NOVA FLEX

Flexible Grazer Test Report

Light efficiency:

78 Lumen/Watt

Light quality:

CRI: 84.8

Color temperature:

2974 K

Output: 650 lm
Peak: 1335 cd

Power: 8.3 W
PF: 1.0

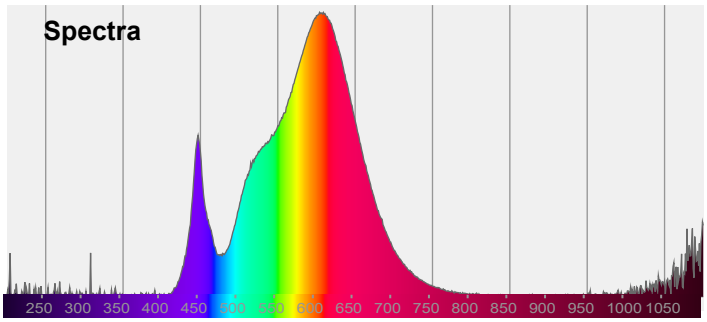
Tracking number: VT250718-001474

Product name:
GRZ-WT-12-24-IP67-30

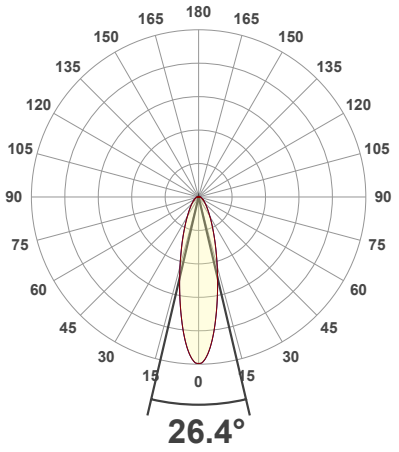
Item number:
1 foot GRZ-WT-12-24-IP67-30 12° optic

Date and time:
7/18/25 9:41:31 AM

All values scaled to 1 foot
From 0.75 M sample tested @ 11 M

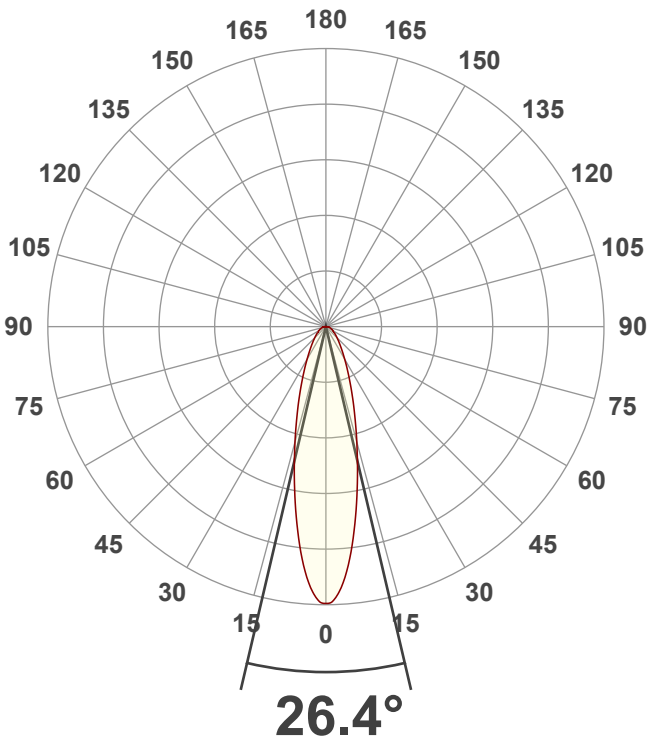


Average Beam Angle

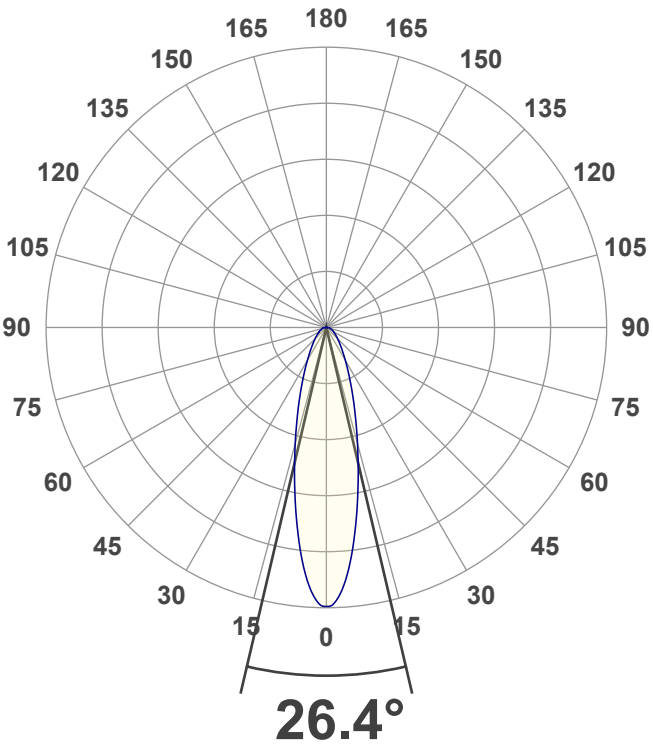


C Plane Resolution: 5°

Angular Distribution 0 ° Plane

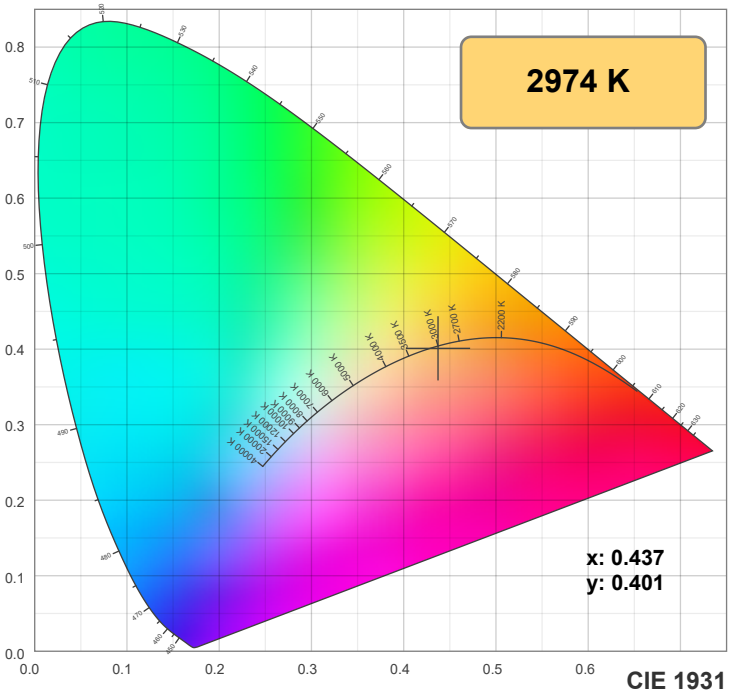


Angular Distribution 90 ° Plane

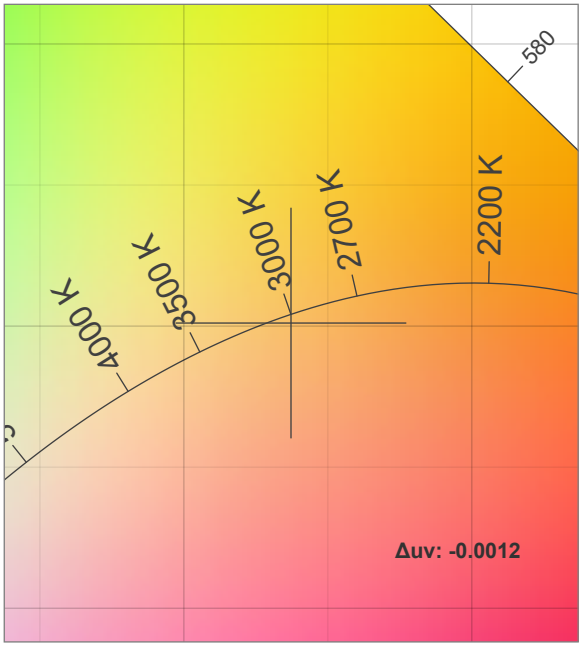


NOVA FLEX

Color details

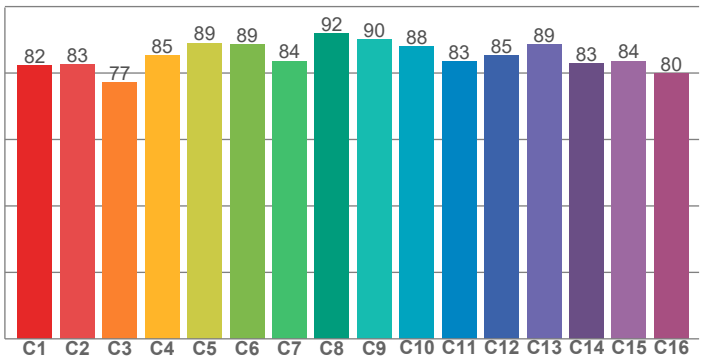


CIE 1931

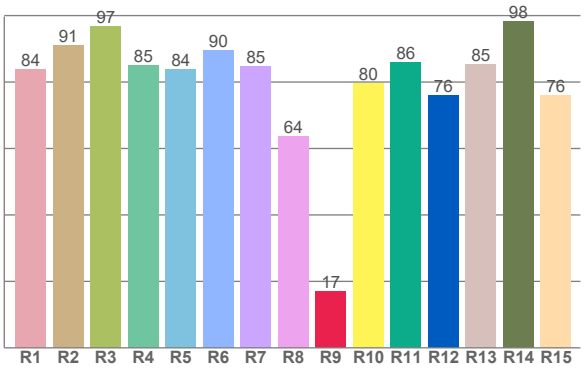


CIE 1931 ZOOM

TM-30: 85.0



CRI: (R1-R8): 84.8



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
83.8	90.9	96.9	84.9	84.0	89.6	84.7	63.8	16.9	79.5	85.9	75.9	85.4	98.3	76.0

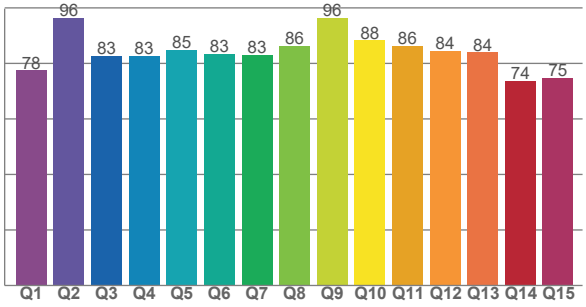
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
82.4	82.6	77.1	85.3	89.1	88.7	83.6	91.8	90.1	87.9	83.5	85.2	88.5	82.9	83.7	79.9

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
77.5	96.4	82.8	82.8	84.9	83.3	83.1	86.3	96.3	88.3	86.4	84.4	83.9	73.6	74.7

CQS: 83.0



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 diviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	x	y	u	v	Δuv
2974 K	84.8	16.9	85.0	99.4	83.0	0.437	0.401	0.252	0.347	-0.0012

NOVA FLEX

TM-30 details

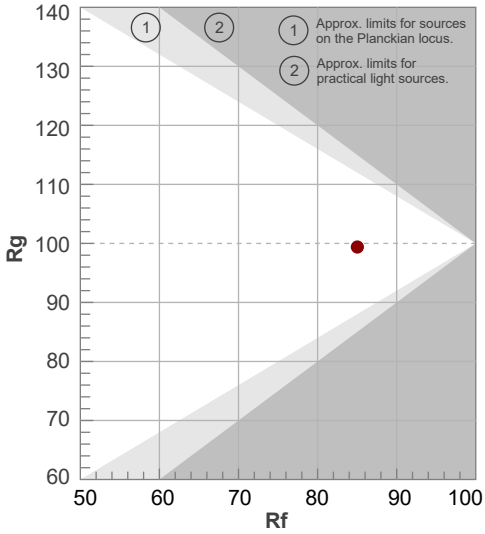
Rf 85.0

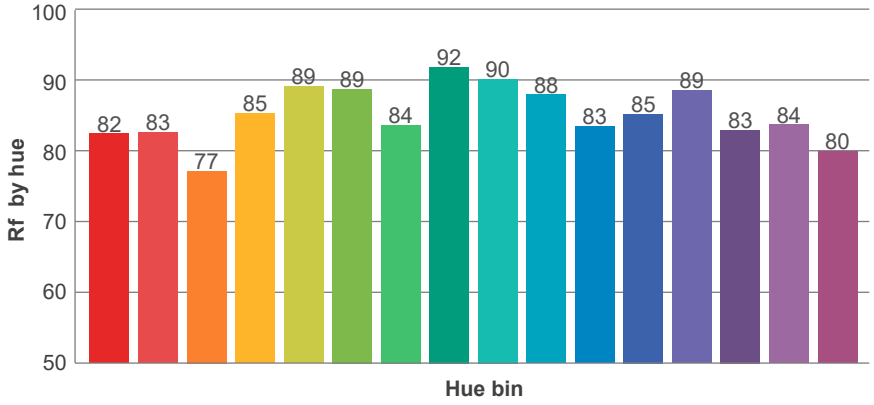
Fidelity index Rf

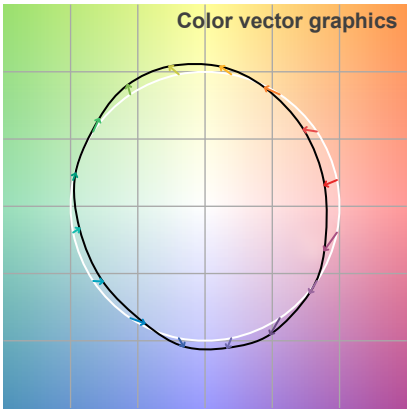
Rg 99.4

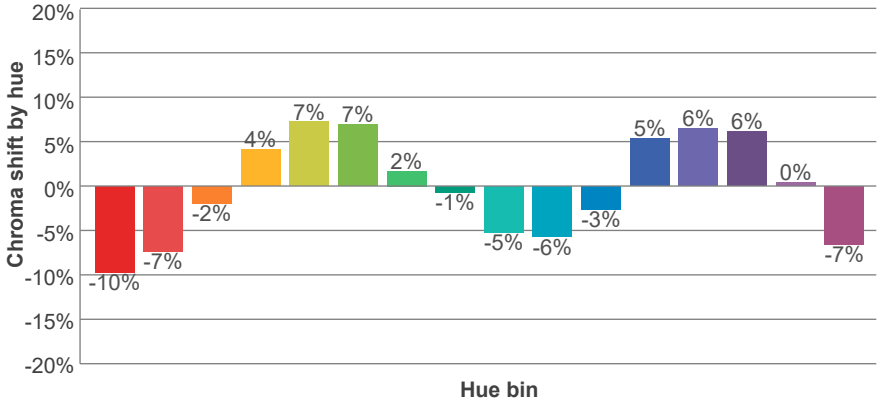
Gamut index Rg

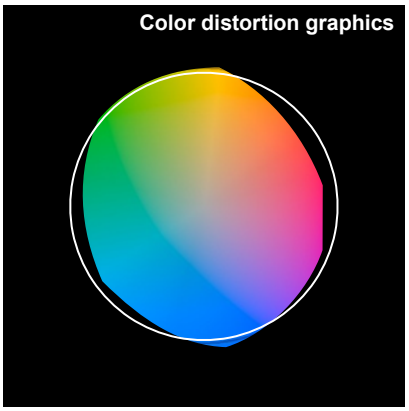
Hue Bin	R_f	Shifts (%) Chroma	Hue
1	82	-10%	-2%
2	83	-7%	7%
3	77	-2%	12%
4	85	4%	9%
5	89	7%	6%
6	89	7%	-2%
7	84	2%	-10%
8	92	-1%	-5%
9	90	-5%	-2%
10	88	-6%	4%
11	83	-3%	11%
12	85	5%	5%
13	89	6%	-4%
14	83	6%	-12%
15	84	0%	-10%
16	80	-7%	-15%

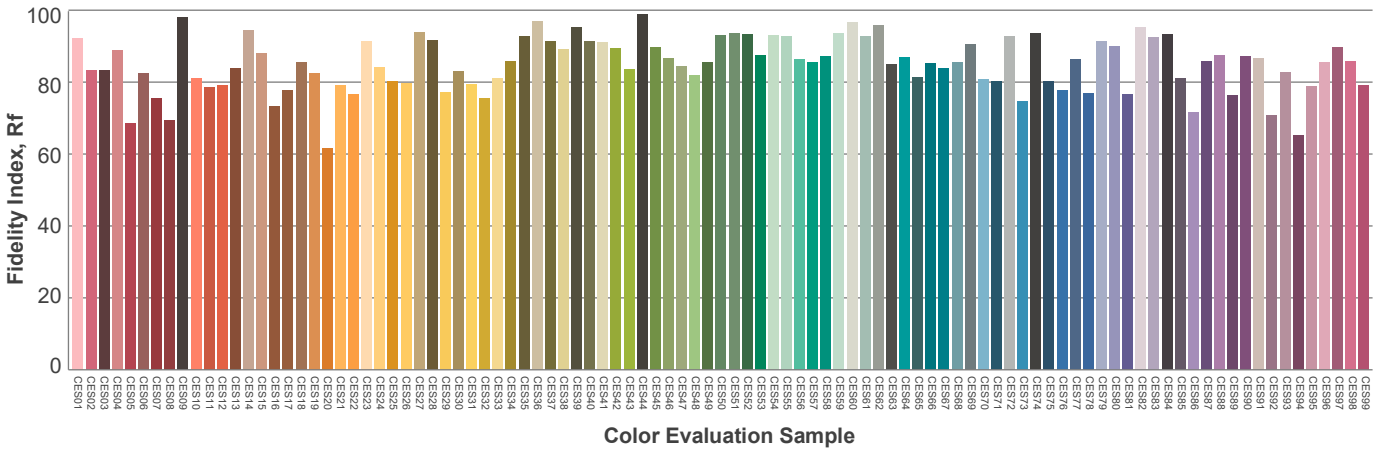






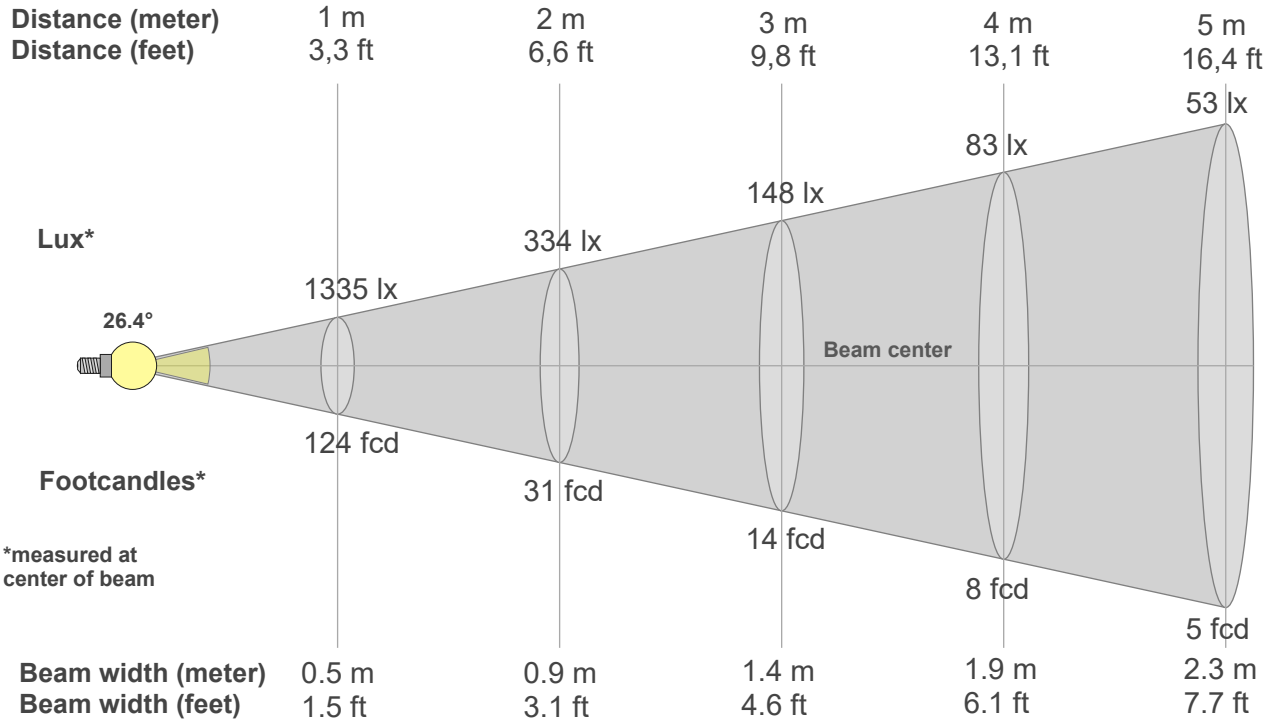






NOVA FLEX

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
1335lx	334lx	148lx	83lx	53lx	37lx	27lx	21lx	16lx	13lx	11lx	9lx	8lx	7lx	6lx	5lx	5lx	4lx	4lx	3lx
124.1fc	31fcd	13.8fcd	7.8fcd	5fcd	3.4fcd	2.5fcd	1.9fcd	1.5fcd	1.2fcd	1fcd	0.9fcd	0.7fcd	0.6fcd	0.6fcd	0.5fcd	0.4fcd	0.4fcd	0.3fcd	0.3fcd

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°
1335	1311	1232	1118	986	856	734	625	532	451	385	328	280	241	209	182	159	140	124	111
100%	98%	92%	84%	74%	64%	55%	47%	40%	34%	29%	25%	21%	18%	16%	14%	12%	10%	9%	8%

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°
1335	1311	1232	1118	986	856	734	625	532	451	385	328	280	241	209	182	159	140	124	111
100%	98%	92%	84%	74%	64%	55%	47%	40%	34%	29%	25%	21%	18%	16%	14%	12%	10%	9%	8%

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°
1335	1311	1232	1118	986	856	734	625	532	451	385	328	280	241	209	182	159	140	124	111
100%	98%	92%	84%	74%	64%	55%	47%	40%	34%	29%	25%	21%	18%	16%	14%	12%	10%	9%	8%

Intensities in 270° c-plane

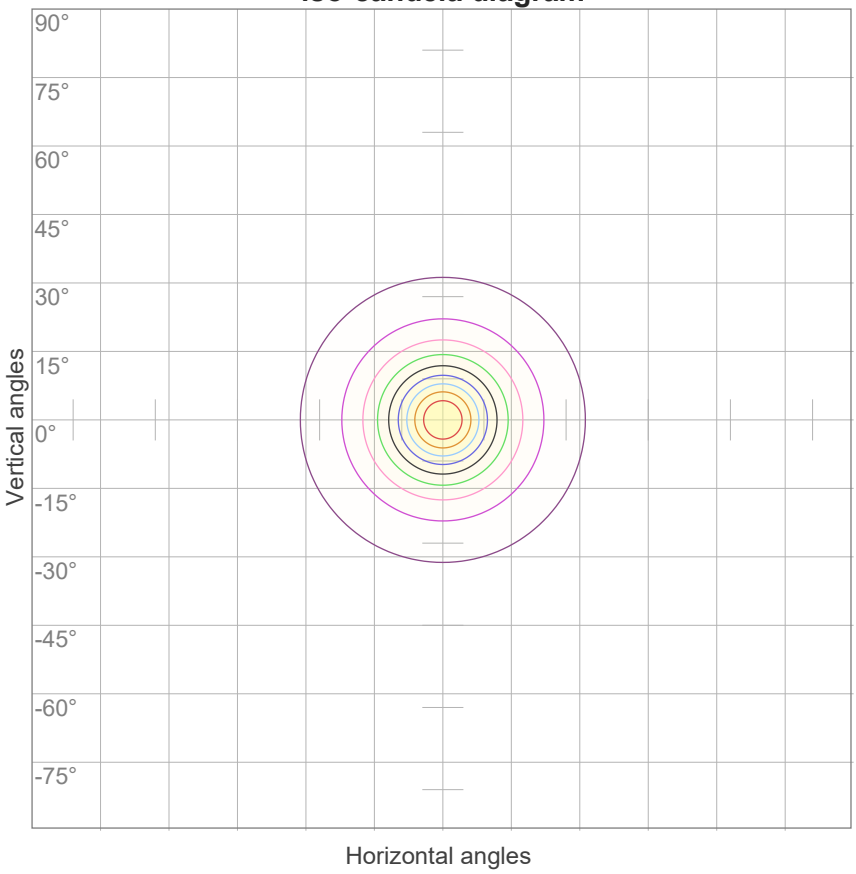
0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1335	1311	1232	1118	986	856	734	625	532	451	385	328	280	241	209	182	159	140	124	111
100%	98%	92%	84%	74%	64%	55%	47%	40%	34%	29%	25%	21%	18%	16%	14%	12%	10%	9%	8%

Beam angle 50%	Field angle 10%	Cutoff angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
26.4°	69.5°	128.6°	87.6%	76.7%

NOVA FLEX

Iso Diagrams

iso-candela diagram



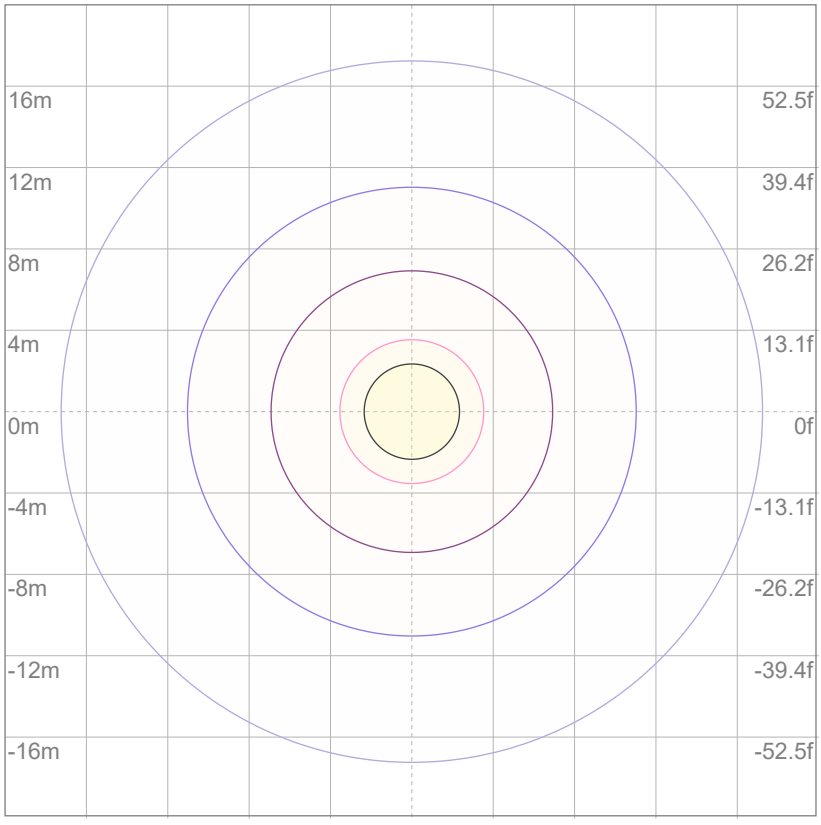
10%	134 cd
20%	267 cd
30%	401 cd
40%	534 cd
50%	668 cd
60%	801 cd
70%	935 cd
80%	1068 cd
90%	1202 cd

Conditions:

Number of c-planes: 72

Candela at center: 1335 cd

iso-lux diagram



Mounting height: 10 meters (33 feet)

3%	0.401 lx
5%	0.668 lx
10%	1.34 lx
30%	4.01 lx
50%	6.68 lx

Conditions:

Number of c-planes: 72

Lux at center: 13.4 lx

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

NOVA FLEX

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	19.2	20.0	19.4	20.3	20.5	19.9	20.7	20.1	21.0	21.2
	3H	20.1	21.0	20.5	21.3	21.5	21.1	22.0	21.5	22.2	22.4
	4H	20.6	21.5	21.0	21.7	22.0	21.7	22.6	22.1	22.9	23.1
	6H	21.1	21.8	21.4	22.1	22.5	22.4	23.1	22.7	23.4	23.8
	8H	21.2	21.9	21.5	22.2	22.6	22.6	23.4	23.0	23.7	24.1
	12H	21.2	21.9	21.6	22.3	22.7	22.8	23.5	23.2	23.9	24.3
4H	2H	19.6	20.5	20.0	20.7	21.0	20.2	21.0	20.6	21.3	21.5
	3H	20.9	21.6	21.3	22.0	22.4	21.7	22.4	22.1	22.8	23.2
	4H	21.4	22.1	21.9	22.5	23.0	22.4	23.1	22.9	23.5	24.0
	6H	21.9	22.6	22.4	22.9	23.3	23.2	23.8	23.7	24.2	24.5
	8H	22.1	22.7	22.6	23.1	23.4	23.5	24.1	24.0	24.4	24.8
	12H	22.2	22.7	22.7	23.1	23.6	23.7	24.2	24.2	24.6	25.1
8H	4H	21.7	22.3	22.2	22.7	23.1	22.6	23.2	23.1	23.6	24.0
	6H	22.4	22.8	22.9	23.3	23.8	23.5	23.9	24.0	24.4	24.9
	8H	22.7	23.0	23.2	23.5	24.2	23.9	24.3	24.4	24.8	25.4
	12H	22.8	23.1	23.4	23.6	24.2	24.2	24.6	24.8	25.1	25.7
12H	4H	21.7	22.2	22.2	22.6	23.1	22.6	23.1	23.1	23.5	24.0
	6H	22.5	22.8	23.0	23.4	24.0	23.6	23.9	24.1	24.4	25.1
	8H	22.8	23.1	23.3	23.6	24.2	24.0	24.3	24.6	24.8	25.4
Variation of the observer position for the luminaire distance S											
S = 1.0H		0.2 / -0.3					0.2 / -0.2				
S = 1.5H		0.6 / -0.5					0.6 / -0.4				
S = 2.0H		1.1 / -0.8					1.0 / -0.7				
CIE 117-1995. Corrected glare indices referring to 650 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	0
RCR	(RCR: Room Cavity Ratio)				Room Values are expressed as percentage of Lumens delivered to the task surface													
0	118	118	118	118	115	115	115	115	110	110	110	104	104	104	99	99	99	97
1	111	107	104	101	108	105	102	100	100	98	96	96	94	93	92	91	89	87
2	104	98	93	89	102	96	92	88	92	89	85	89	86	83	86	83	81	79
3	98	90	84	80	96	89	83	79	85	81	77	83	79	75	80	77	74	72
4	92	84	77	72	90	82	76	72	80	74	70	77	73	69	75	71	68	66
5	87	78	71	66	85	77	70	66	74	69	65	72	68	64	70	66	63	62
6	83	73	66	61	81	72	66	61	70	64	60	68	63	60	67	62	59	57
7	79	69	62	57	77	68	61	57	66	61	56	65	60	56	63	59	55	54
8	75	65	58	54	74	64	58	54	63	57	53	61	56	53	60	56	52	51
9	72	61	55	51	70	61	55	51	59	54	50	58	53	50	57	53	50	48
10	68	58	52	48	67	58	52	48	57	51	48	56	51	47	55	50	47	46

Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
102 lm	160 lm	121 lm	83.3 lm	59.6 lm	43.8 lm	32.2 lm	21.0 lm	8.59 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.153 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	0.000 lm	18.6 lm

LCS table

BUG rating:	B1 U0 G0	
Forward light	Lumens	Lumens %
Low(0-30):	197.2	30.3%
Medium(30-60):	96.1	14.8%
High(60-80):	27.4	4.2%
Very high(80-90):	4.4	0.7%
Back light		
Low(0-30):	197.2	30.3%
Medium(30-60):	96.1	14.8%
High(60-80):	27.4	4.2%
Very high(80-90):	4.4	0.7%
Uplight		
Low(90-100):	0	0%
High(100-180):	0	0%

