

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: P249592

Luminaire Tested: **LSR8B150D010 EC8B150940 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249592
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 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14501.0 lumens
Efficiency: N/A
Efficacy: 91.5 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

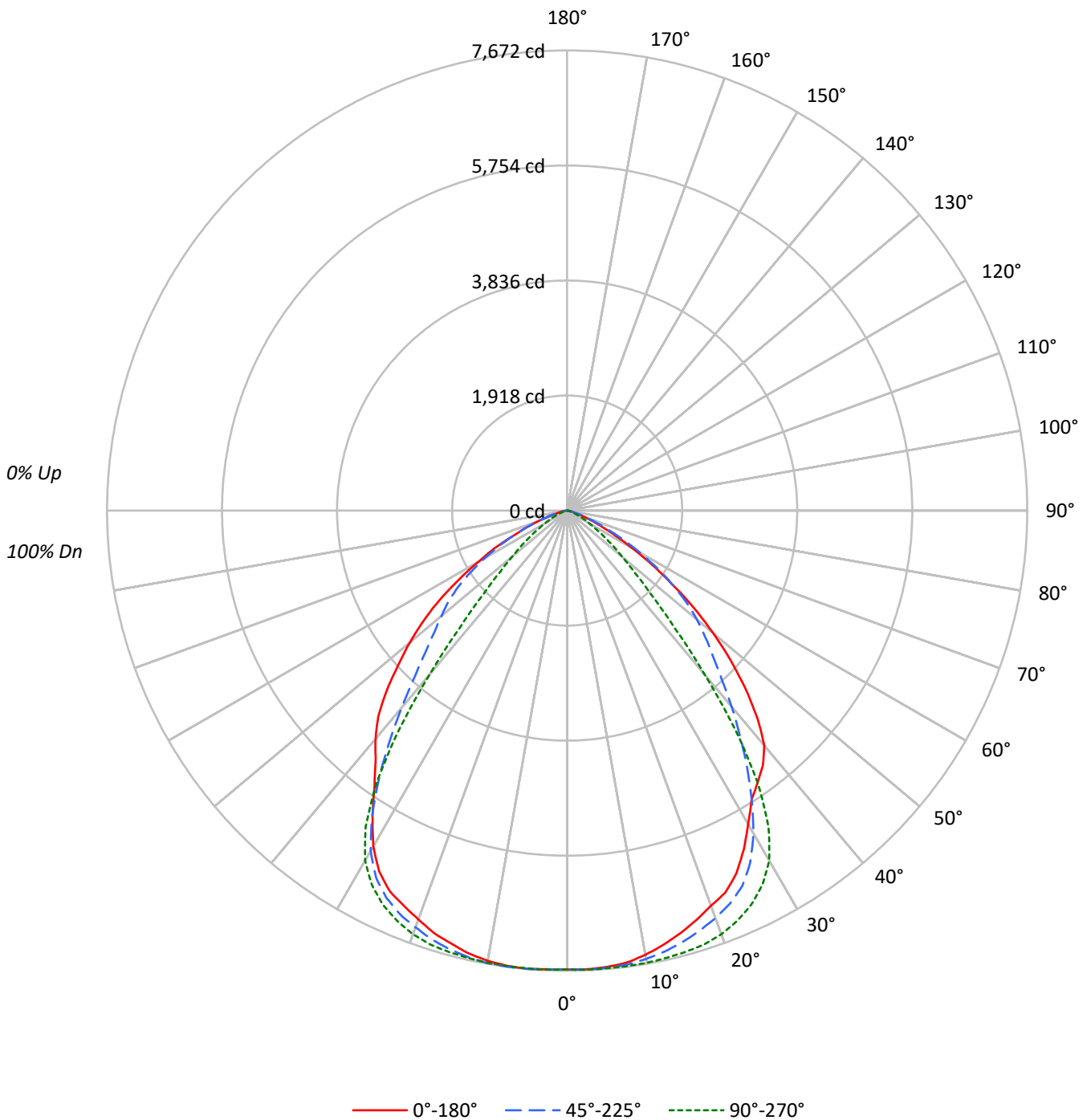
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	235929	235929	235929
5°	236449	237087	237341
10°	235454	239697	238670
15°	232845	243204	238617
20°	230049	246624	238000
25°	227063	246906	238244
30°	214815	239964	230169
35°	208402	208553	210721
40°	205818	143493	200034
45°	183394	86145	185901
50°	152491	57332	164312
55°	114367	39525	139317
60°	77504	26340	105115
65°	46749	17081	72213
70°	25921	9259	44431
75°	11747	3920	22994
80°	10211	4368	16035
85°	11640	5802	15992



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	730.2	5.0
10°-20°	2120.5	14.6
20°-30°	3218.6	22.2
30°-40°	3380.5	23.3
40°-50°	2534.5	17.5
50°-60°	1626.2	11.2
60°-70°	695.6	4.8
70°-80°	164.4	1.1
80°-90°	30.6	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°	6069.3	41.9
0°-40°	9449.8	65.2
0°-60°	13610.4	93.9
0°-90°	14501.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14501.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	7651	7651	7651	7651	7651	
5°	7639	7651	7659	7672	7668	726
15°	7294	7446	7618	7569	7474	2057
25°	6674	6908	7257	7125	7002	3049
35°	5536	5228	5540	5474	5598	3475
45°	4205	3437	1975	3339	4263	3221
55°	2127	2127	735	2218	2591	1930
65°	641	756	234	973	990	684
75°	99	115	33	197	193	144
85°	33	20	16	33	45	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°	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0
2.5°	7655.1	7663.4	7659.3	7659.3	7655.1	7659.3	7659.3	7667.5	7667.5	7659.3	7655.1
5°	7638.7	7646.9	7646.9	7638.7	7638.7	7659.3	7646.9	7655.1	7655.1	7651.0	7651.0
7.5°	7601.8	7601.8	7618.2	7605.9	7605.9	7618.2	7614.0	7622.3	7630.5	7634.6	7634.6
10°	7519.6	7527.8	7531.9	7531.9	7536.1	7548.3	7556.6	7573.0	7581.2	7589.4	7593.5
12.5°	7417.0	7429.2	7433.4	7429.2	7441.6	7458.0	7478.6	7499.1	7511.4	7527.8	7540.2
15°	7293.7	7293.7	7301.9	7314.3	7322.5	7347.1	7367.6	7392.3	7425.1	7445.7	7466.2
17.5°	7158.2	7166.5	7178.7	7178.7	7195.2	7236.2	7248.6	7285.5	7322.5	7343.0	7384.1
20°	7010.4	7018.5	7030.9	7039.1	7059.6	7092.5	7117.1	7150.0	7191.1	7228.1	7269.1
22.5°	6895.3	6879.0	6887.1	6895.3	6915.9	6944.7	6973.4	7014.4	7055.5	7092.5	7133.6
25°	6673.6	6677.7	6690.0	6698.2	6722.9	6747.5	6780.4	6829.6	6866.6	6907.7	6952.8
27.5°	6373.8	6377.9	6398.4	6398.4	6418.9	6460.0	6480.5	6521.6	6571.0	6612.0	6665.4
30°	6033.0	6041.1	6041.1	6057.6	6069.8	6090.4	6110.9	6152.0	6176.7	6213.6	6287.6
32.5°	5720.8	5729.0	5724.9	5720.8	5708.5	5704.4	5700.3	5708.5	5716.7	5729.0	5757.7
35°	5536.1	5515.5	5499.1	5470.3	5437.5	5396.4	5359.4	5310.2	5264.9	5228.0	5187.0
37.5°	5359.4	5355.3	5330.7	5289.6	5223.8	5150.0	5063.8	4956.9	4850.1	4735.2	4624.3
40°	5113.0	5100.6	5080.1	5022.7	4948.7	4858.4	4743.4	4612.0	4439.4	4262.9	4082.2
42.5°	4694.1	4698.2	4673.6	4628.4	4558.6	4472.3	4353.2	4209.5	4024.7	3815.2	3581.2
45°	4205.4	4205.4	4197.2	4160.2	4110.9	4041.1	3950.8	3831.7	3651.0	3437.4	3186.9
47.5°	3696.1	3700.2	3687.9	3679.7	3659.2	3614.0	3548.3	3458.0	3330.7	3125.3	2874.7
50°	3178.7	3178.7	3199.2	3195.1	3195.1	3178.7	3150.0	3096.5	2985.7	2821.4	2587.3
52.5°	2661.2	2669.4	2681.8	2698.2	2718.7	2751.5	2718.7	2694.1	2624.2	2496.9	2295.7
55°	2127.3	2135.6	2156.1	2184.8	2209.5	2242.4	2250.5	2250.5	2213.5	2127.3	1975.4
57.5°	1671.5	1659.1	1675.6	1700.2	1733.1	1766.0	1790.6	1819.3	1815.2	1757.7	1634.5
60°	1256.7	1260.8	1273.1	1297.8	1322.4	1351.2	1384.0	1408.6	1421.0	1392.3	1314.2
62.5°	915.8	915.8	932.2	956.8	969.2	1010.3	1030.8	1043.2	1055.4	1051.3	1002.1
65°	640.7	648.8	657.1	669.4	681.7	706.3	718.7	743.3	751.5	755.7	718.7
67.5°	451.8	439.4	447.7	455.8	468.2	484.6	509.3	509.3	521.5	521.5	496.9
70°	287.5	287.5	291.6	303.9	312.1	316.2	324.5	332.6	345.0	340.9	340.9
72.5°	193.0	188.9	193.0	197.2	201.3	213.5	213.5	217.7	225.9	230.0	213.5
75°	98.6	102.7	110.8	106.8	119.1	110.8	115.0	127.3	123.2	115.0	115.0
77.5°	82.1	82.1	82.1	78.1	86.2	86.2	82.1	90.3	86.2	86.2	82.1
80°	57.5	61.6	57.5	53.4	57.5	53.4	53.4	53.4	53.4	53.4	49.2
82.5°	45.2	37.0	41.1	37.0	41.1	41.1	37.0	32.9	32.9	37.0	32.9
85°	32.9	24.6	28.7	28.7	24.6	24.6	24.6	24.6	24.6	20.5	20.5
87.5°	20.5	12.4	12.4	12.4	16.4	16.4	16.4	12.4	16.4	16.4	8.2
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0
2.5°	7663.4	7659.3	7667.5	7663.4	7663.4	7659.3	7663.4	7659.3	7667.5	7651.0	7655.1
5°	7663.4	7655.1	7659.3	7663.4	7667.5	7659.3	7659.3	7659.3	7667.5	7659.3	7663.4
7.5°	7646.9	7642.8	7655.1	7663.4	7659.3	7655.1	7663.4	7659.3	7667.5	7663.4	7671.5
10°	7614.0	7618.2	7626.4	7638.7	7642.8	7646.9	7655.1	7655.1	7667.5	7651.0	7659.3
12.5°	7564.8	7581.2	7601.8	7609.9	7626.4	7626.4	7634.6	7638.7	7646.9	7642.8	7655.1
15°	7503.2	7523.7	7548.3	7568.9	7589.4	7601.8	7614.0	7618.2	7630.5	7618.2	7622.3
17.5°	7429.2	7453.9	7490.8	7515.5	7548.3	7560.7	7577.1	7585.3	7597.7	7589.4	7593.5
20°	7326.5	7355.4	7396.4	7433.4	7453.9	7482.6	7503.2	7515.5	7523.7	7515.5	7519.6
22.5°	7182.8	7223.9	7277.3	7306.0	7347.1	7371.8	7375.9	7404.6	7425.1	7404.6	7412.9
25°	7014.4	7055.5	7096.6	7158.2	7195.2	7223.9	7252.7	7256.8	7277.3	7273.2	7269.1
27.5°	6735.2	6788.6	6858.4	6907.7	6956.9	7002.2	7035.0	7043.2	7063.8	7055.5	7059.6
30°	6353.2	6410.8	6476.5	6554.5	6624.3	6669.5	6710.6	6739.3	6759.8	6747.5	6743.4
32.5°	5811.2	5868.7	5938.5	6016.5	6098.7	6164.3	6213.6	6250.6	6275.2	6267.0	6246.5
35°	5191.1	5207.5	5252.7	5314.3	5384.0	5453.9	5499.1	5540.1	5568.8	5577.1	5577.1
37.5°	4554.5	4501.1	4468.3	4468.3	4509.3	4538.0	4579.1	4603.7	4648.9	4665.3	4677.7
40°	3938.4	3815.2	3700.2	3614.0	3556.5	3552.4	3552.4	3564.7	3605.8	3659.2	3708.5
42.5°	3388.1	3191.0	3014.4	2854.2	2739.3	2673.6	2644.8	2648.9	2681.8	2731.0	2813.1
45°	2948.7	2702.3	2480.5	2287.5	2131.4	2028.7	1979.5	1975.4	2000.0	2057.5	2147.9
47.5°	2607.8	2345.0	2094.5	1872.7	1704.4	1593.4	1536.0	1519.6	1536.0	1589.3	1696.1
50°	2324.5	2053.5	1794.7	1564.7	1384.0	1269.1	1215.6	1195.1	1215.6	1260.8	1367.5
52.5°	2061.6	1782.3	1540.1	1318.3	1125.3	1026.7	969.2	956.8	969.2	1022.6	1108.9
55°	1757.7	1519.6	1281.3	1059.5	891.2	792.6	747.4	735.2	747.4	796.8	887.1
57.5°	1458.0	1252.6	1043.2	841.9	698.2	611.9	570.9	554.4	583.1	616.0	722.8
60°	1178.6	1014.4	837.8	661.2	542.1	464.1	431.2	427.1	435.3	476.4	550.3
62.5°	924.1	788.5	648.8	505.1	406.6	373.7	332.6	328.6	336.7	361.4	418.9
65°	665.3	579.1	472.3	369.6	291.6	246.4	230.0	234.1	242.3	258.8	312.1
67.5°	464.1	402.5	328.6	258.8	201.3	180.7	164.3	160.2	164.3	193.0	221.8
70°	312.1	275.1	221.8	197.2	139.7	110.8	115.0	102.7	119.1	119.1	143.7
72.5°	205.3	180.7	147.8	115.0	98.6	78.1	78.1	74.0	82.1	86.2	106.8
75°	106.8	82.1	82.1	57.5	41.1	20.5	37.0	32.9	28.7	32.9	41.1
77.5°	74.0	61.6	57.5	45.2	41.1	32.9	32.9	32.9	32.9	37.0	41.1
80°	45.2	45.2	32.9	28.7	24.6	20.5	24.6	24.6	24.6	24.6	28.7
82.5°	28.7	24.6	24.6	20.5	20.5	16.4	16.4	16.4	16.4	16.4	24.6
85°	24.6	16.4	16.4	12.4	16.4	28.7	12.4	16.4	16.4	16.4	12.4
87.5°	8.2	12.4	12.4	12.4	8.2	4.1	8.2	12.4	12.4	20.5	16.4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0	7651.0
2.5°	7663.4	7667.5	7667.5	7663.4	7663.4	7655.1	7671.5	7659.3	7663.4	7679.8	7667.5
5°	7671.5	7675.6	7675.6	7671.5	7671.5	7671.5	7675.6	7675.6	7671.5	7667.5	7675.6
7.5°	7688.0	7683.9	7683.9	7675.6	7675.6	7667.5	7675.6	7663.4	7671.5	7663.4	7675.6
10°	7667.5	7671.5	7667.5	7663.4	7663.4	7659.3	7659.3	7646.9	7651.0	7638.7	7646.9
12.5°	7655.1	7651.0	7651.0	7642.8	7634.6	7626.4	7622.3	7609.9	7609.9	7581.2	7593.5
15°	7622.3	7626.4	7614.0	7597.7	7589.4	7568.9	7560.7	7544.2	7527.8	7507.3	7511.4
17.5°	7593.5	7581.2	7564.8	7548.3	7515.5	7499.1	7482.6	7458.0	7449.7	7425.1	7417.0
20°	7507.3	7499.1	7478.6	7449.7	7429.2	7392.3	7375.9	7351.3	7330.7	7306.0	7293.7
22.5°	7396.4	7388.1	7363.5	7334.8	7301.9	7285.5	7269.1	7223.9	7203.3	7178.7	7174.6
25°	7256.8	7244.4	7219.8	7187.0	7170.5	7125.4	7108.9	7076.0	7067.9	7043.2	7039.1
27.5°	7043.2	7026.8	6998.0	6956.9	6928.2	6899.5	6883.1	6858.4	6850.2	6825.5	6821.5
30°	6722.9	6702.3	6644.8	6628.5	6579.1	6550.4	6550.4	6517.5	6521.6	6505.3	6505.3
32.5°	6217.8	6184.9	6139.7	6106.8	6074.0	6057.6	6057.6	6045.2	6053.5	6053.5	6061.7
35°	5548.3	5503.2	5478.5	5458.0	5458.0	5474.4	5523.7	5536.1	5560.7	5581.2	5597.7
37.5°	4690.0	4685.9	4714.7	4739.3	4800.9	4870.7	4956.9	5030.9	5100.6	5150.0	5199.2
40°	3761.8	3864.5	3946.6	4061.7	4156.1	4291.6	4447.7	4575.0	4694.1	4780.4	4870.7
42.5°	2936.3	3067.8	3240.3	3408.6	3577.1	3761.8	3967.2	4143.8	4299.9	4418.9	4513.4
45°	2287.5	2468.2	2677.7	2891.2	3108.9	3338.9	3552.4	3733.1	3897.4	4020.6	4115.1
47.5°	1843.9	2041.1	2279.3	2513.4	2759.8	3002.1	3240.3	3396.4	3531.8	3630.4	3716.7
50°	1523.6	1733.1	1983.6	2250.5	2496.9	2739.3	2944.6	3096.5	3207.5	3293.7	3347.0
52.5°	1273.1	1494.9	1761.8	2028.7	2275.1	2496.9	2681.8	2796.8	2887.1	2948.7	2997.9
55°	1051.3	1264.9	1515.4	1766.0	2008.2	2217.7	2369.6	2455.9	2525.7	2562.6	2591.4
57.5°	858.4	1055.4	1285.4	1515.4	1724.9	1897.4	2016.5	2102.7	2135.6	2164.3	2160.2
60°	673.6	858.4	1067.8	1264.9	1445.6	1585.2	1671.5	1720.7	1745.4	1757.7	1749.5
62.5°	529.8	698.2	858.4	1030.8	1162.2	1281.3	1363.5	1363.5	1375.8	1379.9	1392.3
65°	394.2	521.5	661.2	788.5	895.2	973.3	1018.5	1030.8	1047.3	1043.2	1034.9
67.5°	291.6	386.1	488.7	583.1	657.1	706.3	739.2	768.0	763.9	755.7	751.5
70°	201.3	262.9	353.2	410.7	464.1	513.4	521.5	525.7	529.8	533.9	525.7
72.5°	139.7	184.8	234.1	283.4	316.2	336.7	357.3	361.4	361.4	361.4	357.3
75°	69.8	94.5	139.7	160.2	188.9	197.2	213.5	213.5	225.9	209.4	205.3
77.5°	61.6	74.0	98.6	115.0	127.3	139.7	143.7	156.1	151.9	143.7	147.8
80°	37.0	45.2	61.6	69.8	86.2	90.3	94.5	98.6	94.5	98.6	98.6
82.5°	28.7	32.9	41.1	41.1	53.4	53.4	57.5	57.5	61.6	61.6	61.6
85°	16.4	28.7	24.6	49.2	32.9	32.9	41.1	49.2	41.1	41.1	49.2
87.5°	16.4	16.4	12.4	16.4	16.4	16.4	20.5	24.6	24.6	28.7	24.6
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: P249592

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	7651.0	7651.0	7651.0	7651.0
2.5°	7663.4	7671.5	7659.3	7655.1
5°	7675.6	7675.6	7667.5	7667.5
7.5°	7675.6	7675.6	7663.4	7655.1
10°	7642.8	7642.8	7630.5	7622.3
12.5°	7581.2	7581.2	7577.1	7564.8
15°	7503.2	7503.2	7486.7	7474.5
17.5°	7396.4	7404.6	7384.1	7384.1
20°	7281.4	7277.3	7260.9	7252.7
22.5°	7162.3	7154.1	7150.0	7125.4
25°	7035.0	7026.8	7014.4	7002.2
27.5°	6817.4	6813.2	6800.9	6784.5
30°	6484.7	6480.5	6464.2	6464.2
32.5°	6053.5	6049.3	6033.0	6037.1
35°	5605.8	5622.3	5614.0	5597.7
37.5°	5232.1	5244.4	5252.7	5244.4
40°	4920.0	4956.9	4961.1	4969.3
42.5°	4587.4	4636.6	4653.1	4661.2
45°	4188.9	4234.1	4271.1	4262.9
47.5°	3782.3	3815.2	3848.1	3823.4
50°	3392.3	3412.8	3425.1	3425.1
52.5°	3022.7	3022.7	3018.5	3022.7
55°	2599.6	2599.6	2583.2	2591.4
57.5°	2156.1	2164.3	2151.9	2131.4
60°	1745.4	1724.9	1716.6	1704.4
62.5°	1359.4	1359.4	1330.7	1367.5
65°	1018.5	1006.2	993.8	989.7
67.5°	739.2	735.2	722.8	718.7
70°	521.5	505.1	501.0	492.8
72.5°	349.1	349.1	340.9	340.9
75°	213.5	193.0	188.9	193.0
77.5°	147.8	143.7	143.7	139.7
80°	98.6	94.5	102.7	90.3
82.5°	61.6	65.7	61.6	65.7
85°	41.1	49.2	45.2	45.2
87.5°	24.6	24.6	24.6	24.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)