

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: P249515

Luminaire Tested: **LSR8B70D010 EC8B70827 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249515
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 EC8B70827 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7080.0 lumens
Efficiency: N/A
Efficacy: 93.3 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

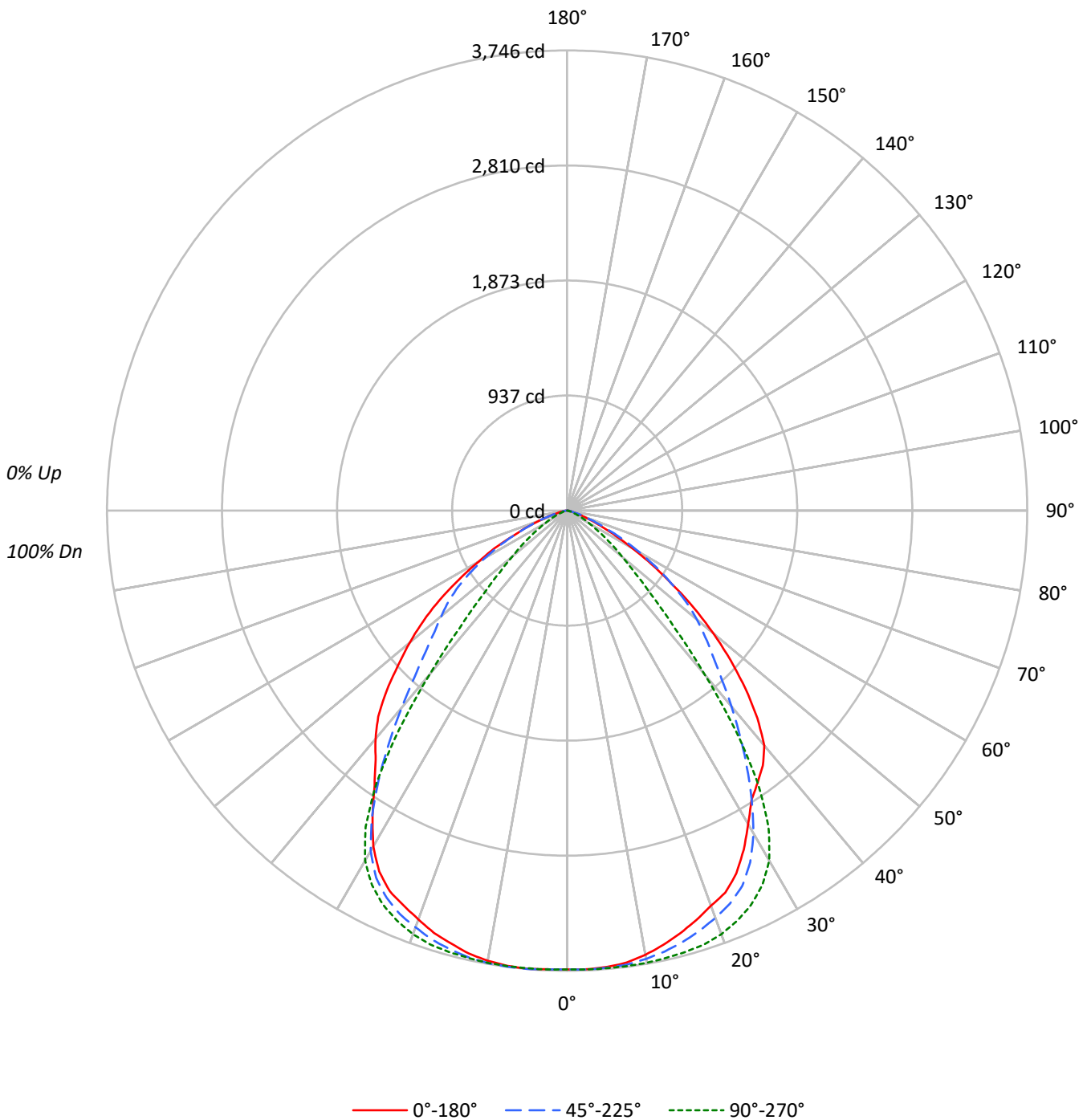
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	115189	115189	115189
5°	115443	115756	115880
10°	114959	117032	116528
15°	113685	118742	116501
20°	112320	120413	116202
25°	110861	120551	116322
30°	104880	117160	112378
35°	101748	101824	102882
40°	100490	70058	97664
45°	89543	42061	90764
50°	74454	27992	80225
55°	55837	19295	68019
60°	37842	12859	51318
65°	22823	8340	35257
70°	12658	4517	21692
75°	5731	1906	11223
80°	4990	2131	7831
85°	5661	2830	7819



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	356.5	5.0
10°-20°	1035.3	14.6
20°-30°	1571.5	22.2
30°-40°	1650.5	23.3
40°-50°	1237.4	17.5
50°-60°	794.0	11.2
60°-70°	339.6	4.8
70°-80°	80.2	1.1
80°-90°	14.9	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°	2963.3	41.9
0°-40°	4613.8	65.2
0°-60°	6645.2	93.9
0°-90°	7080.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7080.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3736	3736	3736	3736	3736	
5°	3730	3736	3740	3746	3744	354
15°	3561	3635	3720	3696	3649	1004
25°	3258	3373	3543	3479	3419	1489
35°	2703	2552	2705	2673	2733	1696
45°	2053	1678	964	1630	2081	1572
55°	1039	1039	359	1083	1265	942
65°	313	369	114	475	483	334
75°	48	56	16	96	94	70
85°	16	10	8	16	22	17
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°	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5
2.5°	3737.6	3741.6	3739.6	3739.6	3737.6	3739.6	3739.6	3743.6	3743.6	3739.6	3737.6
5°	3729.5	3733.5	3733.5	3729.5	3729.5	3739.6	3733.5	3737.6	3737.6	3735.5	3735.5
7.5°	3711.5	3711.5	3719.5	3713.5	3713.5	3719.5	3717.5	3721.5	3725.5	3727.5	3727.5
10°	3671.4	3675.4	3677.4	3677.4	3679.4	3685.4	3689.4	3697.5	3701.4	3705.5	3707.5
12.5°	3621.3	3627.3	3629.3	3627.3	3633.3	3641.3	3651.4	3661.4	3667.4	3675.4	3681.4
15°	3561.1	3561.1	3565.1	3571.1	3575.2	3587.2	3597.2	3609.2	3625.3	3635.3	3645.3
17.5°	3494.9	3499.0	3505.0	3505.0	3513.0	3533.0	3539.1	3557.1	3575.2	3585.2	3605.2
20°	3422.8	3426.8	3432.8	3436.8	3446.8	3462.9	3474.9	3490.9	3511.0	3529.0	3549.1
22.5°	3366.6	3358.6	3362.6	3366.6	3376.7	3390.7	3404.7	3424.7	3444.8	3462.9	3482.9
25°	3258.3	3260.3	3266.4	3270.3	3282.4	3294.4	3310.5	3334.5	3352.6	3372.6	3394.7
27.5°	3112.0	3114.0	3124.0	3124.0	3134.0	3154.1	3164.1	3184.1	3208.2	3228.2	3254.3
30°	2945.5	2949.5	2949.5	2957.6	2963.6	2973.6	2983.6	3003.7	3015.7	3033.8	3069.9
32.5°	2793.2	2797.1	2795.1	2793.2	2787.1	2785.1	2783.1	2787.1	2791.1	2797.1	2811.2
35°	2702.9	2692.9	2684.9	2670.8	2654.8	2634.7	2616.7	2592.6	2570.6	2552.5	2532.5
37.5°	2616.7	2614.7	2602.7	2582.6	2550.5	2514.4	2472.3	2420.2	2368.0	2311.9	2257.8
40°	2496.4	2490.3	2480.3	2452.3	2416.2	2372.1	2315.9	2251.8	2167.5	2081.3	1993.1
42.5°	2291.8	2293.9	2281.8	2259.8	2225.7	2183.6	2125.4	2055.3	1965.0	1862.7	1748.5
45°	2053.3	2053.3	2049.2	2031.2	2007.1	1973.0	1928.9	1870.8	1782.6	1678.3	1556.0
47.5°	1804.6	1806.6	1800.6	1796.6	1786.6	1764.5	1732.4	1688.3	1626.2	1525.9	1403.6
50°	1552.0	1552.0	1562.0	1560.0	1560.0	1552.0	1538.0	1511.9	1457.7	1377.5	1263.3
52.5°	1299.3	1303.3	1309.4	1317.4	1327.4	1343.4	1327.4	1315.4	1281.3	1219.1	1120.9
55°	1038.6	1042.7	1052.7	1066.7	1078.8	1094.8	1098.8	1098.8	1080.7	1038.6	964.5
57.5°	816.1	810.1	818.1	830.1	846.2	862.2	874.2	888.3	886.3	858.2	798.0
60°	613.6	615.6	621.6	633.6	645.7	659.7	675.7	687.8	693.8	679.8	641.6
62.5°	447.2	447.2	455.2	467.2	473.2	493.3	503.3	509.3	515.3	513.3	489.2
65°	312.8	316.8	320.8	326.9	332.8	344.9	350.9	362.9	366.9	368.9	350.9
67.5°	220.6	214.5	218.6	222.5	228.6	236.6	248.6	248.6	254.6	254.6	242.6
70°	140.4	140.4	142.4	148.4	152.4	154.4	158.4	162.4	168.4	166.4	166.4
72.5°	94.2	92.2	94.2	96.3	98.3	104.3	104.3	106.3	110.3	112.3	104.3
75°	48.1	50.1	54.1	52.2	58.1	54.1	56.1	62.2	60.2	56.1	56.1
77.5°	40.1	40.1	40.1	38.1	42.1	42.1	40.1	44.1	42.1	42.1	40.1
80°	28.1	30.1	28.1	26.1	28.1	26.1	26.1	26.1	26.1	26.1	24.0
82.5°	22.1	18.1	20.1	18.1	20.1	20.1	18.1	16.0	16.0	18.1	16.0
85°	16.0	12.0	14.0	14.0	12.0	12.0	12.0	12.0	12.0	10.0	10.0
87.5°	10.0	6.0	6.0	6.0	8.0	8.0	8.0	6.0	8.0	8.0	4.0
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°	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5
2.5°	3741.6	3739.6	3743.6	3741.6	3741.6	3739.6	3741.6	3739.6	3743.6	3735.5	3737.6
5°	3741.6	3737.6	3739.6	3741.6	3743.6	3739.6	3739.6	3739.6	3743.6	3739.6	3741.6
7.5°	3733.5	3731.5	3737.6	3741.6	3739.6	3737.6	3741.6	3739.6	3743.6	3741.6	3745.6
10°	3717.5	3719.5	3723.5	3729.5	3731.5	3733.5	3737.6	3737.6	3743.6	3735.5	3739.6
12.5°	3693.5	3701.4	3711.5	3715.5	3723.5	3723.5	3727.5	3729.5	3733.5	3731.5	3737.6
15°	3663.4	3673.4	3685.4	3695.5	3705.5	3711.5	3717.5	3719.5	3725.5	3719.5	3721.5
17.5°	3627.3	3639.3	3657.3	3669.4	3685.4	3691.4	3699.4	3703.5	3709.5	3705.5	3707.5
20°	3577.1	3591.2	3611.2	3629.3	3639.3	3653.3	3663.4	3669.4	3673.4	3669.4	3671.4
22.5°	3507.0	3527.0	3553.1	3567.1	3587.2	3599.2	3601.2	3615.2	3625.3	3615.2	3619.3
25°	3424.7	3444.8	3464.9	3494.9	3513.0	3527.0	3541.1	3543.1	3553.1	3551.1	3549.1
27.5°	3288.4	3314.5	3348.5	3372.6	3396.7	3418.8	3434.8	3438.8	3448.8	3444.8	3446.8
30°	3101.9	3130.0	3162.1	3200.2	3234.3	3256.3	3276.4	3290.4	3300.4	3294.4	3292.4
32.5°	2837.3	2865.3	2899.4	2937.5	2977.6	3009.7	3033.8	3051.8	3063.8	3059.8	3049.8
35°	2534.5	2542.5	2564.6	2594.7	2628.7	2662.8	2684.9	2704.9	2718.9	2723.0	2723.0
37.5°	2223.7	2197.6	2181.6	2181.6	2201.6	2215.6	2235.7	2247.7	2269.8	2277.8	2283.8
40°	1922.9	1862.7	1806.6	1764.5	1736.5	1734.4	1734.4	1740.4	1760.5	1786.6	1810.6
42.5°	1654.2	1558.0	1471.8	1393.6	1337.4	1305.3	1291.3	1293.3	1309.4	1333.4	1373.5
45°	1439.7	1319.4	1211.1	1116.9	1040.7	990.5	966.5	964.5	976.5	1004.5	1048.7
47.5°	1273.3	1144.9	1022.6	914.3	832.1	778.0	749.9	741.9	749.9	776.0	828.1
50°	1134.9	1002.6	876.3	763.9	675.7	619.6	593.5	583.5	593.5	615.6	667.7
52.5°	1006.6	870.2	751.9	643.6	549.4	501.3	473.2	467.2	473.2	499.3	541.4
55°	858.2	741.9	625.6	517.3	435.1	387.0	364.9	358.9	364.9	389.0	433.1
57.5°	711.8	611.6	509.3	411.0	340.9	298.7	278.7	270.7	284.7	300.8	352.9
60°	575.5	495.3	409.0	322.8	264.7	226.6	210.5	208.5	212.5	232.6	268.7
62.5°	451.2	385.0	316.8	246.6	198.5	182.5	162.4	160.4	164.4	176.4	204.5
65°	324.8	282.7	230.6	180.5	142.4	120.3	112.3	114.3	118.3	126.3	152.4
67.5°	226.6	196.5	160.4	126.3	98.3	88.2	80.2	78.2	80.2	94.2	108.3
70°	152.4	134.3	108.3	96.3	68.2	54.1	56.1	50.1	58.1	58.1	70.2
72.5°	100.2	88.2	72.2	56.1	48.1	38.1	38.1	36.1	40.1	42.1	52.2
75°	52.2	40.1	40.1	28.1	20.1	10.0	18.1	16.0	14.0	16.0	20.1
77.5°	36.1	30.1	28.1	22.1	20.1	16.0	16.0	16.0	16.0	18.1	20.1
80°	22.1	22.1	16.0	14.0	12.0	10.0	12.0	12.0	12.0	12.0	14.0
82.5°	14.0	12.0	12.0	10.0	10.0	8.0	8.0	8.0	8.0	8.0	12.0
85°	12.0	8.0	8.0	6.0	8.0	14.0	6.0	8.0	8.0	8.0	6.0
87.5°	4.0	6.0	6.0	6.0	4.0	2.0	4.0	6.0	6.0	10.0	8.0
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°	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5	3735.5
2.5°	3741.6	3743.6	3743.6	3741.6	3741.6	3737.6	3745.6	3739.6	3741.6	3749.6	3743.6
5°	3745.6	3747.6	3747.6	3745.6	3745.6	3745.6	3747.6	3747.6	3745.6	3743.6	3747.6
7.5°	3753.6	3751.6	3751.6	3747.6	3747.6	3743.6	3747.6	3741.6	3745.6	3741.6	3747.6
10°	3743.6	3745.6	3743.6	3741.6	3741.6	3739.6	3739.6	3733.5	3735.5	3729.5	3733.5
12.5°	3737.6	3735.5	3735.5	3731.5	3727.5	3723.5	3721.5	3715.5	3715.5	3701.4	3707.5
15°	3721.5	3723.5	3717.5	3709.5	3705.5	3695.5	3691.4	3683.4	3675.4	3665.4	3667.4
17.5°	3707.5	3701.4	3693.5	3685.4	3669.4	3661.4	3653.3	3641.3	3637.3	3625.3	3621.3
20°	3665.4	3661.4	3651.4	3637.3	3627.3	3609.2	3601.2	3589.2	3579.1	3567.1	3561.1
22.5°	3611.2	3607.2	3595.2	3581.1	3565.1	3557.1	3549.1	3527.0	3517.0	3505.0	3502.9
25°	3543.1	3537.0	3525.0	3509.0	3500.9	3478.9	3470.9	3454.8	3450.8	3438.8	3436.8
27.5°	3438.8	3430.8	3416.7	3396.7	3382.6	3368.6	3360.6	3348.5	3344.6	3332.5	3330.5
30°	3282.4	3272.4	3244.3	3236.3	3212.2	3198.2	3198.2	3182.1	3184.1	3176.1	3176.1
32.5°	3035.8	3019.7	2997.7	2981.6	2965.6	2957.6	2957.6	2951.5	2955.6	2955.6	2959.6
35°	2708.9	2686.9	2674.8	2664.8	2664.8	2672.8	2696.9	2702.9	2715.0	2725.0	2733.0
37.5°	2289.8	2287.9	2301.9	2313.9	2344.0	2378.1	2420.2	2456.3	2490.3	2514.4	2538.5
40°	1836.7	1886.8	1926.9	1983.1	2029.2	2095.3	2171.5	2233.7	2291.8	2334.0	2378.1
42.5°	1433.6	1497.8	1582.1	1664.2	1746.5	1836.7	1937.0	2023.2	2099.4	2157.5	2203.6
45°	1116.9	1205.1	1307.4	1411.6	1517.9	1630.2	1734.4	1822.7	1902.9	1963.0	2009.1
47.5°	900.3	996.6	1112.8	1227.1	1347.4	1465.7	1582.1	1658.3	1724.4	1772.5	1814.7
50°	743.9	846.2	968.5	1098.8	1219.1	1337.4	1437.7	1511.9	1566.0	1608.1	1634.2
52.5°	621.6	729.9	860.2	990.5	1110.8	1219.1	1309.4	1365.5	1409.6	1439.7	1463.7
55°	513.3	617.6	739.9	862.2	980.5	1082.8	1156.9	1199.1	1233.1	1251.2	1265.2
57.5°	419.1	515.3	627.6	739.9	842.2	926.4	984.5	1026.6	1042.7	1056.7	1054.7
60°	328.9	419.1	521.3	617.6	705.8	774.0	816.1	840.1	852.2	858.2	854.2
62.5°	258.7	340.9	419.1	503.3	567.5	625.6	665.7	665.7	671.7	673.7	679.8
65°	192.5	254.6	322.8	385.0	437.1	475.2	497.3	503.3	511.3	509.3	505.3
67.5°	142.4	188.5	238.6	284.7	320.8	344.9	360.9	375.0	373.0	368.9	366.9
70°	98.3	128.3	172.5	200.5	226.6	250.7	254.6	256.6	258.7	260.7	256.6
72.5°	68.2	90.2	114.3	138.4	154.4	164.4	174.5	176.4	176.4	176.4	174.5
75°	34.1	46.1	68.2	78.2	92.2	96.3	104.3	104.3	110.3	102.2	100.2
77.5°	30.1	36.1	48.1	56.1	62.2	68.2	70.2	76.2	74.2	70.2	72.2
80°	18.1	22.1	30.1	34.1	42.1	44.1	46.1	48.1	46.1	48.1	48.1
82.5°	14.0	16.0	20.1	20.1	26.1	26.1	28.1	28.1	30.1	30.1	30.1
85°	8.0	14.0	12.0	24.0	16.0	16.0	20.1	24.0	20.1	20.1	24.0
87.5°	8.0	8.0	6.0	8.0	8.0	8.0	10.0	12.0	12.0	14.0	12.0
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: P249515

CATALOG NUMBER: LSR8B70D010 EC8B70827 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3735.5	3735.5	3735.5	3735.5
2.5°	3741.6	3745.6	3739.6	3737.6
5°	3747.6	3747.6	3743.6	3743.6
7.5°	3747.6	3747.6	3741.6	3737.6
10°	3731.5	3731.5	3725.5	3721.5
12.5°	3701.4	3701.4	3699.4	3693.5
15°	3663.4	3663.4	3655.3	3649.3
17.5°	3611.2	3615.2	3605.2	3605.2
20°	3555.1	3553.1	3545.1	3541.1
22.5°	3497.0	3492.9	3490.9	3478.9
25°	3434.8	3430.8	3424.7	3418.8
27.5°	3328.5	3326.5	3320.5	3312.5
30°	3166.1	3164.1	3156.1	3156.1
32.5°	2955.6	2953.5	2945.5	2947.6
35°	2737.0	2745.0	2741.0	2733.0
37.5°	2554.5	2560.6	2564.6	2560.6
40°	2402.1	2420.2	2422.2	2426.2
42.5°	2239.7	2263.8	2271.8	2275.8
45°	2045.2	2067.3	2085.3	2081.3
47.5°	1846.7	1862.7	1878.8	1866.8
50°	1656.2	1666.3	1672.3	1672.3
52.5°	1475.8	1475.8	1473.8	1475.8
55°	1269.2	1269.2	1261.2	1265.2
57.5°	1052.7	1056.7	1050.7	1040.7
60°	852.2	842.2	838.1	832.1
62.5°	663.7	663.7	649.7	667.7
65°	497.3	491.3	485.2	483.2
67.5°	360.9	358.9	352.9	350.9
70°	254.6	246.6	244.6	240.6
72.5°	170.4	170.4	166.4	166.4
75°	104.3	94.2	92.2	94.2
77.5°	72.2	70.2	70.2	68.2
80°	48.1	46.1	50.1	44.1
82.5°	30.1	32.1	30.1	32.1
85°	20.1	24.0	22.1	22.1
87.5°	12.0	12.0	12.0	12.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)