

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: P249092

Luminaire Tested: **LSR8B70D010 EC8B70830 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249092
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 EC8B70830 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7340.0 lumens
Efficiency: N/A
Efficacy: 96.7 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

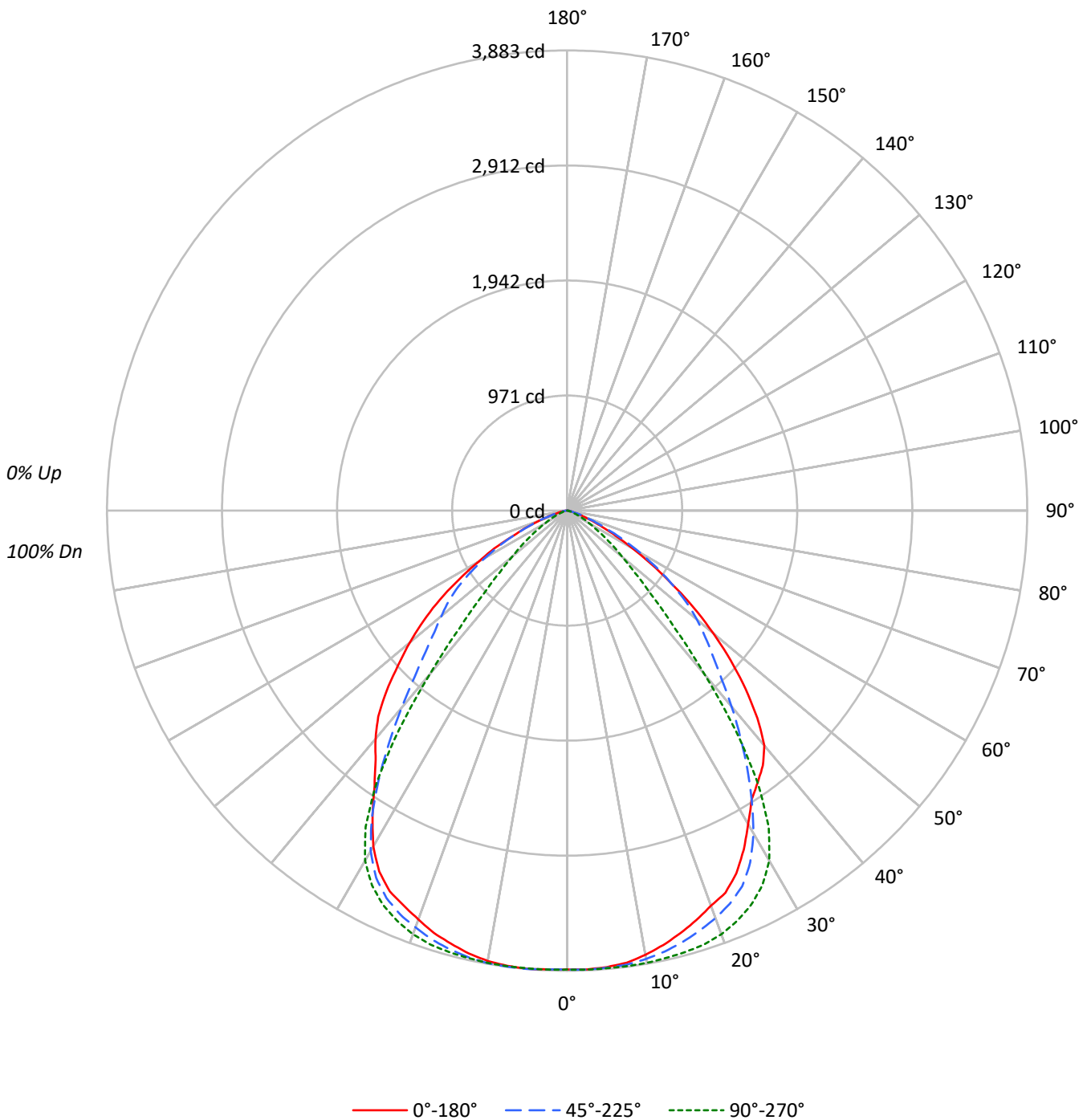
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249092

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0H

Luminous Intensity Polar Plot





TEST NUMBER: P249092

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0H

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°	119420	119420	119420
5°	119684	120006	120136
10°	119180	121328	120808
15°	117861	123103	120782
20°	116445	124833	120468
25°	114933	124977	120592
30°	108732	121462	116505
35°	105487	105562	106661
40°	104181	72630	101251
45°	92831	43605	94095
50°	77188	29019	83170
55°	57890	20005	70519
60°	39230	13334	53205
65°	23663	8646	36555
70°	13118	4688	22486
75°	5945	1978	11640
80°	5168	2220	8115
85°	5873	2937	8102



TEST NUMBER: P249092

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	369.6	5.0
10°-20°	1073.4	14.6
20°-30°	1629.2	22.2
30°-40°	1711.1	23.3
40°-50°	1282.9	17.5
50°-60°	823.1	11.2
60°-70°	352.1	4.8
70°-80°	83.2	1.1
80°-90°	15.5	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°	3072.1	41.9
0°-40°	4783.2	65.2
0°-60°	6889.2	93.9
0°-90°	7340.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7340.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3873	3873	3873	3873	3873	
5°	3866	3873	3877	3883	3881	367
15°	3692	3769	3856	3831	3783	1041
25°	3378	3496	3673	3607	3544	1543
35°	2802	2646	2804	2771	2833	1759
45°	2129	1740	1000	1690	2158	1630
55°	1077	1077	372	1122	1312	977
65°	324	382	118	493	501	346
75°	50	58	17	100	98	73
85°	17	10	8	17	23	18
90°	0	0	0	0	0	



TEST NUMBER: P249092

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7
2.5°	3874.8	3879.0	3876.9	3876.9	3874.8	3876.9	3876.9	3881.1	3881.1	3876.9	3874.8
5°	3866.5	3870.6	3870.6	3866.5	3866.5	3876.9	3870.6	3874.8	3874.8	3872.7	3872.7
7.5°	3847.8	3847.8	3856.1	3849.9	3849.9	3856.1	3854.0	3858.2	3862.4	3864.4	3864.4
10°	3806.2	3810.4	3812.5	3812.5	3814.5	3820.7	3824.9	3833.3	3837.4	3841.5	3843.6
12.5°	3754.3	3760.5	3762.6	3760.5	3766.7	3775.0	3785.4	3795.8	3802.1	3810.4	3816.6
15°	3691.9	3691.9	3696.0	3702.3	3706.5	3718.9	3729.3	3741.8	3758.4	3768.8	3779.2
17.5°	3623.3	3627.5	3633.7	3633.7	3642.0	3662.8	3669.0	3687.7	3706.5	3716.8	3737.6
20°	3548.5	3552.6	3558.8	3563.0	3573.4	3590.0	3602.5	3619.1	3639.9	3658.6	3679.4
22.5°	3490.2	3481.9	3486.1	3490.2	3500.7	3515.2	3529.8	3550.5	3571.3	3590.0	3610.8
25°	3378.0	3380.1	3386.3	3390.4	3402.9	3415.4	3432.0	3457.0	3475.7	3496.5	3519.3
27.5°	3226.2	3228.3	3238.7	3238.7	3249.1	3269.9	3280.3	3301.1	3326.0	3346.8	3373.9
30°	3053.7	3057.8	3057.8	3066.2	3072.4	3082.8	3093.2	3114.0	3126.5	3145.2	3182.6
32.5°	2895.7	2899.9	2897.8	2895.7	2889.5	2887.4	2885.3	2889.5	2893.6	2899.9	2914.4
35°	2802.2	2791.8	2783.5	2768.9	2752.3	2731.5	2712.8	2687.9	2665.0	2646.2	2625.5
37.5°	2712.8	2710.7	2698.2	2677.4	2644.2	2606.8	2563.1	2509.1	2455.0	2396.8	2340.7
40°	2588.1	2581.8	2571.4	2542.3	2504.9	2459.2	2401.0	2334.5	2247.1	2157.7	2066.3
42.5°	2376.0	2378.1	2365.6	2342.7	2307.4	2263.8	2203.5	2130.7	2037.2	1931.2	1812.7
45°	2128.7	2128.7	2124.5	2105.8	2080.8	2045.5	1999.8	1939.5	1848.0	1739.9	1613.1
47.5°	1870.9	1873.0	1866.7	1862.6	1852.2	1829.3	1796.1	1750.3	1685.9	1581.9	1455.1
50°	1609.0	1609.0	1619.4	1617.3	1617.3	1609.0	1594.4	1567.4	1511.3	1428.1	1309.6
52.5°	1347.0	1351.2	1357.5	1365.7	1376.1	1392.8	1376.1	1363.7	1328.3	1263.9	1162.0
55°	1076.8	1081.0	1091.3	1105.9	1118.4	1135.0	1139.1	1139.1	1120.4	1076.8	999.9
57.5°	846.1	839.8	848.2	860.6	877.2	893.9	906.3	920.9	918.8	889.7	827.4
60°	636.1	638.2	644.4	656.9	669.4	683.9	700.5	713.0	719.3	704.7	665.2
62.5°	463.6	463.6	471.9	484.3	490.6	511.4	521.8	528.0	534.2	532.1	507.2
65°	324.3	328.4	332.6	338.9	345.1	357.5	363.8	376.2	380.4	382.5	363.8
67.5°	228.7	222.4	226.6	230.7	237.0	245.3	257.8	257.8	264.0	264.0	251.5
70°	145.5	145.5	147.6	153.8	158.0	160.1	164.2	168.4	174.6	172.5	172.5
72.5°	97.7	95.6	97.7	99.8	101.9	108.1	108.1	110.2	114.3	116.4	108.1
75°	49.9	52.0	56.1	54.1	60.3	56.1	58.2	64.4	62.4	58.2	58.2
77.5°	41.6	41.6	41.6	39.5	43.6	43.6	41.6	45.7	43.6	43.6	41.6
80°	29.1	31.2	29.1	27.0	29.1	27.0	27.0	27.0	27.0	27.0	24.9
82.5°	22.9	18.7	20.8	18.7	20.8	20.8	18.7	16.6	16.6	18.7	16.6
85°	16.6	12.5	14.5	14.5	12.5	12.5	12.5	12.5	12.5	10.4	10.4
87.5°	10.4	6.3	6.3	6.3	8.3	8.3	8.3	6.3	8.3	8.3	4.2
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: P249092

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0H

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7
2.5°	3879.0	3876.9	3881.1	3879.0	3879.0	3876.9	3879.0	3876.9	3881.1	3872.7	3874.8
5°	3879.0	3874.8	3876.9	3879.0	3881.1	3876.9	3876.9	3876.9	3881.1	3876.9	3879.0
7.5°	3870.6	3868.6	3874.8	3879.0	3876.9	3874.8	3879.0	3876.9	3881.1	3879.0	3883.1
10°	3854.0	3856.1	3860.3	3866.5	3868.6	3870.6	3874.8	3874.8	3881.1	3872.7	3876.9
12.5°	3829.1	3837.4	3847.8	3851.9	3860.3	3860.3	3864.4	3866.5	3870.6	3868.6	3874.8
15°	3797.9	3808.3	3820.7	3831.2	3841.5	3847.8	3854.0	3856.1	3862.4	3856.1	3858.2
17.5°	3760.5	3772.9	3791.7	3804.1	3820.7	3827.0	3835.3	3839.5	3845.7	3841.5	3843.6
20°	3708.5	3723.1	3743.8	3762.6	3772.9	3787.5	3797.9	3804.1	3808.3	3804.1	3806.2
22.5°	3635.8	3656.6	3683.6	3698.1	3718.9	3731.4	3733.5	3748.0	3758.4	3748.0	3752.2
25°	3550.5	3571.3	3592.1	3623.3	3642.0	3656.6	3671.1	3673.2	3683.6	3681.5	3679.4
27.5°	3409.2	3436.2	3471.5	3496.5	3521.4	3544.3	3560.9	3565.1	3575.5	3571.3	3573.4
30°	3215.8	3245.0	3278.2	3317.7	3353.1	3375.9	3396.7	3411.2	3421.6	3415.4	3413.3
32.5°	2941.5	2970.6	3005.9	3045.4	3087.0	3120.2	3145.2	3163.9	3176.4	3172.2	3161.8
35°	2627.6	2635.9	2658.8	2689.9	2725.2	2760.6	2783.5	2804.2	2818.8	2822.9	2822.9
37.5°	2305.4	2278.3	2261.7	2261.7	2282.5	2297.0	2317.8	2330.3	2353.2	2361.5	2367.7
40°	1993.5	1931.2	1873.0	1829.3	1800.2	1798.1	1798.1	1804.3	1825.2	1852.2	1877.1
42.5°	1715.0	1615.2	1525.8	1444.7	1386.5	1353.3	1338.7	1340.8	1357.5	1382.4	1423.9
45°	1492.6	1367.8	1255.6	1157.9	1078.9	1026.9	1002.0	999.9	1012.3	1041.4	1087.2
47.5°	1320.0	1187.0	1060.2	947.9	862.7	806.5	777.5	769.2	777.5	804.5	858.5
50°	1176.6	1039.4	908.4	792.0	700.5	642.4	615.3	604.9	615.3	638.2	692.2
52.5°	1043.5	902.2	779.5	667.3	569.6	519.7	490.6	484.3	490.6	517.6	561.3
55°	889.7	769.2	648.6	536.3	451.1	401.2	378.3	372.1	378.3	403.3	449.0
57.5°	738.0	634.0	528.0	426.1	353.4	309.7	289.0	280.6	295.2	311.8	365.9
60°	596.6	513.5	424.1	334.7	274.4	234.9	218.3	216.2	220.3	241.1	278.5
62.5°	467.7	399.1	328.4	255.7	205.8	189.2	168.4	166.3	170.4	182.9	212.1
65°	336.8	293.1	239.1	187.1	147.6	124.7	116.4	118.5	122.6	131.0	158.0
67.5°	234.9	203.7	166.3	131.0	101.9	91.5	83.2	81.1	83.2	97.7	112.3
70°	158.0	139.3	112.3	99.8	70.7	56.1	58.2	52.0	60.3	60.3	72.7
72.5°	103.9	91.5	74.8	58.2	49.9	39.5	39.5	37.4	41.6	43.6	54.1
75°	54.1	41.6	41.6	29.1	20.8	10.4	18.7	16.6	14.5	16.6	20.8
77.5°	37.4	31.2	29.1	22.9	20.8	16.6	16.6	16.6	16.6	18.7	20.8
80°	22.9	22.9	16.6	14.5	12.5	10.4	12.5	12.5	12.5	12.5	14.5
82.5°	14.5	12.5	12.5	10.4	10.4	8.3	8.3	8.3	8.3	8.3	12.5
85°	12.5	8.3	8.3	6.3	8.3	14.5	6.3	8.3	8.3	8.3	6.3
87.5°	4.2	6.3	6.3	6.3	4.2	2.1	4.2	6.3	6.3	10.4	8.3
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: P249092

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0H

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7	3872.7
2.5°	3879.0	3881.1	3881.1	3879.0	3879.0	3874.8	3883.1	3876.9	3879.0	3887.3	3881.1
5°	3883.1	3885.2	3885.2	3883.1	3883.1	3883.1	3885.2	3885.2	3883.1	3881.1	3885.2
7.5°	3891.4	3889.4	3889.4	3885.2	3885.2	3881.1	3885.2	3879.0	3883.1	3879.0	3885.2
10°	3881.1	3883.1	3881.1	3879.0	3879.0	3876.9	3876.9	3870.6	3872.7	3866.5	3870.6
12.5°	3874.8	3872.7	3872.7	3868.6	3864.4	3860.3	3858.2	3851.9	3851.9	3837.4	3843.6
15°	3858.2	3860.3	3854.0	3845.7	3841.5	3831.2	3827.0	3818.7	3810.4	3800.0	3802.1
17.5°	3843.6	3837.4	3829.1	3820.7	3804.1	3795.8	3787.5	3775.0	3770.8	3758.4	3754.3
20°	3800.0	3795.8	3785.4	3770.8	3760.5	3741.8	3733.5	3721.0	3710.6	3698.1	3691.9
22.5°	3743.8	3739.7	3727.2	3712.7	3696.0	3687.7	3679.4	3656.6	3646.1	3633.7	3631.6
25°	3673.2	3666.9	3654.5	3637.8	3629.5	3606.7	3598.3	3581.7	3577.6	3565.1	3563.0
27.5°	3565.1	3556.8	3542.2	3521.4	3506.9	3492.3	3484.0	3471.5	3467.4	3454.9	3452.8
30°	3402.9	3392.5	3363.4	3355.1	3330.2	3315.6	3315.6	3299.0	3301.1	3292.8	3292.8
32.5°	3147.3	3130.6	3107.7	3091.1	3074.5	3066.2	3066.2	3059.9	3064.1	3064.1	3068.3
35°	2808.4	2785.6	2773.1	2762.7	2762.7	2771.0	2795.9	2802.2	2814.7	2825.0	2833.4
37.5°	2373.9	2371.9	2386.4	2398.9	2430.1	2465.4	2509.1	2546.5	2581.8	2606.8	2631.7
40°	1904.1	1956.1	1997.7	2055.9	2103.7	2172.3	2251.3	2315.7	2376.0	2419.7	2465.4
42.5°	1486.3	1552.8	1640.2	1725.4	1810.6	1904.1	2008.1	2097.5	2176.5	2236.7	2284.6
45°	1157.9	1249.3	1355.4	1463.5	1573.6	1690.1	1798.1	1889.6	1972.8	2035.1	2082.9
47.5°	933.4	1033.1	1153.7	1272.2	1396.9	1519.6	1640.2	1719.1	1787.7	1837.6	1881.3
50°	771.2	877.2	1004.1	1139.1	1263.9	1386.5	1490.5	1567.4	1623.5	1667.2	1694.2
52.5°	644.4	756.7	891.8	1026.9	1151.6	1263.9	1357.5	1415.6	1461.4	1492.6	1517.5
55°	532.1	640.3	767.1	893.9	1016.5	1122.5	1199.4	1243.1	1278.4	1297.1	1311.7
57.5°	434.5	534.2	650.7	767.1	873.1	960.4	1020.7	1064.3	1081.0	1095.5	1093.4
60°	340.9	434.5	540.5	640.3	731.7	802.4	846.1	871.0	883.5	889.7	885.5
62.5°	268.2	353.4	434.5	521.8	588.3	648.6	690.2	690.2	696.4	698.5	704.7
65°	199.5	264.0	334.7	399.1	453.1	492.7	515.6	521.8	530.1	528.0	523.8
67.5°	147.6	195.4	247.4	295.2	332.6	357.5	374.2	388.8	386.7	382.5	380.4
70°	101.9	133.1	178.8	207.9	234.9	259.9	264.0	266.1	268.2	270.2	266.1
72.5°	70.7	93.5	118.5	143.4	160.1	170.4	180.9	182.9	182.9	182.9	180.9
75°	35.3	47.8	70.7	81.1	95.6	99.8	108.1	108.1	114.3	106.0	103.9
77.5°	31.2	37.4	49.9	58.2	64.4	70.7	72.7	79.0	76.9	72.7	74.8
80°	18.7	22.9	31.2	35.3	43.6	45.7	47.8	49.9	47.8	49.9	49.9
82.5°	14.5	16.6	20.8	20.8	27.0	27.0	29.1	29.1	31.2	31.2	31.2
85°	8.3	14.5	12.5	24.9	16.6	16.6	20.8	24.9	20.8	20.8	24.9
87.5°	8.3	8.3	6.3	8.3	8.3	8.3	10.4	12.5	12.5	14.5	12.5
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: P249092

CATALOG NUMBER: LSR8B70D010 EC8B70830 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3872.7	3872.7	3872.7	3872.7
2.5°	3879.0	3883.1	3876.9	3874.8
5°	3885.2	3885.2	3881.1	3881.1
7.5°	3885.2	3885.2	3879.0	3874.8
10°	3868.6	3868.6	3862.4	3858.2
12.5°	3837.4	3837.4	3835.3	3829.1
15°	3797.9	3797.9	3789.6	3783.4
17.5°	3743.8	3748.0	3737.6	3737.6
20°	3685.7	3683.6	3675.3	3671.1
22.5°	3625.4	3621.2	3619.1	3606.7
25°	3560.9	3556.8	3550.5	3544.3
27.5°	3450.8	3448.7	3442.4	3434.1
30°	3282.4	3280.3	3272.0	3272.0
32.5°	3064.1	3062.0	3053.7	3055.8
35°	2837.5	2845.8	2841.7	2833.4
37.5°	2648.3	2654.6	2658.8	2654.6
40°	2490.3	2509.1	2511.2	2515.3
42.5°	2322.0	2346.9	2355.3	2359.4
45°	2120.3	2143.2	2161.9	2157.7
47.5°	1914.5	1931.2	1947.8	1935.3
50°	1717.1	1727.4	1733.7	1733.7
52.5°	1530.0	1530.0	1527.9	1530.0
55°	1315.8	1315.8	1307.6	1311.7
57.5°	1091.3	1095.5	1089.3	1078.9
60°	883.5	873.1	868.9	862.7
62.5°	688.1	688.1	673.5	692.2
65°	515.6	509.3	503.0	501.0
67.5°	374.2	372.1	365.9	363.8
70°	264.0	255.7	253.6	249.4
72.5°	176.7	176.7	172.5	172.5
75°	108.1	97.7	95.6	97.7
77.5°	74.8	72.7	72.7	70.7
80°	49.9	47.8	52.0	45.7
82.5°	31.2	33.3	31.2	33.3
85°	20.8	24.9	22.9	22.9
87.5°	12.5	12.5	12.5	12.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)