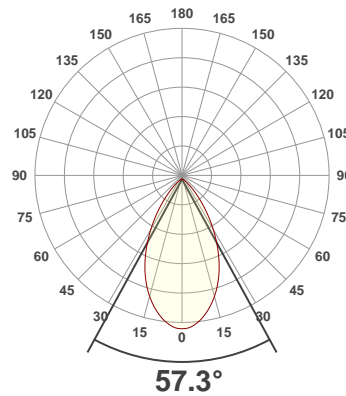
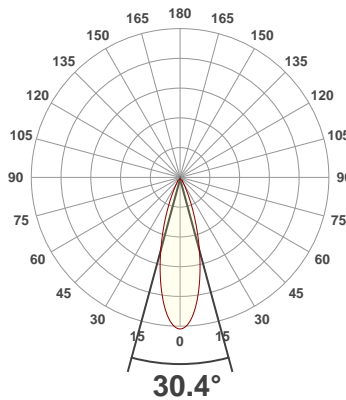




PRODUCT INFORMATION

SERIAL NUMBER:	LL-20190826-545-BMS
DATE OF MEASUREMENT:	2019-08-26
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

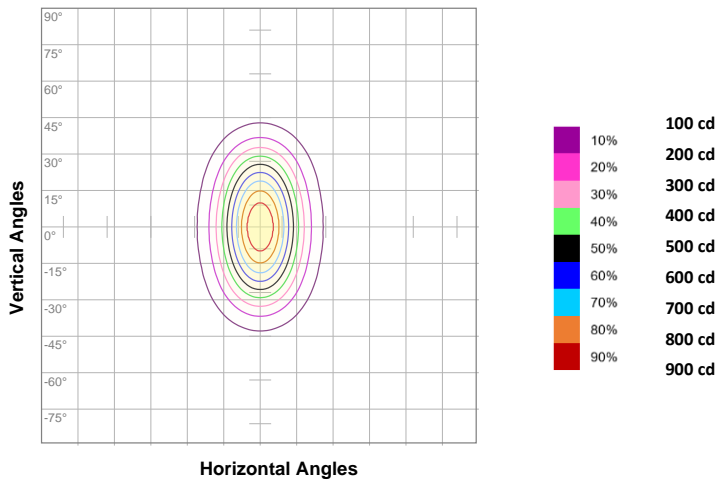


TOTAL LUMEN OUTPUT:	609 lm
EFFICACY:	32 lm/W
PEAK INTENSITY:	1001 cd
COLOR RENDERING INDEX (CRI):	28.6
COLOR TEMPERATURE (CCT):	24156K
FIDELITY INDEX (TM30Rf):	0.0
GAMUT INDEX (TM30Rg):	n/a

BEAM OUTPUT DATA

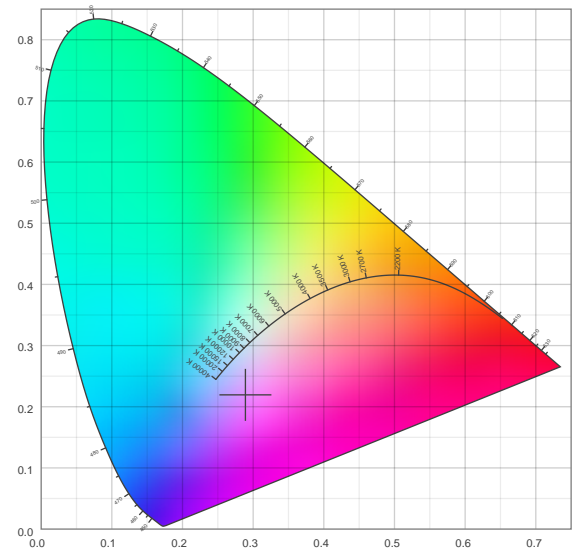
BEAM ANGLE (FWHM) C0/180:	30.4°
BEAM ANGLE (FWHM) C90/270:	57.3°
FIELD ANGLE (10%) C0/180:	57.9°
FIELD ANGLE (10%) C90/270:	95.4°
NUMBER OF PLANES MEASURED:	36

ISOCANDELA DIAGRAM

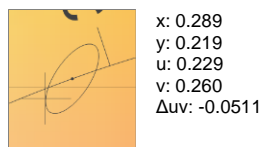
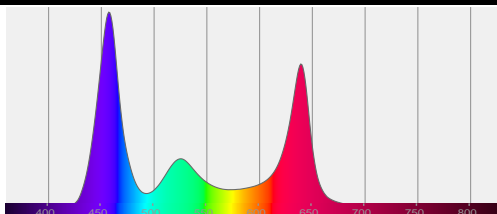


INPUT POWER:	19.2 W
POWER FACTOR:	1.0
OPTICAL POWER:	3.01 mW
PEAK WAVELENGTH:	458 nm
DOMINANT WAVELENGTH:	360 nm

CIE 1931



SPECTRAL DISTRIBUTION | CIE 1931 ZOOM



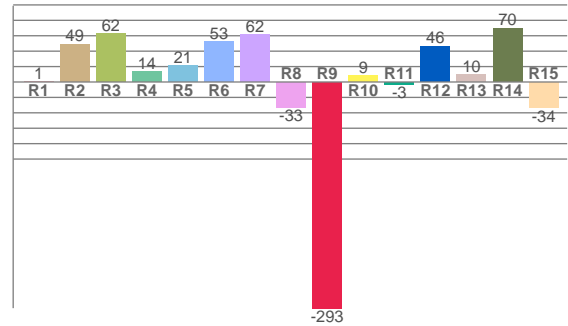
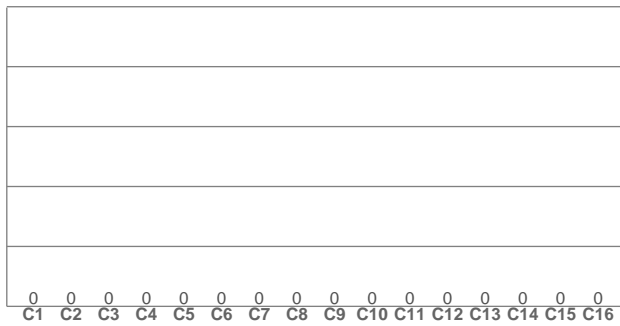
ZONAL LUMEN SUMMARY

0°-10° 78.9 lm	10°-20° 181 lm	20°-30° 158 lm	30°-40° 99.2 lm	40°-50° 46.9 lm	50°-60° 25.1 lm	60°-70° 13.3 lm	70°-80° 5.73 lm	80°-90° 0.719 lm
90°-100° 0.005 lm	100°-110° 0.005 lm	110°-120° 0.050 lm	120°-130° 0.025 lm	130°-140° 0.027 lm	140°-150° 0.000 lm	150°-160° 0.000 lm	160°-170° 0.000 lm	170°-180° 0.034 lm

COLOR DETAILS

TM30: 0.0

CRI: 28.6 (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

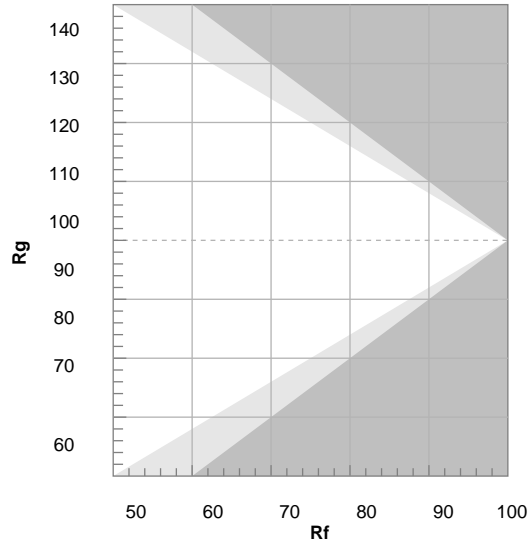
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
0.8	49.3	62.3	13.8	21.4	52.7	61.8	-32.9	-293.5	8.6	-2.9	46.3	9.5	70.0	-33.7

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

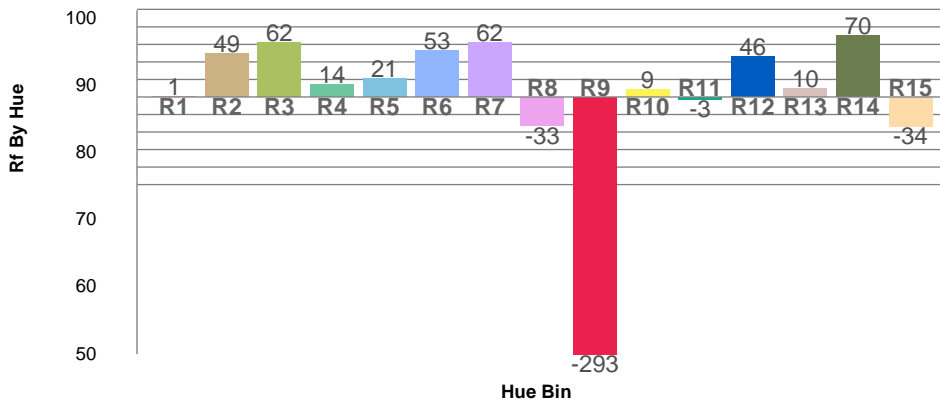
R_f 0.0

GAMUT INDEX

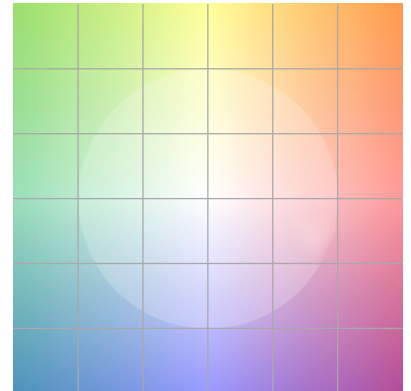
R_g n/a

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

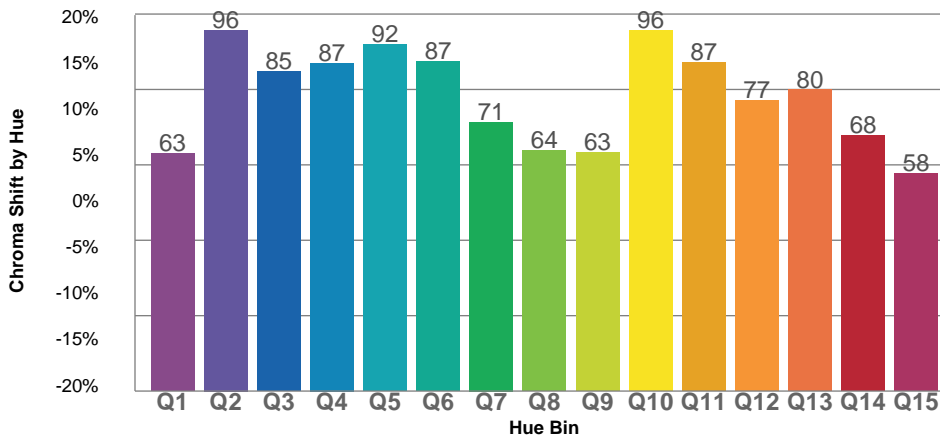
TM30 OVER 50



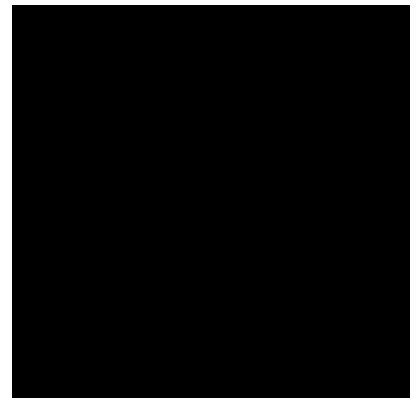
COLOR VECTOR GRAPHICS

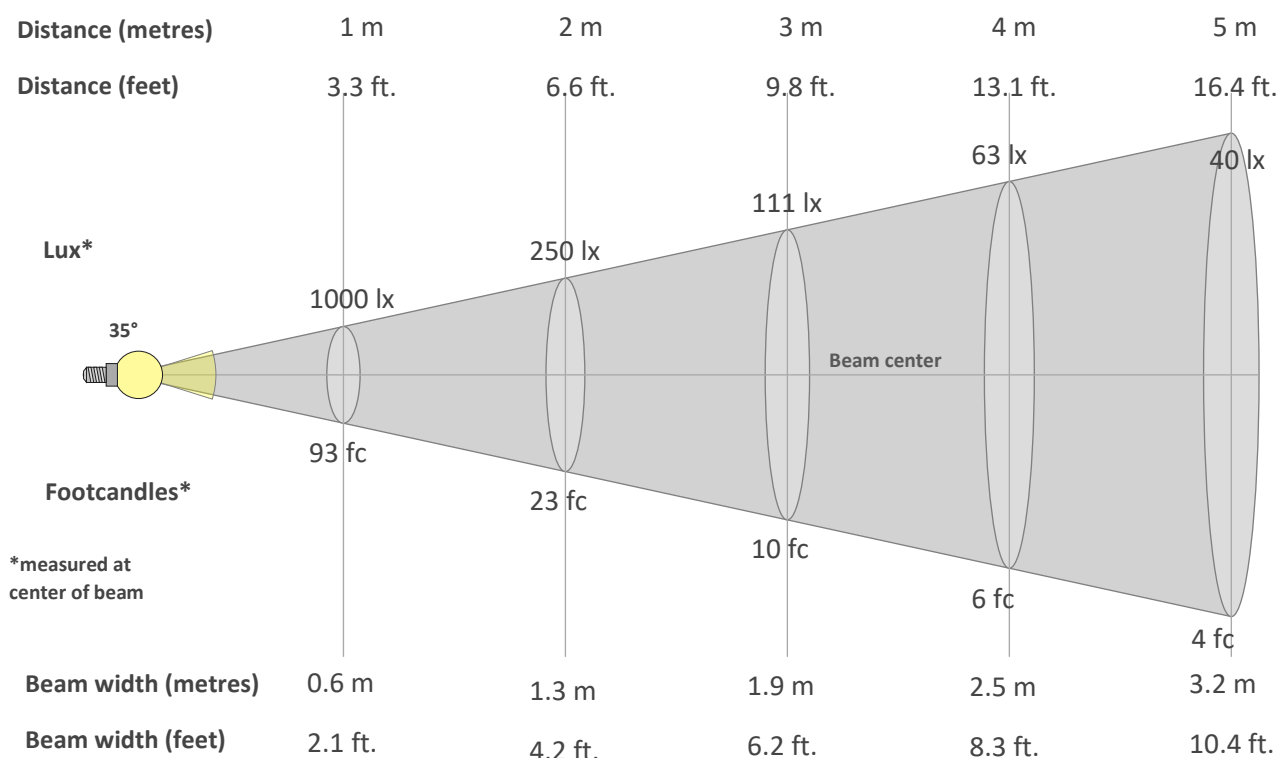


TM30 CHROMA SHIFT



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
1000lx	250lx	111lx	63lx	40lx	28lx	20lx	16lx	12lx	10lx	8lx	7lx	6lx	5lx	4lx	4lx	3lx	3lx	3lx	3lx
92.9fc	23.2fc	10.3fc	5.8fc	3.7fc	2.6fc	1.9fc	1.5fc	1.1fc	0.9fc	0.8fc	0.6fc	0.5fc	0.5fc	0.4fc	0.4fc	0.3fc	0.3fc	0.3fc	0.2fc

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°
1000	989	952	895	821	736	646	554	465	382	306	242	188	145	112	88	71	58	49	41
100%	99%	95%	89%	82%	74%	65%	55%	47%	38%	31%	24%	19%	14%	11%	9%	7%	6%	5%	4%

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°
1000	995	984	965	942	914	882	847	809	767	722	674	623	570	516	462	409	357	308	260
100%	100%	98%	97%	94%	91%	88%	85%	81%	77%	72%	67%	62%	57%	52%	46%	41%	36%	31%	26%

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°
1000	989	952	895	821	736	646	554	465	382	306	242	188	145	112	88	71	58	49	41
100%	99%	95%	89%	82%	74%	65%	55%	47%	38%	31%	24%	19%	14%	11%	9%	7%	6%	5%	4%

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°
1000	995	984	965	942	914	882	847	809	767	722	674	623	570	516	462	409	357	308	260
100%	100%	98%	97%	94%	91%	88%	85%	81%	77%	72%	67%	62%	57%	52%	46%	41%	36%	31%	26%