



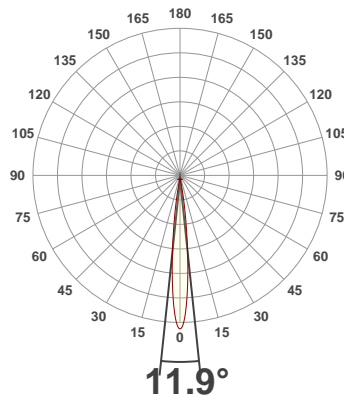
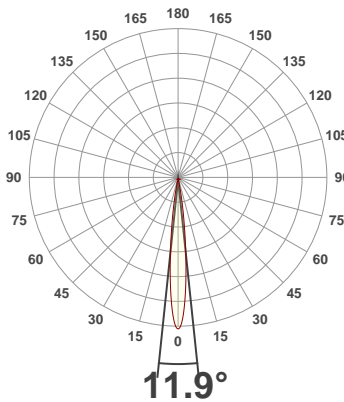
PRODUCT INFORMATION

SERIAL NUMBER:	LL-200325-0493
DATE OF MEASUREMENT:	25/03/2020
SIZE (dia. x h):	73 mm x 47 mm

ANGULAR DISTRIBUTION AT C0/180

ANGULAR DISTRIBUTION AT C90/270

LIGHT OUTPUT DATA

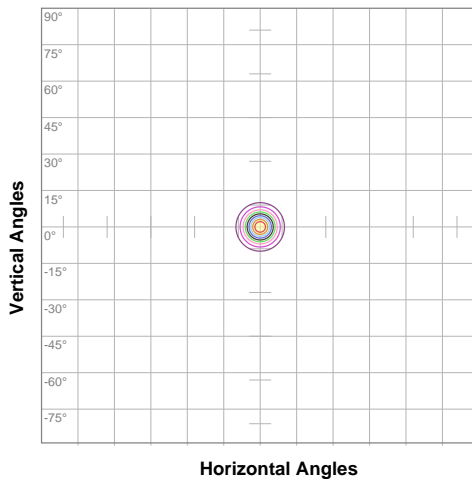


TOTAL LUMEN OUTPUT:	171 lm
EFFICACY:	0 lm/W
PEAK INTENSITY:	3173 cd
COLOR RENDERING INDEX (CRI):	96.8
COLOR TEMPERATURE (CCT):	2739K
FIDELITY INDEX (TM30rf):	93.5
GAMUT INDEX (TM30Rg):	103.6

BEAM OUTPUT DATA

BEAM ANGLE (FWHM) C0/180:	11.9°
BEAM ANGLE (FWHM) C90/270:	11.9°
FIELD ANGLE (10%) C0/180:	22.2°
FIELD ANGLE (10%) C90/270:	22.2°
NUMBER OF PLANES MEASURED:	12

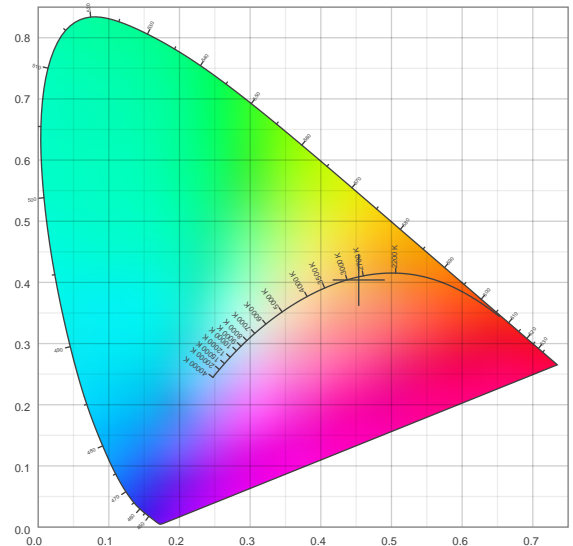
ISOCANDELA DIAGRAM



10%	317 cd
20%	635 cd
30%	952 cd
40%	1269 cd
50%	1586 cd
60%	1904 cd
70%	2221 cd
80%	2538 cd
90%	2855 cd

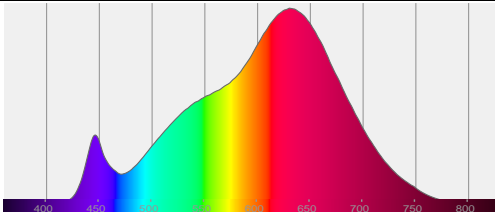
INPUT POWER:	8036 W
POWER FACTOR:	1.0
OPTICAL POWER:	0.643 mW
PEAK WAVELENGTH:	631 nm
DOMINANT WAVELENGTH:	585 nm

CIE 1931



SPECTRAL DISTRIBUTION

CIE 1931 ZOOM



x:	0.454
y:	0.404
u:	0.261
v:	0.349
Δuv:	-0.0019

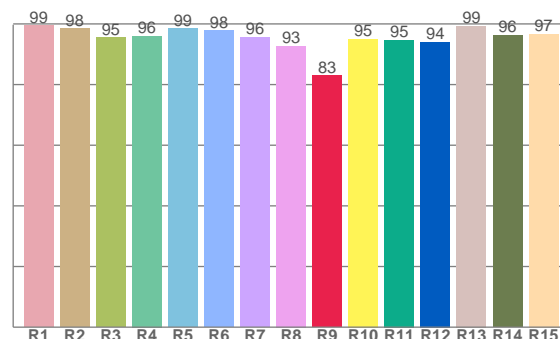
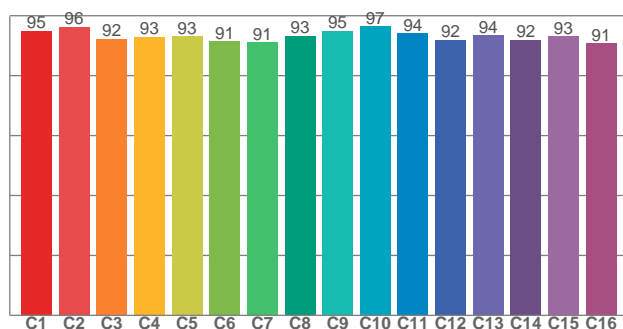
ZONAL LUMEN SUMMARY

0°-10° 134 lm	10°-20° 30.0 lm	20°-30° 4.30 lm	30°-40° 1.10 lm	40°-50° 0.355 lm	50°-60° 0.159 lm	60°-70° 0.107 lm	70°-80° 0.082 lm	80°-90° 0.077 lm
90°-100° 0.039 lm	100°-110° 0.038 lm	110°-120° 0.035 lm	120°-130° 0.032 lm	130°-140° 0.028 lm	140°-150° 0.022 lm	150°-160° 0.016 lm	160°-170° 0.010 lm	170°-180° 0.003 lm

COLOR DETAILS

TM30: 93.5

CRI: 96.8 (R1-R8)



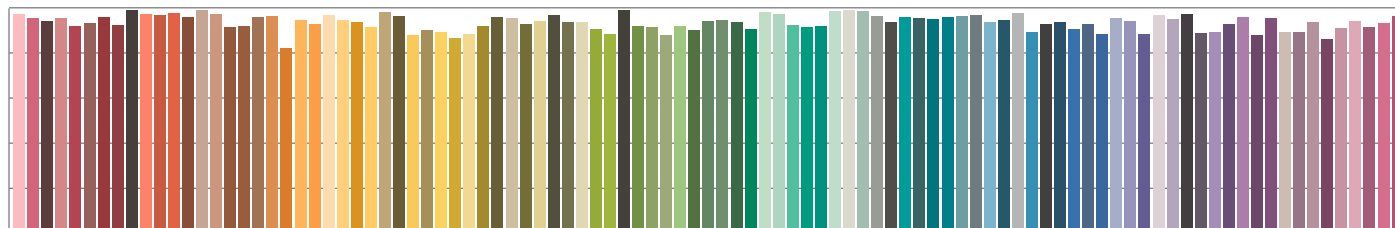
TM30 C values, 16 binned values out of total of 99 C values

CRI R values, only R1-R8 are used to calculate final CRI value

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
94.9	96.4	92.2	92.9	93.2	91.5	91.2	93.3	94.9	96.5	94.1	91.9	93.5	92.0	93.1	90.7

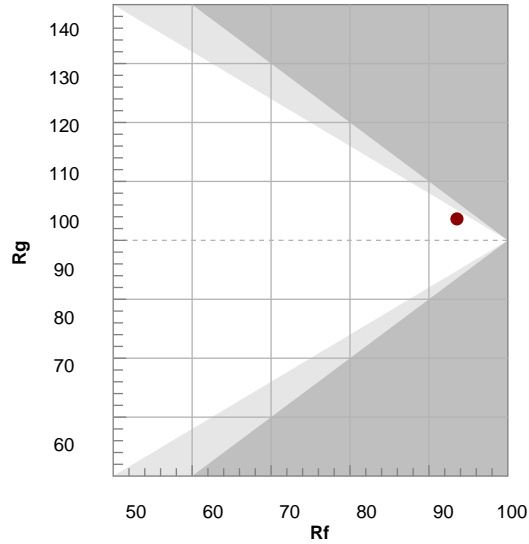
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
99.4	98.5	95.4	96.0	98.5	97.9	95.6	92.7	83.0	95.0	94.7	94.1	99.3	96.3	96.7

TM30 COLOR EVALUATION SAMPLE



TM30 DETAILS

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	95	-2%	-1%
2	96	-1%	2%
3	92	1%	4%
4	93	3%	4%
5	93	5%	3%
6	91	6%	1%
7	91	4%	-4%
8	93	2%	-4%
9	95	0%	-3%
10	97	-1%	0%
11	94	0%	3%
12	92	3%	1%
13	94	4%	-3%
14	92	4%	-5%
15	93	2%	-4%
16	91	0%	-7%



FIDELITY INDEX

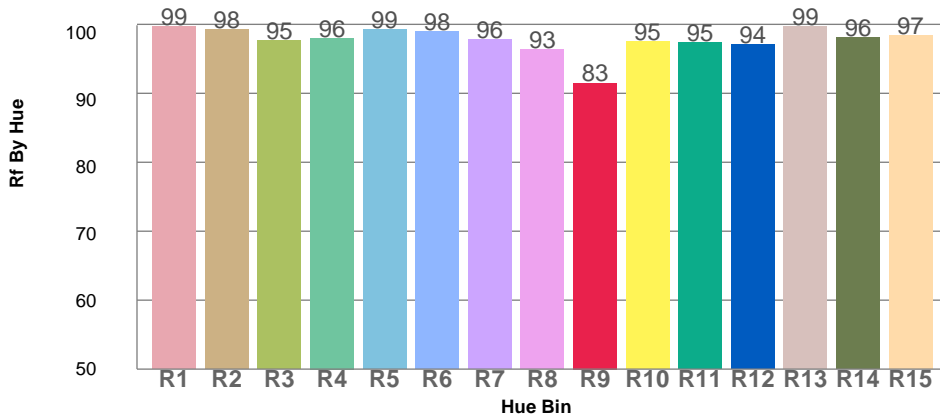
R_f 93.5

GAMUT INDEX

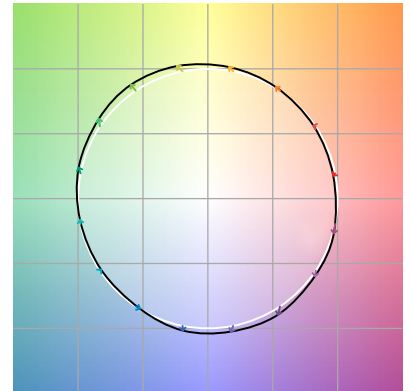
R_g 103.6

Approx. limits for sources on the Planckian locus.
 Approx. limits for practical light sources.

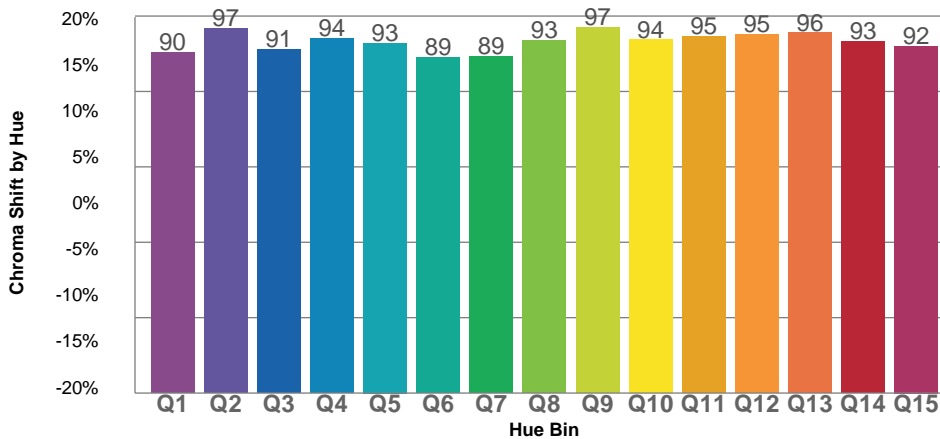
TM30 OVER 50



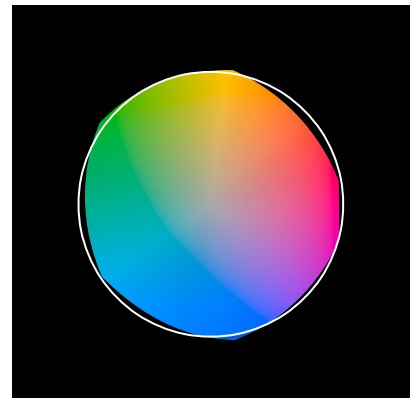
COLOR VECTOR GRAPHICS



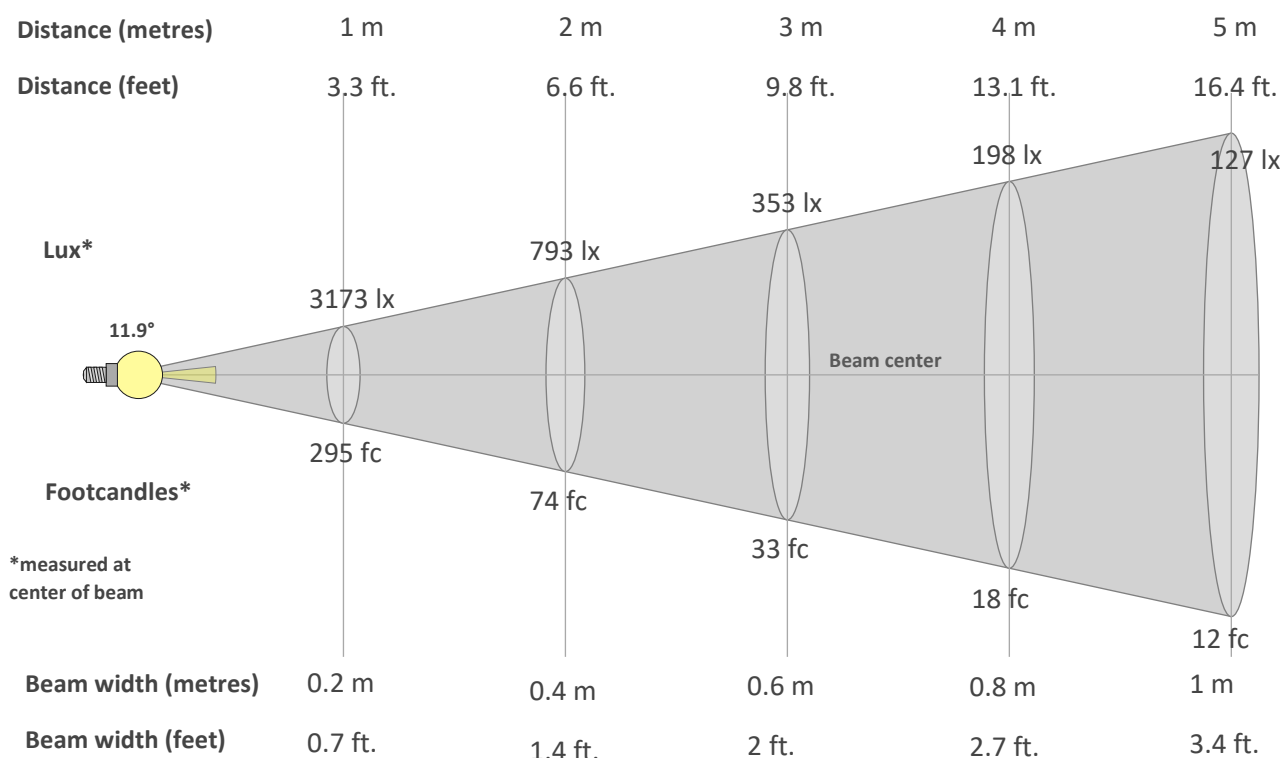
TM30 CHROMA SHIFT



COLOR DISTORTION GRAPHICS



BEAM DETAILS



Beam intensity 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
3173lx	793lx	353lx	198lx	127lx	88lx	65lx	50lx	39lx	32lx	26lx	22lx	19lx	16lx	14lx	12lx	11lx	10lx	9lx	8lx
294.8fc	73.7fc	32.8fc	18.4fc	11.8fc	8.2fc	6fc	4.6fc	3.6fc	2.9fc	2.4fc	2fc	1.7fc	1.5fc	1.3fc	1.2fc	1fc	0.9fc	0.8fc	0.7fc

Intensity in 0° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
3173	3111	2930	2653	2315	1944	1573	1228	928	679	481	331	225	151	103	71	52	39	31	25
100%	98%	92%	84%	73%	61%	50%	39%	29%	21%	15%	10%	7%	5%	3%	2%	2%	1%	1%	1%

Intensity in 90° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
3173	3111	2930	2653	2315	1944	1573	1228	928	679	481	331	225	151	103	71	52	39	31	25
100%	98%	92%	84%	73%	61%	50%	39%	29%	21%	15%	10%	7%	5%	3%	2%	2%	1%	1%	1%

Intensity in 180° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
3173	3111	2930	2653	2315	1944	1573	1228	928	679	481	331	225	151	103	71	52	39	31	25
100%	98%	92%	84%	73%	61%	50%	39%	29%	21%	15%	10%	7%	5%	3%	2%	2%	1%	1%	1%

Intensity in 270° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°
3173	3111	2930	2653	2315	1944	1573	1228	928	679	481	331	225	151	103	71	52	39	31	25
100%	98%	92%	84%	73%	61%	50%	39%	29%	21%	15%	10%	7%	5%	3%	2%	2%	1%	1%	1%