

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: P249182

Luminaire Tested: **LSR8B70D010 EC8B70930 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249182
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 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6303.4 lumens
Efficiency: N/A
Efficacy: 83.0 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

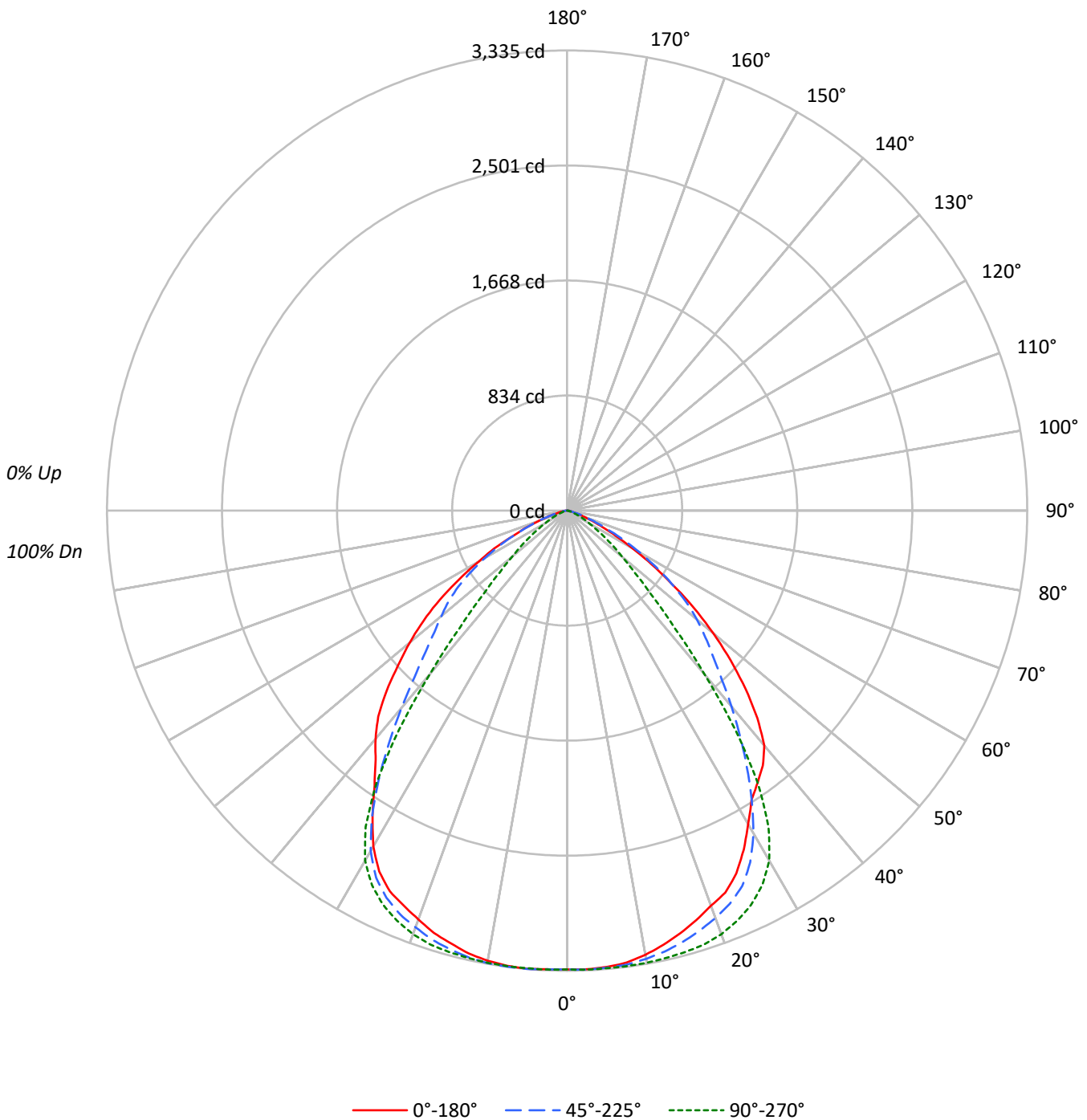
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	52	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°	317.4	5.0
10°-20°	921.8	14.6
20°-30°	1399.1	22.2
30°-40°	1469.4	23.3
40°-50°	1101.7	17.5
50°-60°	706.9	11.2
60°-70°	302.4	4.8
70°-80°	71.4	1.1
80°-90°	13.3	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°	2638.2	41.9
0°-40°	4107.7	65.2
0°-60°	5916.3	93.9
0°-90°	6303.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6303.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3326	3326	3326	3326	3326	
5°	3320	3326	3329	3335	3333	315
15°	3170	3237	3312	3290	3249	894
25°	2901	3003	3154	3097	3044	1325
35°	2406	2272	2408	2380	2433	1510
45°	1828	1494	859	1451	1853	1400
55°	925	925	320	964	1126	839
65°	278	328	102	423	430	297
75°	43	50	14	86	84	62
85°	14	9	7	14	20	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°	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8
2.5°	3327.6	3331.2	3329.4	3329.4	3327.6	3329.4	3329.4	3333.0	3333.0	3329.4	3327.6
5°	3320.4	3324.0	3324.0	3320.4	3320.4	3329.4	3324.0	3327.6	3327.6	3325.8	3325.8
7.5°	3304.4	3304.4	3311.5	3306.2	3306.2	3311.5	3309.8	3313.3	3316.9	3318.7	3318.7
10°	3268.6	3272.2	3274.0	3274.0	3275.8	3281.2	3284.8	3291.9	3295.4	3299.0	3300.8
12.5°	3224.1	3229.4	3231.2	3229.4	3234.8	3241.9	3250.8	3259.8	3265.1	3272.2	3277.6
15°	3170.4	3170.4	3174.0	3179.4	3183.0	3193.7	3202.6	3213.3	3227.6	3236.6	3245.4
17.5°	3111.6	3115.1	3120.5	3120.5	3127.7	3145.5	3150.8	3166.9	3183.0	3191.9	3209.8
20°	3047.3	3050.9	3056.2	3059.8	3068.7	3083.0	3093.7	3108.0	3125.9	3141.9	3159.8
22.5°	2997.3	2990.2	2993.7	2997.3	3006.3	3018.7	3031.3	3049.1	3066.9	3083.0	3100.9
25°	2900.9	2902.7	2908.1	2911.6	2922.3	2933.1	2947.3	2968.7	2984.8	3002.7	3022.3
27.5°	2770.7	2772.3	2781.3	2781.3	2790.2	2808.1	2817.0	2834.9	2856.3	2874.1	2897.3
30°	2622.5	2625.9	2625.9	2633.1	2638.5	2647.5	2656.3	2674.3	2684.9	2700.9	2733.1
32.5°	2486.8	2490.3	2488.5	2486.8	2481.4	2479.7	2477.9	2481.4	2485.0	2490.3	2502.9
35°	2406.5	2397.5	2390.4	2377.9	2363.6	2345.7	2329.7	2308.3	2288.6	2272.5	2254.7
37.5°	2329.7	2327.9	2317.1	2299.3	2270.7	2238.6	2201.2	2154.7	2108.3	2058.3	2010.2
40°	2222.5	2217.2	2208.3	2183.3	2151.1	2111.9	2061.9	2004.8	1929.8	1853.0	1774.4
42.5°	2040.4	2042.2	2031.6	2011.9	1981.6	1944.0	1892.2	1829.8	1749.5	1658.4	1556.7
45°	1828.0	1828.0	1824.4	1808.4	1787.0	1756.6	1717.4	1665.6	1587.0	1494.2	1385.3
47.5°	1606.6	1608.4	1603.0	1599.6	1590.6	1571.0	1542.4	1503.1	1447.8	1358.5	1249.6
50°	1381.7	1381.7	1390.6	1388.9	1388.9	1381.7	1369.3	1346.0	1297.8	1226.4	1124.7
52.5°	1156.8	1160.3	1165.7	1172.9	1181.8	1196.1	1181.8	1171.1	1140.7	1085.4	997.9
55°	924.7	928.3	937.2	949.7	960.5	974.7	978.3	978.3	962.2	924.7	858.7
57.5°	726.6	721.3	728.4	739.1	753.3	767.7	778.3	790.9	789.1	764.1	710.5
60°	546.3	548.1	553.4	564.1	574.8	587.3	601.6	612.3	617.7	605.2	571.3
62.5°	398.1	398.1	405.2	415.9	421.3	439.2	448.1	453.4	458.8	457.0	435.6
65°	278.5	282.0	285.6	291.0	296.3	307.0	312.4	323.1	326.7	328.5	312.4
67.5°	196.4	191.0	194.6	198.1	203.5	210.6	221.4	221.4	226.7	226.7	216.0
70°	125.0	125.0	126.8	132.1	135.6	137.4	141.0	144.6	150.0	148.2	148.2
72.5°	84.0	82.2	84.0	85.8	87.4	92.8	92.8	94.6	98.2	100.0	92.8
75°	42.8	44.6	48.2	46.4	51.8	48.2	50.0	55.4	53.6	50.0	50.0
77.5°	35.6	35.6	35.6	34.0	37.4	37.4	35.6	39.2	37.4	37.4	35.6
80°	25.0	26.8	25.0	23.2	25.0	23.2	23.2	23.2	23.2	23.2	21.4
82.5°	19.6	16.0	17.8	16.0	17.8	17.8	16.0	14.2	14.2	16.0	14.2
85°	14.2	10.6	12.4	12.4	10.6	10.6	10.6	10.6	10.6	8.9	8.9
87.5°	8.9	5.4	5.4	5.4	7.2	7.2	7.2	5.4	7.2	7.2	3.6
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°	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8
2.5°	3331.2	3329.4	3333.0	3331.2	3331.2	3329.4	3331.2	3329.4	3333.0	3325.8	3327.6
5°	3331.2	3327.6	3329.4	3331.2	3333.0	3329.4	3329.4	3329.4	3333.0	3329.4	3331.2
7.5°	3324.0	3322.2	3327.6	3331.2	3329.4	3327.6	3331.2	3329.4	3333.0	3331.2	3334.8
10°	3309.8	3311.5	3315.1	3320.4	3322.2	3324.0	3327.6	3327.6	3333.0	3325.8	3329.4
12.5°	3288.3	3295.4	3304.4	3308.0	3315.1	3315.1	3318.7	3320.4	3324.0	3322.2	3327.6
15°	3261.5	3270.4	3281.2	3290.1	3299.0	3304.4	3309.8	3311.5	3316.9	3311.5	3313.3
17.5°	3229.4	3240.1	3256.2	3266.8	3281.2	3286.5	3293.6	3297.2	3302.6	3299.0	3300.8
20°	3184.8	3197.3	3215.1	3231.2	3240.1	3252.6	3261.5	3266.8	3270.4	3266.8	3268.6
22.5°	3122.3	3140.1	3163.3	3175.8	3193.7	3204.4	3206.2	3218.7	3227.6	3218.7	3222.3
25°	3049.1	3066.9	3084.8	3111.6	3127.7	3140.1	3152.6	3154.4	3163.3	3161.6	3159.8
27.5°	2927.7	2950.9	2981.2	3002.7	3024.1	3043.7	3058.0	3061.6	3070.5	3066.9	3068.7
30°	2761.7	2786.7	2815.3	2849.1	2879.5	2899.1	2917.0	2929.5	2938.4	2933.1	2931.3
32.5°	2526.1	2551.1	2581.4	2615.3	2651.1	2679.5	2700.9	2717.1	2727.7	2724.1	2715.3
35°	2256.5	2263.6	2283.3	2310.0	2340.3	2370.7	2390.4	2408.2	2420.7	2424.3	2424.3
37.5°	1979.8	1956.6	1942.2	1942.2	1960.1	1972.6	1990.4	2001.2	2020.8	2028.0	2033.4
40°	1712.0	1658.4	1608.4	1571.0	1546.0	1544.2	1544.2	1549.6	1567.4	1590.6	1612.0
42.5°	1472.8	1387.1	1310.3	1240.7	1190.7	1162.1	1149.7	1151.5	1165.7	1187.1	1222.8
45°	1281.8	1174.7	1078.3	994.3	926.5	881.9	860.5	858.7	869.3	894.3	933.7
47.5°	1133.6	1019.3	910.5	814.1	740.9	692.7	667.7	660.5	667.7	690.9	737.3
50°	1010.5	892.7	780.1	680.1	601.6	551.6	528.4	519.5	528.4	548.1	594.5
52.5°	896.1	774.7	669.5	573.1	489.1	446.3	421.3	415.9	421.3	444.5	482.0
55°	764.1	660.5	557.0	460.6	387.4	344.6	324.9	319.6	324.9	346.4	385.6
57.5°	633.8	544.5	453.4	366.0	303.5	266.0	248.2	241.0	253.5	267.8	314.2
60°	512.3	441.0	364.2	287.4	235.6	201.7	187.4	185.6	189.2	207.0	239.2
62.5°	401.7	342.8	282.0	219.6	176.8	162.4	144.6	142.8	146.4	157.1	182.1
65°	289.2	251.8	205.3	160.6	126.8	107.1	100.0	101.8	105.3	112.4	135.6
67.5°	201.7	175.0	142.8	112.4	87.4	78.6	71.4	69.6	71.4	84.0	96.4
70°	135.6	119.6	96.4	85.8	60.8	48.2	50.0	44.6	51.8	51.8	62.4
72.5°	89.2	78.6	64.2	50.0	42.8	34.0	34.0	32.2	35.6	37.4	46.4
75°	46.4	35.6	35.6	25.0	17.8	8.9	16.0	14.2	12.4	14.2	17.8
77.5°	32.2	26.8	25.0	19.6	17.8	14.2	14.2	14.2	14.2	16.0	17.8
80°	19.6	19.6	14.2	12.4	10.6	8.9	10.6	10.6	10.6	10.6	12.4
82.5°	12.4	10.6	10.6	8.9	8.9	7.2	7.2	7.2	7.2	7.2	10.6
85°	10.6	7.2	7.2	5.4	7.2	12.4	5.4	7.2	7.2	7.2	5.4
87.5°	3.6	5.4	5.4	5.4	3.6	1.8	3.6	5.4	5.4	8.9	7.2
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°	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8
2.5°	3331.2	3333.0	3333.0	3331.2	3331.2	3327.6	3334.8	3329.4	3331.2	3338.2	3333.0
5°	3334.8	3336.5	3336.5	3334.8	3334.8	3334.8	3336.5	3336.5	3334.8	3333.0	3336.5
7.5°	3341.8	3340.0	3340.0	3336.5	3336.5	3333.0	3336.5	3331.2	3334.8	3331.2	3336.5
10°	3333.0	3334.8	3333.0	3331.2	3331.2	3329.4	3329.4	3324.0	3325.8	3320.4	3324.0
12.5°	3327.6	3325.8	3325.8	3322.2	3318.7	3315.1	3313.3	3308.0	3308.0	3295.4	3300.8
15°	3313.3	3315.1	3309.8	3302.6	3299.0	3290.1	3286.5	3279.4	3272.2	3263.3	3265.1
17.5°	3300.8	3295.4	3288.3	3281.2	3266.8	3259.8	3252.6	3241.9	3238.3	3227.6	3224.1
20°	3263.3	3259.8	3250.8	3238.3	3229.4	3213.3	3206.2	3195.5	3186.6	3175.8	3170.4
22.5°	3215.1	3211.6	3200.8	3188.3	3174.0	3166.9	3159.8	3140.1	3131.2	3120.5	3118.7
25°	3154.4	3149.1	3138.4	3124.1	3116.9	3097.3	3090.1	3075.8	3072.3	3061.6	3059.8
27.5°	3061.6	3054.5	3041.9	3024.1	3011.6	2999.1	2991.9	2981.2	2977.7	2967.0	2965.2
30°	2922.3	2913.4	2888.4	2881.3	2859.9	2847.3	2847.3	2833.1	2834.9	2827.7	2827.7
32.5°	2702.7	2688.5	2668.9	2654.5	2640.3	2633.1	2633.1	2627.7	2631.3	2631.3	2634.9
35°	2411.7	2392.2	2381.5	2372.5	2372.5	2379.7	2401.1	2406.5	2417.1	2426.1	2433.2
37.5°	2038.7	2036.9	2049.4	2060.1	2086.9	2117.2	2154.7	2186.8	2217.2	2238.6	2260.0
40°	1635.2	1679.8	1715.6	1765.6	1806.6	1865.5	1933.4	1988.7	2040.4	2078.0	2117.2
42.5°	1276.4	1333.5	1408.5	1481.7	1554.9	1635.2	1724.5	1801.2	1869.0	1920.8	1961.9
45°	994.3	1072.9	1163.9	1256.8	1351.4	1451.4	1544.2	1622.8	1694.2	1747.8	1788.8
47.5°	801.5	887.3	990.7	1092.5	1199.7	1305.0	1408.5	1476.4	1535.2	1578.1	1615.6
50°	662.3	753.3	862.3	978.3	1085.4	1190.7	1280.0	1346.0	1394.2	1431.7	1454.9
52.5°	553.4	649.8	765.9	881.9	988.9	1085.4	1165.7	1215.7	1255.0	1281.8	1303.2
55°	457.0	549.9	658.7	767.7	872.9	963.9	1030.0	1067.5	1097.9	1113.9	1126.4
57.5°	373.1	458.8	558.7	658.7	749.7	824.7	876.5	914.1	928.3	940.7	938.9
60°	292.8	373.1	464.1	549.9	628.4	689.1	726.6	747.9	758.7	764.1	760.5
62.5°	230.3	303.5	373.1	448.1	505.2	557.0	592.7	592.7	598.1	599.8	605.2
65°	171.4	226.7	287.4	342.8	389.1	423.1	442.8	448.1	455.2	453.4	449.9
67.5°	126.8	167.8	212.4	253.5	285.6	307.0	321.3	333.8	332.0	328.5	326.7
70°	87.4	114.2	153.6	178.6	201.7	223.2	226.7	228.5	230.3	232.0	228.5
72.5°	60.8	80.4	101.8	123.2	137.4	146.4	155.4	157.1	157.1	157.1	155.4
75°	30.4	41.0	60.8	69.6	82.2	85.8	92.8	92.8	98.2	91.0	89.2
77.5°	26.8	32.2	42.8	50.0	55.4	60.8	62.4	67.8	66.0	62.4	64.2
80°	16.0	19.6	26.8	30.4	37.4	39.2	41.0	42.8	41.0	42.8	42.8
82.5°	12.4	14.2	17.8	17.8	23.2	23.2	25.0	25.0	26.8	26.8	26.8
85°	7.2	12.4	10.6	21.4	14.2	14.2	17.8	21.4	17.8	17.8	21.4
87.5°	7.2	7.2	5.4	7.2	7.2	7.2	8.9	10.6	10.6	12.4	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: P249182

CATALOG NUMBER: LSR8B70D010 EC8B70930 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3325.8	3325.8	3325.8	3325.8
2.5°	3331.2	3334.8	3329.4	3327.6
5°	3336.5	3336.5	3333.0	3333.0
7.5°	3336.5	3336.5	3331.2	3327.6
10°	3322.2	3322.2	3316.9	3313.3
12.5°	3295.4	3295.4	3293.6	3288.3
15°	3261.5	3261.5	3254.4	3249.0
17.5°	3215.1	3218.7	3209.8	3209.8
20°	3165.1	3163.3	3156.2	3152.6
22.5°	3113.4	3109.8	3108.0	3097.3
25°	3058.0	3054.5	3049.1	3043.7
27.5°	2963.4	2961.6	2956.3	2949.1
30°	2818.8	2817.0	2809.9	2809.9
32.5°	2631.3	2629.5	2622.5	2624.3
35°	2436.7	2443.9	2440.3	2433.2
37.5°	2274.3	2279.7	2283.3	2279.7
40°	2138.6	2154.7	2156.5	2160.1
42.5°	1994.0	2015.4	2022.6	2026.2
45°	1820.8	1840.6	1856.6	1853.0
47.5°	1644.2	1658.4	1672.8	1662.0
50°	1474.6	1483.5	1488.8	1488.8
52.5°	1313.9	1313.9	1312.1	1313.9
55°	1130.0	1130.0	1122.9	1126.4
57.5°	937.2	940.7	935.5	926.5
60°	758.7	749.7	746.2	740.9
62.5°	590.9	590.9	578.4	594.5
65°	442.8	437.4	432.0	430.2
67.5°	321.3	319.6	314.2	312.4
70°	226.7	219.6	217.8	214.2
72.5°	151.8	151.8	148.2	148.2
75°	92.8	84.0	82.2	84.0
77.5°	64.2	62.4	62.4	60.8
80°	42.8	41.0	44.6	39.2
82.5°	26.8	28.6	26.8	28.6
85°	17.8	21.4	19.6	19.6
87.5°	10.6	10.6	10.6	10.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)