



UL LLC  
1075 W Lambert Rd Suite B  
Brea, CA 92821

## Photometric Test Report

Relevant Standards  
IES LM-79-2019, ANSI C82.77-10-2014, IES LM-35-2002 (Withdrawn)  
CIE 13.3-1995, CIE 15-2004, ANSI C78.377-2017  
IES TM-30-2018

Prepared For  
**B-K LIGHTING INC**  
40429 Brickyard Dr  
Madera, CA 93636-9515  
United States

Catalog Number  
**NS-LED-e207-NSP-WHP-9-C**

Project Number  
15884175  
Test Number  
15884175.05

Test Date  
2025-12-18 - 2025-12-19

Issue Date  
2025-12-30

Prepared By

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Approved By

Shivani Vyas, Engineering Project Handler

The results contained in this report pertain only to the tested sample.  
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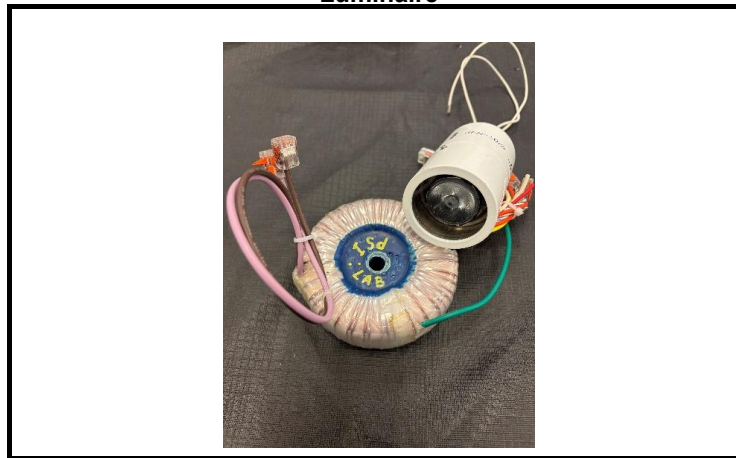
Laboratory results may not be representative of field performance  
Ballast factors have not been applied

Testing was performed in a 2-meter integrating sphere using the  $4\pi$  geometry method.

Absorption correction was employed for Sphere measurement

**Luminaire Description:** White aluminum cylindrical housing with clear lens cap  
**Lamp:** 1 LED array  
**Mounting:** Pendant  
**Ballast/Driver:** Qtran QOM-60DC+CAP-120

**Luminaire**



**Luminaire Characteristics**  
 Luminous Diameter: 1.75 in.

### Summary of Results

#### Integrating Sphere

Luminous Flux: 576.4 Lumens  
 Efficacy: 57.65 lm/w  
 CCT: 4008 K  
 CRI (Ra): 80.9

#### Distribution

Total Luminaire Output: 581.7 Lumens  
 Luminaire Efficacy: 58.8 lm/w  
 Maximum Candela: 8947 Candela

#### Electrical Data at 120 VAC

Test Temperature: 25.6 °C  
 Voltage: 120.1 VAC  
 Current: 0.09250 A  
 Power: 9.999 W  
 Power Factor: 0.900  
 Frequency: 60 Hz  
 Current THD: 46.4 %

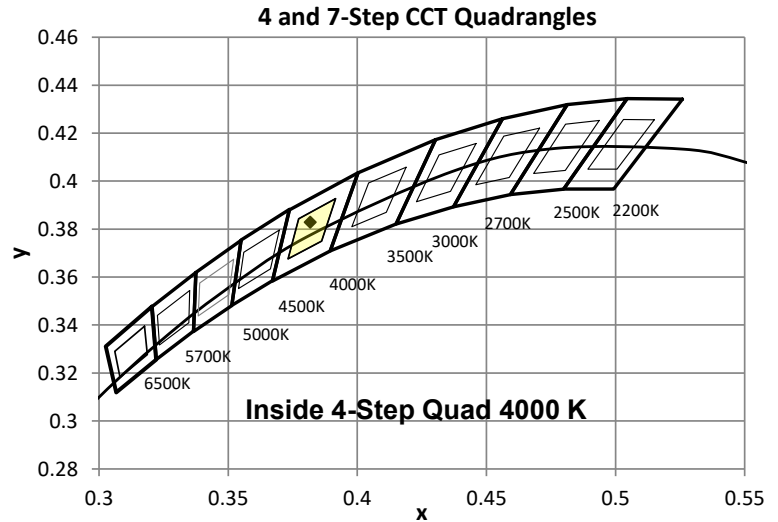
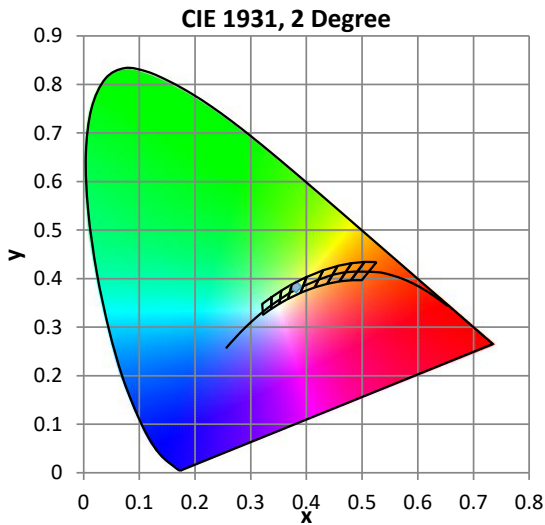
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.6 °C	120.1 VAC	0.09250 A	9.999 W	0.900	60 Hz	46.4 %

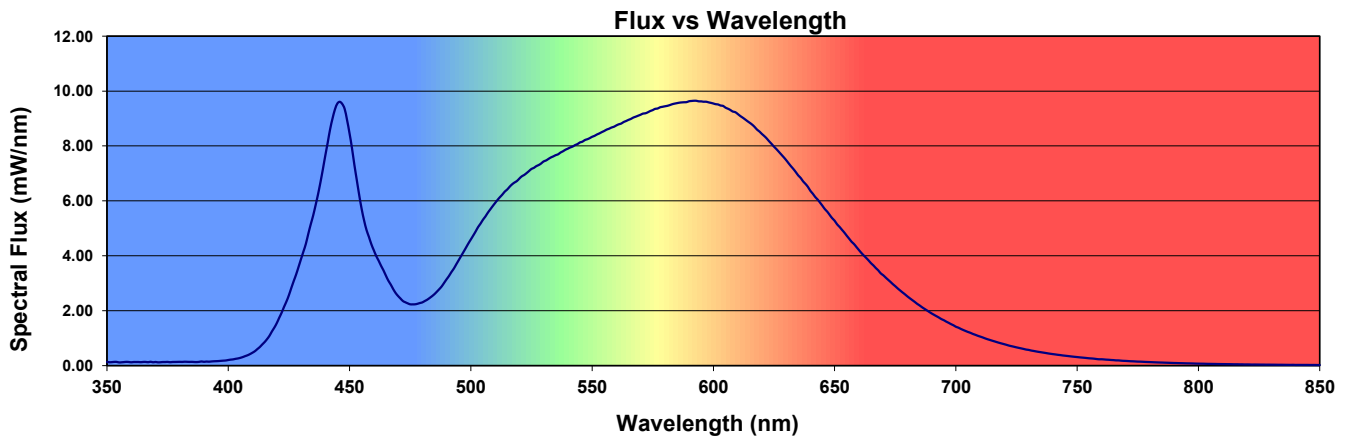
### Summary of Results

<b>Total Output:</b>	576 Lumens	<b>Chromaticity (x):</b>	0.3817
<b>Efficacy:</b>	57.6 lm/w	<b>Chromaticity (y):</b>	0.3829
<b>CCT:</b>	4008 K	<b>Chromaticity (u'):</b>	0.2235
<b>CRI (Ra):</b>	80.9	<b>Chromaticity (v'):</b>	0.5045
<b>CRI (R9):</b>	7.2	<b>TM-30 Rf:</b>	83
<b>Peak Wavelength:</b>	592 nm	<b>TM-30 Rg:</b>	98
<b>Dominant Wavelength:</b>	578 nm	<b>TM-30 Rcs,h1:</b>	-11%
<b>S/P Ratio:</b>	1.63	<b>Duv:</b>	0.0025
<b>M/P Ratio:</b>	0.64	WELL Building Standard v2	



### Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
80.9	79.1	84.8	90.1	81.9	79.3	79.9	86.1	65.8	7.2	64.6	80.9	62.6	79.8	94.3	72.7



## Distribution - Goniophotometer

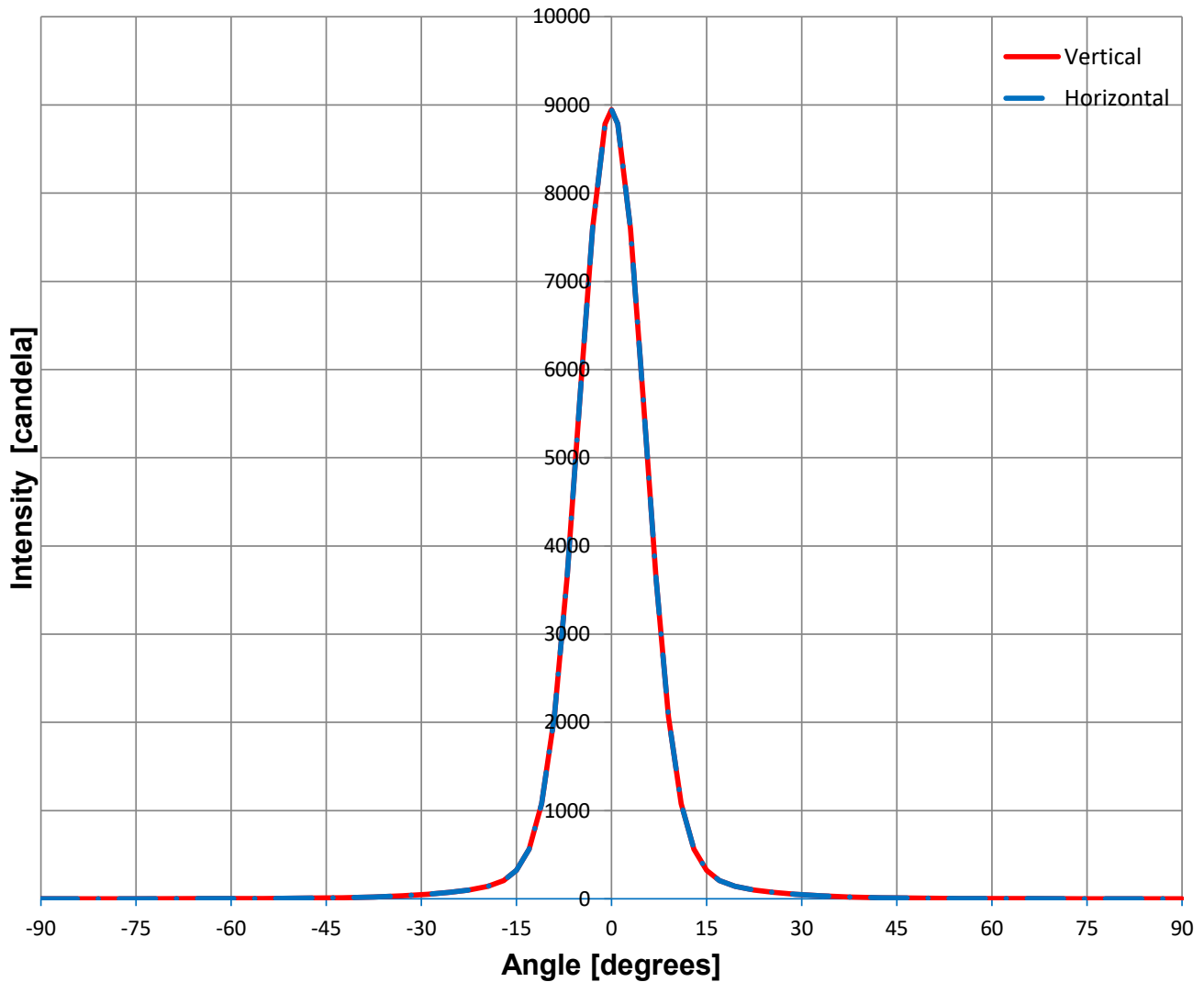
### Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.7 °C	120.1 VAC	0.09031 A	9.896 W	0.913	60 Hz	43.8 %

### Summary of Results

<b>Total Lumen Output:</b>	581.7 Lumens	<b>Maximum Candela:</b>	8946.5 Candela
<b>Luminaire Efficacy:</b>	58.8 Lumens/Watt	<b>Maximum Angle:</b>	0 H      0 V
<b>Field Lumens:</b>	440.0 Lumens	<b>Field Angle :</b>	23.4 H   X   23.4 V
<b>Beam Lumens:</b>	247.6 Lumens	<b>Beam Angle :</b>	12.4 H   X   12.4 V
<b>Spill Light Lumens:</b>	141.7 Lumens	<b>IESNA Type:</b>	2 H    X    2 V

### Maximum Candlepower Plot



**Candela Tabulation**  
Lateral Angle (Degrees)

	0	1	3	5	7	9	11	13	15	17	19.5
85.0	1	1	1	1	1	1	1	1	1	1	1
75.0	1	1	1	1	1	1	1	1	1	1	1
65.0	2	2	2	2	2	2	2	2	2	2	2
55.0	4	4	4	4	4	4	4	4	4	3	3
47.5	8	8	8	8	8	8	8	7	7	7	6
42.5	12	12	12	12	12	12	11	11	10	10	9
37.5	20	20	20	20	19	18	18	17	16	15	13
33.0	33	33	33	32	31	30	28	26	24	22	20
29.0	51	51	50	49	47	45	42	39	35	32	28
25.5	74	74	73	70	68	64	59	55	49	44	38
22.5	100	100	98	95	90	85	78	71	65	58	49
19.5	141	140	137	130	122	112	102	92	82	73	61
17.0	207	207	199	184	166	147	129	114	100	87	73
15.0	321	319	302	268	230	193	161	136	116	100	82
13.0	563	557	514	431	347	270	209	167	136	114	92
11.0	1079	1066	958	759	560	402	287	209	161	129	102
9.0	2067	2036	1795	1383	962	626	402	270	193	147	112
7.0	3644	3583	3116	2357	1567	962	560	347	230	166	122
5.0	5665	5563	4805	3587	2357	1383	759	431	268	184	130
3.0	7597	7448	6436	4805	3116	1795	958	514	302	199	137
1.0	8784	8589	7448	5563	3583	2036	1066	557	319	207	140
0.0	8947	8784	7597	5665	3644	2067	1079	563	321	207	141
-1.0	8784	8589	7448	5563	3583	2036	1066	557	319	207	140
-3.0	7597	7448	6436	4805	3116	1795	958	514	302	199	137
-5.0	5665	5563	4805	3587	2357	1383	759	431	268	184	130
-7.0	3644	3583	3116	2357	1567	962	560	347	230	166	122
-9.0	2067	2036	1795	1383	962	626	402	270	193	147	112
-11.0	1079	1066	958	759	560	402	287	209	161	129	102
-13.0	563	557	514	431	347	270	209	167	136	114	92
-15.0	321	319	302	268	230	193	161	136	116	100	82
-17.0	207	207	199	184	166	147	129	114	100	87	73
-19.5	141	140	137	130	122	112	102	92	82	73	61
-22.5	100	100	98	95	90	85	78	71	65	58	49
-25.5	74	74	73	70	68	64	59	55	49	44	38
-29.0	51	51	50	49	47	45	42	39	35	32	28
-33.0	33	33	33	32	31	30	28	26	24	22	20
-37.5	20	20	20	20	19	18	18	17	16	15	13
-42.5	12	12	12	12	12	12	11	11	10	10	9
-47.5	8	8	8	8	8	8	8	7	7	7	6
-55.0	4	4	4	4	4	4	4	4	4	3	3
-65.0	2	2	2	2	2	2	2	2	2	2	2
-75.0	1	1	1	1	1	1	1	1	1	1	1
-85.0	1	1	1	1	1	1	1	1	1	1	1

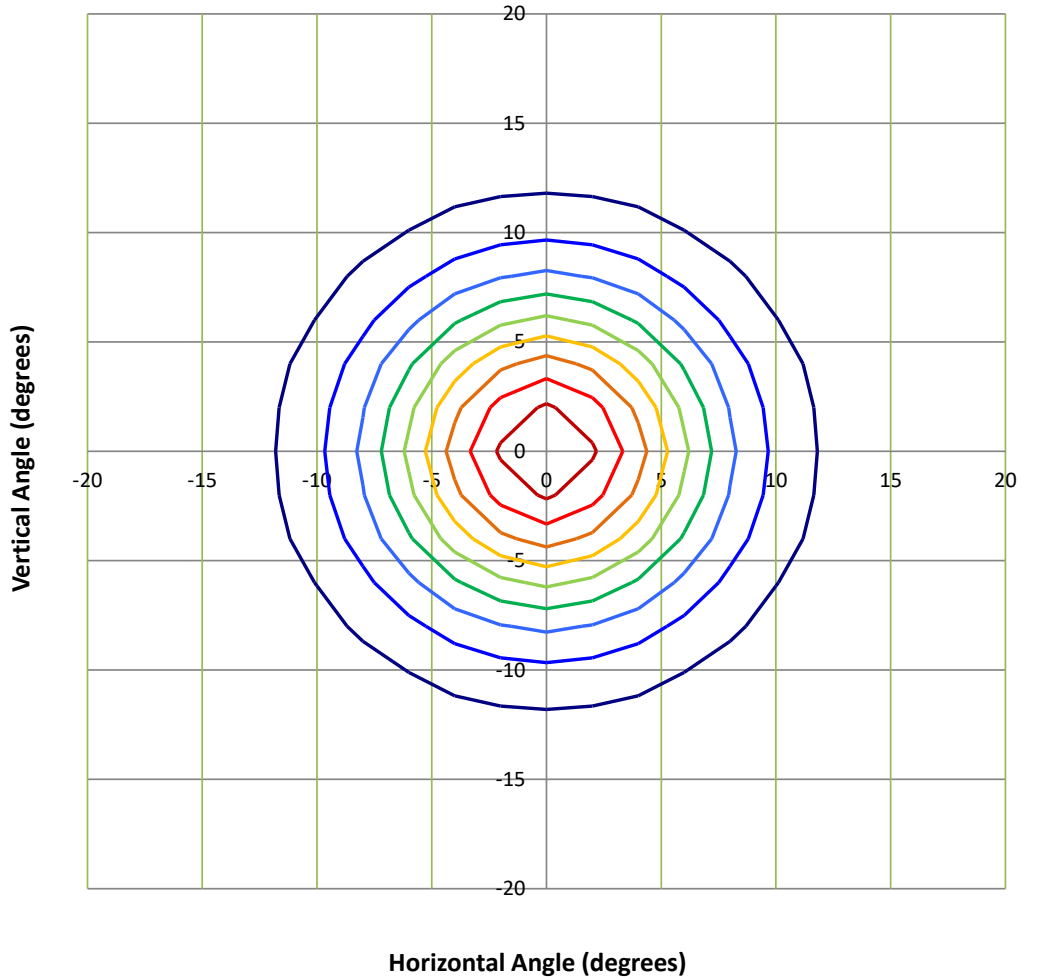
Vertical Angle (Degrees)

**Candela Tabulation**  
Lateral Angle (Degrees)

	22.5	25.5	29	33	37.5	42.5	47.5	55	65	75	85
85.0	0	0	0	0	0	0	0	0	0	0	0
75.0	1	1	1	1	1	1	1	1	1	0	0
65.0	2	2	2	2	1	1	1	1	1	1	0
55.0	3	3	2	2	2	2	2	1	1	1	0
47.5	6	5	5	4	3	2	2	2	1	1	0
42.5	8	8	7	5	4	3	2	2	1	1	0
37.5	12	11	9	8	6	4	3	2	1	1	0
33.0	17	15	12	10	8	5	4	2	2	1	0
29.0	24	20	16	12	9	7	5	2	2	1	0
25.5	31	26	20	15	11	8	5	3	2	1	0
22.5	39	31	24	17	12	8	6	3	2	1	0
19.5	49	38	28	20	13	9	6	3	2	1	1
17.0	58	44	32	22	15	10	7	3	2	1	1
15.0	65	49	35	24	16	10	7	4	2	1	1
13.0	71	55	39	26	17	11	7	4	2	1	1
11.0	78	59	42	28	18	11	8	4	2	1	1
9.0	85	64	45	30	18	12	8	4	2	1	1
7.0	90	68	47	31	19	12	8	4	2	1	1
5.0	95	70	49	32	20	12	8	4	2	1	1
3.0	98	73	50	33	20	12	8	4	2	1	1
1.0	100	74	51	33	20	12	8	4	2	1	1
0.0	100	74	51	33	20	12	8	4	2	1	1
-1.0	100	74	51	33	20	12	8	4	2	1	1
-3.0	98	73	50	33	20	12	8	4	2	1	1
-5.0	95	70	49	32	20	12	8	4	2	1	1
-7.0	90	68	47	31	19	12	8	4	2	1	1
-9.0	85	64	45	30	18	12	8	4	2	1	1
-11.0	78	59	42	28	18	11	8	4	2	1	1
-13.0	71	55	39	26	17	11	7	4	2	1	1
-15.0	65	49	35	24	16	10	7	4	2	1	1
-17.0	58	44	32	22	15	10	7	3	2	1	1
-19.5	49	38	28	20	13	9	6	3	2	1	1
-22.5	39	31	24	17	12	8	6	3	2	1	0
-25.5	31	26	20	15	11	8	5	3	2	1	0
-29.0	24	20	16	12	9	7	5	2	2	1	0
-33.0	17	15	12	10	8	5	4	2	2	1	0
-37.5	12	11	9	8	6	4	3	2	1	1	0
42.5	8	8	7	5	4	3	2	2	1	1	0
-47.5	6	5	5	4	3	2	2	2	1	1	0
-55.0	3	3	2	2	2	2	2	1	1	1	0
-65.0	2	2	2	2	1	1	1	1	1	1	0
-75.0	1	1	1	1	1	1	1	1	1	0	0
-85.0	0	0	0	0	0	0	0	0	0	0	0

Vertical Angle (Degrees)

### Isocandela Diagram (Percent of Maximum Intensity)



# ANSI/IES TM-30-18 Color Rendition Report

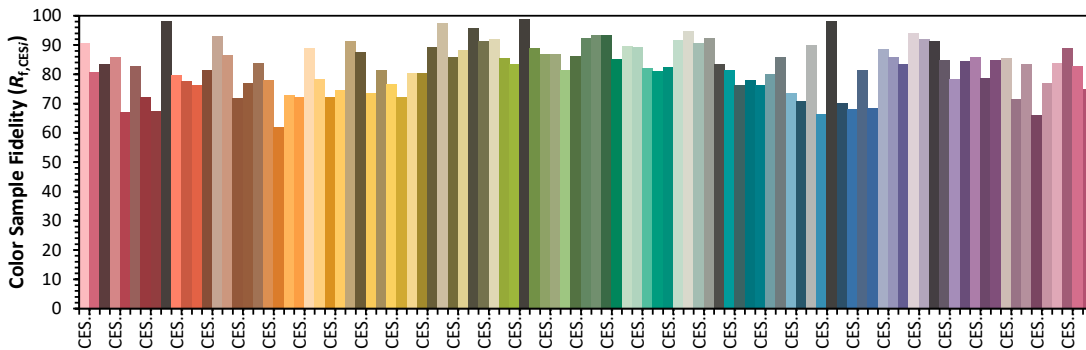
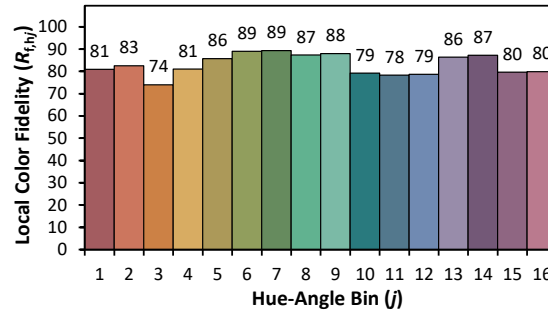
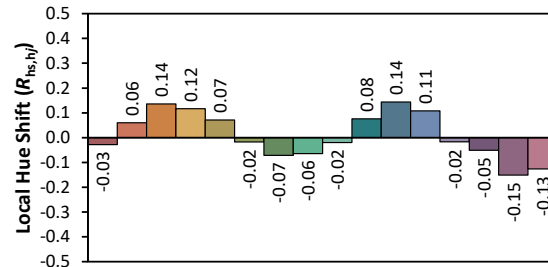
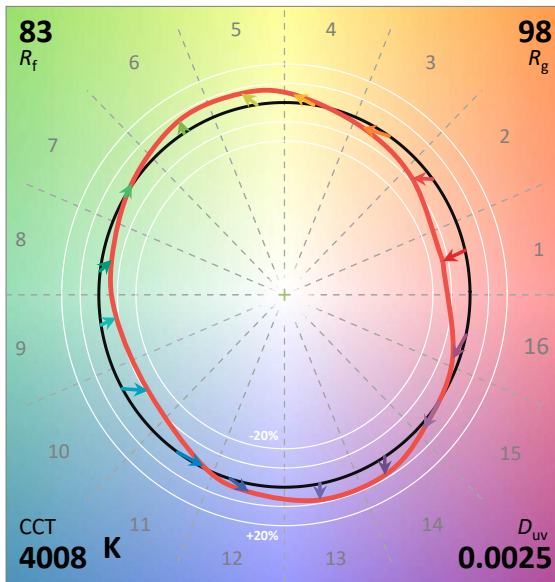
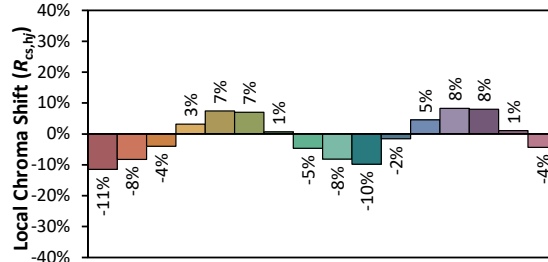
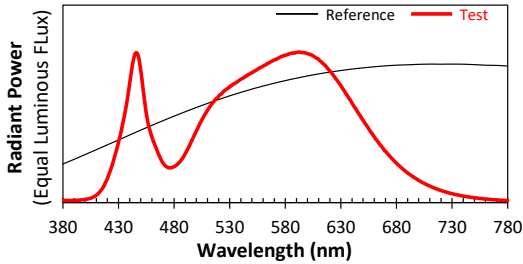
Date: 2025-12-18

Manufacturer:

B-K LIGHTING INC

Model:

NS-LED-e207-NSP-WHP-9-C



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x **0.3817**  
 y **0.3829**  
 u' **0.2235**  
 v' **0.5045**

CIE 13.3-1995 (CRI)	
$R_a$	81
$R_g$	7

Colors are for visual orientation purposes only. Created with the IES TM-30-18 Calculator Version 2.00.