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Components

Light efficiency:

89 Lumen/Watt

Light quality:

CRI: 92,1

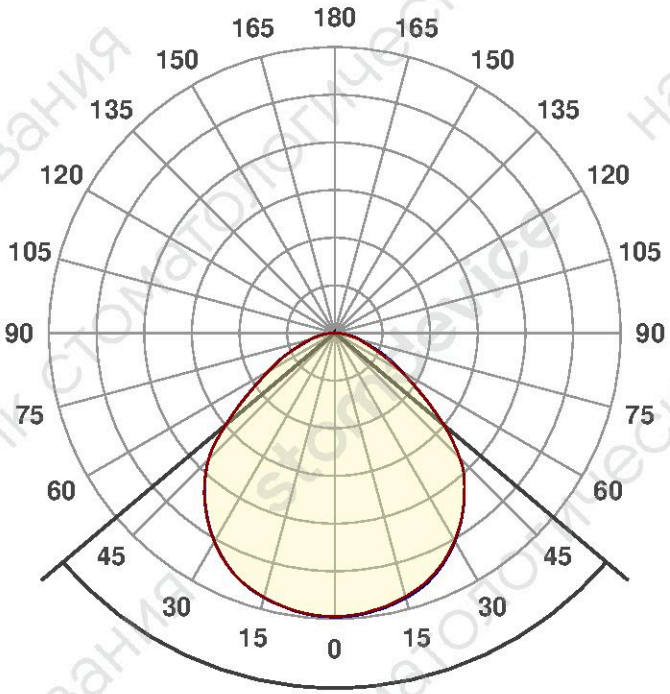
Color temperature:

6070 K

Output: 17197 lm
Peak: 7203 cd

Power: 193,4 W
PF: 0,97





Beam angle 99,7°

CIE 1931
x: 0,320
y: 0,337

Product name:
DTEC - Cloud - IC LGP - Outer Ring
Item number:

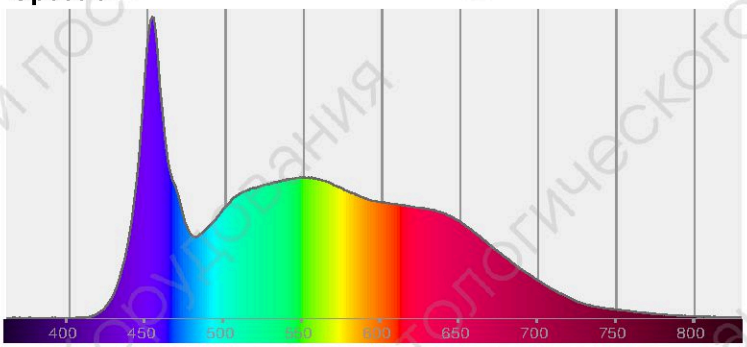
Date and time:
26-10-2018 11:31:24
Description:
Measured in 8 planes.

Measured by Jakob D. Jepsen

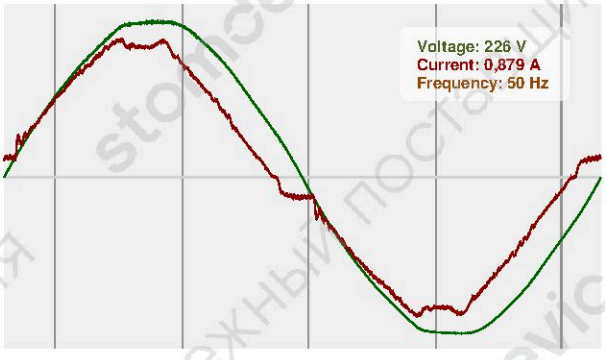
Prism: Original
Foil: Original

LGP: IC

Spectra



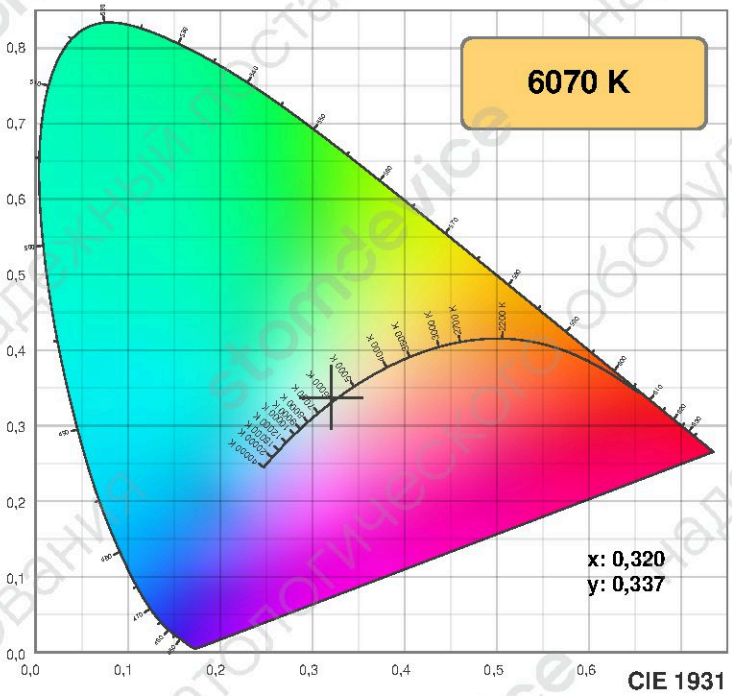
Power

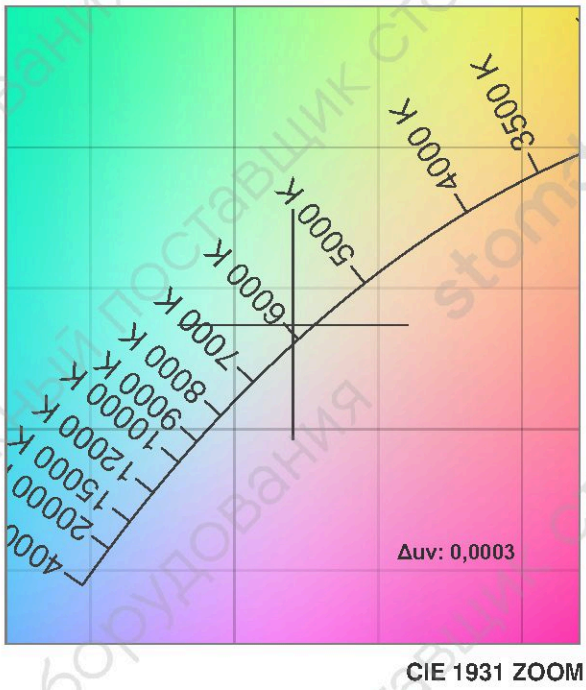


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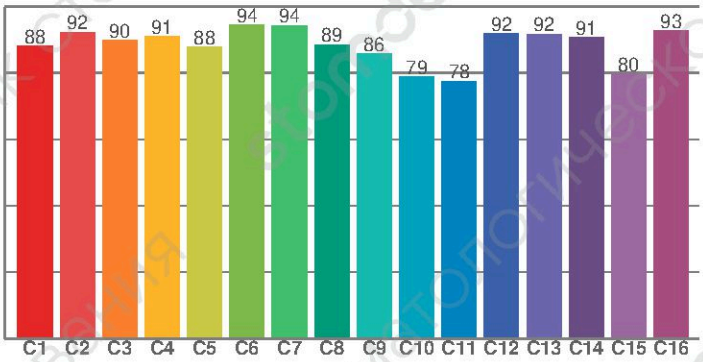
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Color details

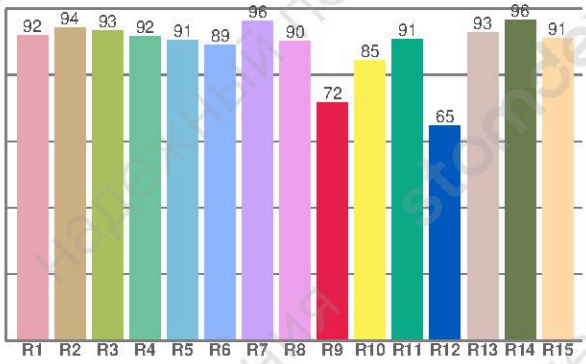




TM30: 88,1



CRI: 92,1 (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
91,9	94,1	93,3	91,6	90,6	89,0	96,1	90,2	71,5	84,5	90,9	64,6	92,8	96,4	91,2

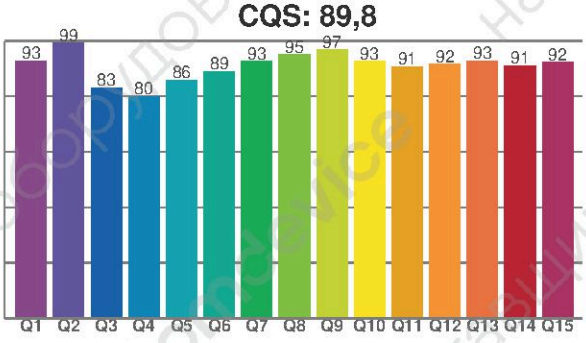
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
88,0	92,3	89,8	91,0	87,8	94,4	94,3	88,5	85,7	78,9	77,6	91,9	91,8	90,8	79,8	92,8

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
92,7	99,2	83,1	80,0	85,9	89,0	92,6	95,0	96,8	92,5	90,7	91,6	92,7	91,1	92,3

CQS: 89,8



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 deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
6070 K	92,1	71,5	88,1	98,1	89,8	0,320	0,337	0,200	0,316	0,0003

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TM30 details

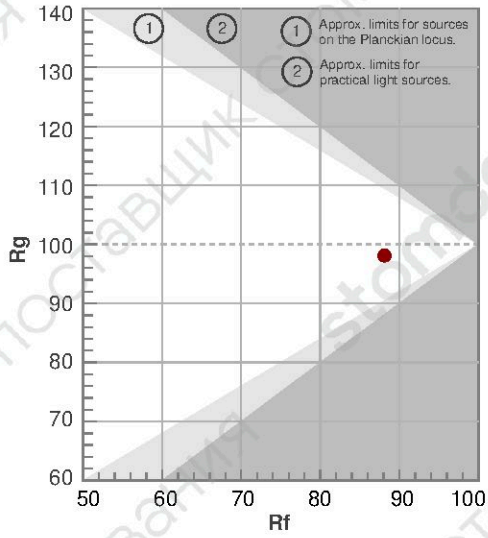
Rf 88,1

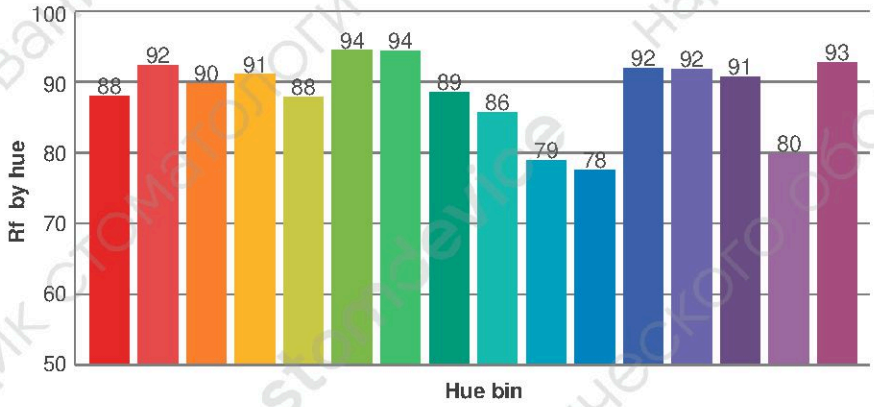
Fidelity index Rf

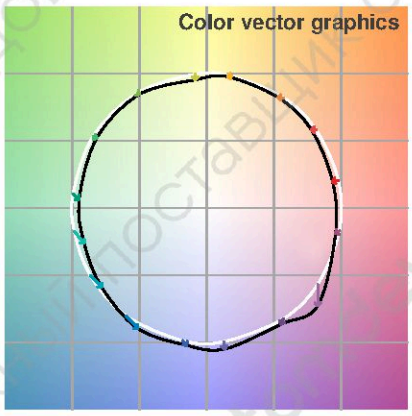
Rg 98,1

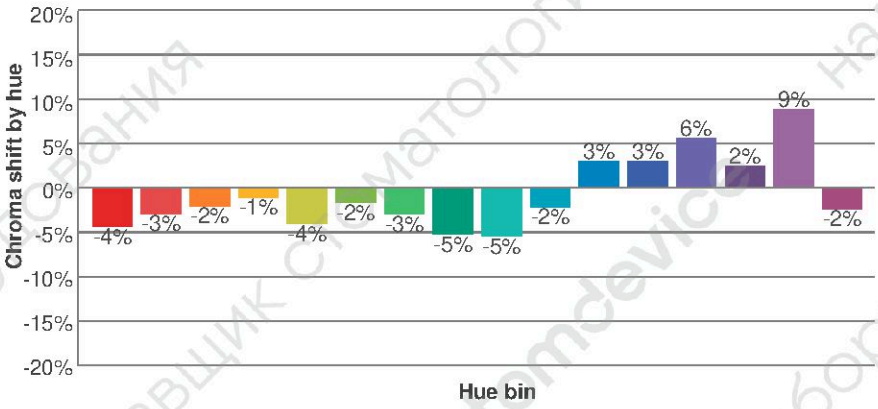
Gammut index Rg

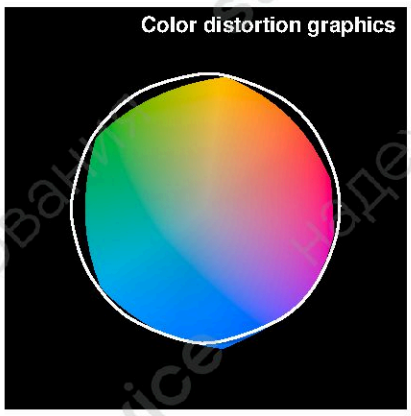
Hue Bin	R_f	Graphic shifts (%) Chroma	Hue
1	88	-4%	0%
2	92	-3%	2%
3	90	-2%	4%
4	91	-1%	3%
5	88	-4%	1%
6	94	-2%	0%
7	94	-3%	-1%
8	89	-5%	3%
9	86	-5%	10%
10	79	-2%	12%
11	78	3%	12%
12	92	3%	4%
13	92	6%	-1%
14	91	2%	-4%
15	80	9%	-13%
16	93	-2%	-2%

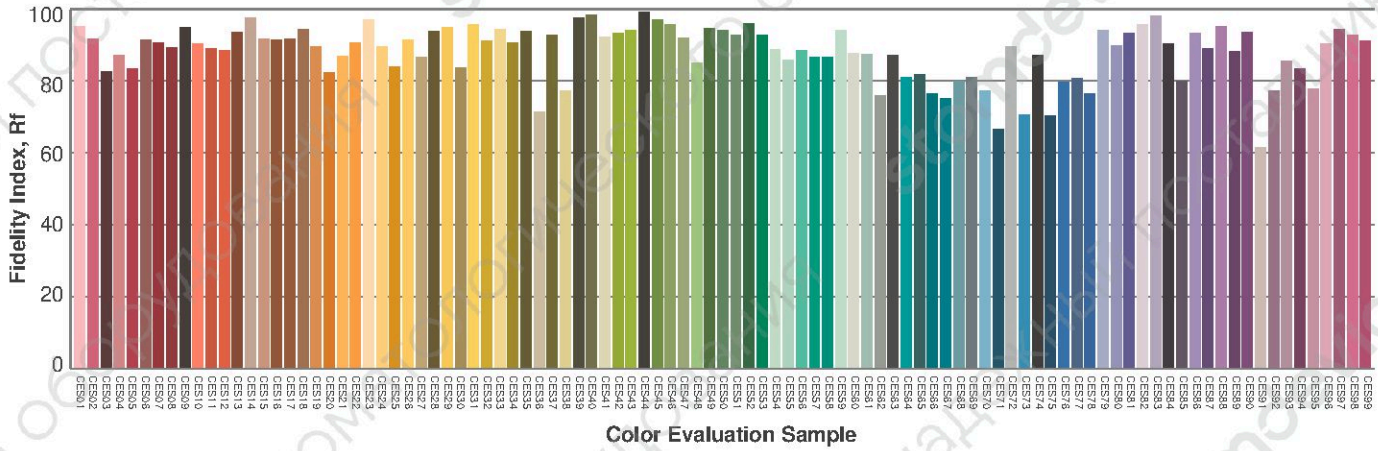










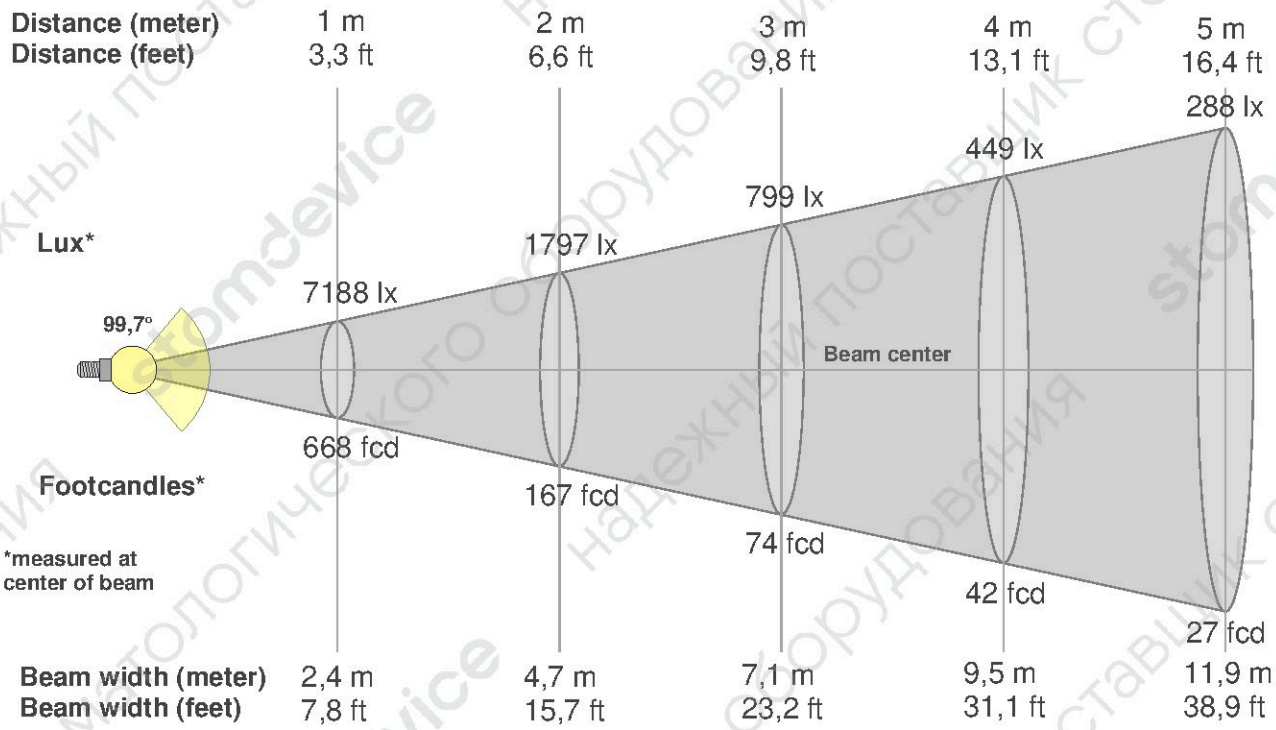


Viso Systems Aps – Copenhagen, Denmark – www.visosystems.com

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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
7188lx	1797lx	799lx	449lx	288lx	200lx	147lx	112lx	89lx	72lx	59lx	50lx	43lx	37lx	32lx	28lx	25lx	22lx	20lx	18lx
667,8fc	166,9fc	74,2fcd	41,7fcd	26,7fcd	18,5fcd	13,6fcd	10,4fcd	8,2fcd	6,7fcd	5,5fcd	4,6fcd	4fcd	3,4fcd	3fcd	2,6fcd	2,3fcd	2,1fcd	1,8fcd	1,7fcd

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°
7188	7147	7058	6918	6731	6449	6075	5627	5106	4471	3603	2707	1964	1381	938	645	409	194	42	7
100%	99%	98%	96%	94%	90%	85%	78%	71%	62%	50%	38%	27%	19%	13%	9%	6%	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°
7188	7170	7087	6957	6771	6477	6094	5640	5112	4467	3584	2675	1986	1473	990	679	442	202	40	6
100%	100%	99%	97%	94%	90%	85%	78%	71%	62%	50%	37%	28%	20%	14%	9%	6%	3%	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°
7188	7152	7065	6929	6742	6469	6101	5657	5142	4506	3604	2685	1957	1432	969	689	443	212	41	6
100%	99%	98%	96%	94%	90%	85%	79%	72%	63%	50%	37%	27%	20%	13%	10%	6%	3%	1%	0%

Intensities in 270° c-plane

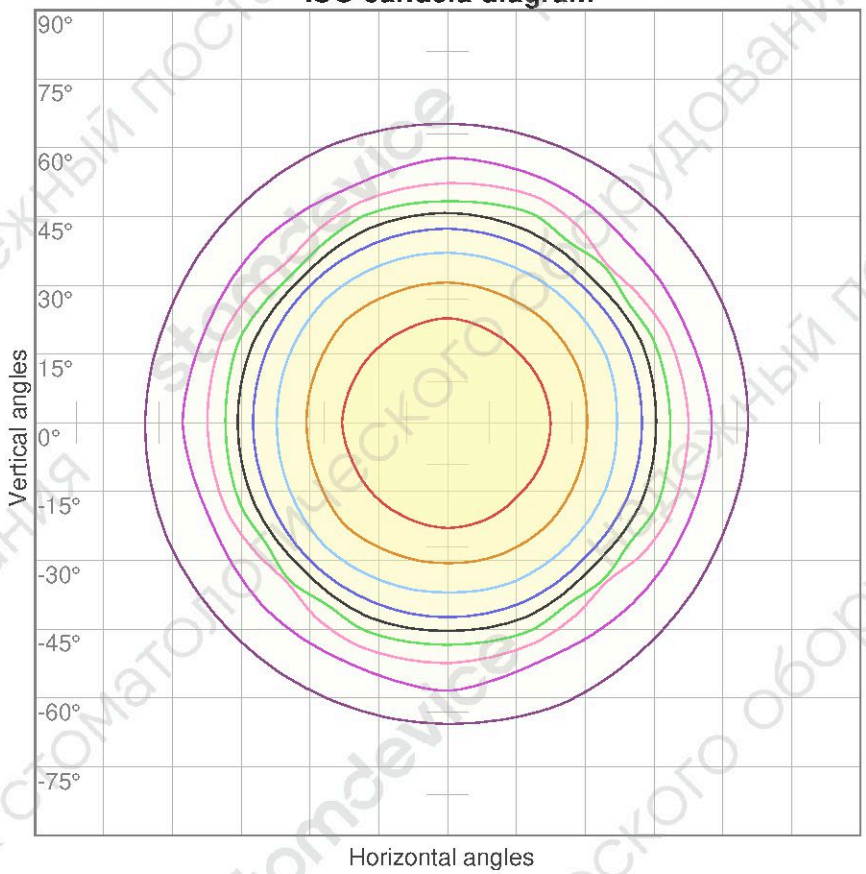
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
7188	7166	7076	6939	6746	6460	6085	5638	5120	4489	3583	2657	1935	1446	921	631	415	207	43	7
100%	100%	98%	97%	94%	90%	85%	78%	71%	62%	50%	37%	27%	20%	13%	9%	6%	3%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
99,7°	146,1°	172,4°	86,5%	63,6%

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ISO Diagrams

ISO candela diagram



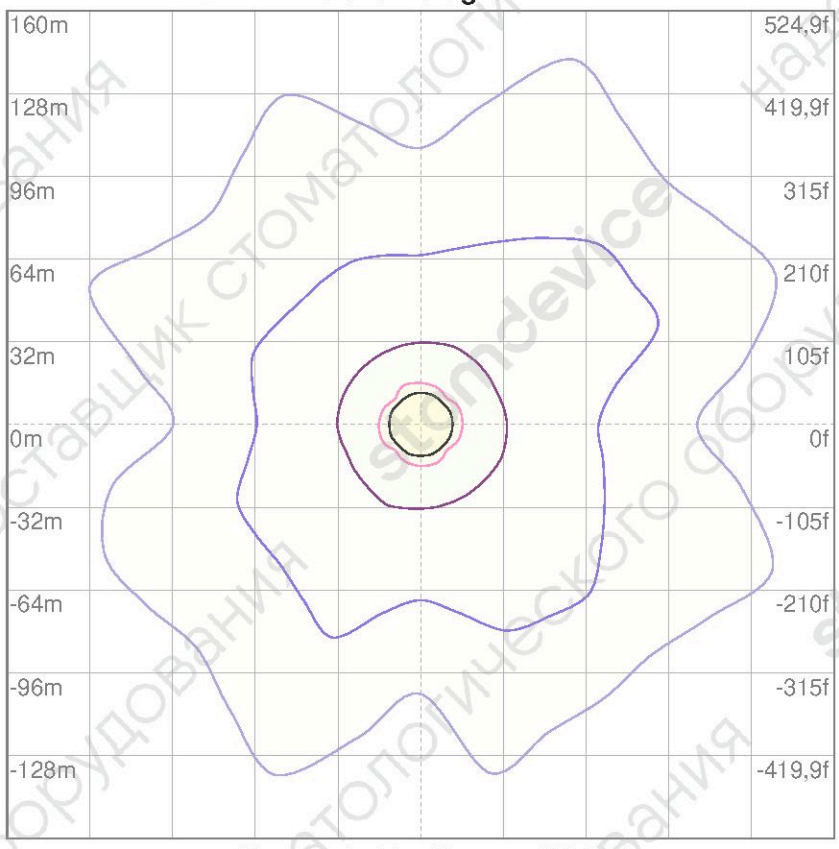
10%	719 cd
20%	1438 cd
30%	2156 cd
40%	2875 cd
50%	3594 cd
60%	4313 cd
70%	5031 cd
80%	5750 cd
90%	6469 cd

Conditions:

Number of c-planes: 16

Candela at center: 7188 cd

ISO lux diagram



3%	2,16 lx
5%	3,59 lx
10%	7,19 lx
30%	21,6 lx
50%	35,9 lx

Conditions:

Number of c-planes: 16

Lux at center: 71,9 lx

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

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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	35,1	36,2	35,3	36,5	36,7	35,1	36,2	35,4	36,5	36,7
	3H	35,8	36,8	36,1	37,1	37,4	35,9	36,9	36,2	37,2	37,5
	4H	36,1	37,1	36,4	37,4	37,7	36,2	37,2	36,5	37,5	37,8
	6H	36,4	37,3	36,7	37,6	37,9	36,5	37,4	36,9	37,7	38,1
	8H	36,5	37,4	36,8	37,7	38,0	36,6	37,5	37,0	37,8	38,2
	12H	36,5	37,4	36,9	37,7	38,1	36,7	37,6	37,1	37,9	38,2
4H	2H	35,3	36,3	35,7	36,6	36,9	35,4	36,4	35,7	36,6	36,9
	3H	36,2	37,1	36,6	37,4	37,7	36,3	37,2	36,7	37,5	37,9
	4H	36,7	37,4	37,1	37,8	38,1	36,8	37,6	37,2	37,9	38,3
	6H	37,1	37,7	37,5	38,1	38,5	37,3	37,9	37,7	38,3	38,7
	8H	37,2	37,8	37,7	38,2	38,7	37,5	38,1	37,9	38,5	38,9
	12H	37,4	37,9	37,8	38,3	38,8	37,6	38,1	38,1	38,6	39,0
8H	4H	36,8	37,4	37,3	37,8	38,2	37,0	37,6	37,4	38,0	38,4
	6H	37,4	37,9	37,9	38,3	38,8	37,6	38,1	38,1	38,5	39,0
	8H	37,7	38,1	38,1	38,5	39,0	37,9	38,3	38,4	38,8	39,3
	12H	37,9	38,3	38,4	38,7	39,3	38,1	38,5	38,6	39,0	39,5
12H	4H	36,8	37,4	37,3	37,8	38,2	37,0	37,5	37,4	38,0	38,4
	6H	37,4	37,9	37,9	38,3	38,8	37,7	38,1	38,1	38,5	39,0
	8H	37,8	38,1	38,3	38,6	39,1	38,0	38,4	38,5	38,8	39,4
Variation of the observer position for the luminaire distance S											
S = 1,0H		+0,3 / -0,3					+0,3 / -0,3				
S = 1,5H		+0,5 / -0,8					+0,5 / -0,7				
S = 2,0H		+1,3 / -1,3					+1,2 / -1,2				
Standard table		BK04					BK04				
Correction summand		20,0					20,1				
Corrected glare indices referring to 17197 lm total luminous flux											

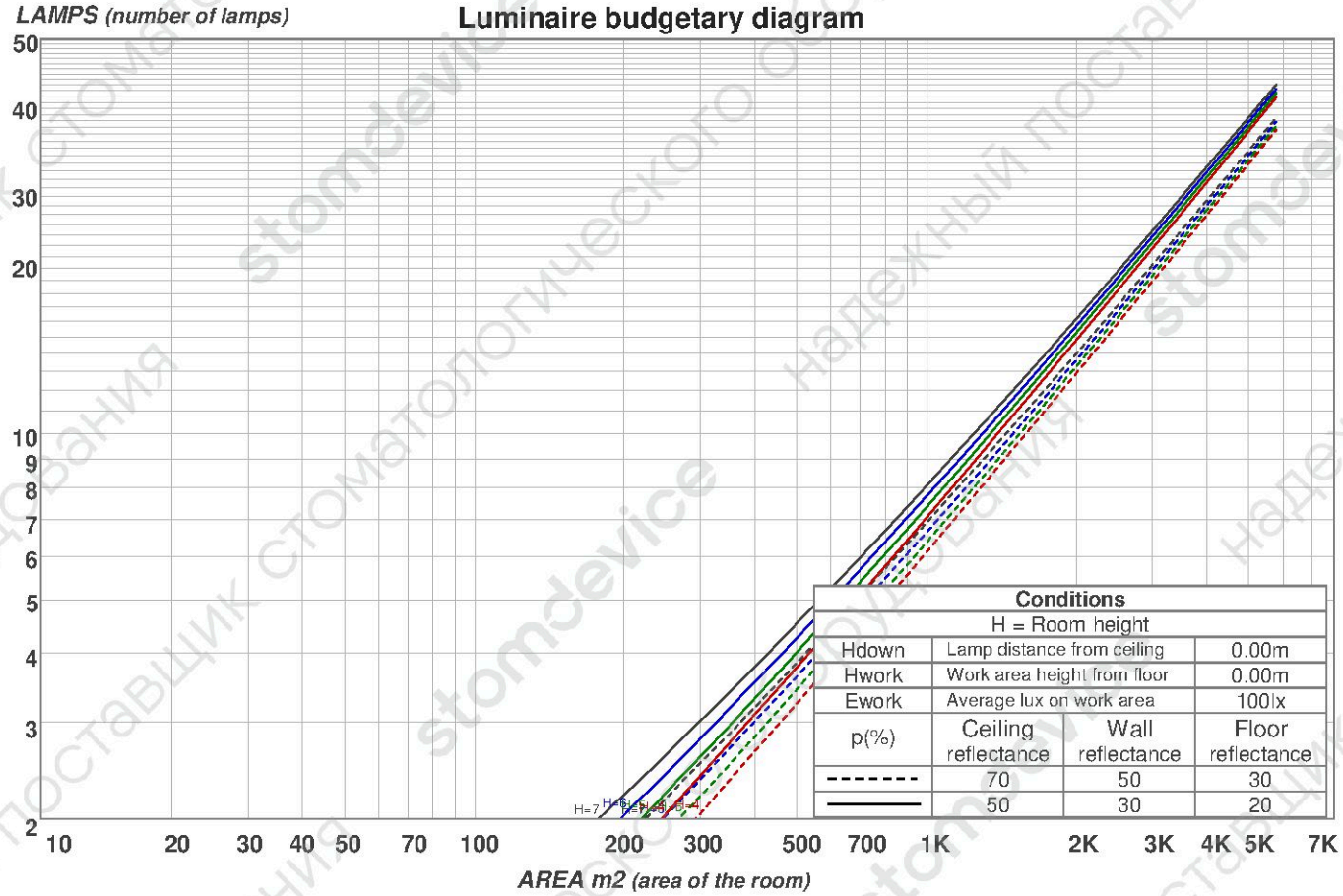
UGR data could be incorrect as lamp output is not symmetrical. Goto Edit->Photometric->Corrections and select Correct asymmetry.

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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	99
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	91	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	52	46	71	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	47	41	66	55	47	41	53	46	41	52	45	41	50	45	40	38
8	64	51	43	37	62	50	42	37	49	42	37	47	41	36	46	41	36	34
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	30	42	35	30	41	34	30	40	34	30	28

Luminaire budgetary diagram



Zonal Lumen Summary

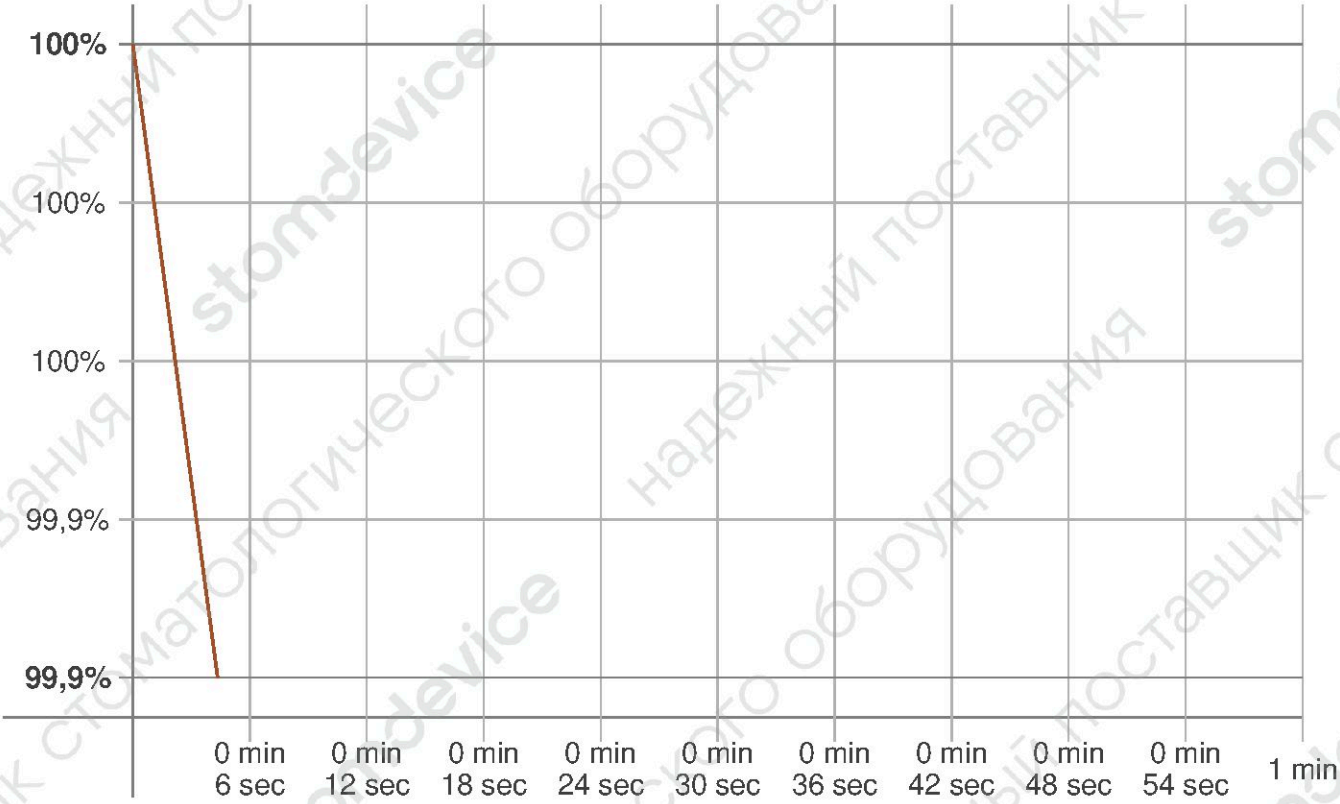
0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
681 lm	1956 lm	2969 lm	3536 lm	3420 lm	2316 lm	1295 lm	677 lm	256 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
11,4 lm	10,1 lm	12,4 lm	13,5 lm	13,3 lm	12,2 lm	10,1 lm	6,69 lm	2,38 lm

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Stabilization

Warmup curve



Warmup result

Warmup time:	**Not completed**
Warmup variation	**-0,1%**

Warmup conditions

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

Color temperature change

CCT start	CCT change	CCT end
6068 K	+2 K	6070 K

Output change

Output start	Output change	Output end
17214 lm	-17 lm	17197 lm

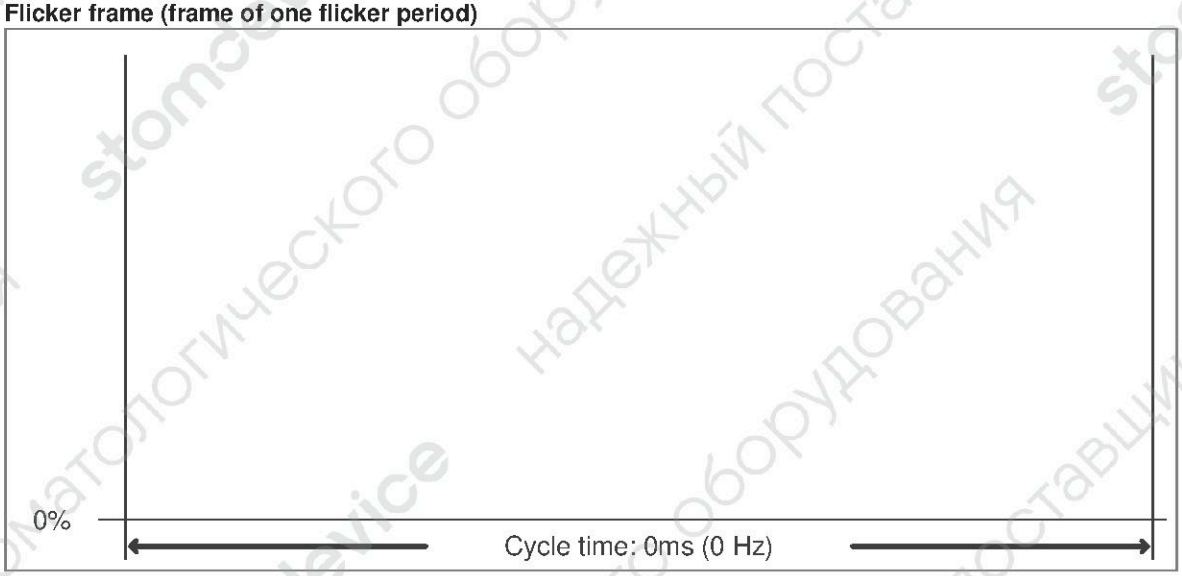
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Flicker

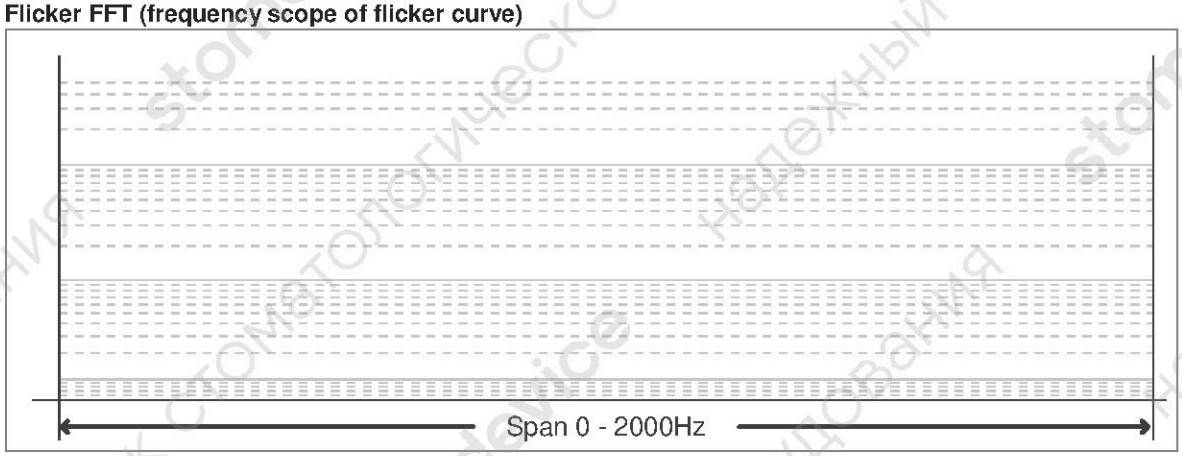
Flicker curve (complete sampled flicker signal)



Flicker frame (frame of one flicker period)



Flicker FFT (frequency scope of flicker curve)



Flicker results:

Flicker frequency:	**n/a Hz**
Flicker index:	**n/a**
Flicker percentage:	**n/a %**
SVM: (Visual flicker)	**n/a**

Flicker conditions:

Sample rate:	**0 samples/second**

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