

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: P249728

Luminaire Tested: **LSR8B80D010 EC8B80850 8LBSWOLI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249728  
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 EC8B80850 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8962.0 lumens  
Efficiency: N/A  
Efficacy: 120.5 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

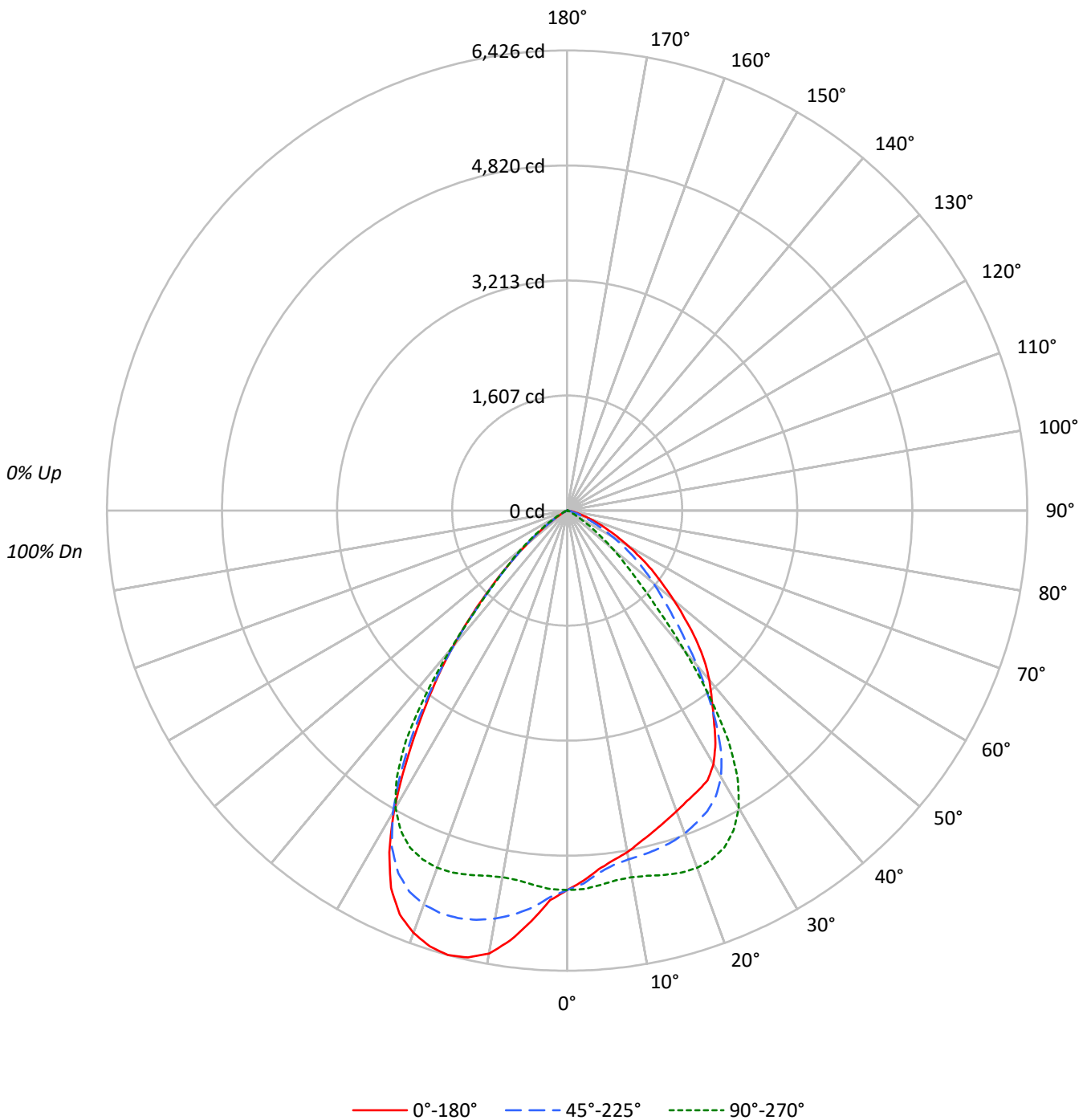
Input Watts (W): 74.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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					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°	163408	163408	163408
5°	155677	162500	178141
10°	151663	162750	196636
15°	148224	168144	205141
20°	146593	174220	205913
25°	146937	176680	197911
30°	145574	170617	172116
35°	134514	147656	134698
40°	124304	102374	99882
45°	110689	61772	63822
50°	93134	39798	36114
55°	77481	21833	16510
60°	60476	9467	5193
65°	44633	4699	2532
70°	31033	2903	1109
75°	18884	596	0
80°	13638	888	0
85°	8774	849	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	509.4	5.7
10°-20°	1524.7	17.0
20°-30°	2334.9	26.1
30°-40°	2289.0	25.5
40°-50°	1378.4	15.4
50°-60°	634.5	7.1
60°-70°	222.9	2.5
70°-80°	58.3	0.7
80°-90°	9.9	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°	4369.0	48.8
0°-40°	6658.0	74.3
0°-60°	8670.9	96.8
0°-90°	8962.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8962.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5299	5299	5299	5299	5299	
5°	5029	5076	5250	5564	5755	475
15°	4643	4893	5267	5891	6426	1312
25°	4319	4631	5193	5584	5817	1989
35°	3573	3623	3922	3697	3578	2238
45°	2538	2090	1416	1426	1464	1946
55°	1441	1142	406	319	307	1286
65°	612	423	64	32	35	623
75°	158	92	5	0	0	192
85°	25	12	2	0	0	34
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°	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2
2.5°	5175.4	5180.4	5180.4	5180.4	5190.3	5192.8	5190.3	5192.8	5197.7	5215.1	5222.5
5°	5029.3	5021.9	5026.9	5024.4	5036.8	5044.2	5039.2	5046.7	5064.0	5076.4	5088.8
7.5°	4925.4	4925.4	4925.4	4930.3	4937.7	4952.6	4950.2	4955.0	4972.4	4989.7	5007.0
10°	4843.6	4841.2	4841.2	4853.5	4863.4	4880.7	4885.7	4900.6	4922.8	4945.2	4964.9
12.5°	4737.1	4739.7	4752.0	4764.4	4786.7	4813.9	4828.8	4848.6	4883.3	4920.4	4942.7
15°	4643.0	4645.5	4655.5	4680.1	4707.5	4739.7	4771.8	4804.0	4846.1	4893.2	4932.8
17.5°	4551.4	4553.9	4561.3	4588.6	4623.3	4665.4	4702.5	4744.6	4799.1	4853.5	4903.1
20°	4467.2	4464.8	4477.1	4501.9	4546.5	4586.1	4623.3	4672.8	4732.2	4799.1	4856.0
22.5°	4385.5	4385.5	4397.9	4422.7	4462.3	4501.9	4541.5	4593.5	4652.9	4717.4	4784.2
25°	4318.6	4316.2	4333.5	4345.9	4375.6	4415.2	4457.3	4499.4	4558.9	4630.7	4695.0
27.5°	4246.9	4244.4	4246.9	4261.7	4289.0	4318.6	4350.8	4388.0	4437.6	4497.0	4558.9
30°	4088.4	4090.8	4090.8	4103.2	4118.1	4150.2	4167.6	4204.8	4249.3	4298.8	4353.4
32.5°	3853.1	3855.6	3855.6	3860.6	3872.9	3887.8	3902.7	3929.9	3964.5	4006.6	4056.2
35°	3573.3	3573.3	3570.8	3573.3	3580.8	3580.8	3593.1	3580.8	3598.1	3622.9	3660.0
37.5°	3315.8	3310.8	3305.9	3300.9	3293.4	3281.1	3263.8	3234.0	3226.6	3216.7	3219.1
40°	3088.0	3085.5	3070.6	3058.2	3033.4	3003.8	2961.7	2909.7	2867.6	2818.1	2776.0
42.5°	2835.4	2832.8	2820.5	2798.2	2771.0	2726.4	2659.6	2590.3	2506.1	2431.8	2355.0
45°	2538.2	2545.6	2528.3	2503.5	2471.3	2429.2	2355.0	2270.7	2186.5	2090.0	1993.4
47.5°	2228.6	2226.2	2213.8	2199.0	2171.7	2129.6	2080.1	1988.5	1899.3	1810.2	1711.1
50°	1941.4	1931.5	1926.5	1911.7	1894.4	1859.7	1807.7	1733.4	1654.2	1570.0	1478.3
52.5°	1669.0	1669.0	1656.6	1646.7	1631.8	1604.6	1560.1	1500.7	1433.8	1354.5	1258.0
55°	1441.2	1436.2	1423.9	1411.5	1396.6	1379.3	1339.7	1290.2	1218.3	1141.6	1057.4
57.5°	1198.6	1196.0	1191.1	1176.2	1168.8	1151.5	1106.9	1057.4	995.5	928.7	859.2
60°	980.6	970.7	960.8	950.9	938.5	921.2	891.4	849.4	797.4	737.9	668.6
62.5°	785.0	799.8	770.2	770.2	745.4	730.5	703.3	678.5	624.0	569.6	510.1
65°	611.7	611.7	599.2	589.3	574.5	557.1	529.9	505.1	465.5	423.4	381.3
67.5°	468.0	465.5	453.2	443.3	430.8	421.0	401.2	371.4	341.8	307.1	272.3
70°	344.2	341.8	339.2	321.9	312.0	299.7	284.8	265.0	242.7	217.9	185.7
72.5°	247.6	247.6	240.2	232.8	222.9	212.9	198.1	185.7	165.9	148.6	126.3
75°	158.5	156.0	156.0	143.6	143.6	128.7	118.8	111.4	101.5	91.6	71.9
77.5°	114.0	111.4	109.0	104.0	99.1	94.1	86.6	76.8	69.3	59.4	52.0
80°	76.8	71.9	69.3	69.3	61.9	59.4	61.9	47.1	44.5	37.1	32.2
82.5°	47.1	47.1	44.5	44.5	42.1	39.6	32.2	32.2	29.8	27.2	22.3
85°	24.8	32.2	22.3	24.8	22.3	24.8	22.3	17.3	14.9	12.3	12.3
87.5°	14.9	9.9	9.9	14.9	12.3	9.9	9.9	9.9	7.4	5.0	5.0
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2
2.5°	5217.6	5234.9	5232.4	5254.7	5262.1	5279.5	5279.5	5291.8	5299.2	5316.6	5331.5
5°	5093.8	5121.0	5128.4	5155.6	5178.0	5205.2	5222.5	5249.7	5274.5	5311.7	5346.3
7.5°	5017.0	5039.2	5054.1	5086.3	5111.1	5140.8	5170.5	5207.6	5242.3	5286.9	5336.5
10°	4979.8	5009.6	5031.8	5064.0	5093.8	5126.0	5155.6	5197.7	5237.4	5294.4	5348.8
12.5°	4969.9	5004.6	5031.8	5076.4	5106.1	5140.8	5175.4	5222.5	5264.6	5324.0	5386.0
15°	4969.9	5017.0	5054.1	5103.7	5138.3	5182.8	5220.1	5267.0	5314.1	5376.0	5435.4
17.5°	4960.0	5017.0	5064.0	5121.0	5165.5	5210.2	5257.2	5301.8	5351.2	5410.8	5477.5
20°	4920.4	4992.2	5049.1	5116.0	5163.1	5212.6	5259.7	5309.1	5361.2	5423.1	5480.1
22.5°	4851.1	4935.3	4999.7	5071.4	5126.0	5175.4	5222.5	5272.0	5329.0	5388.4	5447.9
25°	4759.4	4838.6	4908.1	4982.3	5036.8	5091.2	5135.9	5192.8	5244.8	5301.8	5348.8
27.5°	4620.7	4704.9	4771.8	4848.6	4898.1	4950.2	4987.3	5034.3	5083.9	5130.9	5168.1
30°	4412.8	4489.5	4558.9	4628.2	4677.7	4714.9	4754.5	4791.7	4823.9	4856.0	4888.2
32.5°	4108.1	4177.6	4244.4	4308.7	4348.4	4380.6	4410.2	4432.6	4449.9	4467.2	4469.7
35°	3689.7	3746.6	3788.7	3845.7	3882.9	3912.5	3912.5	3922.4	3920.0	3912.5	3905.1
37.5°	3221.7	3243.9	3261.2	3283.6	3286.0	3286.0	3271.2	3258.8	3239.0	3234.0	3219.1
40°	2733.9	2704.1	2681.8	2652.1	2634.8	2597.6	2565.5	2543.2	2511.0	2506.1	2501.1
42.5°	2270.7	2201.4	2139.5	2087.6	2028.1	1976.0	1929.1	1894.4	1869.6	1867.1	1869.6
45°	1894.4	1815.1	1723.5	1651.7	1584.9	1520.4	1458.6	1416.5	1394.1	1389.2	1394.1
47.5°	1609.6	1518.0	1428.8	1347.1	1275.3	1203.4	1141.6	1084.6	1057.4	1049.9	1047.5
50°	1384.3	1290.2	1196.0	1111.8	1032.6	960.8	884.0	829.6	794.9	782.5	772.6
52.5°	1163.9	1079.7	983.1	896.4	817.1	733.0	653.8	591.8	557.1	542.3	532.4
55°	970.7	886.6	797.4	713.2	629.0	544.8	465.5	406.1	369.0	351.6	339.2
57.5°	775.0	695.9	619.1	534.9	465.5	383.9	304.6	252.6	220.4	200.6	190.7
60°	599.2	537.4	470.5	401.2	334.3	267.5	203.0	153.5	128.7	114.0	101.5
62.5°	453.2	401.2	356.5	297.1	245.1	188.2	138.7	99.1	76.8	64.4	59.4
65°	326.9	287.2	247.6	210.5	173.4	131.3	94.1	64.4	44.5	37.1	34.7
67.5°	232.8	200.6	170.8	146.1	118.8	94.1	66.9	44.5	34.7	29.8	27.2
70°	163.4	138.7	118.8	96.6	79.2	61.9	52.0	32.2	19.8	22.3	17.3
72.5°	109.0	91.6	81.7	66.9	54.4	44.5	32.2	22.3	22.3	17.3	14.9
75°	59.4	54.4	42.1	32.2	27.2	24.8	9.9	5.0	2.4	7.4	2.4
77.5°	42.1	37.1	32.2	27.2	22.3	17.3	9.9	9.9	7.4	9.9	5.0
80°	27.2	22.3	19.8	19.8	12.3	7.4	5.0	5.0	7.4	2.4	2.4
82.5°	17.3	14.9	12.3	12.3	12.3	7.4	7.4	7.4	7.4	5.0	5.0
85°	9.9	7.4	5.0	5.0	2.4	5.0	0.0	2.4	2.4	0.0	0.0
87.5°	5.0	2.4	2.4	2.4	2.4	0.0	0.0	2.4	0.0	2.4	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°	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2	5299.2
2.5°	5341.3	5351.2	5363.7	5373.6	5395.9	5400.8	5410.8	5420.6	5428.1	5435.4	5438.0
5°	5376.0	5413.2	5447.9	5485.0	5532.0	5564.3	5601.4	5633.6	5665.8	5693.0	5712.8
7.5°	5386.0	5442.9	5494.9	5559.3	5628.6	5688.1	5750.0	5811.8	5876.3	5925.8	5967.9
10°	5405.8	5475.1	5541.9	5618.7	5707.9	5787.1	5863.8	5945.6	6027.3	6096.6	6158.6
12.5°	5440.4	5517.2	5589.0	5673.2	5764.8	5853.9	5938.1	6029.8	6116.5	6193.2	6262.6
15°	5497.4	5569.2	5638.6	5717.8	5809.4	5891.1	5975.3	6064.4	6151.1	6230.3	6294.8
17.5°	5534.5	5601.4	5670.7	5742.5	5819.3	5893.6	5972.8	6052.1	6131.3	6203.1	6262.6
20°	5534.5	5598.9	5650.9	5715.3	5787.1	5851.5	5915.9	5985.2	6054.5	6113.9	6170.9
22.5°	5490.0	5551.8	5591.5	5641.0	5702.9	5757.4	5792.1	5868.8	5920.8	5972.8	6014.9
25°	5386.0	5430.5	5462.7	5497.4	5546.9	5584.0	5613.8	5658.3	5710.3	5730.2	5759.9
27.5°	5197.7	5229.9	5247.3	5254.7	5279.5	5299.2	5304.2	5324.0	5346.3	5351.2	5363.7
30°	4900.6	4903.1	4895.6	4893.2	4880.7	4866.0	4863.4	4861.0	4851.1	4841.2	4843.6
32.5°	4452.3	4440.0	4410.2	4378.1	4345.9	4311.3	4291.4	4266.6	4251.8	4237.0	4219.6
35°	3872.9	3843.2	3801.1	3761.5	3724.4	3697.1	3652.5	3637.6	3622.9	3603.0	3598.1
37.5°	3191.9	3174.6	3134.9	3105.3	3085.5	3073.1	3050.8	3036.0	3036.0	3028.5	3023.5
40°	2488.6	2483.7	2468.9	2476.3	2466.4	2471.3	2468.9	2463.9	2476.3	2476.3	2481.3
42.5°	1867.1	1869.6	1877.1	1882.0	1896.8	1899.3	1911.7	1911.7	1919.2	1926.5	1931.5
45°	1389.2	1399.1	1399.1	1409.0	1423.9	1426.4	1431.2	1433.8	1438.7	1451.1	1456.0
47.5°	1042.5	1044.9	1044.9	1047.5	1052.4	1057.4	1054.9	1057.4	1064.8	1059.8	1064.8
50°	770.2	772.6	765.2	757.7	765.2	765.2	762.7	755.3	762.7	752.8	757.7
52.5°	525.0	522.5	515.0	517.6	512.6	510.1	510.1	505.1	505.1	505.1	495.3
55°	331.9	331.9	326.9	326.9	324.4	319.4	317.0	314.4	312.0	309.6	309.6
57.5°	185.7	188.2	180.8	178.3	180.8	178.3	173.4	173.4	173.4	165.9	170.8
60°	101.5	99.1	96.6	94.1	91.6	94.1	94.1	89.2	89.2	89.2	91.6
62.5°	54.4	54.4	52.0	52.0	49.5	49.5	54.4	47.1	49.5	47.1	49.5
65°	29.8	37.1	27.2	27.2	34.7	32.2	29.8	29.8	32.2	27.2	29.8
67.5°	32.2	22.3	19.8	22.3	19.8	19.8	19.8	24.8	22.3	17.3	22.3
70°	14.9	17.3	17.3	12.3	19.8	9.9	17.3	9.9	14.9	12.3	14.9
72.5°	14.9	14.9	14.9	9.9	14.9	9.9	12.3	12.3	9.9	9.9	14.9
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°	5.0	5.0	2.4	2.4	2.4	2.4	5.0	5.0	5.0	0.0	2.4
80°	5.0	5.0	0.0	2.4	0.0	0.0	2.4	0.0	2.4	0.0	5.0
82.5°	2.4	5.0	2.4	2.4	5.0	5.0	5.0	2.4	2.4	2.4	2.4
85°	0.0	2.4	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	2.4
87.5°	0.0	2.4	0.0	0.0	0.0	0.0	2.4	2.4	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: P249728

CATALOG NUMBER: LSR8B80D010 EC8B80850 8LBSWOLI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	5299.2	5299.2	5299.2	5299.2
2.5°	5440.4	5442.9	5447.9	5445.4
5°	5727.6	5747.5	5757.4	5755.0
7.5°	5997.5	6032.3	6052.1	6052.1
10°	6205.6	6245.2	6274.9	6279.9
12.5°	6317.0	6361.6	6401.3	6391.3
15°	6349.2	6393.8	6433.4	6425.9
17.5°	6312.1	6356.6	6386.4	6381.4
20°	6210.6	6247.7	6277.4	6274.9
22.5°	6052.1	6084.3	6109.1	6106.5
25°	5784.6	5806.9	5826.7	5816.8
27.5°	5373.6	5381.0	5393.3	5378.5
30°	4826.3	4831.2	4836.2	4833.8
32.5°	4212.2	4209.7	4204.8	4199.8
35°	3590.7	3590.7	3593.1	3578.2
37.5°	3026.0	3023.5	3031.0	3023.5
40°	2486.2	2483.7	2493.6	2481.3
42.5°	1938.9	1946.4	1948.8	1948.8
45°	1458.6	1461.0	1463.5	1463.5
47.5°	1064.8	1067.3	1079.7	1064.8
50°	752.8	755.3	757.7	752.8
52.5°	497.7	500.3	497.7	490.3
55°	304.6	307.1	307.1	307.1
57.5°	163.4	165.9	165.9	163.4
60°	89.2	86.6	89.2	84.2
62.5°	47.1	52.0	49.5	44.5
65°	29.8	29.8	29.8	34.7
67.5°	24.8	19.8	22.3	17.3
70°	14.9	17.3	17.3	12.3
72.5°	12.3	12.3	12.3	14.9
75°	0.0	0.0	0.0	0.0
77.5°	5.0	5.0	5.0	2.4
80°	2.4	0.0	2.4	0.0
82.5°	2.4	2.4	5.0	2.4
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)