



# LUMINAIRE TESTING LABORATORY, INC.

SUSTAINING  
MEMBER  
of the  
IESNA

905 Harrison Street · Allentown, PA 18103 · 610-770-1044 · Fax 610-770-8912 · [www.LuminaireTesting.com](http://www.LuminaireTesting.com)

LTL NUMBER: 18669

DATE: 04-13-2010

PREPARED FOR: APPALACHIAN LIGHTING SYSTEMS, INC.

CATALOG NUMBER: CL2-02-4000-1 (NO FILM)

LUMINAIRE: CAST AND EXTRUDED ALUMINUM HOUSING, CLEAR PRISMATIC  
POLYCARBONATE ENCLOSURE.

LAMP: 24 WHITE LEDS

LED POWER SUPPLIES: TWO AUTECH POWER SYSTEMS LED DRIVERS  
MODEL: LEDWCD035S070ST

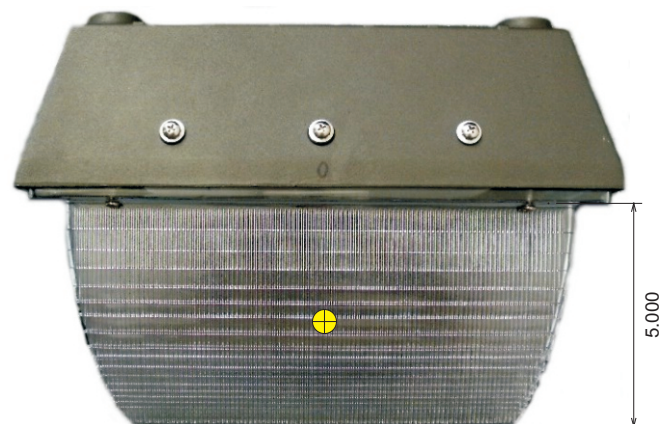
ELECTRICAL VALUES: 120.0VAC, 0.2851A, 33.51W, PF=0.979

LUMINAIRE EFFICACY: 82.6 LUMENS/WATT

NOTE: THIS TEST WAS PERFORMED USING THE CALIBRATED  
PHOTODETECTOR METHOD OF ABSOLUTE PHOTOMETRY.\*

IES CLASSIFICATION: **AREA LIGHT**  
CUTOFF CLASSIFICATION: **SEMI-CUTOFF\*\***

\*\*CUTOFF DESIGNATION IS NOT DEFINED FOR ABSOLUTE PHOTOMETRIC  
TESTS. THIS CUTOFF RATING IS BASED ON THE MAXIMUM CANDELA  
READING PER LUMINAIRE RATED AT 1000 LUMENS.



### FLUX DISTRIBUTION

LUMENS	DOWNWARD	UPWARD	TOTALS
HOUSE SIDE	1290.60	93.56	1384.16
STREET SIDE	1290.60	93.56	1384.16
TOTALS	2581.21	187.11	2768.32

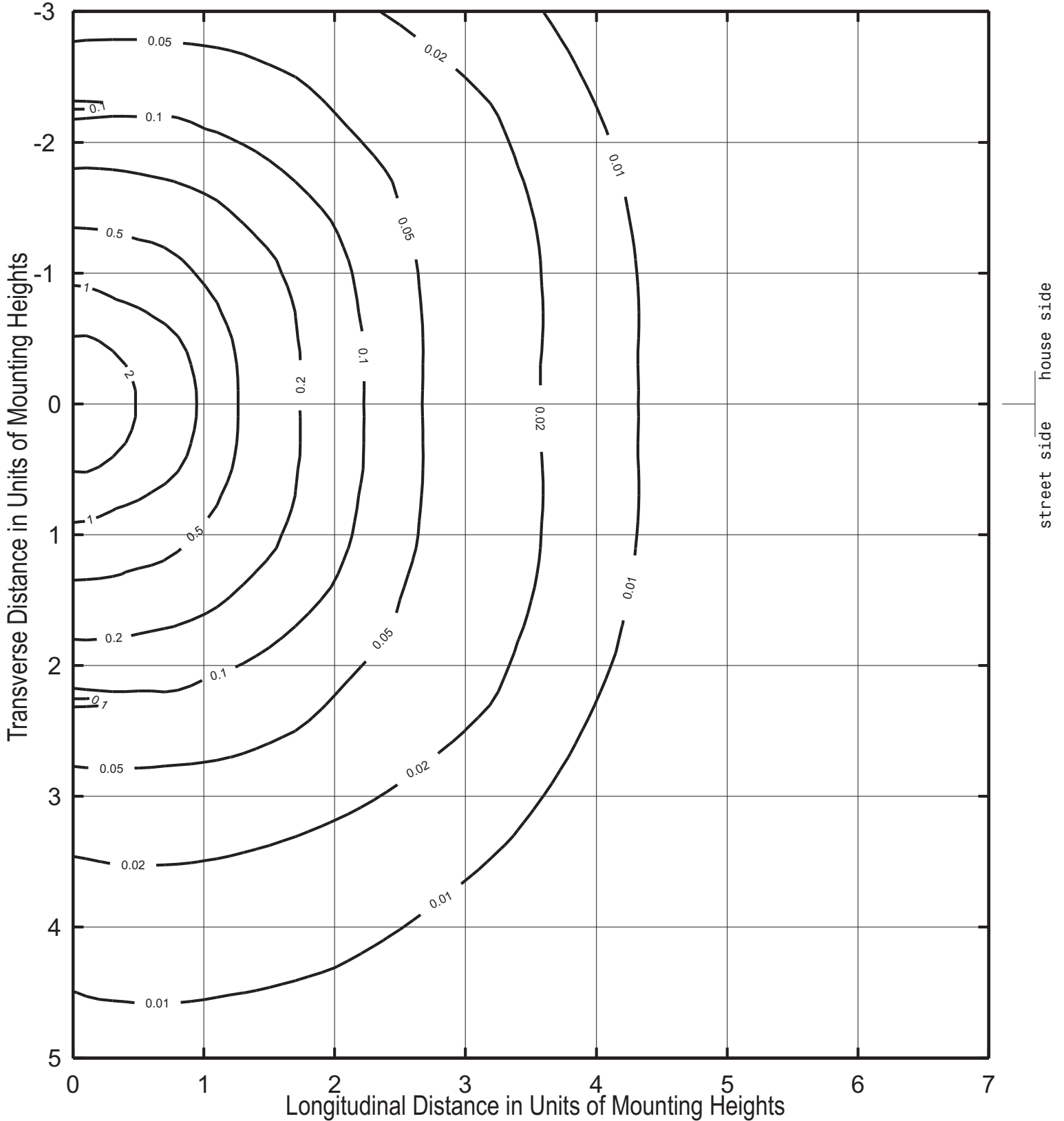
Approved By: MG

\*DATA WAS ACQUIRED USING THE CALIBRATED PHOTODETECTOR METHOD OF ABSOLUTE PHOTOMETRY. A UDT MODEL #211 PHOTODETECTOR AND UDT MODEL #S370 OPTOMETER COMBINATION WERE USED AS A STANDARD. A SPECTRAL MISMATCH CORRECTION FACTOR WAS EMPLOYED BASED ON THE SPECTRAL RESPONSIVITY OF THE PHOTODETECTOR AND THE SPECTRAL POWER DISTRIBUTION OF THE TEST SUBJECT.

**TESTING WAS PERFORMED IN ACCORDANCE WITH IES LM-79-08.**  
TEST ANGULAR INCREMENTS AND REPORT FORMATTING WAS BASED ON IES LM-31-95.



### ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION VALUES BASED ON 15.00 FOOT MOUNTING HEIGHT



PROJECTION OF HALF-MAX CANDELA CONTOUR

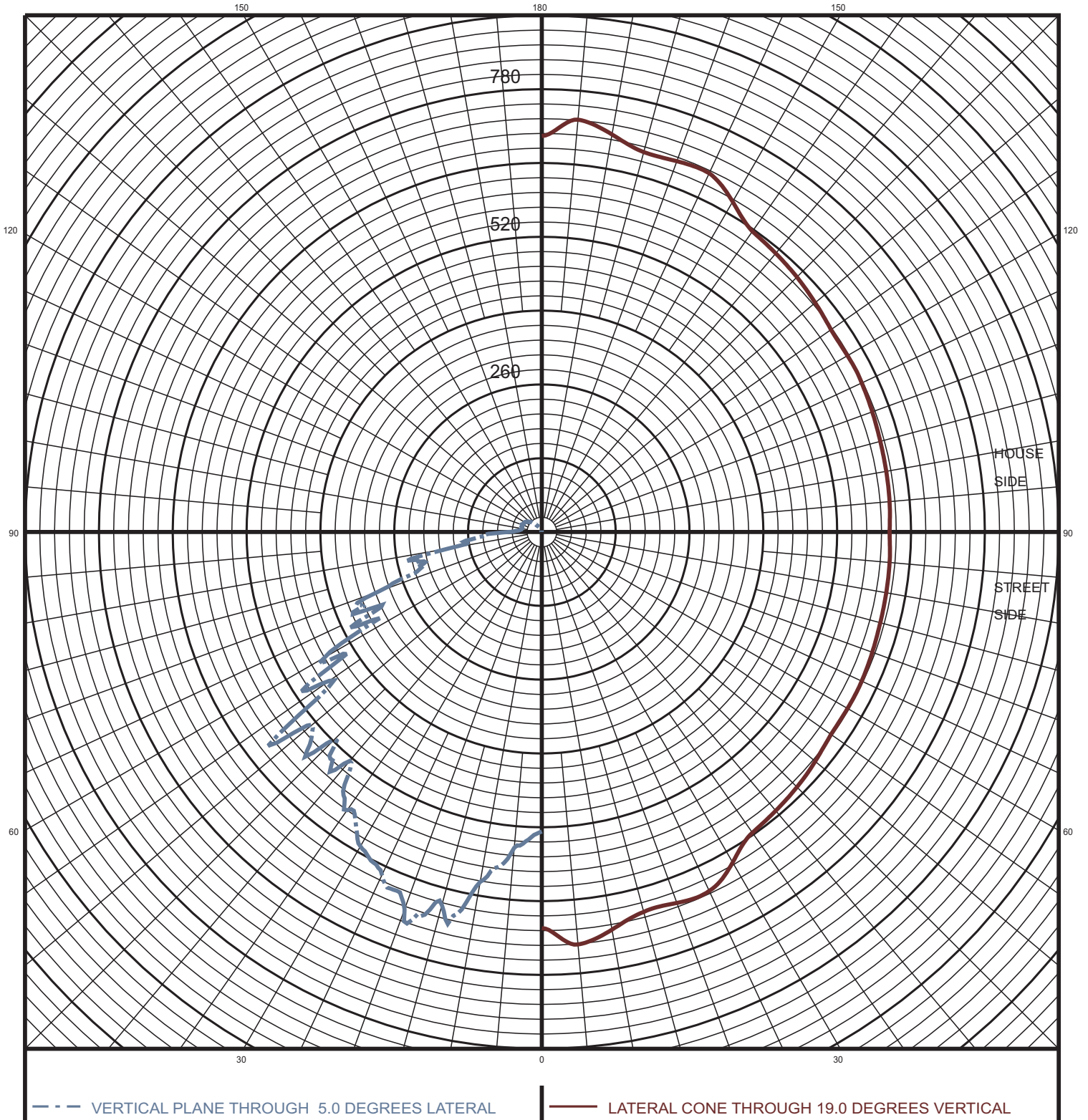


CANDELA DISTRIBUTION

Table with 12 columns (0-90) and 20 rows (180-0) showing Candela Distribution values.



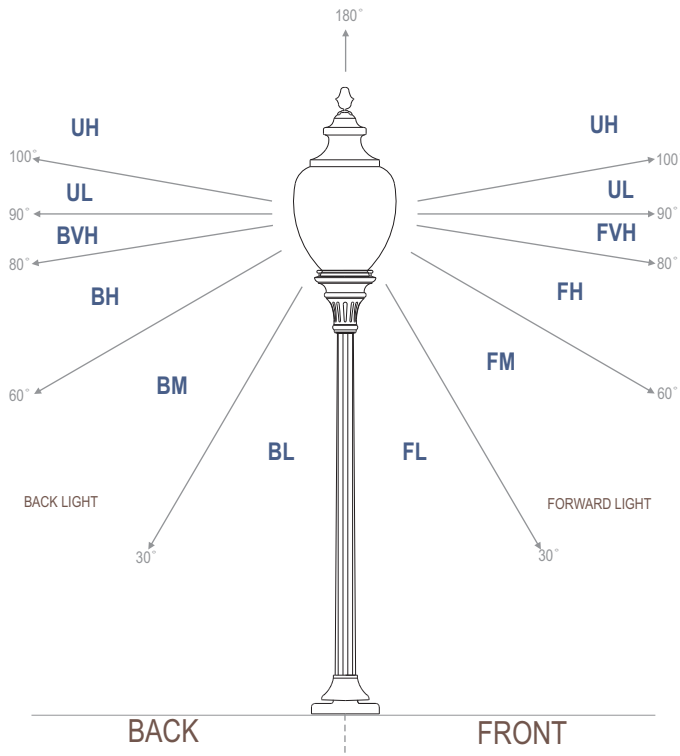
MAXIMUM PLANE AND CONE PLOTS OF CANDELA





FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

FLUX



ZONE	LUMINAIRE LUMENS	% OF LUMINAIRE LUMENS
FORWARD LIGHT	1291	46.6
FL ( 0° -30°)	266	9.6
FM (30° -60°)	620	22.4
FH (60° -80°)	329	11.9
FVH (80° -90°)	75	2.7

BACK LIGHT	1291	46.6
BL ( 0° -30°)	266	9.6
BM (30° -60°)	620	22.4
BH (60° -80°)	329	11.9
BVH (80° -90°)	75	2.7

UPLIGHT	187	6.8
UL (90° -100°)	54	2.0
UH (100° -180°)	133	4.8

TRAPPED LIGHT	NA	NA
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BUG (Backlight, Uplight, Glare) Rating	
Asymmetrical Luminaire Types (Type I, II, III, IV)	B1 U3 G1
Quadrilateral Symmetrical Luminaire Types (Type V, Area Light)	B1 U3 G1