

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: P249399

Luminaire Tested: **LSR8B80D010 EC8B809730 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249399
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 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6112.0 lumens
Efficiency: N/A
Efficacy: 82.2 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

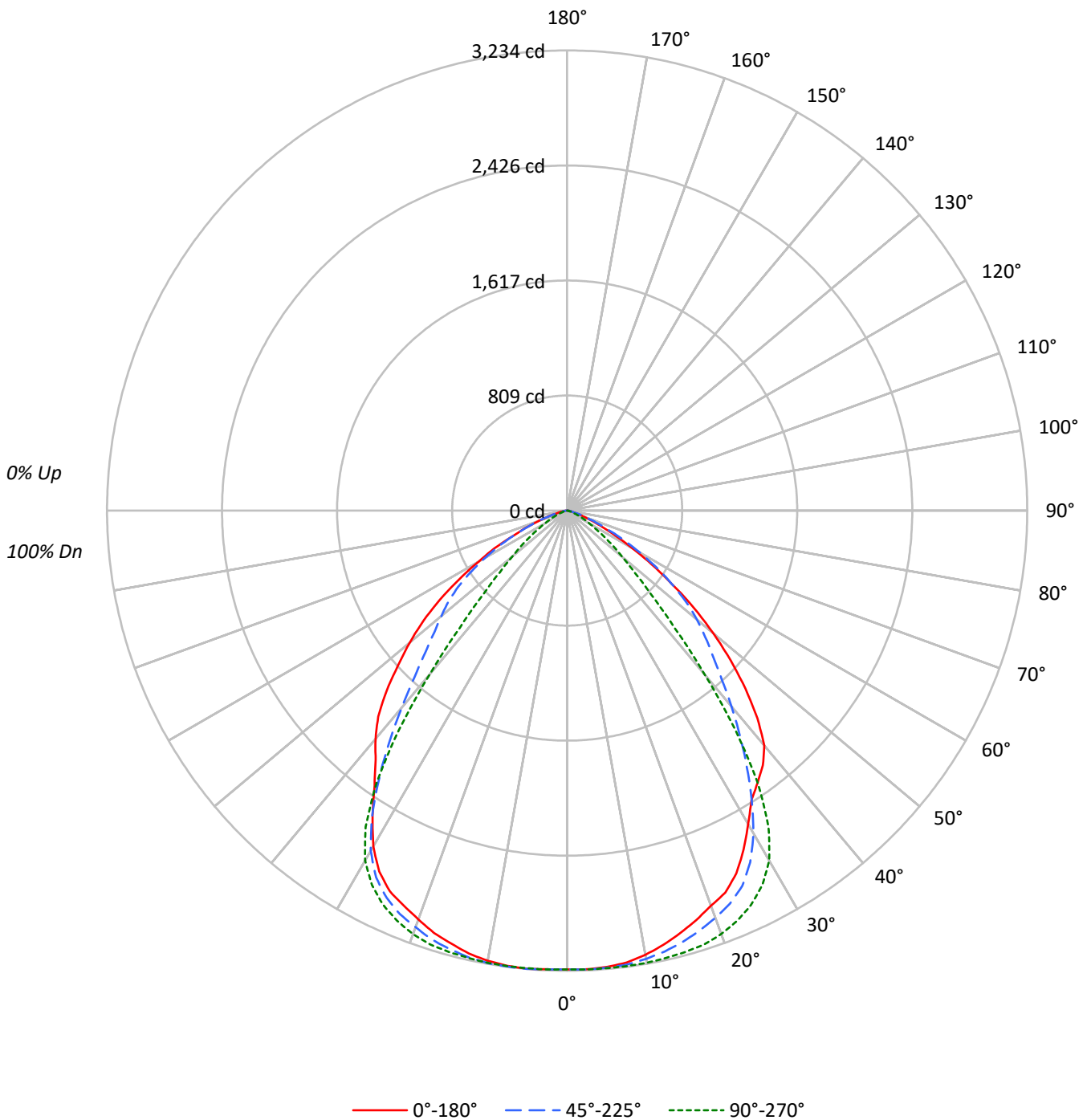
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249399

CATALOG NUMBER: LSR8B80D010 EC8B809730 8LBDW0GPH

Luminous Intensity Polar Plot





TEST NUMBER: P249399

CATALOG NUMBER: LSR8B80D010 EC8B809730 8LBDW0GPH

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°			



TEST NUMBER: P249399

CATALOG NUMBER: LSR8B80D010 EC8B809730 8LBDW0GPH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	307.8	5.0
10°-20°	893.8	14.6
20°-30°	1356.6	22.2
30°-40°	1424.8	23.3
40°-50°	1068.2	17.5
50°-60°	685.4	11.2
60°-70°	293.2	4.8
70°-80°	69.3	1.1
80°-90°	12.9	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°	2558.1	41.9
0°-40°	3983.0	65.2
0°-60°	5736.6	93.9
0°-90°	6112.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6112.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3225	3225	3225	3225	3225	
5°	3220	3225	3228	3234	3232	306
15°	3074	3138	3211	3190	3150	867
25°	2813	2912	3059	3003	2951	1285
35°	2333	2204	2335	2307	2359	1464
45°	1772	1449	833	1407	1797	1357
55°	897	897	310	935	1092	813
65°	270	318	99	410	417	288
75°	42	48	14	83	81	61
85°	14	9	7	14	19	15
90°	0	0	0	0	0	



TEST NUMBER: P249399

CATALOG NUMBER: LSR8B80D010 EC8B809730 8LBDW0GPH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8
2.5°	3226.5	3230.0	3228.3	3228.3	3226.5	3228.3	3228.3	3231.8	3231.8	3228.3	3226.5
5°	3219.6	3223.1	3223.1	3219.6	3219.6	3228.3	3223.1	3226.5	3226.5	3224.8	3224.8
7.5°	3204.1	3204.1	3211.0	3205.8	3205.8	3211.0	3209.2	3212.7	3216.2	3217.9	3217.9
10°	3169.4	3172.9	3174.6	3174.6	3176.4	3181.5	3185.0	3191.9	3195.4	3198.8	3200.6
12.5°	3126.2	3131.3	3133.1	3131.3	3136.5	3143.4	3152.1	3160.8	3166.0	3172.9	3178.1
15°	3074.2	3074.2	3077.7	3082.9	3086.4	3096.7	3105.4	3115.7	3129.6	3138.3	3146.9
17.5°	3017.1	3020.6	3025.7	3025.7	3032.7	3050.0	3055.2	3070.8	3086.4	3095.0	3112.3
20°	2954.8	2958.2	2963.4	2966.9	2975.6	2989.4	2999.8	3013.6	3031.0	3046.5	3063.8
22.5°	2906.3	2899.4	2902.8	2906.3	2915.0	2927.1	2939.2	2956.5	2973.8	2989.4	3006.7
25°	2812.8	2814.6	2819.8	2823.2	2833.6	2844.0	2857.9	2878.6	2894.2	2911.5	2930.5
27.5°	2686.5	2688.2	2696.9	2696.9	2705.5	2722.8	2731.5	2748.8	2769.6	2786.9	2809.4
30°	2542.8	2546.3	2546.3	2553.2	2558.4	2567.0	2575.7	2593.0	2603.4	2619.0	2650.1
32.5°	2411.3	2414.7	2413.0	2411.3	2406.1	2404.3	2402.6	2406.1	2409.5	2414.7	2426.8
35°	2333.4	2324.7	2317.8	2305.7	2291.8	2274.5	2258.9	2238.2	2219.1	2203.5	2186.2
37.5°	2258.9	2257.2	2246.8	2229.5	2201.8	2170.7	2134.3	2089.3	2044.3	1995.8	1949.1
40°	2155.1	2149.9	2141.2	2117.0	2085.8	2047.7	1999.3	1943.9	1871.2	1796.8	1720.6
42.5°	1978.5	1980.2	1969.9	1950.8	1921.4	1885.0	1834.8	1774.3	1696.4	1608.1	1509.4
45°	1772.5	1772.5	1769.1	1753.5	1732.7	1703.3	1665.2	1615.0	1538.9	1448.8	1343.2
47.5°	1557.9	1559.6	1554.4	1551.0	1542.3	1523.3	1495.6	1457.5	1403.8	1317.3	1211.7
50°	1339.8	1339.8	1348.4	1346.7	1346.7	1339.8	1327.7	1305.1	1258.4	1189.2	1090.5
52.5°	1121.7	1125.1	1130.3	1137.3	1145.9	1159.7	1145.9	1135.5	1106.1	1052.4	967.6
55°	896.6	900.1	908.8	920.9	931.3	945.1	948.6	948.6	933.0	896.6	832.6
57.5°	704.5	699.3	706.3	716.6	730.5	744.3	754.7	766.8	765.1	740.9	688.9
60°	529.7	531.4	536.6	547.0	557.4	569.5	583.3	593.7	598.9	586.8	553.9
62.5°	386.0	386.0	392.9	403.3	408.5	425.8	434.5	439.7	444.8	443.1	422.4
65°	270.0	273.5	277.0	282.2	287.3	297.7	302.9	313.3	316.8	318.5	302.9
67.5°	190.4	185.2	188.7	192.1	197.3	204.3	214.7	214.7	219.8	219.8	209.4
70°	121.2	121.2	122.9	128.1	131.6	133.3	136.8	140.2	145.4	143.7	143.7
72.5°	81.4	79.6	81.4	83.1	84.8	90.0	90.0	91.7	95.2	96.9	90.0
75°	41.5	43.3	46.7	45.0	50.2	46.7	48.5	53.7	51.9	48.5	48.5
77.5°	34.6	34.6	34.6	32.9	36.3	36.3	34.6	38.1	36.3	36.3	34.6
80°	24.2	26.0	24.2	22.5	24.2	22.5	22.5	22.5	22.5	22.5	20.8
82.5°	19.1	15.6	17.3	15.6	17.3	17.3	15.6	13.8	13.8	15.6	13.8
85°	13.8	10.4	12.1	12.1	10.4	10.4	10.4	10.4	10.4	8.6	8.6
87.5°	8.6	5.2	5.2	5.2	6.9	6.9	6.9	5.2	6.9	6.9	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



TEST NUMBER: P249399

CATALOG NUMBER: LSR8B80D010 EC8B809730 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8
2.5°	3230.0	3228.3	3231.8	3230.0	3230.0	3228.3	3230.0	3228.3	3231.8	3224.8	3226.5
5°	3230.0	3226.5	3228.3	3230.0	3231.8	3228.3	3228.3	3228.3	3231.8	3228.3	3230.0
7.5°	3223.1	3221.3	3226.5	3230.0	3228.3	3226.5	3230.0	3228.3	3231.8	3230.0	3233.5
10°	3209.2	3211.0	3214.4	3219.6	3221.3	3223.1	3226.5	3226.5	3231.8	3224.8	3228.3
12.5°	3188.5	3195.4	3204.1	3207.5	3214.4	3214.4	3217.9	3219.6	3223.1	3221.3	3226.5
15°	3162.5	3171.1	3181.5	3190.2	3198.8	3204.1	3209.2	3211.0	3216.2	3211.0	3212.7
17.5°	3131.3	3141.7	3157.3	3167.7	3181.5	3186.7	3193.6	3197.1	3202.3	3198.8	3200.6
20°	3088.1	3100.2	3117.5	3133.1	3141.7	3153.8	3162.5	3167.7	3171.1	3167.7	3169.4
22.5°	3027.5	3044.8	3067.3	3079.4	3096.7	3107.1	3108.8	3121.0	3129.6	3121.0	3124.4
25°	2956.5	2973.8	2991.1	3017.1	3032.7	3044.8	3056.9	3058.7	3067.3	3065.6	3063.8
27.5°	2838.8	2861.3	2890.7	2911.5	2932.3	2951.3	2965.2	2968.6	2977.3	2973.8	2975.6
30°	2677.8	2702.1	2729.8	2762.6	2792.1	2811.1	2828.4	2840.5	2849.2	2844.0	2842.3
32.5°	2449.3	2473.6	2503.0	2535.9	2570.5	2598.2	2619.0	2634.6	2644.9	2641.5	2632.8
35°	2188.0	2194.9	2213.9	2239.9	2269.3	2298.7	2317.8	2335.1	2347.2	2350.7	2350.7
37.5°	1919.7	1897.2	1883.3	1883.3	1900.6	1912.7	1930.0	1940.4	1959.5	1966.4	1971.6
40°	1660.0	1608.1	1559.6	1523.3	1499.0	1497.3	1497.3	1502.5	1519.8	1542.3	1563.1
42.5°	1428.1	1345.0	1270.5	1203.0	1154.6	1126.9	1114.8	1116.5	1130.3	1151.1	1185.7
45°	1242.8	1139.0	1045.5	964.2	898.4	855.1	834.3	832.6	843.0	867.2	905.3
47.5°	1099.2	988.4	882.8	789.3	718.4	671.6	647.4	640.5	647.4	669.9	714.9
50°	979.7	865.5	756.4	659.5	583.3	534.9	512.4	503.7	512.4	531.4	576.4
52.5°	868.9	751.2	649.1	555.6	474.3	432.7	408.5	403.3	408.5	431.0	467.4
55°	740.9	640.5	540.1	446.6	375.6	334.1	315.0	309.9	315.0	335.8	373.9
57.5°	614.5	527.9	439.7	354.8	294.3	257.9	240.6	233.7	245.8	259.6	304.7
60°	496.8	427.6	353.1	278.7	228.5	195.6	181.7	180.0	183.5	200.8	231.9
62.5°	389.5	332.4	273.5	212.9	171.4	157.5	140.2	138.5	141.9	152.3	176.6
65°	280.4	244.1	199.1	155.8	122.9	103.9	96.9	98.7	102.1	109.1	131.6
67.5°	195.6	169.6	138.5	109.1	84.8	76.2	69.2	67.5	69.2	81.4	93.5
70°	131.6	116.0	93.5	83.1	58.9	46.7	48.5	43.3	50.2	50.2	60.6
72.5°	86.5	76.2	62.3	48.5	41.5	32.9	32.9	31.2	34.6	36.3	45.0
75°	45.0	34.6	34.6	24.2	17.3	8.6	15.6	13.8	12.1	13.8	17.3
77.5°	31.2	26.0	24.2	19.1	17.3	13.8	13.8	13.8	13.8	15.6	17.3
80°	19.1	19.1	13.8	12.1	10.4	8.6	10.4	10.4	10.4	10.4	12.1
82.5°	12.1	10.4	10.4	8.6	8.6	6.9	6.9	6.9	6.9	6.9	10.4
85°	10.4	6.9	6.9	5.2	6.9	12.1	5.2	6.9	6.9	6.9	5.2
87.5°	3.5	5.2	5.2	5.2	3.5	1.7	3.5	5.2	5.2	8.6	6.9
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: P249399

CATALOG NUMBER: LSR8B80D010 EC8B809730 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8	3224.8
2.5°	3230.0	3231.8	3231.8	3230.0	3230.0	3226.5	3233.5	3228.3	3230.0	3236.9	3231.8
5°	3233.5	3235.2	3235.2	3233.5	3233.5	3233.5	3235.2	3235.2	3233.5	3231.8	3235.2
7.5°	3240.4	3238.7	3238.7	3235.2	3235.2	3231.8	3235.2	3230.0	3233.5	3230.0	3235.2
10°	3231.8	3233.5	3231.8	3230.0	3230.0	3228.3	3228.3	3223.1	3224.8	3219.6	3223.1
12.5°	3226.5	3224.8	3224.8	3221.3	3217.9	3214.4	3212.7	3207.5	3207.5	3195.4	3200.6
15°	3212.7	3214.4	3209.2	3202.3	3198.8	3190.2	3186.7	3179.8	3172.9	3164.2	3166.0
17.5°	3200.6	3195.4	3188.5	3181.5	3167.7	3160.8	3153.8	3143.4	3140.0	3129.6	3126.2
20°	3164.2	3160.8	3152.1	3140.0	3131.3	3115.7	3108.8	3098.5	3089.8	3079.4	3074.2
22.5°	3117.5	3114.0	3103.6	3091.5	3077.7	3070.8	3063.8	3044.8	3036.1	3025.7	3024.0
25°	3058.7	3053.4	3043.1	3029.2	3022.3	3003.3	2996.3	2982.5	2979.0	2968.6	2966.9
27.5°	2968.6	2961.7	2949.6	2932.3	2920.2	2908.0	2901.1	2890.7	2887.3	2876.9	2875.2
30°	2833.6	2824.9	2800.7	2793.8	2773.0	2760.9	2760.9	2747.1	2748.8	2741.9	2741.9
32.5°	2620.7	2606.9	2587.8	2574.0	2560.1	2553.2	2553.2	2548.0	2551.5	2551.5	2554.9
35°	2338.5	2319.5	2309.1	2300.5	2300.5	2307.4	2328.2	2333.4	2343.8	2352.4	2359.3
37.5°	1976.8	1975.1	1987.2	1997.6	2023.5	2053.0	2089.3	2120.5	2149.9	2170.7	2191.4
40°	1585.6	1628.9	1663.5	1712.0	1751.7	1808.9	1874.6	1928.3	1978.5	2014.9	2053.0
42.5°	1237.6	1293.0	1365.8	1436.7	1507.7	1585.6	1672.1	1746.6	1812.3	1862.5	1902.3
45°	964.2	1040.3	1128.6	1218.6	1310.4	1407.3	1497.3	1573.5	1642.7	1694.6	1734.4
47.5°	777.2	860.3	960.7	1059.4	1163.2	1265.3	1365.8	1431.5	1488.6	1530.2	1566.6
50°	642.2	730.5	836.1	948.6	1052.4	1154.6	1241.1	1305.1	1351.9	1388.2	1410.7
52.5°	536.6	630.1	742.6	855.1	958.9	1052.4	1130.3	1178.8	1216.9	1242.8	1263.6
55°	443.1	533.2	638.7	744.3	846.4	934.7	998.8	1035.1	1064.5	1080.1	1092.2
57.5°	361.8	444.8	541.8	638.7	727.0	799.7	849.9	886.3	900.1	912.2	910.5
60°	283.9	361.8	450.1	533.2	609.3	668.1	704.5	725.3	735.7	740.9	737.4
62.5°	223.3	294.3	361.8	434.5	489.9	540.1	574.7	574.7	579.9	581.6	586.8
65°	166.2	219.8	278.7	332.4	377.3	410.2	429.3	434.5	441.4	439.7	436.2
67.5°	122.9	162.7	206.0	245.8	277.0	297.7	311.6	323.7	322.0	318.5	316.8
70°	84.8	110.8	148.9	173.1	195.6	216.4	219.8	221.6	223.3	225.0	221.6
72.5°	58.9	77.9	98.7	119.4	133.3	141.9	150.6	152.3	152.3	152.3	150.6
75°	29.4	39.8	58.9	67.5	79.6	83.1	90.0	90.0	95.2	88.3	86.5
77.5°	26.0	31.2	41.5	48.5	53.7	58.9	60.6	65.8	64.0	60.6	62.3
80°	15.6	19.1	26.0	29.4	36.3	38.1	39.8	41.5	39.8	41.5	41.5
82.5°	12.1	13.8	17.3	17.3	22.5	22.5	24.2	24.2	26.0	26.0	26.0
85°	6.9	12.1	10.4	20.8	13.8	13.8	17.3	20.8	17.3	17.3	20.8
87.5°	6.9	6.9	5.2	6.9	6.9	6.9	8.6	10.4	10.4	12.1	10.4
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: P249399

CATALOG NUMBER: LSR8B80D010 EC8B809730 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3224.8	3224.8	3224.8	3224.8
2.5°	3230.0	3233.5	3228.3	3226.5
5°	3235.2	3235.2	3231.8	3231.8
7.5°	3235.2	3235.2	3230.0	3226.5
10°	3221.3	3221.3	3216.2	3212.7
12.5°	3195.4	3195.4	3193.6	3188.5
15°	3162.5	3162.5	3155.6	3150.4
17.5°	3117.5	3121.0	3112.3	3112.3
20°	3069.0	3067.3	3060.4	3056.9
22.5°	3018.8	3015.4	3013.6	3003.3
25°	2965.2	2961.7	2956.5	2951.3
27.5°	2873.4	2871.7	2866.5	2859.6
30°	2733.2	2731.5	2724.6	2724.6
32.5°	2551.5	2549.7	2542.8	2544.6
35°	2362.8	2369.7	2366.2	2359.3
37.5°	2205.3	2210.5	2213.9	2210.5
40°	2073.7	2089.3	2091.0	2094.5
42.5°	1933.5	1954.3	1961.2	1964.6
45°	1765.6	1784.6	1800.2	1796.8
47.5°	1594.2	1608.1	1621.9	1611.5
50°	1429.8	1438.4	1443.6	1443.6
52.5°	1274.0	1274.0	1272.3	1274.0
55°	1095.7	1095.7	1088.8	1092.2
57.5°	908.8	912.2	907.0	898.4
60°	735.7	727.0	723.5	718.4
62.5°	573.0	573.0	560.9	576.4
65°	429.3	424.1	418.9	417.1
67.5°	311.6	309.9	304.7	302.9
70°	219.8	212.9	211.2	207.7
72.5°	147.1	147.1	143.7	143.7
75°	90.0	81.4	79.6	81.4
77.5°	62.3	60.6	60.6	58.9
80°	41.5	39.8	43.3	38.1
82.5°	26.0	27.7	26.0	27.7
85°	17.3	20.8	19.1	19.1
87.5°	10.4	10.4	10.4	10.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)