

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: P249488

Luminaire Tested: **LSR8B70D010 EC8B70950 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249488
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 EC8B70950 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6229.0 lumens
Efficiency: N/A
Efficacy: 82.1 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

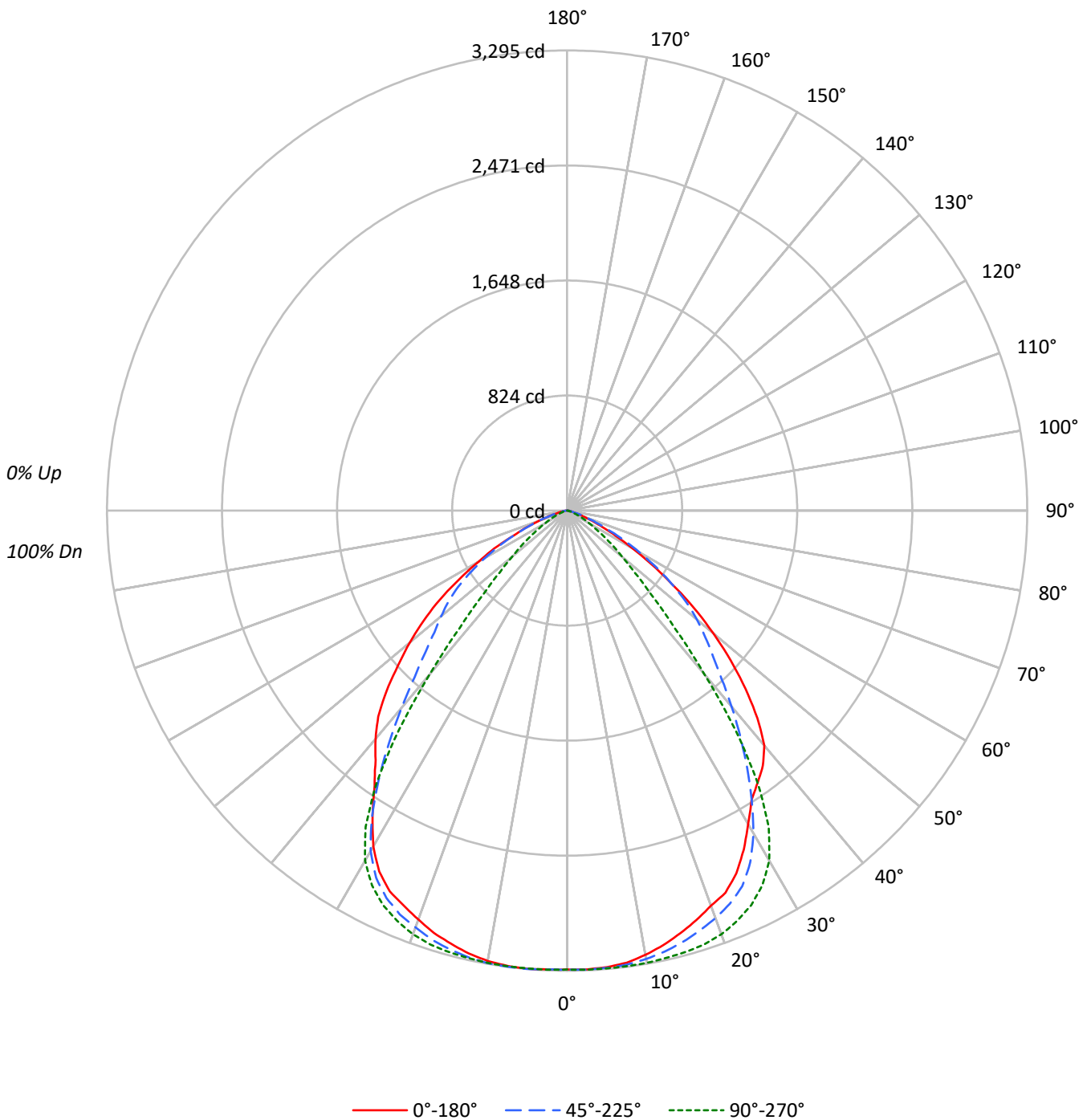
Input Watts (W): 75.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: LSR8B70D010 EC8B70950 8LBDW0B

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°	101344	101344	101344
5°	101567	101842	101950
10°	101141	102963	102522
15°	100018	104468	102499
20°	98820	105938	102233
25°	97537	106060	102338
30°	92275	103078	98869
35°	89518	89586	90515
40°	88410	61637	85926
45°	78780	37002	79853
50°	65502	24629	70582
55°	49127	16978	59842
60°	33291	11317	45151
65°	20080	7340	31017
70°	11135	3976	19087
75°	5040	1680	9877
80°	4386	1882	6890
85°	4989	2477	6864



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.7	5.0
10°-20°	910.9	14.6
20°-30°	1382.6	22.2
30°-40°	1452.1	23.3
40°-50°	1088.7	17.5
50°-60°	698.5	11.2
60°-70°	298.8	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°	2607.1	41.9
0°-40°	4059.2	65.2
0°-60°	5846.4	93.9
0°-90°	6229.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6229.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3286	3286	3286	3286	3286	
5°	3281	3286	3290	3295	3294	312
15°	3133	3198	3272	3251	3211	884
25°	2867	2967	3117	3061	3008	1310
35°	2378	2246	2380	2352	2404	1492
45°	1806	1476	848	1434	1831	1383
55°	914	914	316	953	1113	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°	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5
2.5°	3288.3	3291.9	3290.1	3290.1	3288.3	3290.1	3290.1	3293.6	3293.6	3290.1	3288.3
5°	3281.2	3284.8	3284.8	3281.2	3281.2	3290.1	3284.8	3288.3	3288.3	3286.5	3286.5
7.5°	3265.4	3265.4	3272.4	3267.2	3267.2	3272.4	3270.7	3274.2	3277.7	3279.5	3279.5
10°	3230.1	3233.6	3235.4	3235.4	3237.2	3242.4	3246.0	3253.0	3256.5	3260.1	3261.9
12.5°	3186.0	3191.3	3193.0	3191.3	3196.6	3203.6	3212.5	3221.3	3226.6	3233.6	3238.9
15°	3133.0	3133.0	3136.6	3141.9	3145.4	3156.0	3164.8	3175.4	3189.5	3198.4	3207.2
17.5°	3074.9	3078.4	3083.7	3083.7	3090.7	3108.4	3113.7	3129.6	3145.4	3154.2	3171.9
20°	3011.4	3014.9	3020.2	3023.7	3032.5	3046.6	3057.2	3071.3	3089.0	3104.9	3122.5
22.5°	2961.9	2954.9	2958.4	2961.9	2970.8	2983.1	2995.5	3013.1	3030.7	3046.6	3064.3
25°	2866.7	2868.4	2873.8	2877.3	2887.9	2898.4	2912.6	2933.7	2949.6	2967.3	2986.6
27.5°	2737.9	2739.7	2748.5	2748.5	2757.3	2775.0	2783.8	2801.4	2822.6	2840.2	2863.2
30°	2591.5	2595.0	2595.0	2602.1	2607.3	2616.2	2625.0	2642.6	2653.2	2669.1	2700.9
32.5°	2457.4	2460.9	2459.2	2457.4	2452.1	2450.3	2448.6	2452.1	2455.7	2460.9	2473.3
35°	2378.0	2369.2	2362.2	2349.8	2335.7	2318.0	2302.2	2281.0	2261.6	2245.7	2228.1
37.5°	2302.2	2300.4	2289.8	2272.2	2243.9	2212.2	2175.2	2129.3	2083.4	2034.0	1986.4
40°	2196.3	2191.0	2182.2	2157.5	2125.7	2086.9	2037.6	1981.1	1907.0	1831.1	1753.5
42.5°	2016.4	2018.1	2007.6	1988.1	1958.2	1921.1	1870.0	1808.2	1728.8	1638.8	1538.3
45°	1806.5	1806.5	1802.9	1787.0	1765.9	1735.9	1697.1	1645.9	1568.3	1476.5	1368.9
47.5°	1587.7	1589.5	1584.2	1580.7	1571.8	1552.4	1524.2	1485.4	1430.7	1342.5	1234.9
50°	1365.4	1365.4	1374.2	1372.5	1372.5	1365.4	1353.1	1330.1	1282.5	1211.9	1111.4
52.5°	1143.1	1146.7	1152.0	1159.0	1167.8	1181.9	1167.8	1157.3	1127.3	1072.6	986.1
55°	913.8	917.3	926.1	938.5	949.1	963.2	966.7	966.7	950.8	913.8	848.5
57.5°	718.0	712.7	719.8	730.4	744.5	758.6	769.2	781.5	779.7	755.0	702.1
60°	539.8	541.6	546.9	557.5	568.1	580.4	594.5	605.1	610.4	598.1	564.5
62.5°	393.4	393.4	400.4	411.0	416.3	434.0	442.8	448.1	453.4	451.6	430.4
65°	275.2	278.7	282.3	287.6	292.8	303.4	308.7	319.3	322.8	324.6	308.7
67.5°	194.1	188.8	192.3	195.8	201.1	208.2	218.8	218.8	224.0	224.0	213.5
70°	123.5	123.5	125.3	130.5	134.1	135.8	139.4	142.9	148.2	146.4	146.4
72.5°	82.9	81.2	82.9	84.7	86.5	91.7	91.7	93.5	97.0	98.8	91.7
75°	42.3	44.1	47.6	45.9	51.2	47.6	49.4	54.7	52.9	49.4	49.4
77.5°	35.3	35.3	35.3	33.5	37.0	37.0	35.3	38.8	37.0	37.0	35.3
80°	24.7	26.5	24.7	22.9	24.7	22.9	22.9	22.9	22.9	22.9	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	10.6	12.3	12.3	10.6	10.6	10.6	10.6	10.6	8.8	8.8
87.5°	8.8	5.3	5.3	5.3	7.0	7.0	7.0	5.3	7.0	7.0	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



TEST NUMBER: P249488

CATALOG NUMBER: LSR8B70D010 EC8B70950 8LBDW0B

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5
2.5°	3291.9	3290.1	3293.6	3291.9	3291.9	3290.1	3291.9	3290.1	3293.6	3286.5	3288.3
5°	3291.9	3288.3	3290.1	3291.9	3293.6	3290.1	3290.1	3290.1	3293.6	3290.1	3291.9
7.5°	3284.8	3283.0	3288.3	3291.9	3290.1	3288.3	3291.9	3290.1	3293.6	3291.9	3295.3
10°	3270.7	3272.4	3276.0	3281.2	3283.0	3284.8	3288.3	3288.3	3293.6	3286.5	3290.1
12.5°	3249.5	3256.5	3265.4	3268.9	3276.0	3276.0	3279.5	3281.2	3284.8	3283.0	3288.3
15°	3223.0	3231.9	3242.4	3251.3	3260.1	3265.4	3270.7	3272.4	3277.7	3272.4	3274.2
17.5°	3191.3	3201.9	3217.7	3228.3	3242.4	3247.7	3254.8	3258.3	3263.6	3260.1	3261.9
20°	3147.2	3159.6	3177.2	3193.0	3201.9	3214.2	3223.0	3228.3	3231.9	3228.3	3230.1
22.5°	3085.4	3103.1	3126.0	3138.4	3156.0	3166.6	3168.4	3180.7	3189.5	3180.7	3184.2
25°	3013.1	3030.7	3048.4	3074.9	3090.7	3103.1	3115.4	3117.2	3126.0	3124.2	3122.5
27.5°	2893.1	2916.1	2946.1	2967.3	2988.4	3007.8	3021.9	3025.4	3034.3	3030.7	3032.5
30°	2729.1	2753.8	2782.0	2815.5	2845.5	2864.9	2882.6	2894.9	2903.7	2898.4	2896.7
32.5°	2496.2	2520.9	2550.9	2584.4	2619.7	2647.9	2669.1	2685.0	2695.6	2692.0	2683.2
35°	2229.9	2236.9	2256.3	2282.8	2312.7	2342.7	2362.2	2379.8	2392.1	2395.7	2395.7
37.5°	1956.4	1933.5	1919.4	1919.4	1937.0	1949.3	1967.0	1977.6	1997.0	2004.0	2009.3
40°	1691.8	1638.8	1589.5	1552.4	1527.7	1526.0	1526.0	1531.2	1548.9	1571.8	1593.0
42.5°	1455.4	1370.7	1294.9	1226.1	1176.7	1148.4	1136.1	1137.9	1152.0	1173.1	1208.4
45°	1266.6	1160.8	1065.5	982.6	915.6	871.5	850.3	848.5	859.1	883.8	922.7
47.5°	1120.2	1007.3	899.7	804.4	732.1	684.5	659.8	652.7	659.8	682.7	728.6
50°	998.5	882.1	770.9	672.1	594.5	545.1	522.2	513.4	522.2	541.6	587.4
52.5°	885.6	765.6	661.5	566.3	483.4	441.0	416.3	411.0	416.3	439.2	476.3
55°	755.0	652.7	550.4	455.1	382.8	340.5	321.1	315.8	321.1	342.3	381.1
57.5°	626.3	538.1	448.1	361.6	299.9	262.8	245.2	238.1	250.5	264.6	310.5
60°	506.3	435.8	359.9	284.0	232.9	199.3	185.2	183.5	187.0	204.6	236.4
62.5°	396.9	338.7	278.7	217.0	174.6	160.5	142.9	141.1	144.6	155.2	180.0
65°	285.8	248.8	202.9	158.8	125.3	105.8	98.8	100.6	104.1	111.1	134.1
67.5°	199.3	172.9	141.1	111.1	86.5	77.6	70.6	68.8	70.6	82.9	95.3
70°	134.1	118.2	95.3	84.7	60.0	47.6	49.4	44.1	51.2	51.2	61.7
72.5°	88.2	77.6	63.5	49.4	42.3	33.5	33.5	31.8	35.3	37.0	45.9
75°	45.9	35.3	35.3	24.7	17.7	8.8	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	10.6	8.8	10.6	10.6	10.6	10.6	12.3
82.5°	12.3	10.6	10.6	8.8	8.8	7.0	7.0	7.0	7.0	7.0	10.6
85°	10.6	7.0	7.0	5.3	7.0	12.3	5.3	7.0	7.0	7.0	5.3
87.5°	3.5	5.3	5.3	5.3	3.5	1.8	3.5	5.3	5.3	8.8	7.0
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: P249488

CATALOG NUMBER: LSR8B70D010 EC8B70950 8LBDW0B

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5	3286.5
2.5°	3291.9	3293.6	3293.6	3291.9	3291.9	3288.3	3295.3	3290.1	3291.9	3298.9	3293.6
5°	3295.3	3297.1	3297.1	3295.3	3295.3	3295.3	3297.1	3297.1	3295.3	3293.6	3297.1
7.5°	3302.4	3300.7	3300.7	3297.1	3297.1	3293.6	3297.1	3291.9	3295.3	3291.9	3297.1
10°	3293.6	3295.3	3293.6	3291.9	3291.9	3290.1	3290.1	3284.8	3286.5	3281.2	3284.8
12.5°	3288.3	3286.5	3286.5	3283.0	3279.5	3276.0	3274.2	3268.9	3268.9	3256.5	3261.9
15°	3274.2	3276.0	3270.7	3263.6	3260.1	3251.3	3247.7	3240.7	3233.6	3224.8	3226.6
17.5°	3261.9	3256.5	3249.5	3242.4	3228.3	3221.3	3214.2	3203.6	3200.1	3189.5	3186.0
20°	3224.8	3221.3	3212.5	3200.1	3191.3	3175.4	3168.4	3157.8	3148.9	3138.4	3133.0
22.5°	3177.2	3173.6	3163.0	3150.7	3136.6	3129.6	3122.5	3103.1	3094.2	3083.7	3081.9
25°	3117.2	3111.9	3101.3	3087.2	3080.1	3060.7	3053.7	3039.6	3036.1	3025.4	3023.7
27.5°	3025.4	3018.4	3006.1	2988.4	2976.1	2963.7	2956.7	2946.1	2942.6	2931.9	2930.2
30°	2887.9	2879.0	2854.3	2847.3	2826.1	2813.8	2813.8	2799.6	2801.4	2794.4	2794.4
32.5°	2670.9	2656.8	2637.3	2623.2	2609.1	2602.1	2602.1	2596.8	2600.3	2600.3	2603.8
35°	2383.3	2363.9	2353.3	2344.5	2344.5	2351.5	2372.7	2378.0	2388.6	2397.4	2404.5
37.5°	2014.6	2012.9	2025.2	2035.8	2062.3	2092.3	2129.3	2161.1	2191.0	2212.2	2233.4
40°	1615.9	1660.0	1695.3	1744.7	1785.3	1843.5	1910.5	1965.2	2016.4	2053.4	2092.3
42.5°	1261.3	1317.8	1391.9	1464.2	1536.5	1615.9	1704.2	1780.0	1847.0	1898.2	1938.8
45°	982.6	1060.2	1150.2	1241.9	1335.4	1434.2	1526.0	1603.6	1674.2	1727.1	1767.7
47.5°	792.1	876.8	979.1	1079.6	1185.5	1289.6	1391.9	1458.9	1517.1	1559.5	1596.5
50°	654.5	744.5	852.1	966.7	1072.6	1176.7	1264.9	1330.1	1377.8	1414.8	1437.7
52.5°	546.9	642.1	756.8	871.5	977.3	1072.6	1152.0	1201.4	1240.2	1266.6	1287.8
55°	451.6	543.4	651.0	758.6	862.7	952.6	1017.9	1055.0	1084.9	1100.8	1113.1
57.5°	368.7	453.4	552.2	651.0	740.9	815.0	866.2	903.2	917.3	929.7	927.9
60°	289.3	368.7	458.7	543.4	621.0	680.9	718.0	739.2	749.7	755.0	751.5
62.5°	227.6	299.9	368.7	442.8	499.2	550.4	585.7	585.7	591.0	592.7	598.1
65°	169.3	224.0	284.0	338.7	384.6	418.1	437.5	442.8	449.9	448.1	444.6
67.5°	125.3	165.8	209.9	250.5	282.3	303.4	317.5	329.9	328.1	324.6	322.8
70°	86.5	112.9	151.7	176.4	199.3	220.5	224.0	225.8	227.6	229.3	225.8
72.5°	60.0	79.4	100.6	121.7	135.8	144.6	153.5	155.2	155.2	155.2	153.5
75°	30.0	40.6	60.0	68.8	81.2	84.7	91.7	91.7	97.0	90.0	88.2
77.5°	26.5	31.8	42.3	49.4	54.7	60.0	61.7	67.0	65.3	61.7	63.5
80°	15.9	19.4	26.5	30.0	37.0	38.8	40.6	42.3	40.6	42.3	42.3
82.5°	12.3	14.1	17.7	17.7	22.9	22.9	24.7	24.7	26.5	26.5	26.5
85°	7.0	12.3	10.6	21.2	14.1	14.1	17.7	21.2	17.7	17.7	21.2
87.5°	7.0	7.0	5.3	7.0	7.0	7.0	8.8	10.6	10.6	12.3	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: P249488

CATALOG NUMBER: LSR8B70D010 EC8B70950 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	3286.5	3286.5	3286.5	3286.5
2.5°	3291.9	3295.3	3290.1	3288.3
5°	3297.1	3297.1	3293.6	3293.6
7.5°	3297.1	3297.1	3291.9	3288.3
10°	3283.0	3283.0	3277.7	3274.2
12.5°	3256.5	3256.5	3254.8	3249.5
15°	3223.0	3223.0	3216.0	3210.7
17.5°	3177.2	3180.7	3171.9	3171.9
20°	3127.8	3126.0	3119.0	3115.4
22.5°	3076.6	3073.1	3071.3	3060.7
25°	3021.9	3018.4	3013.1	3007.8
27.5°	2928.4	2926.7	2921.4	2914.3
30°	2785.5	2783.8	2776.7	2776.7
32.5°	2600.3	2598.5	2591.5	2593.3
35°	2408.0	2415.1	2411.5	2404.5
37.5°	2247.5	2252.8	2256.3	2252.8
40°	2113.4	2129.3	2131.1	2134.6
42.5°	1970.5	1991.7	1998.8	2002.3
45°	1799.4	1818.8	1834.7	1831.1
47.5°	1624.7	1638.8	1653.0	1642.4
50°	1457.2	1466.0	1471.3	1471.3
52.5°	1298.4	1298.4	1296.6	1298.4
55°	1116.7	1116.7	1109.6	1113.1
57.5°	926.1	929.7	924.4	915.6
60°	749.7	740.9	737.4	732.1
62.5°	583.9	583.9	571.6	587.4
65°	437.5	432.2	426.9	425.1
67.5°	317.5	315.8	310.5	308.7
70°	224.0	217.0	215.2	211.7
72.5°	150.0	150.0	146.4	146.4
75°	91.7	82.9	81.2	82.9
77.5°	63.5	61.7	61.7	60.0
80°	42.3	40.6	44.1	38.8
82.5°	26.5	28.2	26.5	28.2
85°	17.7	21.2	19.4	19.4
87.5°	10.6	10.6	10.6	10.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)