

Project Number
15.00945



Date
6/5/2015

LAB 6

Test Sample Description

Catalog Number: 9460673130K9
Description: 1-Lt. Small Lantern 9" w/HAL AC 9W LED Module

Test Method: IES LM-79-08 § 10
Preburn Time: 00:00
Time To Stabilize: 1:57
Total Operating Time: 2:56

Input Voltage (Volts): 120.0
Input Current (Amps): 0.071
Input Wattage (Watts): 8.0
Ambient Temp (°C): 24.3



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Greenville, SC 29607
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Checked: B. FLAUM
Approved: M. WASHBURN





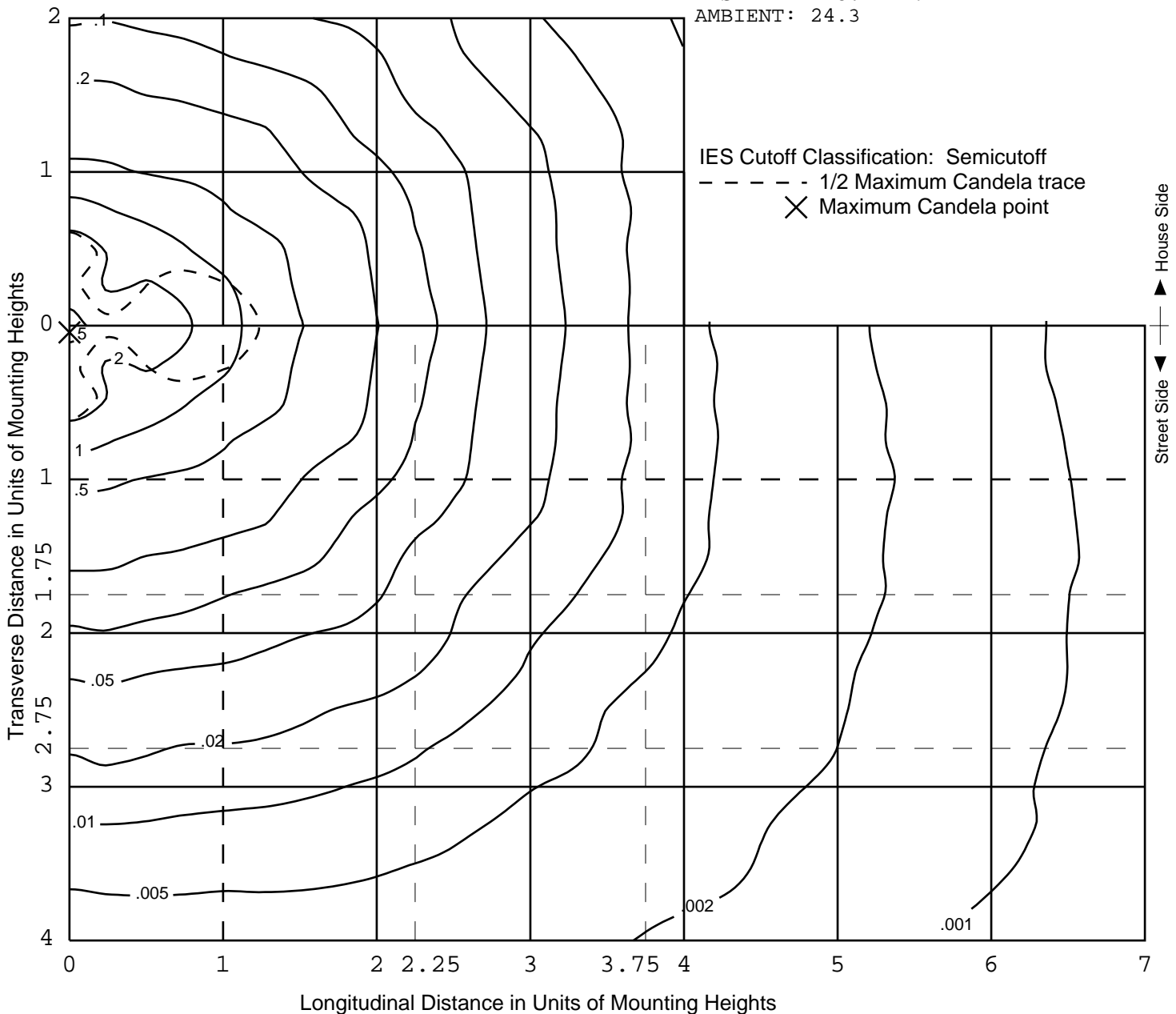
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ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION
Values based on 6 foot mounting height.

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PREPARED FOR: PROGRESS
CATALOG NUMBER: 9460673130K9
LUMINAIRE: 1-Lt. Small Lantern 9" w/HAL
AC 9W LED Module
LAMP CAT. NO.: 93049180-3130
LAMP: 20 - Nichia 3000K LEDs
INPUT ELECTRICAL: 120.0 VOLTS, 8.00
WATTS, 0.071 AMPS
MOUNTING: Wall
REFRACTOR: Part # 93053157 Clear Seeded
panels
NOTE: DATA SHOWN IS ABSOLUTE FOR THE
SAMPLE PROVIDED.
AMBIENT: 24.3





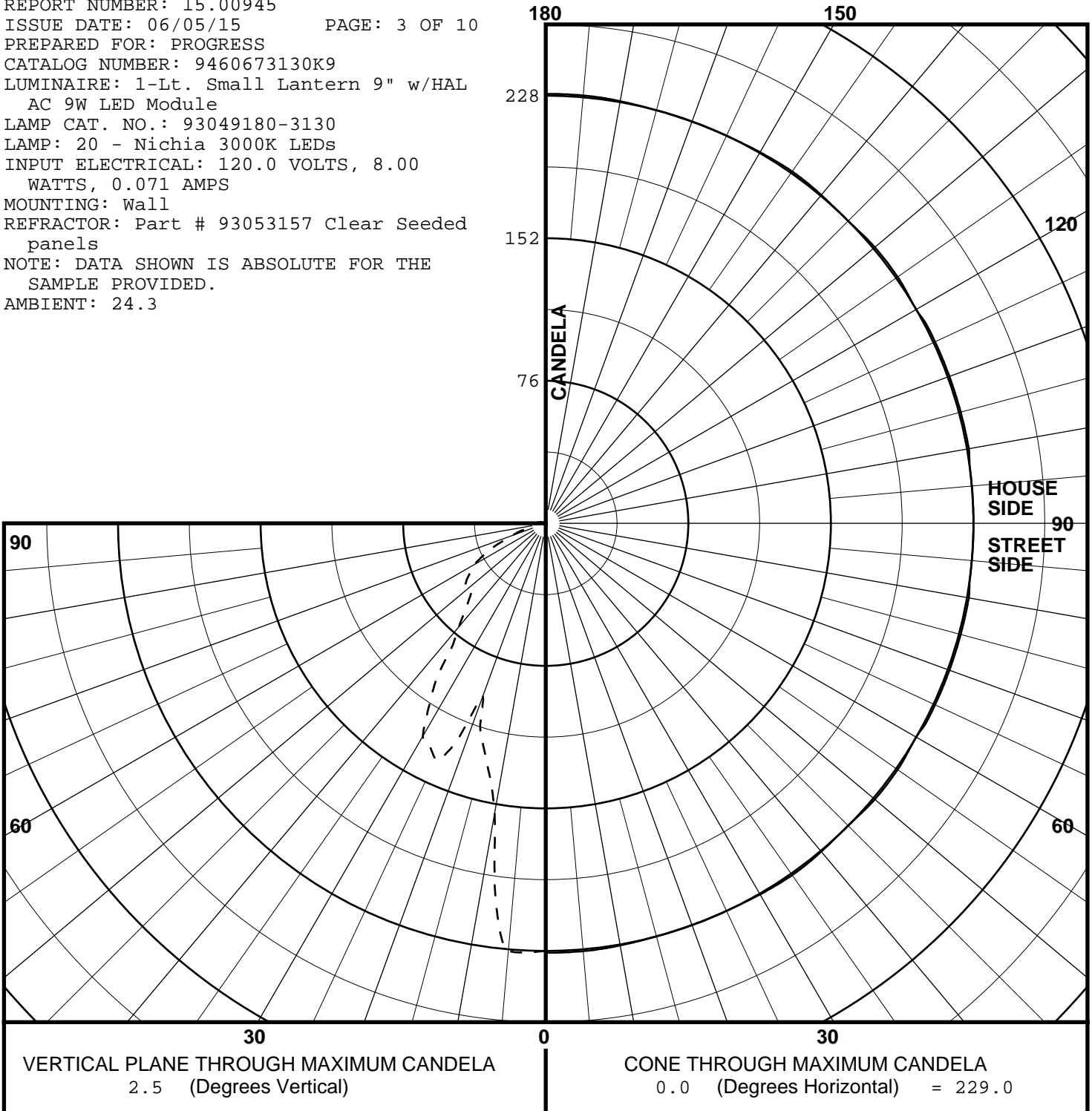
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MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA

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 SAMPLE PROVIDED.
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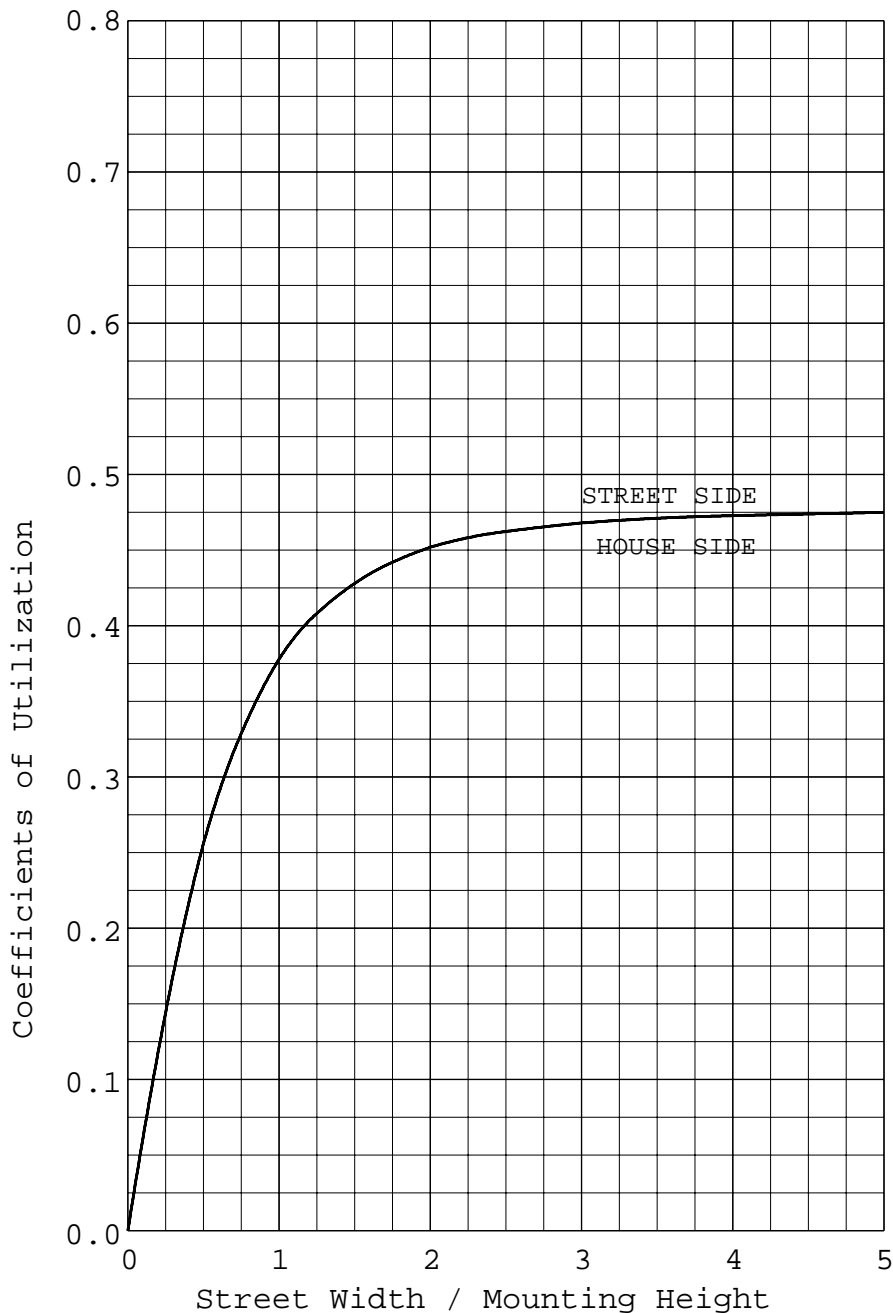
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COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	192.	48.5
DOWNWARD HOUSE SIDE	192.	48.5
DOWNWARD TOTAL	384.	97.0
UPWARD STREET SIDE	6.	1.5
UPWARD HOUSE SIDE	6.	1.5
UPWARD TOTAL	12.	3.0
TOTAL FLUX	396.	100.0
TOTAL INPUT WATTS = 8.00		
EFFICACY = 49.5 Lm/W		

ALL CANDELA AND LUMENS IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS LUMINAIRE SAMPLE.

THIS REPORT IS BASED ON PUBLISHED INDUSTRY PROCEDURES. FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE.



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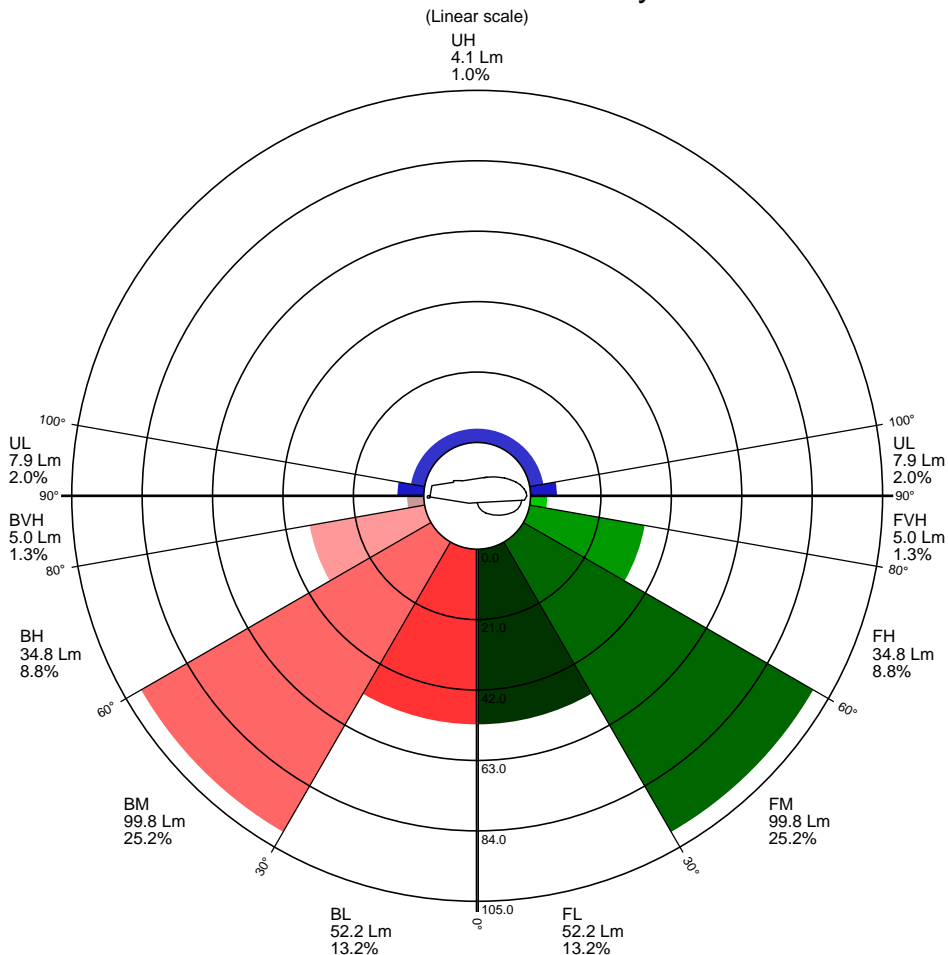


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BUG Rating:			B0 U1 G0		
Zonal Summary			Lumens	% of Fixture	Zone Ratings
			B U G		
Forward			192	48.5	
FL	(0° - 30°)		52.2	13.2	
FM	(30° - 60°)		99.8	25.2	
FH	(60° - 80°)		34.8	8.8	G0
FVH	(80° - 90°)		5.0	1.3	G0
Backward			192	48.5	
BL	(0° - 30°)		52.2	13.2	B0
BM	(30° - 60°)		99.8	25.2	B0
BH	(60° - 80°)		34.8	8.8	B0
BVH	(80° - 90°)		5.0	1.3	G0
Upward			12	3.0	
UL	(90° - 100°)		7.9	2.0	U1
UH	(100° - 180°)		4.1	1.0	U1
Trapped Light			0	0.0	
Total Flux			396	100.0	

Zonal Lumen Summary





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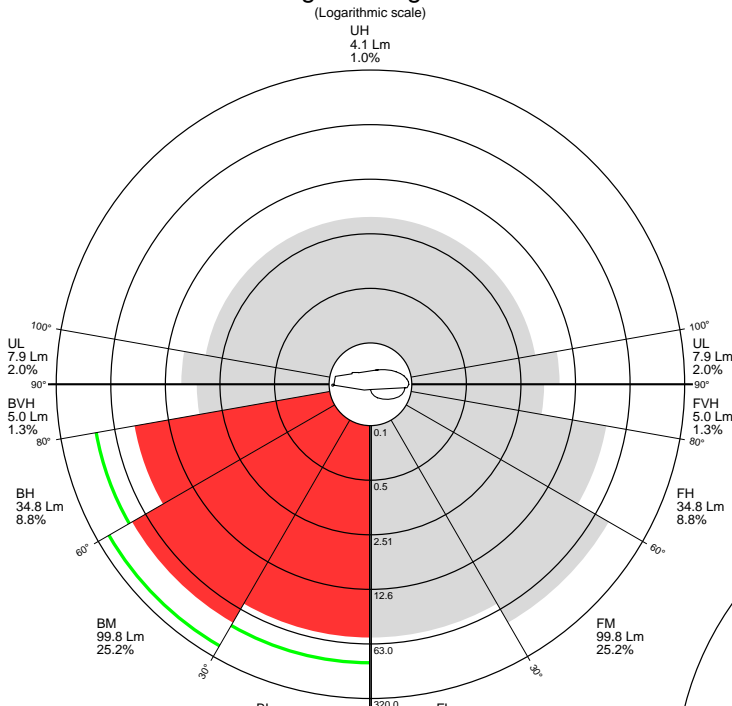


NVLAP LAB CODE: 201003-0

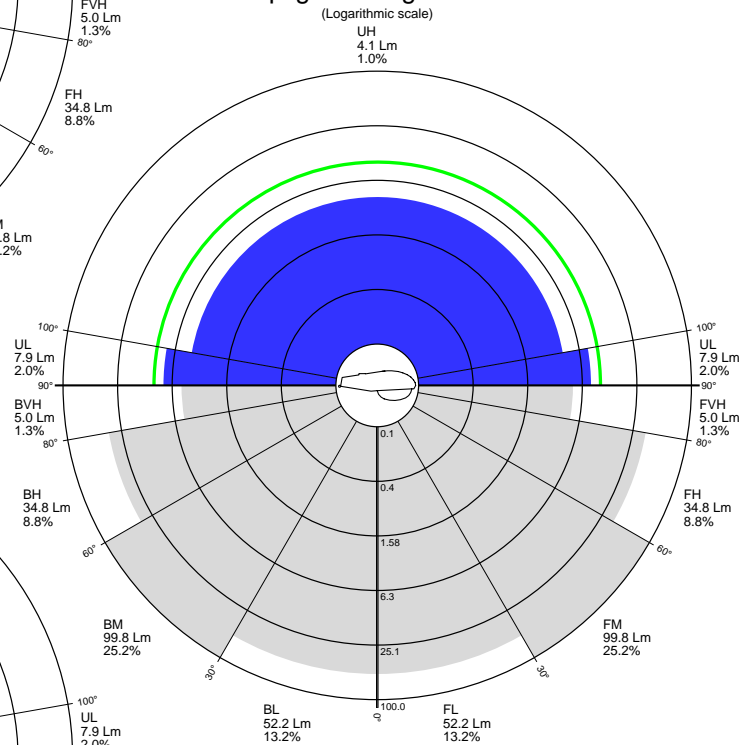
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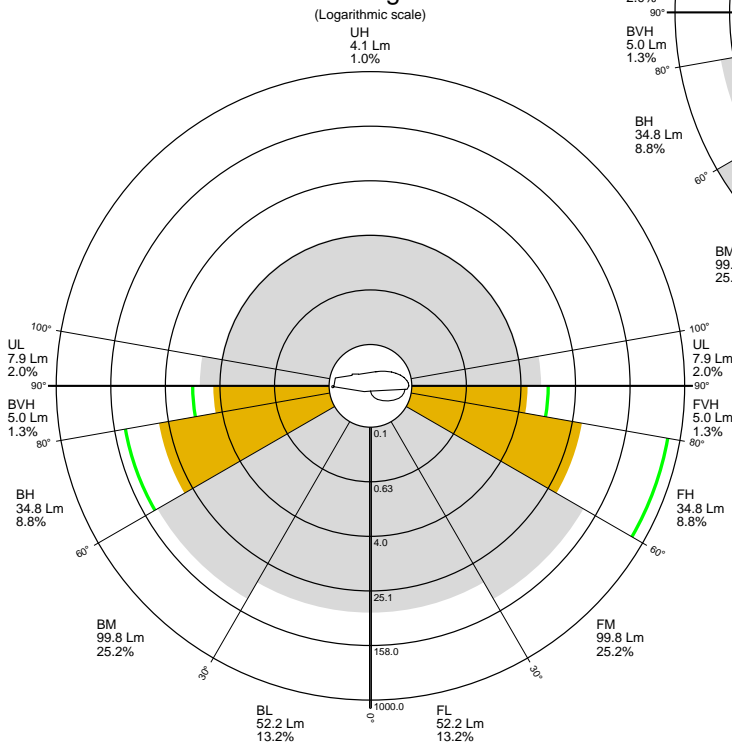
Backlight Rating Details



Uplight Rating Details



Glare Rating Details





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CANDELA TABULATION
STREET SIDE

	LATERAL ANGLE									
	0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	85.0
	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.	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.	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.
	3.	3.	4.	5.	6.	7.	7.	7.	7.	5.
	4.	4.	5.	6.	8.	8.	9.	9.	8.	6.
	4.	5.	6.	7.	8.	9.	10.	10.	9.	7.
	5.	5.	6.	7.	9.	10.	10.	10.	9.	7.
	5.	5.	7.	8.	9.	10.	11.	11.	10.	8.
	6.	6.	7.	9.	10.	11.	12.	12.	11.	9.
V	6.	7.	8.	10.	11.	12.	13.	13.	12.	11.
E	7.	8.	9.	11.	13.	14.	14.	15.	14.	13.
R	9.	10.	11.	14.	17.	18.	19.	20.	20.	18.
T	15.	15.	15.	18.	21.	28.	23.	27.	29.	28.
I	19.	22.	20.	26.	29.	41.	35.	43.	42.	39.
C	25.	27.	26.	32.	36.	49.	49.	54.	56.	55.
A	32.	36.	34.	38.	42.	53.	52.	67.	72.	70.
L	38.	43.	40.	43.	45.	63.	60.	73.	83.	79.
	44.	46.	45.	47.	51.	66.	65.	82.	94.	88.
A	47.	51.	45.	51.	56.	71.	69.	89.	100.	97.
N	51.	53.	50.	52.	57.	75.	73.	93.	106.	105.
G	54.	55.	55.	56.	56.	77.	75.	97.	104.	105.
L	55.	57.	58.	56.	60.	80.	78.	99.	111.	110.
E	54.	58.	57.	59.	63.	83.	85.	100.	114.	121.
	58.	59.	59.	65.	65.	86.	87.	108.	116.	117.
	64.	64.	65.	67.	70.	90.	87.	114.	122.	128.
	72.	72.	69.	69.	73.	92.	90.	117.	131.	130.
	81.	83.	81.	80.	73.	95.	93.	120.	139.	146.
	102.	102.	99.	89.	77.	92.	95.	126.	152.	154.
	131.	124.	122.	103.	86.	88.	95.	124.	156.	165.
	139.	138.	134.	108.	79.	72.	82.	106.	143.	149.
	98.	95.	89.	93.	78.	75.	81.	97.	99.	100.
	126.	127.	124.	119.	109.	104.	110.	119.	126.	124.
	157.	158.	164.	164.	173.	186.	174.	166.	164.	157.
	229.	229.	229.	229.	229.	229.	229.	228.	228.	228.
	229.	229.	228.	228.	229.	228.	229.	229.	229.	228.
	228.	228.	228.	228.	228.	228.	228.	228.	228.	228.

||
||
PLANE OF MAXIMUM CANDELA
CONE OF MAXIMUM CANDELA



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CANDELA TABULATION
HOUSE SIDE

LATERAL ANGLE

	90.0	95.0	105.0	115.0	125.0	135.0	145.0	155.0	165.0	175.0	180.0
	180.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	175.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	165.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	155.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	145.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	135.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	125.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	115.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	105.0	5.	5.	7.	7.	7.	7.	6.	5.	4.	3.
	95.0	6.	6.	8.	9.	9.	8.	8.	6.	5.	4.
	90.0	7.	7.	9.	10.	10.	9.	8.	7.	6.	5.
	87.5	7.	7.	9.	10.	10.	10.	9.	7.	6.	5.
	85.0	8.	8.	10.	11.	11.	10.	9.	8.	7.	5.
	82.5	9.	9.	11.	12.	12.	11.	10.	9.	7.	6.
V	80.0	10.	11.	12.	13.	13.	12.	11.	10.	8.	7.
E	77.5	12.	13.	14.	15.	14.	14.	13.	11.	9.	8.
R	75.0	17.	18.	20.	20.	19.	18.	17.	14.	11.	10.
T	72.5	29.	28.	29.	27.	23.	28.	21.	18.	15.	15.
I	70.0	41.	39.	42.	43.	35.	41.	29.	26.	20.	22.
C	67.5	60.	55.	56.	54.	49.	49.	36.	32.	26.	27.
A	65.0	77.	70.	72.	67.	52.	53.	42.	38.	34.	36.
L	62.5	85.	79.	83.	73.	60.	63.	45.	43.	40.	43.
	60.0	93.	88.	94.	82.	65.	66.	51.	47.	45.	46.
A	57.5	107.	97.	100.	89.	69.	71.	56.	51.	45.	51.
N	55.0	112.	105.	106.	93.	73.	75.	57.	52.	50.	53.
G	52.5	113.	105.	104.	97.	75.	77.	56.	56.	55.	55.
L	50.0	115.	110.	111.	99.	78.	80.	60.	56.	58.	57.
E	47.5	120.	121.	114.	100.	85.	83.	63.	59.	57.	58.
	45.0	124.	117.	116.	108.	87.	86.	65.	65.	59.	59.
	42.5	139.	128.	122.	114.	87.	90.	70.	67.	65.	64.
	40.0	144.	130.	131.	117.	90.	92.	73.	69.	69.	72.
	37.5	154.	146.	139.	120.	93.	95.	73.	80.	81.	83.
	35.0	156.	154.	152.	126.	95.	92.	77.	89.	99.	102.
	30.0	155.	165.	156.	124.	95.	88.	86.	103.	122.	124.
	25.0	147.	149.	143.	106.	82.	72.	79.	108.	134.	138.
	20.0	97.	100.	99.	97.	81.	75.	78.	93.	89.	95.
	15.0	123.	124.	126.	119.	110.	104.	109.	119.	124.	127.
	10.0	156.	157.	164.	166.	174.	186.	173.	164.	164.	158.
	5.0	229.	228.	228.	228.	229.	229.	229.	229.	229.	229.
	2.5<<	228.	228.	229.	229.	229.	228.	229.	228.	228.	229.
	0.0	228.	228.	228.	228.	228.	228.	228.	228.	228.	228.

CONE OF MAXIMUM CANDELA



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	5
5- 10	15
10- 15	16
15- 20	17
20- 25	21
25- 30	30
30- 35	33
35- 40	34
40- 45	33
45- 50	33
50- 55	33
55- 60	32
60- 65	28
65- 70	22
70- 75	13
75- 80	7
80- 85	5
85- 90	5
90- 95	4
95-100	4
100-105	3
105-110	1
110-115	0
115-120	0
120-125	0
125-130	0
130-135	0
135-140	0
140-145	0
145-150	0
150-155	0
155-160	0
160-165	0
165-170	0
170-175	0
175-180	0

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	20
0- 20	54
0- 30	104
0- 40	172
0- 50	239
0- 60	304
0- 70	354
0- 80	374
0- 90	384
0-100	392
0-110	396
0-120	396
0-130	396
0-140	396
0-150	396
0-160	396
0-170	396
0-180	396

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Date
6/5/2015

Goniophotometer Calibration

Calibration Lamp: GE 1000W, 120V, T6, CL (FEL)

Lamp Number: ITL78966-1000-38

Calibration Current: 8.300 Amps DC

Total Luminous Flux: 25753.0 Lumens

Calibration Date: 11/24/2014

Test Equipment Used

<i>Instrument</i>	<i>Manufacturer / Model</i>	<i>S/N</i>	<i>Calibration Due:</i>
<i>Goniophotometer</i>	ITL / HLI LAB 6 - Test Distance: 31.3'	N/A	N/A
<i>Power Analyzer</i>	Yokogawa / WT 332	C2QA27076V	11/12/2015
<i>Power Source</i>	Voltage-Regulated House Power	N/A	N/A
<i>Thermometer</i>	National Instruments / USB-TC01	1912745	11/11/2015

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This report shall not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.