

Light efficiency:



Light quality:



Color temperature:



Output: 3098 lm

Peak: 1633 cd

Power: 32,2 W

PF: 0,96



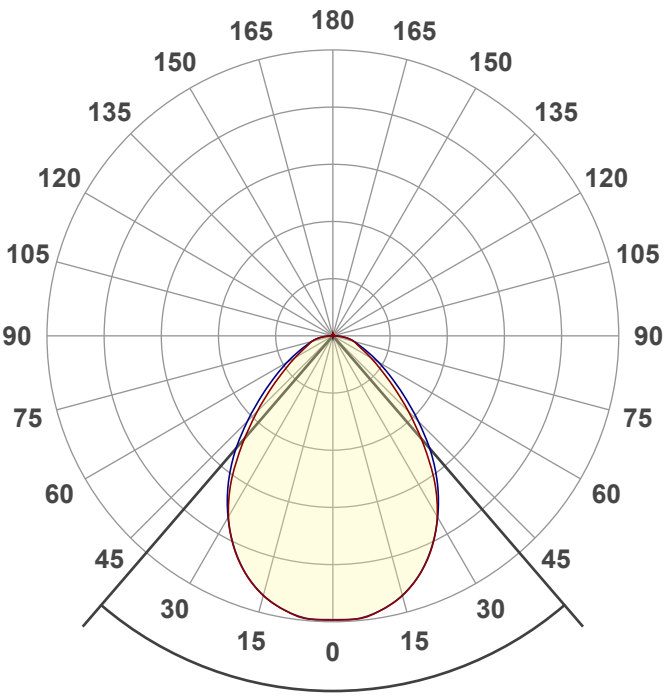
Tracking number: [VT240926-006624](#)

Product name:  
**273702-6000K**

Item number:  
**273702-6000K**

Date and time:  
**26-9-2024 10:17:02**

Description:  
**SIDE-LIT LED PANEEL | DESDE |  
150X18CM | 32W | CCT-SWITCH**

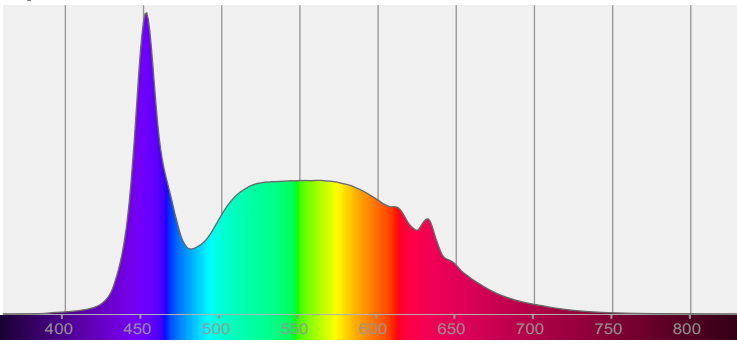


Beam angle **81,4°**

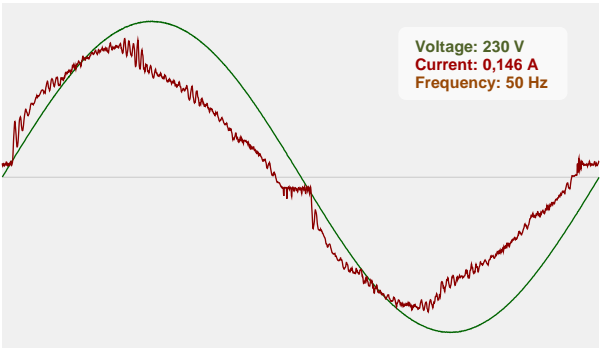


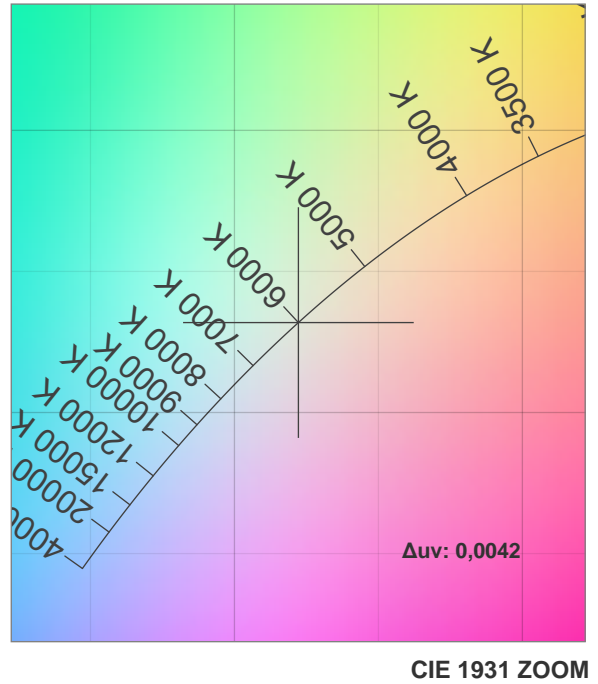
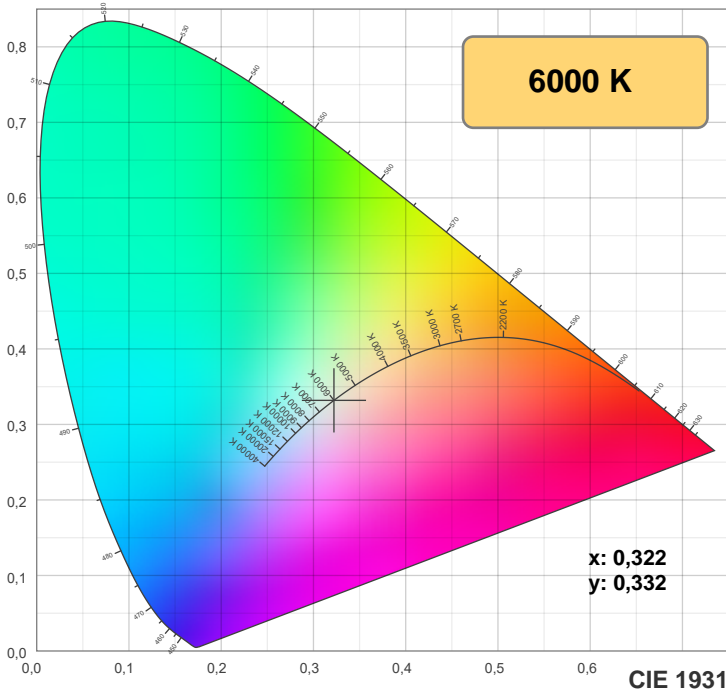
CIE 1931  
x: 0,322  
y: 0,332

Spectra

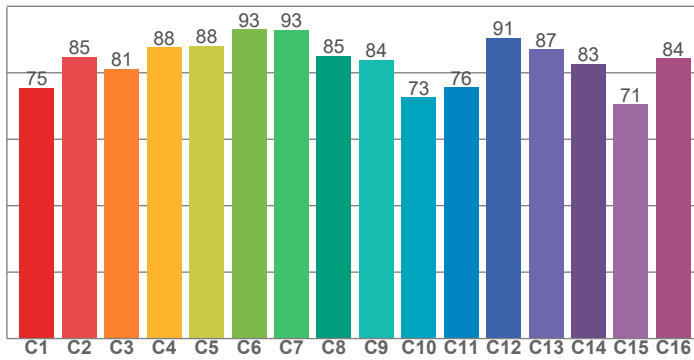


Power

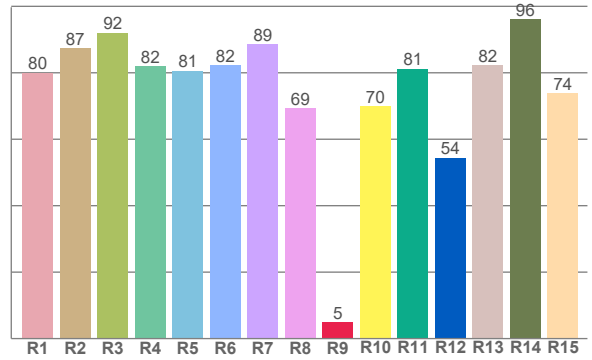




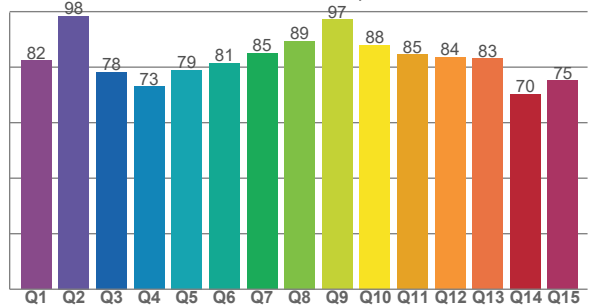
**TM-30: 83,3**



**CRI: 82,8 (R1-R8)**



**CQS: 81,6**



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
80,0	87,3	92,1	81,9	80,6	82,2	88,7	69,3	5,0	70,0	81,2	54,4	82,2	96,0	73,8

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
75,5	84,8	81,1	87,6	88,1	93,1	93,0	85,1	83,8	72,6	75,7	90,5	87,0	82,7	70,6	84,4

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
82,3	98,5	78,2	73,1	79,0	81,4	85,0	89,4	97,1	88,0	84,5	83,6	83,1	70,4	75,2

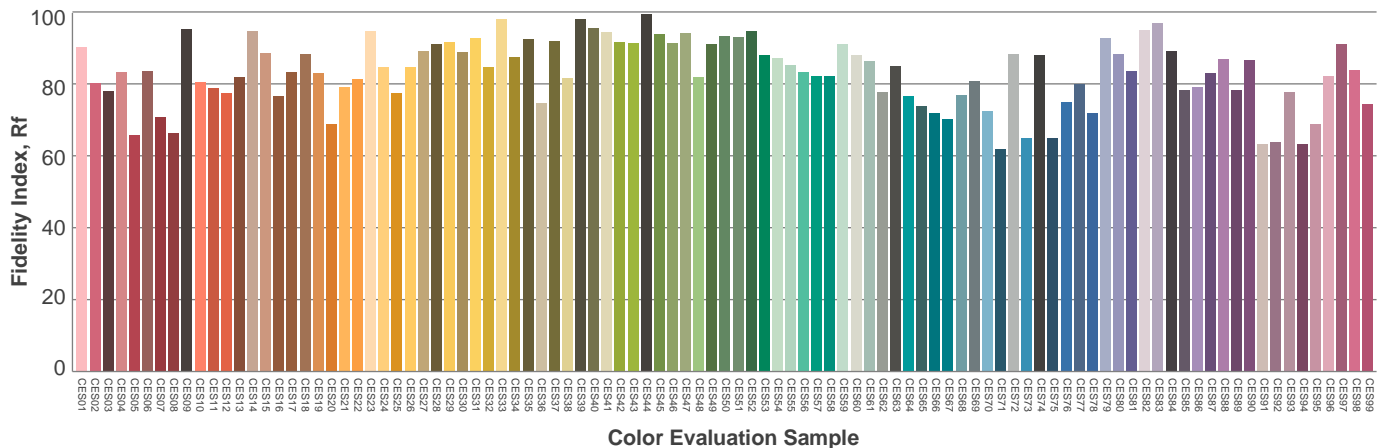
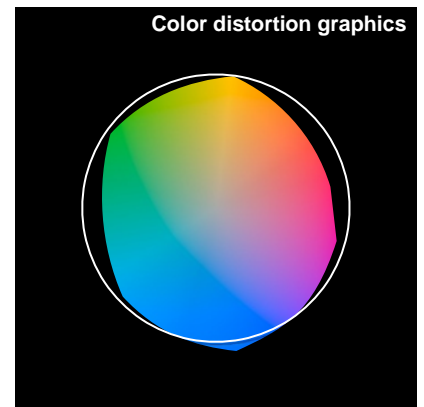
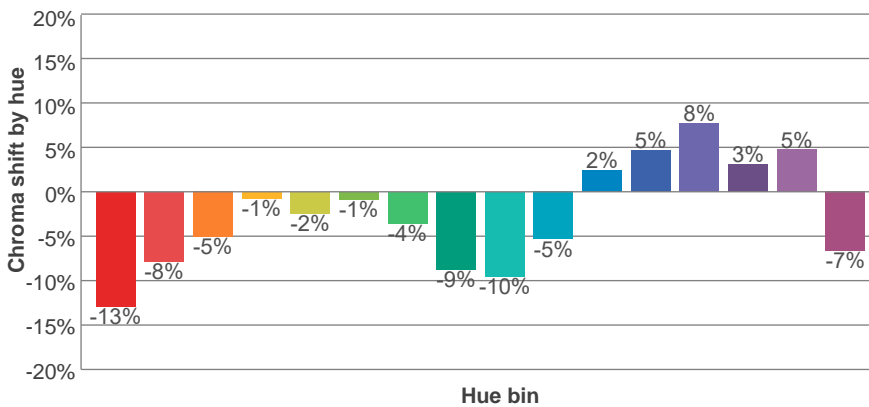
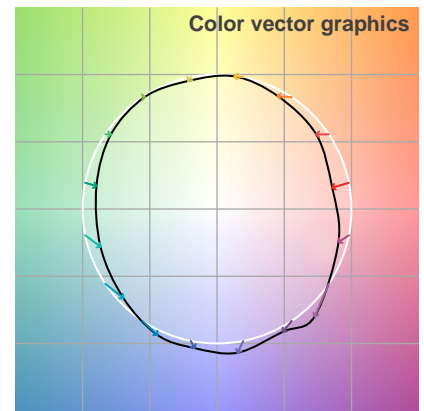
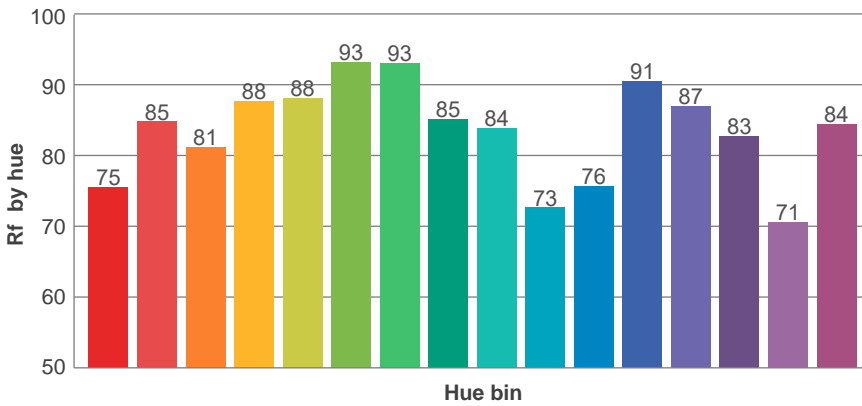
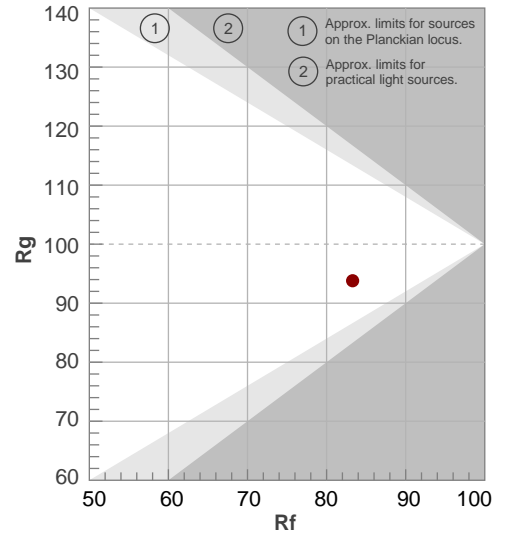
**Color parameters**

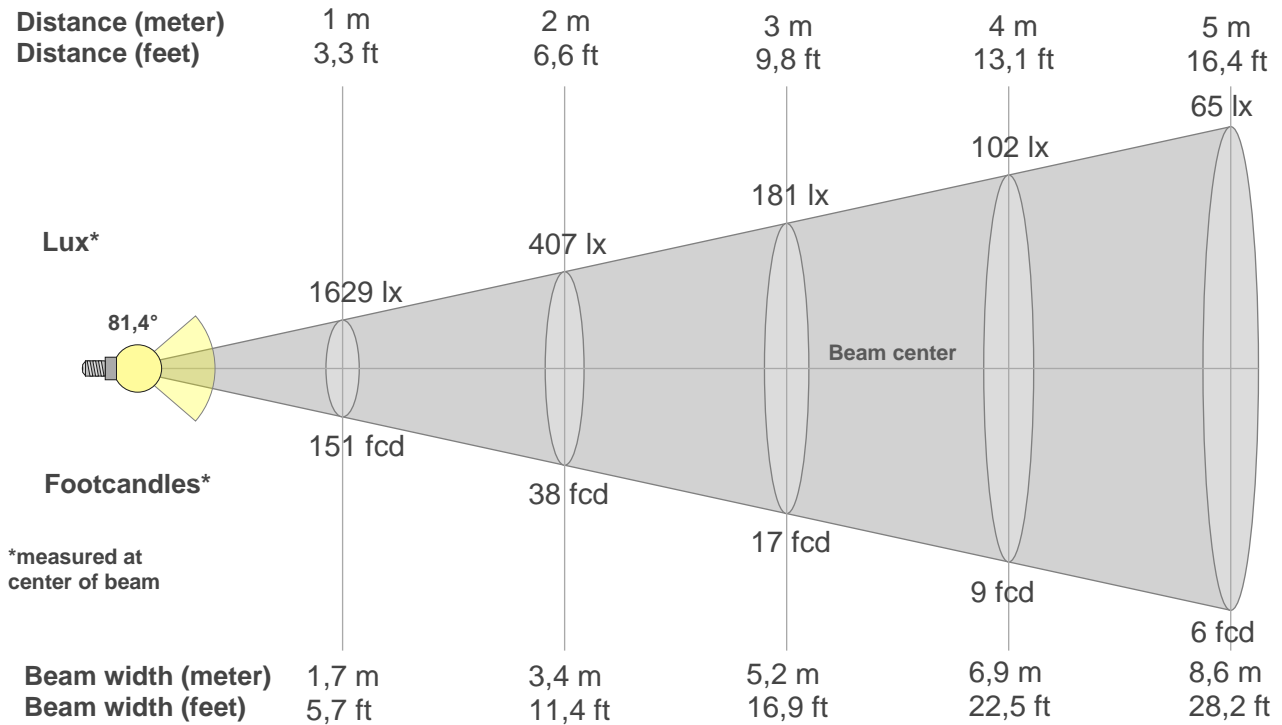
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Color coordinate cie 1931	Color coordinate cie 1931	Color coordinate	Color coordinate	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
6000 K	82,8	5,0	83,3	93,8	81,6	0,322	0,332	0,203	0,314	0,0042

**Rf 83,3**  
Fidelity index Rf

**Rg 93,8**  
Gamut index Rg

Hue Bin	R <sub>f</sub>	Shifts (%)	
		Chroma	Hue
1	75	-13%	-1%
2	85	-8%	5%
3	81	-5%	9%
4	88	-1%	6%
5	88	-2%	2%
6	93	-1%	-2%
7	93	-4%	-2%
8	85	-9%	1%
9	84	-10%	11%
10	73	-5%	16%
11	76	2%	15%
12	91	5%	4%
13	87	8%	-6%
14	83	3%	-10%
15	71	5%	-26%
16	84	-7%	-6%





**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
1629lx	407lx	181lx	102lx	65lx	45lx	33lx	25lx	20lx	16lx	13lx	11lx	10lx	8lx	7lx	6lx	6lx	5lx	5lx	4lx
151,3fcd	37,8fcd	16,8fcd	9,5fcd	6,1fcd	4,2fcd	3,1fcd	2,4fcd	1,9fcd	1,5fcd	1,3fcd	1,1fcd	0,9fcd	0,8fcd	0,7fcd	0,6fcd	0,5fcd	0,5fcd	0,4fcd	0,4fcd

**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°
1629	1622	1591	1535	1450	1336	1192	1011	802	611	452	333	250	188	149	125	90	49	11	4
100%	100%	98%	94%	89%	82%	73%	62%	49%	38%	28%	20%	15%	12%	9%	8%	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°
1629	1621	1590	1534	1448	1334	1197	1043	873	691	529	400	302	222	164	126	92	48	11	3
100%	100%	98%	94%	89%	82%	73%	64%	54%	42%	33%	25%	19%	14%	10%	8%	6%	3%	1%	0%

**Intensities in 180° c-plane**

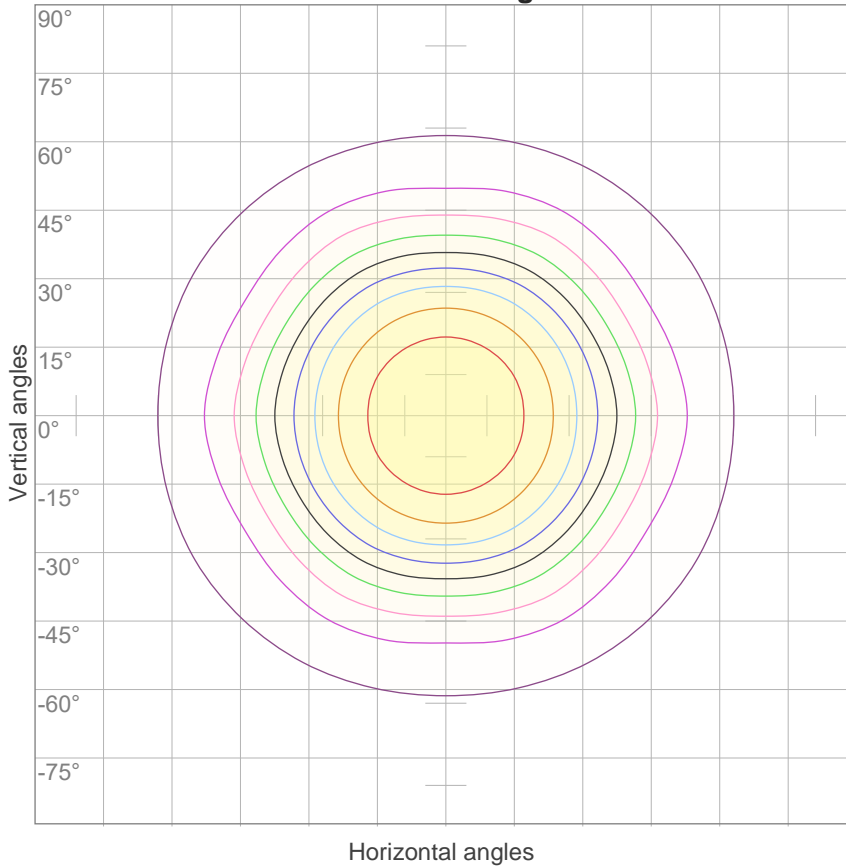
0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
1629	1622	1591	1535	1450	1336	1192	1011	802	611	452	333	250	188	149	125	90	49	11	4
100%	100%	98%	94%	89%	82%	73%	62%	49%	38%	28%	20%	15%	12%	9%	8%	6%	3%	1%	0%

**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°
1629	1621	1590	1534	1448	1334	1197	1043	873	691	529	400	302	222	164	126	92	48	11	3
100%	100%	98%	94%	89%	82%	73%	64%	54%	42%	33%	25%	19%	14%	10%	8%	6%	3%	1%	0%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
<b>81,4°</b>	<b>139,3°</b>	<b>171,7°</b>	<b>86,4%</b>	<b>68,4%</b>

**iso-candela diagram**



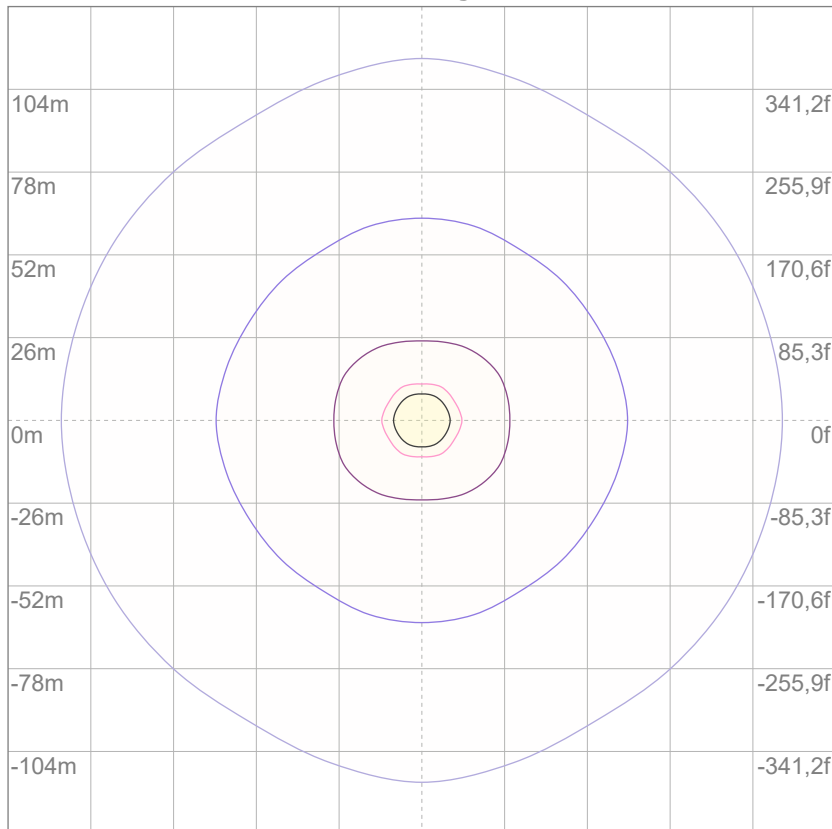
10%	163 cd
20%	326 cd
30%	489 cd
40%	651 cd
50%	814 cd
60%	977 cd
70%	1140 cd
80%	1303 cd
90%	1466 cd

Conditions:

Number of c-planes: 12

Candela at center: 1629 cd

**iso-lux diagram**



3%	0,489 lx
5%	0,814 lx
10%	1,63 lx
30%	4,89 lx
50%	8,14 lx

Conditions:

Number of c-planes: 12

Lux at center: 16,3 lx

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

Glare evaluation according to UGR

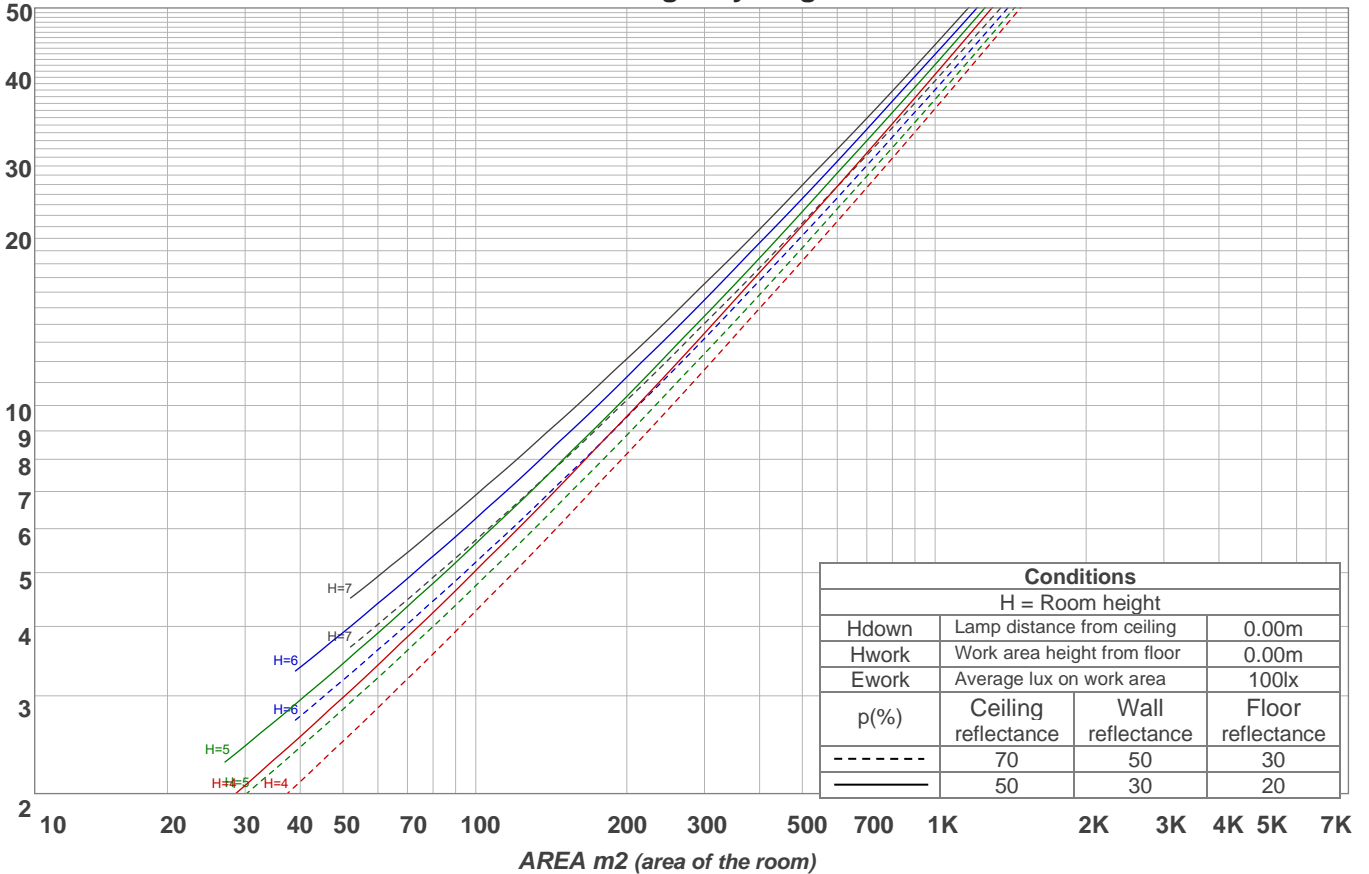
p Ceiling	70	70	50	50	30	70	70	50	50	30	
p Walls	50	30	50	30	30	50	30	50	30	30	
p Floor	20	20	20	20	20	20	20	20	20	20	
Room size X Y	Viewing direction at right angles to lamp axis					Viewing direction parallel to lamp axis					
2H	2H	15,9	16,9	16,1	17,2	17,4	16,0	17,1	16,2	17,4	17,6
	3H	16,6	17,7	17,1	18,0	18,2	16,8	17,9	17,2	18,2	18,4
	4H	17,2	18,2	17,6	18,5	18,8	17,2	18,3	17,7	18,6	18,8
	6H	17,8	18,7	18,1	19,0	19,4	17,7	18,6	18,0	18,9	19,3
	8H	18,0	18,9	18,3	19,2	19,6	17,9	18,7	18,2	19,1	19,5
12H	18,2	19,0	18,5	19,4	19,8	17,9	18,8	18,3	19,2	19,6	
4H	2H	16,1	17,2	16,6	17,5	17,7	16,3	17,3	16,7	17,6	17,9
	3H	17,3	18,2	17,7	18,5	19,0	17,4	18,3	17,8	18,6	19,1
	4H	17,9	18,7	18,4	19,1	19,7	17,9	18,7	18,4	19,2	19,7
	6H	18,6	19,4	19,1	19,7	20,1	18,5	19,3	19,0	19,6	20,0
	8H	18,9	19,6	19,4	20,0	20,4	18,7	19,4	19,2	19,8	20,2
12H	19,1	19,7	19,6	20,1	20,6	18,9	19,4	19,4	19,9	20,4	
8H	4H	18,2	18,9	18,7	19,2	19,6	18,2	18,9	18,7	19,2	19,6
	6H	19,0	19,5	19,5	20,0	20,6	18,9	19,4	19,4	19,9	20,5
	8H	19,5	19,9	20,0	20,4	21,1	19,2	19,7	19,8	20,2	20,9
	12H	19,8	20,2	20,4	20,7	21,3	19,5	19,9	20,1	20,4	21,0
12H	4H	18,2	18,7	18,7	19,2	19,7	18,2	18,8	18,7	19,2	19,7
	6H	19,1	19,6	19,6	20,1	20,7	19,0	19,4	19,5	20,0	20,6
	8H	19,5	19,9	20,1	20,4	21,1	19,3	19,7	19,9	20,2	20,9
Variation of the observer position for the luminaire distance S											
S = 1.0H	0,2 / -0,3					0,1 / -0,3					
S = 1.5H	0,4 / -0,5					0,5 / -0,5					
S = 2.0H	0,9 / -0,8					1,1 / -0,9					
CIE 117-1995. Corrected glare indices referring to 3098 lm total luminous flux											

**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	0
<b>RCR</b>	<b>(RCR: Room Cavity Ratio)</b>																				
	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	101	101	101	99			
1	110	106	102	99	107	104	100	97	99	96	94	95	93	91	91	90	88	86			
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	82	79	77	75			
3	94	85	78	72	91	83	76	71	80	74	70	77	73	69	75	71	67	65			
4	87	76	69	63	85	75	68	62	73	66	61	70	65	60	68	63	60	58			
5	81	69	61	55	79	68	61	55	66	60	54	64	58	54	62	57	53	51			
6	75	63	55	50	73	62	55	49	61	54	49	59	53	48	57	52	48	46			
7	70	58	50	45	69	57	50	44	56	49	44	54	48	44	53	47	43	42			
8	66	54	46	40	64	53	45	40	52	45	40	50	44	40	49	44	39	38			
9	62	50	42	37	61	49	42	37	48	41	37	47	41	36	46	40	36	34			
10	58	46	39	34	57	46	39	34	45	38	34	44	38	33	43	37	33	32			

LAMPS (number of lamps)

**Luminaire budgetary diagram**



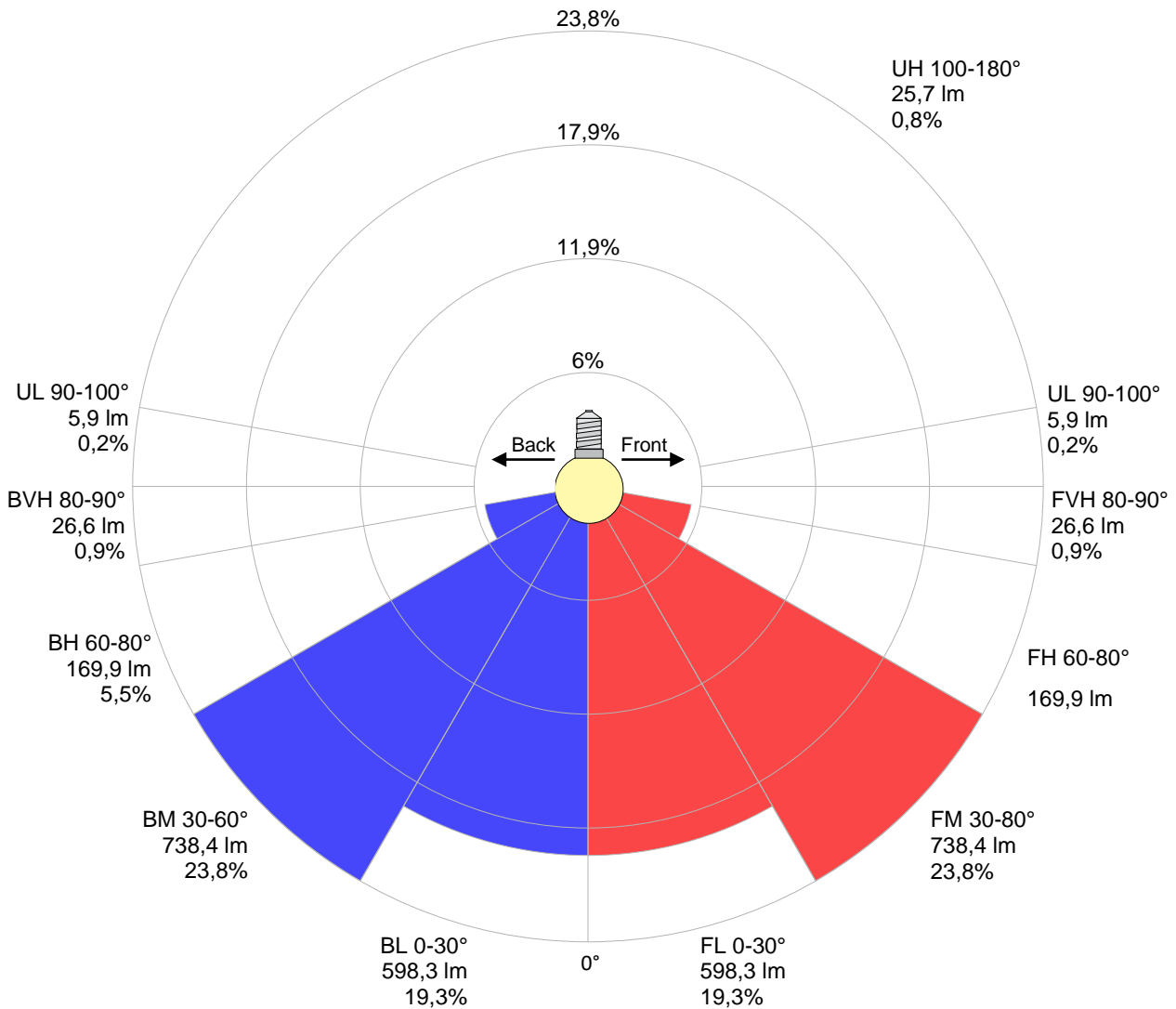
**Zonal Lumen Summary**

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
{LUM0-10}	432 lm	614 lm	643 lm	503 lm	330 lm	205 lm	133 lm	52,5 lm
90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
4,89 lm	4,01 lm	4,41 lm	4,27 lm	4,07 lm	3,58 lm	2,81 lm	1,87 lm	0,657 lm

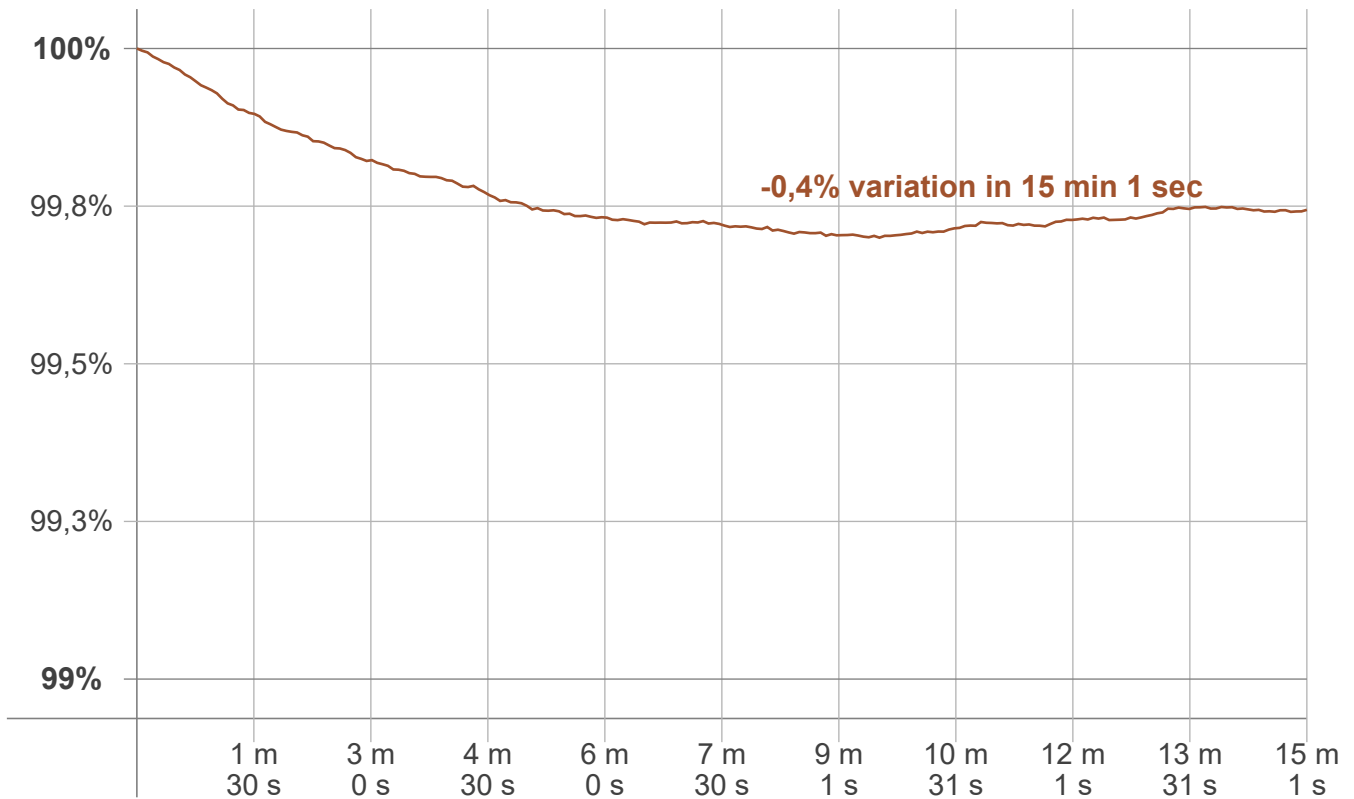
LCS table

BUG rating:	B2 U2 G1	
<b>Forward light</b>	Lumens	Lumens %
Low(0-30):	598,3	19,3%
Medium(30-60):	738,4	23,8%
High(60-80):	169,9	5,5%
Very high(80-90):	26,6	0,9%
<b>Back light</b>		
Low(0-30):	598,3	19,3%
Medium(30-60):	738,4	23,8%
High(60-80):	169,9	5,5%
Very high(80-90):	26,6	0,9%
<b>Uplight</b>		
Low(90-100):	5,9	0,2%
High(100-180):	25,7	0,8%

LCS graph



**Warmup curve**



**Warmup result**

<b>Warmup time:</b>	<b>Lamp stabilized in 15 min 1 sec</b>
<b>Warmup variation</b>	<b>-0,4%</b>

**Warmup conditions**

<b>Stable period:</b>	<b>15 min</b>
<b>Stable change max:</b>	<b>2,0%</b>
<b>Minimum time:</b>	<b>15 min</b>

**Color temperature change**

CCT start	CCT change	CCT end
5969 K	+31 K	6000 K

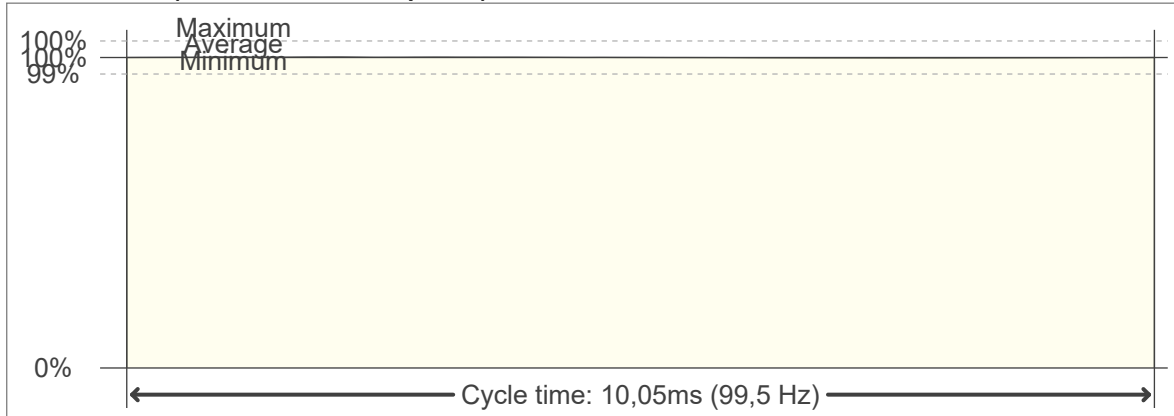
**Output change**

Output start	Output change	Output end
3107 lm	-9 lm	3098 lm

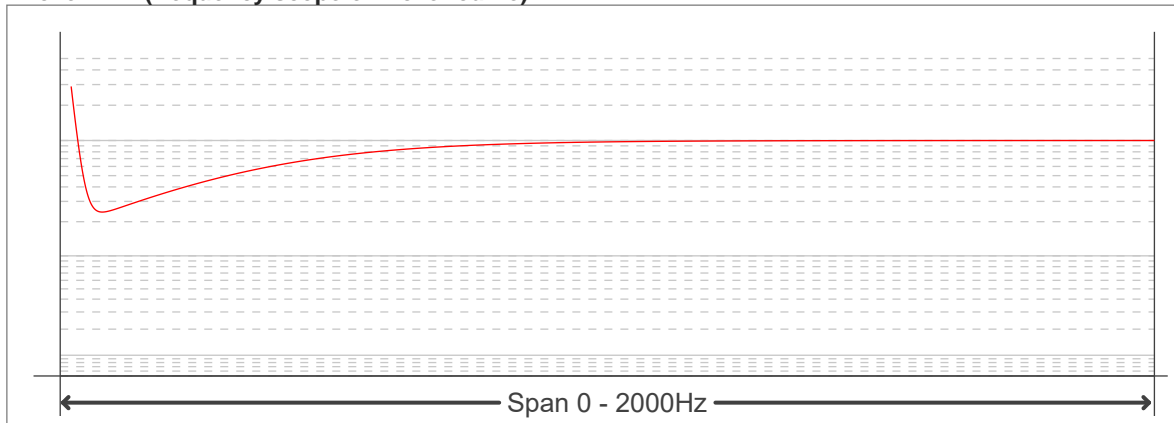
**Flicker curve (complete sampled flicker signal)**



**Flicker frame (frame of one flicker period)**



**Flicker FFT (frequency scope of flicker curve)**



**Flicker results:**

Flicker frequency:		99,5 Hz	
Flicker index:	0	JA8/10 40Hz	0,02 %
Flicker percentage:	0,25 %	JA8/10 90Hz	0,03 %
SVM: (Visual flicker)	0,01	JA8/10 200Hz	0,18 %
PstLM	0,02	JA8/10 400Hz	0,19 %
Mp	0,01	JA8/10 1000Hz	0,23 %

**Flicker conditions:**

Sample rate:	20000 samples/second
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