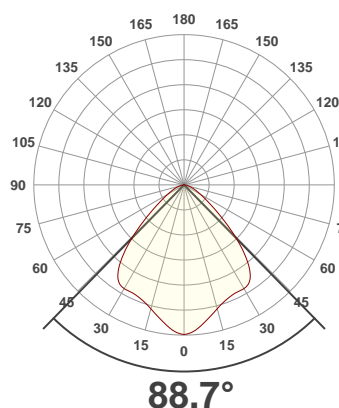
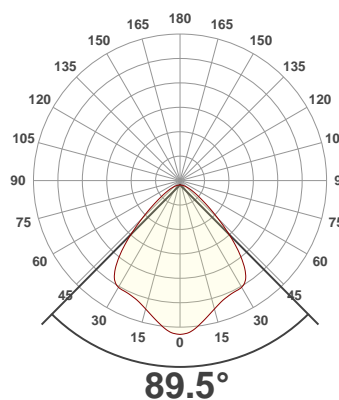



PRODUCT INFORMATION

SERIAL NUMBER: LL-20190724-393-BMS

DATE OF MEASUREMENT: 2019-07-24

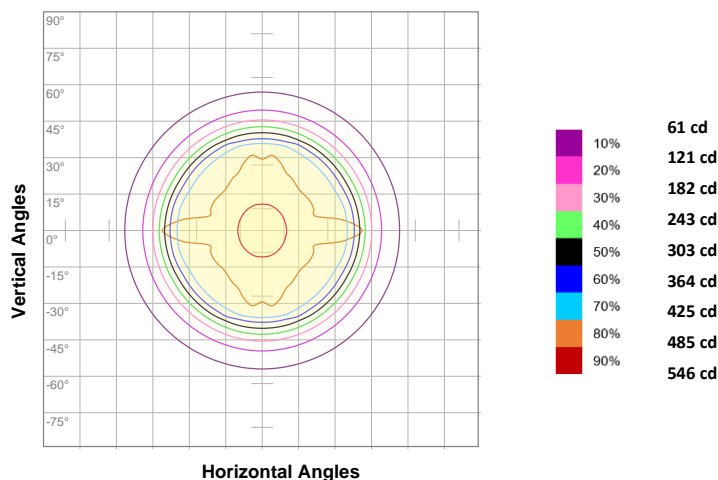
SIZE (mm): (L x W x H) 298 x 71 x 59.5

ANGULAR DISTRIBUTION AT C0/180

ANGULAR DISTRIBUTION AT C90/270

LIGHT OUTPUT DATA

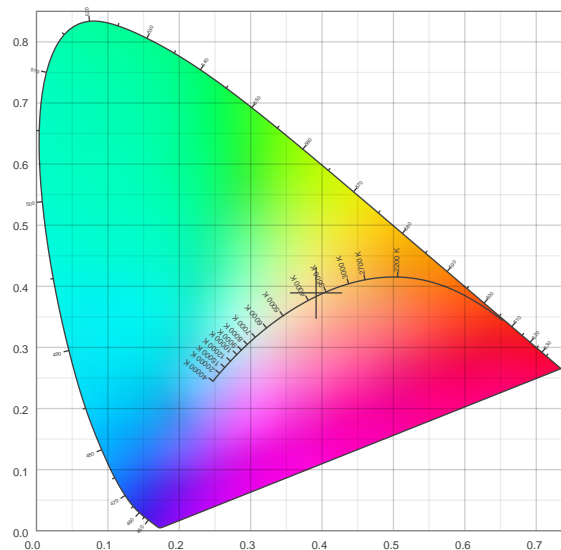
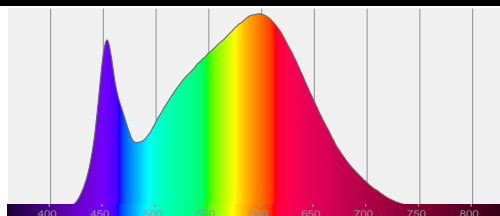
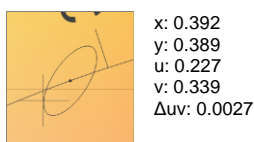
TOTAL LUMEN OUTPUT: 1128 lm
 EFFICACY: 75 lm/W
 PEAK INTENSITY: 608 cd
 COLOR RENDERING INDEX (CRI): 83.8
 COLOR TEMPERATURE (CCT): 3809K
 FIDELITY INDEX (TM30Rf): 84.6
 GAMUT INDEX (TM30Rg): 93.6

BEAM OUTPUT DATA

BEAM ANGLE (FWHM) | C0/180: 88.7°
 BEAM ANGLE (FWHM) | C90/270: 89.5°
 FIELD ANGLE (10%) | C0/180: 126.1°
 FIELD ANGLE (10%) | C90/270: 127.3°
 NUMBER OF PLANES MEASURED: 12

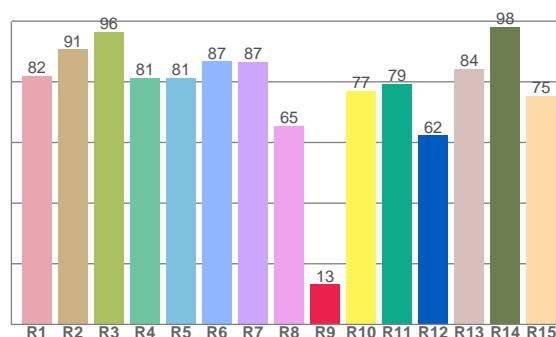
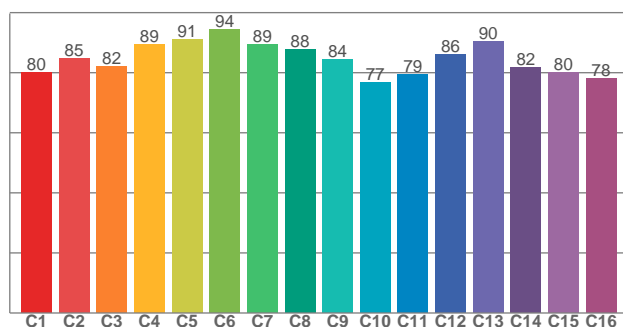
ISO CANDELA DIAGRAM

DATA

INPUT POWER: 15.1 W
 POWER FACTOR: 1.0
 OPTICAL POWER: 3.41 mW
 PEAK WAVELENGTH: 598 nm
 DOMINANT WAVELENGTH: 580 nm

CIE 1931:

SPECTRA

CIE 1931 ZOOM


ZONAL LUMEN SUMMARY

0°-10° 53.2 lm	10°-20° 147 lm	20°-30° 225 lm	30°-40° 285 lm	40°-50° 224 lm	50°-60° 111 lm	60°-70° 54.7 lm	70°-80° 24.0 lm	80°-90° 3.89 lm
90°-100° 0.070 lm	100°-110° 0.050 lm	110°-120° 0.030 lm	120°-130° 0.027 lm	130°-140° 0.018 lm	140°-150° 0.010 lm	150°-160° 0.008 lm	160°-170° 0.005 lm	170°-180° 0.024 lm

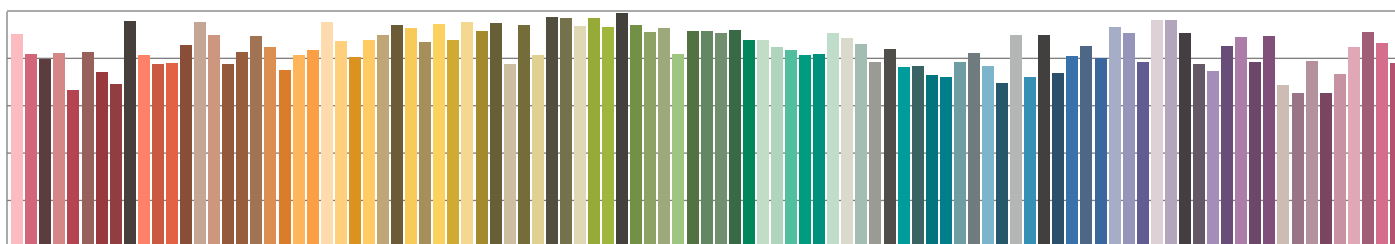
COLOR DETAILS
TM30: 84.6
CRI: 83.8 (R1-R8)


TM30 C values, 16 binned values out of total of 99 C values

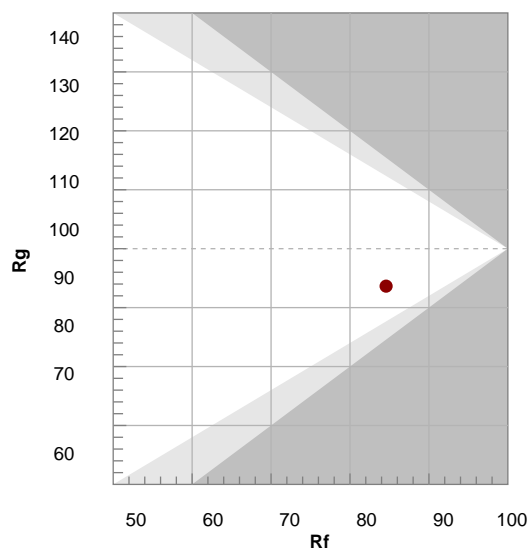
CRI R values, only R1-R8 are used to calculate final CRI value

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
80.2	84.6	81.9	89.2	91.0	94.3	89.5	87.8	84.3	76.7	79.3	85.9	90.3	81.8	80.1	78.1

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
81.9	90.7	96.4	81.2	81.3	86.7	86.5	65.4	13.2	77.0	79.4	62.3	84.3	98.1	75.2

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	88	-7%	2%
9	84	-6%	9%
10	77	-5%	14%
11	79	3%	14%
12	86	6%	4%
13	90	3%	-5%
14	82	5%	-14%
15	80	-3%	-13%
16	78	-7%	-11%

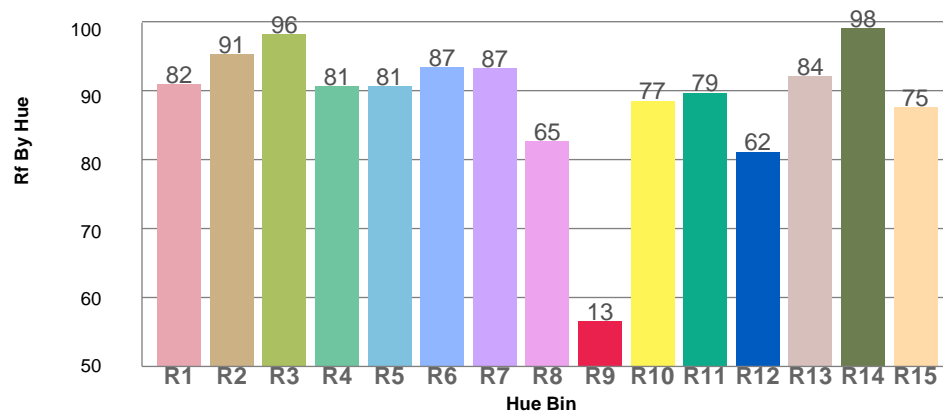


FIDELITY INDEX
 R_f 84.6

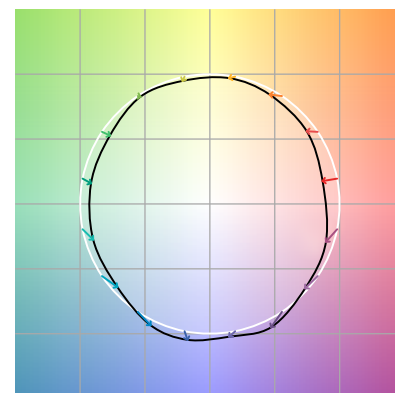
GAMUT INDEX
 R_g 93.6

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

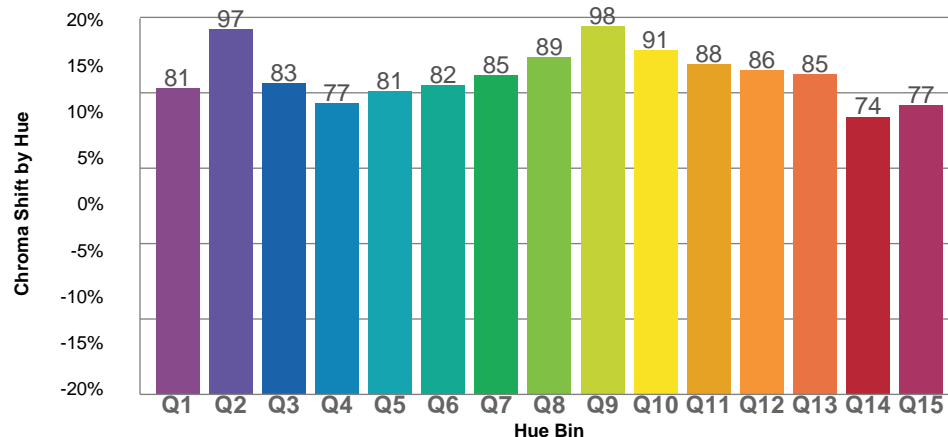
TM30 OVER 50



COLOR VECTOR GRAPHICS

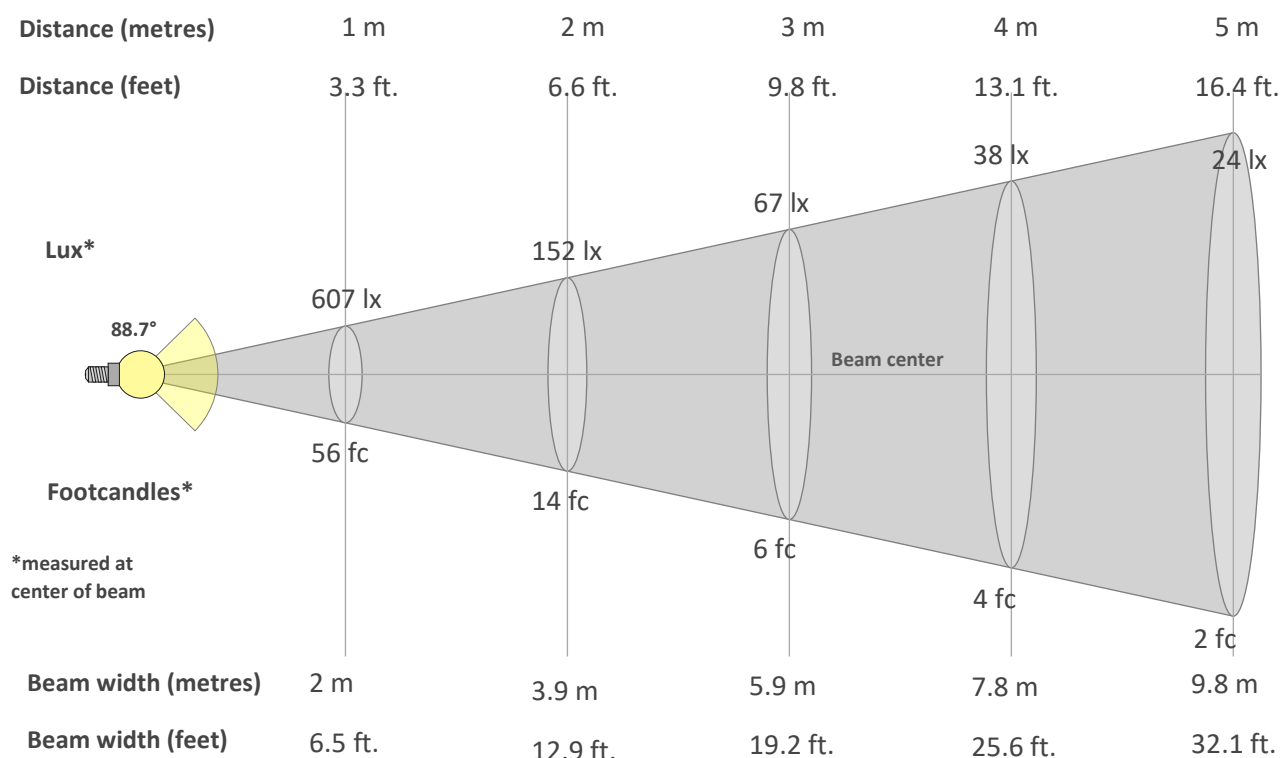


TM30 CHROMA SHIFT



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
607lx	152lx	67lx	38lx	24lx	17lx	12lx	9lx	7lx	6lx	5lx	4lx	4lx	3lx	3lx	2lx	2lx	2lx	2lx	2lx
56.4fc	14.1fc	6.3fc	3.5fc	2.3fc	1.6fc	1.2fc	0.9fc	0.7fc	0.6fc	0.5fc	0.4fc	0.3fc	0.3fc	0.3fc	0.2fc	0.2fc	0.2fc	0.2fc	0.1fc

Intensity in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
607	589	554	522	499	488	486	466	396	289	186	118	77	53	35	22	11	2	0	0
100%	97%	91%	86%	82%	80%	80%	77%	65%	48%	31%	19%	13%	9%	6%	4%	2%	0%	0%	0%

Intensity in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
607	592	560	528	504	492	489	472	404	297	195	124	81	55	36	22	11	2	0	0
100%	98%	92%	87%	83%	81%	81%	78%	67%	49%	32%	20%	13%	9%	6%	4%	2%	0%	0%	0%

Intensity in 180° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
607	589	554	522	499	488	486	466	396	289	186	118	77	53	35	22	11	2	0	0
100%	97%	91%	86%	82%	80%	80%	77%	65%	48%	31%	19%	13%	9%	6%	4%	2%	0%	0%	0%

Intensity in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°
607	592	560	528	504	492	489	472	404	297	195	124	81	55	36	22	11	2	0	0
100%	98%	92%	87%	83%	81%	81%	78%	67%	49%	32%	20%	13%	9%	6%	4%	2%	0%	0%	0%