

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: P248797

Luminaire Tested: **LSR8B90D010 EC8B90850 8LBSW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248797
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13958)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B90D010 EC8B90850 8LBSW0GPH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8838.0 lumens
Efficiency: N/A
Efficacy: 102.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.23 / 1.15
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

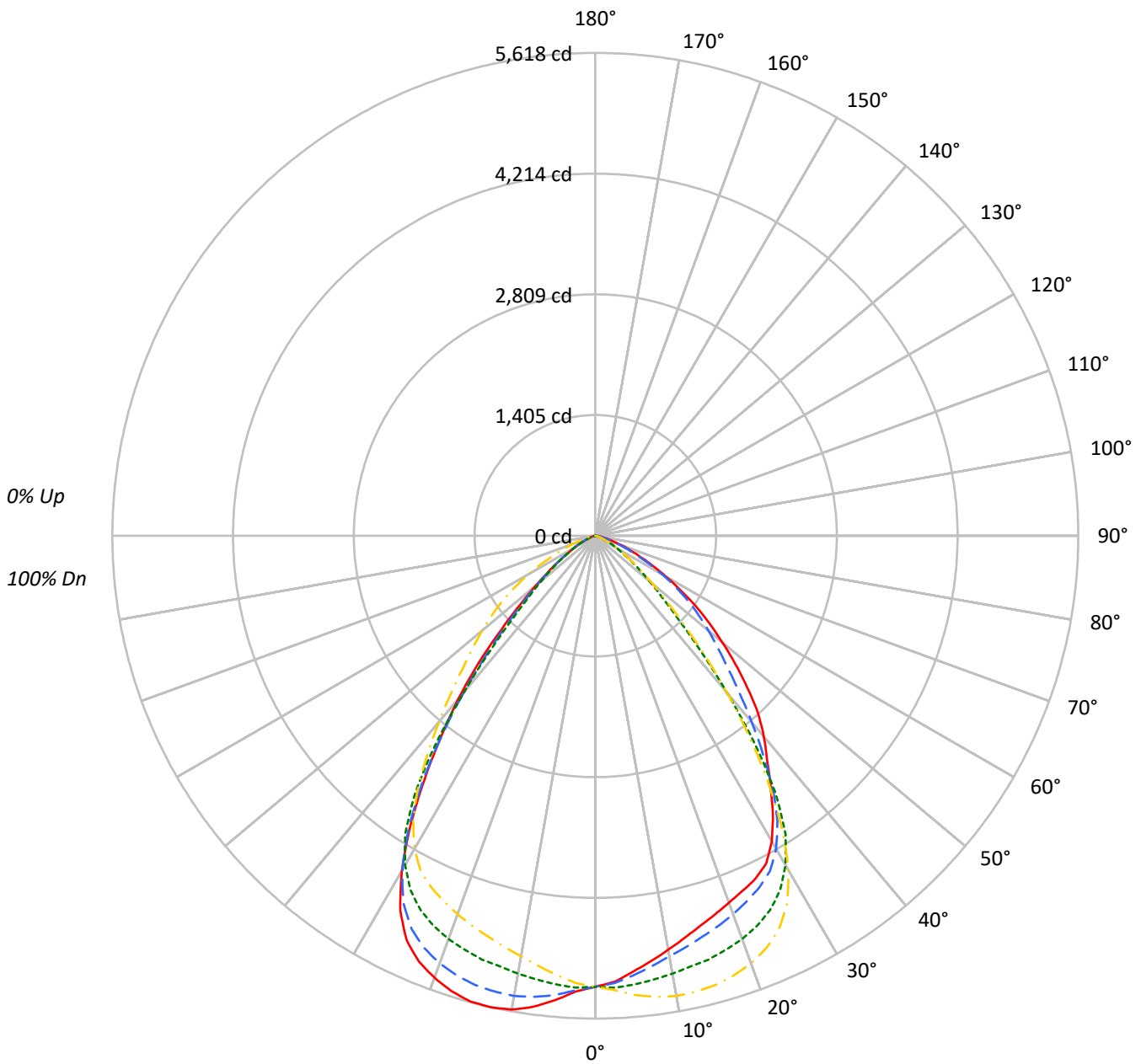
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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CATALOG NUMBER: LSR8B90D010 EC8B90850 8LBSW0GPH

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270° - - - 135°-315°



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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	109	106	103	109	106	104	101	102	100	98	99	97	95	95	94	92	90					90			
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81					81			
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72					72			
4	91	82	75	70	89	80	74	69	78	73	68	76	71	67	74	70	67	65					65			
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58					58			
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53					53			
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48					48			
8	70	59	51	46	69	58	51	46	57	50	46	56	50	46	55	49	46	44					44			
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40					40			
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37					37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	161792	161792	161792	161792
5°	157494	162172	167963	162172
10°	153138	161961	175278	161961
15°	150078	162921	179113	162921
20°	149057	163853	179575	163853
25°	149842	163527	176691	163527
30°	146137	157538	160369	157538
35°	133671	137428	130392	137428
40°	122722	95599	99830	95599
45°	109045	58318	67481	58318
50°	92300	38959	43262	38959
55°	76443	26585	28096	26585
60°	58305	17694	17854	17694
65°	41313	11025	10098	11025
70°	29798	7384	6699	7384
75°	18920	3670	3050	3670
80°	13194	2735	2273	2735
85°	11782	0	885	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	499.4	5.7
10°-20°	1446.2	16.4
20°-30°	2189.8	24.8
30°-40°	2194.7	24.8
40°-50°	1378.2	15.6
50°-60°	734.4	8.3
60°-70°	302.0	3.4
70°-80°	79.8	0.9
80°-90°	13.5	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°	4135.4	46.8
0°-40°	6330.1	71.6
0°-60°	8442.7	95.5
0°-90°	8838.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8838.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	5247	5247	5247	5247	5247	
5°	5088	5239	5426	5239	5088	480
15°	4701	5103	5611	5103	4701	1330
25°	4404	4806	5193	4806	4404	2020
35°	3551	3651	3464	3651	3551	2225
45°	2500	1337	1547	1337	2500	1923
55°	1422	494	523	494	1422	1268
65°	566	151	138	151	566	587
75°	159	31	26	31	159	180
85°	33	0	2	0	33	37
90°	0	0	0	0	0	



TEST NUMBER: P248797

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8
2.5°	5193.1	5187.9	5185.4	5190.5	5193.1	5203.3	5200.8	5205.8	5205.8	5208.5	5213.5
5°	5088.0	5085.4	5088.0	5088.0	5098.3	5108.5	5106.0	5113.7	5118.7	5131.6	5136.6
7.5°	4990.7	4990.7	4988.1	4998.3	5003.5	5018.9	5016.2	5029.1	5036.8	5049.5	5067.5
10°	4890.7	4890.7	4893.3	4901.0	4903.6	4926.6	4926.6	4944.5	4954.7	4967.6	4990.7
12.5°	4793.4	4793.4	4808.8	4803.6	4813.9	4831.8	4839.5	4857.4	4872.8	4898.4	4921.5
15°	4701.1	4701.1	4706.3	4719.1	4726.8	4749.8	4762.6	4783.2	4801.1	4826.7	4860.0
17.5°	4621.7	4619.2	4621.7	4637.1	4652.5	4673.0	4683.2	4708.8	4726.8	4760.1	4790.9
20°	4542.3	4547.5	4547.5	4560.2	4570.5	4596.1	4606.3	4634.6	4655.0	4685.7	4721.7
22.5°	4473.1	4470.6	4470.6	4488.5	4496.2	4519.2	4529.5	4555.1	4578.2	4603.8	4637.1
25°	4404.0	4398.8	4409.1	4411.7	4416.7	4442.4	4450.0	4468.0	4491.1	4514.2	4547.5
27.5°	4301.5	4296.4	4298.9	4309.2	4316.9	4337.3	4342.5	4360.4	4378.3	4398.8	4427.1
30°	4104.2	4099.1	4096.6	4114.5	4122.2	4137.5	4145.2	4176.0	4181.0	4204.1	4224.6
32.5°	3842.9	3840.3	3845.5	3860.8	3868.5	3889.0	3899.3	3917.2	3930.0	3942.8	3963.3
35°	3550.9	3545.7	3550.9	3566.3	3566.3	3584.2	3591.9	3599.5	3596.9	3599.5	3594.4
37.5°	3279.3	3276.7	3279.3	3286.9	3279.3	3286.9	3279.3	3263.9	3235.8	3205.0	3174.2
40°	3048.7	3051.2	3035.9	3046.2	3017.9	3012.9	2984.7	2946.2	2889.9	2828.4	2741.3
42.5°	2802.8	2795.1	2784.9	2789.9	2766.9	2748.9	2702.8	2654.2	2582.4	2480.0	2374.9
45°	2500.5	2497.9	2492.8	2490.2	2474.8	2456.9	2418.4	2362.1	2282.7	2177.7	2052.1
47.5°	2205.8	2198.1	2198.1	2200.7	2182.7	2180.2	2149.4	2100.8	2031.6	1929.1	1798.5
50°	1924.0	1921.4	1926.6	1936.8	1924.0	1918.9	1898.4	1865.1	1803.6	1716.5	1593.5
52.5°	1670.4	1667.8	1673.0	1685.7	1680.6	1685.7	1665.3	1639.7	1598.6	1514.1	1406.5
55°	1421.9	1421.9	1421.9	1437.2	1437.2	1437.2	1427.0	1411.7	1373.2	1311.7	1211.8
57.5°	1163.1	1165.7	1181.1	1183.6	1181.1	1186.2	1183.6	1168.2	1142.7	1099.1	1022.2
60°	945.4	945.4	953.1	960.8	958.1	960.8	960.8	953.1	927.4	891.6	830.1
62.5°	748.1	755.8	750.6	755.8	766.0	755.8	750.6	745.5	727.6	704.5	653.3
65°	566.2	571.3	571.3	573.9	568.7	571.3	561.1	553.4	543.2	517.6	484.2
67.5°	430.5	430.5	430.5	430.5	427.8	425.3	422.8	415.1	397.1	386.9	350.9
70°	330.5	315.1	315.1	315.1	315.1	317.7	310.0	299.8	294.6	276.7	251.1
72.5°	220.3	225.5	220.3	220.3	215.2	217.8	207.5	202.4	197.3	187.1	171.7
75°	158.8	146.1	151.1	153.7	146.1	151.1	140.9	130.7	130.7	123.0	115.3
77.5°	102.5	100.0	102.5	105.0	102.5	100.0	94.8	89.6	89.6	87.1	79.4
80°	74.3	71.7	71.7	71.7	69.2	71.7	66.6	66.6	61.5	58.9	53.8
82.5°	48.7	48.7	46.1	48.7	46.1	48.7	41.0	41.0	41.0	38.4	33.3
85°	33.3	28.2	28.2	30.8	25.6	30.8	28.2	25.6	23.1	23.1	20.5
87.5°	15.4	17.9	15.4	17.9	15.4	15.4	17.9	15.4	15.4	10.2	10.2
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: P248797

CATALOG NUMBER: LSR8B90D010 EC8B90850 8LBSW0GPH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8
2.5°	5221.2	5223.7	5223.7	5234.1	5239.1	5241.7	5241.7	5262.2	5254.5	5259.7	5264.8
5°	5147.0	5162.3	5167.4	5167.4	5195.6	5205.8	5216.0	5239.1	5241.7	5257.1	5275.0
7.5°	5075.2	5093.1	5103.4	5126.4	5144.3	5162.3	5193.1	5208.5	5223.7	5244.3	5267.3
10°	5006.0	5026.6	5047.0	5064.9	5093.1	5116.2	5136.6	5172.5	5190.5	5218.7	5249.4
12.5°	4939.4	4967.6	4985.5	5016.2	5047.0	5067.5	5098.3	5131.6	5159.7	5187.9	5223.7
15°	4880.5	4913.8	4934.3	4967.6	5000.9	5029.1	5062.4	5103.4	5123.9	5157.2	5190.5
17.5°	4816.4	4852.3	4878.0	4908.7	4949.7	4980.4	5008.6	5049.5	5075.2	5111.0	5149.5
20°	4749.8	4785.7	4816.4	4847.2	4888.2	4918.9	4952.2	4993.2	5021.4	5057.2	5088.0
22.5°	4670.4	4703.8	4737.0	4772.8	4813.9	4839.5	4878.0	4913.8	4944.5	4977.8	5008.6
25°	4567.9	4609.0	4634.6	4667.8	4701.1	4729.3	4770.3	4806.2	4831.8	4862.6	4890.7
27.5°	4447.5	4478.3	4498.8	4526.9	4560.2	4585.9	4616.6	4652.5	4678.1	4706.3	4726.8
30°	4242.5	4270.8	4288.7	4309.2	4342.5	4365.6	4391.2	4424.4	4442.4	4462.9	4480.8
32.5°	3973.5	3996.6	4006.8	4022.2	4045.3	4068.3	4088.9	4117.0	4124.7	4137.5	4137.5
35°	3584.2	3589.2	3586.7	3591.9	3602.1	3614.9	3632.8	3650.7	3661.0	3661.0	3653.4
37.5°	3128.1	3097.4	3064.1	3038.5	3030.8	3025.6	3035.9	3043.5	3053.9	3058.9	3046.2
40°	2654.2	2585.0	2510.7	2444.0	2398.0	2377.5	2369.8	2374.9	2374.9	2392.8	2392.8
42.5°	2246.9	2139.2	2029.1	1929.1	1862.5	1811.3	1788.2	1788.2	1790.8	1803.6	1811.3
45°	1908.7	1772.8	1644.7	1534.6	1442.4	1375.7	1345.0	1337.3	1334.8	1339.9	1357.8
47.5°	1649.9	1509.0	1375.7	1240.0	1142.7	1076.0	1047.9	1037.5	1027.3	1037.5	1040.2
50°	1447.5	1301.5	1160.6	1024.8	922.3	863.3	827.5	812.1	809.6	809.6	814.7
52.5°	1263.0	1127.3	986.4	848.0	740.4	684.1	650.7	643.0	632.8	643.0	643.0
55°	1088.8	953.1	814.7	684.1	594.3	535.5	504.7	494.5	489.3	497.0	497.0
57.5°	899.3	783.9	655.9	538.0	448.4	407.4	384.3	371.5	368.9	374.0	368.9
60°	737.8	640.5	530.3	422.8	353.6	310.0	292.1	286.9	281.8	286.9	286.9
62.5°	584.1	502.2	412.4	330.5	271.5	240.9	220.3	220.3	217.8	217.8	220.3
65°	433.0	368.9	304.9	235.7	189.6	166.5	151.1	151.1	148.6	151.1	148.6
67.5°	315.1	271.5	220.3	171.7	135.8	123.0	112.7	105.0	110.2	105.0	102.5
70°	230.6	194.7	158.8	130.7	105.0	92.3	84.6	81.9	76.9	76.9	76.9
72.5°	153.7	130.7	107.6	84.6	69.2	56.3	53.8	48.7	43.6	46.1	51.2
75°	102.5	87.1	76.9	61.5	46.1	46.1	30.8	30.8	25.6	30.8	23.1
77.5°	71.7	58.9	46.1	38.4	30.8	28.2	20.5	20.5	17.9	17.9	17.9
80°	51.2	43.6	33.3	28.2	20.5	20.5	17.9	15.4	12.8	12.8	15.4
82.5°	30.8	23.1	23.1	20.5	12.8	10.2	7.7	10.2	5.2	5.2	5.2
85°	17.9	15.4	12.8	7.7	5.2	5.2	2.5	0.0	2.5	2.5	0.0
87.5°	10.2	5.2	5.2	2.5	0.0	2.5	2.5	0.0	0.0	0.0	5.2
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: P248797

CATALOG NUMBER: LSR8B90D010 EC8B90850 8LBSW0GPH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8
2.5°	5277.6	5275.0	5280.2	5280.2	5295.6	5292.9	5300.6	5300.6	5295.6	5298.1	5308.3
5°	5295.6	5303.3	5318.5	5331.4	5354.4	5364.7	5377.5	5390.4	5392.9	5400.6	5408.3
7.5°	5295.6	5321.2	5339.1	5362.1	5392.9	5410.8	5439.0	5462.1	5472.3	5485.1	5500.5
10°	5285.2	5310.8	5344.2	5369.8	5408.3	5436.4	5464.6	5500.5	5515.8	5536.3	5556.9
12.5°	5264.8	5292.9	5328.8	5362.1	5405.7	5431.3	5467.1	5500.5	5523.5	5551.7	5574.8
15°	5234.1	5267.3	5300.6	5333.9	5380.0	5410.8	5444.1	5482.5	5505.6	5536.3	5556.9
17.5°	5185.4	5221.2	5252.0	5282.7	5326.2	5362.1	5392.9	5428.7	5451.8	5477.5	5505.6
20°	5126.4	5159.7	5193.1	5218.7	5262.2	5292.9	5326.2	5359.6	5377.5	5382.7	5426.2
22.5°	5052.2	5075.2	5100.8	5141.8	5167.4	5195.6	5226.4	5257.1	5275.0	5303.3	5318.5
25°	4929.1	4952.2	4980.4	4998.3	5029.1	5052.2	5082.9	5116.2	5126.4	5147.0	5162.3
27.5°	4757.5	4770.3	4783.2	4798.5	4816.4	4829.3	4847.2	4862.6	4872.8	4883.0	4893.3
30°	4485.9	4485.9	4485.9	4475.7	4483.4	4491.1	4493.6	4491.1	4491.1	4488.5	4488.5
32.5°	4127.3	4106.8	4083.7	4063.3	4055.6	4045.3	4040.2	4032.5	4019.7	4012.0	4014.5
35°	3643.0	3596.9	3568.8	3543.2	3522.7	3507.3	3499.6	3491.9	3489.4	3479.2	3468.8
37.5°	3038.5	3005.2	2984.7	2969.3	2951.4	2936.0	2938.5	2941.1	2948.7	2943.7	2946.2
40°	2398.0	2390.3	2398.0	2380.0	2374.9	2380.0	2392.8	2410.8	2421.1	2431.3	2449.2
42.5°	1824.1	1836.9	1854.9	1854.9	1862.5	1872.8	1888.1	1916.4	1931.7	1949.6	1970.1
45°	1373.2	1388.6	1411.7	1419.3	1424.4	1437.2	1455.2	1478.2	1488.4	1503.8	1521.8
47.5°	1058.1	1068.3	1081.1	1094.0	1106.7	1111.9	1129.8	1129.8	1142.7	1152.9	1158.0
50°	824.9	835.2	845.4	853.1	858.3	866.0	871.0	878.7	881.3	886.4	889.0
52.5°	645.6	658.4	658.4	663.5	671.2	678.9	676.4	678.9	681.4	681.4	689.1
55°	504.7	504.7	512.4	512.4	517.6	514.9	517.6	517.6	517.6	517.6	520.1
57.5°	376.6	379.2	386.9	381.7	379.2	384.3	379.2	384.3	381.7	386.9	379.2
60°	289.5	289.5	292.1	292.1	294.6	294.6	294.6	292.1	292.1	289.5	289.5
62.5°	217.8	220.3	222.9	220.3	220.3	220.3	217.8	217.8	215.2	212.6	212.6
65°	146.1	143.5	148.6	143.5	146.1	146.1	143.5	146.1	138.4	140.9	138.4
67.5°	105.0	102.5	100.0	102.5	100.0	97.3	97.3	100.0	102.5	94.8	94.8
70°	69.2	71.7	69.2	71.7	74.3	74.3	71.7	69.2	71.7	66.6	69.2
72.5°	43.6	43.6	43.6	43.6	43.6	46.1	46.1	46.1	41.0	41.0	38.4
75°	20.5	28.2	23.1	20.5	28.2	28.2	25.6	25.6	23.1	23.1	23.1
77.5°	20.5	15.4	15.4	15.4	15.4	15.4	15.4	15.4	12.8	15.4	12.8
80°	10.2	10.2	10.2	7.7	10.2	10.2	12.8	10.2	10.2	7.7	12.8
82.5°	5.2	5.2	5.2	0.0	2.5	5.2	5.2	2.5	5.2	5.2	2.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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: P248797

CATALOG NUMBER: LSR8B90D010 EC8B90850 8LBSW0GPH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8
2.5°	5305.8	5303.3	5305.8	5308.3	5305.8	5303.3	5305.8	5308.3	5298.1	5295.6	5300.6
5°	5418.5	5418.5	5423.6	5426.2	5423.6	5418.5	5418.5	5408.3	5400.6	5392.9	5390.4
7.5°	5515.8	5521.0	5526.1	5528.6	5526.1	5521.0	5515.8	5500.5	5485.1	5472.3	5462.1
10°	5574.8	5582.5	5592.7	5597.8	5592.7	5582.5	5574.8	5556.9	5536.3	5515.8	5500.5
12.5°	5600.4	5608.1	5620.9	5618.3	5620.9	5608.1	5600.4	5574.8	5551.7	5523.5	5500.5
15°	5582.5	5592.7	5605.5	5610.6	5605.5	5592.7	5582.5	5556.9	5536.3	5505.6	5482.5
17.5°	5526.1	5541.5	5549.2	5556.9	5549.2	5541.5	5526.1	5505.6	5477.5	5451.8	5428.7
20°	5449.2	5459.5	5469.8	5472.3	5469.8	5459.5	5449.2	5426.2	5382.7	5377.5	5359.6
22.5°	5339.1	5346.8	5369.8	5362.1	5369.8	5346.8	5339.1	5318.5	5303.3	5275.0	5257.1
25°	5180.2	5187.9	5190.5	5193.1	5190.5	5187.9	5180.2	5162.3	5147.0	5126.4	5116.2
27.5°	4906.1	4906.1	4911.2	4913.8	4911.2	4906.1	4906.1	4893.3	4883.0	4872.8	4862.6
30°	4491.1	4491.1	4491.1	4503.9	4491.1	4491.1	4491.1	4488.5	4488.5	4491.1	4491.1
32.5°	4012.0	4006.8	4001.8	4006.8	4001.8	4006.8	4012.0	4014.5	4012.0	4019.7	4032.5
35°	3468.8	3466.3	3474.0	3463.8	3474.0	3466.3	3468.8	3468.8	3479.2	3489.4	3491.9
37.5°	2948.7	2943.7	2953.9	2943.7	2953.9	2943.7	2948.7	2946.2	2943.7	2948.7	2941.1
40°	2454.4	2459.4	2459.4	2480.0	2459.4	2459.4	2454.4	2449.2	2431.3	2421.1	2410.8
42.5°	1980.4	1995.8	1990.6	2006.0	1990.6	1995.8	1980.4	1970.1	1949.6	1931.7	1916.4
45°	1532.0	1542.3	1542.3	1547.4	1542.3	1542.3	1532.0	1521.8	1503.8	1488.4	1478.2
47.5°	1175.9	1175.9	1175.9	1178.5	1175.9	1175.9	1175.9	1158.0	1152.9	1142.7	1129.8
50°	894.1	896.7	899.3	901.8	899.3	896.7	894.1	889.0	886.4	881.3	878.7
52.5°	686.6	689.1	684.1	689.1	684.1	689.1	686.6	689.1	681.4	681.4	678.9
55°	520.1	517.6	520.1	522.6	520.1	517.6	520.1	520.1	517.6	517.6	517.6
57.5°	381.7	376.6	376.6	376.6	376.6	376.6	381.7	379.2	386.9	381.7	384.3
60°	284.4	286.9	286.9	289.5	286.9	286.9	284.4	289.5	289.5	292.1	292.1
62.5°	210.1	217.8	212.6	217.8	212.6	217.8	210.1	212.6	212.6	215.2	217.8
65°	135.8	135.8	135.8	138.4	135.8	135.8	135.8	138.4	140.9	138.4	146.1
67.5°	92.3	94.8	100.0	97.3	100.0	94.8	92.3	94.8	94.8	102.5	100.0
70°	74.3	66.6	66.6	74.3	66.6	66.6	74.3	69.2	66.6	71.7	69.2
72.5°	43.6	38.4	43.6	43.6	43.6	38.4	43.6	38.4	41.0	41.0	46.1
75°	23.1	20.5	17.9	25.6	17.9	20.5	23.1	23.1	23.1	23.1	25.6
77.5°	15.4	12.8	17.9	17.9	17.9	12.8	15.4	12.8	15.4	12.8	15.4
80°	7.7	10.2	7.7	12.8	7.7	10.2	7.7	12.8	7.7	10.2	10.2
82.5°	2.5	5.2	5.2	5.2	5.2	5.2	2.5	2.5	5.2	5.2	2.5
85°	0.0	5.2	2.5	2.5	2.5	5.2	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	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: P248797

CATALOG NUMBER: LSR8B90D010 EC8B90850 8LBSW0GPH

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8
2.5°	5300.6	5292.9	5295.6	5280.2	5280.2	5275.0	5277.6	5264.8	5259.7	5254.5	5262.2
5°	5377.5	5364.7	5354.4	5331.4	5318.5	5303.3	5295.6	5275.0	5257.1	5241.7	5239.1
7.5°	5439.0	5410.8	5392.9	5362.1	5339.1	5321.2	5295.6	5267.3	5244.3	5223.7	5208.5
10°	5464.6	5436.4	5408.3	5369.8	5344.2	5310.8	5285.2	5249.4	5218.7	5190.5	5172.5
12.5°	5467.1	5431.3	5405.7	5362.1	5328.8	5292.9	5264.8	5223.7	5187.9	5159.7	5131.6
15°	5444.1	5410.8	5380.0	5333.9	5300.6	5267.3	5234.1	5190.5	5157.2	5123.9	5103.4
17.5°	5392.9	5362.1	5326.2	5282.7	5252.0	5221.2	5185.4	5149.5	5111.0	5075.2	5049.5
20°	5326.2	5292.9	5262.2	5218.7	5193.1	5159.7	5126.4	5088.0	5057.2	5021.4	4993.2
22.5°	5226.4	5195.6	5167.4	5141.8	5100.8	5075.2	5052.2	5008.6	4977.8	4944.5	4913.8
25°	5082.9	5052.2	5029.1	4998.3	4980.4	4952.2	4929.1	4890.7	4862.6	4831.8	4806.2
27.5°	4847.2	4829.3	4816.4	4798.5	4783.2	4770.3	4757.5	4726.8	4706.3	4678.1	4652.5
30°	4493.6	4491.1	4483.4	4475.7	4485.9	4485.9	4485.9	4480.8	4462.9	4442.4	4424.4
32.5°	4040.2	4045.3	4055.6	4063.3	4083.7	4106.8	4127.3	4137.5	4137.5	4124.7	4117.0
35°	3499.6	3507.3	3522.7	3543.2	3568.8	3596.9	3643.0	3653.4	3661.0	3661.0	3650.7
37.5°	2938.5	2936.0	2951.4	2969.3	2984.7	3005.2	3038.5	3046.2	3058.9	3053.9	3043.5
40°	2392.8	2380.0	2374.9	2380.0	2398.0	2390.3	2398.0	2392.8	2392.8	2374.9	2374.9
42.5°	1888.1	1872.8	1862.5	1854.9	1854.9	1836.9	1824.1	1811.3	1803.6	1790.8	1788.2
45°	1455.2	1437.2	1424.4	1419.3	1411.7	1388.6	1373.2	1357.8	1339.9	1334.8	1337.3
47.5°	1129.8	1111.9	1106.7	1094.0	1081.1	1068.3	1058.1	1040.2	1037.5	1027.3	1037.5
50°	871.0	866.0	858.3	853.1	845.4	835.2	824.9	814.7	809.6	809.6	812.1
52.5°	676.4	678.9	671.2	663.5	658.4	658.4	645.6	643.0	643.0	632.8	643.0
55°	517.6	514.9	517.6	512.4	512.4	504.7	504.7	497.0	497.0	489.3	494.5
57.5°	379.2	384.3	379.2	381.7	386.9	379.2	376.6	368.9	374.0	368.9	371.5
60°	294.6	294.6	294.6	292.1	292.1	289.5	289.5	286.9	286.9	281.8	286.9
62.5°	217.8	220.3	220.3	220.3	222.9	220.3	217.8	220.3	217.8	217.8	220.3
65°	143.5	146.1	146.1	143.5	148.6	143.5	146.1	148.6	151.1	148.6	151.1
67.5°	97.3	97.3	100.0	102.5	100.0	102.5	105.0	102.5	105.0	110.2	105.0
70°	71.7	74.3	74.3	71.7	69.2	71.7	69.2	76.9	76.9	76.9	81.9
72.5°	46.1	46.1	43.6	43.6	43.6	43.6	43.6	51.2	46.1	43.6	48.7
75°	25.6	28.2	28.2	20.5	23.1	28.2	20.5	23.1	30.8	25.6	30.8
77.5°	15.4	15.4	15.4	15.4	15.4	15.4	20.5	17.9	17.9	17.9	20.5
80°	12.8	10.2	10.2	7.7	10.2	10.2	10.2	15.4	12.8	12.8	15.4
82.5°	5.2	5.2	2.5	0.0	5.2	5.2	5.2	5.2	5.2	5.2	10.2
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	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: P248797

CATALOG NUMBER: LSR8B90D010 EC8B90850 8LBSW0GPH

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8
2.5°	5241.7	5241.7	5239.1	5234.1	5223.7	5223.7	5221.2	5213.5	5208.5	5205.8	5205.8
5°	5216.0	5205.8	5195.6	5167.4	5167.4	5162.3	5147.0	5136.6	5131.6	5118.7	5113.7
7.5°	5193.1	5162.3	5144.3	5126.4	5103.4	5093.1	5075.2	5067.5	5049.5	5036.8	5029.1
10°	5136.6	5116.2	5093.1	5064.9	5047.0	5026.6	5006.0	4990.7	4967.6	4954.7	4944.5
12.5°	5098.3	5067.5	5047.0	5016.2	4985.5	4967.6	4939.4	4921.5	4898.4	4872.8	4857.4
15°	5062.4	5029.1	5000.9	4967.6	4934.3	4913.8	4880.5	4860.0	4826.7	4801.1	4783.2
17.5°	5008.6	4980.4	4949.7	4908.7	4878.0	4852.3	4816.4	4790.9	4760.1	4726.8	4708.8
20°	4952.2	4918.9	4888.2	4847.2	4816.4	4785.7	4749.8	4721.7	4685.7	4655.0	4634.6
22.5°	4878.0	4839.5	4813.9	4772.8	4737.0	4703.8	4670.4	4637.1	4603.8	4578.2	4555.1
25°	4770.3	4729.3	4701.1	4667.8	4634.6	4609.0	4567.9	4547.5	4514.2	4491.1	4468.0
27.5°	4616.6	4585.9	4560.2	4526.9	4498.8	4478.3	4447.5	4427.1	4398.8	4378.3	4360.4
30°	4391.2	4365.6	4342.5	4309.2	4288.7	4270.8	4242.5	4224.6	4204.1	4181.0	4176.0
32.5°	4088.9	4068.3	4045.3	4022.2	4006.8	3996.6	3973.5	3963.3	3942.8	3930.0	3917.2
35°	3632.8	3614.9	3602.1	3591.9	3586.7	3589.2	3584.2	3594.4	3599.5	3596.9	3599.5
37.5°	3035.9	3025.6	3030.8	3038.5	3064.1	3097.4	3128.1	3174.2	3205.0	3235.8	3263.9
40°	2369.8	2377.5	2398.0	2444.0	2510.7	2585.0	2654.2	2741.3	2828.4	2889.9	2946.2
42.5°	1788.2	1811.3	1862.5	1929.1	2029.1	2139.2	2246.9	2374.9	2480.0	2582.4	2654.2
45°	1345.0	1375.7	1442.4	1534.6	1644.7	1772.8	1908.7	2052.1	2177.7	2282.7	2362.1
47.5°	1047.9	1076.0	1142.7	1240.0	1375.7	1509.0	1649.9	1798.5	1929.1	2031.6	2100.8
50°	827.5	863.3	922.3	1024.8	1160.6	1301.5	1447.5	1593.5	1716.5	1803.6	1865.1
52.5°	650.7	684.1	740.4	848.0	986.4	1127.3	1263.0	1406.5	1514.1	1598.6	1639.7
55°	504.7	535.5	594.3	684.1	814.7	953.1	1088.8	1211.8	1311.7	1373.2	1411.7
57.5°	384.3	407.4	448.4	538.0	655.9	783.9	899.3	1022.2	1099.1	1142.7	1168.2
60°	292.1	310.0	353.6	422.8	530.3	640.5	737.8	830.1	891.6	927.4	953.1
62.5°	220.3	240.9	271.5	330.5	412.4	502.2	584.1	653.3	704.5	727.6	745.5
65°	151.1	166.5	189.6	235.7	304.9	368.9	433.0	484.2	517.6	543.2	553.4
67.5°	112.7	123.0	135.8	171.7	220.3	271.5	315.1	350.9	386.9	397.1	415.1
70°	84.6	92.3	105.0	130.7	158.8	194.7	230.6	251.1	276.7	294.6	299.8
72.5°	53.8	56.3	69.2	84.6	107.6	130.7	153.7	171.7	187.1	197.3	202.4
75°	30.8	46.1	46.1	61.5	76.9	87.1	102.5	115.3	123.0	130.7	130.7
77.5°	20.5	28.2	30.8	38.4	46.1	58.9	71.7	79.4	87.1	89.6	89.6
80°	17.9	20.5	20.5	28.2	33.3	43.6	51.2	53.8	58.9	61.5	66.6
82.5°	7.7	10.2	12.8	20.5	23.1	23.1	30.8	33.3	38.4	41.0	41.0
85°	2.5	5.2	5.2	7.7	12.8	15.4	17.9	20.5	23.1	23.1	25.6
87.5°	2.5	2.5	0.0	2.5	5.2	5.2	10.2	10.2	10.2	15.4	15.4
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: P248797

CATALOG NUMBER: LSR8B90D010 EC8B90850 8LBSW0GPH

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8	5246.8
2.5°	5200.8	5203.3	5193.1	5190.5	5185.4	5187.9	5193.1
5°	5106.0	5108.5	5098.3	5088.0	5088.0	5085.4	5088.0
7.5°	5016.2	5018.9	5003.5	4998.3	4988.1	4990.7	4990.7
10°	4926.6	4926.6	4903.6	4901.0	4893.3	4890.7	4890.7
12.5°	4839.5	4831.8	4813.9	4803.6	4808.8	4793.4	4793.4
15°	4762.6	4749.8	4726.8	4719.1	4706.3	4701.1	4701.1
17.5°	4683.2	4673.0	4652.5	4637.1	4621.7	4619.2	4621.7
20°	4606.3	4596.1	4570.5	4560.2	4547.5	4547.5	4542.3
22.5°	4529.5	4519.2	4496.2	4488.5	4470.6	4470.6	4473.1
25°	4450.0	4442.4	4416.7	4411.7	4409.1	4398.8	4404.0
27.5°	4342.5	4337.3	4316.9	4309.2	4298.9	4296.4	4301.5
30°	4145.2	4137.5	4122.2	4114.5	4096.6	4099.1	4104.2
32.5°	3899.3	3889.0	3868.5	3860.8	3845.5	3840.3	3842.9
35°	3591.9	3584.2	3566.3	3566.3	3550.9	3545.7	3550.9
37.5°	3279.3	3286.9	3279.3	3286.9	3279.3	3276.7	3279.3
40°	2984.7	3012.9	3017.9	3046.2	3035.9	3051.2	3048.7
42.5°	2702.8	2748.9	2766.9	2789.9	2784.9	2795.1	2802.8
45°	2418.4	2456.9	2474.8	2490.2	2492.8	2497.9	2500.5
47.5°	2149.4	2180.2	2182.7	2200.7	2198.1	2198.1	2205.8
50°	1898.4	1918.9	1924.0	1936.8	1926.6	1921.4	1924.0
52.5°	1665.3	1685.7	1680.6	1685.7	1673.0	1667.8	1670.4
55°	1427.0	1437.2	1437.2	1437.2	1421.9	1421.9	1421.9
57.5°	1183.6	1186.2	1181.1	1183.6	1181.1	1165.7	1163.1
60°	960.8	960.8	958.1	960.8	953.1	945.4	945.4
62.5°	750.6	755.8	766.0	755.8	750.6	755.8	748.1
65°	561.1	571.3	568.7	573.9	571.3	571.3	566.2
67.5°	422.8	425.3	427.8	430.5	430.5	430.5	430.5
70°	310.0	317.7	315.1	315.1	315.1	315.1	330.5
72.5°	207.5	217.8	215.2	220.3	220.3	225.5	220.3
75°	140.9	151.1	146.1	153.7	151.1	146.1	158.8
77.5°	94.8	100.0	102.5	105.0	102.5	100.0	102.5
80°	66.6	71.7	69.2	71.7	71.7	71.7	74.3
82.5°	41.0	48.7	46.1	48.7	46.1	48.7	48.7
85°	28.2	30.8	25.6	30.8	28.2	28.2	33.3
87.5°	17.9	15.4	15.4	17.9	15.4	17.9	15.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)