

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: P249174

Luminaire Tested: **LSR8B80D010 EC8B809727 8LBDW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249174  
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 EC8B809727 8LBDW0H  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 2700 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5910.0 lumens  
Efficiency: N/A  
Efficacy: 79.4 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

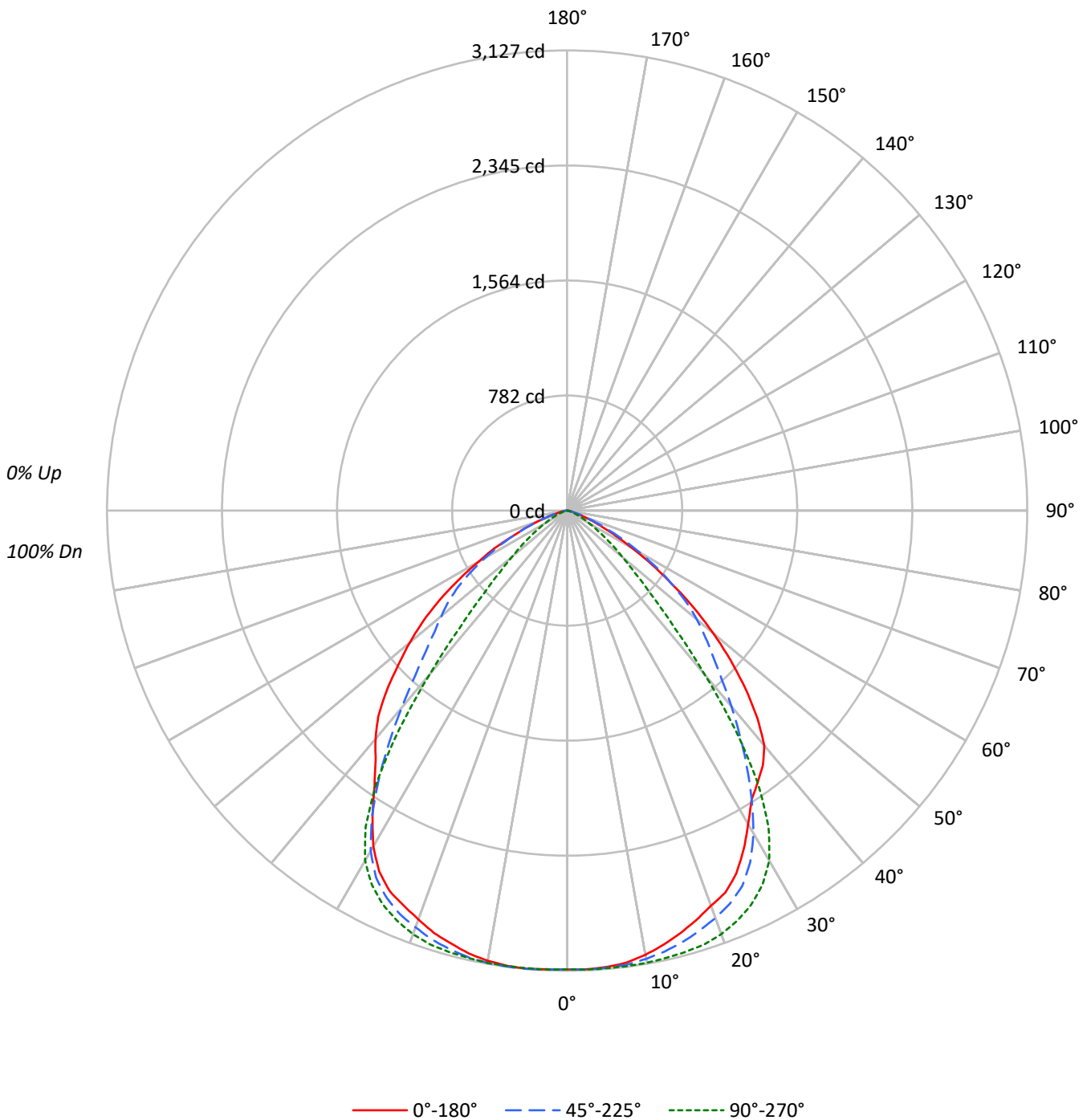
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	297.6	5.0
10°-20°	864.2	14.6
20°-30°	1311.8	22.2
30°-40°	1377.7	23.3
40°-50°	1032.9	17.5
50°-60°	662.8	11.2
60°-70°	283.5	4.8
70°-80°	67.0	1.1
80°-90°	12.5	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°	2473.6	41.9
0°-40°	3851.4	65.2
0°-60°	5547.0	93.9
0°-90°	5910.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5910.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3118	3118	3118	3118	3118	
5°	3113	3118	3122	3127	3125	296
15°	2973	3035	3105	3085	3046	838
25°	2720	2815	2958	2904	2854	1243
35°	2256	2131	2258	2231	2281	1416
45°	1714	1401	805	1361	1737	1313
55°	867	867	300	904	1056	786
65°	261	308	95	397	403	279
75°	40	47	13	80	79	59
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°	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2
2.5°	3119.9	3123.3	3121.6	3121.6	3119.9	3121.6	3121.6	3124.9	3124.9	3121.6	3119.9
5°	3113.2	3116.6	3116.6	3113.2	3113.2	3121.6	3116.6	3119.9	3119.9	3118.2	3118.2
7.5°	3098.2	3098.2	3104.8	3099.8	3099.8	3104.8	3103.2	3106.5	3109.9	3111.6	3111.6
10°	3064.7	3068.0	3069.7	3069.7	3071.4	3076.4	3079.7	3086.5	3089.8	3093.1	3094.8
12.5°	3022.8	3027.8	3029.5	3027.8	3032.9	3039.6	3048.0	3056.3	3061.3	3068.0	3073.1
15°	2972.6	2972.6	2976.0	2981.0	2984.4	2994.4	3002.7	3012.8	3026.2	3034.6	3042.9
17.5°	2917.4	2920.7	2925.7	2925.7	2932.5	2949.2	2954.2	2969.3	2984.4	2992.7	3009.5
20°	2857.1	2860.5	2865.5	2868.9	2877.2	2890.6	2900.6	2914.0	2930.8	2945.9	2962.6
22.5°	2810.3	2803.6	2806.9	2810.3	2818.6	2830.4	2842.1	2858.8	2875.5	2890.6	2907.4
25°	2719.9	2721.5	2726.6	2729.9	2740.0	2750.0	2763.4	2783.5	2798.5	2815.3	2833.7
27.5°	2597.7	2599.4	2607.7	2607.7	2616.1	2632.8	2641.2	2657.9	2678.1	2694.8	2716.5
30°	2458.8	2462.1	2462.1	2468.8	2473.8	2482.2	2490.6	2507.3	2517.3	2532.4	2562.6
32.5°	2331.6	2334.9	2333.2	2331.6	2326.5	2324.9	2323.2	2326.5	2329.9	2334.9	2346.6
35°	2256.3	2247.9	2241.2	2229.5	2216.1	2199.3	2184.3	2164.2	2145.8	2130.7	2114.0
37.5°	2184.3	2182.6	2172.6	2155.8	2129.0	2098.9	2063.8	2020.2	1976.7	1929.9	1884.7
40°	2083.8	2078.8	2070.5	2047.0	2016.9	1980.1	1933.2	1879.6	1809.3	1737.4	1663.7
42.5°	1913.1	1914.8	1904.8	1886.3	1857.9	1822.7	1774.2	1715.6	1640.3	1554.9	1459.5
45°	1713.9	1713.9	1710.6	1695.5	1675.4	1647.0	1610.2	1561.6	1488.0	1400.9	1298.8
47.5°	1506.4	1508.1	1503.0	1499.7	1491.3	1472.9	1446.1	1409.3	1357.4	1273.7	1171.6
50°	1295.5	1295.5	1303.9	1302.2	1302.2	1295.5	1283.8	1262.0	1216.8	1149.9	1054.5
52.5°	1084.6	1088.0	1093.0	1099.7	1108.0	1121.4	1108.0	1098.0	1069.5	1017.6	935.6
55°	867.0	870.4	878.7	890.4	900.5	913.9	917.2	917.2	902.1	867.0	805.1
57.5°	681.2	676.2	682.9	692.9	706.3	719.7	729.8	741.5	739.8	716.4	666.2
60°	512.2	513.9	518.9	528.9	539.0	550.7	564.1	574.1	579.1	567.4	535.6
62.5°	373.3	373.3	379.9	390.0	395.0	411.8	420.1	425.1	430.1	428.5	408.4
65°	261.1	264.4	267.8	272.8	277.8	287.9	292.9	302.9	306.3	308.0	292.9
67.5°	184.1	179.1	182.5	185.8	190.8	197.5	207.6	207.6	212.6	212.6	202.5
70°	117.2	117.2	118.8	123.8	127.2	128.9	132.2	135.6	140.6	138.9	138.9
72.5°	78.7	77.0	78.7	80.4	82.0	87.0	87.0	88.7	92.1	93.7	87.0
75°	40.2	41.9	45.2	43.5	48.5	45.2	46.9	51.9	50.2	46.9	46.9
77.5°	33.5	33.5	33.5	31.8	35.1	35.1	33.5	36.8	35.1	35.1	33.5
80°	23.4	25.1	23.4	21.7	23.4	21.7	21.7	21.7	21.7	21.7	20.1
82.5°	18.4	15.1	16.7	15.1	16.7	16.7	15.1	13.4	13.4	15.1	13.4
85°	13.4	10.0	11.7	11.7	10.0	10.0	10.0	10.0	10.0	8.4	8.4
87.5°	8.4	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°	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2
2.5°	3123.3	3121.6	3124.9	3123.3	3123.3	3121.6	3123.3	3121.6	3124.9	3118.2	3119.9
5°	3123.3	3119.9	3121.6	3123.3	3124.9	3121.6	3121.6	3121.6	3124.9	3121.6	3123.3
7.5°	3116.6	3114.9	3119.9	3123.3	3121.6	3119.9	3123.3	3121.6	3124.9	3123.3	3126.6
10°	3103.2	3104.8	3108.2	3113.2	3114.9	3116.6	3119.9	3119.9	3124.9	3118.2	3121.6
12.5°	3083.1	3089.8	3098.2	3101.5	3108.2	3108.2	3111.6	3113.2	3116.6	3114.9	3119.9
15°	3058.0	3066.3	3076.4	3084.8	3093.1	3098.2	3103.2	3104.8	3109.9	3104.8	3106.5
17.5°	3027.8	3037.9	3053.0	3063.0	3076.4	3081.4	3088.1	3091.4	3096.5	3093.1	3094.8
20°	2986.0	2997.7	3014.5	3029.5	3037.9	3049.6	3058.0	3063.0	3066.3	3063.0	3064.7
22.5°	2927.4	2944.2	2965.9	2977.6	2994.4	3004.4	3006.1	3017.8	3026.2	3017.8	3021.2
25°	2858.8	2875.5	2892.3	2917.4	2932.5	2944.2	2955.9	2957.6	2965.9	2964.2	2962.6
27.5°	2745.0	2766.8	2795.2	2815.3	2835.4	2853.8	2867.2	2870.5	2878.9	2875.5	2877.2
30°	2589.3	2612.8	2639.6	2671.3	2699.8	2718.2	2734.9	2746.7	2755.0	2750.0	2748.3
32.5°	2368.4	2391.8	2420.3	2452.1	2485.6	2512.3	2532.4	2547.5	2557.5	2554.2	2545.8
35°	2115.7	2122.3	2140.8	2165.9	2194.3	2222.8	2241.2	2257.9	2269.6	2273.0	2273.0
37.5°	1856.2	1834.5	1821.1	1821.1	1837.8	1849.5	1866.3	1876.3	1894.7	1901.4	1906.4
40°	1605.1	1554.9	1508.1	1472.9	1449.5	1447.8	1447.8	1452.8	1469.6	1491.3	1511.4
42.5°	1380.9	1300.5	1228.6	1163.3	1116.4	1089.6	1077.9	1079.6	1093.0	1113.1	1146.5
45°	1201.8	1101.3	1011.0	932.3	868.7	826.8	806.8	805.1	815.1	838.5	875.4
47.5°	1062.9	955.7	853.6	763.2	694.6	649.4	626.0	619.3	626.0	647.7	691.3
50°	947.4	836.9	731.4	637.7	564.1	517.2	495.4	487.1	495.4	513.9	557.4
52.5°	840.2	726.4	627.7	537.3	458.6	418.4	395.0	390.0	395.0	416.8	451.9
55°	716.4	619.3	522.2	431.8	363.2	323.0	304.6	299.6	304.6	324.7	361.5
57.5°	594.2	510.5	425.1	343.1	284.6	249.4	232.7	225.9	237.7	251.1	294.6
60°	480.4	413.4	341.4	269.5	220.9	189.1	175.7	174.1	177.4	194.2	224.3
62.5°	376.6	321.4	264.4	205.9	165.7	152.3	135.6	133.9	137.2	147.3	170.7
65°	271.2	236.0	192.5	150.6	118.8	100.4	93.7	95.4	98.7	105.5	127.2
67.5°	189.1	164.0	133.9	105.5	82.0	73.6	67.0	65.3	67.0	78.7	90.4
70°	127.2	112.1	90.4	80.4	56.9	45.2	46.9	41.9	48.5	48.5	58.6
72.5°	83.7	73.6	60.2	46.9	40.2	31.8	31.8	30.1	33.5	35.1	43.5
75°	43.5	33.5	33.5	23.4	16.7	8.4	15.1	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	15.1	16.7
80°	18.4	18.4	13.4	11.7	10.0	8.4	10.0	10.0	10.0	10.0	11.7
82.5°	11.7	10.0	10.0	8.4	8.4	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	8.4	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°	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2	3118.2
2.5°	3123.3	3124.9	3124.9	3123.3	3123.3	3119.9	3126.6	3121.6	3123.3	3129.9	3124.9
5°	3126.6	3128.3	3128.3	3126.6	3126.6	3126.6	3128.3	3128.3	3126.6	3124.9	3128.3
7.5°	3133.3	3131.6	3131.6	3128.3	3128.3	3124.9	3128.3	3123.3	3126.6	3123.3	3128.3
10°	3124.9	3126.6	3124.9	3123.3	3123.3	3121.6	3121.6	3116.6	3118.2	3113.2	3116.6
12.5°	3119.9	3118.2	3118.2	3114.9	3111.6	3108.2	3106.5	3101.5	3101.5	3089.8	3094.8
15°	3106.5	3108.2	3103.2	3096.5	3093.1	3084.8	3081.4	3074.7	3068.0	3059.7	3061.3
17.5°	3094.8	3089.8	3083.1	3076.4	3063.0	3056.3	3049.6	3039.6	3036.2	3026.2	3022.8
20°	3059.7	3056.3	3048.0	3036.2	3027.8	3012.8	3006.1	2996.1	2987.7	2977.6	2972.6
22.5°	3014.5	3011.1	3001.1	2989.3	2976.0	2969.3	2962.6	2944.2	2935.8	2925.7	2924.1
25°	2957.6	2952.5	2942.5	2929.1	2922.4	2904.0	2897.3	2883.9	2880.6	2870.5	2868.9
27.5°	2870.5	2863.8	2852.1	2835.4	2823.6	2811.9	2805.3	2795.2	2791.9	2781.8	2780.2
30°	2740.0	2731.6	2708.2	2701.5	2681.4	2669.7	2669.7	2656.3	2657.9	2651.3	2651.3
32.5°	2534.1	2520.7	2502.3	2488.9	2475.5	2468.8	2468.8	2463.8	2467.1	2467.1	2470.5
35°	2261.3	2242.9	2232.8	2224.4	2224.4	2231.1	2251.2	2256.3	2266.3	2274.7	2281.4
37.5°	1911.4	1909.8	1921.5	1931.5	1956.6	1985.1	2020.2	2050.4	2078.8	2098.9	2119.0
40°	1533.2	1575.0	1608.5	1655.4	1693.8	1749.1	1812.7	1864.6	1913.1	1948.3	1985.1
42.5°	1196.7	1250.3	1320.6	1389.2	1457.9	1533.2	1616.9	1688.8	1752.4	1801.0	1839.5
45°	932.3	1005.9	1091.3	1178.3	1267.0	1360.8	1447.8	1521.5	1588.4	1638.6	1677.1
47.5°	751.5	831.9	928.9	1024.4	1124.8	1223.5	1320.6	1384.2	1439.4	1479.6	1514.8
50°	621.0	706.3	808.4	917.2	1017.6	1116.4	1200.1	1262.0	1307.2	1342.4	1364.1
52.5°	518.9	609.2	718.1	826.8	927.3	1017.6	1093.0	1139.8	1176.7	1201.8	1221.8
55°	428.5	515.5	617.6	719.7	818.5	903.8	965.7	1000.9	1029.4	1044.4	1056.1
57.5°	349.8	430.1	523.9	617.6	703.0	773.3	821.8	857.0	870.4	882.1	880.4
60°	274.5	349.8	435.2	515.5	589.2	646.1	681.2	701.3	711.3	716.4	713.0
62.5°	215.9	284.6	349.8	420.1	473.7	522.2	555.7	555.7	560.7	562.4	567.4
65°	160.7	212.6	269.5	321.4	364.9	396.7	415.1	420.1	426.8	425.1	421.8
67.5°	118.8	157.3	199.2	237.7	267.8	287.9	301.3	313.0	311.3	308.0	306.3
70°	82.0	107.1	144.0	167.4	189.1	209.2	212.6	214.2	215.9	217.6	214.2
72.5°	56.9	75.3	95.4	115.5	128.9	137.2	145.6	147.3	147.3	147.3	145.6
75°	28.5	38.5	56.9	65.3	77.0	80.4	87.0	87.0	92.1	85.3	83.7
77.5°	25.1	30.1	40.2	46.9	51.9	56.9	58.6	63.6	61.9	58.6	60.2
80°	15.1	18.4	25.1	28.5	35.1	36.8	38.5	40.2	38.5	40.2	40.2
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	20.1	13.4	13.4	16.7	20.1	16.7	16.7	20.1
87.5°	6.7	6.7	5.0	6.7	6.7	6.7	8.4	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: P249174

CATALOG NUMBER: LSR8B80D010 EC8B809727 8LBDW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3118.2	3118.2	3118.2	3118.2
2.5°	3123.3	3126.6	3121.6	3119.9
5°	3128.3	3128.3	3124.9	3124.9
7.5°	3128.3	3128.3	3123.3	3119.9
10°	3114.9	3114.9	3109.9	3106.5
12.5°	3089.8	3089.8	3088.1	3083.1
15°	3058.0	3058.0	3051.3	3046.3
17.5°	3014.5	3017.8	3009.5	3009.5
20°	2967.6	2965.9	2959.2	2955.9
22.5°	2919.1	2915.7	2914.0	2904.0
25°	2867.2	2863.8	2858.8	2853.8
27.5°	2778.5	2776.8	2771.8	2765.1
30°	2642.9	2641.2	2634.5	2634.5
32.5°	2467.1	2465.5	2458.8	2460.5
35°	2284.7	2291.4	2288.0	2281.4
37.5°	2132.4	2137.4	2140.8	2137.4
40°	2005.2	2020.2	2021.9	2025.3
42.5°	1869.6	1889.7	1896.4	1899.7
45°	1707.2	1725.7	1740.7	1737.4
47.5°	1541.5	1554.9	1568.3	1558.3
50°	1382.5	1390.9	1395.9	1395.9
52.5°	1231.9	1231.9	1230.2	1231.9
55°	1059.5	1059.5	1052.8	1056.1
57.5°	878.7	882.1	877.0	868.7
60°	711.3	703.0	699.6	694.6
62.5°	554.0	554.0	542.3	557.4
65°	415.1	410.1	405.0	403.4
67.5°	301.3	299.6	294.6	292.9
70°	212.6	205.9	204.2	200.8
72.5°	142.3	142.3	138.9	138.9
75°	87.0	78.7	77.0	78.7
77.5°	60.2	58.6	58.6	56.9
80°	40.2	38.5	41.9	36.8
82.5°	25.1	26.8	25.1	26.8
85°	16.7	20.1	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)