

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: P244217

Luminaire Tested: **LSR8B50D010 EC8B50950 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P244217
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 EC8B50950 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5334.0 lumens
Efficiency: N/A
Efficacy: 100.6 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

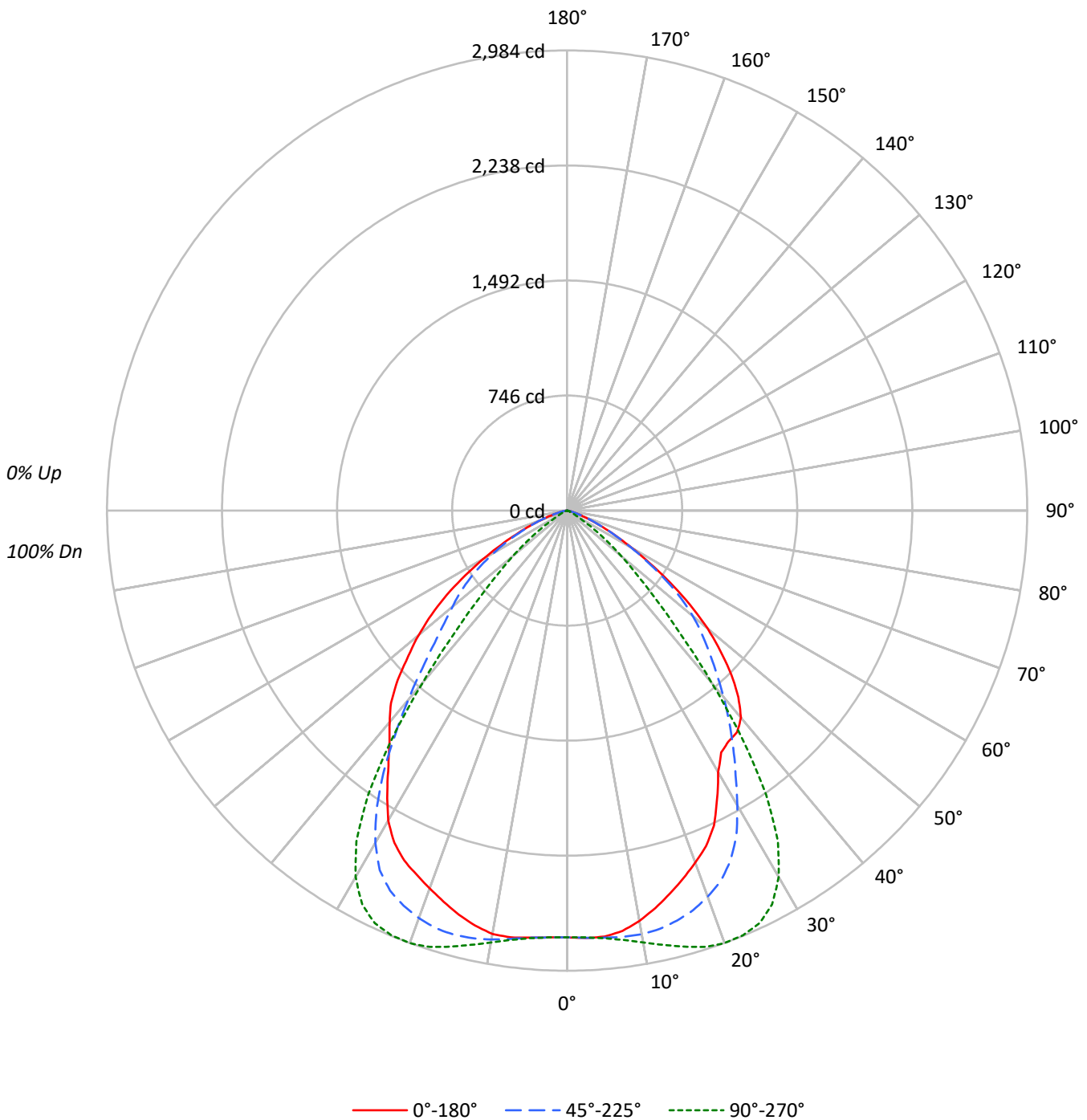
Input Watts (W): 53
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	85327	85327	85327
5°	85836	86155	86062
10°	84574	89036	87289
15°	82102	93448	86604
20°	79718	97937	85550
25°	76656	100446	85152
30°	69764	97691	82629
35°	68723	84650	76022
40°	70593	58710	72071
45°	65715	35485	67764
50°	57001	21914	60383
55°	43746	11451	51245
60°	29800	4619	38675
65°	18540	2357	26683
70°	10062	1461	16292
75°	5254	703	9627
80°	2344	781	5221
85°	1557	531	4670



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	266.1	5.0
10°-20°	788.3	14.8
20°-30°	1202.6	22.5
30°-40°	1255.0	23.5
40°-50°	942.7	17.7
50°-60°	580.0	10.9
60°-70°	236.0	4.4
70°-80°	55.6	1.0
80°-90°	7.7	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°	2257.1	42.3
0°-40°	3512.0	65.8
0°-60°	5034.7	94.4
0°-90°	5334.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5334.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2767	2767	2767	2767	2767	
5°	2773	2780	2783	2780	2780	262
15°	2572	2752	2927	2846	2713	724
25°	2253	2506	2952	2719	2503	1024
35°	1826	1877	2249	2078	2020	1153
45°	1507	1304	814	1215	1554	1150
55°	814	773	213	773	953	731
65°	254	257	32	345	366	265
75°	44	44	6	78	81	53
85°	4	4	2	10	13	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°	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1
2.5°	2774.5	2770.0	2774.5	2774.5	2775.9	2773.0	2774.5	2775.9	2773.0	2773.0	2773.0
5°	2773.0	2770.0	2773.0	2771.5	2774.5	2774.5	2777.4	2777.4	2780.3	2780.3	2784.7
7.5°	2749.5	2743.6	2749.5	2753.9	2756.8	2762.7	2770.0	2775.9	2781.8	2787.7	2795.0
10°	2701.0	2701.0	2705.4	2714.2	2723.0	2733.3	2746.5	2761.2	2775.9	2789.1	2802.3
12.5°	2640.8	2636.4	2645.2	2656.9	2670.2	2686.3	2706.9	2728.9	2752.4	2778.8	2799.4
15°	2571.8	2567.3	2577.6	2589.4	2605.6	2629.1	2654.0	2683.4	2717.2	2752.4	2786.2
17.5°	2501.3	2499.8	2510.1	2526.2	2539.5	2564.4	2596.7	2632.0	2670.2	2717.2	2761.2
20°	2429.3	2427.8	2438.1	2451.3	2469.0	2492.5	2524.8	2565.9	2611.4	2664.3	2715.7
22.5°	2354.4	2355.9	2364.7	2379.4	2394.1	2419.0	2452.8	2493.9	2543.8	2601.1	2658.4
25°	2253.0	2245.7	2257.5	2272.2	2297.1	2317.7	2350.0	2394.1	2445.4	2505.7	2573.2
27.5°	2106.2	2104.7	2115.0	2128.2	2150.2	2175.2	2210.5	2256.0	2310.3	2376.4	2442.5
30°	1959.3	1962.2	1966.7	1979.9	1994.5	2019.5	2054.8	2093.0	2144.4	2207.5	2278.0
32.5°	1859.4	1859.4	1865.3	1874.1	1884.4	1897.6	1922.6	1950.5	1990.2	2034.2	2085.6
35°	1825.6	1819.8	1825.6	1827.1	1828.6	1831.5	1835.9	1844.8	1857.9	1877.1	1896.1
37.5°	1811.0	1806.5	1806.5	1800.7	1793.3	1784.5	1772.8	1759.5	1744.9	1725.8	1711.1
40°	1753.7	1750.7	1747.8	1741.9	1725.8	1708.2	1689.0	1658.2	1624.4	1577.4	1530.4
42.5°	1643.5	1640.6	1639.1	1627.4	1612.7	1592.1	1570.1	1537.8	1495.2	1435.0	1367.4
45°	1506.9	1501.0	1496.7	1486.4	1476.1	1458.5	1437.9	1408.5	1365.9	1304.2	1223.5
47.5°	1348.3	1345.4	1343.9	1339.5	1329.2	1318.9	1305.7	1282.2	1244.0	1185.3	1101.6
50°	1188.2	1182.3	1185.3	1183.8	1179.4	1172.1	1163.2	1147.1	1117.7	1064.8	988.5
52.5°	1004.6	1004.6	1003.2	1007.5	1009.0	1007.5	1009.0	991.4	966.4	926.8	862.1
55°	813.7	813.7	818.1	824.0	829.8	831.3	829.8	822.5	804.9	772.6	715.3
57.5°	634.5	631.6	640.4	649.2	655.1	660.9	656.5	650.7	640.4	613.9	569.9
60°	483.2	483.2	489.1	495.0	500.8	506.7	505.2	503.8	495.0	477.3	442.1
62.5°	355.4	356.9	356.9	361.3	367.2	373.1	377.5	373.1	368.6	356.9	333.4
65°	254.1	252.6	254.1	258.5	262.9	268.8	271.7	270.3	265.8	257.0	239.4
67.5°	170.4	168.9	174.8	176.2	179.2	185.1	183.6	185.1	183.6	176.2	161.6
70°	111.6	108.7	111.6	110.1	114.6	116.0	119.0	120.4	119.0	114.6	110.1
72.5°	69.0	67.6	69.0	70.5	72.0	73.4	76.4	76.4	74.9	72.0	66.1
75°	44.1	39.6	41.1	38.2	41.1	41.1	44.1	45.5	44.1	44.1	41.1
77.5°	26.4	26.4	26.4	26.4	26.4	26.4	26.4	27.9	29.4	26.4	25.0
80°	13.2	13.2	14.7	14.7	14.7	16.2	14.7	14.7	14.7	16.2	11.8
82.5°	10.3	8.8	8.8	8.8	10.3	8.8	8.8	8.8	8.8	8.8	8.8
85°	4.4	5.9	4.4	2.9	4.4	4.4	5.9	4.4	4.4	4.4	5.9
87.5°	1.5	1.5	0.0	0.0	0.0	1.5	0.0	1.5	1.5	2.9	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°	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1
2.5°	2774.5	2771.5	2771.5	2770.0	2773.0	2770.0	2771.5	2770.0	2770.0	2773.0	2770.0
5°	2784.7	2786.2	2783.3	2781.8	2786.2	2786.2	2786.2	2783.3	2783.3	2784.7	2783.3
7.5°	2799.4	2802.3	2803.8	2805.3	2808.2	2809.7	2809.7	2808.2	2806.8	2811.2	2805.3
10°	2815.6	2820.0	2828.8	2833.2	2840.5	2840.5	2843.5	2843.5	2840.5	2843.5	2842.0
12.5°	2809.7	2836.1	2850.8	2861.1	2871.4	2880.2	2883.1	2884.6	2883.1	2889.0	2883.1
15°	2820.0	2842.0	2865.5	2883.1	2902.2	2912.5	2915.4	2927.2	2930.1	2931.6	2922.8
17.5°	2803.8	2843.5	2868.4	2894.9	2922.8	2941.9	2959.5	2966.9	2968.3	2971.3	2959.5
20°	2767.1	2811.2	2849.4	2887.6	2919.9	2949.2	2963.9	2984.5	2978.6	2990.4	2974.2
22.5°	2717.2	2767.1	2815.6	2865.5	2899.3	2934.6	2965.4	2980.1	2987.4	2987.4	2969.8
25°	2637.9	2696.6	2749.5	2800.9	2852.3	2894.9	2930.1	2952.2	2956.6	2955.1	2934.6
27.5°	2514.5	2577.6	2639.3	2698.1	2761.2	2811.2	2852.3	2878.7	2886.1	2886.1	2864.1
30°	2344.1	2411.7	2471.9	2542.4	2607.0	2662.8	2720.1	2743.6	2756.8	2756.8	2731.9
32.5°	2141.4	2198.7	2254.5	2323.5	2394.1	2457.2	2511.5	2543.8	2560.0	2558.5	2536.5
35°	1921.1	1949.0	1991.6	2043.0	2106.2	2164.9	2217.8	2248.7	2276.5	2275.1	2254.5
37.5°	1700.8	1693.5	1697.9	1717.0	1756.6	1797.7	1838.9	1868.3	1891.7	1902.0	1897.6
40°	1484.9	1446.7	1410.0	1396.8	1399.7	1414.4	1436.4	1458.5	1484.9	1498.1	1504.0
42.5°	1291.0	1226.4	1161.8	1113.3	1085.4	1076.6	1086.9	1094.2	1110.4	1129.4	1148.6
45°	1135.3	1048.7	963.5	888.6	841.6	813.7	807.8	813.7	822.5	841.6	866.6
47.5°	1007.5	906.2	810.8	727.0	658.0	621.3	611.0	608.1	616.9	634.5	668.3
50°	894.5	793.1	687.4	590.4	518.5	477.3	462.7	456.8	467.0	480.3	511.1
52.5°	771.1	671.2	562.5	468.5	393.6	351.0	334.9	326.1	331.9	349.6	380.4
55°	637.4	544.9	446.5	349.6	277.6	237.9	218.8	213.0	218.8	237.9	268.8
57.5°	503.8	425.9	343.7	252.6	188.0	148.4	129.2	123.4	139.5	146.9	179.2
60°	393.6	330.5	260.0	185.1	129.2	98.4	79.3	74.9	82.3	95.5	121.9
62.5°	295.2	255.6	199.7	132.2	95.5	63.1	52.9	48.5	52.9	63.1	83.7
65°	214.4	183.6	139.5	96.9	64.6	47.0	35.3	32.3	36.7	44.1	61.7
67.5°	146.9	123.4	96.9	67.6	44.1	29.4	25.0	25.0	26.4	32.3	45.5
70°	95.5	80.8	61.7	44.1	29.4	22.0	19.1	16.2	19.1	23.5	30.8
72.5°	60.2	51.4	39.6	30.8	22.0	16.2	13.2	11.8	14.7	17.6	23.5
75°	36.7	27.9	20.6	16.2	11.8	11.8	11.8	5.9	7.3	11.8	14.7
77.5°	22.0	19.1	16.2	13.2	10.3	5.9	5.9	5.9	7.3	8.8	13.2
80°	11.8	10.3	7.3	7.3	5.9	4.4	5.9	4.4	2.9	7.3	8.8
82.5°	7.3	5.9	5.9	5.9	7.3	2.9	4.4	2.9	4.4	5.9	4.4
85°	4.4	4.4	4.4	2.9	7.3	2.9	2.9	1.5	1.5	2.9	2.9
87.5°	0.0	1.5	1.5	0.0	1.5	0.0	1.5	1.5	1.5	1.5	1.5
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°	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1	2767.1
2.5°	2771.5	2770.0	2771.5	2770.0	2770.0	2770.0	2771.5	2771.5	2770.0	2770.0	2773.0
5°	2783.3	2783.3	2783.3	2781.8	2780.3	2780.3	2783.3	2783.3	2778.8	2783.3	2783.3
7.5°	2808.2	2803.8	2808.2	2802.3	2799.4	2800.9	2802.3	2799.4	2796.5	2798.0	2798.0
10°	2840.5	2836.1	2836.1	2831.7	2827.3	2824.4	2821.5	2814.1	2806.8	2805.3	2799.4
12.5°	2878.7	2871.4	2867.0	2858.2	2850.8	2840.5	2831.7	2820.0	2805.3	2795.0	2784.7
15°	2916.9	2905.2	2894.9	2880.2	2864.1	2846.4	2827.3	2808.2	2784.7	2764.2	2746.5
17.5°	2947.7	2931.6	2912.5	2889.0	2865.5	2839.1	2811.2	2783.3	2749.5	2723.0	2702.5
20°	2958.0	2934.6	2909.6	2878.7	2847.9	2811.2	2775.9	2739.2	2701.0	2673.1	2649.6
22.5°	2944.8	2916.9	2886.1	2853.8	2812.6	2773.0	2731.9	2689.3	2655.5	2617.3	2595.3
25°	2908.1	2874.3	2840.5	2802.3	2762.7	2718.6	2674.6	2630.5	2589.4	2568.8	2540.9
27.5°	2833.2	2796.5	2759.8	2720.1	2674.6	2630.5	2585.0	2542.4	2507.2	2479.2	2463.1
30°	2701.0	2658.4	2615.8	2573.2	2533.6	2488.0	2445.4	2410.2	2374.9	2352.9	2336.8
32.5°	2498.3	2460.1	2417.6	2376.4	2339.7	2301.5	2266.3	2235.4	2210.5	2195.8	2184.0
35°	2225.2	2186.9	2154.6	2125.3	2094.4	2078.3	2056.2	2038.6	2028.3	2022.5	2021.0
37.5°	1881.4	1859.4	1849.1	1843.3	1837.4	1833.0	1835.9	1843.3	1849.1	1859.4	1871.2
40°	1514.3	1533.4	1539.2	1559.8	1578.9	1603.9	1631.8	1664.1	1690.5	1724.3	1747.8
42.5°	1179.4	1214.7	1255.8	1299.8	1346.8	1392.4	1448.2	1499.6	1546.6	1589.2	1625.9
45°	906.2	960.5	1022.2	1085.4	1148.6	1214.7	1282.2	1345.4	1401.2	1446.7	1484.9
47.5°	706.5	766.7	846.0	923.8	1000.2	1078.1	1153.0	1219.0	1266.0	1310.1	1343.9
50°	559.6	628.6	715.3	804.9	888.6	970.8	1050.1	1111.8	1158.8	1194.1	1219.0
52.5°	433.3	515.5	603.6	697.7	787.2	876.8	950.3	1007.5	1045.7	1076.6	1095.7
55°	323.1	403.9	497.9	594.8	685.9	772.6	841.6	891.5	925.3	942.9	953.2
57.5°	233.5	307.0	401.0	497.9	580.1	662.4	718.2	763.7	782.8	793.1	797.5
60°	170.4	237.9	321.6	405.4	483.2	549.3	597.8	628.6	643.3	649.2	647.7
62.5°	124.8	183.6	255.6	326.1	389.2	443.5	481.7	502.3	509.7	512.6	508.2
65°	95.5	141.0	202.7	257.0	305.5	345.1	373.1	386.3	390.7	389.2	386.3
67.5°	70.5	105.8	151.3	192.4	227.7	258.5	273.2	284.9	287.9	283.5	279.1
70°	50.0	77.8	110.1	138.1	164.5	182.1	198.3	199.7	199.7	198.3	195.4
72.5°	35.3	54.3	74.9	94.0	110.1	123.4	129.2	133.7	132.2	130.7	127.8
75°	23.5	33.8	54.3	58.8	73.4	77.8	83.7	83.7	85.2	80.8	80.8
77.5°	14.7	23.5	32.3	38.2	44.1	50.0	52.9	52.9	54.3	52.9	52.9
80°	8.8	14.7	17.6	26.4	26.4	30.8	32.3	33.8	30.8	35.3	30.8
82.5°	5.9	8.8	13.2	13.2	16.2	19.1	19.1	20.6	20.6	19.1	19.1
85°	4.4	5.9	7.3	8.8	8.8	10.3	8.8	8.8	10.3	11.8	10.3
87.5°	1.5	2.9	1.5	2.9	2.9	5.9	4.4	4.4	4.4	5.9	5.9
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: P244217

CATALOG NUMBER: LSR8B50D010 EC8B50950 8LBDW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2767.1	2767.1	2767.1	2767.1
2.5°	2770.0	2771.5	2770.0	2770.0
5°	2783.3	2781.8	2783.3	2780.3
7.5°	2793.5	2793.5	2792.1	2792.1
10°	2793.5	2787.7	2787.7	2787.7
12.5°	2771.5	2764.2	2759.8	2756.8
15°	2733.3	2720.1	2714.2	2712.8
17.5°	2683.4	2671.6	2664.3	2659.9
20°	2626.1	2614.4	2605.6	2607.0
22.5°	2576.2	2563.0	2557.1	2554.1
25°	2526.2	2510.1	2505.7	2502.7
27.5°	2445.4	2436.6	2432.2	2427.8
30°	2322.1	2317.7	2310.3	2320.6
32.5°	2179.6	2172.3	2166.4	2170.8
35°	2022.5	2018.0	2022.5	2019.5
37.5°	1878.5	1882.9	1888.8	1891.7
40°	1765.4	1781.6	1787.5	1790.4
42.5°	1652.3	1671.4	1683.2	1690.5
45°	1512.8	1531.9	1545.1	1553.9
47.5°	1368.9	1385.0	1398.2	1396.8
50°	1238.2	1247.0	1252.8	1258.7
52.5°	1105.9	1105.9	1107.4	1107.4
55°	956.2	953.2	951.7	953.2
57.5°	791.6	788.7	787.2	782.8
60°	641.8	633.0	627.1	627.1
62.5°	502.3	492.0	487.6	486.2
65°	377.5	376.0	367.2	365.7
67.5°	273.2	267.3	261.4	262.9
70°	192.4	183.6	183.6	180.7
72.5°	124.8	120.4	119.0	119.0
75°	77.8	77.8	74.9	80.8
77.5°	51.4	51.4	50.0	51.4
80°	30.8	30.8	30.8	29.4
82.5°	19.1	20.6	19.1	19.1
85°	10.3	11.8	8.8	13.2
87.5°	5.9	7.3	5.9	7.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)