

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: P249507

Luminaire Tested: **LSR8B80D010 EC8B809730 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249507
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B80D010 EC8B809730 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5533.0 lumens
Efficiency: N/A
Efficacy: 74.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

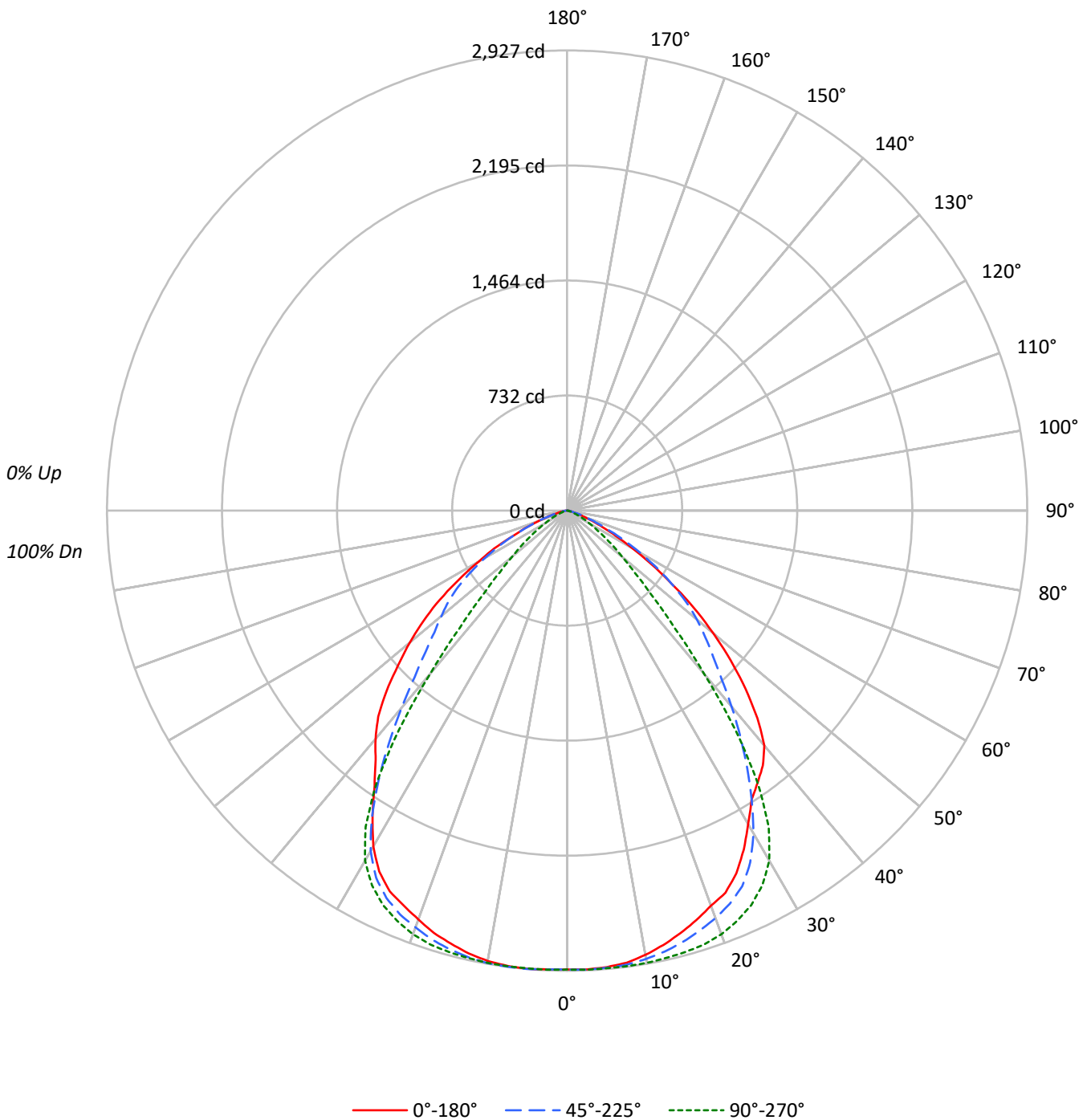
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	91	90						
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79						
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70						
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62						
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55						
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50						
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45						
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41						
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37						
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34						

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.6	5.0
10°-20°	809.1	14.6
20°-30°	1228.1	22.2
30°-40°	1289.9	23.3
40°-50°	967.0	17.5
50°-60°	620.5	11.2
60°-70°	265.4	4.8
70°-80°	62.7	1.1
80°-90°	11.7	0.2
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°	2315.8	41.9
0°-40°	3605.7	65.2
0°-60°	5193.2	93.9
0°-90°	5533.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5533.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2919	2919	2919	2919	2919	
5°	2915	2919	2922	2927	2926	277
15°	2783	2841	2907	2888	2852	785
25°	2546	2636	2769	2719	2672	1163
35°	2112	1995	2114	2089	2136	1326
45°	1605	1312	754	1274	1626	1229
55°	812	812	280	846	989	736
65°	244	288	89	371	378	261
75°	38	44	12	75	74	55
85°	12	8	6	12	17	13
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°	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3
2.5°	2920.9	2924.0	2922.5	2922.5	2920.9	2922.5	2922.5	2925.6	2925.6	2922.5	2920.9
5°	2914.6	2917.7	2917.7	2914.6	2914.6	2922.5	2917.7	2920.9	2920.9	2919.3	2919.3
7.5°	2900.5	2900.5	2906.8	2902.1	2902.1	2906.8	2905.2	2908.4	2911.5	2913.1	2913.1
10°	2869.2	2872.3	2873.9	2873.9	2875.5	2880.1	2883.3	2889.6	2892.7	2895.8	2897.4
12.5°	2830.0	2834.7	2836.3	2834.7	2839.4	2845.7	2853.5	2861.3	2866.1	2872.3	2877.0
15°	2783.0	2783.0	2786.1	2790.8	2794.0	2803.4	2811.2	2820.6	2833.1	2841.0	2848.8
17.5°	2731.3	2734.4	2739.1	2739.1	2745.4	2761.0	2765.8	2779.9	2794.0	2801.8	2817.5
20°	2674.9	2678.0	2682.7	2685.9	2693.7	2706.2	2715.6	2728.1	2743.8	2757.9	2773.6
22.5°	2631.0	2624.7	2627.8	2631.0	2638.8	2649.8	2660.8	2676.4	2692.1	2706.2	2721.9
25°	2546.4	2547.9	2552.7	2555.8	2565.2	2574.6	2587.1	2605.9	2620.0	2635.7	2652.9
27.5°	2432.0	2433.6	2441.4	2441.4	2449.2	2464.9	2472.7	2488.4	2507.2	2522.9	2543.3
30°	2301.9	2305.0	2305.0	2311.3	2316.0	2323.9	2331.7	2347.4	2356.8	2370.9	2399.1
32.5°	2182.8	2186.0	2184.4	2182.8	2178.1	2176.6	2175.0	2178.1	2181.3	2186.0	2196.9
35°	2112.3	2104.5	2098.2	2087.3	2074.7	2059.0	2044.9	2026.1	2008.9	1994.8	1979.1
37.5°	2044.9	2043.4	2034.0	2018.3	1993.2	1965.0	1932.1	1891.4	1850.6	1806.8	1764.5
40°	1950.9	1946.2	1938.4	1916.4	1888.2	1853.8	1809.9	1759.7	1693.9	1626.5	1557.6
42.5°	1791.1	1792.6	1783.2	1766.0	1739.4	1706.4	1661.0	1606.2	1535.7	1455.7	1366.4
45°	1604.6	1604.6	1601.5	1587.4	1568.6	1541.9	1507.5	1462.0	1393.1	1311.6	1216.0
47.5°	1410.3	1411.9	1407.2	1404.0	1396.2	1379.0	1353.9	1319.4	1270.8	1192.5	1096.9
50°	1212.9	1212.9	1220.7	1219.1	1219.1	1212.9	1201.9	1181.5	1139.2	1076.5	987.2
52.5°	1015.4	1018.6	1023.3	1029.5	1037.3	1049.9	1037.3	1027.9	1001.3	952.7	876.0
55°	811.7	814.8	822.7	833.6	843.1	855.6	858.7	858.7	844.6	811.7	753.7
57.5°	637.8	633.1	639.4	648.7	661.3	673.8	683.2	694.2	692.6	670.7	623.7
60°	479.5	481.1	485.8	495.2	504.6	515.5	528.1	537.5	542.2	531.2	501.4
62.5°	349.4	349.4	355.7	365.1	369.8	385.5	393.3	398.0	402.7	401.1	382.3
65°	244.5	247.6	250.7	255.4	260.1	269.5	274.2	283.6	286.8	288.3	274.2
67.5°	172.4	167.7	170.8	173.9	178.6	184.9	194.3	194.3	199.0	199.0	189.6
70°	109.7	109.7	111.3	115.9	119.1	120.7	123.8	126.9	131.6	130.1	130.1
72.5°	73.7	72.1	73.7	75.2	76.8	81.5	81.5	83.0	86.2	87.8	81.5
75°	37.6	39.2	42.3	40.8	45.4	42.3	43.9	48.6	47.0	43.9	43.9
77.5°	31.3	31.3	31.3	29.8	32.9	32.9	31.3	34.5	32.9	32.9	31.3
80°	21.9	23.5	21.9	20.4	21.9	20.4	20.4	20.4	20.4	20.4	18.8
82.5°	17.3	14.1	15.7	14.1	15.7	15.7	14.1	12.5	12.5	14.1	12.5
85°	12.5	9.4	11.0	11.0	9.4	9.4	9.4	9.4	9.4	7.8	7.8
87.5°	7.8	4.7	4.7	4.7	6.3	6.3	6.3	4.7	6.3	6.3	3.1
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°	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3
2.5°	2924.0	2922.5	2925.6	2924.0	2924.0	2922.5	2924.0	2922.5	2925.6	2919.3	2920.9
5°	2924.0	2920.9	2922.5	2924.0	2925.6	2922.5	2922.5	2922.5	2925.6	2922.5	2924.0
7.5°	2917.7	2916.2	2920.9	2924.0	2922.5	2920.9	2924.0	2922.5	2925.6	2924.0	2927.1
10°	2905.2	2906.8	2909.9	2914.6	2916.2	2917.7	2920.9	2920.9	2925.6	2919.3	2922.5
12.5°	2886.4	2892.7	2900.5	2903.6	2909.9	2909.9	2913.1	2914.6	2917.7	2916.2	2920.9
15°	2862.9	2870.7	2880.1	2888.0	2895.8	2900.5	2905.2	2906.8	2911.5	2906.8	2908.4
17.5°	2834.7	2844.1	2858.2	2867.6	2880.1	2884.9	2891.1	2894.2	2899.0	2895.8	2897.4
20°	2795.5	2806.5	2822.2	2836.3	2844.1	2855.1	2862.9	2867.6	2870.7	2867.6	2869.2
22.5°	2740.7	2756.4	2776.7	2787.7	2803.4	2812.8	2814.3	2825.3	2833.1	2825.3	2828.4
25°	2676.4	2692.1	2707.8	2731.3	2745.4	2756.4	2767.3	2768.9	2776.7	2775.2	2773.6
27.5°	2569.9	2590.3	2616.9	2635.7	2654.5	2671.7	2684.3	2687.4	2695.2	2692.1	2693.7
30°	2424.1	2446.1	2471.2	2500.9	2527.6	2544.8	2560.5	2571.4	2579.3	2574.6	2573.0
32.5°	2217.3	2239.2	2265.9	2295.6	2327.0	2352.1	2370.9	2385.0	2394.4	2391.2	2383.4
35°	1980.7	1987.0	2004.2	2027.7	2054.3	2081.0	2098.2	2113.9	2124.8	2128.0	2128.0
37.5°	1737.8	1717.5	1704.9	1704.9	1720.6	1731.5	1747.2	1756.6	1773.9	1780.1	1784.8
40°	1502.7	1455.7	1411.9	1379.0	1357.0	1355.5	1355.5	1360.1	1375.8	1396.2	1415.0
42.5°	1292.8	1217.5	1150.2	1089.1	1045.2	1020.1	1009.2	1010.7	1023.3	1042.1	1073.4
45°	1125.1	1031.1	946.5	872.8	813.3	774.1	755.3	753.7	763.1	785.1	819.6
47.5°	995.1	894.7	799.2	714.5	650.3	608.0	586.1	579.8	586.1	606.4	647.2
50°	886.9	783.5	684.8	597.0	528.1	484.2	463.8	456.0	463.8	481.1	521.8
52.5°	786.6	680.1	587.6	503.0	429.4	391.7	369.8	365.1	369.8	390.2	423.1
55°	670.7	579.8	488.9	404.3	340.1	302.4	285.2	280.5	285.2	304.0	338.5
57.5°	556.3	477.9	398.0	321.2	266.4	233.5	217.8	211.5	222.5	235.0	275.8
60°	449.7	387.1	319.7	252.3	206.9	177.1	164.5	163.0	166.1	181.8	210.0
62.5°	352.6	300.9	247.6	192.7	155.1	142.6	126.9	125.4	128.5	137.9	159.8
65°	253.9	221.0	180.2	141.0	111.3	94.0	87.8	89.3	92.4	98.7	119.1
67.5°	177.1	153.6	125.4	98.7	76.8	68.9	62.7	61.1	62.7	73.7	84.6
70°	119.1	105.0	84.6	75.2	53.3	42.3	43.9	39.2	45.4	45.4	54.8
72.5°	78.3	68.9	56.4	43.9	37.6	29.8	29.8	28.2	31.3	32.9	40.8
75°	40.8	31.3	31.3	21.9	15.7	7.8	14.1	12.5	11.0	12.5	15.7
77.5°	28.2	23.5	21.9	17.3	15.7	12.5	12.5	12.5	12.5	14.1	15.7
80°	17.3	17.3	12.5	11.0	9.4	7.8	9.4	9.4	9.4	9.4	11.0
82.5°	11.0	9.4	9.4	7.8	7.8	6.3	6.3	6.3	6.3	6.3	9.4
85°	9.4	6.3	6.3	4.7	6.3	11.0	4.7	6.3	6.3	6.3	4.7
87.5°	3.1	4.7	4.7	4.7	3.1	1.6	3.1	4.7	4.7	7.8	6.3
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°	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3	2919.3
2.5°	2924.0	2925.6	2925.6	2924.0	2924.0	2920.9	2927.1	2922.5	2924.0	2930.3	2925.6
5°	2927.1	2928.7	2928.7	2927.1	2927.1	2927.1	2928.7	2928.7	2927.1	2925.6	2928.7
7.5°	2933.4	2931.9	2931.9	2928.7	2928.7	2925.6	2928.7	2924.0	2927.1	2924.0	2928.7
10°	2925.6	2927.1	2925.6	2924.0	2924.0	2922.5	2922.5	2917.7	2919.3	2914.6	2917.7
12.5°	2920.9	2919.3	2919.3	2916.2	2913.1	2909.9	2908.4	2903.6	2903.6	2892.7	2897.4
15°	2908.4	2909.9	2905.2	2899.0	2895.8	2888.0	2884.9	2878.6	2872.3	2864.5	2866.1
17.5°	2897.4	2892.7	2886.4	2880.1	2867.6	2861.3	2855.1	2845.7	2842.5	2833.1	2830.0
20°	2864.5	2861.3	2853.5	2842.5	2834.7	2820.6	2814.3	2804.9	2797.1	2787.7	2783.0
22.5°	2822.2	2819.0	2809.6	2798.7	2786.1	2779.9	2773.6	2756.4	2748.5	2739.1	2737.5
25°	2768.9	2764.2	2754.8	2742.3	2736.0	2718.8	2712.5	2699.9	2696.8	2687.4	2685.9
27.5°	2687.4	2681.1	2670.2	2654.5	2643.5	2632.6	2626.3	2616.9	2613.8	2604.3	2602.8
30°	2565.2	2557.3	2535.4	2529.2	2510.3	2499.4	2499.4	2486.8	2488.4	2482.1	2482.1
32.5°	2372.4	2359.9	2342.7	2330.1	2317.6	2311.3	2311.3	2306.6	2309.8	2309.8	2312.9
35°	2117.0	2099.8	2090.4	2082.5	2082.5	2088.8	2107.6	2112.3	2121.7	2129.6	2135.8
37.5°	1789.5	1788.0	1798.9	1808.3	1831.8	1858.5	1891.4	1919.6	1946.2	1965.0	1983.8
40°	1435.4	1474.6	1505.9	1549.8	1585.8	1637.5	1697.1	1745.6	1791.1	1824.0	1858.5
42.5°	1120.4	1170.5	1236.4	1300.6	1364.9	1435.4	1513.7	1581.1	1640.7	1686.1	1722.1
45°	872.8	941.8	1021.7	1103.2	1186.2	1274.0	1355.5	1424.4	1487.1	1534.1	1570.1
47.5°	703.6	778.8	869.7	959.0	1053.0	1145.5	1236.4	1295.9	1347.6	1385.2	1418.2
50°	581.3	661.3	756.9	858.7	952.7	1045.2	1123.5	1181.5	1223.8	1256.7	1277.1
52.5°	485.8	570.4	672.2	774.1	868.1	952.7	1023.3	1067.1	1101.6	1125.1	1143.9
55°	401.1	482.6	578.2	673.8	766.3	846.2	904.1	937.1	963.7	977.8	988.8
57.5°	327.5	402.7	490.5	578.2	658.1	724.0	769.4	802.3	814.8	825.8	824.2
60°	257.0	327.5	407.4	482.6	551.6	604.8	637.8	656.6	666.0	670.7	667.5
62.5°	202.1	266.4	327.5	393.3	443.5	488.9	520.3	520.3	524.9	526.5	531.2
65°	150.4	199.0	252.3	300.9	341.6	371.4	388.6	393.3	399.6	398.0	394.9
67.5°	111.3	147.3	186.5	222.5	250.7	269.5	282.0	293.0	291.5	288.3	286.8
70°	76.8	100.3	134.8	156.7	177.1	195.9	199.0	200.6	202.1	203.7	200.6
72.5°	53.3	70.5	89.3	108.1	120.7	128.5	136.3	137.9	137.9	137.9	136.3
75°	26.6	36.0	53.3	61.1	72.1	75.2	81.5	81.5	86.2	79.9	78.3
77.5°	23.5	28.2	37.6	43.9	48.6	53.3	54.8	59.5	58.0	54.8	56.4
80°	14.1	17.3	23.5	26.6	32.9	34.5	36.0	37.6	36.0	37.6	37.6
82.5°	11.0	12.5	15.7	15.7	20.4	20.4	21.9	21.9	23.5	23.5	23.5
85°	6.3	11.0	9.4	18.8	12.5	12.5	15.7	18.8	15.7	15.7	18.8
87.5°	6.3	6.3	4.7	6.3	6.3	6.3	7.8	9.4	9.4	11.0	9.4
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: P249507

CATALOG NUMBER: LSR8B80D010 EC8B809730 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2919.3	2919.3	2919.3	2919.3
2.5°	2924.0	2927.1	2922.5	2920.9
5°	2928.7	2928.7	2925.6	2925.6
7.5°	2928.7	2928.7	2924.0	2920.9
10°	2916.2	2916.2	2911.5	2908.4
12.5°	2892.7	2892.7	2891.1	2886.4
15°	2862.9	2862.9	2856.6	2852.0
17.5°	2822.2	2825.3	2817.5	2817.5
20°	2778.3	2776.7	2770.5	2767.3
22.5°	2732.9	2729.7	2728.1	2718.8
25°	2684.3	2681.1	2676.4	2671.7
27.5°	2601.2	2599.7	2594.9	2588.7
30°	2474.3	2472.7	2466.5	2466.5
32.5°	2309.8	2308.2	2301.9	2303.5
35°	2138.9	2145.2	2142.1	2135.8
37.5°	1996.4	2001.1	2004.2	2001.1
40°	1877.3	1891.4	1892.9	1896.1
42.5°	1750.3	1769.1	1775.4	1778.5
45°	1598.3	1615.6	1629.7	1626.5
47.5°	1443.2	1455.7	1468.3	1458.9
50°	1294.3	1302.2	1306.9	1306.9
52.5°	1153.3	1153.3	1151.8	1153.3
55°	991.9	991.9	985.7	988.8
57.5°	822.7	825.8	821.1	813.3
60°	666.0	658.1	655.0	650.3
62.5°	518.7	518.7	507.7	521.8
65°	388.6	383.9	379.2	377.6
67.5°	282.0	280.5	275.8	274.2
70°	199.0	192.7	191.2	188.0
72.5°	133.2	133.2	130.1	130.1
75°	81.5	73.7	72.1	73.7
77.5°	56.4	54.8	54.8	53.3
80°	37.6	36.0	39.2	34.5
82.5°	23.5	25.1	23.5	25.1
85°	15.7	18.8	17.3	17.3
87.5°	9.4	9.4	9.4	9.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)