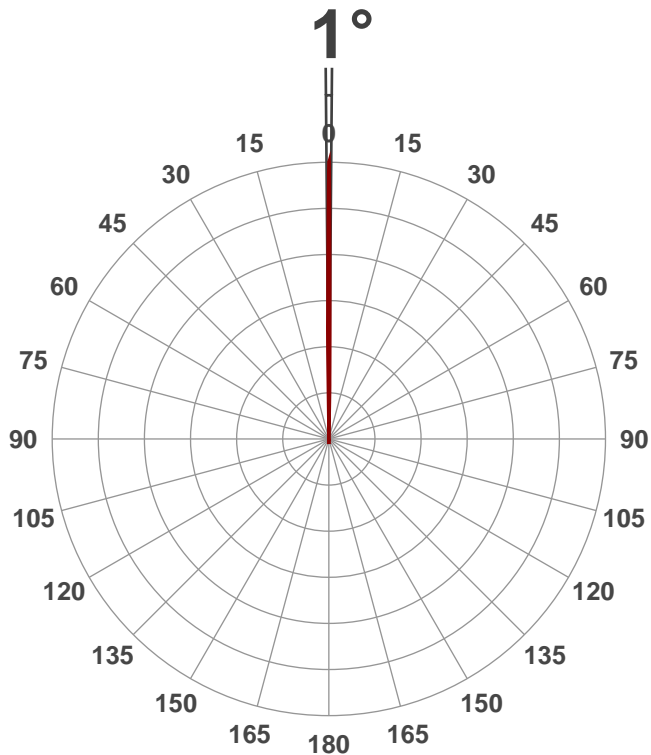


## 21 Lumen/Watt

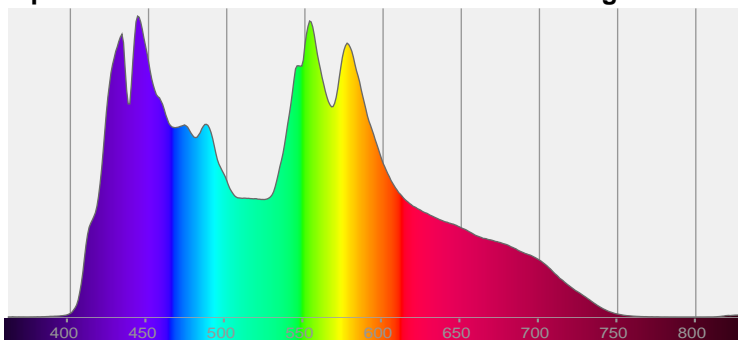
**CRI: 73.6**

**6784 K**

**PF: 1.0**

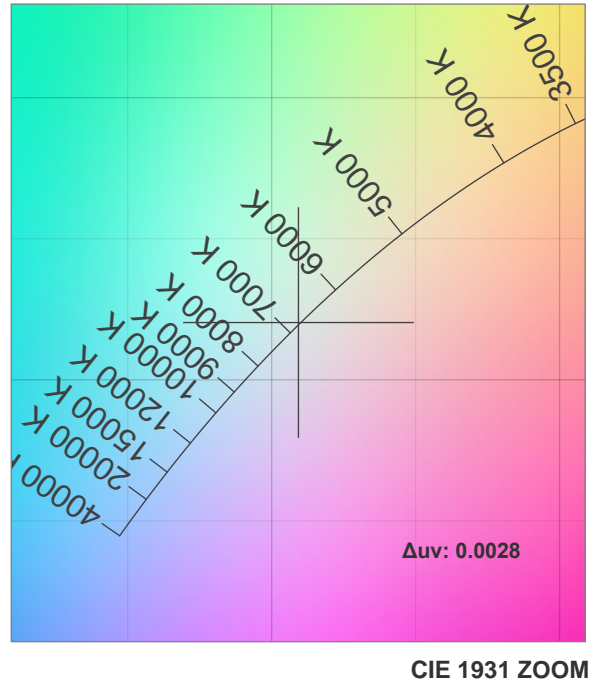
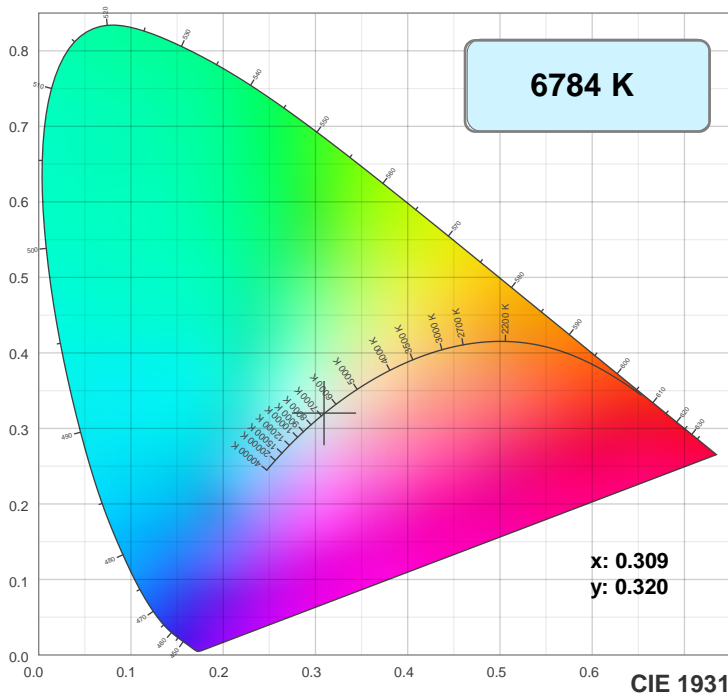


**CIE 1931**  
**x: 0.309**  
**y: 0.320**

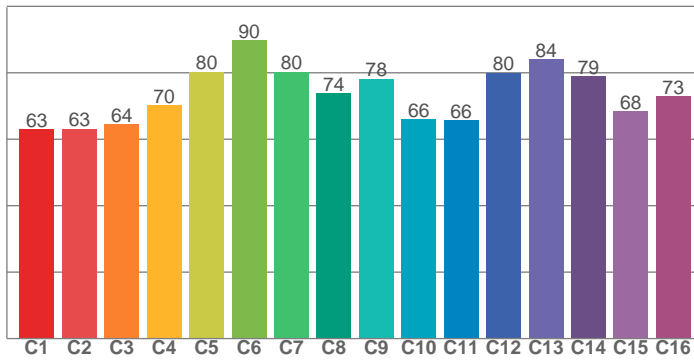


Voltage: 117 V  
Current: 5.59 A  
Frequency: 0 Hz

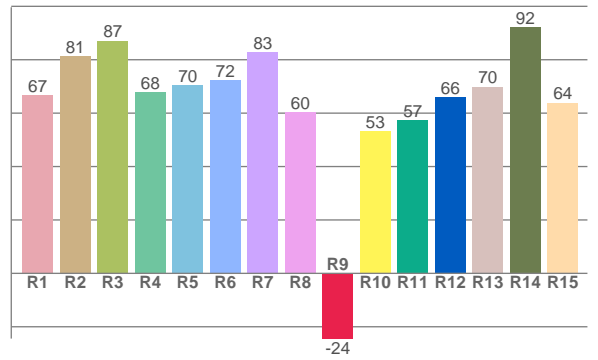
## Color Details



TM30: 73.7



CRI: 73.6 (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
66.7	81.4	87.1	67.8	70.4	72.2	82.9	60.3	-24.4	53.3	57.2	66.0	69.9	92.1	63.9

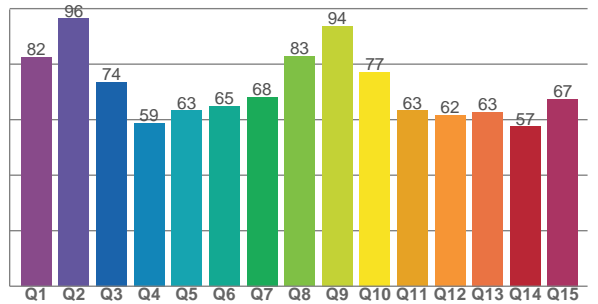
TM30 C Values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
62.9	63.2	64.4	70.2	80.4	89.8	80.2	73.8	78.1	66.0	65.7	80.0	84.0	79.0	68.4	72.9

CQS Q Values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
82.5	96.4	73.5	58.7	63.3	64.8	68.1	82.8	93.7	77.1	63.3	61.6	62.7	57.4	67.5

CQS: 69.2



## 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	$\Delta uv$
6784 K	73.6	-24.4	73.7	89.8	69.2	0.309	0.320	0.199	0.309	0.0028

## TM30 Details

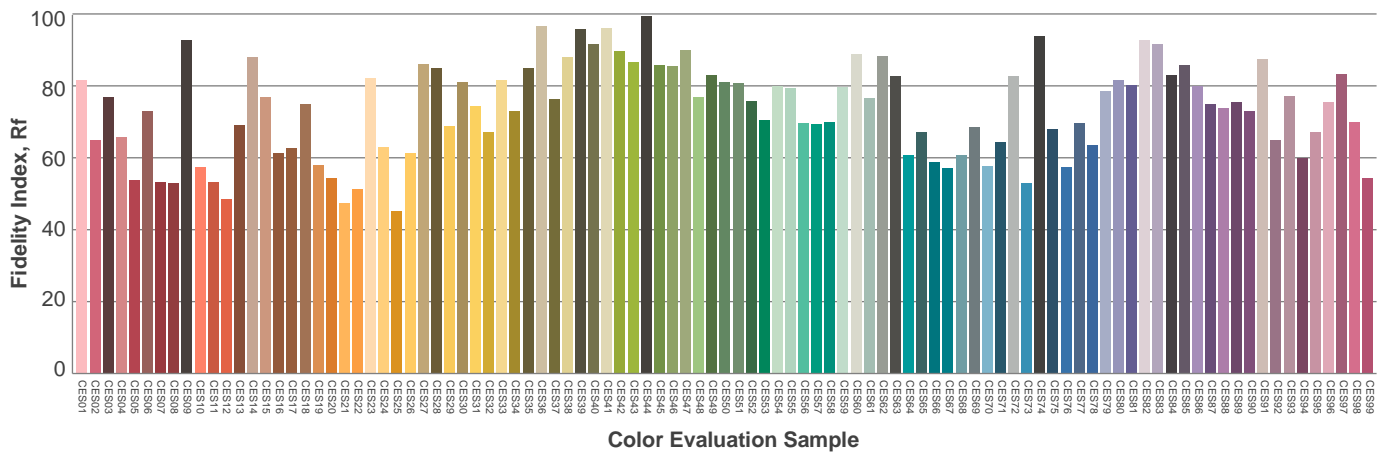
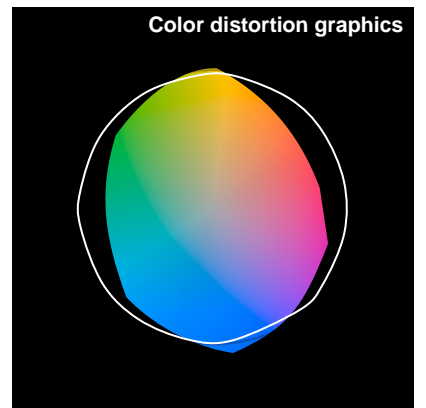
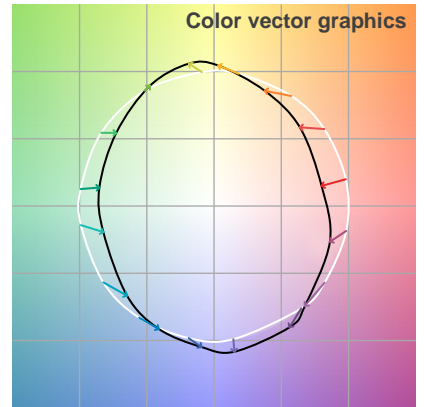
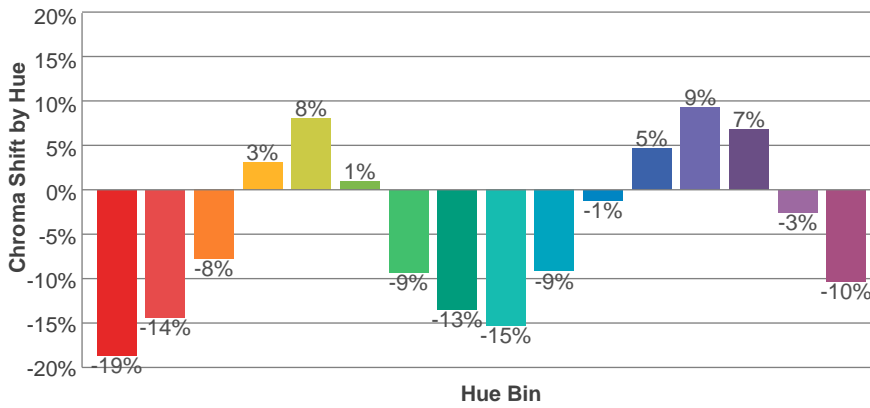
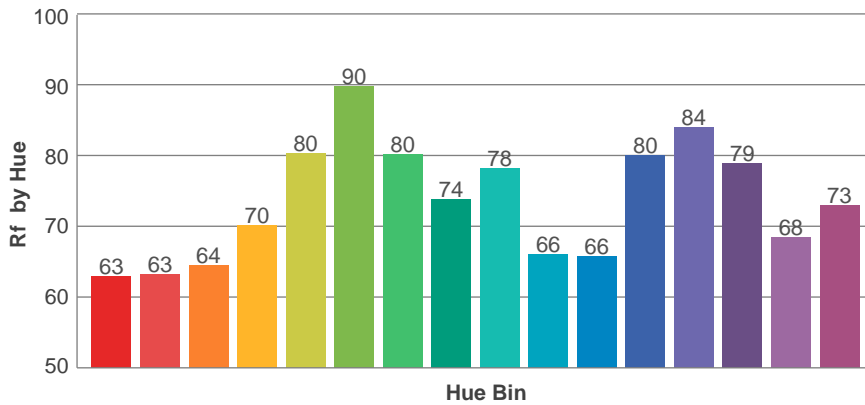
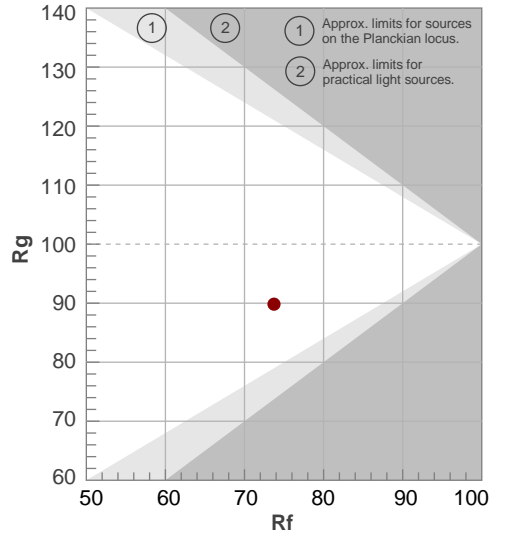
**Rf 73.7**

## Fidelity Index Rf

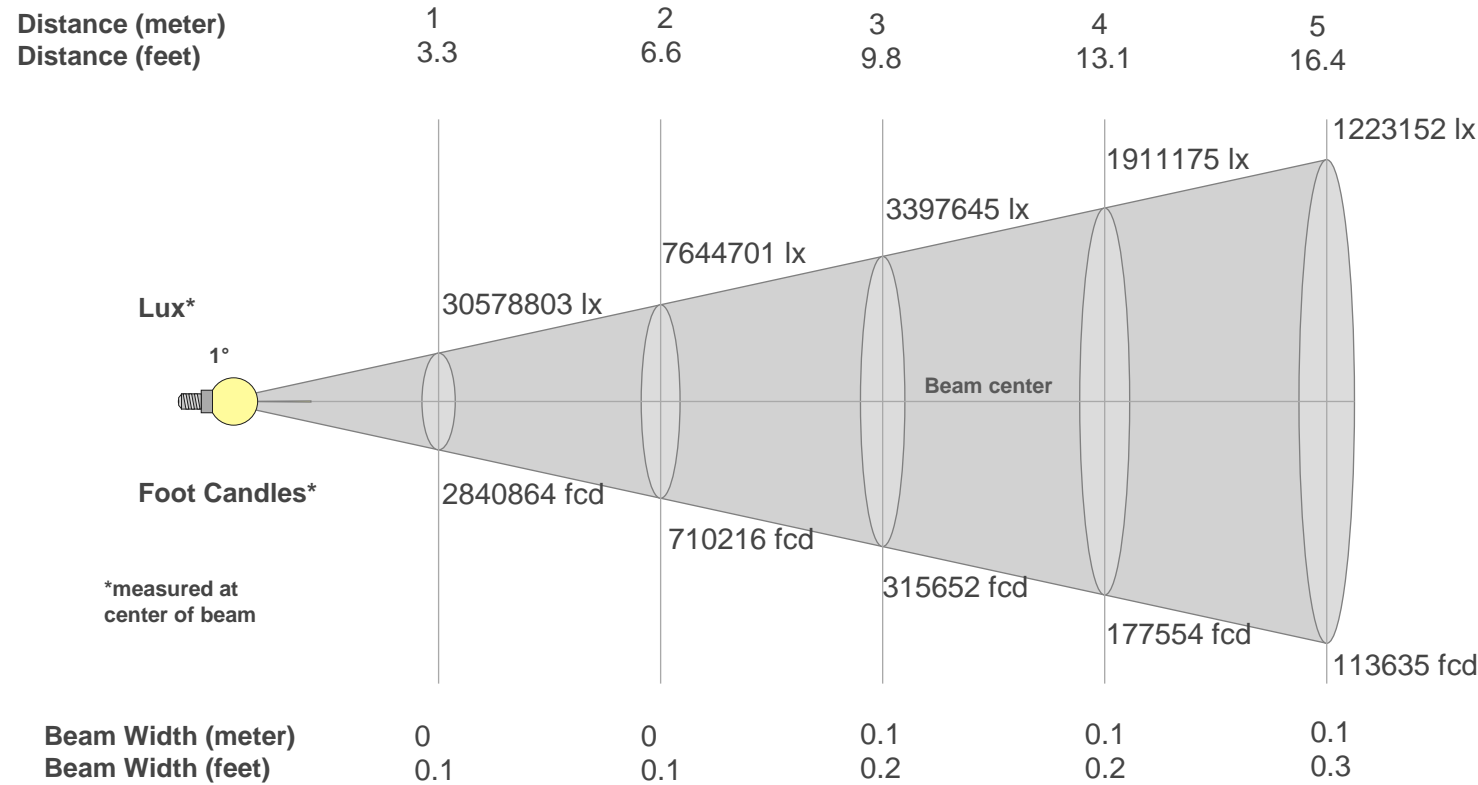
# Rg 89.8

# Gammut Index Rg

		Graphic shifts (%)	
Hue Bin	$R_i$	Chroma	Hue
1	63	-19%	-1%
2	63	-14%	11%
3	64	-8%	19%
4	70	3%	16%
5	80	8%	8%
6	90	1%	-5%
7	80	-9%	-6%
8	74	-13%	-4%
9	78	-15%	8%
10	66	-9%	18%
11	66	-1%	17%
12	80	5%	11%
13	84	9%	-1%
14	79	7%	-15%
15	68	-3%	-22%
16	73	-10%	-10%



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	30578803	7644701	3397645	1911175	1223152	849411	624057	477794	377516	305788	252717	212353	180940	156014	135906	119448	105809	94379	84706	76447
Fcd	2840863.9	710216	315651.5	177554	113634.6	78912.9	57976.8	44388.5	35072.4	28408.6	23478.2	19728.2	16809.8	14494.2	12626.1	11097.1	9830	8768.1	7869.4	7102.2

Intensities in 0° C-plane																			
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
31M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M
100%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Intensities in 90° C-plane																			
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
31M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M
100%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

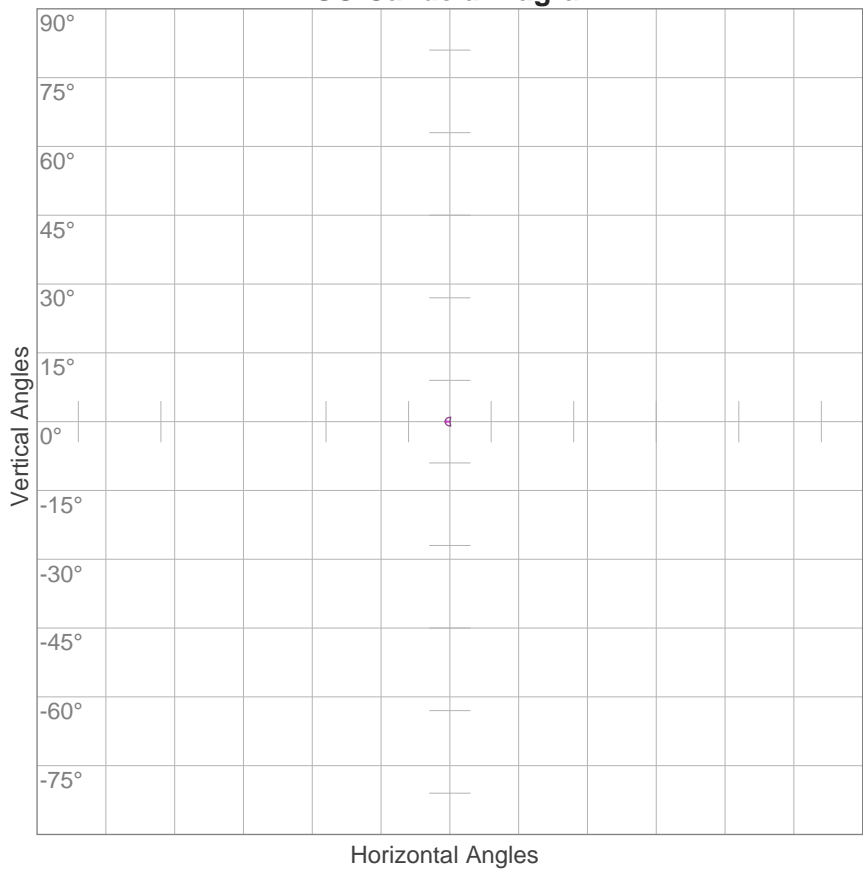
Intensities in 180° C-plane																			
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
31M	7M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M
100%	22%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Intensities in 270° C-plane																			
0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
31M	7M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M	0M
100%	22%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%

Beam Angle 50%	Field Angle 10%	Cutoff Angle 2,5%	Intensity Ratio in 120° Cone	Intensity Ratio in 90° Cone
1°	2.2°	2.5°	100.0%	100.0%

# ISO Diagrams

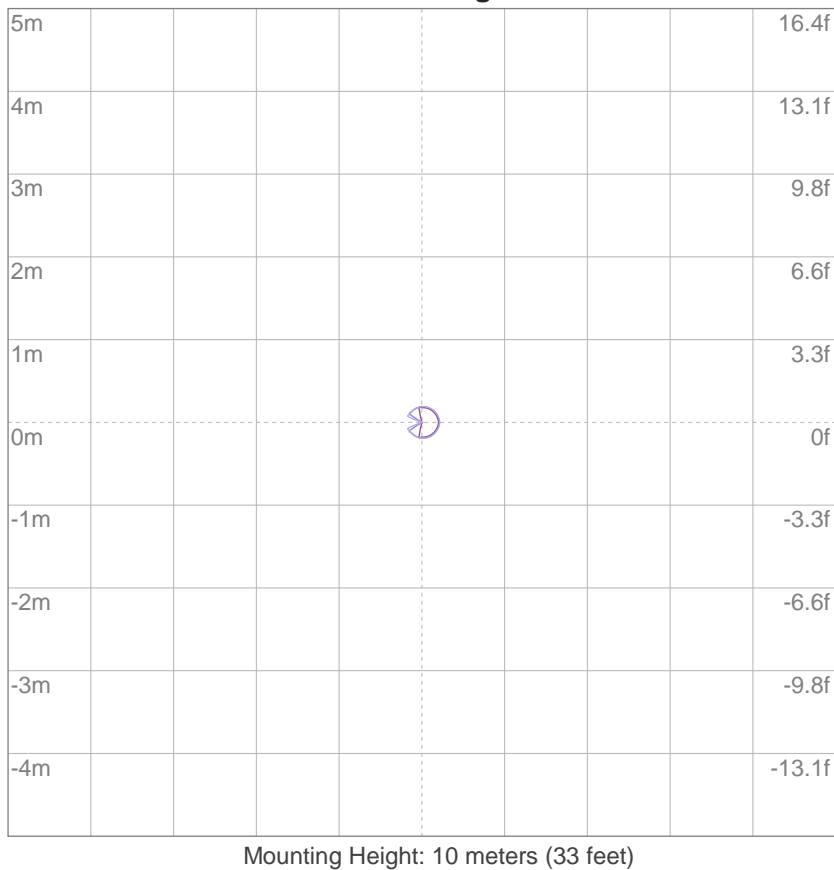
ISO Candela Diagram



10%	3057880 cd
20%	6115761 cd
30%	9173641 cd
40%	12231521 cd
50%	15289401 cd
60%	18347282 cd
70%	21405162 cd
80%	24463042 cd
90%	27520923 cd

Conditions:  
Number of c-planes: 2  
Candela at center: 30578803 cd

ISO Lux Diagram



3%	9174 lx
5%	15.3K lx
10%	30.6K lx
30%	91.7K lx
50%	153K lx

Conditions:  
Number of c-planes: 2  
Lux at center: 306K lx

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

# Light Planning

## 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	117	115	114	113	114	113	112	111	109	108	108	106	105	105	102	102	102	100
2	115	112	111	109	113	111	109	108	108	107	105	105	104	103	103	102	101	100
3	113	110	108	106	112	109	107	106	107	105	104	105	103	102	103	102	101	100
4	112	109	106	105	111	108	106	104	106	104	103	104	103	102	103	102	101	100
5	111	107	105	104	110	107	105	103	105	104	102	104	103	102	103	102	101	100
6	110	106	104	103	109	106	104	102	105	103	102	104	102	101	103	102	101	100
7	109	106	104	102	108	105	103	102	104	103	101	104	102	101	103	102	101	100
8	108	105	103	102	108	105	103	102	104	102	101	103	102	101	103	101	101	100
9	108	105	103	101	107	104	102	101	104	102	101	103	102	101	103	101	100	100
10	107	104	102	101	107	104	102	101	103	102	101	103	102	101	103	101	100	100

## Zonal Lumen Summary

0°-10°	10°-20°	20°-30°	30°-40°	40°-50°	50°-60°	60°-70°	70°-80°	80°-90°
13554 lm	0.221 lm	0.002 lm	0.006 lm	0.023 lm	0.015 lm	0.008 lm	0.007 lm	0.010 lm

90°-100°	100°-110°	110°-120°	120°-130°	130°-140°	140°-150°	150°-160°	160°-170°	170°-180°
0.009 lm	0.009 lm	0.006 lm	0.009 lm	0.010 lm	0.007 lm	0.004 lm	0.003 lm	0.001 lm