

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: P249700

Luminaire Tested: **LSR8B80D010 EC8B80827 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249700
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: LSR8B80D010 EC8B80827 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 2700 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8301.0 lumens
Efficiency: N/A
Efficacy: 111.6 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

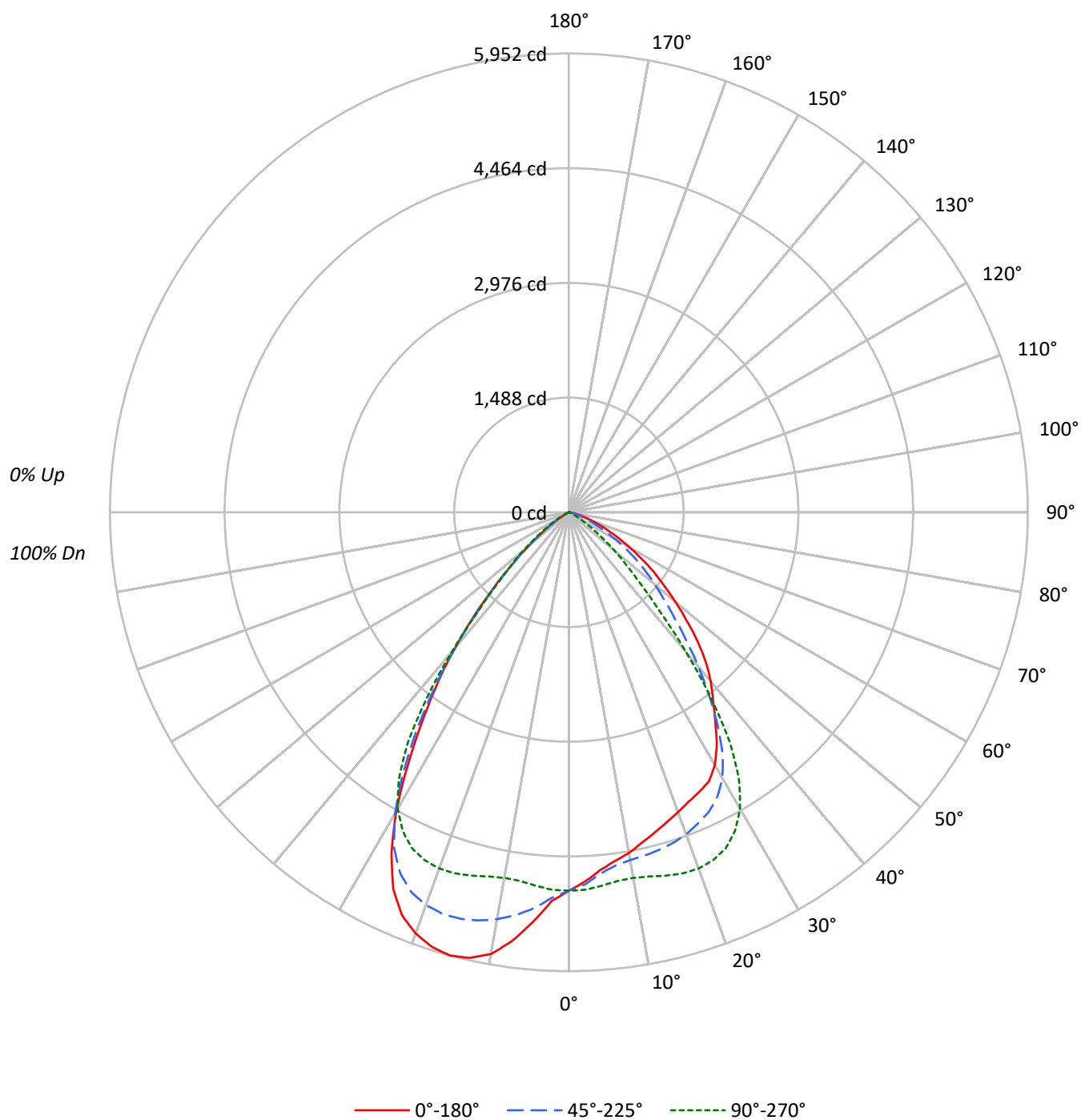
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P249700

CATALOG NUMBER: LSR8B80D010 EC8B80827 8LBSW0LI

Luminous Intensity Polar Plot





TEST NUMBER: P249700

CATALOG NUMBER: LSR8B80D010 EC8B80827 8LBSW0LI

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	112	109	106	103	110	107	104	102		103	100	98		99	97	96		95	94	93
2	105	99	94	90	103	97	93	89		94	90	87		91	88	85		88	86	83
3	98	90	84	80	96	89	83	79		86	82	78		84	80	76		81	78	75
4	92	83	76	71	90	81	75	70		79	74	70		77	72	69		75	71	68
5	86	76	69	64	84	75	68	63		73	67	63		71	66	62		69	65	61
6	80	70	63	57	79	69	62	57		67	61	57		66	60	56		64	60	56
7	75	64	57	52	74	64	57	52		62	56	52		61	55	51		60	55	51
8	71	60	53	48	70	59	52	48		58	52	47		57	51	47		56	51	47
9	67	55	48	44	66	55	48	44		54	48	43		53	47	43		52	47	43
10	63	52	45	40	62	51	45	40		50	44	40		49	44	40		49	43	40

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	151357	151357	151357
5°	144197	150514	165001
10°	140478	150749	182133
15°	137293	155745	190012
20°	135780	161373	190726
25°	136100	163649	183315
30°	134835	158030	159418
35°	124595	136765	124764
40°	115134	94822	92516
45°	102525	57215	59112
50°	86265	36862	33451
55°	71766	20220	15295
60°	56017	8770	4810
65°	41335	4356	2342
70°	28743	2687	1028
75°	17490	548	0
80°	12626	817	0
85°	8102	814	0



TEST NUMBER: P249700

CATALOG NUMBER: LSR8B80D010 EC8B80827 8LBSW0LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	471.9	5.7
10°-20°	1412.2	17.0
20°-30°	2162.7	26.1
30°-40°	2120.2	25.5
40°-50°	1276.8	15.4
50°-60°	587.7	7.1
60°-70°	206.4	2.5
70°-80°	54.0	0.7
80°-90°	9.2	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°	4046.8	48.8
0°-40°	6166.9	74.3
0°-60°	8031.4	96.8
0°-90°	8301.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8301.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4908	4908	4908	4908	4908	
5°	4658	4702	4862	5154	5330	440
15°	4301	4532	4879	5457	5952	1215
25°	4000	4289	4810	5172	5388	1842
35°	3310	3356	3633	3424	3314	2073
45°	2351	1936	1312	1321	1356	1803
55°	1335	1057	376	296	284	1191
65°	566	392	60	30	32	577
75°	147	85	5	0	0	178
85°	23	11	2	0	0	32
90°	0	0	0	0	0	



TEST NUMBER: P249700

CATALOG NUMBER: LSR8B80D010 EC8B80827 8LBSWOLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4
2.5°	4793.7	4798.3	4798.3	4798.3	4807.5	4809.8	4807.5	4809.8	4814.4	4830.4	4837.3
5°	4658.4	4651.5	4656.1	4653.8	4665.3	4672.2	4667.6	4674.5	4690.5	4702.0	4713.4
7.5°	4562.1	4562.1	4562.1	4566.6	4573.5	4587.3	4585.0	4589.6	4605.6	4621.7	4637.7
10°	4486.4	4484.1	4484.1	4495.5	4504.7	4520.8	4525.4	4539.2	4559.7	4580.4	4598.7
12.5°	4387.7	4390.1	4401.5	4413.0	4433.6	4458.8	4472.6	4491.0	4523.1	4557.5	4578.2
15°	4300.6	4302.9	4312.1	4335.0	4360.3	4390.1	4419.8	4449.7	4488.7	4532.3	4569.0
17.5°	4215.7	4218.0	4224.9	4250.2	4282.3	4321.3	4355.6	4394.6	4445.1	4495.5	4541.4
20°	4137.7	4135.5	4146.9	4169.8	4211.2	4247.8	4282.3	4328.2	4383.2	4445.1	4497.8
22.5°	4062.0	4062.0	4073.5	4096.5	4133.2	4169.8	4206.6	4254.7	4309.8	4369.4	4431.4
25°	4000.1	3997.8	4013.9	4025.4	4052.9	4089.6	4128.6	4167.6	4222.6	4289.2	4348.7
27.5°	3933.6	3931.4	3933.6	3947.4	3972.6	4000.1	4029.9	4064.4	4110.3	4165.3	4222.6
30°	3786.8	3789.1	3789.1	3800.6	3814.4	3844.1	3860.2	3894.6	3935.9	3981.8	4032.3
32.5°	3568.9	3571.2	3571.2	3575.8	3587.2	3601.0	3614.8	3640.0	3672.1	3711.1	3757.0
35°	3309.8	3309.8	3307.4	3309.8	3316.7	3316.7	3328.1	3316.7	3332.7	3355.7	3390.0
37.5°	3071.2	3066.6	3062.0	3057.4	3050.5	3039.1	3023.1	2995.5	2988.6	2979.4	2981.7
40°	2860.2	2857.9	2844.2	2832.6	2809.7	2782.2	2743.2	2695.1	2656.1	2610.2	2571.2
42.5°	2626.3	2623.9	2612.5	2591.8	2566.6	2525.3	2463.4	2399.2	2321.2	2252.4	2181.3
45°	2351.0	2357.9	2341.8	2318.9	2289.0	2250.0	2181.3	2103.2	2025.3	1935.8	1846.3
47.5°	2064.2	2062.0	2050.6	2036.8	2011.6	1972.6	1926.7	1841.8	1759.2	1676.7	1584.9
50°	1798.2	1789.0	1784.4	1770.7	1754.7	1722.6	1674.3	1605.5	1532.2	1454.2	1369.3
52.5°	1545.9	1545.9	1534.4	1525.3	1511.5	1486.3	1445.0	1390.0	1328.0	1254.6	1165.2
55°	1334.9	1330.3	1318.9	1307.4	1293.6	1277.5	1240.9	1195.0	1128.5	1057.4	979.4
57.5°	1110.2	1107.8	1103.3	1089.5	1082.6	1066.5	1025.3	979.4	922.1	860.2	795.9
60°	908.3	899.1	889.9	880.7	869.3	853.3	825.7	786.7	738.6	683.5	619.3
62.5°	727.1	740.8	713.4	713.4	690.4	676.6	651.4	628.5	578.0	527.6	472.5
65°	566.5	566.5	555.0	545.9	532.1	516.0	490.8	467.9	431.2	392.2	353.2
67.5°	433.5	431.2	419.7	410.6	399.1	389.9	371.6	344.0	316.6	284.5	252.3
70°	318.8	316.6	314.2	298.1	289.0	277.6	263.8	245.5	224.8	201.8	172.0
72.5°	229.3	229.3	222.5	215.6	206.5	197.2	183.5	172.0	153.7	137.6	117.0
75°	146.8	144.5	144.5	133.0	133.0	119.2	110.1	103.2	94.0	84.9	66.6
77.5°	105.5	103.2	100.9	96.3	91.8	87.1	80.2	71.1	64.2	55.0	48.1
80°	71.1	66.6	64.2	64.2	57.3	55.0	57.3	43.6	41.3	34.4	29.8
82.5°	43.6	43.6	41.3	41.3	39.0	36.7	29.8	29.8	27.6	25.2	20.7
85°	22.9	29.8	20.7	22.9	20.7	22.9	20.7	16.0	13.8	11.4	11.4
87.5°	13.8	9.2	9.2	13.8	11.4	9.2	9.2	9.2	6.9	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



TEST NUMBER: P249700

CATALOG NUMBER: LSR8B80D010 EC8B80827 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4
2.5°	4832.8	4848.8	4846.5	4867.1	4874.0	4890.1	4890.1	4901.5	4908.4	4924.4	4938.2
5°	4718.1	4743.3	4750.2	4775.4	4796.1	4821.3	4837.3	4862.5	4885.5	4919.9	4952.0
7.5°	4647.0	4667.6	4681.3	4711.2	4734.1	4761.6	4789.2	4823.5	4855.6	4897.0	4942.9
10°	4612.5	4640.1	4660.7	4690.5	4718.1	4747.9	4775.4	4814.4	4851.1	4903.9	4954.3
12.5°	4603.4	4635.5	4660.7	4702.0	4729.5	4761.6	4793.7	4837.3	4876.3	4931.3	4988.7
15°	4603.4	4647.0	4681.3	4727.2	4759.3	4800.6	4835.0	4878.6	4922.2	4979.5	5034.5
17.5°	4594.2	4647.0	4690.5	4743.3	4784.5	4825.9	4869.4	4910.8	4956.5	5011.7	5073.5
20°	4557.5	4624.0	4676.7	4738.7	4782.3	4828.2	4871.8	4917.6	4965.8	5023.1	5075.9
22.5°	4493.3	4571.3	4630.9	4697.4	4747.9	4793.7	4837.3	4883.2	4936.0	4991.0	5046.0
25°	4408.4	4481.8	4546.1	4614.8	4665.3	4715.7	4757.1	4809.8	4858.0	4910.8	4954.3
27.5°	4279.9	4357.9	4419.8	4491.0	4536.8	4585.0	4619.4	4663.0	4708.9	4752.4	4786.9
30°	4087.3	4158.4	4222.6	4286.8	4332.7	4367.2	4403.8	4438.2	4468.1	4497.8	4527.6
32.5°	3805.1	3869.4	3931.4	3990.9	4027.7	4057.5	4085.0	4105.6	4121.7	4137.7	4140.0
35°	3417.6	3470.3	3509.3	3562.0	3596.5	3624.0	3624.0	3633.1	3630.9	3624.0	3617.1
37.5°	2984.1	3004.6	3020.7	3041.4	3043.6	3043.6	3030.0	3018.4	3000.1	2995.5	2981.7
40°	2532.2	2504.7	2484.0	2456.5	2440.5	2406.0	2376.3	2355.6	2325.8	2321.2	2316.6
42.5°	2103.2	2039.0	1981.7	1933.6	1878.5	1830.3	1786.8	1754.7	1731.7	1729.4	1731.7
45°	1754.7	1681.2	1596.4	1529.9	1468.0	1408.3	1351.0	1312.0	1291.3	1286.7	1291.3
47.5°	1490.9	1406.0	1323.4	1247.7	1181.2	1114.7	1057.4	1004.6	979.4	972.5	970.2
50°	1282.2	1195.0	1107.8	1029.8	956.5	889.9	818.8	768.4	736.3	724.8	715.6
52.5°	1078.1	1000.1	910.6	830.3	756.9	678.9	605.5	548.1	516.0	502.3	493.1
55°	899.1	821.2	738.6	660.6	582.6	504.6	431.2	376.1	341.8	325.7	314.2
57.5°	717.9	644.5	573.4	495.5	431.2	355.5	282.1	233.9	204.1	185.8	176.6
60°	555.0	497.7	435.8	371.6	309.7	247.7	188.1	142.2	119.2	105.5	94.0
62.5°	419.7	371.6	330.2	275.2	227.1	174.3	128.5	91.8	71.1	59.7	55.0
65°	302.8	266.0	229.3	195.0	160.6	121.6	87.1	59.7	41.3	34.4	32.1
67.5°	215.6	185.8	158.2	135.3	110.1	87.1	61.9	41.3	32.1	27.6	25.2
70°	151.3	128.5	110.1	89.5	73.4	57.3	48.1	29.8	18.3	20.7	16.0
72.5°	100.9	84.9	75.7	61.9	50.4	41.3	29.8	20.7	20.7	16.0	13.8
75°	55.0	50.4	39.0	29.8	25.2	22.9	9.2	4.6	2.3	6.9	2.3
77.5°	39.0	34.4	29.8	25.2	20.7	16.0	9.2	9.2	6.9	9.2	4.6
80°	25.2	20.7	18.3	18.3	11.4	6.9	4.6	4.6	6.9	2.3	2.3
82.5°	16.0	13.8	11.4	11.4	11.4	6.9	6.9	6.9	6.9	4.6	4.6
85°	9.2	6.9	4.6	4.6	2.3	4.6	0.0	2.3	2.3	0.0	0.0
87.5°	4.6	2.3	2.3	2.3	2.3	0.0	0.0	2.3	0.0	2.3	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: P249700

CATALOG NUMBER: LSR8B80D010 EC8B80827 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4	4908.4
2.5°	4947.4	4956.5	4968.1	4977.2	4997.9	5002.4	5011.7	5020.8	5027.7	5034.5	5036.9
5°	4979.5	5013.9	5046.0	5080.4	5124.0	5153.9	5188.2	5218.1	5247.9	5273.1	5291.4
7.5°	4988.7	5041.4	5089.7	5149.2	5213.4	5268.6	5325.9	5383.2	5442.8	5488.7	5527.7
10°	5007.1	5071.3	5133.2	5204.3	5286.9	5360.2	5431.3	5507.0	5582.8	5647.0	5704.4
12.5°	5039.2	5110.2	5176.8	5254.8	5339.7	5422.2	5500.2	5585.0	5665.4	5736.5	5800.7
15°	5091.9	5158.4	5222.7	5296.0	5380.9	5456.6	5534.6	5617.1	5697.5	5770.8	5830.5
17.5°	5126.3	5188.2	5252.4	5319.0	5390.1	5458.9	5532.3	5605.7	5679.1	5745.6	5800.7
20°	5126.3	5186.0	5234.1	5293.8	5360.2	5419.9	5479.6	5543.8	5608.0	5663.0	5715.8
22.5°	5085.0	5142.3	5179.1	5225.0	5282.3	5332.8	5364.9	5436.0	5484.1	5532.3	5571.2
25°	4988.7	5030.0	5059.8	5091.9	5137.8	5172.2	5199.7	5241.0	5289.1	5307.6	5335.0
27.5°	4814.4	4844.2	4860.3	4867.1	4890.1	4908.4	4913.0	4931.3	4952.0	4956.5	4968.1
30°	4539.2	4541.4	4534.5	4532.3	4520.8	4507.1	4504.7	4502.4	4493.3	4484.1	4486.4
32.5°	4124.0	4112.5	4085.0	4055.2	4025.4	3993.3	3974.9	3951.9	3938.2	3924.5	3908.4
35°	3587.2	3559.8	3520.8	3484.1	3449.7	3424.4	3383.1	3369.3	3355.7	3337.3	3332.7
37.5°	2956.5	2940.5	2903.7	2876.3	2857.9	2846.4	2825.7	2812.1	2812.1	2805.2	2800.5
40°	2305.1	2300.5	2286.8	2293.7	2284.5	2289.0	2286.8	2282.1	2293.7	2293.7	2298.3
42.5°	1729.4	1731.7	1738.6	1743.2	1756.9	1759.2	1770.7	1770.7	1777.6	1784.4	1789.0
45°	1286.7	1295.9	1295.9	1305.1	1318.9	1321.2	1325.7	1328.0	1332.6	1344.1	1348.6
47.5°	965.6	967.9	967.9	970.2	974.8	979.4	977.1	979.4	986.3	981.7	986.3
50°	713.4	715.6	708.7	701.8	708.7	708.7	706.5	699.6	706.5	697.3	701.8
52.5°	486.3	483.9	477.0	479.4	474.8	472.5	472.5	467.9	467.9	467.9	458.7
55°	307.4	307.4	302.8	302.8	300.5	295.9	293.6	291.3	289.0	286.7	286.7
57.5°	172.0	174.3	167.5	165.1	167.5	165.1	160.6	160.6	160.6	153.7	158.2
60°	94.0	91.8	89.5	87.1	84.9	87.1	87.1	82.6	82.6	82.6	84.9
62.5°	50.4	50.4	48.1	48.1	45.9	45.9	50.4	43.6	45.9	43.6	45.9
65°	27.6	34.4	25.2	25.2	32.1	29.8	27.6	27.6	29.8	25.2	27.6
67.5°	29.8	20.7	18.3	20.7	18.3	18.3	18.3	22.9	20.7	16.0	20.7
70°	13.8	16.0	16.0	11.4	18.3	9.2	16.0	9.2	13.8	11.4	13.8
72.5°	13.8	13.8	13.8	9.2	13.8	9.2	11.4	11.4	9.2	9.2	13.8
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	2.3	2.3	2.3	2.3	4.6	4.6	4.6	0.0	2.3
80°	4.6	4.6	0.0	2.3	0.0	0.0	2.3	0.0	2.3	0.0	4.6
82.5°	2.3	4.6	2.3	2.3	4.6	4.6	4.6	2.3	2.3	2.3	2.3
85°	0.0	2.3	0.0	0.0	0.0	0.0	4.6	0.0	0.0	0.0	2.3
87.5°	0.0	2.3	0.0	0.0	0.0	0.0	2.3	2.3	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: P249700

CATALOG NUMBER: LSR8B80D010 EC8B80827 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4908.4	4908.4	4908.4	4908.4
2.5°	5039.2	5041.4	5046.0	5043.8
5°	5305.2	5323.6	5332.8	5330.5
7.5°	5555.2	5587.4	5605.7	5605.7
10°	5747.9	5784.6	5812.1	5816.7
12.5°	5851.1	5892.4	5929.1	5919.9
15°	5880.9	5922.3	5958.9	5952.0
17.5°	5846.5	5887.8	5915.4	5910.7
20°	5752.5	5786.9	5814.4	5812.1
22.5°	5605.7	5635.5	5658.5	5656.1
25°	5358.0	5378.6	5397.0	5387.8
27.5°	4977.2	4984.1	4995.5	4981.8
30°	4470.3	4474.9	4479.5	4477.2
32.5°	3901.5	3899.2	3894.6	3890.0
35°	3325.8	3325.8	3328.1	3314.3
37.5°	2802.8	2800.5	2807.4	2800.5
40°	2302.8	2300.5	2309.7	2298.3
42.5°	1795.9	1802.8	1805.1	1805.1
45°	1351.0	1353.3	1355.5	1355.5
47.5°	986.3	988.6	1000.1	986.3
50°	697.3	699.6	701.8	697.3
52.5°	461.0	463.4	461.0	454.1
55°	282.1	284.5	284.5	284.5
57.5°	151.3	153.7	153.7	151.3
60°	82.6	80.2	82.6	78.0
62.5°	43.6	48.1	45.9	41.3
65°	27.6	27.6	27.6	32.1
67.5°	22.9	18.3	20.7	16.0
70°	13.8	16.0	16.0	11.4
72.5°	11.4	11.4	11.4	13.8
75°	0.0	0.0	0.0	0.0
77.5°	4.6	4.6	4.6	2.3
80°	2.3	0.0	2.3	0.0
82.5°	2.3	2.3	4.6	2.3
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)