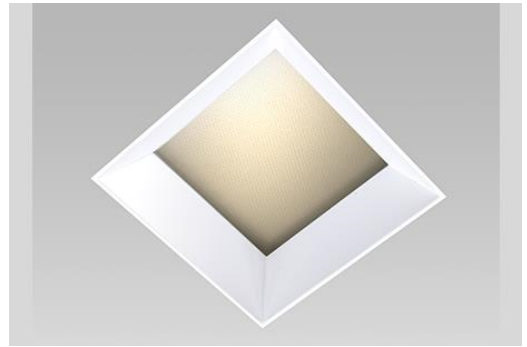


Light efficiency:



Output: 1112 lm



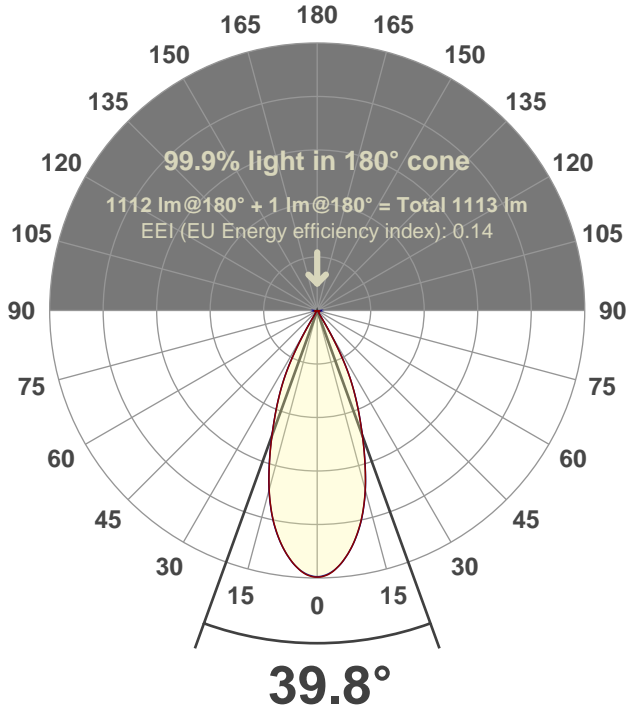
Light quality:



Peak: 2422 cd

Power: 15.0 W

Beam angle



Test number:

CR4D-S-OR-C14-30k-40 (1017-CZ20-FL)

Luminaire Model:

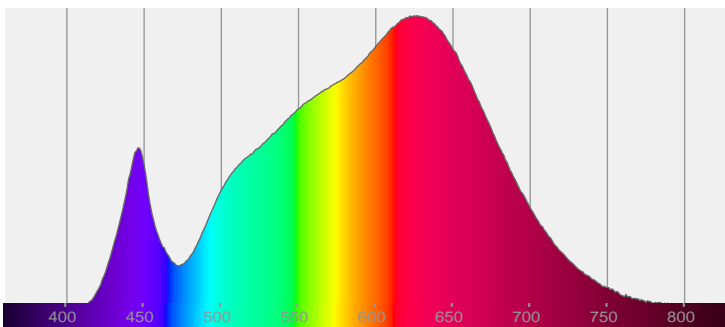
Core 4" Square Open Regress C14 30K 40°

Date and time:

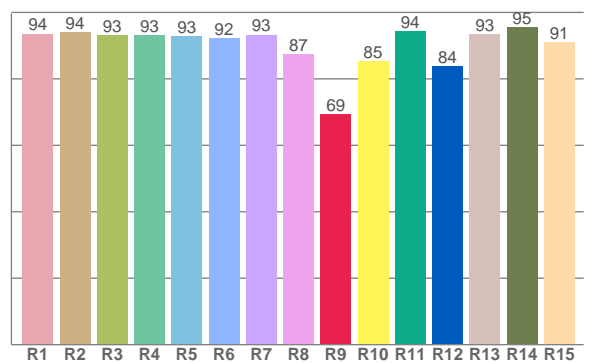
3/31/2017 1:48:55 PM

LUM: 1112

Spectra



CRI: 92.4 (R1-R8)



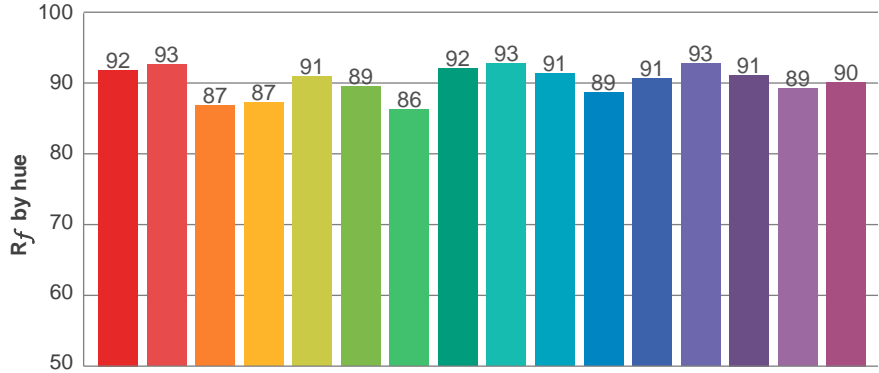
Color parameters

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
92.4	69.3	90.3	103.1	90.2	0.429	0.400	0.247	0.346	-0.0006

R_f 90.3
Fidelity index R_f

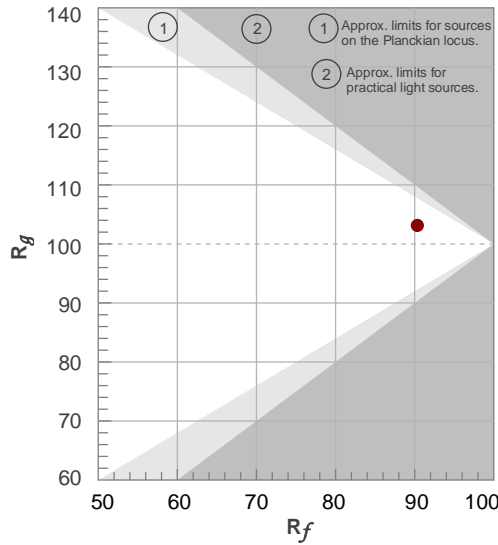
R_g 103.1
Gammut index R_g

TM30: 90.3

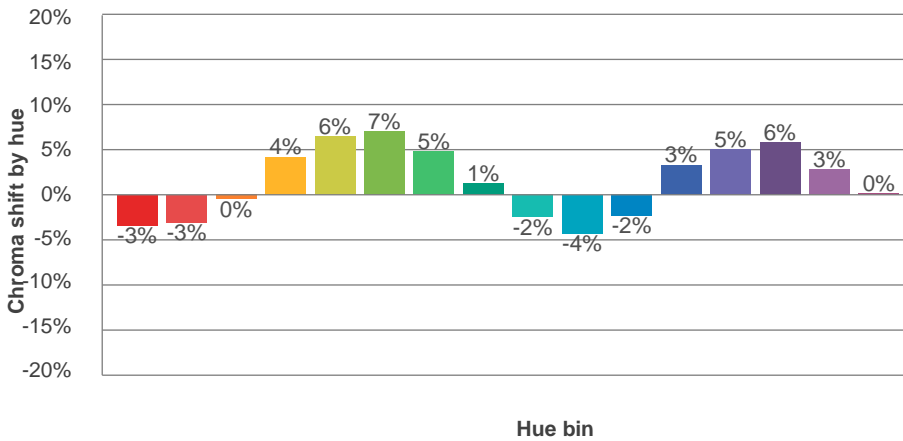
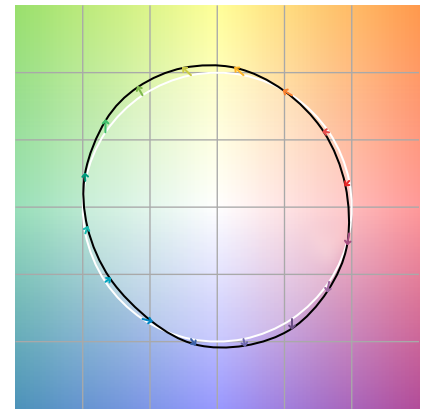


TM-30Color

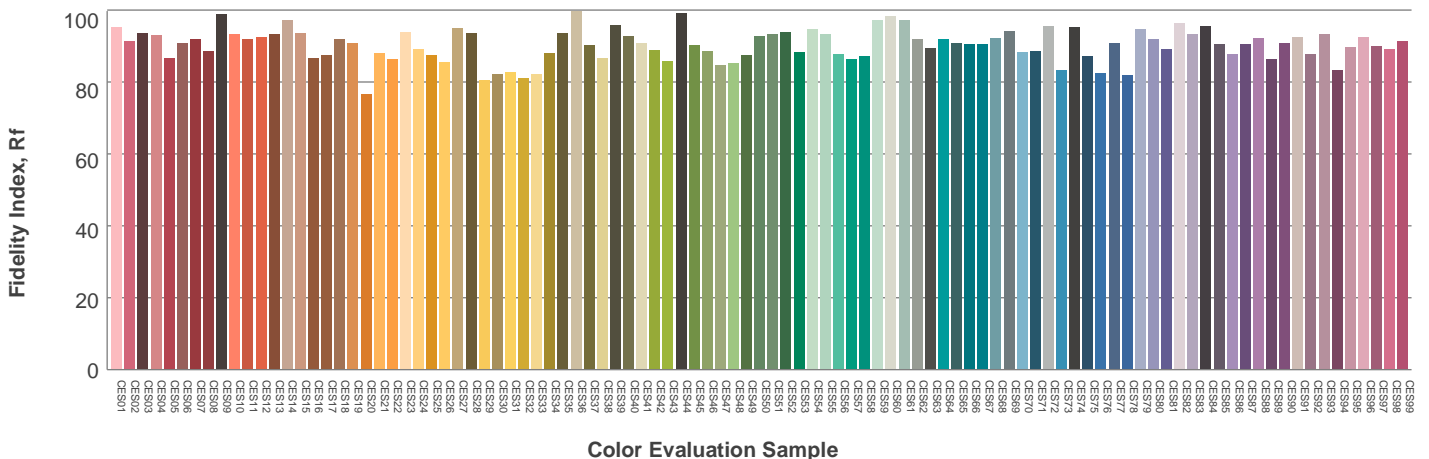
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	92	-3%	-3%
2	93	-3%	3%
3	87	0%	7%
4	87	4%	7%
5	91	6%	5%
6	89	7%	-1%
7	86	5%	-7%
8	92	1%	-5%
9	93	-2%	-4%
10	91	-4%	0%
11	89	-2%	6%
12	91	3%	4%
13	93	5%	0%
14	91	6%	-4%
15	89	3%	-6%
16	90	0%	-8%



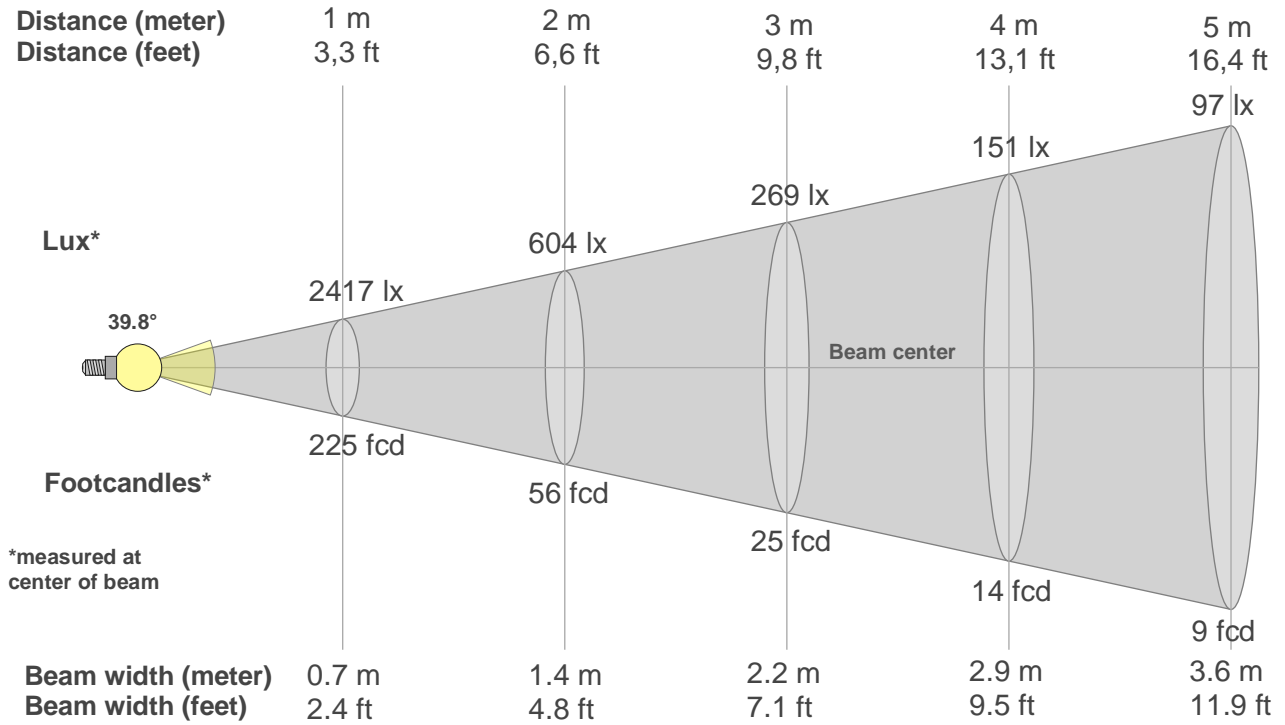
Color vector graphics



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
2417lx	604lx	269lx	151lx	97lx	67lx	49lx	38lx	30lx	24lx	20lx	17lx	14lx	12lx	11lx	9lx	8lx	7lx	7lx	6lx
224.6fc	56.1fcd	25fcd	14fcd	9fcd	6.2fcd	4.6fcd	3.5fcd	2.8fcd	2.2fcd	1.9fcd	1.6fcd	1.3fcd	1.1fcd	1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.6fcd

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°
2417	2407	2359	2283	2188	2072	1937	1777	1594	1396	1202	1023	855	688	490	274	98	40	30	25
100%	100%	98%	94%	91%	86%	80%	74%	66%	58%	50%	42%	35%	28%	20%	11%	4%	2%	1%	1%

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°
2417	2402	2357	2285	2189	2075	1940	1781	1599	1399	1204	1023	855	687	491	272	96	40	30	25
100%	99%	98%	95%	91%	86%	80%	74%	66%	58%	50%	42%	35%	28%	20%	11%	4%	2%	1%	1%

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°
2417	2407	2359	2283	2188	2072	1937	1777	1594	1396	1202	1023	855	688	490	274	98	40	30	25
100%	100%	98%	94%	91%	86%	80%	74%	66%	58%	50%	42%	35%	28%	20%	11%	4%	2%	1%	1%

Intensities in 270° c-plane

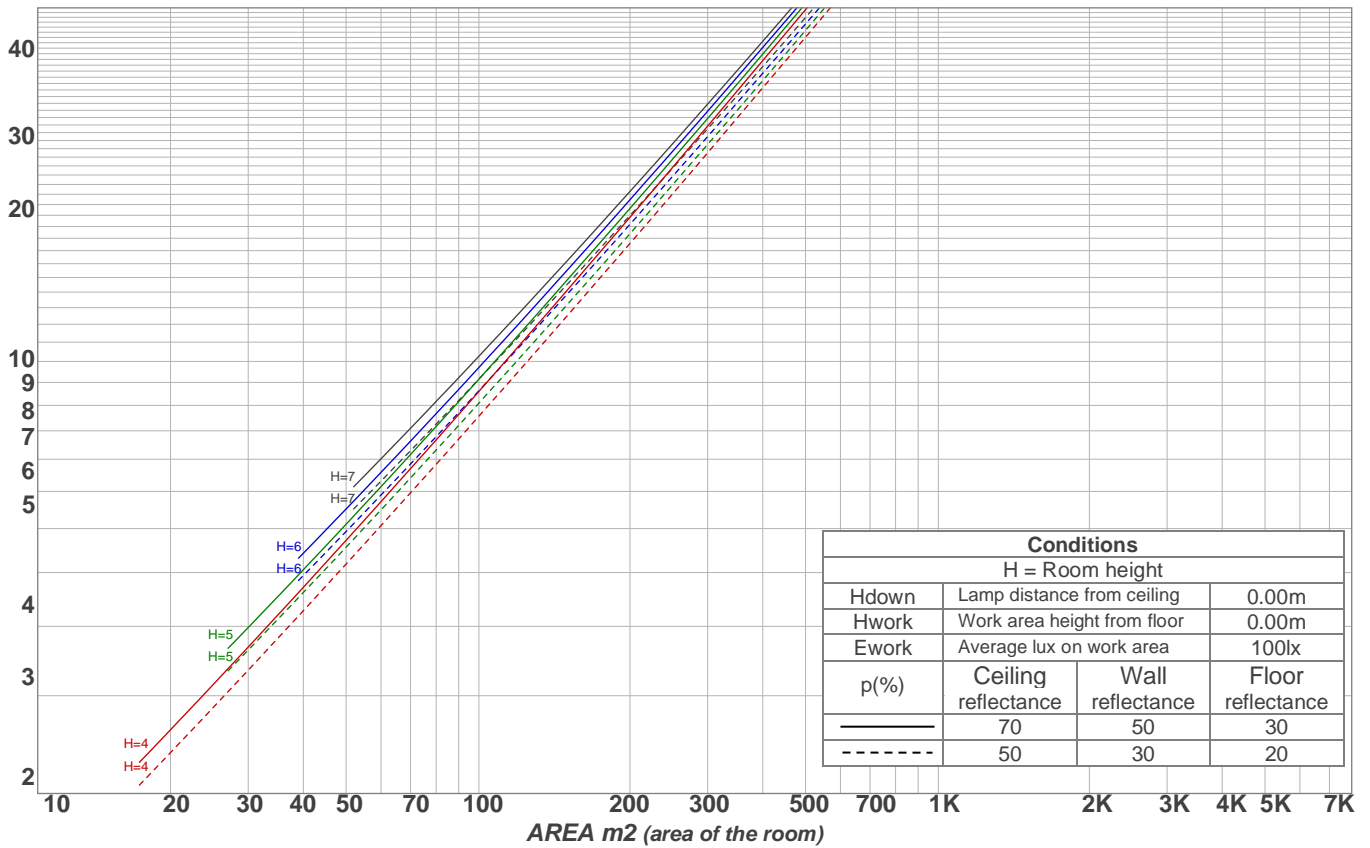
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2417	2402	2357	2285	2189	2075	1940	1781	1599	1399	1204	1023	855	687	491	272	96	40	30	25
100%	99%	98%	95%	91%	86%	80%	74%	66%	58%	50%	42%	35%	28%	20%	11%	4%	2%	1%	1%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
39.8°	63°	70.3°	99.3%	98.3%

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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95
2	110	106	102	99	108	104	101	98	101	98	96	98	96	94	95	93	92	90
3	105	100	96	92	104	99	95	92	96	93	90	94	91	89	92	89	88	86
4	101	95	90	87	100	94	90	86	92	88	85	90	87	84	88	86	83	82
5	97	90	86	82	96	90	85	82	88	84	81	86	83	80	85	82	80	78
6	94	86	81	78	92	86	81	78	84	80	77	83	79	77	82	78	76	75
7	90	82	78	74	89	82	77	74	81	77	73	80	76	73	79	75	73	72
8	87	79	74	71	86	78	74	71	77	73	70	77	73	70	76	72	70	69
9	84	76	71	68	83	75	71	67	74	70	67	74	70	67	73	69	67	66
10	81	73	68	65	80	72	68	65	72	67	65	71	67	64	70	67	64	63

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
213 lm	459 lm	346 lm	67.4 lm	13.0 lm	6.13 lm	3.66 lm	2.19 lm	1.04 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	22.5	23.0	22.6	23.2	23.4	22.5	23.0	22.6	23.2	23.4
	3H	22.4	23.0	22.7	23.2	23.4	22.5	23.2	22.9	23.3	23.5
	4H	22.4	23.1	22.8	23.3	23.5	22.6	23.3	23.0	23.5	23.7
	6H	22.6	23.1	22.9	23.4	23.7	22.8	23.4	23.1	23.6	24.0
	8H	22.6	23.1	22.9	23.4	23.8	22.9	23.4	23.2	23.7	24.1
	12H	22.6	23.1	22.9	23.4	23.9	22.9	23.4	23.3	23.8	24.2
4H	2H	22.3	22.9	22.7	23.1	23.4	22.3	22.9	22.7	23.1	23.4
	3H	22.5	22.9	22.8	23.3	23.7	22.6	23.1	23.0	23.5	23.9
	4H	22.5	23.0	22.9	23.4	23.9	22.8	23.2	23.2	23.6	24.2
	6H	22.7	23.2	23.2	23.5	23.9	23.0	23.5	23.5	23.8	24.2
	8H	22.7	23.2	23.3	23.5	23.9	23.1	23.5	23.6	23.9	24.2
	12H	22.8	23.2	23.3	23.6	24.0	23.2	23.5	23.7	23.9	24.4
8H	4H	22.6	23.0	23.1	23.3	23.7	22.8	23.2	23.3	23.6	23.9
	6H	22.8	23.1	23.3	23.6	24.1	23.1	23.4	23.6	23.9	24.4
	8H	23.0	23.2	23.5	23.7	24.3	23.3	23.5	23.8	24.0	24.7
	12H	23.1	23.3	23.7	23.8	24.4	23.5	23.7	24.1	24.2	24.8
12H	4H	22.5	22.9	23.0	23.3	23.7	22.7	23.1	23.2	23.5	24.0
	6H	22.9	23.1	23.4	23.6	24.2	23.2	23.4	23.7	23.9	24.5
	8H	23.0	23.2	23.6	23.7	24.3	23.3	23.5	23.9	24.0	24.6
Corrected glare indices referring to 1112 lm total luminous flux											