

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: P249190

Luminaire Tested: **LSR8B60D010 EC8B60827 8LBDW0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249190  
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 EC8B60827 8LBDW0WMH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 2700 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5901.0 lumens  
Efficiency: N/A  
Efficacy: 99.2 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

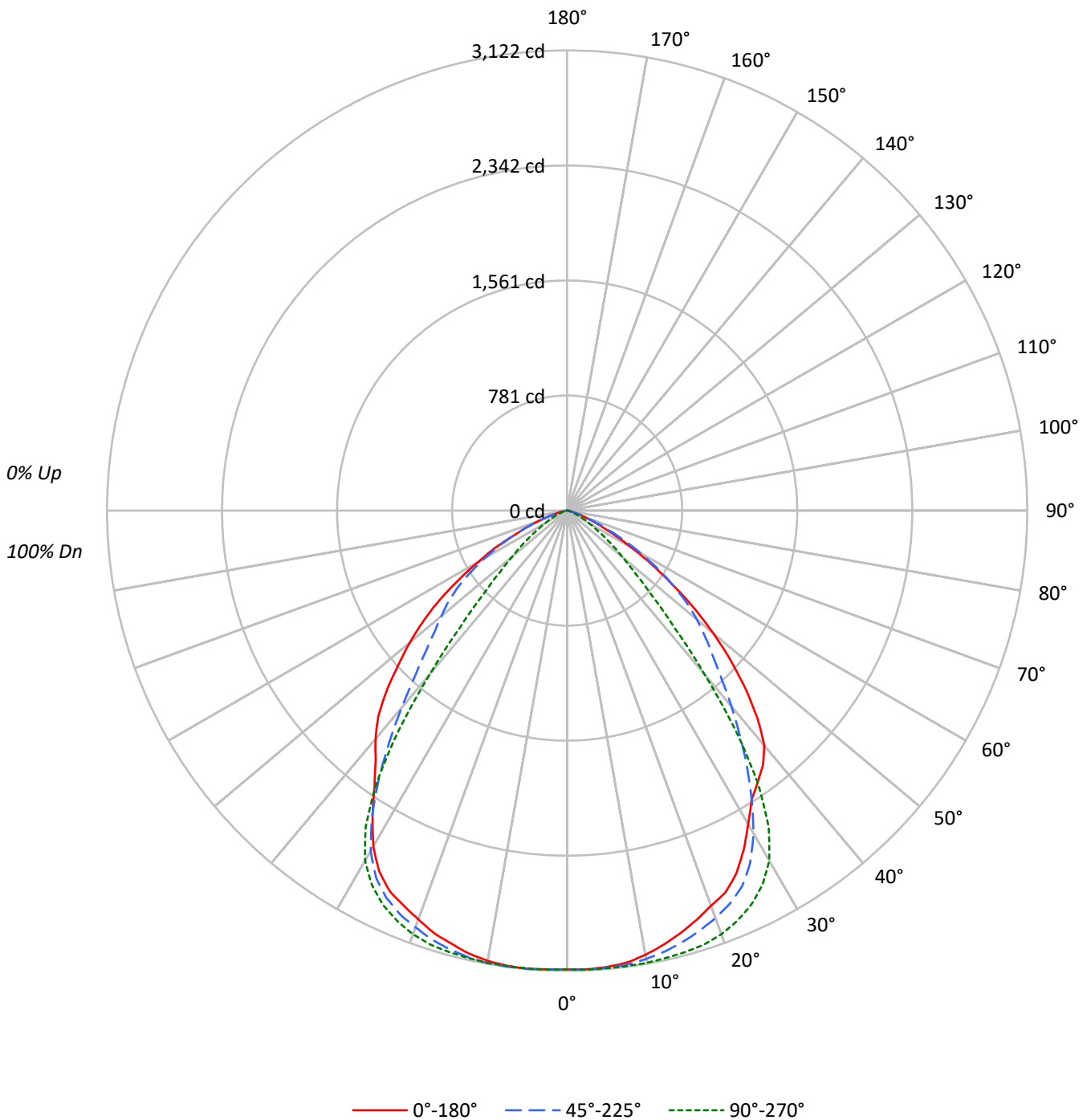
Input Watts (W): 59.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	96009	96009	96009
5°	96221	96478	96583
10°	95815	97543	97124
15°	94754	98968	97100
20°	93616	100359	96851
25°	92399	100477	96948
30°	87414	97651	93663
35°	84805	84869	85750
40°	83756	58392	81402
45°	74628	35057	75649
50°	62053	23329	66864
55°	46541	16085	56691
60°	31539	10719	42776
65°	19022	6954	29383
70°	10549	3769	18077
75°	4778	1597	9365
80°	4155	1776	6535
85°	4741	2371	6510



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	297.1	5.0
10°-20°	862.9	14.6
20°-30°	1309.8	22.2
30°-40°	1375.6	23.3
40°-50°	1031.4	17.5
50°-60°	661.7	11.2
60°-70°	283.1	4.8
70°-80°	66.9	1.1
80°-90°	12.4	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°	2469.8	41.9
0°-40°	3845.5	65.2
0°-60°	5538.6	93.9
0°-90°	5901.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5901.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3114	3114	3114	3114	3114	
5°	3108	3114	3117	3122	3120	295
15°	2968	3030	3100	3080	3042	837
25°	2716	2811	2953	2900	2849	1241
35°	2253	2128	2254	2228	2278	1414
45°	1711	1399	804	1359	1735	1311
55°	866	866	299	902	1054	785
65°	261	308	95	396	403	278
75°	40	47	13	80	79	58
85°	13	8	7	13	18	14
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°	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5
2.5°	3115.2	3118.5	3116.8	3116.8	3115.2	3116.8	3116.8	3120.2	3120.2	3116.8	3115.2
5°	3108.5	3111.8	3111.8	3108.5	3108.5	3116.8	3111.8	3115.2	3115.2	3113.5	3113.5
7.5°	3093.4	3093.4	3100.1	3095.1	3095.1	3100.1	3098.4	3101.8	3105.1	3106.8	3106.8
10°	3060.0	3063.3	3065.0	3065.0	3066.7	3071.7	3075.0	3081.8	3085.1	3088.4	3090.1
12.5°	3018.2	3023.2	3024.9	3023.2	3028.3	3034.9	3043.3	3051.7	3056.7	3063.3	3068.4
15°	2968.1	2968.1	2971.4	2976.5	2979.8	2989.8	2998.2	3008.2	3021.6	3029.9	3038.3
17.5°	2912.9	2916.3	2921.3	2921.3	2928.0	2944.7	2949.7	2964.8	2979.8	2988.1	3004.9
20°	2852.8	2856.1	2861.1	2864.5	2872.8	2886.2	2896.2	2909.6	2926.3	2941.4	2958.1
22.5°	2806.0	2799.3	2802.6	2806.0	2814.4	2826.1	2837.7	2854.4	2871.2	2886.2	2902.9
25°	2715.7	2717.4	2722.4	2725.7	2735.8	2745.8	2759.2	2779.2	2794.3	2811.0	2829.4
27.5°	2593.7	2595.4	2603.8	2603.8	2612.1	2628.8	2637.2	2653.9	2674.0	2690.7	2712.4
30°	2455.0	2458.4	2458.4	2465.1	2470.0	2478.4	2486.8	2503.5	2513.5	2528.6	2558.7
32.5°	2328.0	2331.3	2329.7	2328.0	2323.0	2321.3	2319.6	2323.0	2326.4	2331.3	2343.0
35°	2252.8	2244.4	2237.8	2226.1	2212.7	2196.0	2180.9	2160.9	2142.5	2127.5	2110.8
37.5°	2180.9	2179.3	2169.2	2152.5	2125.8	2095.7	2060.6	2017.2	1973.7	1926.9	1881.8
40°	2080.7	2075.6	2067.3	2043.9	2013.8	1977.1	1930.3	1876.8	1806.6	1734.7	1661.2
42.5°	1910.2	1911.9	1901.9	1883.5	1855.1	1819.9	1771.5	1713.0	1637.8	1552.6	1457.3
45°	1711.3	1711.3	1708.0	1692.9	1672.9	1644.5	1607.7	1559.3	1485.7	1398.8	1296.9
47.5°	1504.1	1505.8	1500.7	1497.4	1489.0	1470.7	1443.9	1407.2	1355.4	1271.8	1169.8
50°	1293.5	1293.5	1301.9	1300.2	1300.2	1293.5	1281.8	1260.1	1215.0	1148.1	1052.9
52.5°	1082.9	1086.3	1091.3	1098.0	1106.3	1119.7	1106.3	1096.3	1067.9	1016.1	934.2
55°	865.7	869.0	877.4	889.1	899.1	912.5	915.8	915.8	900.8	865.7	803.9
57.5°	680.2	675.2	681.9	691.9	705.3	718.6	728.7	740.4	738.7	715.3	665.2
60°	511.4	513.1	518.1	528.1	538.1	549.8	563.2	573.2	578.3	566.6	534.8
62.5°	372.7	372.7	379.4	389.4	394.4	411.1	419.5	424.5	429.5	427.8	407.8
65°	260.7	264.0	267.4	272.4	277.4	287.4	292.5	302.5	305.8	307.5	292.5
67.5°	183.9	178.8	182.2	185.5	190.5	197.2	207.2	207.2	212.2	212.2	202.2
70°	117.0	117.0	118.7	123.7	127.0	128.7	132.0	135.4	140.4	138.7	138.7
72.5°	78.6	76.9	78.6	80.2	81.9	86.9	86.9	88.6	91.9	93.6	86.9
75°	40.1	41.8	45.1	43.5	48.5	45.1	46.8	51.8	50.1	46.8	46.8
77.5°	33.4	33.4	33.4	31.8	35.1	35.1	33.4	36.8	35.1	35.1	33.4
80°	23.4	25.1	23.4	21.7	23.4	21.7	21.7	21.7	21.7	21.7	20.0
82.5°	18.4	15.0	16.7	15.0	16.7	16.7	15.0	13.4	13.4	15.0	13.4
85°	13.4	10.0	11.7	11.7	10.0	10.0	10.0	10.0	10.0	8.3	8.3
87.5°	8.3	5.0	5.0	5.0	6.7	6.7	6.7	5.0	6.7	6.7	3.4
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5
2.5°	3118.5	3116.8	3120.2	3118.5	3118.5	3116.8	3118.5	3116.8	3120.2	3113.5	3115.2
5°	3118.5	3115.2	3116.8	3118.5	3120.2	3116.8	3116.8	3116.8	3120.2	3116.8	3118.5
7.5°	3111.8	3110.1	3115.2	3118.5	3116.8	3115.2	3118.5	3116.8	3120.2	3118.5	3121.8
10°	3098.4	3100.1	3103.5	3108.5	3110.1	3111.8	3115.2	3115.2	3120.2	3113.5	3116.8
12.5°	3078.4	3085.1	3093.4	3096.8	3103.5	3103.5	3106.8	3108.5	3111.8	3110.1	3115.2
15°	3053.3	3061.7	3071.7	3080.1	3088.4	3093.4	3098.4	3100.1	3105.1	3100.1	3101.8
17.5°	3023.2	3033.3	3048.3	3058.3	3071.7	3076.7	3083.4	3086.7	3091.8	3088.4	3090.1
20°	2981.4	2993.2	3009.9	3024.9	3033.3	3044.9	3053.3	3058.3	3061.7	3058.3	3060.0
22.5°	2923.0	2939.7	2961.4	2973.1	2989.8	2999.8	3001.5	3013.2	3021.6	3013.2	3016.6
25°	2854.4	2871.2	2887.9	2912.9	2928.0	2939.7	2951.4	2953.1	2961.4	2959.7	2958.1
27.5°	2740.8	2762.5	2790.9	2811.0	2831.0	2849.4	2862.8	2866.1	2874.5	2871.2	2872.8
30°	2585.4	2608.8	2635.5	2667.3	2695.7	2714.1	2730.8	2742.5	2750.8	2745.8	2744.1
32.5°	2364.8	2388.2	2416.6	2448.3	2481.8	2508.5	2528.6	2543.6	2553.6	2550.3	2541.9
35°	2112.4	2119.1	2137.5	2162.6	2191.0	2219.4	2237.8	2254.5	2266.2	2269.5	2269.5
37.5°	1853.4	1831.7	1818.3	1818.3	1835.0	1846.7	1863.4	1873.4	1891.8	1898.5	1903.5
40°	1602.7	1552.6	1505.8	1470.7	1447.3	1445.6	1445.6	1450.6	1467.3	1489.0	1509.1
42.5°	1378.8	1298.5	1226.7	1161.5	1114.7	1088.0	1076.3	1078.0	1091.3	1111.4	1144.8
45°	1199.9	1099.7	1009.4	930.9	867.4	825.6	805.5	803.9	813.9	837.3	874.1
47.5°	1061.2	954.3	852.3	762.1	693.6	648.4	625.0	618.4	625.0	646.8	690.2
50°	945.9	835.6	730.3	636.7	563.2	516.4	494.7	486.3	494.7	513.1	556.5
52.5°	838.9	725.3	626.7	536.5	457.9	417.8	394.4	389.4	394.4	416.1	451.2
55°	715.3	618.4	521.4	431.2	362.7	322.6	304.2	299.2	304.2	324.2	361.0
57.5°	593.3	509.7	424.5	342.6	284.1	249.0	232.3	225.6	237.3	250.7	294.1
60°	479.6	412.8	340.9	269.1	220.6	188.8	175.5	173.8	177.1	193.9	223.9
62.5°	376.0	320.9	264.0	205.6	165.4	152.1	135.4	133.7	137.0	147.0	170.5
65°	270.7	235.7	192.2	150.4	118.7	100.3	93.6	95.3	98.6	105.3	127.0
67.5°	188.8	163.8	133.7	105.3	81.9	73.5	66.9	65.2	66.9	78.6	90.2
70°	127.0	112.0	90.2	80.2	56.8	45.1	46.8	41.8	48.5	48.5	58.5
72.5°	83.5	73.5	60.2	46.8	40.1	31.8	31.8	30.1	33.4	35.1	43.5
75°	43.5	33.4	33.4	23.4	16.7	8.3	15.0	13.4	11.7	13.4	16.7
77.5°	30.1	25.1	23.4	18.4	16.7	13.4	13.4	13.4	13.4	15.0	16.7
80°	18.4	18.4	13.4	11.7	10.0	8.3	10.0	10.0	10.0	10.0	11.7
82.5°	11.7	10.0	10.0	8.3	8.3	6.7	6.7	6.7	6.7	6.7	10.0
85°	10.0	6.7	6.7	5.0	6.7	11.7	5.0	6.7	6.7	6.7	5.0
87.5°	3.4	5.0	5.0	5.0	3.4	1.7	3.4	5.0	5.0	8.3	6.7
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°	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5	3113.5
2.5°	3118.5	3120.2	3120.2	3118.5	3118.5	3115.2	3121.8	3116.8	3118.5	3125.2	3120.2
5°	3121.8	3123.5	3123.5	3121.8	3121.8	3121.8	3123.5	3123.5	3121.8	3120.2	3123.5
7.5°	3128.5	3126.9	3126.9	3123.5	3123.5	3120.2	3123.5	3118.5	3121.8	3118.5	3123.5
10°	3120.2	3121.8	3120.2	3118.5	3118.5	3116.8	3116.8	3111.8	3113.5	3108.5	3111.8
12.5°	3115.2	3113.5	3113.5	3110.1	3106.8	3103.5	3101.8	3096.8	3096.8	3085.1	3090.1
15°	3101.8	3103.5	3098.4	3091.8	3088.4	3080.1	3076.7	3070.0	3063.3	3055.0	3056.7
17.5°	3090.1	3085.1	3078.4	3071.7	3058.3	3051.7	3044.9	3034.9	3031.6	3021.6	3018.2
20°	3055.0	3051.7	3043.3	3031.6	3023.2	3008.2	3001.5	2991.5	2983.1	2973.1	2968.1
22.5°	3009.9	3006.5	2996.5	2984.8	2971.4	2964.8	2958.1	2939.7	2931.3	2921.3	2919.6
25°	2953.1	2948.0	2938.0	2924.6	2917.9	2899.6	2892.9	2879.5	2876.2	2866.1	2864.5
27.5°	2866.1	2859.5	2847.8	2831.0	2819.3	2807.7	2801.0	2790.9	2787.6	2777.6	2775.9
30°	2735.8	2727.4	2704.0	2697.4	2677.3	2665.6	2665.6	2652.2	2653.9	2647.2	2647.2
32.5°	2530.2	2516.9	2498.5	2485.1	2471.7	2465.1	2465.1	2460.0	2463.4	2463.4	2466.7
35°	2257.8	2239.5	2229.4	2221.1	2221.1	2227.7	2247.8	2252.8	2262.8	2271.2	2277.9
37.5°	1908.5	1906.9	1918.6	1928.6	1953.7	1982.1	2017.2	2047.3	2075.6	2095.7	2115.8
40°	1530.8	1572.6	1606.0	1652.9	1691.3	1746.4	1809.9	1861.7	1910.2	1945.3	1982.1
42.5°	1194.9	1248.4	1318.6	1387.1	1455.6	1530.8	1614.4	1686.3	1749.8	1798.2	1836.7
45°	930.9	1004.4	1089.7	1176.5	1265.1	1358.7	1445.6	1519.1	1586.0	1636.1	1674.6
47.5°	750.4	830.6	927.5	1022.8	1123.1	1221.7	1318.6	1382.1	1437.2	1477.4	1512.5
50°	620.0	705.3	807.2	915.8	1016.1	1114.7	1198.3	1260.1	1305.2	1340.3	1362.0
52.5°	518.1	608.3	717.0	825.6	925.8	1016.1	1091.3	1138.1	1174.9	1199.9	1220.0
55°	427.8	514.7	616.7	718.6	817.2	902.4	964.3	999.4	1027.8	1042.8	1054.5
57.5°	349.3	429.5	523.1	616.7	701.9	772.1	820.6	855.7	869.0	880.7	879.1
60°	274.1	349.3	434.5	514.7	588.3	645.1	680.2	700.2	710.3	715.3	711.9
62.5°	215.6	284.1	349.3	419.5	473.0	521.4	554.9	554.9	559.9	561.5	566.6
65°	160.4	212.2	269.1	320.9	364.3	396.1	414.5	419.5	426.2	424.5	421.1
67.5°	118.7	157.1	198.9	237.3	267.4	287.4	300.8	312.5	310.9	307.5	305.8
70°	81.9	107.0	143.7	167.1	188.8	208.9	212.2	213.9	215.6	217.3	213.9
72.5°	56.8	75.2	95.3	115.3	128.7	137.0	145.4	147.0	147.0	147.0	145.4
75°	28.4	38.4	56.8	65.2	76.9	80.2	86.9	86.9	91.9	85.2	83.5
77.5°	25.1	30.1	40.1	46.8	51.8	56.8	58.5	63.5	61.8	58.5	60.2
80°	15.0	18.4	25.1	28.4	35.1	36.8	38.4	40.1	38.4	40.1	40.1
82.5°	11.7	13.4	16.7	16.7	21.7	21.7	23.4	23.4	25.1	25.1	25.1
85°	6.7	11.7	10.0	20.0	13.4	13.4	16.7	20.0	16.7	16.7	20.0
87.5°	6.7	6.7	5.0	6.7	6.7	6.7	8.3	10.0	10.0	11.7	10.0
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: P249190

CATALOG NUMBER: LSR8B60D010 EC8B60827 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3113.5	3113.5	3113.5	3113.5
2.5°	3118.5	3121.8	3116.8	3115.2
5°	3123.5	3123.5	3120.2	3120.2
7.5°	3123.5	3123.5	3118.5	3115.2
10°	3110.1	3110.1	3105.1	3101.8
12.5°	3085.1	3085.1	3083.4	3078.4
15°	3053.3	3053.3	3046.6	3041.6
17.5°	3009.9	3013.2	3004.9	3004.9
20°	2963.1	2961.4	2954.7	2951.4
22.5°	2914.6	2911.3	2909.6	2899.6
25°	2862.8	2859.5	2854.4	2849.4
27.5°	2774.2	2772.6	2767.5	2760.9
30°	2638.8	2637.2	2630.5	2630.5
32.5°	2463.4	2461.7	2455.0	2456.7
35°	2281.2	2287.9	2284.6	2277.9
37.5°	2129.1	2134.2	2137.5	2134.2
40°	2002.1	2017.2	2018.8	2022.2
42.5°	1866.8	1886.8	1893.5	1896.8
45°	1704.6	1723.0	1738.1	1734.7
47.5°	1539.2	1552.6	1565.9	1555.9
50°	1380.4	1388.8	1393.8	1393.8
52.5°	1230.0	1230.0	1228.4	1230.0
55°	1057.9	1057.9	1051.2	1054.5
57.5°	877.4	880.7	875.7	867.4
60°	710.3	701.9	698.6	693.6
62.5°	553.2	553.2	541.5	556.5
65°	414.5	409.5	404.4	402.7
67.5°	300.8	299.2	294.1	292.5
70°	212.2	205.6	203.9	200.5
72.5°	142.1	142.1	138.7	138.7
75°	86.9	78.6	76.9	78.6
77.5°	60.2	58.5	58.5	56.8
80°	40.1	38.4	41.8	36.8
82.5°	25.1	26.7	25.1	26.7
85°	16.7	20.0	18.4	18.4
87.5°	10.0	10.0	10.0	10.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)