

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: P249407

Luminaire Tested: **LSR8B70D010 EC8B70827 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249407
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 EC8B70827 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6337.0 lumens
Efficiency: N/A
Efficacy: 83.5 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

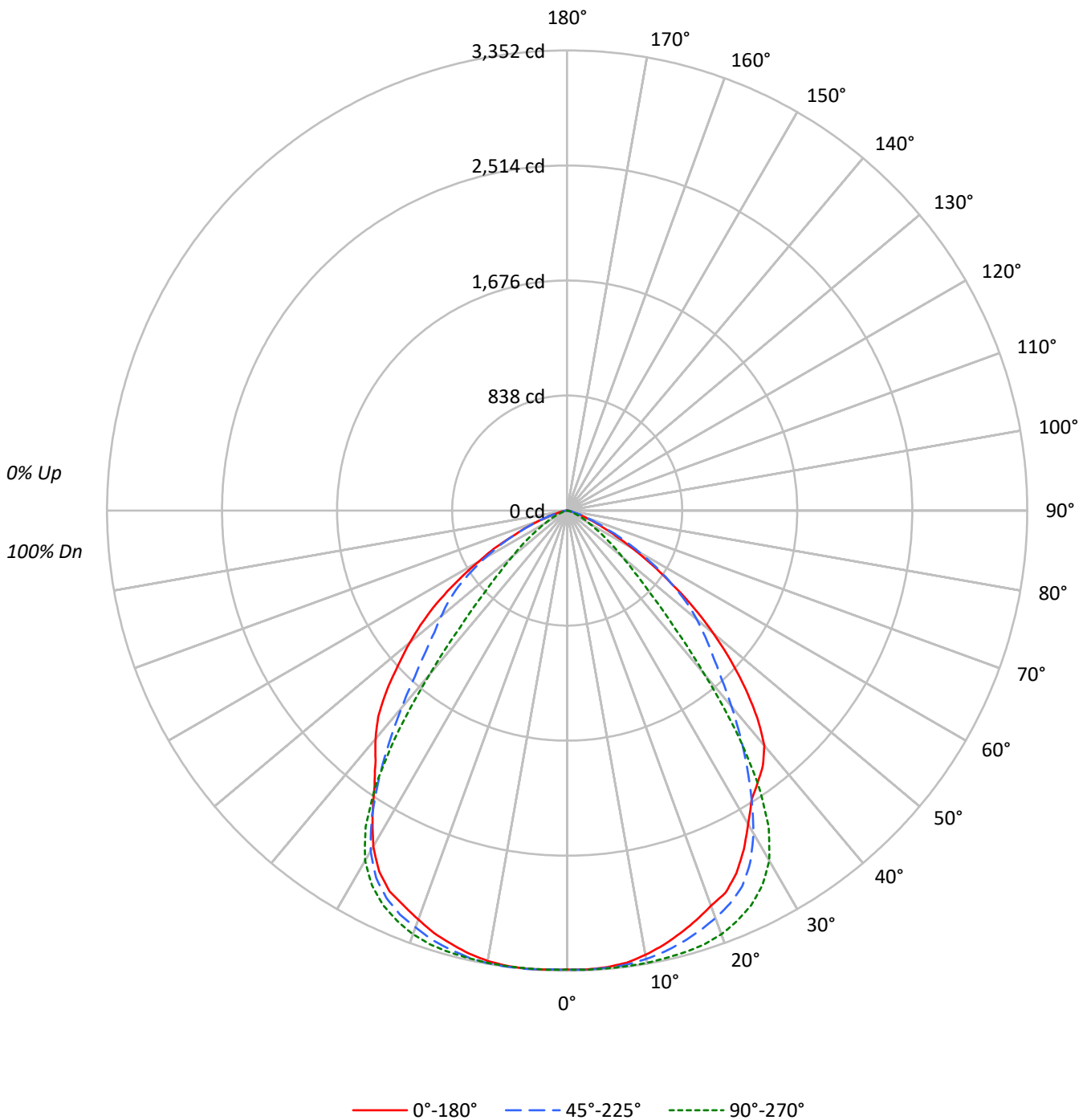
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	103101	103101	103101
5°	103328	103606	103718
10°	102894	104748	104300
15°	101755	106282	104277
20°	100533	107775	104008
25°	99228	107901	104114
30°	93874	104865	100585
35°	91073	91137	92085
40°	89943	62708	87415
45°	80145	37648	81239
50°	66639	25056	71806
55°	49977	17274	60879
60°	33871	11508	45934
65°	20430	7464	31557
70°	11324	4048	19420
75°	5135	1716	10056
80°	4457	1918	7014
85°	5095	2547	7005



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	319.1	5.0
10°-20°	926.7	14.6
20°-30°	1406.5	22.2
30°-40°	1477.3	23.3
40°-50°	1107.6	17.5
50°-60°	710.6	11.2
60°-70°	304.0	4.8
70°-80°	71.8	1.1
80°-90°	13.4	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°	2652.3	41.9
0°-40°	4129.6	65.2
0°-60°	5947.8	93.9
0°-90°	6337.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6337.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3344	3344	3344	3344	3344	
5°	3338	3344	3347	3352	3351	317
15°	3187	3254	3329	3308	3266	899
25°	2916	3019	3171	3114	3060	1332
35°	2419	2285	2421	2392	2446	1518
45°	1838	1502	863	1459	1863	1407
55°	930	930	321	969	1132	843
65°	280	330	102	425	432	299
75°	43	50	14	86	84	63
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°	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5
2.5°	3345.3	3348.9	3347.1	3347.1	3345.3	3347.1	3347.1	3350.7	3350.7	3347.1	3345.3
5°	3338.1	3341.7	3341.7	3338.1	3338.1	3347.1	3341.7	3345.3	3345.3	3343.5	3343.5
7.5°	3322.0	3322.0	3329.2	3323.8	3323.8	3329.2	3327.4	3331.0	3334.6	3336.4	3336.4
10°	3286.1	3289.7	3291.5	3291.5	3293.3	3298.6	3302.2	3309.4	3313.0	3316.6	3318.4
12.5°	3241.3	3246.6	3248.4	3246.6	3252.0	3259.2	3268.2	3277.1	3282.5	3289.7	3295.1
15°	3187.4	3187.4	3191.0	3196.4	3200.0	3210.7	3219.7	3230.4	3244.8	3253.8	3262.8
17.5°	3128.2	3131.8	3137.1	3137.1	3144.3	3162.3	3167.7	3183.8	3200.0	3208.9	3226.9
20°	3063.6	3067.1	3072.5	3076.1	3085.1	3099.5	3110.2	3124.6	3142.5	3158.7	3176.6
22.5°	3013.3	3006.1	3009.7	3013.3	3022.3	3034.9	3047.4	3065.3	3083.3	3099.5	3117.4
25°	2916.4	2918.2	2923.6	2927.1	2937.9	2948.7	2963.1	2984.6	3000.7	3018.7	3038.4
27.5°	2785.4	2787.2	2796.1	2796.1	2805.1	2823.1	2832.0	2850.0	2871.5	2889.5	2912.8
30°	2636.4	2640.0	2640.0	2647.2	2652.5	2661.5	2670.5	2688.5	2699.2	2715.4	2747.7
32.5°	2500.0	2503.6	2501.8	2500.0	2494.6	2492.8	2491.0	2494.6	2498.2	2503.6	2516.2
35°	2419.3	2410.3	2403.1	2390.6	2376.2	2358.2	2342.1	2320.6	2300.8	2284.6	2266.7
37.5°	2342.1	2340.3	2329.5	2311.6	2282.8	2250.6	2212.9	2166.2	2119.5	2069.3	2020.9
40°	2234.4	2229.0	2220.0	2194.9	2162.6	2123.1	2072.9	2015.5	1940.1	1862.9	1783.9
42.5°	2051.3	2053.1	2042.4	2022.6	1992.1	1954.4	1902.4	1839.6	1758.8	1667.3	1565.0
45°	1837.8	1837.8	1834.2	1818.0	1796.5	1766.0	1726.5	1674.5	1595.5	1502.1	1392.7
47.5°	1615.2	1617.0	1611.6	1608.1	1599.1	1579.3	1550.6	1511.1	1455.5	1365.8	1256.3
50°	1389.1	1389.1	1398.1	1396.3	1396.3	1389.1	1376.6	1353.2	1304.8	1233.0	1130.7
52.5°	1163.0	1166.6	1172.0	1179.1	1188.1	1202.4	1188.1	1177.3	1146.8	1091.2	1003.2
55°	929.6	933.2	942.2	954.8	965.6	979.9	983.5	983.5	967.3	929.6	863.3
57.5°	730.5	725.1	732.3	743.0	757.4	771.7	782.5	795.1	793.3	768.1	714.3
60°	549.2	551.0	556.3	567.1	577.9	590.5	604.8	615.6	621.0	608.4	574.3
62.5°	400.2	400.2	407.4	418.1	423.5	441.5	450.5	455.9	461.2	459.4	437.9
65°	280.0	283.5	287.2	292.6	297.9	308.7	314.1	324.8	328.4	330.2	314.1
67.5°	197.4	192.0	195.6	199.2	204.6	211.8	222.6	222.6	227.9	227.9	217.2
70°	125.6	125.6	127.4	132.8	136.4	138.2	141.8	145.4	150.8	149.0	149.0
72.5°	84.4	82.6	84.4	86.2	88.0	93.3	93.3	95.1	98.7	100.5	93.3
75°	43.1	44.9	48.4	46.7	52.0	48.4	50.2	55.6	53.8	50.2	50.2
77.5°	35.9	35.9	35.9	34.1	37.7	37.7	35.9	39.5	37.7	37.7	35.9
80°	25.1	26.9	25.1	23.3	25.1	23.3	23.3	23.3	23.3	23.3	21.5
82.5°	19.8	16.2	18.0	16.2	18.0	18.0	16.2	14.4	14.4	16.2	14.4
85°	14.4	10.8	12.6	12.6	10.8	10.8	10.8	10.8	10.8	9.0	9.0
87.5°	9.0	5.4	5.4	5.4	7.2	7.2	7.2	5.4	7.2	7.2	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°	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5
2.5°	3348.9	3347.1	3350.7	3348.9	3348.9	3347.1	3348.9	3347.1	3350.7	3343.5	3345.3
5°	3348.9	3345.3	3347.1	3348.9	3350.7	3347.1	3347.1	3347.1	3350.7	3347.1	3348.9
7.5°	3341.7	3339.9	3345.3	3348.9	3347.1	3345.3	3348.9	3347.1	3350.7	3348.9	3352.5
10°	3327.4	3329.2	3332.8	3338.1	3339.9	3341.7	3345.3	3345.3	3350.7	3343.5	3347.1
12.5°	3305.8	3313.0	3322.0	3325.6	3332.8	3332.8	3336.4	3338.1	3341.7	3339.9	3345.3
15°	3278.9	3287.9	3298.6	3307.6	3316.6	3322.0	3327.4	3329.2	3334.6	3329.2	3331.0
17.5°	3246.6	3257.4	3273.5	3284.3	3298.6	3304.0	3311.2	3314.8	3320.2	3316.6	3318.4
20°	3201.7	3214.3	3232.2	3248.4	3257.4	3269.9	3278.9	3284.3	3287.9	3284.3	3286.1
22.5°	3138.9	3156.9	3180.2	3192.8	3210.7	3221.5	3223.3	3235.8	3244.8	3235.8	3239.5
25°	3065.3	3083.3	3101.3	3128.2	3144.3	3156.9	3169.5	3171.3	3180.2	3178.4	3176.6
27.5°	2943.3	2966.7	2997.1	3018.7	3040.2	3060.0	3074.3	3077.9	3086.9	3083.3	3085.1
30°	2776.4	2801.5	2830.3	2864.3	2894.9	2914.6	2932.5	2945.1	2954.1	2948.7	2946.9
32.5°	2539.5	2564.6	2595.2	2629.2	2665.1	2693.8	2715.4	2731.5	2742.3	2738.7	2729.7
35°	2268.5	2275.7	2295.4	2322.4	2352.8	2383.4	2403.1	2421.0	2433.6	2437.2	2437.2
37.5°	1990.3	1967.0	1952.7	1952.7	1970.6	1983.1	2001.1	2011.9	2031.6	2038.8	2044.2
40°	1721.1	1667.3	1617.0	1579.3	1554.2	1552.4	1552.4	1557.8	1575.7	1599.1	1620.6
42.5°	1480.6	1394.5	1317.3	1247.3	1197.1	1168.4	1155.8	1157.6	1172.0	1193.5	1229.4
45°	1288.6	1180.9	1084.0	999.6	931.4	886.6	865.1	863.3	874.0	899.1	938.6
47.5°	1139.6	1024.8	915.3	818.4	744.8	696.3	671.2	664.1	671.2	694.5	741.2
50°	1015.8	897.4	784.3	683.8	604.8	554.6	531.2	522.3	531.2	551.0	597.6
52.5°	900.9	778.9	673.0	576.1	491.7	448.7	423.5	418.1	423.5	446.9	484.6
55°	768.1	664.1	559.9	463.0	389.5	346.4	326.6	321.3	326.6	348.2	387.7
57.5°	637.1	547.4	455.9	367.9	305.1	267.4	249.5	242.3	254.8	269.2	315.9
60°	515.1	443.3	366.1	289.0	236.9	202.8	188.4	186.6	190.2	208.2	240.5
62.5°	403.8	344.6	283.5	220.8	177.7	163.3	145.4	143.6	147.2	157.9	183.1
65°	290.8	253.1	206.4	161.5	127.4	107.7	100.5	102.3	105.9	113.1	136.4
67.5°	202.8	175.9	143.6	113.1	88.0	79.0	71.8	70.0	71.8	84.4	96.9
70°	136.4	120.2	96.9	86.2	61.0	48.4	50.2	44.9	52.0	52.0	62.8
72.5°	89.7	79.0	64.6	50.2	43.1	34.1	34.1	32.3	35.9	37.7	46.7
75°	46.7	35.9	35.9	25.1	18.0	9.0	16.2	14.4	12.6	14.4	18.0
77.5°	32.3	26.9	25.1	19.8	18.0	14.4	14.4	14.4	14.4	16.2	18.0
80°	19.8	19.8	14.4	12.6	10.8	9.0	10.8	10.8	10.8	10.8	12.6
82.5°	12.6	10.8	10.8	9.0	9.0	7.2	7.2	7.2	7.2	7.2	10.8
85°	10.8	7.2	7.2	5.4	7.2	12.6	5.4	7.2	7.2	7.2	5.4
87.5°	3.6	5.4	5.4	5.4	3.6	1.8	3.6	5.4	5.4	9.0	7.2
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°	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5	3343.5
2.5°	3348.9	3350.7	3350.7	3348.9	3348.9	3345.3	3352.5	3347.1	3348.9	3356.1	3350.7
5°	3352.5	3354.3	3354.3	3352.5	3352.5	3352.5	3354.3	3354.3	3352.5	3350.7	3354.3
7.5°	3359.7	3357.9	3357.9	3354.3	3354.3	3350.7	3354.3	3348.9	3352.5	3348.9	3354.3
10°	3350.7	3352.5	3350.7	3348.9	3348.9	3347.1	3347.1	3341.7	3343.5	3338.1	3341.7
12.5°	3345.3	3343.5	3343.5	3339.9	3336.4	3332.8	3331.0	3325.6	3325.6	3313.0	3318.4
15°	3331.0	3332.8	3327.4	3320.2	3316.6	3307.6	3304.0	3296.8	3289.7	3280.7	3282.5
17.5°	3318.4	3313.0	3305.8	3298.6	3284.3	3277.1	3269.9	3259.2	3255.6	3244.8	3241.3
20°	3280.7	3277.1	3268.2	3255.6	3246.6	3230.4	3223.3	3212.5	3203.5	3192.8	3187.4
22.5°	3232.2	3228.6	3217.9	3205.3	3191.0	3183.8	3176.6	3156.9	3147.9	3137.1	3135.3
25°	3171.3	3165.9	3155.1	3140.7	3133.5	3113.8	3106.6	3092.3	3088.7	3077.9	3076.1
27.5°	3077.9	3070.7	3058.2	3040.2	3027.7	3015.1	3007.9	2997.1	2993.6	2982.8	2981.0
30°	2937.9	2928.9	2903.8	2896.7	2875.1	2862.5	2862.5	2848.2	2850.0	2842.8	2842.8
32.5°	2717.2	2702.8	2683.1	2668.7	2654.3	2647.2	2647.2	2641.8	2645.4	2645.4	2649.0
35°	2424.6	2404.9	2394.1	2385.2	2385.2	2392.3	2413.9	2419.3	2430.0	2439.0	2446.2
37.5°	2049.5	2047.8	2060.3	2071.1	2098.0	2128.5	2166.2	2198.5	2229.0	2250.6	2272.1
40°	1643.9	1688.8	1724.7	1775.0	1816.2	1875.5	1943.7	1999.3	2051.3	2089.0	2128.5
42.5°	1283.2	1340.6	1416.0	1489.6	1563.2	1643.9	1733.7	1810.9	1879.1	1931.1	1972.4
45°	999.6	1078.6	1170.2	1263.5	1358.6	1459.1	1552.4	1631.4	1703.2	1757.0	1798.3
47.5°	805.8	892.0	996.0	1098.4	1206.0	1311.9	1416.0	1484.2	1543.4	1586.5	1624.2
50°	665.8	757.4	866.9	983.5	1091.2	1197.1	1286.8	1353.2	1401.7	1439.4	1462.7
52.5°	556.3	653.3	769.9	886.6	994.2	1091.2	1172.0	1222.2	1261.7	1288.6	1310.1
55°	459.4	552.8	662.3	771.7	877.6	969.1	1035.5	1073.2	1103.7	1119.9	1132.4
57.5°	375.1	461.2	561.7	662.3	753.8	829.2	881.2	918.9	933.2	945.8	944.0
60°	294.4	375.1	466.6	552.8	631.7	692.7	730.5	752.0	762.7	768.1	764.5
62.5°	231.5	305.1	375.1	450.5	507.9	559.9	595.9	595.9	601.2	603.0	608.4
65°	172.3	227.9	289.0	344.6	391.2	425.3	445.1	450.5	457.7	455.9	452.3
67.5°	127.4	168.7	213.6	254.8	287.2	308.7	323.0	335.6	333.8	330.2	328.4
70°	88.0	114.9	154.4	179.5	202.8	224.4	227.9	229.7	231.5	233.3	229.7
72.5°	61.0	80.8	102.3	123.8	138.2	147.2	156.2	157.9	157.9	157.9	156.2
75°	30.5	41.3	61.0	70.0	82.6	86.2	93.3	93.3	98.7	91.5	89.7
77.5°	26.9	32.3	43.1	50.2	55.6	61.0	62.8	68.2	66.4	62.8	64.6
80°	16.2	19.8	26.9	30.5	37.7	39.5	41.3	43.1	41.3	43.1	43.1
82.5°	12.6	14.4	18.0	18.0	23.3	23.3	25.1	25.1	26.9	26.9	26.9
85°	7.2	12.6	10.8	21.5	14.4	14.4	18.0	21.5	18.0	18.0	21.5
87.5°	7.2	7.2	5.4	7.2	7.2	7.2	9.0	10.8	10.8	12.6	10.8
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: P249407

CATALOG NUMBER: LSR8B70D010 EC8B70827 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3343.5	3343.5	3343.5	3343.5
2.5°	3348.9	3352.5	3347.1	3345.3
5°	3354.3	3354.3	3350.7	3350.7
7.5°	3354.3	3354.3	3348.9	3345.3
10°	3339.9	3339.9	3334.6	3331.0
12.5°	3313.0	3313.0	3311.2	3305.8
15°	3278.9	3278.9	3271.7	3266.4
17.5°	3232.2	3235.8	3226.9	3226.9
20°	3182.0	3180.2	3173.1	3169.5
22.5°	3130.0	3126.4	3124.6	3113.8
25°	3074.3	3070.7	3065.3	3060.0
27.5°	2979.2	2977.4	2972.0	2964.9
30°	2833.8	2832.0	2824.9	2824.9
32.5°	2645.4	2643.6	2636.4	2638.2
35°	2449.8	2457.0	2453.4	2446.2
37.5°	2286.4	2291.8	2295.4	2291.8
40°	2150.0	2166.2	2168.0	2171.6
42.5°	2004.7	2026.2	2033.4	2037.0
45°	1830.6	1850.3	1866.5	1862.9
47.5°	1652.9	1667.3	1681.6	1670.9
50°	1482.4	1491.4	1496.8	1496.8
52.5°	1320.9	1320.9	1319.1	1320.9
55°	1136.0	1136.0	1128.9	1132.4
57.5°	942.2	945.8	940.4	931.4
60°	762.7	753.8	750.2	744.8
62.5°	594.1	594.1	581.5	597.6
65°	445.1	439.7	434.3	432.5
67.5°	323.0	321.3	315.9	314.1
70°	227.9	220.8	219.0	215.4
72.5°	152.6	152.6	149.0	149.0
75°	93.3	84.4	82.6	84.4
77.5°	64.6	62.8	62.8	61.0
80°	43.1	41.3	44.9	39.5
82.5°	26.9	28.7	26.9	28.7
85°	18.0	21.5	19.8	19.8
87.5°	10.8	10.8	10.8	10.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)