

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: P244180

Luminaire Tested: **LSR8B40D010 EC8B40840 8LBDW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P244180  
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 EC8B40840 8LBDW0LI  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4593.0 lumens  
Efficiency: N/A  
Efficacy: 112.3 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

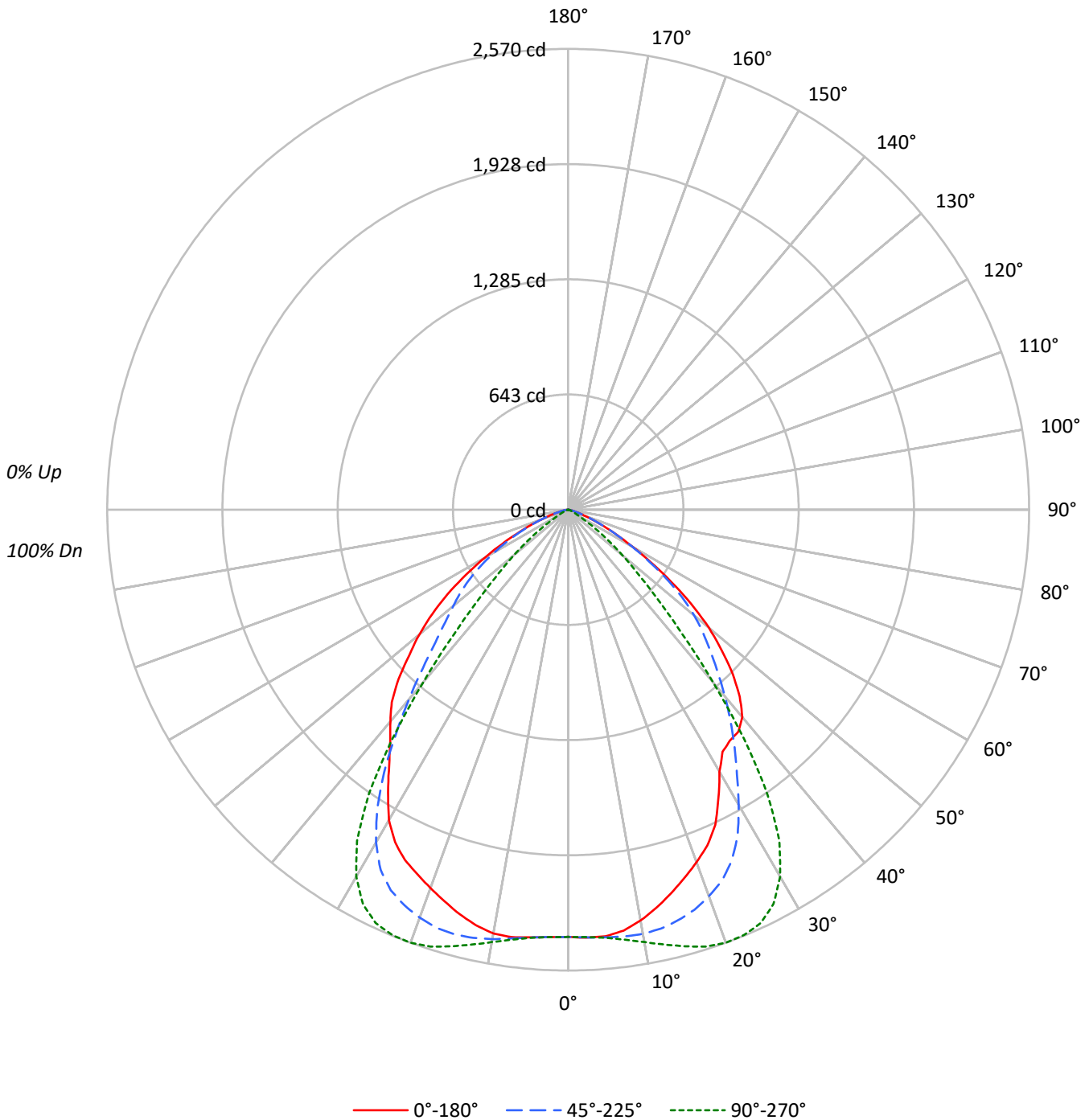
Input Watts (W): 40.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	73474	73474	73474
5°	73912	74185	74107
10°	72825	76667	75161
15°	70696	80465	74572
20°	68643	84332	73667
25°	66007	86493	73325
30°	60072	84121	71149
35°	59177	72890	65463
40°	60787	50551	62060
45°	56587	30553	58353
50°	49081	18868	51998
55°	37665	9860	44127
60°	25662	3978	33303
65°	15965	2028	22977
70°	8664	1253	14029
75°	4515	596	8292
80°	2024	675	4493
85°	1344	460	4033



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	229.1	5.0
10°-20°	678.8	14.8
20°-30°	1035.6	22.5
30°-40°	1080.6	23.5
40°-50°	811.7	17.7
50°-60°	499.4	10.9
60°-70°	203.2	4.4
70°-80°	47.9	1.0
80°-90°	6.6	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°	1943.5	42.3
0°-40°	3024.2	65.8
0°-60°	4335.3	94.4
0°-90°	4593.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4593.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2383	2383	2383	2383	2383	
5°	2388	2394	2397	2394	2394	226
15°	2214	2370	2520	2451	2336	624
25°	1940	2158	2542	2341	2155	882
35°	1572	1616	1936	1790	1739	993
45°	1298	1123	701	1046	1338	990
55°	701	665	183	665	821	630
65°	219	221	28	297	315	228
75°	38	38	5	67	70	46
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°	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7
2.5°	2389.0	2385.2	2389.0	2389.0	2390.3	2387.8	2389.0	2390.3	2387.8	2387.8	2387.8
5°	2387.8	2385.2	2387.8	2386.5	2389.0	2389.0	2391.6	2391.6	2394.1	2394.1	2397.9
7.5°	2367.5	2362.5	2367.5	2371.3	2373.8	2378.9	2385.2	2390.3	2395.3	2400.4	2406.7
10°	2325.8	2325.8	2329.6	2337.2	2344.7	2353.6	2365.0	2377.6	2390.3	2401.7	2413.0
12.5°	2273.9	2270.1	2277.7	2287.8	2299.2	2313.2	2330.9	2349.8	2370.1	2392.8	2410.5
15°	2214.5	2210.7	2219.5	2229.7	2243.6	2263.8	2285.3	2310.6	2339.7	2370.1	2399.1
17.5°	2153.8	2152.5	2161.4	2175.3	2186.7	2208.2	2236.0	2266.3	2299.2	2339.7	2377.6
20°	2091.8	2090.6	2099.4	2110.8	2126.0	2146.2	2174.0	2209.4	2248.6	2294.2	2338.4
22.5°	2027.3	2028.6	2036.2	2048.8	2061.5	2083.0	2112.0	2147.5	2190.5	2239.8	2289.1
25°	1940.0	1933.7	1943.9	1956.5	1978.0	1995.7	2023.5	2061.5	2105.7	2157.6	2215.8
27.5°	1813.6	1812.3	1821.2	1832.5	1851.5	1873.0	1903.4	1942.6	1989.4	2046.3	2103.2
30°	1687.1	1689.6	1693.4	1704.8	1717.5	1739.0	1769.3	1802.2	1846.5	1900.8	1961.6
32.5°	1601.1	1601.1	1606.2	1613.8	1622.6	1634.0	1655.5	1679.5	1713.7	1751.6	1795.9
35°	1572.0	1567.0	1572.0	1573.3	1574.6	1577.1	1580.9	1588.5	1599.8	1616.3	1632.7
37.5°	1559.4	1555.6	1555.6	1550.5	1544.2	1536.6	1526.5	1515.1	1502.5	1486.0	1473.4
40°	1510.1	1507.5	1505.0	1499.9	1486.0	1470.9	1454.4	1427.8	1398.8	1358.3	1317.8
42.5°	1415.2	1412.7	1411.4	1401.3	1388.6	1370.9	1352.0	1324.1	1287.5	1235.6	1177.4
45°	1297.6	1292.5	1288.7	1279.9	1271.0	1255.8	1238.1	1212.8	1176.2	1123.1	1053.5
47.5°	1161.0	1158.5	1157.2	1153.4	1144.6	1135.7	1124.3	1104.1	1071.2	1020.6	948.5
50°	1023.1	1018.1	1020.6	1019.4	1015.6	1009.2	1001.6	987.7	962.4	916.9	851.1
52.5°	865.0	865.0	863.8	867.6	868.8	867.6	868.8	853.7	832.2	798.0	742.4
55°	700.6	700.6	704.4	709.5	714.6	715.8	714.6	708.2	693.0	665.2	615.9
57.5°	546.3	543.8	551.4	559.0	564.1	569.1	565.3	560.3	551.4	528.6	490.7
60°	416.1	416.1	421.1	426.2	431.3	436.3	435.1	433.8	426.2	411.0	380.7
62.5°	306.0	307.3	307.3	311.1	316.2	321.2	325.0	321.2	317.4	307.3	287.1
65°	218.8	217.5	218.8	222.6	226.4	231.4	234.0	232.7	228.9	221.3	206.2
67.5°	146.7	145.4	150.5	151.8	154.3	159.4	158.1	159.4	158.1	151.8	139.1
70°	96.1	93.6	96.1	94.8	98.7	99.9	102.4	103.7	102.4	98.7	94.8
72.5°	59.4	58.2	59.4	60.7	62.0	63.2	65.8	65.8	64.5	62.0	56.9
75°	37.9	34.1	35.4	32.9	35.4	35.4	37.9	39.2	37.9	37.9	35.4
77.5°	22.8	22.8	22.8	22.8	22.8	22.8	22.8	24.0	25.3	22.8	21.5
80°	11.4	11.4	12.7	12.7	12.7	13.9	12.7	12.7	12.7	13.9	10.1
82.5°	8.9	7.6	7.6	7.6	8.9	7.6	7.6	7.6	7.6	7.6	7.6
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°	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7
2.5°	2389.0	2386.5	2386.5	2385.2	2387.8	2385.2	2386.5	2385.2	2385.2	2387.8	2385.2
5°	2397.9	2399.1	2396.6	2395.3	2399.1	2399.1	2399.1	2396.6	2396.6	2397.9	2396.6
7.5°	2410.5	2413.0	2414.3	2415.6	2418.1	2419.4	2419.4	2418.1	2416.8	2420.7	2415.6
10°	2424.4	2428.2	2435.8	2439.6	2445.9	2445.9	2448.5	2448.5	2445.9	2448.5	2447.2
12.5°	2419.4	2442.1	2454.8	2463.6	2472.5	2480.1	2482.6	2483.9	2482.6	2487.7	2482.6
15°	2428.2	2447.2	2467.4	2482.6	2499.0	2507.9	2510.4	2520.5	2523.1	2524.4	2516.8
17.5°	2414.3	2448.5	2470.0	2492.7	2516.8	2533.2	2548.4	2554.7	2556.0	2558.5	2548.4
20°	2382.7	2420.7	2453.5	2486.4	2514.2	2539.5	2552.2	2569.9	2564.8	2574.9	2561.0
22.5°	2339.7	2382.7	2424.4	2467.4	2496.5	2526.9	2553.4	2566.1	2572.4	2572.4	2557.2
25°	2271.4	2322.0	2367.5	2411.8	2456.1	2492.7	2523.1	2542.1	2545.9	2544.6	2526.9
27.5°	2165.2	2219.5	2272.7	2323.3	2377.6	2420.7	2456.1	2478.8	2485.1	2485.1	2466.2
30°	2018.5	2076.6	2128.5	2189.2	2244.9	2292.9	2342.2	2362.5	2373.8	2373.8	2352.4
32.5°	1843.9	1893.3	1941.3	2000.8	2061.5	2115.8	2162.6	2190.5	2204.4	2203.1	2184.1
35°	1654.2	1678.3	1715.0	1759.2	1813.6	1864.2	1909.7	1936.3	1960.3	1959.0	1941.3
37.5°	1464.5	1458.2	1462.0	1478.4	1512.6	1548.0	1583.4	1608.7	1628.9	1637.8	1634.0
40°	1278.6	1245.7	1214.1	1202.7	1205.3	1217.9	1236.9	1255.8	1278.6	1290.0	1295.1
42.5°	1111.7	1056.0	1000.4	958.7	934.6	927.0	935.9	942.2	956.1	972.5	989.0
45°	977.6	903.0	829.6	765.2	724.7	700.6	695.6	700.6	708.2	724.7	746.2
47.5°	867.6	780.3	698.1	626.0	566.6	535.0	526.1	523.6	531.2	546.3	575.4
50°	770.2	682.9	591.9	508.4	446.4	411.0	398.4	393.3	402.2	413.6	440.1
52.5°	664.0	578.0	484.4	403.4	338.9	302.3	288.3	280.8	285.8	301.0	327.6
55°	548.9	469.2	384.5	301.0	239.0	204.9	188.4	183.4	188.4	204.9	231.4
57.5°	433.8	366.8	295.9	217.5	161.9	127.7	111.3	106.2	120.2	126.5	154.3
60°	338.9	284.6	223.9	159.4	111.3	84.7	68.3	64.5	70.8	82.2	105.0
62.5°	254.2	220.1	172.0	113.8	82.2	54.4	45.5	41.7	45.5	54.4	72.1
65°	184.6	158.1	120.2	83.5	55.6	40.5	30.4	27.8	31.6	37.9	53.1
67.5°	126.5	106.2	83.5	58.2	37.9	25.3	21.5	21.5	22.8	27.8	39.2
70°	82.2	69.6	53.1	37.9	25.3	19.0	16.4	13.9	16.4	20.2	26.6
72.5°	51.9	44.3	34.1	26.6	19.0	13.9	11.4	10.1	12.7	15.2	20.2
75°	31.6	24.0	17.7	13.9	10.1	10.1	10.1	5.0	6.3	10.1	12.7
77.5°	19.0	16.4	13.9	11.4	8.9	5.0	5.0	5.0	6.3	7.6	11.4
80°	10.1	8.9	6.3	6.3	5.0	3.8	5.0	3.8	2.5	6.3	7.6
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°	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7	2382.7
2.5°	2386.5	2385.2	2386.5	2385.2	2385.2	2385.2	2386.5	2386.5	2385.2	2385.2	2387.8
5°	2396.6	2396.6	2396.6	2395.3	2394.1	2394.1	2396.6	2396.6	2392.8	2396.6	2396.6
7.5°	2418.1	2414.3	2418.1	2413.0	2410.5	2411.8	2413.0	2410.5	2408.0	2409.3	2409.3
10°	2445.9	2442.1	2442.1	2438.4	2434.6	2432.0	2429.5	2423.2	2416.8	2415.6	2410.5
12.5°	2478.8	2472.5	2468.7	2461.1	2454.8	2445.9	2438.4	2428.2	2415.6	2406.7	2397.9
15°	2511.7	2501.6	2492.7	2480.1	2466.2	2451.0	2434.6	2418.1	2397.9	2380.2	2365.0
17.5°	2538.2	2524.4	2507.9	2487.7	2467.4	2444.7	2420.7	2396.6	2367.5	2344.7	2327.0
20°	2547.1	2526.9	2505.4	2478.8	2452.3	2420.7	2390.3	2358.7	2325.8	2301.8	2281.5
22.5°	2535.7	2511.7	2485.1	2457.3	2421.9	2387.8	2352.4	2315.7	2286.6	2253.7	2234.7
25°	2504.1	2475.0	2445.9	2413.0	2378.9	2341.0	2303.0	2265.1	2229.7	2212.0	2187.9
27.5°	2439.6	2408.0	2376.4	2342.2	2303.0	2265.1	2225.9	2189.2	2158.9	2134.8	2120.9
30°	2325.8	2289.1	2252.4	2215.8	2181.6	2142.4	2105.7	2075.4	2045.0	2026.0	2012.1
32.5°	2151.2	2118.4	2081.7	2046.3	2014.7	1981.8	1951.4	1924.9	1903.4	1890.7	1880.6
35°	1916.0	1883.1	1855.3	1830.0	1803.5	1789.6	1770.6	1755.4	1746.5	1741.5	1740.2
37.5°	1620.1	1601.1	1592.3	1587.2	1582.1	1578.4	1580.9	1587.2	1592.3	1601.1	1611.2
40°	1303.9	1320.3	1325.4	1343.1	1359.5	1381.1	1405.1	1432.9	1455.7	1484.8	1505.0
42.5°	1015.6	1045.9	1081.3	1119.3	1159.7	1198.9	1247.0	1291.3	1331.7	1368.4	1400.0
45°	780.3	827.1	880.2	934.6	989.0	1045.9	1104.1	1158.5	1206.5	1245.7	1278.6
47.5°	608.3	660.2	728.5	795.5	861.3	928.3	992.8	1049.7	1090.2	1128.1	1157.2
50°	481.8	541.3	615.9	693.0	765.2	836.0	904.2	957.4	997.9	1028.2	1049.7
52.5°	373.1	443.9	519.8	600.7	677.9	755.0	818.3	867.6	900.5	927.0	943.5
55°	278.2	347.8	428.7	512.2	590.6	665.2	724.7	767.7	796.8	811.9	820.8
57.5°	201.1	264.3	345.3	428.7	499.5	570.4	618.4	657.6	674.1	682.9	686.7
60°	146.7	204.9	277.0	349.1	416.1	473.0	514.7	541.3	553.9	559.0	557.7
62.5°	107.5	158.1	220.1	280.8	335.1	381.9	414.8	432.5	438.9	441.4	437.6
65°	82.2	121.4	174.5	221.3	263.1	297.2	321.2	332.6	336.4	335.1	332.6
67.5°	60.7	91.1	130.3	165.7	196.0	222.6	235.2	245.4	247.9	244.1	240.3
70°	43.0	67.0	94.8	118.9	141.6	156.8	170.7	172.0	172.0	170.7	168.2
72.5°	30.4	46.8	64.5	81.0	94.8	106.2	111.3	115.1	113.8	112.5	110.0
75°	20.2	29.1	46.8	50.6	63.2	67.0	72.1	72.1	73.3	69.6	69.6
77.5°	12.7	20.2	27.8	32.9	37.9	43.0	45.5	45.5	46.8	45.5	45.5
80°	7.6	12.7	15.2	22.8	22.8	26.6	27.8	29.1	26.6	30.4	26.6
82.5°	5.0	7.6	11.4	11.4	13.9	16.4	16.4	17.7	17.7	16.4	16.4
85°	3.8	5.0	6.3	7.6	7.6	8.9	7.6	7.6	8.9	10.1	8.9
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: P244180

CATALOG NUMBER: LSR8B40D010 EC8B40840 8LBDW0LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2382.7	2382.7	2382.7	2382.7
2.5°	2385.2	2386.5	2385.2	2385.2
5°	2396.6	2395.3	2396.6	2394.1
7.5°	2405.5	2405.5	2404.2	2404.2
10°	2405.5	2400.4	2400.4	2400.4
12.5°	2386.5	2380.2	2376.4	2373.8
15°	2353.6	2342.2	2337.2	2335.9
17.5°	2310.6	2300.5	2294.2	2290.4
20°	2261.3	2251.2	2243.6	2244.9
22.5°	2218.3	2206.9	2201.8	2199.3
25°	2175.3	2161.4	2157.6	2155.1
27.5°	2105.7	2098.1	2094.3	2090.6
30°	1999.5	1995.7	1989.4	1998.2
32.5°	1876.8	1870.5	1865.4	1869.2
35°	1741.5	1737.7	1741.5	1739.0
37.5°	1617.6	1621.3	1626.4	1628.9
40°	1520.2	1534.1	1539.2	1541.7
42.5°	1422.8	1439.2	1449.3	1455.7
45°	1302.6	1319.1	1330.5	1338.1
47.5°	1178.7	1192.6	1204.0	1202.7
50°	1066.2	1073.7	1078.8	1083.9
52.5°	952.3	952.3	953.6	953.6
55°	823.3	820.8	819.5	820.8
57.5°	681.7	679.2	677.9	674.1
60°	552.7	545.1	540.0	540.0
62.5°	432.5	423.7	419.9	418.6
65°	325.0	323.7	316.2	314.9
67.5°	235.2	230.2	225.1	226.4
70°	165.7	158.1	158.1	155.6
72.5°	107.5	103.7	102.4	102.4
75°	67.0	67.0	64.5	69.6
77.5°	44.3	44.3	43.0	44.3
80°	26.6	26.6	26.6	25.3
82.5°	16.4	17.7	16.4	16.4
85°	8.9	10.1	7.6	11.4
87.5°	5.0	6.3	5.0	6.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)