

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: P249398

Luminaire Tested: **LSR8B70D010 EC8B70930 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249398
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 EC8B70930 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: 6161.0 lumens
Efficiency: N/A
Efficacy: 81.2 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

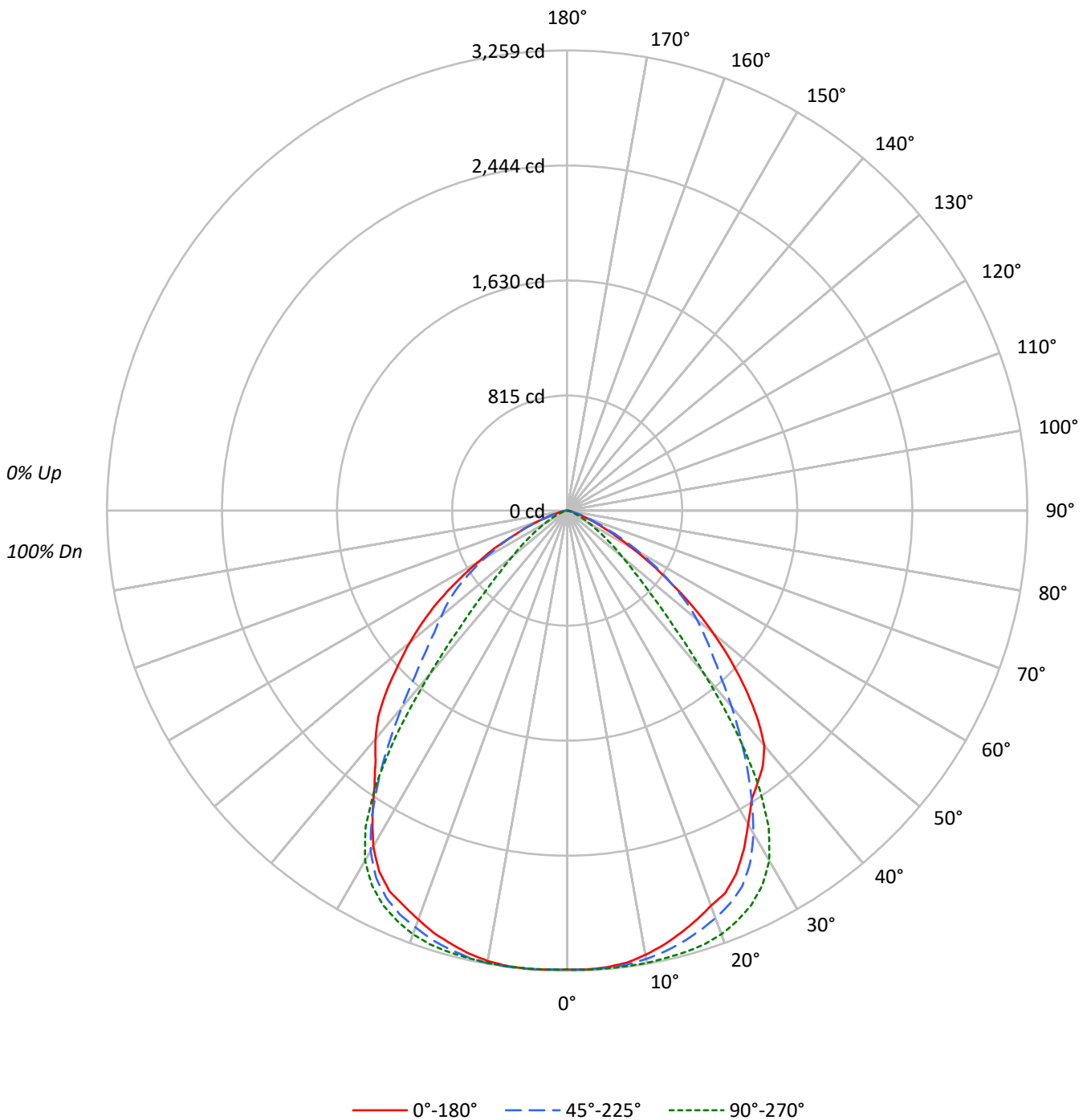
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	310.2	5.0
10°-20°	901.0	14.6
20°-30°	1367.5	22.2
30°-40°	1436.3	23.3
40°-50°	1076.8	17.5
50°-60°	690.9	11.2
60°-70°	295.6	4.8
70°-80°	69.8	1.1
80°-90°	13.0	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°	2578.7	41.9
0°-40°	4014.9	65.2
0°-60°	5782.6	93.9
0°-90°	6161.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6161.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3251	3251	3251	3251	3251	
5°	3245	3251	3254	3259	3258	308
15°	3099	3164	3237	3216	3176	874
25°	2835	2935	3083	3027	2975	1295
35°	2352	2221	2354	2326	2378	1476
45°	1787	1460	839	1419	1811	1368
55°	904	904	312	942	1101	820
65°	272	321	99	414	420	291
75°	42	49	14	84	82	61
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°	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7
2.5°	3252.5	3255.9	3254.2	3254.2	3252.5	3254.2	3254.2	3257.6	3257.6	3254.2	3252.5
5°	3245.4	3248.9	3248.9	3245.4	3245.4	3254.2	3248.9	3252.5	3252.5	3250.7	3250.7
7.5°	3229.7	3229.7	3236.7	3231.5	3231.5	3236.7	3235.0	3238.5	3241.9	3243.7	3243.7
10°	3194.8	3198.3	3200.1	3200.1	3201.8	3207.1	3210.5	3217.5	3221.0	3224.6	3226.2
12.5°	3151.2	3156.4	3158.2	3156.4	3161.7	3168.6	3177.4	3186.1	3191.4	3198.3	3203.6
15°	3098.9	3098.9	3102.4	3107.6	3111.1	3121.5	3130.3	3140.7	3154.7	3163.5	3172.2
17.5°	3041.3	3044.7	3050.0	3050.0	3057.0	3074.5	3079.7	3095.4	3111.1	3119.9	3137.2
20°	2978.5	2982.0	2987.2	2990.7	2999.5	3013.4	3023.8	3037.8	3055.3	3071.0	3088.4
22.5°	2929.6	2922.7	2926.1	2929.6	2938.4	2950.6	2962.8	2980.2	2997.7	3013.4	3030.8
25°	2835.3	2837.1	2842.4	2845.9	2856.3	2866.8	2880.7	2901.7	2917.4	2934.9	2954.1
27.5°	2708.0	2709.8	2718.5	2718.5	2727.2	2744.7	2753.4	2770.9	2791.9	2809.2	2832.0
30°	2563.2	2566.6	2566.6	2573.7	2578.9	2587.6	2596.3	2613.8	2624.3	2640.0	2671.5
32.5°	2430.6	2434.0	2432.3	2430.6	2425.4	2423.6	2421.8	2425.4	2428.9	2434.0	2446.2
35°	2352.1	2343.3	2336.4	2324.2	2310.2	2292.8	2277.1	2256.1	2237.0	2221.1	2203.8
37.5°	2277.1	2275.3	2264.9	2247.4	2219.5	2188.1	2151.4	2106.0	2060.6	2011.9	1964.8
40°	2172.4	2167.1	2158.4	2133.9	2102.5	2064.2	2015.3	1959.5	1886.2	1811.2	1734.4
42.5°	1994.4	1996.2	1985.6	1966.5	1936.9	1900.1	1849.5	1788.4	1710.0	1621.0	1521.5
45°	1786.8	1786.8	1783.3	1767.5	1746.6	1716.9	1678.6	1627.9	1551.2	1460.4	1353.9
47.5°	1570.4	1572.1	1566.8	1563.5	1554.6	1535.4	1507.5	1469.2	1415.0	1327.8	1221.4
50°	1350.6	1350.6	1359.2	1357.5	1357.5	1350.6	1338.4	1315.6	1268.5	1198.7	1099.3
52.5°	1130.6	1134.1	1139.4	1146.3	1155.1	1169.1	1155.1	1144.7	1114.9	1060.9	975.4
55°	903.9	907.3	916.1	928.3	938.7	952.7	956.2	956.2	940.4	903.9	839.3
57.5°	710.2	704.9	711.9	722.4	736.4	750.3	760.7	772.9	771.2	746.8	694.5
60°	533.9	535.7	540.9	551.4	561.8	574.1	588.1	598.5	603.8	591.6	558.4
62.5°	389.1	389.1	396.0	406.6	411.7	429.2	438.0	443.2	448.4	446.7	425.8
65°	272.2	275.7	279.1	284.4	289.7	300.1	305.4	315.8	319.3	321.1	305.4
67.5°	191.9	186.6	190.2	193.7	198.9	205.9	216.4	216.4	221.6	221.6	211.1
70°	122.2	122.2	123.9	129.1	132.6	134.4	137.9	141.4	146.5	144.8	144.8
72.5°	82.1	80.3	82.1	83.7	85.5	90.7	90.7	92.5	96.0	97.8	90.7
75°	41.9	43.6	47.1	45.4	50.6	47.1	48.9	54.1	52.4	48.9	48.9
77.5°	34.9	34.9	34.9	33.2	36.7	36.7	34.9	38.3	36.7	36.7	34.9
80°	24.4	26.1	24.4	22.6	24.4	22.6	22.6	22.6	22.6	22.6	21.0
82.5°	19.2	15.7	17.5	15.7	17.5	17.5	15.7	14.0	14.0	15.7	14.0
85°	14.0	10.4	12.2	12.2	10.4	10.4	10.4	10.4	10.4	8.7	8.7
87.5°	8.7	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°	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7
2.5°	3255.9	3254.2	3257.6	3255.9	3255.9	3254.2	3255.9	3254.2	3257.6	3250.7	3252.5
5°	3255.9	3252.5	3254.2	3255.9	3257.6	3254.2	3254.2	3254.2	3257.6	3254.2	3255.9
7.5°	3248.9	3247.2	3252.5	3255.9	3254.2	3252.5	3255.9	3254.2	3257.6	3255.9	3259.4
10°	3235.0	3236.7	3240.3	3245.4	3247.2	3248.9	3252.5	3252.5	3257.6	3250.7	3254.2
12.5°	3214.0	3221.0	3229.7	3233.2	3240.3	3240.3	3243.7	3245.4	3248.9	3247.2	3252.5
15°	3187.9	3196.5	3207.1	3215.8	3224.6	3229.7	3235.0	3236.7	3241.9	3236.7	3238.5
17.5°	3156.4	3166.9	3182.6	3193.1	3207.1	3212.3	3219.3	3222.8	3228.0	3224.6	3226.2
20°	3112.8	3125.0	3142.5	3158.2	3166.9	3179.2	3187.9	3193.1	3196.5	3193.1	3194.8
22.5°	3051.8	3069.2	3091.9	3104.0	3121.5	3132.1	3133.8	3146.0	3154.7	3146.0	3149.4
25°	2980.2	2997.7	3015.2	3041.3	3057.0	3069.2	3081.4	3083.2	3091.9	3090.1	3088.4
27.5°	2861.6	2884.2	2913.9	2934.9	2955.7	2975.0	2988.9	2992.4	3001.1	2997.7	2999.5
30°	2699.3	2723.7	2751.7	2784.8	2814.5	2833.7	2851.2	2863.3	2872.0	2866.8	2865.1
32.5°	2469.0	2493.4	2523.0	2556.2	2591.2	2619.0	2640.0	2655.6	2666.2	2662.6	2654.0
35°	2205.6	2212.5	2231.7	2257.9	2287.5	2317.2	2336.4	2353.8	2366.0	2369.5	2369.5
37.5°	1935.1	1912.4	1898.4	1898.4	1915.9	1928.0	1945.5	1956.0	1975.2	1982.2	1987.4
40°	1673.3	1621.0	1572.1	1535.4	1511.1	1509.3	1509.3	1514.5	1532.0	1554.6	1575.6
42.5°	1439.5	1355.7	1280.7	1212.7	1163.8	1135.9	1123.7	1125.5	1139.4	1160.3	1195.2
45°	1252.8	1148.1	1053.9	971.9	905.5	861.9	841.0	839.3	849.7	874.2	912.6
47.5°	1108.0	996.3	889.8	795.7	724.2	677.0	652.5	645.6	652.5	675.3	720.6
50°	987.6	872.5	762.5	664.8	588.1	539.2	516.4	507.8	516.4	535.7	581.0
52.5°	875.9	757.2	654.3	560.1	478.1	436.2	411.7	406.6	411.7	434.5	471.2
55°	746.8	645.6	544.4	450.2	378.7	336.7	317.6	312.3	317.6	338.5	376.9
57.5°	619.5	532.1	443.2	357.7	296.6	260.0	242.6	235.5	247.7	261.8	307.0
60°	500.8	431.0	355.9	280.9	230.4	197.2	183.2	181.5	185.0	202.5	233.8
62.5°	392.6	335.1	275.7	214.7	172.7	158.7	141.4	139.6	143.0	153.6	178.0
65°	282.7	246.1	200.7	157.1	123.9	104.7	97.8	99.4	102.9	110.0	132.6
67.5°	197.2	171.0	139.6	110.0	85.5	76.8	69.8	68.0	69.8	82.1	94.3
70°	132.6	116.9	94.3	83.7	59.3	47.1	48.9	43.6	50.6	50.6	61.1
72.5°	87.2	76.8	62.8	48.9	41.9	33.2	33.2	31.4	34.9	36.7	45.4
75°	45.4	34.9	34.9	24.4	17.5	8.7	15.7	14.0	12.2	14.0	17.5
77.5°	31.4	26.1	24.4	19.2	17.5	14.0	14.0	14.0	14.0	15.7	17.5
80°	19.2	19.2	14.0	12.2	10.4	8.7	10.4	10.4	10.4	10.4	12.2
82.5°	12.2	10.4	10.4	8.7	8.7	7.0	7.0	7.0	7.0	7.0	10.4
85°	10.4	7.0	7.0	5.3	7.0	12.2	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	8.7	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°	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7	3250.7
2.5°	3255.9	3257.6	3257.6	3255.9	3255.9	3252.5	3259.4	3254.2	3255.9	3262.9	3257.6
5°	3259.4	3261.1	3261.1	3259.4	3259.4	3259.4	3261.1	3261.1	3259.4	3257.6	3261.1
7.5°	3266.4	3264.7	3264.7	3261.1	3261.1	3257.6	3261.1	3255.9	3259.4	3255.9	3261.1
10°	3257.6	3259.4	3257.6	3255.9	3255.9	3254.2	3254.2	3248.9	3250.7	3245.4	3248.9
12.5°	3252.5	3250.7	3250.7	3247.2	3243.7	3240.3	3238.5	3233.2	3233.2	3221.0	3226.2
15°	3238.5	3240.3	3235.0	3228.0	3224.6	3215.8	3212.3	3205.3	3198.3	3189.6	3191.4
17.5°	3226.2	3221.0	3214.0	3207.1	3193.1	3186.1	3179.2	3168.6	3165.1	3154.7	3151.2
20°	3189.6	3186.1	3177.4	3165.1	3156.4	3140.7	3133.8	3123.3	3114.6	3104.0	3098.9
22.5°	3142.5	3139.0	3128.5	3116.3	3102.4	3095.4	3088.4	3069.2	3060.4	3050.0	3048.2
25°	3083.2	3077.9	3067.5	3053.5	3046.5	3027.4	3020.3	3006.4	3002.9	2992.4	2990.7
27.5°	2992.4	2985.4	2973.2	2955.7	2943.5	2931.4	2924.4	2913.9	2910.5	2899.9	2898.2
30°	2856.3	2847.6	2823.1	2816.2	2795.2	2783.0	2783.0	2769.1	2770.9	2763.8	2763.8
32.5°	2641.7	2627.7	2608.6	2594.6	2580.7	2573.7	2573.7	2568.4	2571.9	2571.9	2575.4
35°	2357.4	2338.2	2327.6	2318.9	2318.9	2325.9	2346.8	2352.1	2362.5	2371.3	2378.3
37.5°	1992.6	1990.9	2003.1	2013.5	2039.8	2069.4	2106.0	2137.5	2167.1	2188.1	2208.9
40°	1598.3	1641.9	1676.8	1725.7	1765.8	1823.4	1889.7	1943.8	1994.4	2031.0	2069.4
42.5°	1247.6	1303.4	1376.7	1448.2	1519.7	1598.3	1685.5	1760.5	1826.9	1877.5	1917.6
45°	971.9	1048.7	1137.7	1228.4	1320.9	1418.6	1509.3	1586.1	1655.8	1708.2	1748.3
47.5°	783.5	867.2	968.4	1067.9	1172.6	1275.5	1376.7	1443.1	1500.6	1542.5	1579.2
50°	647.4	736.4	842.8	956.2	1060.9	1163.8	1251.0	1315.6	1362.8	1399.3	1422.1
52.5°	540.9	635.2	748.6	861.9	966.6	1060.9	1139.4	1188.3	1226.6	1252.8	1273.7
55°	446.7	537.4	643.9	750.3	853.2	942.2	1006.8	1043.4	1073.0	1088.8	1101.0
57.5°	364.7	448.4	546.2	643.9	732.8	806.1	856.8	893.3	907.3	919.6	917.8
60°	286.2	364.7	453.7	537.4	614.2	673.5	710.2	731.1	741.5	746.8	743.3
62.5°	225.1	296.6	364.7	438.0	493.8	544.4	579.3	579.3	584.5	586.3	591.6
65°	167.5	221.6	280.9	335.1	380.4	413.5	432.7	438.0	444.9	443.2	439.7
67.5°	123.9	164.0	207.6	247.7	279.1	300.1	314.1	326.3	324.5	321.1	319.3
70°	85.5	111.7	150.1	174.5	197.2	218.1	221.6	223.3	225.1	226.8	223.3
72.5°	59.3	78.5	99.4	120.4	134.4	143.0	151.8	153.6	153.6	153.6	151.8
75°	29.7	40.1	59.3	68.0	80.3	83.7	90.7	90.7	96.0	89.0	87.2
77.5°	26.1	31.4	41.9	48.9	54.1	59.3	61.1	66.3	64.6	61.1	62.8
80°	15.7	19.2	26.1	29.7	36.7	38.3	40.1	41.9	40.1	41.9	41.9
82.5°	12.2	14.0	17.5	17.5	22.6	22.6	24.4	24.4	26.1	26.1	26.1
85°	7.0	12.2	10.4	21.0	14.0	14.0	17.5	21.0	17.5	17.5	21.0
87.5°	7.0	7.0	5.3	7.0	7.0	7.0	8.7	10.4	10.4	12.2	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: P249398

CATALOG NUMBER: LSR8B70D010 EC8B70930 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3250.7	3250.7	3250.7	3250.7
2.5°	3255.9	3259.4	3254.2	3252.5
5°	3261.1	3261.1	3257.6	3257.6
7.5°	3261.1	3261.1	3255.9	3252.5
10°	3247.2	3247.2	3241.9	3238.5
12.5°	3221.0	3221.0	3219.3	3214.0
15°	3187.9	3187.9	3180.8	3175.7
17.5°	3142.5	3146.0	3137.2	3137.2
20°	3093.6	3091.9	3084.9	3081.4
22.5°	3043.1	3039.6	3037.8	3027.4
25°	2988.9	2985.4	2980.2	2975.0
27.5°	2896.4	2894.8	2889.5	2882.5
30°	2755.1	2753.4	2746.4	2746.4
32.5°	2571.9	2570.2	2563.2	2565.0
35°	2381.7	2388.7	2385.3	2378.3
37.5°	2222.9	2228.2	2231.7	2228.2
40°	2090.3	2106.0	2107.8	2111.3
42.5°	1949.0	1969.9	1977.0	1980.4
45°	1779.7	1799.0	1814.7	1811.2
47.5°	1607.0	1621.0	1634.9	1624.4
50°	1441.3	1450.0	1455.2	1455.2
52.5°	1284.2	1284.2	1282.5	1284.2
55°	1104.5	1104.5	1097.6	1101.0
57.5°	916.1	919.6	914.3	905.5
60°	741.5	732.8	729.3	724.2
62.5°	577.5	577.5	565.3	581.0
65°	432.7	427.5	422.3	420.5
67.5°	314.1	312.3	307.0	305.4
70°	221.6	214.7	212.9	209.4
72.5°	148.3	148.3	144.8	144.8
75°	90.7	82.1	80.3	82.1
77.5°	62.8	61.1	61.1	59.3
80°	41.9	40.1	43.6	38.3
82.5°	26.1	27.9	26.1	27.9
85°	17.5	21.0	19.2	19.2
87.5°	10.4	10.4	10.4	10.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)