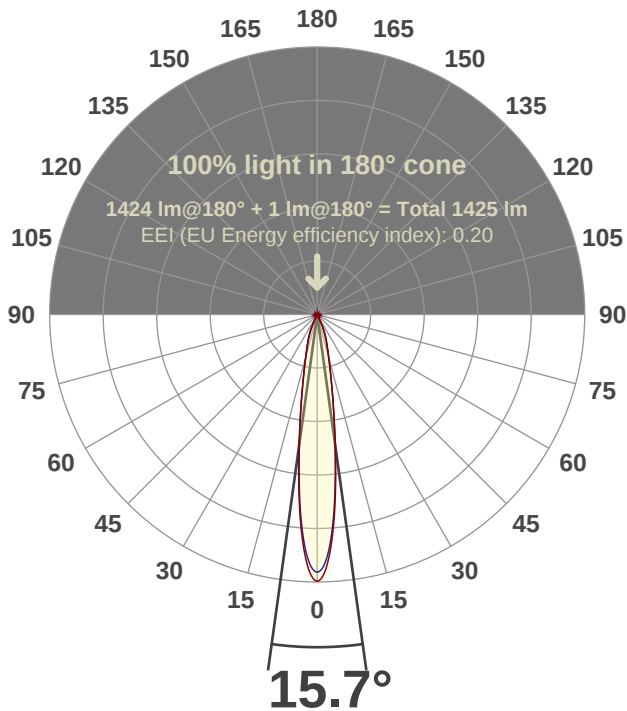
CRI: 92.3

Peak: 10190 cd

Power: 21.3 W



Beam angle



Test number:

CR4D-S-DR-C20-30k-15 (1009-CZ20-SP)

Luminaire Model:

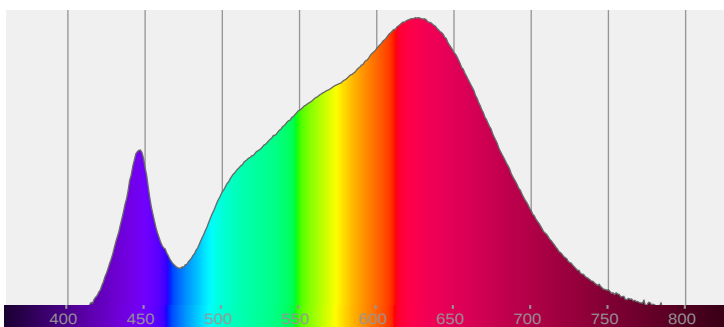
Core 4" Square Deep Regress C20 30K 15°

Date and time:

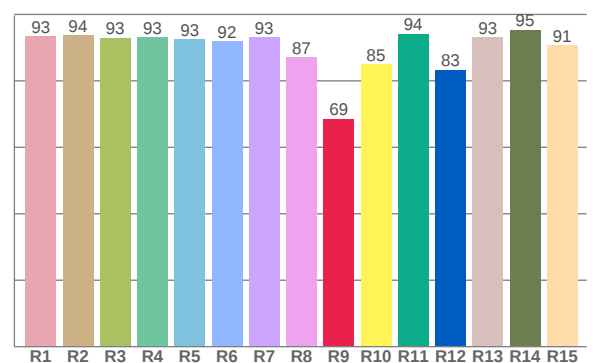
3/8/2017 4:59:36 PM

LUM: 1424

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 _f	TM30 R _g	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

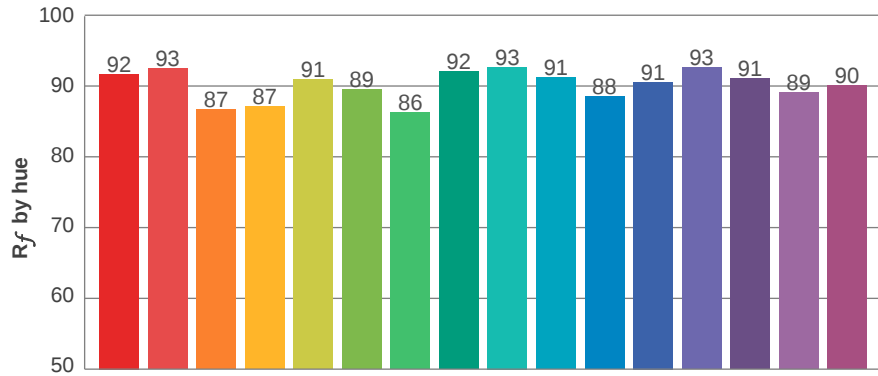
Fidelity index R_f

R_g 103.1

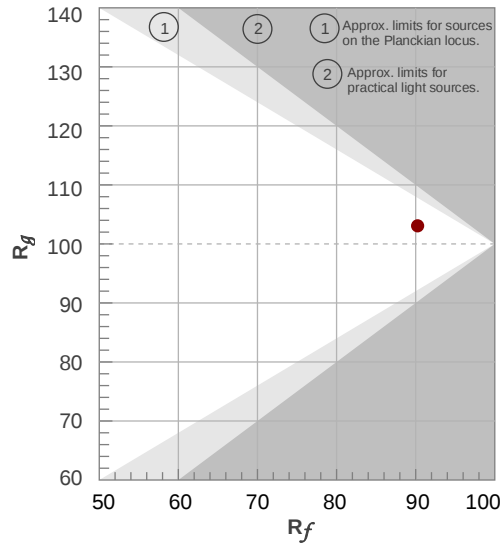
Gammut index R_g

TM30: 90.2

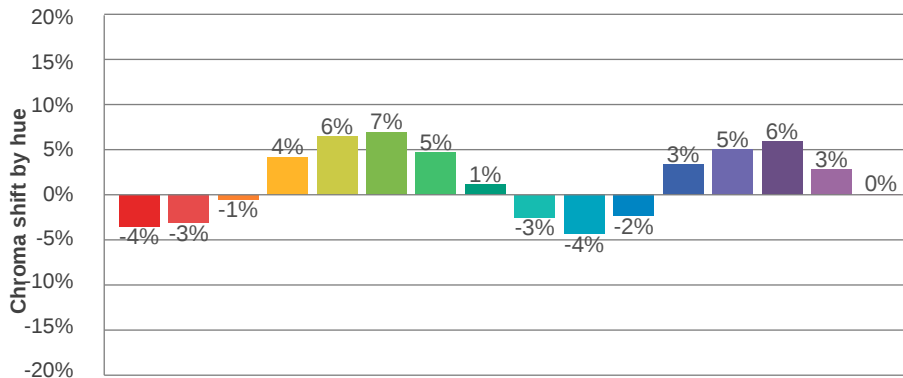
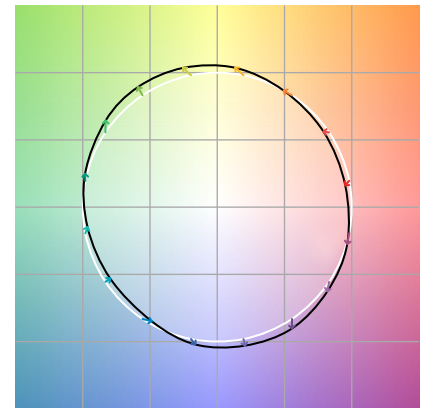
TM-30Color



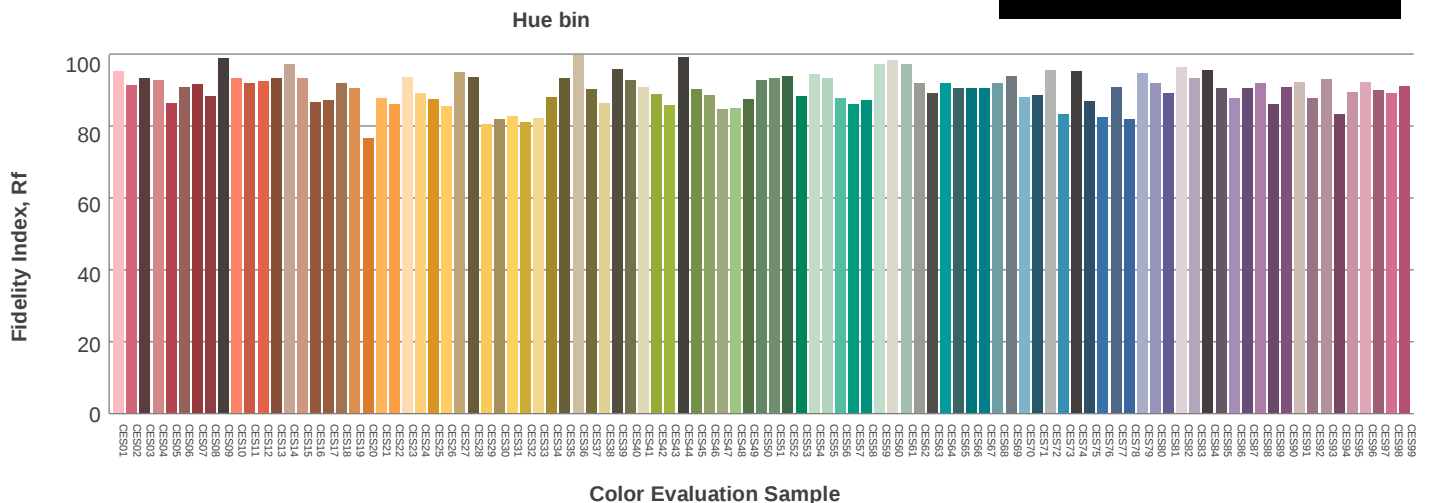
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	-3%
2	93	-3%	3%
3	87	-1%	7%
4	87	4%	7%
5	91	6%	5%
6	89	7%	-1%
7	86	5%	-7%
8	92	1%	-5%
9	93	-3%	-4%
10	91	-4%	0%
11	88	-2%	7%
12	91	3%	4%
13	93	5%	0%
14	91	6%	-4%
15	89	3%	-7%
16	90	0%	-8%



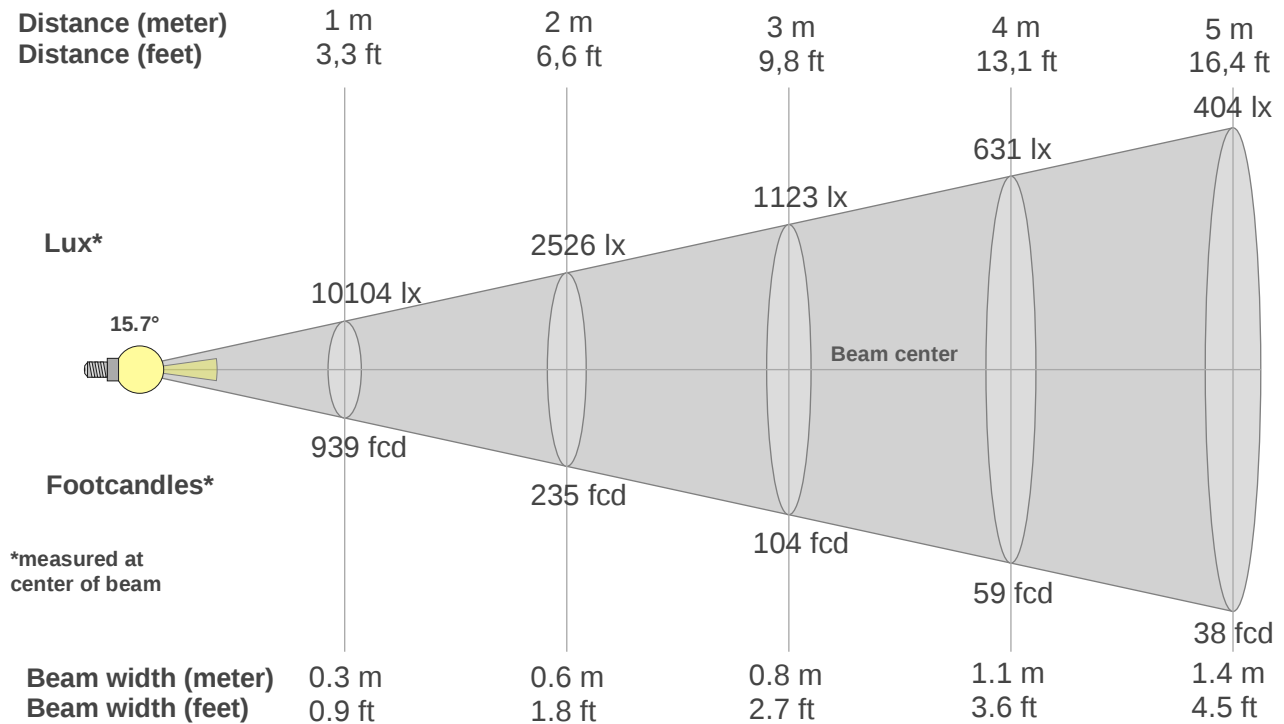
Color vector graphics



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
10104lx	2526lx	1123lx	631lx	404lx	281lx	206lx	158lx	125lx	101lx	84lx	70lx	60lx	52lx	45lx	39lx	35lx	31lx	28lx	25lx
938.7fc	234.7fc	104.3fc	58.7fcd	37.5fcd	26.1fcd	19.2fcd	14.7fcd	11.6fcd	9.4fcd	7.8fcd	6.5fcd	5.6fcd	4.8fcd	4.2fcd	3.7fcd	3.2fcd	2.9fcd	2.6fcd	2.3fcd

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°
10.1K	9.7K	8.4K	6.7K	5.0K	3.6K	2.6K	1.9K	1.5K	1.2K	0.9K	0.7K	0.5K	0.2K	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°
10.1K	9.4K	8.2K	6.6K	4.9K	3.6K	2.6K	2.0K	1.5K	1.2K	1.0K	0.8K	0.6K	0.3K	0.1K	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°
10.1K	9.7K	8.4K	6.7K	5.0K	3.6K	2.6K	1.9K	1.5K	1.2K	0.9K	0.7K	0.5K	0.2K	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

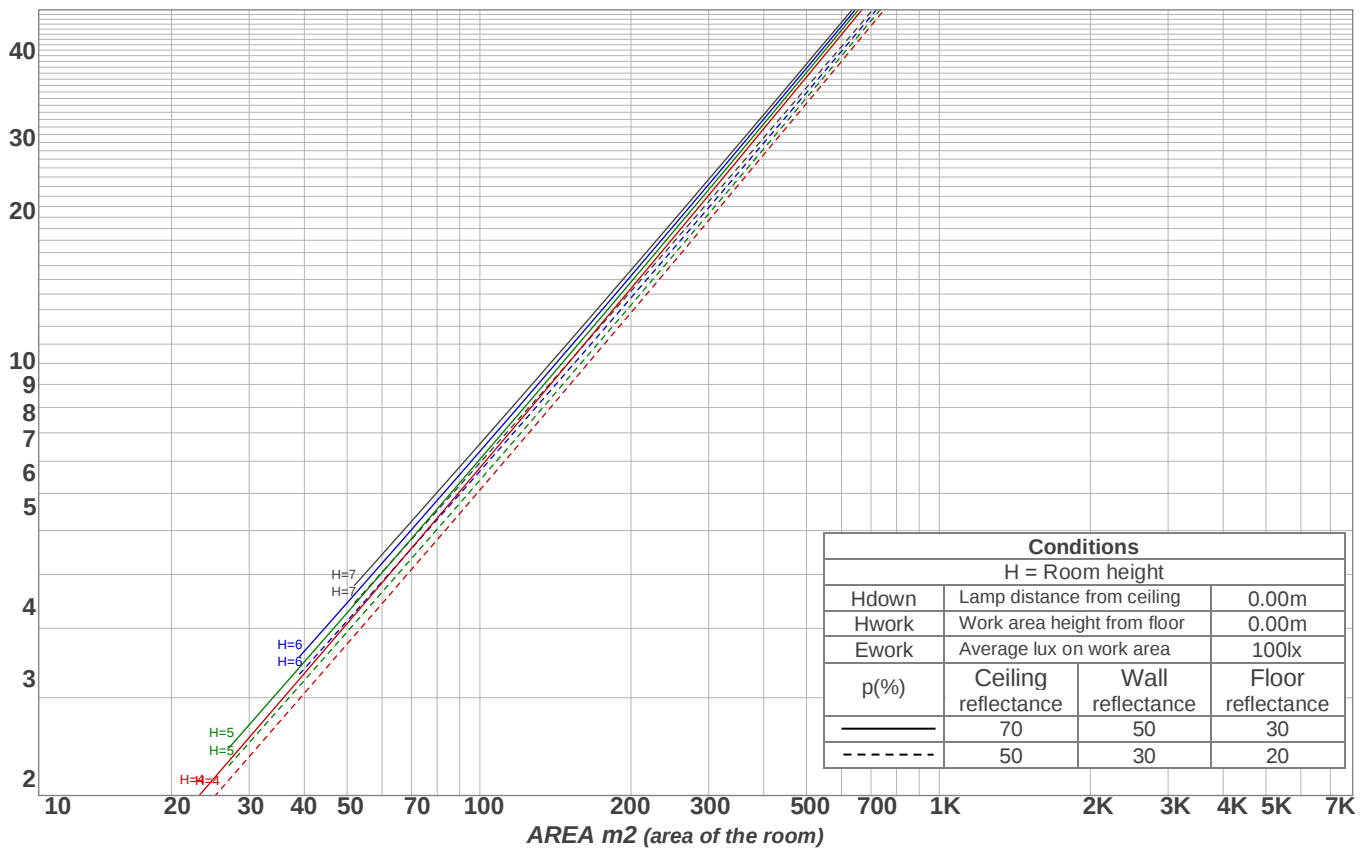
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
10.1K	9.4K	8.2K	6.6K	4.9K	3.6K	2.6K	2.0K	1.5K	1.2K	1.0K	0.8K	0.6K	0.3K	0.1K	0.0K	0.0K	0.0K	0.0K	0.0K
100%	93%	82%	65%	48%	35%	26%	20%	15%	12%	10%	8%	6%	3%	1%	0%	0%	0%	0%	0%

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	0
Floor reflectance	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
1	115	113	111	109	113	111	109	108	107	106	104	103	102	101	100	99	98	97
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	97	96	95	94
3	108	103	100	97	106	102	99	96	100	97	95	97	95	93	95	93	92	91
4	105	99	95	92	103	98	95	92	96	93	91	94	92	90	93	91	89	88
5	102	96	92	89	100	95	91	88	93	90	88	92	89	87	91	88	86	85
6	99	93	89	86	98	92	88	85	91	87	85	89	87	84	88	86	84	83
7	96	90	86	83	95	89	85	83	88	85	82	87	84	82	86	84	81	80
8	94	87	83	80	93	87	83	80	86	82	80	85	82	80	84	81	79	78
9	91	85	81	78	90	84	81	78	84	80	78	83	80	78	82	79	77	76
10	89	83	79	76	88	82	78	76	81	78	76	81	78	76	80	77	75	75

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
582 lm	504 lm	270 lm	55.8 lm	3.59 lm	2.91 lm	2.68 lm	1.75 lm	1.25 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	18.5	18.9	18.6	19.1	19.3	18.6	19.0	18.7	19.2	19.4
	3H	18.6	19.1	18.9	19.3	19.5	18.7	19.3	19.1	19.5	19.7
	4H	18.7	19.2	19.1	19.4	19.7	18.9	19.5	19.3	19.7	19.9
	6H	18.9	19.3	19.2	19.6	20.0	19.3	19.7	19.5	20.0	20.3
	8H	19.0	19.4	19.3	19.8	20.1	19.4	19.9	19.7	20.2	20.6
	12H	19.2	19.6	19.5	20.0	20.4	19.7	20.1	20.0	20.4	20.8
4H	2H	18.3	18.8	18.7	19.0	19.3	18.4	18.9	18.8	19.1	19.4
	3H	18.6	19.1	19.0	19.4	19.8	18.8	19.2	19.2	19.6	20.0
	4H	18.8	19.2	19.2	19.6	20.1	19.1	19.4	19.5	19.9	20.4
	6H	19.1	19.5	19.6	19.8	20.2	19.5	19.9	20.0	20.3	20.6
	8H	19.2	19.7	19.8	20.0	20.4	19.8	20.2	20.3	20.5	20.9
	12H	19.6	19.9	20.1	20.3	20.7	20.1	20.5	20.6	20.9	21.3
8H	4H	18.8	19.3	19.3	19.6	19.9	19.1	19.5	19.6	19.8	20.2
	6H	19.3	19.5	19.8	20.0	20.5	19.7	20.0	20.2	20.4	20.9
	8H	19.6	19.8	20.1	20.4	21.0	20.2	20.4	20.7	20.9	21.5
	12H	20.2	20.3	20.8	20.8	21.4	20.7	20.9	21.3	21.4	22.0
12H	4H	18.8	19.1	19.3	19.5	20.0	19.1	19.4	19.6	19.8	20.2
	6H	19.4	19.6	19.9	20.1	20.7	19.8	20.0	20.3	20.5	21.1
	8H	19.7	19.9	20.3	20.4	21.0	20.2	20.4	20.8	20.9	21.5
Corrected glare indices referring to 1424 lm total luminous flux											