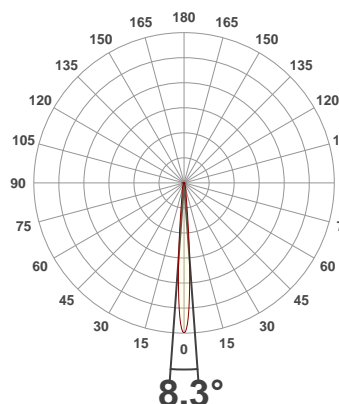




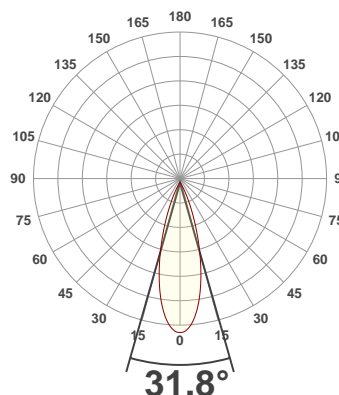
PRODUCT INFORMATION

SERIAL NUMBER:	LL-20191121-1165
DATE OF MEASUREMENT:	2019-11-21
SIZE (mm): (L x W x H)	298 x 71 x 59.5

ANGULAR DISTRIBUTION AT C0/180



ANGULAR DISTRIBUTION AT C90/270



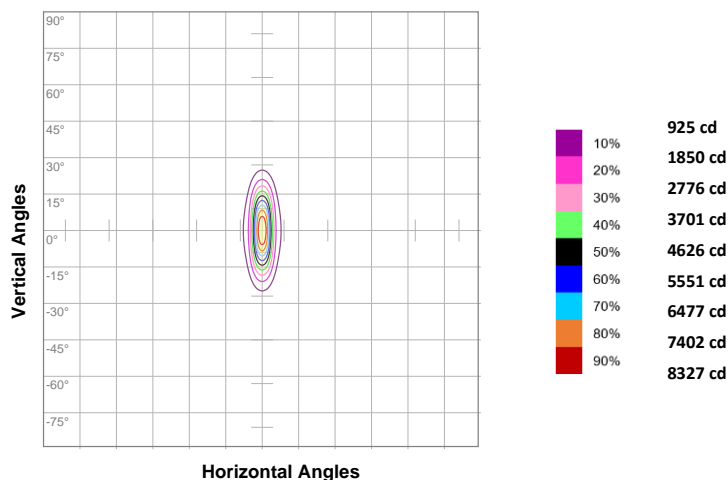
LIGHT OUTPUT DATA

TOTAL LUMEN OUTPUT:	1099 lm
EFFICACY:	74 lm/W
PEAK INTENSITY:	9258 cd
COLOR RENDERING INDEX (CRI):	83.8
COLOR TEMPERATURE (CCT):	3773K
FIDELITY INDEX (TM30Rf):	84.7
GAMUT INDEX (TM30Rg):	93.5

BEAM OUTPUT DATA

BEAM ANGLE (FWHM) C0/180:	8.3°
BEAM ANGLE (FWHM) C90/270:	31.8°
FIELD ANGLE (10%) C0/180:	17.3°
FIELD ANGLE (10%) C90/270:	55.3°
NUMBER OF PLANES MEASURED:	36

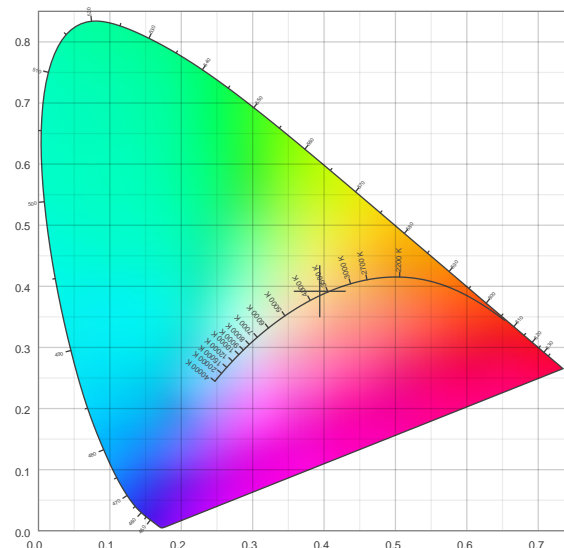
ISO CANDELA DIAGRAM



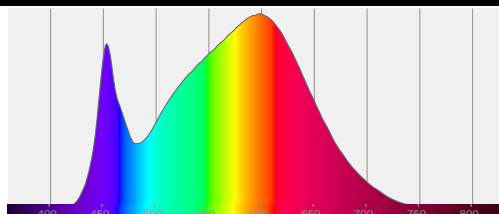
DATA

INPUT POWER:	14.9 W
POWER FACTOR:	1.0
OPTICAL POWER:	3.32 mW
PEAK WAVELENGTH:	598 nm
DOMINANT WAVELENGTH:	580 nm

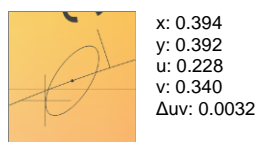
CIE 1931:



SPECTRA

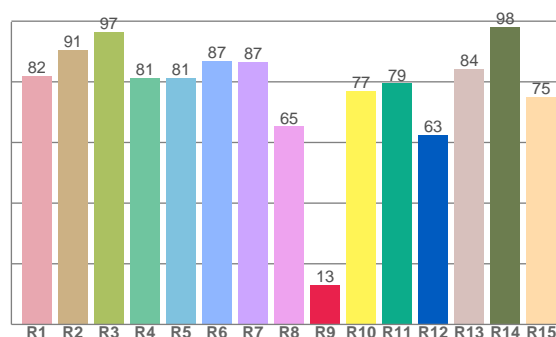
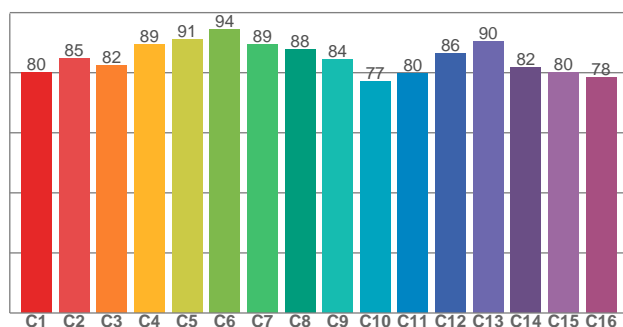


CIE 1931 ZOOM



ZONAL LUMEN SUMMARY

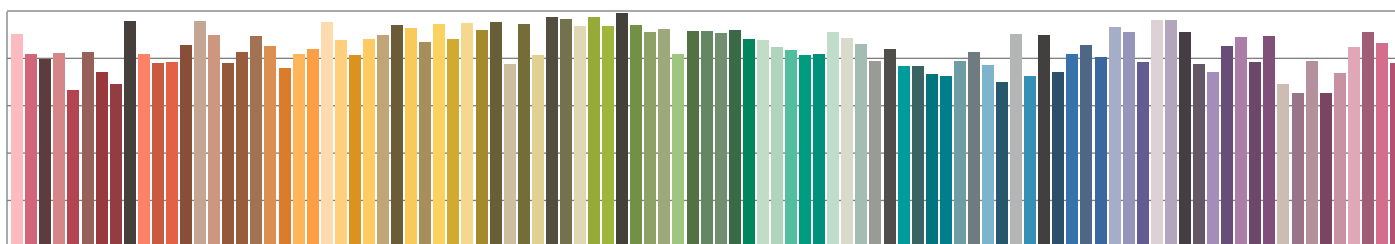
0°-10° 431 lm	10°-20° 380 lm	20°-30° 171 lm	30°-40° 65.8 lm	40°-50° 26.3 lm	50°-60° 15.1 lm	60°-70° 7.23 lm	70°-80° 2.45 lm	80°-90° 0.266 lm
90°-100° 0.003 lm	100°-110° 0.003 lm	110°-120° 0.016 lm	120°-130° 0.012 lm	130°-140° 0.007 lm	140°-150° 0.000 lm	150°-160° 0.000 lm	160°-170° 0.000 lm	170°-180° 0.019 lm

COLOR DETAILS
TM30: 84.7
CRI: 83.8 (R1-R8)

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

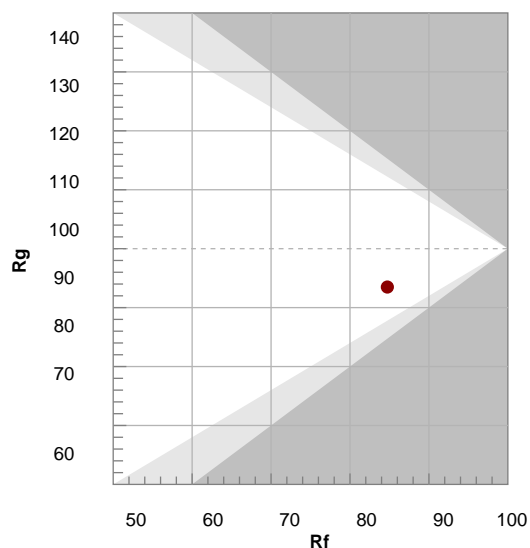
C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
80.2	84.8	82.3	89.5	91.2	94.4	89.5	87.8	84.4	77.0	79.7	86.3	90.3	81.9	80.1	78.3

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
81.9	90.6	96.6	81.2	81.2	86.8	86.6	65.3	13.0	76.9	79.4	62.5	84.1	98.2	75.0

TM30 COLOR EVALUATION SAMPLE

TM30 DETAILS

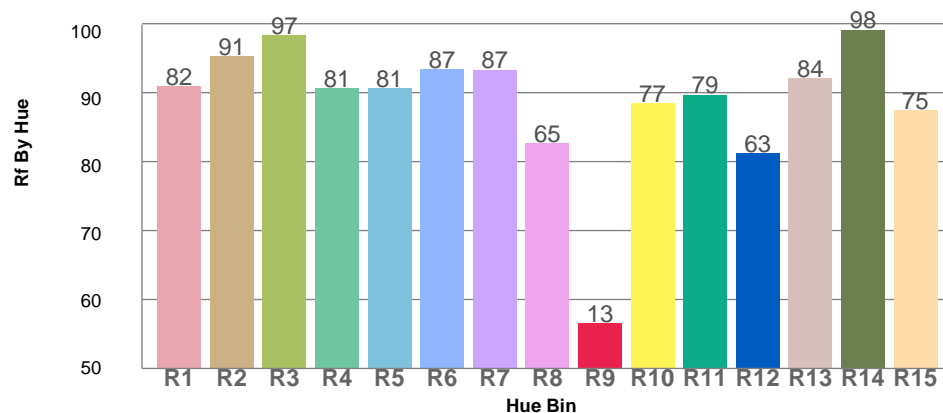
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	80	-11%	0%
2	85	-7%	5%
3	82	-4%	8%
4	89	-2%	4%
5	91	-3%	2%
6	94	-2%	-1%
7	89	-7%	-1%
8	88	-7%	2%
9	84	-6%	9%
10	77	-5%	13%
11	80	3%	14%
12	86	6%	3%
13	90	3%	-5%
14	82	5%	-14%
15	80	-3%	-13%
16	78	-7%	-11%



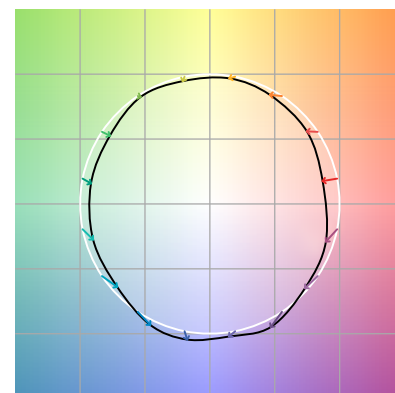
FIDELITY INDEX
Rf 84.7

GAMUT INDEX
Rg 93.5

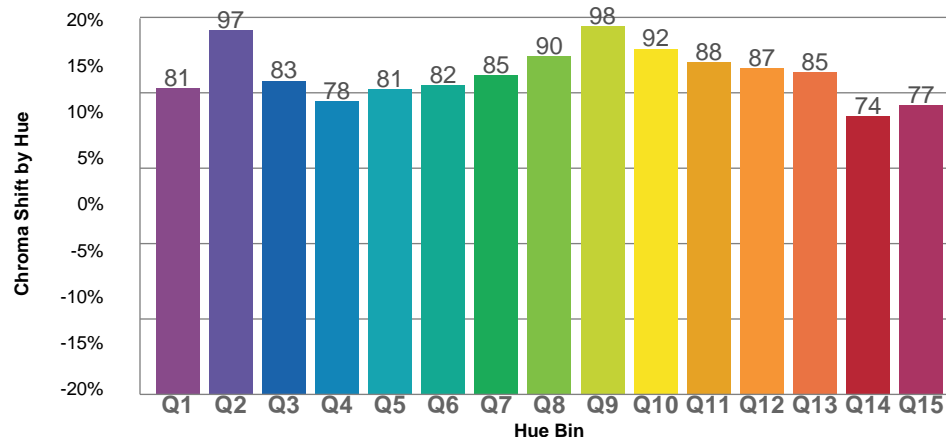
TM30 OVER 50



COLOR VECTOR GRAPHICS

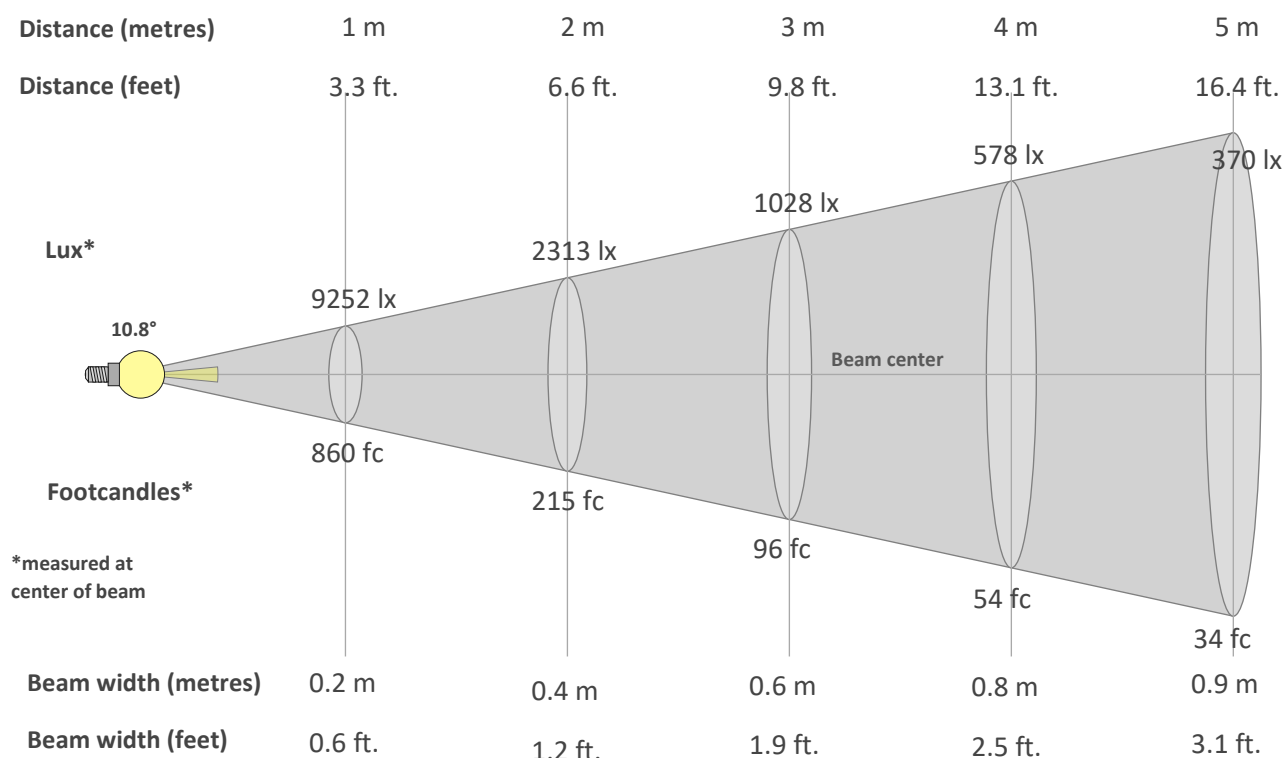


TM30 CHROMA SHIFT



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
9252lx	2313lx	1028lx	578lx	370lx	257lx	189lx	145lx	114lx	93lx	76lx	64lx	55lx	47lx	41lx	36lx	32lx	29lx	26lx	23lx
859.6fc	214.9fc	95.5fc	53.7fc	34.4fc	23.9fc	17.5fc	13.4fc	10.6fc	8.6fc	7.1fc	6fc	5.1fc	4.4fc	3.8fc	3.4fc	3fc	2.7fc	2.4fc	2.1fc

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°
9252	8951	8036	6519	4828	3322	2159	1451	1072	860	722	628	559	505	458	415	371	327	286	252
100%	97%	87%	70%	52%	36%	23%	16%	12%	9%	8%	7%	6%	5%	5%	4%	4%	4%	3%	3%

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°
9252	9226	9151	9040	8887	8678	8438	8160	7838	7493	7120	6719	6304	5876	5437	4998	4562	4134	3715	3311
100%	100%	99%	98%	96%	94%	91%	88%	85%	81%	77%	73%	68%	64%	59%	54%	49%	45%	40%	36%

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°
9252	8951	8036	6519	4828	3322	2159	1451	1072	860	722	628	559	505	458	415	371	327	286	252
100%	97%	87%	70%	52%	36%	23%	16%	12%	9%	8%	7%	6%	5%	5%	4%	4%	4%	3%	3%

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°
9252	9226	9151	9040	8887	8678	8438	8160	7838	7493	7120	6719	6304	5876	5437	4998	4562	4134	3715	3311
100%	100%	99%	98%	96%	94%	91%	88%	85%	81%	77%	73%	68%	64%	59%	54%	49%	45%	40%	36%