



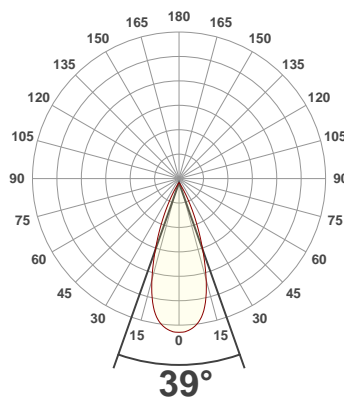
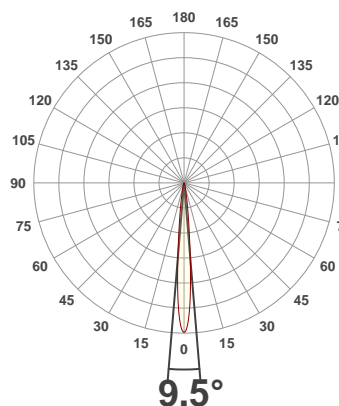
PRODUCT INFORMATION

SERIAL NUMBER:	LL-200305-0360
DATE OF MEASUREMENT:	2020-03-05
SIZE (dia. x h):	310 mm x 85 mm

ANGULAR DISTRIBUTION AT C0/180

ANGULAR DISTRIBUTION AT C90/270

LIGHT OUTPUT DATA

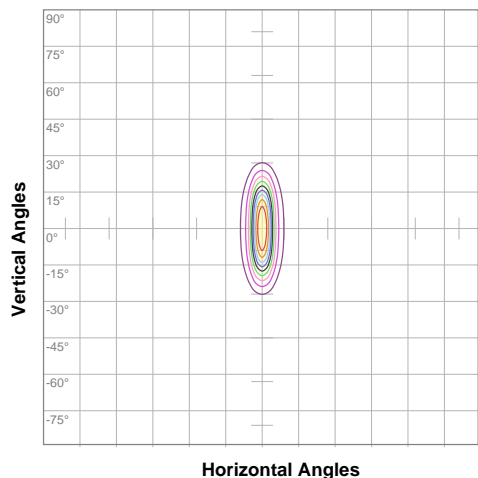


TOTAL LUMEN OUTPUT:	9966 lm
EFFICACY:	103 lm/W
PEAK INTENSITY:	69496 cd
COLOR RENDERING INDEX (CRI):	81.1
COLOR TEMPERATURE (CCT):	3787K
FIDELITY INDEX (TM30Rf):	82.3
GAMUT INDEX (TM30Rg):	98.0

BEAM OUTPUT DATA

BEAM ANGLE (FWHM) C0/180:	9.5°
BEAM ANGLE (FWHM) C90/270:	39°
FIELD ANGLE (10%) C0/180:	19.9°
FIELD ANGLE (10%) C90/270:	60.2°
NUMBER OF PLANES MEASURED:	24

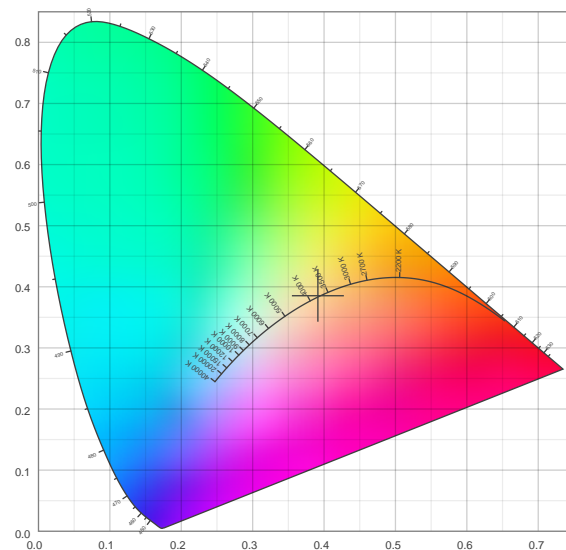
ISO CANDELA DIAGRAM DATA



10%	6940 cd
20%	13880 cd
30%	20819 cd
40%	27759 cd
50%	34699 cd
60%	41639 cd
70%	48578 cd
80%	55518 cd
90%	62458 cd

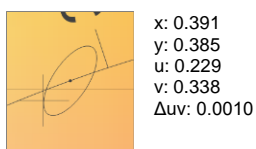
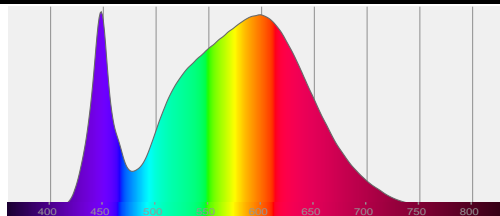
INPUT POWER:	96.9 W
POWER FACTOR:	1.0
OPTICAL POWER:	30.0 mW
PEAK WAVELENGTH:	448 nm
DOMINANT WAVELENGTH:	581 nm

CIE 1931:



SPECTRA

CIE 1931 ZOOM



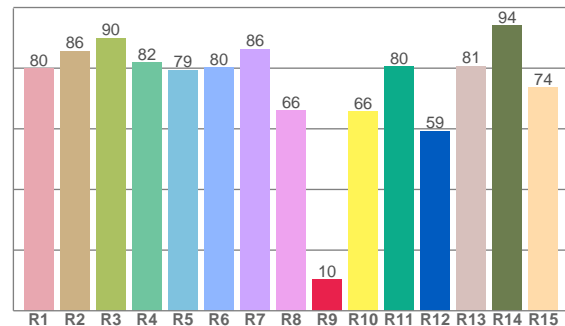
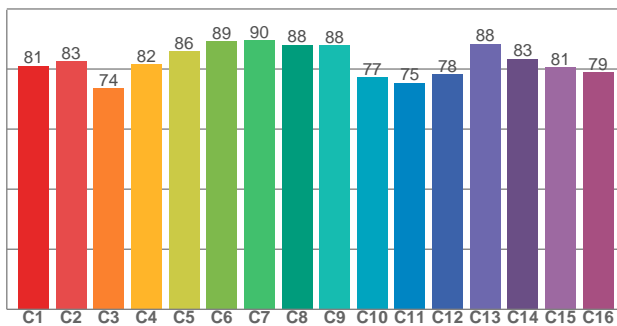
ZONAL LUMEN SUMMARY

0°-10° 3719 lm	10°-20° 3752 lm	20°-30° 1615 lm	30°-40° 449 lm	40°-50° 195 lm	50°-60° 125 lm	60°-70° 79.8 lm	70°-80° 28.1 lm	80°-90° 1.27 lm
90°-100° 0.007 lm	100°-110° 0.007 lm	110°-120° 0.013 lm	120°-130° 0.002 lm	130°-140° 0.003 lm	140°-150° 0.001 lm	150°-160° 0.001 lm	160°-170° 0.000 lm	170°-180° 0.006 lm

COLOR DETAILS

TM30: 82.3

CRI: 81.1 (R1-R8)



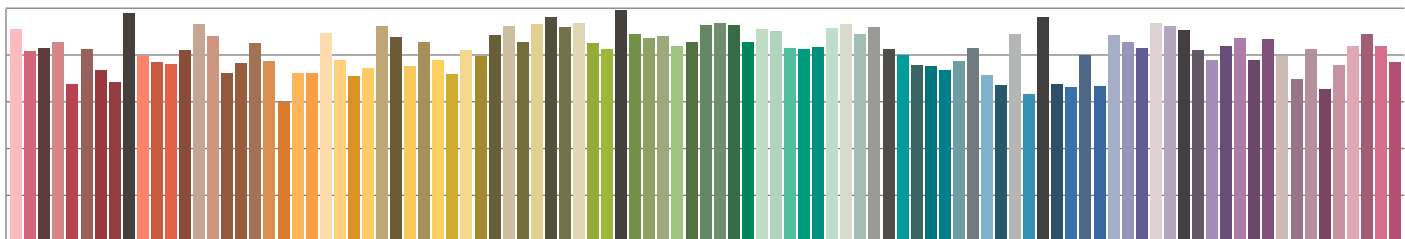
TM30 C values, 16 binned values out of total of 99 C values

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
81.0	82.6	73.5	81.5	85.8	89.2	89.6	88.0	88.0	77.2	75.4	78.3	88.4	83.4	80.6	78.9

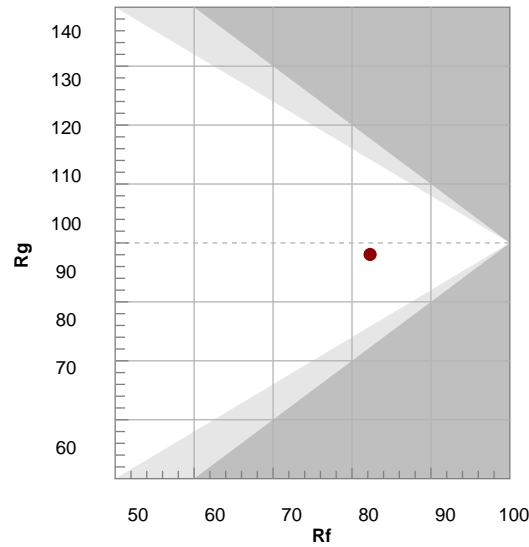
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
79.9	85.6	90.0	81.9	79.3	80.2	86.2	66.0	10.2	65.6	80.5	59.3	80.7	94.1	73.7

TM30 COLOR EVALUATION SAMPLE



TM30 DETAILS

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	81	-11%	-2%
2	83	-8%	6%
3	74	-4%	14%
4	82	3%	12%
5	86	7%	7%
6	89	7%	-2%
7	90	0%	-7%
8	88	-5%	-5%
9	88	-8%	0%
10	77	-10%	9%
11	75	-1%	17%
12	78	6%	10%
13	88	7%	1%
14	83	10%	-9%
15	81	2%	-14%
16	79	-4%	-13%



FIDELITY INDEX

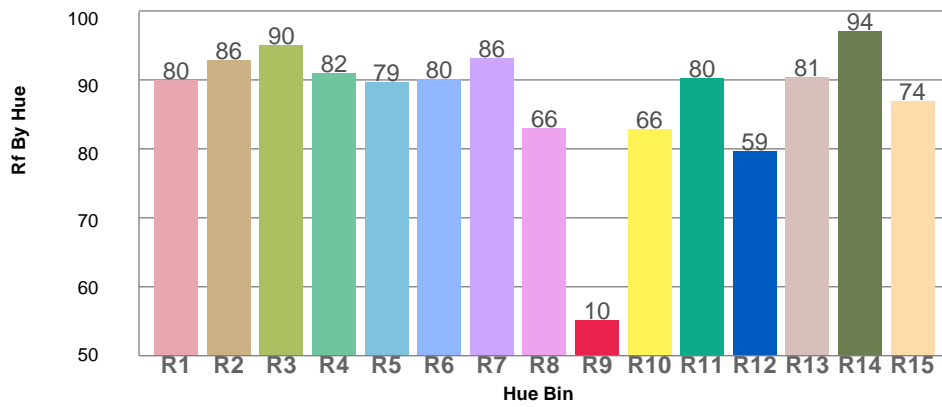
R_f 82.3

GAMUT INDEX

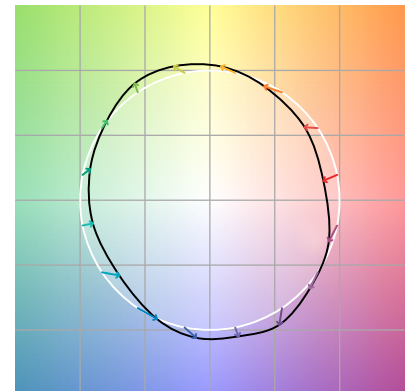
R_g 98.0

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

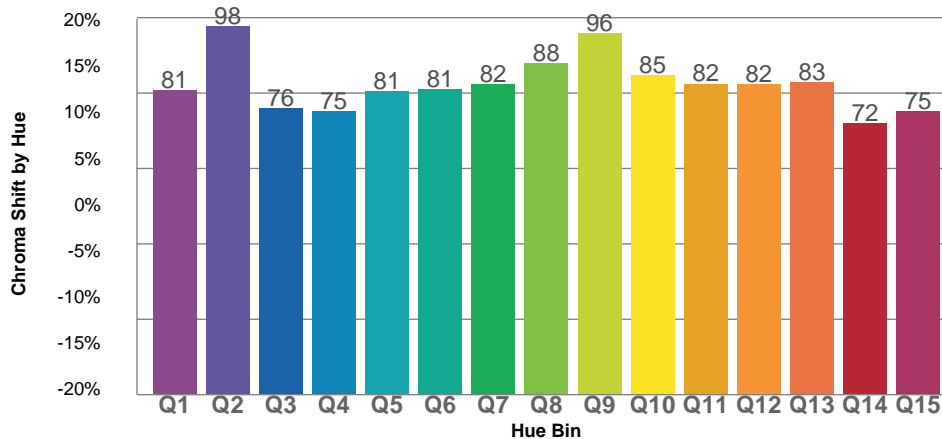
TM30 OVER 50



COLOR VECTOR GRAPHICS



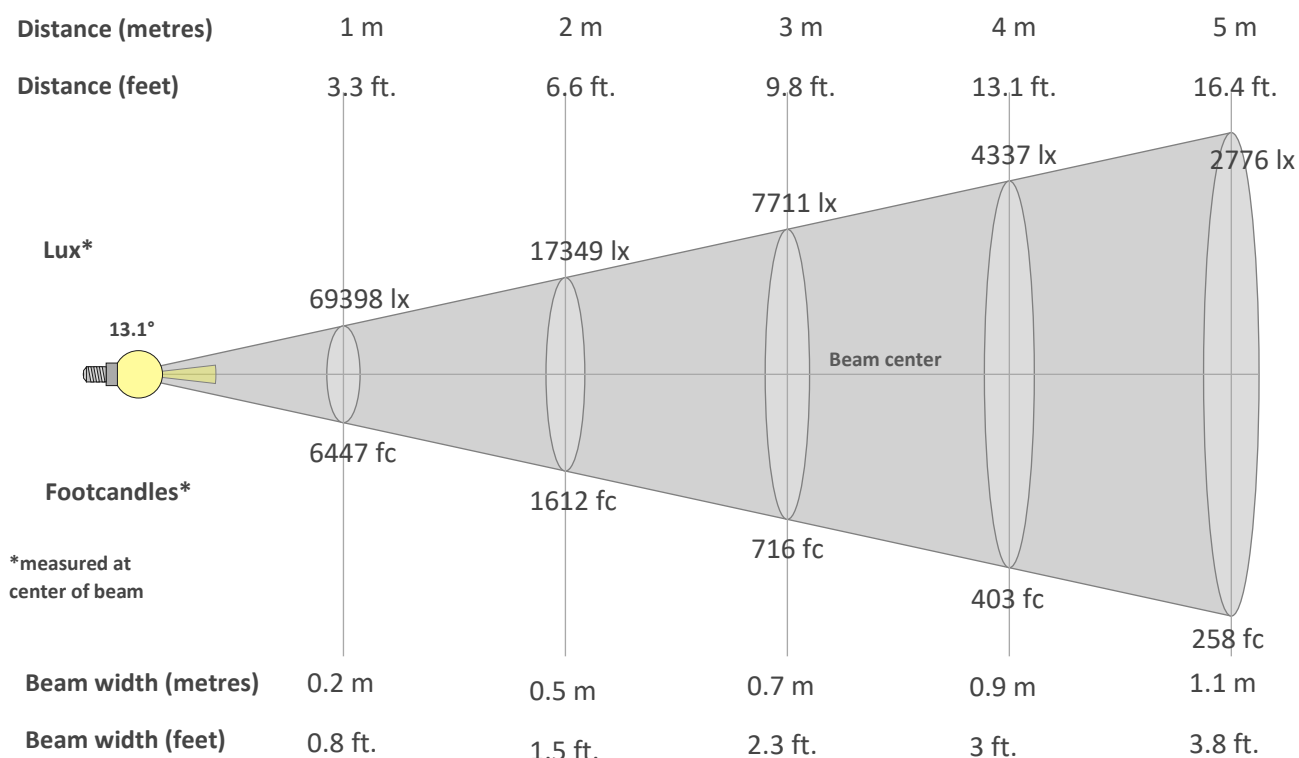
TM30 CHROMA SHIFT



COLOR DISTORTION GRAPHICS



BEAM DETAILS



*measured at center of beam

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
69398lx	17349lx	7711lx	4337lx	2776lx	1928lx	1416lx	1084lx	857lx	694lx	574lx	482lx	411lx	354lx	308lx	271lx	240lx	214lx	192lx	173lx
6447.3fc	1611.8fc	716.4fc	403fc	257.9fc	179.1fc	131.6fc	100.7fc	79.6fc	64.5fc	53.3fc	44.8fc	38.1fc	32.9fc	28.7fc	25.2fc	22.3fc	19.9fc	17.9fc	16.1fc

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°
69.4K	67.6K	62.4K	53.9K	42.9K	31.9K	23.1K	16.8K	12.3K	9.1K	6.8K	5.1K	3.8K	2.9K	2.3K	1.9K	1.5K	1.3K	1.2K	1.0K
100%	97%	90%	78%	62%	46%	33%	24%	18%	13%	10%	7%	6%	4%	3%	3%	2%	2%	2%	1%

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°
69.4K	69.3K	69.1K	68.9K	68.4K	67.9K	67.3K	66.4K	65.4K	64.2K	62.6K	60.8K	58.7K	56.1K	53.2K	50.2K	46.8K	43.3K	39.8K	36.3K
100%	100%	100%	99%	99%	98%	97%	96%	94%	92%	90%	88%	85%	81%	77%	72%	67%	62%	57%	52%

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°
69.4K	67.6K	62.4K	53.9K	42.9K	31.9K	23.1K	16.8K	12.3K	9.1K	6.8K	5.1K	3.8K	2.9K	2.3K	1.9K	1.5K	1.3K	1.2K	1.0K
100%	97%	90%	78%	62%	46%	33%	24%	18%	13%	10%	7%	6%	4%	3%	3%	2%	2%	2%	1%

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°
69.4K	69.3K	69.1K	68.9K	68.4K	67.9K	67.3K	66.4K	65.4K	64.2K	62.6K	60.8K	58.7K	56.1K	53.2K	50.2K	46.8K	43.3K	39.8K	36.3K
100%	100%	100%	99%	99%	98%	97%	96%	94%	92%	90%	88%	85%	81%	77%	72%	67%	62%	57%	52%