

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: P249471

Luminaire Tested: **LSR8B80D010 EC8B80935 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249471
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 EC8B80935 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6405.0 lumens
Efficiency: N/A
Efficacy: 86.1 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

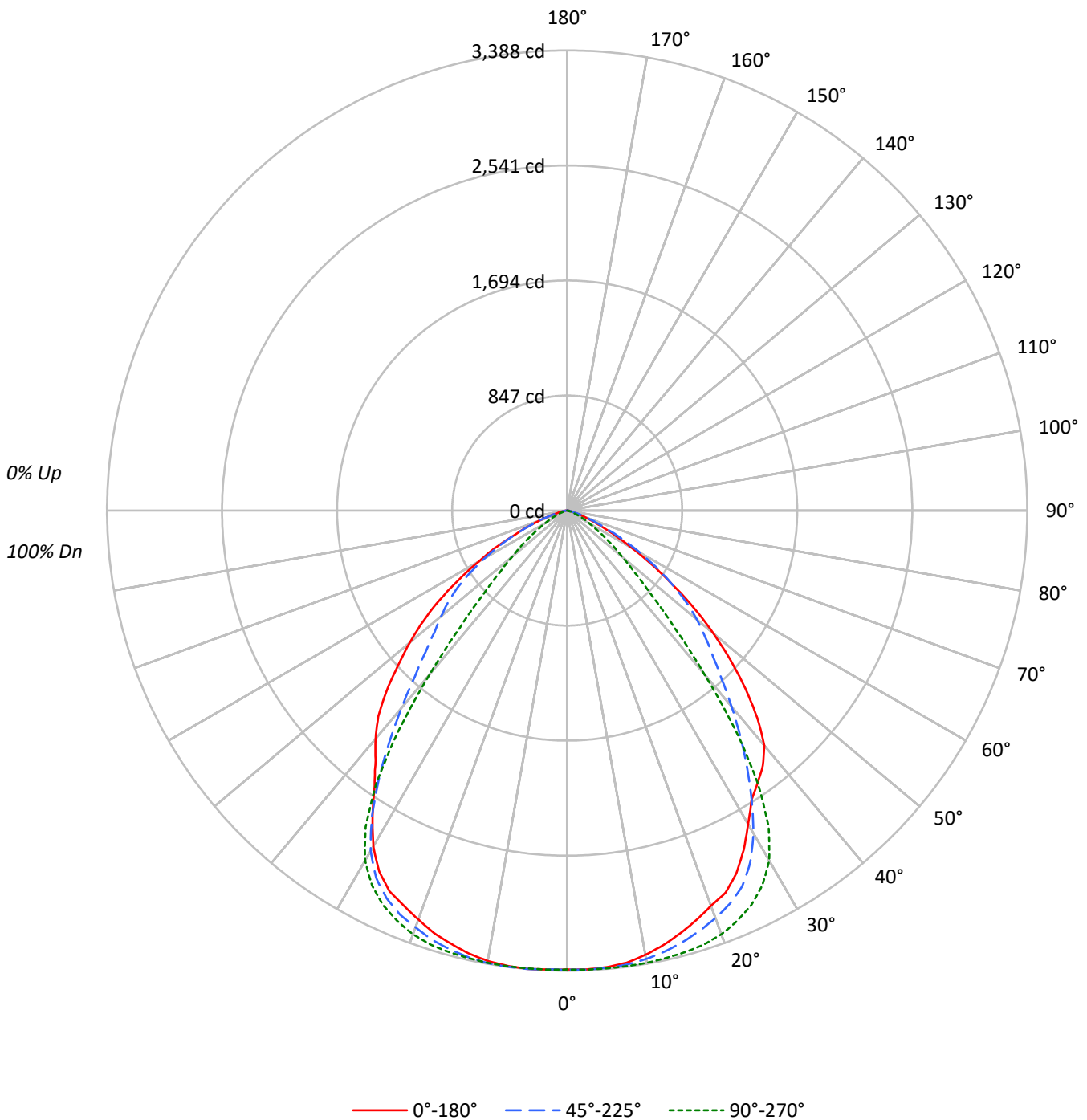
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	104208	104208	104208
5°	104436	104718	104832
10°	103997	105872	105418
15°	102847	107421	105394
20°	101613	108930	105124
25°	100293	109057	105230
30°	94881	105990	101664
35°	92048	92115	93071
40°	90910	63380	88353
45°	81004	38049	82112
50°	67354	25325	72578
55°	50514	17456	61535
60°	34234	11631	46427
65°	20649	7545	31893
70°	11450	4093	19628
75°	5183	1728	10163
80°	4511	1936	7085
85°	5130	2547	7076



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	322.5	5.0
10°-20°	936.6	14.6
20°-30°	1421.6	22.2
30°-40°	1493.1	23.3
40°-50°	1119.5	17.5
50°-60°	718.3	11.2
60°-70°	307.3	4.8
70°-80°	72.6	1.1
80°-90°	13.5	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°	2680.8	41.9
0°-40°	4173.9	65.2
0°-60°	6011.6	93.9
0°-90°	6405.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6405.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3379	3379	3379	3379	3379	
5°	3374	3379	3383	3388	3387	320
15°	3222	3289	3365	3343	3301	909
25°	2948	3051	3205	3147	3093	1347
35°	2445	2309	2447	2418	2472	1535
45°	1858	1518	872	1475	1883	1423
55°	940	940	325	980	1145	852
65°	283	334	103	430	437	302
75°	44	51	14	87	85	63
85°	14	9	7	14	20	15
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°	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4
2.5°	3381.2	3384.9	3383.0	3383.0	3381.2	3383.0	3383.0	3386.7	3386.7	3383.0	3381.2
5°	3373.9	3377.6	3377.6	3373.9	3373.9	3383.0	3377.6	3381.2	3381.2	3379.4	3379.4
7.5°	3357.7	3357.7	3364.9	3359.5	3359.5	3364.9	3363.1	3366.7	3370.3	3372.2	3372.2
10°	3321.3	3325.0	3326.8	3326.8	3328.6	3334.0	3337.7	3345.0	3348.6	3352.2	3354.0
12.5°	3276.0	3281.4	3283.3	3281.4	3286.9	3294.1	3303.2	3312.3	3317.8	3325.0	3330.4
15°	3221.6	3221.6	3225.2	3230.7	3234.3	3245.2	3254.2	3265.1	3279.6	3288.7	3297.8
17.5°	3161.7	3165.4	3170.8	3170.8	3178.1	3196.2	3201.6	3218.0	3234.3	3243.4	3261.5
20°	3096.5	3100.0	3105.5	3109.1	3118.2	3132.7	3143.6	3158.1	3176.3	3192.6	3210.7
22.5°	3045.6	3038.4	3042.0	3045.6	3054.7	3067.4	3080.1	3098.2	3116.4	3132.7	3150.9
25°	2947.7	2949.5	2955.0	2958.5	2969.5	2980.3	2994.9	3016.6	3032.9	3051.1	3071.0
27.5°	2815.3	2817.1	2826.1	2826.1	2835.2	2853.4	2862.4	2880.6	2902.4	2920.5	2944.1
30°	2664.7	2668.3	2668.3	2675.6	2681.0	2690.1	2699.2	2717.3	2728.2	2744.5	2777.2
32.5°	2526.9	2530.5	2528.6	2526.9	2521.4	2519.6	2517.8	2521.4	2525.0	2530.5	2543.2
35°	2445.2	2436.1	2428.9	2416.2	2401.7	2383.5	2367.2	2345.5	2325.5	2309.2	2291.0
37.5°	2367.2	2365.4	2354.5	2336.4	2307.3	2274.7	2236.6	2189.5	2142.3	2091.5	2042.5
40°	2258.4	2252.9	2243.9	2218.5	2185.8	2145.9	2095.1	2037.1	1960.9	1882.9	1803.1
42.5°	2073.3	2075.2	2064.3	2044.3	2013.5	1975.4	1922.8	1859.3	1777.7	1685.2	1581.8
45°	1857.5	1857.5	1853.9	1837.5	1815.8	1784.9	1745.0	1692.4	1612.6	1518.3	1407.6
47.5°	1632.6	1634.4	1628.9	1625.3	1616.2	1596.3	1567.3	1527.4	1471.1	1380.4	1269.8
50°	1404.0	1404.0	1413.1	1411.3	1411.3	1404.0	1391.3	1367.7	1318.8	1246.2	1142.8
52.5°	1175.4	1179.1	1184.5	1191.8	1200.8	1215.3	1200.8	1190.0	1159.1	1102.9	1014.0
55°	939.6	943.3	952.3	965.0	975.9	990.4	994.0	994.0	977.7	939.6	872.5
57.5°	738.3	732.8	740.1	751.0	765.5	780.0	790.9	803.6	801.8	776.4	722.0
60°	555.1	556.9	562.3	573.2	584.1	596.8	611.3	622.2	627.6	614.9	580.5
62.5°	404.5	404.5	411.8	422.6	428.1	446.2	455.3	460.8	466.2	464.4	442.6
65°	283.0	286.6	290.2	295.7	301.1	312.0	317.4	328.3	332.0	333.8	317.4
67.5°	199.6	194.1	197.7	201.3	206.8	214.1	224.9	224.9	230.4	230.4	219.5
70°	127.0	127.0	128.8	134.2	137.9	139.7	143.3	146.9	152.4	150.6	150.6
72.5°	85.3	83.4	85.3	87.1	88.9	94.3	94.3	96.1	99.8	101.6	94.3
75°	43.5	45.4	49.0	47.2	52.6	49.0	50.8	56.2	54.4	50.8	50.8
77.5°	36.3	36.3	36.3	34.5	38.1	38.1	36.3	39.9	38.1	38.1	36.3
80°	25.4	27.2	25.4	23.6	25.4	23.6	23.6	23.6	23.6	23.6	21.7
82.5°	20.0	16.3	18.2	16.3	18.2	18.2	16.3	14.5	14.5	16.3	14.5
85°	14.5	10.9	12.7	12.7	10.9	10.9	10.9	10.9	10.9	9.1	9.1
87.5°	9.1	5.5	5.5	5.5	7.2	7.2	7.2	5.5	7.2	7.2	3.6
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°	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4
2.5°	3384.9	3383.0	3386.7	3384.9	3384.9	3383.0	3384.9	3383.0	3386.7	3379.4	3381.2
5°	3384.9	3381.2	3383.0	3384.9	3386.7	3383.0	3383.0	3383.0	3386.7	3383.0	3384.9
7.5°	3377.6	3375.8	3381.2	3384.9	3383.0	3381.2	3384.9	3383.0	3386.7	3384.9	3388.5
10°	3363.1	3364.9	3368.5	3373.9	3375.8	3377.6	3381.2	3381.2	3386.7	3379.4	3383.0
12.5°	3341.3	3348.6	3357.7	3361.3	3368.5	3368.5	3372.2	3373.9	3377.6	3375.8	3381.2
15°	3314.1	3323.2	3334.0	3343.1	3352.2	3357.7	3363.1	3364.9	3370.3	3364.9	3366.7
17.5°	3281.4	3292.3	3308.7	3319.5	3334.0	3339.5	3346.7	3350.4	3355.8	3352.2	3354.0
20°	3236.1	3248.8	3266.9	3283.3	3292.3	3305.0	3314.1	3319.5	3323.2	3319.5	3321.3
22.5°	3172.6	3190.8	3214.3	3227.0	3245.2	3256.1	3257.9	3270.6	3279.6	3270.6	3274.2
25°	3098.2	3116.4	3134.5	3161.7	3178.1	3190.8	3203.5	3205.3	3214.3	3212.5	3210.7
27.5°	2974.9	2998.5	3029.3	3051.1	3072.8	3092.8	3107.3	3110.9	3120.0	3116.4	3118.2
30°	2806.2	2831.6	2860.6	2895.1	2925.9	2945.9	2964.0	2976.7	2985.8	2980.3	2978.5
32.5°	2566.8	2592.2	2623.0	2657.4	2693.7	2722.7	2744.5	2760.9	2771.7	2768.1	2759.0
35°	2292.9	2300.1	2320.1	2347.3	2378.1	2408.9	2428.9	2447.0	2459.7	2463.3	2463.3
37.5°	2011.7	1988.1	1973.6	1973.6	1991.7	2004.4	2022.6	2033.4	2053.4	2060.6	2066.1
40°	1739.6	1685.2	1634.4	1596.3	1570.9	1569.1	1569.1	1574.5	1592.7	1616.2	1638.0
42.5°	1496.5	1409.4	1331.5	1260.7	1209.9	1180.9	1168.2	1170.0	1184.5	1206.3	1242.5
45°	1302.4	1193.6	1095.6	1010.4	941.4	896.1	874.3	872.5	883.4	908.8	948.7
47.5°	1151.9	1035.8	925.1	827.2	752.8	703.8	678.4	671.2	678.4	702.0	749.2
50°	1026.7	907.0	792.7	691.1	611.3	560.5	536.9	527.9	536.9	556.9	604.0
52.5°	910.6	787.3	680.2	582.3	497.0	453.5	428.1	422.6	428.1	451.7	489.8
55°	776.4	671.2	565.9	468.0	393.6	350.1	330.1	324.7	330.1	351.9	391.8
57.5°	644.0	553.3	460.8	371.9	308.4	270.3	252.1	244.9	257.6	272.1	319.3
60°	520.6	448.1	370.0	292.1	239.5	205.0	190.5	188.6	192.3	210.4	243.1
62.5°	408.2	348.3	286.6	223.1	179.6	165.1	146.9	145.1	148.7	159.6	185.0
65°	293.9	255.8	208.6	163.2	128.8	108.8	101.6	103.4	107.0	114.3	137.9
67.5°	205.0	177.8	145.1	114.3	88.9	79.8	72.6	70.7	72.6	85.3	98.0
70°	137.9	121.5	98.0	87.1	61.7	49.0	50.8	45.4	52.6	52.6	63.5
72.5°	90.7	79.8	65.3	50.8	43.5	34.5	34.5	32.7	36.3	38.1	47.2
75°	47.2	36.3	36.3	25.4	18.2	9.1	16.3	14.5	12.7	14.5	18.2
77.5°	32.7	27.2	25.4	20.0	18.2	14.5	14.5	14.5	14.5	16.3	18.2
80°	20.0	20.0	14.5	12.7	10.9	9.1	10.9	10.9	10.9	10.9	12.7
82.5°	12.7	10.9	10.9	9.1	9.1	7.2	7.2	7.2	7.2	7.2	10.9
85°	10.9	7.2	7.2	5.5	7.2	12.7	5.5	7.2	7.2	7.2	5.5
87.5°	3.6	5.5	5.5	5.5	3.6	1.8	3.6	5.5	5.5	9.1	7.2
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°	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4	3379.4
2.5°	3384.9	3386.7	3386.7	3384.9	3384.9	3381.2	3388.5	3383.0	3384.9	3392.1	3386.7
5°	3388.5	3390.3	3390.3	3388.5	3388.5	3388.5	3390.3	3390.3	3388.5	3386.7	3390.3
7.5°	3395.7	3393.9	3393.9	3390.3	3390.3	3386.7	3390.3	3384.9	3388.5	3384.9	3390.3
10°	3386.7	3388.5	3386.7	3384.9	3384.9	3383.0	3383.0	3377.6	3379.4	3373.9	3377.6
12.5°	3381.2	3379.4	3379.4	3375.8	3372.2	3368.5	3366.7	3361.3	3361.3	3348.6	3354.0
15°	3366.7	3368.5	3363.1	3355.8	3352.2	3343.1	3339.5	3332.2	3325.0	3315.9	3317.8
17.5°	3354.0	3348.6	3341.3	3334.0	3319.5	3312.3	3305.0	3294.1	3290.5	3279.6	3276.0
20°	3315.9	3312.3	3303.2	3290.5	3281.4	3265.1	3257.9	3247.0	3237.9	3227.0	3221.6
22.5°	3266.9	3263.3	3252.4	3239.7	3225.2	3218.0	3210.7	3190.8	3181.7	3170.8	3169.0
25°	3205.3	3199.8	3188.9	3174.4	3167.2	3147.2	3139.9	3125.4	3121.8	3110.9	3109.1
27.5°	3110.9	3103.7	3091.0	3072.8	3060.1	3047.5	3040.2	3029.3	3025.7	3014.8	3013.0
30°	2969.5	2960.4	2935.0	2927.7	2906.0	2893.3	2893.3	2878.7	2880.6	2873.3	2873.3
32.5°	2746.3	2731.8	2711.9	2697.3	2682.8	2675.6	2675.6	2670.1	2673.8	2673.8	2677.4
35°	2450.7	2430.7	2419.8	2410.8	2410.8	2418.0	2439.8	2445.2	2456.1	2465.2	2472.4
37.5°	2071.5	2069.7	2082.4	2093.3	2120.5	2151.4	2189.5	2222.1	2252.9	2274.7	2296.5
40°	1661.6	1706.9	1743.2	1794.0	1835.7	1895.6	1964.5	2020.7	2073.3	2111.5	2151.4
42.5°	1297.0	1355.0	1431.2	1505.6	1580.0	1661.6	1752.3	1830.3	1899.2	1951.8	1993.5
45°	1010.4	1090.2	1182.7	1277.0	1373.2	1474.8	1569.1	1648.9	1721.5	1775.9	1817.6
47.5°	814.5	901.5	1006.7	1110.1	1219.0	1326.0	1431.2	1500.2	1560.0	1603.5	1641.7
50°	673.0	765.5	876.2	994.0	1102.9	1209.9	1300.6	1367.7	1416.7	1454.8	1478.4
52.5°	562.3	660.3	778.2	896.1	1004.9	1102.9	1184.5	1235.3	1275.2	1302.4	1324.2
55°	464.4	558.7	669.4	780.0	887.0	979.5	1046.6	1084.8	1115.6	1131.9	1144.6
57.5°	379.1	466.2	567.8	669.4	761.9	838.1	890.7	928.7	943.3	956.0	954.1
60°	297.5	379.1	471.6	558.7	638.5	700.2	738.3	760.0	770.9	776.4	772.7
62.5°	234.0	308.4	379.1	455.3	513.4	565.9	602.3	602.3	607.7	609.5	614.9
65°	174.1	230.4	292.1	348.3	395.4	429.9	449.9	455.3	462.6	460.8	457.1
67.5°	128.8	170.5	215.8	257.6	290.2	312.0	326.5	339.2	337.4	333.8	332.0
70°	88.9	116.1	156.0	181.4	205.0	226.8	230.4	232.2	234.0	235.8	232.2
72.5°	61.7	81.6	103.4	125.2	139.7	148.7	157.8	159.6	159.6	159.6	157.8
75°	30.8	41.7	61.7	70.7	83.4	87.1	94.3	94.3	99.8	92.5	90.7
77.5°	27.2	32.7	43.5	50.8	56.2	61.7	63.5	68.9	67.1	63.5	65.3
80°	16.3	20.0	27.2	30.8	38.1	39.9	41.7	43.5	41.7	43.5	43.5
82.5°	12.7	14.5	18.2	18.2	23.6	23.6	25.4	25.4	27.2	27.2	27.2
85°	7.2	12.7	10.9	21.7	14.5	14.5	18.2	21.7	18.2	18.2	21.7
87.5°	7.2	7.2	5.5	7.2	7.2	7.2	9.1	10.9	10.9	12.7	10.9
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: P249471

CATALOG NUMBER: LSR8B80D010 EC8B80935 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3379.4	3379.4	3379.4	3379.4
2.5°	3384.9	3388.5	3383.0	3381.2
5°	3390.3	3390.3	3386.7	3386.7
7.5°	3390.3	3390.3	3384.9	3381.2
10°	3375.8	3375.8	3370.3	3366.7
12.5°	3348.6	3348.6	3346.7	3341.3
15°	3314.1	3314.1	3306.8	3301.4
17.5°	3266.9	3270.6	3261.5	3261.5
20°	3216.2	3214.3	3207.1	3203.5
22.5°	3163.6	3159.9	3158.1	3147.2
25°	3107.3	3103.7	3098.2	3092.8
27.5°	3011.2	3009.4	3003.9	2996.7
30°	2864.2	2862.4	2855.2	2855.2
32.5°	2673.8	2672.0	2664.7	2666.5
35°	2476.0	2483.3	2479.7	2472.4
37.5°	2311.0	2316.4	2320.1	2316.4
40°	2173.1	2189.5	2191.3	2194.9
42.5°	2026.2	2048.0	2055.2	2058.8
45°	1850.2	1870.2	1886.5	1882.9
47.5°	1670.6	1685.2	1699.7	1688.8
50°	1498.3	1507.4	1512.9	1512.9
52.5°	1335.1	1335.1	1333.3	1335.1
55°	1148.2	1148.2	1141.0	1144.6
57.5°	952.3	956.0	950.5	941.4
60°	770.9	761.9	758.2	752.8
62.5°	600.4	600.4	587.7	604.0
65°	449.9	444.4	439.0	437.1
67.5°	326.5	324.7	319.3	317.4
70°	230.4	223.1	221.3	217.7
72.5°	154.2	154.2	150.6	150.6
75°	94.3	85.3	83.4	85.3
77.5°	65.3	63.5	63.5	61.7
80°	43.5	41.7	45.4	39.9
82.5°	27.2	29.0	27.2	29.0
85°	18.2	21.7	20.0	20.0
87.5°	10.9	10.9	10.9	10.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)