

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: P249325

Luminaire Tested: **LSR8B60D010 EC8B60840 8LBDW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249325
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 EC8B60840 8LBDW0GPH
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6140.0 lumens
Efficiency: N/A
Efficacy: 103.2 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

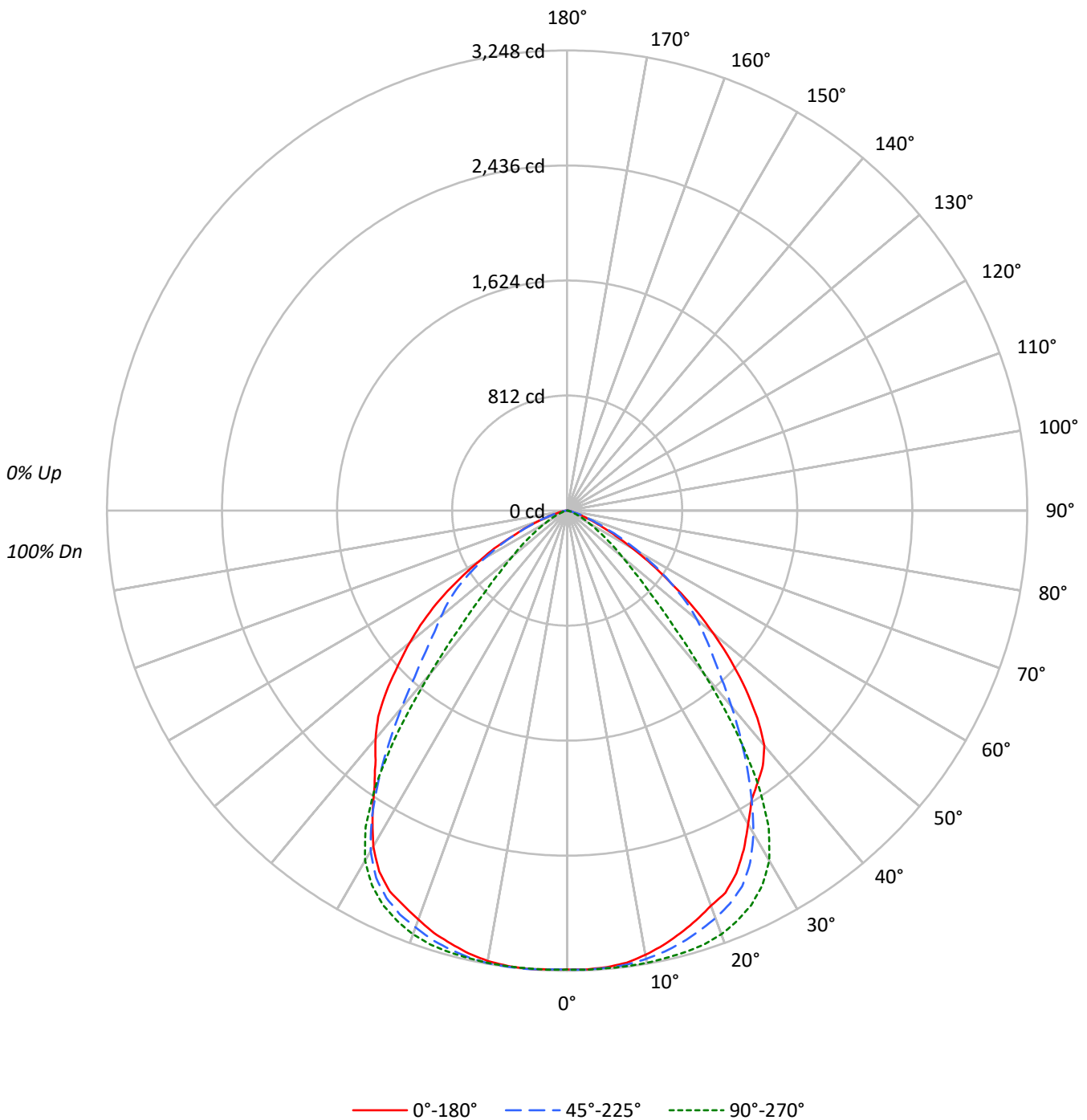
Input Watts (W): 59.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	99897	99897	99897
5°	100118	100387	100496
10°	99694	101492	101056
15°	98591	102978	101033
20°	97406	104425	100773
25°	96142	104546	100875
30°	90957	101604	97456
35°	88242	88306	89224
40°	87146	60759	84698
45°	77650	36475	78714
50°	64567	24274	69575
55°	48423	16736	58987
60°	32816	11150	44509
65°	19795	7231	30580
70°	10972	3922	18816
75°	4968	1656	9734
80°	4315	1847	6801
85°	4918	2441	6758



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.2	5.0
10°-20°	897.9	14.6
20°-30°	1362.8	22.2
30°-40°	1431.4	23.3
40°-50°	1073.1	17.5
50°-60°	688.5	11.2
60°-70°	294.5	4.8
70°-80°	69.6	1.1
80°-90°	12.9	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°	2569.9	41.9
0°-40°	4001.2	65.2
0°-60°	5762.9	93.9
0°-90°	6140.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6140.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3240	3240	3240	3240	3240	
5°	3234	3240	3243	3248	3247	307
15°	3088	3153	3226	3205	3165	871
25°	2826	2925	3073	3017	2965	1291
35°	2344	2214	2346	2318	2370	1471
45°	1781	1456	836	1414	1805	1364
55°	901	901	311	939	1097	817
65°	271	320	99	412	419	290
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°	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6
2.5°	3241.3	3244.8	3243.1	3243.1	3241.3	3243.1	3243.1	3246.6	3246.6	3243.1	3241.3
5°	3234.4	3237.8	3237.8	3234.4	3234.4	3243.1	3237.8	3241.3	3241.3	3239.6	3239.6
7.5°	3218.7	3218.7	3225.7	3220.5	3220.5	3225.7	3223.9	3227.4	3230.9	3232.6	3232.6
10°	3183.9	3187.4	3189.2	3189.2	3190.9	3196.1	3199.6	3206.6	3210.0	3213.5	3215.2
12.5°	3140.5	3145.7	3147.4	3145.7	3150.9	3157.8	3166.6	3175.3	3180.5	3187.4	3192.7
15°	3088.3	3088.3	3091.8	3097.0	3100.5	3110.9	3119.6	3130.0	3143.9	3152.7	3161.3
17.5°	3030.9	3034.4	3039.6	3039.6	3046.6	3063.9	3069.2	3084.8	3100.5	3109.2	3126.6
20°	2968.3	2971.8	2977.0	2980.5	2989.2	3003.1	3013.5	3027.4	3044.8	3060.5	3077.9
22.5°	2919.6	2912.7	2916.1	2919.6	2928.3	2940.5	2952.7	2970.0	2987.4	3003.1	3020.5
25°	2825.7	2827.5	2832.7	2836.1	2846.6	2857.0	2870.9	2891.8	2907.5	2924.9	2944.0
27.5°	2698.8	2700.5	2709.2	2709.2	2717.9	2735.3	2744.0	2761.4	2782.3	2799.6	2822.3
30°	2554.5	2557.9	2557.9	2564.9	2570.1	2578.8	2587.5	2604.9	2615.3	2631.0	2662.3
32.5°	2422.3	2425.8	2424.0	2422.3	2417.1	2415.3	2413.6	2417.1	2420.6	2425.8	2437.9
35°	2344.1	2335.3	2328.4	2316.2	2302.3	2284.9	2269.3	2248.4	2229.3	2213.6	2196.3
37.5°	2269.3	2267.5	2257.1	2239.7	2211.9	2180.6	2144.1	2098.9	2053.6	2005.0	1958.0
40°	2164.9	2159.7	2151.0	2126.7	2095.4	2057.1	2008.4	1952.8	1879.7	1805.0	1728.5
42.5°	1987.6	1989.3	1978.9	1959.7	1930.2	1893.7	1843.2	1782.4	1704.1	1615.4	1516.3
45°	1780.6	1780.6	1777.2	1761.5	1740.7	1711.1	1672.8	1622.4	1545.9	1455.5	1349.4
47.5°	1565.0	1566.8	1561.5	1558.1	1549.4	1530.2	1502.4	1464.2	1410.3	1323.3	1217.2
50°	1345.9	1345.9	1354.6	1352.9	1352.9	1345.9	1333.8	1311.1	1264.2	1194.6	1095.5
52.5°	1126.8	1130.3	1135.5	1142.5	1151.1	1165.1	1151.1	1140.7	1111.1	1057.2	972.1
55°	900.7	904.2	912.9	925.1	935.6	949.5	952.9	952.9	937.3	900.7	836.4
57.5°	707.7	702.5	709.5	719.9	733.8	747.7	758.2	770.3	768.6	744.3	692.1
60°	532.1	533.9	539.0	549.5	559.9	572.1	586.0	596.4	601.7	589.5	556.4
62.5°	387.8	387.8	394.7	405.1	410.4	427.8	436.5	441.7	446.9	445.1	424.3
65°	271.3	274.7	278.2	283.5	288.6	299.1	304.3	314.7	318.2	320.0	304.3
67.5°	191.3	186.1	189.6	193.0	198.2	205.2	215.6	215.6	220.8	220.8	210.4
70°	121.7	121.7	123.5	128.7	132.2	133.9	137.4	140.8	146.1	144.3	144.3
72.5°	81.7	80.0	81.7	83.5	85.2	90.4	90.4	92.2	95.6	97.4	90.4
75°	41.7	43.5	46.9	45.2	50.4	46.9	48.7	53.9	52.2	48.7	48.7
77.5°	34.8	34.8	34.8	33.1	36.5	36.5	34.8	38.3	36.5	36.5	34.8
80°	24.3	26.1	24.3	22.6	24.3	22.6	22.6	22.6	22.6	22.6	20.8
82.5°	19.1	15.7	17.4	15.7	17.4	17.4	15.7	13.9	13.9	15.7	13.9
85°	13.9	10.4	12.2	12.2	10.4	10.4	10.4	10.4	10.4	8.7	8.7
87.5°	8.7	5.2	5.2	5.2	6.9	6.9	6.9	5.2	6.9	6.9	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°	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6
2.5°	3244.8	3243.1	3246.6	3244.8	3244.8	3243.1	3244.8	3243.1	3246.6	3239.6	3241.3
5°	3244.8	3241.3	3243.1	3244.8	3246.6	3243.1	3243.1	3243.1	3246.6	3243.1	3244.8
7.5°	3237.8	3236.1	3241.3	3244.8	3243.1	3241.3	3244.8	3243.1	3246.6	3244.8	3248.3
10°	3223.9	3225.7	3229.2	3234.4	3236.1	3237.8	3241.3	3241.3	3246.6	3239.6	3243.1
12.5°	3203.1	3210.0	3218.7	3222.2	3229.2	3229.2	3232.6	3234.4	3237.8	3236.1	3241.3
15°	3177.0	3185.7	3196.1	3204.8	3213.5	3218.7	3223.9	3225.7	3230.9	3225.7	3227.4
17.5°	3145.7	3156.1	3171.8	3182.2	3196.1	3201.3	3208.3	3211.8	3217.0	3213.5	3215.2
20°	3102.2	3114.4	3131.8	3147.4	3156.1	3168.3	3177.0	3182.2	3185.7	3182.2	3183.9
22.5°	3041.4	3058.8	3081.3	3093.5	3110.9	3121.3	3123.1	3135.3	3143.9	3135.3	3138.7
25°	2970.0	2987.4	3004.8	3030.9	3046.6	3058.8	3070.9	3072.7	3081.3	3079.6	3077.9
27.5°	2851.8	2874.4	2904.0	2924.9	2945.7	2964.8	2978.8	2982.2	2990.9	2987.4	2989.2
30°	2690.1	2714.5	2742.3	2775.3	2804.9	2824.0	2841.4	2853.5	2862.2	2857.0	2855.3
32.5°	2460.6	2484.9	2514.5	2547.5	2582.3	2610.1	2631.0	2646.6	2657.1	2653.6	2644.9
35°	2198.0	2204.9	2224.1	2250.2	2279.7	2309.3	2328.4	2345.8	2357.9	2361.4	2361.4
37.5°	1928.5	1905.9	1892.0	1892.0	1909.3	1921.5	1938.9	1949.3	1968.5	1975.4	1980.6
40°	1667.6	1615.4	1566.8	1530.2	1505.9	1504.2	1504.2	1509.4	1526.8	1549.4	1570.2
42.5°	1434.6	1351.1	1276.4	1208.5	1159.9	1132.0	1119.9	1121.6	1135.5	1156.4	1191.1
45°	1248.5	1144.2	1050.3	968.6	902.5	859.0	838.2	836.4	846.8	871.2	909.5
47.5°	1104.2	992.9	886.8	792.9	721.7	674.7	650.4	643.4	650.4	672.9	718.2
50°	984.2	869.5	759.9	662.5	586.0	537.3	514.7	506.0	514.7	533.9	579.0
52.5°	872.9	754.7	652.1	558.2	476.5	434.7	410.4	405.1	410.4	433.0	469.5
55°	744.3	643.4	542.5	448.6	377.4	335.6	316.5	311.3	316.5	337.4	375.6
57.5°	617.3	530.4	441.7	356.5	295.6	259.1	241.7	234.7	246.9	260.8	306.0
60°	499.0	429.5	354.7	280.0	229.5	196.5	182.6	180.8	184.3	201.7	233.0
62.5°	391.3	333.9	274.7	213.9	172.2	158.2	140.8	139.1	142.6	153.0	177.4
65°	281.7	245.2	200.0	156.5	123.5	104.3	97.4	99.1	102.6	109.6	132.2
67.5°	196.5	170.4	139.1	109.6	85.2	76.5	69.6	67.8	69.6	81.7	93.9
70°	132.2	116.5	93.9	83.5	59.1	46.9	48.7	43.5	50.4	50.4	60.8
72.5°	86.9	76.5	62.6	48.7	41.7	33.1	33.1	31.3	34.8	36.5	45.2
75°	45.2	34.8	34.8	24.3	17.4	8.7	15.7	13.9	12.2	13.9	17.4
77.5°	31.3	26.1	24.3	19.1	17.4	13.9	13.9	13.9	13.9	15.7	17.4
80°	19.1	19.1	13.9	12.2	10.4	8.7	10.4	10.4	10.4	10.4	12.2
82.5°	12.2	10.4	10.4	8.7	8.7	6.9	6.9	6.9	6.9	6.9	10.4
85°	10.4	6.9	6.9	5.2	6.9	12.2	5.2	6.9	6.9	6.9	5.2
87.5°	3.5	5.2	5.2	5.2	3.5	1.7	3.5	5.2	5.2	8.7	6.9
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°	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6	3239.6
2.5°	3244.8	3246.6	3246.6	3244.8	3244.8	3241.3	3248.3	3243.1	3244.8	3251.8	3246.6
5°	3248.3	3250.0	3250.0	3248.3	3248.3	3248.3	3250.0	3250.0	3248.3	3246.6	3250.0
7.5°	3255.2	3253.5	3253.5	3250.0	3250.0	3246.6	3250.0	3244.8	3248.3	3244.8	3250.0
10°	3246.6	3248.3	3246.6	3244.8	3244.8	3243.1	3243.1	3237.8	3239.6	3234.4	3237.8
12.5°	3241.3	3239.6	3239.6	3236.1	3232.6	3229.2	3227.4	3222.2	3222.2	3210.0	3215.2
15°	3227.4	3229.2	3223.9	3217.0	3213.5	3204.8	3201.3	3194.4	3187.4	3178.7	3180.5
17.5°	3215.2	3210.0	3203.1	3196.1	3182.2	3175.3	3168.3	3157.8	3154.4	3143.9	3140.5
20°	3178.7	3175.3	3166.6	3154.4	3145.7	3130.0	3123.1	3112.7	3103.9	3093.5	3088.3
22.5°	3131.8	3128.3	3117.9	3105.7	3091.8	3084.8	3077.9	3058.8	3050.0	3039.6	3037.9
25°	3072.7	3067.4	3057.0	3043.1	3036.1	3017.0	3010.0	2996.1	2992.7	2982.2	2980.5
27.5°	2982.2	2975.3	2963.1	2945.7	2933.5	2921.4	2914.4	2904.0	2900.5	2890.1	2888.3
30°	2846.6	2837.9	2813.5	2806.6	2785.7	2773.6	2773.6	2759.6	2761.4	2754.4	2754.4
32.5°	2632.7	2618.8	2599.7	2585.7	2571.8	2564.9	2564.9	2559.7	2563.2	2563.2	2566.6
35°	2349.3	2330.2	2319.7	2311.0	2311.0	2317.9	2338.8	2344.1	2354.5	2363.2	2370.2
37.5°	1985.8	1984.1	1996.3	2006.7	2032.8	2062.4	2098.9	2130.2	2159.7	2180.6	2201.4
40°	1592.8	1636.3	1671.1	1719.8	1759.8	1817.2	1883.2	1937.1	1987.6	2024.1	2062.4
42.5°	1243.3	1299.0	1372.0	1443.3	1514.6	1592.8	1679.8	1754.6	1820.6	1871.1	1911.1
45°	968.6	1045.1	1133.8	1224.2	1316.4	1413.8	1504.2	1580.7	1650.2	1702.4	1742.4
47.5°	780.8	864.2	965.1	1064.2	1168.5	1271.1	1372.0	1438.1	1495.4	1537.2	1573.7
50°	645.1	733.8	839.9	952.9	1057.2	1159.9	1246.8	1311.1	1358.1	1394.6	1417.2
52.5°	539.0	632.9	746.0	859.0	963.3	1057.2	1135.5	1184.2	1222.5	1248.5	1269.4
55°	445.1	535.6	641.7	747.7	850.3	939.0	1003.3	1039.9	1069.4	1085.1	1097.2
57.5°	363.4	446.9	544.3	641.7	730.3	803.4	853.8	890.3	904.2	916.4	914.7
60°	285.2	363.4	452.1	535.6	612.1	671.2	707.7	728.6	739.0	744.3	740.8
62.5°	224.3	295.6	363.4	436.5	492.1	542.5	577.3	577.3	582.5	584.3	589.5
65°	166.9	220.8	280.0	333.9	379.1	412.1	431.3	436.5	443.4	441.7	438.2
67.5°	123.5	163.5	206.9	246.9	278.2	299.1	313.0	325.2	323.5	320.0	318.2
70°	85.2	111.3	149.6	173.9	196.5	217.4	220.8	222.6	224.3	226.1	222.6
72.5°	59.1	78.2	99.1	120.0	133.9	142.6	151.3	153.0	153.0	153.0	151.3
75°	29.6	40.0	59.1	67.8	80.0	83.5	90.4	90.4	95.6	88.7	86.9
77.5°	26.1	31.3	41.7	48.7	53.9	59.1	60.8	66.1	64.3	60.8	62.6
80°	15.7	19.1	26.1	29.6	36.5	38.3	40.0	41.7	40.0	41.7	41.7
82.5°	12.2	13.9	17.4	17.4	22.6	22.6	24.3	24.3	26.1	26.1	26.1
85°	6.9	12.2	10.4	20.8	13.9	13.9	17.4	20.8	17.4	17.4	20.8
87.5°	6.9	6.9	5.2	6.9	6.9	6.9	8.7	10.4	10.4	12.2	10.4
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: P249325

CATALOG NUMBER: LSR8B60D010 EC8B60840 8LBDW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3239.6	3239.6	3239.6	3239.6
2.5°	3244.8	3248.3	3243.1	3241.3
5°	3250.0	3250.0	3246.6	3246.6
7.5°	3250.0	3250.0	3244.8	3241.3
10°	3236.1	3236.1	3230.9	3227.4
12.5°	3210.0	3210.0	3208.3	3203.1
15°	3177.0	3177.0	3170.0	3164.8
17.5°	3131.8	3135.3	3126.6	3126.6
20°	3083.1	3081.3	3074.4	3070.9
22.5°	3032.7	3029.2	3027.4	3017.0
25°	2978.8	2975.3	2970.0	2964.8
27.5°	2886.6	2884.9	2879.6	2872.7
30°	2745.7	2744.0	2737.0	2737.0
32.5°	2563.2	2561.4	2554.5	2556.2
35°	2373.6	2380.6	2377.1	2370.2
37.5°	2215.4	2220.6	2224.1	2220.6
40°	2083.2	2098.9	2100.6	2104.1
42.5°	1942.4	1963.2	1970.2	1973.6
45°	1773.7	1792.8	1808.5	1805.0
47.5°	1601.5	1615.4	1629.3	1618.9
50°	1436.3	1445.0	1450.3	1450.3
52.5°	1279.9	1279.9	1278.1	1279.9
55°	1100.7	1100.7	1093.8	1097.2
57.5°	912.9	916.4	911.2	902.5
60°	739.0	730.3	726.9	721.7
62.5°	575.6	575.6	563.4	579.0
65°	431.3	426.0	420.8	419.1
67.5°	313.0	311.3	306.0	304.3
70°	220.8	213.9	212.1	208.7
72.5°	147.8	147.8	144.3	144.3
75°	90.4	81.7	80.0	81.7
77.5°	62.6	60.8	60.8	59.1
80°	41.7	40.0	43.5	38.3
82.5°	26.1	27.8	26.1	27.8
85°	17.4	20.8	19.1	19.1
87.5°	10.4	10.4	10.4	10.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)