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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

4600 Silicon Dr
Durham, NC 27703-8475
United States

Catalog Number

RSWM-A-HT-2ME-9L-27K8-UL-xxxxx

Order Number

11683107

Test Number

11683107.01

Test Date

2017-03-24 - 2017-03-27

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 4π 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: LEA02609X0001

Luminaire



Luminaire Characteristics

Luminous Length: 5.50 in.
Luminous Width: 9.000 in.

Summary of Results

Integrating Sphere

Luminous Flux: 9379 Lumens
Efficacy: 95.3 lm/w
CCT: 2746 K
CRI (Ra): 81.1

Distribution

Roadway Classification:
Cutoff Classification:
BUG Rating:

Type III, Short
Semicutoff
B2 U0 G3

Electrical Data at 276 VAC

Test Temperature: 24.5 °C
Voltage: 276.9 VAC
Current: 0.3749 A
Power: 98.40 W
Power Factor: 0.948
Frequency: 60 Hz
Current THD: 8.86 %



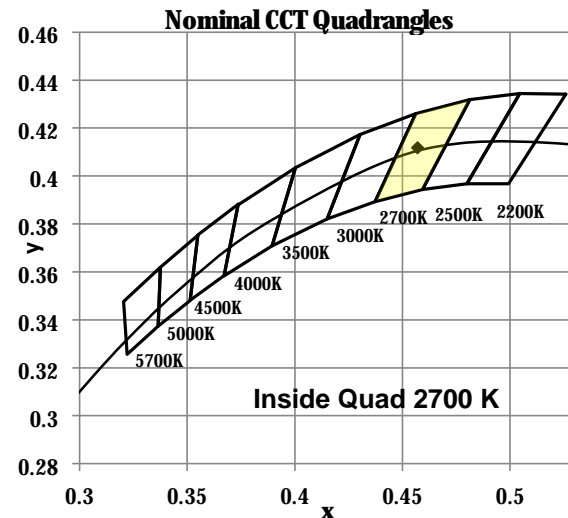
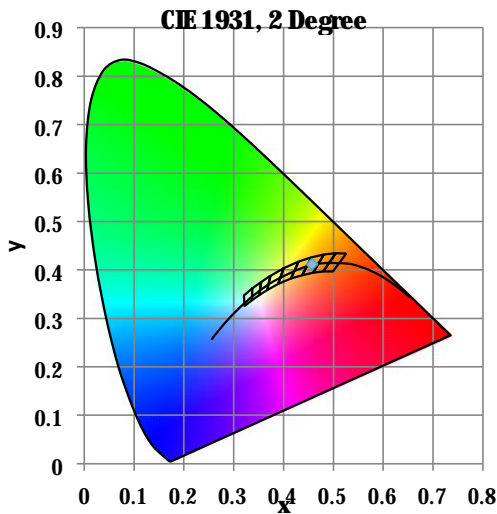
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power	Frequency	Current THD
25.7 °C	120.0 VAC	0.8247 A	98.42 W	0.995	60 Hz	4.05 %

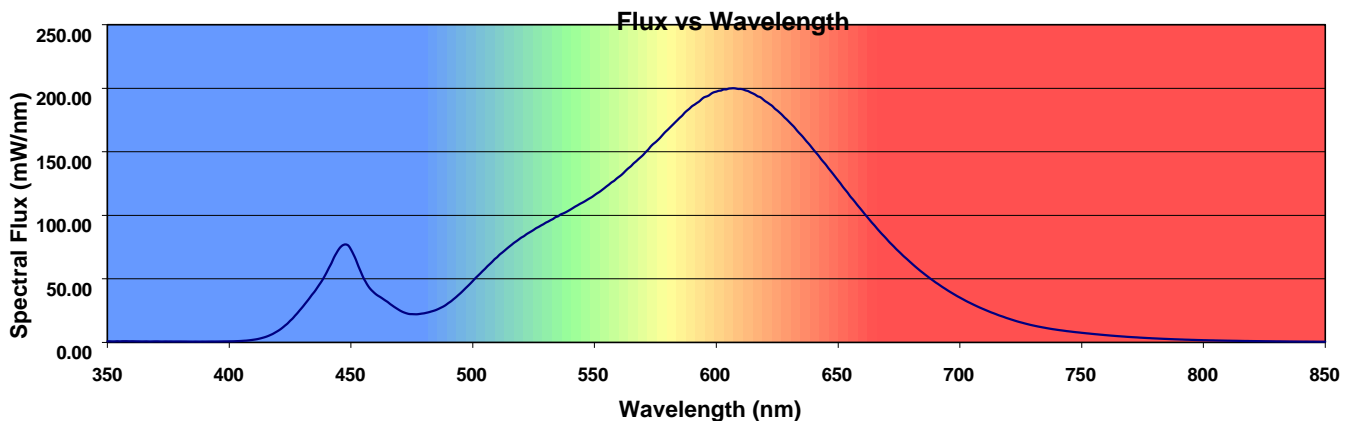
Summary of Results

Total Output:	9379 Lumens	Chromaticity (x):	0.4571
Efficacy:	95.3 lm/w	Chromaticity (y):	0.4117
CCT:	2746 K	Chromaticity (u'):	0.2602
CRI (Ra):	81.1	Chromaticity (v'):	0.5273
CRI (R9):	6.4	TM-30 R_f:	80.4
Peak Wavelength:	606.7 nm	TM-30 R_g:	98.1
Dominant Wavelength:	583.8 nm	Duv:	0.0004
S/P Ratio:	1.181		



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
81.1	79.2	88.2	96.2	79.9	78.7	85.3	83.2	58.4	6.4	73.0	78.7	68.6	80.9	97.6





Distribution - Goniophotometer

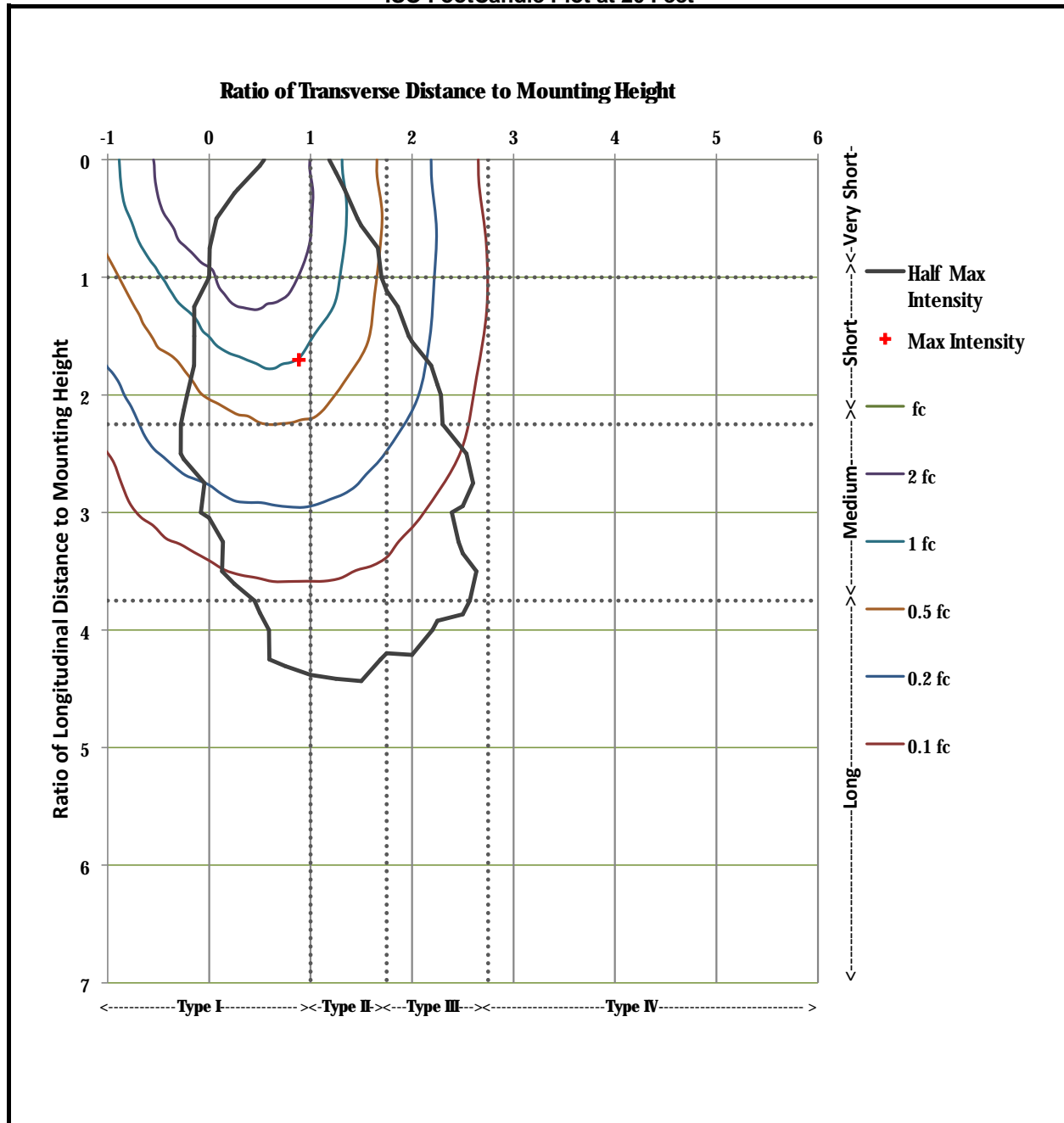
Distribution Test Conditions

Temperature	Voltage	Current	Power	Power	Frequency	Current THD
25.0 °C	119.9 VAC	0.8260 A	98.59 W	0.995	60 Hz	4.10 %

Summary of Results

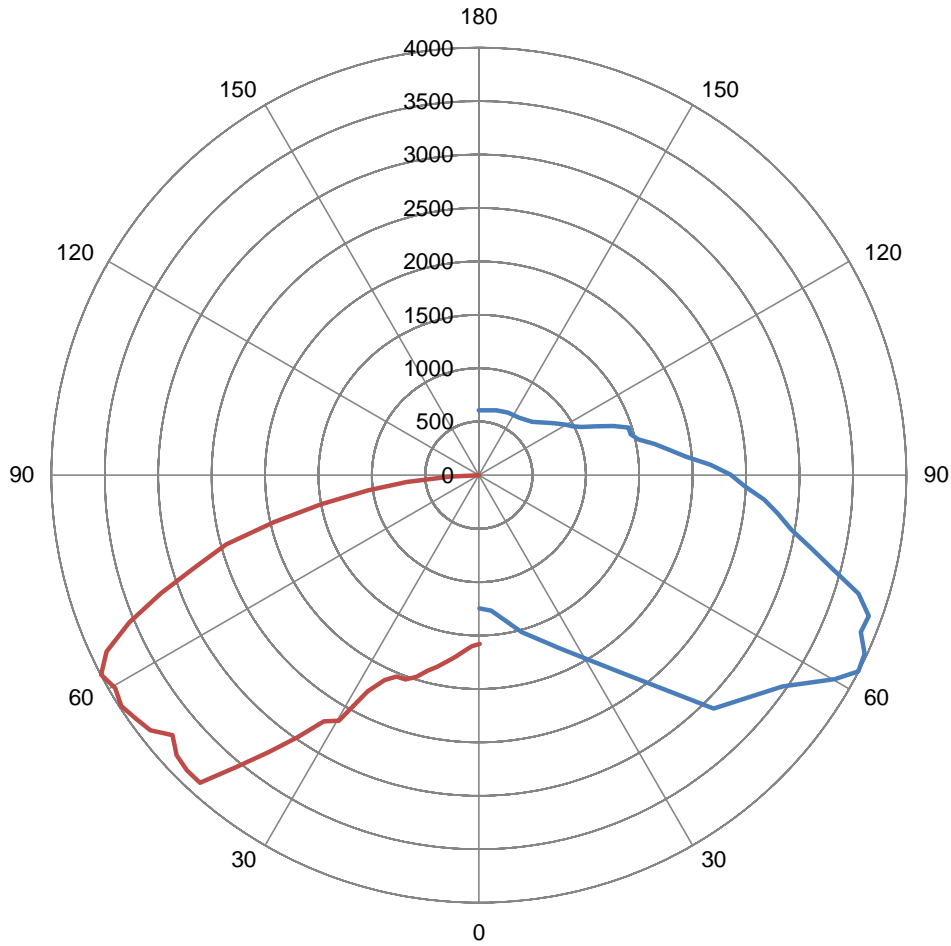
IES Roadway Classification:	Type III, Short	Total Lumen Output:	9374 Lumens
Cutoff Classification:	Semicutoff	Luminaire Efficacy:	95.1 lm/w
BUG Rating:	B2 U0 G3	Maximum Candela:	3996 Candela

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):

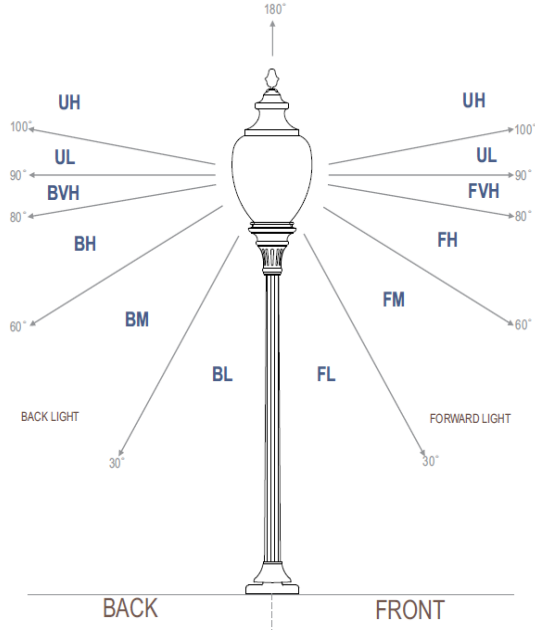
3996 Candela

Zonal Lumen Summary

Zone	Lumens	% of	Zone	Lumens	% of	Zone	Lumens	% of
0-5	40.4	0.4%	60-65	867.3	9.3%	120-125	0.0	0.0%
5-10	115.7	1.2%	65-70	798.6	8.5%	125-130	0.0	0.0%
10-15	196.8	2.1%	70-75	671.5	7.2%	130-135	0.0	0.0%
15-20	284.0	3.0%	75-80	491.3	5.2%	135-140	0.0	0.0%
20-25	370.8	4.0%	80-85	265.0	2.8%	140-145	0.0	0.0%
25-30	465.5	5.0%	85-90	64.4	0.7%	145-150	0.0	0.0%
30-35	586.1	6.3%	90-95	0.0	0.0%	150-155	0.0	0.0%
35-40	706.4	7.5%	95-100	0.0	0.0%	155-160	0.0	0.0%
40-45	800.3	8.5%	100-105	0.0	0.0%	160-165	0.0	0.0%
45-50	859.5	9.2%	105-110	0.0	0.0%	165-170	0.0	0.0%
50-55	894.0	9.5%	110-115	0.0	0.0%	170-175	0.0	0.0%
55-60	896.2	9.6%	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)	842.9	9.0%
FM	(30-60)	3366.0	35.9%
FH	(60-80)	2038.5	21.7%
FVH	(80-90)	225.8	2.4%
BL	(0-30)	630.4	6.7%
BM	(30-60)	1376.6	14.7%
BH	(60-80)	790.3	8.4%
BVH	(80-90)	103.7	1.1%
UL	(90-100)	0.0	0.0%
UH	(100-180)	0.0	0.0%
Total		9374.0	100.0%
BUG Rating		B2 U0 G3	