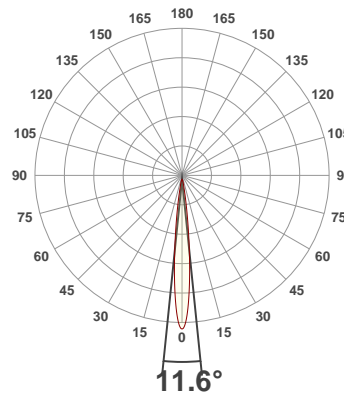
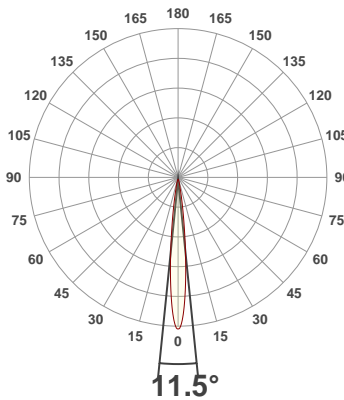




PRODUCT INFORMATION

SERIAL NUMBER:	LL-20190828-561-BMS
DATE OF MEASUREMENT:	2019-08-28
SIZE (l x w. x h):	298 mm x 71 mm x 59.5 mm

ANGULAR DISTRIBUTION AT C0/180 | ANGULAR DISTRIBUTION AT C90/270 | LIGHT OUTPUT DATA

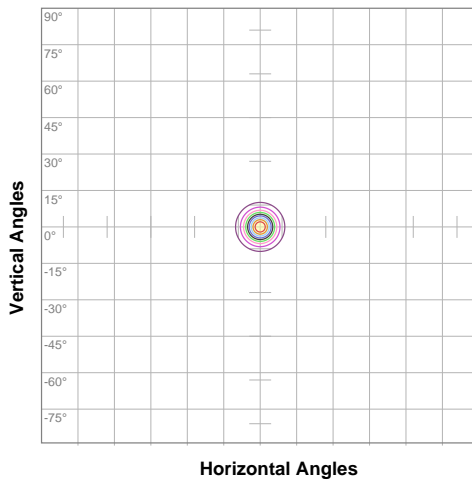


TOTAL LUMEN OUTPUT:	553 lm
EFFICACY:	29 lm/W
PEAK INTENSITY:	9144 cd
COLOR RENDERING INDEX (CRI):	26.3
COLOR TEMPERATURE (CCT):	21133K
FIDELITY INDEX (TM30Rf):	0.0
GAMUT INDEX (TM30Rg):	n/a

BEAM OUTPUT DATA

BEAM ANGLE (FWHM) C0/180:	11.5°
BEAM ANGLE (FWHM) C90/270:	11.6°
FIELD ANGLE (10%) C0/180:	22.7°
FIELD ANGLE (10%) C90/270:	22.5°
NUMBER OF PLANES MEASURED:	12

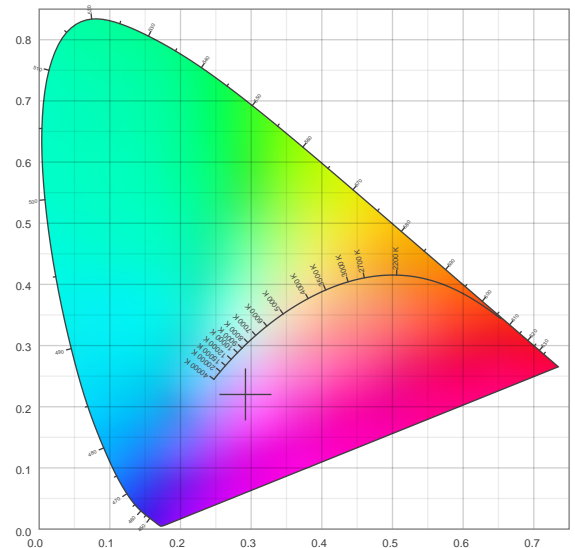
ISOCANDELA DIAGRAM



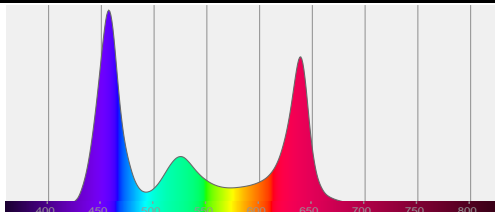
10%	914 cd
20%	1827 cd
30%	2741 cd
40%	3654 cd
50%	4568 cd
60%	5482 cd
70%	6395 cd
80%	7309 cd
90%	8223 cd

INPUT POWER:	19.2 W
POWER FACTOR:	1.0
OPTICAL POWER:	2.72 mW
PEAK WAVELENGTH:	457 nm
DOMINANT WAVELENGTH:	360 nm

CIE 1931



SPECTRAL DISTRIBUTION | CIE 1931 ZOOM



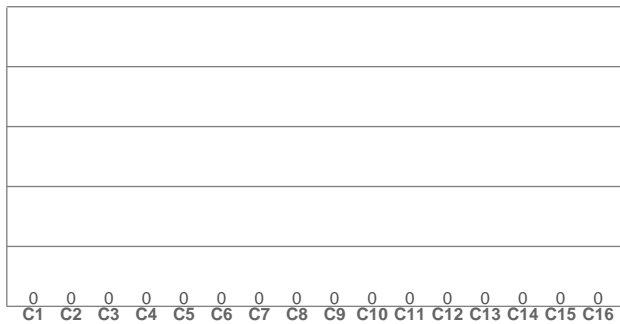
x: 0.292
y: 0.220
u: 0.231
v: 0.261
Δuv: -0.0529

ZONAL LUMEN SUMMARY

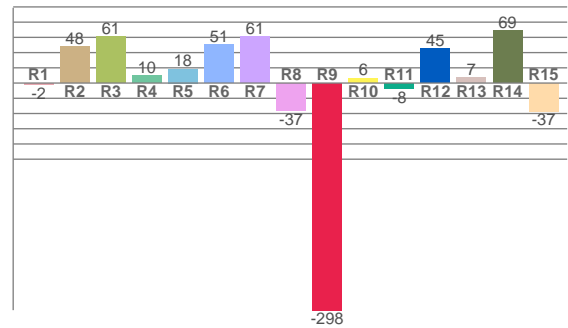
0°-10° 373 lm	10°-20° 125 lm	20°-30° 41.5 lm	30°-40° 8.23 lm	40°-50° 2.83 lm	50°-60° 1.54 lm	60°-70° 0.499 lm	70°-80° 0.126 lm	80°-90° 0.020 lm
90°-100° 0.005 lm	100°-110° 0.004 lm	110°-120° 0.002 lm	120°-130° 0.001 lm	130°-140° 0.001 lm	140°-150° 0.000 lm	150°-160° 0.000 lm	160°-170° 0.000 lm	170°-180° 0.000 lm

COLOR DETAILS

TM30: 0.0



CRI: 26.3 (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
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

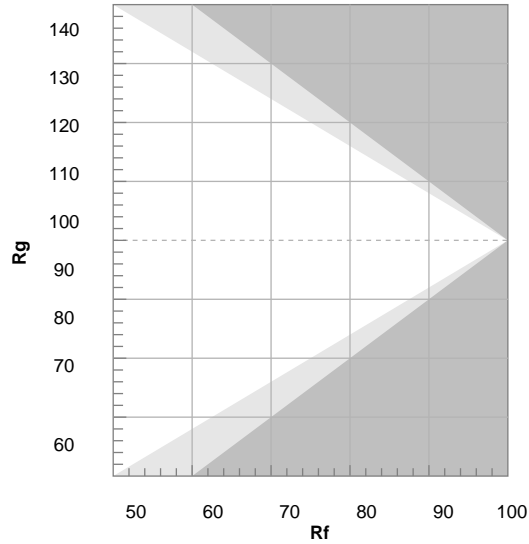
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
-2.1	48.0	61.2	10.1	18.4	50.8	60.6	-36.7	-298.3	6.3	-7.7	45.4	7.0	69.1	-37.1

TM30 COLOR EVALUATION SAMPLE

TM30 DETAILS

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	0	0%	0%
2	0	0%	0%
3	0	0%	0%
4	0	0%	0%
5	0	0%	0%
6	0	0%	0%
7	0	0%	0%
8	0	0%	0%
9	0	0%	0%
10	0	0%	0%
11	0	0%	0%
12	0	0%	0%
13	0	0%	0%
14	0	0%	0%
15	0	0%	0%
16	0	0%	0%



FIDELITY INDEX

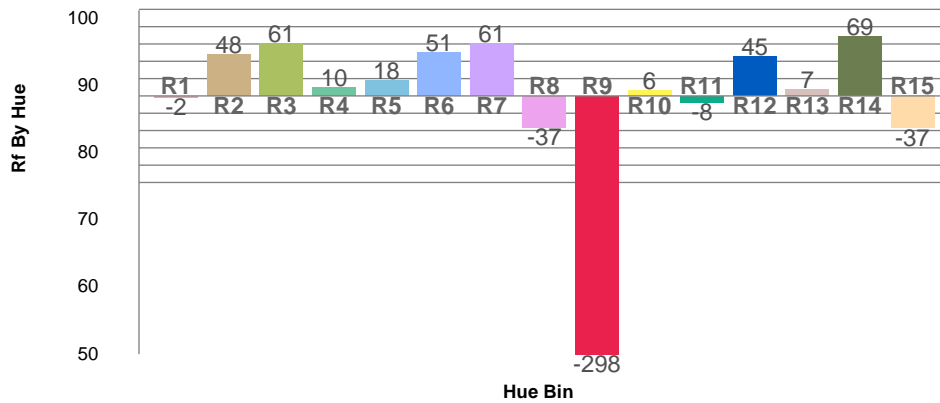
R_f 0.0

GAMUT INDEX

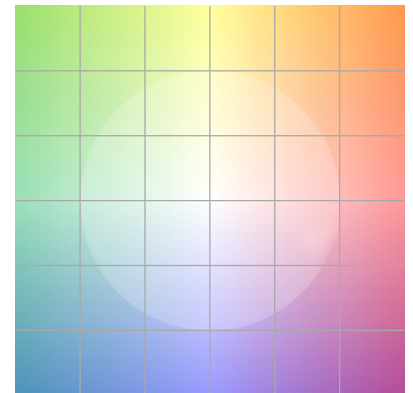
R_g n/a

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

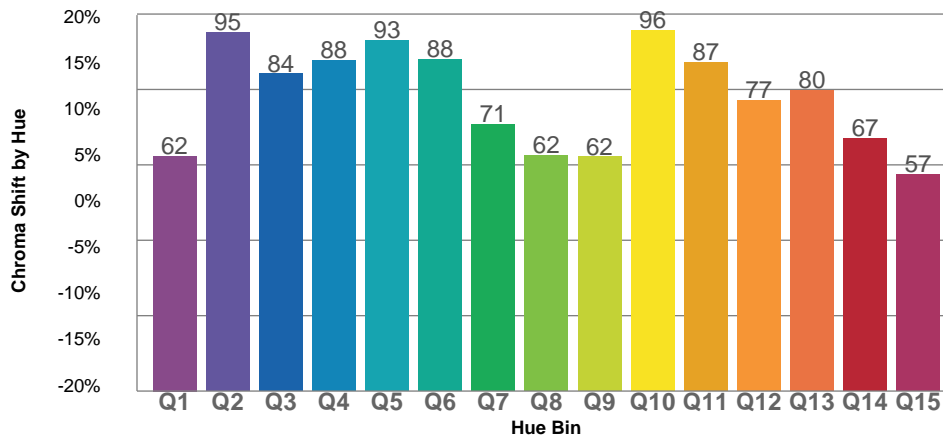
TM30 OVER 50



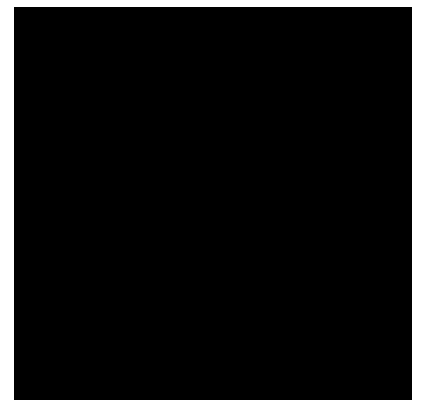
COLOR VECTOR GRAPHICS

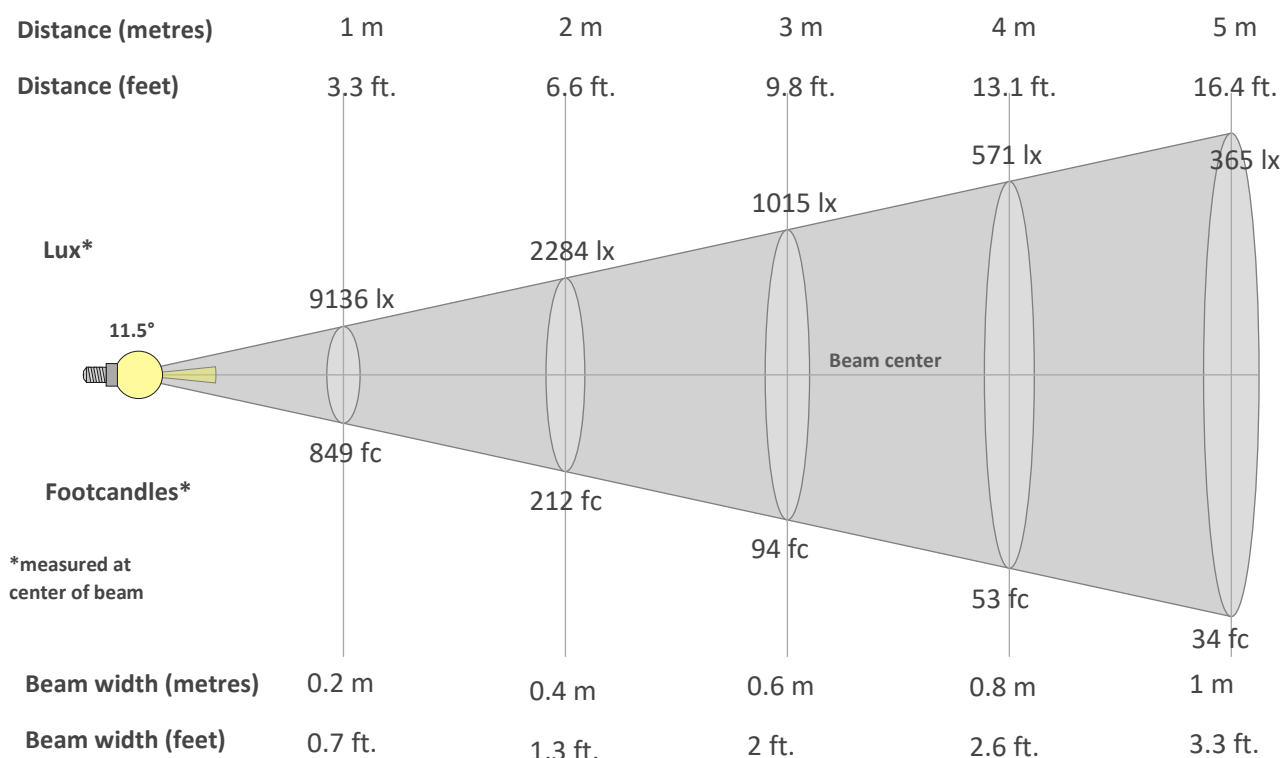


TM30 CHROMA SHIFT



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
9136lx	2284lx	1015lx	571lx	365lx	254lx	186lx	143lx	113lx	91lx	76lx	63lx	54lx	47lx	41lx	36lx	32lx	28lx	25lx	23lx
848.8fc	212.2fc	94.3fc	53fc	34fc	23.6fc	17.3fc	13.3fc	10.5fc	8.5fc	7fc	5.9fc	5fc	4.3fc	3.8fc	3.3fc	2.9fc	2.6fc	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°
9136	8941	8389	7544	6511	5401	4313	3328	2505	1855	1361	1005	761	589	470	386	326	281	248	218
100%	98%	92%	83%	71%	59%	47%	36%	27%	20%	15%	11%	8%	6%	5%	4%	4%	3%	3%	2%

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°
9136	8950	8409	7578	6559	5452	4357	3360	2522	1856	1349	985	739	569	454	375	320	279	245	217
100%	98%	92%	83%	72%	60%	48%	37%	28%	20%	15%	11%	8%	6%	5%	4%	3%	3%	3%	2%

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°
9136	8941	8389	7544	6511	5401	4313	3328	2505	1855	1361	1005	761	589	470	386	326	281	248	218
100%	98%	92%	83%	71%	59%	47%	36%	27%	20%	15%	11%	8%	6%	5%	4%	4%	3%	3%	2%

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°
9136	8950	8409	7578	6559	5452	4357	3360	2522	1856	1349	985	739	569	454	375	320	279	245	217
100%	98%	92%	83%	72%	60%	48%	37%	28%	20%	15%	11%	8%	6%	5%	4%	3%	3%	3%	2%