

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: P249778

Luminaire Tested: **LSR8B90D010 EC8B90930 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249778
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: LSR8B90D010 EC8B90930 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8229.3 lumens
Efficiency: N/A
Efficacy: 95.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

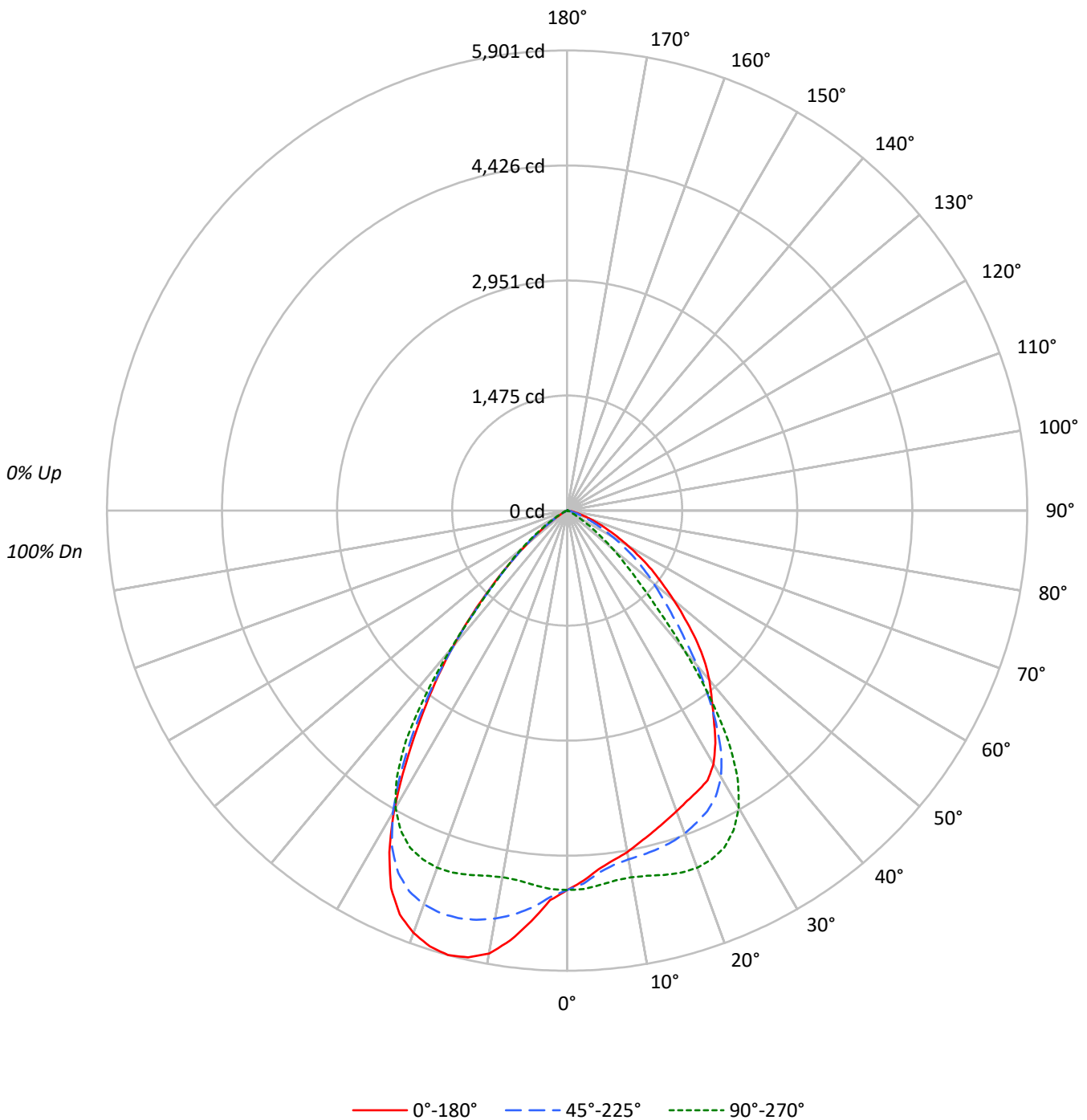
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	467.8	5.7
10°-20°	1400.0	17.0
20°-30°	2144.0	26.1
30°-40°	2101.8	25.5
40°-50°	1265.7	15.4
50°-60°	582.6	7.1
60°-70°	204.7	2.5
70°-80°	53.5	0.7
80°-90°	9.1	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°	4011.8	48.8
0°-40°	6113.7	74.3
0°-60°	7962.0	96.8
0°-90°	8229.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8229.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4866	4866	4866	4866	4866	
5°	4618	4661	4820	5109	5284	436
15°	4263	4493	4836	5410	5901	1205
25°	3966	4252	4768	5128	5341	1826
35°	3281	3327	3602	3395	3286	2055
45°	2331	1919	1301	1310	1344	1787
55°	1324	1048	373	293	282	1181
65°	562	389	59	30	32	572
75°	146	84	5	0	0	176
85°	23	11	2	0	0	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°	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9
2.5°	4752.3	4756.9	4756.9	4756.9	4765.9	4768.3	4765.9	4768.3	4772.8	4788.7	4795.5
5°	4618.2	4611.3	4615.9	4613.6	4625.0	4631.9	4627.3	4634.1	4650.0	4661.3	4672.7
7.5°	4522.7	4522.7	4522.7	4527.2	4534.0	4547.7	4545.4	4549.9	4565.8	4581.8	4597.7
10°	4447.6	4445.3	4445.3	4456.6	4465.7	4481.6	4486.2	4499.9	4520.3	4540.8	4559.0
12.5°	4349.8	4352.2	4363.5	4374.9	4395.3	4420.3	4434.0	4452.2	4484.0	4518.1	4538.6
15°	4263.4	4265.6	4274.8	4297.5	4322.6	4352.2	4381.7	4411.2	4449.9	4493.1	4529.5
17.5°	4179.3	4181.6	4188.4	4213.5	4245.2	4283.9	4318.0	4356.7	4406.8	4456.6	4502.2
20°	4102.0	4099.7	4111.0	4133.8	4174.8	4211.1	4245.2	4290.7	4345.3	4406.8	4458.9
22.5°	4027.0	4027.0	4038.3	4061.0	4097.5	4133.8	4170.2	4218.0	4272.5	4331.7	4393.1
25°	3965.5	3963.3	3979.2	3990.6	4017.9	4054.2	4092.9	4131.6	4186.2	4252.1	4311.1
27.5°	3899.6	3897.4	3899.6	3913.3	3938.3	3965.5	3995.1	4029.2	4074.7	4129.3	4186.2
30°	3754.1	3756.4	3756.4	3767.8	3781.5	3811.0	3826.9	3860.9	3901.9	3947.4	3997.5
32.5°	3538.1	3540.3	3540.3	3544.9	3556.3	3569.9	3583.6	3608.6	3640.3	3679.0	3724.5
35°	3281.2	3281.2	3278.8	3281.2	3288.0	3288.0	3299.3	3288.0	3303.9	3326.7	3360.8
37.5°	3044.6	3040.0	3035.6	3031.0	3024.1	3012.8	2996.9	2969.6	2962.8	2953.7	2956.0
40°	2835.5	2833.2	2819.5	2808.1	2785.5	2758.2	2719.5	2671.8	2633.1	2587.6	2549.0
42.5°	2603.5	2601.2	2589.8	2569.4	2544.4	2503.5	2442.1	2378.4	2301.2	2232.9	2162.4
45°	2330.7	2337.5	2321.6	2298.8	2269.2	2230.6	2162.4	2085.1	2007.7	1919.2	1830.4
47.5°	2046.4	2044.1	2032.8	2019.1	1994.1	1955.5	1910.1	1825.9	1744.1	1662.2	1571.2
50°	1782.6	1773.5	1769.1	1755.4	1739.6	1707.7	1659.9	1591.6	1519.0	1441.6	1357.4
52.5°	1532.6	1532.6	1521.2	1512.1	1498.4	1473.4	1432.5	1377.9	1316.6	1243.7	1155.1
55°	1323.5	1318.9	1307.5	1296.1	1282.4	1266.5	1230.2	1184.7	1118.8	1048.2	970.9
57.5°	1100.6	1098.2	1093.8	1080.1	1073.2	1057.3	1016.4	970.9	914.2	852.7	789.0
60°	900.5	891.4	882.2	873.1	861.8	845.9	818.6	779.9	732.1	677.6	614.0
62.5°	720.8	734.4	707.2	707.2	684.5	670.8	645.8	623.1	572.9	522.9	468.5
65°	561.6	561.6	550.2	541.1	527.5	511.6	486.6	463.9	427.4	388.8	350.1
67.5°	429.8	427.4	416.1	407.0	395.6	386.5	368.4	341.0	313.8	282.0	250.1
70°	316.0	313.8	311.5	295.6	286.5	275.2	261.5	243.4	222.9	200.1	170.5
72.5°	227.3	227.3	220.6	213.8	204.7	195.5	181.9	170.5	152.3	136.4	115.9
75°	145.5	143.3	143.3	131.8	131.8	118.2	109.1	102.3	93.3	84.2	66.0
77.5°	104.6	102.3	100.1	95.5	91.0	86.4	79.6	70.5	63.7	54.6	47.8
80°	70.5	66.0	63.7	63.7	56.8	54.6	56.8	43.3	40.9	34.1	29.6
82.5°	43.3	43.3	40.9	40.9	38.7	36.4	29.6	29.6	27.4	25.0	20.5
85°	22.8	29.6	20.5	22.8	20.5	22.8	20.5	15.9	13.7	11.3	11.3
87.5°	13.7	9.1	9.1	13.7	11.3	9.1	9.1	9.1	6.8	4.6	4.6
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9
2.5°	4791.0	4807.0	4804.6	4825.1	4832.0	4847.9	4847.9	4859.2	4865.9	4881.8	4895.5
5°	4677.3	4702.3	4709.1	4734.1	4754.6	4779.6	4795.5	4820.5	4843.3	4877.4	4909.2
7.5°	4606.9	4627.3	4640.9	4670.4	4693.2	4720.4	4747.8	4781.8	4813.7	4854.6	4900.1
10°	4572.7	4600.0	4620.4	4650.0	4677.3	4706.9	4734.1	4772.8	4809.2	4861.4	4911.4
12.5°	4563.6	4595.4	4620.4	4661.3	4688.6	4720.4	4752.3	4795.5	4834.2	4888.7	4945.6
15°	4563.6	4606.9	4640.9	4686.3	4718.2	4759.1	4793.3	4836.4	4879.6	4936.4	4991.0
17.5°	4554.5	4606.9	4650.0	4702.3	4743.2	4784.2	4827.4	4868.3	4913.7	4968.4	5029.7
20°	4518.1	4584.1	4636.3	4697.7	4740.9	4786.4	4829.7	4875.0	4922.9	4979.7	5032.1
22.5°	4454.4	4531.8	4590.9	4656.7	4706.9	4752.3	4795.5	4841.0	4893.3	4947.9	5002.5
25°	4370.3	4443.1	4506.8	4574.9	4625.0	4674.9	4715.9	4768.3	4816.0	4868.3	4911.4
27.5°	4243.0	4320.2	4381.7	4452.2	4497.6	4545.4	4579.5	4622.8	4668.2	4711.3	4745.5
30°	4052.0	4122.5	4186.2	4249.7	4295.2	4329.4	4365.7	4399.9	4429.4	4458.9	4488.5
32.5°	3772.3	3835.9	3897.4	3956.5	3992.9	4022.4	4049.6	4070.1	4086.0	4102.0	4104.2
35°	3388.1	3440.2	3478.9	3531.3	3565.5	3592.7	3592.7	3601.8	3599.5	3592.7	3585.9
37.5°	2958.3	2978.7	2994.6	3015.0	3017.3	3017.3	3003.7	2992.4	2974.2	2969.6	2956.0
40°	2510.4	2483.0	2462.5	2435.3	2419.3	2385.3	2355.8	2335.3	2305.7	2301.2	2296.6
42.5°	2085.1	2021.4	1964.6	1916.9	1862.3	1814.5	1771.3	1739.6	1716.8	1714.5	1716.8
45°	1739.6	1666.7	1582.5	1516.7	1455.3	1396.1	1339.3	1300.7	1280.2	1275.6	1280.2
47.5°	1478.0	1393.9	1312.0	1236.9	1171.0	1105.1	1048.2	995.9	970.9	964.1	961.8
50°	1271.1	1184.7	1098.2	1020.9	948.1	882.2	811.7	761.7	729.9	718.6	709.5
52.5°	1068.8	991.4	902.7	823.2	750.3	673.0	600.3	543.3	511.6	498.1	488.9
55°	891.4	814.1	732.1	654.9	577.5	500.3	427.4	372.8	338.8	322.8	311.5
57.5°	711.7	639.0	568.5	491.2	427.4	352.4	279.7	231.9	202.3	184.2	175.1
60°	550.2	493.5	432.0	368.4	306.9	245.6	186.4	140.9	118.2	104.6	93.3
62.5°	416.1	368.4	327.3	272.9	225.1	172.7	127.3	91.0	70.5	59.2	54.6
65°	300.2	263.8	227.3	193.3	159.2	120.5	86.4	59.2	40.9	34.1	31.8
67.5°	213.8	184.2	156.8	134.1	109.1	86.4	61.4	40.9	31.8	27.4	25.0
70°	150.0	127.3	109.1	88.7	72.8	56.8	47.8	29.6	18.2	20.5	15.9
72.5°	100.1	84.2	75.1	61.4	50.0	40.9	29.6	20.5	20.5	15.9	13.7
75°	54.6	50.0	38.7	29.6	25.0	22.8	9.1	4.6	2.2	6.8	2.2
77.5°	38.7	34.1	29.6	25.0	20.5	15.9	9.1	9.1	6.8	9.1	4.6
80°	25.0	20.5	18.2	18.2	11.3	6.8	4.6	4.6	6.8	2.2	2.2
82.5°	15.9	13.7	11.3	11.3	11.3	6.8	6.8	6.8	6.8	4.6	4.6
85°	9.1	6.8	4.6	4.6	2.2	4.6	0.0	2.2	2.2	0.0	0.0
87.5°	4.6	2.2	2.2	2.2	2.2	0.0	0.0	2.2	0.0	2.2	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9	4865.9
2.5°	4904.6	4913.7	4925.1	4934.2	4954.7	4959.2	4968.4	4977.5	4984.3	4991.0	4993.4
5°	4936.4	4970.6	5002.5	5036.5	5079.7	5109.3	5143.4	5173.0	5202.6	5227.6	5245.7
7.5°	4945.6	4997.9	5045.7	5104.7	5168.4	5223.1	5279.8	5336.6	5395.8	5441.3	5479.9
10°	4963.8	5027.5	5088.8	5159.3	5241.2	5313.9	5384.4	5459.5	5534.5	5598.2	5655.1
12.5°	4995.6	5066.1	5132.1	5209.4	5293.5	5375.3	5452.7	5536.7	5616.4	5686.8	5750.5
15°	5048.0	5113.8	5177.6	5250.3	5334.4	5409.5	5486.7	5568.6	5648.3	5720.9	5780.1
17.5°	5081.9	5143.4	5207.0	5273.0	5343.5	5411.7	5484.5	5557.2	5630.0	5695.9	5750.5
20°	5081.9	5141.1	5188.9	5248.1	5313.9	5373.1	5432.3	5495.8	5559.5	5614.1	5666.4
22.5°	5041.1	5097.9	5134.3	5179.8	5236.6	5286.6	5318.5	5389.0	5436.7	5484.5	5523.1
25°	4945.6	4986.5	5016.1	5048.0	5093.4	5127.5	5154.8	5195.7	5243.5	5261.6	5288.9
27.5°	4772.8	4802.4	4818.3	4825.1	4847.9	4865.9	4870.5	4888.7	4909.2	4913.7	4925.1
30°	4499.9	4502.2	4495.3	4493.1	4481.6	4468.1	4465.7	4463.5	4454.4	4445.3	4447.6
32.5°	4088.3	4077.0	4049.6	4020.1	3990.6	3958.8	3940.5	3917.8	3904.1	3890.5	3874.6
35°	3556.3	3529.0	3490.3	3453.9	3419.8	3394.8	3353.9	3340.2	3326.7	3308.4	3303.9
37.5°	2931.0	2915.0	2878.6	2851.4	2833.2	2821.8	2801.4	2787.7	2787.7	2780.9	2776.4
40°	2285.2	2280.7	2267.0	2273.8	2264.8	2269.2	2267.0	2262.4	2273.8	2273.8	2278.4
42.5°	1714.5	1716.8	1723.6	1728.1	1741.8	1744.1	1755.4	1755.4	1762.2	1769.1	1773.5
45°	1275.6	1284.8	1284.8	1293.9	1307.5	1309.8	1314.3	1316.6	1321.1	1332.5	1337.0
47.5°	957.2	959.5	959.5	961.8	966.3	970.9	968.7	970.9	977.7	973.1	977.7
50°	707.2	709.5	702.6	695.8	702.6	702.6	700.4	693.6	700.4	691.3	695.8
52.5°	482.1	479.8	472.9	475.3	470.7	468.5	468.5	463.9	463.9	463.9	454.8
55°	304.7	304.7	300.2	300.2	297.8	293.4	291.1	288.8	286.5	284.3	284.3
57.5°	170.5	172.7	166.0	163.7	166.0	163.7	159.2	159.2	159.2	152.3	156.8
60°	93.3	91.0	88.7	86.4	84.2	86.4	86.4	81.9	81.9	81.9	84.2
62.5°	50.0	50.0	47.8	47.8	45.5	45.5	50.0	43.3	45.5	43.3	45.5
65°	27.4	34.1	25.0	25.0	31.8	29.6	27.4	27.4	29.6	25.0	27.4
67.5°	29.6	20.5	18.2	20.5	18.2	18.2	18.2	22.8	20.5	15.9	20.5
70°	13.7	15.9	15.9	11.3	18.2	9.1	15.9	9.1	13.7	11.3	13.7
72.5°	13.7	13.7	13.7	9.1	13.7	9.1	11.3	11.3	9.1	9.1	13.7
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°	4.6	4.6	2.2	2.2	2.2	2.2	4.6	4.6	4.6	0.0	2.2
80°	4.6	4.6	0.0	2.2	0.0	0.0	2.2	0.0	2.2	0.0	4.6
82.5°	2.2	4.6	2.2	2.2	4.6	4.6	4.6	2.2	2.2	2.2	2.2
85°	0.0	2.2	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	2.2
87.5°	0.0	2.2	0.0	0.0	0.0	0.0	2.2	2.2	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: P249778

CATALOG NUMBER: LSR8B90D010 EC8B90930 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4865.9	4865.9	4865.9	4865.9
2.5°	4995.6	4997.9	5002.5	5000.2
5°	5259.4	5277.6	5286.6	5284.4
7.5°	5507.1	5539.1	5557.2	5557.2
10°	5698.2	5734.6	5761.8	5766.4
12.5°	5800.5	5841.5	5877.9	5868.8
15°	5830.1	5871.1	5907.3	5900.6
17.5°	5796.0	5836.9	5864.3	5859.7
20°	5702.8	5736.8	5764.2	5761.8
22.5°	5557.2	5586.8	5609.6	5607.2
25°	5311.6	5332.1	5350.3	5341.2
27.5°	4934.2	4941.0	4952.4	4938.8
30°	4431.8	4436.2	4440.8	4438.5
32.5°	3867.8	3865.4	3860.9	3856.4
35°	3297.1	3297.1	3299.3	3285.7
37.5°	2778.6	2776.4	2783.2	2776.4
40°	2282.9	2280.7	2289.8	2278.4
42.5°	1780.4	1787.2	1789.5	1789.5
45°	1339.3	1341.6	1343.9	1343.9
47.5°	977.7	980.0	991.4	977.7
50°	691.3	693.6	695.8	691.3
52.5°	457.0	459.4	457.0	450.2
55°	279.7	282.0	282.0	282.0
57.5°	150.0	152.3	152.3	150.0
60°	81.9	79.6	81.9	77.3
62.5°	43.3	47.8	45.5	40.9
65°	27.4	27.4	27.4	31.8
67.5°	22.8	18.2	20.5	15.9
70°	13.7	15.9	15.9	11.3
72.5°	11.3	11.3	11.3	13.7
75°	0.0	0.0	0.0	0.0
77.5°	4.6	4.6	4.6	2.2
80°	2.2	0.0	2.2	0.0
82.5°	2.2	2.2	4.6	2.2
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)