

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

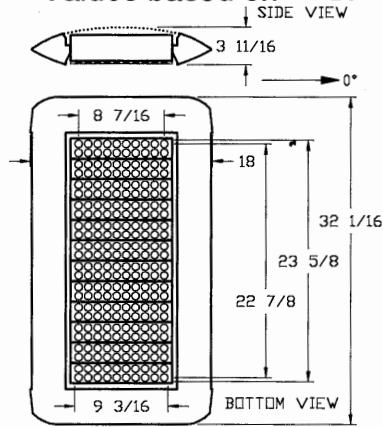
INDEPENDENT TESTING LABORATORIES, INC.  
3386 LONGHORN ROAD, BOULDER, CO 80302 USA

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

**ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION**

Values based on 20

foot mounting height.



REPORT NUMBER: ITL63822

DATE: 12/10/09

PREPARED FOR: BETA LIGHTING, INC.

CATALOG NUMBER: BXAL1524C-UT (350mA)

LUMINAIRE: EXTRUDED BLACK PAINTED METAL HOUSING, FABRICATED BLACK PAINTED METAL BALLAST MOUNTING PLATES, CAST BLACK PAINTED METAL END CAPS, FORMED PERFORATED METAL TOP, TWELVE EXTRUDED FINNED METAL HEAT SINKS, EACH HEAT SINK CONTAINS ONE CIRCUIT BOARD WITH 20 LEDS, CAST BLACK PAINTED METAL TRIM PLATE, ONE CLEAR PLASTIC NON-INTEGRAL LENS BELOW EACH LED.

LAMPS: TWO HUNDRED FORTY WHITE LIGHT EMITTING DIODES (LEDS), VERTICAL BASE-UP POSITION.

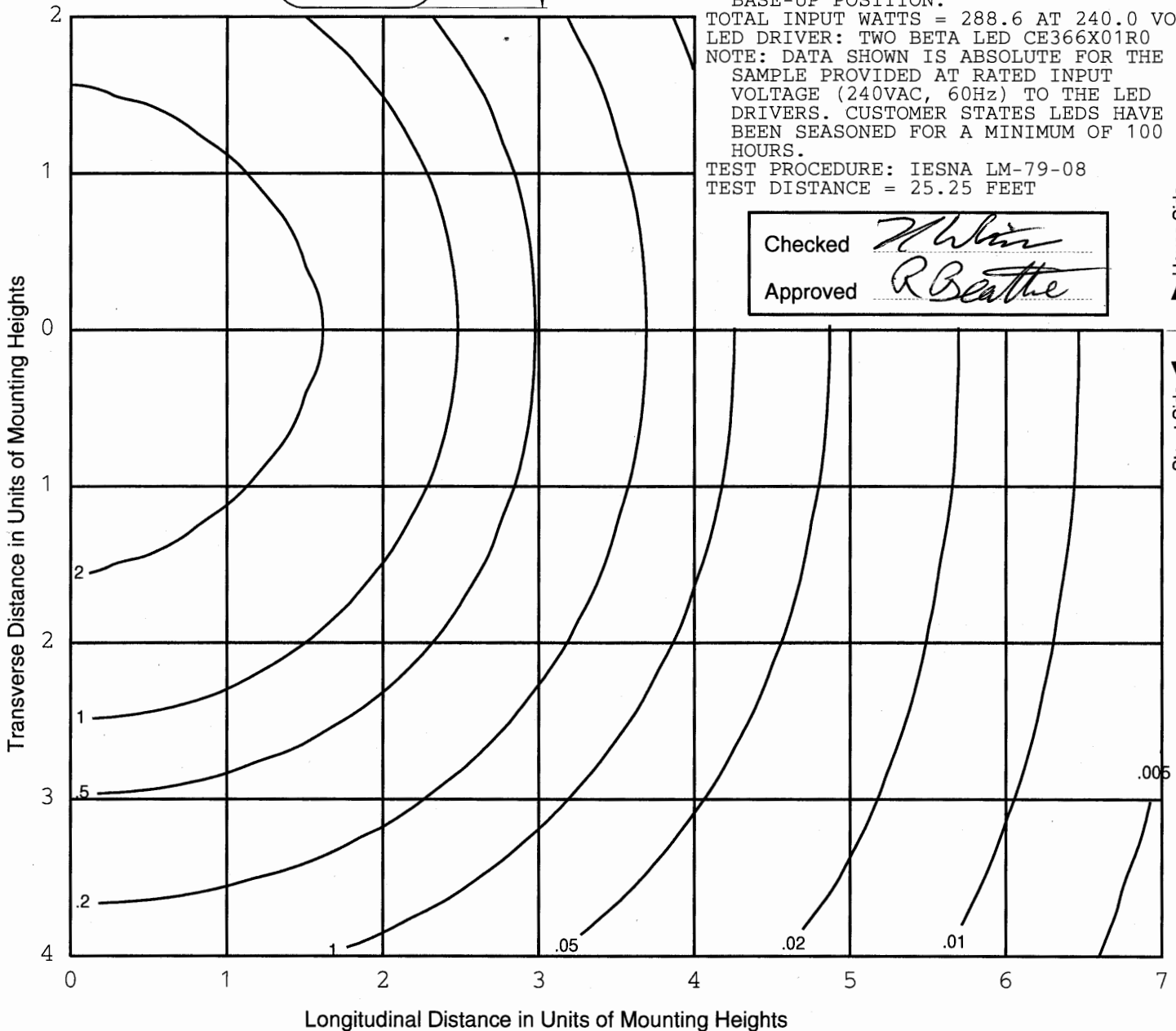
TOTAL INPUT WATTS = 288.6 AT 240.0 VOLTS

LED DRIVER: TWO BETA LED CE366X01R0

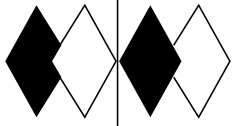
NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (240VAC, 60Hz) TO THE LED DRIVERS. CUSTOMER STATES LEDS HAVE BEEN SEASONED FOR A MINIMUM OF 100 HOURS.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 25.25 FEET



Checked *[Signature]*  
Approved *[Signature]*



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REPORT NUMBER: ITL63822

DATE: 12/10/09

PREPARED FOR: BetaLED a Division of Ruud Lighting

CATALOG NUMBER: BXAL1524C-U(350mA)/ARE-EDG-5M-DA-24-C-UL

LUMINAIRE: EXTRUDED BLACK PAINTED

METAL HOUSING, FABRICATED BLACK PAINTED METAL BALLAST MOUNTING PLATES, CAST BLACK PAINTED METAL END CAPS, FORMED PERFORATED METAL TOP, TWELVE EXTRUDED FINNED METAL HEAT SINKS, EACH HEAT SINK CONTAINS ONE CIRCUIT BOARD WITH 20 LEDS, CAST BLACK PAINTED METAL TRIM PLATE, ONE CLEAR PLASTIC NON-INTEGRAL LENS BELOW EACH LED.

LAMPS: TWO HUNDRED FORTY WHITE LIGHT EMITTING DIODES (LEDs), VERTICAL BASE-UP POSITION.

TOTAL INPUT WATTS = 288.6 AT 240.0 VOLTS

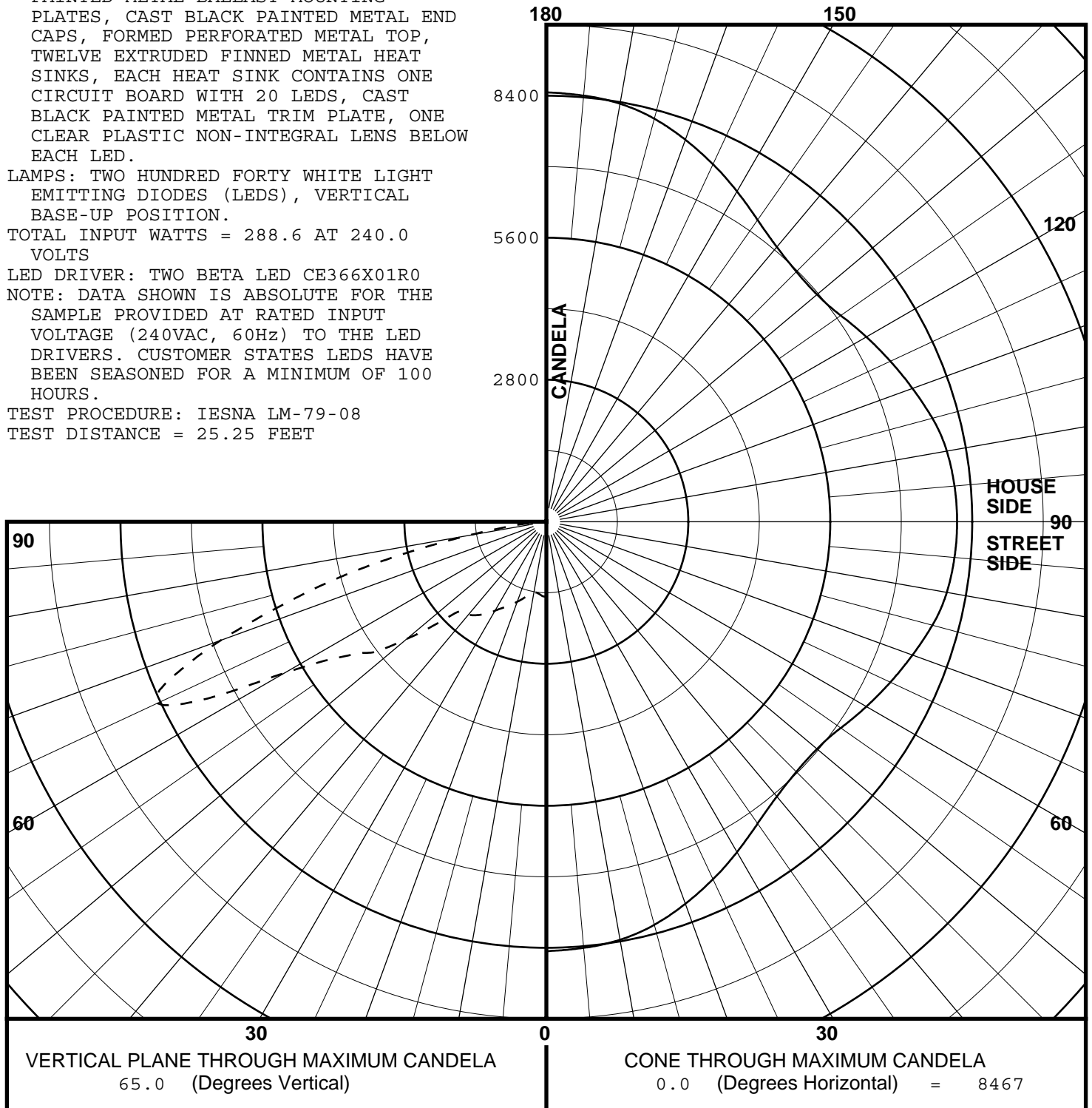
LED DRIVER: TWO BETA LED CE366X01R0

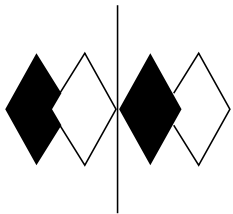
NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (240VAC, 60Hz) TO THE LED DRIVERS. CUSTOMER STATES LEDS HAVE BEEN SEASONED FOR A MINIMUM OF 100 HOURS.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 25.25 FEET

MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA





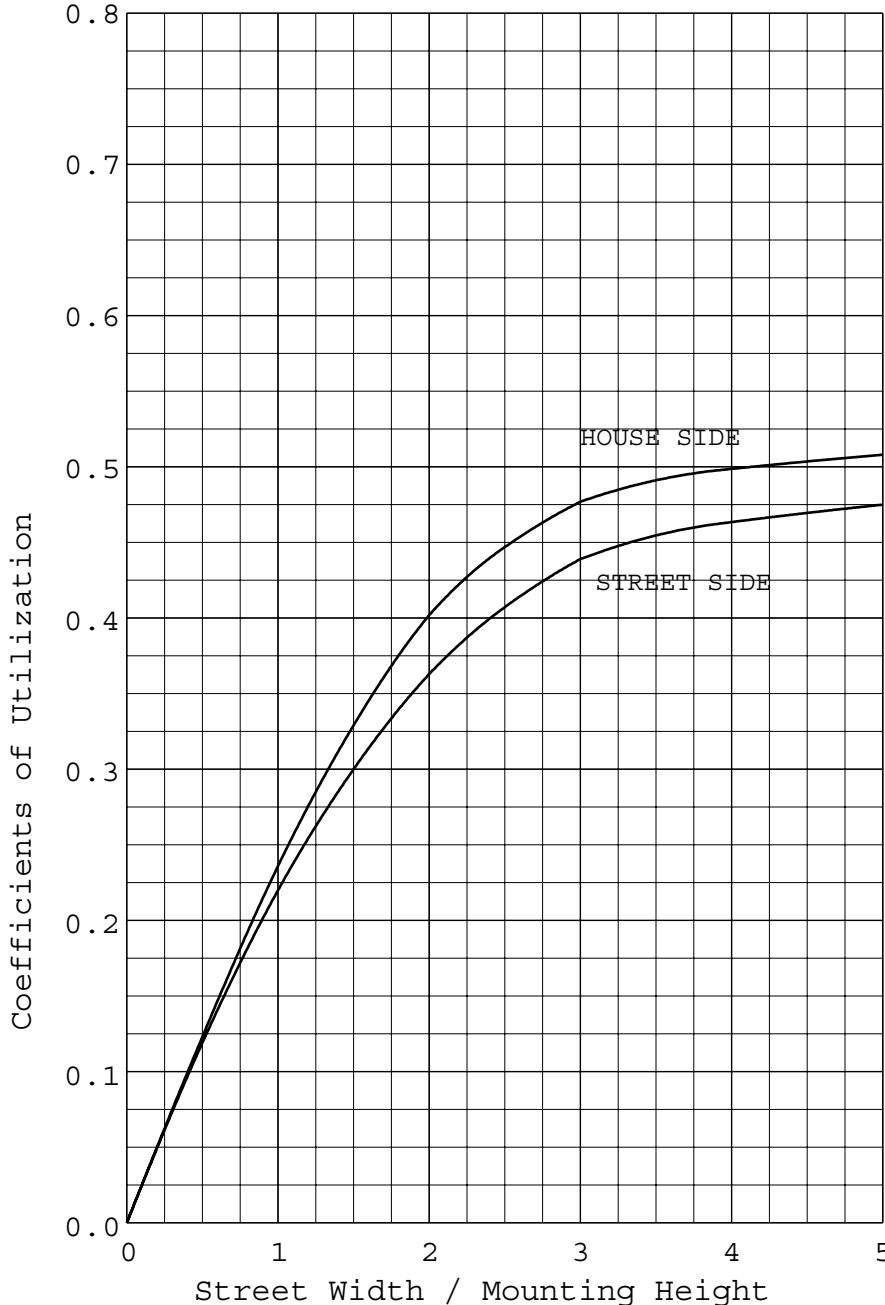
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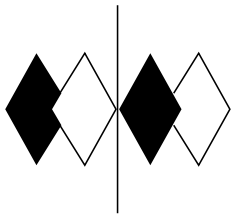
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COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	10566.	48.5
DOWNWARD HOUSE SIDE	11213.	51.5
DOWNWARD TOTAL	21779.	100.0
UPWARD STREET SIDE	0.	0.0
UPWARD HOUSE SIDE	0.	0.0
UPWARD TOTAL	0.	0.0
TOTAL FLUX	21779.	100.0
EFFICACY = 75.5 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.



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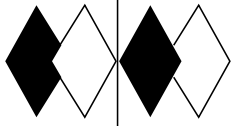
DATE: 12/10/09

PREPARED FOR: BetaLED a Division of Ruud Lighting

FLUX DISTRIBUTION BY SOLID ANGLE

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

	LUMENS	PERCENT OF FIXTURE
FORWARD LIGHT	10566.	48.5
FL ( 0- 30)		3.2
FM ( 30- 60)		16.7
FH ( 60- 80)		27.0
FVH( 80- 90)		1.6
BACK LIGHT	11213.	51.5
BL ( 0- 30)		3.4
BM ( 30- 60)		19.2
BH ( 60- 80)		27.7
BVH( 80- 90)		1.2
UPLIGHT	0.	0.0
UL ( 90-100)		0.0
UH (100-180)		0.0
TRAPPED LIGHT	0.	0.0
TOTAL FLUX	21779.	100.0



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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
	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	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	95.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	92.5	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	90.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
	87.5	109.	109.	103.	97.	51.	45.	70.	53.	40.	32.	31.
	85.0	384.	381.	393.	412.	347.	335.	385.	311.	252.	217.	212.
V	82.5	806.	815.	868.	974.	1038.	1033.	1020.	881.	745.	675.	665.
E	80.0	1582.	1595.	1719.	1935.	2110.	2183.	2097.	1875.	1665.	1553.	1539.
R	77.5	2795.	2808.	2985.	3211.	3370.	3415.	3374.	3257.	3079.	2944.	2926.
T	75.0	4208.	4216.	4349.	4547.	4738.	4812.	4761.	4610.	4452.	4362.	4347.
I	72.5	5469.	5497.	5658.	5959.	6253.	6403.	6285.	6043.	5789.	5621.	5604.
C	70.0	6833.	6855.	7014.	7256.	7525.	7649.	7536.	7275.	7037.	6892.	6878.
A	67.5	7972.	7974.	8009.	8042.	7965.	7828.	7838.	7880.	7870.	7852.	7856.
L	65.0 <<	8467.	8434.	8227.	7777.	7264.	6974.	7089.	7487.	7883.	8081.	8101.
	62.5	7564.	7498.	7109.	6547.	6136.	5979.	6079.	6380.	6798.	7106.	7139.
A	60.0	5958.	5950.	5738.	5489.	5321.	5291.	5369.	5534.	5746.	5900.	5919.
N	57.5	5047.	5032.	4970.	4878.	4820.	4832.	4898.	5007.	5131.	5208.	5220.
G	55.0	4527.	4519.	4504.	4472.	4474.	4511.	4561.	4626.	4694.	4734.	4739.
L	52.5	4184.	4183.	4193.	4190.	4218.	4268.	4294.	4313.	4312.	4293.	4289.
E	50.0	3598.	3611.	3714.	3853.	3977.	4054.	4027.	3912.	3783.	3692.	3681.
	47.5	3047.	3051.	3107.	3259.	3457.	3571.	3503.	3321.	3165.	3078.	3070.
	45.0	2551.	2572.	2699.	2824.	2927.	2988.	2958.	2843.	2705.	2604.	2594.
	42.5	2419.	2419.	2431.	2505.	2620.	2673.	2611.	2495.	2417.	2384.	2382.
	40.0	2395.	2392.	2381.	2358.	2343.	2345.	2335.	2336.	2345.	2346.	2346.
	37.5	2323.	2319.	2312.	2300.	2284.	2274.	2268.	2272.	2275.	2272.	2270.
	35.0	2237.	2233.	2229.	2216.	2206.	2196.	2188.	2186.	2189.	2187.	2188.
	32.5	2139.	2138.	2133.	2125.	2114.	2104.	2099.	2097.	2096.	2091.	2089.
	30.0	2025.	2025.	2026.	2027.	2025.	2020.	2012.	2002.	1994.	1985.	1985.
	25.0	1839.	1841.	1850.	1863.	1871.	1871.	1858.	1841.	1821.	1806.	1804.
	20.0	1679.	1681.	1688.	1696.	1704.	1703.	1695.	1681.	1665.	1654.	1653.
	15.0	1522.	1523.	1525.	1528.	1529.	1528.	1525.	1521.	1516.	1511.	1511.
	10.0	1415.	1415.	1416.	1418.	1420.	1420.	1420.	1419.	1418.	1415.	1416.
	5.0	1439.	1438.	1439.	1437.	1438.	1438.	1438.	1440.	1441.	1440.	1439.
	0.0	1481.	1481.	1481.	1481.	1481.	1481.	1481.	1481.	1481.	1481.	1481.
		PLANE OF MAXIMUM CANDELA										
		CONE OF MAXIMUM CANDELA										