

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: P249291

Luminaire Tested: **LSR8B80D010 EC8B809730 8LBDW0WMH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249291  
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 EC8B809730 8LBDW0WMH  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
97 CRI 3000 CCT WITH WARM HAZE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6220.0 lumens  
Efficiency: N/A  
Efficacy: 83.6 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

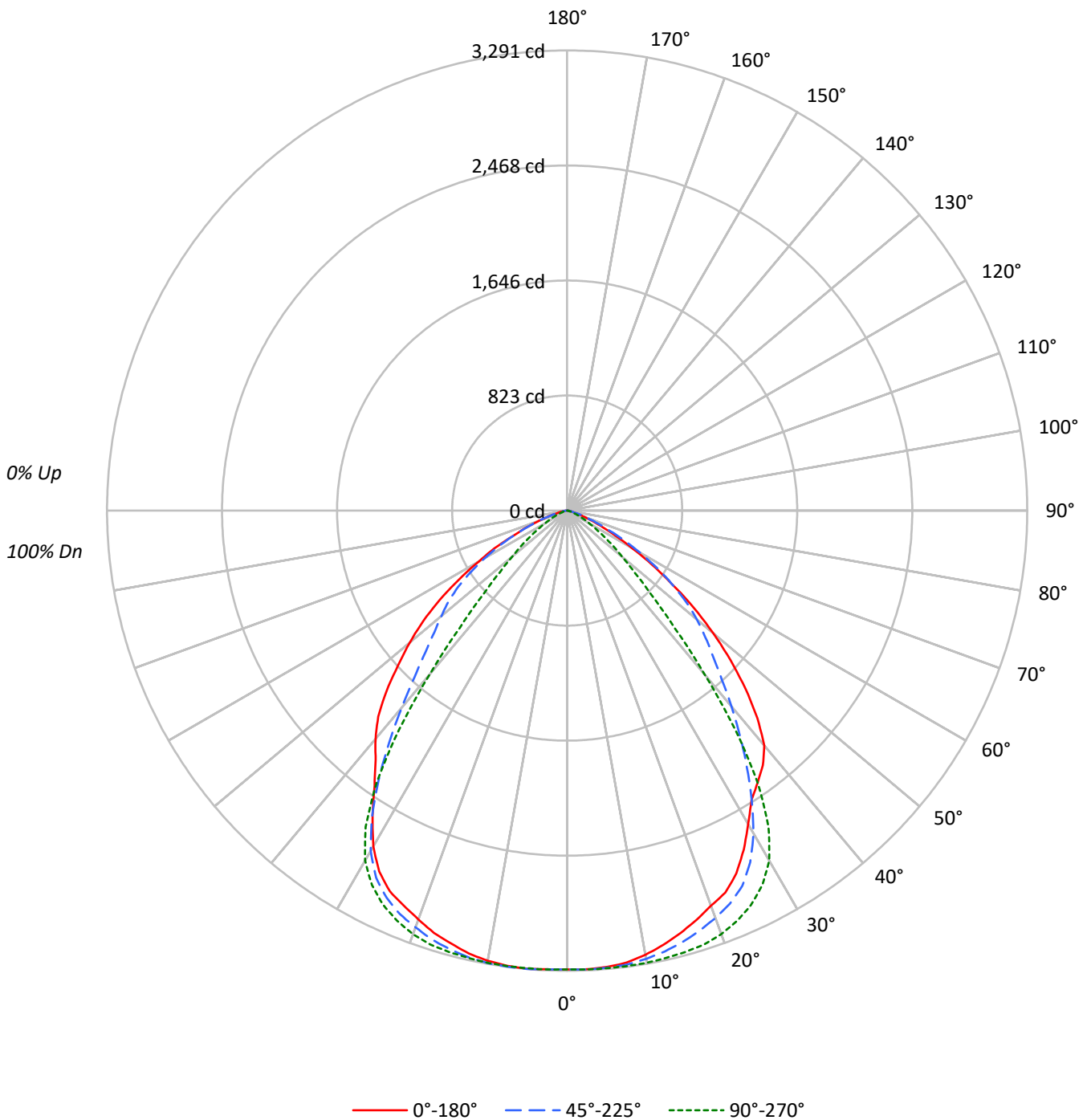
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	313.2	5.0
10°-20°	909.6	14.6
20°-30°	1380.6	22.2
30°-40°	1450.0	23.3
40°-50°	1087.1	17.5
50°-60°	697.5	11.2
60°-70°	298.4	4.8
70°-80°	70.5	1.1
80°-90°	13.1	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°	2603.4	41.9
0°-40°	4053.4	65.2
0°-60°	5838.0	93.9
0°-90°	6220.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6220.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3282	3282	3282	3282	3282	
5°	3276	3282	3285	3291	3289	311
15°	3128	3194	3268	3247	3206	882
25°	2862	2963	3113	3056	3004	1308
35°	2375	2242	2376	2348	2401	1490
45°	1804	1474	847	1432	1828	1381
55°	912	912	315	951	1112	828
65°	275	324	100	418	424	293
75°	42	49	14	85	83	62
85°	14	9	7	14	19	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°	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8
2.5°	3283.6	3287.1	3285.3	3285.3	3283.6	3285.3	3285.3	3288.9	3288.9	3285.3	3283.6
5°	3276.5	3280.0	3280.0	3276.5	3276.5	3285.3	3280.0	3283.6	3283.6	3281.8	3281.8
7.5°	3260.7	3260.7	3267.7	3262.4	3262.4	3267.7	3265.9	3269.5	3273.0	3274.8	3274.8
10°	3225.4	3229.0	3230.7	3230.7	3232.5	3237.7	3241.3	3248.3	3251.8	3255.4	3257.1
12.5°	3181.4	3186.7	3188.4	3186.7	3192.0	3199.0	3207.8	3216.6	3221.9	3229.0	3234.3
15°	3128.5	3128.5	3132.1	3137.4	3140.9	3151.5	3160.2	3170.8	3184.9	3193.7	3202.5
17.5°	3070.4	3074.0	3079.2	3079.2	3086.3	3103.9	3109.2	3125.0	3140.9	3149.7	3167.3
20°	3007.0	3010.5	3015.8	3019.3	3028.1	3042.2	3052.8	3066.9	3084.5	3100.4	3118.0
22.5°	2957.7	2950.6	2954.1	2957.7	2966.5	2978.8	2991.2	3008.7	3026.4	3042.2	3059.9
25°	2862.5	2864.3	2869.6	2873.1	2883.7	2894.3	2908.4	2929.5	2945.3	2963.0	2982.3
27.5°	2734.0	2735.7	2744.5	2744.5	2753.3	2770.9	2779.7	2797.4	2818.5	2836.1	2859.0
30°	2587.8	2591.2	2591.2	2598.3	2603.6	2612.4	2621.2	2638.8	2649.4	2665.3	2697.0
32.5°	2453.9	2457.4	2455.6	2453.9	2448.6	2446.8	2445.0	2448.6	2452.1	2457.4	2469.7
35°	2374.6	2365.8	2358.7	2346.4	2332.3	2314.7	2298.8	2277.7	2258.3	2242.5	2224.9
37.5°	2298.8	2297.1	2286.5	2268.9	2240.7	2209.0	2172.0	2126.2	2080.4	2031.1	1983.5
40°	2193.2	2187.8	2179.1	2154.4	2122.7	2083.9	2034.6	1978.2	1904.2	1828.5	1751.0
42.5°	2013.5	2015.2	2004.7	1985.3	1955.4	1918.3	1867.3	1805.6	1726.3	1636.5	1536.1
45°	1803.8	1803.8	1800.3	1784.5	1763.3	1733.4	1694.6	1643.5	1566.0	1474.4	1367.0
47.5°	1585.4	1587.2	1581.9	1578.4	1569.5	1550.2	1522.0	1483.2	1428.6	1340.5	1233.1
50°	1363.5	1363.5	1372.3	1370.5	1370.5	1363.5	1351.1	1328.2	1280.7	1210.2	1109.8
52.5°	1141.5	1145.0	1150.3	1157.3	1166.1	1180.2	1166.1	1155.6	1125.6	1071.0	984.7
55°	912.5	916.0	924.8	937.1	947.7	961.8	965.3	965.3	949.5	912.5	847.3
57.5°	717.0	711.7	718.7	729.3	743.4	757.5	768.0	780.4	778.6	754.0	701.1
60°	539.0	540.8	546.1	556.7	567.2	579.6	593.7	604.2	609.5	597.2	563.7
62.5°	392.8	392.8	399.9	410.4	415.7	433.4	442.1	447.4	452.7	450.9	429.8
65°	274.8	278.3	281.8	287.1	292.4	303.0	308.3	318.8	322.4	324.1	308.3
67.5°	193.8	188.5	192.0	195.5	200.8	207.9	218.4	218.4	223.7	223.7	213.1
70°	123.3	123.3	125.1	130.3	133.9	135.6	139.2	142.7	148.0	146.2	146.2
72.5°	82.8	81.0	82.8	84.6	86.3	91.6	91.6	93.4	96.9	98.7	91.6
75°	42.3	44.1	47.5	45.8	51.1	47.5	49.3	54.6	52.8	49.3	49.3
77.5°	35.2	35.2	35.2	33.5	37.0	37.0	35.2	38.7	37.0	37.0	35.2
80°	24.7	26.4	24.7	22.9	24.7	22.9	22.9	22.9	22.9	22.9	21.1
82.5°	19.4	15.9	17.6	15.9	17.6	17.6	15.9	14.1	14.1	15.9	14.1
85°	14.1	10.6	12.3	12.3	10.6	10.6	10.6	10.6	10.6	8.8	8.8
87.5°	8.8	5.3	5.3	5.3	7.0	7.0	7.0	5.3	7.0	7.0	3.5
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°	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8
2.5°	3287.1	3285.3	3288.9	3287.1	3287.1	3285.3	3287.1	3285.3	3288.9	3281.8	3283.6
5°	3287.1	3283.6	3285.3	3287.1	3288.9	3285.3	3285.3	3285.3	3288.9	3285.3	3287.1
7.5°	3280.0	3278.3	3283.6	3287.1	3285.3	3283.6	3287.1	3285.3	3288.9	3287.1	3290.6
10°	3265.9	3267.7	3271.2	3276.5	3278.3	3280.0	3283.6	3283.6	3288.9	3281.8	3285.3
12.5°	3244.8	3251.8	3260.7	3264.2	3271.2	3271.2	3274.8	3276.5	3280.0	3278.3	3283.6
15°	3218.4	3227.2	3237.7	3246.6	3255.4	3260.7	3265.9	3267.7	3273.0	3267.7	3269.5
17.5°	3186.7	3197.2	3213.1	3223.6	3237.7	3243.0	3250.1	3253.6	3258.9	3255.4	3257.1
20°	3142.6	3155.0	3172.6	3188.4	3197.2	3209.6	3218.4	3223.6	3227.2	3223.6	3225.4
22.5°	3081.0	3098.6	3121.5	3133.8	3151.5	3162.0	3163.8	3176.1	3184.9	3176.1	3179.6
25°	3008.7	3026.4	3044.0	3070.4	3086.3	3098.6	3110.9	3112.7	3121.5	3119.7	3118.0
27.5°	2889.0	2911.9	2941.8	2963.0	2984.1	3003.5	3017.6	3021.1	3029.9	3026.4	3028.1
30°	2725.1	2749.8	2778.0	2811.5	2841.4	2860.8	2878.4	2890.7	2899.5	2894.3	2892.5
32.5°	2492.6	2517.3	2547.2	2580.7	2615.9	2644.1	2665.3	2681.1	2691.7	2688.1	2679.3
35°	2226.6	2233.7	2253.1	2279.5	2309.4	2339.4	2358.7	2376.3	2388.7	2392.2	2392.2
37.5°	1953.6	1930.7	1916.6	1916.6	1934.2	1946.5	1964.1	1974.7	1994.1	2001.1	2006.4
40°	1689.3	1636.5	1587.2	1550.2	1525.5	1523.8	1523.8	1529.0	1546.7	1569.5	1590.7
42.5°	1453.3	1368.7	1293.0	1224.3	1175.0	1146.8	1134.5	1136.2	1150.3	1171.4	1206.7
45°	1264.8	1159.1	1064.0	981.2	914.3	870.2	849.1	847.3	857.9	882.5	921.3
47.5°	1118.6	1005.8	898.4	803.3	731.1	683.5	658.8	651.8	658.8	681.7	727.5
50°	997.1	880.8	769.8	671.2	593.7	544.3	521.4	512.6	521.4	540.8	586.6
52.5°	884.3	764.5	660.6	565.5	482.7	440.4	415.7	410.4	415.7	438.6	475.6
55°	754.0	651.8	549.6	454.5	382.3	340.0	320.6	315.3	320.6	341.8	380.5
57.5°	625.4	537.3	447.4	361.1	299.5	262.5	244.9	237.8	250.1	264.2	310.0
60°	505.6	435.1	359.3	283.6	232.5	199.0	185.0	183.2	186.7	204.3	236.0
62.5°	396.4	338.2	278.3	216.7	174.4	160.3	142.7	140.9	144.4	155.0	179.7
65°	285.4	248.4	202.6	158.5	125.1	105.7	98.7	100.4	103.9	111.0	133.9
67.5°	199.0	172.6	140.9	111.0	86.3	77.5	70.5	68.7	70.5	82.8	95.1
70°	133.9	118.0	95.1	84.6	59.9	47.5	49.3	44.1	51.1	51.1	61.6
72.5°	88.1	77.5	63.4	49.3	42.3	33.5	33.5	31.7	35.2	37.0	45.8
75°	45.8	35.2	35.2	24.7	17.6	8.8	15.9	14.1	12.3	14.1	17.6
77.5°	31.7	26.4	24.7	19.4	17.6	14.1	14.1	14.1	14.1	15.9	17.6
80°	19.4	19.4	14.1	12.3	10.6	8.8	10.6	10.6	10.6	10.6	12.3
82.5°	12.3	10.6	10.6	8.8	8.8	7.0	7.0	7.0	7.0	7.0	10.6
85°	10.6	7.0	7.0	5.3	7.0	12.3	5.3	7.0	7.0	7.0	5.3
87.5°	3.5	5.3	5.3	5.3	3.5	1.8	3.5	5.3	5.3	8.8	7.0
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°	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8	3281.8
2.5°	3287.1	3288.9	3288.9	3287.1	3287.1	3283.6	3290.6	3285.3	3287.1	3294.1	3288.9
5°	3290.6	3292.4	3292.4	3290.6	3290.6	3290.6	3292.4	3292.4	3290.6	3288.9	3292.4
7.5°	3297.7	3295.9	3295.9	3292.4	3292.4	3288.9	3292.4	3287.1	3290.6	3287.1	3292.4
10°	3288.9	3290.6	3288.9	3287.1	3287.1	3285.3	3285.3	3280.0	3281.8	3276.5	3280.0
12.5°	3283.6	3281.8	3281.8	3278.3	3274.8	3271.2	3269.5	3264.2	3264.2	3251.8	3257.1
15°	3269.5	3271.2	3265.9	3258.9	3255.4	3246.6	3243.0	3236.0	3229.0	3220.2	3221.9
17.5°	3257.1	3251.8	3244.8	3237.7	3223.6	3216.6	3209.6	3199.0	3195.5	3184.9	3181.4
20°	3220.2	3216.6	3207.8	3195.5	3186.7	3170.8	3163.8	3153.2	3144.4	3133.8	3128.5
22.5°	3172.6	3169.0	3158.5	3146.2	3132.1	3125.0	3118.0	3098.6	3089.8	3079.2	3077.4
25°	3112.7	3107.4	3096.8	3082.7	3075.7	3056.3	3049.3	3035.2	3031.7	3021.1	3019.3
27.5°	3021.1	3014.0	3001.7	2984.1	2971.8	2959.4	2952.4	2941.8	2938.3	2927.7	2926.0
30°	2883.7	2874.9	2850.2	2843.2	2822.0	2809.7	2809.7	2795.6	2797.4	2790.3	2790.3
32.5°	2667.0	2652.9	2633.5	2619.4	2605.3	2598.3	2598.3	2593.0	2596.5	2596.5	2600.1
35°	2379.9	2360.5	2349.9	2341.1	2341.1	2348.1	2369.3	2374.6	2385.2	2394.0	2401.0
37.5°	2011.7	2010.0	2022.3	2032.9	2059.3	2089.2	2126.2	2157.9	2187.8	2209.0	2230.1
40°	1613.6	1657.6	1692.9	1742.2	1782.7	1840.8	1907.8	1962.4	2013.5	2050.5	2089.2
42.5°	1259.5	1315.9	1389.9	1462.1	1534.3	1613.6	1701.7	1777.4	1844.4	1895.4	1936.0
45°	981.2	1058.7	1148.6	1240.1	1333.5	1432.2	1523.8	1601.3	1671.7	1724.6	1765.1
47.5°	790.9	875.5	977.7	1078.1	1183.8	1287.7	1389.9	1456.8	1514.9	1557.2	1594.2
50°	653.5	743.4	850.8	965.3	1071.0	1175.0	1263.0	1328.2	1375.8	1412.8	1435.7
52.5°	546.1	641.2	755.7	870.2	975.9	1071.0	1150.3	1199.6	1238.4	1264.8	1285.9
55°	450.9	542.6	650.0	757.5	861.4	951.2	1016.4	1053.4	1083.3	1099.2	1111.5
57.5°	368.2	452.7	551.4	650.0	739.9	813.9	864.9	901.9	916.0	928.3	926.6
60°	288.9	368.2	458.0	542.6	620.1	679.9	717.0	738.1	748.7	754.0	750.4
62.5°	227.2	299.5	368.2	442.1	498.5	549.6	584.9	584.9	590.1	591.9	597.2
65°	169.1	223.7	283.6	338.2	384.0	417.5	436.9	442.1	449.2	447.4	443.9
67.5°	125.1	165.6	209.6	250.1	281.8	303.0	317.1	329.4	327.7	324.1	322.4
70°	86.3	112.8	151.5	176.2	199.0	220.2	223.7	225.5	227.2	229.0	225.5
72.5°	59.9	79.3	100.4	121.5	135.6	144.4	153.3	155.0	155.0	155.0	153.3
75°	30.0	40.5	59.9	68.7	81.0	84.6	91.6	91.6	96.9	89.8	88.1
77.5°	26.4	31.7	42.3	49.3	54.6	59.9	61.6	66.9	65.2	61.6	63.4
80°	15.9	19.4	26.4	30.0	37.0	38.7	40.5	42.3	40.5	42.3	42.3
82.5°	12.3	14.1	17.6	17.6	22.9	22.9	24.7	24.7	26.4	26.4	26.4
85°	7.0	12.3	10.6	21.1	14.1	14.1	17.6	21.1	17.6	17.6	21.1
87.5°	7.0	7.0	5.3	7.0	7.0	7.0	8.8	10.6	10.6	12.3	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: P249291

CATALOG NUMBER: LSR8B80D010 EC8B809730 8LBDW0WMH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3281.8	3281.8	3281.8	3281.8
2.5°	3287.1	3290.6	3285.3	3283.6
5°	3292.4	3292.4	3288.9	3288.9
7.5°	3292.4	3292.4	3287.1	3283.6
10°	3278.3	3278.3	3273.0	3269.5
12.5°	3251.8	3251.8	3250.1	3244.8
15°	3218.4	3218.4	3211.3	3206.1
17.5°	3172.6	3176.1	3167.3	3167.3
20°	3123.3	3121.5	3114.5	3110.9
22.5°	3072.2	3068.7	3066.9	3056.3
25°	3017.6	3014.0	3008.7	3003.5
27.5°	2924.2	2922.4	2917.1	2910.1
30°	2781.5	2779.7	2772.7	2772.7
32.5°	2596.5	2594.8	2587.8	2589.5
35°	2404.5	2411.6	2408.1	2401.0
37.5°	2244.2	2249.5	2253.1	2249.5
40°	2110.4	2126.2	2128.0	2131.5
42.5°	1967.7	1988.8	1995.9	1999.4
45°	1796.8	1816.2	1832.0	1828.5
47.5°	1622.4	1636.5	1650.6	1640.0
50°	1455.1	1463.9	1469.2	1469.2
52.5°	1296.5	1296.5	1294.8	1296.5
55°	1115.1	1115.1	1108.0	1111.5
57.5°	924.8	928.3	923.0	914.3
60°	748.7	739.9	736.3	731.1
62.5°	583.1	583.1	570.8	586.6
65°	436.9	431.6	426.3	424.5
67.5°	317.1	315.3	310.0	308.3
70°	223.7	216.7	214.9	211.4
72.5°	149.7	149.7	146.2	146.2
75°	91.6	82.8	81.0	82.8
77.5°	63.4	61.6	61.6	59.9
80°	42.3	40.5	44.1	38.7
82.5°	26.4	28.2	26.4	28.2
85°	17.6	21.1	19.4	19.4
87.5°	10.6	10.6	10.6	10.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)