

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: P249606

Luminaire Tested: **LSR8B80D010 EC8B809727 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249606
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 EC8B809727 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5843.0 lumens
Efficiency: N/A
Efficacy: 78.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

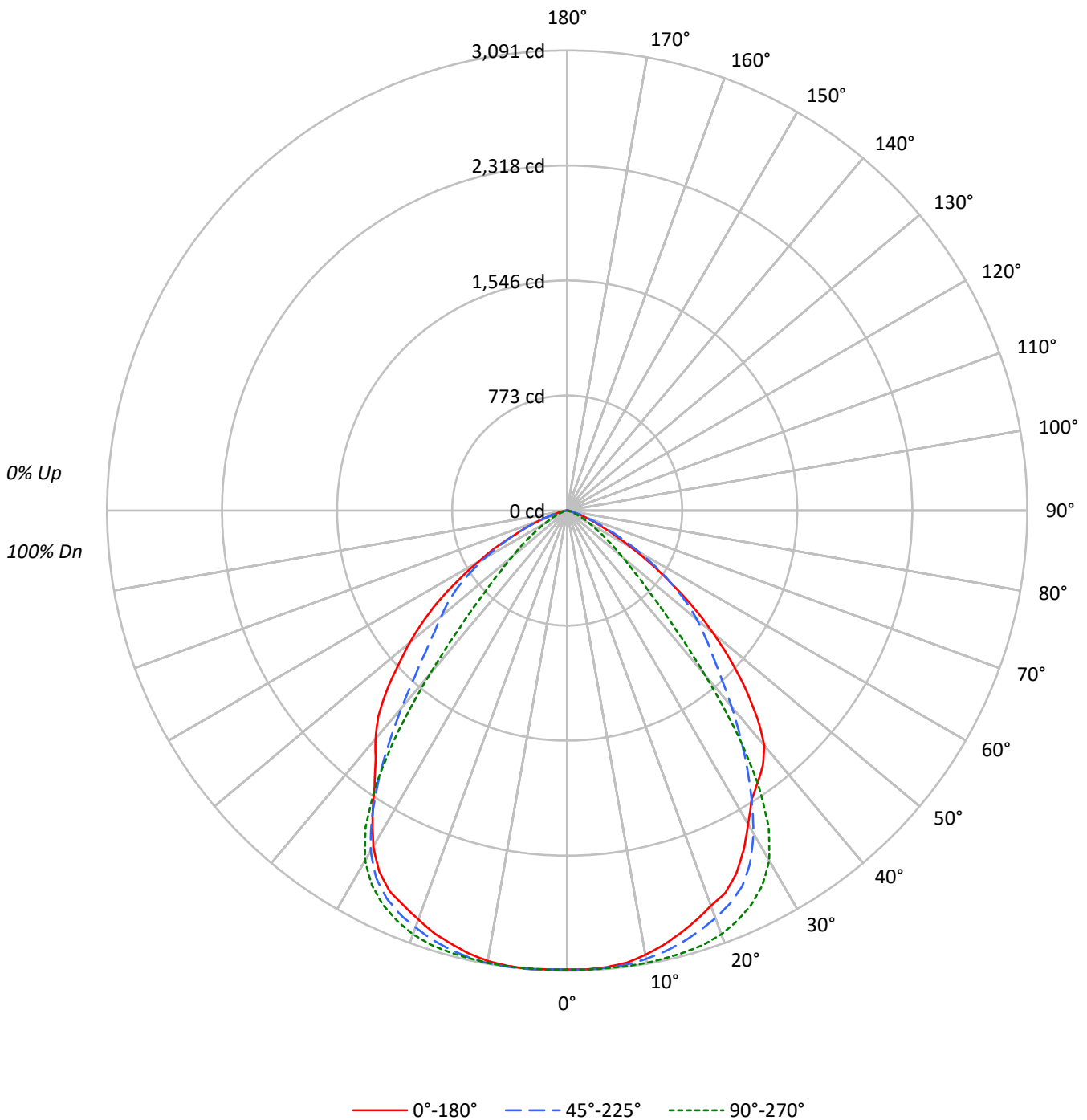
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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													
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10										
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°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.2	5.0
10°-20°	854.4	14.6
20°-30°	1296.9	22.2
30°-40°	1362.1	23.3
40°-50°	1021.2	17.5
50°-60°	655.2	11.2
60°-70°	280.3	4.8
70°-80°	66.2	1.1
80°-90°	12.3	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°	2445.6	41.9
0°-40°	3807.7	65.2
0°-60°	5484.2	93.9
0°-90°	5843.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5843.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3083	3083	3083	3083	3083	
5°	3078	3083	3086	3091	3090	292
15°	2939	3000	3070	3050	3012	829
25°	2689	2783	2924	2871	2821	1228
35°	2231	2106	2232	2206	2256	1400
45°	1694	1385	796	1345	1718	1298
55°	857	857	296	894	1044	778
65°	258	304	94	392	399	276
75°	40	46	13	79	78	58
85°	13	8	7	13	18	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°	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9
2.5°	3084.5	3087.9	3086.2	3086.2	3084.5	3086.2	3086.2	3089.5	3089.5	3086.2	3084.5
5°	3077.9	3081.2	3081.2	3077.9	3077.9	3086.2	3081.2	3084.5	3084.5	3082.9	3082.9
7.5°	3063.0	3063.0	3069.6	3064.7	3064.7	3069.6	3068.0	3071.3	3074.6	3076.3	3076.3
10°	3029.9	3033.2	3034.9	3034.9	3036.6	3041.5	3044.8	3051.5	3054.7	3058.1	3059.7
12.5°	2988.6	2993.5	2995.2	2993.5	2998.5	3005.1	3013.4	3021.7	3026.6	3033.2	3038.2
15°	2938.9	2938.9	2942.2	2947.2	2950.5	2960.4	2968.7	2978.6	2991.9	3000.2	3008.4
17.5°	2884.3	2887.6	2892.6	2892.6	2899.2	2915.7	2920.7	2935.6	2950.5	2958.8	2975.3
20°	2824.8	2828.0	2833.0	2836.3	2844.6	2857.8	2867.8	2881.0	2897.6	2912.5	2929.0
22.5°	2778.4	2771.8	2775.1	2778.4	2786.7	2798.3	2809.9	2826.4	2842.9	2857.8	2874.4
25°	2689.0	2690.7	2695.7	2699.0	2708.9	2718.8	2732.1	2751.9	2766.8	2783.4	2801.6
27.5°	2568.3	2569.9	2578.2	2578.2	2586.4	2603.0	2611.3	2627.8	2647.7	2664.2	2685.8
30°	2430.9	2434.2	2434.2	2440.8	2445.8	2454.1	2462.3	2478.9	2488.8	2503.7	2533.5
32.5°	2305.1	2308.4	2306.8	2305.1	2300.2	2298.5	2296.8	2300.2	2303.5	2308.4	2320.0
35°	2230.7	2222.4	2215.8	2204.2	2191.0	2174.4	2159.5	2139.7	2121.4	2106.5	2090.0
37.5°	2159.5	2157.8	2147.9	2131.4	2104.9	2075.1	2040.4	1997.3	1954.3	1908.0	1863.3
40°	2060.2	2055.2	2047.0	2023.8	1994.0	1957.6	1911.3	1858.3	1788.8	1717.7	1644.9
42.5°	1891.4	1893.1	1883.2	1864.9	1836.8	1802.1	1754.1	1696.2	1621.7	1537.3	1443.0
45°	1694.5	1694.5	1691.2	1676.3	1656.5	1628.3	1591.9	1543.9	1471.1	1385.0	1284.1
47.5°	1489.3	1491.0	1486.0	1482.7	1474.4	1456.2	1429.7	1393.3	1342.0	1259.3	1158.3
50°	1280.8	1280.8	1289.1	1287.4	1287.4	1280.8	1269.2	1247.7	1203.0	1136.8	1042.5
52.5°	1072.3	1075.6	1080.6	1087.2	1095.5	1108.7	1095.5	1085.5	1057.4	1006.1	925.0
55°	857.2	860.5	868.8	880.3	890.3	903.5	906.8	906.8	891.9	857.2	796.0
57.5°	673.5	668.5	675.2	685.1	698.3	711.6	721.5	733.1	731.4	708.3	658.6
60°	506.4	508.0	513.0	522.9	532.9	544.4	557.7	567.6	572.6	561.0	529.5
62.5°	369.0	369.0	375.6	385.5	390.5	407.1	415.3	420.3	425.3	423.6	403.8
65°	258.2	261.4	264.8	269.7	274.7	284.6	289.6	299.5	302.8	304.5	289.6
67.5°	182.0	177.1	180.4	183.7	188.6	195.3	205.2	205.2	210.1	210.1	200.2
70°	115.8	115.8	117.5	122.4	125.8	127.4	130.7	134.0	139.0	137.3	137.3
72.5°	77.8	76.1	77.8	79.4	81.1	86.0	86.0	87.7	91.0	92.7	86.0
75°	39.7	41.4	44.7	43.0	48.0	44.7	46.3	51.3	49.6	46.3	46.3
77.5°	33.1	33.1	33.1	31.5	34.7	34.7	33.1	36.4	34.7	34.7	33.1
80°	23.2	24.8	23.2	21.5	23.2	21.5	21.5	21.5	21.5	21.5	19.8
82.5°	18.2	14.9	16.6	14.9	16.6	16.6	14.9	13.2	13.2	14.9	13.2
85°	13.2	9.9	11.6	11.6	9.9	9.9	9.9	9.9	9.9	8.3	8.3
87.5°	8.3	5.0	5.0	5.0	6.6	6.6	6.6	5.0	6.6	6.6	3.3
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°	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9
2.5°	3087.9	3086.2	3089.5	3087.9	3087.9	3086.2	3087.9	3086.2	3089.5	3082.9	3084.5
5°	3087.9	3084.5	3086.2	3087.9	3089.5	3086.2	3086.2	3086.2	3089.5	3086.2	3087.9
7.5°	3081.2	3079.6	3084.5	3087.9	3086.2	3084.5	3087.9	3086.2	3089.5	3087.9	3091.1
10°	3068.0	3069.6	3073.0	3077.9	3079.6	3081.2	3084.5	3084.5	3089.5	3082.9	3086.2
12.5°	3048.1	3054.7	3063.0	3066.3	3073.0	3073.0	3076.3	3077.9	3081.2	3079.6	3084.5
15°	3023.3	3031.6	3041.5	3049.8	3058.1	3063.0	3068.0	3069.6	3074.6	3069.6	3071.3
17.5°	2993.5	3003.4	3018.3	3028.3	3041.5	3046.5	3053.1	3056.4	3061.4	3058.1	3059.7
20°	2952.1	2963.8	2980.3	2995.2	3003.4	3015.0	3023.3	3028.3	3031.6	3028.3	3029.9
22.5°	2894.2	2910.8	2932.3	2943.9	2960.4	2970.4	2972.0	2983.6	2991.9	2983.6	2986.9
25°	2826.4	2842.9	2859.5	2884.3	2899.2	2910.8	2922.4	2924.0	2932.3	2930.6	2929.0
27.5°	2713.9	2735.4	2763.5	2783.4	2803.2	2821.4	2834.7	2838.0	2846.3	2842.9	2844.6
30°	2560.0	2583.2	2609.6	2641.1	2669.2	2687.4	2703.9	2715.5	2723.8	2718.8	2717.2
32.5°	2341.5	2364.7	2392.8	2424.3	2457.4	2483.8	2503.7	2518.6	2528.5	2525.2	2517.0
35°	2091.7	2098.3	2116.5	2141.3	2169.4	2197.6	2215.8	2232.3	2243.9	2247.2	2247.2
37.5°	1835.2	1813.7	1800.4	1800.4	1817.0	1828.5	1845.1	1855.0	1873.2	1879.8	1884.8
40°	1586.9	1537.3	1491.0	1456.2	1433.1	1431.4	1431.4	1436.3	1452.9	1474.4	1494.3
42.5°	1365.2	1285.8	1214.6	1150.1	1103.8	1077.3	1065.7	1067.4	1080.6	1100.4	1133.5
45°	1188.1	1088.9	999.5	921.7	858.8	817.5	797.6	796.0	805.9	829.0	865.5
47.5°	1050.8	944.9	843.9	754.6	686.8	642.1	618.9	612.3	618.9	640.4	683.4
50°	936.6	827.4	723.2	630.5	557.7	511.3	489.8	481.5	489.8	508.0	551.0
52.5°	830.7	718.2	620.6	531.2	453.4	413.7	390.5	385.5	390.5	412.0	446.8
55°	708.3	612.3	516.3	426.9	359.1	319.4	301.2	296.2	301.2	321.0	357.4
57.5°	587.5	504.7	420.3	339.2	281.3	246.5	230.0	223.4	235.0	248.2	291.2
60°	474.9	408.7	337.6	266.4	218.4	187.0	173.7	172.1	175.4	192.0	221.7
62.5°	372.3	317.7	261.4	203.5	163.8	150.6	134.0	132.4	135.7	145.6	168.8
65°	268.1	233.3	190.3	148.9	117.5	99.3	92.7	94.3	97.6	104.3	125.8
67.5°	187.0	162.2	132.4	104.3	81.1	72.8	66.2	64.5	66.2	77.8	89.4
70°	125.8	110.9	89.4	79.4	56.3	44.7	46.3	41.4	48.0	48.0	57.9
72.5°	82.7	72.8	59.6	46.3	39.7	31.5	31.5	29.8	33.1	34.7	43.0
75°	43.0	33.1	33.1	23.2	16.6	8.3	14.9	13.2	11.6	13.2	16.6
77.5°	29.8	24.8	23.2	18.2	16.6	13.2	13.2	13.2	13.2	14.9	16.6
80°	18.2	18.2	13.2	11.6	9.9	8.3	9.9	9.9	9.9	9.9	11.6
82.5°	11.6	9.9	9.9	8.3	8.3	6.6	6.6	6.6	6.6	6.6	9.9
85°	9.9	6.6	6.6	5.0	6.6	11.6	5.0	6.6	6.6	6.6	5.0
87.5°	3.3	5.0	5.0	5.0	3.3	1.7	3.3	5.0	5.0	8.3	6.6
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9	3082.9
2.5°	3087.9	3089.5	3089.5	3087.9	3087.9	3084.5	3091.1	3086.2	3087.9	3094.5	3089.5
5°	3091.1	3092.8	3092.8	3091.1	3091.1	3091.1	3092.8	3092.8	3091.1	3089.5	3092.8
7.5°	3097.8	3096.1	3096.1	3092.8	3092.8	3089.5	3092.8	3087.9	3091.1	3087.9	3092.8
10°	3089.5	3091.1	3089.5	3087.9	3087.9	3086.2	3086.2	3081.2	3082.9	3077.9	3081.2
12.5°	3084.5	3082.9	3082.9	3079.6	3076.3	3073.0	3071.3	3066.3	3066.3	3054.7	3059.7
15°	3071.3	3073.0	3068.0	3061.4	3058.1	3049.8	3046.5	3039.8	3033.2	3025.0	3026.6
17.5°	3059.7	3054.7	3048.1	3041.5	3028.3	3021.7	3015.0	3005.1	3001.8	2991.9	2988.6
20°	3025.0	3021.7	3013.4	3001.8	2993.5	2978.6	2972.0	2962.1	2953.8	2943.9	2938.9
22.5°	2980.3	2977.0	2967.0	2955.5	2942.2	2935.6	2929.0	2910.8	2902.5	2892.6	2890.9
25°	2924.0	2919.1	2909.1	2895.9	2889.3	2871.1	2864.4	2851.2	2847.9	2838.0	2836.3
27.5°	2838.0	2831.4	2819.8	2803.2	2791.6	2780.1	2773.5	2763.5	2760.2	2750.3	2748.6
30°	2708.9	2700.6	2677.5	2670.9	2651.0	2639.4	2639.4	2626.2	2627.8	2621.2	2621.2
32.5°	2505.4	2492.1	2473.9	2460.7	2447.4	2440.8	2440.8	2435.8	2439.2	2439.2	2442.5
35°	2235.6	2217.4	2207.5	2199.2	2199.2	2205.8	2225.7	2230.7	2240.6	2248.9	2255.5
37.5°	1889.8	1888.1	1899.7	1909.6	1934.5	1962.6	1997.3	2027.1	2055.2	2075.1	2095.0
40°	1515.8	1557.2	1590.3	1636.6	1674.6	1729.3	1792.1	1843.4	1891.4	1926.2	1962.6
42.5°	1183.2	1236.1	1305.6	1373.5	1441.3	1515.8	1598.6	1669.7	1732.6	1780.6	1818.6
45°	921.7	994.5	1078.9	1165.0	1252.7	1345.4	1431.4	1504.2	1570.4	1620.1	1658.1
47.5°	743.0	822.4	918.4	1012.7	1112.0	1209.6	1305.6	1368.5	1423.1	1462.8	1497.6
50°	613.9	698.3	799.3	906.8	1006.1	1103.8	1186.5	1247.7	1292.4	1327.1	1348.6
52.5°	513.0	602.3	709.9	817.5	916.7	1006.1	1080.6	1126.9	1163.3	1188.1	1208.0
55°	423.6	509.7	610.6	711.6	809.2	893.6	954.8	989.6	1017.7	1032.6	1044.2
57.5°	345.9	425.3	518.0	610.6	695.0	764.5	812.5	847.3	860.5	872.1	870.4
60°	271.4	345.9	430.2	509.7	582.5	638.7	673.5	693.4	703.3	708.3	704.9
62.5°	213.5	281.3	345.9	415.3	468.3	516.3	549.4	549.4	554.4	556.0	561.0
65°	158.8	210.1	266.4	317.7	360.7	392.2	410.4	415.3	422.0	420.3	417.0
67.5°	117.5	155.6	196.9	235.0	264.8	284.6	297.8	309.5	307.8	304.5	302.8
70°	81.1	105.9	142.3	165.5	187.0	206.9	210.1	211.8	213.5	215.1	211.8
72.5°	56.3	74.5	94.3	114.2	127.4	135.7	144.0	145.6	145.6	145.6	144.0
75°	28.1	38.1	56.3	64.5	76.1	79.4	86.0	86.0	91.0	84.4	82.7
77.5°	24.8	29.8	39.7	46.3	51.3	56.3	57.9	62.9	61.2	57.9	59.6
80°	14.9	18.2	24.8	28.1	34.7	36.4	38.1	39.7	38.1	39.7	39.7
82.5°	11.6	13.2	16.6	16.6	21.5	21.5	23.2	23.2	24.8	24.8	24.8
85°	6.6	11.6	9.9	19.8	13.2	13.2	16.6	19.8	16.6	16.6	19.8
87.5°	6.6	6.6	5.0	6.6	6.6	6.6	8.3	9.9	9.9	11.6	9.9
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: P249606

CATALOG NUMBER: LSR8B80D010 EC8B809727 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3082.9	3082.9	3082.9	3082.9
2.5°	3087.9	3091.1	3086.2	3084.5
5°	3092.8	3092.8	3089.5	3089.5
7.5°	3092.8	3092.8	3087.9	3084.5
10°	3079.6	3079.6	3074.6	3071.3
12.5°	3054.7	3054.7	3053.1	3048.1
15°	3023.3	3023.3	3016.7	3011.7
17.5°	2980.3	2983.6	2975.3	2975.3
20°	2934.0	2932.3	2925.7	2922.4
22.5°	2886.0	2882.7	2881.0	2871.1
25°	2834.7	2831.4	2826.4	2821.4
27.5°	2747.0	2745.3	2740.3	2733.7
30°	2612.9	2611.3	2604.7	2604.7
32.5°	2439.2	2437.5	2430.9	2432.6
35°	2258.8	2265.4	2262.1	2255.5
37.5°	2108.2	2113.2	2116.5	2113.2
40°	1982.4	1997.3	1999.0	2002.3
42.5°	1848.4	1868.3	1874.9	1878.2
45°	1687.9	1706.1	1721.0	1717.7
47.5°	1524.1	1537.3	1550.5	1540.6
50°	1366.9	1375.1	1380.1	1380.1
52.5°	1217.9	1217.9	1216.3	1217.9
55°	1047.5	1047.5	1040.9	1044.2
57.5°	868.8	872.1	867.1	858.8
60°	703.3	695.0	691.7	686.8
62.5°	547.8	547.8	536.2	551.0
65°	410.4	405.4	400.4	398.8
67.5°	297.8	296.2	291.2	289.6
70°	210.1	203.5	201.9	198.6
72.5°	140.7	140.7	137.3	137.3
75°	86.0	77.8	76.1	77.8
77.5°	59.6	57.9	57.9	56.3
80°	39.7	38.1	41.4	36.4
82.5°	24.8	26.5	24.8	26.5
85°	16.6	19.8	18.2	18.2
87.5°	9.9	9.9	9.9	9.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)