

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: P249498

Luminaire Tested: **LSR8B80D010 EC8B80927 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249498  
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: LSR8B80D010 EC8B80927 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5883.8 lumens  
Efficiency: N/A  
Efficacy: 79.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

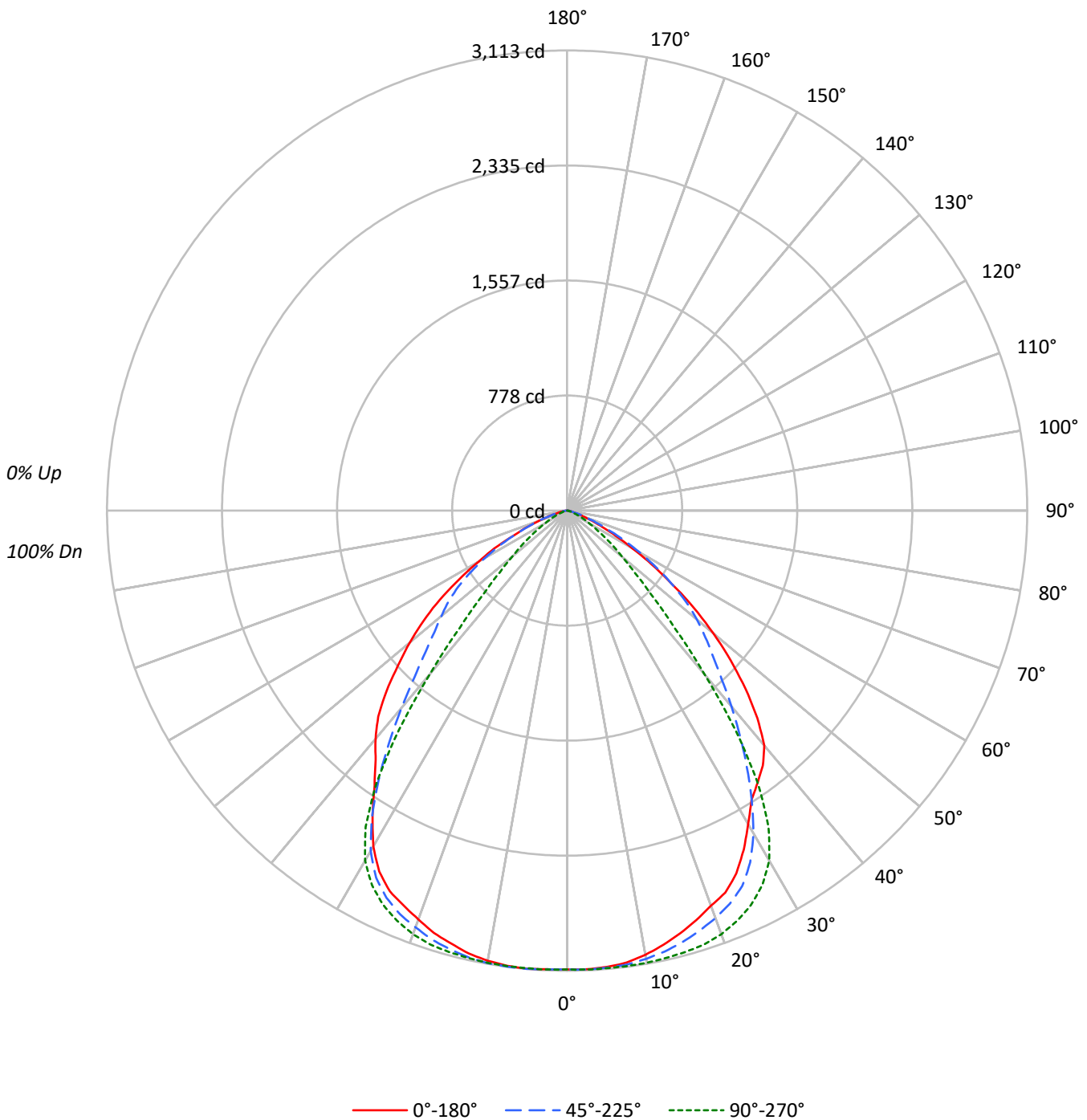
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	296.3	5.0
10°-20°	860.4	14.6
20°-30°	1305.9	22.2
30°-40°	1371.6	23.3
40°-50°	1028.4	17.5
50°-60°	659.8	11.2
60°-70°	282.3	4.8
70°-80°	66.7	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°	2462.6	41.9
0°-40°	3834.2	65.2
0°-60°	5522.4	93.9
0°-90°	5883.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5883.8	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3104	3104	3104	3104	3104	
5°	3099	3104	3108	3113	3111	294
15°	2959	3021	3091	3071	3033	835
25°	2708	2803	2944	2891	2841	1237
35°	2246	2121	2248	2221	2271	1410
45°	1706	1395	802	1355	1730	1307
55°	863	863	298	900	1051	783
65°	260	307	95	395	402	278
75°	40	47	13	80	78	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°	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4
2.5°	3106.0	3109.4	3107.7	3107.7	3106.0	3107.7	3107.7	3111.1	3111.1	3107.7	3106.0
5°	3099.4	3102.8	3102.8	3099.4	3099.4	3107.7	3102.8	3106.0	3106.0	3104.4	3104.4
7.5°	3084.4	3084.4	3091.0	3086.1	3086.1	3091.0	3089.4	3092.7	3096.1	3097.7	3097.7
10°	3051.0	3054.4	3056.1	3056.1	3057.8	3062.7	3066.1	3072.7	3076.1	3079.4	3081.0
12.5°	3009.4	3014.4	3016.1	3014.4	3019.4	3026.0	3034.5	3042.8	3047.7	3054.4	3059.4
15°	2959.4	2959.4	2962.7	2967.8	2971.1	2981.1	2989.4	2999.4	3012.8	3021.1	3029.4
17.5°	2904.4	2907.8	2912.7	2912.7	2919.5	2936.0	2941.1	2956.0	2971.1	2979.5	2996.1
20°	2844.5	2847.7	2852.8	2856.2	2864.5	2877.8	2887.8	2901.0	2917.8	2932.8	2949.4
22.5°	2797.8	2791.1	2794.4	2797.8	2806.1	2817.8	2829.5	2846.1	2862.8	2877.8	2894.4
25°	2707.8	2709.5	2714.5	2717.8	2727.8	2737.8	2751.1	2771.1	2786.1	2802.8	2821.0
27.5°	2586.2	2587.8	2596.2	2596.2	2604.5	2621.1	2629.5	2646.1	2666.1	2682.8	2704.5
30°	2447.9	2451.2	2451.2	2457.9	2462.8	2471.2	2479.5	2496.2	2506.2	2521.1	2551.2
32.5°	2321.2	2324.5	2322.9	2321.2	2316.3	2314.6	2312.9	2316.3	2319.5	2324.5	2336.2
35°	2246.3	2237.8	2231.2	2219.6	2206.2	2189.6	2174.5	2154.6	2136.3	2121.2	2104.6
37.5°	2174.5	2172.9	2162.9	2146.3	2119.6	2089.6	2054.6	2011.3	1968.0	1921.3	1876.3
40°	2074.6	2069.5	2061.2	2037.9	2007.9	1971.2	1924.6	1871.3	1801.2	1729.7	1656.3
42.5°	1904.6	1906.3	1896.3	1878.0	1849.6	1814.6	1766.4	1708.0	1633.0	1548.0	1453.0
45°	1706.3	1706.3	1703.0	1688.0	1668.0	1639.7	1603.0	1554.8	1481.4	1394.7	1293.1
47.5°	1499.7	1501.3	1496.4	1493.1	1484.7	1466.4	1439.8	1403.1	1351.4	1268.1	1166.4
50°	1289.8	1289.8	1298.0	1296.4	1296.4	1289.8	1278.1	1256.4	1211.4	1144.8	1049.9
52.5°	1079.8	1083.1	1088.1	1094.7	1103.1	1116.4	1103.1	1093.2	1064.8	1013.1	931.5
55°	863.1	866.5	874.8	886.5	896.5	909.8	913.2	913.2	898.1	863.1	801.6
57.5°	678.3	673.2	679.8	689.8	703.2	716.5	726.5	738.2	736.5	713.1	663.2
60°	509.8	511.5	516.6	526.6	536.5	548.2	561.6	571.5	576.6	564.9	533.2
62.5°	371.6	371.6	378.2	388.2	393.3	410.0	418.3	423.2	428.3	426.6	406.6
65°	260.0	263.2	266.6	271.6	276.6	286.5	291.6	301.6	305.0	306.6	291.6
67.5°	183.3	178.3	181.7	185.0	190.0	196.6	206.7	206.7	211.6	211.6	201.6
70°	116.7	116.7	118.4	123.3	126.7	128.4	131.6	135.0	140.0	138.3	138.3
72.5°	78.3	76.6	78.3	80.0	81.7	86.6	86.6	88.3	91.7	93.4	86.6
75°	40.1	41.6	45.0	43.3	48.3	45.0	46.7	51.6	49.9	46.7	46.7
77.5°	33.3	33.3	33.3	31.7	35.0	35.0	33.3	36.7	35.0	35.0	33.3
80°	23.3	25.0	23.3	21.6	23.3	21.6	21.6	21.6	21.6	21.6	20.0
82.5°	18.3	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	5.1	5.1	5.1	6.6	6.6	6.6	5.1	6.6	6.6	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°	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4
2.5°	3109.4	3107.7	3111.1	3109.4	3109.4	3107.7	3109.4	3107.7	3111.1	3104.4	3106.0
5°	3109.4	3106.0	3107.7	3109.4	3111.1	3107.7	3107.7	3107.7	3111.1	3107.7	3109.4
7.5°	3102.8	3101.1	3106.0	3109.4	3107.7	3106.0	3109.4	3107.7	3111.1	3109.4	3112.6
10°	3089.4	3091.0	3094.4	3099.4	3101.1	3102.8	3106.0	3106.0	3111.1	3104.4	3107.7
12.5°	3069.5	3076.1	3084.4	3087.7	3094.4	3094.4	3097.7	3099.4	3102.8	3101.1	3106.0
15°	3044.4	3052.7	3062.7	3071.0	3079.4	3084.4	3089.4	3091.0	3096.1	3091.0	3092.7
17.5°	3014.4	3024.3	3039.4	3049.4	3062.7	3067.8	3074.4	3077.7	3082.7	3079.4	3081.0
20°	2972.7	2984.4	3001.0	3016.1	3024.3	3036.0	3044.4	3049.4	3052.7	3049.4	3051.0
22.5°	2914.4	2931.1	2952.8	2964.4	2981.1	2991.0	2992.7	3004.4	3012.8	3004.4	3007.8
25°	2846.1	2862.8	2879.4	2904.4	2919.5	2931.1	2942.8	2944.5	2952.8	2951.1	2949.4
27.5°	2732.7	2754.5	2782.8	2802.8	2822.7	2841.1	2854.5	2857.7	2866.2	2862.8	2864.5
30°	2577.8	2601.1	2627.9	2659.5	2687.8	2706.1	2722.8	2734.4	2742.8	2737.8	2736.1
32.5°	2357.9	2381.2	2409.5	2441.1	2474.5	2501.1	2521.1	2536.2	2546.2	2542.8	2534.5
35°	2106.2	2112.9	2131.3	2156.3	2184.5	2212.9	2231.2	2247.9	2259.6	2262.8	2262.8
37.5°	1847.9	1826.3	1812.9	1812.9	1829.6	1841.3	1857.9	1868.0	1886.3	1892.9	1898.0
40°	1598.0	1548.0	1501.3	1466.4	1443.0	1441.4	1441.4	1446.4	1463.1	1484.7	1504.7
42.5°	1374.8	1294.8	1223.1	1158.1	1111.5	1084.8	1073.1	1074.8	1088.1	1108.1	1141.4
45°	1196.4	1096.4	1006.4	928.1	864.8	823.2	803.1	801.6	811.5	834.9	871.5
47.5°	1058.2	951.5	849.8	759.8	691.5	646.5	623.2	616.6	623.2	644.8	688.2
50°	943.2	833.2	728.2	634.8	561.6	514.9	493.2	484.9	493.2	511.5	554.8
52.5°	836.4	723.2	624.8	534.9	456.5	416.6	393.3	388.2	393.3	414.9	449.9
55°	713.1	616.6	519.9	429.9	361.6	321.6	303.3	298.2	303.3	323.3	359.9
57.5°	591.5	508.3	423.2	341.6	283.3	248.3	231.6	224.9	236.6	250.0	293.3
60°	478.2	411.6	340.0	268.3	219.9	188.3	174.9	173.2	176.6	193.3	223.3
62.5°	375.0	320.0	263.2	205.0	164.9	151.6	135.0	133.3	136.6	146.6	170.0
65°	270.0	235.0	191.6	150.0	118.4	100.0	93.4	95.0	98.3	105.0	126.7
67.5°	188.3	163.4	133.3	105.0	81.7	73.4	66.7	65.0	66.7	78.3	90.0
70°	126.7	111.6	90.0	80.0	56.7	45.0	46.7	41.6	48.3	48.3	58.3
72.5°	83.2	73.4	60.0	46.7	40.1	31.7	31.7	30.0	33.3	35.0	43.3
75°	43.3	33.3	33.3	23.3	16.7	8.3	15.0	13.4	11.7	13.4	16.7
77.5°	30.0	25.0	23.3	18.3	16.7	13.4	13.4	13.4	13.4	15.0	16.7
80°	18.3	18.3	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	6.6	6.6	6.6	6.6	6.6	10.0
85°	10.0	6.6	6.6	5.1	6.6	11.7	5.1	6.6	6.6	6.6	5.1
87.5°	3.4	5.1	5.1	5.1	3.4	1.7	3.4	5.1	5.1	8.3	6.6
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4	3104.4
2.5°	3109.4	3111.1	3111.1	3109.4	3109.4	3106.0	3112.6	3107.7	3109.4	3116.0	3111.1
5°	3112.6	3114.3	3114.3	3112.6	3112.6	3112.6	3114.3	3114.3	3112.6	3111.1	3114.3
7.5°	3119.4	3117.7	3117.7	3114.3	3114.3	3111.1	3114.3	3109.4	3112.6	3109.4	3114.3
10°	3111.1	3112.6	3111.1	3109.4	3109.4	3107.7	3107.7	3102.8	3104.4	3099.4	3102.8
12.5°	3106.0	3104.4	3104.4	3101.1	3097.7	3094.4	3092.7	3087.7	3087.7	3076.1	3081.0
15°	3092.7	3094.4	3089.4	3082.7	3079.4	3071.0	3067.8	3061.0	3054.4	3046.0	3047.7
17.5°	3081.0	3076.1	3069.5	3062.7	3049.4	3042.8	3036.0	3026.0	3022.8	3012.8	3009.4
20°	3046.0	3042.8	3034.5	3022.8	3014.4	2999.4	2992.7	2982.7	2974.4	2964.4	2959.4
22.5°	3001.0	2997.7	2987.8	2976.1	2962.7	2956.0	2949.4	2931.1	2922.8	2912.7	2911.0
25°	2944.5	2939.4	2929.4	2916.1	2909.4	2891.1	2884.4	2871.1	2867.7	2857.7	2856.2
27.5°	2857.7	2851.1	2839.4	2822.7	2811.2	2799.5	2792.8	2782.8	2779.4	2769.4	2767.8
30°	2727.8	2719.5	2696.2	2689.4	2669.5	2657.8	2657.8	2644.4	2646.1	2639.5	2639.5
32.5°	2522.8	2509.5	2491.2	2477.8	2464.5	2457.9	2457.9	2452.8	2456.2	2456.2	2459.5
35°	2251.2	2232.9	2222.9	2214.6	2214.6	2221.2	2241.2	2246.3	2256.2	2264.5	2271.3
37.5°	1902.9	1901.2	1913.0	1923.0	1947.9	1976.3	2011.3	2041.3	2069.5	2089.6	2109.6
40°	1526.4	1568.0	1601.3	1648.0	1686.3	1741.3	1804.6	1856.2	1904.6	1939.6	1976.3
42.5°	1191.4	1244.7	1314.8	1383.1	1451.4	1526.4	1609.6	1681.3	1744.6	1793.0	1831.3
45°	928.1	1001.5	1086.4	1173.1	1261.5	1354.7	1441.4	1514.7	1581.4	1631.4	1669.7
47.5°	748.1	828.2	924.8	1019.8	1119.8	1218.0	1314.8	1378.1	1433.0	1473.1	1508.1
50°	618.2	703.2	804.8	913.2	1013.1	1111.5	1194.8	1256.4	1301.4	1336.4	1358.1
52.5°	516.6	606.5	714.8	823.2	923.2	1013.1	1088.1	1134.8	1171.5	1196.4	1216.5
55°	426.6	513.2	614.9	716.5	814.8	899.8	961.4	996.5	1024.8	1039.8	1051.4
57.5°	348.3	428.3	521.6	614.9	699.9	769.8	818.2	853.2	866.5	878.2	876.5
60°	273.3	348.3	433.2	513.2	586.6	643.2	678.3	698.2	708.2	713.1	709.9
62.5°	215.0	283.3	348.3	418.3	471.6	519.9	553.3	553.3	558.2	559.9	564.9
65°	160.0	211.6	268.3	320.0	363.3	394.9	413.3	418.3	424.9	423.2	420.0
67.5°	118.4	156.6	198.2	236.6	266.6	286.5	299.9	311.6	309.9	306.6	305.0
70°	81.7	106.6	143.3	166.6	188.3	208.4	211.6	213.3	215.0	216.7	213.3
72.5°	56.7	74.9	95.0	115.0	128.4	136.6	145.0	146.6	146.6	146.6	145.0
75°	28.4	38.4	56.7	65.0	76.6	80.0	86.6	86.6	91.7	84.9	83.2
77.5°	25.0	30.0	40.1	46.7	51.6	56.7	58.3	63.3	61.6	58.3	60.0
80°	15.0	18.3	25.0	28.4	35.0	36.7	38.4	40.1	38.4	40.1	40.1
82.5°	11.7	13.4	16.7	16.7	21.6	21.6	23.3	23.3	25.0	25.0	25.0
85°	6.6	11.7	10.0	20.0	13.4	13.4	16.7	20.0	16.7	16.7	20.0
87.5°	6.6	6.6	5.1	6.6	6.6	6.6	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: P249498

CATALOG NUMBER: LSR8B80D010 EC8B80927 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3104.4	3104.4	3104.4	3104.4
2.5°	3109.4	3112.6	3107.7	3106.0
5°	3114.3	3114.3	3111.1	3111.1
7.5°	3114.3	3114.3	3109.4	3106.0
10°	3101.1	3101.1	3096.1	3092.7
12.5°	3076.1	3076.1	3074.4	3069.5
15°	3044.4	3044.4	3037.7	3032.8
17.5°	3001.0	3004.4	2996.1	2996.1
20°	2954.5	2952.8	2946.2	2942.8
22.5°	2906.1	2902.7	2901.0	2891.1
25°	2854.5	2851.1	2846.1	2841.1
27.5°	2766.2	2764.5	2759.4	2752.8
30°	2631.2	2629.5	2622.8	2622.8
32.5°	2456.2	2454.5	2447.9	2449.6
35°	2274.5	2281.3	2277.9	2271.3
37.5°	2122.9	2127.9	2131.3	2127.9
40°	1996.3	2011.3	2013.0	2016.3
42.5°	1861.3	1881.3	1888.0	1891.2
45°	1699.6	1718.0	1733.0	1729.7
47.5°	1534.7	1548.0	1561.4	1551.4
50°	1376.4	1384.8	1389.7	1389.7
52.5°	1226.5	1226.5	1224.8	1226.5
55°	1054.8	1054.8	1048.2	1051.4
57.5°	874.8	878.2	873.1	864.8
60°	708.2	699.9	696.5	691.5
62.5°	551.6	551.6	539.9	554.8
65°	413.3	408.3	403.2	401.6
67.5°	299.9	298.2	293.3	291.6
70°	211.6	205.0	203.3	199.9
72.5°	141.6	141.6	138.3	138.3
75°	86.6	78.3	76.6	78.3
77.5°	60.0	58.3	58.3	56.7
80°	40.1	38.4	41.6	36.7
82.5°	25.0	26.7	25.0	26.7
85°	16.7	20.0	18.3	18.3
87.5°	10.0	10.0	10.0	10.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)