

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: P249281

Luminaire Tested: **LSR8B70D010 EC8B70927 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249281
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: LSR8B70D010 EC8B70927 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5947.9 lumens
Efficiency: N/A
Efficacy: 78.4 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

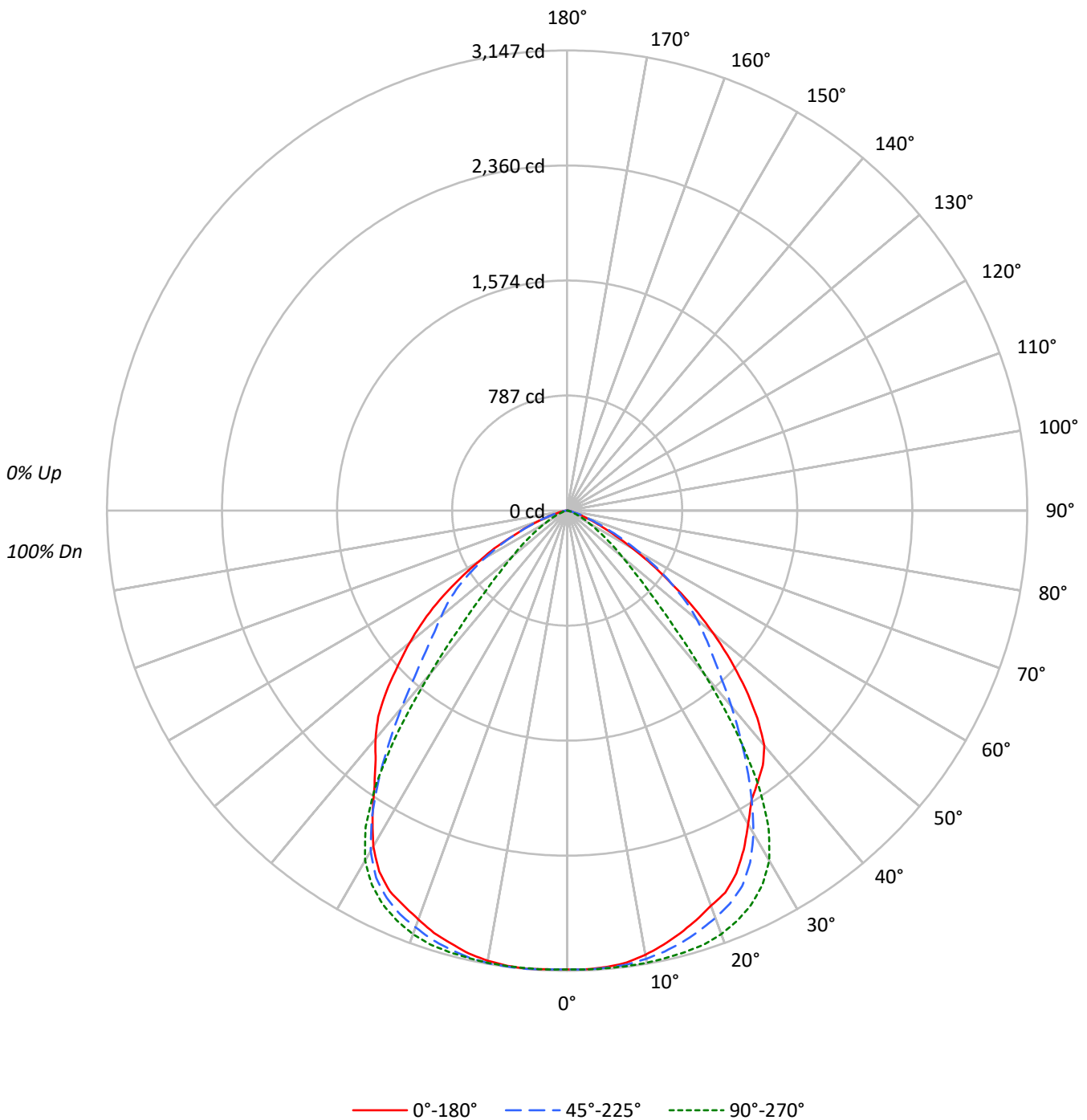
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	299.5	5.0
10°-20°	869.8	14.6
20°-30°	1320.2	22.2
30°-40°	1386.6	23.3
40°-50°	1039.6	17.5
50°-60°	667.0	11.2
60°-70°	285.3	4.8
70°-80°	67.4	1.1
80°-90°	12.6	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°	2489.4	41.9
0°-40°	3876.0	65.2
0°-60°	5582.6	93.9
0°-90°	5947.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5947.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3138	3138	3138	3138	3138	
5°	3133	3138	3142	3147	3145	298
15°	2992	3054	3125	3104	3066	844
25°	2737	2833	2976	2923	2872	1251
35°	2271	2144	2272	2245	2296	1425
45°	1725	1410	810	1370	1748	1321
55°	873	873	302	910	1063	792
65°	263	310	96	399	406	281
75°	40	47	14	81	79	59
85°	14	8	7	14	19	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°	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2
2.5°	3139.9	3143.2	3141.6	3141.6	3139.9	3141.6	3141.6	3144.9	3144.9	3141.6	3139.9
5°	3133.1	3136.5	3136.5	3133.1	3133.1	3141.6	3136.5	3139.9	3139.9	3138.2	3138.2
7.5°	3118.0	3118.0	3124.7	3119.7	3119.7	3124.7	3123.0	3126.4	3129.9	3131.5	3131.5
10°	3084.3	3087.7	3089.4	3089.4	3091.0	3096.1	3099.5	3106.2	3109.6	3113.0	3114.7
12.5°	3042.2	3047.3	3049.0	3047.3	3052.4	3059.0	3067.5	3075.9	3080.9	3087.7	3092.7
15°	2991.6	2991.6	2995.0	3000.2	3003.5	3013.5	3022.0	3032.1	3045.6	3054.0	3062.4
17.5°	2936.1	2939.5	2944.5	2944.5	2951.2	2968.1	2973.2	2988.3	3003.5	3011.8	3028.7
20°	2875.5	2878.8	2883.8	2887.2	2895.6	2909.1	2919.3	2932.8	2949.5	2964.7	2981.6
22.5°	2828.2	2821.5	2824.9	2828.2	2836.7	2848.5	2860.3	2877.1	2894.0	2909.1	2926.0
25°	2737.4	2739.0	2744.1	2747.4	2757.5	2767.6	2781.1	2801.4	2816.4	2833.3	2851.9
27.5°	2614.4	2616.1	2624.4	2624.4	2632.8	2649.7	2658.2	2675.0	2695.2	2712.0	2734.0
30°	2474.5	2477.9	2477.9	2484.7	2489.6	2498.1	2506.5	2523.4	2533.5	2548.7	2579.0
32.5°	2346.5	2349.9	2348.2	2346.5	2341.5	2339.8	2338.1	2341.5	2344.8	2349.9	2361.6
35°	2270.7	2262.3	2255.5	2243.8	2230.3	2213.4	2198.2	2178.1	2159.5	2144.4	2127.5
37.5°	2198.2	2196.6	2186.4	2169.6	2142.7	2112.4	2077.0	2033.2	1989.3	1942.2	1896.8
40°	2097.2	2092.2	2083.7	2060.1	2029.8	1992.7	1945.6	1891.7	1820.9	1748.5	1674.4
42.5°	1925.3	1927.0	1917.0	1898.4	1869.8	1834.4	1785.6	1726.6	1650.8	1564.9	1468.9
45°	1725.0	1725.0	1721.6	1706.4	1686.2	1657.6	1620.4	1571.6	1497.5	1410.0	1307.1
47.5°	1516.0	1517.7	1512.7	1509.3	1500.9	1482.4	1455.4	1418.4	1366.1	1281.9	1179.1
50°	1303.8	1303.8	1312.2	1310.5	1310.5	1303.8	1292.1	1270.1	1224.7	1157.3	1061.2
52.5°	1091.6	1095.0	1100.0	1106.7	1115.1	1128.6	1115.1	1105.0	1076.4	1024.2	941.6
55°	872.6	875.9	884.4	896.2	906.3	919.8	923.1	923.1	907.9	872.6	810.2
57.5°	685.6	680.5	687.3	697.4	710.9	724.4	734.4	746.2	744.5	721.0	670.4
60°	515.5	517.2	522.2	532.4	542.4	554.2	567.7	577.8	582.9	571.1	539.0
62.5°	375.6	375.6	382.4	392.5	397.6	414.4	422.8	427.8	432.9	431.2	411.0
65°	262.8	266.2	269.6	274.6	279.6	289.7	294.8	304.9	308.2	309.9	294.8
67.5°	185.3	180.2	183.6	187.0	192.0	198.8	208.9	208.9	213.9	213.9	203.8
70°	117.9	117.9	119.6	124.6	128.0	129.7	133.1	136.5	141.5	139.8	139.8
72.5°	79.2	77.5	79.2	80.9	82.6	87.6	87.6	89.3	92.7	94.4	87.6
75°	40.4	42.1	45.4	43.8	48.8	45.4	47.1	52.2	50.5	47.1	47.1
77.5°	33.6	33.6	33.6	32.1	35.3	35.3	33.6	37.0	35.3	35.3	33.6
80°	23.6	25.3	23.6	21.9	23.6	21.9	21.9	21.9	21.9	21.9	20.2
82.5°	18.6	15.2	16.9	15.2	16.9	16.9	15.2	13.5	13.5	15.2	13.5
85°	13.5	10.1	11.8	11.8	10.1	10.1	10.1	10.1	10.1	8.4	8.4
87.5°	8.4	5.1	5.1	5.1	6.8	6.8	6.8	5.1	6.8	6.8	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°	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2
2.5°	3143.2	3141.6	3144.9	3143.2	3143.2	3141.6	3143.2	3141.6	3144.9	3138.2	3139.9
5°	3143.2	3139.9	3141.6	3143.2	3144.9	3141.6	3141.6	3141.6	3144.9	3141.6	3143.2
7.5°	3136.5	3134.8	3139.9	3143.2	3141.6	3139.9	3143.2	3141.6	3144.9	3143.2	3146.6
10°	3123.0	3124.7	3128.1	3133.1	3134.8	3136.5	3139.9	3139.9	3144.9	3138.2	3141.6
12.5°	3102.9	3109.6	3118.0	3121.3	3128.1	3128.1	3131.5	3133.1	3136.5	3134.8	3139.9
15°	3077.5	3086.0	3096.1	3104.5	3113.0	3118.0	3123.0	3124.7	3129.9	3124.7	3126.4
17.5°	3047.3	3057.3	3072.5	3082.6	3096.1	3101.2	3107.9	3111.3	3116.4	3113.0	3114.7
20°	3005.1	3016.9	3033.8	3049.0	3057.3	3069.1	3077.5	3082.6	3086.0	3082.6	3084.3
22.5°	2946.2	2963.0	2985.0	2996.7	3013.5	3023.7	3025.4	3037.2	3045.6	3037.2	3040.5
25°	2877.1	2894.0	2910.8	2936.1	2951.2	2963.0	2974.8	2976.5	2985.0	2983.3	2981.6
27.5°	2762.5	2784.5	2813.1	2833.3	2853.6	2872.1	2885.5	2888.9	2897.3	2894.0	2895.6
30°	2606.0	2629.5	2656.5	2688.4	2717.1	2735.7	2752.4	2764.2	2772.7	2767.6	2765.9
32.5°	2383.5	2407.2	2435.8	2467.8	2501.5	2528.4	2548.7	2563.8	2573.9	2570.5	2562.1
35°	2129.2	2135.9	2154.5	2179.8	2208.4	2237.1	2255.5	2272.4	2284.2	2287.6	2287.6
37.5°	1868.1	1846.2	1832.7	1832.7	1849.6	1861.3	1878.2	1888.3	1906.9	1913.6	1918.7
40°	1615.4	1564.9	1517.7	1482.4	1458.8	1457.1	1457.1	1462.2	1479.0	1500.9	1521.1
42.5°	1389.7	1308.8	1236.4	1170.7	1123.5	1096.6	1084.8	1086.5	1100.0	1120.2	1153.9
45°	1209.5	1108.4	1017.4	938.2	874.2	832.2	811.9	810.2	820.4	843.9	881.0
47.5°	1069.6	961.9	859.0	768.2	699.1	653.6	630.0	623.2	630.0	651.9	695.7
50°	953.4	842.3	736.1	641.8	567.7	520.5	498.6	490.2	498.6	517.2	560.9
52.5°	845.7	731.0	631.7	540.7	461.6	421.1	397.6	392.5	397.6	419.4	454.8
55°	721.0	623.2	525.6	434.6	365.5	325.1	306.6	301.5	306.6	326.8	363.8
57.5°	598.1	513.8	427.8	345.3	286.4	251.0	234.1	227.4	239.2	252.7	296.4
60°	483.4	416.1	343.6	271.2	222.4	190.4	176.8	175.2	178.5	195.4	225.7
62.5°	379.0	323.4	266.2	207.2	166.7	153.3	136.5	134.8	138.2	148.2	171.8
65°	272.9	237.5	193.7	151.6	119.6	101.0	94.4	96.1	99.3	106.1	128.0
67.5°	190.4	165.0	134.8	106.1	82.6	74.1	67.4	65.7	67.4	79.2	91.0
70°	128.0	112.8	91.0	80.9	57.3	45.4	47.1	42.1	48.8	48.8	59.0
72.5°	84.3	74.1	60.6	47.1	40.4	32.1	32.1	30.4	33.6	35.3	43.8
75°	43.8	33.6	33.6	23.6	16.9	8.4	15.2	13.5	11.8	13.5	16.9
77.5°	30.4	25.3	23.6	18.6	16.9	13.5	13.5	13.5	13.5	15.2	16.9
80°	18.6	18.6	13.5	11.8	10.1	8.4	10.1	10.1	10.1	10.1	11.8
82.5°	11.8	10.1	10.1	8.4	8.4	6.8	6.8	6.8	6.8	6.8	10.1
85°	10.1	6.8	6.8	5.1	6.8	11.8	5.1	6.8	6.8	6.8	5.1
87.5°	3.4	5.1	5.1	5.1	3.4	1.7	3.4	5.1	5.1	8.4	6.8
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°	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2	3138.2
2.5°	3143.2	3144.9	3144.9	3143.2	3143.2	3139.9	3146.6	3141.6	3143.2	3150.0	3144.9
5°	3146.6	3148.3	3148.3	3146.6	3146.6	3146.6	3148.3	3148.3	3146.6	3144.9	3148.3
7.5°	3153.4	3151.7	3151.7	3148.3	3148.3	3144.9	3148.3	3143.2	3146.6	3143.2	3148.3
10°	3144.9	3146.6	3144.9	3143.2	3143.2	3141.6	3141.6	3136.5	3138.2	3133.1	3136.5
12.5°	3139.9	3138.2	3138.2	3134.8	3131.5	3128.1	3126.4	3121.3	3121.3	3109.6	3114.7
15°	3126.4	3128.1	3123.0	3116.4	3113.0	3104.5	3101.2	3094.4	3087.7	3079.2	3080.9
17.5°	3114.7	3109.6	3102.9	3096.1	3082.6	3075.9	3069.1	3059.0	3055.6	3045.6	3042.2
20°	3079.2	3075.9	3067.5	3055.6	3047.3	3032.1	3025.4	3015.2	3006.8	2996.7	2991.6
22.5°	3033.8	3030.4	3020.3	3008.5	2995.0	2988.3	2981.6	2963.0	2954.6	2944.5	2942.8
25°	2976.5	2971.5	2961.3	2947.8	2941.1	2922.6	2915.9	2902.4	2899.0	2888.9	2887.2
27.5°	2888.9	2882.1	2870.4	2853.6	2841.8	2829.9	2823.2	2813.1	2809.8	2799.7	2798.0
30°	2757.5	2749.0	2725.5	2718.8	2698.5	2686.7	2686.7	2673.3	2675.0	2668.3	2668.3
32.5°	2550.4	2536.9	2518.3	2504.8	2491.3	2484.7	2484.7	2479.6	2483.0	2483.0	2486.4
35°	2275.8	2257.2	2247.1	2238.8	2238.8	2245.4	2265.6	2270.7	2280.8	2289.3	2296.0
37.5°	1923.6	1922.1	1933.8	1943.9	1969.2	1997.8	2033.2	2063.5	2092.2	2112.4	2132.5
40°	1543.0	1585.1	1618.8	1666.0	1704.7	1760.3	1824.3	1876.5	1925.3	1960.8	1997.8
42.5°	1204.4	1258.3	1329.1	1398.1	1467.2	1543.0	1627.2	1699.6	1763.7	1812.5	1851.3
45°	938.2	1012.4	1098.3	1185.9	1275.2	1369.5	1457.1	1531.2	1598.6	1649.1	1687.8
47.5°	756.3	837.2	934.9	1031.0	1132.0	1231.3	1329.1	1393.1	1448.7	1489.0	1524.5
50°	624.9	710.9	813.6	923.1	1024.2	1123.5	1207.8	1270.1	1315.6	1351.0	1372.8
52.5°	522.2	613.1	722.7	832.2	933.2	1024.2	1100.0	1147.2	1184.2	1209.5	1229.6
55°	431.2	518.8	621.6	724.4	823.7	909.6	971.9	1007.3	1035.9	1051.1	1062.9
57.5°	352.1	432.9	527.3	621.6	707.5	778.3	827.1	862.4	875.9	887.7	886.0
60°	276.3	352.1	438.0	518.8	593.0	650.2	685.6	705.8	715.9	721.0	717.6
62.5°	217.4	286.4	352.1	422.8	476.7	525.6	559.2	559.2	564.3	566.0	571.1
65°	161.7	213.9	271.2	323.4	367.2	399.3	417.8	422.8	429.5	427.8	424.5
67.5°	119.6	158.4	200.5	239.2	269.6	289.7	303.2	315.0	313.3	309.9	308.2
70°	82.6	107.8	144.9	168.4	190.4	210.6	213.9	215.6	217.4	219.0	215.6
72.5°	57.3	75.8	96.1	116.2	129.7	138.2	146.6	148.2	148.2	148.2	146.6
75°	28.7	38.7	57.3	65.7	77.5	80.9	87.6	87.6	92.7	86.0	84.3
77.5°	25.3	30.4	40.4	47.1	52.2	57.3	59.0	64.0	62.3	59.0	60.6
80°	15.2	18.6	25.3	28.7	35.3	37.0	38.7	40.4	38.7	40.4	40.4
82.5°	11.8	13.5	16.9	16.9	21.9	21.9	23.6	23.6	25.3	25.3	25.3
85°	6.8	11.8	10.1	20.2	13.5	13.5	16.9	20.2	16.9	16.9	20.2
87.5°	6.8	6.8	5.1	6.8	6.8	6.8	8.4	10.1	10.1	11.8	10.1
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: P249281

CATALOG NUMBER: LSR8B70D010 EC8B70927 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3138.2	3138.2	3138.2	3138.2
2.5°	3143.2	3146.6	3141.6	3139.9
5°	3148.3	3148.3	3144.9	3144.9
7.5°	3148.3	3148.3	3143.2	3139.9
10°	3134.8	3134.8	3129.9	3126.4
12.5°	3109.6	3109.6	3107.9	3102.9
15°	3077.5	3077.5	3070.8	3065.8
17.5°	3033.8	3037.2	3028.7	3028.7
20°	2986.6	2985.0	2978.2	2974.8
22.5°	2937.8	2934.5	2932.8	2922.6
25°	2885.5	2882.1	2877.1	2872.1
27.5°	2796.3	2794.6	2789.5	2782.8
30°	2659.8	2658.2	2651.4	2651.4
32.5°	2483.0	2481.3	2474.5	2476.2
35°	2299.3	2306.1	2302.8	2296.0
37.5°	2146.0	2151.1	2154.5	2151.1
40°	2018.0	2033.2	2034.9	2038.3
42.5°	1881.6	1901.8	1908.6	1911.9
45°	1718.2	1736.7	1751.8	1748.5
47.5°	1551.4	1564.9	1578.4	1568.2
50°	1391.4	1399.8	1404.9	1404.9
52.5°	1239.8	1239.8	1238.1	1239.8
55°	1066.3	1066.3	1059.5	1062.9
57.5°	884.4	887.7	882.7	874.2
60°	715.9	707.5	704.1	699.1
62.5°	557.6	557.6	545.8	560.9
65°	417.8	412.6	407.6	405.9
67.5°	303.2	301.5	296.4	294.8
70°	213.9	207.2	205.5	202.2
72.5°	143.2	143.2	139.8	139.8
75°	87.6	79.2	77.5	79.2
77.5°	60.6	59.0	59.0	57.3
80°	40.4	38.7	42.1	37.0
82.5°	25.3	27.0	25.3	27.0
85°	16.9	20.2	18.6	18.6
87.5°	10.1	10.1	10.1	10.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)