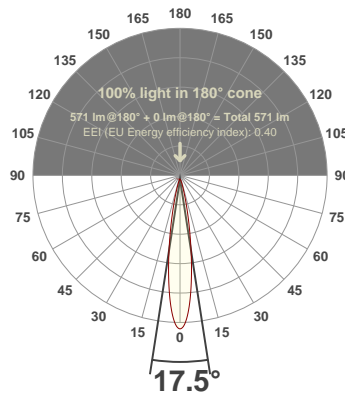
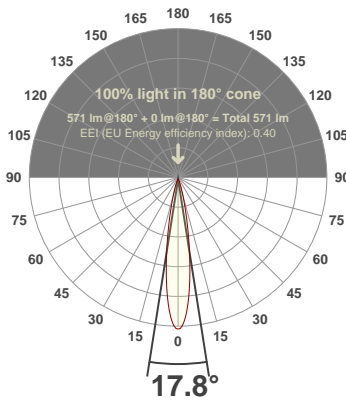




PRODUCT INFORMATION

SERIAL NUMBER:	LL-20190828-565-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

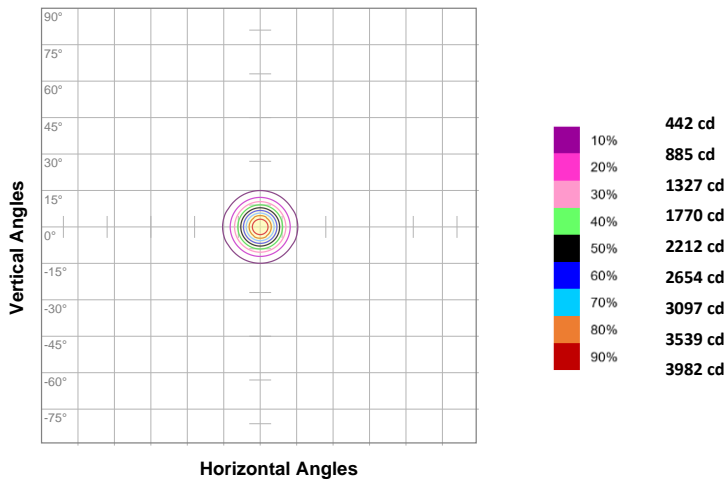


TOTAL LUMEN OUTPUT:	571 lm
EFFICACY:	30 lm/W
PEAK INTENSITY:	4428 cd
COLOR RENDERING INDEX (CRI):	28.1
COLOR TEMPERATURE (CCT):	23729K
FIDELITY INDEX (TM30Rf):	0.0
GAMUT INDEX (TM30Rg):	n/a

BEAM OUTPUT DATA

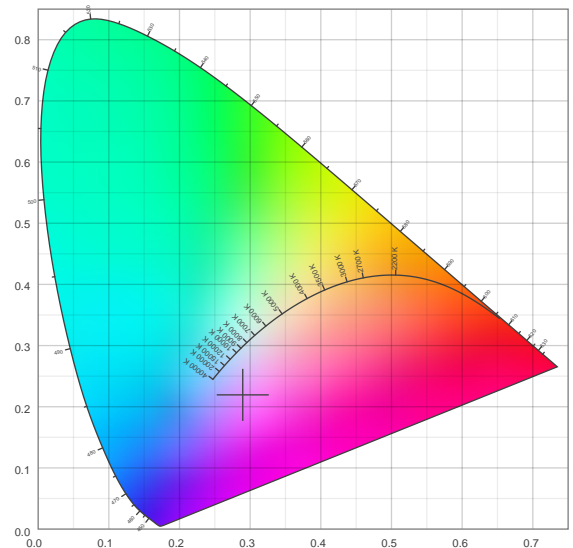
BEAM ANGLE (FWHM) C0/180:	17.8°
BEAM ANGLE (FWHM) C90/270:	17.5°
FIELD ANGLE (10%) C0/180:	34.5°
FIELD ANGLE (10%) C90/270:	33.6°
NUMBER OF PLANES MEASURED:	12

ISOCANDELA DIAGRAM

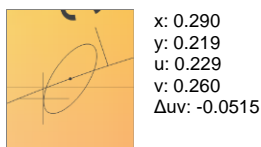
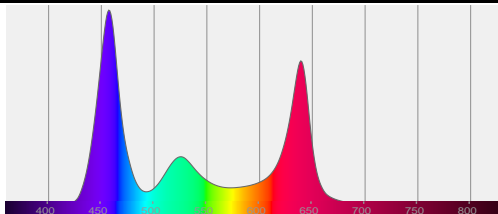


INPUT POWER:	19.2 W
POWER FACTOR:	1.0
OPTICAL POWER:	2.82 mW
PEAK WAVELENGTH:	458 nm
DOMINANT WAVELENGTH:	360 nm

CIE 1931

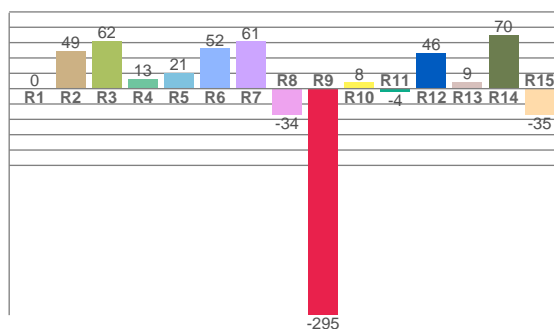
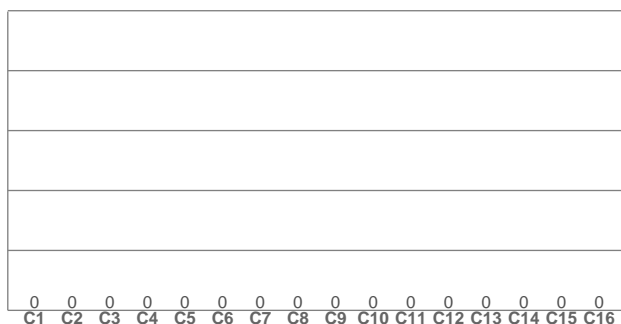


SPECTRAL DISTRIBUTION | CIE 1931 ZOOM



ZONAL LUMEN SUMMARY

0°-10° 280 lm	10°-20° 200 lm	20°-30° 57.9 lm	30°-40° 20.4 lm	40°-50° 7.88 lm	50°-60° 3.52 lm	60°-70° 1.35 lm	70°-80° 0.314 lm	80°-90° 0.040 lm
90°-100° 0.000 lm	100°-110° 0.000 lm	110°-120° 0.000 lm	120°-130° 0.000 lm	130°-140° 0.000 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: 28.1 (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

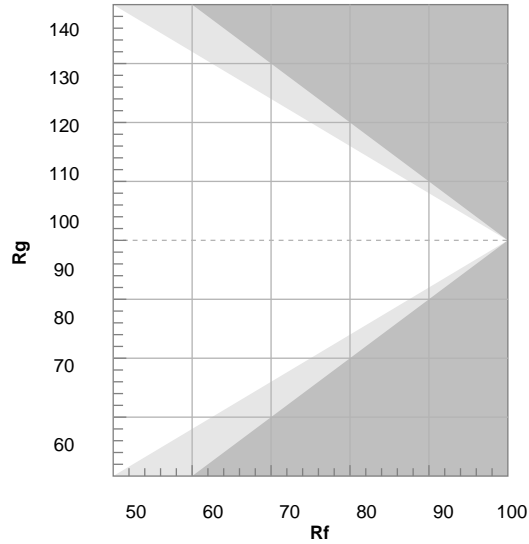
C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
0.1	49.0	61.9	13.0	20.7	52.3	61.5	-33.9	-295.2	8.2	-3.9	46.1	8.9	69.8	-34.5

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

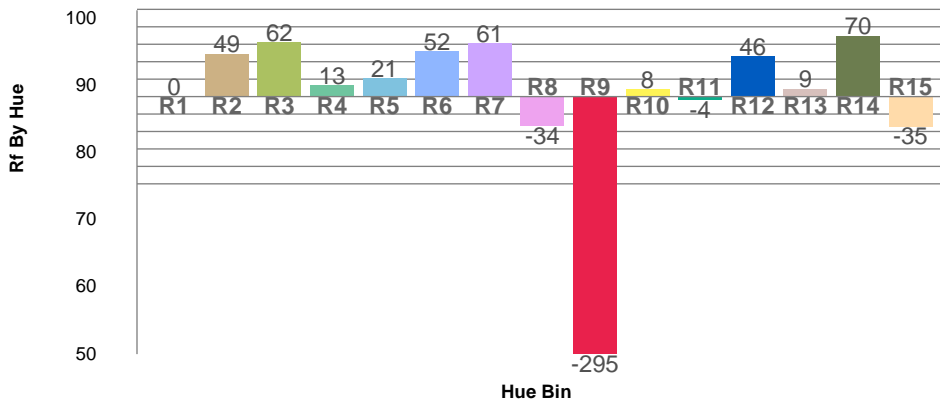
R_f 0.0

GAMUT INDEX

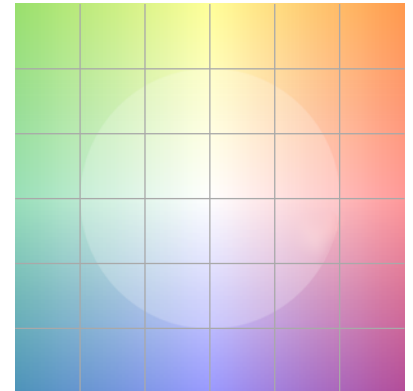
R_g n/a

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

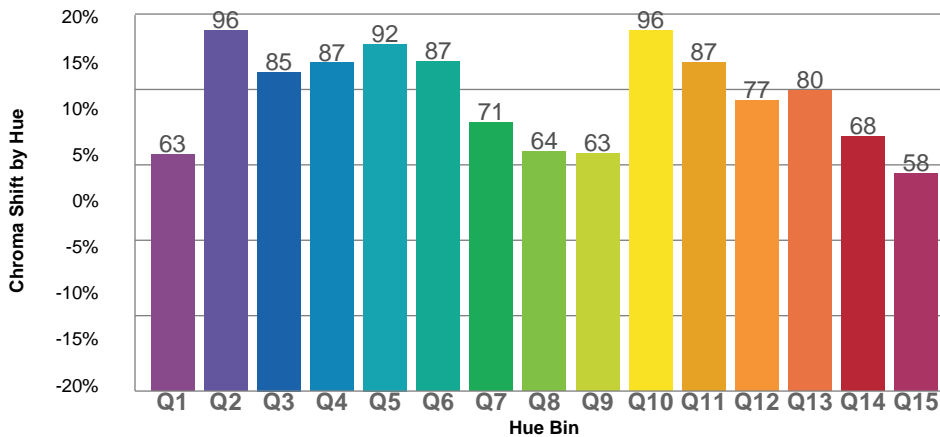
TM30 OVER 50



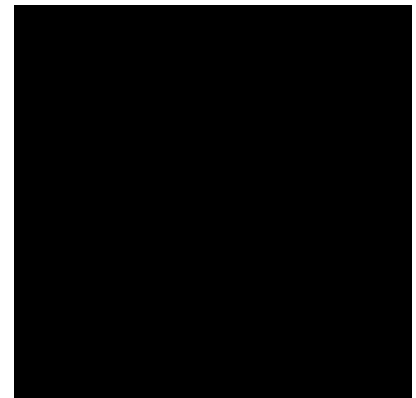
COLOR VECTOR GRAPHICS

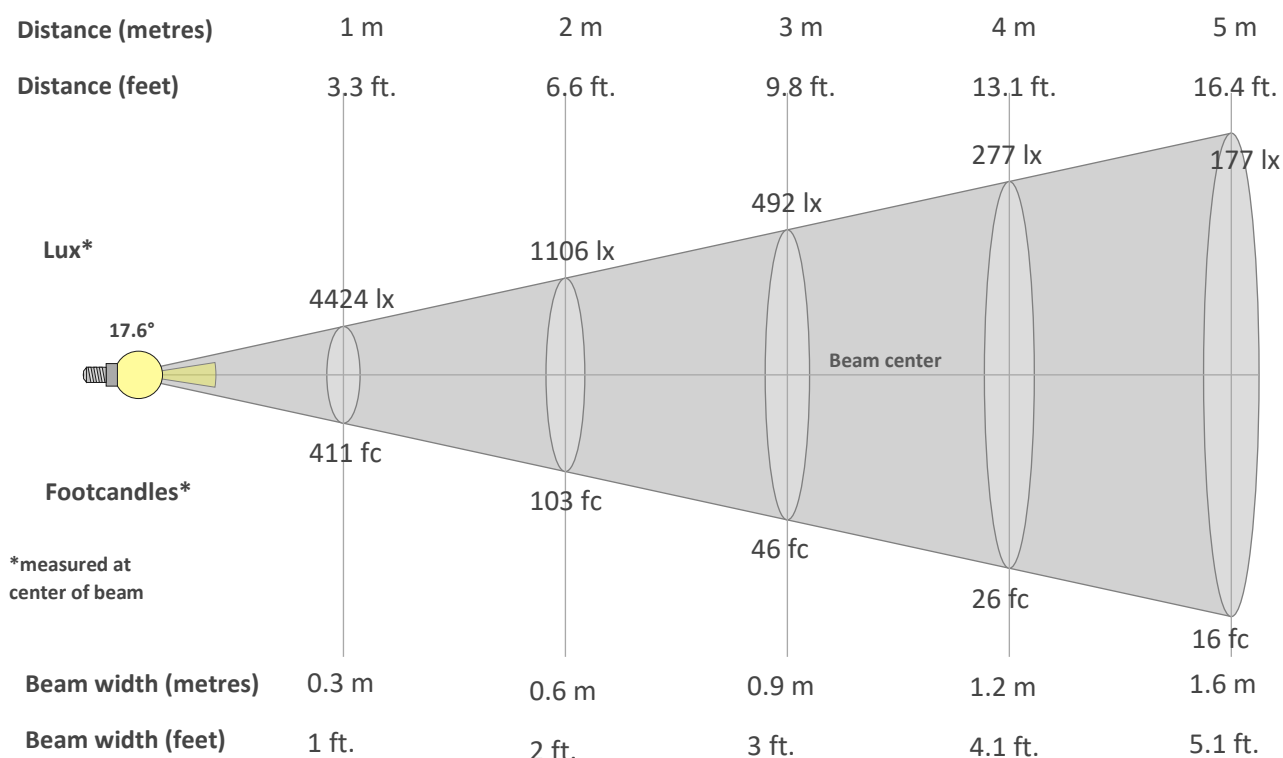


TM30 CHROMA SHIFT



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
4424lx	1106lx	492lx	277lx	177lx	123lx	90lx	69lx	55lx	44lx	37lx	31lx	26lx	23lx	20lx	17lx	15lx	14lx	12lx	11lx
411fc	102.8fc	45.7fc	25.7fc	16.4fc	11.4fc	8.4fc	6.4fc	5.1fc	4.1fc	3.4fc	2.9fc	2.4fc	2.1fc	1.8fc	1.6fc	1.4fc	1.3fc	1.1fc	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°
4424	4384	4274	4088	3846	3554	3225	2878	2524	2177	1847	1549	1281	1052	857	696	568	464	384	320
100%	99%	97%	92%	87%	80%	73%	65%	57%	49%	42%	35%	29%	24%	19%	16%	13%	10%	9%	7%

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°
4424	4387	4266	4080	3829	3531	3197	2840	2483	2134	1803	1498	1232	1000	807	650	522	425	348	289
100%	99%	96%	92%	87%	80%	72%	64%	56%	48%	41%	34%	28%	23%	18%	15%	12%	10%	8%	7%

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°
4424	4384	4274	4088	3846	3554	3225	2878	2524	2177	1847	1549	1281	1052	857	696	568	464	384	320
100%	99%	97%	92%	87%	80%	73%	65%	57%	49%	42%	35%	29%	24%	19%	16%	13%	10%	9%	7%

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°
4424	4387	4266	4080	3829	3531	3197	2840	2483	2134	1803	1498	1232	1000	807	650	522	425	348	289
100%	99%	96%	92%	87%	80%	72%	64%	56%	48%	41%	34%	28%	23%	18%	15%	12%	10%	8%	7%