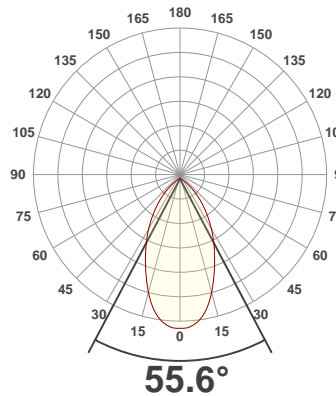
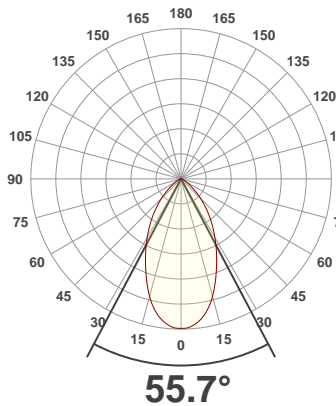




PRODUCT INFORMATION

SERIAL NUMBER:	LL-200302-0343
DATE OF MEASUREMENT:	2020-03-02
SIZE (dia. x h):	310 mm x 85 mm

ANGULAR DISTRIBUTION AT C0/180 | ANGULAR DISTRIBUTION AT C90/270 | LIGHT OUTPUT DATA

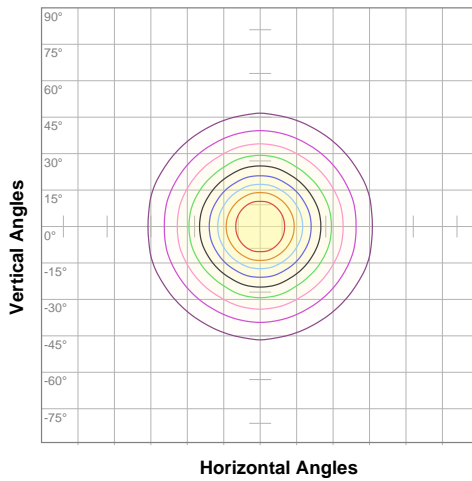


TOTAL LUMEN OUTPUT:	10426 lm
EFFICACY:	108 lm/W
PEAK INTENSITY:	10075 cd
COLOR RENDERING INDEX (CRI):	81.1
COLOR TEMPERATURE (CCT):	3802K
FIDELITY INDEX (TM30Rf):	82.2
GAMUT INDEX (TM30Rg):	98.3

BEAM OUTPUT DATA

BEAM ANGLE (FWHM) C0/180:	55.7°
BEAM ANGLE (FWHM) C90/270:	55.6°
FIELD ANGLE (10%) C0/180:	103.2°
FIELD ANGLE (10%) C90/270:	103.7°
NUMBER OF PLANES MEASURED:	12

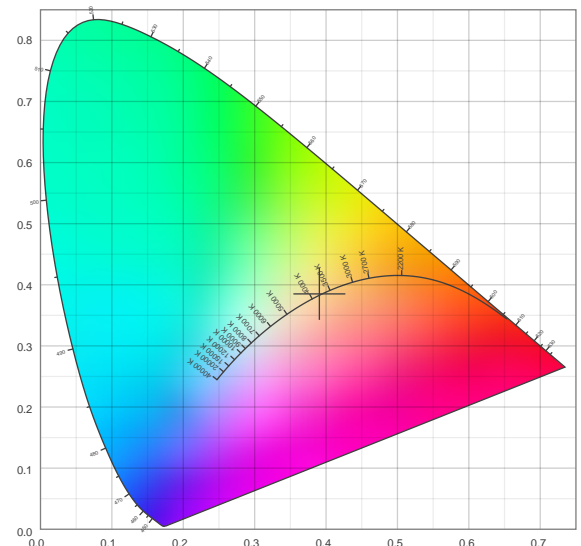
ISO CANDELA DIAGRAM | DATA



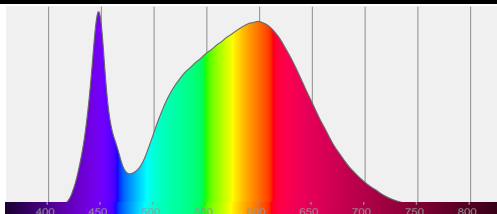
10%	1007 cd
20%	2014 cd
30%	3020 cd
40%	4027 cd
50%	5034 cd
60%	6041 cd
70%	7047 cd
80%	8054 cd
90%	9061 cd

INPUT POWER:	96.9 W
POWER FACTOR:	1.0
OPTICAL POWER:	31.4 mW
PEAK WAVELENGTH:	448 nm
DOMINANT WAVELENGTH:	581 nm

CIE 1931:



SPECTRA | CIE 1931 ZOOM



x:	0.391
y:	0.385
u:	0.228
v:	0.338
Δuv:	0.0010

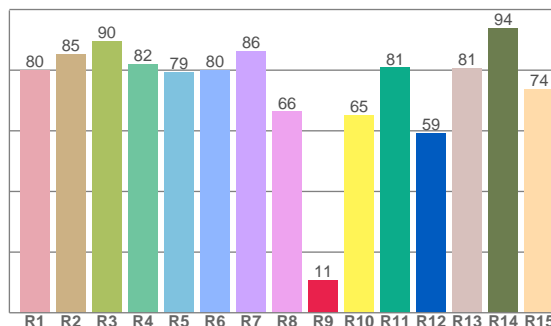
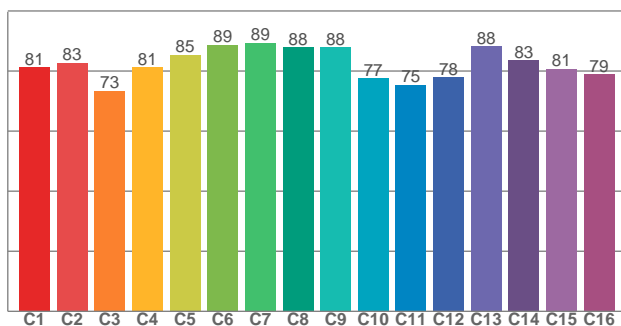
ZONAL LUMEN SUMMARY

0°-10° 925 lm	10°-20° 2267 lm	20°-30° 2570 lm	30°-40° 2183 lm	40°-50° 1424 lm	50°-60° 650 lm	60°-70° 273 lm	70°-80° 117 lm	80°-90° 17.6 lm
90°-100° 0.002 lm	100°-110° 0.001 lm	110°-120° 0.001 lm	120°-130° 0.001 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: 82.2

CRI: 81.1 (R1-R8)



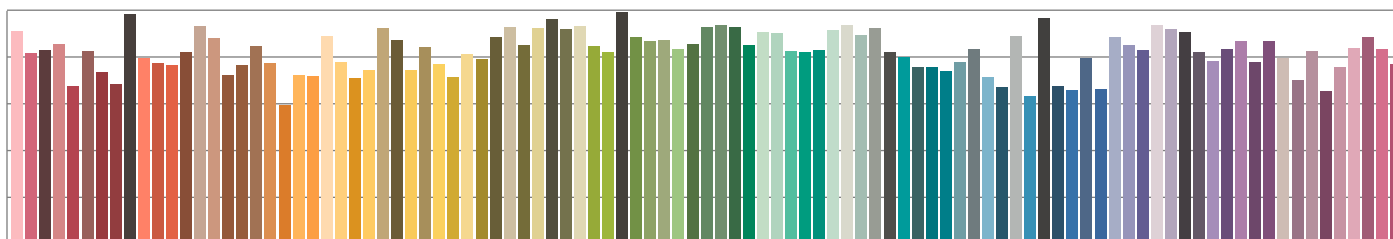
TM30 C values, 16 binned values out of total of 99 C values

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
81.2	82.7	73.4	81.1	85.4	88.7	89.4	87.9	88.0	77.5	75.4	78.0	88.2	83.5	80.7	78.9

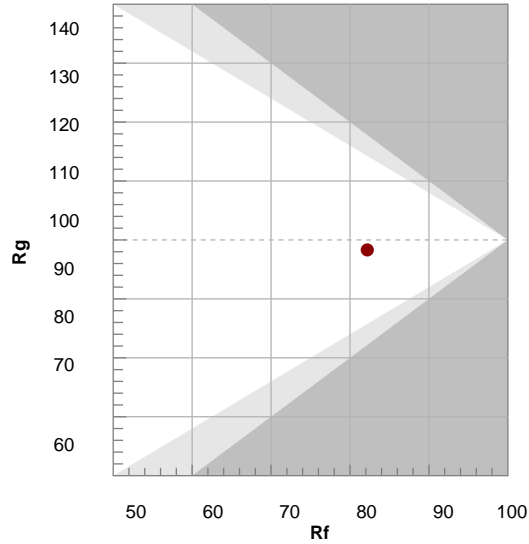
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
80.0	85.4	89.6	82.1	79.4	80.0	86.2	66.4	10.8	65.3	80.9	59.3	80.7	93.9	73.8

TM30 COLOR EVALUATION SAMPLE



TM30 DETAILS

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	81	-11%	-3%
2	83	-8%	6%
3	73	-4%	14%
4	81	3%	12%
5	85	7%	7%
6	89	7%	-2%
7	89	0%	-7%
8	88	-5%	-6%
9	88	-8%	-1%
10	77	-10%	9%
11	75	-1%	17%
12	78	6%	11%
13	88	7%	1%
14	83	10%	-9%
15	81	2%	-13%
16	79	-4%	-13%



FIDELITY INDEX

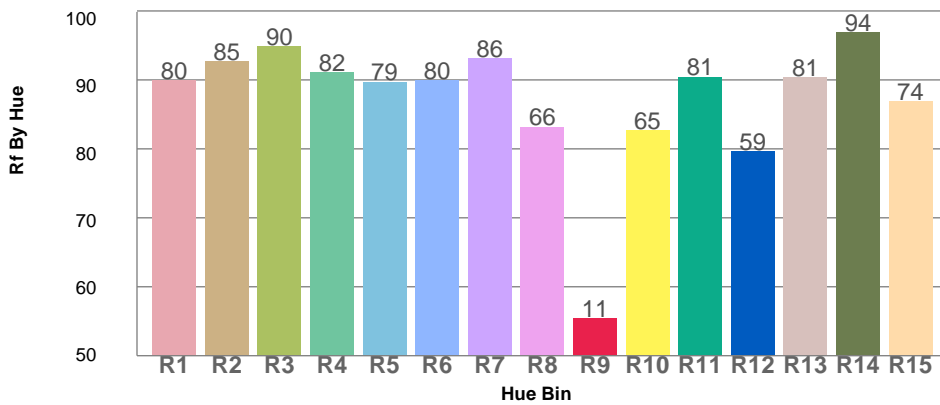
R_f 82.2

GAMUT INDEX

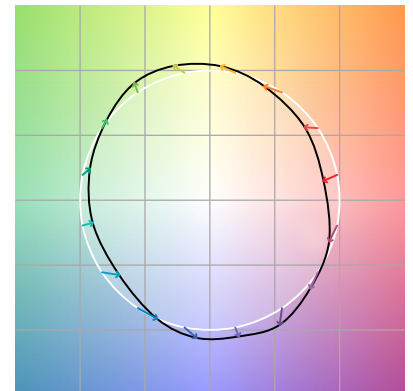
R_g 98.3

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

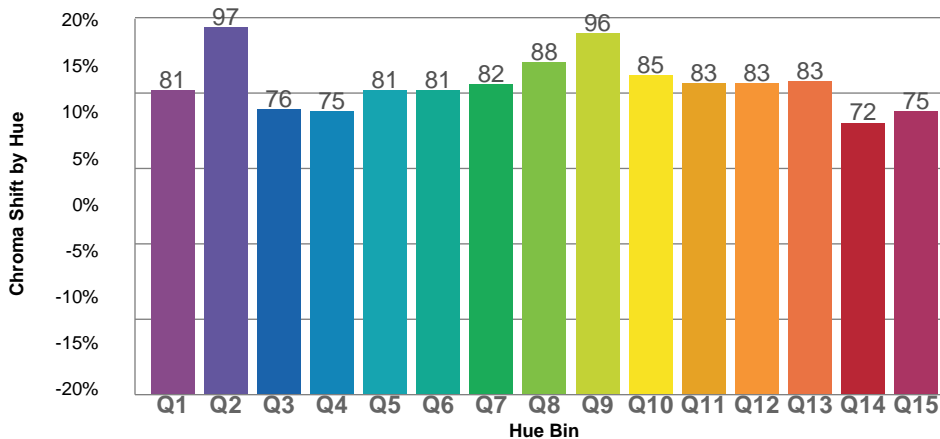
TM30 OVER 50



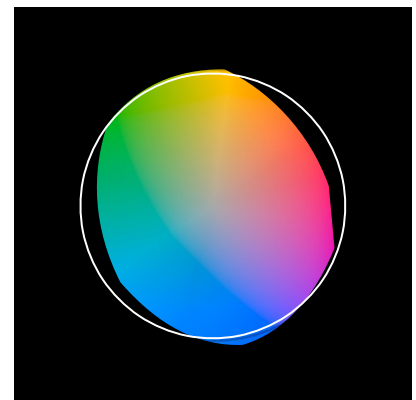
COLOR VECTOR GRAPHICS



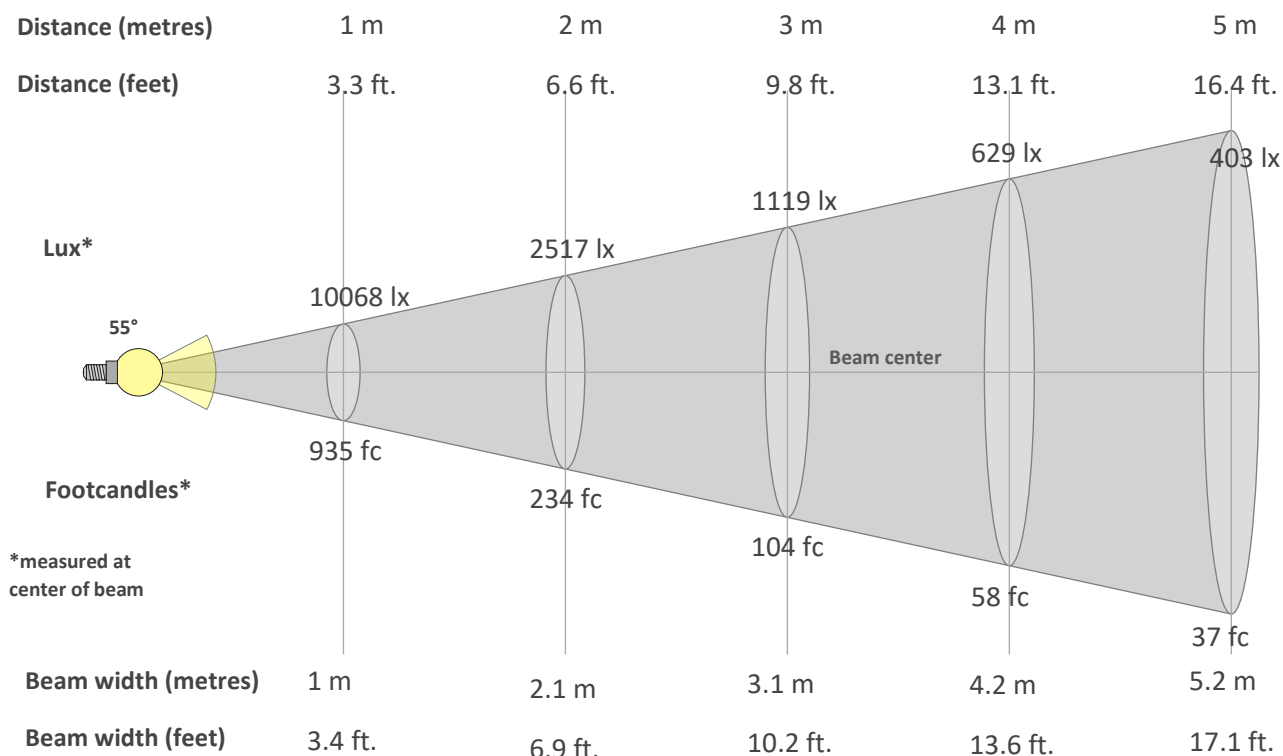
TM30 CHROMA SHIFT



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
10068lx	2517lx	1119lx	629lx	403lx	280lx	205lx	157lx	124lx	101lx	83lx	70lx	60lx	51lx	45lx	39lx	35lx	31lx	28lx	25lx
935.3fc	233.8fc	103.9fc	58.5fc	37.4fc	26fc	19.1fc	14.6fc	11.5fc	9.4fc	7.7fc	6.5fc	5.5fc	4.8fc	4.2fc	3.7fc	3.2fc	2.9fc	2.6fc	2.3fc

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°
10.1K	9.9K	9.2K	8.2K	6.9K	5.7K	4.6K	3.6K	2.7K	1.9K	1.2K	0.7K	0.4K	0.3K	0.2K	0.1K	0.1K	0.0K	0.0K	0.0K
100%	98%	92%	81%	68%	56%	45%	35%	26%	18%	12%	7%	4%	3%	2%	1%	1%	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°
10.1K	9.9K	9.3K	8.2K	6.8K	5.6K	4.6K	3.6K	2.6K	1.9K	1.2K	0.7K	0.4K	0.3K	0.2K	0.1K	0.1K	0.0K	0.0K	0.0K
100%	98%	92%	81%	68%	56%	45%	35%	26%	19%	12%	7%	4%	3%	2%	1%	1%	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°
10.1K	9.9K	9.2K	8.2K	6.9K	5.7K	4.6K	3.6K	2.7K	1.9K	1.2K	0.7K	0.4K	0.3K	0.2K	0.1K	0.1K	0.0K	0.0K	0.0K
100%	98%	92%	81%	68%	56%	45%	35%	26%	18%	12%	7%	4%	3%	2%	1%	1%	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°
10.1K	9.9K	9.3K	8.2K	6.8K	5.6K	4.6K	3.6K	2.6K	1.9K	1.2K	0.7K	0.4K	0.3K	0.2K	0.1K	0.1K	0.0K	0.0K	0.0K
100%	98%	92%	81%	68%	56%	45%	35%	26%	19%	12%	7%	4%	3%	2%	1%	1%	0%	0%	0%