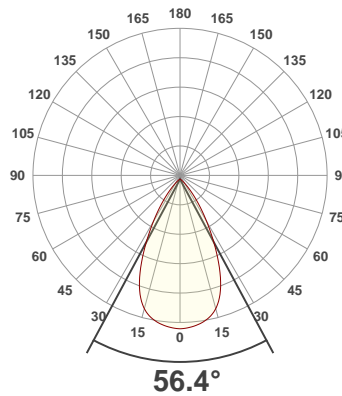
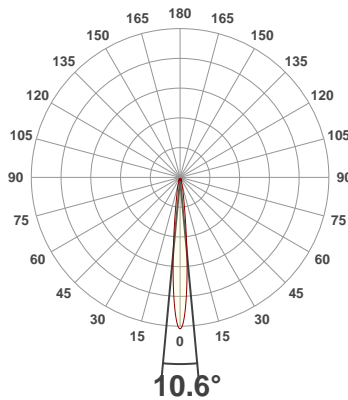




**PRODUCT INFORMATION**

SERIAL NUMBER:	LL-20190827-550-BMS
DATE OF MEASUREMENT:	2019-08-27
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**

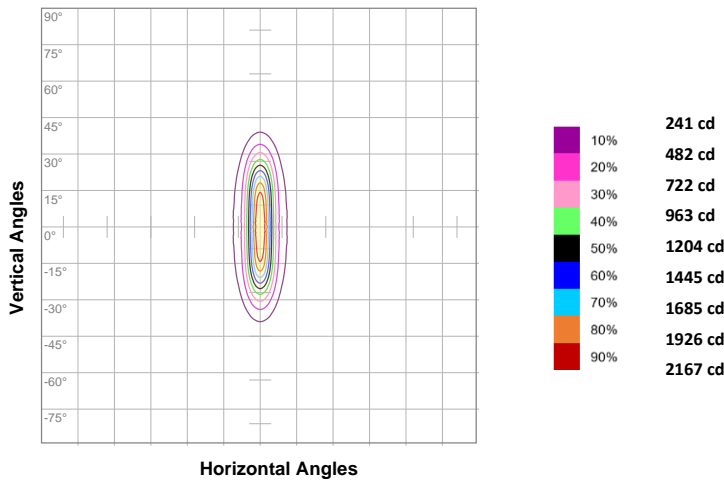


TOTAL LUMEN OUTPUT:	604 lm
EFFICACY:	31 lm/W
PEAK INTENSITY:	2410 cd
COLOR RENDERING INDEX (CRI):	0.0
COLOR TEMPERATURE (CCT):	0K
FIDELITY INDEX (TM30Rf):	0.0
GAMUT INDEX (TM30Rg):	0.0

**BEAM OUTPUT DATA**

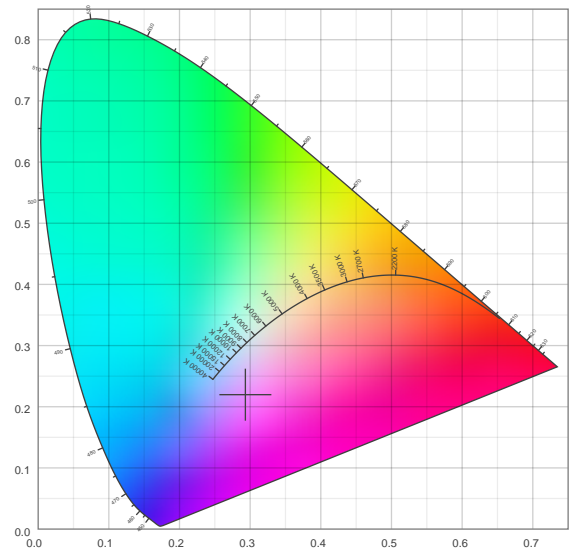
BEAM ANGLE (FWHM)   C0/180:	10.6°
BEAM ANGLE (FWHM)   C90/270:	56.4°
FIELD ANGLE (10%)   C0/180:	24.7°
FIELD ANGLE (10%)   C90/270:	86.7°
NUMBER OF PLANES MEASURED:	36

**ISOCANDELA DIAGRAM**

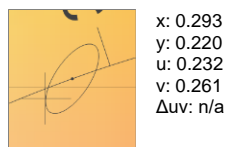
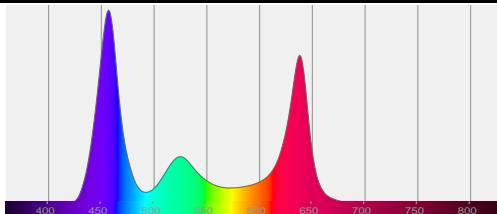


INPUT POWER:	19.3 W
POWER FACTOR:	1.0
OPTICAL POWER:	2.97 mW
PEAK WAVELENGTH:	457 nm
DOMINANT WAVELENGTH:	360 nm

**CIE 1931**



**SPECTRAL DISTRIBUTION | CIE 1931 ZOOM**



**ZONAL LUMEN SUMMARY**

0°-10° 142 lm	10°-20° 189 lm	20°-30° 142 lm	30°-40° 75.9 lm	40°-50° 32.8 lm	50°-60° 14.0 lm	60°-70° 5.40 lm	70°-80° 1.62 lm	80°-90° 0.172 lm
90°-100° 0.000 lm	100°-110° 0.010 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° 0.012 lm

**COLOR DETAILS**

**TM30: 0.0**

**CRI: 0.0 (R1-R8)**

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15		

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

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

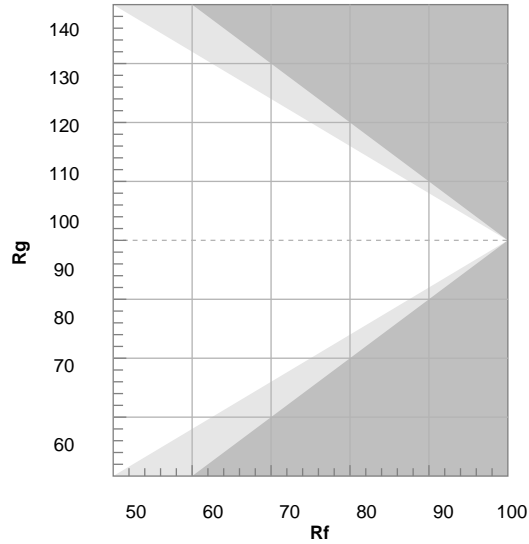
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
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

**TM30 COLOR EVALUATION SAMPLE**


TM30 DETAILS

Hue Bin	R <sub>f</sub>	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

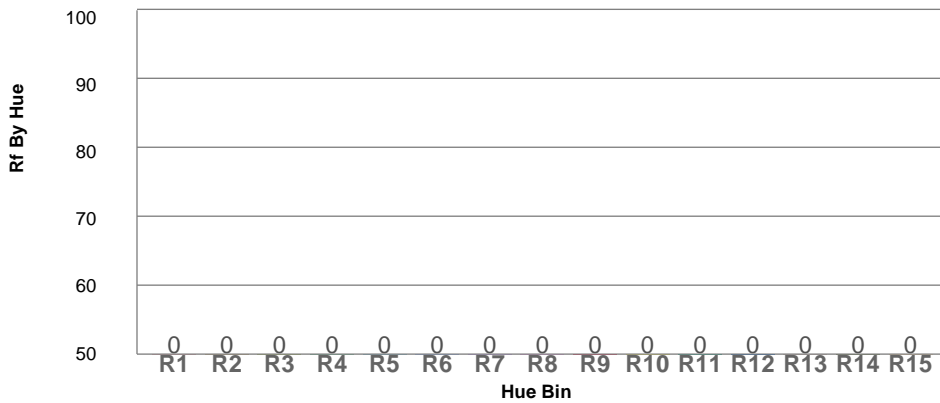
**R<sub>f</sub> 0.0**

GAMUT INDEX

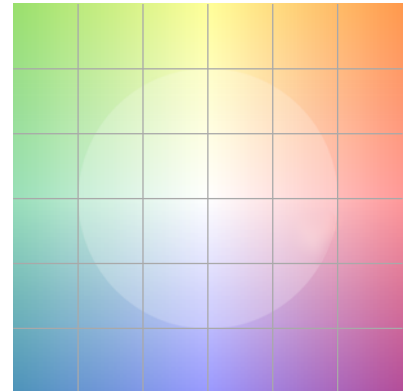
**R<sub>g</sub> 0.0**

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

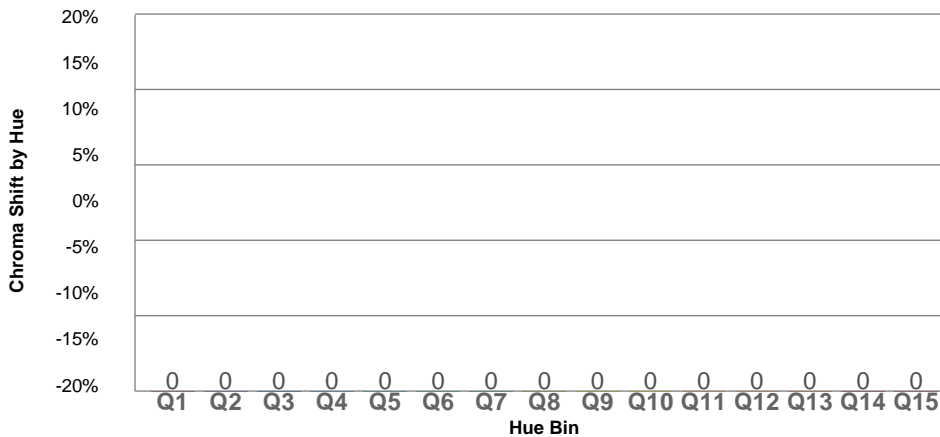
TM30 OVER 50



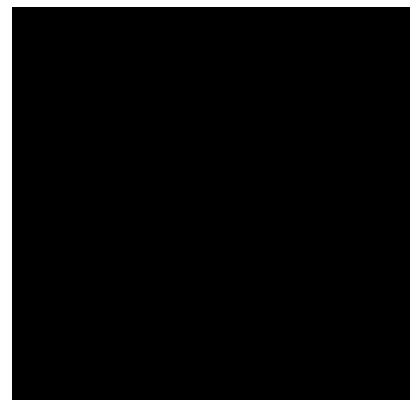
COLOR VECTOR GRAPHICS

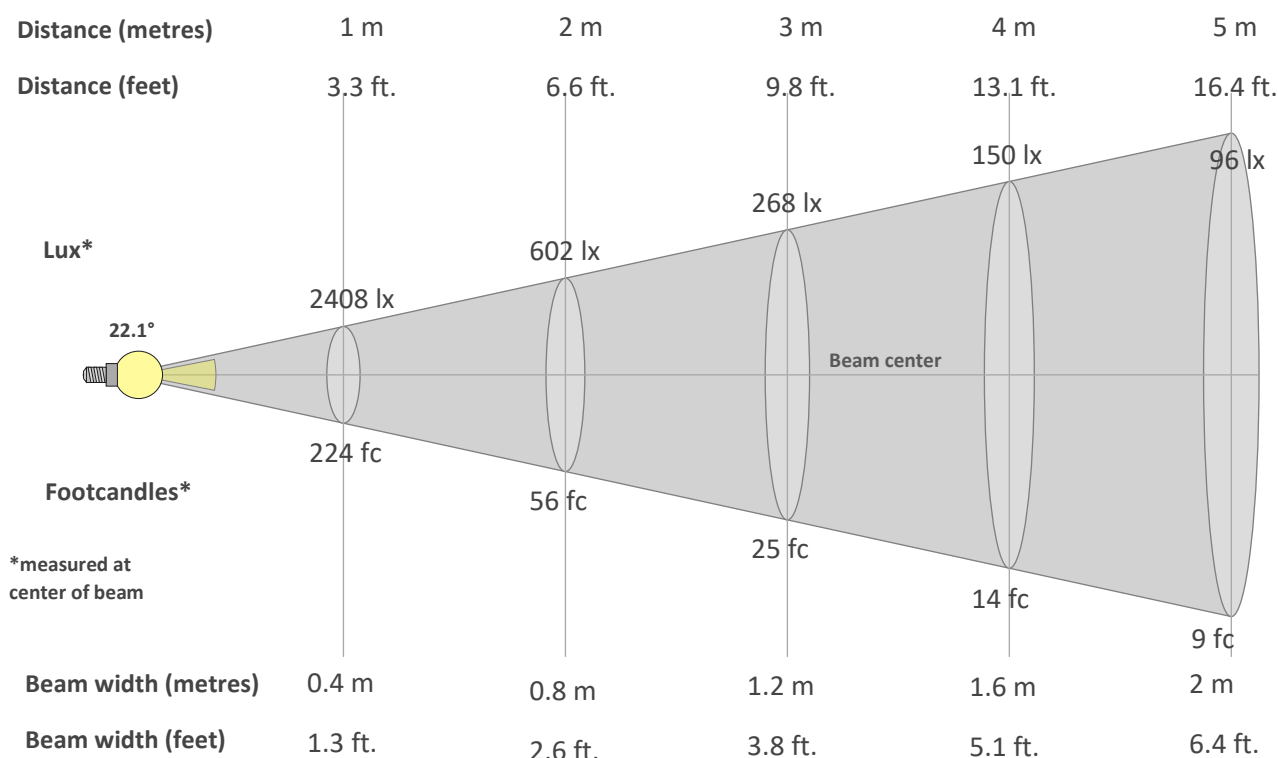


TM30 CHROMA SHIFT



COLOR DISTORTION GRAPHICS



**BEAM DETAILS**

**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
2408lx	602lx	268lx	150lx	96lx	67lx	49lx	38lx	30lx	24lx	20lx	17lx	14lx	12lx	11lx	9lx	8lx	7lx	7lx	6lx
223.7fc	55.9fc	24.9fc	14fc	8.9fc	6.2fc	4.6fc	3.5fc	2.8fc	2.2fc	1.8fc	1.6fc	1.3fc	1.1fc	1fc	0.9fc	0.8fc	0.7fc	0.6fc	0.6fc

**Intensity in 0° c-plane**

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2408	2171	1609	1010	587	363	253	194	158	128	101	76	58	44	34	28	23	18	15	14
100%	90%	67%	42%	24%	15%	10%	8%	7%	5%	4%	3%	2%	2%	1%	1%	1%	1%	1%	1%

**Intensity in 90° c-plane**

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2408	2404	2391	2374	2351	2321	2282	2228	2155	2059	1936	1786	1609	1418	1226	1041	874	724	590	473
100%	100%	99%	99%	98%	96%	95%	93%	90%	85%	80%	74%	67%	59%	51%	43%	36%	30%	25%	20%

**Intensity in 180° c-plane**

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2408	2171	1609	1010	587	363	253	194	158	128	101	76	58	44	34	28	23	18	15	14
100%	90%	67%	42%	24%	15%	10%	8%	7%	5%	4%	3%	2%	2%	1%	1%	1%	1%	1%	1%

**Intensity in 270° c-plane**

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°
2408	2404	2391	2374	2351	2321	2282	2228	2155	2059	1936	1786	1609	1418	1226	1041	874	724	590	473
100%	100%	99%	99%	98%	96%	95%	93%	90%	85%	80%	74%	67%	59%	51%	43%	36%	30%	25%	20%