



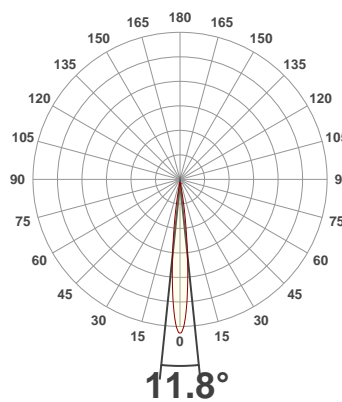
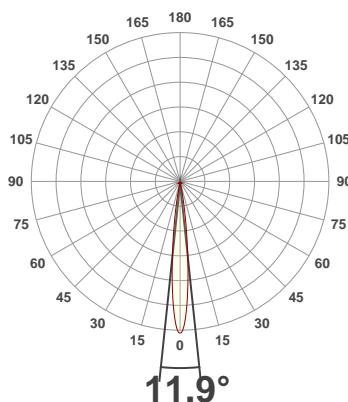
PRODUCT INFORMATION

SERIAL NUMBER:	LL-200325-0497
DATE OF MEASUREMENT:	25/03/2020
SIZE (dia. x h):	73 mm x 47 mm

ANGULAR DISTRIBUTION AT C0/180

ANGULAR DISTRIBUTION AT C90/270

LIGHT OUTPUT DATA

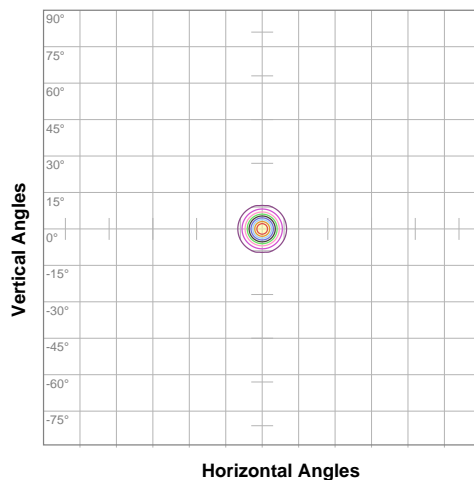


TOTAL LUMEN OUTPUT:	264 lm
EFFICACY:	33 lm/W
PEAK INTENSITY:	5009 cd
COLOR RENDERING INDEX (CRI):	77.4
COLOR TEMPERATURE (CCT):	6878K
FIDELITY INDEX (TM30Rf):	74.1
GAMUT INDEX (TM30Rg):	100.7

BEAM OUTPUT DATA

BEAM ANGLE (FWHM) C0/180:	11.9°
BEAM ANGLE (FWHM) C90/270:	11.8°
FIELD ANGLE (10%) C0/180:	22.4°
FIELD ANGLE (10%) C90/270:	22°
NUMBER OF PLANES MEASURED:	12

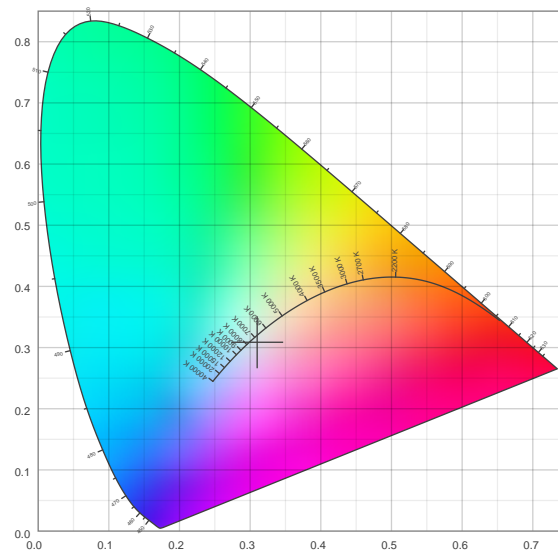
ISOCANDELA DIAGRAM



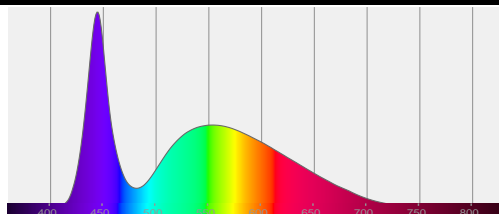
10%	501 cd
20%	1001 cd
30%	1502 cd
40%	2002 cd
50%	2503 cd
60%	3004 cd
70%	3504 cd
80%	4005 cd
90%	4505 cd

INPUT POWER:	8.1 W
POWER FACTOR:	1.0
OPTICAL POWER:	0.903 mW
PEAK WAVELENGTH:	445 nm
DOMINANT WAVELENGTH:	360 nm

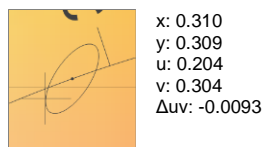
CIE 1931



SPECTRAL DISTRIBUTION



CIE 1931 ZOOM



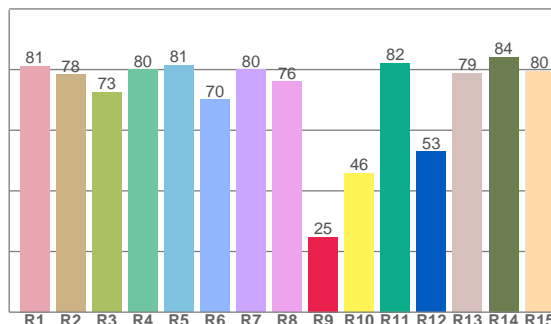
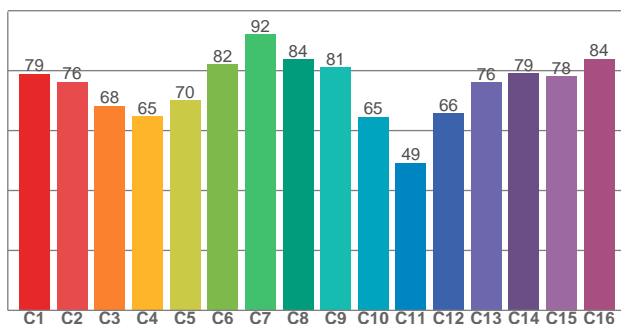
ZONAL LUMEN SUMMARY

0°-10° 211 lm	10°-20° 46.4 lm	20°-30° 5.82 lm	30°-40° 1.07 lm	40°-50° 0.253 lm	50°-60° 0.099 lm	60°-70° 0.057 lm	70°-80° 0.041 lm	80°-90° 0.030 lm
90°-100° 0.012 lm	100°-110° 0.004 lm	110°-120° 0.003 lm	120°-130° 0.003 lm	130°-140° 0.003 lm	140°-150° 0.002 lm	150°-160° 0.002 lm	160°-170° 0.001 lm	170°-180° 0.000 lm

COLOR DETAILS

TM30: 74.1

CRI: 77.4 (R1-R8)



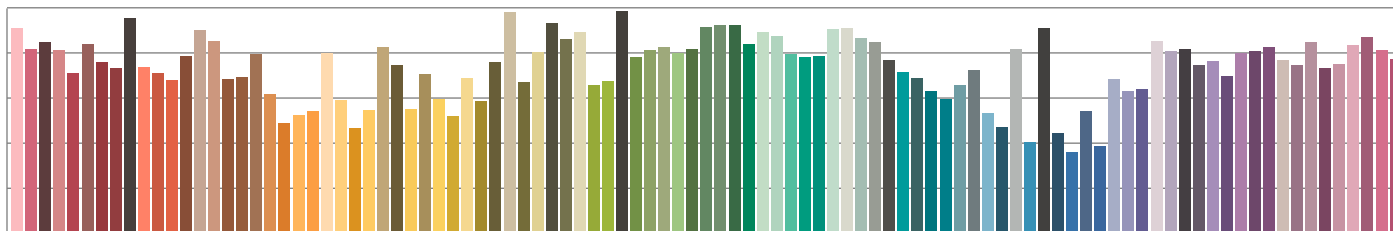
TM30 C values, 16 binned values out of total of 99 C values

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
78.9	76.3	68.3	64.7	70.1	82.2	92.1	83.7	81.1	64.6	49.3	65.8	76.2	79.1	78.2	84.0

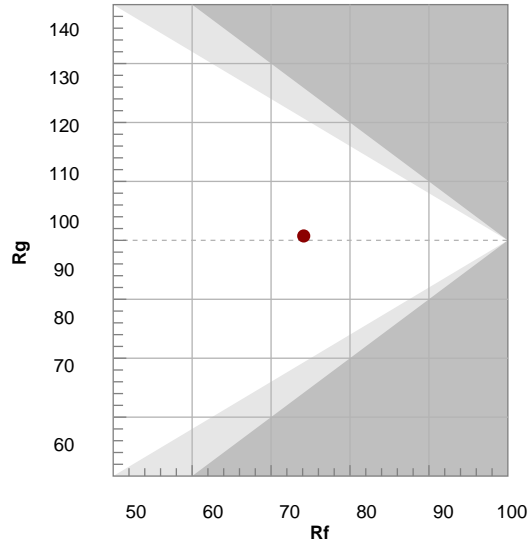
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
81.2	78.4	72.5	80.0	81.4	70.0	80.0	76.0	24.8	45.8	82.2	52.9	78.9	84.2	79.6

TM30 COLOR EVALUATION SAMPLE



TM30 DETAILS

Hue Bin	R _f	Graphic shifts (%)	
		Chroma	Hue
1	79	-11%	-3%
2	76	-10%	9%
3	68	-4%	20%
4	65	4%	22%
5	70	14%	14%
6	82	12%	0%
7	92	2%	-5%
8	84	-6%	-8%
9	81	-16%	3%
10	65	-12%	20%
11	49	-4%	28%
12	66	4%	23%
13	76	14%	14%
14	79	19%	0%
15	78	11%	-13%
16	84	0%	-10%

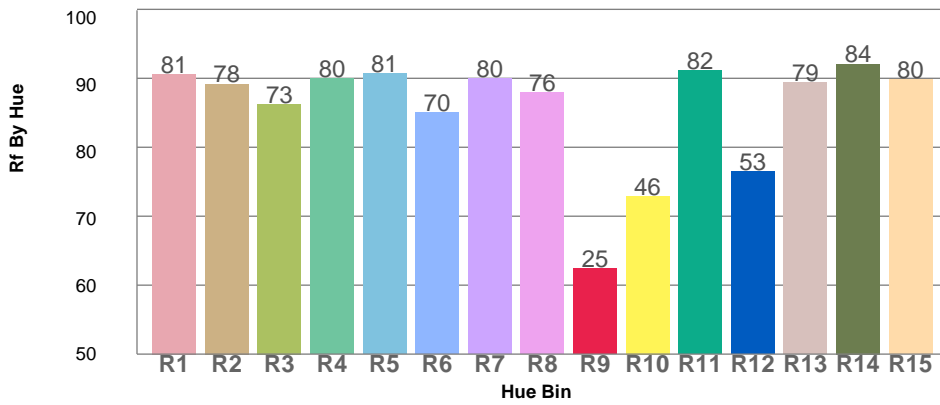


FIDELITY INDEX
R_f 74.1

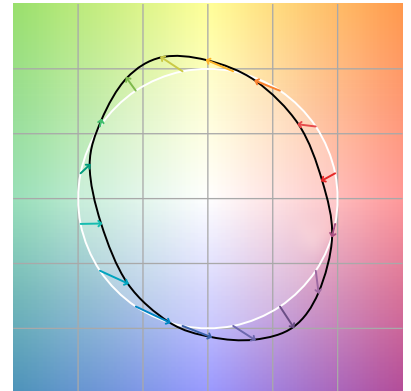
GAMUT INDEX
R_g 100.7

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

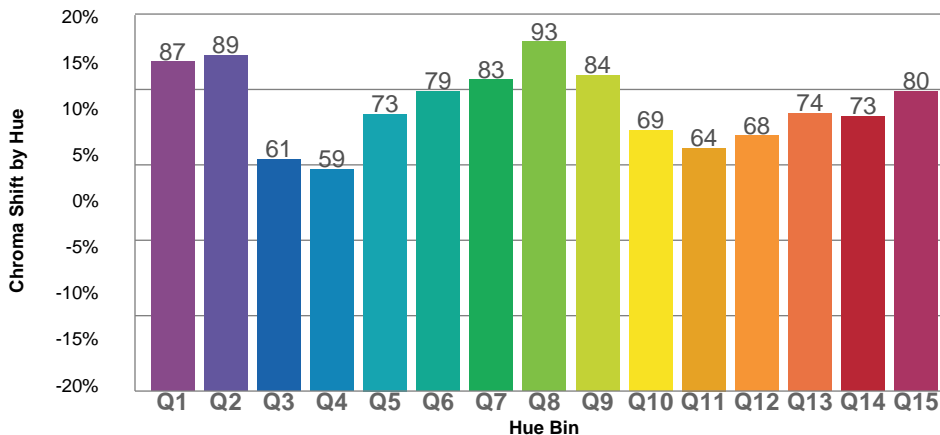
TM30 OVER 50



COLOR VECTOR GRAPHICS



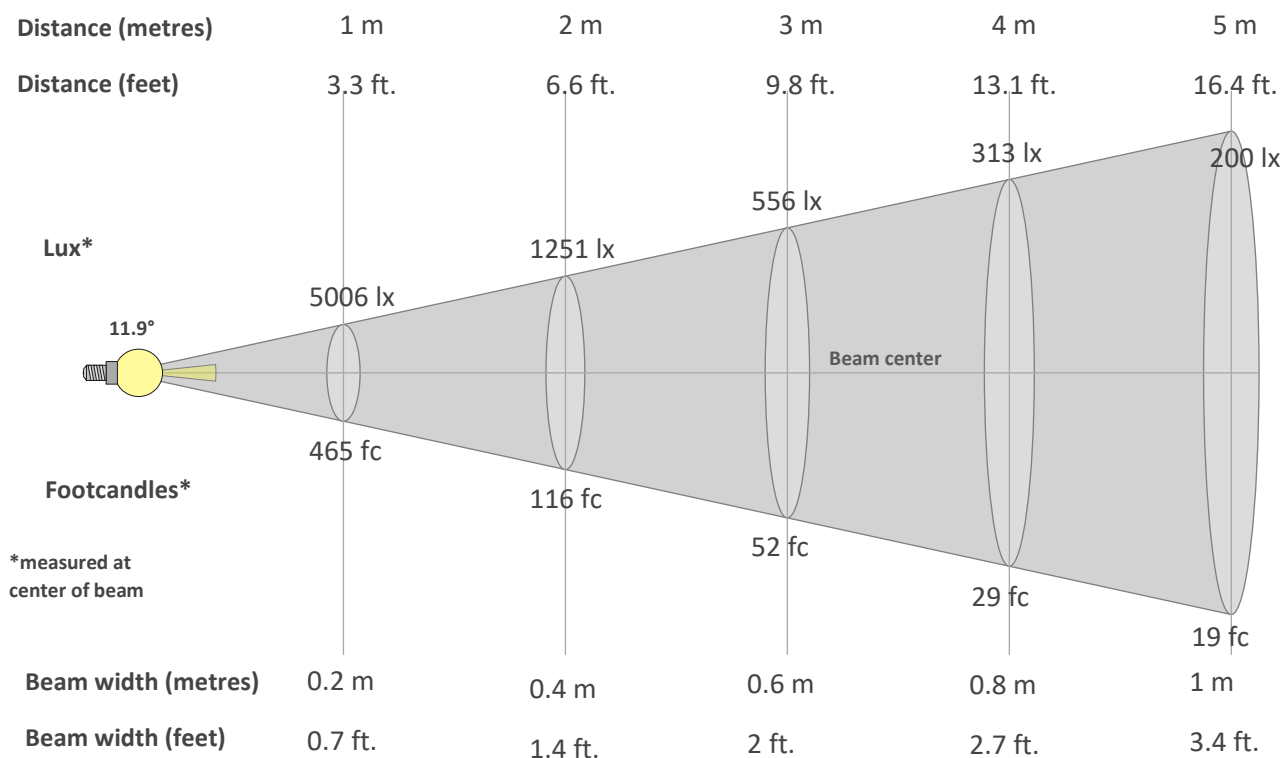
TM30 CHROMA SHIFT



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
5006lx	1251lx	556lx	313lx	200lx	139lx	102lx	78lx	62lx	50lx	41lx	35lx	30lx	26lx	22lx	20lx	17lx	15lx	14lx	13lx
465.1fc	116.3fc	51.7fc	29.1fc	18.6fc	12.9fc	9.5fc	7.3fc	5.7fc	4.7fc	3.8fc	3.2fc	2.8fc	2.4fc	2.1fc	1.8fc	1.6fc	1.4fc	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°
5006	4909	4624	4183	3650	3071	2483	1942	1474	1085	770	534	367	250	170	119	86	64	50	39
100%	98%	92%	84%	73%	61%	50%	39%	29%	22%	15%	11%	7%	5%	3%	2%	2%	1%	1%	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°
5006	4909	4625	4177	3627	3035	2444	1898	1425	1035	726	498	334	223	149	104	75	57	45	36
100%	98%	92%	83%	72%	61%	49%	38%	28%	21%	15%	10%	7%	4%	3%	2%	1%	1%	1%	1%

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°
5006	4909	4624	4183	3650	3071	2483	1942	1474	1085	770	534	367	250	170	119	86	64	50	39
100%	98%	92%	84%	73%	61%	50%	39%	29%	22%	15%	11%	7%	5%	3%	2%	2%	1%	1%	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°
5006	4909	4625	4177	3627	3035	2444	1898	1425	1035	726	498	334	223	149	104	75	57	45	36
100%	98%	92%	83%	72%	61%	49%	38%	28%	21%	15%	10%	7%	4%	3%	2%	1%	1%	1%	1%