



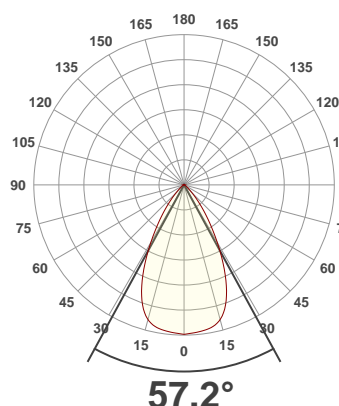
PRODUCT INFORMATION

SERIAL NUMBER: LL-20190822-536-BMS

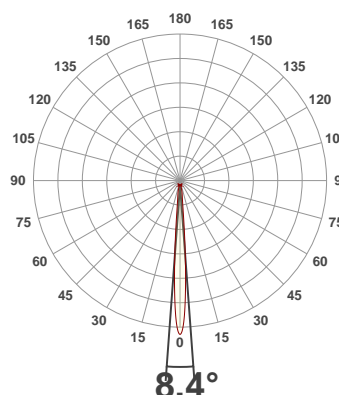
DATE OF MEASUREMENT: 2019-08-22

SIZE (mm): (L x W x H) 298 x 71 x 59.5

ANGULAR DISTRIBUTION AT C0/180



ANGULAR DISTRIBUTION AT C90/270



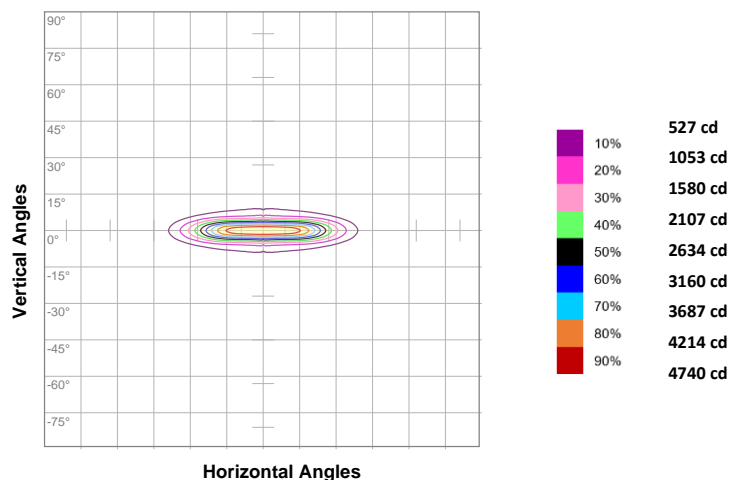
LIGHT OUTPUT DATA

TOTAL LUMEN OUTPUT:	1126 lm
EFFICACY:	74 lm/W
PEAK INTENSITY:	5284 cd
COLOR RENDERING INDEX (CRI):	83.7
COLOR TEMPERATURE (CCT):	3728K
FIDELITY INDEX (TM30Rf):	84.7
GAMUT INDEX (TM30Rg):	93.5

BEAM OUTPUT DATA

BEAM ANGLE (FWHM) C0/180:	57.2°
BEAM ANGLE (FWHM) C90/270:	8.4°
FIELD ANGLE (10%) C0/180:	86.5°
FIELD ANGLE (10%) C90/270:	19°
NUMBER OF PLANES MEASURED:	36

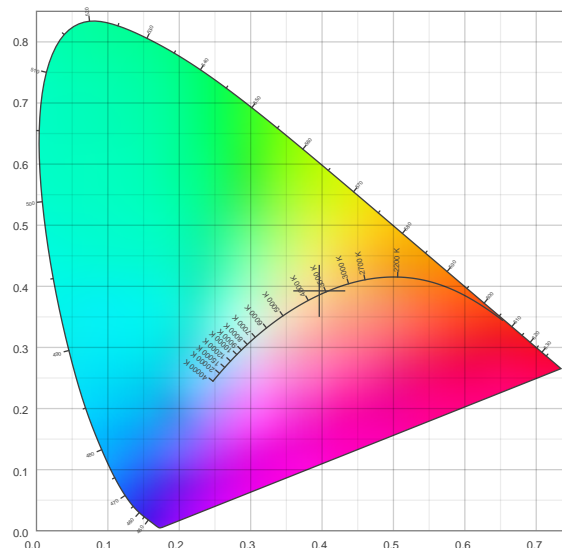
ISO CANDELA DIAGRAM



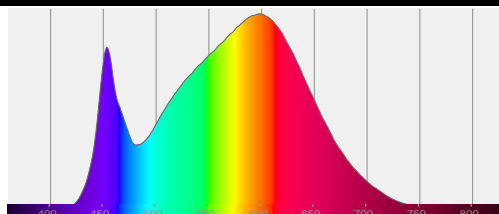
DATA

INPUT POWER:	15.2 W
POWER FACTOR:	1.0
OPTICAL POWER:	3.41 mW
PEAK WAVELENGTH:	598 nm
DOMINANT WAVELENGTH:	580 nm

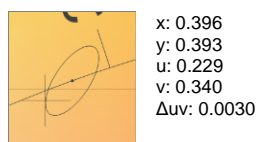
CIE 1931:



SPECTRA



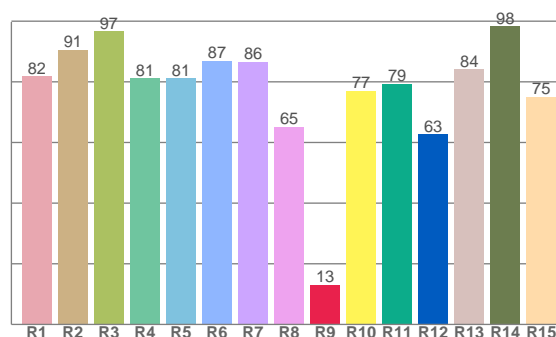
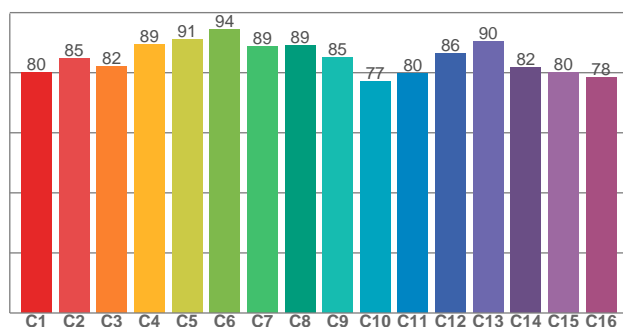
CIE 1931 ZOOM



x:	0.396
y:	0.393
u:	0.229
v:	0.340
Δuv:	0.0030

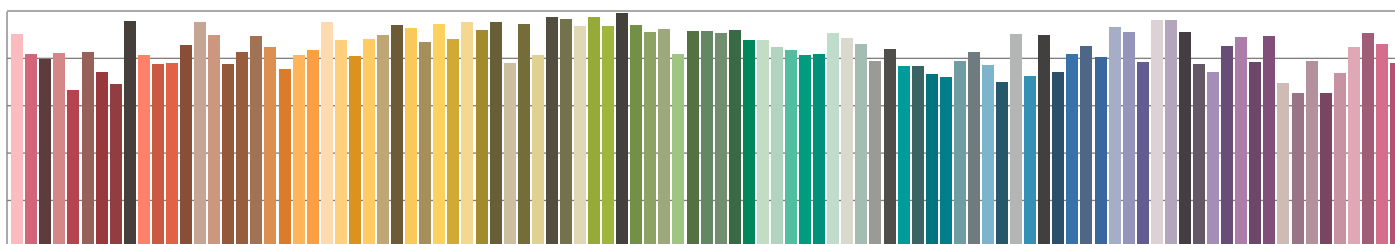
ZONAL LUMEN SUMMARY

0°-10° 275 lm	10°-20° 340 lm	20°-30° 259 lm	30°-40° 141 lm	40°-50° 63.4 lm	50°-60° 28.7 lm	60°-70° 14.2 lm	70°-80° 5.33 lm	80°-90° 0.612 lm
90°-100° 0.039 lm	100°-110° 0.031 lm	110°-120° 0.023 lm	120°-130° 0.018 lm	130°-140° 0.009 lm	140°-150° 0.005 lm	150°-160° 0.003 lm	160°-170° 0.002 lm	170°-180° 0.003 lm

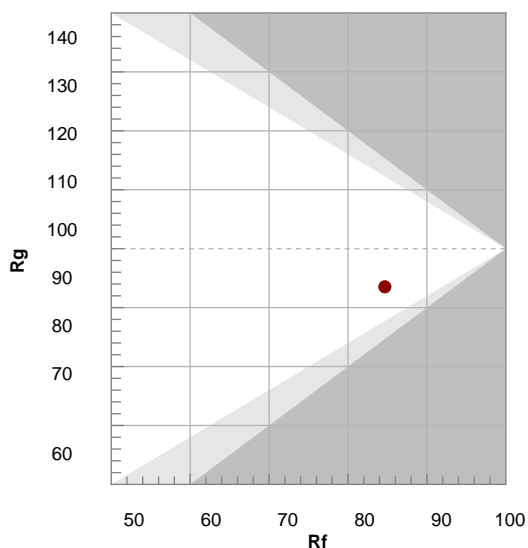
COLOR DETAILS
TM30: 84.7
CRI: 83.7 (R1-R8)

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	84.6	82.1	89.4	91.2	94.3	88.8	89.1	85.2	77.1	79.7	86.2	90.3	81.8	80.1	78.3

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
81.8	90.6	96.6	81.1	81.2	86.8	86.4	65.1	13.1	77.0	79.2	62.7	84.1	98.2	75.0

TM30 COLOR EVALUATION SAMPLE

TM30 DETAILS

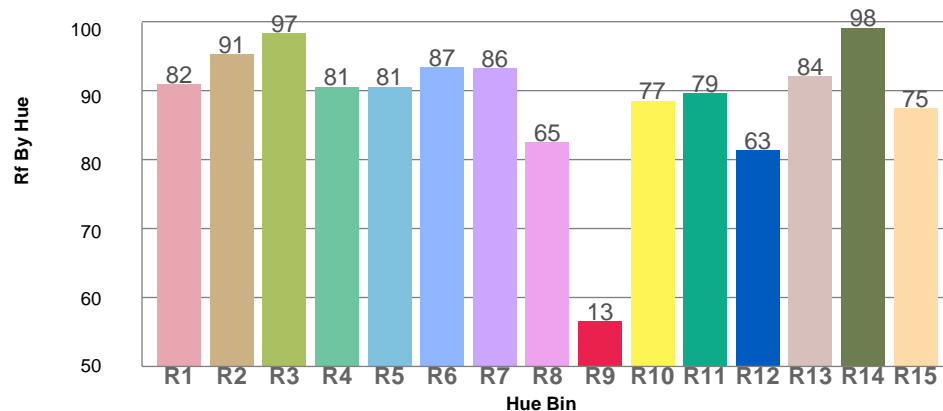
Hue Bin	R_f	Graphic shifts (%)	
		Chroma	Hue
1	80	-11%	0%
2	85	-7%	5%
3	82	-4%	8%
4	89	-2%	4%
5	91	-3%	2%
6	94	-2%	-2%
7	89	-7%	-1%
8	89	-6%	2%
9	85	-6%	8%
10	77	-4%	15%
11	80	3%	14%
12	86	6%	3%
13	90	3%	-6%
14	82	5%	-14%
15	80	-3%	-13%
16	78	-7%	-11%



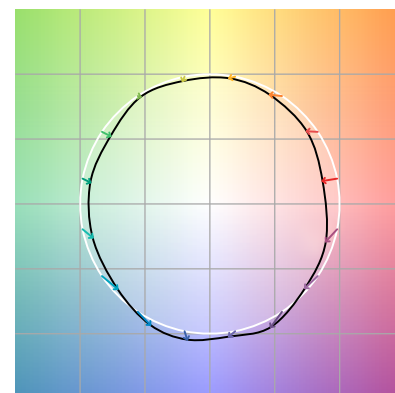
FIDELITY INDEX
Rf 84.7

GAMUT INDEX
Rg 93.5

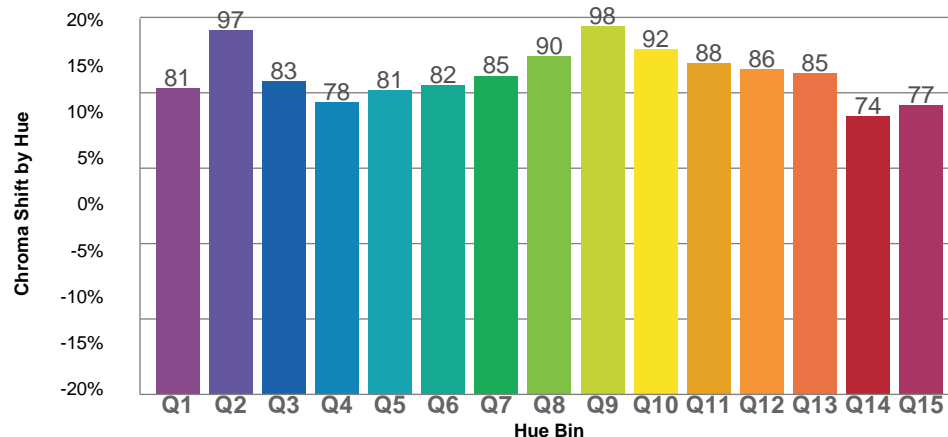
TM30 OVER 50



COLOR VECTOR GRAPHICS



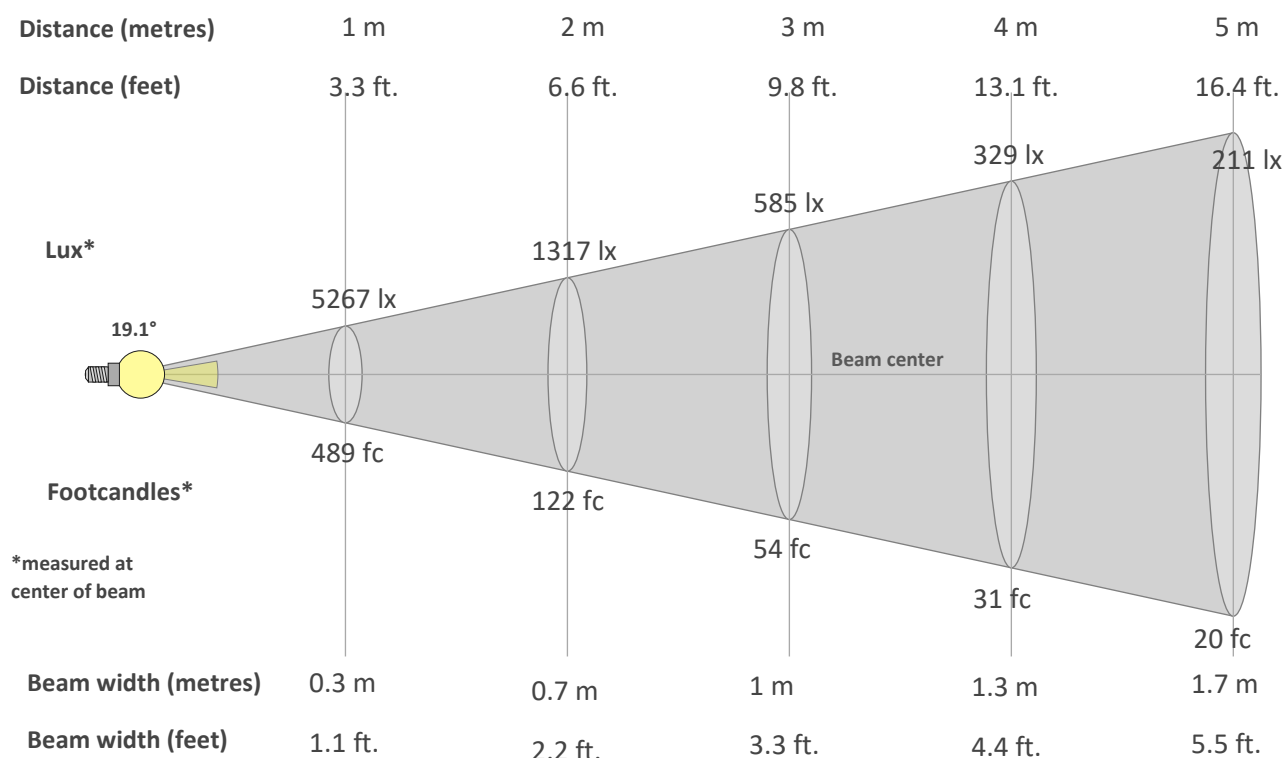
TM30 CHROMA SHIFT



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
5267lx	1317lx	585lx	329lx	211lx	146lx	107lx	82lx	65lx	53lx	44lx	37lx	31lx	27lx	23lx	21lx	18lx	16lx	15lx	13lx
489.3fc	122.3fc	54.4fc	30.6fc	19.6fc	13.6fc	10fc	7.6fc	6fc	4.9fc	4fc	3.4fc	2.9fc	2.5fc	2.2fc	1.9fc	1.7fc	1.5fc	1.4fc	1.2fc

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°
5267	5276	5263	5253	5244	5233	5221	5207	5193	5175	5155	5128	5094	5050	4994	4928	4842	4747	4627	4501
100%	100%	100%	100%	100%	99%	99%	99%	99%	98%	98%	97%	97%	96%	95%	94%	92%	90%	88%	85%

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°
5267	5103	4578	3750	2813	1972	1334	930	707	576	489	428	381	344	313	283	255	228	203	181
100%	97%	87%	71%	53%	37%	25%	18%	13%	11%	9%	8%	7%	7%	6%	5%	5%	4%	4%	3%

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°
5267	5276	5263	5253	5244	5233	5221	5207	5193	5175	5155	5128	5094	5050	4994	4928	4842	4747	4627	4501
100%	100%	100%	100%	100%	99%	99%	99%	99%	98%	98%	97%	97%	96%	95%	94%	92%	90%	88%	85%

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°
5267	5103	4578	3750	2813	1972	1334	930	707	576	489	428	381	344	313	283	255	228	203	181
100%	97%	87%	71%	53%	37%	25%	18%	13%	11%	9%	8%	7%	7%	6%	5%	5%	4%	4%	3%