

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: P249484

Luminaire Tested: **LSR8B150D010 EC8B150940 8LBDW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249484
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: LSR8B150D010 EC8B150940 8LBDW0B
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12978.0 lumens
Efficiency: N/A
Efficacy: 81.9 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

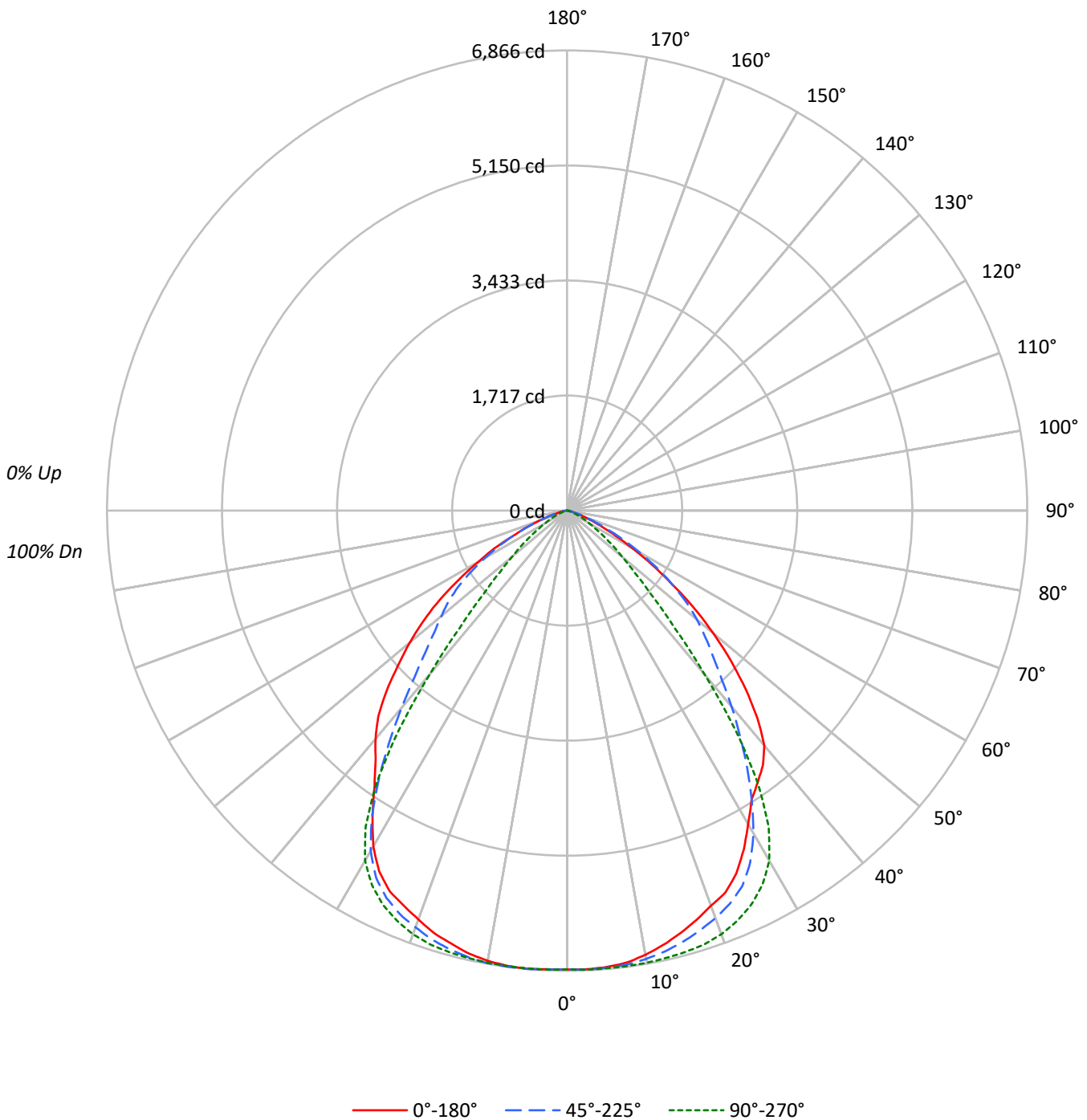
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	211149	211149	211149
5°	211615	212184	212413
10°	210724	214522	213601
15°	208388	217659	213553
20°	205887	220719	213004
25°	203216	220973	213219
30°	192251	214762	205992
35°	186512	186647	188586
40°	184202	128422	179025
45°	164132	77097	166378
50°	136478	51312	147056
55°	102356	35375	124684
60°	69363	23571	94075
65°	41838	15286	64632
70°	23198	8286	39760
75°	10508	3503	20588
80°	9128	3907	14366
85°	10402	5201	14329



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	653.5	5.0
10°-20°	1897.8	14.6
20°-30°	2880.6	22.2
30°-40°	3025.4	23.3
40°-50°	2268.3	17.5
50°-60°	1455.4	11.2
60°-70°	622.6	4.8
70°-80°	147.1	1.1
80°-90°	27.4	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°	5431.9	41.9
0°-40°	8457.3	65.2
0°-60°	12181.0	93.9
0°-90°	12978.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12978.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6847	6847	6847	6847	6847	
5°	6836	6847	6855	6866	6862	649
15°	6528	6664	6818	6774	6689	1841
25°	5973	6182	6495	6377	6267	2729
35°	4955	4679	4958	4899	5010	3110
45°	3764	3076	1768	2988	3815	2882
55°	1904	1904	658	1985	2319	1727
65°	573	676	210	871	886	612
75°	88	103	29	176	173	128
85°	29	18	15	29	40	31
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°	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4
2.5°	6851.1	6858.5	6854.8	6854.8	6851.1	6854.8	6854.8	6862.2	6862.2	6854.8	6851.1
5°	6836.4	6843.8	6843.8	6836.4	6836.4	6854.8	6843.8	6851.1	6851.1	6847.4	6847.4
7.5°	6803.4	6803.4	6818.0	6807.1	6807.1	6818.0	6814.4	6821.7	6829.1	6832.8	6832.8
10°	6729.8	6737.2	6740.9	6740.9	6744.6	6755.5	6762.9	6777.7	6784.9	6792.3	6796.0
12.5°	6638.0	6649.0	6652.7	6649.0	6660.0	6674.7	6693.1	6711.5	6722.5	6737.2	6748.2
15°	6527.6	6527.6	6535.0	6546.1	6553.5	6575.5	6593.8	6615.9	6645.3	6663.7	6682.1
17.5°	6406.4	6413.8	6424.8	6424.8	6439.5	6476.2	6487.3	6520.4	6553.5	6571.8	6608.6
20°	6274.1	6281.4	6292.5	6299.8	6318.2	6347.6	6369.6	6399.0	6435.8	6468.9	6505.6
22.5°	6171.1	6156.5	6163.8	6171.1	6189.6	6215.3	6241.0	6277.7	6314.5	6347.6	6384.4
25°	5972.7	5976.4	5987.4	5994.7	6016.8	6038.9	6068.3	6112.3	6145.4	6182.2	6222.6
27.5°	5704.4	5708.1	5726.4	5726.4	5744.8	5781.6	5799.9	5836.7	5880.8	5917.5	5965.4
30°	5399.3	5406.6	5406.6	5421.4	5432.3	5450.8	5469.1	5505.9	5527.9	5561.0	5627.2
32.5°	5120.0	5127.3	5123.6	5120.0	5108.9	5105.3	5101.6	5108.9	5116.3	5127.3	5153.0
35°	4954.6	4936.2	4921.5	4895.8	4866.4	4829.6	4796.5	4752.4	4712.0	4678.9	4642.2
37.5°	4796.5	4792.8	4770.8	4734.0	4675.2	4609.1	4531.9	4436.3	4340.7	4237.8	4138.6
40°	4576.0	4564.9	4546.6	4495.1	4429.0	4348.1	4245.2	4127.6	3973.2	3815.2	3653.5
42.5°	4201.1	4204.8	4182.7	4142.2	4079.8	4002.6	3896.0	3767.4	3602.0	3414.5	3205.0
45°	3763.7	3763.7	3756.3	3723.2	3679.2	3616.7	3535.8	3429.3	3267.6	3076.4	2852.2
47.5°	3307.9	3311.6	3300.6	3293.3	3274.8	3234.5	3175.6	3094.8	2980.8	2797.0	2572.8
50°	2844.9	2844.9	2863.2	2859.5	2859.5	2844.9	2819.1	2771.3	2672.1	2525.1	2315.6
52.5°	2381.7	2389.1	2400.1	2414.8	2433.2	2462.6	2433.2	2411.1	2348.6	2234.7	2054.6
55°	1903.9	1911.3	1929.6	1955.3	1977.5	2006.9	2014.2	2014.2	1981.1	1903.9	1767.9
57.5°	1496.0	1484.9	1499.6	1521.7	1551.1	1580.5	1602.5	1628.2	1624.6	1573.1	1462.9
60°	1124.7	1128.4	1139.4	1161.5	1183.5	1209.2	1238.7	1260.7	1271.7	1246.0	1176.2
62.5°	819.7	819.7	834.3	856.3	867.4	904.2	922.5	933.6	944.6	940.9	896.8
65°	573.4	580.7	588.1	599.1	610.1	632.1	643.2	665.2	672.6	676.3	643.2
67.5°	404.3	393.3	400.7	407.9	419.0	433.7	455.8	455.8	466.8	466.8	444.7
70°	257.3	257.3	261.0	272.0	279.3	283.0	290.4	297.7	308.7	305.1	305.1
72.5°	172.8	169.1	172.8	176.4	180.1	191.1	191.1	194.8	202.2	205.9	191.1
75°	88.2	91.9	99.2	95.6	106.6	99.2	102.9	113.9	110.3	102.9	102.9
77.5°	73.5	73.5	73.5	69.9	77.2	77.2	73.5	80.9	77.2	77.2	73.5
80°	51.4	55.1	51.4	47.8	51.4	47.8	47.8	47.8	47.8	47.8	44.1
82.5°	40.5	33.1	36.8	33.1	36.8	36.8	33.1	29.4	29.4	33.1	29.4
85°	29.4	22.0	25.7	25.7	22.0	22.0	22.0	22.0	22.0	18.3	18.3
87.5°	18.3	11.1	11.1	11.1	14.7	14.7	14.7	11.1	14.7	14.7	7.4
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°	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4
2.5°	6858.5	6854.8	6862.2	6858.5	6858.5	6854.8	6858.5	6854.8	6862.2	6847.4	6851.1
5°	6858.5	6851.1	6854.8	6858.5	6862.2	6854.8	6854.8	6854.8	6862.2	6854.8	6858.5
7.5°	6843.8	6840.1	6851.1	6858.5	6854.8	6851.1	6858.5	6854.8	6862.2	6858.5	6865.8
10°	6814.4	6818.0	6825.4	6836.4	6840.1	6843.8	6851.1	6851.1	6862.2	6847.4	6854.8
12.5°	6770.3	6784.9	6803.4	6810.7	6825.4	6825.4	6832.8	6836.4	6843.8	6840.1	6851.1
15°	6715.2	6733.5	6755.5	6774.0	6792.3	6803.4	6814.4	6818.0	6829.1	6818.0	6821.7
17.5°	6649.0	6671.0	6704.1	6726.1	6755.5	6766.6	6781.3	6788.6	6799.7	6792.3	6796.0
20°	6557.1	6582.9	6619.6	6652.7	6671.0	6696.7	6715.2	6726.1	6733.5	6726.1	6729.8
22.5°	6428.4	6465.2	6513.0	6538.7	6575.5	6597.5	6601.2	6626.9	6645.3	6626.9	6634.3
25°	6277.7	6314.5	6351.3	6406.4	6439.5	6465.2	6491.0	6494.6	6513.0	6509.3	6505.6
27.5°	6027.8	6075.6	6138.1	6182.2	6226.3	6266.7	6296.2	6303.4	6321.9	6314.5	6318.2
30°	5686.0	5737.5	5796.3	5866.1	5928.6	5969.0	6005.8	6031.5	6049.8	6038.9	6035.2
32.5°	5200.9	5252.3	5314.8	5384.6	5458.2	5516.9	5561.0	5594.1	5616.2	5608.8	5590.4
35°	4645.9	4660.5	4701.0	4756.1	4818.5	4881.1	4921.5	4958.2	4983.9	4991.3	4991.3
37.5°	4076.1	4028.4	3999.0	3999.0	4035.7	4061.4	4098.2	4120.2	4160.7	4175.3	4186.4
40°	3524.8	3414.5	3311.6	3234.5	3183.0	3179.3	3179.3	3190.3	3227.1	3274.8	3319.0
42.5°	3032.3	2855.8	2697.8	2554.5	2451.6	2392.8	2367.0	2370.7	2400.1	2444.2	2517.7
45°	2639.0	2418.5	2220.0	2047.2	1907.6	1815.7	1771.6	1767.9	1789.9	1841.4	1922.3
47.5°	2334.0	2098.7	1874.5	1676.0	1525.4	1426.1	1374.6	1360.0	1374.6	1422.4	1518.0
50°	2080.3	1837.8	1606.2	1400.4	1238.7	1135.8	1087.9	1069.6	1087.9	1128.4	1223.9
52.5°	1845.1	1595.2	1378.3	1179.8	1007.1	918.9	867.4	856.3	867.4	915.2	992.4
55°	1573.1	1360.0	1146.7	948.3	797.6	709.4	668.9	658.0	668.9	713.1	793.9
57.5°	1304.8	1121.0	933.6	753.5	624.9	547.6	510.9	496.2	521.9	551.3	646.9
60°	1054.8	907.9	749.8	591.8	485.2	415.3	385.9	382.2	389.6	426.4	492.5
62.5°	827.0	705.7	580.7	452.1	363.9	334.5	297.7	294.1	301.4	323.4	374.9
65°	595.4	518.3	422.7	330.8	261.0	220.5	205.9	209.5	216.8	231.6	279.3
67.5°	415.3	360.2	294.1	231.6	180.1	161.7	147.0	143.4	147.0	172.8	198.5
70°	279.3	246.2	198.5	176.4	125.0	99.2	102.9	91.9	106.6	106.6	128.6
72.5°	183.7	161.7	132.3	102.9	88.2	69.9	69.9	66.2	73.5	77.2	95.6
75°	95.6	73.5	73.5	51.4	36.8	18.3	33.1	29.4	25.7	29.4	36.8
77.5°	66.2	55.1	51.4	40.5	36.8	29.4	29.4	29.4	29.4	33.1	36.8
80°	40.5	40.5	29.4	25.7	22.0	18.3	22.0	22.0	22.0	22.0	25.7
82.5°	25.7	22.0	22.0	18.3	18.3	14.7	14.7	14.7	14.7	14.7	22.0
85°	22.0	14.7	14.7	11.1	14.7	25.7	11.1	14.7	14.7	14.7	11.1
87.5°	7.4	11.1	11.1	11.1	7.4	3.7	7.4	11.1	11.1	18.3	14.7
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°	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4	6847.4
2.5°	6858.5	6862.2	6862.2	6858.5	6858.5	6851.1	6865.8	6854.8	6858.5	6873.2	6862.2
5°	6865.8	6869.5	6869.5	6865.8	6865.8	6865.8	6869.5	6869.5	6865.8	6862.2	6869.5
7.5°	6880.5	6876.9	6876.9	6869.5	6869.5	6862.2	6869.5	6858.5	6865.8	6858.5	6869.5
10°	6862.2	6865.8	6862.2	6858.5	6858.5	6854.8	6854.8	6843.8	6847.4	6836.4	6843.8
12.5°	6851.1	6847.4	6847.4	6840.1	6832.8	6825.4	6821.7	6810.7	6810.7	6784.9	6796.0
15°	6821.7	6825.4	6814.4	6799.7	6792.3	6774.0	6766.6	6751.9	6737.2	6718.8	6722.5
17.5°	6796.0	6784.9	6770.3	6755.5	6726.1	6711.5	6696.7	6674.7	6667.3	6645.3	6638.0
20°	6718.8	6711.5	6693.1	6667.3	6649.0	6615.9	6601.2	6579.2	6560.7	6538.7	6527.6
22.5°	6619.6	6612.2	6590.1	6564.4	6535.0	6520.4	6505.6	6465.2	6446.8	6424.8	6421.1
25°	6494.6	6483.6	6461.5	6432.1	6417.4	6377.0	6362.3	6332.9	6325.6	6303.4	6299.8
27.5°	6303.4	6288.8	6263.1	6226.3	6200.6	6174.8	6160.2	6138.1	6130.8	6108.6	6105.0
30°	6016.8	5998.4	5946.9	5932.3	5888.1	5862.4	5862.4	5833.0	5836.7	5822.0	5822.0
32.5°	5564.7	5535.3	5494.8	5465.4	5436.0	5421.4	5421.4	5410.3	5417.7	5417.7	5425.1
35°	4965.6	4925.2	4903.1	4884.7	4884.7	4899.4	4943.6	4954.6	4976.6	4995.0	5009.7
37.5°	4197.4	4193.8	4219.5	4241.5	4296.7	4359.2	4436.3	4502.5	4564.9	4609.1	4653.2
40°	3366.8	3458.7	3532.1	3635.1	3719.6	3840.9	3980.5	4094.5	4201.1	4278.3	4359.2
42.5°	2627.9	2745.6	2900.0	3050.6	3201.4	3366.8	3550.6	3708.6	3848.3	3954.8	4039.4
45°	2047.2	2208.9	2396.5	2587.6	2782.4	2988.2	3179.3	3341.0	3488.1	3598.3	3682.9
47.5°	1650.3	1826.7	2039.9	2249.4	2469.9	2686.8	2900.0	3039.7	3160.9	3249.1	3326.4
50°	1363.6	1551.1	1775.3	2014.2	2234.7	2451.6	2635.3	2771.3	2870.6	2947.8	2995.5
52.5°	1139.4	1337.9	1576.8	1815.7	2036.2	2234.7	2400.1	2503.0	2583.9	2639.0	2683.1
55°	940.9	1132.1	1356.3	1580.5	1797.3	1984.7	2120.7	2198.0	2260.4	2293.5	2319.2
57.5°	768.2	944.6	1150.4	1356.3	1543.7	1698.1	1804.7	1881.9	1911.3	1937.0	1933.3
60°	602.8	768.2	955.6	1132.1	1293.8	1418.7	1496.0	1540.0	1562.1	1573.1	1565.7
62.5°	474.1	624.9	768.2	922.5	1040.2	1146.7	1220.3	1220.3	1231.3	1235.0	1246.0
65°	352.8	466.8	591.8	705.7	801.2	871.1	911.6	922.5	937.3	933.6	926.2
67.5°	261.0	345.5	437.3	521.9	588.1	632.1	661.6	687.4	683.7	676.3	672.6
70°	180.1	235.3	316.1	367.6	415.3	459.5	466.8	470.4	474.1	477.8	470.4
72.5°	125.0	165.4	209.5	253.6	283.0	301.4	319.8	323.4	323.4	323.4	319.8
75°	62.5	84.5	125.0	143.4	169.1	176.4	191.1	191.1	202.2	187.4	183.7
77.5°	55.1	66.2	88.2	102.9	113.9	125.0	128.6	139.7	136.0	128.6	132.3
80°	33.1	40.5	55.1	62.5	77.2	80.9	84.5	88.2	84.5	88.2	88.2
82.5°	25.7	29.4	36.8	36.8	47.8	47.8	51.4	51.4	55.1	55.1	55.1
85°	14.7	25.7	22.0	44.1	29.4	29.4	36.8	44.1	36.8	36.8	44.1
87.5°	14.7	14.7	11.1	14.7	14.7	14.7	18.3	22.0	22.0	25.7	22.0
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: P249484

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBDW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6847.4	6847.4	6847.4	6847.4
2.5°	6858.5	6865.8	6854.8	6851.1
5°	6869.5	6869.5	6862.2	6862.2
7.5°	6869.5	6869.5	6858.5	6851.1
10°	6840.1	6840.1	6829.1	6821.7
12.5°	6784.9	6784.9	6781.3	6770.3
15°	6715.2	6715.2	6700.4	6689.4
17.5°	6619.6	6626.9	6608.6	6608.6
20°	6516.7	6513.0	6498.3	6491.0
22.5°	6410.1	6402.7	6399.0	6377.0
25°	6296.2	6288.8	6277.7	6266.7
27.5°	6101.4	6097.7	6086.6	6071.9
30°	5803.6	5799.9	5785.2	5785.2
32.5°	5417.7	5414.0	5399.3	5403.0
35°	5017.0	5031.8	5024.4	5009.7
37.5°	4682.6	4693.6	4701.0	4693.6
40°	4403.2	4436.3	4440.0	4447.4
42.5°	4105.6	4149.6	4164.4	4171.7
45°	3749.0	3789.4	3822.5	3815.2
47.5°	3385.1	3414.5	3443.9	3421.9
50°	3036.0	3054.3	3065.4	3065.4
52.5°	2705.2	2705.2	2701.5	2705.2
55°	2326.6	2326.6	2311.9	2319.2
57.5°	1929.6	1937.0	1925.9	1907.6
60°	1562.1	1543.7	1536.3	1525.4
62.5°	1216.6	1216.6	1190.9	1223.9
65°	911.6	900.5	889.4	885.8
67.5°	661.6	658.0	646.9	643.2
70°	466.8	452.1	448.4	441.0
72.5°	312.4	312.4	305.1	305.1
75°	191.1	172.8	169.1	172.8
77.5°	132.3	128.6	128.6	125.0
80°	88.2	84.5	91.9	80.9
82.5°	55.1	58.8	55.1	58.8
85°	36.8	44.1	40.5	40.5
87.5°	22.0	22.0	22.0	22.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)