

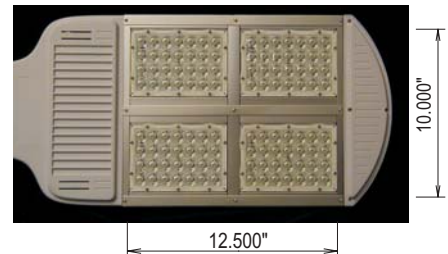


# LUMINAIRE TESTING LABORATORY, INC.

SUSTAINING  
MEMBER  
of the  
IESNA

905 Harrison Street · Allentown, PA 18103 · 610-770-1044 · Fax 610-770-8912 · www.LuminaireTesting.com

LTL NUMBER: 15228 DATE: 03-31-2009  
 PREPARED FOR: FALA TECHNOLOGIES, INC.  
 CATALOG NUMBER: MAST GHS4 LED STREET LIGHT  
 LUMINAIRE: CAST AND EXTRUDED ALUMINUM AND FORMED PLASTIC HOUSING, CLEAR PLASTIC ENCLOSURE.  
 LAMP: 112 WHITE LEDS  
 LED POWER SUPPLY: ONE UNMARKED LED POWER SUPPLY  
 POWER FACTOR: 0.997  
 ELECTRICAL VALUES: 120.0VAC, 0.6517A, 77.92W  
 LUMINAIRE EFFICACY: 59.6 LUMENS/WATT  
 NOTE: THIS TEST WAS PERFORMED USING THE CALIBRATED PHOTODETECTOR METHOD OF ABSOLUTE PHOTOMETRY.\*



IES CLASSIFICATION: **TYPE II**  
 LONGITUDINAL CLASSIFICATION: **SHORT**  
 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	1966.77	3.65	1970.41
STREET SIDE	2665.22	4.37	2669.60
TOTALS	4631.99	8.02	4640.01

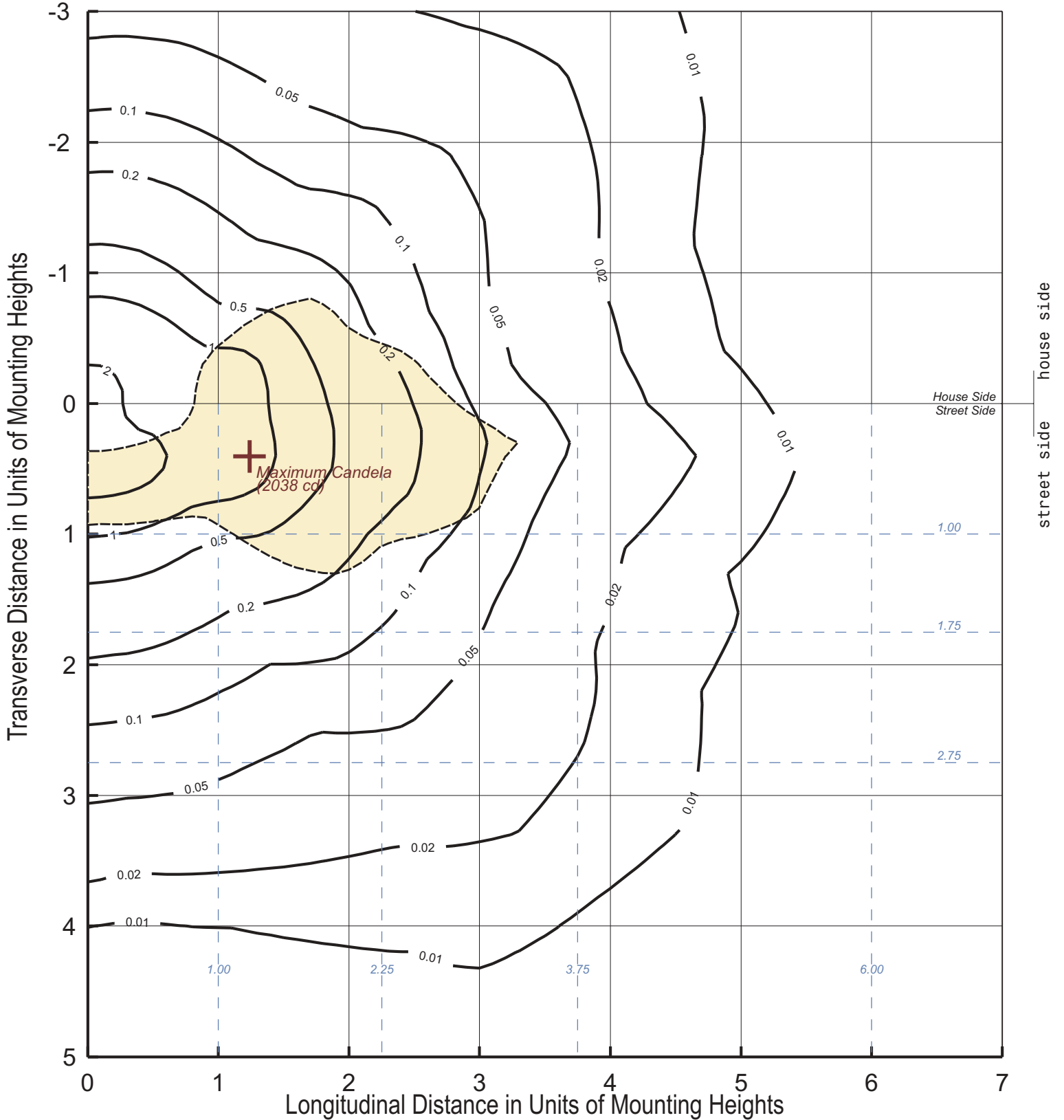
Approved By: MG

\*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 18.00 FOOT MOUNTING HEIGHT



PROJECTION OF HALF-MAX CANDELA CONTOUR



CANDELA DISTRIBUTION

Table with 12 columns (0, 5, 15, 25, 35, 45, 55, 65, 71.9, 75, 85) and 21 rows (180, 175, 165, 155, 145, 135, 125, 115, 105, 95, 90, 87.5, 85, 82.5, 80, 77.5, 75, 72.5, 70, 67.5, 65, 62.5, 60, 57.5, 55, 52.5, 50, 47.5, 45, 40, 35, 30, 25, 20, 15, 10, 5, 0). Values represent candela distribution for various beam angles.

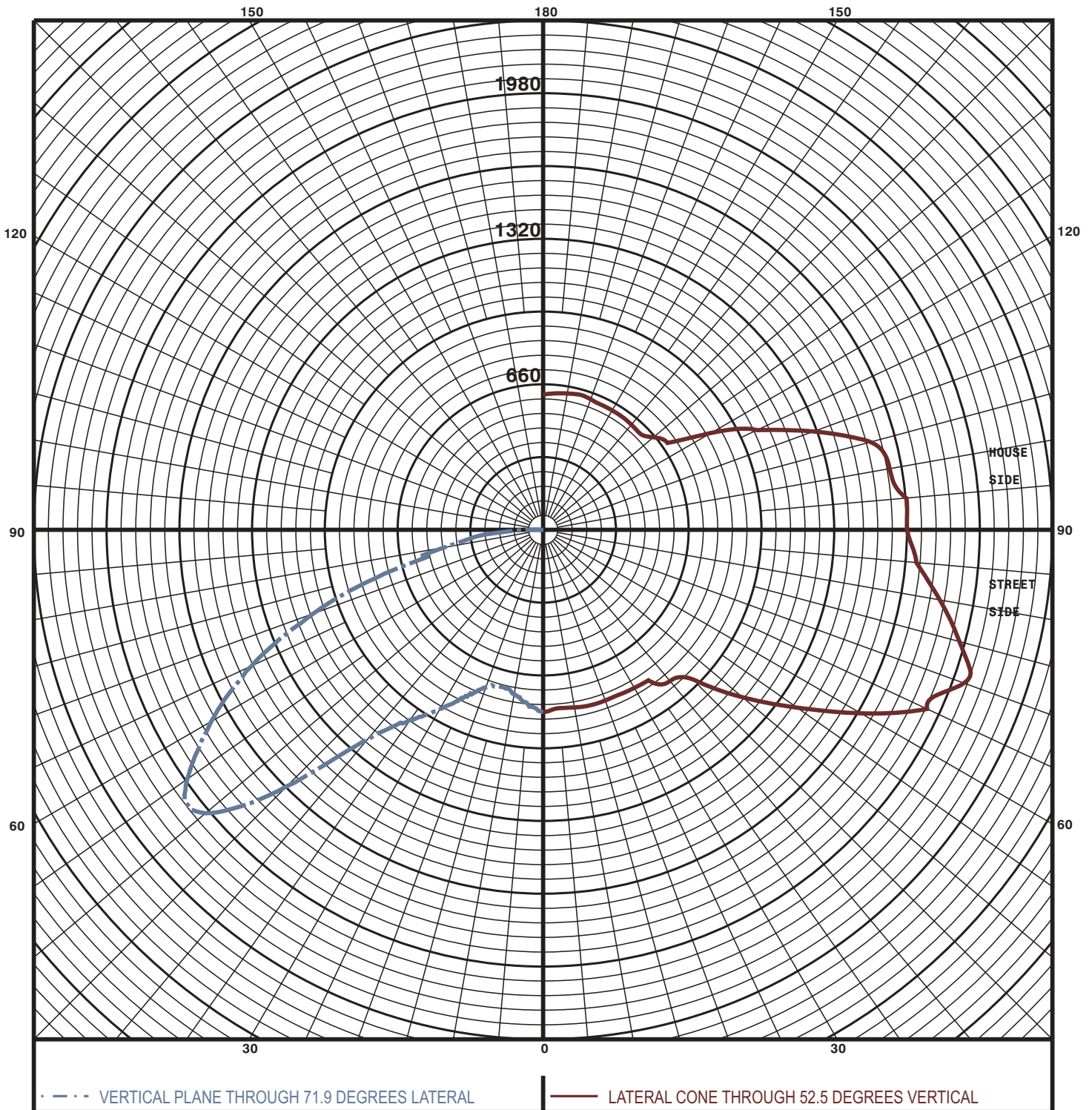


CANDELA DISTRIBUTION

Table with 12 columns (90-180) and 21 rows (180-0) showing Candela Distribution values.



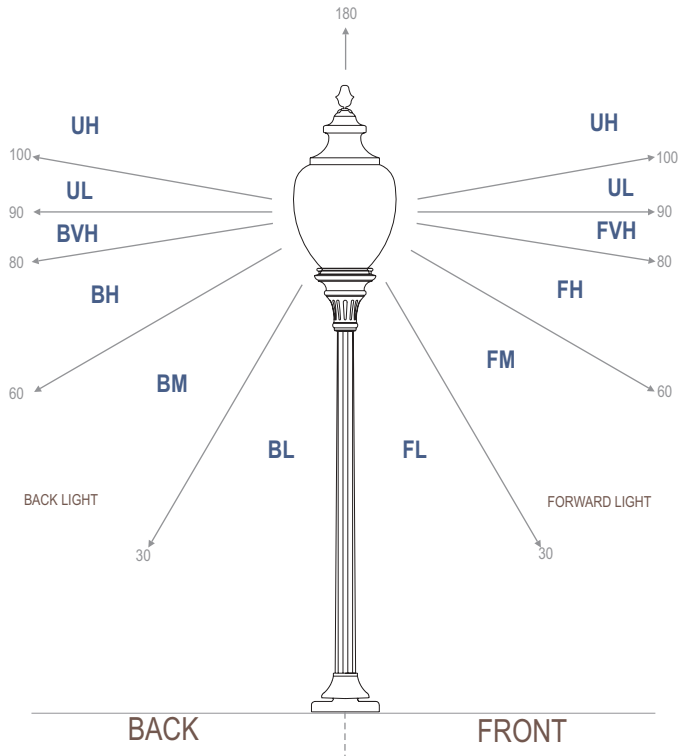
MAXIMUM PLANE AND CONE PLOTS OF CANDELA





FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM

FLUX



ZONE	LUMINAIRE LUMENS	% OF LUMINAIRE LUMENS	
FORWARD LIGHT	2665	57.4	
FL ( 0°-30°)	380	8.2	
FM (30°-60°)	1387	29.9	
FH (60°-80°)	798	17.2	
FVH (80°-90°)	100	2.2	

ZONE	LUMINAIRE LUMENS	% OF LUMINAIRE LUMENS	
BACK LIGHT	1967	42.4	
BL ( 0°-30°)	318	6.8	
BM (30°-60°)	978	21.1	
BH (60°-80°)	592	12.8	
BVH (80°-90°)	78	1.7	

ZONE	LUMINAIRE LUMENS	% OF LUMINAIRE LUMENS	
UPLIGHT	8	0.2	
UL (90°-100°)	8	0.2	
UH (100°-180°)	0	0	

ZONE	LUMINAIRE LUMENS	% OF LUMINAIRE LUMENS	
TRAPPED LIGHT	NA	NA	

