

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



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](mailto:itl@itlboulder.com) • WEBSITE: [www.itlboulder.com](http://www.itlboulder.com)

REPORT NUMBER: ITL83574

PAGE: 1 OF 7

ISSUE DATE: 12/02/14

REVISED: 11/10/15

PREPARED FOR: B-K LIGHTING, INC.

CATALOG NUMBER: K2-LED-X45-WFL-12, SM-AP-LED-X45-WFL-12, AP-LED-X45-WFL-12, TY2-LED-X45-WFL-12

LUMINAIRE: CAST METAL HOUSING WITH UNFINISHED BROWN INTERIOR FINISH, CAST METAL DRIVER HOUSING, MACHINED BLACK FINISHED CIRCUIT BOARD MOUNTING BLOCK, 1 CIRCUIT BOARD WITH ONE LED, MOLDED WHITE PLASTIC LED SURROUND, MOLDED MULTI-FACETED TIERED PLASTIC REFLECTOR WITH TEXTURED SEMI-SPECULAR FINISH, CLEAR MICRO-PRISMATIC FLAT GLASS LENS IN MACHINED WHITE PAINTED METAL FRAME. LENS PRISMS IN.

LAMP: ONE WHITE MULTI-CHIP LIGHT EMITTING DIODE (LED), AIMED AT THE HORIZON.

INPUT ELECTRICAL: 120.0 VOLTS, 34.6 WATTS, 0.292 AMPS

LED DRIVER: ELDOLED ECODRIVE 561/S, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST. CLIENT STATES DRIVER PROGRAMMED FOR 1050mA OUTPUT.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE DRIVER.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 20.0 FEET

AXIAL CANDLEPOWER

FLOODLIGHT CHARACTERISTICS

IES TYPE 5H X 5V  
 MAXIMUM CANDLEPOWER 2931. AT 0.0 H, 0.0 V  
 HORIZONTAL BEAM ANGLE (50%) 49.7 deg  
 VERTICAL BEAM ANGLE (50%) 50.3 deg  
 HORIZONTAL FIELD ANGLE (10%) 76.5 deg  
 VERTICAL FIELD ANGLE (10%) 75.1 deg  
 BEAM LUMENS (% FIXTURE) 1242. ( 61.4 % )  
 FIELD LUMENS (% FIXTURE) 1812. ( 89.6 % )  
 TOTAL LUMENS (% FIXTURE) 2022. (100.0 % )  
 EFFICACY = 58.4 lm/W

DEG	HORIZ.	DEG	VERT.
90.0	0.	90.0	0.
85.0	7.	85.0	2.
75.0	14.	75.0	8.
65.0	23.	65.0	12.
55.0	40.	55.0	37.
47.5	78.	47.5	75.
42.5	152.	42.5	136.
37.5	318.	37.5	296.
33.0	598.	33.0	614.
29.0	1019.	29.0	1066.
25.5	1406.	25.5	1462.
22.5	1685.	22.5	1740.
19.5	1941.	19.5	1997.
17.0	2142.	17.0	2210.
15.0	2299.	15.0	2367.
13.0	2439.	13.0	2505.
11.0	2566.	11.0	2629.
9.0	2682.	9.0	2732.
7.0	2774.	7.0	2811.
5.0	2845.	5.0	2875.
3.0	2897.	3.0	2916.
1.0	2927.	1.0	2931.
0.0	2931.	0.0	2931.
-1.0	2927.	-1.0	2926.
-3.0	2897.	-3.0	2886.
-5.0	2845.	-5.0	2814.
-7.0	2774.	-7.0	2733.
-9.0	2682.	-9.0	2629.
-11.0	2566.	-11.0	2514.
-13.0	2439.	-13.0	2387.
-15.0	2299.	-15.0	2266.
-17.0	2142.	-17.0	2123.
-19.5	1941.	-19.5	1933.
-22.5	1685.	-22.5	1678.
-25.5	1406.	-25.5	1389.
-29.0	1019.	-29.0	994.
-33.0	598.	-33.0	568.
-37.5	318.	-37.5	290.
-42.5	152.	-42.5	139.
-47.5	78.	-47.5	75.
-55.0	40.	-55.0	38.
-65.0	23.	-65.0	22.
-75.0	14.	-75.0	14.
-85.0	7.	-85.0	6.
-90.0	0.	-90.0	0.



Checked ..... *B HYRE* .....  
 Approved ..... *R BEATTIE* .....  
 Lighting Engineer

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.



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PAGE: 2 OF 7  
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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	2.	3.	3.	4.	5.	6.	6.	7.	7.	7.	7.	7.	7.	6.	6.	6.	6.	5.	4.	3.	2.	1.	0.
75.0	8.	8.	10.	11.	11.	13.	14.	14.	14.	14.	13.	13.	13.	12.	12.	11.	11.	10.	9.	8.	5.	2.	0.
65.0	12.	13.	16.	18.	20.	21.	22.	22.	22.	22.	21.	21.	20.	20.	19.	18.	17.	15.	13.	10.	8.	3.	0.
55.0	37.	37.	37.	37.	37.	36.	36.	35.	34.	34.	33.	31.	30.	28.	27.	25.	23.	21.	17.	13.	9.	4.	0.
47.5	75.	75.	74.	74.	73.	71.	69.	66.	63.	59.	56.	51.	47.	42.	37.	32.	28.	25.	21.	15.	10.	5.	0.
42.5	136.	138.	135.	134.	131.	127.	120.	113.	106.	97.	89.	79.	69.	59.	50.	41.	34.	28.	23.	17.	11.	5.	0.
37.5	296.	300.	291.	285.	275.	259.	243.	223.	202.	182.	157.	133.	111.	90.	71.	54.	41.	33.	25.	18.	12.	5.	0.
33.0	614.	627.	611.	593.	558.	518.	481.	434.	390.	344.	289.	231.	180.	135.	98.	70.	50.	38.	27.	19.	12.	6.	0.
29.0	1066.	1068.	1055.	1026.	986.	923.	850.	767.	679.	589.	488.	380.	286.	204.	140.	93.	61.	43.	29.	20.	13.	6.	0.
25.5	1462.	1460.	1455.	1423.	1377.	1312.	1229.	1129.	1017.	895.	741.	568.	422.	293.	192.	119.	73.	48.	31.	20.	13.	6.	0.
22.5	1740.	1741.	1729.	1709.	1662.	1596.	1514.	1416.	1301.	1171.	992.	770.	568.	386.	245.	146.	84.	52.	33.	21.	13.	6.	0.
19.5	1997.	1998.	1984.	1961.	1909.	1841.	1754.	1658.	1547.	1418.	1235.	987.	736.	491.	305.	177.	96.	57.	34.	21.	13.	7.	0.
17.0	2210.	2209.	2191.	2160.	2104.	2028.	1939.	1834.	1717.	1591.	1411.	1157.	884.	588.	358.	204.	107.	61.	35.	22.	13.	7.	0.
15.0	2367.	2366.	2345.	2303.	2254.	2171.	2076.	1964.	1836.	1705.	1528.	1280.	998.	673.	400.	225.	115.	65.	36.	22.	14.	7.	0.
13.0	2505.	2503.	2485.	2442.	2386.	2302.	2201.	2078.	1946.	1809.	1628.	1384.	1099.	750.	442.	245.	122.	68.	37.	22.	14.	7.	0.
11.0	2629.	2630.	2609.	2565.	2500.	2416.	2309.	2181.	2045.	1899.	1717.	1469.	1189.	821.	480.	264.	130.	70.	38.	22.	14.	7.	0.
9.0	2732.	2735.	2712.	2665.	2595.	2506.	2396.	2266.	2123.	1976.	1788.	1541.	1265.	883.	515.	280.	137.	73.	38.	23.	14.	7.	0.
7.0	2811.	2817.	2796.	2753.	2673.	2578.	2461.	2337.	2196.	2041.	1848.	1596.	1325.	937.	545.	295.	142.	75.	39.	23.	14.	7.	0.
5.0	2875.	2877.	2857.	2809.	2731.	2634.	2519.	2394.	2247.	2089.	1893.	1635.	1366.	977.	570.	305.	146.	76.	39.	23.	14.	7.	0.
3.0	2916.	2917.	2893.	2843.	2766.	2673.	2560.	2428.	2281.	2122.	1919.	1663.	1393.	1003.	587.	312.	149.	78.	39.	23.	14.	7.	0.
1.0	2931.	2929.	2902.	2852.	2781.	2688.	2571.	2440.	2297.	2139.	1939.	1682.	1405.	1017.	596.	317.	151.	78.	40.	23.	14.	7.	0.
0.0	2931.	2927.	2897.	2845.	2774.	2682.	2566.	2439.	2299.	2142.	1941.	1685.	1406.	1019.	598.	318.	152.	78.	40.	23.	14.	7.	0.
-1.0	2926.	2918.	2888.	2836.	2765.	2670.	2560.	2435.	2296.	2137.	1935.	1682.	1405.	1016.	597.	317.	152.	78.	40.	23.	14.	7.	0.
-3.0	2886.	2877.	2848.	2802.	2733.	2636.	2529.	2406.	2270.	2114.	1914.	1665.	1389.	1003.	590.	315.	151.	78.	40.	23.	14.	7.	0.
-5.0	2814.	2807.	2786.	2744.	2676.	2584.	2481.	2360.	2226.	2076.	1884.	1635.	1360.	976.	576.	308.	149.	77.	40.	23.	14.	7.	0.
-7.0	2733.	2727.	2705.	2659.	2600.	2512.	2415.	2301.	2170.	2025.	1834.	1590.	1314.	935.	552.	298.	145.	76.	39.	23.	14.	7.	0.
-9.0	2629.	2633.	2606.	2563.	2509.	2423.	2330.	2224.	2097.	1958.	1772.	1531.	1258.	882.	521.	285.	140.	74.	39.	23.	14.	7.	0.
-11.0	2514.	2514.	2494.	2454.	2402.	2326.	2229.	2129.	2005.	1874.	1694.	1460.	1180.	820.	489.	270.	133.	72.	39.	23.	14.	7.	0.
-13.0	2387.	2390.	2373.	2334.	2282.	2213.	2126.	2023.	1903.	1777.	1601.	1369.	1087.	750.	453.	252.	127.	70.	38.	23.	14.	7.	0.
-15.0	2266.	2264.	2243.	2204.	2155.	2090.	2009.	1903.	1790.	1670.	1501.	1262.	984.	672.	412.	233.	119.	67.	37.	22.	14.	7.	0.
-17.0	2123.	2125.	2106.	2072.	2024.	1956.	1875.	1774.	1668.	1552.	1384.	1139.	872.	594.	370.	212.	111.	64.	37.	22.	14.	7.	0.
-19.5	1933.	1939.	1921.	1887.	1838.	1776.	1687.	1599.	1495.	1375.	1201.	969.	730.	498.	318.	186.	101.	60.	35.	22.	13.	6.	0.
-22.5	1678.	1691.	1671.	1639.	1592.	1530.	1451.	1356.	1247.	1123.	956.	751.	566.	398.	258.	155.	89.	55.	34.	21.	13.	6.	0.
-25.5	1389.	1405.	1386.	1352.	1308.	1250.	1168.	1070.	967.	853.	711.	556.	427.	307.	205.	128.	78.	51.	33.	21.	13.	6.	0.
-29.0	994.	998.	982.	957.	912.	865.	800.	721.	638.	565.	474.	381.	298.	220.	151.	100.	66.	46.	31.	20.	13.	6.	0.
-33.0	568.	566.	558.	544.	519.	491.	460.	421.	382.	347.	296.	245.	195.	148.	107.	76.	54.	41.	28.	19.	12.	6.	0.
-37.5	290.	288.	288.	282.	274.	263.	249.	230.	212.	193.	170.	145.	121.	98.	77.	59.	44.	35.	26.	18.	12.	5.	0.
-42.5	139.	141.	139.	137.	134.	130.	124.	119.	111.	103.	95.	84.	74.	65.	54.	45.	36.	30.	24.	17.	11.	5.	0.
-47.5	75.	75.	75.	75.	74.	72.	70.	68.	65.	62.	59.	55.	51.	46.	40.	35.	31.	27.	22.	16.	10.	5.	0.
-55.0	38.	38.	38.	38.	38.	37.	37.	36.	36.	35.	34.	33.	32.	30.	28.	26.	24.	22.	18.	13.	9.	4.	0.
-65.0	22.	22.	22.	22.	22.	22.	22.	22.	22.	22.	22.	21.	21.	21.	20.	19.	17.	16.	14.	10.	8.	3.	0.
-75.0	14.	14.	14.	14.	14.	14.	14.	14.	14.	14.	13.	13.	13.	13.	12.	12.	11.	10.	9.	8.	5.	2.	0.
-85.0	6.	6.	6.	7.	7.	7.	7.	7.	7.	7.	7.	6.	6.	6.	6.	6.	6.	5.	4.	3.	2.	1.	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 = 1466. CP = 50% OF MAX  
FIELD EDGE = 293. CP = 10% OF MAX



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PAGE: 3 OF 7  
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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	296.	300.																						
33.0	614.	627.	611.	593.	558.	518.	481.	434.	390.	344.														
29.0	1066.	1068.	1055.	1026.	986.	923.	850.	767.	679.	589.	488.	380.												
25.5	1462.	1460.	1455.	1423.	1377.	1312.	1229.	1129.	1017.	895.	741.	568.	422.											
22.5	1740.	1741.	1729.	1709.	1662.	1596.	1514.	1416.	1301.	1171.	992.	770.	568.	386.										
19.5	1997.	1998.	1984.	1961.	1909.	1841.	1754.	1658.	1547.	1418.	1235.	987.	736.	491.	305.									
17.0	2210.	2209.	2191.	2160.	2104.	2028.	1939.	1834.	1717.	1591.	1411.	1157.	884.	588.	358.									
15.0	2367.	2366.	2345.	2303.	2254.	2171.	2076.	1964.	1836.	1705.	1528.	1280.	998.	673.	400.									
13.0	2505.	2503.	2485.	2442.	2386.	2302.	2201.	2078.	1946.	1809.	1628.	1384.	1099.	750.	442.									
11.0	2629.	2630.	2609.	2565.	2500.	2416.	2309.	2181.	2045.	1899.	1717.	1469.	1189.	821.	480.									
9.0	2732.	2735.	2712.	2665.	2595.	2506.	2396.	2266.	2123.	1976.	1788.	1541.	1265.	883.	515.									
7.0	2811.	2817.	2796.	2753.	2673.	2578.	2461.	2337.	2196.	2041.	1848.	1596.	1325.	937.	545.	295.								
5.0	2875.	2877.	2857.	2809.	2731.	2634.	2519.	2394.	2247.	2089.	1893.	1635.	1366.	977.	570.	305.								
3.0	2916.	2917.	2893.	2843.	2766.	2673.	2560.	2428.	2281.	2122.	1919.	1663.	1393.	1003.	587.	312.								
1.0	2931.	2929.	2902.	2852.	2781.	2688.	2571.	2440.	2297.	2139.	1939.	1682.	1405.	1017.	596.	317.								
0.0	2931.	2927.	2897.	2845.	2774.	2682.	2566.	2439.	2299.	2142.	1941.	1685.	1406.	1019.	598.	318.								
-1.0	2926.	2918.	2888.	2836.	2765.	2670.	2560.	2435.	2296.	2137.	1935.	1682.	1405.	1016.	597.	317.								
-3.0	2886.	2877.	2848.	2802.	2733.	2636.	2529.	2406.	2270.	2114.	1914.	1665.	1389.	1003.	590.	315.								
-5.0	2814.	2807.	2786.	2744.	2676.	2584.	2481.	2360.	2226.	2076.	1884.	1635.	1360.	976.	576.	308.								
-7.0	2733.	2727.	2705.	2659.	2600.	2512.	2415.	2301.	2170.	2025.	1834.	1590.	1314.	935.	552.	298.								
-9.0	2629.	2633.	2606.	2563.	2509.	2423.	2330.	2224.	2097.	1958.	1772.	1531.	1258.	882.	521.									
-11.0	2514.	2514.	2494.	2454.	2402.	2326.	2229.	2129.	2005.	1874.	1694.	1460.	1180.	820.	489.									
-13.0	2387.	2390.	2373.	2334.	2282.	2213.	2126.	2023.	1903.	1777.	1601.	1369.	1087.	750.	453.									
-15.0	2266.	2264.	2243.	2204.	2155.	2090.	2009.	1903.	1790.	1670.	1501.	1262.	984.	672.	412.									
-17.0	2123.	2125.	2106.	2072.	2024.	1956.	1875.	1774.	1668.	1552.	1384.	1139.	872.	594.	370.									
-19.5	1933.	1939.	1921.	1887.	1838.	1776.	1687.	1599.	1495.	1375.	1201.	969.	730.	498.	318.									
-22.5	1678.	1691.	1671.	1639.	1592.	1530.	1451.	1356.	1247.	1123.	956.	751.	566.	398.										
-25.5	1389.	1405.	1386.	1352.	1308.	1250.	1168.	1070.	967.	853.	711.	556.	427.	307.										
-29.0	994.	998.	982.	957.	912.	865.	800.	721.	638.	565.	474.	381.	298.											
-33.0	568.	566.	558.	544.	519.	491.	460.	421.	382.	347.	296.													
-37.5																								
-42.5																								
-47.5																								
-55.0																								
-65.0																								
-75.0																								
-85.0																								
-90.0																								

BEAM EDGE = 1466. CP = 50% OF MAX  
FIELD EDGE = 293. CP = 10% OF MAX

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



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PAGE: 4 OF 7  
REVISED: 11/10/15

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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.9
80	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0	1.9
70	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	3.0
60	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.1	0.0	4.6
50	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.0	0.0	3.7
45	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.2	0.1	0.0	0.0	5.8
40	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.5	0.7	0.6	0.5	0.5	0.4	0.3	0.2	0.2	0.2	0.1	0.0	0.0	0.0	10.4
35	1.5	1.5	1.4	1.3	1.2	1.2	1.0	0.9	0.8	1.0	0.8	0.6	0.6	0.4	0.3	0.2	0.2	0.2	0.1	0.0	0.0	0.0	15.3
31	2.6	2.6	2.5	2.4	2.2	2.0	1.8	1.6	1.4	1.7	1.3	0.9	0.9	0.6	0.4	0.3	0.2	0.2	0.1	0.0	0.0	0.0	25.7
27	2.7	2.7	2.6	2.5	2.4	2.2	2.0	1.8	1.6	1.9	1.4	1.0	0.9	0.6	0.4	0.2	0.1	0.2	0.1	0.0	0.0	0.0	27.4
24	3.2	3.2	3.1	3.0	2.9	2.7	2.5	2.3	2.0	2.6	2.0	1.4	1.2	0.8	0.5	0.3	0.2	0.2	0.1	0.0	0.0	0.0	34.1
21	3.7	3.6	3.6	3.5	3.3	3.1	3.0	2.7	2.5	3.2	2.5	1.8	1.6	0.9	0.6	0.3	0.2	0.2	0.1	0.0	0.0	0.0	40.4
18	2.7	2.7	2.6	2.5	2.4	2.3	2.2	2.0	1.9	2.4	2.0	1.5	1.3	0.7	0.5	0.2	0.1	0.1	0.1	0.0	0.0	0.0	30.2
16	2.9	2.9	2.8	2.7	2.6	2.5	2.3	2.2	2.0	2.6	2.2	1.6	1.4	0.8	0.5	0.3	0.1	0.1	0.1	0.0	0.0	0.0	32.7
14	3.0	3.0	3.0	2.9	2.8	2.6	2.5	2.3	2.1	2.8	2.3	1.8	1.6	0.9	0.6	0.3	0.1	0.1	0.1	0.0	0.0	0.0	34.9
12	3.2	3.2	3.1	3.0	2.9	2.8	2.6	2.4	2.2	3.0	2.5	2.0	1.7	1.0	0.6	0.3	0.1	0.1	0.1	0.0	0.0	0.0	36.8
10	3.3	3.3	3.2	3.1	3.0	2.9	2.7	2.5	2.3	3.1	2.6	2.1	1.9	1.1	0.7	0.3	0.2	0.1	0.1	0.0	0.0	0.0	38.4
8	3.4	3.4	3.3	3.2	3.1	2.9	2.8	2.6	2.4	3.2	2.7	2.2	2.0	1.1	0.7	0.3	0.2	0.1	0.1	0.0	0.0	0.0	39.8
6	3.5	3.5	3.4	3.3	3.2	3.0	2.8	2.6	2.4	3.3	2.8	2.3	2.1	1.2	0.7	0.3	0.2	0.1	0.1	0.0	0.0	0.0	40.8
4	3.6	3.5	3.5	3.3	3.2	3.1	2.9	2.7	2.5	3.3	2.8	2.3	2.1	1.2	0.8	0.3	0.2	0.1	0.1	0.0	0.0	0.0	41.4
2	3.6	3.5	3.5	3.4	3.2	3.1	2.9	2.7	2.5	3.3	2.8	2.3	2.2	1.2	0.8	0.3	0.2	0.1	0.1	0.0	0.0	0.0	41.7
0	3.6	3.5	3.4	3.3	3.2	3.1	2.9	2.7	2.5	3.3	2.8	2.3	2.2	1.2	0.8	0.3	0.2	0.1	0.1	0.0	0.0	0.0	41.6
-2	3.5	3.5	3.4	3.3	3.2	3.0	2.9	2.7	2.5	3.3	2.8	2.3	2.1	1.2	0.8	0.3	0.2	0.1	0.1	0.0	0.0	0.0	41.1
-4	3.4	3.4	3.3	3.2	3.1	3.0	2.8	2.6	2.4	3.2	2.8	2.2	2.1	1.2	0.7	0.3	0.2	0.1	0.1	0.0	0.0	0.0	40.3
-6	3.3	3.3	3.2	3.1	3.0	2.9	2.7	2.6	2.4	3.2	2.7	2.2	2.0	1.1	0.7	0.3	0.2	0.1	0.1	0.0	0.0	0.0	39.1
-8	3.2	3.2	3.1	3.0	2.9	2.8	2.6	2.5	2.3	3.1	2.6	2.1	1.9	1.1	0.7	0.3	0.2	0.1	0.1	0.0	0.0	0.0	37.6
-10	3.1	3.0	3.0	2.9	2.8	2.7	2.5	2.4	2.2	2.9	2.5	1.9	1.7	1.0	0.7	0.3	0.1	0.1	0.1	0.0	0.0	0.0	35.9
-12	2.9	2.9	2.8	2.8	2.7	2.5	2.4	2.2	2.1	2.8	2.3	1.8	1.6	0.9	0.6	0.3	0.1	0.1	0.1	0.0	0.0	0.0	34.0
-14	2.8	2.7	2.7	2.6	2.5	2.4	2.3	2.1	1.9	2.6	2.1	1.6	1.4	0.8	0.6	0.3	0.1	0.1	0.1	0.0	0.0	0.0	31.8
-16	2.6	2.6	2.5	2.4	2.4	2.2	2.1	2.0	1.8	2.4	1.9	1.4	1.3	0.8	0.5	0.2	0.1	0.1	0.1	0.0	0.0	0.0	29.5
-18	3.5	3.5	3.4	3.3	3.2	3.0	2.8	2.6	2.4	3.1	2.5	1.8	1.6	1.0	0.7	0.3	0.2	0.2	0.1	0.0	0.0	0.0	39.4
-21	3.1	3.0	3.0	2.9	2.8	2.6	2.4	2.2	2.0	2.5	1.9	1.4	1.3	0.8	0.6	0.3	0.2	0.2	0.1	0.0	0.0	0.0	33.1
-24	2.6	2.5	2.5	2.4	2.3	2.1	1.9	1.7	1.5	1.8	1.4	1.1	1.0	0.6	0.5	0.3	0.2	0.2	0.1	0.0	0.0	0.0	26.5
-27	2.4	2.4	2.3	2.2	2.1	1.9	1.7	1.5	1.3	1.6	1.3	1.0	0.9	0.6	0.5	0.3	0.2	0.2	0.1	0.0	0.0	0.0	24.7
-31	1.4	1.4	1.3	1.3	1.2	1.1	1.0	0.9	0.8	1.0	0.8	0.6	0.6	0.4	0.4	0.2	0.2	0.2	0.1	0.0	0.0	0.0	15.0
-35	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.7	0.6	0.5	0.5	0.4	0.4	0.2	0.2	0.2	0.1	0.0	0.0	0.0	10.8
-40	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.0	0.0	0.0	6.1
-45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.0	0.0	0.0	3.9
-50	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.1	0.0	0.0	4.8
-60	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.0	0.0	3.2
-70	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0	2.0
-80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	1.0
-90	88.1	87.2	85.5	82.9	79.5	75.3	70.4	65.1	59.4	78.1	64.5	50.7	46.8	28.2	20.0	10.7	6.3	7.0	3.5	1.4	0.2	0.0	1011.1

LUMEN TOTAL THIS PAGE = 1011.1



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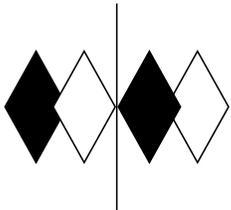
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LUMEN TABULATION - FIELD ONLY

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	0.9																						0.9
31	1.5	1.5	1.4	1.3	1.2	1.2	1.0	0.9	0.8														11.0
27	2.6	2.6	2.5	2.4	2.2	2.0	1.8	1.6	1.4	1.7	1.3												22.1
24	2.7	2.7	2.6	2.5	2.4	2.2	2.0	1.8	1.6	1.9	1.4	1.0											24.8
21	3.2	3.2	3.1	3.0	2.9	2.7	2.5	2.3	2.0	2.6	2.0	1.4	1.2										32.1
18	3.7	3.6	3.6	3.5	3.3	3.1	3.0	2.7	2.5	3.2	2.5	1.8	1.6	0.9									39.0
16	2.7	2.7	2.6	2.5	2.4	2.3	2.2	2.0	1.9	2.4	2.0	1.5	1.3	0.7									29.2
14	2.9	2.9	2.8	2.7	2.6	2.5	2.3	2.2	2.0	2.6	2.2	1.6	1.4	0.8									31.5
12	3.0	3.0	3.0	2.9	2.8	2.6	2.5	2.3	2.1	2.8	2.3	1.8	1.6	0.9									33.6
10	3.2	3.2	3.1	3.0	2.9	2.8	2.6	2.4	2.2	3.0	2.5	2.0	1.7	1.0									35.5
8	3.3	3.3	3.2	3.1	3.0	2.9	2.7	2.5	2.3	3.1	2.6	2.1	1.9	1.1									37.1
6	3.4	3.4	3.3	3.2	3.1	2.9	2.8	2.6	2.4	3.2	2.7	2.2	2.0	1.1	0.7								39.1
4	3.5	3.5	3.4	3.3	3.2	3.0	2.8	2.6	2.4	3.3	2.8	2.3	2.1	1.2	0.7								40.1
2	3.6	3.5	3.5	3.3	3.2	3.1	2.9	2.7	2.5	3.3	2.8	2.3	2.1	1.2	0.8								40.7
0	3.6	3.5	3.5	3.4	3.2	3.1	2.9	2.7	2.5	3.3	2.8	2.3	2.2	1.2	0.8								41.0
-2	3.6	3.5	3.4	3.3	3.2	3.1	2.9	2.7	2.5	3.3	2.8	2.3	2.2	1.2	0.8								40.9
-4	3.5	3.5	3.4	3.3	3.2	3.0	2.9	2.7	2.5	3.3	2.8	2.3	2.1	1.2	0.8								40.4
-6	3.4	3.4	3.3	3.2	3.1	3.0	2.8	2.6	2.4	3.2	2.8	2.2	2.1	1.2	0.7								39.5
-8	3.3	3.3	3.2	3.1	3.0	2.9	2.7	2.6	2.4	3.2	2.7	2.2	2.0	1.1	0.7								38.4
-10	3.2	3.2	3.1	3.0	2.9	2.8	2.6	2.5	2.3	3.1	2.6	2.1	1.9	1.1									36.3
-12	3.1	3.0	3.0	2.9	2.8	2.7	2.5	2.4	2.2	2.9	2.5	1.9	1.7	1.0									34.6
-14	2.9	2.9	2.8	2.8	2.7	2.5	2.4	2.2	2.1	2.8	2.3	1.8	1.6	0.9									32.7
-16	2.8	2.7	2.7	2.6	2.5	2.4	2.3	2.1	1.9	2.6	2.1	1.6	1.4	0.8									30.6
-18	2.6	2.6	2.5	2.4	2.4	2.2	2.1	2.0	1.8	2.4	1.9	1.4	1.3	0.8									28.4
-21	3.5	3.5	3.4	3.3	3.2	3.0	2.8	2.6	2.4	3.1	2.5	1.8	1.6	1.0									37.9
-24	3.1	3.0	3.0	2.9	2.8	2.6	2.4	2.2	2.0	2.5	1.9	1.4	1.3										31.0
-27	2.6	2.5	2.5	2.4	2.3	2.1	1.9	1.7	1.5	1.8	1.4	1.1	1.0										24.7
-31	2.4	2.4	2.3	2.2	2.1	1.9	1.7	1.5	1.3	1.6	1.3	1.0											21.8
-35	1.4	1.4	1.3	1.3	1.2	1.1	1.0	0.9	0.8	1.0													11.3
-40																							0.0
-45																							0.0
-50																							0.0
-60																							0.0
-70																							0.0
-80																							0.0
-90																							0.0
	85.1	83.3	81.6	79.1	75.8	71.7	67.1	62.0	56.5	73.1	59.4	45.4	39.2	20.4	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	905.8

LUMEN TOTAL THIS PAGE = 905.8

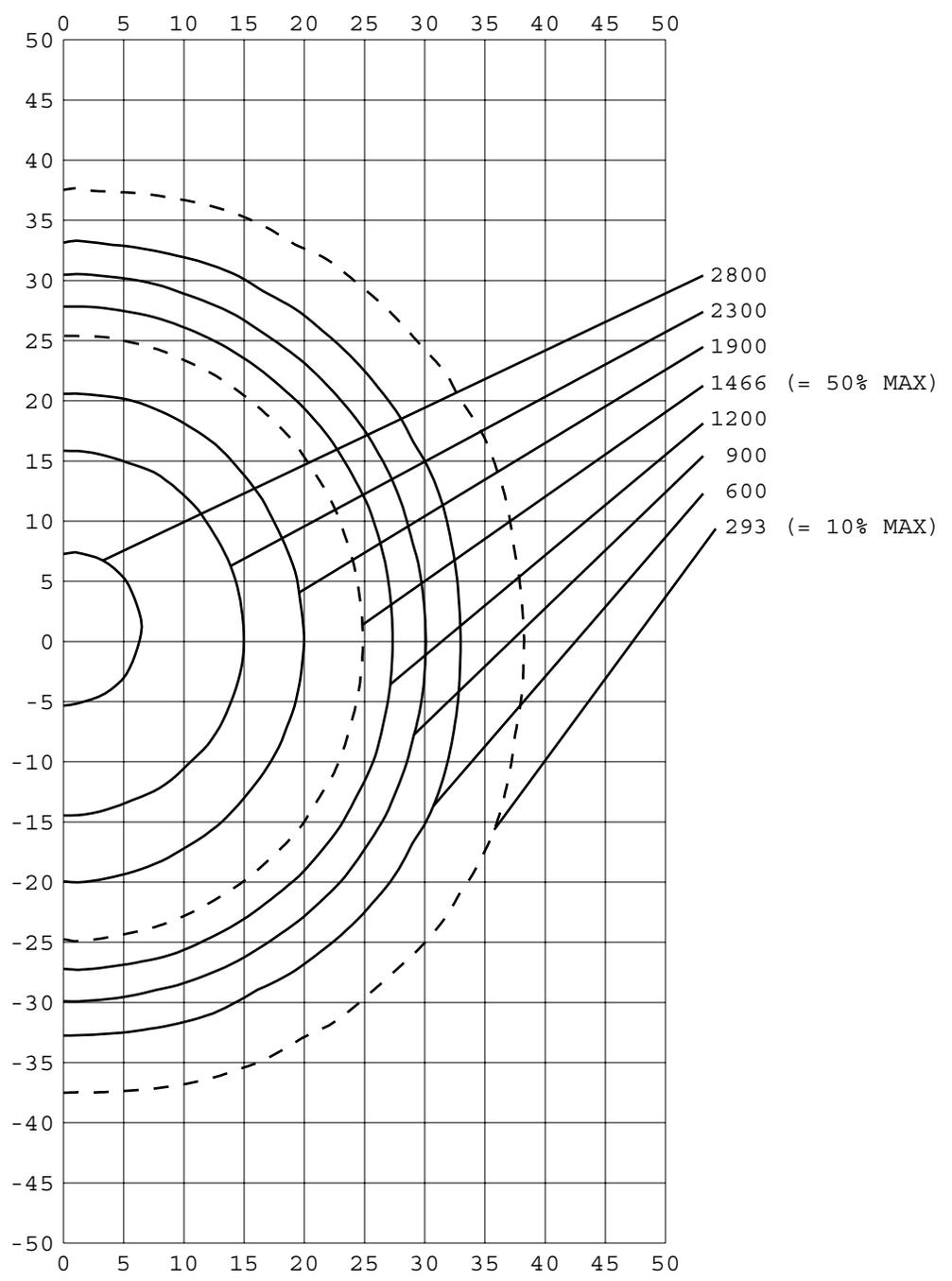


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PAGE: 6 OF 7  
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