

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: P249160

Luminaire Tested: **LSR8B150D010 EC8B150940 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249160
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 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14666.0 lumens
Efficiency: N/A
Efficacy: 92.5 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

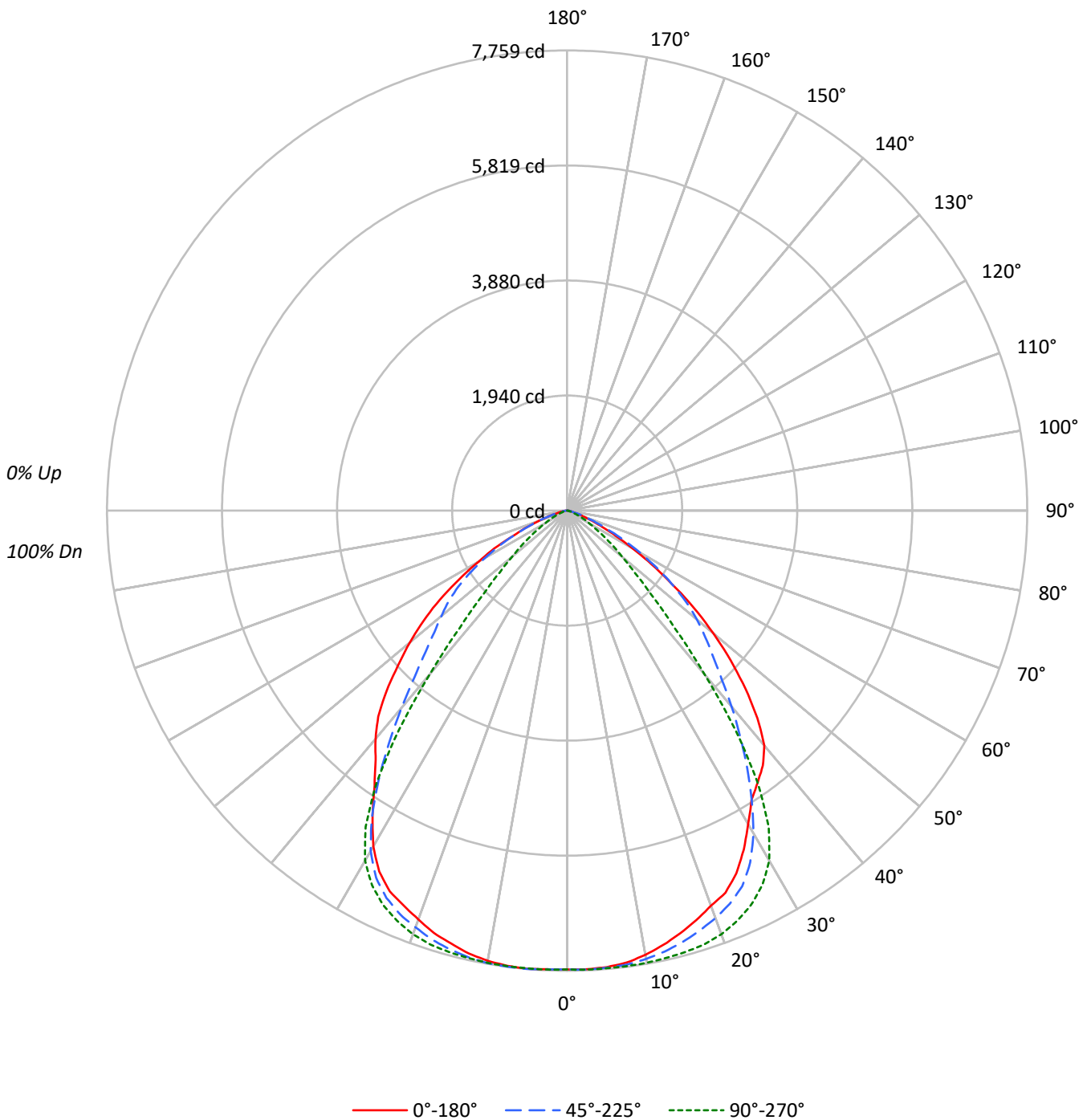
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	238614	238614	238614
5°	239139	239783	240040
10°	238131	242424	241384
15°	235495	245969	241330
20°	232667	249429	240707
25°	229646	249717	240952
30°	217258	242695	232786
35°	210770	210924	213115
40°	208161	145128	202308
45°	185478	87127	188016
50°	154228	57985	166183
55°	115668	39972	140903
60°	78386	26636	106311
65°	47281	17278	73038
70°	26218	9368	44935
75°	11878	3956	23257
80°	10317	4422	16231
85°	11746	5873	16169



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	738.5	5.0
10°-20°	2144.7	14.6
20°-30°	3255.2	22.2
30°-40°	3418.9	23.3
40°-50°	2563.3	17.5
50°-60°	1644.7	11.2
60°-70°	703.6	4.8
70°-80°	166.2	1.1
80°-90°	30.9	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°	6138.4	41.9
0°-40°	9557.3	65.2
0°-60°	13765.3	93.9
0°-90°	14666.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14666.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7738	7738	7738	7738	7738	
5°	7726	7738	7746	7759	7755	734
15°	7377	7530	7705	7655	7560	2081
25°	6750	6986	7339	7206	7082	3083
35°	5599	5287	5603	5537	5661	3514
45°	4253	3476	1998	3377	4311	3257
55°	2152	2152	744	2243	2621	1952
65°	648	764	237	984	1001	692
75°	100	116	33	199	195	145
85°	33	21	17	33	46	35
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°	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1
2.5°	7742.2	7750.6	7746.4	7746.4	7742.2	7746.4	7746.4	7754.7	7754.7	7746.4	7742.2
5°	7725.6	7733.9	7733.9	7725.6	7725.6	7746.4	7733.9	7742.2	7742.2	7738.1	7738.1
7.5°	7688.3	7688.3	7704.8	7692.4	7692.4	7704.8	7700.7	7709.0	7717.3	7721.5	7721.5
10°	7605.1	7613.5	7617.6	7617.6	7621.8	7634.2	7642.5	7659.2	7667.4	7675.8	7679.9
12.5°	7501.4	7513.8	7517.9	7513.8	7526.3	7542.8	7563.7	7584.4	7596.9	7613.5	7626.0
15°	7376.7	7376.7	7385.0	7397.5	7405.8	7430.7	7451.5	7476.4	7509.6	7530.4	7551.2
17.5°	7239.7	7248.0	7260.4	7260.4	7277.1	7318.5	7331.0	7368.4	7405.8	7426.6	7468.1
20°	7090.2	7098.4	7110.9	7119.2	7140.0	7173.2	7198.1	7231.3	7272.9	7310.3	7351.8
22.5°	6973.8	6957.2	6965.5	6973.8	6994.6	7023.7	7052.8	7094.2	7135.8	7173.2	7214.8
25°	6749.5	6753.7	6766.2	6774.4	6799.4	6824.3	6857.5	6907.3	6944.7	6986.3	7031.9
27.5°	6446.3	6450.5	6471.2	6471.2	6492.0	6533.5	6554.3	6595.8	6645.7	6687.2	6741.3
30°	6101.6	6109.8	6109.8	6126.5	6138.9	6159.7	6180.5	6222.0	6246.9	6284.3	6359.1
32.5°	5785.9	5794.2	5790.0	5785.9	5773.4	5769.3	5765.1	5773.4	5781.8	5794.2	5823.2
35°	5599.0	5578.2	5561.6	5532.6	5499.3	5457.8	5420.4	5370.6	5324.8	5287.4	5246.0
37.5°	5420.4	5416.2	5391.3	5349.7	5283.3	5208.6	5121.4	5013.3	4905.3	4789.0	4676.9
40°	5171.2	5158.7	5137.9	5079.8	5005.0	4913.6	4797.4	4664.4	4490.0	4311.4	4128.7
42.5°	4747.5	4751.6	4726.7	4681.0	4610.5	4523.2	4402.8	4257.4	4070.5	3858.6	3621.9
45°	4253.2	4253.2	4244.9	4207.5	4157.7	4087.1	3995.7	3875.3	3692.6	3476.5	3223.1
47.5°	3738.2	3742.4	3729.9	3721.6	3700.8	3655.2	3588.7	3497.3	3368.6	3160.8	2907.5
50°	3214.9	3214.9	3235.6	3231.5	3231.5	3214.9	3185.8	3131.8	3019.7	2853.5	2616.8
52.5°	2691.5	2699.8	2712.3	2728.9	2749.6	2782.9	2749.6	2724.7	2654.1	2525.3	2321.9
55°	2151.5	2159.9	2180.6	2209.7	2234.7	2267.9	2276.1	2276.1	2238.7	2151.5	1997.9
57.5°	1690.5	1678.0	1694.7	1719.6	1752.8	1786.1	1811.0	1840.0	1835.9	1777.7	1653.1
60°	1271.0	1275.2	1287.6	1312.6	1337.5	1366.5	1399.8	1424.7	1437.2	1408.1	1329.1
62.5°	926.3	926.3	942.8	967.7	980.2	1021.8	1042.5	1055.0	1067.4	1063.3	1013.5
65°	648.0	656.2	664.6	677.1	689.5	714.4	726.9	751.8	760.1	764.3	726.9
67.5°	456.9	444.4	452.8	461.0	473.5	490.2	515.1	515.1	527.5	527.5	502.6
70°	290.8	290.8	294.9	307.3	315.7	319.8	328.2	336.4	348.9	344.7	344.7
72.5°	195.2	191.1	195.2	199.4	203.6	216.0	216.0	220.1	228.5	232.6	216.0
75°	99.7	103.9	112.1	108.0	120.4	112.1	116.3	128.8	124.6	116.3	116.3
77.5°	83.0	83.0	83.0	79.0	87.2	87.2	83.0	91.4	87.2	87.2	83.0
80°	58.1	62.3	58.1	54.0	58.1	54.0	54.0	54.0	54.0	54.0	49.8
82.5°	45.7	37.4	41.6	37.4	41.6	41.6	37.4	33.2	33.2	37.4	33.2
85°	33.2	24.9	29.1	29.1	24.9	24.9	24.9	24.9	24.9	20.7	20.7
87.5°	20.7	12.5	12.5	12.5	16.6	16.6	16.6	12.5	16.6	16.6	8.3
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°	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1
2.5°	7750.6	7746.4	7754.7	7750.6	7750.6	7746.4	7750.6	7746.4	7754.7	7738.1	7742.2
5°	7750.6	7742.2	7746.4	7750.6	7754.7	7746.4	7746.4	7746.4	7754.7	7746.4	7750.6
7.5°	7733.9	7729.7	7742.2	7750.6	7746.4	7742.2	7750.6	7746.4	7754.7	7750.6	7758.8
10°	7700.7	7704.8	7713.2	7725.6	7729.7	7733.9	7742.2	7742.2	7754.7	7738.1	7746.4
12.5°	7650.9	7667.4	7688.3	7696.5	7713.2	7713.2	7721.5	7725.6	7733.9	7729.7	7742.2
15°	7588.6	7609.3	7634.2	7655.0	7675.8	7688.3	7700.7	7704.8	7717.3	7704.8	7709.0
17.5°	7513.8	7538.7	7576.1	7601.0	7634.2	7646.7	7663.3	7671.6	7684.1	7675.8	7679.9
20°	7409.9	7439.1	7480.5	7517.9	7538.7	7567.7	7588.6	7601.0	7609.3	7601.0	7605.1
22.5°	7264.6	7306.1	7360.1	7389.2	7430.7	7455.6	7459.8	7488.9	7509.6	7488.9	7497.2
25°	7094.2	7135.8	7177.4	7239.7	7277.1	7306.1	7335.2	7339.4	7360.1	7355.9	7351.8
27.5°	6811.8	6865.9	6936.4	6986.3	7036.1	7081.8	7115.1	7123.3	7144.1	7135.8	7140.0
30°	6425.5	6483.7	6550.2	6629.1	6699.7	6745.3	6786.9	6816.0	6836.7	6824.3	6820.1
32.5°	5877.3	5935.4	6006.1	6084.9	6168.1	6234.4	6284.3	6321.7	6346.6	6338.3	6317.6
35°	5250.1	5266.7	5312.4	5374.7	5445.3	5515.9	5561.6	5603.1	5632.2	5640.5	5640.5
37.5°	4606.3	4552.3	4519.1	4519.1	4560.6	4589.6	4631.2	4656.1	4701.8	4718.4	4730.9
40°	3983.2	3858.6	3742.4	3655.2	3597.0	3592.9	3592.9	3605.3	3646.8	3700.8	3750.7
42.5°	3426.7	3227.3	3048.7	2886.7	2770.5	2704.0	2674.9	2679.1	2712.3	2762.1	2845.2
45°	2982.3	2733.1	2508.8	2313.5	2155.7	2051.8	2002.0	1997.9	2022.8	2080.9	2172.4
47.5°	2637.5	2371.7	2118.3	1894.0	1723.8	1611.6	1553.4	1536.9	1553.4	1607.4	1715.4
50°	2350.9	2076.8	1815.1	1582.5	1399.8	1283.5	1229.4	1208.7	1229.4	1275.2	1383.1
52.5°	2085.1	1802.6	1557.6	1333.3	1138.1	1038.4	980.2	967.7	980.2	1034.2	1121.5
55°	1777.7	1536.9	1295.9	1071.6	901.4	801.7	755.9	743.5	755.9	805.8	897.2
57.5°	1474.6	1266.8	1055.0	851.5	706.1	618.8	577.4	560.7	589.8	623.0	731.0
60°	1192.0	1026.0	847.3	668.7	548.3	469.3	436.1	431.9	440.3	481.8	556.5
62.5°	934.6	797.5	656.2	510.9	411.2	378.0	336.4	332.3	340.6	365.5	423.7
65°	672.9	585.7	477.7	373.8	294.9	249.2	232.6	236.8	245.0	261.7	315.7
67.5°	469.3	407.0	332.3	261.7	203.6	182.7	166.2	162.0	166.2	195.2	224.3
70°	315.7	278.3	224.3	199.4	141.3	112.1	116.3	103.9	120.4	120.4	145.3
72.5°	207.6	182.7	149.5	116.3	99.7	79.0	79.0	74.8	83.0	87.2	108.0
75°	108.0	83.0	83.0	58.1	41.6	20.7	37.4	33.2	29.1	33.2	41.6
77.5°	74.8	62.3	58.1	45.7	41.6	33.2	33.2	33.2	33.2	37.4	41.6
80°	45.7	45.7	33.2	29.1	24.9	20.7	24.9	24.9	24.9	24.9	29.1
82.5°	29.1	24.9	24.9	20.7	20.7	16.6	16.6	16.6	16.6	16.6	24.9
85°	24.9	16.6	16.6	12.5	16.6	29.1	12.5	16.6	16.6	16.6	12.5
87.5°	8.3	12.5	12.5	12.5	8.3	4.2	8.3	12.5	12.5	20.7	16.6
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1	7738.1
2.5°	7750.6	7754.7	7754.7	7750.6	7750.6	7742.2	7758.8	7746.4	7750.6	7767.1	7754.7
5°	7758.8	7763.0	7763.0	7758.8	7758.8	7758.8	7763.0	7763.0	7758.8	7754.7	7763.0
7.5°	7775.5	7771.3	7771.3	7763.0	7763.0	7754.7	7763.0	7750.6	7758.8	7750.6	7763.0
10°	7754.7	7758.8	7754.7	7750.6	7750.6	7746.4	7746.4	7733.9	7738.1	7725.6	7733.9
12.5°	7742.2	7738.1	7738.1	7729.7	7721.5	7713.2	7709.0	7696.5	7696.5	7667.4	7679.9
15°	7709.0	7713.2	7700.7	7684.1	7675.8	7655.0	7646.7	7630.0	7613.5	7592.7	7596.9
17.5°	7679.9	7667.4	7650.9	7634.2	7601.0	7584.4	7567.7	7542.8	7534.5	7509.6	7501.4
20°	7592.7	7584.4	7563.7	7534.5	7513.8	7476.4	7459.8	7434.9	7414.1	7389.2	7376.7
22.5°	7480.5	7472.2	7447.3	7418.2	7385.0	7368.4	7351.8	7306.1	7285.3	7260.4	7256.2
25°	7339.4	7326.9	7302.0	7268.7	7252.1	7206.4	7189.8	7156.5	7148.3	7123.3	7119.2
27.5°	7123.3	7106.7	7077.7	7036.1	7007.0	6978.0	6961.4	6936.4	6928.2	6903.2	6899.1
30°	6799.4	6778.6	6720.4	6703.9	6654.0	6624.9	6624.9	6591.7	6595.8	6579.3	6579.3
32.5°	6288.5	6255.3	6209.5	6176.3	6143.1	6126.5	6126.5	6114.0	6122.3	6122.3	6130.7
35°	5611.4	5565.8	5540.8	5520.1	5520.1	5536.6	5586.5	5599.0	5623.9	5644.7	5661.3
37.5°	4743.3	4739.2	4768.3	4793.2	4855.5	4926.1	5013.3	5088.1	5158.7	5208.6	5258.4
40°	3804.7	3908.5	3991.6	4107.9	4203.4	4340.5	4498.3	4627.0	4747.5	4834.8	4926.1
42.5°	2969.8	3102.7	3277.2	3447.4	3617.8	3804.7	4012.4	4191.0	4348.8	4469.2	4564.7
45°	2313.5	2496.3	2708.2	2924.1	3144.3	3376.9	3592.9	3775.6	3941.8	4066.4	4161.9
47.5°	1864.9	2064.3	2305.2	2542.0	2791.2	3036.2	3277.2	3435.0	3572.0	3671.7	3759.0
50°	1540.9	1752.8	2006.2	2276.1	2525.3	2770.5	2978.1	3131.8	3244.0	3331.2	3385.1
52.5°	1287.6	1511.9	1781.9	2051.8	2301.0	2525.3	2712.3	2828.6	2920.0	2982.3	3032.1
55°	1063.3	1279.3	1532.7	1786.1	2031.1	2242.9	2396.6	2483.9	2554.4	2591.8	2620.9
57.5°	868.1	1067.4	1300.1	1532.7	1744.5	1919.0	2039.4	2126.6	2159.9	2188.9	2184.8
60°	681.2	868.1	1079.9	1279.3	1462.1	1603.2	1690.5	1740.3	1765.2	1777.7	1769.4
62.5°	535.8	706.1	868.1	1042.5	1175.5	1295.9	1379.0	1379.0	1391.4	1395.6	1408.1
65°	398.7	527.5	668.7	797.5	905.4	984.4	1030.1	1042.5	1059.2	1055.0	1046.7
67.5°	294.9	390.5	494.2	589.8	664.6	714.4	747.6	776.8	772.6	764.3	760.1
70°	203.6	265.9	357.2	415.4	469.3	519.2	527.5	531.6	535.8	540.0	531.6
72.5°	141.3	186.9	236.8	286.6	319.8	340.6	361.4	365.5	365.5	365.5	361.4
75°	70.6	95.5	141.3	162.0	191.1	199.4	216.0	216.0	228.5	211.8	207.6
77.5°	62.3	74.8	99.7	116.3	128.8	141.3	145.3	157.8	153.7	145.3	149.5
80°	37.4	45.7	62.3	70.6	87.2	91.4	95.5	99.7	95.5	99.7	99.7
82.5°	29.1	33.2	41.6	41.6	54.0	54.0	58.1	58.1	62.3	62.3	62.3
85°	16.6	29.1	24.9	49.8	33.2	33.2	41.6	49.8	41.6	41.6	49.8
87.5°	16.6	16.6	12.5	16.6	16.6	16.6	20.7	24.9	24.9	29.1	24.9
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: P249160

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7738.1	7738.1	7738.1	7738.1
2.5°	7750.6	7758.8	7746.4	7742.2
5°	7763.0	7763.0	7754.7	7754.7
7.5°	7763.0	7763.0	7750.6	7742.2
10°	7729.7	7729.7	7717.3	7709.0
12.5°	7667.4	7667.4	7663.3	7650.9
15°	7588.6	7588.6	7571.9	7559.5
17.5°	7480.5	7488.9	7468.1	7468.1
20°	7364.3	7360.1	7343.5	7335.2
22.5°	7243.8	7235.5	7231.3	7206.4
25°	7115.1	7106.7	7094.2	7081.8
27.5°	6894.9	6890.8	6878.3	6861.7
30°	6558.4	6554.3	6537.7	6537.7
32.5°	6122.3	6118.2	6101.6	6105.8
35°	5669.6	5686.2	5677.9	5661.3
37.5°	5291.6	5304.1	5312.4	5304.1
40°	4975.9	5013.3	5017.5	5025.8
42.5°	4639.5	4689.3	4706.0	4714.2
45°	4236.6	4282.3	4319.7	4311.4
47.5°	3825.4	3858.6	3891.9	3867.0
50°	3430.9	3451.6	3464.1	3464.1
52.5°	3057.1	3057.1	3052.9	3057.1
55°	2629.2	2629.2	2612.6	2620.9
57.5°	2180.6	2188.9	2176.4	2155.7
60°	1765.2	1744.5	1736.2	1723.8
62.5°	1374.9	1374.9	1345.8	1383.1
65°	1030.1	1017.6	1005.1	1001.0
67.5°	747.6	743.5	731.0	726.9
70°	527.5	510.9	506.7	498.4
72.5°	353.1	353.1	344.7	344.7
75°	216.0	195.2	191.1	195.2
77.5°	149.5	145.3	145.3	141.3
80°	99.7	95.5	103.9	91.4
82.5°	62.3	66.5	62.3	66.5
85°	41.6	49.8	45.7	45.7
87.5°	24.9	24.9	24.9	24.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)