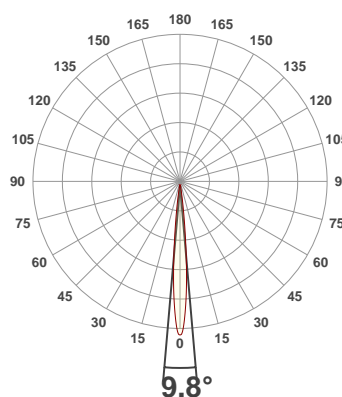
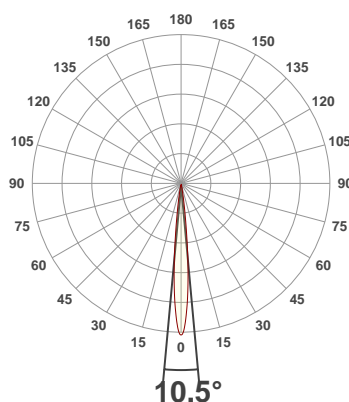




PRODUCT INFORMATION

SERIAL NUMBER:	LL-190625-272-BMS
DATE OF MEASUREMENT:	2019-06-25
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

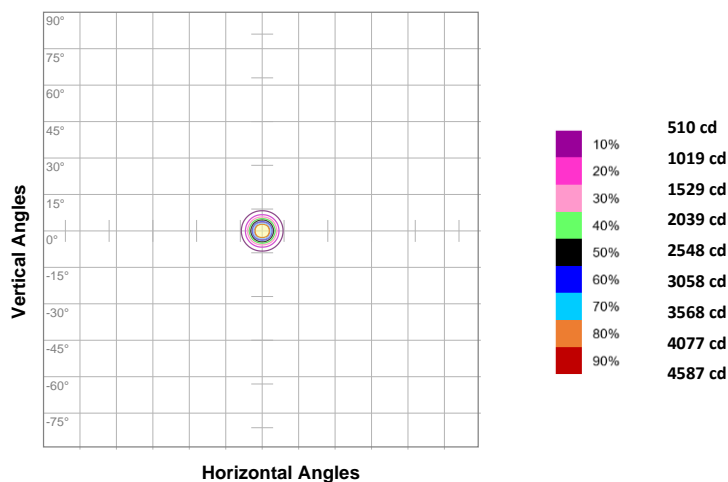


TOTAL LUMEN OUTPUT:	242 lm
EFFICACY:	20 lm/W
PEAK INTENSITY:	5102 cd
COLOR RENDERING INDEX (CRI):	0.0
COLOR TEMPERATURE (CCT):	0K
FIDELITY INDEX (TM30Rf):	0.0
GAMUT INDEX (TM30Rg):	0.0

BEAM OUTPUT DATA

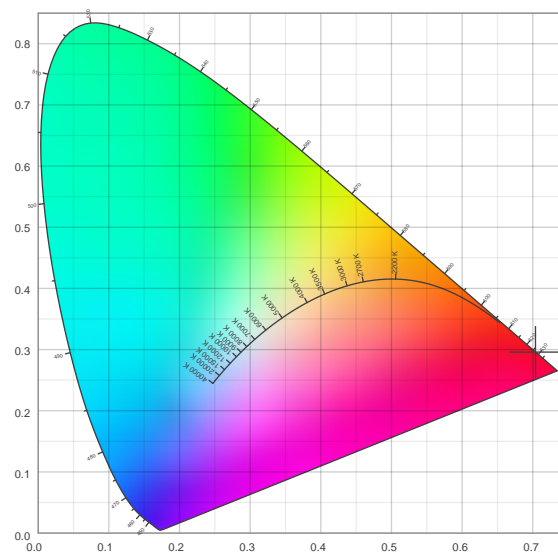
BEAM ANGLE (FWHM) C0/180:	10.5°
BEAM ANGLE (FWHM) C90/270:	9.8°
FIELD ANGLE (10%) C0/180:	19.6°
FIELD ANGLE (10%) C90/270:	18.6°
NUMBER OF PLANES MEASURED:	8

ISOCANDELA DIAGRAM

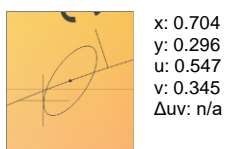
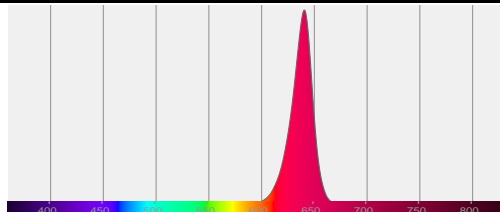


INPUT POWER:	12.2 W
POWER FACTOR:	1.0
OPTICAL POWER:	1.62 mW
PEAK WAVELENGTH:	641 nm
DOMINANT WAVELENGTH:	627 nm

CIE 1931



SPECTRAL DISTRIBUTION | CIE 1931 ZOOM



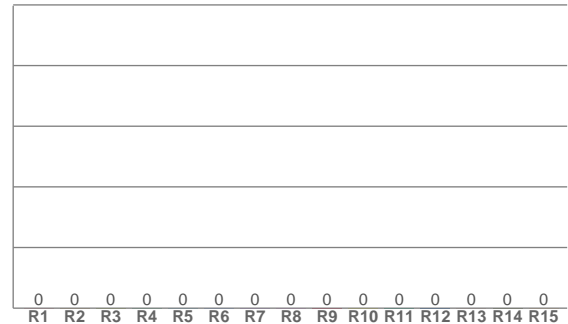
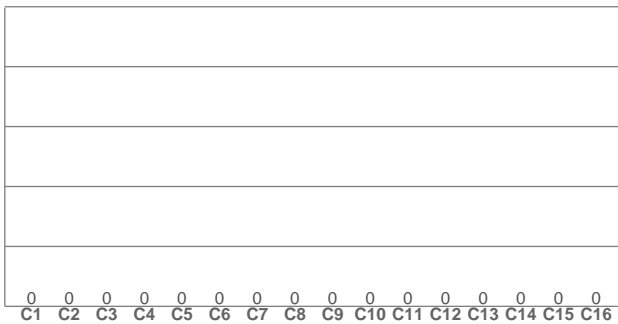
ZONAL LUMEN SUMMARY

0°-10° 170 lm	10°-20° 43.4 lm	20°-30° 17.0 lm	30°-40° 5.26 lm	40°-50° 3.23 lm	50°-60° 2.40 lm	60°-70° 0.553 lm	70°-80° 0.019 lm	80°-90° 0.009 lm
90°-100° 0.007 lm	100°-110° 0.008 lm	110°-120° 0.007 lm	120°-130° 0.008 lm	130°-140° 0.006 lm	140°-150° 0.005 lm	150°-160° 0.004 lm	160°-170° 0.002 lm	170°-180° 0.001 lm

COLOR DETAILS

TM30: 0.0

CRI: 0.0 (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

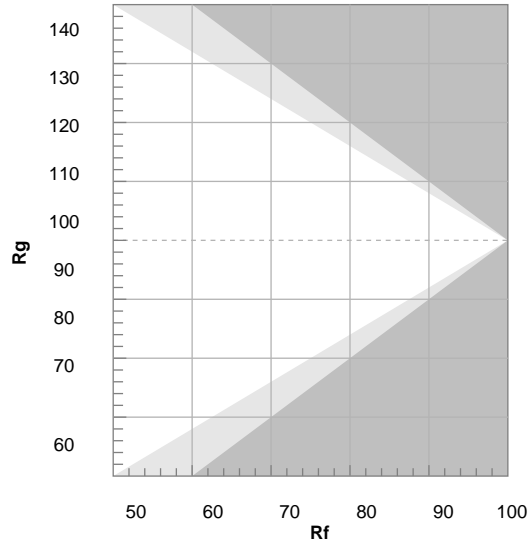
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
0.0	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

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

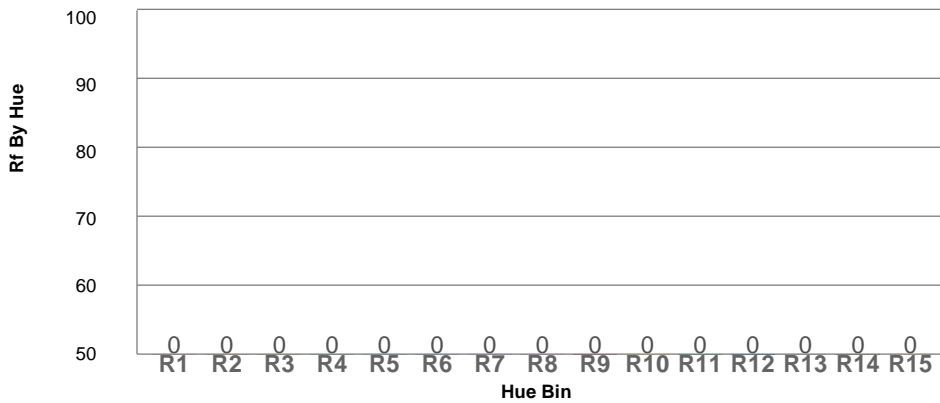
R_f 0.0

GAMUT INDEX

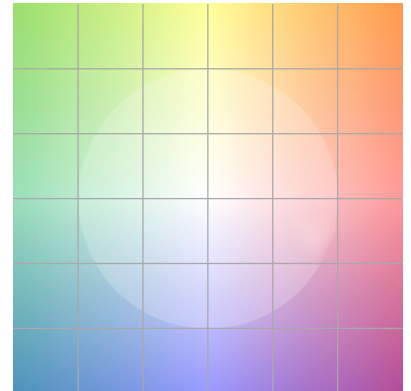
R_g 0.0

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

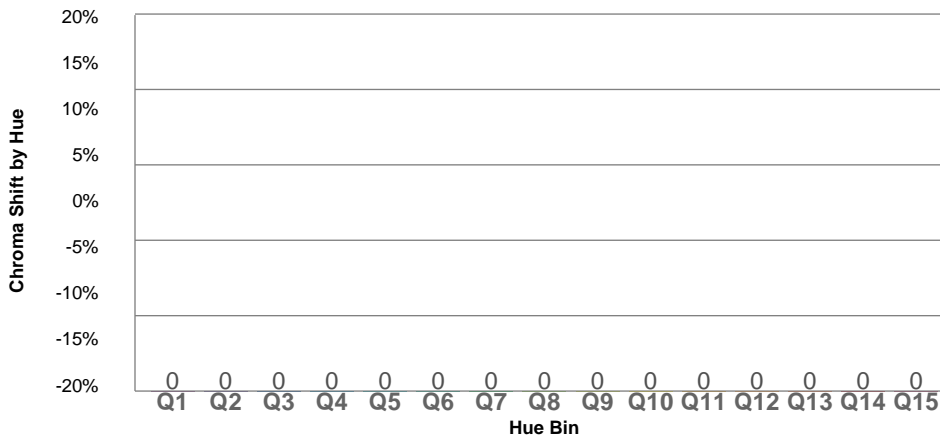
TM30 OVER 50



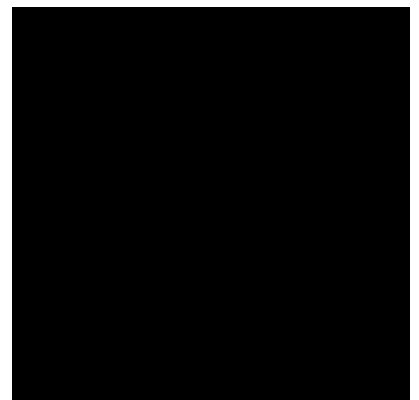
COLOR VECTOR GRAPHICS

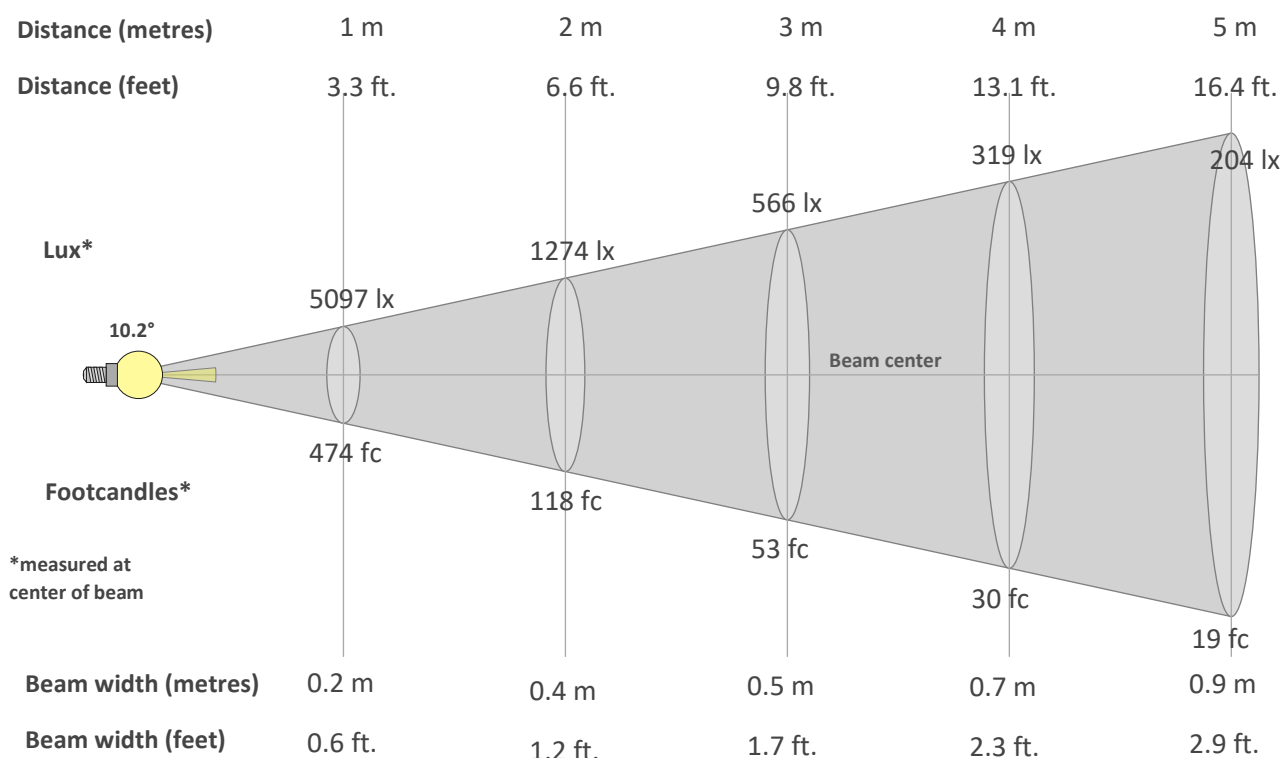


TM30 CHROMA SHIFT



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
5097lx	1274lx	566lx	319lx	204lx	142lx	104lx	80lx	63lx	51lx	42lx	35lx	30lx	26lx	23lx	20lx	18lx	16lx	14lx	13lx
473.5fc	118.4fc	52.6fc	29.6fc	18.9fc	13.2fc	9.7fc	7.4fc	5.8fc	4.7fc	3.9fc	3.3fc	2.8fc	2.4fc	2.1fc	1.8fc	1.6fc	1.5fc	1.3fc	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°
5097	4963	4570	4033	3398	2704	2015	1418	972	673	475	343	253	193	160	140	125	115	104	92
100%	97%	90%	79%	67%	53%	40%	28%	19%	13%	9%	7%	5%	4%	3%	3%	2%	2%	2%	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°
5097	4965	4525	3932	3238	2485	1794	1242	839	569	400	292	218	168	135	114	101	92	87	80
100%	97%	89%	77%	64%	49%	35%	24%	16%	11%	8%	6%	4%	3%	3%	2%	2%	2%	2%	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°
5097	4963	4570	4033	3398	2704	2015	1418	972	673	475	343	253	193	160	140	125	115	104	92
100%	97%	90%	79%	67%	53%	40%	28%	19%	13%	9%	7%	5%	4%	3%	3%	2%	2%	2%	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°
5097	4965	4525	3932	3238	2485	1794	1242	839	569	400	292	218	168	135	114	101	92	87	80
100%	97%	89%	77%	64%	49%	35%	24%	16%	11%	8%	6%	4%	3%	3%	2%	2%	2%	2%	2%