

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: P249173

Luminaire Tested: **LSR8B70D010 EC8B709727 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249173
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: LSR8B70D010 EC8B709727 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5314.0 lumens
Efficiency: N/A
Efficacy: 70.0 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

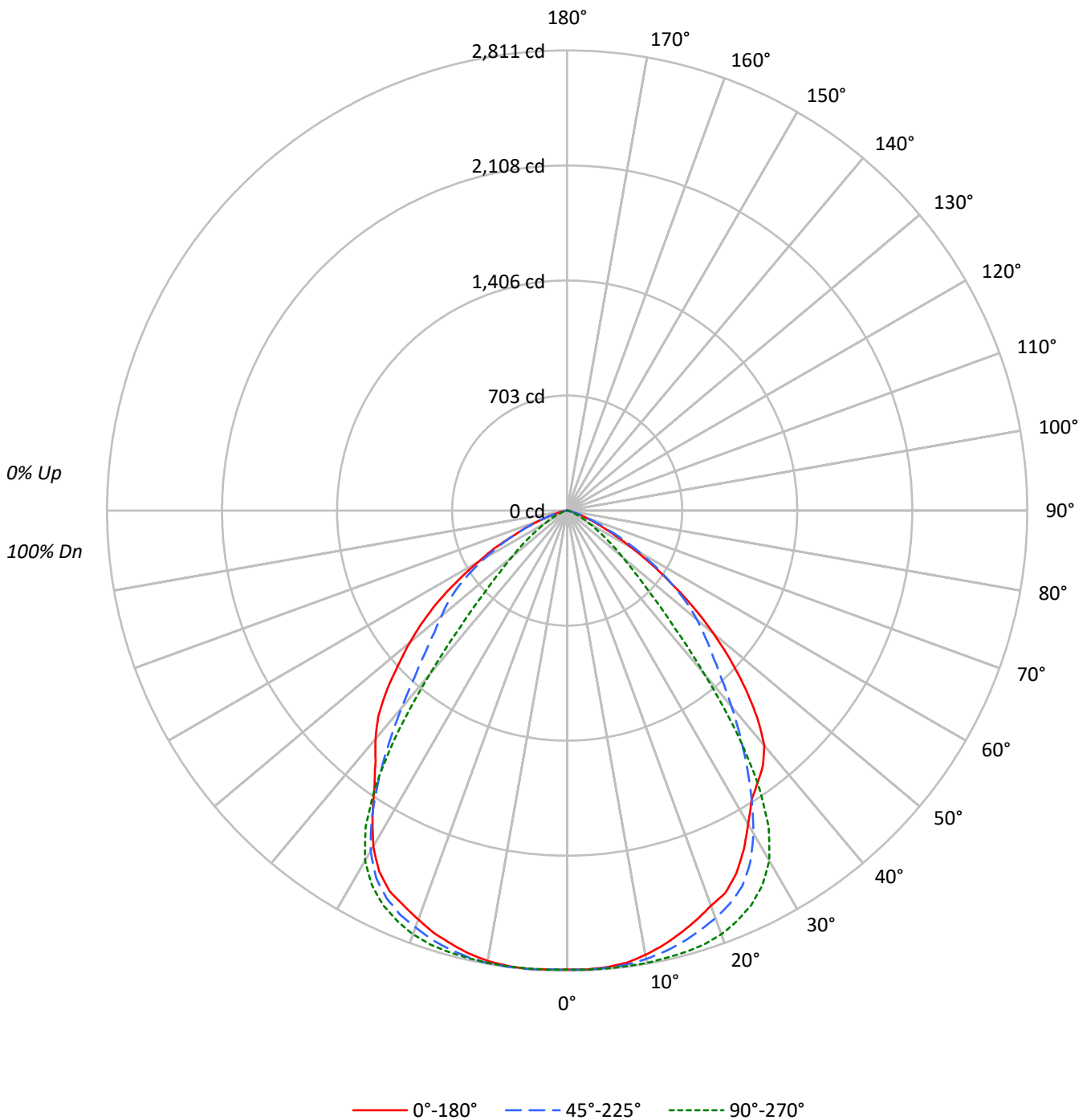
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	267.6	5.0
10°-20°	777.1	14.6
20°-30°	1179.5	22.2
30°-40°	1238.8	23.3
40°-50°	928.8	17.5
50°-60°	595.9	11.2
60°-70°	254.9	4.8
70°-80°	60.2	1.1
80°-90°	11.2	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°	2224.1	41.9
0°-40°	3462.9	65.2
0°-60°	4987.6	93.9
0°-90°	5314.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5314.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2804	2804	2804	2804	2804	
5°	2799	2804	2807	2811	2810	266
15°	2673	2728	2792	2774	2739	754
25°	2446	2531	2659	2611	2566	1117
35°	2029	1916	2030	2006	2051	1273
45°	1541	1260	724	1224	1562	1180
55°	780	780	269	813	950	707
65°	235	277	86	357	363	251
75°	36	42	12	72	71	53
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°	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8
2.5°	2805.3	2808.3	2806.8	2806.8	2805.3	2806.8	2806.8	2809.8	2809.8	2806.8	2805.3
5°	2799.2	2802.3	2802.3	2799.2	2799.2	2806.8	2802.3	2805.3	2805.3	2803.8	2803.8
7.5°	2785.7	2785.7	2791.7	2787.2	2787.2	2791.7	2790.2	2793.2	2796.3	2797.8	2797.8
10°	2755.6	2758.6	2760.1	2760.1	2761.6	2766.1	2769.2	2775.2	2778.2	2781.2	2782.7
12.5°	2718.0	2722.5	2724.0	2722.5	2727.0	2733.0	2740.6	2748.1	2752.6	2758.6	2763.2
15°	2672.8	2672.8	2675.8	2680.4	2683.4	2692.4	2699.9	2708.9	2721.0	2728.5	2736.1
17.5°	2623.2	2626.2	2630.7	2630.7	2636.7	2651.8	2656.3	2669.8	2683.4	2690.9	2706.0
20°	2569.0	2572.0	2576.5	2579.5	2587.1	2599.1	2608.1	2620.2	2635.2	2648.8	2663.8
22.5°	2526.9	2520.8	2523.8	2526.9	2534.4	2544.9	2555.5	2570.5	2585.5	2599.1	2614.2
25°	2445.6	2447.1	2451.6	2454.6	2463.7	2472.7	2484.7	2502.8	2516.3	2531.4	2547.9
27.5°	2335.7	2337.2	2344.8	2344.8	2352.3	2367.3	2374.8	2389.9	2408.0	2423.0	2442.6
30°	2210.8	2213.8	2213.8	2219.8	2224.3	2231.9	2239.4	2254.5	2263.5	2277.0	2304.1
32.5°	2096.4	2099.4	2097.9	2096.4	2091.9	2090.4	2088.9	2091.9	2094.9	2099.4	2110.0
35°	2028.7	2021.2	2015.2	2004.6	1992.6	1977.5	1964.0	1945.9	1929.4	1915.8	1900.8
37.5°	1964.0	1962.5	1953.5	1938.4	1914.3	1887.2	1855.7	1816.5	1777.4	1735.2	1694.6
40°	1873.7	1869.2	1861.7	1840.6	1813.5	1780.4	1738.3	1690.1	1626.9	1562.2	1496.0
42.5°	1720.2	1721.7	1712.7	1696.1	1670.5	1638.9	1595.3	1542.6	1474.9	1398.1	1312.3
45°	1541.1	1541.1	1538.1	1524.5	1506.5	1480.9	1447.8	1404.1	1337.9	1259.7	1167.8
47.5°	1354.5	1356.0	1351.5	1348.5	1340.9	1324.4	1300.3	1267.2	1220.5	1145.3	1053.5
50°	1164.9	1164.9	1172.4	1170.9	1170.9	1164.9	1154.3	1134.7	1094.1	1033.9	948.2
52.5°	975.2	978.2	982.8	988.8	996.3	1008.3	996.3	987.3	961.7	915.0	841.3
55°	779.6	782.6	790.1	800.6	809.7	821.7	824.7	824.7	811.2	779.6	723.9
57.5°	612.5	608.0	614.0	623.1	635.1	647.2	656.2	666.7	665.2	644.1	599.0
60°	460.5	462.0	466.5	475.6	484.6	495.1	507.2	516.2	520.7	510.2	481.6
62.5°	335.6	335.6	341.6	350.6	355.2	370.2	377.7	382.3	386.8	385.3	367.2
65°	234.8	237.8	240.8	245.3	249.8	258.8	263.4	272.4	275.4	276.9	263.4
67.5°	165.6	161.0	164.1	167.0	171.6	177.6	186.6	186.6	191.1	191.1	182.1
70°	105.4	105.4	106.9	111.4	114.4	115.9	118.9	121.9	126.4	124.9	124.9
72.5°	70.7	69.2	70.7	72.2	73.8	78.3	78.3	79.8	82.8	84.3	78.3
75°	36.1	37.6	40.6	39.1	43.6	40.6	42.1	46.7	45.1	42.1	42.1
77.5°	30.1	30.1	30.1	28.6	31.6	31.6	30.1	33.1	31.6	31.6	30.1
80°	21.1	22.6	21.1	19.6	21.1	19.6	19.6	19.6	19.6	19.6	18.0
82.5°	16.6	13.6	15.1	13.6	15.1	15.1	13.6	12.0	12.0	13.6	12.0
85°	12.0	9.0	10.5	10.5	9.0	9.0	9.0	9.0	9.0	7.5	7.5
87.5°	7.5	4.5	4.5	4.5	6.0	6.0	6.0	4.5	6.0	6.0	3.0
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°	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8
2.5°	2808.3	2806.8	2809.8	2808.3	2808.3	2806.8	2808.3	2806.8	2809.8	2803.8	2805.3
5°	2808.3	2805.3	2806.8	2808.3	2809.8	2806.8	2806.8	2806.8	2809.8	2806.8	2808.3
7.5°	2802.3	2800.8	2805.3	2808.3	2806.8	2805.3	2808.3	2806.8	2809.8	2808.3	2811.3
10°	2790.2	2791.7	2794.7	2799.2	2800.8	2802.3	2805.3	2805.3	2809.8	2803.8	2806.8
12.5°	2772.2	2778.2	2785.7	2788.7	2794.7	2794.7	2797.8	2799.2	2802.3	2800.8	2805.3
15°	2749.6	2757.1	2766.1	2773.7	2781.2	2785.7	2790.2	2791.7	2796.3	2791.7	2793.2
17.5°	2722.5	2731.5	2745.1	2754.1	2766.1	2770.7	2776.7	2779.7	2784.2	2781.2	2782.7
20°	2684.9	2695.4	2710.5	2724.0	2731.5	2742.1	2749.6	2754.1	2757.1	2754.1	2755.6
22.5°	2632.2	2647.3	2666.8	2677.4	2692.4	2701.4	2702.9	2713.5	2721.0	2713.5	2716.5
25°	2570.5	2585.5	2600.6	2623.2	2636.7	2647.3	2657.8	2659.3	2666.8	2665.3	2663.8
27.5°	2468.2	2487.7	2513.3	2531.4	2549.4	2566.0	2578.0	2581.0	2588.6	2585.5	2587.1
30°	2328.2	2349.3	2373.4	2401.9	2427.5	2444.1	2459.1	2469.7	2477.2	2472.7	2471.2
32.5°	2129.6	2150.6	2176.2	2204.8	2234.9	2259.0	2277.0	2290.6	2299.6	2296.6	2289.1
35°	1902.3	1908.3	1924.9	1947.5	1973.0	1998.6	2015.2	2030.2	2040.7	2043.8	2043.8
37.5°	1669.0	1649.5	1637.4	1637.4	1652.5	1663.0	1678.0	1687.1	1703.6	1709.6	1714.2
40°	1443.3	1398.1	1356.0	1324.4	1303.3	1301.8	1301.8	1306.3	1321.4	1340.9	1359.0
42.5°	1241.6	1169.4	1104.7	1046.0	1003.8	979.7	969.2	970.7	982.8	1000.8	1030.9
45°	1080.6	990.3	909.0	838.3	781.1	743.4	725.4	723.9	732.9	754.0	787.1
47.5°	955.7	859.3	767.5	686.3	624.6	583.9	562.9	556.9	562.9	582.4	621.6
50°	851.8	752.5	657.7	573.4	507.2	465.1	445.5	438.0	445.5	462.0	501.1
52.5°	755.5	653.2	564.4	483.1	412.4	376.2	355.2	350.6	355.2	374.7	406.4
55°	644.1	556.9	469.5	388.3	326.6	290.5	273.9	269.4	273.9	292.0	325.1
57.5°	534.3	459.0	382.3	308.5	255.9	224.2	209.2	203.2	213.7	225.7	264.9
60°	431.9	371.7	307.0	242.3	198.7	170.1	158.0	156.5	159.5	174.6	201.7
62.5°	338.6	289.0	237.8	185.1	149.0	136.9	121.9	120.4	123.4	132.4	153.5
65°	243.8	212.2	173.1	135.4	106.9	90.3	84.3	85.8	88.8	94.8	114.4
67.5°	170.1	147.5	120.4	94.8	73.8	66.2	60.2	58.7	60.2	70.7	81.3
70°	114.4	100.8	81.3	72.2	51.2	40.6	42.1	37.6	43.6	43.6	52.7
72.5°	75.2	66.2	54.2	42.1	36.1	28.6	28.6	27.1	30.1	31.6	39.1
75°	39.1	30.1	30.1	21.1	15.1	7.5	13.6	12.0	10.5	12.0	15.1
77.5°	27.1	22.6	21.1	16.6	15.1	12.0	12.0	12.0	12.0	13.6	15.1
80°	16.6	16.6	12.0	10.5	9.0	7.5	9.0	9.0	9.0	9.0	10.5
82.5°	10.5	9.0	9.0	7.5	7.5	6.0	6.0	6.0	6.0	6.0	9.0
85°	9.0	6.0	6.0	4.5	6.0	10.5	4.5	6.0	6.0	6.0	4.5
87.5°	3.0	4.5	4.5	4.5	3.0	1.5	3.0	4.5	4.5	7.5	6.0
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8	2803.8
2.5°	2808.3	2809.8	2809.8	2808.3	2808.3	2805.3	2811.3	2806.8	2808.3	2814.3	2809.8
5°	2811.3	2812.8	2812.8	2811.3	2811.3	2811.3	2812.8	2812.8	2811.3	2809.8	2812.8
7.5°	2817.3	2815.8	2815.8	2812.8	2812.8	2809.8	2812.8	2808.3	2811.3	2808.3	2812.8
10°	2809.8	2811.3	2809.8	2808.3	2808.3	2806.8	2806.8	2802.3	2803.8	2799.2	2802.3
12.5°	2805.3	2803.8	2803.8	2800.8	2797.8	2794.7	2793.2	2788.7	2788.7	2778.2	2782.7
15°	2793.2	2794.7	2790.2	2784.2	2781.2	2773.7	2770.7	2764.6	2758.6	2751.1	2752.6
17.5°	2782.7	2778.2	2772.2	2766.1	2754.1	2748.1	2742.1	2733.0	2730.0	2721.0	2718.0
20°	2751.1	2748.1	2740.6	2730.0	2722.5	2708.9	2702.9	2693.9	2686.4	2677.4	2672.8
22.5°	2710.5	2707.4	2698.4	2687.9	2675.8	2669.8	2663.8	2647.3	2639.7	2630.7	2629.2
25°	2659.3	2654.8	2645.8	2633.7	2627.7	2611.1	2605.1	2593.1	2590.1	2581.0	2579.5
27.5°	2581.0	2575.0	2564.5	2549.4	2538.9	2528.4	2522.4	2513.3	2510.3	2501.3	2499.8
30°	2463.7	2456.1	2435.0	2429.0	2411.0	2400.4	2400.4	2388.4	2389.9	2383.9	2383.9
32.5°	2278.5	2266.5	2249.9	2237.9	2225.8	2219.8	2219.8	2215.3	2218.3	2218.3	2221.4
35°	2033.2	2016.7	2007.6	2000.1	2000.1	2006.1	2024.2	2028.7	2037.7	2045.3	2051.3
37.5°	1718.7	1717.2	1727.7	1736.7	1759.3	1784.9	1816.5	1843.6	1869.2	1887.2	1905.3
40°	1378.6	1416.2	1446.3	1488.4	1523.0	1572.7	1629.9	1676.5	1720.2	1751.8	1784.9
42.5°	1076.0	1124.2	1187.4	1249.1	1310.8	1378.6	1453.8	1518.5	1575.7	1619.4	1654.0
45°	838.3	904.5	981.3	1059.5	1139.3	1223.6	1301.8	1368.0	1428.2	1473.4	1508.0
47.5°	675.7	748.0	835.3	921.1	1011.3	1100.1	1187.4	1244.6	1294.3	1330.4	1362.0
50°	558.3	635.1	726.9	824.7	915.0	1003.8	1079.1	1134.7	1175.4	1207.0	1226.5
52.5°	466.5	547.8	645.6	743.4	833.7	915.0	982.8	1024.9	1058.0	1080.6	1098.6
55°	385.3	463.5	555.3	647.2	735.9	812.7	868.4	900.0	925.5	939.1	949.6
57.5°	314.6	386.8	471.1	555.3	632.1	695.3	739.0	770.5	782.6	793.1	791.6
60°	246.8	314.6	391.3	463.5	529.8	580.9	612.5	630.6	639.6	644.1	641.1
62.5°	194.1	255.9	314.6	377.7	425.9	469.5	499.7	499.7	504.2	505.7	510.2
65°	144.5	191.1	242.3	289.0	328.1	356.7	373.3	377.7	383.8	382.3	379.3
67.5°	106.9	141.5	179.1	213.7	240.8	258.8	270.9	281.4	279.9	276.9	275.4
70°	73.8	96.3	129.4	150.5	170.1	188.1	191.1	192.6	194.1	195.6	192.6
72.5°	51.2	67.7	85.8	103.8	115.9	123.4	130.9	132.4	132.4	132.4	130.9
75°	25.6	34.6	51.2	58.7	69.2	72.2	78.3	78.3	82.8	76.7	75.2
77.5°	22.6	27.1	36.1	42.1	46.7	51.2	52.7	57.2	55.7	52.7	54.2
80°	13.6	16.6	22.6	25.6	31.6	33.1	34.6	36.1	34.6	36.1	36.1
82.5°	10.5	12.0	15.1	15.1	19.6	19.6	21.1	21.1	22.6	22.6	22.6
85°	6.0	10.5	9.0	18.0	12.0	12.0	15.1	18.0	15.1	15.1	18.0
87.5°	6.0	6.0	4.5	6.0	6.0	6.0	7.5	9.0	9.0	10.5	9.0
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: P249173

CATALOG NUMBER: LSR8B70D010 EC8B709727 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2803.8	2803.8	2803.8	2803.8
2.5°	2808.3	2811.3	2806.8	2805.3
5°	2812.8	2812.8	2809.8	2809.8
7.5°	2812.8	2812.8	2808.3	2805.3
10°	2800.8	2800.8	2796.3	2793.2
12.5°	2778.2	2778.2	2776.7	2772.2
15°	2749.6	2749.6	2743.6	2739.1
17.5°	2710.5	2713.5	2706.0	2706.0
20°	2668.3	2666.8	2660.8	2657.8
22.5°	2624.7	2621.7	2620.2	2611.1
25°	2578.0	2575.0	2570.5	2566.0
27.5°	2498.3	2496.8	2492.2	2486.2
30°	2376.4	2374.8	2368.8	2368.8
32.5°	2218.3	2216.8	2210.8	2212.3
35°	2054.3	2060.3	2057.3	2051.3
37.5°	1917.3	1921.9	1924.9	1921.9
40°	1803.0	1816.5	1818.0	1821.0
42.5°	1681.1	1699.1	1705.2	1708.1
45°	1535.1	1551.6	1565.2	1562.2
47.5°	1386.1	1398.1	1410.2	1401.1
50°	1243.1	1250.6	1255.2	1255.2
52.5°	1107.7	1107.7	1106.2	1107.7
55°	952.6	952.6	946.6	949.6
57.5°	790.1	793.1	788.6	781.1
60°	639.6	632.1	629.1	624.6
62.5°	498.2	498.2	487.6	501.1
65°	373.3	368.7	364.2	362.7
67.5°	270.9	269.4	264.9	263.4
70°	191.1	185.1	183.6	180.6
72.5°	127.9	127.9	124.9	124.9
75°	78.3	70.7	69.2	70.7
77.5°	54.2	52.7	52.7	51.2
80°	36.1	34.6	37.6	33.1
82.5°	22.6	24.1	22.6	24.1
85°	15.1	18.0	16.6	16.6
87.5°	9.0	9.0	9.0	9.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)