

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: P249424

Luminaire Tested: **LSR8B60D010 EC8B60835 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249424
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: LSR8B60D010 EC8B60835 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5596.0 lumens
Efficiency: N/A
Efficacy: 94.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

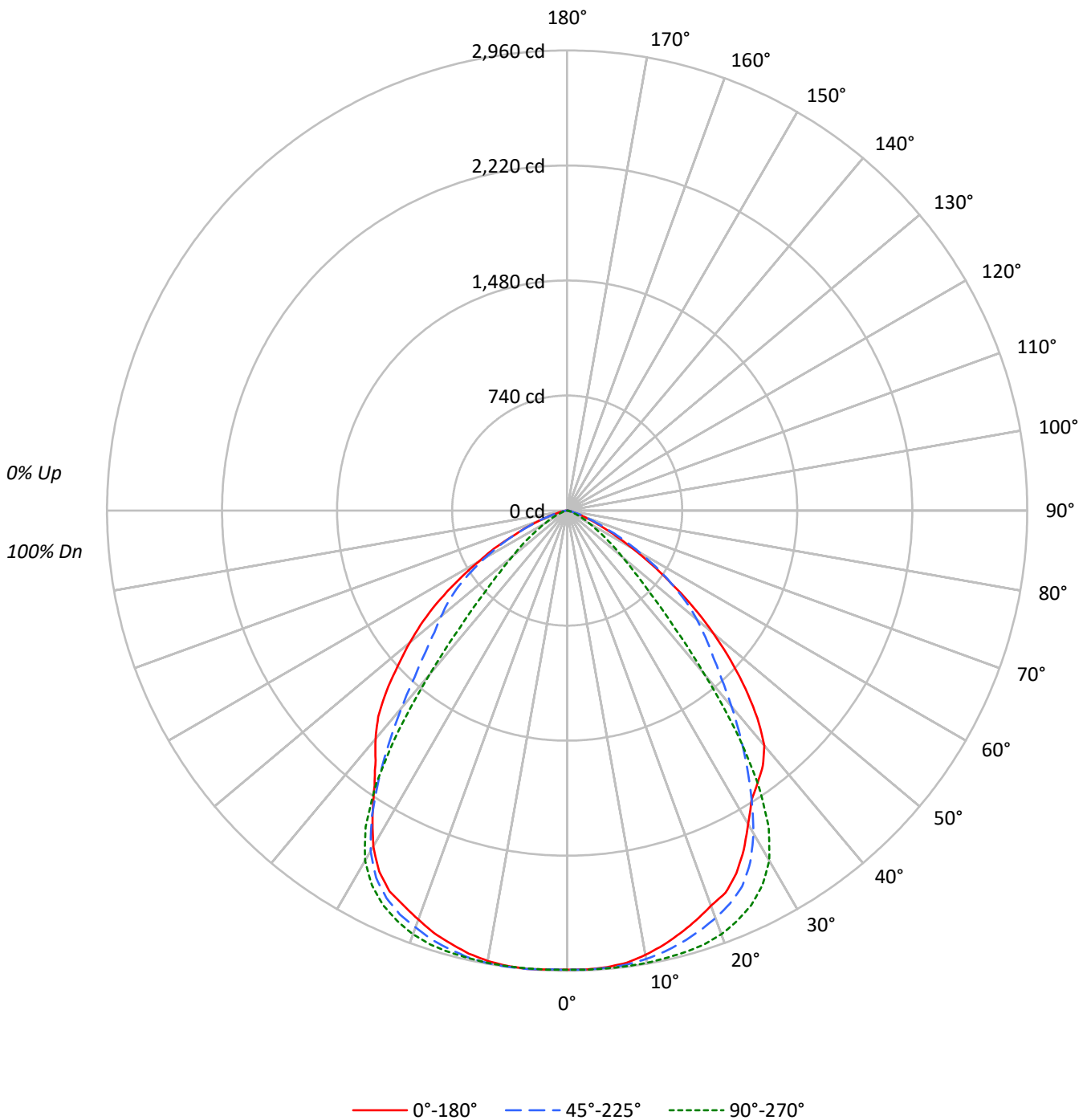
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	91047	91047	91047
5°	91247	91491	91590
10°	90861	92499	92104
15°	89857	93854	92082
20°	88775	95171	91844
25°	87626	95281	91940
30°	82896	92602	88821
35°	80423	80480	81319
40°	79425	55373	77195
45°	70773	33243	71741
50°	58848	22125	63410
55°	44133	15252	53761
60°	29911	10164	40562
65°	18044	6596	27865
70°	9999	3570	17148
75°	4527	1513	8876
80°	3942	1687	6198
85°	4493	2229	6156



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.8	5.0
10°-20°	818.3	14.6
20°-30°	1242.1	22.2
30°-40°	1304.5	23.3
40°-50°	978.1	17.5
50°-60°	627.5	11.2
60°-70°	268.5	4.8
70°-80°	63.4	1.1
80°-90°	11.8	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°	2342.2	41.9
0°-40°	3646.7	65.2
0°-60°	5252.3	93.9
0°-90°	5596.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5596.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2953	2953	2953	2953	2953	
5°	2948	2953	2956	2960	2959	280
15°	2815	2873	2940	2921	2884	794
25°	2575	2666	2800	2750	2702	1177
35°	2136	2018	2138	2113	2160	1341
45°	1623	1326	762	1288	1645	1243
55°	821	821	284	856	1000	745
65°	247	292	90	376	382	264
75°	38	44	13	76	74	55
85°	13	8	6	13	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°	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6
2.5°	2954.1	2957.3	2955.7	2955.7	2954.1	2955.7	2955.7	2958.9	2958.9	2955.7	2954.1
5°	2947.8	2951.0	2951.0	2947.8	2947.8	2955.7	2951.0	2954.1	2954.1	2952.6	2952.6
7.5°	2933.6	2933.6	2939.9	2935.1	2935.1	2939.9	2938.3	2941.5	2944.6	2946.2	2946.2
10°	2901.8	2905.0	2906.6	2906.6	2908.2	2912.9	2916.1	2922.5	2925.6	2928.8	2930.4
12.5°	2862.2	2867.0	2868.6	2867.0	2871.7	2878.1	2886.0	2893.9	2898.7	2905.0	2909.8
15°	2814.7	2814.7	2817.8	2822.6	2825.8	2835.3	2843.2	2852.7	2865.4	2873.3	2881.2
17.5°	2762.4	2765.6	2770.3	2770.3	2776.7	2792.5	2797.3	2811.5	2825.8	2833.7	2849.6
20°	2705.3	2708.5	2713.3	2716.4	2724.3	2737.0	2746.5	2759.2	2775.1	2789.3	2805.2
22.5°	2660.9	2654.6	2657.8	2660.9	2668.9	2680.0	2691.1	2706.9	2722.8	2737.0	2752.9
25°	2575.4	2577.0	2581.7	2584.9	2594.4	2603.9	2616.6	2635.6	2649.9	2665.7	2683.1
27.5°	2459.7	2461.3	2469.2	2469.2	2477.1	2493.0	2500.9	2516.7	2535.8	2551.6	2572.2
30°	2328.1	2331.3	2331.3	2337.6	2342.4	2350.3	2358.2	2374.1	2383.6	2397.9	2426.4
32.5°	2207.7	2210.8	2209.3	2207.7	2202.9	2201.3	2199.8	2202.9	2206.1	2210.8	2221.9
35°	2136.4	2128.4	2122.1	2111.0	2098.3	2082.5	2068.2	2049.2	2031.8	2017.5	2001.7
37.5°	2068.2	2066.6	2057.1	2041.3	2015.9	1987.4	1954.1	1912.9	1871.7	1827.3	1784.5
40°	1973.1	1968.4	1960.4	1938.3	1909.7	1874.9	1830.5	1779.8	1713.2	1645.1	1575.3
42.5°	1811.5	1813.1	1803.6	1786.1	1759.2	1725.9	1679.9	1624.5	1553.2	1472.3	1382.0
45°	1622.9	1622.9	1619.7	1605.4	1586.4	1559.5	1524.6	1478.7	1408.9	1326.5	1229.8
47.5°	1426.4	1427.9	1423.2	1420.0	1412.1	1394.7	1369.3	1334.4	1285.3	1206.1	1109.4
50°	1226.7	1226.7	1234.6	1233.0	1233.0	1226.7	1215.6	1195.0	1152.2	1088.8	998.5
52.5°	1027.0	1030.2	1034.9	1041.2	1049.2	1061.8	1049.2	1039.7	1012.7	963.6	885.9
55°	820.9	824.1	832.0	843.1	852.7	865.3	868.5	868.5	854.2	820.9	762.3
57.5°	645.0	640.3	646.6	656.1	668.8	681.5	691.0	702.1	700.5	678.3	630.8
60°	485.0	486.6	491.3	500.8	510.3	521.4	534.1	543.6	548.4	537.3	507.1
62.5°	353.4	353.4	359.7	369.3	374.0	389.9	397.8	402.6	407.3	405.7	386.7
65°	247.3	250.4	253.6	258.3	263.1	272.6	277.3	286.8	290.0	291.6	277.3
67.5°	174.3	169.6	172.8	175.9	180.7	187.0	196.5	196.5	201.3	201.3	191.8
70°	110.9	110.9	112.5	117.3	120.4	122.0	125.2	128.4	133.1	131.5	131.5
72.5°	74.5	72.9	74.5	76.1	77.7	82.4	82.4	84.0	87.2	88.8	82.4
75°	38.0	39.6	42.8	41.2	46.0	42.8	44.4	49.1	47.5	44.4	44.4
77.5°	31.7	31.7	31.7	30.1	33.3	33.3	31.7	34.9	33.3	33.3	31.7
80°	22.2	23.8	22.2	20.6	22.2	20.6	20.6	20.6	20.6	20.6	19.0
82.5°	17.4	14.3	15.9	14.3	15.9	15.9	14.3	12.7	12.7	14.3	12.7
85°	12.7	9.5	11.1	11.1	9.5	9.5	9.5	9.5	9.5	7.9	7.9
87.5°	7.9	4.8	4.8	4.8	6.3	6.3	6.3	4.8	6.3	6.3	3.2
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°	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6
2.5°	2957.3	2955.7	2958.9	2957.3	2957.3	2955.7	2957.3	2955.7	2958.9	2952.6	2954.1
5°	2957.3	2954.1	2955.7	2957.3	2958.9	2955.7	2955.7	2955.7	2958.9	2955.7	2957.3
7.5°	2951.0	2949.4	2954.1	2957.3	2955.7	2954.1	2957.3	2955.7	2958.9	2957.3	2960.5
10°	2938.3	2939.9	2943.1	2947.8	2949.4	2951.0	2954.1	2954.1	2958.9	2952.6	2955.7
12.5°	2919.3	2925.6	2933.6	2936.7	2943.1	2943.1	2946.2	2947.8	2951.0	2949.4	2954.1
15°	2895.5	2903.4	2912.9	2920.9	2928.8	2933.6	2938.3	2939.9	2944.6	2939.9	2941.5
17.5°	2867.0	2876.5	2890.7	2900.2	2912.9	2917.7	2924.0	2927.2	2932.0	2928.8	2930.4
20°	2827.3	2838.5	2854.3	2868.6	2876.5	2887.6	2895.5	2900.2	2903.4	2900.2	2901.8
22.5°	2771.9	2787.8	2808.3	2819.4	2835.3	2844.8	2846.4	2857.5	2865.4	2857.5	2860.7
25°	2706.9	2722.8	2738.6	2762.4	2776.7	2787.8	2798.8	2800.4	2808.3	2806.8	2805.2
27.5°	2599.1	2619.8	2646.7	2665.7	2684.7	2702.2	2714.8	2718.0	2725.9	2722.8	2724.3
30°	2451.7	2474.0	2499.3	2529.4	2556.4	2573.8	2589.6	2600.7	2608.6	2603.9	2602.3
32.5°	2242.6	2264.7	2291.7	2321.8	2353.5	2378.8	2397.9	2412.1	2421.6	2418.5	2410.6
35°	2003.3	2009.6	2027.0	2050.8	2077.7	2104.7	2122.1	2137.9	2149.0	2152.2	2152.2
37.5°	1757.6	1737.0	1724.3	1724.3	1740.1	1751.2	1767.1	1776.6	1794.1	1800.4	1805.1
40°	1519.8	1472.3	1427.9	1394.7	1372.5	1370.9	1370.9	1375.6	1391.5	1412.1	1431.1
42.5°	1307.5	1231.4	1163.3	1101.5	1057.1	1031.7	1020.7	1022.2	1034.9	1053.9	1085.6
45°	1137.9	1042.8	957.2	882.8	822.5	782.9	763.9	762.3	771.8	794.0	828.9
47.5°	1006.4	904.9	808.3	722.7	657.7	614.9	592.7	586.4	592.7	613.3	654.5
50°	897.0	792.4	692.6	603.8	534.1	489.7	469.1	461.2	469.1	486.6	527.7
52.5°	795.6	687.8	594.3	508.7	434.2	396.2	374.0	369.3	374.0	394.6	427.9
55°	678.3	586.4	494.5	408.9	343.9	305.9	288.4	283.7	288.4	307.5	342.3
57.5°	562.6	483.4	402.6	324.9	269.4	236.1	220.3	213.9	225.0	237.7	278.9
60°	454.8	391.5	323.3	255.2	209.2	179.1	166.4	164.8	168.0	183.8	212.4
62.5°	356.6	304.3	250.4	194.9	156.9	144.2	128.4	126.8	129.9	139.4	161.7
65°	256.8	223.5	182.3	142.6	112.5	95.1	88.8	90.4	93.5	99.9	120.4
67.5°	179.1	155.3	126.8	99.9	77.7	69.7	63.4	61.8	63.4	74.5	85.6
70°	120.4	106.2	85.6	76.1	53.9	42.8	44.4	39.6	46.0	46.0	55.5
72.5°	79.2	69.7	57.0	44.4	38.0	30.1	30.1	28.5	31.7	33.3	41.2
75°	41.2	31.7	31.7	22.2	15.9	7.9	14.3	12.7	11.1	12.7	15.9
77.5°	28.5	23.8	22.2	17.4	15.9	12.7	12.7	12.7	12.7	14.3	15.9
80°	17.4	17.4	12.7	11.1	9.5	7.9	9.5	9.5	9.5	9.5	11.1
82.5°	11.1	9.5	9.5	7.9	7.9	6.3	6.3	6.3	6.3	6.3	9.5
85°	9.5	6.3	6.3	4.8	6.3	11.1	4.8	6.3	6.3	6.3	4.8
87.5°	3.2	4.8	4.8	4.8	3.2	1.6	3.2	4.8	4.8	7.9	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°	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6	2952.6
2.5°	2957.3	2958.9	2958.9	2957.3	2957.3	2954.1	2960.5	2955.7	2957.3	2963.7	2958.9
5°	2960.5	2962.1	2962.1	2960.5	2960.5	2960.5	2962.1	2962.1	2960.5	2958.9	2962.1
7.5°	2966.8	2965.2	2965.2	2962.1	2962.1	2958.9	2962.1	2957.3	2960.5	2957.3	2962.1
10°	2958.9	2960.5	2958.9	2957.3	2957.3	2955.7	2955.7	2951.0	2952.6	2947.8	2951.0
12.5°	2954.1	2952.6	2952.6	2949.4	2946.2	2943.1	2941.5	2936.7	2936.7	2925.6	2930.4
15°	2941.5	2943.1	2938.3	2932.0	2928.8	2920.9	2917.7	2911.3	2905.0	2897.1	2898.7
17.5°	2930.4	2925.6	2919.3	2912.9	2900.2	2893.9	2887.6	2878.1	2874.9	2865.4	2862.2
20°	2897.1	2893.9	2886.0	2874.9	2867.0	2852.7	2846.4	2836.9	2828.9	2819.4	2814.7
22.5°	2854.3	2851.1	2841.6	2830.5	2817.8	2811.5	2805.2	2787.8	2779.8	2770.3	2768.7
25°	2800.4	2795.7	2786.2	2773.5	2767.1	2749.7	2743.3	2730.7	2727.5	2718.0	2716.4
27.5°	2718.0	2711.7	2700.6	2684.7	2673.6	2662.5	2656.2	2646.7	2643.5	2634.0	2632.4
30°	2594.4	2586.5	2564.3	2557.9	2538.9	2527.8	2527.8	2515.1	2516.7	2510.4	2510.4
32.5°	2399.5	2386.8	2369.3	2356.7	2344.0	2337.6	2337.6	2332.9	2336.1	2336.1	2339.2
35°	2141.1	2123.7	2114.2	2106.3	2106.3	2112.6	2131.6	2136.4	2145.9	2153.8	2160.2
37.5°	1809.9	1808.3	1819.4	1828.9	1852.7	1879.6	1912.9	1941.4	1968.4	1987.4	2006.4
40°	1451.7	1491.3	1523.0	1567.4	1603.8	1656.2	1716.4	1765.5	1811.5	1844.8	1879.6
42.5°	1133.1	1183.9	1250.5	1315.4	1380.4	1451.7	1531.0	1599.1	1659.3	1705.3	1741.7
45°	882.8	952.5	1033.3	1115.7	1199.7	1288.5	1370.9	1440.6	1504.0	1551.6	1588.0
47.5°	711.6	787.7	879.6	969.9	1065.0	1158.5	1250.5	1310.7	1363.0	1401.0	1434.3
50°	588.0	668.8	765.5	868.5	963.6	1057.1	1136.3	1195.0	1237.8	1271.0	1291.6
52.5°	491.3	576.9	679.9	782.9	878.0	963.6	1034.9	1079.3	1114.1	1137.9	1156.9
55°	405.7	488.1	584.8	681.5	775.0	855.8	914.4	947.7	974.7	988.9	1000.0
57.5°	331.2	407.3	496.1	584.8	665.6	732.2	778.2	811.4	824.1	835.2	833.6
60°	259.9	331.2	412.1	488.1	557.9	611.7	645.0	664.0	673.5	678.3	675.1
62.5°	204.4	269.4	331.2	397.8	448.5	494.5	526.2	526.2	530.9	532.5	537.3
65°	152.1	201.3	255.2	304.3	345.5	375.6	393.1	397.8	404.1	402.6	399.4
67.5°	112.5	149.0	188.6	225.0	253.6	272.6	285.3	296.4	294.8	291.6	290.0
70°	77.7	101.4	136.3	158.5	179.1	198.1	201.3	202.9	204.4	206.0	202.9
72.5°	53.9	71.3	90.4	109.4	122.0	129.9	137.9	139.4	139.4	139.4	137.9
75°	27.0	36.5	53.9	61.8	72.9	76.1	82.4	82.4	87.2	80.8	79.2
77.5°	23.8	28.5	38.0	44.4	49.1	53.9	55.5	60.2	58.6	55.5	57.0
80°	14.3	17.4	23.8	27.0	33.3	34.9	36.5	38.0	36.5	38.0	38.0
82.5°	11.1	12.7	15.9	15.9	20.6	20.6	22.2	22.2	23.8	23.8	23.8
85°	6.3	11.1	9.5	19.0	12.7	12.7	15.9	19.0	15.9	15.9	19.0
87.5°	6.3	6.3	4.8	6.3	6.3	6.3	7.9	9.5	9.5	11.1	9.5
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: P249424

CATALOG NUMBER: LSR8B60D010 EC8B60835 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	2952.6	2952.6	2952.6	2952.6
2.5°	2957.3	2960.5	2955.7	2954.1
5°	2962.1	2962.1	2958.9	2958.9
7.5°	2962.1	2962.1	2957.3	2954.1
10°	2949.4	2949.4	2944.6	2941.5
12.5°	2925.6	2925.6	2924.0	2919.3
15°	2895.5	2895.5	2889.2	2884.4
17.5°	2854.3	2857.5	2849.6	2849.6
20°	2809.9	2808.3	2802.0	2798.8
22.5°	2764.0	2760.8	2759.2	2749.7
25°	2714.8	2711.7	2706.9	2702.2
27.5°	2630.9	2629.3	2624.5	2618.2
30°	2502.5	2500.9	2494.5	2494.5
32.5°	2336.1	2334.5	2328.1	2329.7
35°	2163.3	2169.7	2166.5	2160.2
37.5°	2019.1	2023.9	2027.0	2023.9
40°	1898.6	1912.9	1914.5	1917.7
42.5°	1770.3	1789.3	1795.6	1798.8
45°	1616.5	1634.0	1648.2	1645.1
47.5°	1459.6	1472.3	1485.0	1475.5
50°	1309.1	1317.0	1321.8	1321.8
52.5°	1166.5	1166.5	1164.9	1166.5
55°	1003.2	1003.2	996.9	1000.0
57.5°	832.0	835.2	830.4	822.5
60°	673.5	665.6	662.5	657.7
62.5°	524.6	524.6	513.5	527.7
65°	393.1	388.3	383.5	381.9
67.5°	285.3	283.7	278.9	277.3
70°	201.3	194.9	193.3	190.2
72.5°	134.7	134.7	131.5	131.5
75°	82.4	74.5	72.9	74.5
77.5°	57.0	55.5	55.5	53.9
80°	38.0	36.5	39.6	34.9
82.5°	23.8	25.4	23.8	25.4
85°	15.9	19.0	17.4	17.4
87.5°	9.5	9.5	9.5	9.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)