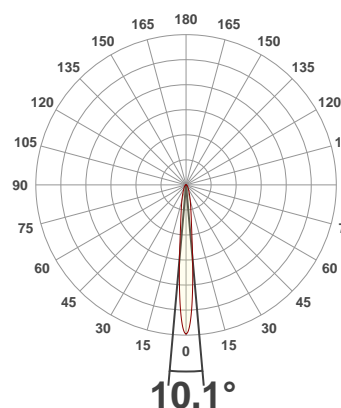




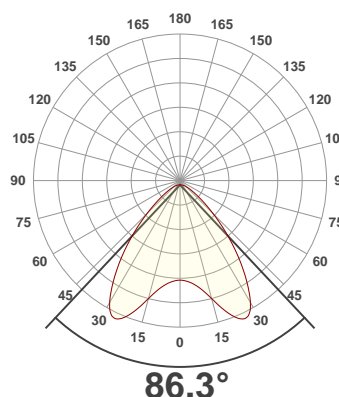
PRODUCT INFORMATION

SERIAL NUMBER:	LL-20191120-1163
DATE OF MEASUREMENT:	2019-11-20
SIZE (mm): (L x W x H)	298 x 71 x 59.5

ANGULAR DISTRIBUTION AT C0/180



ANGULAR DISTRIBUTION AT C90/270



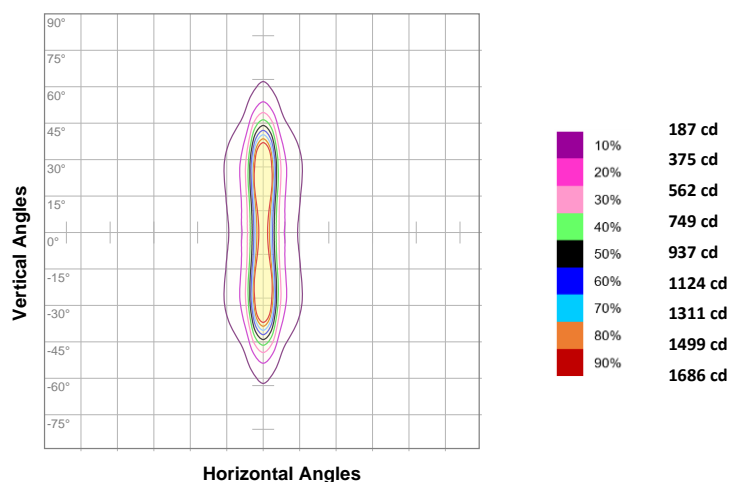
LIGHT OUTPUT DATA

TOTAL LUMEN OUTPUT:	1026 lm
EFFICACY:	68 lm/W
PEAK INTENSITY:	2936 cd
COLOR RENDERING INDEX (CRI):	83.8
COLOR TEMPERATURE (CCT):	3780K
FIDELITY INDEX (TM30Rf):	84.6
GAMUT INDEX (TM30Rg):	93.5

BEAM OUTPUT DATA

BEAM ANGLE (FWHM) C0/180:	10.1°
BEAM ANGLE (FWHM) C90/270:	86.3°
FIELD ANGLE (10%) C0/180:	31.5°
FIELD ANGLE (10%) C90/270:	125.8°
NUMBER OF PLANES MEASURED:	36

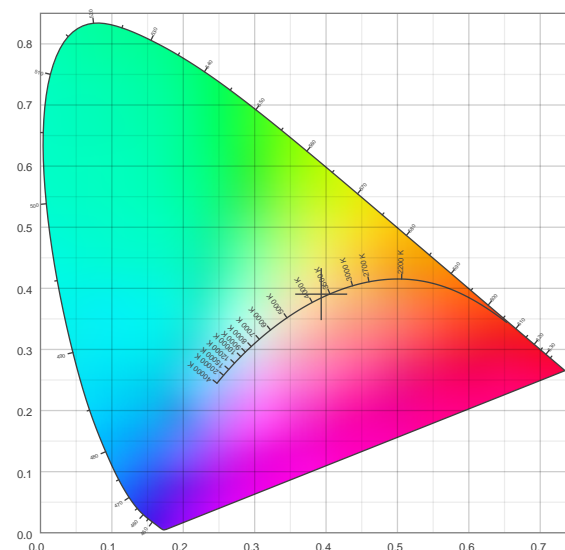
ISO CANDELA DIAGRAM



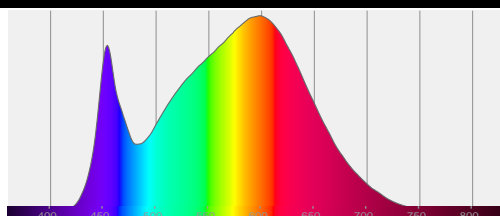
DATA

INPUT POWER:	15.1 W
POWER FACTOR:	1.0
OPTICAL POWER:	3.11 mW
PEAK WAVELENGTH:	598 nm
DOMINANT WAVELENGTH:	580 nm

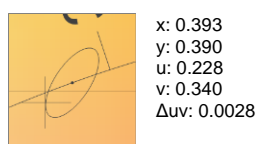
CIE 1931:



SPECTRA

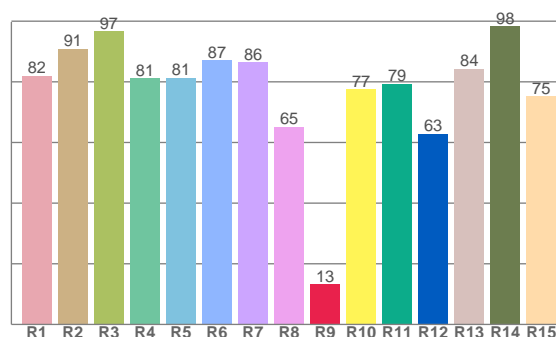
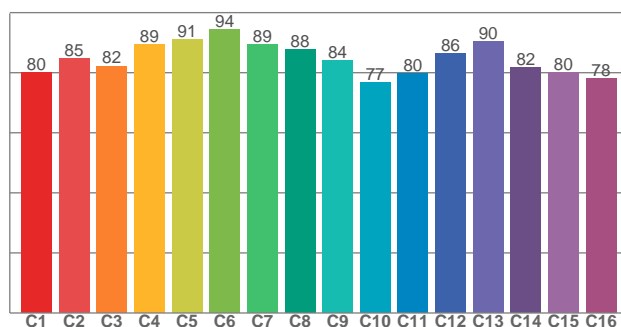


CIE 1931 ZOOM



ZONAL LUMEN SUMMARY

0°-10° 115 lm	10°-20° 193 lm	20°-30° 232 lm	30°-40° 206 lm	40°-50° 135 lm	50°-60° 75.5 lm	60°-70° 41.2 lm	70°-80° 21.7 lm	80°-90° 6.45 lm
90°-100° 0.413 lm	100°-110° 0.396 lm	110°-120° 0.135 lm	120°-130° 0.062 lm	130°-140° 0.045 lm	140°-150° 0.034 lm	150°-160° 0.025 lm	160°-170° 0.015 lm	170°-180° 0.005 lm

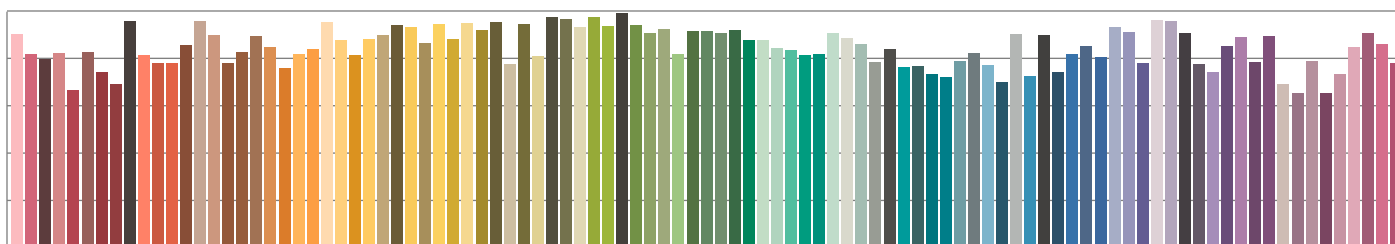
COLOR DETAILS
TM30: 84.6
CRI: 83.8 (R1-R8)


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

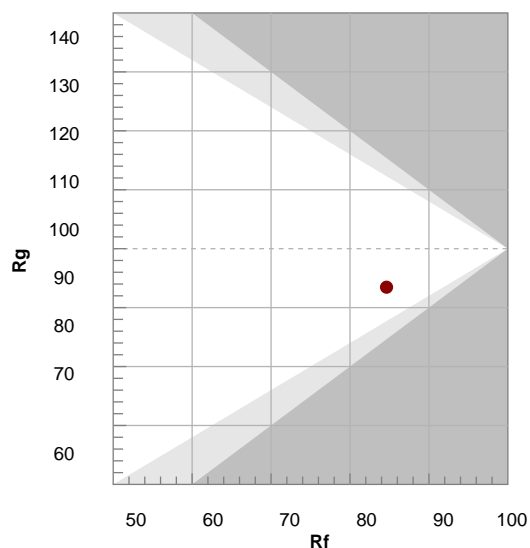
CRI R values, only R1-R8 are used to calculate final CRI value

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
80.1	84.7	82.2	89.4	91.1	94.2	89.3	87.6	84.2	76.8	79.7	86.3	90.3	81.8	80.0	78.2

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
82.0	90.8	96.6	81.1	81.3	87.1	86.4	65.2	13.2	77.5	79.3	62.8	84.3	98.3	75.2

TM30 COLOR EVALUATION SAMPLE

TM30 DETAILS

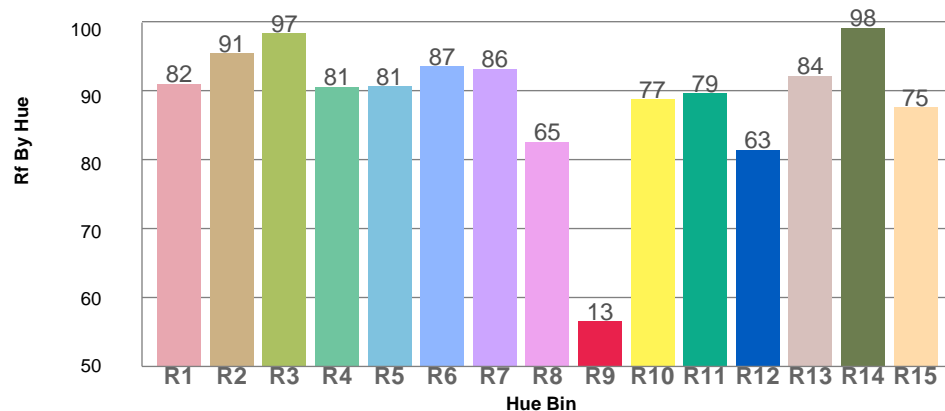
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	80	-11%	0%
2	85	-7%	5%
3	82	-4%	8%
4	89	-2%	4%
5	91	-3%	2%
6	94	-2%	-2%
7	89	-7%	-1%
8	88	-7%	2%
9	84	-6%	10%
10	77	-5%	14%
11	80	3%	14%
12	86	6%	3%
13	90	3%	-6%
14	82	5%	-14%
15	80	-3%	-13%
16	78	-7%	-11%



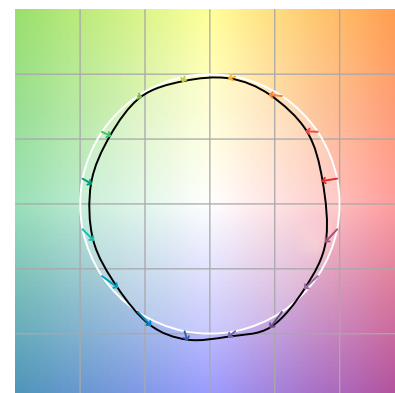
FIDELITY INDEX
Rf 84.6

GAMUT INDEX
Rg 93.5

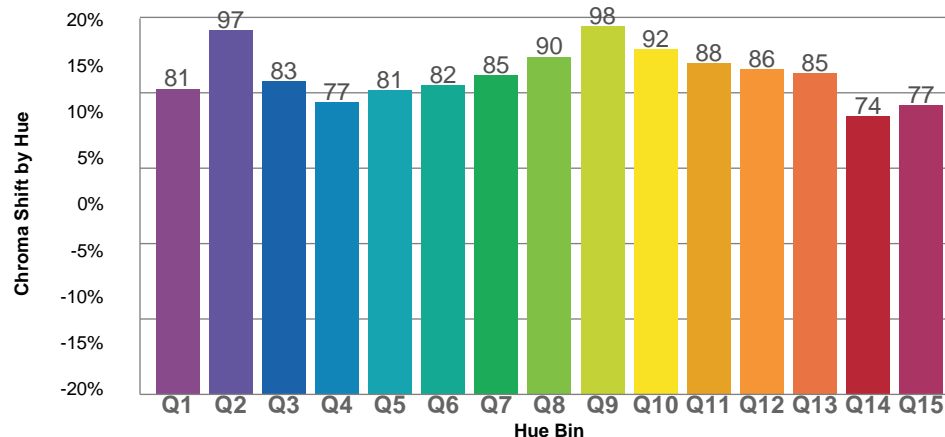
TM30 OVER 50



COLOR VECTOR GRAPHICS

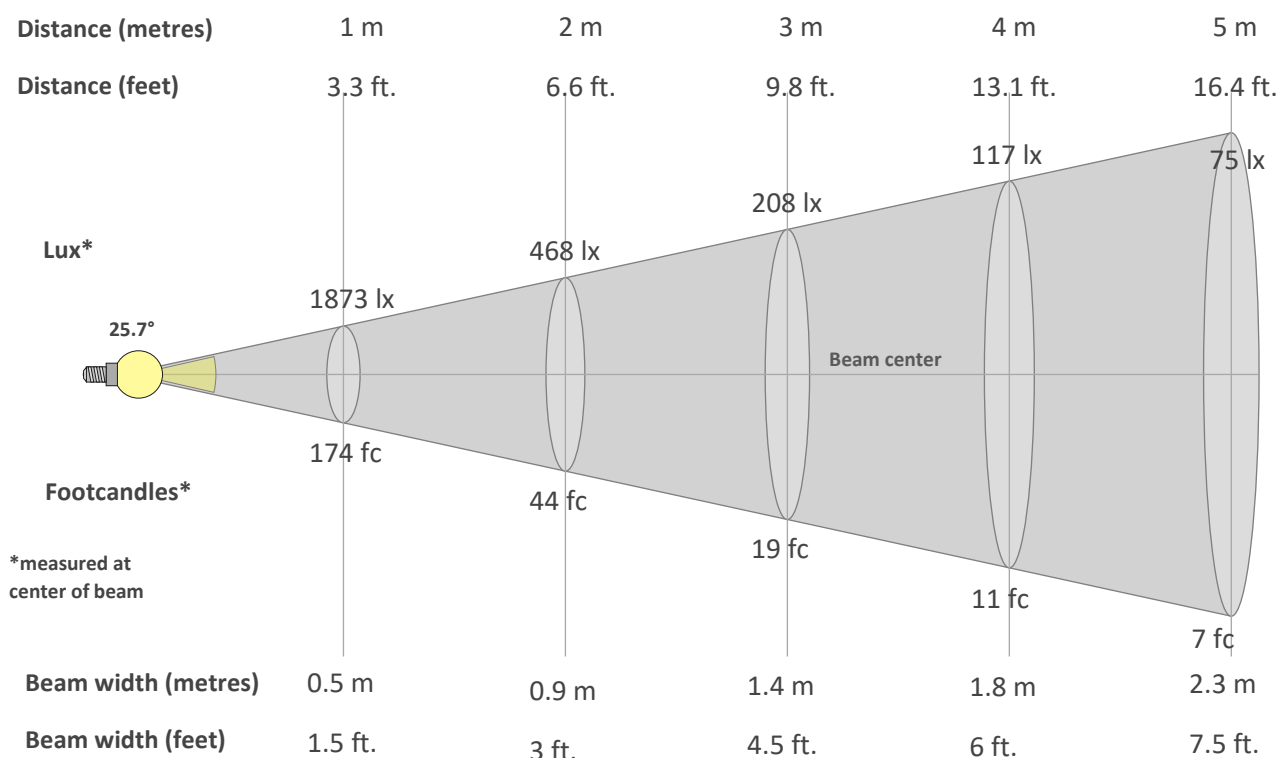


TM30 CHROMA SHIFT



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
1873lx	468lx	208lx	117lx	75lx	52lx	38lx	29lx	23lx	19lx	15lx	13lx	11lx	10lx	8lx	7lx	6lx	6lx	5lx	5lx
174fc	43.5fc	19.3fc	10.9fc	7fc	4.8fc	3.6fc	2.7fc	2.1fc	1.7fc	1.4fc	1.2fc	1fc	0.9fc	0.8fc	0.7fc	0.6fc	0.5fc	0.5fc	0.4fc

Intensity in 0° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1873	1683	1203	737	487	360	280	225	183	150	123	103	87	75	65	57	51	45	41	37
100%	90%	64%	39%	26%	19%	15%	12%	10%	8%	7%	6%	5%	4%	3%	3%	3%	2%	2%	2%

Intensity in 90° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1873	1880	1898	1928	1970	2029	2105	2206	2333	2478	2625	2761	2869	2929	2916	2827	2666	2466	2249	2027
100%	100%	101%	103%	105%	108%	112%	118%	125%	132%	140%	147%	153%	156%	156%	151%	142%	132%	120%	108%

Intensity in 180° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1873	1683	1203	737	487	360	280	225	183	150	123	103	87	75	65	57	51	45	41	37
100%	90%	64%	39%	26%	19%	15%	12%	10%	8%	7%	6%	5%	4%	3%	3%	3%	2%	2%	2%

Intensity in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
1873	1880	1898	1928	1970	2029	2105	2206	2333	2478	2625	2761	2869	2929	2916	2827	2666	2466	2249	2027
100%	100%	101%	103%	105%	108%	112%	118%	125%	132%	140%	147%	153%	156%	156%	151%	142%	132%	120%	108%