



itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

NVLAP
NVLAP LAB CODE: 200925-0

INDEPENDENT TESTING LABORATORIES, INC.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL85919

PAGE: 1 OF 7

ISSUE DATE: 10/30/15

PREPARED FOR: B-K LIGHTING, INC.

CATALOG NUMBER: NS-LED-e65-SP-12, AR-LED-TR-e65-SP-12, AR-LED-RM-e65-SP-12, DS-LED-e65-SP-12, RM-AR-LED-e65-SP-12, SN-LED-e65-SP-12, ST-LED-e65-SP-12, SF-LED-e65-SP-12, TF-LED-e65-SP-12, WS-LED-e65-SP-12, AW-LED-e65-SP-12, SW-LED-e65-SP-12, GD-LED-e65-SP-12, GQ-LED-e65-SP-12, EC-LED-e65-SP-12, ED-LED-e65-SP-12, SM-AR-LED-e65-SP-12, PM-LED-e65-SP-12, WM-LED-e65-SP-12, UL-AR-LED-e65-SP-12, HP2-LED-e65-SP-12, CO2-LED-e65-SP-12, VQ-LED-e65-SP-12, VS-LED-e65-SP-12

LUMINAIRE: MACHINED CYLINDRICAL METAL HOUSING, 1 BLACK CIRCUIT BOARD WITH 3 LEDS, ONE CLEAR CONICAL PLASTIC OPTIC PER LED WITH FROSTED SURFACE OPPOSITE LED AND SEMI-HEMISPHERICAL RECESSED CENTER TOWARD LED, MOLDED BLACK PLASTIC OPTIC MOUNTING FRAME, CLEAR MICRO-PRISMATIC FLAT GLASS LENS IN MACHINED CYLINDRICAL BLACK PAINTED METAL LENS FRAME. LENS PRISMS OUT.

LAMPS: THREE WHITE LIGHT EMITTING DIODES (LEDs), AIMED AT THE HORIZON.

INPUT ELECTRICAL: 12.0 VOLTS, 6.61 WATTS, 0.612 AMPS

LED DRIVER: B-K LIGHTING 528930/400188-M, DRIVER HAS MULTIPLE LEADS, LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (12VAC, 60Hz) TO THE DRIVER. POTENTIOMETER ON THE LED CIRCUIT BOARD SET TO POSITION "9" FOR THIS TEST.

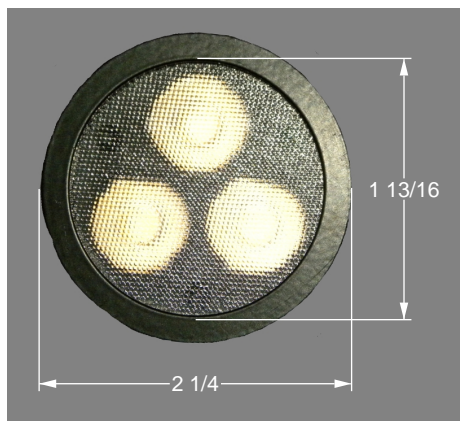
TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 20.0 FEET

AXIAL CANDLEPOWER

FLOODLIGHT CHARACTERISTICS

IES TYPE 3H X 3V
MAXIMUM CANDLEPOWER 4240. AT 0.0 H, 0.0 V
HORIZONTAL BEAM ANGLE (50%) 16.2 deg
VERTICAL BEAM ANGLE (50%) 16.0 deg
HORIZONTAL FIELD ANGLE (10%) 31.8 deg
VERTICAL FIELD ANGLE (10%) 31.5 deg
BEAM LUMENS (% FIXTURE) 191. (42.1 %)
FIELD LUMENS (% FIXTURE) 364. (80.2 %)
TOTAL LUMENS (% FIXTURE) 454. (100.0 %)
EFFICACY = 68.7 lm/W



Checked B HYRE

Approved R BEATTIE
Lighting Engineer

DEG	HORIZ.	DEG	VERT.
90.0	0.	90.0	0.
85.0	0.	85.0	0.
75.0	0.	75.0	0.
65.0	1.	65.0	1.
55.0	4.	55.0	4.
47.5	6.	47.5	6.
42.5	8.	42.5	8.
37.5	12.	37.5	12.
33.0	19.	33.0	19.
29.0	32.	29.0	32.
25.5	55.	25.5	53.
22.5	95.	22.5	88.
19.5	179.	19.5	160.
17.0	321.	17.0	281.
15.0	510.	15.0	454.
13.0	808.	13.0	734.
11.0	1241.	11.0	1155.
9.0	1806.	9.0	1725.
7.0	2491.	7.0	2422.
5.0	3224.	5.0	3169.
3.0	3840.	3.0	3810.
1.0	4191.	1.0	4187.
0.0	4240.	0.0	4240.
-1.0	4191.	-1.0	4198.
-3.0	3840.	-3.0	3846.
-5.0	3224.	-5.0	3216.
-7.0	2491.	-7.0	2485.
-9.0	1806.	-9.0	1802.
-11.0	1241.	-11.0	1246.
-13.0	808.	-13.0	829.
-15.0	510.	-15.0	536.
-17.0	321.	-17.0	341.
-19.5	179.	-19.5	185.
-22.5	95.	-22.5	99.
-25.5	55.	-25.5	59.
-29.0	32.	-29.0	34.
-33.0	19.	-33.0	21.
-37.5	12.	-37.5	13.
-42.5	8.	-42.5	9.
-47.5	6.	-47.5	6.
-55.0	4.	-55.0	4.
-65.0	1.	-65.0	1.
-75.0	0.	-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.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL85919
ISSUE DATE: 10/30/15
PREPARED FOR: B-K LIGHTING, INC.

PAGE: 2 OF 7

CANDELA TABULATION

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.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
65.0	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	0.	0.	0.	0.	0.
55.0	4.	4.	4.	4.	4.	4.	3.	3.	3.	3.	3.	3.	3.	2.	2.	2.	2.	1.	1.	0.	0.	0.	0.
47.5	6.	6.	6.	6.	6.	6.	6.	6.	5.	5.	5.	5.	4.	4.	3.	3.	2.	2.	1.	0.	0.	0.	0.
42.5	8.	8.	8.	8.	8.	8.	8.	8.	7.	7.	7.	6.	6.	5.	5.	4.	3.	2.	1.	1.	0.	0.	0.
37.5	12.	12.	12.	12.	12.	12.	11.	11.	10.	10.	9.	9.	8.	7.	6.	5.	4.	3.	2.	1.	0.	0.	0.
33.0	19.	19.	19.	18.	18.	17.	16.	16.	15.	14.	13.	12.	10.	9.	7.	6.	5.	3.	2.	1.	0.	0.	0.
29.0	32.	31.	31.	30.	28.	27.	25.	23.	21.	19.	17.	15.	13.	11.	9.	7.	5.	4.	2.	1.	0.	0.	0.
25.5	53.	52.	51.	48.	45.	41.	37.	33.	30.	27.	23.	19.	16.	13.	10.	8.	6.	4.	3.	1.	0.	0.	0.
22.5	88.	86.	83.	79.	73.	65.	57.	50.	43.	37.	30.	24.	19.	15.	12.	9.	6.	5.	3.	1.	0.	0.	0.
19.5	160.	158.	152.	139.	123.	107.	92.	76.	63.	52.	41.	31.	23.	18.	13.	9.	7.	5.	3.	1.	0.	0.	0.
17.0	281.	283.	261.	238.	206.	173.	143.	114.	91.	72.	53.	38.	28.	20.	14.	10.	7.	5.	3.	1.	0.	0.	0.
15.0	454.	455.	418.	374.	317.	259.	206.	158.	121.	93.	66.	45.	31.	22.	15.	11.	7.	5.	3.	1.	0.	0.	0.
13.0	734.	726.	681.	586.	487.	387.	297.	220.	161.	119.	81.	52.	35.	24.	16.	11.	8.	5.	3.	1.	0.	0.	0.
11.0	1155.	1135.	1058.	901.	736.	570.	423.	303.	213.	151.	98.	61.	40.	26.	17.	11.	8.	6.	3.	1.	0.	0.	0.
9.0	1725.	1705.	1581.	1336.	1073.	812.	586.	405.	276.	188.	118.	70.	44.	28.	18.	12.	8.	6.	3.	1.	0.	0.	0.
7.0	2422.	2413.	2183.	1865.	1478.	1099.	775.	519.	345.	229.	138.	78.	47.	29.	18.	12.	8.	6.	3.	1.	0.	0.	0.
5.0	3169.	3073.	2859.	2420.	1893.	1388.	965.	634.	413.	267.	156.	86.	51.	30.	19.	12.	8.	6.	4.	1.	0.	0.	0.
3.0	3810.	3729.	3440.	2893.	2244.	1632.	1124.	736.	469.	298.	170.	91.	53.	31.	19.	12.	8.	6.	4.	1.	0.	0.	0.
1.0	4187.	4139.	3787.	3179.	2456.	1780.	1222.	796.	503.	317.	178.	95.	55.	32.	19.	12.	8.	6.	4.	1.	0.	0.	0.
0.0	4240.	4191.	3840.	3224.	2491.	1806.	1241.	808.	510.	321.	179.	95.	55.	32.	19.	12.	8.	6.	4.	1.	0.	0.	0.
-1.0	4198.	4151.	3804.	3198.	2475.	1797.	1238.	807.	509.	320.	180.	95.	55.	32.	19.	12.	8.	6.	4.	1.	0.	0.	0.
-3.0	3846.	3836.	3491.	2947.	2296.	1680.	1165.	766.	487.	308.	174.	93.	53.	31.	19.	12.	8.	6.	4.	1.	0.	0.	0.
-5.0	3216.	3241.	2981.	2500.	1968.	1457.	1023.	682.	440.	283.	162.	88.	51.	30.	19.	12.	8.	6.	4.	1.	0.	0.	0.
-7.0	2485.	2526.	2336.	1970.	1573.	1180.	842.	572.	377.	248.	146.	81.	48.	29.	18.	12.	8.	6.	4.	1.	0.	0.	0.
-9.0	1802.	1843.	1676.	1453.	1178.	899.	653.	457.	308.	209.	126.	72.	44.	27.	17.	11.	8.	6.	4.	1.	0.	0.	0.
-11.0	1246.	1271.	1159.	1014.	834.	648.	484.	351.	241.	168.	106.	63.	40.	25.	16.	11.	8.	6.	3.	1.	0.	0.	0.
-13.0	829.	819.	770.	680.	567.	449.	345.	252.	184.	132.	88.	54.	36.	23.	16.	11.	7.	5.	3.	1.	0.	0.	0.
-15.0	536.	513.	498.	443.	376.	306.	242.	183.	138.	103.	71.	46.	31.	21.	15.	10.	7.	5.	3.	1.	0.	0.	0.
-17.0	341.	325.	309.	286.	248.	207.	168.	132.	103.	79.	57.	39.	28.	19.	14.	10.	7.	5.	3.	1.	0.	0.	0.
-19.5	185.	185.	179.	165.	149.	128.	108.	88.	71.	57.	43.	31.	23.	17.	12.	9.	7.	5.	3.	1.	0.	0.	0.
-22.5	99.	100.	97.	92.	85.	76.	66.	56.	48.	40.	32.	25.	19.	15.	11.	8.	6.	5.	3.	1.	0.	0.	0.
-25.5	59.	59.	58.	55.	51.	46.	41.	37.	32.	28.	24.	19.	16.	13.	10.	8.	6.	5.	3.	1.	0.	0.	0.
-29.0	34.	35.	34.	33.	31.	29.	27.	25.	22.	20.	18.	15.	13.	11.	9.	7.	5.	4.	3.	1.	0.	0.	0.
-33.0	21.	21.	21.	20.	19.	19.	17.	17.	15.	14.	13.	12.	10.	9.	7.	6.	5.	4.	2.	1.	0.	0.	0.
-37.5	13.	13.	13.	13.	13.	12.	12.	11.	11.	10.	10.	9.	8.	7.	6.	5.	4.	3.	2.	1.	0.	0.	0.
-42.5	9.	9.	9.	9.	9.	8.	8.	8.	8.	8.	7.	7.	6.	6.	5.	4.	4.	3.	2.	0.	0.	0.	0.
-47.5	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	5.	5.	5.	4.	4.	3.	3.	2.	1.	0.	0.	0.	0.
-55.0	4.	4.	4.	4.	4.	4.	3.	3.	3.	3.	3.	3.	3.	3.	2.	2.	2.	1.	1.	0.	0.	0.	0.
-65.0	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.
-75.0	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.
-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 = 2120. CP = 50% OF MAX
FIELD EDGE = 424. CP = 10% OF MAX

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



INDEPENDENT TESTING LABORATORIES, INC.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL85919
ISSUE DATE: 10/30/15
PREPARED FOR: B-K LIGHTING, INC.

PAGE: 3 OF 7

CANDELA TABULATION - FIELD ONLY

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																							
17.0																							
15.0	454.	455.																					
13.0	734.	726.	681.	586.	487.																		
11.0	1155.	1135.	1058.	901.	736.	570.																	
9.0	1725.	1705.	1581.	1336.	1073.	812.	586.																
7.0	2422.	2413.	2183.	1865.	1478.	1099.	775.	519.															
5.0	3169.	3073.	2859.	2420.	1893.	1388.	965.	634.															
3.0	3810.	3729.	3440.	2893.	2244.	1632.	1124.	736.	469.														
1.0	4187.	4139.	3787.	3179.	2456.	1780.	1222.	796.	503.														
0.0	4240.	4191.	3840.	3224.	2491.	1806.	1241.	808.	510.														
-1.0	4198.	4151.	3804.	3198.	2475.	1797.	1238.	807.	509.														
-3.0	3846.	3836.	3491.	2947.	2296.	1680.	1165.	766.	487.														
-5.0	3216.	3241.	2981.	2500.	1968.	1457.	1023.	682.	440.														
-7.0	2485.	2526.	2336.	1970.	1573.	1180.	842.	572.															
-9.0	1802.	1843.	1676.	1453.	1178.	899.	653.	457.															
-11.0	1246.	1271.	1159.	1014.	834.	648.	484.																
-13.0	829.	819.	770.	680.	567.	449.																	
-15.0	536.	513.	498.	443.																			
-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																							

BEAM EDGE = 2120. CP = 50% OF MAX
FIELD EDGE = 424. CP = 10% OF MAX

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



INDEPENDENT TESTING LABORATORIES, INC.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL85919
ISSUE DATE: 10/30/15
PREPARED FOR: B-K LIGHTING, INC.

PAGE: 4 OF 7

LUMEN TABULATION

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	0.0
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	0.1
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	0.6
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	0.6
31	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	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	0.9
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	0.1	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	1.4
21	0.3	0.3	0.3	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	2.2
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	2.2
16	0.6	0.5	0.5	0.4	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	3.3
14	0.9	0.8	0.7	0.6	0.5	0.4	0.3	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	4.9
12	1.4	1.3	1.1	0.9	0.7	0.5	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	7.1
10	2.1	1.9	1.6	1.3	1.0	0.7	0.5	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	10.2
8	2.9	2.7	2.3	1.8	1.3	0.9	0.6	0.4	0.3	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	13.8
6	3.7	3.5	2.9	2.3	1.7	1.2	0.8	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	17.5
4	4.5	4.2	3.5	2.7	2.0	1.3	0.9	0.6	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	20.7
2	5.0	4.6	3.9	3.0	2.1	1.5	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	22.7
0	5.1	4.6	3.9	3.0	2.2	1.5	1.0	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	22.9
-2	4.7	4.2	3.6	2.8	2.0	1.4	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	21.3
-4	3.9	3.6	3.0	2.4	1.8	1.2	0.8	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	18.3
-6	3.1	2.8	2.4	1.9	1.4	1.0	0.7	0.4	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	14.7
-8	2.2	2.0	1.8	1.4	1.1	0.8	0.5	0.4	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	11.1
-10	1.5	1.4	1.2	1.0	0.8	0.6	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	8.0
-12	1.0	0.9	0.8	0.7	0.5	0.4	0.3	0.2	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	5.5
-14	0.6	0.6	0.5	0.5	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	3.8
-16	0.4	0.4	0.3	0.3	0.2	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	2.6
-18	0.3	0.3	0.3	0.3	0.2	0.2	0.2	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	2.5
-21	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	1.6
-24	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
-27	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	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	1.0
-31	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	0.0	0.0	0.0	0.7
-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	0.6
-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	0.4
-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	0.3
-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	0.4
-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	45.7	42.1	35.9	28.5	21.4	15.4	10.6	7.2	4.9	4.7	2.9	1.9	1.7	1.2	1.0	0.7	0.5	0.5	0.1	0.0	0.0	0.0	226.9

LUMEN TOTAL THIS PAGE = 226.9



INDEPENDENT TESTING LABORATORIES, INC.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL85919
ISSUE DATE: 10/30/15
PREPARED FOR: B-K LIGHTING, INC.

PAGE: 5 OF 7

LUMEN TABULATION - FIELD ONLY

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																						0.0
16																						0.0
14	0.6																					0.6
12	0.9	0.8	0.7	0.6																		3.0
10	1.4	1.3	1.1	0.9	0.7																	5.3
8	2.1	1.9	1.6	1.3	1.0	0.7																8.6
6	2.9	2.7	2.3	1.8	1.3	0.9	0.6															12.5
4	3.7	3.5	2.9	2.3	1.7	1.2	0.8															16.0
2	4.5	4.2	3.5	2.7	2.0	1.3	0.9	0.6														19.7
0	5.0	4.6	3.9	3.0	2.1	1.5	0.9	0.6														21.6
-2	5.1	4.6	3.9	3.0	2.2	1.5	1.0	0.6														21.8
-4	4.7	4.2	3.6	2.8	2.0	1.4	0.9	0.6														20.2
-6	3.9	3.6	3.0	2.4	1.8	1.2	0.8	0.5														17.3
-8	3.1	2.8	2.4	1.9	1.4	1.0	0.7															13.3
-10	2.2	2.0	1.8	1.4	1.1	0.8	0.5															9.9
-12	1.5	1.4	1.2	1.0	0.8	0.6																6.6
-14	1.0	0.9	0.8	0.7	0.5																	4.0
-16	0.6	0.6	0.5																			1.8
-18																						0.0
-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	43.3	39.3	33.2	25.7	18.5	12.1	7.1	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	182.1

LUMEN TOTAL THIS PAGE = 182.1

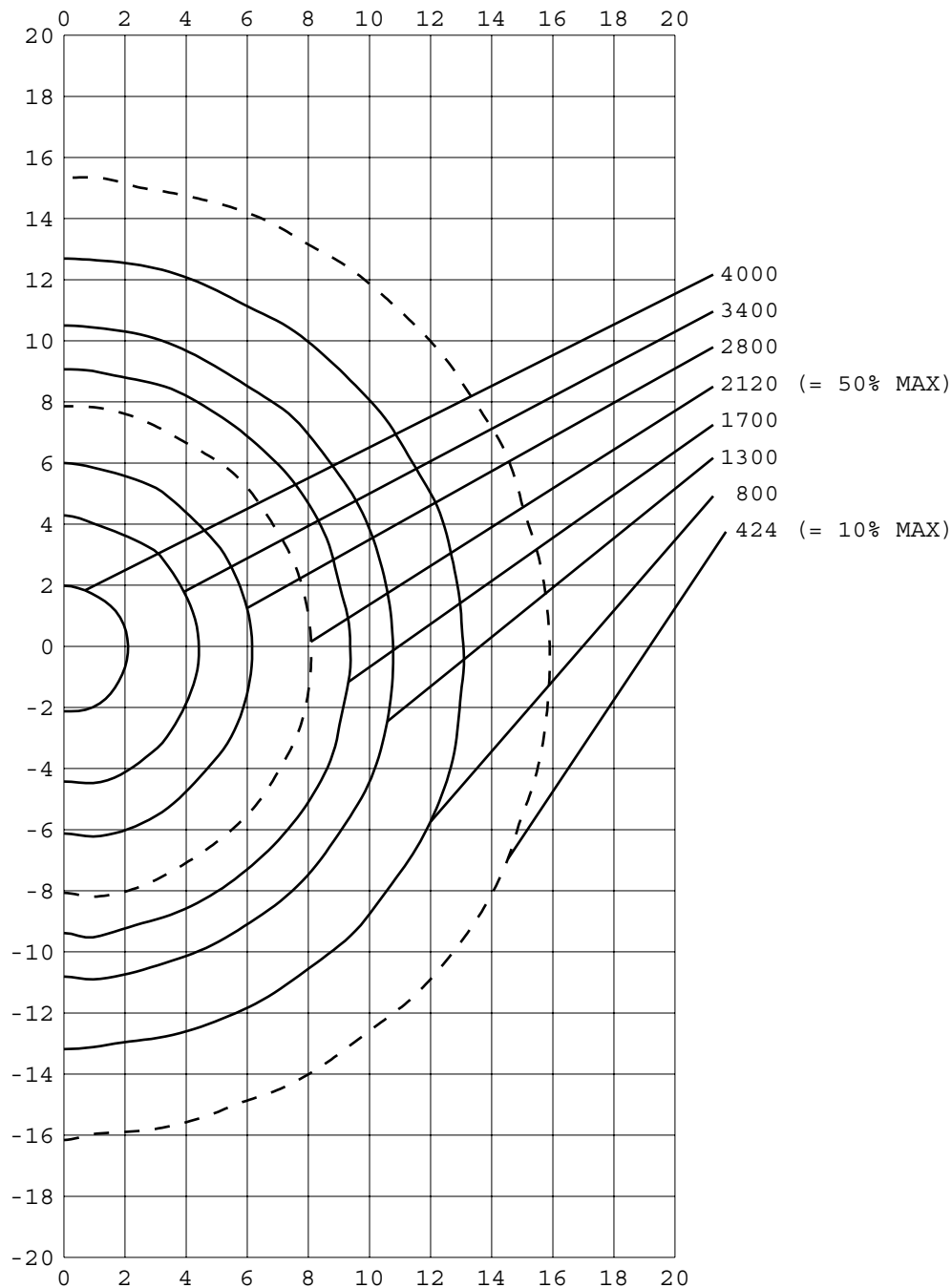


REPORT NUMBER: ITL85919
ISSUE DATE: 10/30/15
PREPARED FOR: B-K LIGHTING, INC.

PAGE: 6 OF 7

ISOCANDELA CURVES

AVERAGE OF RIGHT AND LEFT SIDES





itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955



INDEPENDENT TESTING LABORATORIES, INC.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL85919
ISSUE DATE: 10/30/15
PREPARED FOR: B-K LIGHTING, INC.

PAGE: 7 OF 7

ADDRESS: 40429 BRICKYARD DRIVE
MADERA, CA 93636-9515

THIS ITL REPORT WITH THE USE OF THE NVLAP LOGO SHALL NOT BE USED BY THE CLIENT TO CLAIM PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NVLAP, NIST, OR ANY AGENCY OF THE FEDERAL GOVERNMENT.