

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: P249217

Luminaire Tested: **LSR8B60D010 EC8B60840 8LBDW0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249217  
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 EC8B60840 8LBDW0WMH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6249.0 lumens  
Efficiency: N/A  
Efficacy: 105.0 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

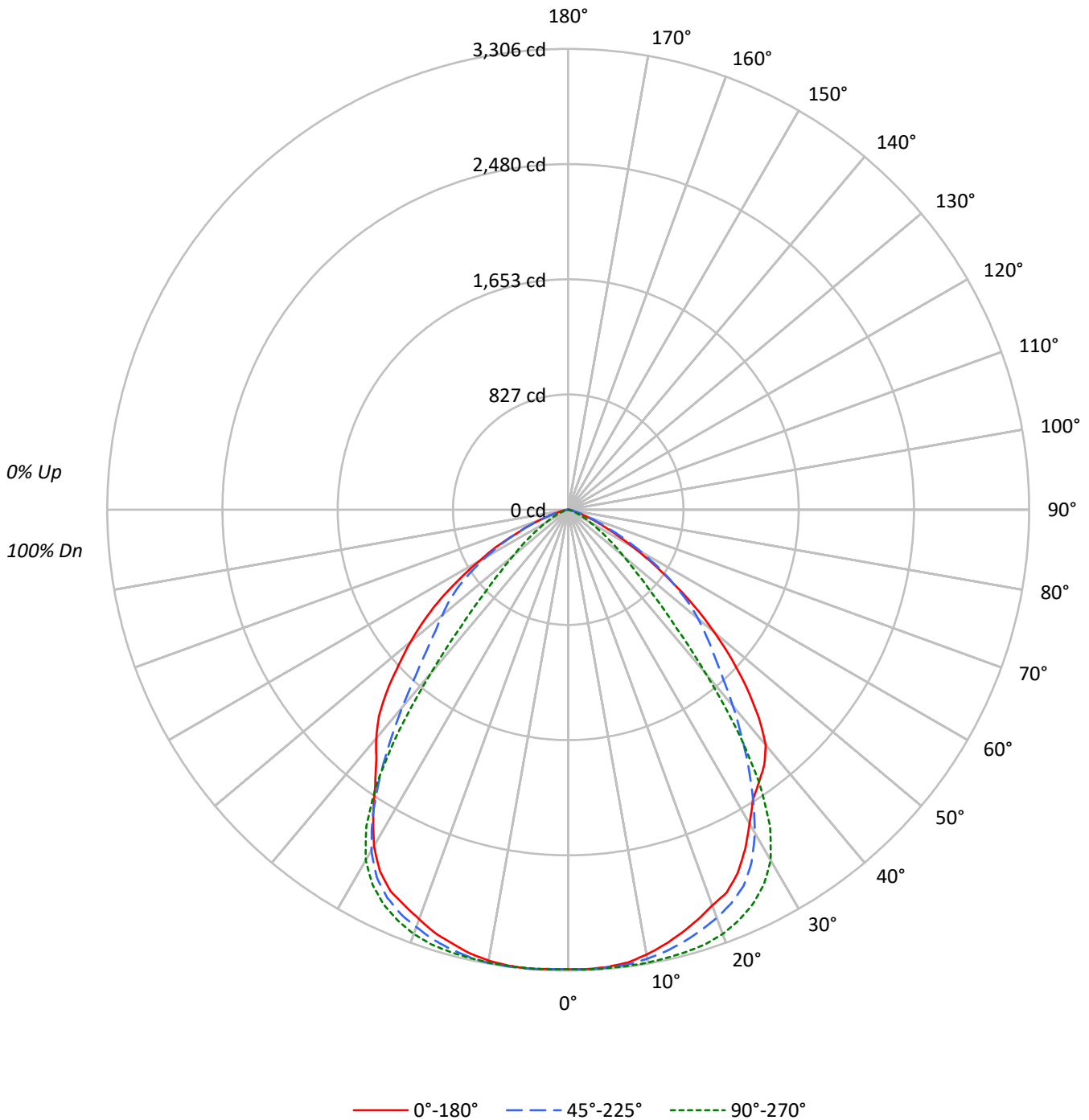
Input Watts (W): 59.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	101670	101670	101670
5°	101895	102167	102279
10°	101467	103295	102851
15°	100341	104804	102828
20°	99135	106279	102561
25°	97850	106400	102668
30°	92570	103409	99186
35°	89808	89872	90805
40°	88696	61838	86204
45°	79033	37124	80110
50°	65713	24706	70808
55°	49283	17032	60035
60°	33402	11348	45299
65°	20146	7362	31120
70°	11171	3994	19150
75°	5064	1692	9913
80°	4404	1882	6908
85°	5024	2512	6899



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	314.7	5.0
10°-20°	913.8	14.6
20°-30°	1387.0	22.2
30°-40°	1456.8	23.3
40°-50°	1092.2	17.5
50°-60°	700.8	11.2
60°-70°	299.8	4.8
70°-80°	70.8	1.1
80°-90°	13.2	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°	2615.5	41.9
0°-40°	4072.3	65.2
0°-60°	5865.2	93.9
0°-90°	6249.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6249.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3297	3297	3297	3297	3297	
5°	3292	3297	3301	3306	3304	313
15°	3143	3209	3283	3262	3221	887
25°	2876	2977	3127	3071	3018	1314
35°	2386	2253	2387	2359	2412	1497
45°	1812	1481	851	1439	1837	1388
55°	917	917	317	956	1117	832
65°	276	326	101	419	426	295
75°	42	50	14	85	83	62
85°	14	9	7	14	20	15
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°	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1
2.5°	3298.9	3302.4	3300.6	3300.6	3298.9	3300.6	3300.6	3304.2	3304.2	3300.6	3298.9
5°	3291.8	3295.3	3295.3	3291.8	3291.8	3300.6	3295.3	3298.9	3298.9	3297.1	3297.1
7.5°	3275.9	3275.9	3282.9	3277.7	3277.7	3282.9	3281.2	3284.7	3288.3	3290.0	3290.0
10°	3240.5	3244.0	3245.8	3245.8	3247.6	3252.8	3256.4	3263.5	3267.0	3270.6	3272.3
12.5°	3196.2	3201.5	3203.3	3201.5	3206.8	3213.9	3222.8	3231.6	3236.9	3244.0	3249.3
15°	3143.1	3143.1	3146.7	3152.0	3155.5	3166.1	3175.0	3185.6	3199.7	3208.6	3217.5
17.5°	3084.7	3088.3	3093.6	3093.6	3100.7	3118.3	3123.7	3139.6	3155.5	3164.4	3182.1
20°	3021.0	3024.5	3029.9	3033.4	3042.3	3056.4	3067.0	3081.2	3098.9	3114.8	3132.5
22.5°	2971.5	2964.4	2967.9	2971.5	2980.3	2992.7	3005.1	3022.8	3040.5	3056.4	3074.1
25°	2875.9	2877.7	2883.0	2886.5	2897.1	2907.8	2921.9	2943.1	2959.1	2976.8	2996.2
27.5°	2746.7	2748.5	2757.3	2757.3	2766.2	2783.9	2792.7	2810.4	2831.7	2849.3	2872.4
30°	2599.8	2603.3	2603.3	2610.4	2615.7	2624.6	2633.4	2651.1	2661.7	2677.7	2709.6
32.5°	2465.3	2468.8	2467.1	2465.3	2460.0	2458.2	2456.4	2460.0	2463.5	2468.8	2481.2
35°	2385.7	2376.8	2369.7	2357.4	2343.2	2325.5	2309.6	2288.3	2268.9	2252.9	2235.2
37.5°	2309.6	2307.8	2297.2	2279.5	2251.1	2219.3	2182.2	2136.1	2090.1	2040.6	1992.8
40°	2203.4	2198.0	2189.2	2164.4	2132.6	2093.6	2044.1	1987.5	1913.1	1837.0	1759.2
42.5°	2022.8	2024.6	2014.0	1994.5	1964.5	1927.3	1876.0	1814.0	1734.4	1644.1	1543.3
45°	1812.3	1812.3	1808.7	1792.8	1771.6	1741.5	1702.5	1651.2	1573.4	1481.3	1373.3
47.5°	1592.8	1594.6	1589.2	1585.7	1576.9	1557.4	1529.1	1490.2	1435.3	1346.8	1238.8
50°	1369.8	1369.8	1378.7	1376.9	1376.9	1369.8	1357.4	1334.4	1286.6	1215.8	1115.0
52.5°	1146.8	1150.4	1155.7	1162.7	1171.6	1185.7	1171.6	1161.0	1130.9	1076.0	989.3
55°	916.7	920.3	929.1	941.5	952.2	966.3	969.8	969.8	953.9	916.7	851.3
57.5°	720.3	715.0	722.1	732.7	746.9	761.0	771.6	784.0	782.2	757.5	704.4
60°	541.6	543.3	548.6	559.3	569.9	582.3	596.4	607.0	612.4	600.0	566.3
62.5°	394.7	394.7	401.7	412.3	417.7	435.4	444.2	449.5	454.8	453.0	431.8
65°	276.1	279.6	283.2	288.5	293.8	304.4	309.7	320.3	323.9	325.6	309.7
67.5°	194.7	189.4	192.9	196.4	201.8	208.9	219.5	219.5	224.7	224.7	214.1
70°	123.9	123.9	125.7	131.0	134.5	136.3	139.8	143.3	148.7	146.9	146.9
72.5°	83.2	81.4	83.2	85.0	86.7	92.0	92.0	93.8	97.3	99.1	92.0
75°	42.5	44.3	47.8	46.0	51.3	47.8	49.5	54.9	53.1	49.5	49.5
77.5°	35.4	35.4	35.4	33.6	37.2	37.2	35.4	38.9	37.2	37.2	35.4
80°	24.8	26.5	24.8	23.0	24.8	23.0	23.0	23.0	23.0	23.0	21.2
82.5°	19.5	15.9	17.7	15.9	17.7	17.7	15.9	14.2	14.2	15.9	14.2
85°	14.2	10.6	12.4	12.4	10.6	10.6	10.6	10.6	10.6	8.8	8.8
87.5°	8.8	5.3	5.3	5.3	7.1	7.1	7.1	5.3	7.1	7.1	3.6
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°	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1
2.5°	3302.4	3300.6	3304.2	3302.4	3302.4	3300.6	3302.4	3300.6	3304.2	3297.1	3298.9
5°	3302.4	3298.9	3300.6	3302.4	3304.2	3300.6	3300.6	3300.6	3304.2	3300.6	3302.4
7.5°	3295.3	3293.5	3298.9	3302.4	3300.6	3298.9	3302.4	3300.6	3304.2	3302.4	3305.9
10°	3281.2	3282.9	3286.5	3291.8	3293.5	3295.3	3298.9	3298.9	3304.2	3297.1	3300.6
12.5°	3259.9	3267.0	3275.9	3279.4	3286.5	3286.5	3290.0	3291.8	3295.3	3293.5	3298.9
15°	3233.4	3242.2	3252.8	3261.7	3270.6	3275.9	3281.2	3282.9	3288.3	3282.9	3284.7
17.5°	3201.5	3212.1	3228.1	3238.7	3252.8	3258.2	3265.2	3268.8	3274.1	3270.6	3272.3
20°	3157.3	3169.7	3187.4	3203.3	3212.1	3224.5	3233.4	3238.7	3242.2	3238.7	3240.5
22.5°	3095.3	3113.1	3136.0	3148.4	3166.1	3176.8	3178.5	3190.9	3199.7	3190.9	3194.5
25°	3022.8	3040.5	3058.2	3084.7	3100.7	3113.1	3125.4	3127.2	3136.0	3134.3	3132.5
27.5°	2902.4	2925.5	2955.5	2976.8	2998.0	3017.5	3031.6	3035.2	3044.0	3040.5	3042.3
30°	2737.8	2762.6	2791.0	2824.6	2854.7	2874.1	2891.8	2904.2	2913.0	2907.8	2906.0
32.5°	2504.2	2529.0	2559.1	2592.7	2628.1	2656.4	2677.7	2693.6	2704.2	2700.7	2691.8
35°	2237.0	2244.1	2263.6	2290.1	2320.2	2350.3	2369.7	2387.4	2399.8	2403.4	2403.4
37.5°	1962.7	1939.7	1925.5	1925.5	1943.2	1955.6	1973.3	1983.9	2003.4	2010.5	2015.8
40°	1697.2	1644.1	1594.6	1557.4	1532.6	1530.9	1530.9	1536.2	1553.9	1576.9	1598.1
42.5°	1460.1	1375.1	1299.0	1230.0	1180.5	1152.1	1139.8	1141.5	1155.7	1176.9	1212.3
45°	1270.7	1164.5	1068.9	985.8	918.5	874.3	853.0	851.3	861.9	886.6	925.6
47.5°	1123.8	1010.5	902.6	807.0	734.5	686.7	661.9	654.8	661.9	684.9	730.9
50°	1001.7	884.9	773.4	674.3	596.4	546.9	523.8	515.0	523.8	543.3	589.3
52.5°	888.4	768.1	663.7	568.1	484.9	442.4	417.7	412.3	417.7	440.7	477.9
55°	757.5	654.8	552.2	456.6	384.1	341.6	322.1	316.8	322.1	343.4	382.3
57.5°	628.3	539.8	449.5	362.8	300.9	263.7	246.0	238.9	251.3	265.5	311.5
60°	507.9	437.1	361.0	284.9	233.6	200.0	185.8	184.0	187.6	205.3	237.1
62.5°	398.2	339.8	279.6	217.7	175.2	161.0	143.3	141.6	145.1	155.7	180.5
65°	286.7	249.6	203.5	159.3	125.7	106.2	99.1	100.9	104.4	111.5	134.5
67.5°	200.0	173.4	141.6	111.5	86.7	77.9	70.8	69.0	70.8	83.2	95.6
70°	134.5	118.6	95.6	85.0	60.2	47.8	49.5	44.3	51.3	51.3	61.9
72.5°	88.5	77.9	63.7	49.5	42.5	33.6	33.6	31.9	35.4	37.2	46.0
75°	46.0	35.4	35.4	24.8	17.7	8.8	15.9	14.2	12.4	14.2	17.7
77.5°	31.9	26.5	24.8	19.5	17.7	14.2	14.2	14.2	14.2	15.9	17.7
80°	19.5	19.5	14.2	12.4	10.6	8.8	10.6	10.6	10.6	10.6	12.4
82.5°	12.4	10.6	10.6	8.8	8.8	7.1	7.1	7.1	7.1	7.1	10.6
85°	10.6	7.1	7.1	5.3	7.1	12.4	5.3	7.1	7.1	7.1	5.3
87.5°	3.6	5.3	5.3	5.3	3.6	1.8	3.6	5.3	5.3	8.8	7.1
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1	3297.1
2.5°	3302.4	3304.2	3304.2	3302.4	3302.4	3298.9	3305.9	3300.6	3302.4	3309.5	3304.2
5°	3305.9	3307.7	3307.7	3305.9	3305.9	3305.9	3307.7	3307.7	3305.9	3304.2	3307.7
7.5°	3313.0	3311.3	3311.3	3307.7	3307.7	3304.2	3307.7	3302.4	3305.9	3302.4	3307.7
10°	3304.2	3305.9	3304.2	3302.4	3302.4	3300.6	3300.6	3295.3	3297.1	3291.8	3295.3
12.5°	3298.9	3297.1	3297.1	3293.5	3290.0	3286.5	3284.7	3279.4	3279.4	3267.0	3272.3
15°	3284.7	3286.5	3281.2	3274.1	3270.6	3261.7	3258.2	3251.1	3244.0	3235.2	3236.9
17.5°	3272.3	3267.0	3259.9	3252.8	3238.7	3231.6	3224.5	3213.9	3210.4	3199.7	3196.2
20°	3235.2	3231.6	3222.8	3210.4	3201.5	3185.6	3178.5	3167.9	3159.0	3148.4	3143.1
22.5°	3187.4	3183.8	3173.2	3160.8	3146.7	3139.6	3132.5	3113.1	3104.2	3093.6	3091.8
25°	3127.2	3121.9	3111.3	3097.1	3090.0	3070.6	3063.5	3049.3	3045.8	3035.2	3033.4
27.5°	3035.2	3028.1	3015.7	2998.0	2985.6	2973.2	2966.2	2955.5	2952.0	2941.4	2939.6
30°	2897.1	2888.3	2863.5	2856.4	2835.2	2822.8	2822.8	2808.6	2810.4	2803.3	2803.3
32.5°	2679.5	2665.3	2645.8	2631.6	2617.5	2610.4	2610.4	2605.1	2608.7	2608.7	2612.2
35°	2391.0	2371.5	2360.9	2352.0	2352.0	2359.1	2380.4	2385.7	2396.3	2405.1	2412.2
37.5°	2021.1	2019.3	2031.7	2042.3	2068.9	2099.0	2136.1	2168.0	2198.0	2219.3	2240.5
40°	1621.1	1665.4	1700.8	1750.3	1791.0	1849.4	1916.7	1971.5	2022.8	2060.0	2099.0
42.5°	1265.4	1322.0	1396.4	1468.9	1541.5	1621.1	1709.6	1785.7	1853.0	1904.3	1945.0
45°	985.8	1063.6	1153.9	1245.9	1339.7	1438.8	1530.9	1608.7	1679.5	1732.6	1773.3
47.5°	794.6	879.6	982.2	1083.1	1189.3	1293.7	1396.4	1463.6	1522.0	1564.5	1601.7
50°	656.6	746.9	854.8	969.8	1076.0	1180.5	1268.9	1334.4	1382.2	1419.4	1442.4
52.5°	548.6	644.2	759.2	874.3	980.4	1076.0	1155.7	1205.2	1244.2	1270.7	1291.9
55°	453.0	545.1	653.1	761.0	865.4	955.7	1021.1	1058.3	1088.4	1104.3	1116.7
57.5°	369.9	454.8	553.9	653.1	743.3	817.7	869.0	906.1	920.3	932.7	930.9
60°	290.3	369.9	460.1	545.1	623.0	683.1	720.3	741.5	752.1	757.5	753.9
62.5°	228.3	300.9	369.9	444.2	500.8	552.2	587.6	587.6	592.9	594.6	600.0
65°	169.9	224.7	284.9	339.8	385.8	419.4	438.9	444.2	451.3	449.5	446.0
67.5°	125.7	166.4	210.6	251.3	283.2	304.4	318.5	331.0	329.2	325.6	323.9
70°	86.7	113.3	152.2	177.0	200.0	221.2	224.7	226.5	228.3	230.1	226.5
72.5°	60.2	79.6	100.9	122.1	136.3	145.1	154.0	155.7	155.7	155.7	154.0
75°	30.1	40.7	60.2	69.0	81.4	85.0	92.0	92.0	97.3	90.2	88.5
77.5°	26.5	31.9	42.5	49.5	54.9	60.2	61.9	67.3	65.5	61.9	63.7
80°	15.9	19.5	26.5	30.1	37.2	38.9	40.7	42.5	40.7	42.5	42.5
82.5°	12.4	14.2	17.7	17.7	23.0	23.0	24.8	24.8	26.5	26.5	26.5
85°	7.1	12.4	10.6	21.2	14.2	14.2	17.7	21.2	17.7	17.7	21.2
87.5°	7.1	7.1	5.3	7.1	7.1	7.1	8.8	10.6	10.6	12.4	10.6
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: P249217

CATALOG NUMBER: LSR8B60D010 EC8B60840 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3297.1	3297.1	3297.1	3297.1
2.5°	3302.4	3305.9	3300.6	3298.9
5°	3307.7	3307.7	3304.2	3304.2
7.5°	3307.7	3307.7	3302.4	3298.9
10°	3293.5	3293.5	3288.3	3284.7
12.5°	3267.0	3267.0	3265.2	3259.9
15°	3233.4	3233.4	3226.3	3221.0
17.5°	3187.4	3190.9	3182.1	3182.1
20°	3137.8	3136.0	3129.0	3125.4
22.5°	3086.5	3083.0	3081.2	3070.6
25°	3031.6	3028.1	3022.8	3017.5
27.5°	2937.8	2936.1	2930.7	2923.7
30°	2794.5	2792.7	2785.6	2785.6
32.5°	2608.7	2606.9	2599.8	2601.6
35°	2415.7	2422.8	2419.3	2412.2
37.5°	2254.7	2260.0	2263.6	2260.0
40°	2120.2	2136.1	2137.9	2141.5
42.5°	1976.9	1998.1	2005.2	2008.7
45°	1805.2	1824.6	1840.6	1837.0
47.5°	1629.9	1644.1	1658.3	1647.7
50°	1461.8	1470.7	1476.0	1476.0
52.5°	1302.6	1302.6	1300.8	1302.6
55°	1120.3	1120.3	1113.2	1116.7
57.5°	929.1	932.7	927.3	918.5
60°	752.1	743.3	739.8	734.5
62.5°	585.8	585.8	573.4	589.3
65°	438.9	433.6	428.3	426.5
67.5°	318.5	316.8	311.5	309.7
70°	224.7	217.7	215.9	212.4
72.5°	150.4	150.4	146.9	146.9
75°	92.0	83.2	81.4	83.2
77.5°	63.7	61.9	61.9	60.2
80°	42.5	40.7	44.3	38.9
82.5°	26.5	28.3	26.5	28.3
85°	17.7	21.2	19.5	19.5
87.5°	10.6	10.6	10.6	10.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)