

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: P249758

Luminaire Tested: **LSR8B100D010 EC8B100940 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249758
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B100D010 EC8B100940 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10241.0 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

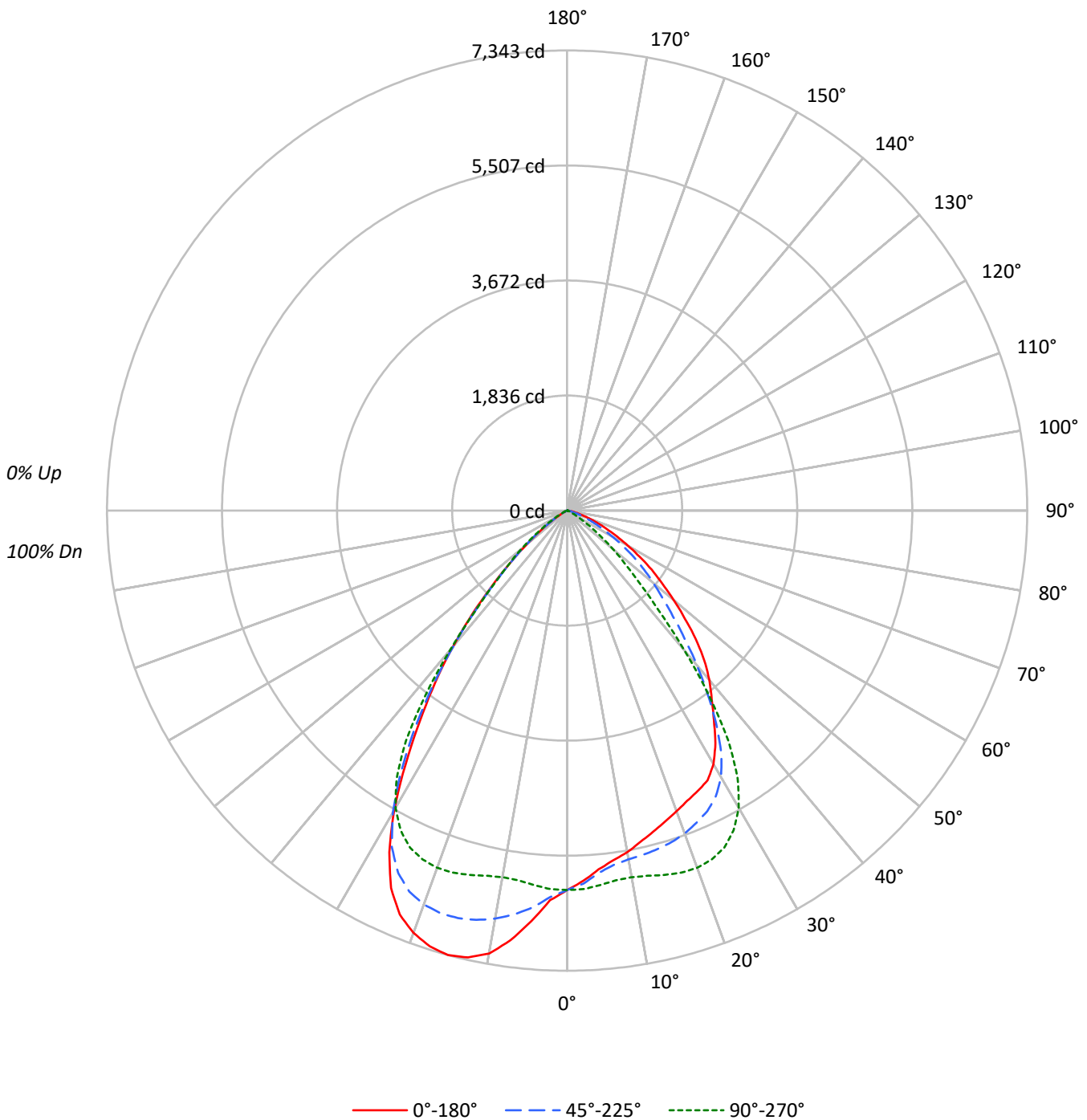
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249758

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBSWOLI

Luminous Intensity Polar Plot





TEST NUMBER: P249758

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBSW0LI

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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60					60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54					54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49					49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42					42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	186729	186729	186729
5°	177896	185691	203563
10°	173309	185978	224698
15°	169380	192142	234419
20°	167516	199084	235299
25°	167906	201896	226158
30°	166347	194965	196677
35°	153713	168729	153923
40°	142044	116982	114136
45°	126484	70586	72928
50°	106428	45478	41271
55°	88540	24945	18865
60°	69110	10817	5933
65°	51002	5370	2889
70°	35460	3318	1271
75°	21577	679	0
80°	15574	1012	0
85°	10013	991	0



TEST NUMBER: P249758

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBSWOLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	582.1	5.7
10°-20°	1742.3	17.0
20°-30°	2668.1	26.1
30°-40°	2615.7	25.5
40°-50°	1575.2	15.4
50°-60°	725.0	7.1
60°-70°	254.7	2.5
70°-80°	66.6	0.7
80°-90°	11.3	0.1
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°	4992.6	48.8
0°-40°	7608.2	74.3
0°-60°	9908.4	96.8
0°-90°	10241.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10241.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6056	6056	6056	6056	6056	
5°	5747	5801	5999	6358	6576	543
15°	5306	5592	6019	6732	7343	1499
25°	4935	5292	5934	6381	6647	2273
35°	4083	4140	4482	4225	4089	2557
45°	2900	2388	1619	1630	1672	2224
55°	1647	1304	464	365	351	1469
65°	699	484	74	37	40	712
75°	181	105	6	0	0	220
85°	28	14	3	0	0	39
90°	0	0	0	0	0	



TEST NUMBER: P249758

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBSWOLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5
2.5°	5914.0	5919.7	5919.7	5919.7	5931.0	5933.9	5931.0	5933.9	5939.5	5959.3	5967.8
5°	5747.1	5738.6	5744.3	5741.4	5755.6	5764.1	5758.4	5766.9	5786.7	5800.9	5815.0
7.5°	5628.3	5628.3	5628.3	5633.9	5642.4	5659.4	5656.6	5662.2	5682.0	5701.8	5721.6
10°	5534.9	5532.1	5532.1	5546.2	5557.5	5577.3	5583.0	5600.0	5625.4	5650.9	5673.5
12.5°	5413.2	5416.1	5430.2	5444.4	5469.8	5500.9	5517.9	5540.6	5580.2	5622.6	5648.1
15°	5305.7	5308.5	5319.9	5348.1	5379.3	5416.1	5452.8	5489.6	5537.7	5591.5	5636.8
17.5°	5201.0	5203.8	5212.3	5243.5	5283.1	5331.2	5373.6	5421.7	5484.0	5546.2	5602.8
20°	5104.8	5102.0	5116.1	5144.4	5195.4	5240.6	5283.1	5339.7	5407.6	5484.0	5549.0
22.5°	5011.3	5011.3	5025.6	5053.9	5099.2	5144.4	5189.7	5249.1	5317.0	5390.6	5467.0
25°	4934.9	4932.1	4951.9	4966.2	5000.1	5045.4	5093.5	5141.6	5209.5	5291.6	5365.1
27.5°	4852.9	4850.2	4852.9	4870.0	4901.0	4934.9	4971.7	5014.3	5070.9	5138.8	5209.5
30°	4671.8	4674.6	4674.6	4688.8	4705.8	4742.5	4762.3	4804.8	4855.7	4912.3	4974.7
32.5°	4403.0	4405.8	4405.8	4411.5	4425.6	4442.6	4459.6	4490.7	4530.3	4578.4	4635.0
35°	4083.3	4083.3	4080.4	4083.3	4091.8	4091.8	4105.9	4091.8	4111.6	4139.9	4182.3
37.5°	3789.0	3783.3	3777.7	3772.0	3763.5	3749.4	3729.6	3695.6	3687.1	3675.8	3678.6
40°	3528.7	3525.9	3508.9	3494.6	3466.3	3432.4	3384.3	3324.9	3276.8	3220.2	3172.1
42.5°	3240.0	3237.1	3223.0	3197.5	3166.4	3115.5	3039.1	2959.9	2863.7	2778.8	2691.1
45°	2900.4	2908.9	2889.1	2860.8	2824.0	2775.9	2691.1	2594.8	2498.6	2388.3	2277.9
47.5°	2546.7	2543.9	2529.8	2512.8	2481.7	2433.6	2377.0	2272.3	2170.3	2068.6	1955.3
50°	2218.5	2207.2	2201.4	2184.6	2164.8	2125.2	2065.6	1980.7	1890.2	1794.0	1689.3
52.5°	1907.2	1907.2	1893.0	1881.7	1864.7	1833.6	1782.7	1714.8	1638.4	1547.8	1437.5
55°	1646.9	1641.2	1627.1	1612.9	1595.9	1576.1	1530.9	1474.3	1392.2	1304.5	1208.3
57.5°	1369.6	1366.7	1361.1	1344.1	1335.6	1315.8	1264.9	1208.3	1137.6	1061.2	981.9
60°	1120.6	1109.3	1097.9	1086.6	1072.5	1052.7	1018.7	970.6	911.2	843.3	764.1
62.5°	897.1	914.0	880.1	880.1	851.8	834.8	803.7	775.4	713.0	650.8	582.9
65°	699.0	699.0	684.7	673.4	656.4	636.6	605.5	577.2	531.9	483.8	435.7
67.5°	534.8	531.9	517.8	506.5	492.3	481.0	458.4	424.4	390.5	350.9	311.2
70°	393.3	390.5	387.6	367.8	356.5	342.4	325.4	302.8	277.3	249.0	212.2
72.5°	282.9	282.9	274.5	266.0	254.7	243.3	226.4	212.2	189.6	169.8	144.3
75°	181.1	178.3	178.3	164.1	164.1	147.1	135.8	127.3	116.0	104.7	82.1
77.5°	130.2	127.3	124.5	118.8	113.2	107.5	99.0	87.7	79.2	67.9	59.4
80°	87.7	82.1	79.2	79.2	70.7	67.9	70.7	53.8	50.9	42.4	36.8
82.5°	53.8	53.8	50.9	50.9	48.1	45.3	36.8	36.8	34.0	31.1	25.5
85°	28.3	36.8	25.5	28.3	25.5	28.3	25.5	19.8	17.0	14.1	14.1
87.5°	17.0	11.3	11.3	17.0	14.1	11.3	11.3	11.3	8.5	5.7	5.7
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: P249758

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5
2.5°	5962.2	5982.0	5979.1	6004.6	6013.1	6032.9	6032.9	6047.0	6055.5	6075.3	6092.3
5°	5820.7	5851.8	5860.3	5891.4	5916.9	5948.0	5967.8	5998.9	6027.2	6069.7	6109.3
7.5°	5733.0	5758.4	5775.4	5812.2	5840.5	5874.4	5908.4	5950.8	5990.4	6041.4	6098.0
10°	5690.5	5724.5	5749.9	5786.7	5820.7	5857.5	5891.4	5939.5	5984.8	6049.9	6112.1
12.5°	5679.2	5718.8	5749.9	5800.9	5834.8	5874.4	5914.0	5967.8	6015.9	6083.8	6154.6
15°	5679.2	5718.8	5749.9	5800.9	5834.8	5874.4	5914.0	5967.8	6015.9	6083.8	6154.6
17.5°	5667.9	5733.0	5786.7	5851.8	5902.7	5953.7	6007.4	6058.4	6114.9	6182.9	6259.2
20°	5622.6	5704.7	5769.7	5846.1	5899.9	5956.5	6010.3	6066.8	6126.3	6197.0	6262.1
22.5°	5543.4	5639.6	5713.2	5795.2	5857.5	5914.0	5967.8	6024.4	6089.5	6157.4	6225.3
25°	5438.7	5529.2	5608.5	5693.3	5755.6	5817.8	5868.8	5933.9	5993.3	6058.4	6112.1
27.5°	5280.2	5376.4	5452.8	5540.6	5597.1	5656.6	5699.0	5752.8	5809.4	5863.1	5905.6
30°	5042.6	5130.3	5209.5	5288.7	5345.3	5387.8	5433.0	5475.5	5512.3	5549.0	5585.8
32.5°	4694.4	4773.7	4850.2	4923.6	4969.0	5005.8	5039.7	5065.2	5085.0	5104.8	5107.6
35°	4216.3	4281.3	4329.4	4394.5	4437.0	4470.9	4470.9	4482.2	4479.4	4470.9	4462.4
37.5°	3681.5	3706.9	3726.7	3752.2	3755.0	3755.0	3738.1	3723.9	3701.3	3695.6	3678.6
40°	3124.0	3090.0	3064.5	3030.6	3010.8	2968.3	2931.6	2906.1	2869.3	2863.7	2858.0
42.5°	2594.8	2515.6	2444.9	2385.5	2317.6	2258.1	2204.4	2164.8	2136.5	2133.5	2136.5
45°	2164.8	2074.1	1969.4	1887.4	1811.0	1737.4	1666.7	1618.6	1593.1	1587.4	1593.1
47.5°	1839.3	1734.6	1632.7	1539.3	1457.3	1375.2	1304.5	1239.4	1208.3	1199.8	1197.0
50°	1581.8	1474.3	1366.7	1270.5	1180.0	1097.9	1010.2	948.0	908.4	894.2	882.9
52.5°	1330.0	1233.8	1123.4	1024.4	933.8	837.6	747.1	676.2	636.6	619.8	608.3
55°	1109.3	1013.1	911.2	815.0	718.8	622.5	531.9	464.0	421.6	401.8	387.6
57.5°	885.7	795.2	707.5	611.2	531.9	438.6	348.0	288.6	251.8	229.2	217.9
60°	684.7	614.0	537.6	458.4	382.0	305.6	232.0	175.4	147.1	130.2	116.0
62.5°	517.8	458.4	407.4	339.5	280.1	215.0	158.5	113.2	87.7	73.6	67.9
65°	373.5	328.2	282.9	240.5	198.1	150.0	107.5	73.6	50.9	42.4	39.6
67.5°	266.0	229.2	195.2	166.9	135.8	107.5	76.4	50.9	39.6	34.0	31.1
70°	186.7	158.5	135.8	110.4	90.5	70.7	59.4	36.8	22.6	25.5	19.8
72.5°	124.5	104.7	93.4	76.4	62.2	50.9	36.8	25.5	25.5	19.8	17.0
75°	67.9	62.2	48.1	36.8	31.1	28.3	11.3	5.7	2.8	8.5	2.8
77.5°	48.1	42.4	36.8	31.1	25.5	19.8	11.3	11.3	8.5	11.3	5.7
80°	31.1	25.5	22.6	22.6	14.1	8.5	5.7	5.7	8.5	2.8	2.8
82.5°	19.8	17.0	14.1	14.1	14.1	8.5	8.5	8.5	8.5	5.7	5.7
85°	11.3	8.5	5.7	5.7	2.8	5.7	0.0	2.8	2.8	0.0	0.0
87.5°	5.7	2.8	2.8	2.8	2.8	0.0	0.0	2.8	0.0	2.8	0.0
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: P249758

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5	6055.5
2.5°	6103.6	6114.9	6129.1	6140.4	6165.9	6171.5	6182.9	6194.2	6202.7	6211.1	6214.0
5°	6143.2	6185.7	6225.3	6267.7	6321.5	6358.4	6400.7	6437.6	6474.4	6505.5	6528.1
7.5°	6154.6	6219.6	6279.2	6352.6	6431.8	6499.9	6570.6	6641.3	6714.9	6771.5	6819.6
10°	6177.2	6256.4	6332.8	6420.6	6522.5	6613.0	6700.7	6794.1	6887.5	6966.7	7037.5
12.5°	6216.8	6304.5	6386.7	6482.9	6587.6	6689.4	6785.6	6890.3	6989.4	7077.1	7156.3
15°	6281.9	6363.9	6443.3	6533.8	6638.5	6731.9	6828.1	6929.9	7029.0	7119.5	7193.1
17.5°	6324.3	6400.7	6480.0	6562.1	6649.8	6734.7	6825.2	6915.8	7006.3	7088.4	7156.3
20°	6324.3	6398.0	6457.4	6531.0	6613.0	6686.6	6760.2	6839.4	6918.6	6986.5	7051.6
22.5°	6273.4	6344.1	6389.5	6446.1	6516.8	6579.1	6618.7	6706.4	6765.8	6825.2	6873.3
25°	6154.6	6205.5	6242.3	6281.9	6338.6	6380.9	6415.0	6465.9	6525.3	6548.0	6581.9
27.5°	5939.5	5976.3	5996.1	6004.6	6032.9	6055.5	6061.2	6083.8	6109.3	6114.9	6129.1
30°	5600.0	5602.8	5594.3	5591.5	5577.3	5560.4	5557.5	5554.7	5543.4	5532.1	5534.9
32.5°	5087.8	5073.7	5039.7	5003.0	4966.2	4926.6	4903.8	4875.5	4858.5	4841.6	4821.8
35°	4425.6	4391.7	4343.6	4298.3	4255.9	4224.7	4173.8	4156.8	4139.9	4117.2	4111.6
37.5°	3647.5	3627.7	3582.3	3548.5	3525.9	3511.6	3486.1	3469.3	3469.3	3460.7	3455.0
40°	2843.8	2838.2	2821.2	2829.7	2818.4	2824.0	2821.2	2815.5	2829.7	2829.7	2835.4
42.5°	2133.5	2136.5	2145.0	2150.5	2167.6	2170.3	2184.6	2184.6	2193.1	2201.4	2207.2
45°	1587.4	1598.8	1598.8	1610.1	1627.1	1629.9	1635.5	1638.4	1644.0	1658.2	1663.8
47.5°	1191.3	1194.1	1194.1	1197.0	1202.6	1208.3	1205.5	1208.3	1216.8	1211.1	1216.8
50°	880.1	882.9	874.4	865.9	874.4	874.4	871.6	863.1	871.6	860.3	865.9
52.5°	600.0	597.0	588.5	591.4	585.7	582.9	582.9	577.2	577.2	577.2	565.9
55°	379.2	379.2	373.5	373.5	370.7	365.0	362.2	359.3	356.5	353.7	353.7
57.5°	212.2	215.0	206.6	203.7	206.6	203.7	198.1	198.1	198.1	189.6	195.2
60°	116.0	113.2	110.4	107.5	104.7	107.5	107.5	101.9	101.9	101.9	104.7
62.5°	62.2	62.2	59.4	59.4	56.6	56.6	62.2	53.8	56.6	53.8	56.6
65°	34.0	42.4	31.1	31.1	39.6	36.8	34.0	34.0	36.8	31.1	34.0
67.5°	36.8	25.5	22.6	25.5	22.6	22.6	22.6	28.3	25.5	19.8	25.5
70°	17.0	19.8	19.8	14.1	22.6	11.3	19.8	11.3	17.0	14.1	17.0
72.5°	17.0	17.0	17.0	11.3	17.0	11.3	14.1	14.1	11.3	11.3	17.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	5.7	5.7	2.8	2.8	2.8	2.8	5.7	5.7	5.7	0.0	2.8
80°	5.7	5.7	0.0	2.8	0.0	0.0	2.8	0.0	2.8	0.0	5.7
82.5°	2.8	5.7	2.8	2.8	5.7	5.7	5.7	2.8	2.8	2.8	2.8
85°	0.0	2.8	0.0	0.0	0.0	0.0	5.7	0.0	0.0	0.0	2.8
87.5°	0.0	2.8	0.0	0.0	0.0	0.0	2.8	2.8	0.0	0.0	0.0
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: P249758

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6055.5	6055.5	6055.5	6055.5
2.5°	6216.8	6219.6	6225.3	6222.5
5°	6545.1	6567.8	6579.1	6576.3
7.5°	6853.5	6893.2	6915.8	6915.8
10°	7091.2	7136.5	7170.4	7176.1
12.5°	7218.5	7269.5	7314.8	7303.4
15°	7255.3	7306.3	7351.5	7343.0
17.5°	7212.9	7263.8	7297.8	7292.1
20°	7096.9	7139.3	7173.3	7170.4
22.5°	6915.8	6952.6	6980.9	6978.0
25°	6610.2	6635.7	6658.3	6647.0
27.5°	6140.4	6148.9	6163.0	6146.1
30°	5515.1	5520.7	5526.4	5523.6
32.5°	4813.3	4810.4	4804.8	4799.1
35°	4103.1	4103.1	4105.9	4088.9
37.5°	3457.8	3455.0	3463.5	3455.0
40°	2841.0	2838.2	2849.5	2835.4
42.5°	2215.7	2224.2	2227.0	2227.0
45°	1666.7	1669.5	1672.3	1672.3
47.5°	1216.8	1219.6	1233.8	1216.8
50°	860.3	863.1	865.9	860.3
52.5°	568.7	571.6	568.7	560.2
55°	348.0	350.9	350.9	350.9
57.5°	186.7	189.6	189.6	186.7
60°	101.9	99.0	101.9	96.2
62.5°	53.8	59.4	56.6	50.9
65°	34.0	34.0	34.0	39.6
67.5°	28.3	22.6	25.5	19.8
70°	17.0	19.8	19.8	14.1
72.5°	14.1	14.1	14.1	17.0
75°	0.0	0.0	0.0	0.0
77.5°	5.7	5.7	5.7	2.8
80°	2.8	0.0	2.8	0.0
82.5°	2.8	2.8	5.7	2.8
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)