

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: P249380

Luminaire Tested: **LSR8B70D010 EC8B70950 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249380
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 EC8B70950 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6880.0 lumens
Efficiency: N/A
Efficacy: 90.6 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

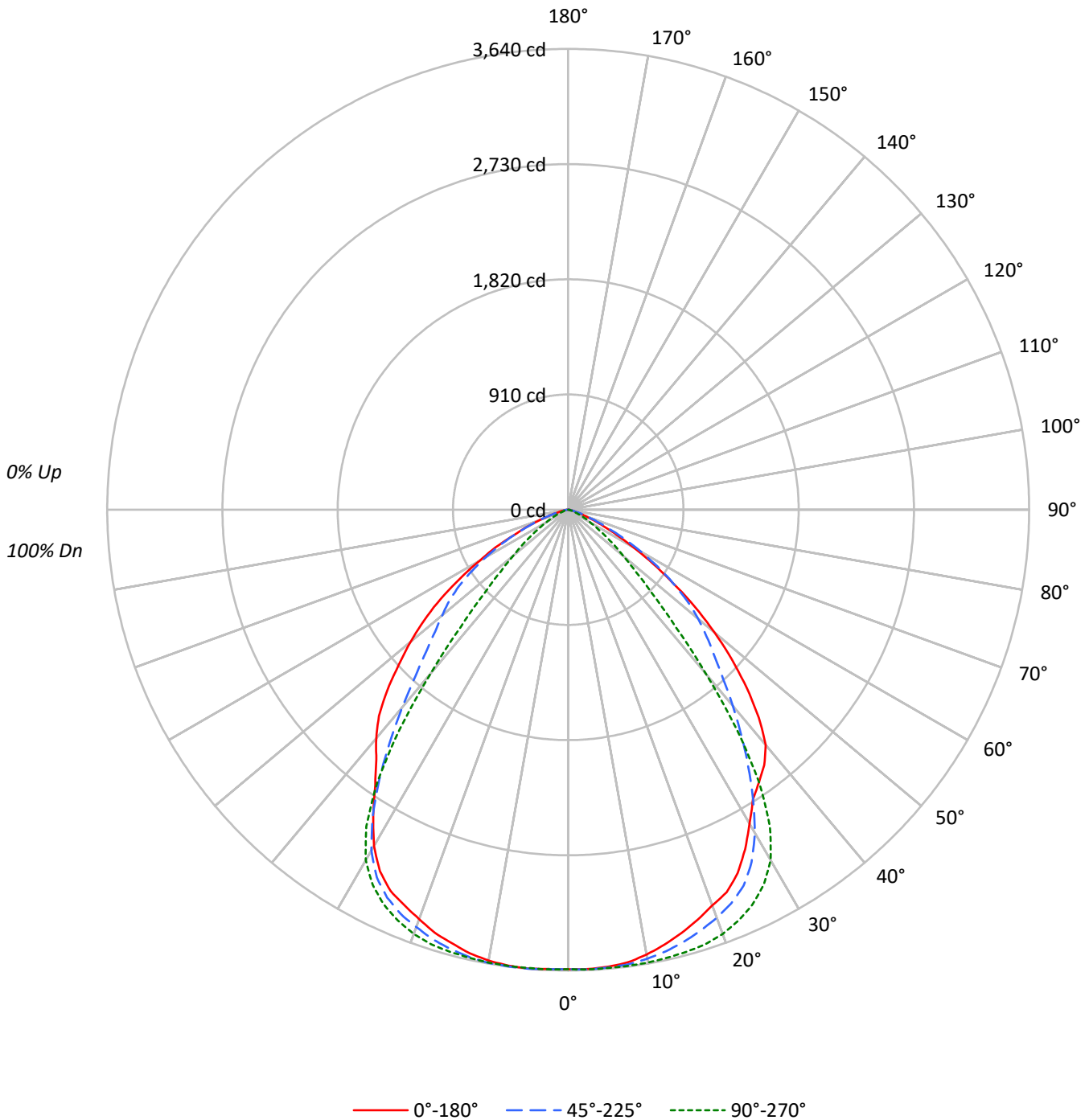
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249380

CATALOG NUMBER: LSR8B70D010 EC8B70950 8LBDW0GPH

Luminous Intensity Polar Plot





TEST NUMBER: P249380

CATALOG NUMBER: LSR8B70D010 EC8B70950 8LBDW0GPH

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°	111936	111936	111936
5°	112184	112484	112605
10°	111712	113725	113237
15°	110473	115386	113212
20°	109147	117010	112918
25°	107731	117145	113035
30°	101917	113852	109202
35°	98876	98948	99975
40°	97652	68082	94907
45°	87013	40870	88199
50°	72348	27201	77956
55°	54261	18752	66100
60°	36769	12495	49868
65°	22181	8106	34264
70°	12298	4391	21079
75°	5576	1859	10913
80°	4848	2078	7618
85°	5519	2760	7607



TEST NUMBER: P249380

CATALOG NUMBER: LSR8B70D010 EC8B70950 8LBDW0GPH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	346.4	5.0
10°-20°	1006.1	14.6
20°-30°	1527.1	22.2
30°-40°	1603.9	23.3
40°-50°	1202.5	17.5
50°-60°	771.5	11.2
60°-70°	330.0	4.8
70°-80°	78.0	1.1
80°-90°	14.5	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°	2879.6	41.9
0°-40°	4483.5	65.2
0°-60°	6457.5	93.9
0°-90°	6880.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6880.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3630	3630	3630	3630	3630	
5°	3624	3630	3634	3640	3638	344
15°	3460	3533	3614	3591	3546	976
25°	3166	3277	3443	3381	3322	1447
35°	2627	2480	2628	2597	2656	1649
45°	1995	1631	937	1584	2022	1528
55°	1009	1009	349	1052	1230	915
65°	304	358	111	462	470	324
75°	47	54	16	94	92	68
85°	16	10	8	16	22	16
90°	0	0	0	0	0	



TEST NUMBER: P249380

CATALOG NUMBER: LSR8B70D010 EC8B70950 8LBDW0GPH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0
2.5°	3632.0	3635.9	3633.9	3633.9	3632.0	3633.9	3633.9	3637.8	3637.8	3633.9	3632.0
5°	3624.2	3628.1	3628.1	3624.2	3624.2	3633.9	3628.1	3632.0	3632.0	3630.0	3630.0
7.5°	3606.7	3606.7	3614.4	3608.6	3608.6	3614.4	3612.5	3616.4	3620.3	3622.3	3622.3
10°	3567.7	3571.6	3573.5	3573.5	3575.5	3581.3	3585.2	3593.0	3596.9	3600.8	3602.8
12.5°	3519.0	3524.8	3526.8	3524.8	3530.7	3538.4	3548.2	3557.9	3563.8	3571.6	3577.4
15°	3460.5	3460.5	3464.4	3470.3	3474.2	3485.8	3495.6	3507.3	3522.8	3532.6	3542.3
17.5°	3396.2	3400.1	3405.9	3405.9	3413.8	3433.2	3439.1	3456.6	3474.2	3483.9	3503.4
20°	3326.1	3329.9	3335.8	3339.7	3349.4	3365.0	3376.7	3392.3	3411.8	3429.4	3448.8
22.5°	3271.5	3263.7	3267.6	3271.5	3281.3	3294.9	3308.5	3328.0	3347.5	3365.0	3384.5
25°	3166.3	3168.2	3174.1	3178.0	3189.7	3201.4	3217.0	3240.3	3257.9	3277.4	3298.8
27.5°	3024.1	3026.0	3035.7	3035.7	3045.5	3065.0	3074.7	3094.2	3117.6	3137.1	3162.4
30°	2862.3	2866.2	2866.2	2874.0	2879.8	2889.6	2899.3	2918.8	2930.5	2948.1	2983.2
32.5°	2714.3	2718.1	2716.2	2714.3	2708.4	2706.4	2704.5	2708.4	2712.3	2718.1	2731.8
35°	2626.6	2616.8	2609.0	2595.4	2579.8	2560.3	2542.8	2519.4	2498.0	2480.4	2461.0
37.5°	2542.8	2540.8	2529.1	2509.6	2478.5	2443.4	2402.5	2351.8	2301.1	2246.6	2194.0
40°	2425.9	2420.0	2410.3	2383.0	2347.9	2305.1	2250.5	2188.1	2106.3	2022.5	1936.8
42.5°	2227.1	2229.1	2217.4	2195.9	2162.8	2121.9	2065.4	1997.2	1909.5	1810.1	1699.1
45°	1995.3	1995.3	1991.3	1973.8	1950.4	1917.3	1874.4	1817.9	1732.2	1630.9	1512.0
47.5°	1753.6	1755.6	1749.7	1745.9	1736.1	1714.7	1683.5	1640.6	1580.2	1482.8	1363.9
50°	1508.1	1508.1	1517.9	1515.9	1515.9	1508.1	1494.5	1469.1	1416.6	1338.6	1227.6
52.5°	1262.6	1266.5	1272.4	1280.2	1289.9	1305.5	1289.9	1278.2	1245.1	1184.7	1089.2
55°	1009.3	1013.2	1022.9	1036.6	1048.3	1063.9	1067.8	1067.8	1050.2	1009.3	937.2
57.5°	793.0	787.2	795.0	806.7	822.3	837.9	849.5	863.2	861.2	834.0	775.5
60°	596.2	598.2	604.0	615.7	627.4	641.1	656.6	668.3	674.2	660.6	623.5
62.5°	434.5	434.5	442.3	454.0	459.8	479.3	489.1	494.9	500.7	498.8	475.4
65°	304.0	307.8	311.8	317.6	323.4	335.1	341.0	352.7	356.6	358.5	341.0
67.5°	214.4	208.5	212.4	216.3	222.1	229.9	241.6	241.6	247.4	247.4	235.8
70°	136.4	136.4	138.4	144.2	148.1	150.0	153.9	157.8	163.7	161.7	161.7
72.5°	91.6	89.6	91.6	93.5	95.5	101.3	101.3	103.3	107.2	109.1	101.3
75°	46.8	48.7	52.6	50.7	56.5	52.6	54.5	60.4	58.5	54.5	54.5
77.5°	39.0	39.0	39.0	37.0	40.9	40.9	39.0	42.9	40.9	40.9	39.0
80°	27.3	29.2	27.3	25.3	27.3	25.3	25.3	25.3	25.3	25.3	23.4
82.5°	21.5	17.5	19.5	17.5	19.5	19.5	17.5	15.6	15.6	17.5	15.6
85°	15.6	11.7	13.6	13.6	11.7	11.7	11.7	11.7	11.7	9.7	9.7
87.5°	9.7	5.9	5.9	5.9	7.8	7.8	7.8	5.9	7.8	7.8	3.9
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: P249380

CATALOG NUMBER: LSR8B70D010 EC8B70950 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0
2.5°	3635.9	3633.9	3637.8	3635.9	3635.9	3633.9	3635.9	3633.9	3637.8	3630.0	3632.0
5°	3635.9	3632.0	3633.9	3635.9	3637.8	3633.9	3633.9	3633.9	3637.8	3633.9	3635.9
7.5°	3628.1	3626.1	3632.0	3635.9	3633.9	3632.0	3635.9	3633.9	3637.8	3635.9	3639.8
10°	3612.5	3614.4	3618.3	3624.2	3626.1	3628.1	3632.0	3632.0	3637.8	3630.0	3633.9
12.5°	3589.1	3596.9	3606.7	3610.5	3618.3	3618.3	3622.3	3624.2	3628.1	3626.1	3632.0
15°	3559.9	3569.6	3581.3	3591.1	3600.8	3606.7	3612.5	3614.4	3620.3	3614.4	3616.4
17.5°	3524.8	3536.5	3554.0	3565.7	3581.3	3587.2	3594.9	3598.8	3604.7	3600.8	3602.8
20°	3476.1	3489.8	3509.2	3526.8	3536.5	3550.1	3559.9	3565.7	3569.6	3565.7	3567.7
22.5°	3407.9	3427.4	3452.7	3466.4	3485.8	3497.5	3499.5	3513.1	3522.8	3513.1	3517.0
25°	3328.0	3347.5	3367.0	3396.2	3413.8	3427.4	3441.0	3443.0	3452.7	3450.8	3448.8
27.5°	3195.5	3220.9	3254.0	3277.4	3300.7	3322.2	3337.8	3341.6	3351.4	3347.5	3349.4
30°	3014.3	3041.6	3072.8	3109.8	3142.9	3164.3	3183.8	3197.5	3207.2	3201.4	3199.4
32.5°	2757.1	2784.4	2817.5	2854.5	2893.5	2924.7	2948.1	2965.6	2977.3	2973.4	2963.7
35°	2462.9	2470.7	2492.1	2521.4	2554.4	2587.6	2609.0	2628.5	2642.1	2646.0	2646.0
37.5°	2160.9	2135.6	2120.0	2120.0	2139.4	2153.1	2172.6	2184.2	2205.7	2213.5	2219.3
40°	1868.6	1810.1	1755.6	1714.7	1687.4	1685.5	1685.5	1691.3	1710.8	1736.1	1759.5
42.5°	1607.5	1514.0	1430.2	1354.2	1299.7	1268.5	1254.8	1256.8	1272.4	1295.7	1334.7
45°	1399.0	1282.1	1176.9	1085.3	1011.3	962.5	939.2	937.2	948.9	976.2	1019.1
47.5°	1237.3	1112.6	993.7	888.5	808.6	756.0	728.7	721.0	728.7	754.0	804.7
50°	1102.8	974.3	851.5	742.4	656.6	602.1	576.7	567.0	576.7	598.2	648.8
52.5°	978.1	845.6	730.7	625.5	533.9	487.1	459.8	454.0	459.8	485.2	526.1
55°	834.0	721.0	607.9	502.7	422.8	376.1	354.6	348.8	354.6	378.0	420.9
57.5°	691.7	594.3	494.9	399.4	331.3	290.3	270.8	263.0	276.7	292.3	342.9
60°	559.2	481.3	397.5	313.7	257.2	220.2	204.6	202.6	206.5	226.0	261.1
62.5°	438.4	374.1	307.8	239.7	192.9	177.3	157.8	155.9	159.8	171.4	198.8
65°	315.7	274.8	224.1	175.4	138.4	116.9	109.1	111.1	114.9	122.8	148.1
67.5°	220.2	190.9	155.9	122.8	95.5	85.7	78.0	76.0	78.0	91.6	105.2
70°	148.1	130.5	105.2	93.5	66.3	52.6	54.5	48.7	56.5	56.5	68.2
72.5°	97.4	85.7	70.1	54.5	46.8	37.0	37.0	35.1	39.0	40.9	50.7
75°	50.7	39.0	39.0	27.3	19.5	9.7	17.5	15.6	13.6	15.6	19.5
77.5°	35.1	29.2	27.3	21.5	19.5	15.6	15.6	15.6	15.6	17.5	19.5
80°	21.5	21.5	15.6	13.6	11.7	9.7	11.7	11.7	11.7	11.7	13.6
82.5°	13.6	11.7	11.7	9.7	9.7	7.8	7.8	7.8	7.8	7.8	11.7
85°	11.7	7.8	7.8	5.9	7.8	13.6	5.9	7.8	7.8	7.8	5.9
87.5°	3.9	5.9	5.9	5.9	3.9	2.0	3.9	5.9	5.9	9.7	7.8
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: P249380

CATALOG NUMBER: LSR8B70D010 EC8B70950 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0	3630.0
2.5°	3635.9	3637.8	3637.8	3635.9	3635.9	3632.0	3639.8	3633.9	3635.9	3643.7	3637.8
5°	3639.8	3641.7	3641.7	3639.8	3639.8	3639.8	3641.7	3641.7	3639.8	3637.8	3641.7
7.5°	3647.6	3645.6	3645.6	3641.7	3641.7	3637.8	3641.7	3635.9	3639.8	3635.9	3641.7
10°	3637.8	3639.8	3637.8	3635.9	3635.9	3633.9	3633.9	3628.1	3630.0	3624.2	3628.1
12.5°	3632.0	3630.0	3630.0	3626.1	3622.3	3618.3	3616.4	3610.5	3610.5	3596.9	3602.8
15°	3616.4	3618.3	3612.5	3604.7	3600.8	3591.1	3587.2	3579.3	3571.6	3561.8	3563.8
17.5°	3602.8	3596.9	3589.1	3581.3	3565.7	3557.9	3550.1	3538.4	3534.5	3522.8	3519.0
20°	3561.8	3557.9	3548.2	3534.5	3524.8	3507.3	3499.5	3487.8	3478.0	3466.4	3460.5
22.5°	3509.2	3505.3	3493.6	3480.0	3464.4	3456.6	3448.8	3427.4	3417.6	3405.9	3404.0
25°	3443.0	3437.1	3425.4	3409.9	3402.0	3380.6	3372.8	3357.2	3353.4	3341.6	3339.7
27.5°	3341.6	3333.9	3320.2	3300.7	3287.1	3273.5	3265.7	3254.0	3250.1	3238.4	3236.5
30°	3189.7	3179.9	3152.6	3144.9	3121.5	3107.8	3107.8	3092.2	3094.2	3086.4	3086.4
32.5°	2950.0	2934.4	2913.0	2897.4	2881.8	2874.0	2874.0	2868.2	2872.1	2872.1	2876.0
35°	2632.4	2611.0	2599.3	2589.5	2589.5	2597.3	2620.7	2626.6	2638.3	2648.0	2655.8
37.5°	2225.1	2223.2	2236.9	2248.6	2277.8	2310.9	2351.8	2386.9	2420.0	2443.4	2466.8
40°	1784.8	1833.5	1872.5	1927.1	1971.8	2036.2	2110.2	2170.6	2227.1	2268.1	2310.9
42.5°	1393.1	1455.5	1537.4	1617.2	1697.1	1784.8	1882.3	1966.0	2040.1	2096.6	2141.4
45°	1085.3	1171.0	1270.4	1371.7	1475.0	1584.1	1685.5	1771.2	1849.1	1907.6	1952.4
47.5°	874.9	968.4	1081.4	1192.5	1309.4	1424.3	1537.4	1611.4	1675.7	1722.4	1763.4
50°	722.9	822.3	941.1	1067.8	1184.7	1299.7	1397.1	1469.1	1521.8	1562.7	1588.0
52.5°	604.0	709.2	835.9	962.5	1079.4	1184.7	1272.4	1326.9	1369.8	1399.0	1422.4
55°	498.8	600.1	719.0	837.9	952.8	1052.2	1124.3	1165.2	1198.3	1215.8	1229.5
57.5°	407.2	500.7	609.9	719.0	818.4	900.2	956.7	997.6	1013.2	1026.9	1024.9
60°	319.6	407.2	506.6	600.1	685.9	752.1	793.0	816.4	828.1	834.0	830.0
62.5°	251.3	331.3	407.2	489.1	551.4	607.9	646.9	646.9	652.7	654.7	660.6
65°	187.0	247.4	313.7	374.1	424.7	461.8	483.2	489.1	496.9	494.9	491.0
67.5°	138.4	183.2	231.9	276.7	311.8	335.1	350.7	364.4	362.4	358.5	356.6
70°	95.5	124.7	167.6	194.9	220.2	243.6	247.4	249.4	251.3	253.3	249.4
72.5°	66.3	87.7	111.1	134.4	150.0	159.8	169.5	171.4	171.4	171.4	169.5
75°	33.1	44.8	66.3	76.0	89.6	93.5	101.3	101.3	107.2	99.4	97.4
77.5°	29.2	35.1	46.8	54.5	60.4	66.3	68.2	74.0	72.1	68.2	70.1
80°	17.5	21.5	29.2	33.1	40.9	42.9	44.8	46.8	44.8	46.8	46.8
82.5°	13.6	15.6	19.5	19.5	25.3	25.3	27.3	27.3	29.2	29.2	29.2
85°	7.8	13.6	11.7	23.4	15.6	15.6	19.5	23.4	19.5	19.5	23.4
87.5°	7.8	7.8	5.9	7.8	7.8	7.8	9.7	11.7	11.7	13.6	11.7
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: P249380

CATALOG NUMBER: LSR8B70D010 EC8B70950 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3630.0	3630.0	3630.0	3630.0
2.5°	3635.9	3639.8	3633.9	3632.0
5°	3641.7	3641.7	3637.8	3637.8
7.5°	3641.7	3641.7	3635.9	3632.0
10°	3626.1	3626.1	3620.3	3616.4
12.5°	3596.9	3596.9	3594.9	3589.1
15°	3559.9	3559.9	3552.1	3546.3
17.5°	3509.2	3513.1	3503.4	3503.4
20°	3454.7	3452.7	3444.9	3441.0
22.5°	3398.2	3394.3	3392.3	3380.6
25°	3337.8	3333.9	3328.0	3322.2
27.5°	3234.5	3232.5	3226.7	3218.9
30°	3076.6	3074.7	3066.9	3066.9
32.5°	2872.1	2870.1	2862.3	2864.3
35°	2659.7	2667.5	2663.6	2655.8
37.5°	2482.4	2488.2	2492.1	2488.2
40°	2334.3	2351.8	2353.8	2357.7
42.5°	2176.5	2199.8	2207.6	2211.5
45°	1987.4	2008.9	2026.4	2022.5
47.5°	1794.5	1810.1	1825.7	1814.0
50°	1609.5	1619.2	1625.0	1625.0
52.5°	1434.1	1434.1	1432.1	1434.1
55°	1233.4	1233.4	1225.6	1229.5
57.5°	1022.9	1026.9	1021.0	1011.3
60°	828.1	818.4	814.5	808.6
62.5°	645.0	645.0	631.3	648.8
65°	483.2	477.4	471.5	469.6
67.5°	350.7	348.8	342.9	341.0
70°	247.4	239.7	237.7	233.8
72.5°	165.6	165.6	161.7	161.7
75°	101.3	91.6	89.6	91.6
77.5°	70.1	68.2	68.2	66.3
80°	46.8	44.8	48.7	42.9
82.5°	29.2	31.2	29.2	31.2
85°	19.5	23.4	21.5	21.5
87.5°	11.7	11.7	11.7	11.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)