

Photometric Test Report



ASTRABEAM260IP

IP65 moving beam light with 260 W PRO
long life lamp (6.000 hours)

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TESTING PROCESS

Prolights has its own optical testing laboratory in order to provide accurate photometric reports for its lighting products. The testing laboratory contains certain variety of precise lighting measurement systems that ensure an optimal reading of all the characteristic parameters of the lighting devices. All measurements are made at a controlled room temperature of 20°C without any external light sources. This photometric report is obtained through the data measured by a high precision measurement system and analyzed by a dedicate software.

Prolights measurement instrument

Prolights measurement instrument is a complete measurement system for any light source. It's equipped with two-axis goniometer, that enables to measure the full 3D distribution field of the light source. This instrument measures the light intensity, the beam angle and the most significative colors parameters, like color temperature, spectral distribution, CRI, CQS, TM-30 with a very high accuracy rate.

Please Note: All measurements are made with light source at operating temperature. Before starting the measurement, the instrument analyzes the process of the light source during the heating phase. The measuring process of all the parameters begins only when the light emission is stable, that is with a variation of less than 0.5% in a 15 minutes time frame.

Prolights measurement software

The software provides user friendly interface for the operator who does the measurements, and it also analyzes and processes all the collected data by the instrument. With this software it is possible to see the measured data in real-time and it is possible to examine all the measured data and graphics afterwards as well. All information is collected in a specific Prolights template, and the software creates also IES and LDT files, which are widely used to transfer the photometric data, and to develop lighting system.

Additionally, the fixtures are rechecked using various hand-held instruments like Sekonic C-700 and Gossen Mavospec Base, this is done to ensure, that the data in the photometric report are as accurate as possible.



Light quality:

CRI: 76,9

Color temperature:

7456 K

PRODUCT NAME:

ASTRABEAM2601P

MEASURAMENT CONDITIONS:

Beam angle:

Native

Target:

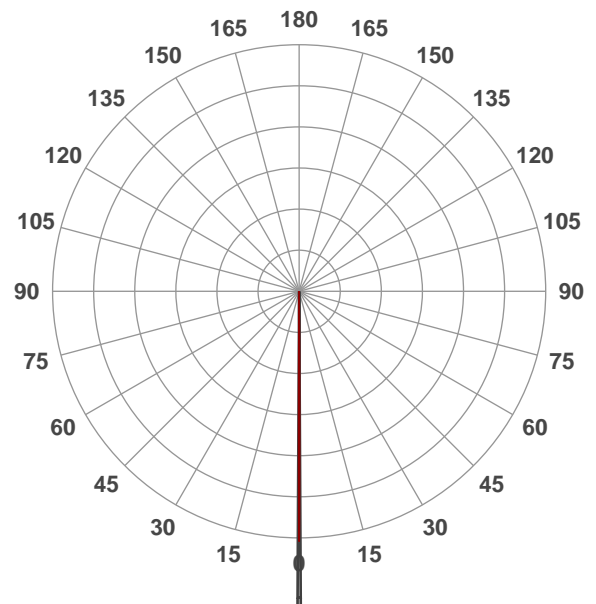
Full On

Operator:

Paolo Carvone

Date and time:

03/02/2021 16:49:31

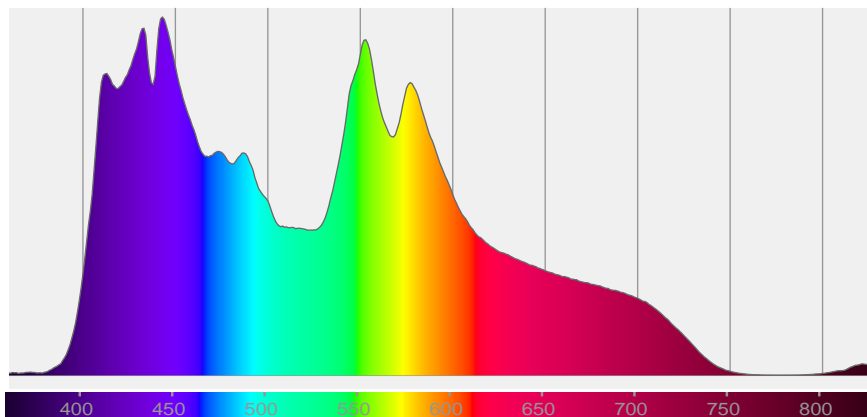


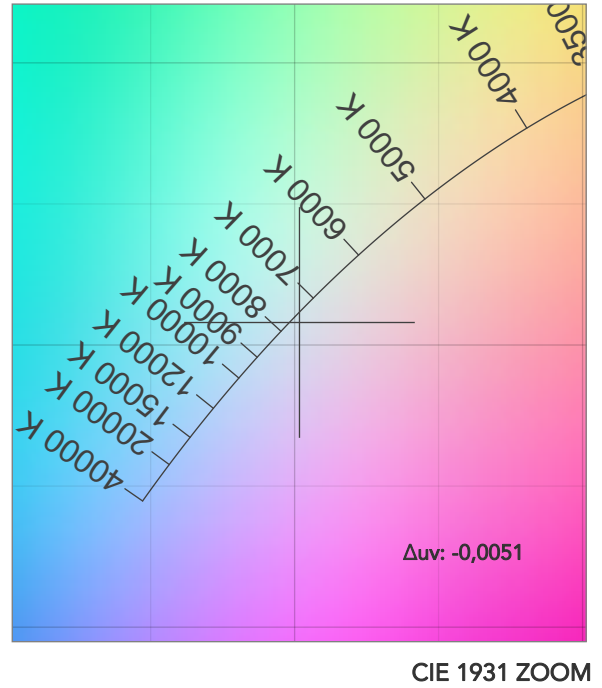
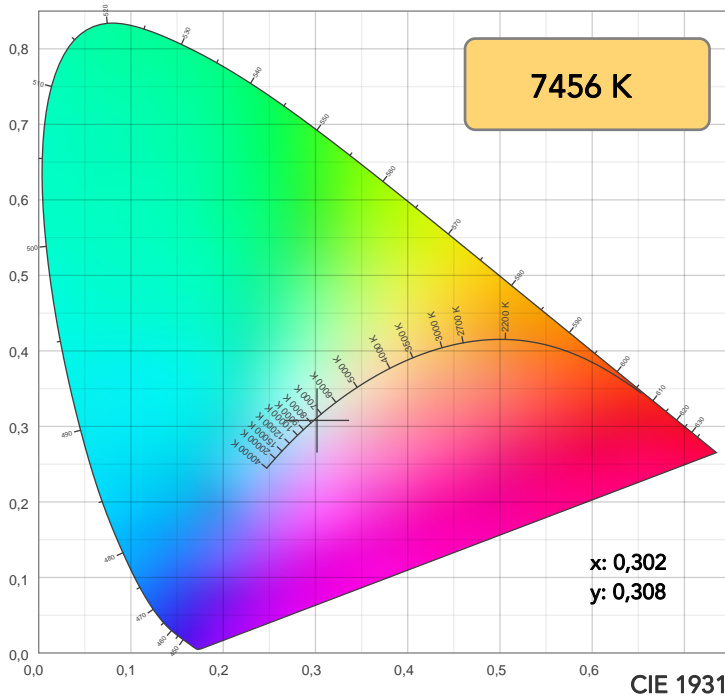
Beam angle 50%: 0,6°

Field angle 10%: 1,4°

Cut off angle 2.5%: 1,9°

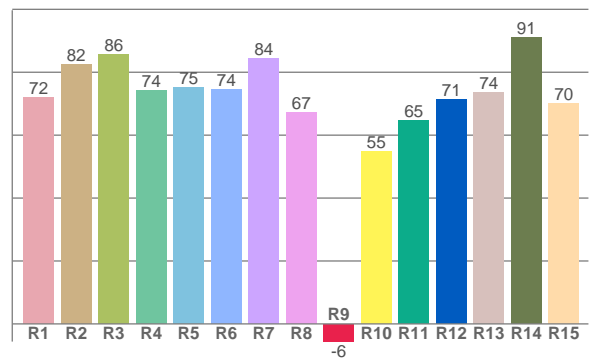
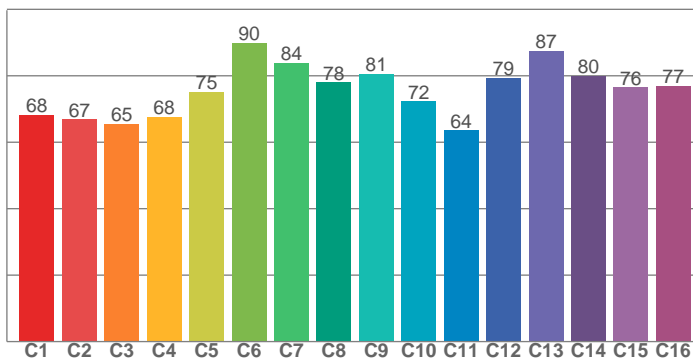
Spectra





TM30: 75,7

CRI: 76,9 (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
72,0	82,4	85,5	74,2	75,3	74,4	84,4	67,2	-5,6	55,0	64,8	71,3	73,6	91,1	70,0

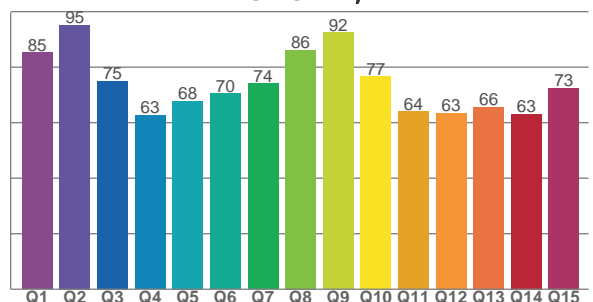
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
68,3	66,8	65,5	67,7	75,2	89,8	83,9	78,0	80,6	72,3	63,6	79,4	87,5	80,1	76,5	77,0

CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
85,2	95,2	75,0	62,7	67,9	70,4	74,0	86,2	92,5	76,6	64,0	63,4	65,7	63,2	72,6

CQS: 72,2



COLOR PARAMETERS

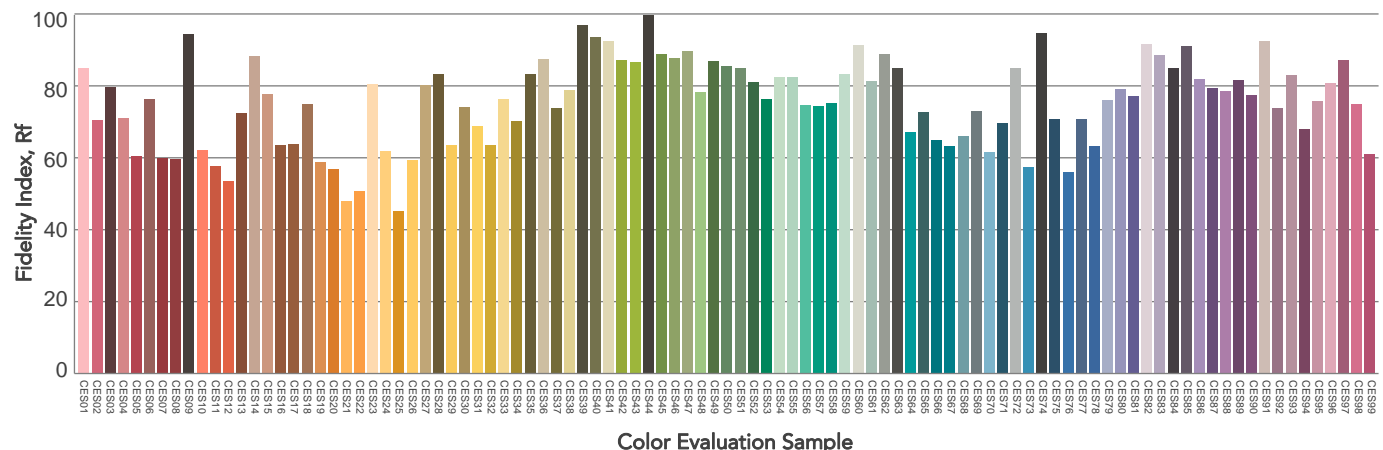
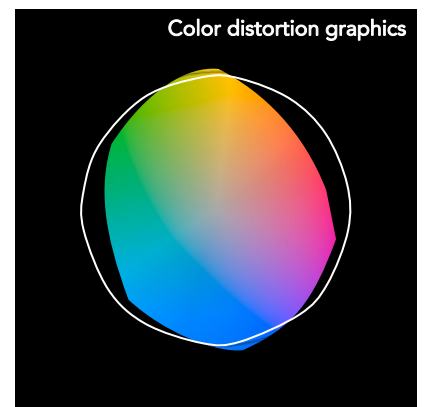
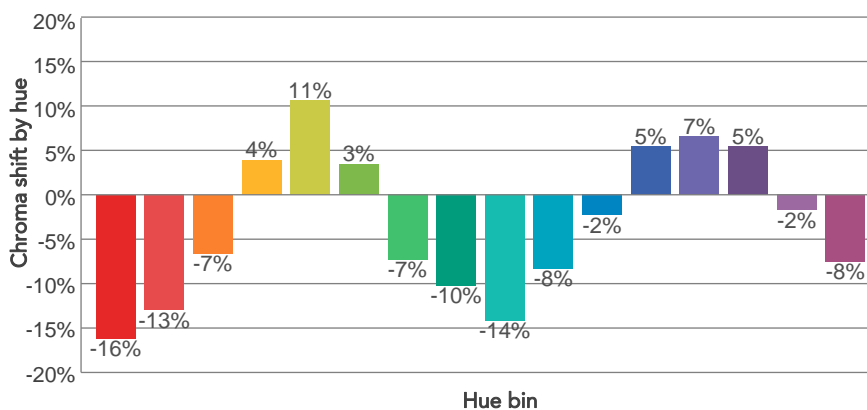
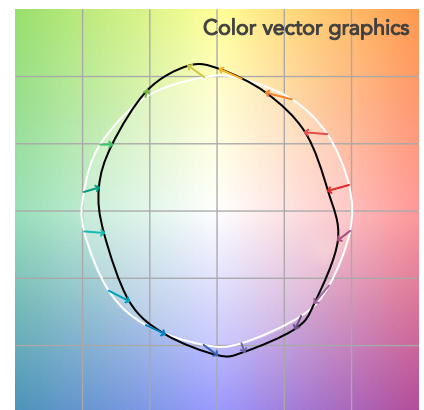
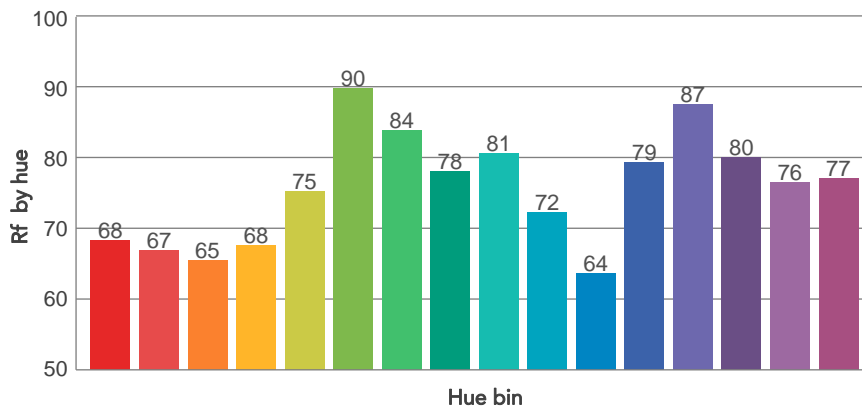
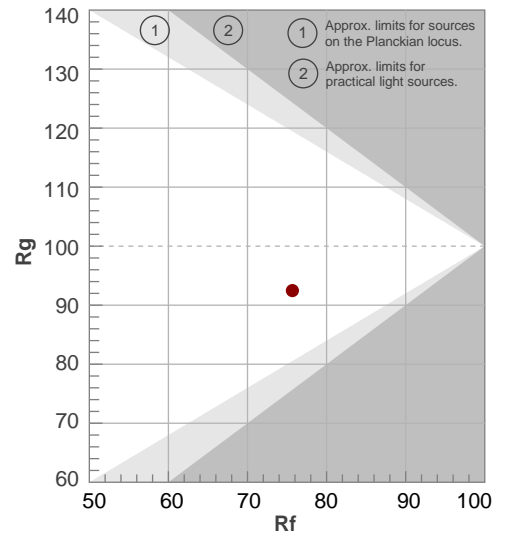
Color temperature	Color rendering index	Red component	Color fidelity	Color gamut	Color quality scale	Television lighting index	Color coordinate cie 1931	Color coordinate cie 1931	Color deviation from black body
CCT	CRI	CRI R9	TM30 Rf	TM30 Rg	CQS	TLCI	x	y	Δuv
7456 K	76,9	-5,6	75,7	92,5	72,2	48	0,302	0,308	-0,0051

TM30 DETAILS

Rf 75,7
Fidelity index Rf

Rg 92,5
Gammut index

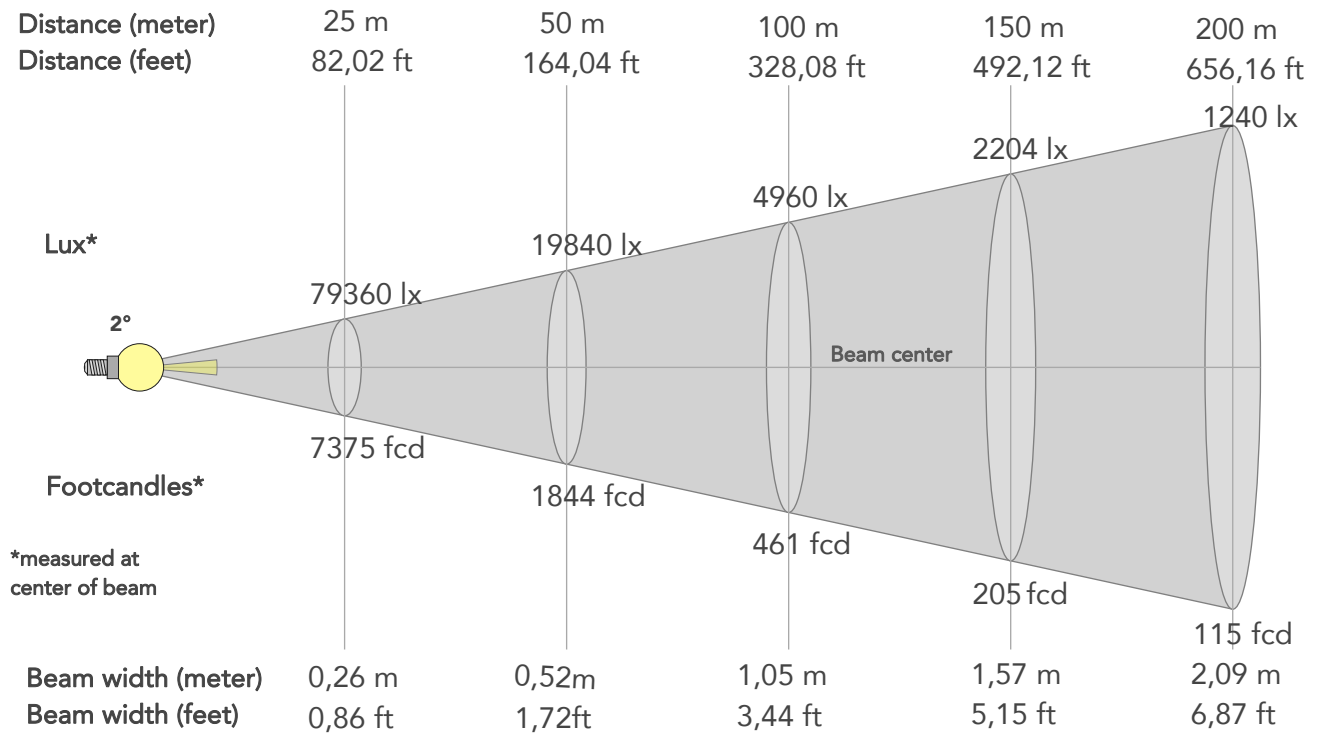
Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	68	-16%	-1%
2	67	-13%	10%
3	65	-7%	19%
4	68	4%	17%
5	75	11%	10%
6	90	3%	-4%
7	84	-7%	-5%
8	78	-10%	-5%
9	81	-14%	4%
10	72	-8%	15%
11	64	-2%	15%
12	79	5%	11%
13	87	7%	1%
14	80	5%	-9%
15	76	-2%	-17%
16	77	-8%	-9%



BEAM DETAILS



Beam angle 50%	Field angle 10%	Cut off angle 2,5%	Intensity ratio in 120° cone	Intensity ratio in 90° cone
0,6°	1,4°	1,9°	67,0%	54,4%

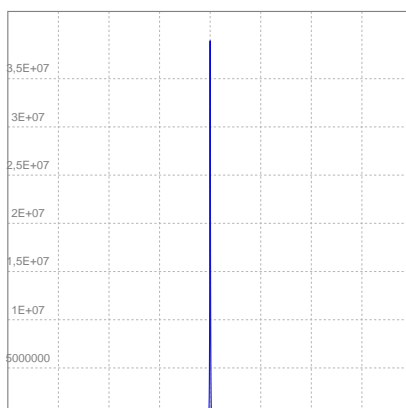


BEAM INTENSITIES AND WIDTHS

Full On (Open)

Distance (mt)	10	20	30	40	50	60	70	80	90	100
Distance (ft)	32.81	65.62	98.42	131.23	164.04	196.85	229.66	262.46	295.27	328.08
lux center	496000	124000	55111	31000	19840	13778	10122	7750	6123	4960
Foot candles	46097	11524	5122	2881	1844	1280	941	720	569	461
Diameter cm	35	70	105	140	175	209	244	279	314	349
Diameter ft	1.15	2.29	3.44	4.58	5.73	6.87	8.02	9.16	10.31	11.45

LINEAR DISTRIBUTION DIAGRAM



ELECTRICAL SPECIFICATIONS

Input voltage	Input current	Input power
223V	1,62A	343,8W
Power Fc		
0,95		

BEAM DETAILS ALL COLORS PRESETS

Dark Red

Distance (mt)	10	20	30	40	50	60	70	80	90	100
Distance (ft)	32.81	65.62	98.42	131.23	164.04	196.85	229.66	262.46	295.27	328.08
lux center	11780	2945	1309	736	471	327	240	184	145	118
Foot candles	1095	274	122	68	44	30	22	17	14	11
Diameter cm	35	70	105	140	175	209	244	279	314	349
Diameter ft	1.15	2.29	3.44	4.58	5.73	6.87	8.02	9.16	10.31	11.45

Orange

Distance (mt)	10	20	30	40	50	60	70	80	90	100
Distance (ft)	32.81	65.62	98.42	131.23	164.04	196.85	229.66	262.46	295.27	328.08
lux center	140912	35228	15657	8807	5636	3914	2876	2202	1740	1409
Foot candles	13096	3274	1455	818	524	364	267	205	162	131
Diameter cm	35	70	105	140	175	209	244	279	314	349
Diameter ft	1.15	2.29	3.44	4.58	5.73	6.87	8.02	9.16	10.31	11.45

Aquamarine

Distance (mt)	10	20	30	40	50	60	70	80	90	100
Distance (ft)	32.81	65.62	98.42	131.23	164.04	196.85	229.66	262.46	295.27	328.08
lux center	42016	10504	4668	2626	1681	1167	857	657	519	420
Foot candles	3905	976	434	244	156	108	80	61	48	39
Diameter cm	35	70	105	140	175	209	244	279	314	349
Diameter ft	1.15	2.29	3.44	4.58	5.73	6.87	8.02	9.16	10.31	11.45

Deep Green

Distance (mt)	10	20	30	40	50	60	70	80	90	100
Distance (ft)	32.81	65.62	98.42	131.23	164.04	196.85	229.66	262.46	295.27	328.08
lux center	91540	22885	10171	5721	3662	2543	1868	1430	1130	915
Foot candles	8507	2127	945	532	340	236	174	133	105	85
Diameter cm	35	70	105	140	175	209	244	279	314	349
Diameter ft	1.15	2.29	3.44	4.58	5.73	6.87	8.02	9.16	10.31	11.45

Lavander

Distance (mt)	10	20	30	40	50	60	70	80	90	100
Distance (ft)	32.81	65.62	98.42	131.23	164.04	196.85	229.66	262.46	295.27	328.08
lux center	83940	20985	9327	5246	3358	2332	1713	1312	1036	839
Foot candles	7801	1950	867	488	312	217	159	122	96	78
Diameter cm	35	70	105	140	175	209	244	279	314	349
Diameter ft	1.15	2.29	3.44	4.58	5.73	6.87	8.02	9.16	10.31	11.45

Pink

Distance (mt)	10	20	30	40	50	60	70	80	90	100
Distance (ft)	32.81	65.62	98.42	131.23	164.04	196.85	229.66	262.46	295.27	328.08
lux center	208760	52190	23196	13048	8350	5799	4260	3262	2577	2088
Foot candles	19401	4850	2156	1213	776	539	396	303	240	194
Diameter cm	35	70	105	140	175	209	244	279	314	349
Diameter ft	1.15	2.29	3.44	4.58	5.73	6.87	8.02	9.16	10.31	11.45

BEAM DETAILS ALL COLORS PRESETS

Yellow										
Distance (mt)	10	20	30	40	50	60	70	80	90	100
Distance (ft)	32.81	65.62	98.42	131.23	164.04	196.85	229.66	262.46	295.27	328.08
lux center	263660	65915	29296	16479	10546	7324	5381	4120	3255	2637
Foot candles	24504	6126	2723	1531	980	681	500	383	303	245
Diameter cm	35	70	105	140	175	209	244	279	314	349
Diameter ft	1.15	2.29	3.44	4.58	5.73	6.87	8.02	9.16	10.31	11.45

Magenta										
Distance (mt)	10	20	30	40	50	60	70	80	90	100
Distance (ft)	32.81	65.62	98.42	131.23	164.04	196.85	229.66	262.46	295.27	328.08
lux center	45892	11473	5099	2868	1836	1275	937	717	567	459
Foot candles	4265	1066	474	267	171	118	87	67	53	43
Diameter cm	35	70	105	140	175	209	244	279	314	349
Diameter ft	1.15	2.29	3.44	4.58	5.73	6.87	8.02	9.16	10.31	11.45

Cyan										
Distance (mt)	10	20	30	40	50	60	70	80	90	100
Distance (ft)	32.81	65.62	98.42	131.23	164.04	196.85	229.66	262.46	295.27	328.08
lux center	119748	29937	13305	7484	4790	3326	2444	1871	1478	1197
Foot candles	11129	2782	1237	696	445	309	227	174	137	111
Diameter cm	35	70	105	140	175	209	244	279	314	349
Diameter ft	1.15	2.29	3.44	4.58	5.73	6.87	8.02	9.16	10.31	11.45

CTO1										
Distance (mt)	10	20	30	40	50	60	70	80	90	100
Distance (ft)	32.81	65.62	98.42	131.23	164.04	196.85	229.66	262.46	295.27	328.08
lux center	211916	52979	23546	13245	8477	5887	4325	3311	2616	2119
Foot candles	19695	4924	2188	1231	788	547	402	308	243	197
Diameter cm	35	70	105	140	175	209	244	279	314	349
Diameter ft	1.15	2.29	3.44	4.58	5.73	6.87	8.02	9.16	10.31	11.45

CTO2										
Distance (mt)	10	20	30	40	50	60	70	80	90	100
Distance (ft)	32.81	65.62	98.42	131.23	164.04	196.85	229.66	262.46	295.27	328.08
lux center	211332	52833	23481	13208	8453	5870	4313	3302	2609	2113
Foot candles	19641	4910	2182	1228	786	546	401	307	242	196
Diameter cm	35	70	105	140	175	209	244	279	314	349
Diameter ft	1.15	2.29	3.44	4.58	5.73	6.87	8.02	9.16	10.31	11.45

CTB										
Distance (mt)	10	20	30	40	50	60	70	80	90	100
Distance (ft)	32.81	65.62	98.42	131.23	164.04	196.85	229.66	262.46	295.27	328.08
lux center	230592	57648	25621	14412	9224	6405	4706	3603	2847	2306
Foot candles	21430	5358	2381	1339	857	595	437	335	265	214
Diameter cm	35	70	105	140	175	209	244	279	314	349
Diameter ft	1.15	2.29	3.44	4.58	5.73	6.87	8.02	9.16	10.31	11.45

Dark Blue										
Distance (mt)	10	20	30	40	50	60	70	80	90	100
Distance (ft)	32.81	65.62	98.42	131.23	164.04	196.85	229.66	262.46	295.27	328.08
lux center	8404	2101	934	525	336	233	172	131	104	84
Foot candles	781	195	87	49	31	22	16	12	10	8
Diameter cm	35	70	105	140	175	209	244	279	314	349
Diameter ft	1.15	2.29	3.44	4.58	5.73	6.87	8.02	9.16	10.31	11.45