

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: P249316

Luminaire Tested: **LSR8B60D010 EC8B60835 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249316
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: LSR8B60D010 EC8B60835 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6181.0 lumens
Efficiency: N/A
Efficacy: 103.9 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

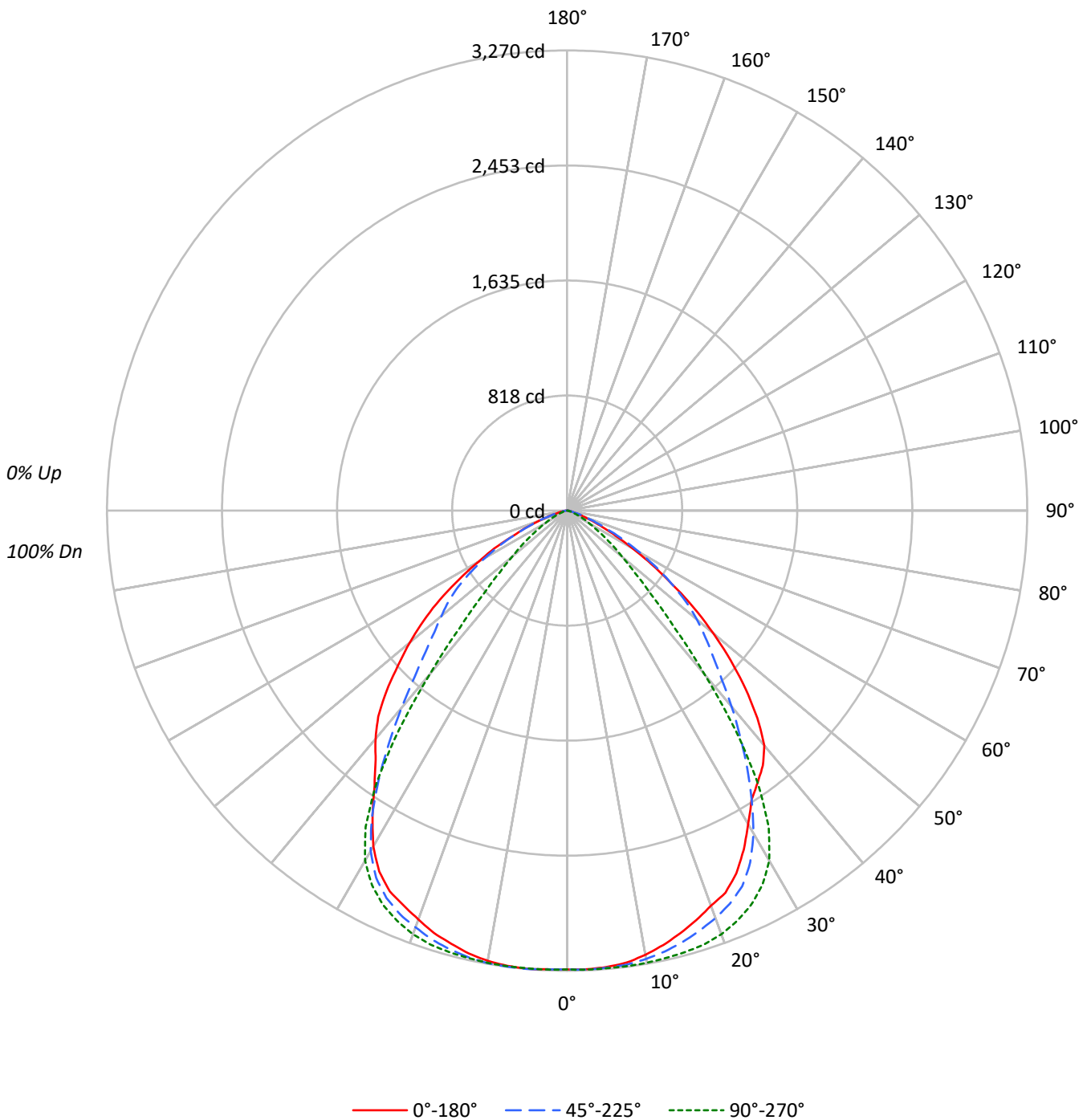
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	100563	100563	100563
5°	100783	101056	101164
10°	100361	102171	101733
15°	99249	103664	101710
20°	98059	105121	101445
25°	96785	105243	101548
30°	91563	102284	98107
35°	88829	88893	89819
40°	87729	61162	85262
45°	78169	36719	79238
50°	64998	24437	70035
55°	48751	16849	59385
60°	33038	11224	44805
65°	19927	7282	30784
70°	11045	3949	18942
75°	5004	1668	9805
80°	4351	1865	6837
85°	4953	2477	6828



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.2	5.0
10°-20°	903.9	14.6
20°-30°	1371.9	22.2
30°-40°	1440.9	23.3
40°-50°	1080.3	17.5
50°-60°	693.1	11.2
60°-70°	296.5	4.8
70°-80°	70.1	1.1
80°-90°	13.0	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°	2587.0	41.9
0°-40°	4027.9	65.2
0°-60°	5801.4	93.9
0°-90°	6181.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6181.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3261	3261	3261	3261	3261	
5°	3256	3261	3265	3270	3268	309
15°	3109	3174	3247	3226	3186	877
25°	2845	2944	3093	3037	2985	1300
35°	2360	2228	2361	2333	2386	1481
45°	1792	1465	842	1423	1817	1373
55°	907	907	313	945	1105	823
65°	273	322	100	415	422	292
75°	42	49	14	84	82	61
85°	14	9	7	14	19	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°	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2
2.5°	3263.0	3266.5	3264.7	3264.7	3263.0	3264.7	3264.7	3268.2	3268.2	3264.7	3263.0
5°	3255.9	3259.5	3259.5	3255.9	3255.9	3264.7	3259.5	3263.0	3263.0	3261.2	3261.2
7.5°	3240.2	3240.2	3247.2	3242.0	3242.0	3247.2	3245.5	3249.0	3252.5	3254.2	3254.2
10°	3205.2	3208.7	3210.5	3210.5	3212.2	3217.4	3221.0	3228.0	3231.4	3235.0	3236.7
12.5°	3161.5	3166.7	3168.4	3166.7	3172.0	3178.9	3187.7	3196.5	3201.7	3208.7	3214.0
15°	3108.9	3108.9	3112.4	3117.7	3121.2	3131.7	3140.4	3150.9	3164.9	3173.7	3182.4
17.5°	3051.2	3054.7	3059.9	3059.9	3066.9	3084.4	3089.7	3105.4	3121.2	3129.9	3147.5
20°	2988.2	2991.6	2996.9	3000.4	3009.1	3023.2	3033.6	3047.7	3065.2	3080.9	3098.4
22.5°	2939.1	2932.1	2935.6	2939.1	2947.9	2960.1	2972.4	2989.9	3007.4	3023.2	3040.7
25°	2844.6	2846.3	2851.6	2855.1	2865.6	2876.1	2890.1	2911.1	2926.9	2944.4	2963.6
27.5°	2716.8	2718.6	2727.3	2727.3	2736.0	2753.6	2762.3	2779.8	2800.9	2818.3	2841.1
30°	2571.5	2575.0	2575.0	2582.0	2587.3	2596.0	2604.8	2622.3	2632.8	2648.5	2680.1
32.5°	2438.5	2442.0	2440.2	2438.5	2433.2	2431.5	2429.7	2433.2	2436.7	2442.0	2454.2
35°	2359.7	2350.9	2344.0	2331.7	2317.7	2300.2	2284.4	2263.4	2244.2	2228.4	2210.9
37.5°	2284.4	2282.7	2272.2	2254.7	2226.6	2195.2	2158.4	2112.9	2067.3	2018.3	1971.1
40°	2179.4	2174.1	2165.4	2140.9	2109.4	2070.9	2021.9	1965.8	1892.3	1817.0	1740.0
42.5°	2000.8	2002.6	1992.1	1972.8	1943.1	1906.3	1855.5	1794.3	1715.5	1626.2	1526.5
45°	1792.5	1792.5	1789.0	1773.3	1752.3	1722.5	1684.0	1633.2	1556.2	1465.2	1358.4
47.5°	1575.5	1577.2	1572.0	1568.5	1559.7	1540.5	1512.5	1473.9	1419.7	1332.1	1225.4
50°	1354.9	1354.9	1363.7	1361.9	1361.9	1354.9	1342.7	1319.9	1272.6	1202.6	1102.8
52.5°	1134.3	1137.8	1143.1	1150.1	1158.8	1172.8	1158.8	1148.3	1118.6	1064.3	978.5
55°	906.8	910.3	919.0	931.3	941.8	955.8	959.3	959.3	943.5	906.8	842.0
57.5°	712.5	707.2	714.2	724.7	738.7	752.7	763.2	775.5	773.7	749.2	696.7
60°	535.7	537.4	542.6	553.2	563.7	575.9	589.9	600.4	605.7	593.4	560.2
62.5°	390.4	390.4	397.4	407.9	413.1	430.6	439.4	444.6	449.9	448.1	427.1
65°	273.1	276.6	280.1	285.3	290.6	301.1	306.3	316.8	320.3	322.1	306.3
67.5°	192.6	187.3	190.8	194.3	199.6	206.6	217.1	217.1	222.3	222.3	211.8
70°	122.5	122.5	124.3	129.5	133.0	134.8	138.3	141.8	147.0	145.3	145.3
72.5°	82.3	80.5	82.3	84.0	85.8	91.0	91.0	92.8	96.3	98.0	91.0
75°	42.0	43.8	47.2	45.5	50.8	47.2	49.0	54.3	52.5	49.0	49.0
77.5°	35.0	35.0	35.0	33.3	36.8	36.8	35.0	38.5	36.8	36.8	35.0
80°	24.5	26.3	24.5	22.7	24.5	22.7	22.7	22.7	22.7	22.7	21.0
82.5°	19.3	15.8	17.5	15.8	17.5	17.5	15.8	14.0	14.0	15.8	14.0
85°	14.0	10.5	12.3	12.3	10.5	10.5	10.5	10.5	10.5	8.7	8.7
87.5°	8.7	5.3	5.3	5.3	7.0	7.0	7.0	5.3	7.0	7.0	3.5
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°	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2
2.5°	3266.5	3264.7	3268.2	3266.5	3266.5	3264.7	3266.5	3264.7	3268.2	3261.2	3263.0
5°	3266.5	3263.0	3264.7	3266.5	3268.2	3264.7	3264.7	3264.7	3268.2	3264.7	3266.5
7.5°	3259.5	3257.7	3263.0	3266.5	3264.7	3263.0	3266.5	3264.7	3268.2	3266.5	3270.0
10°	3245.5	3247.2	3250.7	3255.9	3257.7	3259.5	3263.0	3263.0	3268.2	3261.2	3264.7
12.5°	3224.5	3231.4	3240.2	3243.7	3250.7	3250.7	3254.2	3255.9	3259.5	3257.7	3263.0
15°	3198.2	3206.9	3217.4	3226.2	3235.0	3240.2	3245.5	3247.2	3252.5	3247.2	3249.0
17.5°	3166.7	3177.2	3192.9	3203.4	3217.4	3222.7	3229.7	3233.2	3238.5	3235.0	3236.7
20°	3122.9	3135.2	3152.7	3168.4	3177.2	3189.4	3198.2	3203.4	3206.9	3203.4	3205.2
22.5°	3061.7	3079.2	3101.9	3114.2	3131.7	3142.2	3143.9	3156.2	3164.9	3156.2	3159.7
25°	2989.9	3007.4	3024.9	3051.2	3066.9	3079.2	3091.4	3093.2	3101.9	3100.2	3098.4
27.5°	2870.8	2893.6	2923.4	2944.4	2965.4	2984.6	2998.7	3002.1	3010.9	3007.4	3009.1
30°	2708.0	2732.6	2760.6	2793.8	2823.6	2842.8	2860.3	2872.6	2881.3	2876.1	2874.4
32.5°	2477.0	2501.5	2531.3	2564.5	2599.5	2627.5	2648.5	2664.3	2674.8	2671.3	2662.5
35°	2212.7	2219.7	2238.9	2265.2	2294.9	2324.7	2344.0	2361.4	2373.7	2377.2	2377.2
37.5°	1941.3	1918.6	1904.6	1904.6	1922.1	1934.3	1951.8	1962.3	1981.6	1988.6	1993.8
40°	1678.7	1626.2	1577.2	1540.5	1516.0	1514.2	1514.2	1519.4	1537.0	1559.7	1580.7
42.5°	1444.2	1360.1	1284.9	1216.6	1167.6	1139.6	1127.3	1129.1	1143.1	1164.1	1199.1
45°	1256.9	1151.8	1057.3	975.0	908.5	864.7	843.8	842.0	852.5	877.0	915.5
47.5°	1111.6	999.5	892.8	798.2	726.5	679.2	654.7	647.7	654.7	677.4	723.0
50°	990.8	875.3	765.0	666.9	589.9	540.9	518.1	509.4	518.1	537.4	582.9
52.5°	878.8	759.7	656.4	561.9	479.6	437.6	413.1	407.9	413.1	435.9	472.7
55°	749.2	647.7	546.2	451.6	379.9	337.9	318.6	313.4	318.6	339.6	378.1
57.5°	621.5	533.9	444.6	358.9	297.6	260.8	243.3	236.3	248.6	262.6	308.1
60°	502.4	432.4	357.1	281.8	231.1	197.8	183.8	182.0	185.6	203.1	234.6
62.5°	393.9	336.1	276.6	215.3	173.3	159.3	141.8	140.1	143.5	154.0	178.6
65°	283.6	246.8	201.3	157.5	124.3	105.0	98.0	99.8	103.3	110.3	133.0
67.5°	197.8	171.5	140.1	110.3	85.8	77.0	70.0	68.3	70.0	82.3	94.5
70°	133.0	117.3	94.5	84.0	59.5	47.2	49.0	43.8	50.8	50.8	61.3
72.5°	87.5	77.0	63.0	49.0	42.0	33.3	33.3	31.5	35.0	36.8	45.5
75°	45.5	35.0	35.0	24.5	17.5	8.7	15.8	14.0	12.3	14.0	17.5
77.5°	31.5	26.3	24.5	19.3	17.5	14.0	14.0	14.0	14.0	15.8	17.5
80°	19.3	19.3	14.0	12.3	10.5	8.7	10.5	10.5	10.5	10.5	12.3
82.5°	12.3	10.5	10.5	8.7	8.7	7.0	7.0	7.0	7.0	7.0	10.5
85°	10.5	7.0	7.0	5.3	7.0	12.3	5.3	7.0	7.0	7.0	5.3
87.5°	3.5	5.3	5.3	5.3	3.5	1.8	3.5	5.3	5.3	8.7	7.0
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°	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2	3261.2
2.5°	3266.5	3268.2	3268.2	3266.5	3266.5	3263.0	3270.0	3264.7	3266.5	3273.5	3268.2
5°	3270.0	3271.7	3271.7	3270.0	3270.0	3270.0	3271.7	3271.7	3270.0	3268.2	3271.7
7.5°	3277.0	3275.2	3275.2	3271.7	3271.7	3268.2	3271.7	3266.5	3270.0	3266.5	3271.7
10°	3268.2	3270.0	3268.2	3266.5	3266.5	3264.7	3264.7	3259.5	3261.2	3255.9	3259.5
12.5°	3263.0	3261.2	3261.2	3257.7	3254.2	3250.7	3249.0	3243.7	3243.7	3231.4	3236.7
15°	3249.0	3250.7	3245.5	3238.5	3235.0	3226.2	3222.7	3215.7	3208.7	3200.0	3201.7
17.5°	3236.7	3231.4	3224.5	3217.4	3203.4	3196.5	3189.4	3178.9	3175.4	3164.9	3161.5
20°	3200.0	3196.5	3187.7	3175.4	3166.7	3150.9	3143.9	3133.4	3124.7	3114.2	3108.9
22.5°	3152.7	3149.2	3138.7	3126.4	3112.4	3105.4	3098.4	3079.2	3070.4	3059.9	3058.1
25°	3093.2	3087.9	3077.4	3063.4	3056.4	3037.2	3030.1	3016.1	3012.7	3002.1	3000.4
27.5°	3002.1	2995.1	2982.9	2965.4	2953.1	2940.9	2933.9	2923.4	2919.9	2909.3	2907.6
30°	2865.6	2856.8	2832.3	2825.4	2804.3	2792.1	2792.1	2778.1	2779.8	2772.8	2772.8
32.5°	2650.3	2636.3	2617.0	2603.0	2589.0	2582.0	2582.0	2576.8	2580.3	2580.3	2583.8
35°	2364.9	2345.7	2335.2	2326.4	2326.4	2333.4	2354.5	2359.7	2370.2	2379.0	2386.0
37.5°	1999.1	1997.4	2009.6	2020.1	2046.4	2076.1	2112.9	2144.4	2174.1	2195.2	2216.1
40°	1603.5	1647.2	1682.2	1731.3	1771.5	1829.3	1895.8	1950.1	2000.8	2037.6	2076.1
42.5°	1251.6	1307.6	1381.2	1452.9	1524.7	1603.5	1691.0	1766.3	1832.8	1883.6	1923.8
45°	975.0	1052.1	1141.4	1232.4	1325.1	1423.2	1514.2	1591.2	1661.3	1713.8	1754.0
47.5°	786.0	870.0	971.5	1071.3	1176.3	1279.6	1381.2	1447.7	1505.4	1547.4	1584.2
50°	649.4	738.7	845.5	959.3	1064.3	1167.6	1255.1	1319.9	1367.2	1403.9	1426.7
52.5°	542.6	637.2	751.0	864.7	969.8	1064.3	1143.1	1192.1	1230.6	1256.9	1277.9
55°	448.1	539.2	646.0	752.7	856.0	945.3	1010.0	1046.8	1076.6	1092.3	1104.6
57.5°	365.9	449.9	547.9	646.0	735.2	808.8	859.5	896.3	910.3	922.5	920.8
60°	287.1	365.9	455.1	539.2	616.2	675.7	712.5	733.5	744.0	749.2	745.7
62.5°	225.8	297.6	365.9	439.4	495.4	546.2	581.2	581.2	586.4	588.2	593.4
65°	168.0	222.3	281.8	336.1	381.6	414.9	434.1	439.4	446.4	444.6	441.1
67.5°	124.3	164.6	208.3	248.6	280.1	301.1	315.1	327.4	325.6	322.1	320.3
70°	85.8	112.0	150.6	175.1	197.8	218.8	222.3	224.1	225.8	227.6	224.1
72.5°	59.5	78.8	99.8	120.8	134.8	143.5	152.3	154.0	154.0	154.0	152.3
75°	29.8	40.3	59.5	68.3	80.5	84.0	91.0	91.0	96.3	89.3	87.5
77.5°	26.3	31.5	42.0	49.0	54.3	59.5	61.3	66.5	64.8	61.3	63.0
80°	15.8	19.3	26.3	29.8	36.8	38.5	40.3	42.0	40.3	42.0	42.0
82.5°	12.3	14.0	17.5	17.5	22.7	22.7	24.5	24.5	26.3	26.3	26.3
85°	7.0	12.3	10.5	21.0	14.0	14.0	17.5	21.0	17.5	17.5	21.0
87.5°	7.0	7.0	5.3	7.0	7.0	7.0	8.7	10.5	10.5	12.3	10.5
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: P249316

CATALOG NUMBER: LSR8B60D010 EC8B60835 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3261.2	3261.2	3261.2	3261.2
2.5°	3266.5	3270.0	3264.7	3263.0
5°	3271.7	3271.7	3268.2	3268.2
7.5°	3271.7	3271.7	3266.5	3263.0
10°	3257.7	3257.7	3252.5	3249.0
12.5°	3231.4	3231.4	3229.7	3224.5
15°	3198.2	3198.2	3191.2	3186.0
17.5°	3152.7	3156.2	3147.5	3147.5
20°	3103.7	3101.9	3094.9	3091.4
22.5°	3052.9	3049.4	3047.7	3037.2
25°	2998.7	2995.1	2989.9	2984.6
27.5°	2905.9	2904.1	2898.9	2891.9
30°	2764.1	2762.3	2755.3	2755.3
32.5°	2580.3	2578.5	2571.5	2573.3
35°	2389.4	2396.5	2393.0	2386.0
37.5°	2230.2	2235.4	2238.9	2235.4
40°	2097.1	2112.9	2114.6	2118.1
42.5°	1955.3	1976.3	1983.4	1986.8
45°	1785.5	1804.8	1820.5	1817.0
47.5°	1612.2	1626.2	1640.2	1629.7
50°	1445.9	1454.7	1459.9	1459.9
52.5°	1288.4	1288.4	1286.6	1288.4
55°	1108.1	1108.1	1101.1	1104.6
57.5°	919.0	922.5	917.3	908.5
60°	744.0	735.2	731.7	726.5
62.5°	579.4	579.4	567.2	582.9
65°	434.1	428.9	423.6	421.9
67.5°	315.1	313.4	308.1	306.3
70°	222.3	215.3	213.6	210.1
72.5°	148.8	148.8	145.3	145.3
75°	91.0	82.3	80.5	82.3
77.5°	63.0	61.3	61.3	59.5
80°	42.0	40.3	43.8	38.5
82.5°	26.3	28.0	26.3	28.0
85°	17.5	21.0	19.3	19.3
87.5°	10.5	10.5	10.5	10.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)