

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: P249226

Luminaire Tested: **LSR8B60D010 EC8B60850 8LBDW0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249226  
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 EC8B60850 8LBDW0WMH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6371.0 lumens  
Efficiency: N/A  
Efficacy: 107.1 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

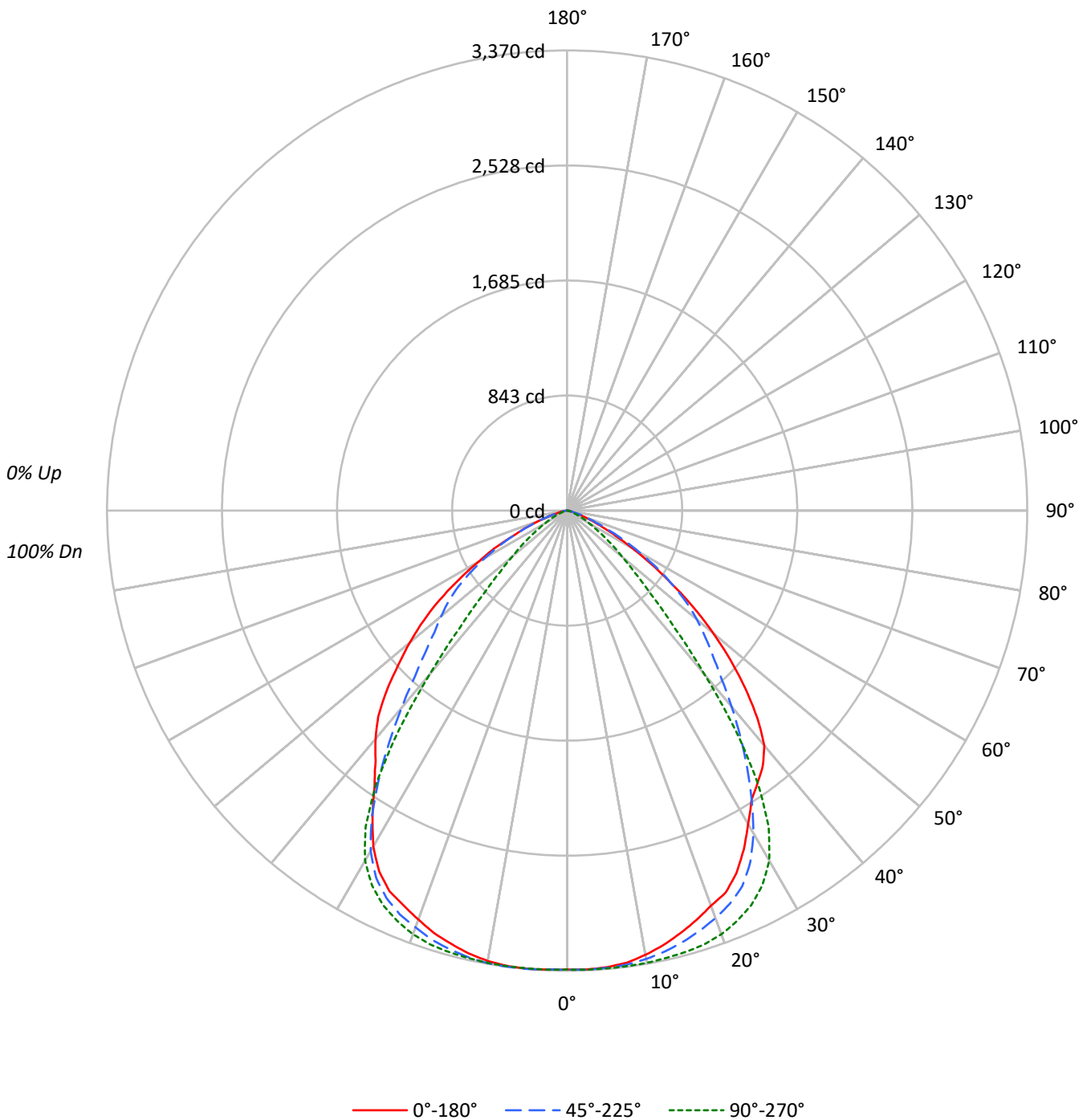
Input Watts (W): 59.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	103656	103656	103656
5°	103882	104164	104275
10°	103446	105312	104858
15°	102301	106850	104836
20°	101071	108353	104566
25°	99759	108479	104672
30°	94379	105428	101123
35°	91562	91626	92578
40°	90426	63042	87886
45°	80572	37848	81676
50°	66999	25191	72189
55°	50245	17365	61207
60°	34049	11570	46180
65°	20540	7508	31725
70°	11387	4066	19519
75°	5159	1716	10103
80°	4493	1918	7050
85°	5095	2547	7041



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	320.8	5.0
10°-20°	931.7	14.6
20°-30°	1414.1	22.2
30°-40°	1485.2	23.3
40°-50°	1113.5	17.5
50°-60°	714.5	11.2
60°-70°	305.6	4.8
70°-80°	72.2	1.1
80°-90°	13.4	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°	2666.5	41.9
0°-40°	4151.8	65.2
0°-60°	5979.7	93.9
0°-90°	6371.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6371.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3362	3362	3362	3362	3362	
5°	3356	3362	3365	3370	3369	319
15°	3204	3271	3347	3325	3284	904
25°	2932	3035	3188	3130	3076	1339
35°	2432	2297	2434	2405	2459	1527
45°	1848	1510	868	1467	1873	1415
55°	935	935	323	974	1138	848
65°	282	332	103	428	435	300
75°	43	50	14	87	85	63
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°	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5
2.5°	3363.3	3366.9	3365.1	3365.1	3363.3	3365.1	3365.1	3368.7	3368.7	3365.1	3363.3
5°	3356.0	3359.7	3359.7	3356.0	3356.0	3365.1	3359.7	3363.3	3363.3	3361.5	3361.5
7.5°	3339.8	3339.8	3347.0	3341.6	3341.6	3347.0	3345.2	3348.8	3352.5	3354.3	3354.3
10°	3303.7	3307.3	3309.1	3309.1	3311.0	3316.3	3320.0	3327.2	3330.8	3334.4	3336.2
12.5°	3258.6	3264.0	3265.8	3264.0	3269.5	3276.7	3285.7	3294.7	3300.1	3307.3	3312.8
15°	3204.5	3204.5	3208.1	3213.5	3217.1	3228.0	3237.0	3247.8	3262.2	3271.3	3280.3
17.5°	3145.0	3148.6	3154.0	3154.0	3161.2	3179.2	3184.6	3200.9	3217.1	3226.1	3244.2
20°	3080.0	3083.6	3089.0	3092.6	3101.6	3116.1	3126.9	3141.3	3159.4	3175.6	3193.7
22.5°	3029.5	3022.3	3025.8	3029.5	3038.5	3051.1	3063.8	3081.8	3099.8	3116.1	3134.1
25°	2932.0	2933.8	2939.3	2942.8	2953.7	2964.5	2979.0	3000.6	3016.8	3034.9	3054.7
27.5°	2800.3	2802.1	2811.1	2811.1	2820.2	2838.2	2847.2	2865.3	2886.9	2905.0	2928.4
30°	2650.6	2654.2	2654.2	2661.4	2666.8	2675.8	2684.8	2702.9	2713.7	2730.0	2762.4
32.5°	2513.4	2517.0	2515.2	2513.4	2508.0	2506.2	2504.4	2508.0	2511.6	2517.0	2529.7
35°	2432.3	2423.2	2416.0	2403.4	2388.9	2370.9	2354.6	2333.0	2313.1	2296.9	2278.9
37.5°	2354.6	2352.8	2342.0	2324.0	2295.1	2262.6	2224.8	2177.8	2130.9	2080.4	2031.7
40°	2246.4	2241.0	2232.0	2206.7	2174.2	2134.5	2084.0	2026.3	1950.5	1872.9	1793.5
42.5°	2062.3	2064.1	2053.3	2033.5	2002.8	1964.9	1912.6	1849.4	1768.3	1676.2	1573.4
45°	1847.6	1847.6	1844.0	1827.8	1806.1	1775.5	1735.8	1683.4	1604.1	1510.2	1400.1
47.5°	1623.9	1625.7	1620.3	1616.7	1607.6	1587.8	1558.9	1519.3	1463.3	1373.1	1263.0
50°	1396.6	1396.6	1405.6	1403.8	1403.8	1396.6	1383.9	1360.5	1311.8	1239.6	1136.7
52.5°	1169.2	1172.8	1178.2	1185.4	1194.5	1208.9	1194.5	1183.6	1153.0	1097.0	1008.6
55°	934.6	938.3	947.3	959.9	970.7	985.2	988.8	988.8	972.5	934.6	867.9
57.5°	734.4	728.9	736.2	747.0	761.4	775.9	786.7	799.3	797.5	772.3	718.1
60°	552.1	553.9	559.3	570.2	581.0	593.6	608.1	618.9	624.3	611.7	577.4
62.5°	402.4	402.4	409.6	420.4	425.8	443.9	452.9	458.3	463.7	461.9	440.3
65°	281.5	285.1	288.7	294.1	299.5	310.3	315.8	326.6	330.2	332.0	315.8
67.5°	198.5	193.1	196.7	200.3	205.7	212.9	223.7	223.7	229.1	229.1	218.3
70°	126.3	126.3	128.1	133.5	137.1	138.9	142.6	146.1	151.6	149.8	149.8
72.5°	84.8	83.0	84.8	86.6	88.4	93.8	93.8	95.6	99.2	101.1	93.8
75°	43.3	45.1	48.7	46.9	52.3	48.7	50.5	55.9	54.1	50.5	50.5
77.5°	36.1	36.1	36.1	34.3	37.9	37.9	36.1	39.7	37.9	37.9	36.1
80°	25.3	27.1	25.3	23.4	25.3	23.4	23.4	23.4	23.4	23.4	21.6
82.5°	19.9	16.2	18.1	16.2	18.1	18.1	16.2	14.4	14.4	16.2	14.4
85°	14.4	10.8	12.6	12.6	10.8	10.8	10.8	10.8	10.8	9.0	9.0
87.5°	9.0	5.4	5.4	5.4	7.2	7.2	7.2	5.4	7.2	7.2	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



TEST NUMBER: P249226

CATALOG NUMBER: LSR8B60D010 EC8B60850 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5
2.5°	3366.9	3365.1	3368.7	3366.9	3366.9	3365.1	3366.9	3365.1	3368.7	3361.5	3363.3
5°	3366.9	3363.3	3365.1	3366.9	3368.7	3365.1	3365.1	3365.1	3368.7	3365.1	3366.9
7.5°	3359.7	3357.8	3363.3	3366.9	3365.1	3363.3	3366.9	3365.1	3368.7	3366.9	3370.5
10°	3345.2	3347.0	3350.6	3356.0	3357.8	3359.7	3363.3	3363.3	3368.7	3361.5	3365.1
12.5°	3323.6	3330.8	3339.8	3343.4	3350.6	3350.6	3354.3	3356.0	3359.7	3357.8	3363.3
15°	3296.5	3305.5	3316.3	3325.4	3334.4	3339.8	3345.2	3347.0	3352.5	3347.0	3348.8
17.5°	3264.0	3274.8	3291.1	3301.9	3316.3	3321.8	3329.0	3332.6	3338.0	3334.4	3336.2
20°	3218.9	3231.6	3249.6	3265.8	3274.8	3287.5	3296.5	3301.9	3305.5	3301.9	3303.7
22.5°	3155.8	3173.8	3197.3	3209.9	3228.0	3238.8	3240.6	3253.2	3262.2	3253.2	3256.8
25°	3081.8	3099.8	3117.9	3145.0	3161.2	3173.8	3186.5	3188.3	3197.3	3195.5	3193.7
27.5°	2959.1	2982.6	3013.2	3034.9	3056.5	3076.4	3090.8	3094.4	3103.5	3099.8	3101.6
30°	2791.3	2816.6	2845.4	2879.7	2910.4	2930.2	2948.3	2960.9	2969.9	2964.5	2962.7
32.5°	2553.1	2578.4	2609.1	2643.3	2679.4	2708.3	2730.0	2746.2	2757.0	2753.4	2744.4
35°	2280.7	2287.9	2307.8	2334.8	2365.5	2396.1	2416.0	2434.0	2446.7	2450.3	2450.3
37.5°	2001.0	1977.6	1963.1	1963.1	1981.1	1993.8	2011.8	2022.6	2042.5	2049.7	2055.1
40°	1730.3	1676.2	1625.7	1587.8	1562.6	1560.8	1560.8	1566.1	1584.2	1607.6	1629.3
42.5°	1488.6	1402.0	1324.4	1254.0	1203.5	1174.6	1162.0	1163.8	1178.2	1199.9	1236.0
45°	1295.5	1187.3	1089.8	1005.0	936.4	891.3	869.7	867.9	878.7	904.0	943.7
47.5°	1145.8	1030.3	920.2	822.8	748.8	700.1	674.8	667.6	674.8	698.3	745.2
50°	1021.3	902.2	788.5	687.4	608.1	557.6	534.1	525.1	534.1	553.9	600.8
52.5°	905.8	783.1	676.6	579.2	494.4	451.1	425.8	420.4	425.8	449.3	487.2
55°	772.3	667.6	562.9	465.5	391.6	348.2	328.4	323.0	328.4	350.1	389.7
57.5°	640.6	550.3	458.3	369.9	306.7	268.8	250.8	243.6	256.2	270.6	317.6
60°	517.8	445.7	368.1	290.5	238.2	203.9	189.4	187.6	191.3	209.3	241.8
62.5°	406.0	346.4	285.1	221.9	178.6	164.2	146.1	144.4	147.9	158.8	184.1
65°	292.3	254.4	207.5	162.4	128.1	108.3	101.1	102.9	106.4	113.7	137.1
67.5°	203.9	176.8	144.4	113.7	88.4	79.4	72.2	70.4	72.2	84.8	97.4
70°	137.1	120.9	97.4	86.6	61.4	48.7	50.5	45.1	52.3	52.3	63.1
72.5°	90.2	79.4	64.9	50.5	43.3	34.3	34.3	32.5	36.1	37.9	46.9
75°	46.9	36.1	36.1	25.3	18.1	9.0	16.2	14.4	12.6	14.4	18.1
77.5°	32.5	27.1	25.3	19.9	18.1	14.4	14.4	14.4	14.4	16.2	18.1
80°	19.9	19.9	14.4	12.6	10.8	9.0	10.8	10.8	10.8	10.8	12.6
82.5°	12.6	10.8	10.8	9.0	9.0	7.2	7.2	7.2	7.2	7.2	10.8
85°	10.8	7.2	7.2	5.4	7.2	12.6	5.4	7.2	7.2	7.2	5.4
87.5°	3.6	5.4	5.4	5.4	3.6	1.8	3.6	5.4	5.4	9.0	7.2
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5	3361.5
2.5°	3366.9	3368.7	3368.7	3366.9	3366.9	3363.3	3370.5	3365.1	3366.9	3374.1	3368.7
5°	3370.5	3372.3	3372.3	3370.5	3370.5	3370.5	3372.3	3372.3	3370.5	3368.7	3372.3
7.5°	3377.7	3375.9	3375.9	3372.3	3372.3	3368.7	3372.3	3366.9	3370.5	3366.9	3372.3
10°	3368.7	3370.5	3368.7	3366.9	3366.9	3365.1	3365.1	3359.7	3361.5	3356.0	3359.7
12.5°	3363.3	3361.5	3361.5	3357.8	3354.3	3350.6	3348.8	3343.4	3343.4	3330.8	3336.2
15°	3348.8	3350.6	3345.2	3338.0	3334.4	3325.4	3321.8	3314.5	3307.3	3298.3	3300.1
17.5°	3336.2	3330.8	3323.6	3316.3	3301.9	3294.7	3287.5	3276.7	3273.0	3262.2	3258.6
20°	3298.3	3294.7	3285.7	3273.0	3264.0	3247.8	3240.6	3229.8	3220.7	3209.9	3204.5
22.5°	3249.6	3246.0	3235.2	3222.5	3208.1	3200.9	3193.7	3173.8	3164.8	3154.0	3152.2
25°	3188.3	3182.8	3172.0	3157.6	3150.3	3130.5	3123.3	3108.8	3105.3	3094.4	3092.6
27.5°	3094.4	3087.2	3074.6	3056.5	3043.9	3031.3	3024.1	3013.2	3009.6	2998.8	2997.0
30°	2953.7	2944.7	2919.4	2912.2	2890.5	2877.9	2877.9	2863.5	2865.3	2858.1	2858.1
32.5°	2731.8	2717.3	2697.5	2683.0	2668.6	2661.4	2661.4	2656.0	2659.6	2659.6	2663.2
35°	2437.6	2417.8	2407.0	2398.0	2398.0	2405.2	2426.8	2432.3	2443.1	2452.1	2459.3
37.5°	2060.5	2058.8	2071.4	2082.2	2109.3	2139.9	2177.8	2210.3	2241.0	2262.6	2284.3
40°	1652.8	1697.9	1734.0	1784.5	1826.0	1885.5	1954.1	2010.0	2062.3	2100.3	2139.9
42.5°	1290.1	1347.8	1423.6	1497.6	1571.6	1652.8	1743.0	1820.6	1889.1	1941.5	1983.0
45°	1005.0	1084.4	1176.4	1270.3	1365.9	1466.9	1560.8	1640.1	1712.3	1766.4	1807.9
47.5°	810.1	896.8	1001.4	1104.3	1212.5	1319.0	1423.6	1492.2	1551.7	1595.0	1632.9
50°	669.4	761.4	871.5	988.8	1097.0	1203.5	1293.7	1360.5	1409.2	1447.1	1470.5
52.5°	559.3	656.8	774.1	891.3	999.6	1097.0	1178.2	1228.8	1268.4	1295.5	1317.1
55°	461.9	555.7	665.8	775.9	882.3	974.3	1041.1	1079.0	1109.6	1125.9	1138.5
57.5°	377.1	463.7	564.8	665.8	757.8	833.6	885.9	923.8	938.3	950.9	949.1
60°	295.9	377.1	469.1	555.7	635.1	696.5	734.4	756.0	766.8	772.3	768.6
62.5°	232.8	306.7	377.1	452.9	510.6	562.9	599.1	599.1	604.4	606.3	611.7
65°	173.2	229.1	290.5	346.4	393.3	427.6	447.5	452.9	460.1	458.3	454.7
67.5°	128.1	169.6	214.7	256.2	288.7	310.3	324.8	337.4	335.6	332.0	330.2
70°	88.4	115.5	155.2	180.4	203.9	225.6	229.1	230.9	232.8	234.6	230.9
72.5°	61.4	81.2	102.9	124.5	138.9	147.9	157.0	158.8	158.8	158.8	157.0
75°	30.7	41.5	61.4	70.4	83.0	86.6	93.8	93.8	99.2	92.0	90.2
77.5°	27.1	32.5	43.3	50.5	55.9	61.4	63.1	68.6	66.8	63.1	64.9
80°	16.2	19.9	27.1	30.7	37.9	39.7	41.5	43.3	41.5	43.3	43.3
82.5°	12.6	14.4	18.1	18.1	23.4	23.4	25.3	25.3	27.1	27.1	27.1
85°	7.2	12.6	10.8	21.6	14.4	14.4	18.1	21.6	18.1	18.1	21.6
87.5°	7.2	7.2	5.4	7.2	7.2	7.2	9.0	10.8	10.8	12.6	10.8
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: P249226

CATALOG NUMBER: LSR8B60D010 EC8B60850 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3361.5	3361.5	3361.5	3361.5
2.5°	3366.9	3370.5	3365.1	3363.3
5°	3372.3	3372.3	3368.7	3368.7
7.5°	3372.3	3372.3	3366.9	3363.3
10°	3357.8	3357.8	3352.5	3348.8
12.5°	3330.8	3330.8	3329.0	3323.6
15°	3296.5	3296.5	3289.3	3283.9
17.5°	3249.6	3253.2	3244.2	3244.2
20°	3199.1	3197.3	3190.1	3186.5
22.5°	3146.8	3143.1	3141.3	3130.5
25°	3090.8	3087.2	3081.8	3076.4
27.5°	2995.2	2993.4	2988.0	2980.8
30°	2849.0	2847.2	2840.0	2840.0
32.5°	2659.6	2657.8	2650.6	2652.4
35°	2462.9	2470.1	2466.5	2459.3
37.5°	2298.7	2304.1	2307.8	2304.1
40°	2161.6	2177.8	2179.6	2183.3
42.5°	2015.4	2037.1	2044.3	2047.9
45°	1840.4	1860.3	1876.5	1872.9
47.5°	1661.8	1676.2	1690.6	1679.8
50°	1490.4	1499.4	1504.8	1504.8
52.5°	1328.0	1328.0	1326.2	1328.0
55°	1142.1	1142.1	1134.9	1138.5
57.5°	947.3	950.9	945.5	936.4
60°	766.8	757.8	754.2	748.8
62.5°	597.2	597.2	584.6	600.8
65°	447.5	442.1	436.6	434.8
67.5°	324.8	323.0	317.6	315.8
70°	229.1	221.9	220.1	216.5
72.5°	153.4	153.4	149.8	149.8
75°	93.8	84.8	83.0	84.8
77.5°	64.9	63.1	63.1	61.4
80°	43.3	41.5	45.1	39.7
82.5°	27.1	28.9	27.1	28.9
85°	18.1	21.6	19.9	19.9
87.5°	10.8	10.8	10.8	10.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)