

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: P249154

Luminaire Tested: **LSR8B60D010 EC8B60940 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249154  
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 EC8B60940 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5632.0 lumens  
Efficiency: N/A  
Efficacy: 94.7 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

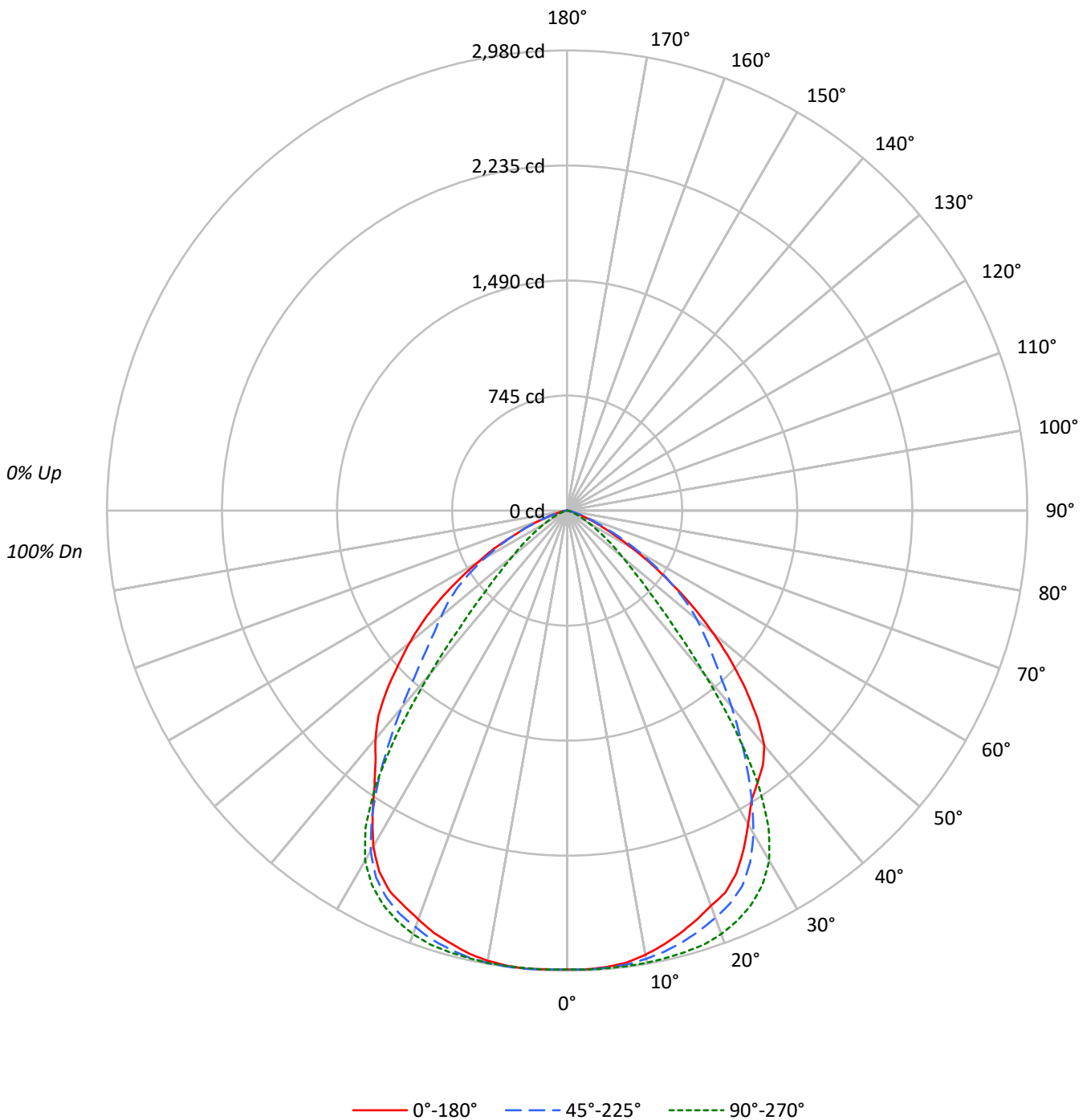
Input Watts (W): 59.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	91633	91633	91633
5°	91835	92082	92181
10°	91447	93097	92696
15°	90435	94457	92676
20°	89346	95785	92434
25°	88187	95894	92529
30°	83430	93201	89394
35°	80939	80999	81842
40°	79936	55732	77690
45°	71227	33457	72199
50°	59227	22269	63818
55°	44418	15349	54111
60°	30102	10231	40827
65°	18154	6633	28048
70°	10071	3597	17256
75°	4563	1525	8936
80°	3960	1705	6233
85°	4529	2264	6227



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	283.6	5.0
10°-20°	823.6	14.6
20°-30°	1250.1	22.2
30°-40°	1312.9	23.3
40°-50°	984.3	17.5
50°-60°	631.6	11.2
60°-70°	270.2	4.8
70°-80°	63.8	1.1
80°-90°	11.9	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°	2357.2	41.9
0°-40°	3670.2	65.2
0°-60°	5286.1	93.9
0°-90°	5632.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5632.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2972	2972	2972	2972	2972	
5°	2967	2972	2975	2980	2978	282
15°	2833	2892	2959	2940	2903	799
25°	2592	2683	2818	2767	2720	1184
35°	2150	2030	2152	2126	2174	1349
45°	1633	1335	767	1297	1656	1251
55°	826	826	286	861	1006	749
65°	249	294	91	378	384	266
75°	38	45	13	77	75	56
85°	13	8	6	13	18	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°	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6
2.5°	2973.2	2976.4	2974.8	2974.8	2973.2	2974.8	2974.8	2978.0	2978.0	2974.8	2973.2
5°	2966.8	2970.0	2970.0	2966.8	2966.8	2974.8	2970.0	2973.2	2973.2	2971.6	2971.6
7.5°	2952.4	2952.4	2958.8	2954.0	2954.0	2958.8	2957.2	2960.4	2963.6	2965.2	2965.2
10°	2920.5	2923.7	2925.3	2925.3	2926.9	2931.7	2934.9	2941.3	2944.4	2947.6	2949.2
12.5°	2880.7	2885.4	2887.0	2885.4	2890.2	2896.6	2904.6	2912.5	2917.3	2923.7	2928.5
15°	2832.8	2832.8	2836.0	2840.8	2844.0	2853.5	2861.5	2871.1	2883.8	2891.8	2899.8
17.5°	2780.2	2783.4	2788.1	2788.1	2794.5	2810.4	2815.2	2829.6	2844.0	2851.9	2867.9
20°	2722.7	2725.9	2730.7	2733.9	2741.9	2754.6	2764.2	2777.0	2792.9	2807.3	2823.2
22.5°	2678.1	2671.7	2674.9	2678.1	2686.1	2697.2	2708.4	2724.3	2740.3	2754.6	2770.6
25°	2591.9	2593.5	2598.3	2601.5	2611.1	2620.7	2633.4	2652.5	2666.9	2682.9	2700.4
27.5°	2475.5	2477.1	2485.1	2485.1	2493.0	2509.0	2517.0	2532.9	2552.1	2568.0	2588.8
30°	2343.1	2346.3	2346.3	2352.7	2357.4	2365.4	2373.4	2389.4	2398.9	2413.3	2442.0
32.5°	2221.9	2225.1	2223.5	2221.9	2217.1	2215.5	2213.9	2217.1	2220.3	2225.1	2236.2
35°	2150.1	2142.1	2135.8	2124.6	2111.8	2095.9	2081.5	2062.4	2044.8	2030.5	2014.5
37.5°	2081.5	2079.9	2070.4	2054.4	2028.9	2000.2	1966.7	1925.2	1883.7	1839.1	1796.0
40°	1985.8	1981.0	1973.1	1950.7	1922.0	1886.9	1842.3	1791.2	1724.2	1655.6	1585.5
42.5°	1823.1	1824.7	1815.2	1797.6	1770.5	1737.0	1690.7	1634.9	1563.1	1481.8	1390.9
45°	1633.3	1633.3	1630.1	1615.8	1596.6	1569.5	1534.4	1488.2	1418.0	1335.0	1237.7
47.5°	1435.5	1437.1	1432.3	1429.2	1421.2	1403.6	1378.1	1343.0	1293.6	1213.8	1116.5
50°	1234.6	1234.6	1242.5	1240.9	1240.9	1234.6	1223.4	1202.6	1159.6	1095.8	1004.9
52.5°	1033.6	1036.8	1041.6	1047.9	1055.9	1068.7	1055.9	1046.3	1019.2	969.8	891.6
55°	826.2	829.4	837.4	848.5	858.1	870.9	874.1	874.1	859.7	826.2	767.2
57.5°	649.2	644.4	650.8	660.4	673.1	685.9	695.4	706.6	705.0	682.7	634.8
60°	488.1	489.7	494.4	504.0	513.6	524.8	537.5	547.1	551.9	540.7	510.4
62.5°	355.7	355.7	362.1	371.6	376.4	392.4	400.3	405.1	409.9	408.3	389.2
65°	248.8	252.0	255.2	260.0	264.8	274.3	279.1	288.7	291.9	293.5	279.1
67.5°	175.5	170.7	173.9	177.0	181.8	188.2	197.8	197.8	202.6	202.6	193.0
70°	111.7	111.7	113.3	118.0	121.2	122.8	126.0	129.2	134.0	132.4	132.4
72.5°	75.0	73.4	75.0	76.6	78.2	82.9	82.9	84.5	87.7	89.3	82.9
75°	38.3	39.9	43.0	41.5	46.2	43.0	44.6	49.4	47.8	44.6	44.6
77.5°	31.9	31.9	31.9	30.3	33.5	33.5	31.9	35.1	33.5	33.5	31.9
80°	22.3	23.9	22.3	20.7	22.3	20.7	20.7	20.7	20.7	20.7	19.1
82.5°	17.6	14.4	16.0	14.4	16.0	16.0	14.4	12.8	12.8	14.4	12.8
85°	12.8	9.6	11.2	11.2	9.6	9.6	9.6	9.6	9.6	8.0	8.0
87.5°	8.0	4.8	4.8	4.8	6.4	6.4	6.4	4.8	6.4	6.4	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°	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6
2.5°	2976.4	2974.8	2978.0	2976.4	2976.4	2974.8	2976.4	2974.8	2978.0	2971.6	2973.2
5°	2976.4	2973.2	2974.8	2976.4	2978.0	2974.8	2974.8	2974.8	2978.0	2974.8	2976.4
7.5°	2970.0	2968.4	2973.2	2976.4	2974.8	2973.2	2976.4	2974.8	2978.0	2976.4	2979.5
10°	2957.2	2958.8	2962.0	2966.8	2968.4	2970.0	2973.2	2973.2	2978.0	2971.6	2974.8
12.5°	2938.1	2944.4	2952.4	2955.6	2962.0	2962.0	2965.2	2966.8	2970.0	2968.4	2973.2
15°	2914.1	2922.1	2931.7	2939.7	2947.6	2952.4	2957.2	2958.8	2963.6	2958.8	2960.4
17.5°	2885.4	2895.0	2909.3	2918.9	2931.7	2936.5	2942.8	2946.0	2950.8	2947.6	2949.2
20°	2845.5	2856.7	2872.7	2887.0	2895.0	2906.1	2914.1	2918.9	2922.1	2918.9	2920.5
22.5°	2789.7	2805.7	2826.4	2837.6	2853.5	2863.1	2864.7	2875.9	2883.8	2875.9	2879.1
25°	2724.3	2740.3	2756.2	2780.2	2794.5	2805.7	2816.8	2818.4	2826.4	2824.8	2823.2
27.5°	2615.9	2636.6	2663.7	2682.9	2702.0	2719.5	2732.3	2735.5	2743.5	2740.3	2741.9
30°	2467.5	2489.9	2515.4	2545.7	2572.8	2590.3	2606.3	2617.5	2625.4	2620.7	2619.1
32.5°	2257.0	2279.3	2306.4	2336.7	2368.6	2394.1	2413.3	2427.7	2437.2	2434.0	2426.1
35°	2016.1	2022.5	2040.1	2064.0	2091.1	2118.2	2135.8	2151.7	2162.9	2166.1	2166.1
37.5°	1768.9	1748.2	1735.4	1735.4	1751.3	1762.5	1778.5	1788.0	1805.6	1812.0	1816.8
40°	1529.6	1481.8	1437.1	1403.6	1381.3	1379.7	1379.7	1384.5	1400.4	1421.2	1440.3
42.5°	1315.9	1239.3	1170.8	1108.6	1063.9	1038.4	1027.2	1028.8	1041.6	1060.7	1092.6
45°	1145.2	1049.5	963.4	888.4	827.8	787.9	768.8	767.2	776.8	799.1	834.2
47.5°	1012.9	910.8	813.5	727.3	662.0	618.9	596.5	590.2	596.5	617.3	658.8
50°	902.8	797.5	697.0	607.7	537.5	492.9	472.1	464.2	472.1	489.7	531.1
52.5°	800.7	692.2	598.1	512.0	437.0	398.7	376.4	371.6	376.4	397.1	430.7
55°	682.7	590.2	497.6	411.5	346.1	307.9	290.3	285.5	290.3	309.5	344.5
57.5°	566.3	486.5	405.1	327.0	271.2	237.6	221.7	215.3	226.5	239.2	280.7
60°	457.8	394.0	325.4	256.8	210.6	180.2	167.5	165.9	169.1	185.0	213.7
62.5°	358.9	306.3	252.0	196.2	157.9	145.1	129.2	127.6	130.8	140.3	162.7
65°	258.4	224.9	183.4	143.5	113.3	95.7	89.3	90.9	94.1	100.5	121.2
67.5°	180.2	156.3	127.6	100.5	78.2	70.2	63.8	62.2	63.8	75.0	86.1
70°	121.2	106.9	86.1	76.6	54.2	43.0	44.6	39.9	46.2	46.2	55.8
72.5°	79.7	70.2	57.4	44.6	38.3	30.3	30.3	28.7	31.9	33.5	41.5
75°	41.5	31.9	31.9	22.3	16.0	8.0	14.4	12.8	11.2	12.8	16.0
77.5°	28.7	23.9	22.3	17.6	16.0	12.8	12.8	12.8	12.8	14.4	16.0
80°	17.6	17.6	12.8	11.2	9.6	8.0	9.6	9.6	9.6	9.6	11.2
82.5°	11.2	9.6	9.6	8.0	8.0	6.4	6.4	6.4	6.4	6.4	9.6
85°	9.6	6.4	6.4	4.8	6.4	11.2	4.8	6.4	6.4	6.4	4.8
87.5°	3.2	4.8	4.8	4.8	3.2	1.6	3.2	4.8	4.8	8.0	6.4
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6	2971.6
2.5°	2976.4	2978.0	2978.0	2976.4	2976.4	2973.2	2979.5	2974.8	2976.4	2982.7	2978.0
5°	2979.5	2981.1	2981.1	2979.5	2979.5	2979.5	2981.1	2981.1	2979.5	2978.0	2981.1
7.5°	2985.9	2984.3	2984.3	2981.1	2981.1	2978.0	2981.1	2976.4	2979.5	2976.4	2981.1
10°	2978.0	2979.5	2978.0	2976.4	2976.4	2974.8	2974.8	2970.0	2971.6	2966.8	2970.0
12.5°	2973.2	2971.6	2971.6	2968.4	2965.2	2962.0	2960.4	2955.6	2955.6	2944.4	2949.2
15°	2960.4	2962.0	2957.2	2950.8	2947.6	2939.7	2936.5	2930.1	2923.7	2915.7	2917.3
17.5°	2949.2	2944.4	2938.1	2931.7	2918.9	2912.5	2906.1	2896.6	2893.4	2883.8	2880.7
20°	2915.7	2912.5	2904.6	2893.4	2885.4	2871.1	2864.7	2855.1	2847.1	2837.6	2832.8
22.5°	2872.7	2869.5	2859.9	2848.7	2836.0	2829.6	2823.2	2805.7	2797.7	2788.1	2786.5
25°	2818.4	2813.6	2804.1	2791.3	2784.9	2767.4	2761.0	2748.2	2745.1	2735.5	2733.9
27.5°	2735.5	2729.1	2717.9	2702.0	2690.8	2679.7	2673.3	2663.7	2660.5	2650.9	2649.4
30°	2611.1	2603.1	2580.8	2574.4	2555.2	2544.1	2544.1	2531.3	2532.9	2526.6	2526.6
32.5°	2414.9	2402.1	2384.6	2371.8	2359.0	2352.7	2352.7	2347.9	2351.1	2351.1	2354.3
35°	2154.9	2137.4	2127.8	2119.8	2119.8	2126.2	2145.3	2150.1	2159.7	2167.7	2174.1
37.5°	1821.5	1820.0	1831.1	1840.7	1864.6	1891.7	1925.2	1953.9	1981.0	2000.2	2019.3
40°	1461.1	1500.9	1532.8	1577.5	1614.2	1666.8	1727.4	1776.9	1823.1	1856.6	1891.7
42.5°	1140.4	1191.5	1258.5	1323.9	1389.3	1461.1	1540.8	1609.4	1670.0	1716.3	1752.9
45°	888.4	958.6	1040.0	1122.9	1207.4	1296.8	1379.7	1449.9	1513.7	1561.5	1598.2
47.5°	716.2	792.7	885.2	976.2	1071.9	1166.0	1258.5	1319.1	1371.7	1410.0	1443.5
50°	591.7	673.1	770.4	874.1	969.8	1063.9	1143.6	1202.6	1245.7	1279.2	1299.9
52.5°	494.4	580.6	684.3	787.9	883.6	969.8	1041.6	1086.2	1121.3	1145.2	1164.4
55°	408.3	491.3	588.6	685.9	780.0	861.3	920.3	953.8	980.9	995.3	1006.5
57.5°	333.4	409.9	499.2	588.6	669.9	736.9	783.2	816.7	829.4	840.6	839.0
60°	261.6	333.4	414.7	491.3	561.5	615.7	649.2	668.3	677.9	682.7	679.5
62.5°	205.8	271.2	333.4	400.3	451.4	497.6	529.6	529.6	534.3	535.9	540.7
65°	153.1	202.6	256.8	306.3	347.7	378.0	395.6	400.3	406.7	405.1	401.9
67.5°	113.3	149.9	189.8	226.5	255.2	274.3	287.1	298.3	296.7	293.5	291.9
70°	78.2	102.1	137.2	159.5	180.2	199.4	202.6	204.2	205.8	207.4	204.2
72.5°	54.2	71.8	90.9	110.1	122.8	130.8	138.8	140.3	140.3	140.3	138.8
75°	27.1	36.7	54.2	62.2	73.4	76.6	82.9	82.9	87.7	81.3	79.7
77.5°	23.9	28.7	38.3	44.6	49.4	54.2	55.8	60.6	59.0	55.8	57.4
80°	14.4	17.6	23.9	27.1	33.5	35.1	36.7	38.3	36.7	38.3	38.3
82.5°	11.2	12.8	16.0	16.0	20.7	20.7	22.3	22.3	23.9	23.9	23.9
85°	6.4	11.2	9.6	19.1	12.8	12.8	16.0	19.1	16.0	16.0	19.1
87.5°	6.4	6.4	4.8	6.4	6.4	6.4	8.0	9.6	9.6	11.2	9.6
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: P249154

CATALOG NUMBER: LSR8B60D010 EC8B60940 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2971.6	2971.6	2971.6	2971.6
2.5°	2976.4	2979.5	2974.8	2973.2
5°	2981.1	2981.1	2978.0	2978.0
7.5°	2981.1	2981.1	2976.4	2973.2
10°	2968.4	2968.4	2963.6	2960.4
12.5°	2944.4	2944.4	2942.8	2938.1
15°	2914.1	2914.1	2907.7	2903.0
17.5°	2872.7	2875.9	2867.9	2867.9
20°	2828.0	2826.4	2820.0	2816.8
22.5°	2781.8	2778.6	2777.0	2767.4
25°	2732.3	2729.1	2724.3	2719.5
27.5°	2647.8	2646.2	2641.4	2635.0
30°	2518.6	2517.0	2510.6	2510.6
32.5°	2351.1	2349.5	2343.1	2344.7
35°	2177.2	2183.6	2180.4	2174.1
37.5°	2032.1	2036.9	2040.1	2036.9
40°	1910.9	1925.2	1926.8	1930.0
42.5°	1781.7	1800.8	1807.2	1810.4
45°	1626.9	1644.5	1658.8	1655.6
47.5°	1469.0	1481.8	1494.5	1485.0
50°	1317.5	1325.5	1330.3	1330.3
52.5°	1174.0	1174.0	1172.4	1174.0
55°	1009.7	1009.7	1003.3	1006.5
57.5°	837.4	840.6	835.8	827.8
60°	677.9	669.9	666.7	662.0
62.5°	528.0	528.0	516.8	531.1
65°	395.6	390.8	386.0	384.4
67.5°	287.1	285.5	280.7	279.1
70°	202.6	196.2	194.6	191.4
72.5°	135.6	135.6	132.4	132.4
75°	82.9	75.0	73.4	75.0
77.5°	57.4	55.8	55.8	54.2
80°	38.3	36.7	39.9	35.1
82.5°	23.9	25.5	23.9	25.5
85°	16.0	19.1	17.6	17.6
87.5°	9.6	9.6	9.6	9.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)