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## Photometric Test Report

### Relevant Standards

IES LM-79-2008, ANSI C82.77-2002, CIE 13.3-1995  
CIE 15-2004, ANSI C78.377-2015, IES TM-30-2015

### Prepared For

#### **Cree, Inc**

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United States

### Catalog Number

**RSWS-A-HT-2ME-3L-30K7-UL-xxxx w/RSWS-BLSS**

Order Number

11675461

Test Number

11675461.02

### Test Date

2017-03-16 - 2017-03-17

### Prepared By

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### Approved By

Edward Bush, 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

Tested in 30 planes left side, 30 planes right side, left and right averaged

Vertical test increments are 2.5 degrees

Test distance exceeds five times the greatest luminous opening of luminaire



**Luminaire Description:** Formed BMC housing, clear acrylic lens, white inner reflector  
**Lamp:** 24 white LEDs  
**Mounting:** Pole/Arm  
**Ballast/Driver:** LEA03060X0010

### Luminaire



### Luminaire Characteristics

Luminous Length: 9.00 in.  
Luminous Width: 6.000 in.

### Summary of Results

#### Integrating Sphere

Luminous Flux: 3084 Lumens  
Efficacy: 110.5 lm/w  
CCT: 2946 K  
CRI (Ra): 71.9

#### Distribution

Roadway Classification:  
Cutoff Classification:  
BUG Rating:

Type III, Short  
Noncutoff  
B1 U0 G1

#### Electrical Data at 277 VAC

Test Temperature: 25.2 °C  
Voltage: 277.1 VAC  
Current: 0.1145 A  
Power: 29.03 W  
Power Factor: 0.915  
Frequency: 60 Hz  
Current THD: 16.3 %



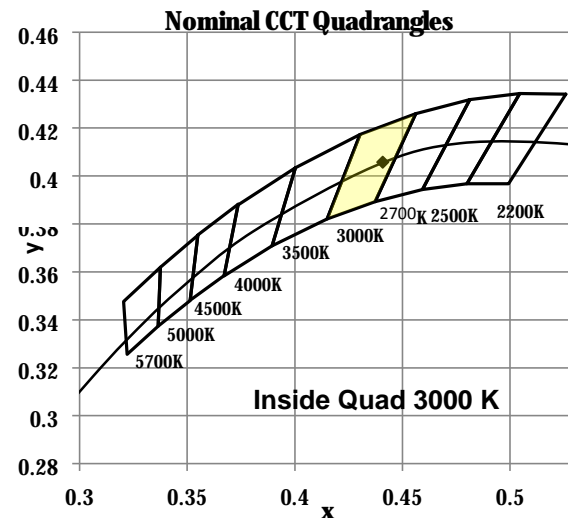
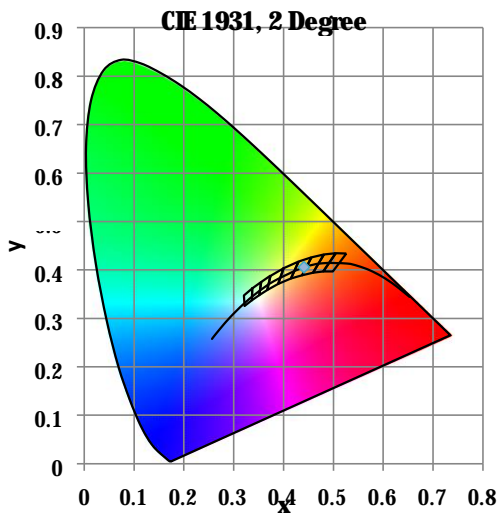
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power	Frequency	Current THD
25.0 °C	120.0 VAC	0.2340 A	27.90 W	0.994	60 Hz	4.35 %

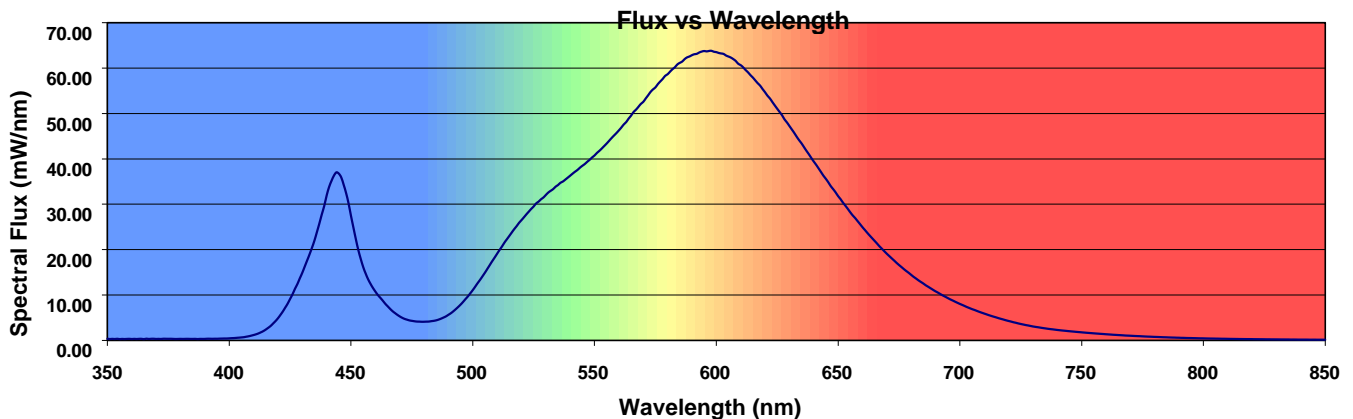
### Summary of Results

Total Output:	3084 Lumens	Chromaticity (x):	0.4409
Efficacy:	110.5 lm/w	Chromaticity (y):	0.4057
CCT:	2946 K	Chromaticity (u'):	0.2524
CRI (Ra):	71.9	Chromaticity (v'):	0.5226
CRI (R9):	-27.1	TM-30 R <sub>f</sub> :	69.2
Peak Wavelength:	597.4 nm	TM-30 R <sub>g</sub> :	96.9
Dominant Wavelength:	583 nm	Duv:	0.0001
S/P Ratio:	1.155		



### Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
71.9	68.9	80.3	90.8	69.8	67.5	72.7	78.5	46.5	-27.1	54.7	65.3	47.7	70.5	94.4





### Distribution - Goniophotometer

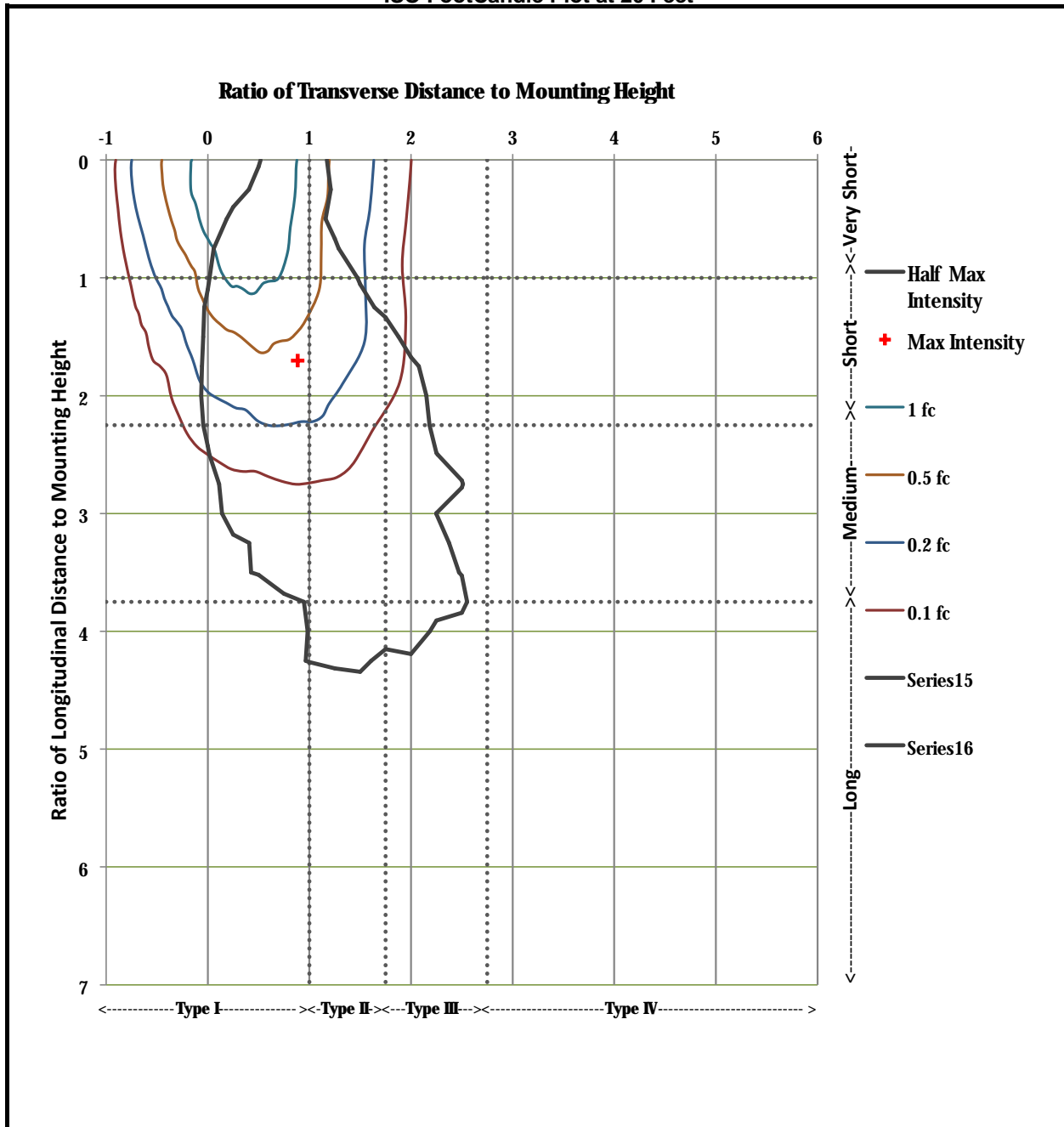
#### Distribution Test Conditions

Temperature	Voltage	Current	Power	Power	Frequency	Current THD
25.2 °C	120.0 VAC	0.2337 A	27.91 W	0.995	60 Hz	4.03 %

#### Summary of Results

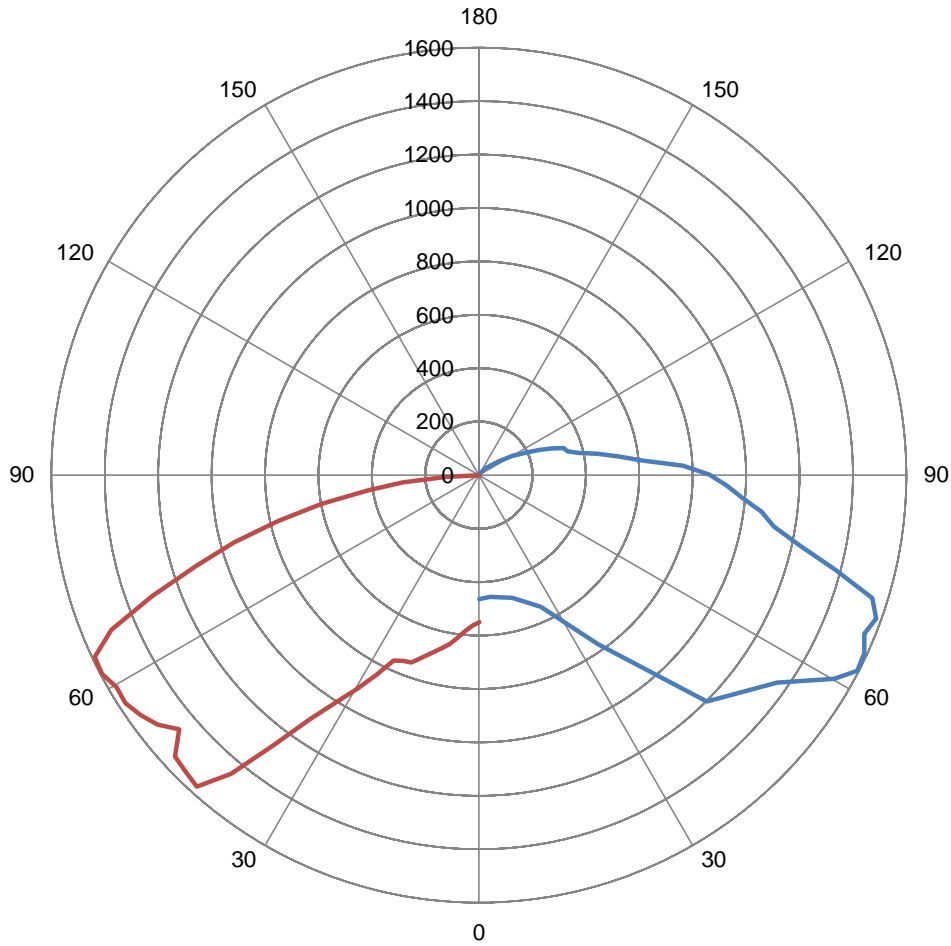
IES Roadway Classification:	Type III, Short	Total Lumen Output:	2975 Lumens
Cutoff Classification:	Noncutoff	Luminaire Efficacy:	106.6 lm/w
BUG Rating:	B1 U0 G1	Maximum Candela:	1595 Candela

#### ISO FootCandle Plot at 20 Feet





**Maximum Plane and Cone Plots of Candela**



Vertical Plane Through

62.5 ° Lateral

Lateral Cone Through

62.5 ° Vertical

Maximum Intensity (Candlepower):

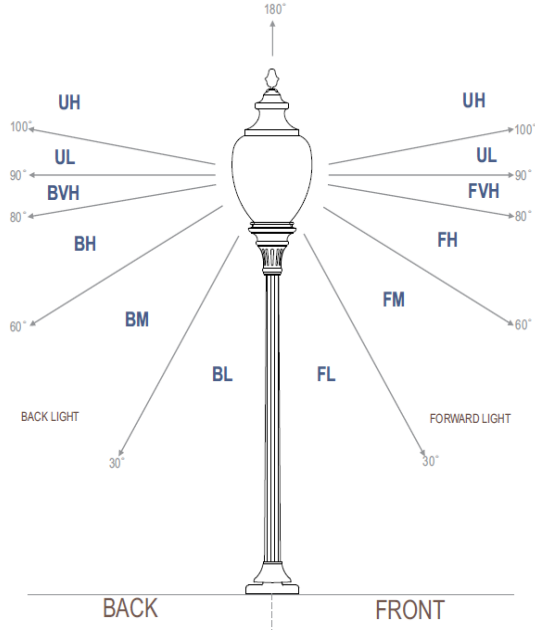
1595 Candela

**Zonal Lumen Summary**

Zone	Lumens	% of	Zone	Lumens	% of	Zone	Lumens	% of
0-5	13.9	0.5%	60-65	274.0	9.2%	120-125	0.0	0.0%
5-10	39.2	1.3%	65-70	251.5	8.5%	125-130	0.0	0.0%
10-15	65.6	2.2%	70-75	205.6	6.9%	130-135	0.0	0.0%
15-20	93.5	3.1%	75-80	146.7	4.9%	135-140	0.0	0.0%
20-25	120.3	4.0%	80-85	78.4	2.6%	140-145	0.0	0.0%
25-30	149.8	5.0%	85-90	20.2	0.7%	145-150	0.0	0.0%
30-35	186.9	6.3%	90-95	0.0	0.0%	150-155	0.0	0.0%
35-40	228.9	7.7%	95-100	0.0	0.0%	155-160	0.0	0.0%
40-45	261.8	8.8%	100-105	0.0	0.0%	160-165	0.0	0.0%
45-50	276.8	9.3%	105-110	0.0	0.0%	165-170	0.0	0.0%
50-55	280.9	9.4%	110-115	0.0	0.0%	170-175	0.0	0.0%
55-60	280.6	9.4%	115-120	0.0	0.0%	175-180	0.0	0.0%



**IES "BUG" Rating**  
 (Back Light, Uplight, Glare)  
 Per IES TM-15-11



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	308.9	10.4%
FM	(30-60)	1247.6	41.9%
FH	(60-80)	756.9	25.4%
FVH	(80-90)	87.0	2.9%
BL	(0-30)	173.4	5.8%
BM	(30-60)	268.2	9.0%
BH	(60-80)	121.0	4.1%
BVH	(80-90)	11.6	0.4%
UL	(90-100)	0.0	0.0%
UH	(100-180)	0.0	0.0%
Total		2974.6	100.0%
<b>BUG Rating</b>		<b>B1 U0 G1</b>	