

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: P249614

Luminaire Tested: **LSR8B70D010 EC8B70930 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249614
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: LSR8B70D010 EC8B70930 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6231.7 lumens
Efficiency: N/A
Efficacy: 82.1 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

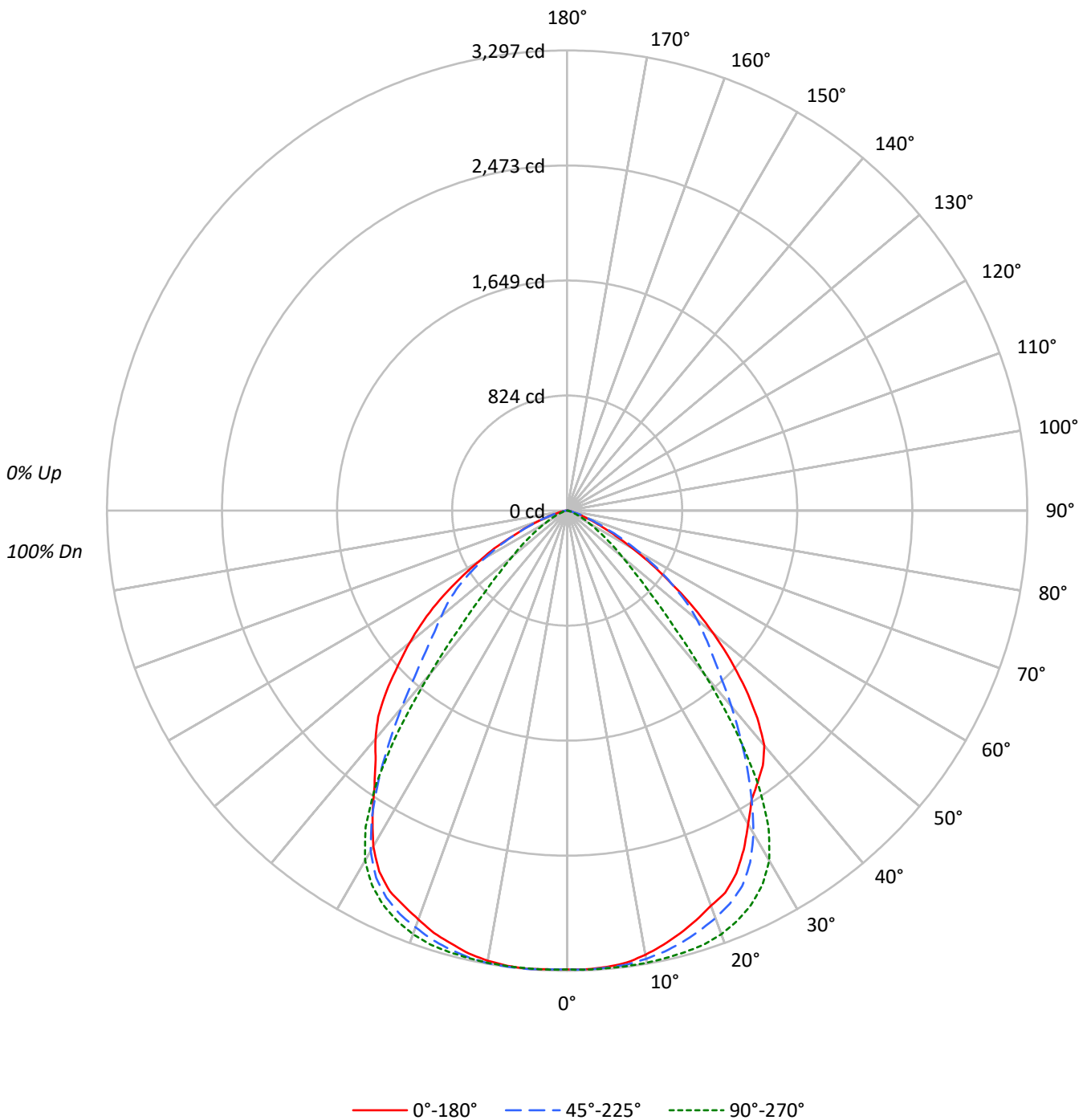
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	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°	313.8	5.0
10°-20°	911.3	14.6
20°-30°	1383.2	22.2
30°-40°	1452.7	23.3
40°-50°	1089.2	17.5
50°-60°	698.8	11.2
60°-70°	298.9	4.8
70°-80°	70.6	1.1
80°-90°	13.1	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°	2608.2	41.9
0°-40°	4060.9	65.2
0°-60°	5848.9	93.9
0°-90°	6231.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6231.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3288	3288	3288	3288	3288	
5°	3283	3288	3292	3297	3295	312
15°	3134	3200	3274	3253	3212	884
25°	2868	2968	3118	3062	3009	1310
35°	2379	2247	2381	2352	2406	1493
45°	1807	1477	849	1435	1832	1384
55°	914	914	316	953	1114	829
65°	275	325	101	418	425	294
75°	42	49	14	85	83	62
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°	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9
2.5°	3289.7	3293.3	3291.5	3291.5	3289.7	3291.5	3291.5	3295.1	3295.1	3291.5	3289.7
5°	3282.6	3286.2	3286.2	3282.6	3282.6	3291.5	3286.2	3289.7	3289.7	3287.9	3287.9
7.5°	3266.8	3266.8	3273.8	3268.5	3268.5	3273.8	3272.1	3275.6	3279.1	3280.9	3280.9
10°	3231.5	3235.0	3236.8	3236.8	3238.6	3243.8	3247.3	3254.4	3258.0	3261.4	3263.2
12.5°	3187.3	3192.6	3194.4	3192.6	3198.0	3204.9	3213.8	3222.7	3227.9	3235.0	3240.3
15°	3134.4	3134.4	3137.9	3143.2	3146.8	3157.3	3166.2	3176.7	3190.8	3199.7	3208.5
17.5°	3076.1	3079.7	3085.0	3085.0	3092.1	3109.7	3115.0	3130.8	3146.8	3155.6	3173.2
20°	3012.7	3016.2	3021.4	3025.0	3033.8	3047.9	3058.5	3072.7	3090.3	3106.2	3123.8
22.5°	2963.3	2956.2	2959.7	2963.3	2972.0	2984.4	2996.8	3014.4	3032.1	3047.9	3065.6
25°	2867.9	2869.6	2874.9	2878.5	2889.0	2899.7	2913.8	2935.0	2950.8	2968.5	2987.9
27.5°	2739.1	2740.8	2749.7	2749.7	2758.4	2776.2	2784.9	2802.6	2823.8	2841.4	2864.4
30°	2592.6	2596.1	2596.1	2603.2	2608.5	2617.3	2626.1	2643.8	2654.3	2670.2	2702.1
32.5°	2458.5	2461.9	2460.1	2458.5	2453.2	2451.4	2449.6	2453.2	2456.7	2461.9	2474.3
35°	2379.1	2370.2	2363.2	2350.8	2336.7	2319.0	2303.1	2282.0	2262.5	2246.7	2229.0
37.5°	2303.1	2301.4	2290.8	2273.2	2244.9	2213.2	2176.1	2130.2	2084.3	2034.8	1987.2
40°	2197.3	2191.9	2183.1	2158.5	2126.6	2087.9	2038.4	1981.9	1907.8	1831.9	1754.3
42.5°	2017.2	2019.0	2008.4	1989.0	1959.1	1922.0	1870.7	1809.0	1729.6	1639.6	1539.0
45°	1807.3	1807.3	1803.7	1787.8	1766.6	1736.7	1697.8	1646.6	1569.0	1477.1	1369.5
47.5°	1588.3	1590.1	1584.9	1581.3	1572.4	1553.0	1524.9	1486.0	1431.3	1343.1	1235.3
50°	1366.1	1366.1	1374.8	1373.1	1373.1	1366.1	1353.7	1330.7	1283.1	1212.5	1111.9
52.5°	1143.6	1147.1	1152.5	1159.6	1168.3	1182.4	1168.3	1157.8	1127.7	1073.0	986.6
55°	914.2	917.8	926.5	938.8	949.5	963.6	967.1	967.1	951.3	914.2	848.9
57.5°	718.3	713.0	720.1	730.7	744.8	758.9	769.5	781.8	780.1	755.3	702.4
60°	540.1	541.8	547.0	557.7	568.3	580.7	594.8	605.3	610.6	598.3	564.8
62.5°	393.6	393.6	400.6	411.2	416.5	434.2	443.0	448.3	453.6	451.8	430.6
65°	275.3	278.8	282.4	287.6	292.9	303.6	308.8	319.4	323.0	324.8	308.8
67.5°	194.2	188.9	192.4	195.8	201.2	208.3	218.8	218.8	224.1	224.1	213.6
70°	123.5	123.5	125.3	130.6	134.1	135.9	139.5	142.9	148.2	146.5	146.5
72.5°	83.0	81.2	83.0	84.7	86.5	91.8	91.8	93.5	97.1	98.9	91.8
75°	42.4	44.2	47.6	45.8	51.1	47.6	49.4	54.7	52.9	49.4	49.4
77.5°	35.3	35.3	35.3	33.5	37.1	37.1	35.3	38.8	37.1	37.1	35.3
80°	24.7	26.5	24.7	23.0	24.7	23.0	23.0	23.0	23.0	23.0	21.2
82.5°	19.4	15.9	17.7	15.9	17.7	17.7	15.9	14.1	14.1	15.9	14.1
85°	14.1	10.5	12.3	12.3	10.5	10.5	10.5	10.5	10.5	8.9	8.9
87.5°	8.9	5.3	5.3	5.3	7.1	7.1	7.1	5.3	7.1	7.1	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°	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9
2.5°	3293.3	3291.5	3295.1	3293.3	3293.3	3291.5	3293.3	3291.5	3295.1	3287.9	3289.7
5°	3293.3	3289.7	3291.5	3293.3	3295.1	3291.5	3291.5	3291.5	3295.1	3291.5	3293.3
7.5°	3286.2	3284.4	3289.7	3293.3	3291.5	3289.7	3293.3	3291.5	3295.1	3293.3	3296.7
10°	3272.1	3273.8	3277.4	3282.6	3284.4	3286.2	3289.7	3289.7	3295.1	3287.9	3291.5
12.5°	3250.9	3258.0	3266.8	3270.3	3277.4	3277.4	3280.9	3282.6	3286.2	3284.4	3289.7
15°	3224.4	3233.2	3243.8	3252.7	3261.4	3266.8	3272.1	3273.8	3279.1	3273.8	3275.6
17.5°	3192.6	3203.3	3219.1	3229.7	3243.8	3249.1	3256.2	3259.6	3265.0	3261.4	3263.2
20°	3148.6	3160.9	3178.5	3194.4	3203.3	3215.6	3224.4	3229.7	3233.2	3229.7	3231.5
22.5°	3086.8	3104.4	3127.4	3139.7	3157.3	3167.9	3169.7	3182.1	3190.8	3182.1	3185.5
25°	3014.4	3032.1	3049.7	3076.1	3092.1	3104.4	3116.7	3118.5	3127.4	3125.6	3123.8
27.5°	2894.3	2917.3	2947.3	2968.5	2989.7	3009.1	3023.2	3026.7	3035.6	3032.1	3033.8
30°	2730.2	2755.0	2783.2	2816.7	2846.8	2866.2	2883.8	2896.1	2905.0	2899.7	2897.9
32.5°	2497.3	2522.0	2552.0	2585.5	2620.8	2649.0	2670.2	2686.1	2696.7	2693.2	2684.3
35°	2230.8	2237.9	2257.2	2283.7	2313.7	2343.8	2363.2	2380.8	2393.1	2396.7	2396.7
37.5°	1957.3	1934.3	1920.2	1920.2	1937.8	1950.2	1967.8	1978.5	1997.8	2004.9	2010.2
40°	1692.5	1639.6	1590.1	1553.0	1528.4	1526.6	1526.6	1531.8	1549.6	1572.4	1593.7
42.5°	1456.1	1371.3	1295.4	1226.6	1177.2	1148.9	1136.6	1138.4	1152.5	1173.7	1208.9
45°	1267.2	1161.2	1066.0	983.0	916.0	871.8	850.6	848.9	859.5	884.1	923.0
47.5°	1120.7	1007.8	900.1	804.8	732.5	684.7	660.0	653.0	660.0	683.0	728.9
50°	998.9	882.5	771.2	672.4	594.8	545.4	522.4	513.5	522.4	541.8	587.6
52.5°	885.9	766.0	661.8	566.6	483.6	441.2	416.5	411.2	416.5	439.4	476.5
55°	755.3	653.0	550.6	455.4	383.0	340.7	321.2	315.9	321.2	342.4	381.3
57.5°	626.5	538.3	448.3	361.7	300.1	263.0	245.3	238.2	250.5	264.7	310.6
60°	506.5	436.0	360.1	284.2	232.9	199.4	185.3	183.5	187.1	204.7	236.4
62.5°	397.1	338.9	278.8	217.1	174.8	160.6	142.9	141.2	144.7	155.3	180.0
65°	286.0	248.9	203.0	158.8	125.3	105.9	98.9	100.7	104.1	111.2	134.1
67.5°	199.4	173.0	141.2	111.2	86.5	77.7	70.6	68.8	70.6	83.0	95.3
70°	134.1	118.3	95.3	84.7	60.0	47.6	49.4	44.2	51.1	51.1	61.8
72.5°	88.2	77.7	63.6	49.4	42.4	33.5	33.5	31.8	35.3	37.1	45.8
75°	45.8	35.3	35.3	24.7	17.7	8.9	15.9	14.1	12.3	14.1	17.7
77.5°	31.8	26.5	24.7	19.4	17.7	14.1	14.1	14.1	14.1	15.9	17.7
80°	19.4	19.4	14.1	12.3	10.5	8.9	10.5	10.5	10.5	10.5	12.3
82.5°	12.3	10.5	10.5	8.9	8.9	7.1	7.1	7.1	7.1	7.1	10.5
85°	10.5	7.1	7.1	5.3	7.1	12.3	5.3	7.1	7.1	7.1	5.3
87.5°	3.6	5.3	5.3	5.3	3.6	1.8	3.6	5.3	5.3	8.9	7.1
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°	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9	3287.9
2.5°	3293.3	3295.1	3295.1	3293.3	3293.3	3289.7	3296.7	3291.5	3293.3	3300.3	3295.1
5°	3296.7	3298.5	3298.5	3296.7	3296.7	3296.7	3298.5	3298.5	3296.7	3295.1	3298.5
7.5°	3303.8	3302.0	3302.0	3298.5	3298.5	3295.1	3298.5	3293.3	3296.7	3293.3	3298.5
10°	3295.1	3296.7	3295.1	3293.3	3293.3	3291.5	3291.5	3286.2	3287.9	3282.6	3286.2
12.5°	3289.7	3287.9	3287.9	3284.4	3280.9	3277.4	3275.6	3270.3	3270.3	3258.0	3263.2
15°	3275.6	3277.4	3272.1	3265.0	3261.4	3252.7	3249.1	3242.0	3235.0	3226.2	3227.9
17.5°	3263.2	3258.0	3250.9	3243.8	3229.7	3222.7	3215.6	3204.9	3201.5	3190.8	3187.3
20°	3226.2	3222.7	3213.8	3201.5	3192.6	3176.7	3169.7	3159.1	3150.2	3139.7	3134.4
22.5°	3178.5	3175.0	3164.4	3152.0	3137.9	3130.8	3123.8	3104.4	3095.5	3085.0	3083.2
25°	3118.5	3113.2	3102.6	3088.5	3081.4	3062.0	3054.9	3040.8	3037.3	3026.7	3025.0
27.5°	3026.7	3019.6	3007.3	2989.7	2977.3	2964.9	2958.0	2947.3	2943.9	2933.2	2931.4
30°	2889.0	2880.3	2855.5	2848.5	2827.3	2814.9	2814.9	2800.8	2802.6	2795.5	2795.5
32.5°	2672.0	2657.9	2638.5	2624.4	2610.2	2603.2	2603.2	2597.9	2601.4	2601.4	2605.0
35°	2384.4	2365.0	2354.3	2345.5	2345.5	2352.5	2373.7	2379.1	2389.6	2398.5	2405.6
37.5°	2015.4	2013.8	2026.1	2036.6	2063.1	2093.1	2130.2	2162.0	2191.9	2213.2	2234.3
40°	1616.6	1660.8	1696.1	1745.5	1786.0	1844.3	1911.3	1966.0	2017.2	2054.3	2093.1
42.5°	1261.9	1318.3	1392.5	1464.8	1537.2	1616.6	1704.9	1780.7	1847.9	1899.0	1939.6
45°	983.0	1060.7	1150.7	1242.5	1336.0	1434.9	1526.6	1604.3	1674.9	1727.8	1768.4
47.5°	792.4	877.2	979.5	1080.1	1186.0	1290.0	1392.5	1459.5	1517.7	1560.1	1597.2
50°	654.8	744.8	852.4	967.1	1073.0	1177.2	1265.4	1330.7	1378.4	1415.4	1438.4
52.5°	547.0	642.4	757.1	871.8	977.7	1073.0	1152.5	1201.8	1240.7	1267.2	1288.4
55°	451.8	543.6	651.3	758.9	863.1	953.0	1018.3	1055.4	1085.4	1101.3	1113.6
57.5°	368.9	453.6	552.4	651.3	741.2	815.4	866.5	903.6	917.8	930.1	928.3
60°	289.4	368.9	458.8	543.6	621.3	681.2	718.3	739.5	750.1	755.3	751.9
62.5°	227.7	300.1	368.9	443.0	499.4	550.6	585.9	585.9	591.2	593.0	598.3
65°	169.4	224.1	284.2	338.9	384.7	418.2	437.8	443.0	450.1	448.3	444.7
67.5°	125.3	165.9	210.0	250.5	282.4	303.6	317.7	330.0	328.2	324.8	323.0
70°	86.5	113.0	151.8	176.4	199.4	220.6	224.1	225.9	227.7	229.5	225.9
72.5°	60.0	79.4	100.7	121.7	135.9	144.7	153.6	155.3	155.3	155.3	153.6
75°	30.0	40.6	60.0	68.8	81.2	84.7	91.8	91.8	97.1	90.0	88.2
77.5°	26.5	31.8	42.4	49.4	54.7	60.0	61.8	67.0	65.2	61.8	63.6
80°	15.9	19.4	26.5	30.0	37.1	38.8	40.6	42.4	40.6	42.4	42.4
82.5°	12.3	14.1	17.7	17.7	23.0	23.0	24.7	24.7	26.5	26.5	26.5
85°	7.1	12.3	10.5	21.2	14.1	14.1	17.7	21.2	17.7	17.7	21.2
87.5°	7.1	7.1	5.3	7.1	7.1	7.1	8.9	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: P249614

CATALOG NUMBER: LSR8B70D010 EC8B70930 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3287.9	3287.9	3287.9	3287.9
2.5°	3293.3	3296.7	3291.5	3289.7
5°	3298.5	3298.5	3295.1	3295.1
7.5°	3298.5	3298.5	3293.3	3289.7
10°	3284.4	3284.4	3279.1	3275.6
12.5°	3258.0	3258.0	3256.2	3250.9
15°	3224.4	3224.4	3217.4	3212.1
17.5°	3178.5	3182.1	3173.2	3173.2
20°	3129.2	3127.4	3120.3	3116.7
22.5°	3077.9	3074.3	3072.7	3062.0
25°	3023.2	3019.6	3014.4	3009.1
27.5°	2929.7	2927.9	2922.6	2915.6
30°	2786.7	2784.9	2778.0	2778.0
32.5°	2601.4	2599.6	2592.6	2594.3
35°	2409.0	2416.1	2412.6	2405.6
37.5°	2248.4	2253.8	2257.2	2253.8
40°	2114.3	2130.2	2131.9	2135.5
42.5°	1971.4	1992.6	1999.6	2003.1
45°	1800.1	1819.6	1835.4	1831.9
47.5°	1625.4	1639.6	1653.7	1643.0
50°	1457.7	1466.6	1471.9	1471.9
52.5°	1298.9	1298.9	1297.2	1298.9
55°	1117.2	1117.2	1110.1	1113.6
57.5°	926.5	930.1	924.8	916.0
60°	750.1	741.2	737.7	732.5
62.5°	584.2	584.2	571.8	587.6
65°	437.8	432.4	427.1	425.3
67.5°	317.7	315.9	310.6	308.8
70°	224.1	217.1	215.3	211.8
72.5°	150.0	150.0	146.5	146.5
75°	91.8	83.0	81.2	83.0
77.5°	63.6	61.8	61.8	60.0
80°	42.4	40.6	44.2	38.8
82.5°	26.5	28.2	26.5	28.2
85°	17.7	21.2	19.4	19.4
87.5°	10.5	10.5	10.5	10.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)