

Light efficiency:

147 Lumen/Watt

Output: 2020 lm

Light quality:

CRI: 83.2

Peak: 997 cd

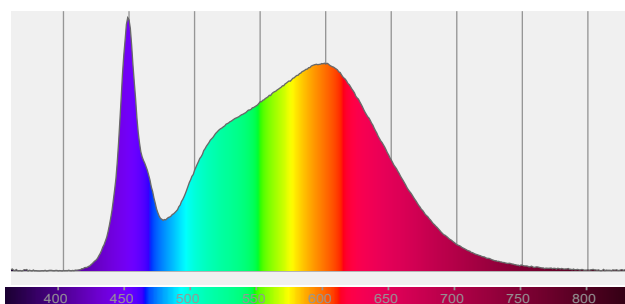
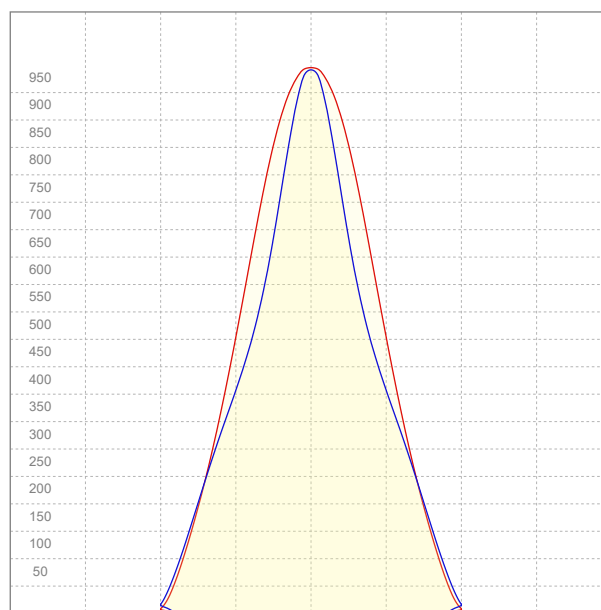
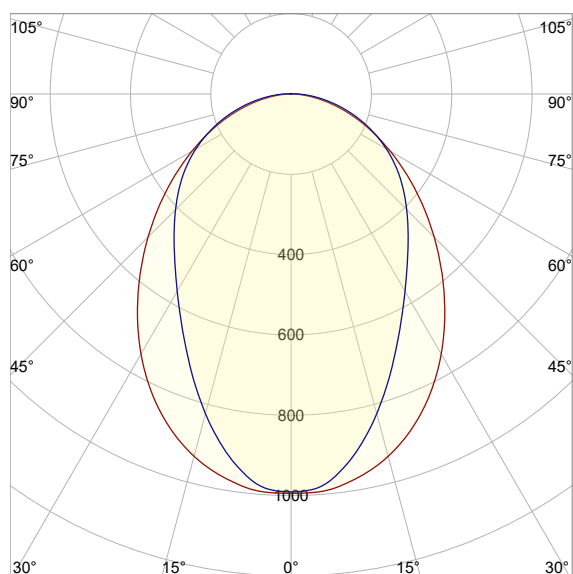
Color temperature:

3945 K

Power: 13.7 W

PF: 0.99

No photo



Product name:

MICROBeam Medium 70°

Item number:

MSQ140

Configuration:

MBE140-4FT-4080-WT-DM70-500LPF

Date and time:

3/9/2021 10:25:42 AM

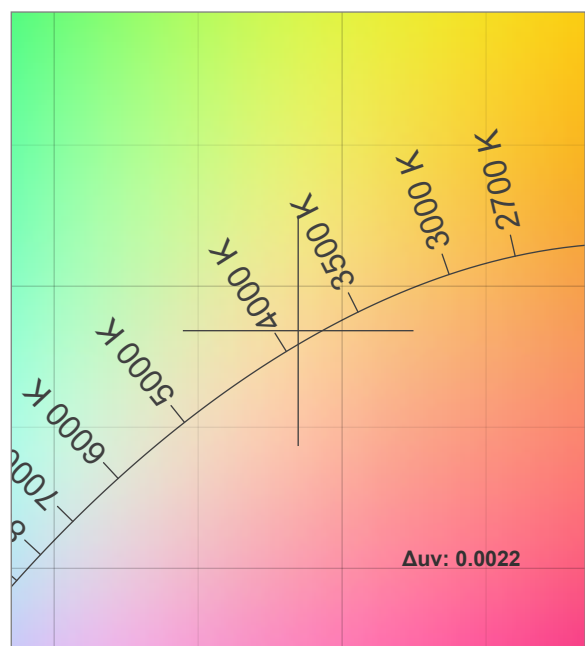
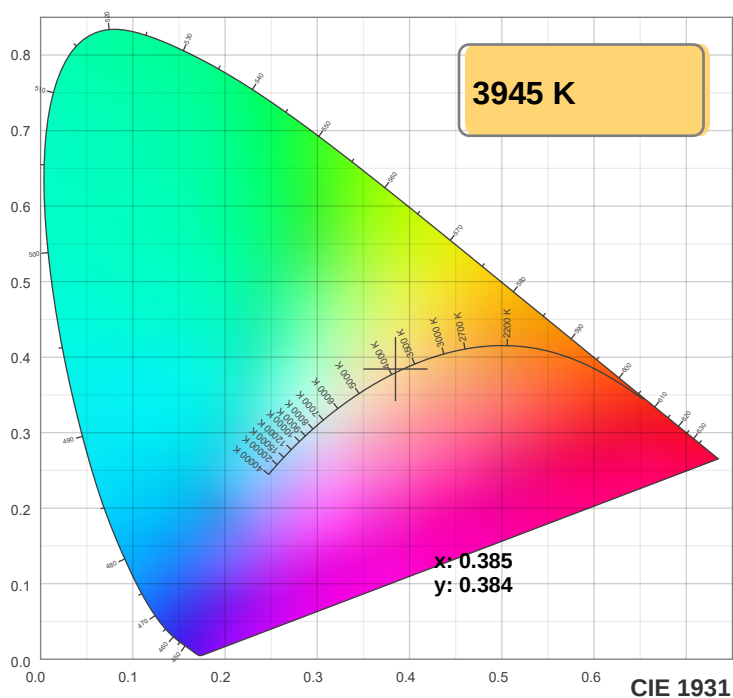
Description:

4000K 80 CRI

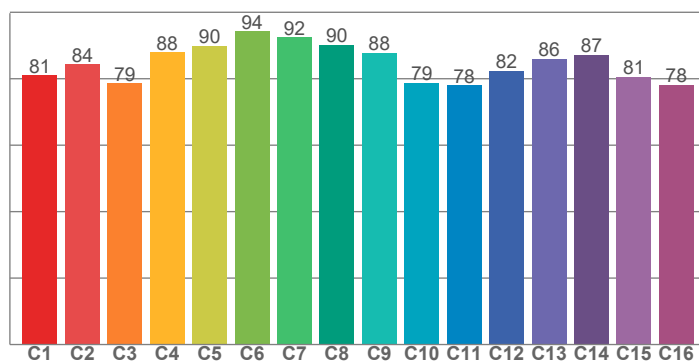
306 mA DC

Narrow 30% Lens with Lenticular Film

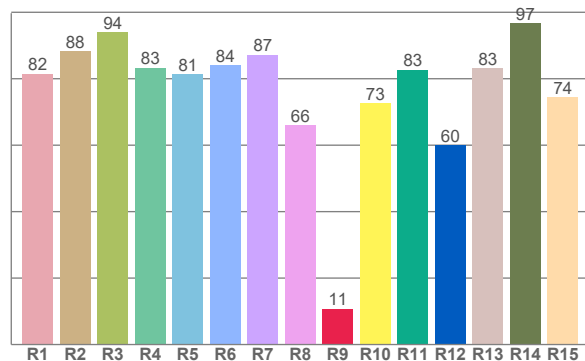
Color Details



TM-30: 84.6



CRI: 83.2 (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
81.5	88.3	94.0	83.3	81.3	84.0	87.2	66.1	10.8	72.5	82.7	60.0	83.1	96.7	74.5

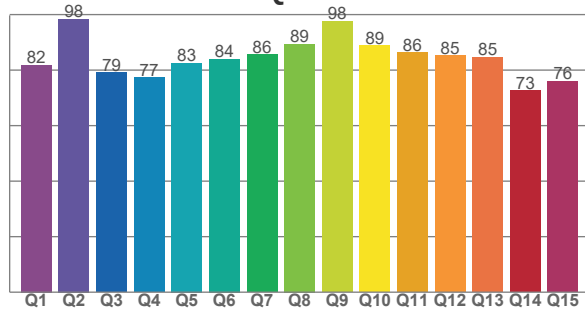
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
81.0	84.4	78.6	88.0	89.8	94.2	92.5	90.2	87.9	78.8	78.0	82.4	86.0	87.3	80.6	78.1

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
81.9	98.4	79.2	77.4	82.6	84.0	85.5	89.4	97.6	88.8	86.2	85.2	84.6	72.6	76.0

CQS: 83.1



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 deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
3945 K	83.2	10.8	84.6	96.3	83.1	0.385	0.384	0.225	0.337	0.0022

TM-30 Details

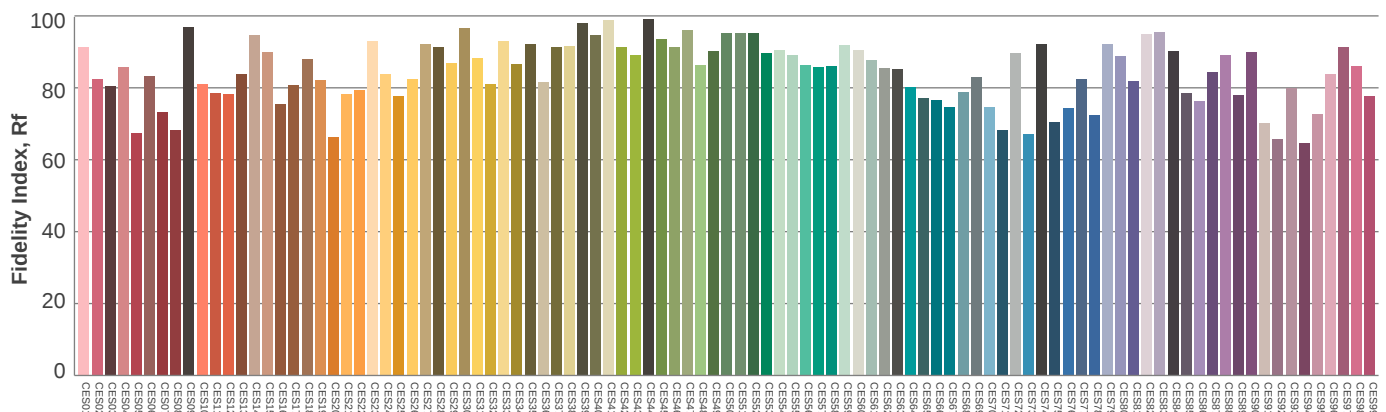
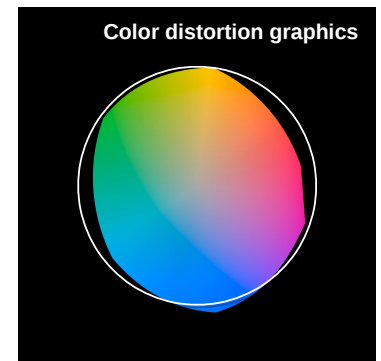
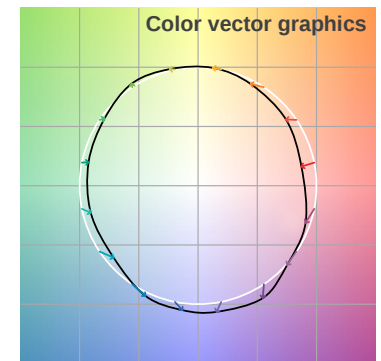
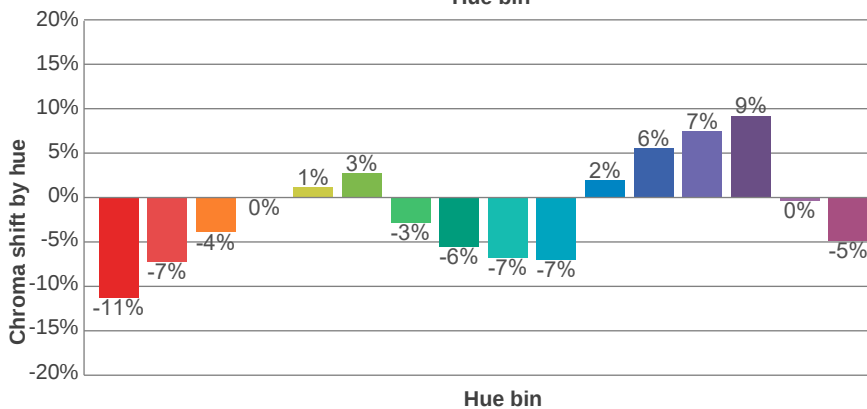
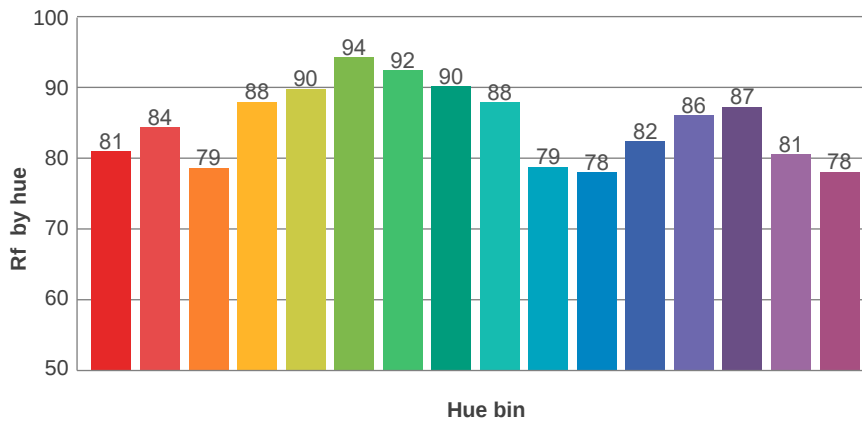
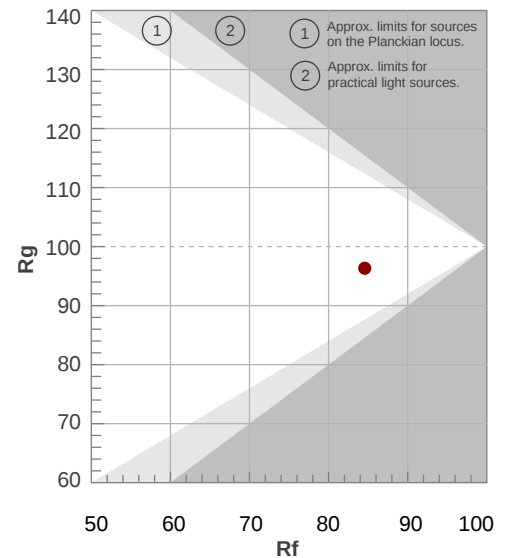
Rf 84.6

Fidelity index Rf

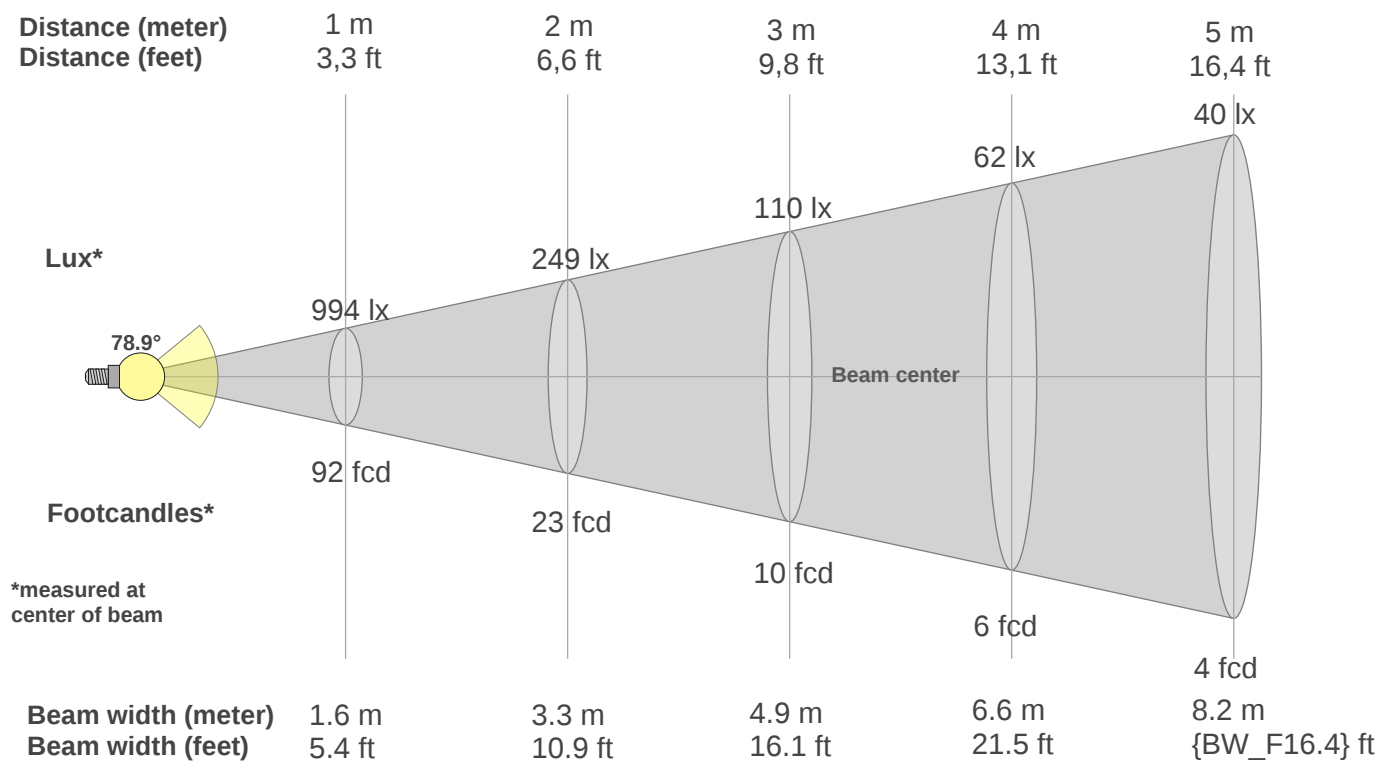
Rg 96.3

Gamut index Rg

Hue Bin	R _f	Shifts (%)	
		Chroma	Hue
1	81	-11%	-1%
2	84	-7%	5%
3	79	-4%	11%
4	88	0%	7%
5	90	1%	4%
6	94	3%	-1%
7	92	-3%	-3%
8	90	-6%	-1%
9	88	-7%	5%
10	79	-7%	11%
11	78	2%	15%
12	82	6%	8%
13	86	7%	-5%
14	87	9%	-7%
15	81	0%	-14%
16	78	-5%	-13%



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
994lx	249lx	110lx	62lx	40lx	28lx	20lx	16lx	12lx	10lx	8lx	7lx	6lx	5lx	4lx	4lx	3lx	3lx	3lx	2lx
92.4fcd	23.1fcd	10.3fcd	5.8fcd	3.7fcd	2.6fcd	1.9fcd	1.4fcd	1.1fcd	0.9fcd	0.8fcd	0.6fcd	0.5fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd	0.3fcd	0.3fcd	0.2fcd

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°
994	989	968	933	883	820	747	667	585	504	426	353	286	224	167	115	69	31	6	0
100%	99%	97%	94%	89%	82%	75%	67%	59%	51%	43%	36%	29%	23%	17%	12%	7%	3%	1%	0%

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°
994	969	908	823	731	643	568	506	454	407	363	320	274	226	178	130	85	46	13	0
100%	97%	91%	83%	73%	65%	57%	51%	46%	41%	37%	32%	28%	23%	18%	13%	9%	5%	1%	0%

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°
994	989	968	933	883	820	747	667	585	504	426	353	286	224	167	115	69	31	6	0
100%	99%	97%	94%	89%	82%	75%	67%	59%	51%	43%	36%	29%	23%	17%	12%	7%	3%	1%	0%

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°
994	969	908	823	731	643	568	506	454	407	363	320	274	226	178	130	85	46	13	0
100%	97%	91%	83%	73%	65%	57%	51%	46%	41%	37%	32%	28%	23%	18%	13%	9%	5%	1%	0%

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	21.6	22.8	21.9	23.1	23.3	21.3	22.4	21.5	22.7	22.9
	3H	22.9	24.1	23.3	24.4	24.6	22.8	24.0	23.2	24.3	24.5
	4H	23.5	24.6	23.9	24.9	25.1	23.5	24.7	24.0	25.0	25.2
	6H	23.9	25.0	24.3	25.2	25.6	24.2	25.2	24.5	25.5	25.9
	8H	24.1	25.1	24.4	25.4	25.8	24.4	25.4	24.8	25.7	26.1
	12H	24.2	25.1	24.5	25.4	25.9	24.6	25.6	25.0	25.9	26.4
4H	2H	22.1	23.2	22.5	23.5	23.8	21.8	23.0	22.2	23.2	23.5
	3H	23.7	24.6	24.1	25.0	25.4	23.7	24.6	24.1	25.0	25.4
	4H	24.3	25.2	24.7	25.6	26.1	24.5	25.4	24.9	25.8	26.3
	6H	24.8	25.7	25.3	26.0	26.4	25.2	26.1	25.7	26.4	26.8
	8H	25.0	25.8	25.5	26.2	26.5	25.5	26.3	26.0	26.7	27.0
	12H	25.2	25.8	25.6	26.2	26.7	25.8	26.4	26.3	26.8	27.3
8H	4H	24.6	25.3	25.1	25.7	26.1	24.8	25.5	25.3	25.9	26.3
	6H	25.3	25.8	25.8	26.3	26.9	25.7	26.3	26.2	26.7	27.3
	8H	25.6	26.1	26.1	26.6	27.2	26.1	26.6	26.6	27.1	27.8
	12H	25.8	26.2	26.4	26.7	27.3	26.5	26.9	27.1	27.4	28.0
12H	4H	24.6	25.2	25.1	25.7	26.1	24.8	25.4	25.3	25.8	26.3
	6H	25.4	25.9	25.9	26.4	27.0	25.8	26.3	26.3	26.8	27.4
	8H	25.7	26.1	26.3	26.6	27.2	26.2	26.6	26.8	27.1	27.8
Variation of the observer position for the luminaire distance S											
S = 1.0H		0.1 / -0.1					0.1 / -0.1				
S = 1.5H		0.2 / -0.3					0.1 / -0.2				
S = 2.0H		0.6 / -0.6					0.3 / -0.4				
CIE 117-1995. Corrected glare indices referring to 2020 lm total luminous flux											