

Light efficiency:

113 Lumen/Watt

Light quality:

CRI: 94,5

Color temperature:

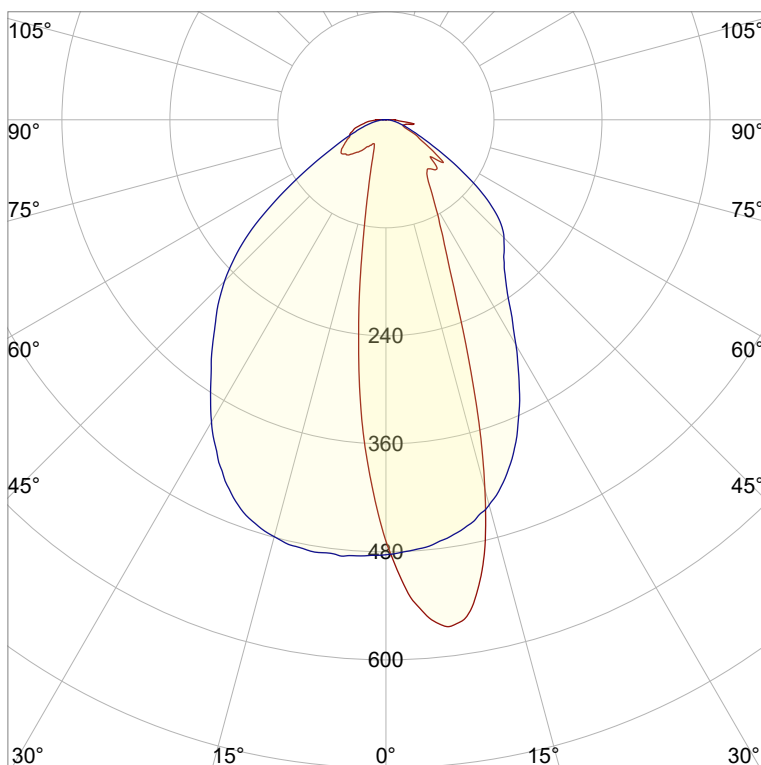
2745 K

Output: 542 lm

Peak: 598 cd

Power: 4,8 W

PF: 1,0



Product name:

Victory-7_510mm_927_Lens-Asymmetric-Frosted-2

Item number:

NP/L1C/03F/G1/L1C/0510/927/LAF-2

Date and time:

03.06.2022 09:46:31

Description:

Rank: C80-AD-8GB

Tolerances:

Lumen +/-4%

Candela +/-2,5%

Colour Temp +/-35 Kelvin

CRI +/-0,7

Angular Resolution: 1 Degree Step

Last Calibration 20-09-2021

Tester: Peter Ulrich

Test Site: Lichtlabor

Gaustrasse 13

55411 Bingen am Rhein

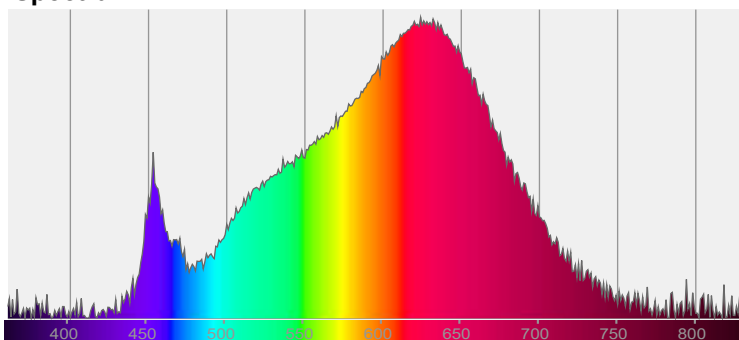


CIE 1931

x: 0,455

y: 0,408

Spectra

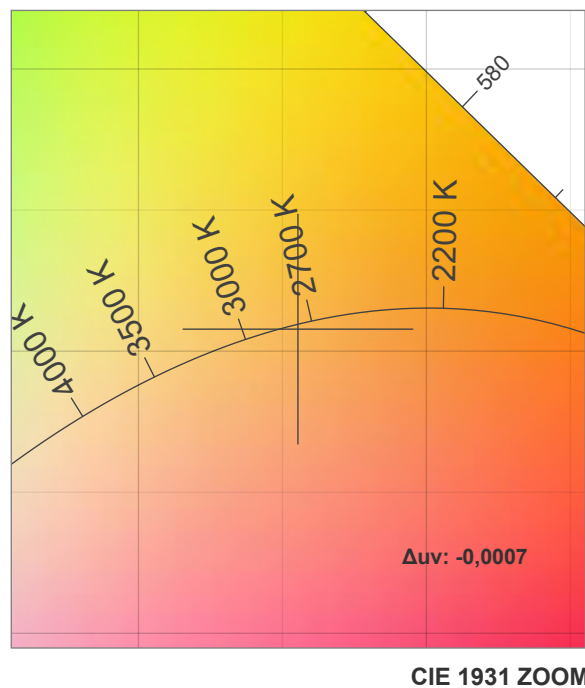
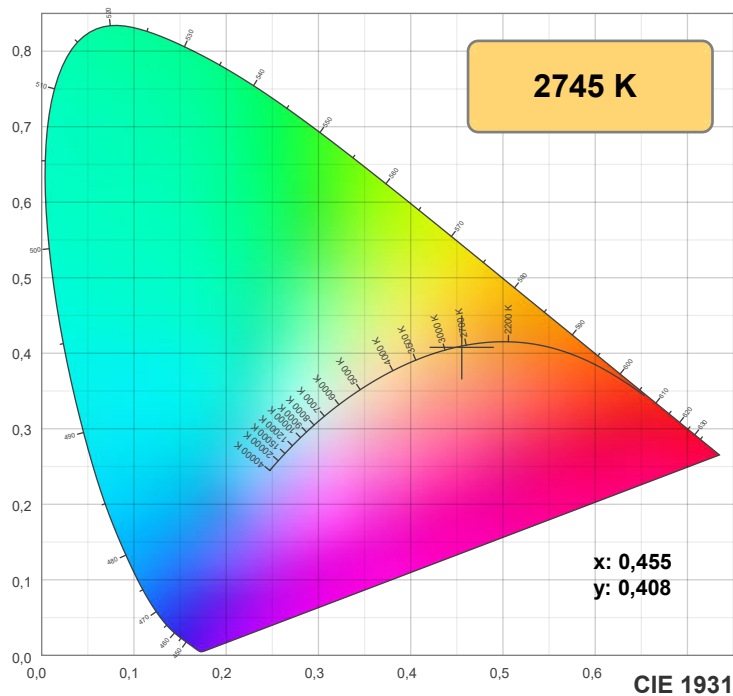


Power

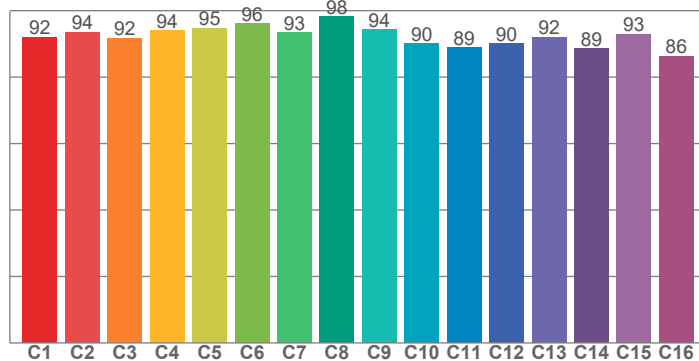
Voltage: 48,0 V

Current: 0,100 A

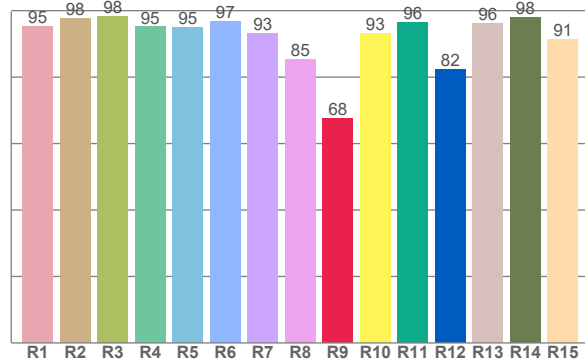
Frequency: 0 Hz



TM30: 92,3



CRI: 94,5 (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
95,2	97,6	98,2	95,1	94,8	96,8	93,1	85,2	67,6	93,2	96,4	82,2	96,1	98,1	91,4

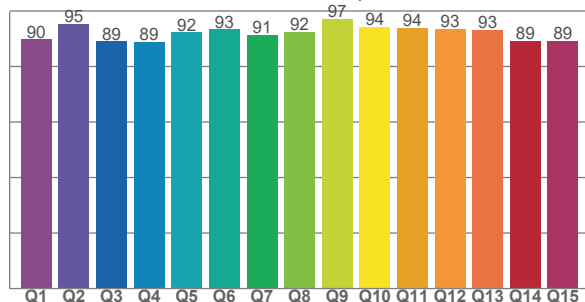
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,1	93,5	91,7	94,1	94,8	96,1	93,3	98,1	94,3	90,2	89,0	90,0	92,1	88,7	93,0	86,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89,7	95,2	89,0	88,8	92,2	93,3	91,3	92,4	97,2	94,3	93,9	93,4	93,2	89,1	89,2

CQS: 91,6



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
2745 K	94,5	67,6	92,3	99,7	91,6	0,455	0,408	0,261	0,350	-0,0007

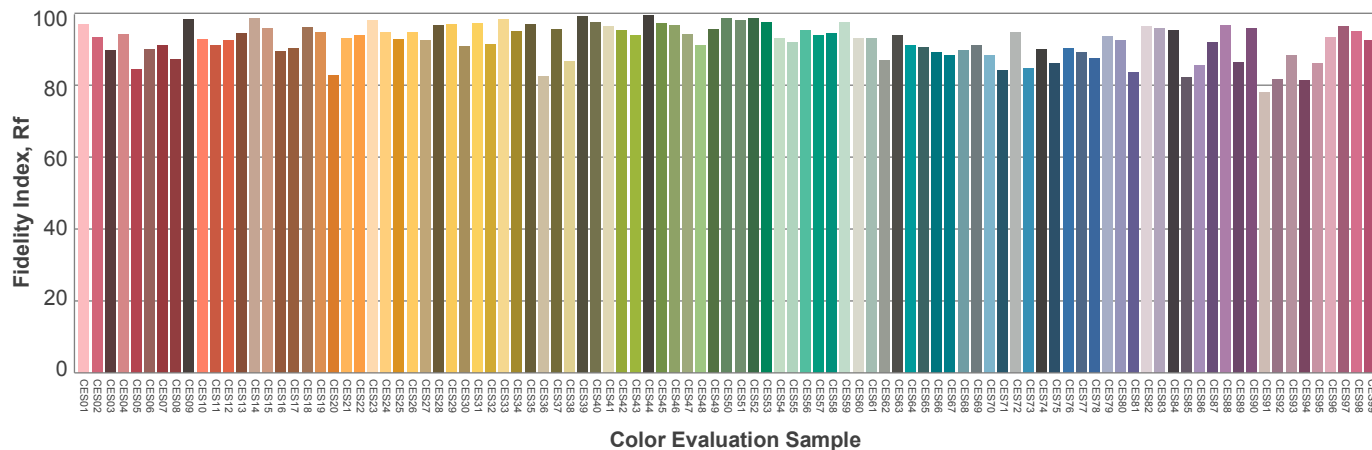
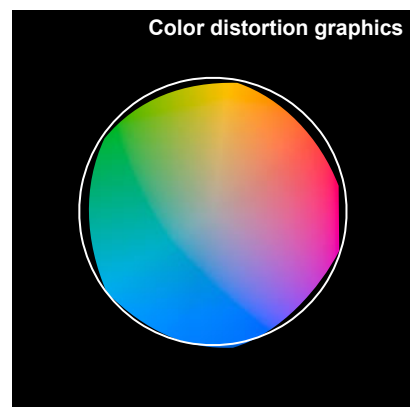
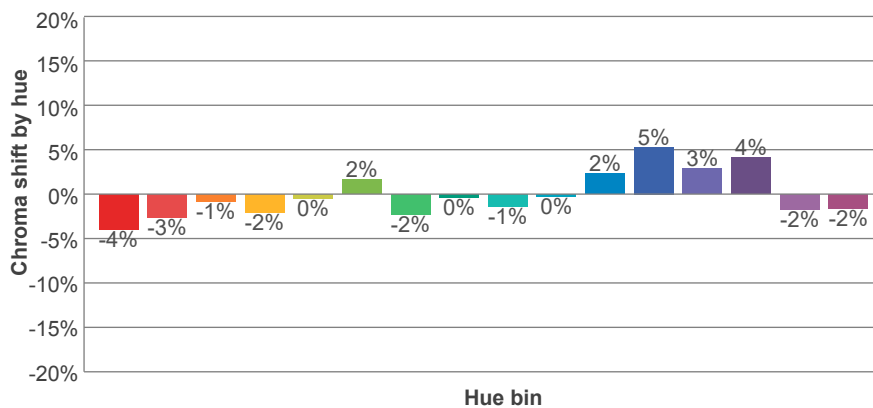
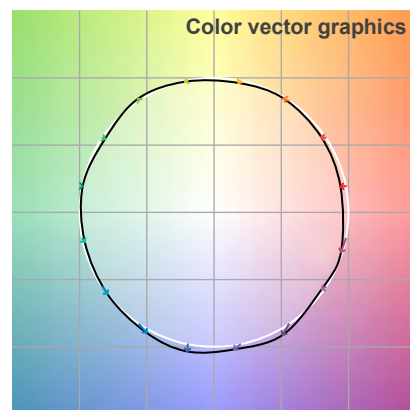
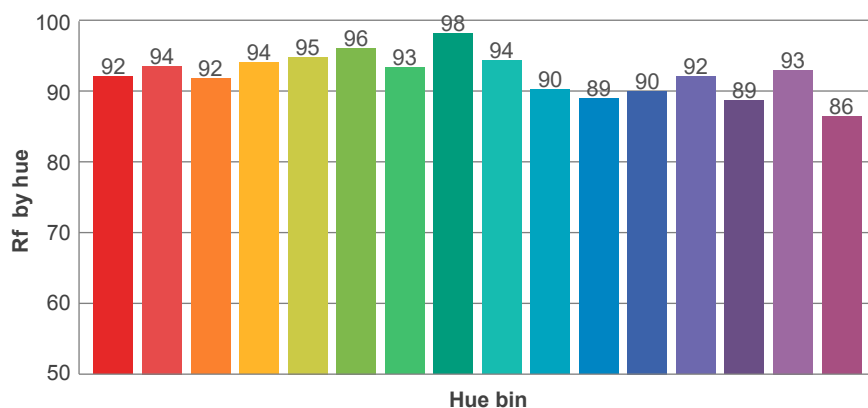
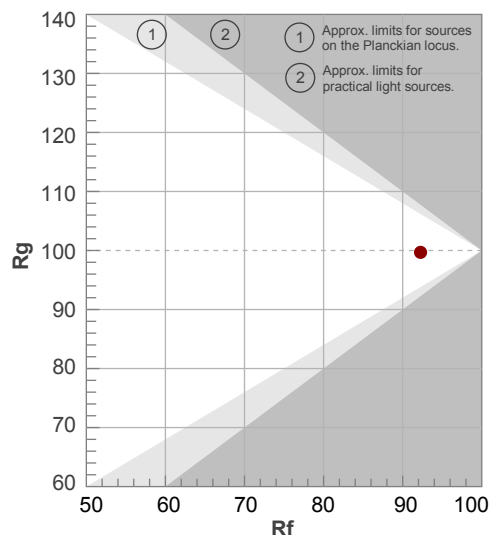
Rf 92,3

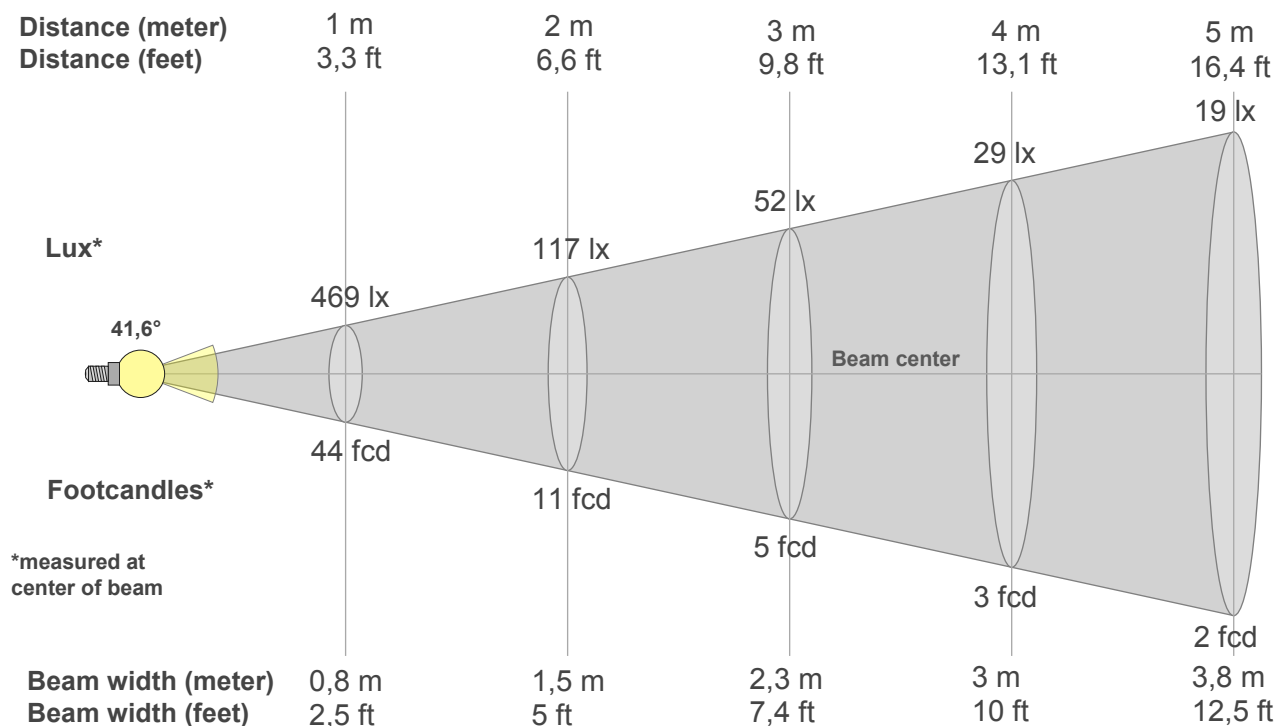
Fidelity index Rf

Rg 99,7

Gammut index Rg

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	92	-4%	0%
2	94	-3%	2%
3	92	-1%	4%
4	94	-2%	1%
5	95	0%	2%
6	96	2%	0%
7	93	-2%	0%
8	98	0%	0%
9	94	-1%	3%
10	90	0%	6%
11	89	2%	8%
12	90	5%	1%
13	92	3%	-5%
14	89	4%	-8%
15	93	-2%	-3%
16	86	-2%	-10%





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
469lx	117lx	52lx	29lx	19lx	13lx	10lx	7lx	6lx	5lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	1lx	1lx	1lx
43,6fcd	10,9fcd	4,8fcd	2,7fcd	1,7fcd	1,2fcd	0,9fcd	0,7fcd	0,5fcd	0,4fcd	0,4fcd	0,3fcd	0,3fcd	0,2fcd	0,2fcd	0,2fcd	0,2fcd	0,1fcd	0,1fcd	0,1fcd

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°
469	512	544	563	565	550	513	458	390	318	252	202	168	144	125	109	96	85	78	74
100%	109%	116%	120%	120%	117%	109%	98%	83%	68%	54%	43%	36%	31%	27%	23%	21%	18%	17%	16%

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°
469	481	478	475	470	465	458	448	437	423	405	385	362	339	313	289	266	245	228	214
100%	102%	102%	101%	100%	99%	98%	95%	93%	90%	86%	82%	77%	72%	67%	62%	57%	52%	49%	46%

Intensities in 180° c-plane

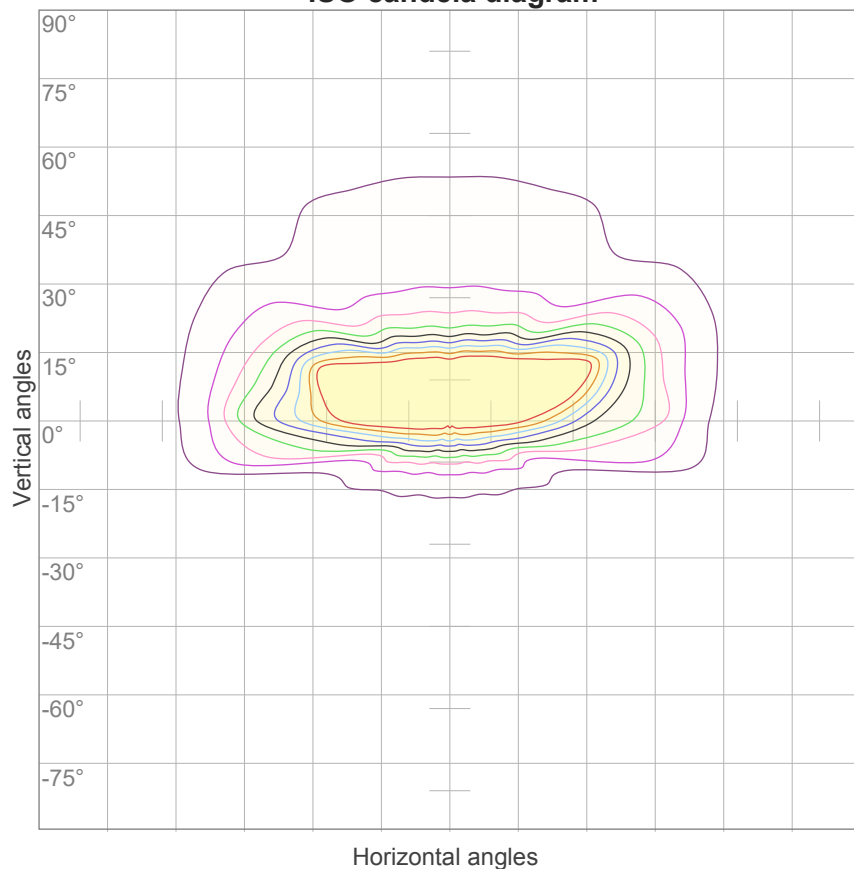
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
469	412	353	285	216	155	111	82	63	51	41	35	32	30	30	32	34	36	39	43
100%	88%	75%	61%	46%	33%	24%	17%	13%	11%	9%	8%	7%	6%	6%	7%	7%	8%	8%	9%

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°
469	484	486	487	486	486	484	482	477	471	464	452	439	424	406	388	368	348	330	312
100%	103%	103%	104%	104%	104%	103%	103%	102%	100%	99%	96%	94%	90%	86%	83%	78%	74%	70%	66%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
41,6°	93,1°	172,4°	84,0%	66,4%

ISO candela diagram



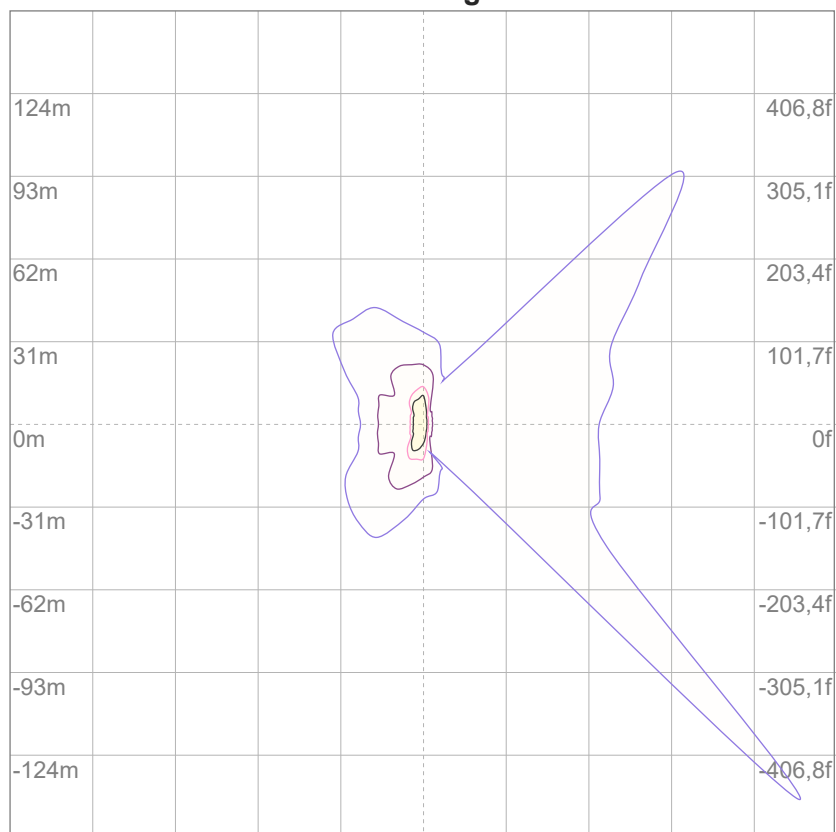
10%	47 cd
20%	94 cd
30%	141 cd
40%	188 cd
50%	235 cd
60%	282 cd
70%	328 cd
80%	375 cd
90%	422 cd

Conditions:

Number of c-planes: 16

Candela at center: 469 cd

ISO lux diagram



3%	0,141 lx
5%	0,235 lx
10%	0,469 lx
30%	1,41 lx
50%	2,35 lx

Conditions:

Number of c-planes: 16

Lux at center: 4,69 lx

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

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				
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Variation of the observer position for the luminaire distance S										
n/a	n/a					n/a				
n/a	n/a					n/a				
n/a	n/a					n/a				
Standard table	n/a					n/a				
Correction summand	n/a					n/a				
Corrected glare indices referring to 542 lm total luminous flux										

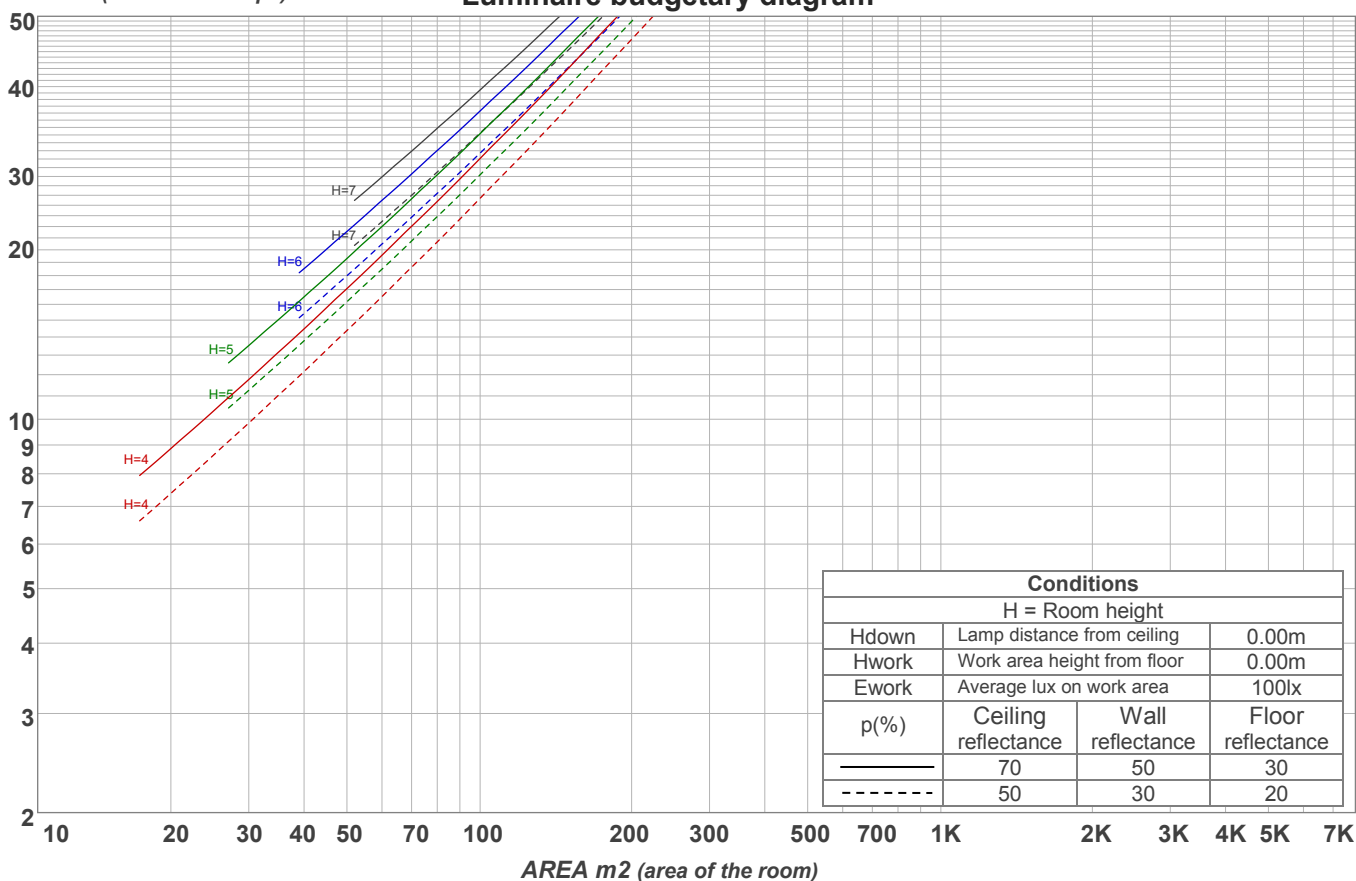
UGR data could not be calculated due to missing/wrong symmetry. Goto Edit->Photometric->Corrections and select Correct asymmetry.

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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	94	84	77	71	91	83	76	71	80	74	70	77	73	68	75	71	67	65
4	87	77	69	63	85	75	68	63	73	67	62	71	65	61	69	64	60	58
5	81	70	62	56	79	69	61	56	67	60	55	65	59	55	63	58	54	52
6	76	64	56	51	74	63	56	51	62	55	50	60	54	50	59	53	49	47
7	72	59	52	46	70	59	51	46	57	51	46	56	50	45	55	49	45	43
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	37	59	48	41	36	47	41	36	46	40	36	45	40	36	34

LAMPS (number of lamps)

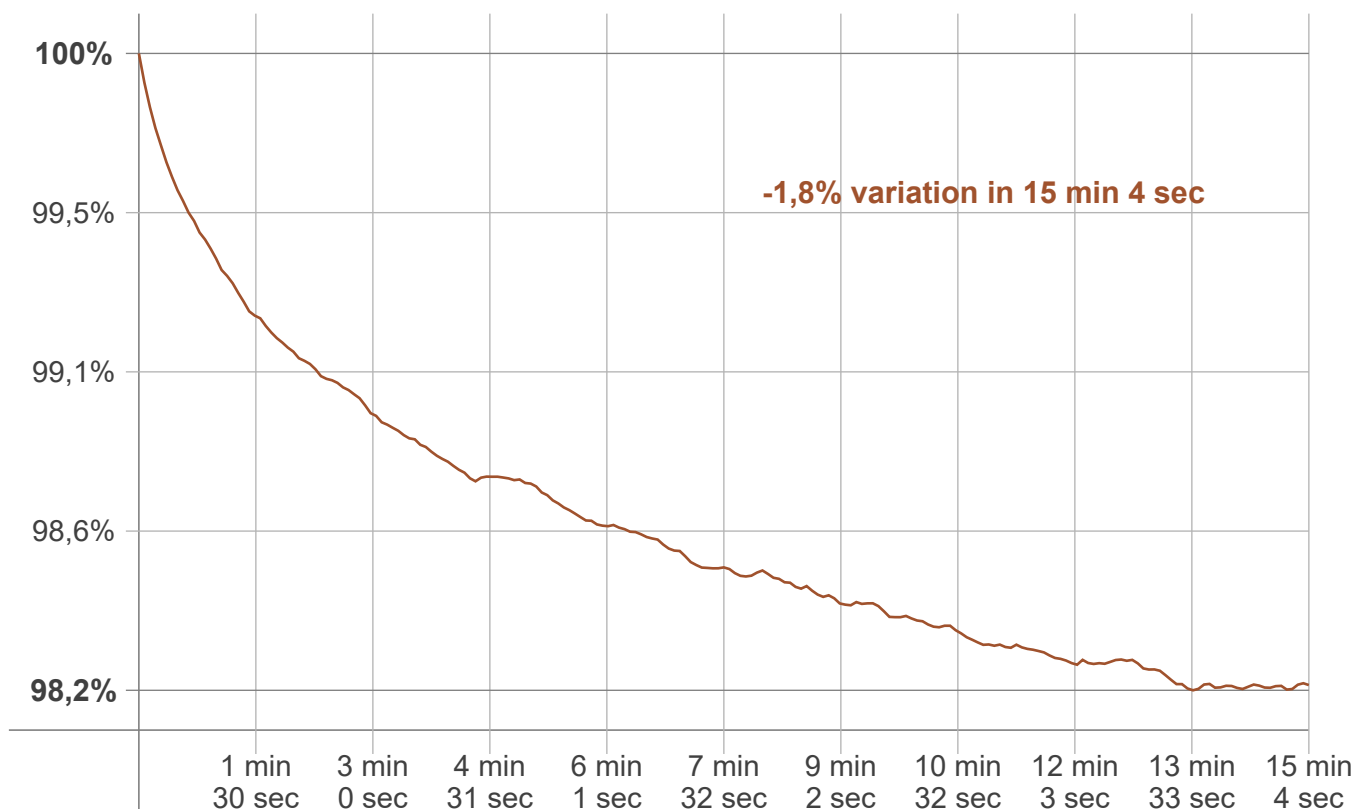
Luminaire budgetary diagram



Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
41,8 lm	95,0 lm	98,9 lm	86,1 lm	73,4 lm	60,0 lm	40,4 lm	27,0 lm	19,0 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0,055 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

Warmup curve



Warmup result

Warmup time:	Lamp stabilized in 15 min 4 sec
Warmup variation	-1,8%

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
2748 K	-3 K	2745 K

Output change

Output start	Output change	Output end
550 lm	-8 lm	542 lm