

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: P249707

Luminaire Tested: **LSR8B80D010 EC8B80830 8LBSW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249707
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 EC8B80830 8LBSW0LI
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8509.0 lumens
Efficiency: N/A
Efficacy: 114.4 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

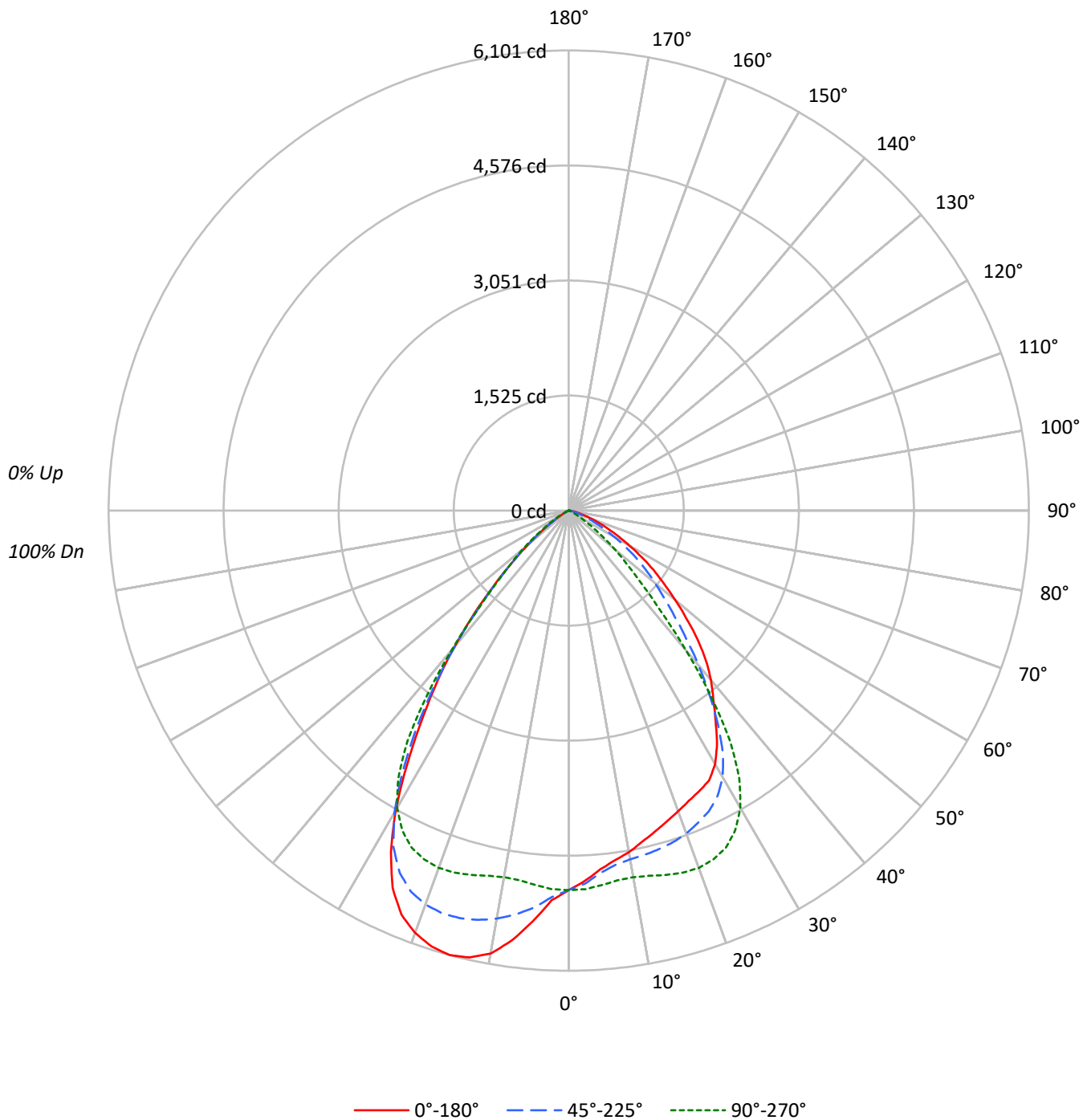
Input Watts (W): 74.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	155150	155150	155150
5°	147809	154288	169136
10°	143998	154525	186698
15°	140734	159646	194772
20°	139183	165415	195504
25°	139509	167752	187908
30°	138215	161993	163413
35°	127715	140194	127892
40°	118021	97197	94834
45°	105094	58650	60595
50°	88428	37783	34291
55°	73567	20725	15677
60°	57423	8986	4928
65°	42371	4465	2401
70°	29464	2759	1055
75°	17931	560	0
80°	12946	835	0
85°	8314	814	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	483.7	5.7
10°-20°	1447.6	17.0
20°-30°	2216.9	26.1
30°-40°	2173.3	25.5
40°-50°	1308.7	15.4
50°-60°	602.4	7.1
60°-70°	211.6	2.5
70°-80°	55.3	0.7
80°-90°	9.4	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°	4148.2	48.8
0°-40°	6321.5	74.3
0°-60°	8232.6	96.8
0°-90°	8509.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8509.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5031	5031	5031	5031	5031	
5°	4775	4820	4984	5283	5464	451
15°	4408	4646	5001	5593	6101	1245
25°	4100	4397	4930	5302	5523	1889
35°	3393	3440	3724	3510	3397	2125
45°	2410	1984	1345	1354	1390	1848
55°	1368	1084	386	303	292	1221
65°	581	402	61	31	33	592
75°	150	87	5	0	0	182
85°	24	12	2	0	0	32
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°	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4
2.5°	4913.8	4918.6	4918.6	4918.6	4927.9	4930.4	4927.9	4930.4	4935.0	4951.5	4958.5
5°	4775.1	4768.1	4772.8	4770.4	4782.2	4789.3	4784.5	4791.6	4808.0	4819.8	4831.6
7.5°	4676.4	4676.4	4676.4	4681.1	4688.1	4702.3	4699.9	4704.6	4721.0	4737.5	4753.9
10°	4598.8	4596.5	4596.5	4608.2	4617.6	4634.0	4638.8	4652.9	4674.0	4695.2	4714.0
12.5°	4497.7	4500.1	4511.8	4523.6	4544.7	4570.6	4584.7	4603.6	4636.5	4671.7	4692.9
15°	4408.4	4410.7	4420.2	4443.6	4469.5	4500.1	4530.6	4561.2	4601.1	4645.8	4683.5
17.5°	4321.4	4323.7	4330.7	4356.7	4389.6	4429.6	4464.8	4504.7	4556.5	4608.2	4655.2
20°	4241.4	4239.1	4250.8	4274.3	4316.7	4354.3	4389.6	4436.6	4493.0	4556.5	4610.5
22.5°	4163.8	4163.8	4175.6	4199.1	4236.8	4274.3	4312.0	4361.3	4417.7	4478.9	4542.4
25°	4100.3	4098.0	4114.5	4126.3	4154.4	4192.1	4232.0	4272.0	4328.4	4396.6	4457.7
27.5°	4032.2	4029.9	4032.2	4046.3	4072.2	4100.3	4130.9	4166.2	4213.3	4269.7	4328.4
30°	3881.7	3884.0	3884.0	3895.8	3910.0	3940.5	3956.9	3992.2	4034.5	4081.6	4133.3
32.5°	3658.4	3660.7	3660.7	3665.4	3677.1	3691.3	3705.4	3731.2	3764.1	3804.1	3851.1
35°	3392.7	3392.7	3390.3	3392.7	3399.8	3399.8	3411.5	3399.8	3416.2	3439.7	3475.0
37.5°	3148.2	3143.4	3138.8	3134.0	3127.0	3115.3	3098.8	3070.5	3063.5	3054.1	3056.4
40°	2931.9	2929.5	2915.4	2903.6	2880.1	2851.9	2812.0	2762.6	2722.6	2675.6	2635.6
42.5°	2692.1	2689.6	2677.9	2656.7	2630.9	2588.6	2525.1	2459.3	2379.4	2308.8	2236.0
45°	2409.9	2416.9	2400.5	2377.0	2346.4	2306.4	2236.0	2155.9	2076.0	1984.4	1892.6
47.5°	2116.0	2113.6	2101.9	2087.8	2062.0	2022.0	1975.0	1888.0	1803.3	1718.7	1624.6
50°	1843.3	1833.9	1829.1	1815.1	1798.6	1765.7	1716.3	1645.7	1570.5	1490.6	1403.6
52.5°	1584.7	1584.7	1572.9	1563.5	1549.4	1523.5	1481.2	1424.8	1361.3	1286.0	1194.4
55°	1368.4	1363.6	1351.9	1340.1	1326.0	1309.5	1272.0	1225.0	1156.7	1083.9	1003.9
57.5°	1138.0	1135.5	1130.9	1116.8	1109.7	1093.3	1051.0	1003.9	945.2	881.7	815.8
60°	931.1	921.7	912.2	902.8	891.1	874.6	846.4	806.4	757.1	700.6	634.8
62.5°	745.4	759.4	731.2	731.2	707.7	693.6	667.7	644.2	592.5	540.8	484.4
65°	580.7	580.7	568.9	559.5	545.4	529.0	503.1	479.6	442.0	402.0	362.0
67.5°	444.4	442.0	430.3	420.9	409.1	399.7	380.9	352.6	324.5	291.6	258.6
70°	326.8	324.5	322.1	305.6	296.2	284.5	270.4	251.6	230.4	206.9	176.3
72.5°	235.1	235.1	228.1	221.0	211.6	202.2	188.1	176.3	157.5	141.1	119.9
75°	150.5	148.2	148.2	136.4	136.4	122.2	112.8	105.8	96.4	87.0	68.2
77.5°	108.2	105.8	103.5	98.7	94.1	89.3	82.3	72.9	65.8	56.4	49.4
80°	72.9	68.2	65.8	65.8	58.7	56.4	58.7	44.7	42.3	35.2	30.6
82.5°	44.7	44.7	42.3	42.3	40.0	37.6	30.6	30.6	28.3	25.8	21.2
85°	23.5	30.6	21.2	23.5	21.2	23.5	21.2	16.5	14.1	11.7	11.7
87.5°	14.1	9.4	9.4	14.1	11.7	9.4	9.4	9.4	7.1	4.7	4.7
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°	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4
2.5°	4953.9	4970.3	4967.9	4989.1	4996.2	5012.6	5012.6	5024.3	5031.4	5047.8	5062.0
5°	4836.3	4862.1	4869.2	4895.0	4916.2	4942.1	4958.5	4984.4	5007.9	5043.2	5076.1
7.5°	4763.4	4784.5	4798.6	4829.2	4852.7	4880.9	4909.2	4944.4	4977.3	5019.7	5066.7
10°	4728.1	4756.4	4777.5	4808.0	4836.3	4866.9	4895.0	4935.0	4972.6	5026.7	5078.4
12.5°	4718.7	4751.6	4777.5	4819.8	4848.0	4880.9	4913.8	4958.5	4998.5	5054.9	5113.7
15°	4718.7	4763.4	4798.6	4845.7	4878.6	4920.9	4956.2	5000.8	5045.5	5104.3	5160.7
17.5°	4709.3	4763.4	4808.0	4862.1	4904.4	4946.8	4991.4	5033.8	5080.7	5137.3	5200.6
20°	4671.7	4739.9	4793.9	4857.4	4902.1	4949.1	4993.8	5040.8	5090.2	5149.0	5203.1
22.5°	4605.9	4685.8	4747.0	4815.1	4866.9	4913.8	4958.5	5005.6	5059.6	5116.1	5172.5
25°	4518.9	4594.1	4660.0	4730.4	4782.2	4833.9	4876.3	4930.4	4979.7	5033.8	5078.4
27.5°	4387.2	4467.1	4530.6	4603.6	4650.5	4699.9	4735.2	4779.9	4826.9	4871.5	4906.8
30°	4189.7	4262.6	4328.4	4394.2	4441.3	4476.6	4514.1	4549.5	4580.0	4610.5	4641.1
32.5°	3900.5	3966.4	4029.9	4090.9	4128.6	4159.2	4187.3	4208.5	4225.0	4241.4	4243.7
35°	3503.2	3557.2	3597.2	3651.3	3686.6	3714.8	3714.8	3724.2	3721.8	3714.8	3707.7
37.5°	3058.8	3079.9	3096.4	3117.6	3119.9	3119.9	3105.9	3094.1	3075.3	3070.5	3056.4
40°	2595.7	2567.4	2546.2	2518.1	2501.6	2466.3	2435.8	2414.6	2384.0	2379.4	2374.6
42.5°	2155.9	2090.1	2031.4	1982.0	1925.6	1876.2	1831.5	1798.6	1775.1	1772.7	1775.1
45°	1798.6	1723.4	1636.4	1568.2	1504.7	1443.6	1384.8	1344.9	1323.7	1318.9	1323.7
47.5°	1528.3	1441.3	1356.6	1279.0	1210.8	1142.6	1083.9	1029.8	1003.9	996.9	994.5
50°	1314.3	1225.0	1135.5	1055.6	980.4	912.2	839.3	787.6	754.7	742.9	733.5
52.5°	1105.1	1025.1	933.4	851.1	775.8	695.9	620.7	561.9	529.0	514.9	505.5
55°	921.7	841.7	757.1	677.1	597.2	517.3	442.0	385.5	350.3	333.9	322.1
57.5°	735.9	660.7	587.8	507.9	442.0	364.5	289.2	239.8	209.2	190.5	181.1
60°	568.9	510.2	446.7	380.9	317.4	253.9	192.8	145.7	122.2	108.2	96.4
62.5°	430.3	380.9	338.5	282.1	232.7	178.6	131.7	94.1	72.9	61.2	56.4
65°	310.4	272.7	235.1	199.8	164.6	124.6	89.3	61.2	42.3	35.2	32.9
67.5°	221.0	190.5	162.2	138.7	112.8	89.3	63.5	42.3	32.9	28.3	25.8
70°	155.1	131.7	112.8	91.7	75.2	58.7	49.4	30.6	18.8	21.2	16.5
72.5°	103.5	87.0	77.6	63.5	51.7	42.3	30.6	21.2	21.2	16.5	14.1
75°	56.4	51.7	40.0	30.6	25.8	23.5	9.4	4.7	2.3	7.1	2.3
77.5°	40.0	35.2	30.6	25.8	21.2	16.5	9.4	9.4	7.1	9.4	4.7
80°	25.8	21.2	18.8	18.8	11.7	7.1	4.7	4.7	7.1	2.3	2.3
82.5°	16.5	14.1	11.7	11.7	11.7	7.1	7.1	7.1	7.1	4.7	4.7
85°	9.4	7.1	4.7	4.7	2.3	4.7	0.0	2.3	2.3	0.0	0.0
87.5°	4.7	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4	5031.4
2.5°	5071.4	5080.7	5092.6	5101.9	5123.1	5127.8	5137.3	5146.6	5153.7	5160.7	5163.1
5°	5104.3	5139.6	5172.5	5207.7	5252.4	5283.0	5318.2	5348.8	5379.4	5405.2	5424.0
7.5°	5113.7	5167.7	5217.2	5278.3	5344.1	5400.6	5459.3	5518.1	5579.2	5626.3	5666.2
10°	5132.5	5198.3	5261.8	5334.7	5419.4	5494.6	5567.4	5645.0	5722.6	5788.5	5847.3
12.5°	5165.4	5238.3	5306.5	5386.5	5473.5	5558.0	5638.0	5725.0	5807.3	5880.2	5946.0
15°	5219.5	5287.6	5353.6	5428.7	5515.7	5593.4	5673.3	5757.9	5840.2	5915.4	5976.6
17.5°	5254.7	5318.2	5384.0	5452.3	5525.1	5595.7	5670.9	5746.2	5821.4	5889.6	5946.0
20°	5254.7	5315.9	5365.3	5426.4	5494.6	5555.7	5616.9	5682.7	5748.5	5804.9	5859.0
22.5°	5212.5	5271.2	5308.8	5355.9	5414.6	5466.4	5499.3	5572.2	5621.5	5670.9	5710.8
25°	5113.7	5156.0	5186.6	5219.5	5266.6	5301.8	5330.0	5372.3	5421.7	5440.6	5468.7
27.5°	4935.0	4965.6	4982.0	4989.1	5012.6	5031.4	5036.1	5054.9	5076.1	5080.7	5092.6
30°	4652.9	4655.2	4648.2	4645.8	4634.0	4620.0	4617.6	4615.3	4605.9	4596.5	4598.8
32.5°	4227.3	4215.6	4187.3	4156.8	4126.3	4093.4	4074.5	4051.0	4036.8	4022.8	4006.4
35°	3677.1	3649.0	3609.0	3571.4	3536.1	3510.2	3467.9	3453.8	3439.7	3420.9	3416.2
37.5°	3030.6	3014.1	2976.5	2948.3	2929.5	2917.7	2896.5	2882.5	2882.5	2875.5	2870.7
40°	2362.8	2358.2	2344.1	2351.1	2341.7	2346.4	2344.1	2339.3	2351.1	2351.1	2355.9
42.5°	1772.7	1775.1	1782.2	1786.8	1801.0	1803.3	1815.1	1815.1	1822.2	1829.1	1833.9
45°	1318.9	1328.4	1328.4	1337.8	1351.9	1354.3	1358.9	1361.3	1366.0	1377.8	1382.4
47.5°	989.8	992.1	992.1	994.5	999.2	1003.9	1001.6	1003.9	1011.0	1006.3	1011.0
50°	731.2	733.5	726.5	719.4	726.5	726.5	724.2	717.1	724.2	714.8	719.4
52.5°	498.5	496.1	489.0	491.4	486.7	484.4	484.4	479.6	479.6	479.6	470.2
55°	315.1	315.1	310.4	310.4	308.0	303.3	301.0	298.5	296.2	293.9	293.9
57.5°	176.3	178.6	171.7	169.3	171.7	169.3	164.6	164.6	164.6	157.5	162.2
60°	96.4	94.1	91.7	89.3	87.0	89.3	89.3	84.7	84.7	84.7	87.0
62.5°	51.7	51.7	49.4	49.4	47.0	47.0	51.7	44.7	47.0	44.7	47.0
65°	28.3	35.2	25.8	25.8	32.9	30.6	28.3	28.3	30.6	25.8	28.3
67.5°	30.6	21.2	18.8	21.2	18.8	18.8	18.8	23.5	21.2	16.5	21.2
70°	14.1	16.5	16.5	11.7	18.8	9.4	16.5	9.4	14.1	11.7	14.1
72.5°	14.1	14.1	14.1	9.4	14.1	9.4	11.7	11.7	9.4	9.4	14.1
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°	4.7	4.7	2.3	2.3	2.3	2.3	4.7	4.7	4.7	0.0	2.3
80°	4.7	4.7	0.0	2.3	0.0	0.0	2.3	0.0	2.3	0.0	4.7
82.5°	2.3	4.7	2.3	2.3	4.7	4.7	4.7	2.3	2.3	2.3	2.3
85°	0.0	2.3	0.0	0.0	0.0	0.0	4.7	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: P249707

CATALOG NUMBER: LSR8B80D010 EC8B80830 8LBSW0LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5031.4	5031.4	5031.4	5031.4
2.5°	5165.4	5167.7	5172.5	5170.2
5°	5438.1	5457.0	5466.4	5464.1
7.5°	5694.4	5727.4	5746.2	5746.2
10°	5891.9	5929.6	5957.7	5962.5
12.5°	5997.7	6040.1	6077.7	6068.2
15°	6028.3	6070.6	6108.2	6101.1
17.5°	5993.0	6035.3	6063.6	6058.8
20°	5896.6	5931.9	5960.1	5957.7
22.5°	5746.2	5776.7	5800.3	5797.8
25°	5492.2	5513.4	5532.2	5522.8
27.5°	5101.9	5109.0	5120.7	5106.7
30°	4582.4	4587.0	4591.7	4589.4
32.5°	3999.3	3996.9	3992.2	3987.5
35°	3409.2	3409.2	3411.5	3397.4
37.5°	2873.0	2870.7	2877.8	2870.7
40°	2360.5	2358.2	2367.6	2355.9
42.5°	1840.9	1848.0	1850.3	1850.3
45°	1384.8	1387.2	1389.5	1389.5
47.5°	1011.0	1013.3	1025.1	1011.0
50°	714.8	717.1	719.4	714.8
52.5°	472.5	475.0	472.5	465.5
55°	289.2	291.6	291.6	291.6
57.5°	155.1	157.5	157.5	155.1
60°	84.7	82.3	84.7	79.9
62.5°	44.7	49.4	47.0	42.3
65°	28.3	28.3	28.3	32.9
67.5°	23.5	18.8	21.2	16.5
70°	14.1	16.5	16.5	11.7
72.5°	11.7	11.7	11.7	14.1
75°	0.0	0.0	0.0	0.0
77.5°	4.7	4.7	4.7	2.3
80°	2.3	0.0	2.3	0.0
82.5°	2.3	2.3	4.7	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)