

Project Number  
17.03080



**HUBBELL**  
Lighting

Date  
12/7/2017

Lab 6  
Sphere

### Test Sample Description

Catalog Number: P560109-031-30  
Description: Medium, Single Module LED Wall Lantern

#### Photometry

IES LM-31-95

Test Method: IES LM-79-08 § 10

Preburn Time: 0:30

Time To Stabilize: 1:00

Total Operating Time: 16:35

Input Voltage (Volts): 119.8

Input Current (Amps): 0.080

Input Wattage (Watts): 9.6

Ambient Temp (°C): 24.2

#### Sphere

IES LM-16-93

Test Method: IES LM-79-08 § 9.1 & 12.1

Preburn Time: 8:00

Time To Stabilize: 1:23

Total Operating Time: 9:23

Input Voltage (Volts): 120.0

Input Current (Amps): 0.080

Input Wattage (Watts): 9.5

Ambient Temp (°C): 24.0

PF @ 120V: 0.992

THD @ 120V (%): 11.7



### Hubbell Lighting, Inc.

701 Millennium Boulevard  
Greenville, SC 29607  
www.hubbelllighting.com

Checked (sphere): B.LEE  
Checked (photometry): M.ELLMANN  
Approved: P. McCARTHY



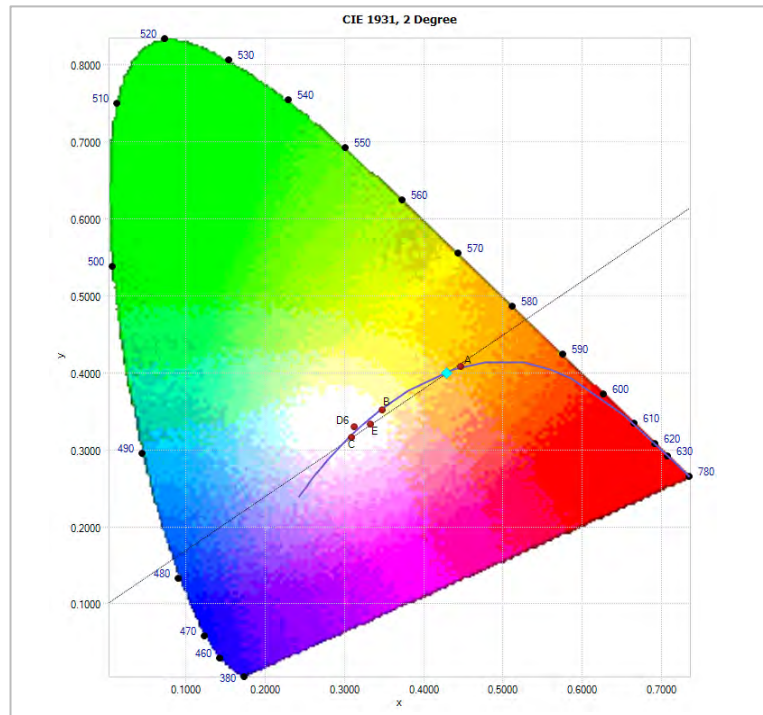
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Lamp Cat#: 93070270-3330  
 Lamp Desc: 20 - 3000K LEDs

Efficacy: 33.9 LPW      S/P Ratio: 1.5 LM/LM

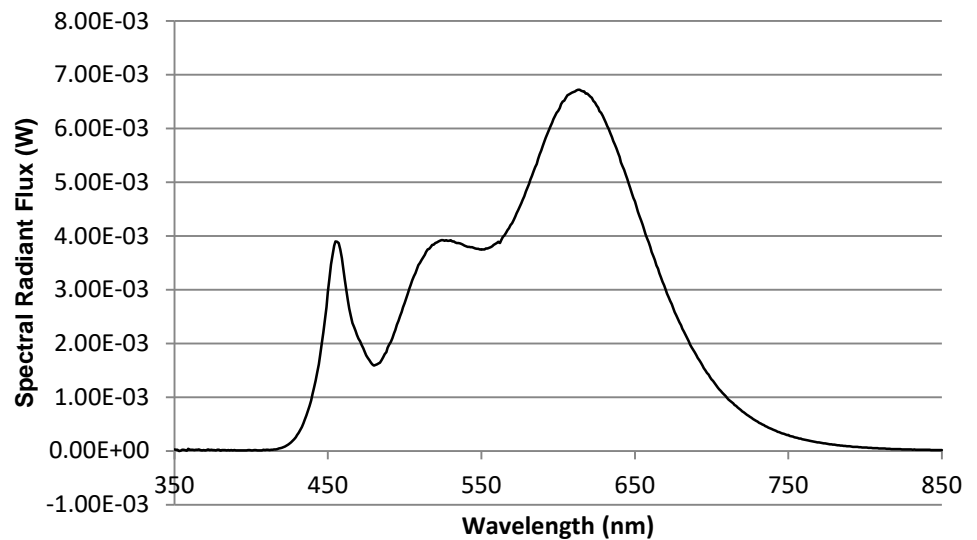
### Chromaticity Diagram



### Spectral Results

Name	Value	Unit
$\Phi$	1.06	watts
$\Phi(v)$	322	lumens
$\Phi(v')$	492	lm'
Chrom x	0.4289	
Chrom y	0.4002	
Chrom u	0.247	
Chrom v	0.3458	
Duv	0.0009	
Chrom u'	0.247	
Chrom v'	0.5187	
CCT	3107	K
Purity	48.9	%
$\lambda$ (dom)	582.5	nm
FWHM	157.7	nm
$\lambda$ (peak)	613.4	nm
$\lambda$ (center)	586.5	nm
$\lambda$ (centroid)	584.6	nm
SDCM	Cool White	
RA	94	
Corr. Coef.	0.000403038	
Correlation	0.0054	
R1	97.9	
R2	99.0	
R3	96.2	
R4	98.8	
R5	98.2	
R6	93.5	
R7	89.8	
R8	80.2	
R9	56.5	
R10	98.2	
R11	94.8	
R12	84.2	
R13	99.4	
R14	98.5	

### Spectral Distribution of Radiant Flux



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**PREPARED FOR:** PROGRESS

**CATALOG NUMBER:** P560109-031-30

**LUMINAIRE:** Medium, Single Module LED Wall Lantern

**LAMP:** 20- 3000K LED

**MOUNTING:** Wall

**REFRACTOR:** Clear, Ribbed

**NOTE:** DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.



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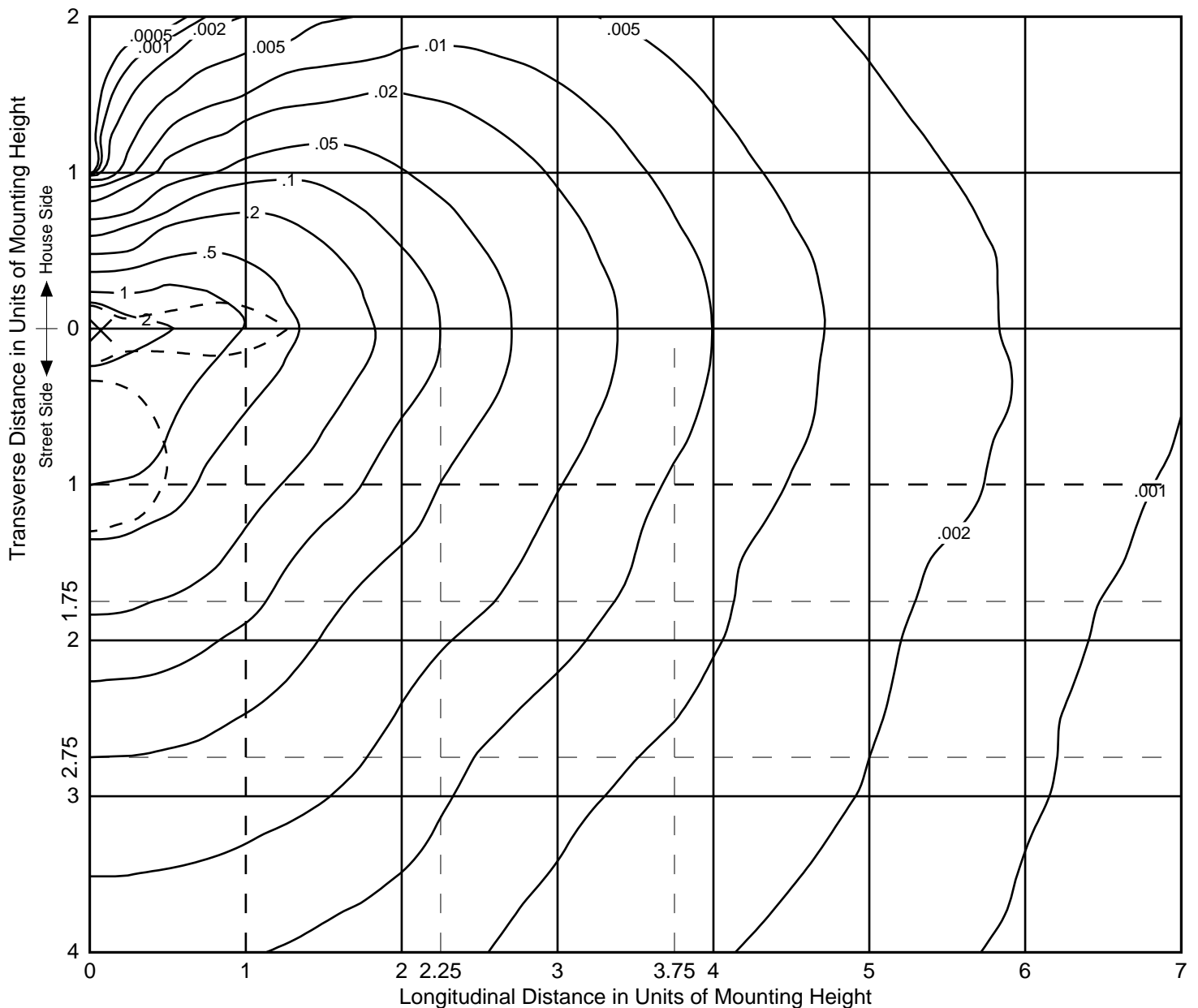
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## ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION

Values based on 6.5-foot mounting height

IES Classification: (does not classify)  
Cutoff Classification (deprecated): Noncutoff

--- 1/2 Maximum Candela trace  
X Maximum Candela point





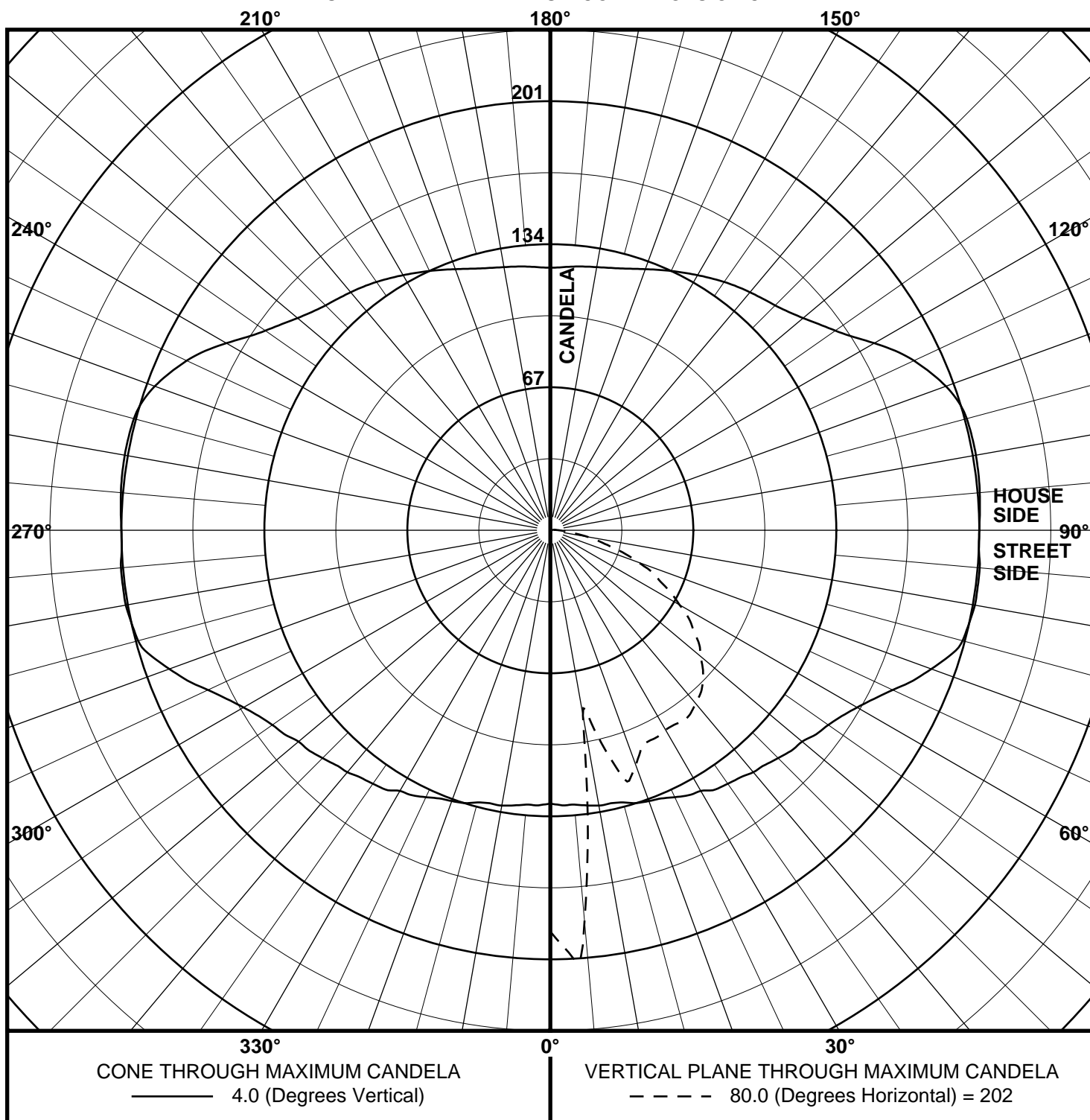
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MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA





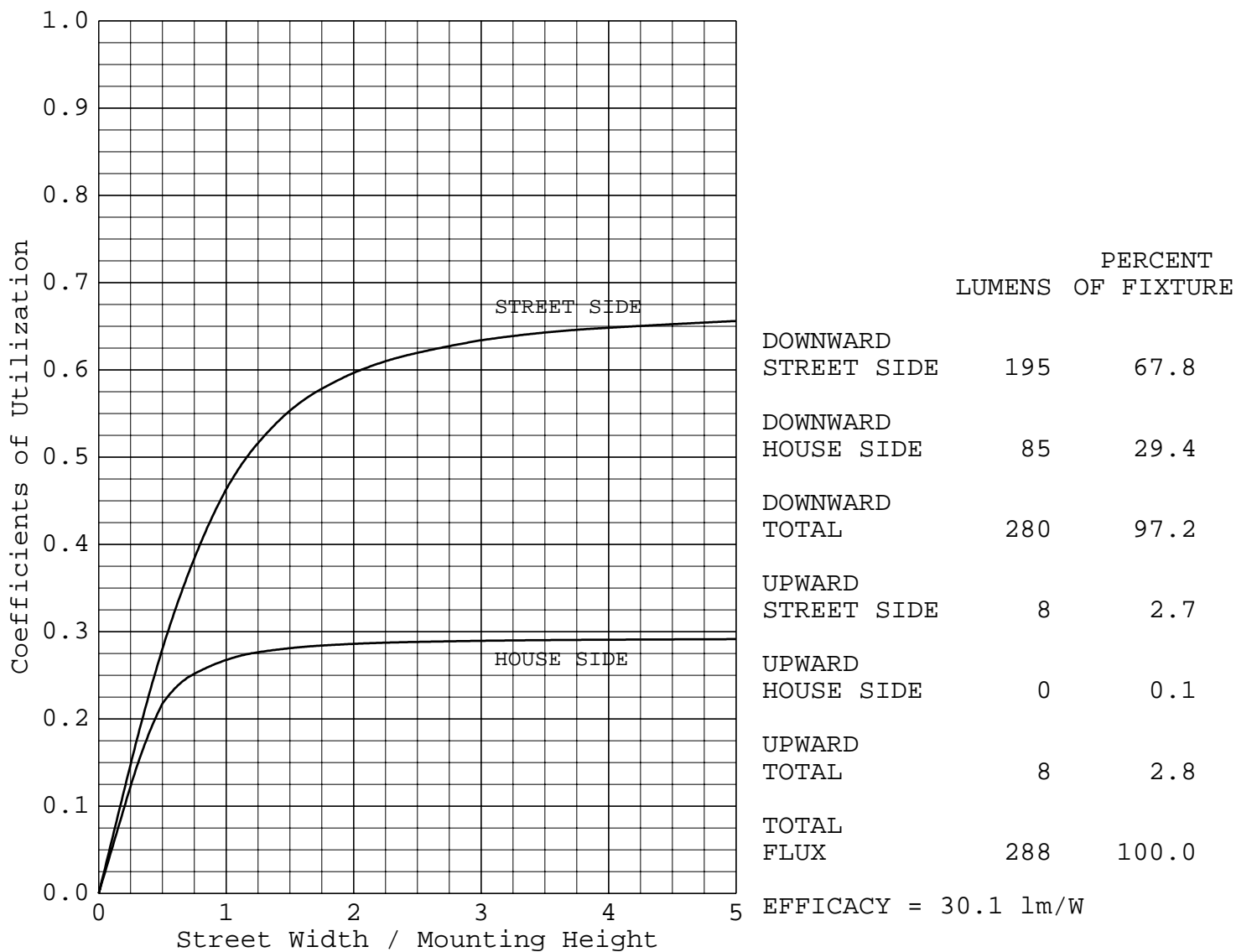
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## COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



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.



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BUG Rating				B0	U1	G0
Zonal Summary		Lumens	% of Fixture	Zone Ratings		
				B	U	G
Forward		195	67.8			
FL	(0° – 30°)	41.8	14.5			
FM	(30° – 60°)	103.5	36.0			
FH	(60° – 80°)	42.2	14.7			G0
FVH	(80° – 90°)	7.5	2.6			G0
Backward		85	29.4			
BL	(0° – 30°)	25.1	8.7	B0		
BM	(30° – 60°)	42.2	14.7	B0		
BH	(60° – 80°)	15.6	5.4	B0		G0
BVH	(80° – 90°)	1.8	0.6			G0
Upward		8	2.8			
UL	(90° – 100°)	3.9	1.3		U1	
UH	(100° – 180°)	4.2	1.5		U1	
Trapped Light		0	0.0			
Total Flux		288	100.0			



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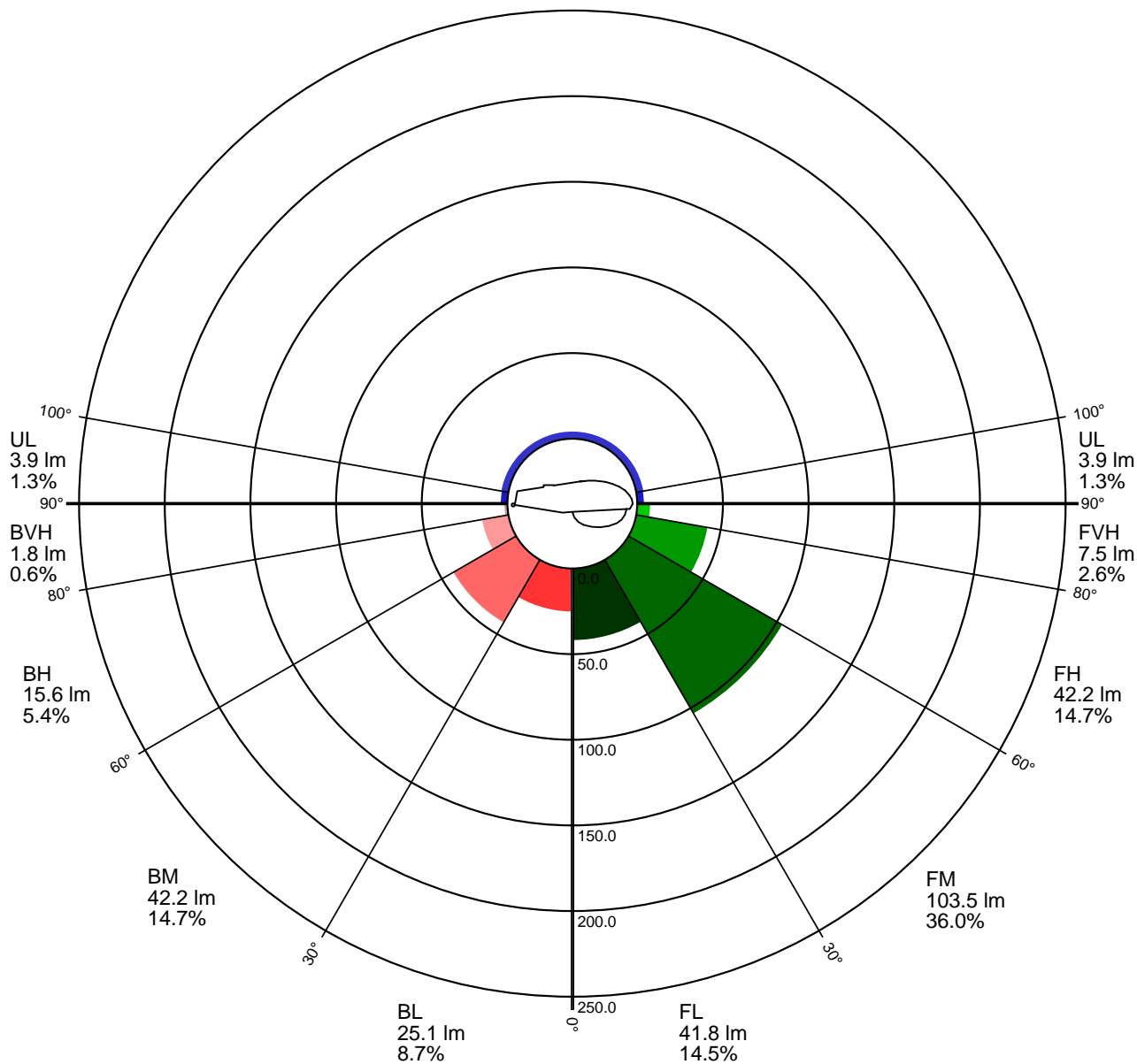
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## Zonal Lumen Summary

(Linear scale)

UH  
4.2 lm  
1.5%







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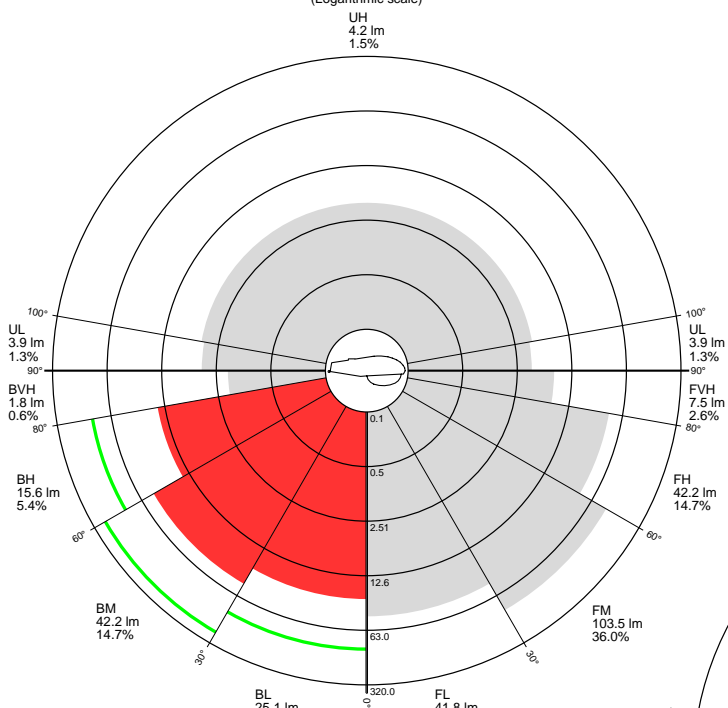
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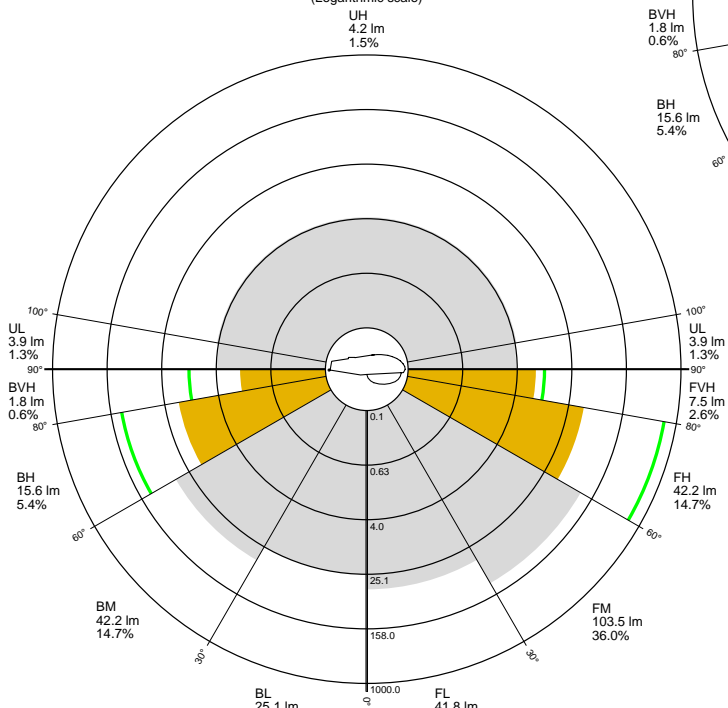
### Backlight Rating Details

(Logarithmic scale)



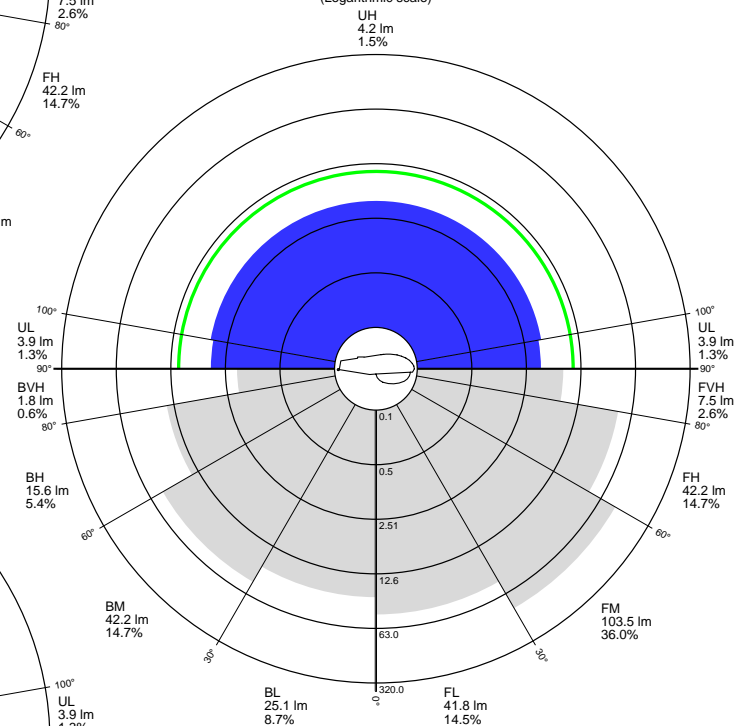
### Glare Rating Details

(Logarithmic scale)



### Uplight Rating Details

(Logarithmic scale)





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CANDELA TABULATION

	LATERAL ANGLE										
	STREET SIDE	2.5	5.0	7.5	10.0	12.5	15.0	17.5	20.0	22.5	25.0
	0.0										
	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	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	145.0	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	135.0	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	125.0	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.
	115.0	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.
	105.0	6.	6.	6.	6.	6.	5.	5.	5.	5.	5.
	95.0	11.	11.	11.	11.	10.	10.	9.	9.	9.	8.
	92.5	13.	13.	13.	12.	12.	11.	11.	11.	10.	10.
	90.0	15.	15.	15.	14.	14.	13.	13.	12.	12.	11.
	87.5	17.	17.	17.	17.	16.	15.	15.	14.	14.	13.
	85.0	20.	20.	20.	20.	19.	18.	18.	17.	17.	16.
V	82.5	24.	24.	24.	23.	22.	22.	21.	20.	20.	19.
E	80.0	27.	28.	27.	28.	27.	26.	25.	25.	24.	23.
R	77.5	33.	33.	33.	33.	32.	31.	30.	30.	28.	28.
T	75.0	39.	39.	39.	38.	38.	37.	36.	35.	34.	34.
I	72.5	45.	46.	45.	45.	44.	43.	42.	41.	41.	40.
C	70.0	53.	53.	53.	53.	52.	51.	50.	48.	47.	46.
A	67.5	60.	61.	61.	60.	59.	57.	56.	54.	52.	51.
L	65.0	67.	66.	66.	66.	65.	64.	63.	61.	59.	58.
	62.5	72.	72.	72.	71.	70.	68.	67.	66.	64.	63.
A	60.0	79.	79.	79.	79.	78.	77.	75.	73.	71.	70.
N	57.5	86.	86.	86.	86.	85.	84.	83.	81.	80.	78.
G	55.0	93.	93.	92.	92.	92.	91.	89.	88.	86.	85.
L	52.5	100.	100.	100.	100.	98.	97.	95.	94.	92.	89.
E	50.0	107.	107.	107.	107.	106.	105.	104.	102.	100.	98.
	47.5	114.	114.	114.	114.	113.	112.	110.	109.	106.	104.
	45.0	120.	120.	120.	120.	119.	118.	116.	114.	112.	110.
	42.5	124.	124.	124.	124.	123.	122.	120.	118.	115.	113.
	40.0	128.	128.	128.	128.	127.	126.	124.	122.	120.	117.
	37.5	131.	131.	131.	131.	130.	129.	127.	125.	122.	119.
	35.0	132.	132.	132.	132.	131.	130.	128.	126.	123.	119.
	30.0	127.	128.	128.	127.	127.	126.	124.	122.	120.	117.
	25.0	117.	117.	117.	117.	117.	115.	114.	113.	110.	108.
	20.0	104.	104.	104.	104.	103.	103.	102.	101.	99.	98.
	15.0	90.	90.	90.	90.	90.	90.	89.	88.	87.	86.
	10.0	82.	82.	83.	83.	83.	84.	84.	84.	84.	84.
	5.0	111.	111.	113.	113.	113.	115.	116.	118.	119.	121.
	4.0<<	128.	129.	129.	130.	131.	131.	132.	134.	135.	136.
	0.0	188.	188.	188.	188.	188.	188.	188.	188.	188.	188.

CONE OF MAXIMUM CANDELA

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CANDELA TABULATION

	STREET	LATERAL ANGLE										
		SIDE	27.5	30.0	32.5	35.0	37.5	40.0	42.5	45.0	47.5	50.0
V E R T I C A L  A N G L E	180.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	175.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	165.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	155.0	1.	1.	1.	1.	1.	1.	0.	1.	1.	0.	0.
	145.0	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	135.0	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
	125.0	2.	2.	2.	2.	2.	1.	1.	1.	1.	1.	1.
	115.0	3.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.
	105.0	5.	4.	4.	4.	4.	4.	4.	3.	3.	3.	3.
	95.0	8.	8.	7.	7.	7.	6.	6.	6.	6.	6.	5.
	92.5	9.	9.	8.	8.	8.	8.	7.	7.	7.	7.	7.
	90.0	11.	11.	10.	10.	9.	9.	9.	9.	8.	8.	8.
	87.5	13.	13.	12.	11.	11.	11.	10.	10.	10.	10.	10.
	85.0	15.	15.	14.	14.	13.	13.	12.	12.	12.	12.	12.
	82.5	19.	18.	17.	16.	16.	15.	15.	15.	14.	14.	14.
	80.0	22.	21.	21.	20.	19.	18.	18.	17.	17.	17.	17.
	77.5	28.	27.	25.	24.	22.	22.	21.	20.	20.	20.	20.
	75.0	33.	32.	31.	28.	26.	24.	23.	23.	23.	23.	24.
	72.5	39.	38.	35.	33.	31.	29.	28.	27.	27.	27.	28.
	70.0	44.	42.	40.	38.	35.	33.	32.	31.	31.	32.	32.
	67.5	49.	47.	45.	42.	40.	38.	36.	36.	36.	36.	37.
	65.0	55.	53.	51.	48.	45.	42.	41.	40.	40.	41.	42.
	62.5	61.	59.	56.	54.	50.	47.	45.	44.	45.	45.	47.
	60.0	67.	65.	62.	59.	56.	53.	51.	49.	49.	50.	52.
	57.5	73.	71.	68.	64.	61.	57.	55.	54.	54.	55.	56.
	55.0	80.	77.	74.	70.	66.	62.	60.	59.	58.	59.	60.
	52.5	86.	83.	79.	75.	71.	67.	65.	64.	63.	63.	64.
	50.0	93.	89.	85.	81.	76.	72.	70.	68.	67.	67.	68.
	47.5	99.	95.	90.	86.	81.	77.	74.	72.	71.	70.	71.
	45.0	104.	100.	95.	90.	85.	81.	78.	76.	75.	74.	74.
	42.5	107.	103.	100.	95.	89.	85.	82.	80.	78.	77.	77.
	40.0	110.	106.	102.	97.	93.	89.	85.	82.	81.	80.	80.
37.5	112.	108.	104.	100.	96.	91.	88.	85.	83.	82.	81.	
35.0	113.	109.	106.	102.	98.	94.	90.	87.	85.	84.	83.	
30.0	111.	108.	105.	103.	100.	97.	94.	92.	90.	88.	86.	
25.0	104.	102.	101.	99.	98.	96.	94.	93.	91.	89.	87.	
20.0	94.	92.	91.	90.	89.	88.	87.	86.	85.	84.	84.	
15.0	83.	81.	79.	77.	75.	74.	72.	71.	71.	71.	71.	
10.0	82.	80.	77.	74.	72.	70.	68.	67.	69.	72.	76.	
5.0	124.	127.	129.	132.	135.	138.	141.	144.	147.	148.	150.	
4.0<<	140.	141.	144.	145.	146.	148.	149.	151.	153.	154.	157.	
0.0	188.	188.	188.	188.	188.	188.	188.	188.	188.	188.	188.	

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CANDELA TABULATION

	STREET	LATERAL ANGLE										
		55.0	57.5	60.0	62.5	65.0	67.5	70.0	72.5	75.0	77.5	80.0
	180.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	175.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	165.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	155.0	1.	1.	0.	0.	1.	1.	0.	0.	0.	0.	0.
	145.0	1.	1.	1.	1.	1.	1.	1.	1.	0.	0.	0.
	135.0	1.	1.	1.	1.	1.	1.	1.	1.	1.	0.	0.
	125.0	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	0.
	115.0	2.	2.	2.	2.	1.	1.	1.	1.	1.	1.	1.
	105.0	3.	3.	3.	3.	2.	2.	2.	2.	1.	1.	1.
	95.0	5.	5.	5.	4.	4.	4.	3.	3.	3.	2.	2.
	92.5	6.	6.	6.	5.	5.	5.	4.	4.	3.	3.	3.
	90.0	8.	8.	7.	7.	6.	6.	5.	5.	5.	4.	4.
	87.5	9.	9.	9.	8.	8.	7.	7.	6.	6.	6.	6.
	85.0	11.	11.	11.	10.	10.	9.	9.	9.	9.	9.	9.
V	82.5	14.	14.	13.	13.	13.	12.	12.	12.	12.	12.	12.
E	80.0	17.	17.	17.	16.	16.	15.	15.	15.	15.	17.	18.
R	77.5	21.	21.	21.	21.	21.	20.	19.	20.	21.	22.	23.
T	75.0	24.	25.	25.	26.	26.	26.	25.	26.	26.	28.	29.
I	72.5	29.	30.	30.	30.	30.	30.	31.	32.	33.	35.	37.
C	70.0	34.	34.	35.	35.	35.	35.	36.	38.	40.	42.	44.
A	67.5	39.	40.	40.	40.	40.	40.	41.	43.	45.	49.	52.
L	65.0	44.	45.	45.	45.	45.	46.	46.	48.	51.	54.	57.
	62.5	48.	50.	50.	50.	50.	50.	52.	54.	57.	60.	64.
A	60.0	54.	55.	55.	55.	55.	56.	57.	60.	63.	66.	70.
N	57.5	58.	59.	60.	60.	60.	61.	62.	65.	68.	72.	77.
G	55.0	62.	63.	63.	64.	65.	66.	67.	70.	74.	78.	82.
L	52.5	65.	66.	67.	68.	68.	70.	71.	74.	78.	83.	88.
E	50.0	69.	70.	71.	71.	72.	73.	75.	78.	82.	87.	92.
	47.5	72.	73.	74.	75.	75.	76.	79.	82.	86.	91.	97.
	45.0	75.	76.	77.	77.	78.	80.	82.	85.	89.	95.	101.
	42.5	78.	78.	79.	80.	81.	82.	85.	88.	91.	97.	104.
	40.0	80.	80.	80.	80.	82.	83.	86.	89.	93.	99.	106.
	37.5	81.	81.	81.	82.	83.	84.	87.	91.	95.	101.	108.
	35.0	83.	83.	82.	82.	83.	85.	88.	91.	95.	101.	109.
	30.0	85.	84.	84.	83.	84.	85.	88.	91.	95.	102.	108.
	25.0	86.	85.	84.	83.	83.	85.	86.	89.	97.	103.	109.
	20.0	84.	84.	84.	84.	84.	84.	89.	99.	105.	111.	117.
	15.0	71.	70.	70.	72.	79.	85.	90.	96.	102.	107.	112.
	10.0	76.	75.	74.	77.	79.	83.	84.	84.	85.	86.	88.
	5.0	149.	149.	149.	150.	152.	155.	163.	169.	175.	181.	184.
	4.0<<	159.	162.	166.	171.	177.	184.	190.	196.	200.	201.	202.
	0.0	188.	188.	188.	188.	188.	188.	188.	188.	188.	188.	188.

PLANE OF MAXIMUM CANDELA

CONE OF MAXIMUM CANDELA

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**HUBBELL**  
**Lighting**

701 Millennium Blvd  
Greenville, SC 29607  
www.hubbelllighting.com

REPORT NUMBER: 17.03080

PAGE: 13 OF 16

ISSUE DATE: 12/08/17

PREPARED FOR: PROGRESS

CATALOG NUMBER: P560109-031-30

CANDELA TABULATION

LATERAL ANGLE

	82.5	85.0	87.5	90.0	95.0	105.0	115.0	125.0	135.0	145.0	155.0
180.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
175.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
165.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
155.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
145.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
135.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
125.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
115.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
105.0	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.
95.0	2.	2.	1.	1.	1.	1.	1.	1.	1.	1.	1.
92.5	3.	2.	2.	2.	2.	2.	1.	1.	1.	1.	0.
90.0	4.	4.	4.	4.	3.	3.	2.	2.	1.	1.	1.
87.5	6.	6.	6.	6.	6.	4.	3.	2.	1.	1.	1.
85.0	9.	9.	9.	9.	9.	7.	5.	4.	2.	1.	1.
V 82.5	13.	14.	14.	13.	12.	9.	7.	5.	2.	1.	1.
E 80.0	18.	19.	19.	18.	18.	13.	10.	7.	3.	2.	1.
R 77.5	24.	24.	24.	25.	24.	18.	14.	9.	3.	2.	1.
T 75.0	30.	32.	32.	32.	31.	24.	18.	11.	4.	2.	1.
I 72.5	38.	39.	40.	40.	39.	31.	23.	14.	5.	2.	1.
C 70.0	46.	48.	49.	49.	47.	37.	27.	17.	6.	3.	1.
A 67.5	55.	57.	58.	58.	57.	44.	31.	20.	7.	3.	1.
L 65.0	62.	63.	64.	66.	63.	49.	36.	23.	8.	3.	1.
62.5	68.	70.	71.	72.	70.	54.	40.	26.	10.	4.	2.
A 60.0	74.	76.	78.	78.	76.	60.	45.	28.	11.	4.	2.
N 57.5	80.	84.	86.	86.	83.	66.	49.	31.	13.	4.	2.
G 55.0	87.	90.	92.	92.	90.	71.	53.	34.	14.	5.	2.
L 52.5	92.	96.	99.	99.	96.	76.	58.	37.	16.	6.	3.
E 50.0	98.	102.	104.	104.	102.	81.	61.	39.	18.	6.	3.
47.5	103.	107.	110.	111.	107.	85.	65.	41.	20.	8.	3.
45.0	106.	111.	115.	114.	112.	88.	68.	43.	21.	9.	4.
42.5	109.	114.	118.	118.	115.	90.	71.	46.	23.	11.	5.
40.0	112.	117.	121.	121.	118.	92.	72.	48.	25.	12.	6.
37.5	114.	120.	123.	124.	120.	94.	72.	50.	27.	14.	7.
35.0	114.	120.	123.	124.	120.	94.	72.	52.	29.	15.	8.
30.0	113.	118.	122.	122.	117.	93.	72.	55.	35.	20.	10.
25.0	113.	119.	122.	123.	115.	90.	72.	57.	42.	26.	13.
20.0	121.	130.	133.	134.	124.	98.	76.	60.	43.	28.	22.
15.0	119.	126.	128.	128.	123.	94.	65.	52.	39.	36.	35.
10.0	89.	89.	89.	89.	89.	81.	71.	63.	52.	56.	68.
5.0	183.	183.	182.	182.	183.	182.	161.	146.	140.	127.	116.
4.0<<	202.	202.	201.	201.	202.	202.	188.	163.	149.	142.	134.
0.0	188.	188.	188.	188.	188.	188.	188.	188.	188.	188.	188.

CONE OF MAXIMUM CANDELA

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**REPORT NUMBER:** 17.03080  
**ISSUE DATE:** 12/08/17  
**PREPARED FOR:** PROGRESS  
**CATALOG NUMBER:** P560109-031-30

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CANDELA TABULATION

	HOUSE SIDE			LATERAL ANGLE
	165.0	175.0	180.0	
	180.0	0.	0.	0.
	175.0	0.	0.	0.
	165.0	0.	0.	0.
	155.0	0.	0.	0.
	145.0	0.	0.	0.
	135.0	0.	0.	0.
	125.0	0.	0.	0.
	115.0	0.	0.	0.
	105.0	0.	0.	0.
	95.0	0.	0.	0.
	92.5	0.	0.	0.
	90.0	0.	0.	0.
	87.5	0.	0.	0.
	85.0	0.	0.	0.
V	82.5	0.	0.	0.
E	80.0	0.	0.	0.
R	77.5	0.	0.	0.
T	75.0	0.	0.	0.
I	72.5	0.	0.	0.
C	70.0	0.	0.	0.
A	67.5	0.	0.	0.
L	65.0	0.	0.	0.
	62.5	0.	0.	0.
A	60.0	1.	0.	0.
N	57.5	1.	0.	0.
G	55.0	1.	0.	0.
L	52.5	1.	0.	0.
E	50.0	1.	0.	0.
	47.5	1.	0.	0.
	45.0	1.	0.	0.
	42.5	2.	1.	1.
	40.0	2.	1.	1.
	37.5	3.	2.	2.
	35.0	4.	3.	3.
	30.0	6.	6.	6.
	25.0	11.	11.	11.
	20.0	22.	21.	21.
	15.0	36.	33.	33.
	10.0	64.	61.	59.
	5.0	108.	104.	104.
	4.0<<	127.	124.	123.
	0.0	188.	188.	188.

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**PAGE:** 15 OF 16

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**PREPARED FOR:** PROGRESS

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5-DEGREE  
ZONAL LUMEN SUMMARY

0- 5	4
5- 10	7
10- 15	8
15- 20	12
20- 25	16
25- 30	19
30- 35	22
35- 40	25
40- 45	26
45- 50	26
50- 55	25
55- 60	23
60- 65	20
65- 70	17
70- 75	13
75- 80	9
80- 85	6
85- 90	4
90- 95	2
95-100	2
100-105	1
105-110	1
110-115	1
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	11
0- 20	32
0- 30	67
0- 40	114
0- 50	165
0- 60	213
0- 70	249
0- 80	270
0- 90	280
0-100	283
0-110	285
0-120	286
0-130	287
0-140	287
0-150	287
0-160	288
0-170	288
0-180	288

Project Number  
17.03080



**HUBBELL**  
Lighting

Date  
12/7/2017

### *Goniophotometer Calibration*

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

Lamp Number: ITL78966-1000-38

Calibration Current: 8.300 Amps DC

Total Luminous Flux: 25889.0 Lumens

Calibration Date: 09/02/16

### *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	10/25/2018
<i>Power Source</i>	Voltage-Regulated House Power	N/A	N/A
<i>Thermometer</i>	National Instruments / USB-TC01	1912745	10/26/2018

### *Sphere Calibration*

Calibration Lamp: EIKO 28V75W/E10

Lamp Number: SCL-1400-J136

Calibration Current: 2.679 Amps

Total Luminous Flux: 1427 Lumens

### *Test Equipment Used - Color & SPD; THD & Power Factor*

<i>Instrument</i>	<i>Manufacturer / Model</i>	<i>S/N</i>	<i>Calibration Due:</i>
<i>3-Meter Sphere</i>	Labsphere / LMS-3M	N/A	Calibration Checked Daily
<i>Thermometer</i>	National Instruments / USB TC01	1912751	10/26/2018
<i>LAMP Power Meter</i>	Yokogawa / WT332	C2QA27075V	10/25/2018
<i>Power Supply</i>	Chroma / 61602	616020002113	N/A
<i>Power Supply PF/THD</i>	Voltage-Regulated House Power	N/A	N/A
<i>Aux Lamp Supply</i>	Labsphere / LPS-100-0833	0331159372	N/A
<i>Cal Lamp Supply</i>	Labsphere / LPS-150-0268	1218148505	N/A
<i>Spectrometer</i>	Labsphere / CDS 1100	0624117792	N/A

### **Hubbell Lighting, Inc.**

701 Millennium Boulevard  
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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.*