

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: P244205

Luminaire Tested: **LSR8B50D010 EC8B50935 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244205
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: LSR8B50D010 EC8B50935 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4933.0 lumens
Efficiency: N/A
Efficacy: 93.1 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

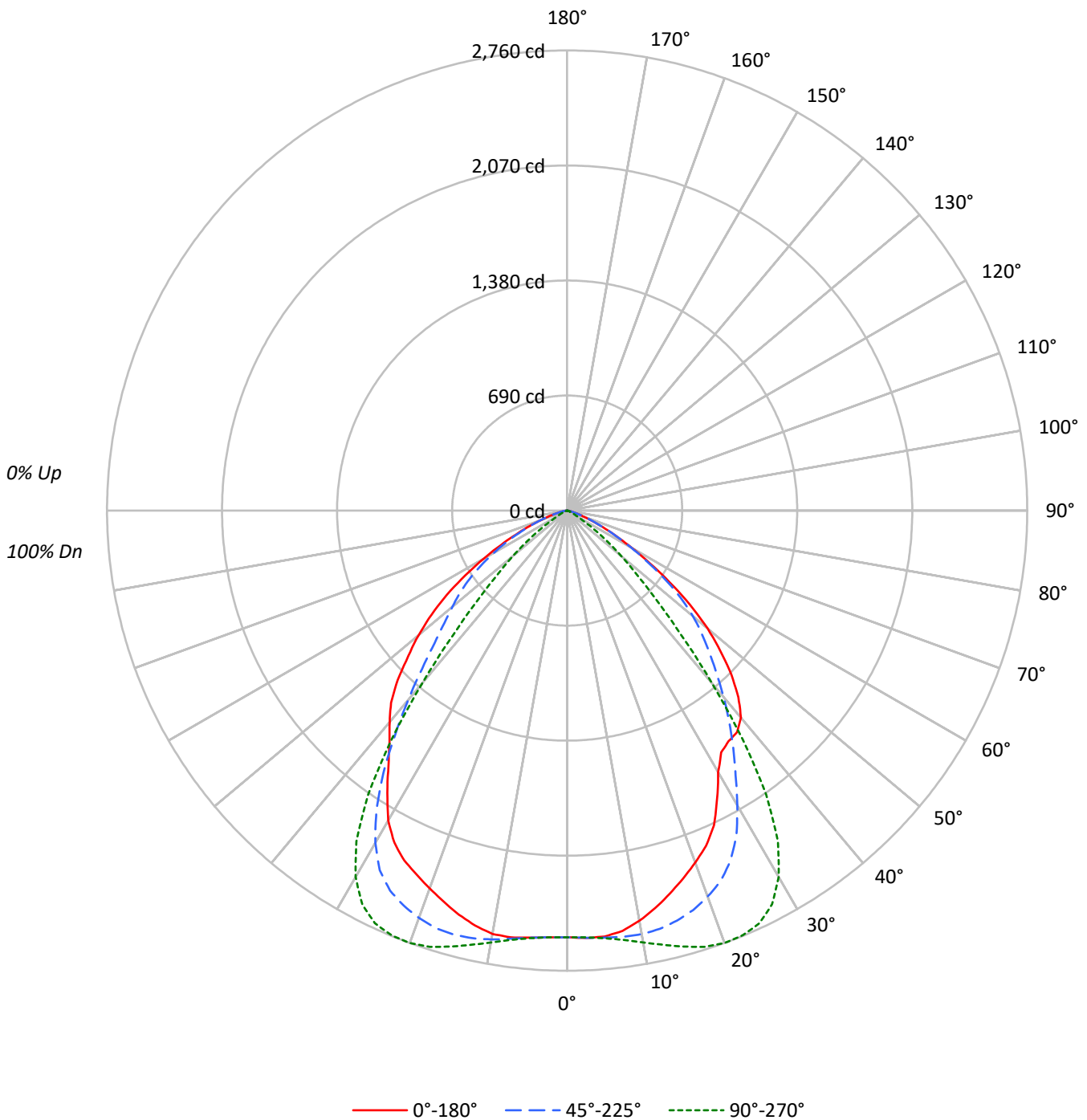
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	78913	78913	78913
5°	79382	79676	79592
10°	78214	82341	80726
15°	75928	86422	80091
20°	73726	90574	79118
25°	70896	92893	78752
30°	64519	90348	76416
35°	63558	78285	70308
40°	65284	54295	66652
45°	60774	32816	62671
50°	52717	20264	55845
55°	40456	10591	47391
60°	27561	4274	35770
65°	17147	2182	24677
70°	9304	1352	15066
75°	4849	643	8900
80°	2166	728	4830
85°	1451	495	4316



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	246.1	5.0
10°-20°	729.0	14.8
20°-30°	1112.2	22.5
30°-40°	1160.6	23.5
40°-50°	871.8	17.7
50°-60°	536.4	10.9
60°-70°	218.3	4.4
70°-80°	51.4	1.0
80°-90°	7.1	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°	2087.4	42.3
0°-40°	3248.0	65.8
0°-60°	4656.2	94.4
0°-90°	4933.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4933.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2559	2559	2559	2559	2559	
5°	2564	2571	2574	2571	2571	243
15°	2378	2546	2707	2632	2509	670
25°	2084	2317	2730	2514	2315	947
35°	1688	1736	2080	1922	1868	1066
45°	1394	1206	752	1123	1437	1063
55°	752	714	197	714	882	676
65°	235	238	30	319	338	245
75°	41	41	5	72	75	49
85°	4	4	1	10	12	6
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°	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1
2.5°	2565.9	2561.8	2565.9	2565.9	2567.2	2564.5	2565.9	2567.2	2564.5	2564.5	2564.5
5°	2564.5	2561.8	2564.5	2563.2	2565.9	2565.9	2568.6	2568.6	2571.3	2571.3	2575.4
7.5°	2542.8	2537.4	2542.8	2546.9	2549.6	2555.0	2561.8	2567.2	2572.7	2578.1	2584.9
10°	2497.9	2497.9	2502.0	2510.2	2518.3	2527.8	2540.1	2553.6	2567.2	2579.4	2591.7
12.5°	2442.3	2438.2	2446.3	2457.2	2469.4	2484.4	2503.4	2523.8	2545.5	2569.9	2589.0
15°	2378.4	2374.3	2383.8	2394.7	2409.7	2431.4	2454.5	2481.7	2512.9	2545.5	2576.7
17.5°	2313.2	2311.9	2321.4	2336.3	2348.5	2371.6	2401.5	2434.1	2469.4	2512.9	2553.6
20°	2246.7	2245.3	2254.8	2267.1	2283.3	2305.1	2335.0	2373.0	2415.1	2464.0	2511.5
22.5°	2177.4	2178.7	2186.9	2200.5	2214.1	2237.1	2268.4	2306.4	2352.6	2405.6	2458.6
25°	2083.7	2076.9	2087.7	2101.3	2124.4	2143.4	2173.3	2214.1	2261.6	2317.3	2379.8
27.5°	1947.8	1946.5	1956.0	1968.2	1988.6	2011.7	2044.3	2086.4	2136.6	2197.8	2258.9
30°	1812.0	1814.7	1818.8	1831.0	1844.6	1867.7	1900.3	1935.6	1983.2	2041.5	2106.8
32.5°	1719.6	1719.6	1725.1	1733.2	1742.7	1755.0	1778.1	1803.8	1840.5	1881.3	1928.8
35°	1688.4	1683.0	1688.4	1689.7	1691.1	1693.8	1697.9	1706.1	1718.3	1735.9	1753.6
37.5°	1674.8	1670.7	1670.7	1665.3	1658.5	1650.4	1639.5	1627.3	1613.7	1596.0	1582.5
40°	1621.8	1619.1	1616.4	1611.0	1596.0	1579.7	1562.1	1533.5	1502.3	1458.8	1415.4
42.5°	1520.0	1517.3	1515.9	1505.0	1491.4	1472.4	1452.0	1422.2	1382.8	1327.1	1264.6
45°	1393.6	1388.2	1384.1	1374.6	1365.1	1348.8	1329.8	1302.6	1263.2	1206.2	1131.5
47.5°	1246.9	1244.2	1242.9	1238.8	1229.3	1219.8	1207.6	1185.8	1150.5	1096.2	1018.7
50°	1098.9	1093.5	1096.2	1094.8	1090.7	1084.0	1075.8	1060.9	1033.7	984.8	914.2
52.5°	929.1	929.1	927.7	931.8	933.2	931.8	933.2	916.9	893.8	857.1	797.3
55°	752.5	752.5	756.6	762.0	767.5	768.8	767.5	760.7	744.4	714.5	661.5
57.5°	586.8	584.1	592.2	600.4	605.8	611.2	607.2	601.7	592.2	567.8	527.0
60°	446.9	446.9	452.3	457.8	463.2	468.6	467.3	465.9	457.8	441.4	408.9
62.5°	328.7	330.1	330.1	334.2	339.6	345.0	349.1	345.0	340.9	330.1	308.3
65°	235.0	233.6	235.0	239.1	243.2	248.6	251.3	249.9	245.8	237.7	221.4
67.5°	157.6	156.2	161.6	163.0	165.7	171.2	169.8	171.2	169.8	163.0	149.4
70°	103.2	100.5	103.2	101.9	106.0	107.3	110.0	111.4	110.0	106.0	101.9
72.5°	63.8	62.5	63.8	65.2	66.6	67.9	70.6	70.6	69.3	66.6	61.1
75°	40.7	36.7	38.0	35.3	38.0	38.0	40.7	42.1	40.7	40.7	38.0
77.5°	24.5	24.5	24.5	24.5	24.5	24.5	24.5	25.8	27.2	24.5	23.1
80°	12.2	12.2	13.6	13.6	13.6	15.0	13.6	13.6	13.6	15.0	10.9
82.5°	9.5	8.1	8.1	8.1	9.5	8.1	8.1	8.1	8.1	8.1	8.1
85°	4.1	5.4	4.1	2.7	4.1	4.1	5.4	4.1	4.1	4.1	5.4
87.5°	1.4	1.4	0.0	0.0	0.0	1.4	0.0	1.4	1.4	2.7	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°	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1
2.5°	2565.9	2563.2	2563.2	2561.8	2564.5	2561.8	2563.2	2561.8	2561.8	2564.5	2561.8
5°	2575.4	2576.7	2574.0	2572.7	2576.7	2576.7	2576.7	2574.0	2574.0	2575.4	2574.0
7.5°	2589.0	2591.7	2593.0	2594.4	2597.1	2598.5	2598.5	2597.1	2595.8	2599.8	2594.4
10°	2603.9	2608.0	2616.1	2620.2	2627.0	2627.0	2629.7	2629.7	2627.0	2629.7	2628.4
12.5°	2598.5	2622.9	2636.5	2646.0	2655.5	2663.7	2666.4	2667.7	2666.4	2671.8	2666.4
15°	2608.0	2628.4	2650.1	2666.4	2684.0	2693.5	2696.3	2707.1	2709.9	2711.2	2703.1
17.5°	2593.0	2629.7	2652.8	2677.3	2703.1	2720.7	2737.0	2743.8	2745.2	2747.9	2737.0
20°	2559.1	2599.8	2635.1	2670.5	2700.4	2727.5	2741.1	2760.1	2754.7	2765.6	2750.6
22.5°	2512.9	2559.1	2603.9	2650.1	2681.3	2713.9	2742.5	2756.0	2762.8	2762.8	2746.5
25°	2439.5	2493.9	2542.8	2590.3	2637.9	2677.3	2709.9	2730.2	2734.3	2733.0	2713.9
27.5°	2325.5	2383.8	2440.9	2495.3	2553.6	2599.8	2637.9	2662.3	2669.1	2669.1	2648.7
30°	2167.9	2230.4	2286.1	2351.2	2411.0	2462.6	2515.6	2537.4	2549.6	2549.6	2526.5
32.5°	1980.4	2033.4	2085.0	2148.9	2214.1	2272.5	2322.7	2352.6	2367.6	2366.2	2345.8
35°	1776.7	1802.5	1841.9	1889.4	1947.8	2002.2	2051.1	2079.6	2105.4	2104.0	2085.0
37.5°	1572.9	1566.1	1570.2	1587.9	1624.5	1662.6	1700.6	1727.8	1749.5	1759.0	1755.0
40°	1373.3	1337.9	1304.0	1291.8	1294.5	1308.1	1328.4	1348.8	1373.3	1385.5	1390.9
42.5°	1194.0	1134.2	1074.4	1029.6	1003.8	995.6	1005.2	1011.9	1026.9	1044.5	1062.2
45°	1050.0	969.9	891.1	821.8	778.3	752.5	747.1	752.5	760.7	778.3	801.4
47.5°	931.8	838.1	749.8	672.4	608.5	574.6	565.1	562.4	570.5	586.8	618.0
50°	827.2	733.5	635.7	546.0	479.5	441.4	427.9	422.4	431.9	444.2	472.7
52.5°	713.1	620.7	520.2	433.3	364.0	324.6	309.7	301.5	307.0	323.3	351.8
55°	589.5	503.9	412.9	323.3	256.7	220.1	202.4	197.0	202.4	220.1	248.6
57.5°	465.9	393.9	317.8	233.6	173.9	137.2	119.5	114.1	129.1	135.8	165.7
60°	364.0	305.6	240.4	171.2	119.5	91.0	73.4	69.3	76.1	88.3	112.7
62.5°	273.0	236.3	184.7	122.2	88.3	58.4	48.9	44.8	48.9	58.4	77.4
65°	198.3	169.8	129.1	89.6	59.8	43.5	32.6	29.9	34.0	40.7	57.1
67.5°	135.8	114.1	89.6	62.5	40.7	27.2	23.1	23.1	24.5	29.9	42.1
70°	88.3	74.7	57.1	40.7	27.2	20.4	17.6	15.0	17.6	21.7	28.5
72.5°	55.7	47.5	36.7	28.5	20.4	15.0	12.2	10.9	13.6	16.3	21.7
75°	34.0	25.8	19.0	15.0	10.9	10.9	10.9	5.4	6.8	10.9	13.6
77.5°	20.4	17.6	15.0	12.2	9.5	5.4	5.4	5.4	6.8	8.1	12.2
80°	10.9	9.5	6.8	6.8	5.4	4.1	5.4	4.1	2.7	6.8	8.1
82.5°	6.8	5.4	5.4	5.4	6.8	2.7	4.1	2.7	4.1	5.4	4.1
85°	4.1	4.1	4.1	2.7	6.8	2.7	2.7	1.4	1.4	2.7	2.7
87.5°	0.0	1.4	1.4	0.0	1.4	0.0	1.4	1.4	1.4	1.4	1.4
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°	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1	2559.1
2.5°	2563.2	2561.8	2563.2	2561.8	2561.8	2561.8	2563.2	2563.2	2561.8	2561.8	2564.5
5°	2574.0	2574.0	2574.0	2572.7	2571.3	2571.3	2574.0	2574.0	2569.9	2574.0	2574.0
7.5°	2597.1	2593.0	2597.1	2591.7	2589.0	2590.3	2591.7	2589.0	2586.3	2587.6	2587.6
10°	2627.0	2622.9	2622.9	2618.9	2614.8	2612.0	2609.4	2602.5	2595.8	2594.4	2589.0
12.5°	2662.3	2655.5	2651.5	2643.3	2636.5	2627.0	2618.9	2608.0	2594.4	2584.9	2575.4
15°	2697.6	2686.8	2677.3	2663.7	2648.7	2632.4	2614.8	2597.1	2575.4	2556.4	2540.1
17.5°	2726.1	2711.2	2693.5	2671.8	2650.1	2625.6	2599.8	2574.0	2542.8	2518.3	2499.3
20°	2735.6	2713.9	2690.8	2662.3	2633.8	2599.8	2567.2	2533.3	2497.9	2472.2	2450.4
22.5°	2723.5	2697.6	2669.1	2639.2	2601.2	2564.5	2526.5	2487.1	2455.8	2420.5	2400.2
25°	2689.5	2658.2	2627.0	2591.7	2555.0	2514.3	2473.5	2432.8	2394.7	2375.7	2349.9
27.5°	2620.2	2586.3	2552.3	2515.6	2473.5	2432.8	2390.7	2351.2	2318.7	2292.8	2277.9
30°	2497.9	2458.6	2419.2	2379.8	2343.1	2301.0	2261.6	2229.0	2196.4	2176.0	2161.1
32.5°	2310.5	2275.2	2235.8	2197.8	2163.8	2128.5	2095.9	2067.4	2044.3	2030.7	2019.8
35°	2057.9	2022.5	1992.7	1965.5	1937.0	1922.0	1901.7	1885.3	1875.8	1870.4	1869.1
37.5°	1740.0	1719.6	1710.1	1704.7	1699.3	1695.2	1697.9	1704.7	1710.1	1719.6	1730.5
40°	1400.4	1418.1	1423.5	1442.5	1460.2	1483.3	1509.1	1539.0	1563.4	1594.7	1616.4
42.5°	1090.7	1123.3	1161.4	1202.1	1245.6	1287.7	1339.3	1386.8	1430.3	1469.7	1503.7
45°	838.1	888.3	945.4	1003.8	1062.2	1123.3	1185.8	1244.2	1295.8	1337.9	1373.3
47.5°	653.4	709.1	782.4	854.4	925.0	997.0	1066.3	1127.4	1170.9	1211.6	1242.9
50°	517.5	581.4	661.5	744.4	821.8	897.8	971.2	1028.3	1071.7	1104.3	1127.4
52.5°	400.7	476.8	558.3	645.2	728.1	810.9	878.8	931.8	967.1	995.6	1013.3
55°	298.8	373.5	460.5	550.1	634.3	714.5	778.3	824.5	855.8	872.0	881.5
57.5°	216.0	283.9	370.8	460.5	536.5	612.6	664.2	706.3	724.0	733.5	737.6
60°	157.6	220.1	297.5	374.9	446.9	508.0	552.8	581.4	595.0	600.4	599.0
62.5°	115.5	169.8	236.3	301.5	359.9	410.2	445.5	464.5	471.4	474.0	470.0
65°	88.3	130.4	187.5	237.7	282.5	319.2	345.0	357.3	361.3	359.9	357.3
67.5°	65.2	97.8	139.9	177.9	210.5	239.1	252.7	263.5	266.2	262.2	258.1
70°	46.2	72.0	101.9	127.7	152.1	168.4	183.4	184.7	184.7	183.4	180.7
72.5°	32.6	50.3	69.3	86.9	101.9	114.1	119.5	123.6	122.2	120.9	118.2
75°	21.7	31.2	50.3	54.3	67.9	72.0	77.4	77.4	78.8	74.7	74.7
77.5°	13.6	21.7	29.9	35.3	40.7	46.2	48.9	48.9	50.3	48.9	48.9
80°	8.1	13.6	16.3	24.5	24.5	28.5	29.9	31.2	28.5	32.6	28.5
82.5°	5.4	8.1	12.2	12.2	15.0	17.6	17.6	19.0	19.0	17.6	17.6
85°	4.1	5.4	6.8	8.1	8.1	9.5	8.1	8.1	9.5	10.9	9.5
87.5°	1.4	2.7	1.4	2.7	2.7	5.4	4.1	4.1	4.1	5.4	5.4
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: P244205

CATALOG NUMBER: LSR8B50D010 EC8B50935 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2559.1	2559.1	2559.1	2559.1
2.5°	2561.8	2563.2	2561.8	2561.8
5°	2574.0	2572.7	2574.0	2571.3
7.5°	2583.5	2583.5	2582.2	2582.2
10°	2583.5	2578.1	2578.1	2578.1
12.5°	2563.2	2556.4	2552.3	2549.6
15°	2527.8	2515.6	2510.2	2508.8
17.5°	2481.7	2470.8	2464.0	2459.9
20°	2428.7	2417.8	2409.7	2411.0
22.5°	2382.5	2370.3	2364.8	2362.1
25°	2336.3	2321.4	2317.3	2314.6
27.5°	2261.6	2253.5	2249.4	2245.3
30°	2147.5	2143.4	2136.6	2146.1
32.5°	2015.8	2008.9	2003.5	2007.6
35°	1870.4	1866.3	1870.4	1867.7
37.5°	1737.3	1741.4	1746.8	1749.5
40°	1632.7	1647.6	1653.1	1655.8
42.5°	1528.1	1545.8	1556.6	1563.4
45°	1399.1	1416.7	1428.9	1437.1
47.5°	1266.0	1280.9	1293.1	1291.8
50°	1145.1	1153.2	1158.6	1164.1
52.5°	1022.8	1022.8	1024.2	1024.2
55°	884.3	881.5	880.2	881.5
57.5°	732.1	729.4	728.1	724.0
60°	593.6	585.5	580.0	580.0
62.5°	464.5	455.0	451.0	449.6
65°	349.1	347.7	339.6	338.2
67.5°	252.7	247.2	241.8	243.2
70°	177.9	169.8	169.8	167.1
72.5°	115.5	111.4	110.0	110.0
75°	72.0	72.0	69.3	74.7
77.5°	47.5	47.5	46.2	47.5
80°	28.5	28.5	28.5	27.2
82.5°	17.6	19.0	17.6	17.6
85°	9.5	10.9	8.1	12.2
87.5°	5.4	6.8	5.4	6.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)