

**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)  
REPORT NUMBER: ITL63763

DATE: 12/30/09  
REVISED: 02/01/10

PAGE 1

PREPARED FOR: B-K LIGHTING, INC.

CATALOG NUMBER: NS-LED-e23-SP-12; AR-LED-TR-e23-SP-12-C; AR-LED-RM-e23-SP-12-C;  
DS-LED-e23-SP-12; RM-LED-e23-SP-12-C; SN-LED-e23-SP-12-C; ST-LED-e23-SP-12-C;  
SF-LED-e23-SP-12-C; TF-LED-e23-SP-12-C; WS-LED-e23-SP-12; AW-LED-e23-SP-12;  
SW-LED-e23-SP-12; VS-LED-e23-SP-12; VQ-LED-e23-SP-12; GD-LED-e23-SP-12;  
GQ-LED-e23-SP-12; EC-LED-e23-SP-12; ED-LED-e23-SP-12; SM-AR-LED-e23-SP-12-C

LUMINAIRE: MACHINED CYLINDRICAL METAL HOUSING, ONE CIRCUIT BOARD WITH 3 LEDS, ONE  
CLEAR CONICAL PLASTIC OPTIC PER LED WITH FROSTED SURFACE OPPOSITE LED, MOLDED  
BLACK PLASTIC OPTIC MOUNTING FRAME, CLEAR FLAT MICRO-PRISMATIC GLASS LENS IN  
MACHINED WHITE PAINTED CYLINDRICAL METAL FRAME WITH UNFINISHED INTERIOR, LENS  
PRISMS IN.

LAMPS: THREE 2.5-WATT WHITE LIGHT EMITTING DIODES (LEDs) EACH WITH CLEAR  
HEMISPHERICAL INTEGRAL PLASTIC LENS, LEDS AIMED AT THE HORIZON.

TOTAL INPUT WATTS = 8.1 AT 12.0 VOLTS

LED DRIVER: INTEGRAL

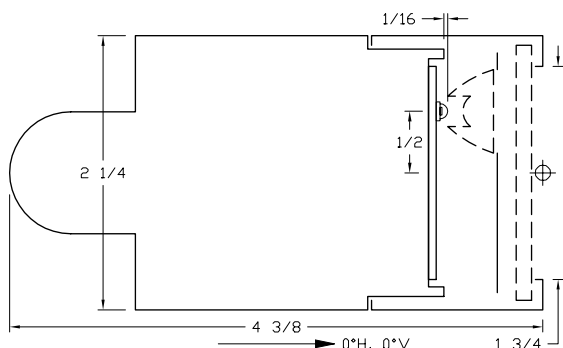
NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (12VAC,  
60Hz) TO THE LED DRIVER. LAMP INFORMATION PROVIDED BY CLIENT.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 25.25 FEET

#### FLOODLIGHT CHARACTERISTICS

IES TYPE	3H X 3V				
MAXIMUM CANDLEPOWER	2456.	AT	0.0 H,	1.4 V	AXIAL CANDLEPOWER
HORIZONTAL BEAM ANGLE (50%)	20.2	deg			
VERTICAL BEAM ANGLE (50%)	18.3	deg			
HORIZONTAL FIELD ANGLE (10%)	37.6	deg			
VERTICAL FIELD ANGLE (10%)	37.3	deg			
BEAM LUMENS (% FIXTURE)	153.	( 43.2 % )			
FIELD LUMENS (% FIXTURE)	294.	( 83.2 % )			
TOTAL LUMENS (% FIXTURE)	354.	(100.0 % )			
EFFICACY = 43.7 Lm/W					



Checked N WHITE

Approved R BEATTIE

DEG	HORIZ.	DEG	VERT.
90.0	0.	90.0	0.
85.0	0.	85.0	0.
75.0	1.	75.0	0.
65.0	2.	65.0	2.
55.0	3.	55.0	3.
47.5	4.	47.5	5.
42.5	6.	42.5	7.
37.5	9.	37.5	11.
33.0	15.	33.0	18.
29.0	26.	29.0	34.
25.5	50.	25.5	73.
22.5	98.	22.5	129.
19.5	201.	19.5	250.
17.0	363.	17.0	413.
15.0	545.	15.0	599.
13.0	791.	13.0	834.
11.0	1075.	11.0	1134.
9.0	1392.	9.0	1468.
7.0	1707.	7.0	1829.
5.0	2018.	5.0	2171.
3.0	2257.	3.0	2399.
1.0	2397.	1.0	2454.
0.0	2414.	0.0	2414.
-1.0	2397.	-1.0	2330.
-3.0	2257.	-3.0	2063.
-5.0	2018.	-5.0	1728.
-7.0	1707.	-7.0	1376.
-9.0	1392.	-9.0	1041.
-11.0	1075.	-11.0	775.
-13.0	791.	-13.0	564.
-15.0	545.	-15.0	401.
-17.0	363.	-17.0	278.
-19.5	201.	-19.5	168.
-22.5	98.	-22.5	87.
-25.5	50.	-25.5	48.
-29.0	26.	-29.0	26.
-33.0	15.	-33.0	15.
-37.5	9.	-37.5	9.
-42.5	6.	-42.5	6.
-47.5	4.	-47.5	4.
-55.0	3.	-55.0	3.
-65.0	2.	-65.0	1.
-75.0	1.	-75.0	0.
-85.0	0.	-85.0	0.
-90.0	0.	-90.0	0.

ALL CANDELA AND LUMEN VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY.

THIS REPORT IS BASED ON PUBLISHED INDUSTRY PROCEDURES. FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE.



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)

REPORT NUMBER: ITL63763  
PREPARED FOR: B-K LIGHTING, INC.

DATE: 12/30/09  
REVISED: 02/01/10

CANDELA TABULATION

PAGE 2

AVERAGE OF RIGHT AND LEFT SIDES

	0.0	1.0	3.0	5.0	7.0	9.0	11.0	13.0	15.0	17.0	19.5	22.5	25.5	29.0	33.0	37.5	42.5	47.5	55.0	65.0	75.0	85.0	90.0
90.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
85.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
75.0	0.	0.	0.	1.	1.	1.	1.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65.0	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	2.	1.	1.	1.	1.	1.	1.	1.	1.	0.	0.	0.	0.
55.0	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	2.	2.	2.	1.	1.	1.	1.	0.	0.	0.
47.5	5.	5.	5.	5.	5.	5.	5.	5.	5.	4.	4.	4.	4.	3.	3.	3.	2.	1.	1.	1.	0.	0.	0.
42.5	7.	7.	7.	7.	7.	7.	7.	7.	6.	6.	6.	5.	5.	4.	4.	3.	3.	2.	1.	1.	0.	0.	0.
37.5	11.	11.	10.	10.	10.	10.	9.	9.	9.	8.	8.	7.	7.	6.	5.	4.	3.	2.	2.	1.	0.	0.	0.
33.0	18.	18.	17.	17.	16.	15.	14.	13.	12.	12.	10.	9.	8.	7.	6.	5.	4.	3.	2.	1.	0.	0.	0.
29.0	34.	33.	33.	31.	28.	25.	23.	21.	19.	17.	14.	12.	10.	9.	7.	5.	4.	3.	2.	1.	0.	0.	0.
25.5	73.	68.	64.	59.	53.	45.	39.	34.	29.	24.	20.	16.	13.	10.	8.	6.	5.	3.	2.	1.	0.	0.	0.
22.5	129.	128.	123.	110.	97.	83.	70.	57.	45.	36.	28.	21.	16.	12.	9.	7.	5.	3.	2.	1.	1.	0.	0.
19.5	250.	249.	237.	214.	181.	150.	121.	95.	73.	56.	40.	27.	20.	14.	10.	7.	5.	4.	2.	1.	1.	0.	0.
17.0	413.	411.	391.	353.	300.	244.	193.	148.	110.	81.	54.	35.	23.	16.	11.	8.	6.	4.	3.	1.	1.	0.	0.
15.0	599.	594.	567.	512.	436.	355.	276.	207.	150.	108.	70.	42.	27.	17.	12.	8.	6.	4.	3.	1.	1.	0.	0.
13.0	834.	831.	789.	711.	607.	495.	382.	283.	201.	141.	89.	51.	31.	19.	12.	8.	6.	4.	3.	1.	1.	0.	0.
11.0	1134.	1124.	1060.	953.	811.	662.	512.	376.	263.	182.	111.	61.	35.	21.	13.	9.	6.	4.	3.	1.	1.	0.	0.
9.0	1468.	1455.	1372.	1232.	1044.	849.	655.	483.	336.	229.	135.	74.	40.	23.	14.	9.	6.	4.	3.	1.	1.	0.	0.
7.0	1829.	1817.	1712.	1528.	1291.	1046.	809.	596.	412.	276.	159.	82.	44.	24.	14.	9.	6.	5.	3.	1.	1.	0.	0.
5.0	2171.	2151.	2020.	1796.	1513.	1227.	945.	693.	476.	316.	179.	90.	47.	25.	15.	9.	6.	5.	3.	1.	1.	0.	0.
3.0	2399.	2382.	2231.	1986.	1676.	1360.	1045.	763.	525.	348.	195.	96.	49.	26.	15.	9.	6.	5.	3.	1.	1.	0.	0.
1.0	2454.	2436.	2290.	2040.	1725.	1413.	1083.	794.	546.	362.	202.	99.	50.	26.	15.	9.	6.	5.	3.	2.	1.	0.	0.
0.0	2414.	2397.	2257.	2018.	1707.	1392.	1075.	791.	545.	363.	201.	98.	50.	26.	15.	9.	6.	4.	3.	2.	1.	0.	0.
-1.0	2330.	2316.	2183.	1957.	1657.	1353.	1049.	775.	537.	357.	198.	98.	50.	25.	15.	9.	6.	4.	3.	1.	1.	0.	0.
-3.0	2063.	2051.	1942.	1746.	1488.	1224.	954.	712.	494.	331.	187.	93.	48.	25.	15.	9.	6.	4.	3.	1.	1.	0.	0.
-5.0	1728.	1719.	1623.	1468.	1262.	1045.	823.	611.	429.	293.	169.	85.	44.	24.	14.	9.	6.	4.	3.	1.	1.	0.	0.
-7.0	1376.	1369.	1294.	1178.	1017.	849.	667.	502.	357.	246.	144.	75.	40.	22.	13.	9.	6.	4.	3.	1.	1.	0.	0.
-9.0	1041.	1038.	991.	905.	785.	656.	519.	394.	284.	198.	118.	64.	36.	20.	13.	8.	6.	4.	3.	1.	1.	0.	0.
-11.0	775.	772.	741.	676.	587.	491.	389.	299.	217.	153.	95.	53.	32.	19.	12.	8.	6.	4.	3.	1.	0.	0.	0.
-13.0	564.	560.	536.	493.	431.	359.	286.	221.	163.	117.	75.	44.	28.	17.	11.	8.	6.	4.	3.	1.	0.	0.	0.
-15.0	401.	398.	380.	347.	304.	255.	204.	157.	116.	85.	57.	36.	23.	15.	10.	7.	5.	4.	3.	1.	0.	0.	0.
-17.0	278.	276.	262.	239.	209.	174.	141.	111.	84.	64.	45.	30.	20.	14.	10.	7.	5.	4.	3.	1.	0.	0.	0.
-19.5	168.	167.	159.	146.	128.	107.	89.	73.	57.	45.	33.	23.	17.	12.	9.	7.	5.	4.	2.	1.	0.	0.	0.
-22.5	87.	86.	84.	80.	70.	61.	52.	44.	37.	30.	23.	17.	13.	10.	8.	6.	5.	3.	2.	1.	0.	0.	0.
-25.5	48.	48.	47.	44.	40.	36.	31.	27.	23.	20.	17.	13.	11.	9.	7.	6.	4.	3.	2.	1.	0.	0.	0.
-29.0	26.	26.	25.	24.	23.	21.	19.	17.	16.	14.	12.	11.	9.	8.	6.	5.	4.	3.	2.	1.	0.	0.	0.
-33.0	15.	15.	15.	15.	14.	13.	13.	12.	11.	10.	9.	8.	7.	6.	5.	4.	3.	3.	2.	1.	0.	0.	0.
-37.5	9.	9.	9.	9.	9.	9.	8.	8.	8.	7.	7.	6.	6.	5.	4.	4.	3.	3.	2.	1.	0.	0.	0.
-42.5	6.	6.	6.	6.	6.	6.	6.	6.	5.	5.	5.	5.	4.	4.	3.	3.	3.	2.	1.	1.	0.	0.	0.
-47.5	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	3.	3.	3.	2.	2.	1.	1.	0.	0.	0.
-55.0	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	3.	2.	2.	2.	2.	2.	1.	1.	1.	0.	0.	0.	0.
-65.0	1.	1.	1.	1.	1.	1.	1.	2.	2.	1.	1.	1.	1.	1.	1.	1.	1.	1.	0.	0.	0.	0.	0.
-75.0	0.	0.	0.	1.	1.	1.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
-85.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
-90.0	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

BEAM EDGE = 1228. CP = 50% OF MAX  
FIELD EDGE = 246. CP = 10% OF MAX

THIS REPORT IS BASED ON PUBLISHED INDUSTRY PROCEDURES. FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE.



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)

REPORT NUMBER: ITL63763  
PREPARED FOR: B-K LIGHTING, INC.

DATE: 12/30/09  
REVISED: 02/01/10

CANDELA TABULATION - FIELD ONLY

PAGE 3

AVERAGE OF RIGHT AND LEFT SIDES

	0.0	1.0	3.0	5.0	7.0	9.0	11.0	13.0	15.0	17.0	19.5	22.5	25.5	29.0	33.0	37.5	42.5	47.5	55.0	65.0	75.0	85.0	90.0
90.0																							
85.0																							
75.0																							
65.0																							
55.0																							
47.5																							
42.5																							
37.5																							
33.0																							
29.0																							
25.5																							
22.5																							
19.5	250.	249.																					
17.0	413.	411.	391.	353.	300.																		
15.0	599.	594.	567.	512.	436.	355.	276.																
13.0	834.	831.	789.	711.	607.	495.	382.	283.															
11.0	1134.	1124.	1060.	953.	811.	662.	512.	376.	263.														
9.0	1468.	1455.	1372.	1232.	1044.	849.	655.	483.	336.														
7.0	1829.	1817.	1712.	1528.	1291.	1046.	809.	596.	412.	276.													
5.0	2171.	2151.	2020.	1796.	1513.	1227.	945.	693.	476.	316.													
3.0	2399.	2382.	2231.	1986.	1676.	1360.	1045.	763.	525.	348.													
1.0	2454.	2436.	2290.	2040.	1725.	1413.	1083.	794.	546.	362.													
0.0	2414.	2397.	2257.	2018.	1707.	1392.	1075.	791.	545.	363.													
-1.0	2330.	2316.	2183.	1957.	1657.	1353.	1049.	775.	537.	357.													
-3.0	2063.	2051.	1942.	1746.	1488.	1224.	954.	712.	494.	331.													
-5.0	1728.	1719.	1623.	1468.	1262.	1045.	823.	611.	429.	293.													
-7.0	1376.	1369.	1294.	1178.	1017.	849.	667.	502.	357.	246.													
-9.0	1041.	1038.	991.	905.	785.	656.	519.	394.	284.														
-11.0	775.	772.	741.	676.	587.	491.	389.	299.															
-13.0	564.	560.	536.	493.	431.	359.	286.																
-15.0	401.	398.	380.	347.	304.	255.																	
-17.0	278.	276.	262.																				
-19.5																							
-22.5																							
-25.5																							
-29.0																							
-33.0																							
-37.5																							
-42.5																							
-47.5																							
-55.0																							
-65.0																							
-75.0																							
-85.0																							
-90.0																							

BEAM EDGE = 1228. CP = 50% OF MAX  
FIELD EDGE = 246. CP = 10% OF MAX

THIS REPORT IS BASED ON PUBLISHED INDUSTRY PROCEDURES. FIELD PERFORMANCE MAY DIFFER FROM LABORATORY PERFORMANCE.



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)

REPORT NUMBER: ITL63763  
PREPARED FOR: B-K LIGHTING, INC.

DATE: 12/30/09  
REVISED: 02/01/10

LUMEN TABULATION

PAGE 4

AVERAGE OF RIGHT AND LEFT SIDES

	0	2	4	6	8	10	12	14	16	18	21	24	27	31	35	40	45	50	60	70	80	90	TOTAL
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
31	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
27	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
24	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
21	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
18	0.5	0.5	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
16	0.7	0.7	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
14	1.0	1.0	0.9	0.7	0.6	0.5	0.3	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8
12	1.4	1.3	1.2	1.0	0.8	0.6	0.4	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.7
10	1.8	1.7	1.5	1.3	1.0	0.8	0.6	0.4	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.8
8	2.2	2.1	1.9	1.6	1.3	1.0	0.7	0.5	0.3	0.3	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.1
6	2.6	2.5	2.2	1.8	1.5	1.1	0.8	0.6	0.4	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.1
4	2.9	2.7	2.4	2.0	1.6	1.2	0.9	0.6	0.4	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.6
2	3.0	2.8	2.5	2.1	1.7	1.3	0.9	0.6	0.4	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1
0	2.8	2.7	2.4	2.0	1.6	1.3	0.9	0.6	0.4	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.4
-2	2.5	2.4	2.1	1.8	1.5	1.1	0.8	0.6	0.4	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.9
-4	2.1	2.0	1.8	1.5	1.3	1.0	0.7	0.5	0.3	0.3	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.8
-6	1.7	1.6	1.4	1.2	1.0	0.8	0.6	0.4	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6
-8	1.3	1.2	1.1	0.9	0.8	0.6	0.5	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
-10	0.9	0.9	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6
-12	0.7	0.7	0.6	0.5	0.4	0.3	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.2
-14	0.5	0.5	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0
-16	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
-18	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
-21	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
-24	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
-27	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
-31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
-35	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
-40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
-45	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
-50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
-70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
-90	30.6	28.9	26.0	22.1	18.2	14.1	10.6	7.5	5.2	4.7	2.7	1.6	1.3	0.9	0.8	0.5	0.4	0.4	0.1	0.0	0.0	0.0	176.8

LUMEN TOTAL THIS PAGE = 176.8



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)

REPORT NUMBER: ITL63763  
PREPARED FOR: B-K LIGHTING, INC.

DATE: 12/30/09  
REVISED: 02/01/10

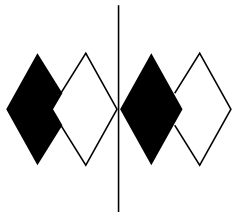
# LUMEN TABULATION - FIELD ONLY

PAGE 5

## AVERAGE OF RIGHT AND LEFT SIDES

	0	2	4	6	8	10	12	14	16	18	21	24	27	31	35	40	45	50	60	70	80	90	TOTAL
90																							0.0
80																							0.0
70																							0.0
60																							0.0
50																							0.0
45																							0.0
40																							0.0
35																							0.0
31																							0.0
27																							0.0
24																							0.0
21																							0.0
18	0.5																						0.5
16	0.5	0.5	0.4	0.4																			1.8
14	0.7	0.7	0.6	0.5	0.4	0.3																	3.3
12	1.0	1.0	0.9	0.7	0.6	0.5	0.3																5.0
10	1.4	1.3	1.2	1.0	0.8	0.6	0.4	0.3															7.0
8	1.8	1.7	1.5	1.3	1.0	0.8	0.6	0.4															9.0
6	2.2	2.1	1.9	1.6	1.3	1.0	0.7	0.5	0.3														11.5
4	2.6	2.5	2.2	1.8	1.5	1.1	0.8	0.6	0.4														13.4
2	2.9	2.7	2.4	2.0	1.6	1.2	0.9	0.6	0.4														14.9
0	3.0	2.8	2.5	2.1	1.7	1.3	0.9	0.6	0.4														15.3
-2	2.8	2.7	2.4	2.0	1.6	1.3	0.9	0.6	0.4														14.7
-4	2.5	2.4	2.1	1.8	1.5	1.1	0.8	0.6	0.4														13.2
-6	2.1	2.0	1.8	1.5	1.3	1.0	0.7	0.5	0.3														11.2
-8	1.7	1.6	1.4	1.2	1.0	0.8	0.6	0.4	0.3														9.0
-10	1.3	1.2	1.1	0.9	0.8	0.6	0.5	0.3															6.7
-12	0.9	0.9	0.8	0.7	0.6	0.5	0.4																4.8
-14	0.7	0.7	0.6	0.5	0.4	0.3																	3.2
-16	0.5	0.5	0.4	0.4	0.3																		2.0
-18	0.3	0.3																					0.7
-21																							0.0
-24																							0.0
-27																							0.0
-31																							0.0
-35																							0.0
-40																							0.0
-45																							0.0
-50																							0.0
-60																							0.0
-70																							0.0
-80																							0.0
-90																							0.0
	29.3	27.2	24.1	20.5	16.4	12.4	8.6	5.5	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	147.1

LUMEN TOTAL THIS PAGE = 147.1



**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)

REPORT NUMBER: ITL63763  
PREPARED FOR: B-K LIGHTING, INC.

DATE: 12/30/09  
REVISED: 02/01/10

ISOCANDELA CURVES

PAGE 6

AVERAGE OF RIGHT AND LEFT SIDES

