

**itl boulder**  
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

INDEPENDENT TESTING LABORATORIES, INC.  
3386 LONGHORN ROAD, BOULDER, CO 80302 USA

PHONE: (303)442-1255 • FAX: (303)449-5274 • E-MAIL: [itl@itlboulder.com](mailto:itl@itlboulder.com) • WEBSITE: [www.itlboulder.com](http://www.itlboulder.com)

## ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION

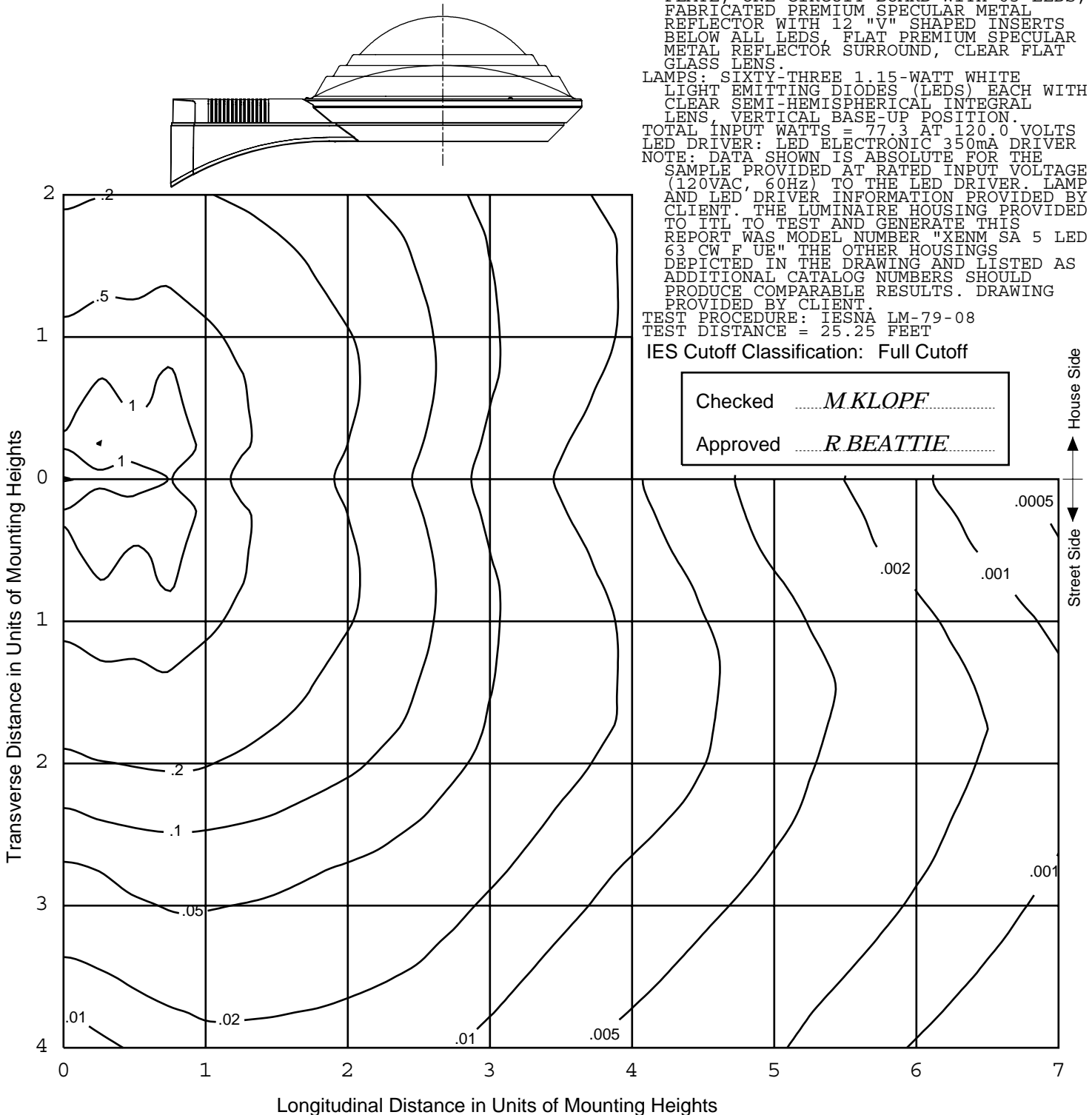
Values based on 20 foot mounting height.

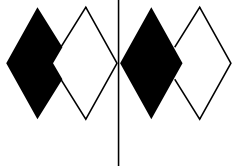
REPORT NUMBER: ITL64428  
DATE: 03/18/10  
PREPARED FOR: LSI INDUSTRIES, INC.  
CATALOG NUMBER: XENM/XINM SA 5 LED 63  
CW F UE  
LUMINAIRE: CAST BLACK PAINTED METAL HOUSING, FORMED BLACK PAINTED METAL TOP, FLAT METAL CIRCUIT BOARD MOUNTING PLATE, ONE CIRCUIT BOARD WITH 63 LEDS, FABRICATED PREMIUM SPECULAR METAL REFLECTOR WITH 12 "V" SHAPED INSERTS BELOW ALL LEDS, FLAT PREMIUM SPECULAR METAL REFLECTOR SURROUND, CLEAR FLAT GLASS LENS.  
LAMPS: SIXTY-THREE 1.15-WATT WHITE LIGHT EMITTING DIODES (LEDs) EACH WITH CLEAR SEMI-HEMISPHERICAL INTEGRAL LENS, VERTICAL BASE-UP POSITION.  
TOTAL INPUT WATTS = 77.3 AT 120.0 VOLTS  
LED DRIVER: LED ELECTRONIC 350mA DRIVER  
NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE LED DRIVER. LAMP AND LED DRIVER INFORMATION PROVIDED BY CLIENT. THE LUMINAIRE HOUSING PROVIDED TO ITL TO TEST AND GENERATE THIS REPORT WAS MODEL NUMBER "XENM SA 5 LED 63 CW F UE" THE OTHER HOUSINGS DEPICTED IN THE DRAWING AND LISTED AS ADDITIONAL CATALOG NUMBERS SHOULD PRODUCE COMPARABLE RESULTS. DRAWING PROVIDED BY CLIENT.  
TEST PROCEDURE: IESNA LM-79-08  
TEST DISTANCE = 25.25 FEET

IES Cutoff Classification: Full Cutoff

Checked M KLOPF

Approved R BEATTIE





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CW F UE

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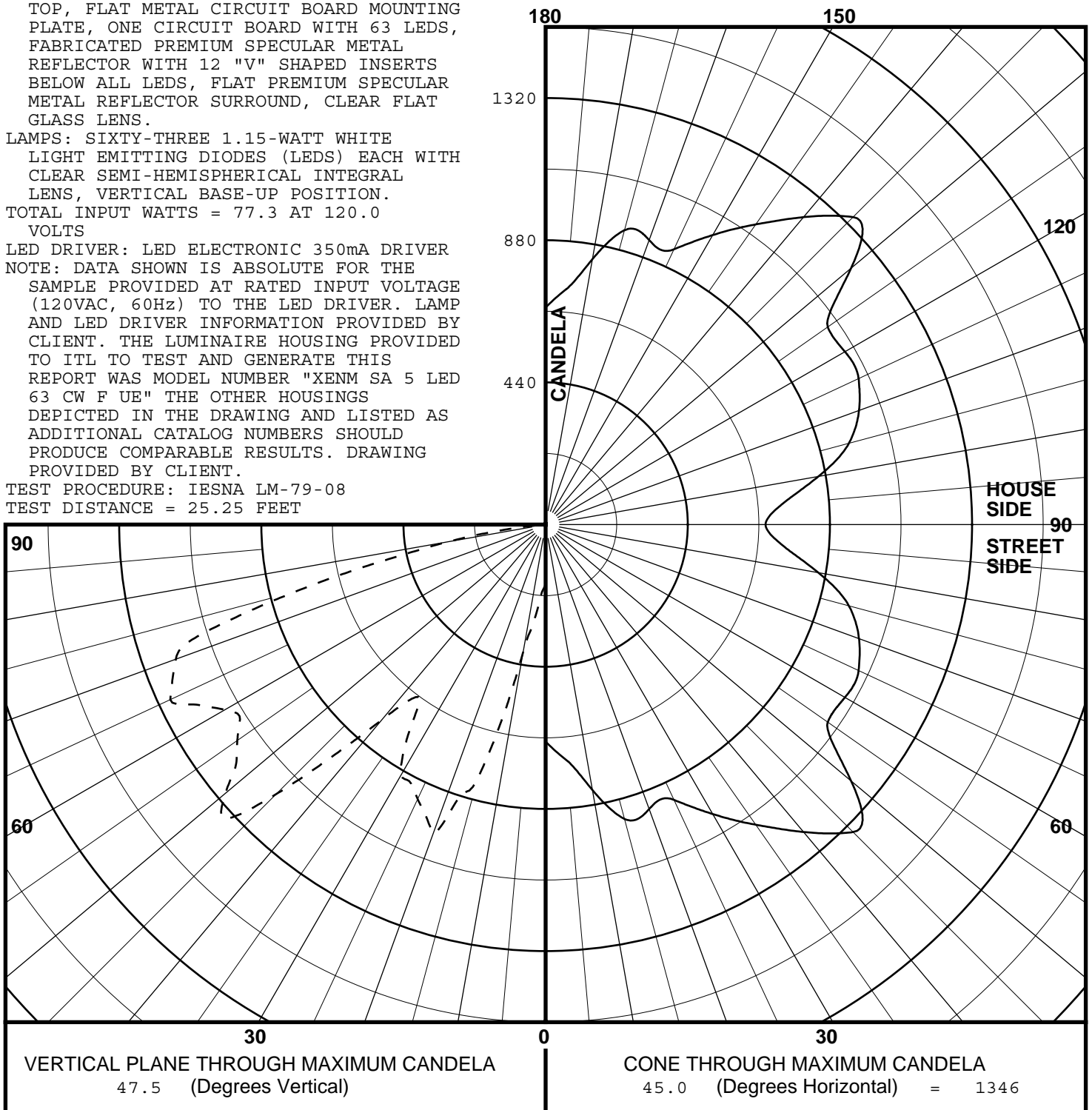
LED DRIVER: LED ELECTRONIC 350mA DRIVER

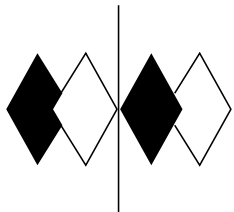
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## MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA





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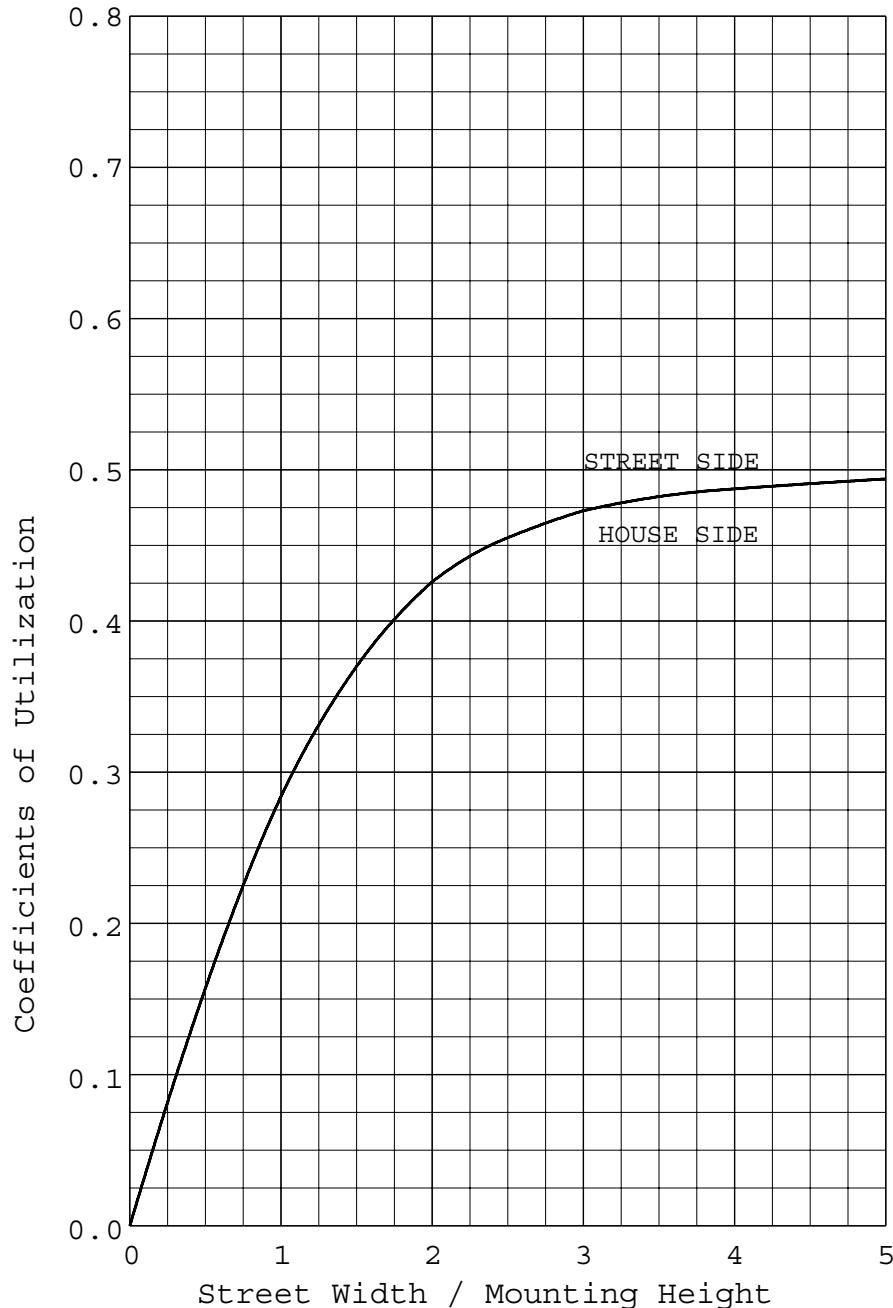
PHONE: (303)442-1255 • FAX: (303)449-5274 • E-MAIL: [itl@itlboulder.com](mailto:itl@itlboulder.com) • WEBSITE: [www.itlboulder.com](http://www.itlboulder.com)

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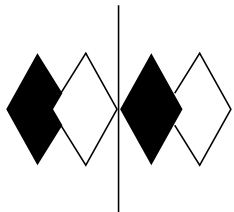
PREPARED FOR: LSI INDUSTRIES, INC.

#### COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	2265.	50.0
DOWNWARD HOUSE SIDE	2265.	50.0
DOWNWARD TOTAL	4530.	100.0
UPWARD STREET SIDE	0.	0.0
UPWARD HOUSE SIDE	0.	0.0
UPWARD TOTAL	0.	0.0
TOTAL FLUX	4530.	100.0
EFFICACY = 58.6 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.



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#### FLUX DISTRIBUTION BY SOLID ANGLE

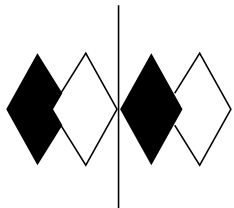
(PER IESNA TM-15-07, LUMINAIRE CLASSIFICATION  
SYSTEM FOR OUTDOOR LUMINAIRES)

	LUMENS	PERCENT OF FIXTURE
FORWARD LIGHT	2265.	50.0
FL ( 0- 30)		5.8
FM ( 30- 60)		24.2
FH ( 60- 80)		19.0
FVH( 80- 90)		1.0
BACK LIGHT	2265.	50.0
BL ( 0- 30)		5.8
BM ( 30- 60)		24.2
BH ( 60- 80)		19.0
BVH( 80- 90)		1.0
UPLIGHT	0.	0.0
UL ( 90-100)		0.0
UH (100-180)		0.0
TRAPPED LIGHT	0.	0.0
TOTAL FLUX	4530.	100.0

#### BACKLIGHT, UPLIGHT, AND GLARE (BUG) RATINGS (PER ADDENDUM A FOR IESNA TM-15-07)

BUG RATING: B2 U1 G1	FIRST DETERMINING SECONDARY SOLID ANGLE*	LUMENS
BACKLIGHT RATING: B2	BH	862.4
UPLIGHT RATING : U1	FVH	45.2
GLARE RATING : G1	FVH	45.2

\* NOTE: OTHER DETERMINING SOLID ANGLES MAY FALL INTO THIS SAME  
CATEGORY. ONLY THE FIRST DETERMINING ANGLES FROM THE  
TABLES A1-A3 IN THE ADDENDUM ARE SHOWN.



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CANDELA TABULATION

		LATERAL ANGLE										
		0.0	5.0	15.0	25.0	35.0	45.0	55.0	65.0	75.0	85.0	90.0