

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: P249146

Luminaire Tested: **LSR8B70D010 EC8B70935 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249146
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 EC8B70935 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6509.0 lumens
Efficiency: N/A
Efficacy: 85.8 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

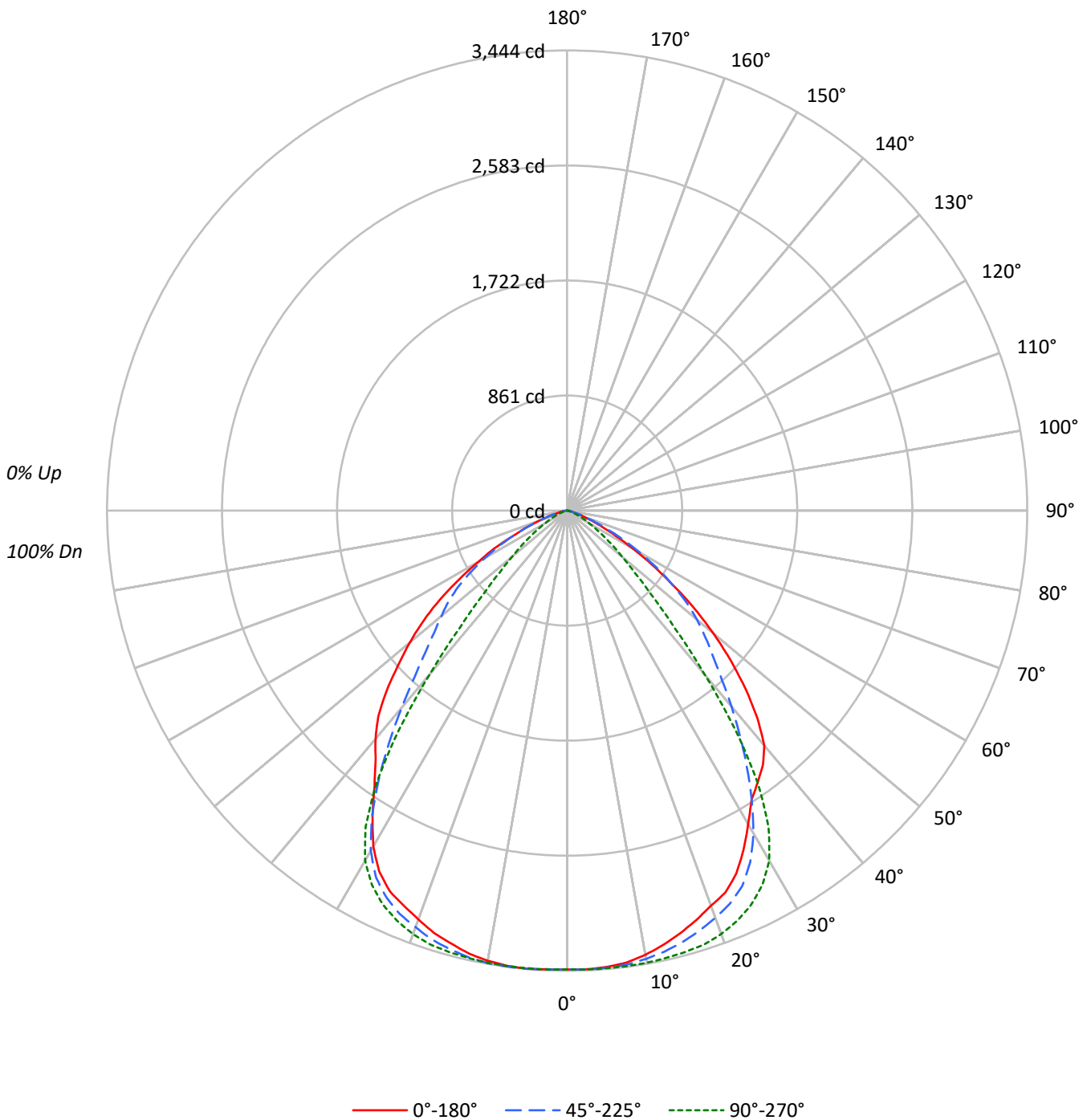
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	105901	105901	105901
5°	106132	106420	106535
10°	105687	107591	107131
15°	104516	109164	107105
20°	103260	110699	106830
25°	101919	110827	106938
30°	96423	107710	103313
35°	93542	93610	94585
40°	92387	64410	89786
45°	82321	38668	83446
50°	68448	25733	73753
55°	51337	17741	62535
60°	34790	11823	47180
65°	20985	7669	32411
70°	11631	4156	19943
75°	5266	1751	10318
80°	4582	1971	7192
85°	5201	2618	7182



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	327.8	5.0
10°-20°	951.8	14.6
20°-30°	1444.7	22.2
30°-40°	1517.4	23.3
40°-50°	1137.6	17.5
50°-60°	729.9	11.2
60°-70°	312.2	4.8
70°-80°	73.8	1.1
80°-90°	13.7	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°	2724.3	41.9
0°-40°	4241.7	65.2
0°-60°	6109.2	93.9
0°-90°	6509.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6509.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3434	3434	3434	3434	3434	
5°	3429	3434	3438	3444	3442	326
15°	3274	3342	3420	3397	3355	923
25°	2996	3101	3257	3198	3143	1368
35°	2485	2347	2487	2457	2513	1560
45°	1888	1543	887	1499	1914	1446
55°	955	955	330	995	1163	866
65°	288	339	105	437	444	307
75°	44	52	15	88	87	64
85°	15	9	7	15	20	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°	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3
2.5°	3436.1	3439.8	3438.0	3438.0	3436.1	3438.0	3438.0	3441.7	3441.7	3438.0	3436.1
5°	3428.7	3432.4	3432.4	3428.7	3428.7	3438.0	3432.4	3436.1	3436.1	3434.3	3434.3
7.5°	3412.2	3412.2	3419.5	3414.0	3414.0	3419.5	3417.7	3421.4	3425.1	3426.9	3426.9
10°	3375.3	3379.0	3380.8	3380.8	3382.7	3388.2	3391.9	3399.3	3402.9	3406.6	3408.5
12.5°	3329.2	3334.7	3336.6	3334.7	3340.3	3347.6	3356.9	3366.1	3371.6	3379.0	3384.5
15°	3273.9	3273.9	3277.6	3283.1	3286.8	3297.9	3307.1	3318.1	3332.9	3342.1	3351.3
17.5°	3213.1	3216.8	3222.3	3222.3	3229.7	3248.1	3253.6	3270.2	3286.8	3296.0	3314.5
20°	3146.7	3150.4	3155.9	3159.6	3168.8	3183.6	3194.6	3209.4	3227.8	3244.4	3262.8
22.5°	3095.1	3087.7	3091.4	3095.1	3104.3	3117.2	3130.1	3148.5	3167.0	3183.6	3202.0
25°	2995.5	2997.4	3002.9	3006.6	3017.7	3028.7	3043.5	3065.6	3082.2	3100.6	3120.9
27.5°	2861.0	2862.8	2872.0	2872.0	2881.2	2899.7	2908.9	2927.3	2949.5	2967.9	2991.9
30°	2708.0	2711.6	2711.6	2719.0	2724.5	2733.8	2743.0	2761.4	2772.5	2789.1	2822.3
32.5°	2567.9	2571.5	2569.7	2567.9	2562.3	2560.5	2558.6	2562.3	2566.0	2571.5	2584.4
35°	2484.9	2475.7	2468.3	2455.4	2440.7	2422.2	2405.6	2383.5	2363.3	2346.7	2328.2
37.5°	2405.6	2403.8	2392.7	2374.3	2344.8	2311.6	2272.9	2225.0	2177.1	2125.5	2075.7
40°	2295.1	2289.5	2280.3	2254.5	2221.3	2180.8	2129.2	2070.2	1992.7	1913.5	1832.4
42.5°	2107.0	2108.9	2097.8	2077.5	2046.2	2007.5	1954.0	1889.5	1806.6	1712.5	1607.5
45°	1887.7	1887.7	1884.0	1867.4	1845.3	1813.9	1773.4	1719.9	1638.8	1542.9	1430.5
47.5°	1659.1	1660.9	1655.4	1651.7	1642.5	1622.2	1592.7	1552.2	1495.0	1402.8	1290.4
50°	1426.8	1426.8	1436.0	1434.2	1434.2	1426.8	1413.9	1389.9	1340.2	1266.4	1161.4
52.5°	1194.5	1198.2	1203.8	1211.1	1220.3	1235.1	1220.3	1209.3	1177.9	1120.8	1030.5
55°	954.9	958.6	967.8	980.7	991.8	1006.5	1010.2	1010.2	993.6	954.9	886.7
57.5°	750.3	744.7	752.1	763.2	777.9	792.7	803.7	816.6	814.8	789.0	733.7
60°	564.1	565.9	571.4	582.5	593.6	606.5	621.2	632.3	637.8	624.9	589.9
62.5°	411.1	411.1	418.4	429.5	435.0	453.5	462.7	468.2	473.7	471.9	449.8
65°	287.6	291.2	294.9	300.5	306.0	317.0	322.6	333.6	337.3	339.2	322.6
67.5°	202.8	197.2	200.9	204.6	210.1	217.5	228.6	228.6	234.1	234.1	223.0
70°	129.0	129.0	130.9	136.4	140.1	141.9	145.6	149.3	154.8	153.0	153.0
72.5°	86.6	84.8	86.6	88.5	90.3	95.8	95.8	97.7	101.4	103.2	95.8
75°	44.2	46.1	49.8	47.9	53.5	49.8	51.6	57.1	55.3	51.6	51.6
77.5°	36.9	36.9	36.9	35.0	38.7	38.7	36.9	40.5	38.7	38.7	36.9
80°	25.8	27.6	25.8	24.0	25.8	24.0	24.0	24.0	24.0	24.0	22.1
82.5°	20.3	16.6	18.4	16.6	18.4	18.4	16.6	14.7	14.7	16.6	14.7
85°	14.7	11.1	12.9	12.9	11.1	11.1	11.1	11.1	11.1	9.2	9.2
87.5°	9.2	5.5	5.5	5.5	7.4	7.4	7.4	5.5	7.4	7.4	3.7
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°	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3
2.5°	3439.8	3438.0	3441.7	3439.8	3439.8	3438.0	3439.8	3438.0	3441.7	3434.3	3436.1
5°	3439.8	3436.1	3438.0	3439.8	3441.7	3438.0	3438.0	3438.0	3441.7	3438.0	3439.8
7.5°	3432.4	3430.6	3436.1	3439.8	3438.0	3436.1	3439.8	3438.0	3441.7	3439.8	3443.5
10°	3417.7	3419.5	3423.2	3428.7	3430.6	3432.4	3436.1	3436.1	3441.7	3434.3	3438.0
12.5°	3395.6	3402.9	3412.2	3415.8	3423.2	3423.2	3426.9	3428.7	3432.4	3430.6	3436.1
15°	3367.9	3377.1	3388.2	3397.4	3406.6	3412.2	3417.7	3419.5	3425.1	3419.5	3421.4
17.5°	3334.7	3345.8	3362.4	3373.4	3388.2	3393.7	3401.1	3404.8	3410.3	3406.6	3408.5
20°	3288.6	3301.6	3320.0	3336.6	3345.8	3358.7	3367.9	3373.4	3377.1	3373.4	3375.3
22.5°	3224.1	3242.6	3266.5	3279.4	3297.9	3308.9	3310.8	3323.7	3332.9	3323.7	3327.4
25°	3148.5	3167.0	3185.4	3213.1	3229.7	3242.6	3255.5	3257.3	3266.5	3264.7	3262.8
27.5°	3023.2	3047.2	3078.5	3100.6	3122.7	3143.0	3157.8	3161.4	3170.7	3167.0	3168.8
30°	2851.7	2877.6	2907.1	2942.1	2973.4	2993.7	3012.1	3025.0	3034.2	3028.7	3026.9
32.5°	2608.4	2634.2	2665.6	2700.6	2737.5	2766.9	2789.1	2805.7	2816.7	2813.0	2803.8
35°	2330.1	2337.4	2357.7	2385.4	2416.7	2448.0	2468.3	2486.7	2499.6	2503.3	2503.3
37.5°	2044.4	2020.4	2005.7	2005.7	2024.1	2037.0	2055.4	2066.5	2086.8	2094.1	2099.7
40°	1767.8	1712.5	1660.9	1622.2	1596.4	1594.6	1594.6	1600.1	1618.5	1642.5	1664.6
42.5°	1520.8	1432.3	1353.1	1281.2	1229.6	1200.1	1187.2	1189.0	1203.8	1225.9	1262.7
45°	1323.6	1213.0	1113.4	1026.8	956.7	910.6	888.5	886.7	897.7	923.5	964.1
47.5°	1170.6	1052.6	940.1	840.6	765.0	715.2	689.4	682.1	689.4	713.4	761.3
50°	1043.4	921.7	805.6	702.3	621.2	569.6	545.6	536.4	545.6	565.9	613.8
52.5°	925.4	800.0	691.3	591.7	505.1	460.8	435.0	429.5	435.0	459.0	497.7
55°	789.0	682.1	575.1	475.6	400.0	355.8	335.5	330.0	335.5	357.6	398.2
57.5°	654.4	562.2	468.2	377.9	313.4	274.6	256.2	248.8	261.7	276.5	324.4
60°	529.0	455.3	376.0	296.8	243.3	208.3	193.5	191.7	195.4	213.8	247.0
62.5°	414.8	353.9	291.2	226.7	182.5	167.7	149.3	147.5	151.1	162.2	188.0
65°	298.6	259.9	212.0	165.9	130.9	110.6	103.2	105.1	108.7	116.1	140.1
67.5°	208.3	180.6	147.5	116.1	90.3	81.1	73.7	71.9	73.7	86.6	99.5
70°	140.1	123.5	99.5	88.5	62.7	49.8	51.6	46.1	53.5	53.5	64.5
72.5°	92.2	81.1	66.4	51.6	44.2	35.0	35.0	33.2	36.9	38.7	47.9
75°	47.9	36.9	36.9	25.8	18.4	9.2	16.6	14.7	12.9	14.7	18.4
77.5°	33.2	27.6	25.8	20.3	18.4	14.7	14.7	14.7	14.7	16.6	18.4
80°	20.3	20.3	14.7	12.9	11.1	9.2	11.1	11.1	11.1	11.1	12.9
82.5°	12.9	11.1	11.1	9.2	9.2	7.4	7.4	7.4	7.4	7.4	11.1
85°	11.1	7.4	7.4	5.5	7.4	12.9	5.5	7.4	7.4	7.4	5.5
87.5°	3.7	5.5	5.5	5.5	3.7	1.8	3.7	5.5	5.5	9.2	7.4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3	3434.3
2.5°	3439.8	3441.7	3441.7	3439.8	3439.8	3436.1	3443.5	3438.0	3439.8	3447.2	3441.7
5°	3443.5	3445.3	3445.3	3443.5	3443.5	3443.5	3445.3	3445.3	3443.5	3441.7	3445.3
7.5°	3450.9	3449.0	3449.0	3445.3	3445.3	3441.7	3445.3	3439.8	3443.5	3439.8	3445.3
10°	3441.7	3443.5	3441.7	3439.8	3439.8	3438.0	3438.0	3432.4	3434.3	3428.7	3432.4
12.5°	3436.1	3434.3	3434.3	3430.6	3426.9	3423.2	3421.4	3415.8	3415.8	3402.9	3408.5
15°	3421.4	3423.2	3417.7	3410.3	3406.6	3397.4	3393.7	3386.3	3379.0	3369.8	3371.6
17.5°	3408.5	3402.9	3395.6	3388.2	3373.4	3366.1	3358.7	3347.6	3343.9	3332.9	3329.2
20°	3369.8	3366.1	3356.9	3343.9	3334.7	3318.1	3310.8	3299.7	3290.5	3279.4	3273.9
22.5°	3320.0	3316.3	3305.2	3292.3	3277.6	3270.2	3262.8	3242.6	3233.3	3222.3	3220.4
25°	3257.3	3251.8	3240.7	3226.0	3218.6	3198.3	3190.9	3176.2	3172.5	3161.4	3159.6
27.5°	3161.4	3154.1	3141.2	3122.7	3109.8	3096.9	3089.6	3078.5	3074.8	3063.7	3061.9
30°	3017.7	3008.4	2982.6	2975.3	2953.1	2940.2	2940.2	2925.5	2927.3	2920.0	2920.0
32.5°	2790.9	2776.2	2755.9	2741.1	2726.4	2719.0	2719.0	2713.5	2717.2	2717.2	2720.9
35°	2490.4	2470.2	2459.1	2449.9	2449.9	2457.3	2479.4	2484.9	2496.0	2505.2	2512.6
37.5°	2105.2	2103.4	2116.3	2127.3	2155.0	2186.3	2225.0	2258.2	2289.5	2311.6	2333.8
40°	1688.6	1734.7	1771.5	1823.2	1865.5	1926.4	1996.4	2053.6	2107.0	2145.8	2186.3
42.5°	1318.0	1377.0	1454.5	1530.0	1605.6	1688.6	1780.8	1860.0	1930.1	1983.5	2025.9
45°	1026.8	1107.9	1201.9	1297.8	1395.5	1498.7	1594.6	1675.7	1749.4	1804.7	1847.1
47.5°	827.7	916.2	1023.1	1128.2	1238.8	1347.5	1454.5	1524.5	1585.3	1629.6	1668.3
50°	683.9	777.9	890.4	1010.2	1120.8	1229.6	1321.7	1389.9	1439.7	1478.4	1502.4
52.5°	571.4	671.0	790.8	910.6	1021.2	1120.8	1203.8	1255.4	1295.9	1323.6	1345.7
55°	471.9	567.8	680.2	792.7	901.4	995.4	1063.6	1102.4	1133.7	1150.3	1163.2
57.5°	385.3	473.7	577.0	680.2	774.2	851.7	905.1	943.8	958.6	971.5	969.6
60°	302.3	385.3	479.3	567.8	648.9	711.5	750.3	772.4	783.4	789.0	785.3
62.5°	237.8	313.4	385.3	462.7	521.7	575.1	612.0	612.0	617.5	619.4	624.9
65°	176.9	234.1	296.8	353.9	401.8	436.9	457.2	462.7	470.1	468.2	464.5
67.5°	130.9	173.3	219.3	261.7	294.9	317.0	331.8	344.7	342.9	339.2	337.3
70°	90.3	118.0	158.5	184.3	208.3	230.4	234.1	235.9	237.8	239.6	235.9
72.5°	62.7	82.9	105.1	127.2	141.9	151.1	160.4	162.2	162.2	162.2	160.4
75°	31.3	42.4	62.7	71.9	84.8	88.5	95.8	95.8	101.4	94.0	92.2
77.5°	27.6	33.2	44.2	51.6	57.1	62.7	64.5	70.0	68.2	64.5	66.4
80°	16.6	20.3	27.6	31.3	38.7	40.5	42.4	44.2	42.4	44.2	44.2
82.5°	12.9	14.7	18.4	18.4	24.0	24.0	25.8	25.8	27.6	27.6	27.6
85°	7.4	12.9	11.1	22.1	14.7	14.7	18.4	22.1	18.4	18.4	22.1
87.5°	7.4	7.4	5.5	7.4	7.4	7.4	9.2	11.1	11.1	12.9	11.1
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: P249146

CATALOG NUMBER: LSR8B70D010 EC8B70935 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3434.3	3434.3	3434.3	3434.3
2.5°	3439.8	3443.5	3438.0	3436.1
5°	3445.3	3445.3	3441.7	3441.7
7.5°	3445.3	3445.3	3439.8	3436.1
10°	3430.6	3430.6	3425.1	3421.4
12.5°	3402.9	3402.9	3401.1	3395.6
15°	3367.9	3367.9	3360.5	3355.0
17.5°	3320.0	3323.7	3314.5	3314.5
20°	3268.4	3266.5	3259.2	3255.5
22.5°	3214.9	3211.2	3209.4	3198.3
25°	3157.8	3154.1	3148.5	3143.0
27.5°	3060.1	3058.2	3052.7	3045.3
30°	2910.7	2908.9	2901.5	2901.5
32.5°	2717.2	2715.3	2708.0	2709.8
35°	2516.2	2523.6	2519.9	2512.6
37.5°	2348.5	2354.0	2357.7	2354.0
40°	2208.4	2225.0	2226.9	2230.5
42.5°	2059.1	2081.2	2088.6	2092.3
45°	1880.3	1900.6	1917.2	1913.5
47.5°	1697.8	1712.5	1727.3	1716.2
50°	1522.7	1531.9	1537.4	1537.4
52.5°	1356.8	1356.8	1354.9	1356.8
55°	1166.9	1166.9	1159.5	1163.2
57.5°	967.8	971.5	965.9	956.7
60°	783.4	774.2	770.5	765.0
62.5°	610.2	610.2	597.3	613.8
65°	457.2	451.6	446.1	444.2
67.5°	331.8	330.0	324.4	322.6
70°	234.1	226.7	224.9	221.2
72.5°	156.7	156.7	153.0	153.0
75°	95.8	86.6	84.8	86.6
77.5°	66.4	64.5	64.5	62.7
80°	44.2	42.4	46.1	40.5
82.5°	27.6	29.5	27.6	29.5
85°	18.4	22.1	20.3	20.3
87.5°	11.1	11.1	11.1	11.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)