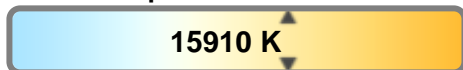


Color Temperature:



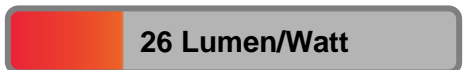
**Total Lumen Output:**  
**3584 lm**

Light Quality:



**Peak:**  
**27545 cd**

Light Efficiency:



**Power: 136 W**



CIE 1931  
x: 0.276  
y: 0.249

**Test: Full On No UV**

**Date: 3/23/2018**

**Voltage: 113 V**

**Current: 1.21 A**

**Frequency: 60 Hz**

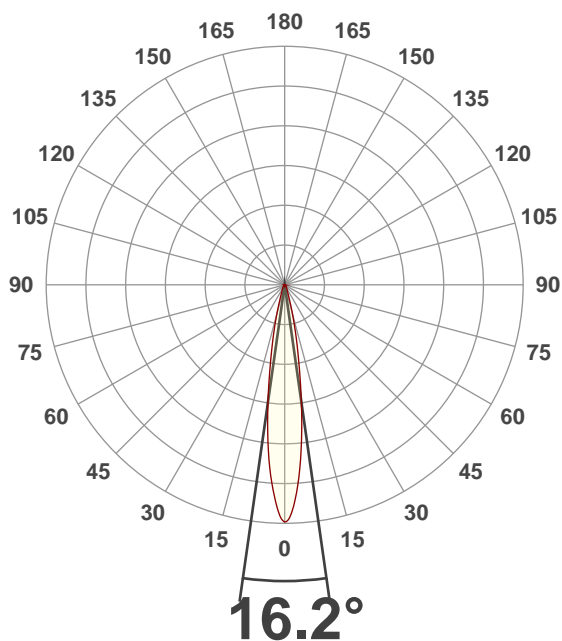
**CRI: 73.6**

**CQS: 85.7**

**TM30: 74.5**

**Note:**

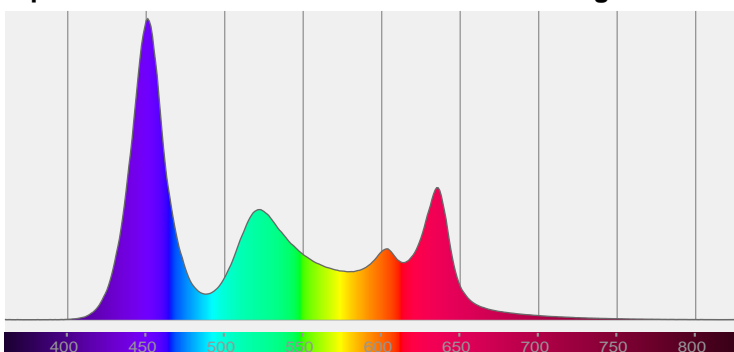
**Beam Angle**



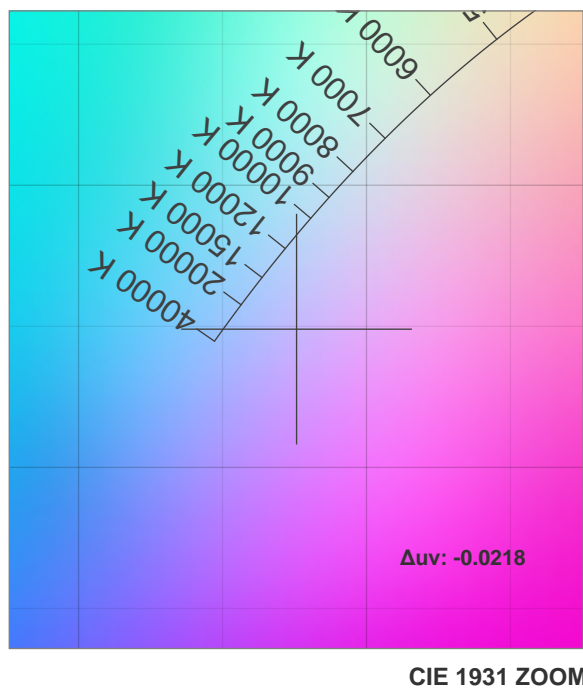
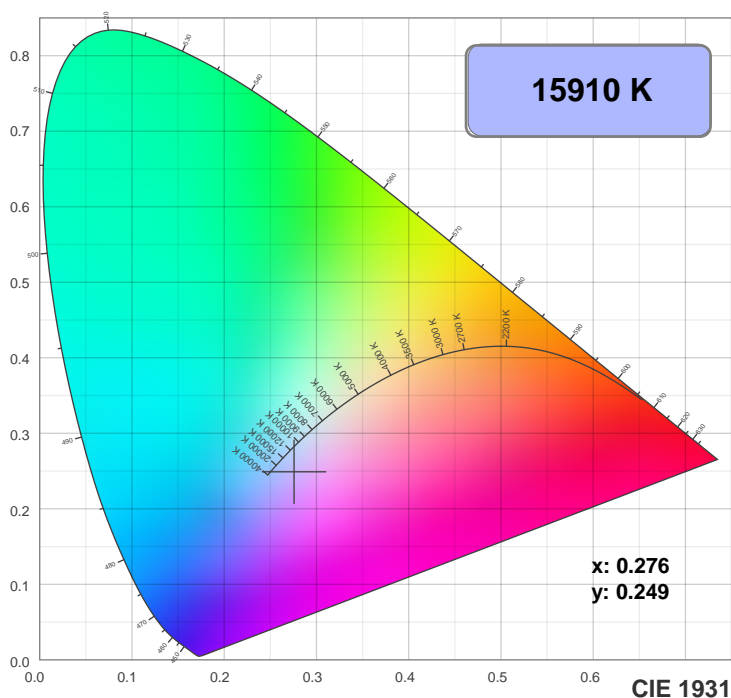
Beam Angle 50%	Field Angle 10%	Cutoff Angle 2.5%
16.2°	32.1°	50.5°

**Spectra**

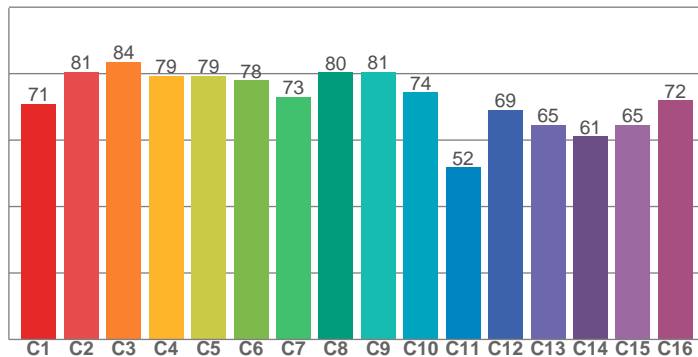
**Dominant Wavelength: 438nm**



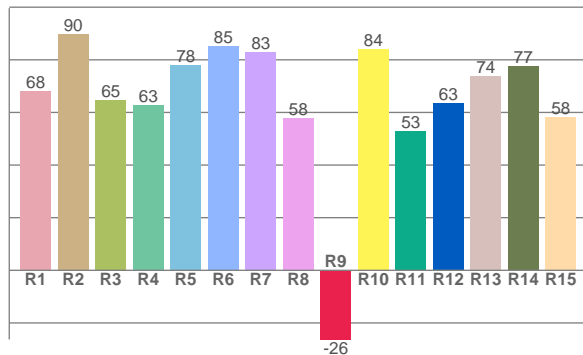
## Color Details



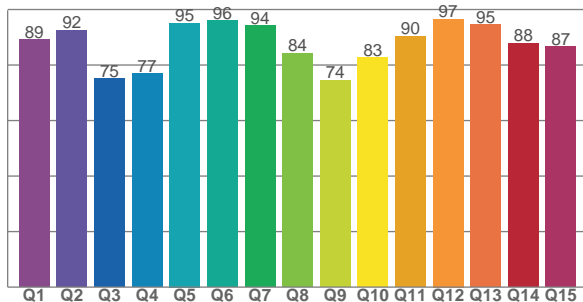
TM30: 74.5



CRI: 73.6 (R1-R8)



CQS: 85.7



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
67.9	89.6	64.6	62.9	77.9	85.0	82.8	57.9	-26.3	84.0	52.8	63.3	73.8	77.5	58.0

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
71.0	80.6	83.5	79.4	79.3	78.0	73.1	80.3	80.5	74.3	51.8	69.0	64.5	61.1	64.5	72.0

CQS Q Values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
89.2	92.5	75.1	77.0	95.2	96.0	94.2	84.3	74.5	82.6	90.4	96.6	94.6	87.8	86.6

## 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	$\Delta uv$
15910 K	73.6	-26.3	74.5	113.8	85.7	0.276	0.249	0.203	0.275	-0.0218

## TM30 Details

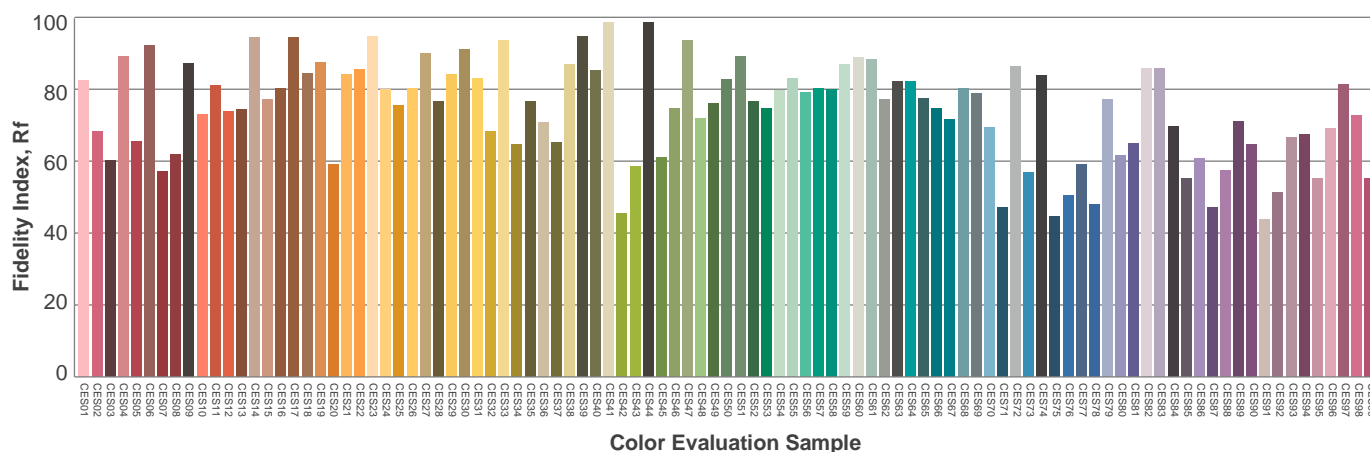
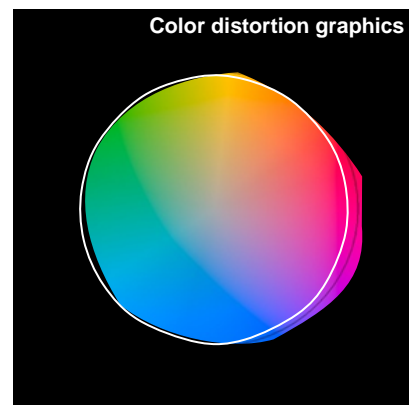
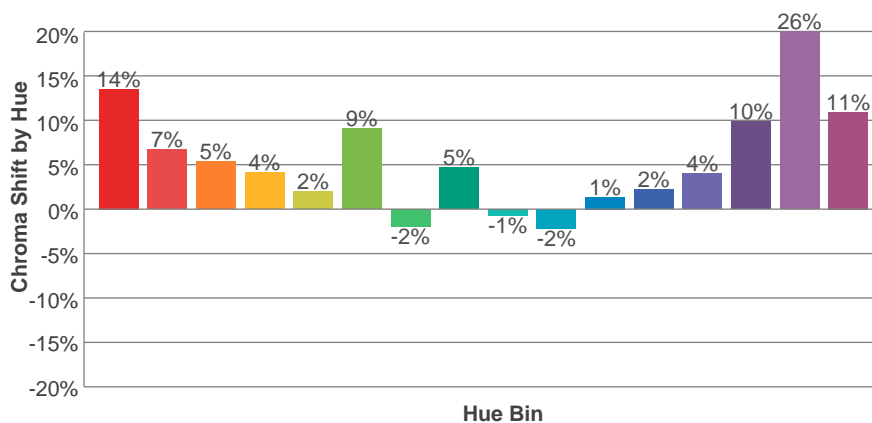
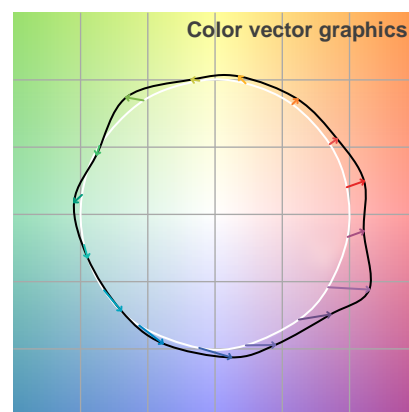
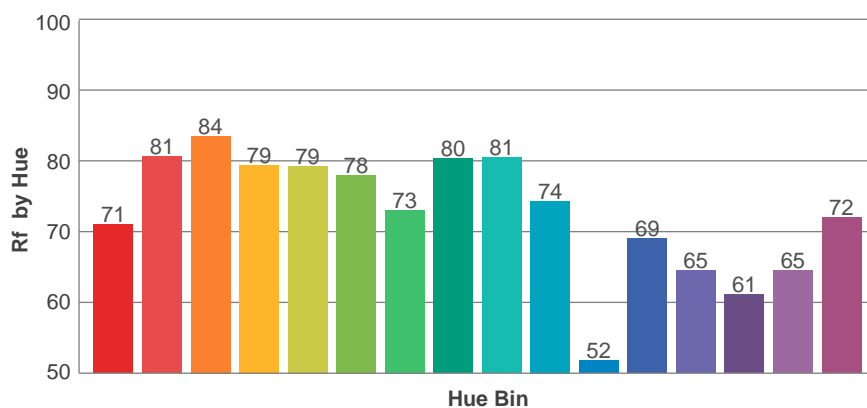
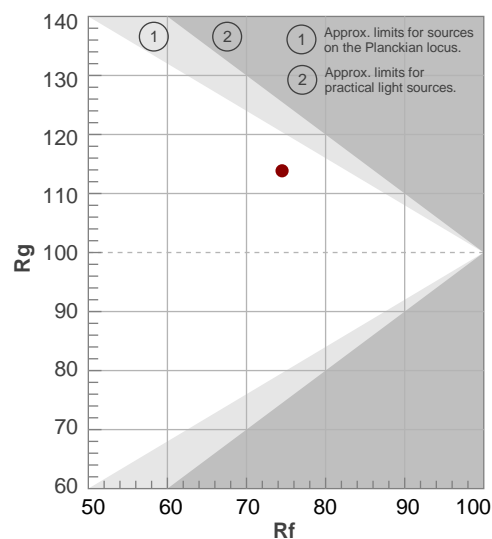
**Rf 74.5**

Fidelity Index Rf

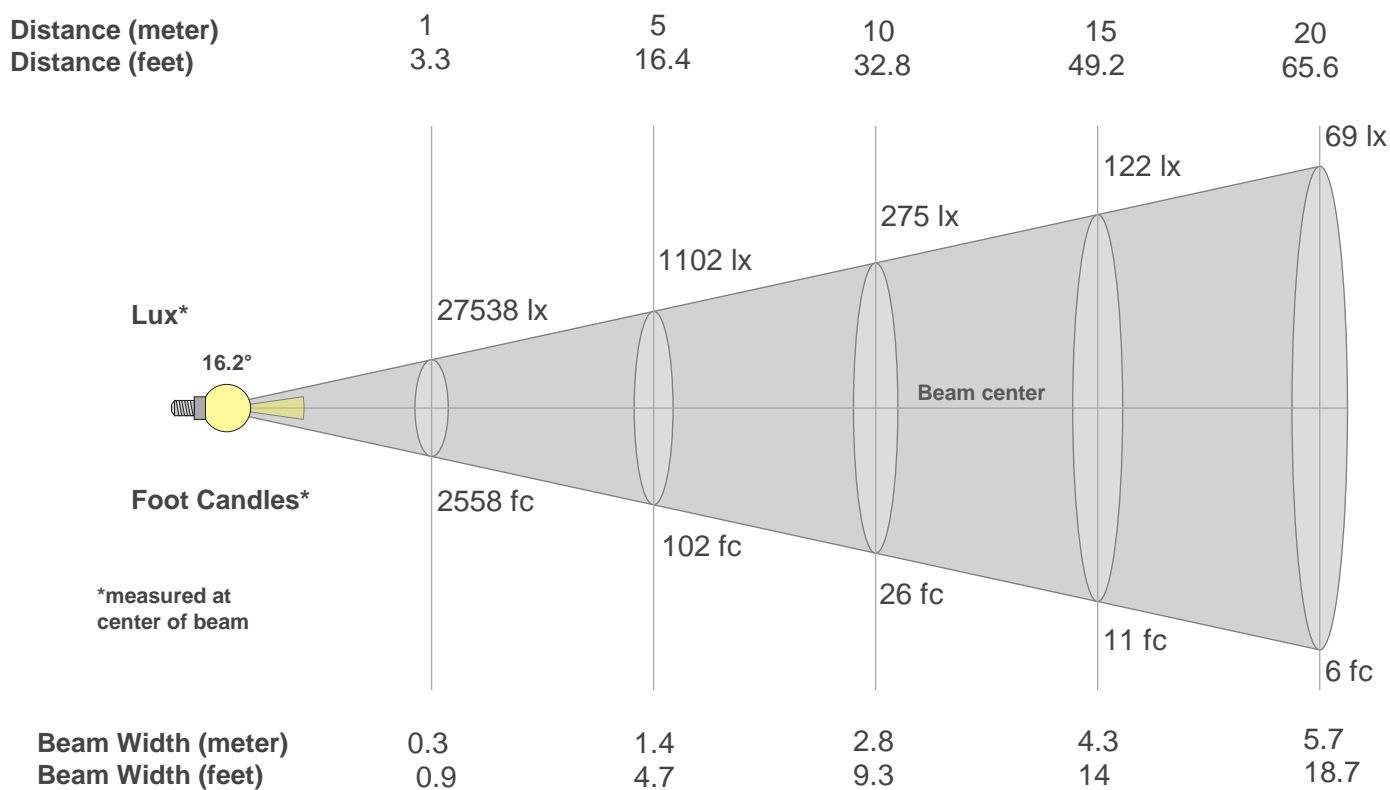
**Rg 113.8**

Gamut Index Rg

Hue Bin	R <sub>f</sub>	Graphic shifts (%)	
		Chroma	Hue
1	71	14%	2%
2	81	7%	0%
3	84	5%	-1%
4	79	4%	6%
5	79	2%	6%
6	78	9%	9%
7	73	-2%	7%
8	80	5%	7%
9	81	-1%	10%
10	74	-2%	20%
11	52	1%	22%
12	69	2%	25%
13	65	4%	21%
14	61	10%	22%
15	65	26%	16%
16	72	11%	7%



## Beam Details



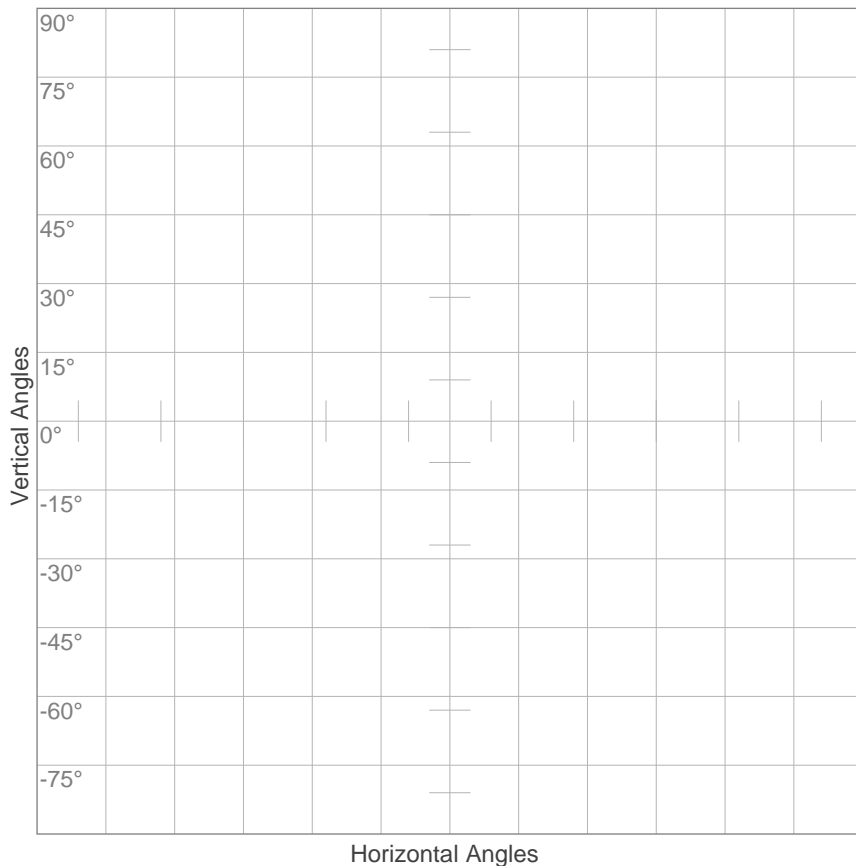
### Beam Intensities from 1-20m

m	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ft	3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6
lx	27538	6885	3060	1721	1102	765	562	430	340	275	228	191	163	141	122	108	95	85	76	69
fc	2558.4	639.6	284.3	159.9	102.3	71.1	52.2	40	31.6	25.6	21.1	17.8	15.1	13.1	11.4	10	8.9	7.9	7.1	6.4

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
16.2°	32.1°	50.5°	98.2%	93.4%

## ISO Diagrams

### ISO Candela Diagram



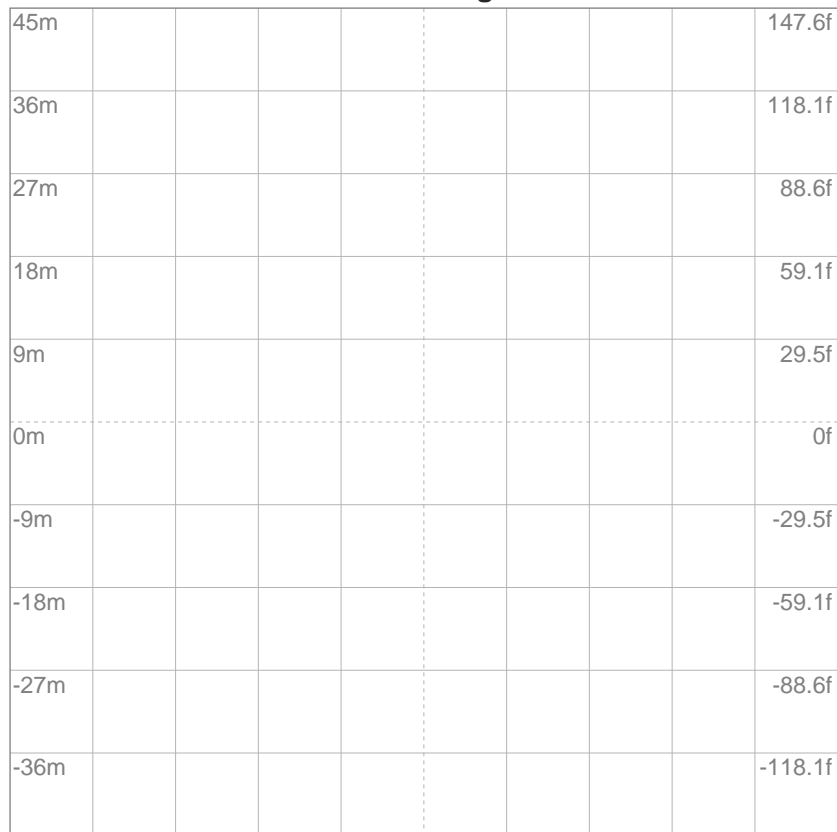
10%	2754 cd
20%	5508 cd
30%	8262 cd
40%	11015 cd
50%	13769 cd
60%	16523 cd
70%	19277 cd
80%	22031 cd
90%	24785 cd

#### Conditions:

Number of c-planes: 2

Candela at center: 27538 cd

### ISO Lux Diagram



3%	8.26 lx
5%	13.8 lx
10%	27.5 lx
30%	82.6 lx
50%	138 lx

#### Conditions:

Number of c-planes: 2

Lux at center: 275 lx

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

Mounting Height: 10 meters (33 feet)