

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: P249371

Luminaire Tested: **LSR8B70D010 EC8B70940 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249371
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 EC8B70940 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6645.0 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

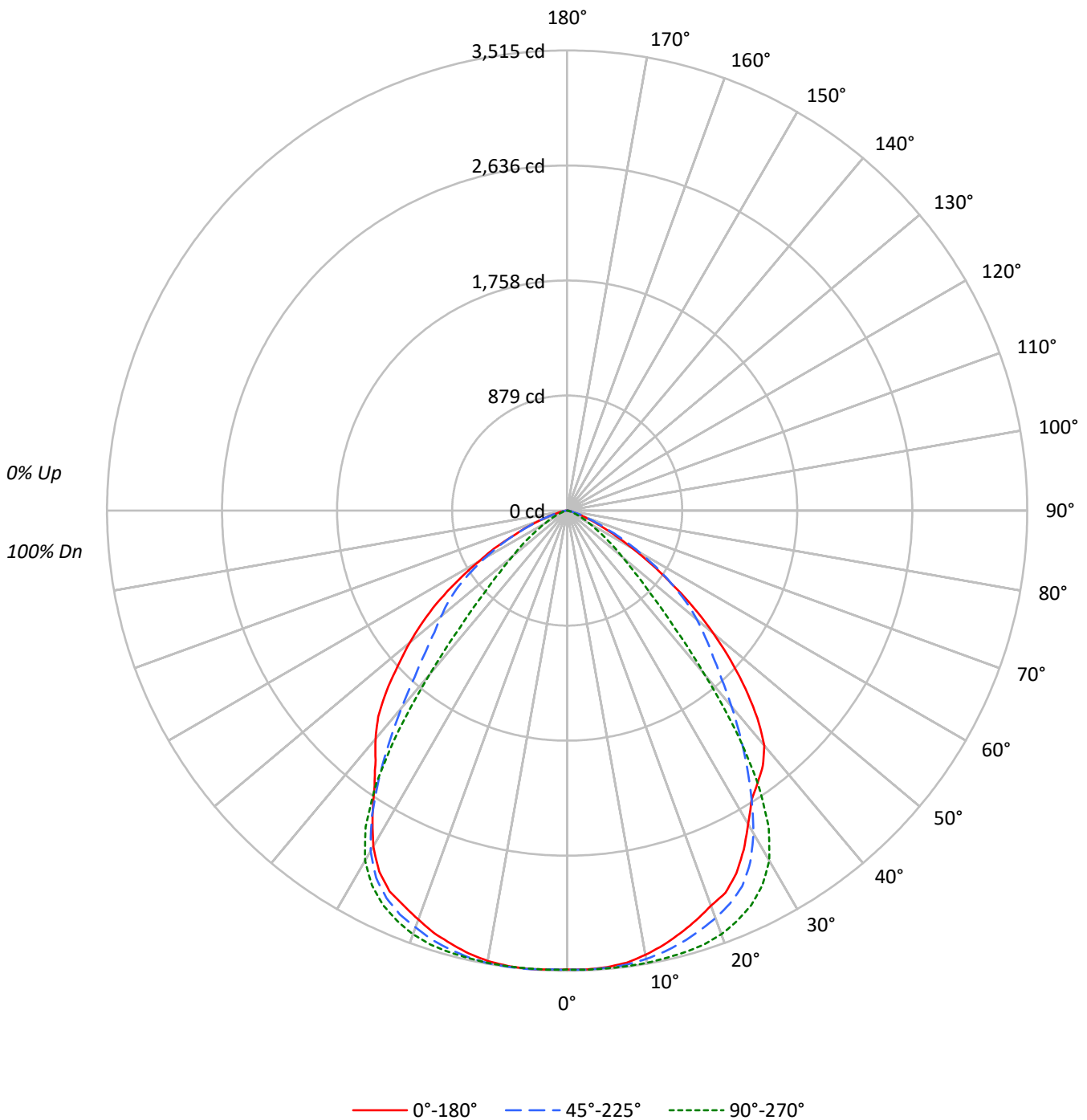
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	108112	108112	108112
5°	108352	108643	108760
10°	107895	109839	109370
15°	106700	111447	109343
20°	105419	113013	109062
25°	104049	113144	109173
30°	98438	109961	105474
35°	95500	95567	96561
40°	94315	65755	91666
45°	84039	39475	85186
50°	69877	26270	75293
55°	52407	18112	63842
60°	35517	12069	48166
65°	21423	7829	33090
70°	11874	4247	20358
75°	5385	1799	10544
80°	4670	2007	7352
85°	5342	2654	7324



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	334.6	5.0
10°-20°	971.7	14.6
20°-30°	1474.9	22.2
30°-40°	1549.1	23.3
40°-50°	1161.4	17.5
50°-60°	745.2	11.2
60°-70°	318.8	4.8
70°-80°	75.3	1.1
80°-90°	14.0	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°	2781.2	41.9
0°-40°	4330.3	65.2
0°-60°	6236.9	93.9
0°-90°	6645.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6645.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3506	3506	3506	3506	3506	
5°	3500	3506	3510	3515	3514	332
15°	3342	3412	3491	3468	3425	943
25°	3058	3165	3325	3265	3209	1397
35°	2537	2396	2539	2509	2565	1592
45°	1927	1575	905	1530	1953	1476
55°	975	975	337	1016	1188	884
65°	294	346	107	446	454	313
75°	45	53	15	90	88	66
85°	15	9	8	15	21	16
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°	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0
2.5°	3507.9	3511.7	3509.8	3509.8	3507.9	3509.8	3509.8	3513.6	3513.6	3509.8	3507.9
5°	3500.4	3504.1	3504.1	3500.4	3500.4	3509.8	3504.1	3507.9	3507.9	3506.0	3506.0
7.5°	3483.5	3483.5	3491.0	3485.4	3485.4	3491.0	3489.1	3492.9	3496.6	3498.5	3498.5
10°	3445.8	3449.6	3451.5	3451.5	3453.4	3459.0	3462.7	3470.3	3474.0	3477.8	3479.7
12.5°	3398.8	3404.4	3406.3	3404.4	3410.1	3417.6	3427.0	3436.4	3442.1	3449.6	3455.2
15°	3342.3	3342.3	3346.1	3351.7	3355.5	3366.8	3376.2	3387.5	3402.5	3412.0	3421.4
17.5°	3280.2	3284.0	3289.6	3289.6	3297.2	3315.9	3321.6	3338.6	3355.5	3364.9	3383.7
20°	3212.5	3216.2	3221.9	3225.6	3235.0	3250.1	3261.4	3276.4	3295.3	3312.2	3331.0
22.5°	3159.8	3152.2	3156.0	3159.8	3169.2	3182.4	3195.5	3214.3	3233.2	3250.1	3268.9
25°	3058.1	3060.0	3065.7	3069.4	3080.7	3092.0	3107.1	3129.6	3146.6	3165.4	3186.1
27.5°	2920.8	2922.7	2932.0	2932.0	2941.4	2960.3	2969.7	2988.5	3011.1	3029.9	3054.4
30°	2764.6	2768.3	2768.3	2775.9	2781.5	2790.9	2800.3	2819.1	2830.4	2847.4	2881.3
32.5°	2621.5	2625.3	2623.4	2621.5	2615.9	2614.0	2612.1	2615.9	2619.7	2625.3	2638.4
35°	2536.9	2527.4	2519.9	2506.7	2491.7	2472.9	2455.9	2433.3	2412.6	2395.7	2376.9
37.5°	2455.9	2454.0	2442.7	2423.9	2393.8	2359.9	2320.4	2271.5	2222.5	2169.9	2119.1
40°	2343.0	2337.3	2327.9	2301.6	2267.7	2226.3	2173.6	2113.4	2034.3	1953.4	1870.6
42.5°	2151.0	2152.9	2141.6	2120.9	2089.0	2049.4	1994.8	1929.0	1844.3	1748.3	1641.1
45°	1927.1	1927.1	1923.3	1906.4	1883.8	1851.8	1810.4	1755.8	1673.1	1575.2	1460.4
47.5°	1693.7	1695.6	1690.0	1686.2	1676.8	1656.1	1626.0	1584.6	1526.3	1432.1	1317.3
50°	1456.6	1456.6	1466.0	1464.1	1464.1	1456.6	1443.5	1419.0	1368.2	1292.9	1185.6
52.5°	1219.5	1223.3	1228.9	1236.4	1245.8	1260.9	1245.8	1234.5	1202.5	1144.2	1052.0
55°	974.8	978.6	988.0	1001.2	1012.5	1027.6	1031.3	1031.3	1014.3	974.8	905.2
57.5°	766.0	760.3	767.8	779.1	794.2	809.2	820.5	833.7	831.8	805.5	749.0
60°	575.9	577.8	583.4	594.7	606.0	619.2	634.2	645.5	651.2	638.0	602.2
62.5°	419.7	419.7	427.2	438.5	444.1	463.0	472.4	478.0	483.6	481.8	459.2
65°	293.6	297.3	301.1	306.8	312.4	323.7	329.3	340.6	344.4	346.3	329.3
67.5°	207.0	201.4	205.1	208.9	214.5	222.1	233.4	233.4	239.0	239.0	227.7
70°	131.7	131.7	133.6	139.2	143.0	144.9	148.7	152.4	158.1	156.2	156.2
72.5°	88.5	86.6	88.5	90.3	92.2	97.9	97.9	99.7	103.5	105.4	97.9
75°	45.2	47.1	50.8	48.9	54.6	50.8	52.7	58.3	56.5	52.7	52.7
77.5°	37.6	37.6	37.6	35.8	39.5	39.5	37.6	41.4	39.5	39.5	37.6
80°	26.3	28.2	26.3	24.5	26.3	24.5	24.5	24.5	24.5	24.5	22.6
82.5°	20.7	16.9	18.8	16.9	18.8	18.8	16.9	15.1	15.1	16.9	15.1
85°	15.1	11.3	13.2	13.2	11.3	11.3	11.3	11.3	11.3	9.4	9.4
87.5°	9.4	5.7	5.7	5.7	7.5	7.5	7.5	5.7	7.5	7.5	3.8
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0
2.5°	3511.7	3509.8	3513.6	3511.7	3511.7	3509.8	3511.7	3509.8	3513.6	3506.0	3507.9
5°	3511.7	3507.9	3509.8	3511.7	3513.6	3509.8	3509.8	3509.8	3513.6	3509.8	3511.7
7.5°	3504.1	3502.3	3507.9	3511.7	3509.8	3507.9	3511.7	3509.8	3513.6	3511.7	3515.4
10°	3489.1	3491.0	3494.8	3500.4	3502.3	3504.1	3507.9	3507.9	3513.6	3506.0	3509.8
12.5°	3466.5	3474.0	3483.5	3487.2	3494.8	3494.8	3498.5	3500.4	3504.1	3502.3	3507.9
15°	3438.3	3447.7	3459.0	3468.4	3477.8	3483.5	3489.1	3491.0	3496.6	3491.0	3492.9
17.5°	3404.4	3415.7	3432.6	3443.9	3459.0	3464.6	3472.1	3475.9	3481.6	3477.8	3479.7
20°	3357.3	3370.6	3389.3	3406.3	3415.7	3428.9	3438.3	3443.9	3447.7	3443.9	3445.8
22.5°	3291.5	3310.3	3334.8	3348.0	3366.8	3378.1	3380.0	3393.1	3402.5	3393.1	3396.9
25°	3214.3	3233.2	3252.0	3280.2	3297.2	3310.3	3323.5	3325.4	3334.8	3332.9	3331.0
27.5°	3086.4	3110.8	3142.8	3165.4	3188.0	3208.7	3223.8	3227.5	3236.9	3233.2	3235.0
30°	2911.3	2937.7	2967.8	3003.6	3035.6	3056.2	3075.1	3088.2	3097.6	3092.0	3090.1
32.5°	2662.9	2689.3	2721.3	2757.0	2794.7	2824.8	2847.4	2864.3	2875.6	2871.8	2862.4
35°	2378.8	2386.3	2407.0	2435.2	2467.2	2499.2	2519.9	2538.7	2551.9	2555.7	2555.7
37.5°	2087.1	2062.6	2047.6	2047.6	2066.3	2079.5	2098.4	2109.6	2130.4	2137.9	2143.5
40°	1804.8	1748.3	1695.6	1656.1	1629.8	1627.9	1627.9	1633.5	1652.3	1676.8	1699.4
42.5°	1552.6	1462.2	1381.3	1307.9	1255.3	1225.1	1212.0	1213.9	1228.9	1251.5	1289.1
45°	1351.2	1238.3	1136.7	1048.2	976.7	929.7	907.1	905.2	916.5	942.8	984.3
47.5°	1195.0	1074.6	959.8	858.1	781.0	730.2	703.8	696.3	703.8	728.3	777.2
50°	1065.2	941.0	822.4	717.0	634.2	581.5	557.0	547.6	557.0	577.8	626.7
52.5°	944.7	816.8	705.7	604.1	515.6	470.5	444.1	438.5	444.1	468.6	508.1
55°	805.5	696.3	587.2	485.5	408.4	363.2	342.5	336.9	342.5	365.1	406.5
57.5°	668.1	574.0	478.0	385.8	319.9	280.4	261.6	254.0	267.2	282.3	331.2
60°	540.1	464.9	383.9	303.0	248.4	212.6	197.6	195.7	199.5	218.3	252.2
62.5°	423.5	361.3	297.3	231.5	186.3	171.3	152.4	150.6	154.3	165.6	192.0
65°	304.9	265.4	216.4	169.4	133.6	112.9	105.4	107.3	111.0	118.6	143.0
67.5°	212.6	184.4	150.6	118.6	92.2	82.8	75.3	73.4	75.3	88.5	101.6
70°	143.0	126.1	101.6	90.3	64.0	50.8	52.7	47.1	54.6	54.6	65.8
72.5°	94.1	82.8	67.7	52.7	45.2	35.8	35.8	33.9	37.6	39.5	48.9
75°	48.9	37.6	37.6	26.3	18.8	9.4	16.9	15.1	13.2	15.1	18.8
77.5°	33.9	28.2	26.3	20.7	18.8	15.1	15.1	15.1	15.1	16.9	18.8
80°	20.7	20.7	15.1	13.2	11.3	9.4	11.3	11.3	11.3	11.3	13.2
82.5°	13.2	11.3	11.3	9.4	9.4	7.5	7.5	7.5	7.5	7.5	11.3
85°	11.3	7.5	7.5	5.7	7.5	13.2	5.7	7.5	7.5	7.5	5.7
87.5°	3.8	5.7	5.7	5.7	3.8	1.9	3.8	5.7	5.7	9.4	7.5
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0	3506.0
2.5°	3511.7	3513.6	3513.6	3511.7	3511.7	3507.9	3515.4	3509.8	3511.7	3519.2	3513.6
5°	3515.4	3517.3	3517.3	3515.4	3515.4	3515.4	3517.3	3517.3	3515.4	3513.6	3517.3
7.5°	3523.0	3521.1	3521.1	3517.3	3517.3	3513.6	3517.3	3511.7	3515.4	3511.7	3517.3
10°	3513.6	3515.4	3513.6	3511.7	3511.7	3509.8	3509.8	3504.1	3506.0	3500.4	3504.1
12.5°	3507.9	3506.0	3506.0	3502.3	3498.5	3494.8	3492.9	3487.2	3487.2	3474.0	3479.7
15°	3492.9	3494.8	3489.1	3481.6	3477.8	3468.4	3464.6	3457.1	3449.6	3440.2	3442.1
17.5°	3479.7	3474.0	3466.5	3459.0	3443.9	3436.4	3428.9	3417.6	3413.8	3402.5	3398.8
20°	3440.2	3436.4	3427.0	3413.8	3404.4	3387.5	3380.0	3368.7	3359.2	3348.0	3342.3
22.5°	3389.3	3385.6	3374.3	3361.1	3346.1	3338.6	3331.0	3310.3	3300.9	3289.6	3287.7
25°	3325.4	3319.7	3308.4	3293.4	3285.8	3265.2	3257.6	3242.5	3238.8	3227.5	3225.6
27.5°	3227.5	3220.0	3206.8	3188.0	3174.8	3161.6	3154.1	3142.8	3139.1	3127.8	3125.9
30°	3080.7	3071.3	3045.0	3037.4	3014.8	3001.7	3001.7	2986.6	2988.5	2981.0	2981.0
32.5°	2849.3	2834.2	2813.5	2798.4	2783.4	2775.9	2775.9	2770.2	2774.0	2774.0	2777.7
35°	2542.5	2521.8	2510.5	2501.1	2501.1	2508.6	2531.2	2536.9	2548.1	2557.5	2565.1
37.5°	2149.1	2147.3	2160.5	2171.8	2200.0	2232.0	2271.5	2305.4	2337.3	2359.9	2382.5
40°	1723.8	1770.9	1808.5	1861.3	1904.5	1966.6	2038.1	2096.5	2151.0	2190.6	2232.0
42.5°	1345.6	1405.8	1484.9	1562.0	1639.2	1723.8	1818.0	1898.9	1970.4	2025.0	2068.2
45°	1048.2	1131.0	1227.0	1324.9	1424.6	1530.0	1627.9	1710.7	1786.0	1842.4	1885.7
47.5°	845.0	935.3	1044.5	1151.7	1264.7	1375.7	1484.9	1556.4	1618.4	1663.6	1703.2
50°	698.2	794.2	909.0	1031.3	1144.2	1255.3	1349.3	1419.0	1469.8	1509.3	1533.8
52.5°	583.4	685.0	807.4	929.7	1042.6	1144.2	1228.9	1281.6	1323.0	1351.2	1373.8
55°	481.8	579.6	694.4	809.2	920.3	1016.2	1085.9	1125.4	1157.4	1174.3	1187.5
57.5°	393.3	483.6	589.0	694.4	790.4	869.5	924.0	963.5	978.6	991.8	989.9
60°	308.7	393.3	489.3	579.6	662.4	726.4	766.0	788.5	799.8	805.5	801.7
62.5°	242.8	319.9	393.3	472.4	532.6	587.2	624.8	624.8	630.4	632.3	638.0
65°	180.6	239.0	303.0	361.3	410.2	446.0	466.7	472.4	479.9	478.0	474.2
67.5°	133.6	176.9	223.9	267.2	301.1	323.7	338.7	351.9	350.1	346.3	344.4
70°	92.2	120.5	161.9	188.2	212.6	235.3	239.0	240.9	242.8	244.7	240.9
72.5°	64.0	84.7	107.3	129.9	144.9	154.3	163.7	165.6	165.6	165.6	163.7
75°	32.0	43.3	64.0	73.4	86.6	90.3	97.9	97.9	103.5	96.0	94.1
77.5°	28.2	33.9	45.2	52.7	58.3	64.0	65.8	71.5	69.6	65.8	67.7
80°	16.9	20.7	28.2	32.0	39.5	41.4	43.3	45.2	43.3	45.2	45.2
82.5°	13.2	15.1	18.8	18.8	24.5	24.5	26.3	26.3	28.2	28.2	28.2
85°	7.5	13.2	11.3	22.6	15.1	15.1	18.8	22.6	18.8	18.8	22.6
87.5°	7.5	7.5	5.7	7.5	7.5	7.5	9.4	11.3	11.3	13.2	11.3
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: P249371

CATALOG NUMBER: LSR8B70D010 EC8B70940 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3506.0	3506.0	3506.0	3506.0
2.5°	3511.7	3515.4	3509.8	3507.9
5°	3517.3	3517.3	3513.6	3513.6
7.5°	3517.3	3517.3	3511.7	3507.9
10°	3502.3	3502.3	3496.6	3492.9
12.5°	3474.0	3474.0	3472.1	3466.5
15°	3438.3	3438.3	3430.7	3425.1
17.5°	3389.3	3393.1	3383.7	3383.7
20°	3336.7	3334.8	3327.3	3323.5
22.5°	3282.1	3278.3	3276.4	3265.2
25°	3223.8	3220.0	3214.3	3208.7
27.5°	3124.0	3122.1	3116.5	3109.0
30°	2971.6	2969.7	2962.2	2962.2
32.5°	2774.0	2772.1	2764.6	2766.5
35°	2568.8	2576.4	2572.6	2565.1
37.5°	2397.6	2403.2	2407.0	2403.2
40°	2254.5	2271.5	2273.4	2277.2
42.5°	2102.1	2124.7	2132.2	2136.0
45°	1919.5	1940.3	1957.2	1953.4
47.5°	1733.2	1748.3	1763.4	1752.1
50°	1554.5	1563.9	1569.5	1569.5
52.5°	1385.1	1385.1	1383.2	1385.1
55°	1191.3	1191.3	1183.7	1187.5
57.5°	988.0	991.8	986.1	976.7
60°	799.8	790.4	786.6	781.0
62.5°	622.9	622.9	609.8	626.7
65°	466.7	461.1	455.4	453.5
67.5°	338.7	336.9	331.2	329.3
70°	239.0	231.5	229.6	225.8
72.5°	160.0	160.0	156.2	156.2
75°	97.9	88.5	86.6	88.5
77.5°	67.7	65.8	65.8	64.0
80°	45.2	43.3	47.1	41.4
82.5°	28.2	30.1	28.2	30.1
85°	18.8	22.6	20.7	20.7
87.5°	11.3	11.3	11.3	11.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)