PHOTOMETRIC TEST REPORT

NANOBeam Regressed Medium 50° NBE9560

Light efficiency:

126 Lumen/Watt

Light quality:

CRI: 82.8

Color temperature:

3413 K

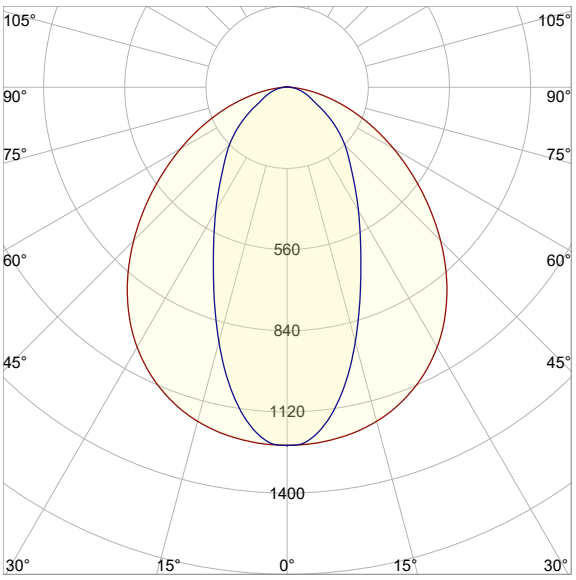
Output: 2033 lm

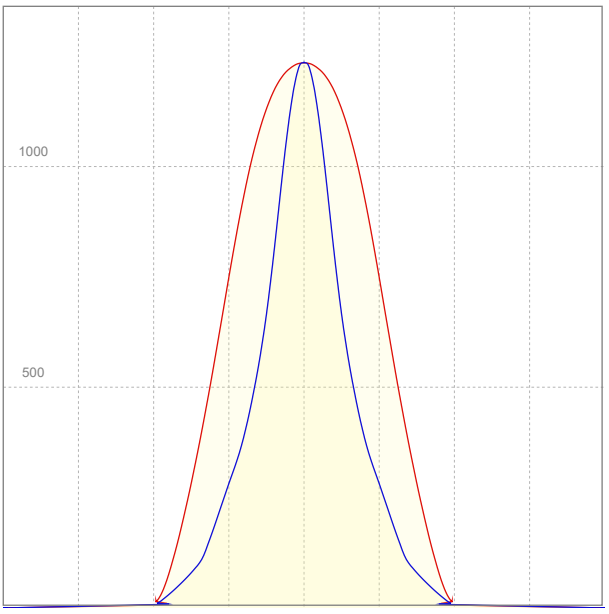
Peak: 1239 cd

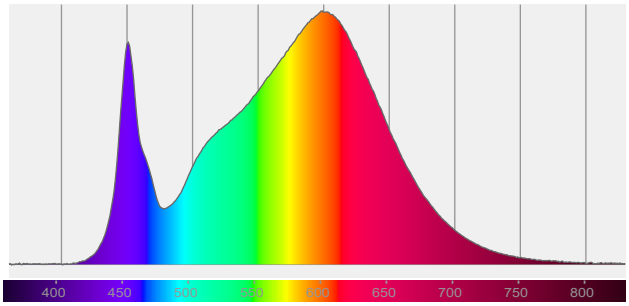
Power: 16.1 W

PF: 1.0

No photo







Product name:
NANOBeam Regressed Medium 50°
Item number:
NBE9560
Configuration:
NBE9560-4FT-3580-WT-DRM50-500LPF
Date and time:
8/3/2021 3:24:10 PM
Description:
Power Supply @ 440mA

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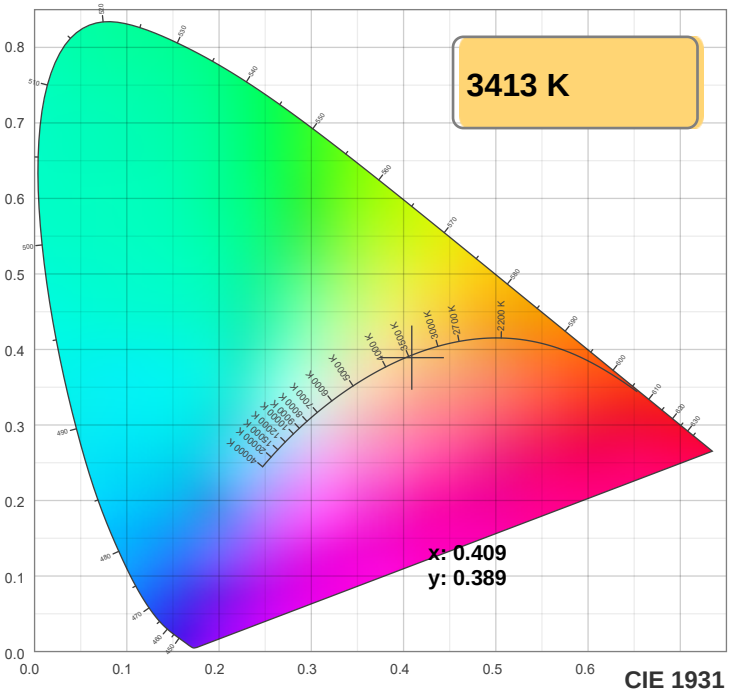
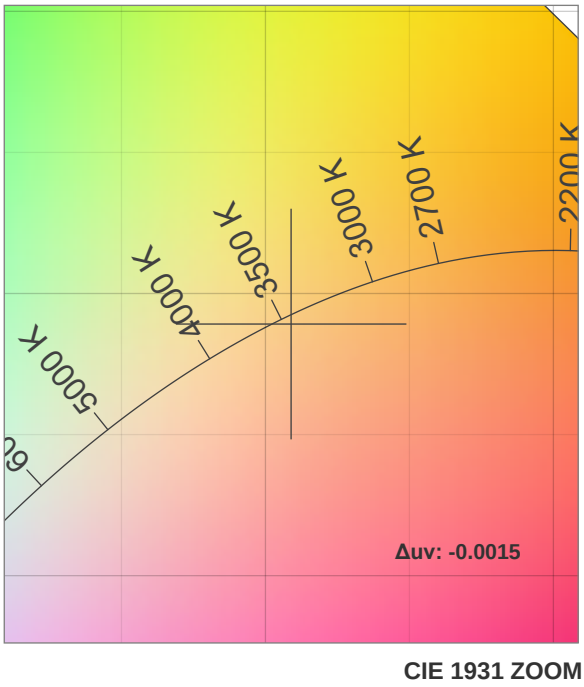
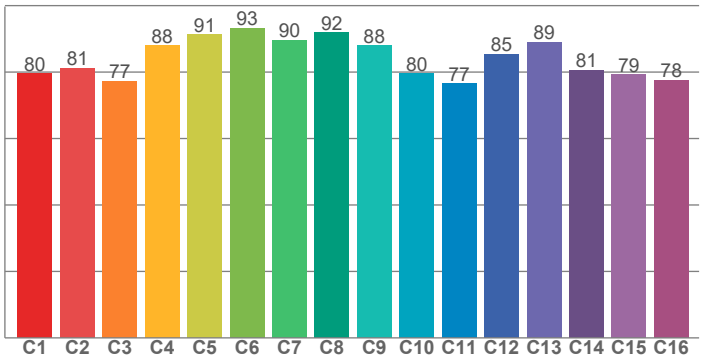
Color Details

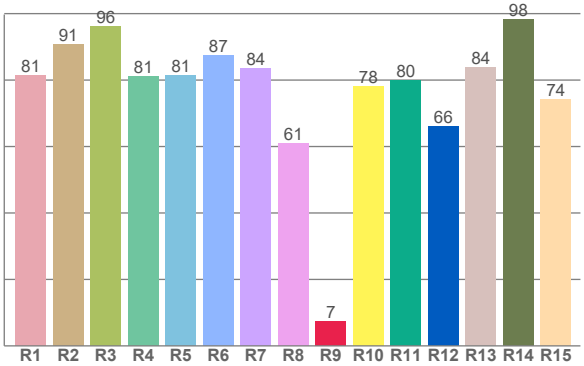




TM-30: 84.0



CRI: 82.8 (R1-R8)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
81.4	90.7	96.1	81.0	81.4	87.4	83.6	61.1	7.3	78.1	80.0	66.2	83.8	98.4	74.3

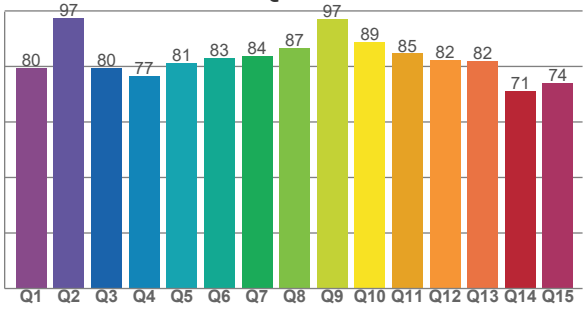
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
79.6	81.2	77.3	87.9	91.3	93.2	89.7	92.0	87.9	79.5	76.7	85.4	89.0	80.6	79.3	77.7

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
79.5	97.3	79.6	76.5	81.3	83.1	83.8	86.7	97.2	88.8	84.7	82.4	81.9	71.3	74.1

CQS: 81.8



Color parameters

Color temperature	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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3413 K	82.8	7.3	84.0	96.2	81.8	0.409	0.389	0.239	0.341	-0.0015

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TM-30 Details

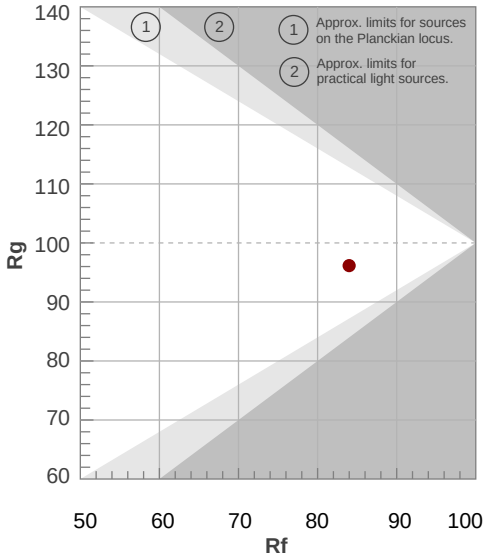
Rf 84.0

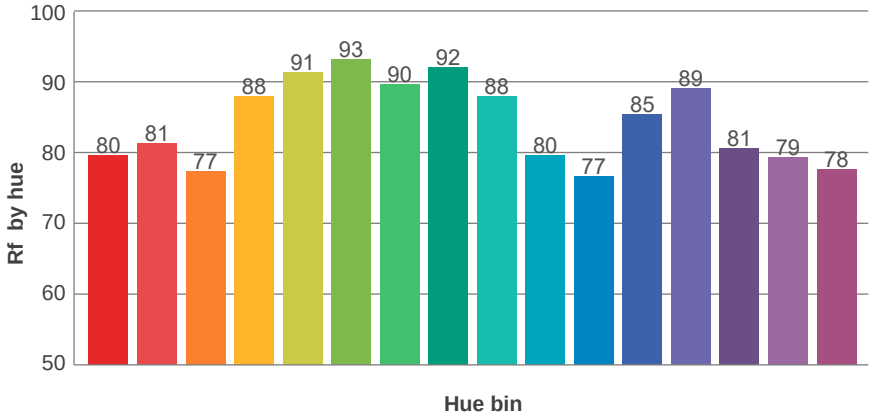
Fidelity index Rf

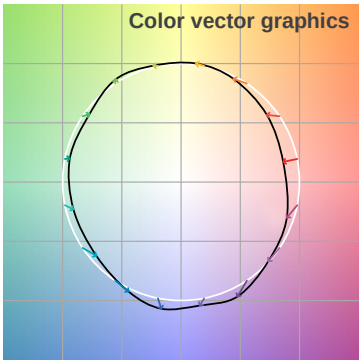
Rg 96.2

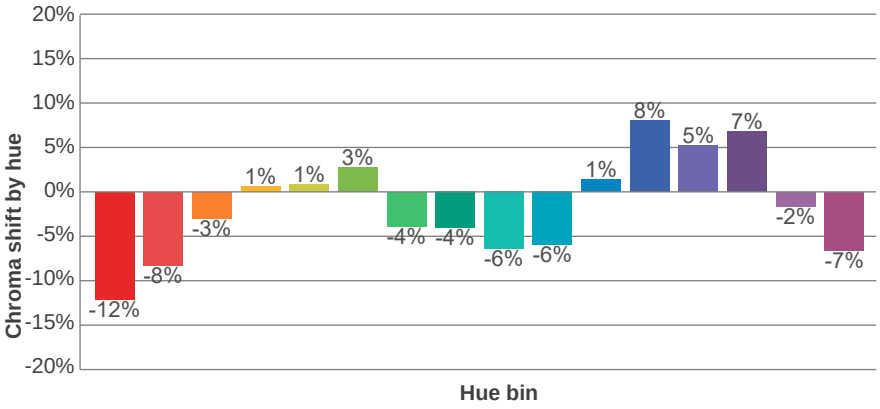
Gamut index Rg

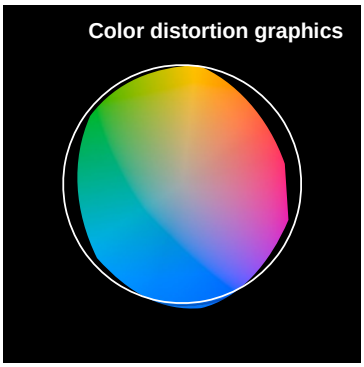
Hue Bin	R_f	Shifts (%) Chroma	Hue
1	80	-12%	0%
2	81	-8%	7%
3	77	-3%	12%
4	88	1%	7%
5	91	1%	4%
6	93	3%	-2%
7	90	-4%	-5%
8	92	-4%	-1%
9	88	-6%	5%
10	80	-6%	12%
11	77	1%	14%
12	85	8%	5%
13	89	5%	-5%
14	81	7%	-14%
15	79	-2%	-15%
16	78	-7%	-12%

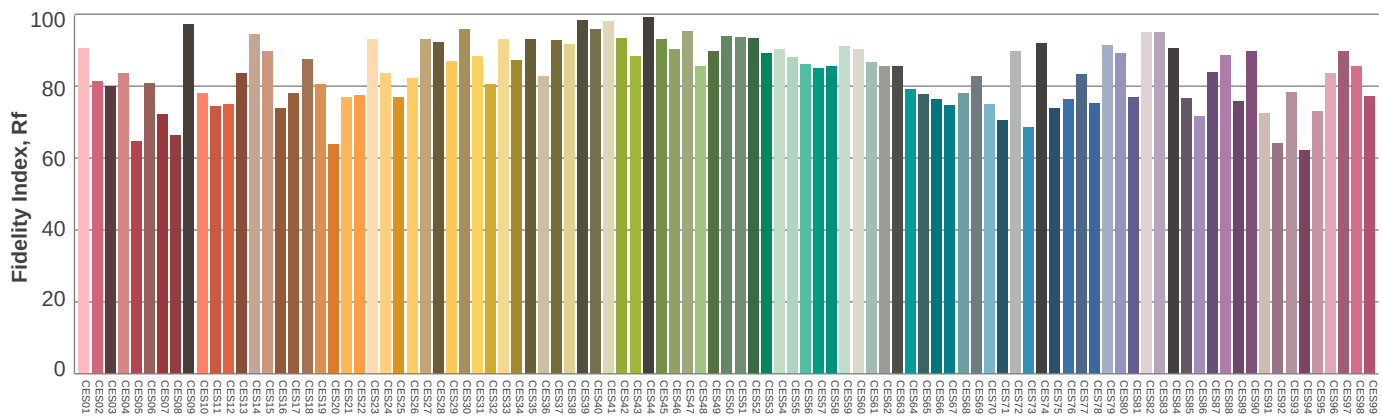












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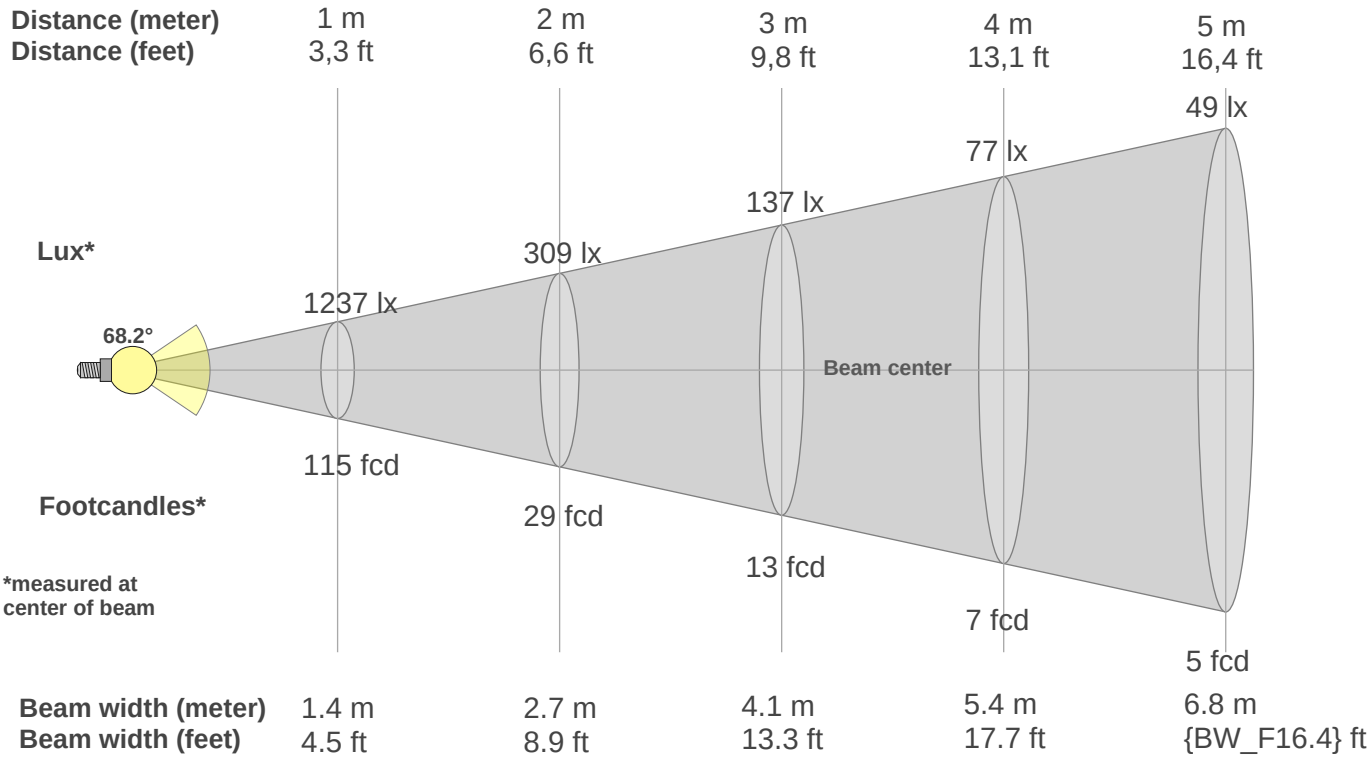
Beam details



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
1237lx	309lx	137lx	77lx	49lx	34lx	25lx	19lx	15lx	12lx	10lx	9lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx	3lx
114.9fc	28.7fcd	12.8fcd	7.2fcd	4.6fcd	3.2fcd	2.3fcd	1.8fcd	1.4fcd	1.1fcd	0.9fcd	0.8fcd	0.7fcd	0.6fcd	0.5fcd	0.4fcd	0.4fcd	0.4fcd	0.3fcd	0.3fcd

Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1237	1230	1217	1192	1154	1102	1034	952	855	748	637	528	424	328	239	158	89	35	7	7
100%	99%	98%	96%	93%	89%	84%	77%	69%	60%	52%	43%	34%	27%	19%	13%	7%	3%	1%	1%

Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1237	1197	1075	909	740	600	492	404	335	281	226	170	119	90	69	50	33	17	7	7
100%	97%	87%	73%	60%	48%	40%	33%	27%	23%	18%	14%	10%	7%	6%	4%	3%	1%	1%	1%

Intensities in 180° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1237	1230	1217	1192	1154	1102	1034	952	855	748	637	528	424	328	239	158	89	35	7	7
100%	99%	98%	96%	93%	89%	84%	77%	69%	60%	52%	43%	34%	27%	19%	13%	7%	3%	1%	1%

Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1237	1197	1075	909	740	600	492	404	335	281	226	170	119	90	69	50	33	17	7	7
100%	97%	87%	73%	60%	48%	40%	33%	27%	23%	18%	14%	10%	7%	6%	4%	3%	1%	1%	1%

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UGR

Glare evaluation according to 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	24.9	25.9	25.1	26.2	26.4	19.9	20.9	20.1	21.2	21.4
	3H	26.2	27.3	26.6	27.5	27.7	20.5	21.6	20.9	21.9	22.1
	4H	26.7	27.8	27.1	28.0	28.3	20.9	22.0	21.3	22.2	22.5
	6H	27.2	28.1	27.5	28.4	28.8	21.3	22.2	21.6	22.5	22.9
	8H	27.3	28.2	27.6	28.5	28.9	21.4	22.3	21.7	22.6	23.0
	12H	27.4	28.2	27.7	28.6	29.0	21.5	22.4	21.9	22.7	23.2
4H	2H	24.8	25.9	25.2	26.1	26.4	20.6	21.7	21.0	21.9	22.2
	3H	26.4	27.2	26.7	27.6	28.0	21.5	22.4	21.9	22.7	23.2
	4H	26.9	27.7	27.4	28.1	28.7	21.9	22.7	22.4	23.1	23.7
	6H	27.4	28.2	27.9	28.6	28.9	22.3	23.1	22.8	23.5	23.8
	8H	27.6	28.3	28.1	28.7	29.1	22.5	23.2	23.0	23.6	24.0
	12H	27.7	28.3	28.2	28.7	29.2	22.7	23.2	23.2	23.7	24.1
8H	4H	26.9	27.6	27.4	28.0	28.3	22.2	22.9	22.7	23.3	23.7
	6H	27.5	28.0	28.0	28.5	29.0	22.8	23.3	23.3	23.8	24.3
	8H	27.8	28.2	28.3	28.7	29.4	23.1	23.6	23.6	24.1	24.7
	12H	28.0	28.3	28.5	28.8	29.4	23.3	23.7	23.9	24.2	24.8
12H	4H	26.9	27.4	27.4	27.9	28.3	22.3	22.9	22.8	23.3	23.7
	6H	27.5	28.0	28.0	28.5	29.1	22.9	23.4	23.4	23.9	24.5
	8H	27.8	28.1	28.4	28.6	29.3	23.2	23.6	23.8	24.1	24.7
Variation of the observer position for the luminaire distance S											
S = 1.0H		0.2 / -0.2					0.2 / -0.3				
S = 1.5H		0.8 / -0.8					0.4 / -0.8				
S = 2.0H		1.6 / -1.5					0.8 / -1.2				
CIE 117-1995. Corrected glare indices referring to 2033 lm total luminous flux											