

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: PORTFOLIO

Report Number: P245482

Luminaire Tested: **LD8B40D010 ER8B40850 8LBDW0WH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P245482  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B40D010 ER8B40850 8LBDW0WH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 5000 CCT WITH WHEAT TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4554.0 lumens  
Efficiency: N/A  
Efficacy: 111.3 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

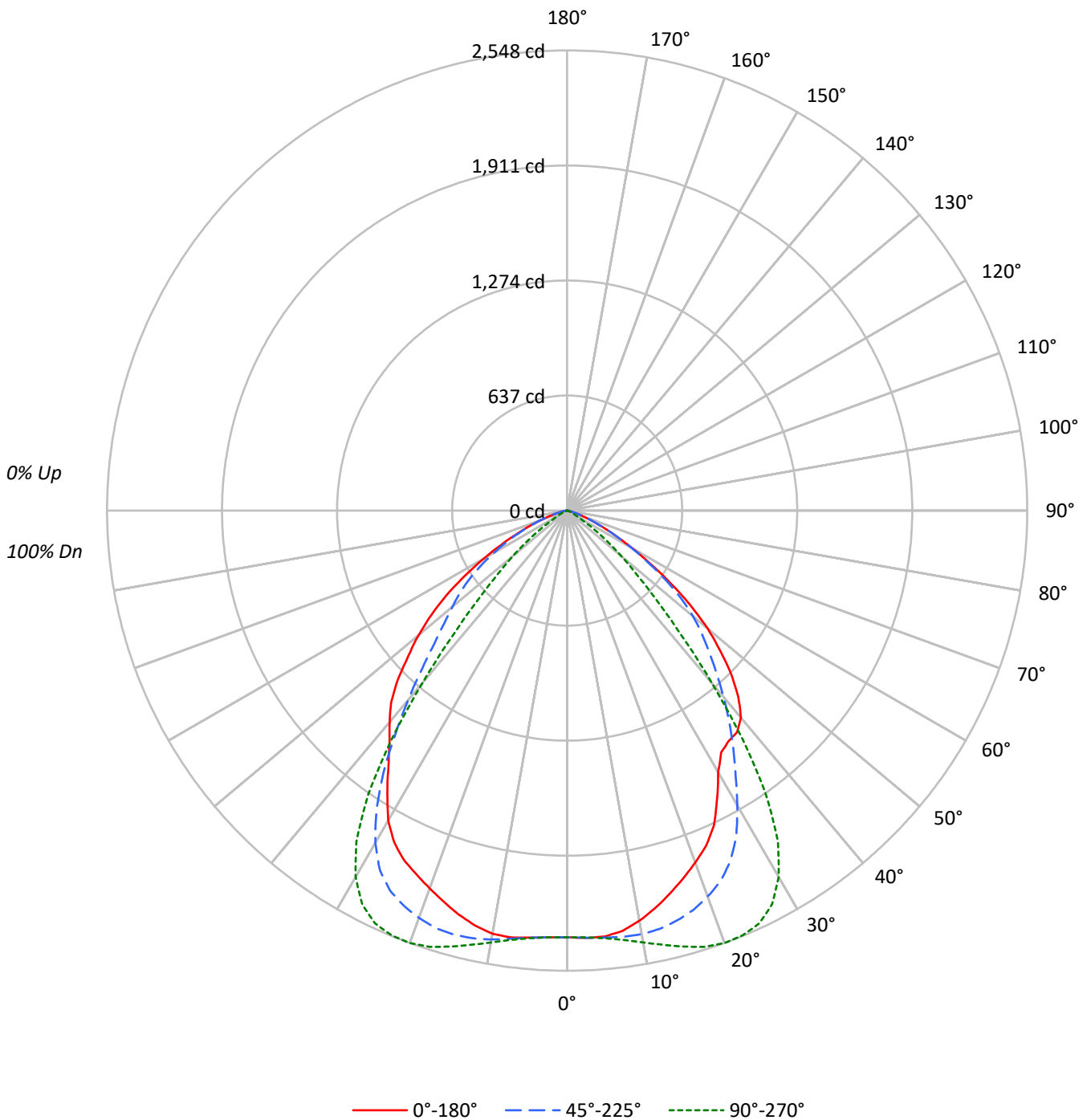
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	72851	72851	72851
5°	73284	73556	73476
10°	72206	76016	74523
15°	70096	79782	73939
20°	68062	83617	73040
25°	65449	85758	72703
30°	59563	83405	70548
35°	58676	72269	64906
40°	60268	50124	61532
45°	56108	30295	57856
50°	48668	18709	51556
55°	37348	9774	43751
60°	25446	3941	33020
65°	15826	2014	22780
70°	8592	1244	13903
75°	4480	596	8221
80°	2007	675	4457
85°	1344	460	3998



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	227.2	5.0
10°-20°	673.0	14.8
20°-30°	1026.8	22.5
30°-40°	1071.5	23.5
40°-50°	804.8	17.7
50°-60°	495.2	10.9
60°-70°	201.5	4.4
70°-80°	47.5	1.0
80°-90°	6.5	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1927.0	42.3
0°-40°	2998.5	65.8
0°-60°	4298.5	94.4
0°-90°	4554.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4554.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2362	2362	2362	2362	2362	
5°	2368	2374	2376	2374	2374	224
15°	2196	2350	2499	2430	2316	619
25°	1924	2139	2520	2321	2137	875
35°	1559	1603	1920	1774	1724	984
45°	1287	1114	695	1037	1327	982
55°	695	660	182	660	814	624
65°	217	219	28	295	312	226
75°	38	38	5	66	69	45
85°	4	4	1	9	11	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5
2.5°	2368.7	2365.0	2368.7	2368.7	2370.0	2367.5	2368.7	2370.0	2367.5	2367.5	2367.5
5°	2367.5	2365.0	2367.5	2366.2	2368.7	2368.7	2371.3	2371.3	2373.7	2373.7	2377.5
7.5°	2347.4	2342.4	2347.4	2351.2	2353.7	2358.7	2365.0	2370.0	2375.0	2380.0	2386.3
10°	2306.0	2306.0	2309.8	2317.3	2324.8	2333.6	2344.9	2357.5	2370.0	2381.3	2392.6
12.5°	2254.6	2250.9	2258.4	2268.4	2279.7	2293.5	2311.1	2329.9	2349.9	2372.5	2390.1
15°	2195.7	2191.9	2200.7	2210.7	2224.5	2244.6	2265.9	2291.0	2319.8	2349.9	2378.8
17.5°	2135.5	2134.2	2143.0	2156.8	2168.1	2189.4	2217.0	2247.1	2279.7	2319.8	2357.5
20°	2074.1	2072.8	2081.6	2092.9	2107.9	2128.0	2155.6	2190.7	2229.5	2274.7	2318.6
22.5°	2010.1	2011.4	2018.9	2031.4	2044.0	2065.3	2094.1	2129.2	2171.9	2220.8	2269.7
25°	1923.6	1917.3	1927.3	1939.9	1961.2	1978.7	2006.4	2044.0	2087.8	2139.3	2197.0
27.5°	1798.2	1796.9	1805.7	1817.0	1835.8	1857.1	1887.2	1926.1	1972.5	2028.9	2085.3
30°	1672.8	1675.3	1679.1	1690.4	1702.9	1724.2	1754.3	1786.9	1830.8	1884.7	1944.9
32.5°	1587.5	1587.5	1592.5	1600.1	1608.8	1620.1	1641.4	1665.3	1699.1	1736.7	1780.6
35°	1558.7	1553.7	1558.7	1559.9	1561.2	1563.7	1567.4	1575.0	1586.3	1602.6	1618.9
37.5°	1546.1	1542.4	1542.4	1537.4	1531.1	1523.6	1513.5	1502.2	1489.7	1473.4	1460.9
40°	1497.2	1494.7	1492.2	1487.2	1473.4	1458.4	1442.0	1415.7	1386.9	1346.7	1306.6
42.5°	1403.2	1400.7	1399.4	1389.4	1376.8	1359.3	1340.5	1312.9	1276.5	1225.1	1167.4
45°	1286.6	1281.5	1277.8	1269.0	1260.2	1245.2	1227.6	1202.5	1166.2	1113.5	1044.6
47.5°	1151.1	1148.6	1147.4	1143.6	1134.8	1126.0	1114.8	1094.7	1062.1	1011.9	940.5
50°	1014.5	1009.5	1011.9	1010.7	1006.9	1000.7	993.1	979.4	954.3	909.1	843.9
52.5°	857.7	857.7	856.5	860.2	861.5	860.2	861.5	846.4	825.1	791.2	736.1
55°	694.7	694.7	698.5	703.5	708.5	709.7	708.5	702.2	687.2	659.6	610.7
57.5°	541.7	539.2	546.7	554.2	559.3	564.3	560.5	555.5	546.7	524.1	486.5
60°	412.6	412.6	417.6	422.6	427.6	432.6	431.4	430.1	422.6	407.5	377.5
62.5°	303.4	304.7	304.7	308.5	313.5	318.5	322.3	318.5	314.7	304.7	284.6
65°	216.9	215.7	216.9	220.7	224.5	229.5	232.0	230.7	227.0	219.4	204.4
67.5°	145.5	144.2	149.2	150.5	153.0	158.0	156.8	158.0	156.8	150.5	137.9
70°	95.3	92.8	95.3	94.0	97.8	99.1	101.6	102.8	101.6	97.8	94.0
72.5°	58.9	57.7	58.9	60.2	61.5	62.7	65.2	65.2	63.9	61.5	56.4
75°	37.6	33.8	35.1	32.6	35.1	35.1	37.6	38.9	37.6	37.6	35.1
77.5°	22.6	22.6	22.6	22.6	22.6	22.6	22.6	23.8	25.1	22.6	21.3
80°	11.3	11.3	12.5	12.5	12.5	13.8	12.5	12.5	12.5	13.8	10.0
82.5°	8.8	7.5	7.5	7.5	8.8	7.5	7.5	7.5	7.5	7.5	7.5
85°	3.8	5.0	3.8	2.5	3.8	3.8	5.0	3.8	3.8	3.8	5.0
87.5°	1.3	1.3	0.0	0.0	0.0	1.3	0.0	1.3	1.3	2.5	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



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5
2.5°	2368.7	2366.2	2366.2	2365.0	2367.5	2365.0	2366.2	2365.0	2365.0	2367.5	2365.0
5°	2377.5	2378.8	2376.3	2375.0	2378.8	2378.8	2378.8	2376.3	2376.3	2377.5	2376.3
7.5°	2390.1	2392.6	2393.8	2395.1	2397.6	2398.8	2398.8	2397.6	2396.3	2400.1	2395.1
10°	2403.8	2407.6	2415.1	2418.9	2425.2	2425.2	2427.7	2427.7	2425.2	2427.7	2426.4
12.5°	2398.8	2421.4	2433.9	2442.7	2451.5	2459.0	2461.5	2462.8	2461.5	2466.6	2461.5
15°	2407.6	2426.4	2446.5	2461.5	2477.8	2486.6	2489.1	2499.1	2501.7	2502.9	2495.4
17.5°	2393.8	2427.7	2449.0	2471.6	2495.4	2511.7	2526.7	2533.0	2534.3	2536.8	2526.7
20°	2362.5	2400.1	2432.7	2465.3	2492.9	2518.0	2530.5	2548.1	2543.1	2553.1	2539.3
22.5°	2319.8	2362.5	2403.8	2446.5	2475.3	2505.4	2531.8	2544.3	2550.6	2550.6	2535.5
25°	2252.1	2302.3	2347.4	2391.3	2435.2	2471.6	2501.7	2520.5	2524.2	2523.0	2505.4
27.5°	2146.8	2200.7	2253.4	2303.5	2357.5	2400.1	2435.2	2457.8	2464.0	2464.0	2445.2
30°	2001.3	2059.0	2110.4	2170.6	2225.8	2273.4	2322.4	2342.4	2353.7	2353.7	2332.4
32.5°	1828.3	1877.2	1924.8	1983.8	2044.0	2097.9	2144.3	2171.9	2185.7	2184.4	2165.6
35°	1640.2	1664.0	1700.4	1744.3	1798.2	1848.3	1893.5	1919.8	1943.6	1942.4	1924.8
37.5°	1452.1	1445.8	1449.6	1465.9	1499.7	1534.9	1570.0	1595.1	1615.1	1623.9	1620.1
40°	1267.8	1235.2	1203.8	1192.5	1195.0	1207.6	1226.4	1245.2	1267.8	1279.1	1284.1
42.5°	1102.2	1047.1	991.9	950.5	926.7	919.2	927.9	934.2	948.0	964.3	980.6
45°	969.3	895.3	822.6	758.7	718.5	694.7	689.7	694.7	702.2	718.5	739.8
47.5°	860.2	773.7	692.2	620.7	561.8	530.4	521.7	519.1	526.7	541.7	570.5
50°	763.7	677.1	586.9	504.1	442.7	407.5	395.0	390.0	398.7	410.0	436.4
52.5°	658.3	573.1	480.3	400.0	336.1	299.7	285.9	278.4	283.4	298.4	324.8
55°	544.2	465.2	381.2	298.4	237.0	203.1	186.8	181.8	186.8	203.1	229.5
57.5°	430.1	363.6	293.4	215.7	160.5	126.7	110.3	105.3	119.1	125.4	153.0
60°	336.1	282.2	222.0	158.0	110.3	84.0	67.7	63.9	70.2	81.5	104.1
62.5°	252.1	218.2	170.5	112.9	81.5	53.9	45.1	41.4	45.1	53.9	71.5
65°	183.1	156.8	119.1	82.8	55.2	40.1	30.1	27.6	31.4	37.6	52.7
67.5°	125.4	105.3	82.8	57.7	37.6	25.1	21.3	21.3	22.6	27.6	38.9
70°	81.5	69.0	52.7	37.6	25.1	18.8	16.3	13.8	16.3	20.1	26.3
72.5°	51.4	43.9	33.8	26.3	18.8	13.8	11.3	10.0	12.5	15.0	20.1
75°	31.4	23.8	17.6	13.8	10.0	10.0	10.0	5.0	6.3	10.0	12.5
77.5°	18.8	16.3	13.8	11.3	8.8	5.0	5.0	5.0	6.3	7.5	11.3
80°	10.0	8.8	6.3	6.3	5.0	3.8	5.0	3.8	2.5	6.3	7.5
82.5°	6.3	5.0	5.0	5.0	6.3	2.5	3.8	2.5	3.8	5.0	3.8
85°	3.8	3.8	3.8	2.5	6.3	2.5	2.5	1.3	1.3	2.5	2.5
87.5°	0.0	1.3	1.3	0.0	1.3	0.0	1.3	1.3	1.3	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5	2362.5
2.5°	2366.2	2365.0	2366.2	2365.0	2365.0	2365.0	2366.2	2366.2	2365.0	2365.0	2367.5
5°	2376.3	2376.3	2376.3	2375.0	2373.7	2373.7	2376.3	2376.3	2372.5	2376.3	2376.3
7.5°	2397.6	2393.8	2397.6	2392.6	2390.1	2391.3	2392.6	2390.1	2387.6	2388.8	2388.8
10°	2425.2	2421.4	2421.4	2417.7	2413.9	2411.4	2408.9	2402.6	2396.3	2395.1	2390.1
12.5°	2457.8	2451.5	2447.8	2440.2	2433.9	2425.2	2417.7	2407.6	2395.1	2386.3	2377.5
15°	2490.4	2480.3	2471.6	2459.0	2445.2	2430.2	2413.9	2397.6	2377.5	2360.0	2344.9
17.5°	2516.7	2502.9	2486.6	2466.6	2446.5	2423.9	2400.1	2376.3	2347.4	2324.8	2307.3
20°	2525.5	2505.4	2484.1	2457.8	2431.4	2400.1	2370.0	2338.6	2306.0	2282.2	2262.2
22.5°	2514.2	2490.4	2464.0	2436.5	2401.3	2367.5	2332.4	2296.0	2267.2	2234.6	2215.8
25°	2482.9	2454.0	2425.2	2392.6	2358.7	2321.1	2283.5	2245.9	2210.7	2193.2	2169.4
27.5°	2418.9	2387.6	2356.2	2322.4	2283.5	2245.9	2207.0	2170.6	2140.5	2116.7	2102.9
30°	2306.0	2269.7	2233.3	2197.0	2163.1	2124.2	2087.8	2057.7	2027.6	2008.8	1995.1
32.5°	2133.0	2100.4	2064.0	2028.9	1997.6	1965.0	1934.9	1908.5	1887.2	1874.7	1864.6
35°	1899.8	1867.1	1839.6	1814.5	1788.1	1774.4	1755.6	1740.5	1731.7	1726.7	1725.5
37.5°	1606.3	1587.5	1578.7	1573.7	1568.7	1565.0	1567.4	1573.7	1578.7	1587.5	1597.5
40°	1292.8	1309.1	1314.2	1331.7	1348.0	1369.3	1393.2	1420.7	1443.3	1472.1	1492.2
42.5°	1006.9	1037.0	1072.1	1109.8	1149.9	1188.8	1236.4	1280.3	1320.4	1356.8	1388.1
45°	773.7	820.1	872.8	926.7	980.6	1037.0	1094.7	1148.6	1196.3	1235.2	1267.8
47.5°	603.2	654.6	722.3	788.8	854.0	920.4	984.4	1040.8	1080.9	1118.5	1147.4
50°	477.8	536.7	610.7	687.2	758.7	828.9	896.6	949.3	989.4	1019.5	1040.8
52.5°	369.9	440.1	515.4	595.6	672.1	748.6	811.3	860.2	892.8	919.2	935.4
55°	275.9	344.8	425.1	507.9	585.6	659.6	718.5	761.2	790.0	805.0	813.8
57.5°	199.4	262.1	342.3	425.1	495.3	565.5	613.2	652.1	668.4	677.1	680.9
60°	145.5	203.1	274.6	346.1	412.6	469.0	510.4	536.7	549.2	554.2	553.0
62.5°	106.6	156.8	218.2	278.4	332.3	378.7	411.3	428.8	435.1	437.6	433.9
65°	81.5	120.4	173.0	219.4	260.8	294.7	318.5	329.8	333.5	332.3	329.8
67.5°	60.2	90.3	129.2	164.3	194.4	220.7	233.2	243.3	245.8	242.0	238.2
70°	42.6	66.5	94.0	117.9	140.4	155.5	169.3	170.5	170.5	169.3	166.8
72.5°	30.1	46.4	63.9	80.3	94.0	105.3	110.3	114.1	112.9	111.6	109.1
75°	20.1	28.8	46.4	50.2	62.7	66.5	71.5	71.5	72.7	69.0	69.0
77.5°	12.5	20.1	27.6	32.6	37.6	42.6	45.1	45.1	46.4	45.1	45.1
80°	7.5	12.5	15.0	22.6	22.6	26.3	27.6	28.8	26.3	30.1	26.3
82.5°	5.0	7.5	11.3	11.3	13.8	16.3	16.3	17.6	17.6	16.3	16.3
85°	3.8	5.0	6.3	7.5	7.5	8.8	7.5	7.5	8.8	10.0	8.8
87.5°	1.3	2.5	1.3	2.5	2.5	5.0	3.8	3.8	3.8	5.0	5.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P245482

CATALOG NUMBER: LD8B40D010 ER8B40850 8LBDW0WH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2362.5	2362.5	2362.5	2362.5
2.5°	2365.0	2366.2	2365.0	2365.0
5°	2376.3	2375.0	2376.3	2373.7
7.5°	2385.0	2385.0	2383.8	2383.8
10°	2385.0	2380.0	2380.0	2380.0
12.5°	2366.2	2360.0	2356.2	2353.7
15°	2333.6	2322.4	2317.3	2316.1
17.5°	2291.0	2281.0	2274.7	2270.9
20°	2242.1	2232.1	2224.5	2225.8
22.5°	2199.4	2188.2	2183.1	2180.6
25°	2156.8	2143.0	2139.3	2136.8
27.5°	2087.8	2080.3	2076.6	2072.8
30°	1982.5	1978.7	1972.5	1981.3
32.5°	1860.9	1854.6	1849.6	1853.4
35°	1726.7	1722.9	1726.7	1724.2
37.5°	1603.8	1607.6	1612.6	1615.1
40°	1507.3	1521.1	1526.1	1528.6
42.5°	1410.7	1427.0	1437.0	1443.3
45°	1291.6	1307.9	1319.2	1326.7
47.5°	1168.7	1182.5	1193.8	1192.5
50°	1057.1	1064.6	1069.6	1074.7
52.5°	944.2	944.2	945.5	945.5
55°	816.3	813.8	812.6	813.8
57.5°	675.9	673.4	672.1	668.4
60°	548.0	540.5	535.4	535.4
62.5°	428.8	420.1	416.3	415.1
65°	322.3	321.0	313.5	312.2
67.5°	233.2	228.2	223.2	224.5
70°	164.3	156.8	156.8	154.2
72.5°	106.6	102.8	101.6	101.6
75°	66.5	66.5	63.9	69.0
77.5°	43.9	43.9	42.6	43.9
80°	26.3	26.3	26.3	25.1
82.5°	16.3	17.6	16.3	16.3
85°	8.8	10.0	7.5	11.3
87.5°	5.0	6.3	5.0	6.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)