

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: P249183

Luminaire Tested: **LSR8B80D010 EC8B809730 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249183
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 EC8B809730 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6252.0 lumens
Efficiency: N/A
Efficacy: 84.0 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

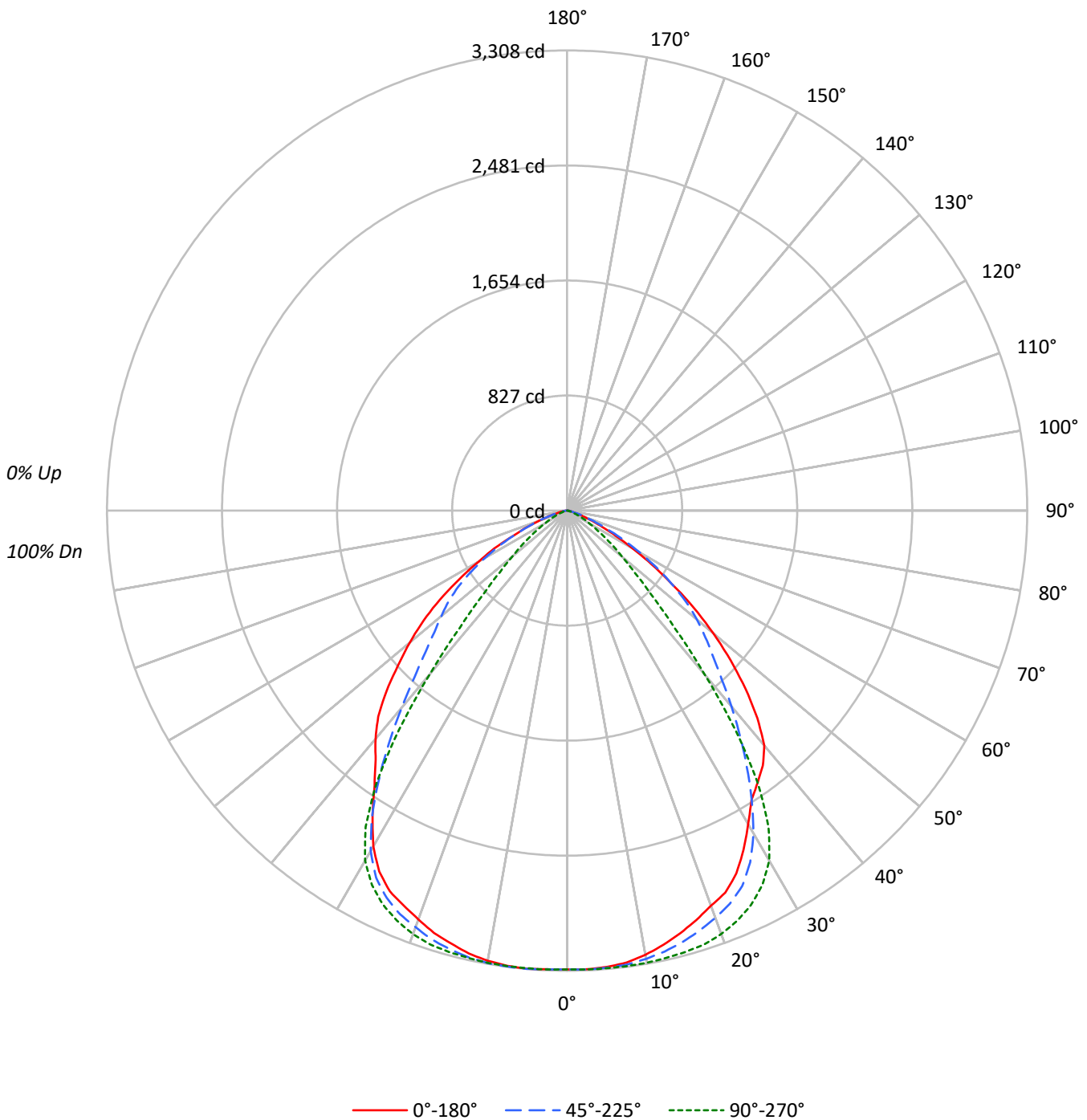
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	314.8	5.0
10°-20°	914.3	14.6
20°-30°	1387.7	22.2
30°-40°	1457.5	23.3
40°-50°	1092.7	17.5
50°-60°	701.1	11.2
60°-70°	299.9	4.8
70°-80°	70.9	1.1
80°-90°	13.2	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°	2616.7	41.9
0°-40°	4074.2	65.2
0°-60°	5868.0	93.9
0°-90°	6252.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6252.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3299	3299	3299	3299	3299	
5°	3293	3299	3302	3308	3306	313
15°	3145	3210	3284	3263	3223	887
25°	2877	2978	3129	3072	3019	1314
35°	2387	2254	2389	2360	2413	1498
45°	1813	1482	852	1440	1838	1389
55°	917	917	317	956	1117	832
65°	276	326	101	420	427	295
75°	42	50	14	85	83	62
85°	14	9	7	14	20	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°	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7
2.5°	3300.5	3304.0	3302.2	3302.2	3300.5	3302.2	3302.2	3305.8	3305.8	3302.2	3300.5
5°	3293.4	3296.9	3296.9	3293.4	3293.4	3302.2	3296.9	3300.5	3300.5	3298.7	3298.7
7.5°	3277.4	3277.4	3284.5	3279.2	3279.2	3284.5	3282.7	3286.3	3289.8	3291.6	3291.6
10°	3242.0	3245.6	3247.3	3247.3	3249.1	3254.4	3258.0	3265.1	3268.6	3272.1	3273.9
12.5°	3197.8	3203.1	3204.8	3203.1	3208.4	3215.5	3224.3	3233.2	3238.5	3245.6	3250.9
15°	3144.6	3144.6	3148.2	3153.5	3157.0	3167.7	3176.5	3187.1	3201.3	3210.2	3219.0
17.5°	3086.2	3089.8	3095.1	3095.1	3102.2	3119.8	3125.2	3141.1	3157.0	3165.9	3183.6
20°	3022.5	3026.0	3031.3	3034.9	3043.7	3057.9	3068.5	3082.7	3100.4	3116.3	3134.0
22.5°	2972.9	2965.8	2969.3	2972.9	2981.8	2994.1	3006.5	3024.2	3041.9	3057.9	3075.6
25°	2877.3	2879.0	2884.4	2887.9	2898.5	2909.1	2923.3	2944.5	2960.5	2978.2	2997.7
27.5°	2748.0	2749.8	2758.6	2758.6	2767.5	2785.2	2794.0	2811.8	2833.0	2850.7	2873.8
30°	2601.1	2604.6	2604.6	2611.7	2617.0	2625.8	2634.7	2652.4	2663.0	2679.0	2710.9
32.5°	2466.5	2470.0	2468.2	2466.5	2461.2	2459.4	2457.6	2461.2	2464.7	2470.0	2482.4
35°	2386.8	2377.9	2370.9	2358.5	2344.3	2326.6	2310.7	2289.4	2269.9	2254.0	2236.3
37.5°	2310.7	2308.9	2298.3	2280.6	2252.2	2220.4	2183.2	2137.2	2091.1	2041.5	1993.7
40°	2204.4	2199.1	2190.3	2165.5	2133.6	2094.6	2045.1	1988.4	1914.0	1837.9	1760.0
42.5°	2023.8	2025.6	2015.0	1995.5	1965.4	1928.2	1876.9	1814.9	1735.2	1644.9	1544.0
45°	1813.1	1813.1	1809.6	1793.6	1772.4	1742.3	1703.3	1652.0	1574.1	1482.0	1374.0
47.5°	1593.6	1595.3	1590.0	1586.5	1577.6	1558.2	1529.8	1490.9	1436.0	1347.4	1239.4
50°	1370.5	1370.5	1379.3	1377.5	1377.5	1370.5	1358.1	1335.0	1287.3	1216.4	1115.5
52.5°	1147.4	1150.9	1156.2	1163.3	1172.1	1186.3	1172.1	1161.5	1131.4	1076.5	989.8
55°	917.2	920.7	929.6	942.0	952.6	966.8	970.3	970.3	954.4	917.2	851.7
57.5°	720.7	715.3	722.4	733.0	747.2	761.4	772.0	784.4	782.6	757.8	704.7
60°	541.8	543.6	548.9	559.5	570.1	582.5	596.7	607.3	612.7	600.3	566.6
62.5°	394.9	394.9	401.9	412.5	417.9	435.6	444.4	449.8	455.0	453.3	432.0
65°	276.2	279.7	283.3	288.6	293.9	304.5	309.9	320.5	324.0	325.8	309.9
67.5°	194.8	189.5	193.0	196.5	201.8	209.0	219.6	219.6	224.9	224.9	214.2
70°	124.0	124.0	125.7	131.0	134.6	136.3	139.9	143.4	148.7	147.0	147.0
72.5°	83.2	81.4	83.2	85.0	86.8	92.1	92.1	93.8	97.4	99.2	92.1
75°	42.5	44.3	47.8	46.1	51.3	47.8	49.6	54.9	53.1	49.6	49.6
77.5°	35.4	35.4	35.4	33.7	37.2	37.2	35.4	38.9	37.2	37.2	35.4
80°	24.8	26.6	24.8	23.0	24.8	23.0	23.0	23.0	23.0	23.0	21.2
82.5°	19.5	15.9	17.7	15.9	17.7	17.7	15.9	14.2	14.2	15.9	14.2
85°	14.2	10.6	12.4	12.4	10.6	10.6	10.6	10.6	10.6	8.8	8.8
87.5°	8.8	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°	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7
2.5°	3304.0	3302.2	3305.8	3304.0	3304.0	3302.2	3304.0	3302.2	3305.8	3298.7	3300.5
5°	3304.0	3300.5	3302.2	3304.0	3305.8	3302.2	3302.2	3302.2	3305.8	3302.2	3304.0
7.5°	3296.9	3295.1	3300.5	3304.0	3302.2	3300.5	3304.0	3302.2	3305.8	3304.0	3307.5
10°	3282.7	3284.5	3288.1	3293.4	3295.1	3296.9	3300.5	3300.5	3305.8	3298.7	3302.2
12.5°	3261.5	3268.6	3277.4	3281.0	3288.1	3288.1	3291.6	3293.4	3296.9	3295.1	3300.5
15°	3234.9	3243.8	3254.4	3263.3	3272.1	3277.4	3282.7	3284.5	3289.8	3284.5	3286.3
17.5°	3203.1	3213.7	3229.6	3240.2	3254.4	3259.7	3266.8	3270.3	3275.7	3272.1	3273.9
20°	3158.8	3171.2	3188.9	3204.8	3213.7	3226.1	3234.9	3240.2	3243.8	3240.2	3242.0
22.5°	3096.8	3114.5	3137.6	3149.9	3167.7	3178.3	3180.1	3192.4	3201.3	3192.4	3196.0
25°	3024.2	3041.9	3059.7	3086.2	3102.2	3114.5	3126.9	3128.7	3137.6	3135.8	3134.0
27.5°	2903.8	2926.9	2956.9	2978.2	2999.4	3018.9	3033.1	3036.6	3045.5	3041.9	3043.7
30°	2739.1	2764.0	2792.3	2825.9	2856.0	2875.5	2893.2	2905.6	2914.4	2909.1	2907.4
32.5°	2505.5	2530.2	2560.3	2594.0	2629.4	2657.7	2679.0	2694.9	2705.5	2702.0	2693.1
35°	2238.1	2245.2	2264.7	2291.2	2321.3	2351.4	2370.9	2388.6	2401.0	2404.5	2404.5
37.5°	1963.6	1940.6	1926.5	1926.5	1944.1	1956.5	1974.3	1984.9	2004.4	2011.4	2016.8
40°	1698.0	1644.9	1595.3	1558.2	1533.4	1531.6	1531.6	1536.9	1554.6	1577.6	1598.9
42.5°	1460.8	1375.8	1299.6	1230.6	1181.0	1152.7	1140.3	1142.1	1156.2	1177.5	1212.9
45°	1271.3	1165.1	1069.5	986.2	919.0	874.7	853.4	851.7	862.3	887.1	926.1
47.5°	1124.4	1011.0	903.0	807.4	734.8	687.0	662.2	655.2	662.2	685.2	731.3
50°	1002.2	885.3	773.8	674.6	596.7	547.1	524.1	515.3	524.1	543.6	589.6
52.5°	888.8	768.4	664.0	568.4	485.1	442.6	417.9	412.5	417.9	440.9	478.1
55°	757.8	655.2	552.4	456.8	384.2	341.7	322.2	317.0	322.2	343.5	382.5
57.5°	628.6	540.0	449.8	363.0	301.0	263.8	246.1	239.0	251.4	265.6	311.6
60°	508.2	437.4	361.2	285.1	233.7	200.1	185.9	184.1	187.7	205.4	237.2
62.5°	398.4	340.0	279.7	217.8	175.3	161.1	143.4	141.7	145.2	155.8	180.6
65°	286.9	249.7	203.6	159.3	125.7	106.2	99.2	100.9	104.5	111.6	134.6
67.5°	200.1	173.5	141.7	111.6	86.8	77.9	70.8	69.1	70.8	83.2	95.6
70°	134.6	118.6	95.6	85.0	60.2	47.8	49.6	44.3	51.3	51.3	62.0
72.5°	88.5	77.9	63.7	49.6	42.5	33.7	33.7	31.9	35.4	37.2	46.1
75°	46.1	35.4	35.4	24.8	17.7	8.8	15.9	14.2	12.4	14.2	17.7
77.5°	31.9	26.6	24.8	19.5	17.7	14.2	14.2	14.2	14.2	15.9	17.7
80°	19.5	19.5	14.2	12.4	10.6	8.8	10.6	10.6	10.6	10.6	12.4
82.5°	12.4	10.6	10.6	8.8	8.8	7.1	7.1	7.1	7.1	7.1	10.6
85°	10.6	7.1	7.1	5.3	7.1	12.4	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	8.8	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°	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7	3298.7
2.5°	3304.0	3305.8	3305.8	3304.0	3304.0	3300.5	3307.5	3302.2	3304.0	3311.1	3305.8
5°	3307.5	3309.3	3309.3	3307.5	3307.5	3307.5	3309.3	3309.3	3307.5	3305.8	3309.3
7.5°	3314.6	3312.8	3312.8	3309.3	3309.3	3305.8	3309.3	3304.0	3307.5	3304.0	3309.3
10°	3305.8	3307.5	3305.8	3304.0	3304.0	3302.2	3302.2	3296.9	3298.7	3293.4	3296.9
12.5°	3300.5	3298.7	3298.7	3295.1	3291.6	3288.1	3286.3	3281.0	3281.0	3268.6	3273.9
15°	3286.3	3288.1	3282.7	3275.7	3272.1	3263.3	3259.7	3252.6	3245.6	3236.7	3238.5
17.5°	3273.9	3268.6	3261.5	3254.4	3240.2	3233.2	3226.1	3215.5	3211.9	3201.3	3197.8
20°	3236.7	3233.2	3224.3	3211.9	3203.1	3187.1	3180.1	3169.4	3160.6	3149.9	3144.6
22.5°	3188.9	3185.3	3174.7	3162.3	3148.2	3141.1	3134.0	3114.5	3105.7	3095.1	3093.3
25°	3128.7	3123.4	3112.8	3098.6	3091.5	3072.0	3064.9	3050.8	3047.3	3036.6	3034.9
27.5°	3036.6	3029.5	3017.2	2999.4	2987.0	2974.7	2967.6	2956.9	2953.4	2942.8	2941.0
30°	2898.5	2889.7	2864.9	2857.8	2836.5	2824.1	2824.1	2810.0	2811.8	2804.7	2804.7
32.5°	2680.7	2666.6	2647.1	2632.9	2618.7	2611.7	2611.7	2606.4	2609.9	2609.9	2613.5
35°	2392.1	2372.7	2362.0	2353.2	2353.2	2360.2	2381.5	2386.8	2397.4	2406.3	2413.4
37.5°	2022.0	2020.3	2032.7	2043.3	2069.9	2100.0	2137.2	2169.0	2199.1	2220.4	2241.6
40°	1621.9	1666.2	1701.6	1751.2	1791.9	1850.3	1917.6	1972.5	2023.8	2061.0	2100.0
42.5°	1266.0	1322.7	1397.0	1469.6	1542.2	1621.9	1710.4	1786.6	1853.9	1905.2	1945.9
45°	986.2	1064.1	1154.5	1246.5	1340.4	1439.5	1531.6	1609.5	1680.3	1733.5	1774.2
47.5°	795.0	880.0	982.7	1083.6	1189.9	1294.3	1397.0	1464.3	1522.7	1565.2	1602.4
50°	656.9	747.2	855.2	970.3	1076.5	1181.0	1269.5	1335.0	1382.9	1420.0	1443.1
52.5°	548.9	644.5	759.6	874.7	980.9	1076.5	1156.2	1205.8	1244.8	1271.3	1292.5
55°	453.3	545.4	653.4	761.4	865.8	956.1	1021.6	1058.8	1088.9	1104.9	1117.3
57.5°	370.1	455.0	554.2	653.4	743.7	818.1	869.4	906.6	920.7	933.1	931.3
60°	290.4	370.1	460.4	545.4	623.3	683.4	720.7	741.9	752.5	757.8	754.3
62.5°	228.4	301.0	370.1	444.4	501.1	552.4	587.9	587.9	593.2	594.9	600.3
65°	170.0	224.9	285.1	340.0	386.0	419.6	439.1	444.4	451.5	449.8	446.2
67.5°	125.7	166.5	210.7	251.4	283.3	304.5	318.7	331.1	329.4	325.8	324.0
70°	86.8	113.3	152.3	177.1	200.1	221.3	224.9	226.6	228.4	230.2	226.6
72.5°	60.2	79.7	100.9	122.2	136.3	145.2	154.1	155.8	155.8	155.8	154.1
75°	30.1	40.7	60.2	69.1	81.4	85.0	92.1	92.1	97.4	90.3	88.5
77.5°	26.6	31.9	42.5	49.6	54.9	60.2	62.0	67.3	65.5	62.0	63.7
80°	15.9	19.5	26.6	30.1	37.2	38.9	40.7	42.5	40.7	42.5	42.5
82.5°	12.4	14.2	17.7	17.7	23.0	23.0	24.8	24.8	26.6	26.6	26.6
85°	7.1	12.4	10.6	21.2	14.2	14.2	17.7	21.2	17.7	17.7	21.2
87.5°	7.1	7.1	5.3	7.1	7.1	7.1	8.8	10.6	10.6	12.4	10.6
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: P249183

CATALOG NUMBER: LSR8B80D010 EC8B809730 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3298.7	3298.7	3298.7	3298.7
2.5°	3304.0	3307.5	3302.2	3300.5
5°	3309.3	3309.3	3305.8	3305.8
7.5°	3309.3	3309.3	3304.0	3300.5
10°	3295.1	3295.1	3289.8	3286.3
12.5°	3268.6	3268.6	3266.8	3261.5
15°	3234.9	3234.9	3227.8	3222.6
17.5°	3188.9	3192.4	3183.6	3183.6
20°	3139.3	3137.6	3130.5	3126.9
22.5°	3088.0	3084.4	3082.7	3072.0
25°	3033.1	3029.5	3024.2	3018.9
27.5°	2939.3	2937.5	2932.2	2925.1
30°	2795.8	2794.0	2787.0	2787.0
32.5°	2609.9	2608.1	2601.1	2602.8
35°	2416.9	2424.0	2420.4	2413.4
37.5°	2255.8	2261.1	2264.7	2261.1
40°	2121.2	2137.2	2138.9	2142.5
42.5°	1977.8	1999.0	2006.1	2009.6
45°	1806.0	1825.5	1841.5	1837.9
47.5°	1630.7	1644.9	1659.1	1648.5
50°	1462.5	1471.4	1476.7	1476.7
52.5°	1303.2	1303.2	1301.4	1303.2
55°	1120.8	1120.8	1113.7	1117.3
57.5°	929.6	933.1	927.8	919.0
60°	752.5	743.7	740.1	734.8
62.5°	586.1	586.1	573.7	589.6
65°	439.1	433.8	428.5	426.7
67.5°	318.7	317.0	311.6	309.9
70°	224.9	217.8	216.0	212.5
72.5°	150.5	150.5	147.0	147.0
75°	92.1	83.2	81.4	83.2
77.5°	63.7	62.0	62.0	60.2
80°	42.5	40.7	44.3	38.9
82.5°	26.6	28.3	26.6	28.3
85°	17.7	21.2	19.5	19.5
87.5°	10.6	10.6	10.6	10.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)