

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: P249199

Luminaire Tested: **LSR8B60D010 EC8B60830 8LBDW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249199
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 EC8B60830 8LBDW0WMH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6049.0 lumens
Efficiency: N/A
Efficacy: 101.7 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

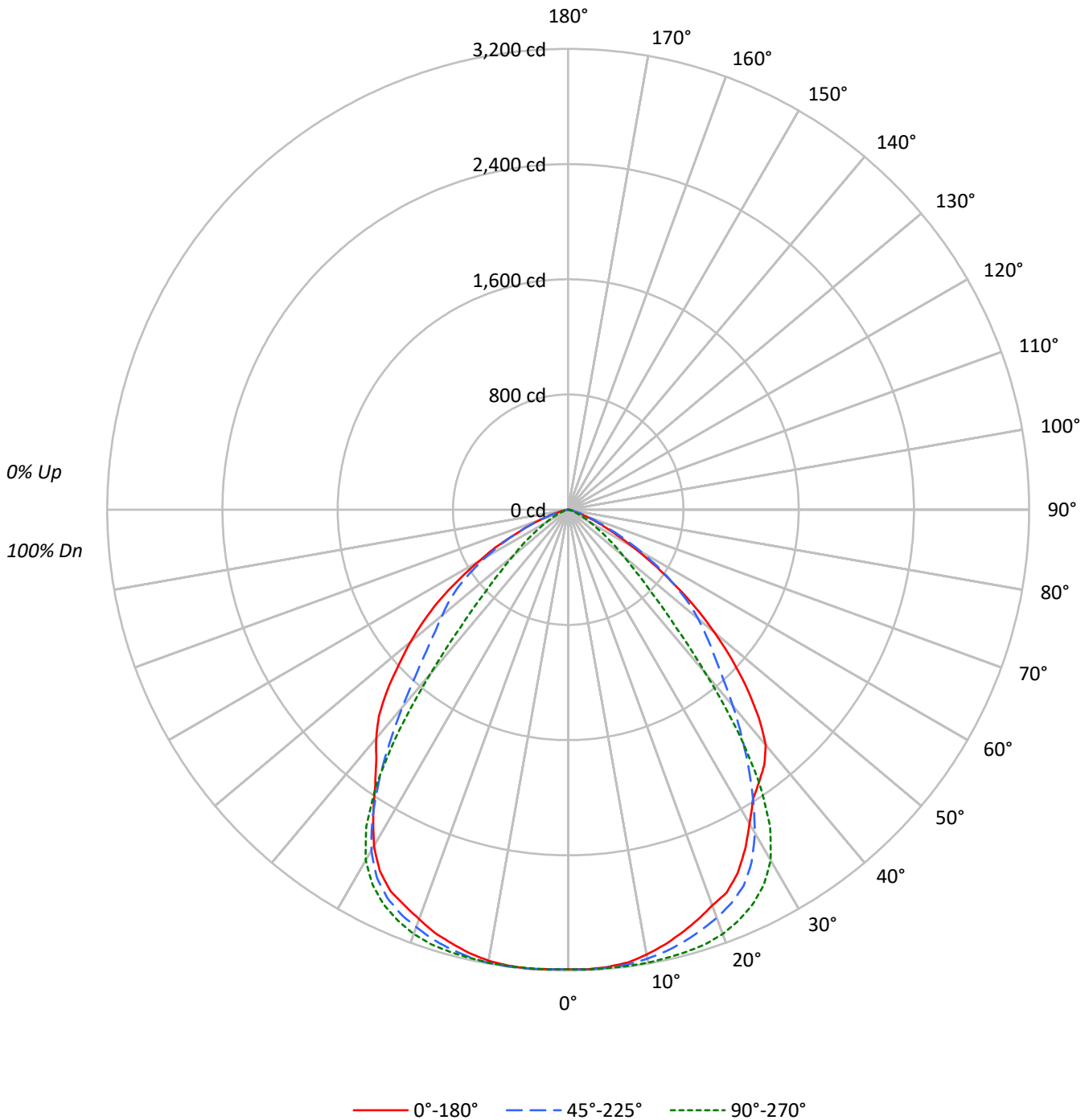
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	98417	98417	98417
5°	98632	98898	99004
10°	98216	99989	99560
15°	97129	101452	99536
20°	95962	102876	99279
25°	94716	102994	99381
30°	89608	100101	96013
35°	86932	86996	87899
40°	85858	59858	83442
45°	76504	35934	77546
50°	63612	23914	68544
55°	47708	16489	58116
60°	32329	10990	43849
65°	19504	7129	30120
70°	10810	3859	18537
75°	4897	1632	9591
80°	4262	1829	6695
85°	4847	2406	6687



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	304.6	5.0
10°-20°	884.6	14.6
20°-30°	1342.6	22.2
30°-40°	1410.1	23.3
40°-50°	1057.2	17.5
50°-60°	678.4	11.2
60°-70°	290.2	4.8
70°-80°	68.6	1.1
80°-90°	12.8	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°	2531.8	41.9
0°-40°	3941.9	65.2
0°-60°	5677.5	93.9
0°-90°	6049.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6049.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3192	3192	3192	3192	3192	
5°	3186	3192	3195	3200	3198	303
15°	3042	3106	3178	3157	3118	858
25°	2784	2882	3027	2972	2921	1272
35°	2309	2181	2311	2284	2335	1449
45°	1754	1434	824	1393	1778	1343
55°	887	887	307	925	1081	805
65°	267	315	98	406	413	285
75°	41	48	14	82	80	60
85°	14	9	7	14	19	14
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°	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6
2.5°	3193.3	3196.7	3195.0	3195.0	3193.3	3195.0	3195.0	3198.4	3198.4	3195.0	3193.3
5°	3186.4	3189.9	3189.9	3186.4	3186.4	3195.0	3189.9	3193.3	3193.3	3191.6	3191.6
7.5°	3171.0	3171.0	3177.9	3172.7	3172.7	3177.9	3176.1	3179.6	3183.0	3184.7	3184.7
10°	3136.7	3140.2	3141.9	3141.9	3143.6	3148.7	3152.2	3159.0	3162.4	3165.9	3167.6
12.5°	3093.9	3099.1	3100.8	3099.1	3104.2	3111.0	3119.6	3128.2	3133.3	3140.2	3145.3
15°	3042.5	3042.5	3045.9	3051.1	3054.5	3064.8	3073.4	3083.6	3097.3	3105.9	3114.5
17.5°	2986.0	2989.4	2994.6	2994.6	3001.4	3018.5	3023.7	3039.1	3054.5	3063.1	3080.2
20°	2924.3	2927.7	2932.9	2936.3	2944.9	2958.6	2968.9	2982.6	2999.7	3015.1	3032.2
22.5°	2876.4	2869.5	2872.9	2876.4	2884.9	2896.9	2908.9	2926.0	2943.2	2958.6	2975.7
25°	2783.8	2785.6	2790.7	2794.1	2804.4	2814.7	2828.4	2848.9	2864.4	2881.5	2900.3
27.5°	2658.8	2660.5	2669.1	2669.1	2677.6	2694.8	2703.3	2720.5	2741.0	2758.1	2780.4
30°	2516.6	2520.0	2520.0	2526.9	2532.0	2540.6	2549.1	2566.3	2576.6	2592.0	2622.8
32.5°	2386.4	2389.8	2388.1	2386.4	2381.3	2379.5	2377.8	2381.3	2384.7	2389.8	2401.8
35°	2309.3	2300.7	2293.9	2281.9	2268.2	2251.1	2235.6	2215.1	2196.2	2180.8	2163.7
37.5°	2235.6	2233.9	2223.6	2206.5	2179.1	2148.3	2112.3	2067.8	2023.2	1975.2	1929.0
40°	2132.9	2127.7	2119.1	2095.2	2064.3	2026.6	1978.7	1923.9	1851.9	1778.2	1702.9
42.5°	1958.1	1959.8	1949.6	1930.7	1901.6	1865.6	1815.9	1756.0	1678.9	1591.5	1493.9
45°	1754.3	1754.3	1750.8	1735.4	1714.9	1685.7	1648.0	1598.4	1523.0	1433.9	1329.4
47.5°	1541.8	1543.5	1538.4	1535.0	1526.4	1507.6	1480.2	1442.5	1389.4	1303.7	1199.2
50°	1326.0	1326.0	1334.5	1332.8	1332.8	1326.0	1314.0	1291.7	1245.5	1176.9	1079.3
52.5°	1110.1	1113.5	1118.7	1125.5	1134.1	1147.8	1134.1	1123.8	1094.7	1041.6	957.7
55°	887.4	890.8	899.4	911.4	921.7	935.4	938.8	938.8	923.4	887.4	824.0
57.5°	697.3	692.1	699.0	709.2	723.0	736.7	746.9	758.9	757.2	733.2	681.8
60°	524.2	525.9	531.1	541.4	551.6	563.6	577.3	587.6	592.8	580.8	548.2
62.5°	382.0	382.0	388.9	399.1	404.3	421.4	430.0	435.1	440.3	438.5	418.0
65°	267.3	270.7	274.1	279.3	284.4	294.6	299.8	310.1	313.5	315.2	299.8
67.5°	188.5	183.3	186.7	190.1	195.3	202.2	212.4	212.4	217.6	217.6	207.3
70°	119.9	119.9	121.6	126.8	130.2	131.9	135.4	138.7	143.9	142.2	142.2
72.5°	80.5	78.8	80.5	82.2	84.0	89.1	89.1	90.8	94.2	95.9	89.1
75°	41.1	42.8	46.2	44.6	49.7	46.2	48.0	53.1	51.4	48.0	48.0
77.5°	34.2	34.2	34.2	32.6	36.0	36.0	34.2	37.7	36.0	36.0	34.2
80°	24.0	25.7	24.0	22.3	24.0	22.3	22.3	22.3	22.3	22.3	20.5
82.5°	18.9	15.4	17.1	15.4	17.1	17.1	15.4	13.7	13.7	15.4	13.7
85°	13.7	10.3	12.0	12.0	10.3	10.3	10.3	10.3	10.3	8.6	8.6
87.5°	8.6	5.2	5.2	5.2	6.8	6.8	6.8	5.2	6.8	6.8	3.4
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°	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6
2.5°	3196.7	3195.0	3198.4	3196.7	3196.7	3195.0	3196.7	3195.0	3198.4	3191.6	3193.3
5°	3196.7	3193.3	3195.0	3196.7	3198.4	3195.0	3195.0	3195.0	3198.4	3195.0	3196.7
7.5°	3189.9	3188.1	3193.3	3196.7	3195.0	3193.3	3196.7	3195.0	3198.4	3196.7	3200.1
10°	3176.1	3177.9	3181.3	3186.4	3188.1	3189.9	3193.3	3193.3	3198.4	3191.6	3195.0
12.5°	3155.6	3162.4	3171.0	3174.4	3181.3	3181.3	3184.7	3186.4	3189.9	3188.1	3193.3
15°	3129.9	3138.5	3148.7	3157.3	3165.9	3171.0	3176.1	3177.9	3183.0	3177.9	3179.6
17.5°	3099.1	3109.3	3124.8	3135.0	3148.7	3153.9	3160.7	3164.2	3169.3	3165.9	3167.6
20°	3056.2	3068.2	3085.4	3100.8	3109.3	3121.3	3129.9	3135.0	3138.5	3135.0	3136.7
22.5°	2996.3	3013.4	3035.7	3047.7	3064.8	3075.1	3076.8	3088.8	3097.3	3088.8	3092.2
25°	2926.0	2943.2	2960.3	2986.0	3001.4	3013.4	3025.4	3027.1	3035.7	3034.0	3032.2
27.5°	2809.5	2831.8	2860.9	2881.5	2902.0	2920.9	2934.6	2938.0	2946.6	2943.2	2944.9
30°	2650.2	2674.2	2701.6	2734.2	2763.3	2782.1	2799.3	2811.3	2819.8	2814.7	2813.0
32.5°	2424.1	2448.1	2477.2	2509.7	2544.0	2571.4	2592.0	2607.4	2617.7	2614.2	2605.7
35°	2165.4	2172.3	2191.1	2216.8	2245.9	2275.0	2293.9	2311.0	2323.0	2326.4	2326.4
37.5°	1899.9	1877.6	1863.9	1863.9	1881.0	1893.0	1910.1	1920.4	1939.3	1946.1	1951.3
40°	1642.9	1591.5	1543.5	1507.6	1483.6	1481.9	1481.9	1487.0	1504.1	1526.4	1547.0
42.5°	1413.3	1331.1	1257.4	1190.6	1142.7	1115.3	1103.3	1105.0	1118.7	1139.2	1173.5
45°	1230.0	1127.3	1034.7	954.2	889.1	846.3	825.7	824.0	834.3	858.3	896.0
47.5°	1087.8	978.2	873.7	781.2	711.0	664.7	640.7	633.9	640.7	663.0	707.5
50°	969.6	856.6	748.6	652.7	577.3	529.4	507.1	498.5	507.1	525.9	570.5
52.5°	860.0	743.5	642.4	549.9	469.4	428.3	404.3	399.1	404.3	426.6	462.6
55°	733.2	633.9	534.5	442.0	371.8	330.6	311.8	306.7	311.8	332.4	370.0
57.5°	608.2	522.5	435.1	351.2	291.2	255.2	238.1	231.3	243.2	257.0	301.5
60°	491.7	423.2	349.5	275.8	226.1	193.6	179.9	178.2	181.6	198.7	229.5
62.5°	385.5	328.9	270.7	210.7	169.6	155.9	138.7	137.1	140.5	150.7	174.8
65°	277.5	241.6	197.0	154.2	121.6	102.8	95.9	97.7	101.1	107.9	130.2
67.5°	193.6	167.9	137.1	107.9	84.0	75.4	68.5	66.8	68.5	80.5	92.5
70°	130.2	114.8	92.5	82.2	58.3	46.2	48.0	42.8	49.7	49.7	59.9
72.5°	85.6	75.4	61.7	48.0	41.1	32.6	32.6	30.9	34.2	36.0	44.6
75°	44.6	34.2	34.2	24.0	17.1	8.6	15.4	13.7	12.0	13.7	17.1
77.5°	30.9	25.7	24.0	18.9	17.1	13.7	13.7	13.7	13.7	15.4	17.1
80°	18.9	18.9	13.7	12.0	10.3	8.6	10.3	10.3	10.3	10.3	12.0
82.5°	12.0	10.3	10.3	8.6	8.6	6.8	6.8	6.8	6.8	6.8	10.3
85°	10.3	6.8	6.8	5.2	6.8	12.0	5.2	6.8	6.8	6.8	5.2
87.5°	3.4	5.2	5.2	5.2	3.4	1.7	3.4	5.2	5.2	8.6	6.8
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°	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6	3191.6
2.5°	3196.7	3198.4	3198.4	3196.7	3196.7	3193.3	3200.1	3195.0	3196.7	3203.6	3198.4
5°	3200.1	3201.8	3201.8	3200.1	3200.1	3200.1	3201.8	3201.8	3200.1	3198.4	3201.8
7.5°	3207.0	3205.3	3205.3	3201.8	3201.8	3198.4	3201.8	3196.7	3200.1	3196.7	3201.8
10°	3198.4	3200.1	3198.4	3196.7	3196.7	3195.0	3195.0	3189.9	3191.6	3186.4	3189.9
12.5°	3193.3	3191.6	3191.6	3188.1	3184.7	3181.3	3179.6	3174.4	3174.4	3162.4	3167.6
15°	3179.6	3181.3	3176.1	3169.3	3165.9	3157.3	3153.9	3147.0	3140.2	3131.6	3133.3
17.5°	3167.6	3162.4	3155.6	3148.7	3135.0	3128.2	3121.3	3111.0	3107.6	3097.3	3093.9
20°	3131.6	3128.2	3119.6	3107.6	3099.1	3083.6	3076.8	3066.5	3057.9	3047.7	3042.5
22.5°	3085.4	3081.9	3071.6	3059.7	3045.9	3039.1	3032.2	3013.4	3004.8	2994.6	2992.8
25°	3027.1	3022.0	3011.7	2998.0	2991.1	2972.3	2965.4	2951.7	2948.3	2938.0	2936.3
27.5°	2938.0	2931.2	2919.2	2902.0	2890.1	2878.1	2871.2	2860.9	2857.5	2847.2	2845.5
30°	2804.4	2795.8	2771.8	2765.0	2744.4	2732.4	2732.4	2718.7	2720.5	2713.6	2713.6
32.5°	2593.7	2580.0	2561.1	2547.4	2533.7	2526.9	2526.9	2521.7	2525.2	2525.2	2528.6
35°	2314.4	2295.6	2285.3	2276.8	2276.8	2283.6	2304.2	2309.3	2319.6	2328.2	2335.0
37.5°	1956.4	1954.7	1966.7	1977.0	2002.7	2031.8	2067.8	2098.6	2127.7	2148.3	2168.8
40°	1569.2	1612.1	1646.3	1694.3	1733.7	1790.2	1855.3	1908.4	1958.1	1994.1	2031.8
42.5°	1224.9	1279.7	1351.7	1421.9	1492.1	1569.2	1654.9	1728.6	1793.7	1843.3	1882.7
45°	954.2	1029.6	1117.0	1206.1	1296.8	1392.8	1481.9	1557.2	1625.8	1677.2	1716.6
47.5°	769.2	851.4	950.8	1048.4	1151.2	1252.3	1351.7	1416.8	1473.3	1514.4	1550.4
50°	635.6	723.0	827.5	938.8	1041.6	1142.7	1228.3	1291.7	1338.0	1373.9	1396.2
52.5°	531.1	623.6	734.9	846.3	949.1	1041.6	1118.7	1166.7	1204.3	1230.0	1250.6
55°	438.5	527.7	632.2	736.7	837.7	925.1	988.5	1024.5	1053.6	1069.0	1081.0
57.5°	358.1	440.3	536.2	632.2	719.5	791.5	841.2	877.1	890.8	902.8	901.1
60°	281.0	358.1	445.4	527.7	603.0	661.3	697.3	717.8	728.1	733.2	729.8
62.5°	221.0	291.2	358.1	430.0	484.8	534.5	568.8	568.8	573.9	575.6	580.8
65°	164.4	217.6	275.8	328.9	373.4	406.0	424.9	430.0	436.9	435.1	431.7
67.5°	121.6	161.0	203.8	243.2	274.1	294.6	308.3	320.4	318.7	315.2	313.5
70°	84.0	109.7	147.3	171.3	193.6	214.2	217.6	219.3	221.0	222.7	219.3
72.5°	58.3	77.1	97.7	118.2	131.9	140.5	149.1	150.7	150.7	150.7	149.1
75°	29.1	39.4	58.3	66.8	78.8	82.2	89.1	89.1	94.2	87.4	85.6
77.5°	25.7	30.9	41.1	48.0	53.1	58.3	59.9	65.1	63.4	59.9	61.7
80°	15.4	18.9	25.7	29.1	36.0	37.7	39.4	41.1	39.4	41.1	41.1
82.5°	12.0	13.7	17.1	17.1	22.3	22.3	24.0	24.0	25.7	25.7	25.7
85°	6.8	12.0	10.3	20.5	13.7	13.7	17.1	20.5	17.1	17.1	20.5
87.5°	6.8	6.8	5.2	6.8	6.8	6.8	8.6	10.3	10.3	12.0	10.3
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: P249199

CATALOG NUMBER: LSR8B60D010 EC8B60830 8LBDW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3191.6	3191.6	3191.6	3191.6
2.5°	3196.7	3200.1	3195.0	3193.3
5°	3201.8	3201.8	3198.4	3198.4
7.5°	3201.8	3201.8	3196.7	3193.3
10°	3188.1	3188.1	3183.0	3179.6
12.5°	3162.4	3162.4	3160.7	3155.6
15°	3129.9	3129.9	3123.0	3117.9
17.5°	3085.4	3088.8	3080.2	3080.2
20°	3037.4	3035.7	3028.8	3025.4
22.5°	2987.7	2984.3	2982.6	2972.3
25°	2934.6	2931.2	2926.0	2920.9
27.5°	2843.8	2842.1	2836.9	2830.1
30°	2705.0	2703.3	2696.5	2696.5
32.5°	2525.2	2523.4	2516.6	2518.3
35°	2338.4	2345.3	2341.9	2335.0
37.5°	2182.5	2187.7	2191.1	2187.7
40°	2052.3	2067.8	2069.5	2072.9
42.5°	1913.6	1934.1	1941.0	1944.4
45°	1747.4	1766.2	1781.7	1778.2
47.5°	1577.8	1591.5	1605.2	1594.9
50°	1415.1	1423.6	1428.8	1428.8
52.5°	1260.9	1260.9	1259.2	1260.9
55°	1084.4	1084.4	1077.6	1081.0
57.5°	899.4	902.8	897.7	889.1
60°	728.1	719.5	716.1	711.0
62.5°	567.1	567.1	555.1	570.5
65°	424.9	419.7	414.6	412.8
67.5°	308.3	306.7	301.5	299.8
70°	217.6	210.7	209.0	205.6
72.5°	145.6	145.6	142.2	142.2
75°	89.1	80.5	78.8	80.5
77.5°	61.7	59.9	59.9	58.3
80°	41.1	39.4	42.8	37.7
82.5°	25.7	27.4	25.7	27.4
85°	17.1	20.5	18.9	18.9
87.5°	10.3	10.3	10.3	10.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)