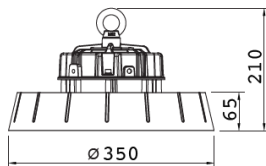




**Dimensiones (mm)**

**Diámetro: Ø350; Alto: 210.**



**Código**

**MESSINA-200W**

**Descripción**

Luminaria tipo Highbay, diseñada con módulo de LED integrado. Para descolgar en cielo. Compuesta por un difusor en policarbonato y un disipador en aluminio inyectado.



**Materiales y acabado**

Luminaria fabricada en aluminio inyectado, con acabado en pintura poliéster electrostática en polvo.

**Color**

Negro Semi mate.

**Características técnicas**

<b>LED</b>	 116°	 50,000h	<b>IP</b> 65	<b>IK</b> 06
<b>PF</b> 0,99	<b>THD</b> <15%	<b>°C</b> -40-55	<b>V</b> 100-277	<b>Dim</b> 1-10V

**Fuente de luz**

Módulo de LED integrado.

Potencia Nominal	CRI	K	Lm / W	Lm de Salida
200W	>80	5000	128	25775

**Características de fuente de luz**

- Color temperatura disponible 5000K (luz día).
- Protección 4KV contra sobretensiones.
- Potencia de Salida: 202W.

Nota: Debido a continua investigación, nos reservamos el derecho de cambiar especificaciones sin previa notificación.



Light efficiency:



Light quality:



Color temperature:



Output: 25775 lm

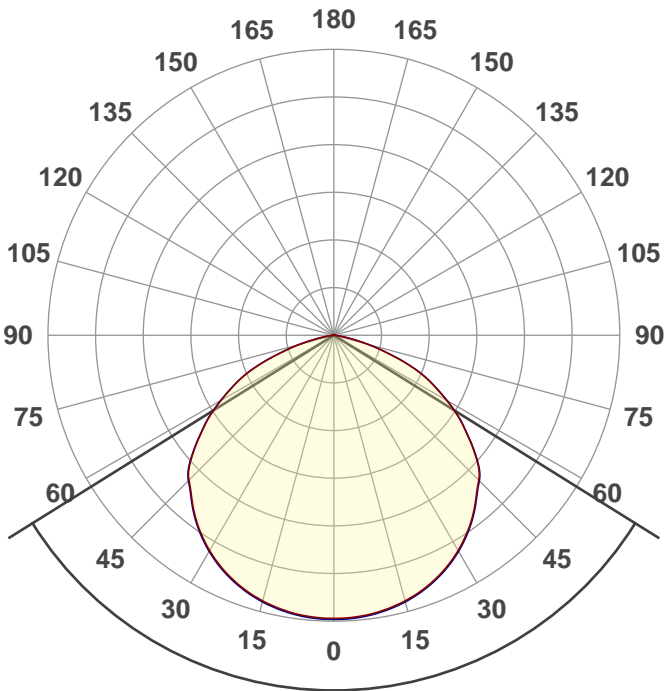
Peak: 8988 cd

Power: 202 W

PF: 0,99



Product name:  
**E0437-MESSINA-200W**



Beam angle **116,1°**



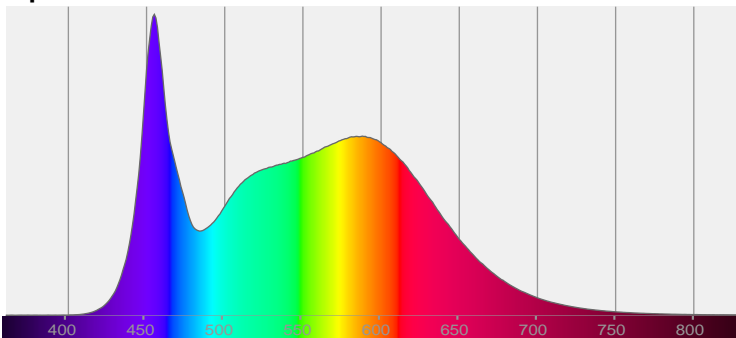
CIE 1931  
x: 0,343  
y: 0,355

THD Values:

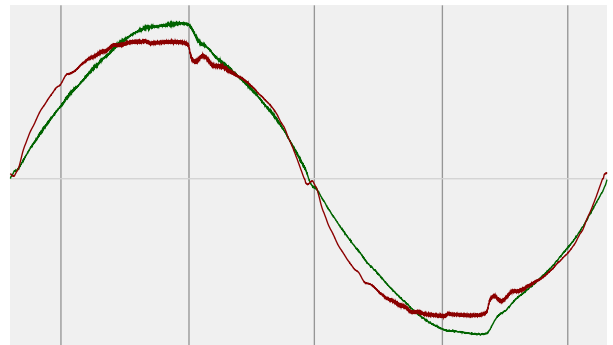
Voltage: 3,18%

Current: 10,74%

Spectra



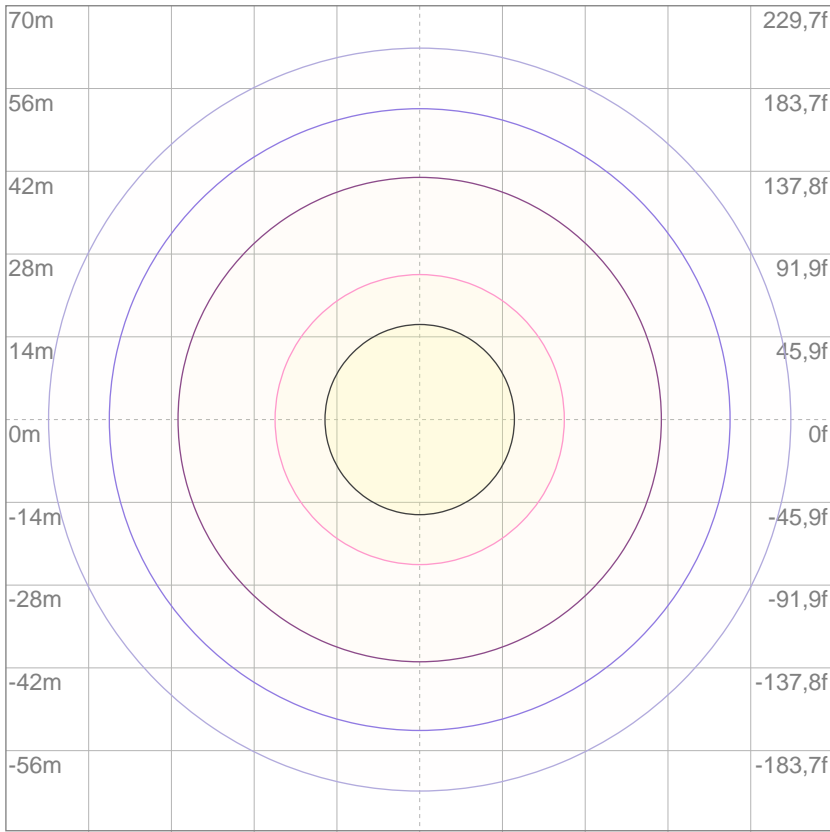
Power



Voltage: 112 V  
Current: 1,83 A  
Frequency: 60 Hz

# ISO Diagrams

## ISO lux diagram



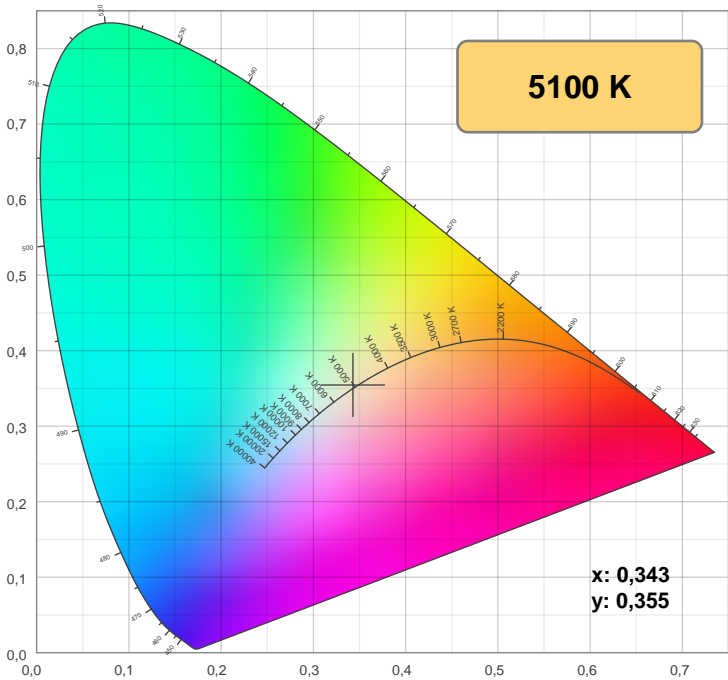
3%	2,69 lx
5%	4,48 lx
10%	8,96 lx
30%	26,9 lx
50%	44,8 lx

**Conditions:**  
 Number of c-planes: 8  
 Lux at center: 89,6 lx

*Lux distribution on a surface when lamp is mounted at 10 meters from the surface.*

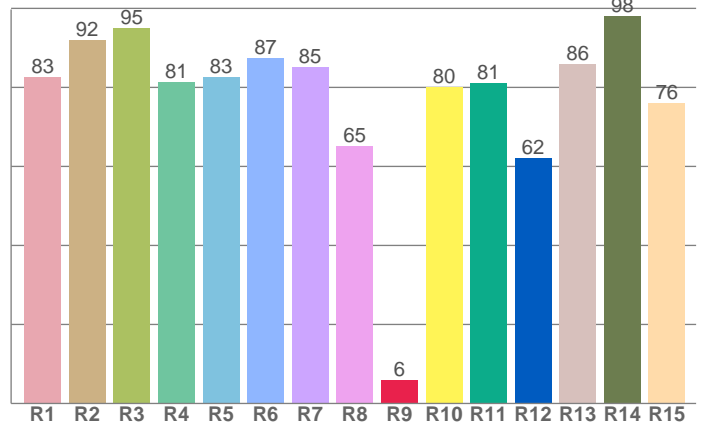
Mounting height: 10 meters (33 f)

## Color details



CIE 1931

## CRI: 83,9 (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
82,6	92,0	95,0	81,4	82,7	87,3	85,1	65,0	6,0	80,1	81,1	62,2	85,8	97,9	75,9

## Color parameters

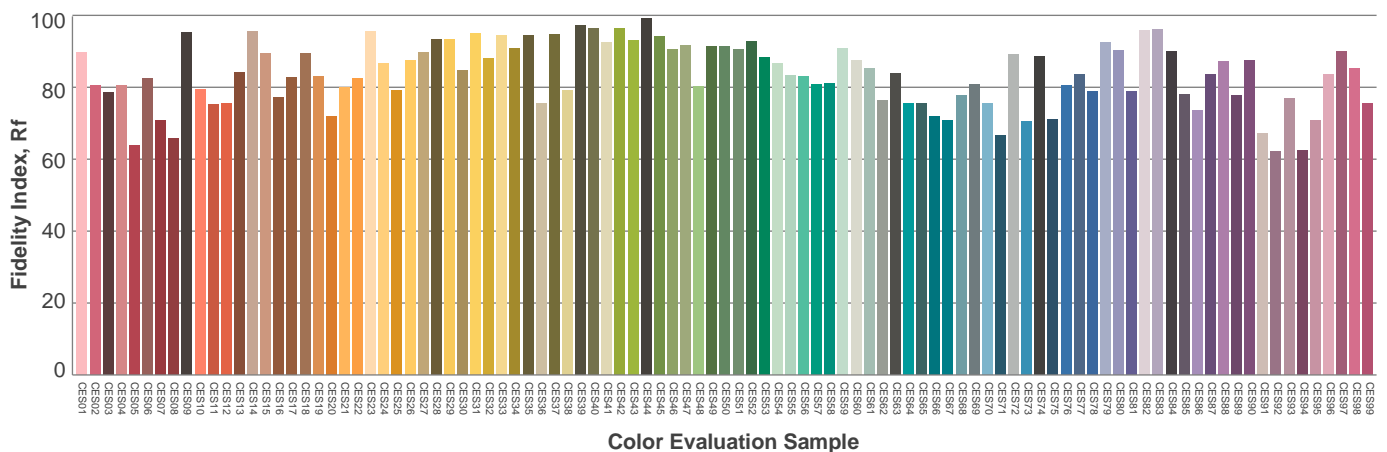
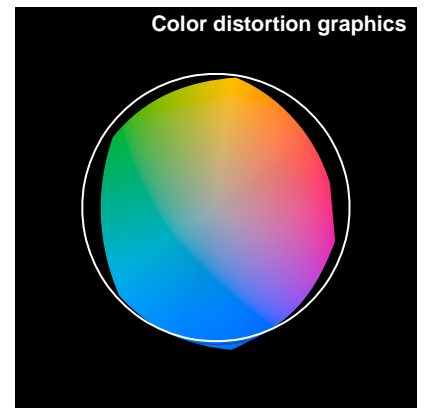
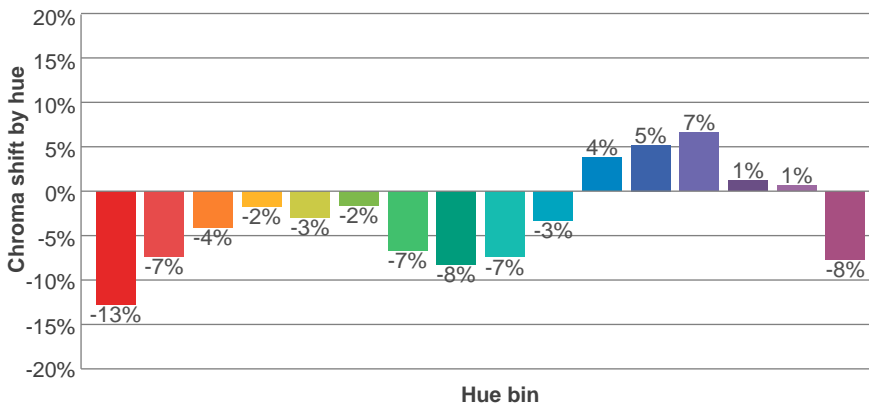
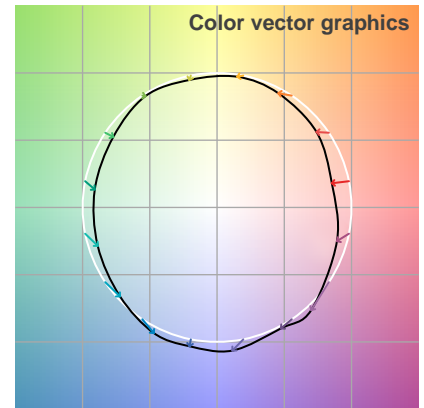
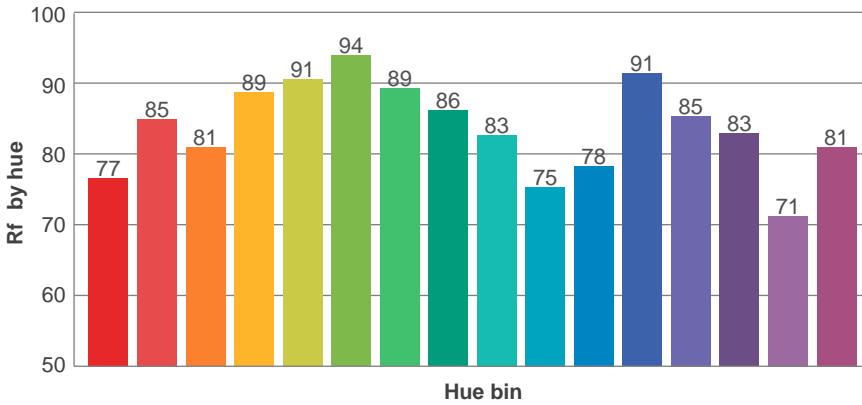
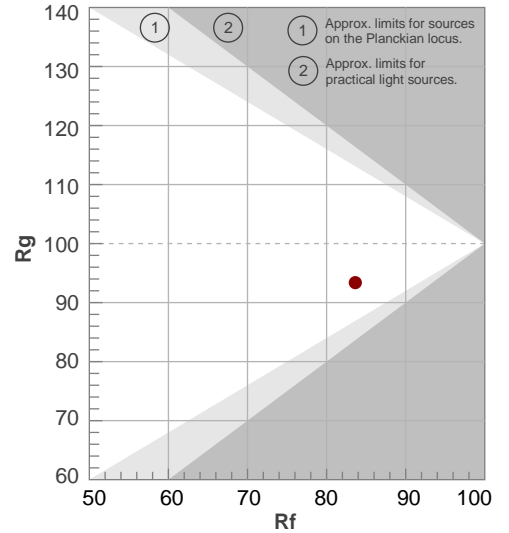
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	$\Delta uv$
5100 K	83,9	6,0	83,6	93,4	81,2	0,343	0,355	0,209	0,324	0,0009

TM-30 details

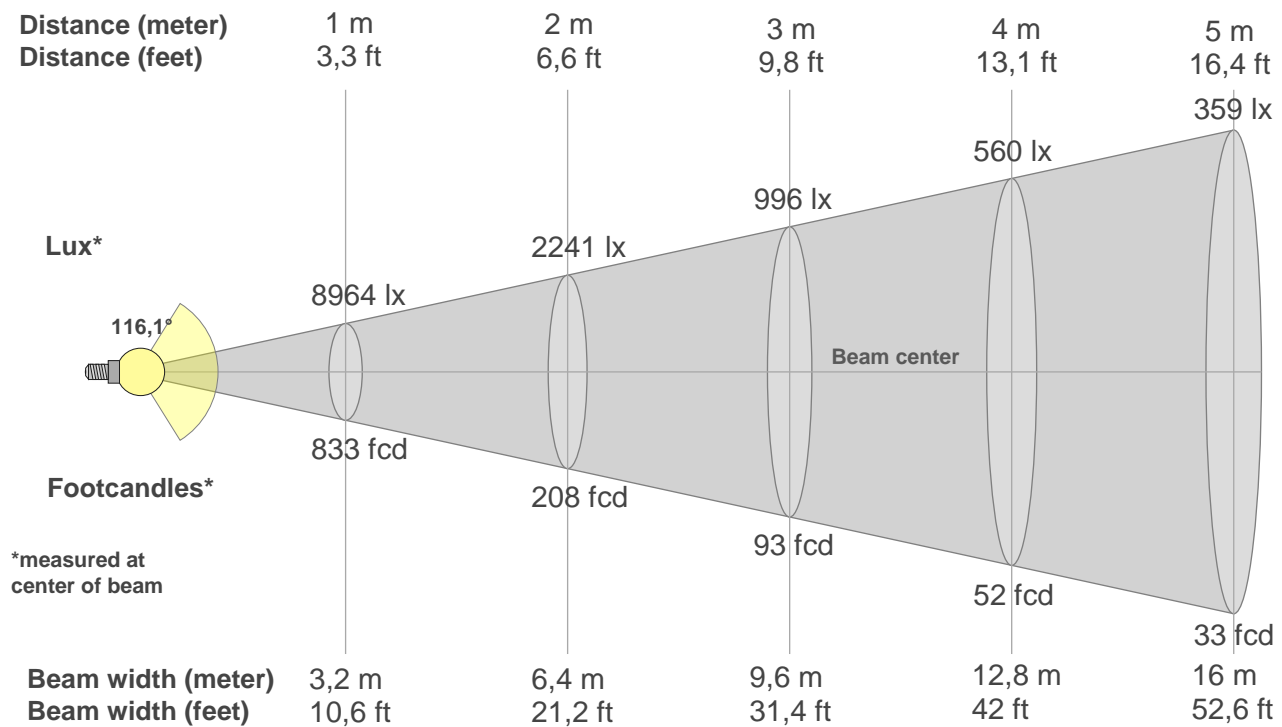
**Rf 83,6**  
Fidelity index Rf

**Rg 93,4**  
Gamut index Rg

Hue Bin	R <sub>f</sub>	Shifts (%)	
		Chroma	Hue
1	77	-13%	1%
2	85	-7%	6%
3	81	-4%	9%
4	89	-2%	4%
5	91	-3%	2%
6	94	-2%	-2%
7	89	-7%	-1%
8	86	-8%	5%
9	83	-7%	11%
10	75	-3%	15%
11	78	4%	13%
12	91	5%	0%
13	85	7%	-10%
14	83	1%	-10%
15	71	1%	-25%
16	81	-8%	-7%



## 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
8964lx	2241lx	996lx	560lx	359lx	249lx	183lx	140lx	111lx	90lx	74lx	62lx	53lx	46lx	40lx	35lx	31lx	28lx	25lx	22lx
832,8fcd	208,2fcd	92,5fcd	52,1fcd	33,3fcd	23,1fcd	17fcd	13fcd	10,3fcd	8,3fcd	6,9fcd	5,8fcd	4,9fcd	4,2fcd	3,7fcd	3,3fcd	2,9fcd	2,6fcd	2,3fcd	2,1fcd

### 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°
8964	8929	8841	8698	8488	8210	7860	7443	6954	6480	5817	4993	4121	3247	2176	1131	369	42	4	5
100%	100%	99%	97%	95%	92%	88%	83%	78%	72%	65%	56%	46%	36%	24%	13%	4%	0%	0%	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°
8964	8964	8876	8733	8518	8242	7892	7470	6980	6508	5841	5013	4139	3261	2186	1136	371	42	4	5
100%	100%	99%	97%	95%	92%	88%	83%	78%	73%	65%	56%	46%	36%	24%	13%	4%	0%	0%	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°
8964	8929	8841	8698	8488	8210	7860	7443	6954	6480	5817	4993	4121	3247	2176	1131	369	42	4	5
100%	100%	99%	97%	95%	92%	88%	83%	78%	72%	65%	56%	46%	36%	24%	13%	4%	0%	0%	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°
8964	8964	8876	8733	8518	8242	7892	7470	6980	6508	5841	5013	4139	3261	2186	1136	371	42	4	5
100%	100%	99%	97%	95%	92%	88%	83%	78%	73%	65%	56%	46%	36%	24%	13%	4%	0%	0%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
116,1°	152,6°	163°	82,3%	55,3%

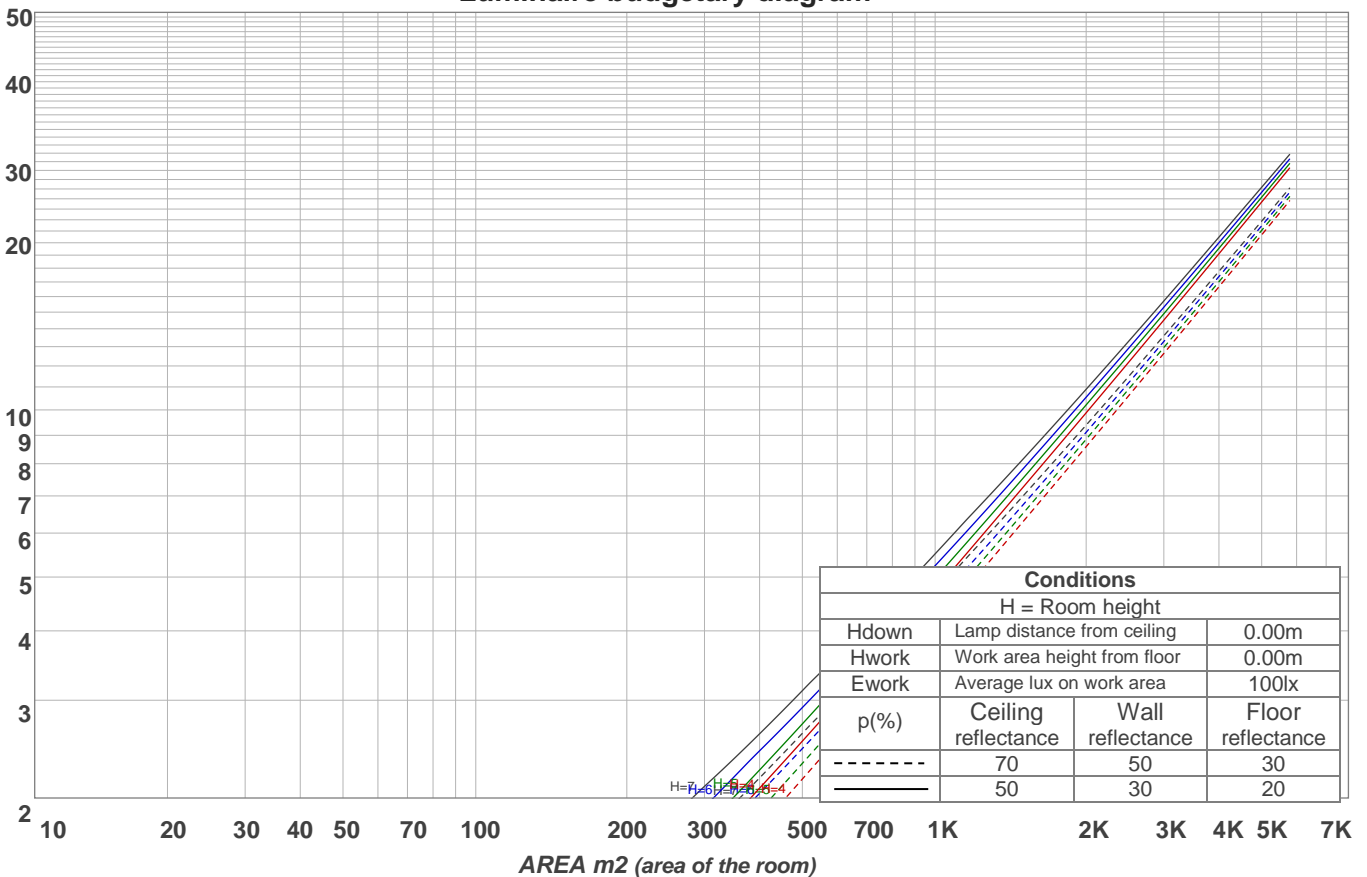
# Light planning

## 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	20	20	20
<b>RCR</b>	<b>(RCR: Room Cavity Ratio)</b>																			
	Room Values are expressed as percentage of Lumens delivered to the task surface																			
<b>0</b>	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
<b>1</b>	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85		
<b>2</b>	100	92	85	80	97	90	84	79	87	82	77	83	79	75	80	77	74	72		
<b>3</b>	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60		
<b>4</b>	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	52		
<b>5</b>	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44		
<b>6</b>	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39		
<b>7</b>	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34		
<b>8</b>	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30		
<b>9</b>	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27		
<b>10</b>	53	40	32	27	52	39	32	27	38	31	27	38	31	27	37	31	26	25		

### LAMPS (number of lamps)

### Luminaire budgetary diagram



### Zonal Lumen Summary

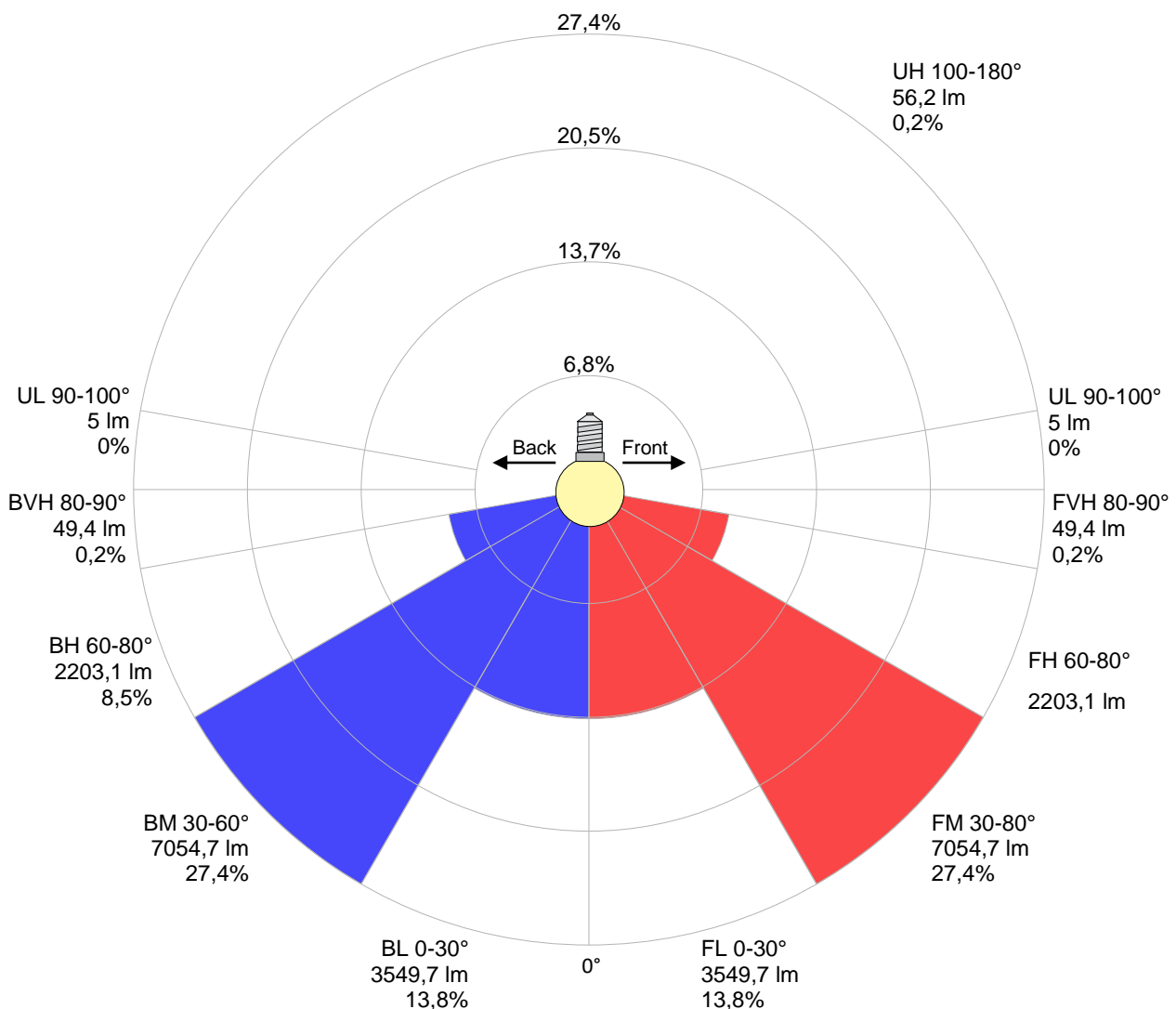
0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
851 lm	2460 lm	3790 lm	4661 lm	4987 lm	4462 lm	3174 lm	1231 lm	97,9 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
5,04 lm	7,21 lm	8,87 lm	9,38 lm	9,23 lm	8,41 lm	6,85 lm	4,59 lm	1,64 lm

# Road report

LCS table

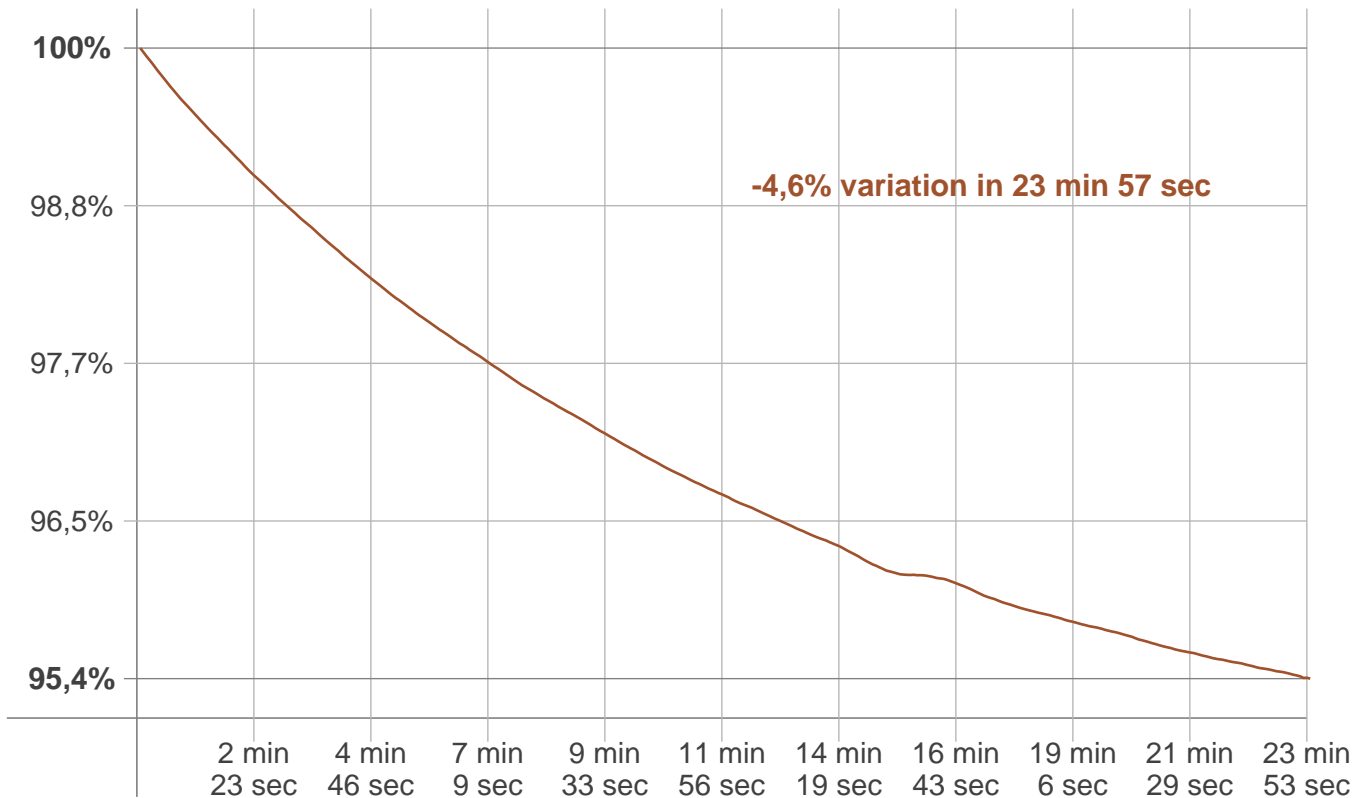
BUG rating:	B4 U3 G3	
<b>Forward light</b>	Lumens	Lumens %
Low(0-30):	3549,7	13,8%
Medium(30-60):	7054,7	27,4%
High(60-80):	2203,1	8,5%
Very high(80-90):	49,4	0,2%
<b>Back light</b>		
Low(0-30):	3549,7	13,8%
Medium(30-60):	7054,7	27,4%
High(60-80):	2203,1	8,5%
Very high(80-90):	49,4	0,2%
<b>Uplight</b>		
Low(90-100):	5	0%
High(100-180):	56,2	0,2%

LCS graph



## Stabilization

### Warmup curve



### Warmup result

Warmup time:	23 min 57 sec
Warmup variation	-4,7%

### Warmup conditions

Stable period:	15 min
Stable change max:	2,0%
Minimum time:	15 min

### Color temperature change

CCT start	CCT change	CCT end
5001 K	+99 K	5100 K

### Output change

Output start	Output change	Output end
27009 lm	-1234 lm	25775 lm