

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: P244186

Luminaire Tested: **LSR8B40D010 EC8B40850 8LBDW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244186  
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: LSR8B40D010 EC8B40850 8LBDW0LI  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4683.0 lumens  
Efficiency: N/A  
Efficacy: 114.5 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

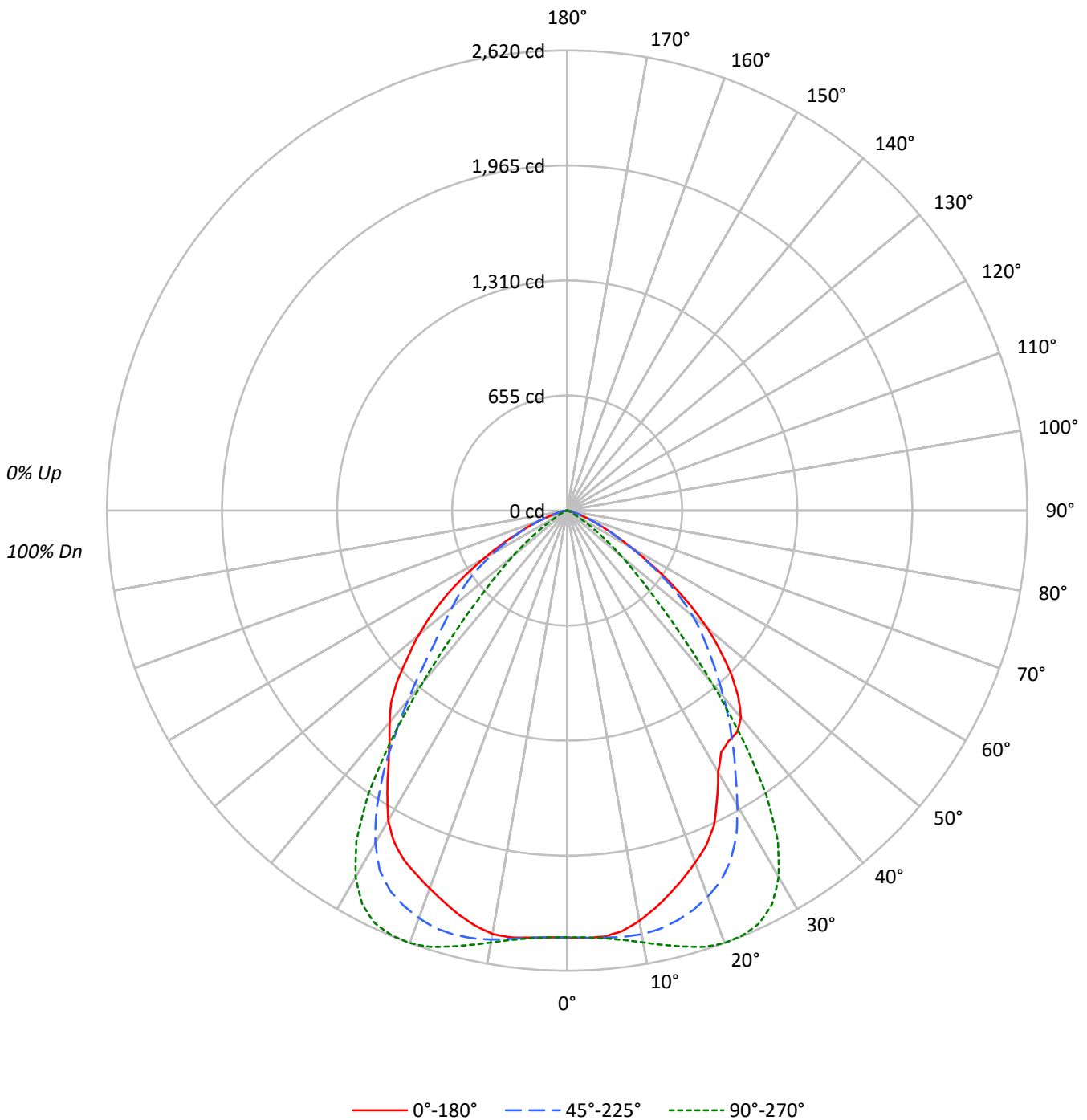
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	74914	74914	74914
5°	75358	75639	75559
10°	74253	78170	76636
15°	72081	82042	76034
20°	69989	85983	75108
25°	67303	88187	74761
30°	61251	85769	72545
35°	60336	74317	66743
40°	61979	51545	63275
45°	57695	31154	59496
50°	50045	19237	53015
55°	38407	10053	44993
60°	26162	4058	33957
65°	16278	2072	23429
70°	8836	1280	14299
75°	4611	608	8447
80°	2060	693	4582
85°	1380	460	4104



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	233.6	5.0
10°-20°	692.1	14.8
20°-30°	1055.9	22.5
30°-40°	1101.8	23.5
40°-50°	827.6	17.7
50°-60°	509.2	10.9
60°-70°	207.2	4.4
70°-80°	48.8	1.0
80°-90°	6.7	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°	1981.6	42.3
0°-40°	3083.4	65.8
0°-60°	4420.2	94.4
0°-90°	4683.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4683.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2429	2429	2429	2429	2429	
5°	2434	2441	2444	2441	2441	230
15°	2258	2416	2570	2499	2382	636
25°	1978	2200	2592	2387	2197	899
35°	1603	1648	1974	1825	1773	1012
45°	1323	1145	714	1066	1364	1009
55°	714	678	187	678	837	642
65°	223	226	28	303	321	233
75°	39	39	5	68	71	47
85°	4	4	1	9	12	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°	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4
2.5°	2435.8	2432.0	2435.8	2435.8	2437.1	2434.5	2435.8	2437.1	2434.5	2434.5	2434.5
5°	2434.5	2432.0	2434.5	2433.3	2435.8	2435.8	2438.4	2438.4	2441.0	2441.0	2444.9
7.5°	2413.9	2408.8	2413.9	2417.8	2420.4	2425.5	2432.0	2437.1	2442.3	2447.5	2453.9
10°	2371.4	2371.4	2375.2	2383.0	2390.7	2399.7	2411.3	2424.2	2437.1	2448.7	2460.3
12.5°	2318.5	2314.6	2322.4	2332.7	2344.3	2358.5	2376.5	2395.9	2416.5	2439.7	2457.8
15°	2257.9	2254.0	2263.0	2273.4	2287.6	2308.2	2330.1	2355.9	2385.5	2416.5	2446.2
17.5°	2196.0	2194.7	2203.7	2217.9	2229.5	2251.4	2279.8	2310.7	2344.3	2385.5	2424.2
20°	2132.8	2131.5	2140.6	2152.2	2167.6	2188.3	2216.6	2252.7	2292.7	2339.1	2384.3
22.5°	2067.0	2068.3	2076.1	2089.0	2101.9	2123.8	2153.4	2189.6	2233.4	2283.7	2334.0
25°	1978.1	1971.6	1981.9	1994.8	2016.7	2034.8	2063.2	2101.9	2147.0	2199.9	2259.2
27.5°	1849.1	1847.8	1856.9	1868.5	1887.8	1909.7	1940.7	1980.6	2028.4	2086.4	2144.4
30°	1720.2	1722.7	1726.6	1738.2	1751.1	1773.0	1804.0	1837.5	1882.6	1938.1	2000.0
32.5°	1632.5	1632.5	1637.7	1645.4	1654.4	1666.0	1687.9	1712.4	1747.3	1785.9	1831.1
35°	1602.8	1597.7	1602.8	1604.1	1605.4	1608.0	1611.8	1619.6	1631.2	1648.0	1664.7
37.5°	1589.9	1586.1	1586.1	1580.9	1574.5	1566.7	1556.4	1544.8	1531.9	1515.1	1502.3
40°	1539.7	1537.1	1534.5	1529.3	1515.1	1499.7	1482.9	1455.8	1426.2	1384.9	1343.7
42.5°	1442.9	1440.4	1439.1	1428.7	1415.8	1397.8	1378.5	1350.1	1312.7	1259.8	1200.5
45°	1323.0	1317.8	1314.0	1305.0	1295.9	1280.5	1262.4	1236.6	1199.2	1145.1	1074.1
47.5°	1183.8	1181.2	1179.9	1176.0	1167.0	1157.9	1146.4	1125.7	1092.2	1040.6	967.1
50°	1043.2	1038.0	1040.6	1039.3	1035.5	1029.0	1021.3	1007.1	981.3	934.9	867.8
52.5°	882.0	882.0	880.7	884.6	885.9	884.6	885.9	870.4	848.5	813.7	756.9
55°	714.4	714.4	718.2	723.4	728.6	729.9	728.6	722.1	706.6	678.3	628.0
57.5°	557.0	554.5	562.2	569.9	575.1	580.3	576.4	571.2	562.2	539.0	500.3
60°	424.2	424.2	429.4	434.6	439.7	444.9	443.6	442.3	434.6	419.1	388.1
62.5°	312.0	313.3	313.3	317.2	322.4	327.5	331.4	327.5	323.7	313.3	292.7
65°	223.1	221.8	223.1	227.0	230.8	236.0	238.6	237.3	233.4	225.7	210.2
67.5°	149.6	148.3	153.4	154.7	157.3	162.5	161.2	162.5	161.2	154.7	141.9
70°	98.0	95.4	98.0	96.7	100.6	101.9	104.4	105.7	104.4	100.6	96.7
72.5°	60.6	59.3	60.6	61.9	63.2	64.5	67.0	67.0	65.8	63.2	58.0
75°	38.7	34.8	36.1	33.5	36.1	36.1	38.7	40.0	38.7	38.7	36.1
77.5°	23.2	23.2	23.2	23.2	23.2	23.2	23.2	24.5	25.8	23.2	21.9
80°	11.6	11.6	12.9	12.9	12.9	14.2	12.9	12.9	12.9	14.2	10.3
82.5°	9.0	7.7	7.7	7.7	9.0	7.7	7.7	7.7	7.7	7.7	7.7
85°	3.9	5.1	3.9	2.6	3.9	3.9	5.1	3.9	3.9	3.9	5.1
87.5°	1.3	1.3	0.0	0.0	0.0	1.3	0.0	1.3	1.3	2.6	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°	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4
2.5°	2435.8	2433.3	2433.3	2432.0	2434.5	2432.0	2433.3	2432.0	2432.0	2434.5	2432.0
5°	2444.9	2446.2	2443.6	2442.3	2446.2	2446.2	2446.2	2443.6	2443.6	2444.9	2443.6
7.5°	2457.8	2460.3	2461.6	2462.9	2465.5	2466.8	2466.8	2465.5	2464.2	2468.1	2462.9
10°	2471.9	2475.8	2483.5	2487.4	2493.9	2493.9	2496.5	2496.5	2493.9	2496.5	2495.2
12.5°	2466.8	2490.0	2502.9	2511.9	2520.9	2528.7	2531.3	2532.5	2531.3	2536.4	2531.3
15°	2475.8	2495.2	2515.8	2531.3	2548.0	2557.0	2559.6	2569.9	2572.5	2573.8	2566.1
17.5°	2461.6	2496.5	2518.4	2541.6	2566.1	2582.8	2598.3	2604.8	2606.1	2608.6	2598.3
20°	2429.4	2468.1	2501.6	2535.1	2563.5	2589.3	2602.2	2620.2	2615.1	2625.4	2611.2
22.5°	2385.5	2429.4	2471.9	2515.8	2545.5	2576.4	2603.5	2616.4	2622.8	2622.8	2607.3
25°	2315.9	2367.5	2413.9	2459.0	2504.2	2541.6	2572.5	2591.9	2595.7	2594.5	2576.4
27.5°	2207.6	2263.0	2317.2	2368.8	2424.2	2468.1	2504.2	2527.4	2533.8	2533.8	2514.5
30°	2058.0	2117.3	2170.2	2232.1	2288.8	2337.8	2388.1	2408.8	2420.4	2420.4	2398.5
32.5°	1880.1	1930.4	1979.4	2040.0	2101.9	2157.3	2205.0	2233.4	2247.6	2246.3	2226.9
35°	1686.7	1711.1	1748.6	1793.7	1849.1	1900.7	1947.1	1974.2	1998.7	1997.4	1979.4
37.5°	1493.2	1486.8	1490.7	1507.4	1542.2	1578.3	1614.4	1640.2	1660.8	1669.9	1666.0
40°	1303.7	1270.1	1237.9	1226.3	1228.9	1241.8	1261.1	1280.5	1303.7	1315.3	1320.4
42.5°	1133.5	1076.7	1020.0	977.4	952.9	945.2	954.2	960.7	974.8	991.6	1008.4
45°	996.8	920.7	845.9	780.1	738.9	714.4	709.2	714.4	722.1	738.9	760.8
47.5°	884.6	795.6	711.8	638.3	577.7	545.5	536.4	533.9	541.6	557.0	586.7
50°	785.3	696.3	603.5	518.4	455.2	419.1	406.2	401.0	410.0	421.7	448.7
52.5°	677.0	589.3	493.9	411.3	345.6	308.2	294.0	286.3	291.4	306.9	334.0
55°	559.6	478.4	392.0	306.9	243.7	208.9	192.1	187.0	192.1	208.9	236.0
57.5°	442.3	373.9	301.7	221.8	165.0	130.2	113.5	108.3	122.5	129.0	157.3
60°	345.6	290.1	228.2	162.5	113.5	86.4	69.6	65.8	72.2	83.8	107.0
62.5°	259.2	224.4	175.4	116.0	83.8	55.4	46.4	42.6	46.4	55.4	73.5
65°	188.3	161.2	122.5	85.1	56.7	41.3	31.0	28.4	32.2	38.7	54.2
67.5°	129.0	108.3	85.1	59.3	38.7	25.8	21.9	21.9	23.2	28.4	40.0
70°	83.8	70.9	54.2	38.7	25.8	19.3	16.8	14.2	16.8	20.6	27.1
72.5°	52.9	45.1	34.8	27.1	19.3	14.2	11.6	10.3	12.9	15.5	20.6
75°	32.2	24.5	18.0	14.2	10.3	10.3	10.3	5.1	6.4	10.3	12.9
77.5°	19.3	16.8	14.2	11.6	9.0	5.1	5.1	5.1	6.4	7.7	11.6
80°	10.3	9.0	6.4	6.4	5.1	3.9	5.1	3.9	2.6	6.4	7.7
82.5°	6.4	5.1	5.1	5.1	6.4	2.6	3.9	2.6	3.9	5.1	3.9
85°	3.9	3.9	3.9	2.6	6.4	2.6	2.6	1.3	1.3	2.6	2.6
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°	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4	2429.4
2.5°	2433.3	2432.0	2433.3	2432.0	2432.0	2432.0	2433.3	2433.3	2432.0	2432.0	2434.5
5°	2443.6	2443.6	2443.6	2442.3	2441.0	2441.0	2443.6	2443.6	2439.7	2443.6	2443.6
7.5°	2465.5	2461.6	2465.5	2460.3	2457.8	2459.0	2460.3	2457.8	2455.2	2456.5	2456.5
10°	2493.9	2490.0	2490.0	2486.1	2482.3	2479.7	2477.1	2470.6	2464.2	2462.9	2457.8
12.5°	2527.4	2520.9	2517.1	2509.3	2502.9	2493.9	2486.1	2475.8	2462.9	2453.9	2444.9
15°	2560.9	2550.6	2541.6	2528.7	2514.5	2499.0	2482.3	2465.5	2444.9	2426.8	2411.3
17.5°	2588.0	2573.8	2557.0	2536.4	2515.8	2492.6	2468.1	2443.6	2413.9	2390.7	2372.6
20°	2597.0	2576.4	2554.5	2527.4	2500.3	2468.1	2437.1	2404.9	2371.4	2346.9	2326.2
22.5°	2585.4	2560.9	2533.8	2505.5	2469.4	2434.5	2398.5	2361.0	2331.4	2297.9	2278.5
25°	2553.2	2523.5	2493.9	2460.3	2425.5	2386.8	2348.2	2309.5	2273.4	2255.3	2230.8
27.5°	2487.4	2455.2	2422.9	2388.1	2348.2	2309.5	2269.5	2232.1	2201.2	2176.6	2162.5
30°	2371.4	2334.0	2296.6	2259.2	2224.4	2184.4	2147.0	2116.0	2085.1	2065.7	2051.6
32.5°	2193.4	2159.9	2122.5	2086.4	2054.2	2020.6	1989.7	1962.6	1940.7	1927.8	1917.5
35°	1953.6	1920.0	1891.7	1865.9	1838.8	1824.6	1805.3	1789.8	1780.8	1775.6	1774.3
37.5°	1651.8	1632.5	1623.5	1618.3	1613.1	1609.3	1611.8	1618.3	1623.5	1632.5	1642.8
40°	1329.5	1346.2	1351.4	1369.4	1386.2	1408.1	1432.6	1461.0	1484.2	1513.8	1534.5
42.5°	1035.5	1066.4	1102.5	1141.2	1182.5	1222.4	1271.4	1316.6	1357.8	1395.2	1427.5
45°	795.6	843.3	897.5	952.9	1008.4	1066.4	1125.7	1181.2	1230.2	1270.1	1303.7
47.5°	620.2	673.1	742.8	811.1	878.1	946.5	1012.2	1070.3	1111.5	1150.2	1179.9
50°	491.3	551.9	628.0	706.6	780.1	852.3	922.0	976.1	1017.4	1048.4	1070.3
52.5°	380.4	452.6	530.0	612.5	691.2	769.8	834.3	884.6	918.1	945.2	961.9
55°	283.7	354.6	437.1	522.2	602.2	678.3	738.9	782.7	812.4	827.8	836.9
57.5°	205.0	269.5	352.0	437.1	509.3	581.6	630.6	670.5	687.3	696.3	700.2
60°	149.6	208.9	282.4	355.9	424.2	482.3	524.8	551.9	564.8	569.9	568.7
62.5°	109.6	161.2	224.4	286.3	341.7	389.4	422.9	441.0	447.5	450.0	446.2
65°	83.8	123.8	178.0	225.7	268.2	303.0	327.5	339.1	343.0	341.7	339.1
67.5°	61.9	92.9	132.8	168.9	199.9	227.0	239.9	250.2	252.7	248.9	245.0
70°	43.9	68.3	96.7	121.2	144.4	159.9	174.1	175.4	175.4	174.1	171.5
72.5°	31.0	47.7	65.8	82.5	96.7	108.3	113.5	117.3	116.0	114.8	112.2
75°	20.6	29.7	47.7	51.6	64.5	68.3	73.5	73.5	74.8	70.9	70.9
77.5°	12.9	20.6	28.4	33.5	38.7	43.9	46.4	46.4	47.7	46.4	46.4
80°	7.7	12.9	15.5	23.2	23.2	27.1	28.4	29.7	27.1	31.0	27.1
82.5°	5.1	7.7	11.6	11.6	14.2	16.8	16.8	18.0	18.0	16.8	16.8
85°	3.9	5.1	6.4	7.7	7.7	9.0	7.7	7.7	9.0	10.3	9.0
87.5°	1.3	2.6	1.3	2.6	2.6	5.1	3.9	3.9	3.9	5.1	5.1
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: P244186

CATALOG NUMBER: LSR8B40D010 EC8B40850 8LBDW0LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2429.4	2429.4	2429.4	2429.4
2.5°	2432.0	2433.3	2432.0	2432.0
5°	2443.6	2442.3	2443.6	2441.0
7.5°	2452.6	2452.6	2451.3	2451.3
10°	2452.6	2447.5	2447.5	2447.5
12.5°	2433.3	2426.8	2422.9	2420.4
15°	2399.7	2388.1	2383.0	2381.7
17.5°	2355.9	2345.6	2339.1	2335.3
20°	2305.6	2295.3	2287.6	2288.8
22.5°	2261.7	2250.2	2245.0	2242.4
25°	2217.9	2203.7	2199.9	2197.3
27.5°	2147.0	2139.3	2135.4	2131.5
30°	2038.7	2034.8	2028.4	2037.4
32.5°	1913.6	1907.1	1902.0	1905.9
35°	1775.6	1771.7	1775.6	1773.0
37.5°	1649.3	1653.1	1658.3	1660.8
40°	1550.0	1564.1	1569.3	1571.9
42.5°	1450.7	1467.4	1477.7	1484.2
45°	1328.2	1344.9	1356.5	1364.3
47.5°	1201.8	1216.0	1227.6	1226.3
50°	1087.0	1094.8	1099.9	1105.1
52.5°	971.0	971.0	972.3	972.3
55°	839.5	836.9	835.6	836.9
57.5°	695.0	692.5	691.2	687.3
60°	563.5	555.8	550.6	550.6
62.5°	441.0	432.0	428.1	426.8
65°	331.4	330.1	322.4	321.1
67.5°	239.9	234.7	229.5	230.8
70°	168.9	161.2	161.2	158.6
72.5°	109.6	105.7	104.4	104.4
75°	68.3	68.3	65.8	70.9
77.5°	45.1	45.1	43.9	45.1
80°	27.1	27.1	27.1	25.8
82.5°	16.8	18.0	16.8	16.8
85°	9.0	10.3	7.7	11.6
87.5°	5.1	6.4	5.1	6.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)