

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: P249480

Luminaire Tested: **LSR8B80D010 EC8B80940 8LBDW0B**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249480  
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: LSR8B80D010 EC8B80940 8LBDW0B  
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
90 CRI 4000 CCT WITH SPECULAR BLACK TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6690.0 lumens  
Efficiency: N/A  
Efficacy: 89.9 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

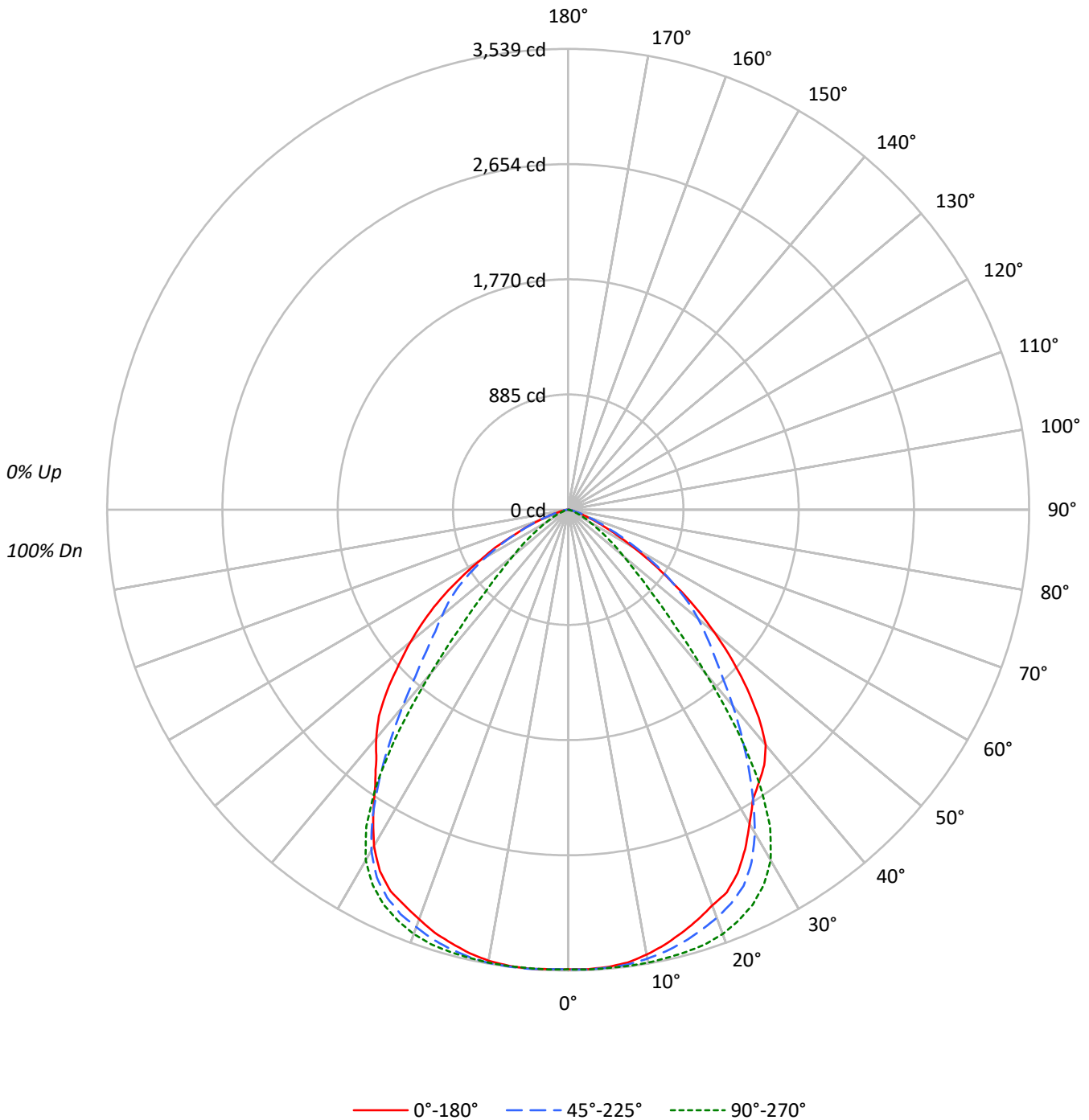
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	108846	108846	108846
5°	109085	109379	109497
10°	108625	110585	110109
15°	107421	112200	110084
20°	106131	113777	109800
25°	104753	113909	109911
30°	99104	110708	106186
35°	96143	96215	97216
40°	94955	66202	92286
45°	84610	39741	85766
50°	70352	26452	75807
55°	52762	18236	64272
60°	35758	12150	48493
65°	21568	7880	33316
70°	11955	4274	20493
75°	5421	1811	10616
80°	4706	2024	7405
85°	5378	2689	7395



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	336.9	5.0
10°-20°	978.3	14.6
20°-30°	1484.9	22.2
30°-40°	1559.6	23.3
40°-50°	1169.3	17.5
50°-60°	750.2	11.2
60°-70°	320.9	4.8
70°-80°	75.8	1.1
80°-90°	14.1	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°	2800.1	41.9
0°-40°	4359.6	65.2
0°-60°	6279.1	93.9
0°-90°	6690.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6690.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	3530	3530	3530	3530	3530	
5°	3524	3530	3534	3539	3537	335
15°	3365	3435	3515	3492	3448	949
25°	3079	3187	3348	3287	3230	1407
35°	2554	2412	2556	2526	2582	1603
45°	1940	1586	911	1540	1967	1486
55°	981	981	339	1023	1196	890
65°	296	349	108	449	457	316
75°	46	53	15	91	89	66
85°	15	10	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°	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8
2.5°	3531.7	3535.5	3533.6	3533.6	3531.7	3533.6	3533.6	3537.4	3537.4	3533.6	3531.7
5°	3524.1	3527.9	3527.9	3524.1	3524.1	3533.6	3527.9	3531.7	3531.7	3529.8	3529.8
7.5°	3507.1	3507.1	3514.6	3509.0	3509.0	3514.6	3512.7	3516.5	3520.3	3522.2	3522.2
10°	3469.1	3472.9	3474.8	3474.8	3476.7	3482.4	3486.2	3493.8	3497.6	3501.4	3503.3
12.5°	3421.8	3427.5	3429.4	3427.5	3433.2	3440.7	3450.2	3459.7	3465.4	3472.9	3478.6
15°	3364.9	3364.9	3368.7	3374.4	3378.2	3389.6	3399.0	3410.4	3425.6	3435.1	3444.5
17.5°	3302.4	3306.2	3311.9	3311.9	3319.5	3338.4	3344.1	3361.2	3378.2	3387.7	3406.6
20°	3234.2	3238.0	3243.7	3247.5	3256.9	3272.1	3283.5	3298.6	3317.6	3334.6	3353.6
22.5°	3181.2	3173.6	3177.4	3181.2	3190.7	3203.9	3217.2	3236.1	3255.0	3272.1	3291.1
25°	3078.8	3080.7	3086.4	3090.2	3101.6	3113.0	3128.1	3150.8	3167.9	3186.9	3207.7
27.5°	2940.5	2942.4	2951.9	2951.9	2961.4	2980.3	2989.8	3008.7	3031.5	3050.4	3075.1
30°	2783.3	2787.0	2787.0	2794.7	2800.3	2809.8	2819.3	2838.2	2849.6	2866.6	2900.8
32.5°	2639.3	2643.1	2641.2	2639.3	2633.6	2631.7	2629.8	2633.6	2637.4	2643.1	2656.3
35°	2554.0	2544.5	2537.0	2523.7	2508.6	2489.6	2472.5	2449.8	2429.0	2411.9	2393.0
37.5°	2472.5	2470.6	2459.3	2440.3	2410.0	2375.9	2336.2	2286.9	2237.6	2184.6	2133.4
40°	2358.9	2353.2	2343.7	2317.2	2283.1	2241.4	2188.4	2127.7	2048.1	1966.7	1883.3
42.5°	2165.6	2167.5	2156.1	2135.3	2103.1	2063.3	2008.3	1942.1	1856.8	1760.1	1652.2
45°	1940.2	1940.2	1936.3	1919.3	1896.6	1864.4	1822.7	1767.7	1684.4	1585.8	1470.3
47.5°	1705.2	1707.1	1701.4	1697.6	1688.1	1667.3	1637.0	1595.3	1536.6	1441.8	1326.3
50°	1466.5	1466.5	1476.0	1474.1	1474.1	1466.5	1453.2	1428.6	1377.4	1301.6	1193.7
52.5°	1227.7	1231.5	1237.2	1244.8	1254.3	1269.4	1254.3	1242.9	1210.7	1151.9	1059.1
55°	981.4	985.2	994.7	1008.0	1019.4	1034.5	1038.3	1038.3	1021.2	981.4	911.3
57.5°	771.1	765.4	773.0	784.4	799.6	814.7	826.1	839.3	837.4	810.9	754.1
60°	579.8	581.7	587.3	598.7	610.1	623.4	638.5	649.9	655.6	642.3	606.3
62.5°	422.5	422.5	430.1	441.4	447.1	466.1	475.6	481.3	486.9	485.0	462.3
65°	295.6	299.3	303.1	308.8	314.5	325.9	331.6	342.9	346.7	348.6	331.6
67.5°	208.4	202.7	206.5	210.3	216.0	223.6	235.0	235.0	240.6	240.6	229.2
70°	132.6	132.6	134.5	140.2	144.0	145.9	149.7	153.5	159.2	157.3	157.3
72.5°	89.1	87.2	89.1	91.0	92.9	98.5	98.5	100.4	104.2	106.1	98.5
75°	45.5	47.4	51.1	49.3	54.9	51.1	53.0	58.7	56.8	53.0	53.0
77.5°	37.9	37.9	37.9	36.0	39.8	39.8	37.9	41.7	39.8	39.8	37.9
80°	26.5	28.4	26.5	24.6	26.5	24.6	24.6	24.6	24.6	24.6	22.7
82.5°	20.9	17.1	19.0	17.1	19.0	19.0	17.1	15.2	15.2	17.1	15.2
85°	15.2	11.4	13.3	13.3	11.4	11.4	11.4	11.4	11.4	9.5	9.5
87.5°	9.5	5.7	5.7	5.7	7.6	7.6	7.6	5.7	7.6	7.6	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



TEST NUMBER: P249480

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8
2.5°	3535.5	3533.6	3537.4	3535.5	3535.5	3533.6	3535.5	3533.6	3537.4	3529.8	3531.7
5°	3535.5	3531.7	3533.6	3535.5	3537.4	3533.6	3533.6	3533.6	3537.4	3533.6	3535.5
7.5°	3527.9	3526.0	3531.7	3535.5	3533.6	3531.7	3535.5	3533.6	3537.4	3535.5	3539.2
10°	3512.7	3514.6	3518.4	3524.1	3526.0	3527.9	3531.7	3531.7	3537.4	3529.8	3533.6
12.5°	3490.0	3497.6	3507.1	3510.8	3518.4	3518.4	3522.2	3524.1	3527.9	3526.0	3531.7
15°	3461.6	3471.0	3482.4	3491.9	3501.4	3507.1	3512.7	3514.6	3520.3	3514.6	3516.5
17.5°	3427.5	3438.8	3455.9	3467.2	3482.4	3488.1	3495.7	3499.5	3505.2	3501.4	3503.3
20°	3380.1	3393.4	3412.3	3429.4	3438.8	3452.1	3461.6	3467.2	3471.0	3467.2	3469.1
22.5°	3313.8	3332.7	3357.4	3370.6	3389.6	3400.9	3402.8	3416.1	3425.6	3416.1	3419.9
25°	3236.1	3255.0	3274.0	3302.4	3319.5	3332.7	3346.0	3347.9	3357.4	3355.5	3353.6
27.5°	3107.3	3131.9	3164.1	3186.9	3209.6	3230.4	3245.6	3249.3	3258.8	3255.0	3256.9
30°	2931.0	2957.6	2987.9	3023.9	3056.1	3076.9	3095.9	3109.2	3118.6	3113.0	3111.1
32.5°	2681.0	2707.5	2739.7	2775.7	2813.6	2843.9	2866.6	2883.7	2895.1	2891.3	2881.8
35°	2394.9	2402.4	2423.3	2451.7	2483.9	2516.1	2537.0	2555.9	2569.2	2573.0	2573.0
37.5°	2101.2	2076.6	2061.4	2061.4	2080.3	2093.6	2112.6	2123.9	2144.8	2152.3	2158.0
40°	1817.0	1760.1	1707.1	1667.3	1640.8	1638.9	1638.9	1644.6	1663.5	1688.1	1710.9
42.5°	1563.1	1472.2	1390.7	1316.8	1263.8	1233.4	1220.2	1222.1	1237.2	1260.0	1297.8
45°	1360.4	1246.7	1144.4	1055.3	983.3	936.0	913.2	911.3	922.7	949.2	990.9
47.5°	1203.1	1081.8	966.3	864.0	786.3	735.1	708.6	701.0	708.6	733.2	782.5
50°	1072.4	947.4	828.0	721.9	638.5	585.5	560.8	551.4	560.8	581.7	630.9
52.5°	951.1	822.3	710.5	608.2	519.1	473.7	447.1	441.4	447.1	471.8	511.6
55°	810.9	701.0	591.1	488.8	411.2	365.7	344.8	339.2	344.8	367.6	409.3
57.5°	672.6	577.9	481.3	388.4	322.1	282.3	263.4	255.8	269.0	284.2	333.5
60°	543.8	468.0	386.5	305.0	250.1	214.1	198.9	197.0	200.8	219.8	253.9
62.5°	426.3	363.8	299.3	233.0	187.6	172.4	153.5	151.6	155.4	166.7	193.3
65°	306.9	267.2	217.9	170.5	134.5	113.7	106.1	108.0	111.8	119.4	144.0
67.5°	214.1	185.7	151.6	119.4	92.9	83.4	75.8	73.9	75.8	89.1	102.3
70°	144.0	126.9	102.3	91.0	64.4	51.1	53.0	47.4	54.9	54.9	66.3
72.5°	94.7	83.4	68.2	53.0	45.5	36.0	36.0	34.1	37.9	39.8	49.3
75°	49.3	37.9	37.9	26.5	19.0	9.5	17.1	15.2	13.3	15.2	19.0
77.5°	34.1	28.4	26.5	20.9	19.0	15.2	15.2	15.2	15.2	17.1	19.0
80°	20.9	20.9	15.2	13.3	11.4	9.5	11.4	11.4	11.4	11.4	13.3
82.5°	13.3	11.4	11.4	9.5	9.5	7.6	7.6	7.6	7.6	7.6	11.4
85°	11.4	7.6	7.6	5.7	7.6	13.3	5.7	7.6	7.6	7.6	5.7
87.5°	3.8	5.7	5.7	5.7	3.8	1.9	3.8	5.7	5.7	9.5	7.6
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: P249480

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8	3529.8
2.5°	3535.5	3537.4	3537.4	3535.5	3535.5	3531.7	3539.2	3533.6	3535.5	3543.0	3537.4
5°	3539.2	3541.1	3541.1	3539.2	3539.2	3539.2	3541.1	3541.1	3539.2	3537.4	3541.1
7.5°	3546.8	3544.9	3544.9	3541.1	3541.1	3537.4	3541.1	3535.5	3539.2	3535.5	3541.1
10°	3537.4	3539.2	3537.4	3535.5	3535.5	3533.6	3533.6	3527.9	3529.8	3524.1	3527.9
12.5°	3531.7	3529.8	3529.8	3526.0	3522.2	3518.4	3516.5	3510.8	3510.8	3497.6	3503.3
15°	3516.5	3518.4	3512.7	3505.2	3501.4	3491.9	3488.1	3480.5	3472.9	3463.5	3465.4
17.5°	3503.3	3497.6	3490.0	3482.4	3467.2	3459.7	3452.1	3440.7	3436.9	3425.6	3421.8
20°	3463.5	3459.7	3450.2	3436.9	3427.5	3410.4	3402.8	3391.5	3382.0	3370.6	3364.9
22.5°	3412.3	3408.5	3397.1	3383.9	3368.7	3361.2	3353.6	3332.7	3323.2	3311.9	3310.0
25°	3347.9	3342.2	3330.8	3315.7	3308.1	3287.3	3279.7	3264.5	3260.7	3249.3	3247.5
27.5°	3249.3	3241.8	3228.5	3209.6	3196.3	3183.1	3175.5	3164.1	3160.3	3148.9	3147.1
30°	3101.6	3092.1	3065.6	3058.0	3035.3	3022.0	3022.0	3006.8	3008.7	3001.2	3001.2
32.5°	2868.5	2853.4	2832.5	2817.4	2802.2	2794.7	2794.7	2788.9	2792.8	2792.8	2796.6
35°	2559.7	2538.9	2527.5	2518.0	2518.0	2525.6	2548.3	2554.0	2565.4	2574.9	2582.5
37.5°	2163.7	2161.8	2175.1	2186.5	2214.9	2247.1	2286.9	2321.0	2353.2	2375.9	2398.6
40°	1735.5	1782.9	1820.8	1873.9	1917.4	1979.9	2051.9	2110.7	2165.6	2205.4	2247.1
42.5°	1354.7	1415.3	1494.9	1572.6	1650.3	1735.5	1830.3	1911.7	1983.7	2038.7	2082.2
45°	1055.3	1138.7	1235.3	1333.9	1434.3	1540.4	1638.9	1722.3	1798.1	1854.9	1898.5
47.5°	850.7	941.7	1051.5	1159.5	1273.2	1385.0	1494.9	1566.9	1629.4	1674.9	1714.7
50°	702.9	799.6	915.1	1038.3	1151.9	1263.8	1358.5	1428.6	1479.8	1519.5	1544.1
52.5°	587.3	689.6	812.8	936.0	1049.6	1151.9	1237.2	1290.3	1332.0	1360.4	1383.1
55°	485.0	583.6	699.1	814.7	926.5	1023.1	1093.2	1133.0	1165.2	1182.3	1195.5
57.5°	396.0	486.9	593.0	699.1	795.8	875.4	930.3	970.1	985.2	998.5	996.6
60°	310.7	396.0	492.6	583.6	666.9	731.3	771.1	793.9	805.2	810.9	807.1
62.5°	244.4	322.1	396.0	475.6	536.2	591.1	629.1	629.1	634.7	636.6	642.3
65°	181.9	240.6	305.0	363.8	413.0	449.0	469.9	475.6	483.2	481.3	477.5
67.5°	134.5	178.1	225.4	269.0	303.1	325.9	341.0	354.3	352.4	348.6	346.7
70°	92.9	121.3	163.0	189.5	214.1	236.9	240.6	242.5	244.4	246.3	242.5
72.5°	64.4	85.3	108.0	130.7	145.9	155.4	164.9	166.7	166.7	166.7	164.9
75°	32.2	43.6	64.4	73.9	87.2	91.0	98.5	98.5	104.2	96.6	94.7
77.5°	28.4	34.1	45.5	53.0	58.7	64.4	66.3	72.0	70.1	66.3	68.2
80°	17.1	20.9	28.4	32.2	39.8	41.7	43.6	45.5	43.6	45.5	45.5
82.5°	13.3	15.2	19.0	19.0	24.6	24.6	26.5	26.5	28.4	28.4	28.4
85°	7.6	13.3	11.4	22.7	15.2	15.2	19.0	22.7	19.0	19.0	22.7
87.5°	7.6	7.6	5.7	7.6	7.6	7.6	9.5	11.4	11.4	13.3	11.4
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: P249480

CATALOG NUMBER: LSR8B80D010 EC8B80940 8LBDW0B

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	3529.8	3529.8	3529.8	3529.8
2.5°	3535.5	3539.2	3533.6	3531.7
5°	3541.1	3541.1	3537.4	3537.4
7.5°	3541.1	3541.1	3535.5	3531.7
10°	3526.0	3526.0	3520.3	3516.5
12.5°	3497.6	3497.6	3495.7	3490.0
15°	3461.6	3461.6	3454.0	3448.3
17.5°	3412.3	3416.1	3406.6	3406.6
20°	3359.3	3357.4	3349.8	3346.0
22.5°	3304.3	3300.5	3298.6	3287.3
25°	3245.6	3241.8	3236.1	3230.4
27.5°	3145.2	3143.3	3137.6	3130.0
30°	2991.7	2989.8	2982.2	2982.2
32.5°	2792.8	2790.8	2783.3	2785.2
35°	2586.2	2593.8	2590.0	2582.5
37.5°	2413.8	2419.5	2423.3	2419.5
40°	2269.8	2286.9	2288.8	2292.6
42.5°	2116.4	2139.1	2146.7	2150.4
45°	1932.5	1953.4	1970.5	1966.7
47.5°	1745.0	1760.1	1775.3	1763.9
50°	1565.0	1574.5	1580.2	1580.2
52.5°	1394.5	1394.5	1392.6	1394.5
55°	1199.3	1199.3	1191.8	1195.5
57.5°	994.7	998.5	992.8	983.3
60°	805.2	795.8	792.0	786.3
62.5°	627.2	627.2	613.9	630.9
65°	469.9	464.2	458.5	456.6
67.5°	341.0	339.2	333.5	331.6
70°	240.6	233.0	231.1	227.3
72.5°	161.1	161.1	157.3	157.3
75°	98.5	89.1	87.2	89.1
77.5°	68.2	66.3	66.3	64.4
80°	45.5	43.6	47.4	41.7
82.5°	28.4	30.3	28.4	30.3
85°	19.0	22.7	20.9	20.9
87.5°	11.4	11.4	11.4	11.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)