

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: P249730

Luminaire Tested: **LSR8B100D010 EC8B100850 8LBSWOLI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249730
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: LSR8B100D010 EC8B100850 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: 11646.0 lumens
Efficiency: N/A
Efficacy: 109.6 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

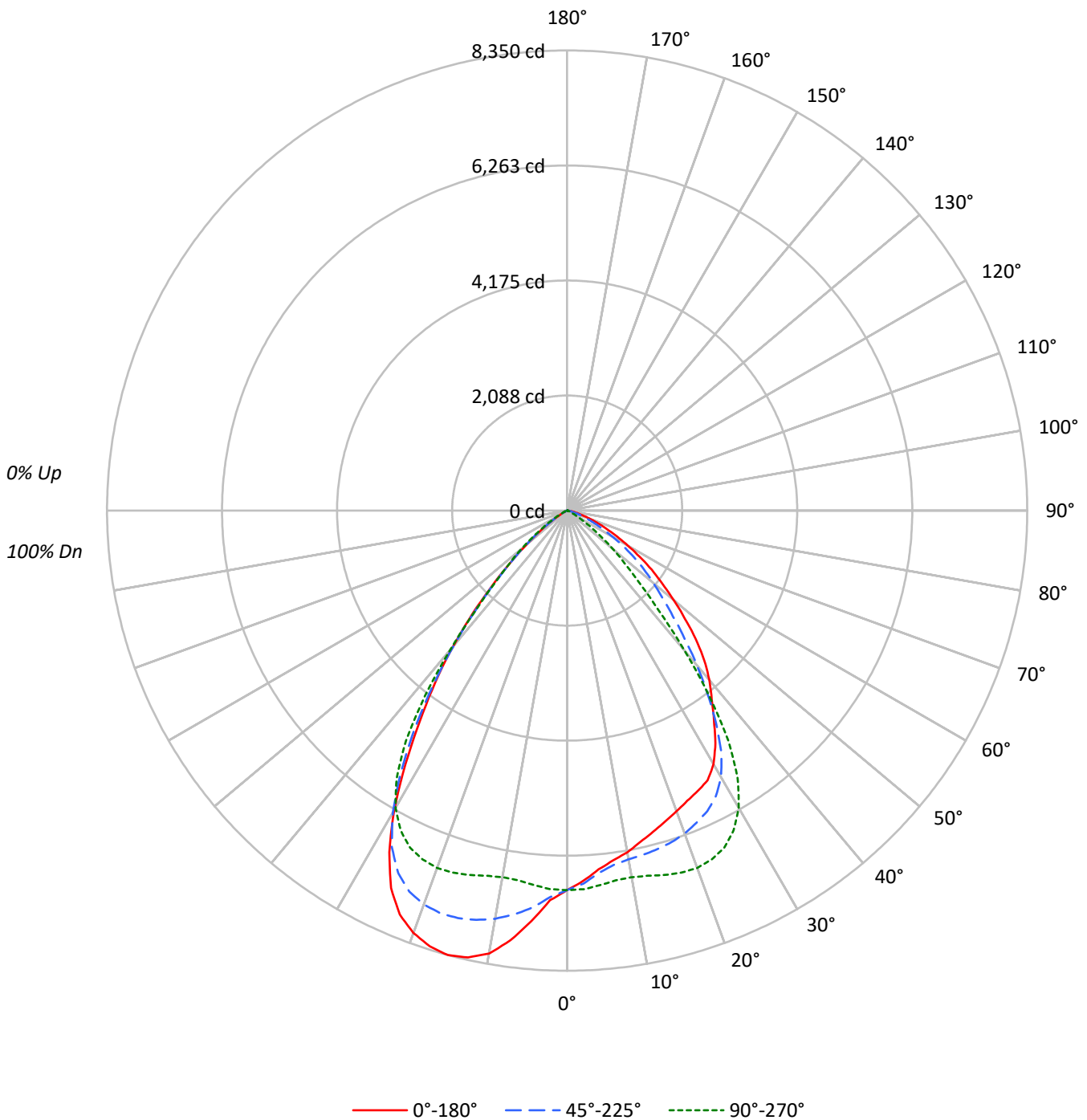
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	212348	212348	212348
5°	202304	211166	231490
10°	197084	211494	255525
15°	192617	218501	266579
20°	190496	226399	267579
25°	190943	229595	257185
30°	189171	221712	223660
35°	174801	191876	175042
40°	161531	133031	129795
45°	143836	80271	82931
50°	121026	51715	46932
55°	100690	28370	21456
60°	78589	12304	6747
65°	57993	6107	3283
70°	40328	3778	1443
75°	24543	774	0
80°	17705	1154	0
85°	11393	1132	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	662.0	5.7
10°-20°	1981.3	17.0
20°-30°	3034.2	26.1
30°-40°	2974.5	25.5
40°-50°	1791.3	15.4
50°-60°	824.5	7.1
60°-70°	289.6	2.5
70°-80°	75.8	0.7
80°-90°	12.9	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°	5677.5	48.8
0°-40°	8652.0	74.3
0°-60°	11267.7	96.8
0°-90°	11646.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11646.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	6886	6886	6886	6886	6886	
5°	6536	6597	6822	7231	7478	617
15°	6034	6359	6844	7656	8350	1705
25°	5612	6018	6748	7256	7559	2585
35°	4644	4708	5097	4804	4650	2908
45°	3298	2716	1841	1854	1902	2529
55°	1873	1484	528	415	399	1671
65°	795	550	84	42	45	810
75°	206	119	6	0	0	250
85°	32	16	3	0	0	44
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°	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3
2.5°	6725.4	6731.9	6731.9	6731.9	6744.7	6748.0	6744.7	6748.0	6754.4	6776.9	6786.6
5°	6535.6	6525.9	6532.4	6529.1	6545.2	6554.9	6548.4	6558.1	6580.6	6596.8	6612.8
7.5°	6400.5	6400.5	6400.5	6406.8	6416.5	6435.8	6432.7	6439.0	6461.5	6484.0	6506.6
10°	6294.2	6291.1	6291.1	6307.1	6319.9	6342.5	6348.9	6368.3	6397.2	6426.2	6451.9
12.5°	6155.8	6159.1	6175.2	6191.3	6220.2	6255.6	6274.9	6300.7	6345.8	6394.0	6423.0
15°	6033.6	6036.8	6049.7	6081.8	6117.3	6159.1	6200.9	6242.7	6297.4	6358.6	6410.1
17.5°	5914.5	5917.7	5927.4	5962.9	6007.9	6062.6	6110.8	6165.5	6236.4	6307.1	6371.5
20°	5805.1	5801.9	5817.9	5850.1	5908.1	5959.5	6007.9	6072.3	6149.5	6236.4	6310.3
22.5°	5698.9	5698.9	5715.0	5747.2	5798.7	5850.1	5901.7	5969.2	6046.4	6130.1	6217.0
25°	5612.0	5608.8	5631.3	5647.5	5686.0	5737.5	5792.3	5847.0	5924.2	6017.6	6101.1
27.5°	5518.7	5515.6	5518.7	5538.1	5573.4	5612.0	5653.8	5702.2	5766.6	5843.8	5924.2
30°	5312.8	5316.0	5316.0	5332.1	5351.5	5393.2	5415.7	5464.0	5521.9	5586.3	5657.2
32.5°	5007.1	5010.3	5010.3	5016.7	5032.8	5052.1	5071.4	5106.8	5151.8	5206.6	5270.9
35°	4643.5	4643.5	4640.2	4643.5	4653.2	4653.2	4669.2	4653.2	4675.7	4707.9	4756.1
37.5°	4308.8	4302.3	4295.9	4289.5	4279.8	4263.8	4241.2	4202.6	4192.9	4180.0	4183.2
40°	4012.8	4009.6	3990.2	3974.1	3941.9	3903.4	3848.7	3781.1	3726.4	3662.0	3607.3
42.5°	3684.5	3681.2	3665.2	3636.2	3600.8	3543.0	3456.1	3366.0	3256.6	3160.0	3060.3
45°	3298.3	3308.0	3285.5	3253.3	3211.4	3156.7	3060.3	2950.8	2841.4	2715.9	2590.4
47.5°	2896.1	2892.9	2876.9	2857.5	2822.2	2767.4	2703.1	2584.0	2468.1	2352.3	2223.6
50°	2522.8	2510.0	2503.5	2484.3	2461.8	2416.7	2349.0	2252.5	2149.6	2040.2	1921.1
52.5°	2168.9	2168.9	2152.7	2139.9	2120.6	2085.2	2027.3	1950.1	1863.2	1760.2	1634.7
55°	1872.9	1866.4	1850.4	1834.2	1814.9	1792.3	1740.9	1676.6	1583.2	1483.5	1374.1
57.5°	1557.5	1554.2	1547.8	1528.5	1518.8	1496.3	1438.4	1374.1	1293.7	1206.8	1116.6
60°	1274.3	1261.5	1248.5	1235.6	1219.6	1197.1	1158.4	1103.7	1036.2	959.0	868.9
62.5°	1020.1	1039.3	1000.8	1000.8	968.6	949.3	913.9	881.7	810.9	740.1	662.9
65°	794.8	794.8	778.7	765.8	746.5	724.0	688.6	656.4	604.9	550.2	495.5
67.5°	608.2	604.9	588.9	576.0	559.9	547.0	521.3	482.7	444.1	399.1	353.9
70°	447.3	444.1	440.8	418.3	405.4	389.4	370.1	344.4	315.4	283.2	241.3
72.5°	321.7	321.7	312.2	302.5	289.7	276.7	257.5	241.3	215.6	193.1	164.1
75°	206.0	202.8	202.8	186.6	186.6	167.3	154.4	144.8	131.9	119.1	93.4
77.5°	148.1	144.8	141.6	135.1	128.7	122.3	112.6	99.7	90.1	77.2	67.6
80°	99.7	93.4	90.1	90.1	80.4	77.2	80.4	61.2	57.9	48.2	41.9
82.5°	61.2	61.2	57.9	57.9	54.7	51.5	41.9	41.9	38.7	35.4	29.0
85°	32.2	41.9	29.0	32.2	29.0	32.2	29.0	22.5	19.3	16.0	16.0
87.5°	19.3	12.8	12.8	19.3	16.0	12.8	12.8	12.8	9.7	6.5	6.5
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°	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3
2.5°	6780.2	6802.7	6799.4	6828.4	6838.1	6860.6	6860.6	6876.6	6886.3	6908.8	6928.2
5°	6619.3	6654.6	6664.3	6699.7	6728.7	6764.1	6786.6	6821.9	6854.1	6902.5	6947.5
7.5°	6519.5	6548.4	6567.8	6609.6	6641.8	6680.3	6719.0	6767.2	6812.3	6870.3	6934.6
10°	6471.2	6509.9	6538.8	6580.6	6619.3	6661.1	6699.7	6754.4	6805.9	6879.9	6950.7
12.5°	6458.4	6503.4	6538.8	6596.8	6635.3	6680.3	6725.4	6786.6	6841.3	6918.5	6999.0
15°	6458.4	6503.4	6538.8	6596.8	6635.3	6680.3	6725.4	6786.6	6841.3	6918.5	6999.0
17.5°	6445.5	6519.5	6580.6	6654.6	6712.5	6770.5	6831.6	6889.6	6953.9	7031.2	7118.0
20°	6394.0	6487.4	6561.3	6648.2	6709.3	6773.7	6834.9	6899.2	6966.8	7047.2	7121.3
22.5°	6303.9	6413.3	6497.0	6590.3	6661.1	6725.4	6786.6	6850.9	6925.0	7002.2	7079.4
25°	6184.8	6287.8	6378.0	6474.4	6545.2	6616.0	6674.0	6748.0	6815.6	6889.6	6950.7
27.5°	6004.6	6114.0	6200.9	6300.7	6365.0	6432.7	6480.9	6542.1	6606.4	6667.5	6715.8
30°	5734.4	5834.1	5924.2	6014.2	6078.6	6127.0	6178.3	6226.7	6268.5	6310.3	6352.1
32.5°	5338.5	5428.7	5515.6	5599.1	5650.7	5692.5	5731.1	5760.1	5782.6	5805.1	5808.3
35°	4794.8	4868.7	4923.4	4997.4	5045.8	5084.3	5084.3	5097.1	5094.0	5084.3	5074.6
37.5°	4186.5	4215.4	4237.9	4266.9	4270.1	4270.1	4250.9	4234.8	4209.1	4202.6	4183.2
40°	3552.6	3513.9	3484.9	3446.4	3423.9	3375.5	3333.8	3304.8	3263.0	3256.6	3250.1
42.5°	2950.8	2860.7	2780.3	2712.7	2635.5	2567.8	2506.8	2461.8	2429.6	2426.3	2429.6
45°	2461.8	2358.7	2239.6	2146.4	2059.5	1975.8	1895.4	1840.7	1811.7	1805.2	1811.7
47.5°	2091.7	1972.6	1856.7	1750.5	1657.2	1563.9	1483.5	1409.4	1374.1	1364.4	1361.2
50°	1798.8	1676.6	1554.2	1444.8	1341.9	1248.5	1148.8	1078.0	1033.0	1016.8	1004.0
52.5°	1512.5	1403.1	1277.5	1164.9	1061.9	952.5	849.5	769.0	724.0	704.8	691.8
55°	1261.5	1152.1	1036.2	926.8	817.4	708.0	604.9	527.7	479.5	457.0	440.8
57.5°	1007.2	904.2	804.5	695.1	604.9	498.8	395.8	328.2	286.4	260.7	247.8
60°	778.7	698.3	611.4	521.3	434.4	347.6	263.8	199.5	167.3	148.1	131.9
62.5°	588.9	521.3	463.3	386.1	318.5	244.5	180.3	128.7	99.7	83.7	77.2
65°	424.8	373.2	321.7	273.5	225.3	170.6	122.3	83.7	57.9	48.2	45.0
67.5°	302.5	260.7	222.0	189.8	154.4	122.3	86.9	57.9	45.0	38.7	35.4
70°	212.3	180.3	154.4	125.6	102.9	80.4	67.6	41.9	25.7	29.0	22.5
72.5°	141.6	119.1	106.2	86.9	70.7	57.9	41.9	29.0	29.0	22.5	19.3
75°	77.2	70.7	54.7	41.9	35.4	32.2	12.8	6.5	3.2	9.7	3.2
77.5°	54.7	48.2	41.9	35.4	29.0	22.5	12.8	12.8	9.7	12.8	6.5
80°	35.4	29.0	25.7	25.7	16.0	9.7	6.5	6.5	9.7	3.2	3.2
82.5°	22.5	19.3	16.0	16.0	16.0	9.7	9.7	9.7	9.7	6.5	6.5
85°	12.8	9.7	6.5	6.5	3.2	6.5	0.0	3.2	3.2	0.0	0.0
87.5°	6.5	3.2	3.2	3.2	3.2	0.0	0.0	3.2	0.0	3.2	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°	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3	6886.3
2.5°	6941.0	6953.9	6970.0	6982.9	7011.9	7018.2	7031.2	7044.1	7053.7	7063.3	7066.6
5°	6986.0	7034.4	7079.4	7127.6	7188.8	7230.7	7278.9	7320.7	7362.6	7398.0	7423.7
7.5°	6999.0	7072.9	7140.6	7224.2	7314.3	7391.6	7472.0	7552.4	7636.1	7700.5	7755.2
10°	7024.7	7114.8	7201.7	7301.4	7417.3	7520.2	7620.0	7726.2	7832.4	7922.5	8003.0
12.5°	7069.8	7169.5	7262.9	7372.3	7491.3	7607.1	7716.5	7835.6	7948.3	8048.0	8138.1
15°	7143.8	7237.0	7327.2	7430.2	7549.2	7655.5	7764.9	7880.6	7993.3	8096.3	8180.0
17.5°	7192.0	7278.9	7369.0	7462.3	7562.1	7658.6	7761.5	7864.6	7967.5	8060.9	8138.1
20°	7192.0	7275.7	7343.3	7427.0	7520.2	7603.9	7687.6	7777.7	7867.8	7945.0	8019.0
22.5°	7134.1	7214.5	7266.0	7330.4	7410.8	7481.7	7526.7	7626.4	7694.0	7761.5	7816.2
25°	6999.0	7056.9	7098.8	7143.8	7208.2	7256.4	7295.1	7352.9	7420.5	7446.3	7484.9
27.5°	6754.4	6796.2	6818.8	6828.4	6860.6	6886.3	6892.8	6918.5	6947.5	6953.9	6970.0
30°	6368.3	6371.5	6361.8	6358.6	6342.5	6323.3	6319.9	6316.8	6303.9	6291.1	6294.2
32.5°	5785.8	5769.7	5731.1	5689.3	5647.5	5602.4	5576.6	5544.4	5525.1	5505.9	5483.4
35°	5032.8	4994.2	4939.5	4888.0	4839.8	4804.3	4746.4	4727.1	4707.9	4682.0	4675.7
37.5°	4147.9	4125.3	4073.8	4035.3	4009.6	3993.4	3964.4	3945.2	3945.2	3935.5	3929.1
40°	3233.9	3227.6	3208.2	3217.9	3205.1	3211.4	3208.2	3201.8	3217.9	3217.9	3224.4
42.5°	2426.3	2429.6	2439.2	2445.6	2464.9	2468.1	2484.3	2484.3	2493.9	2503.5	2510.0
45°	1805.2	1818.2	1818.2	1831.0	1850.4	1853.5	1859.9	1863.2	1869.6	1885.7	1892.1
47.5°	1354.7	1357.9	1357.9	1361.2	1367.6	1374.1	1370.9	1374.1	1383.7	1377.2	1383.7
50°	1000.8	1004.0	994.3	984.6	994.3	994.3	991.1	981.5	991.1	978.3	984.6
52.5°	682.3	678.9	669.3	672.6	666.1	662.9	662.9	656.4	656.4	656.4	643.6
55°	431.3	431.3	424.8	424.8	421.6	415.1	411.9	408.6	405.4	402.3	402.3
57.5°	241.3	244.5	235.0	231.7	235.0	231.7	225.3	225.3	225.3	215.6	222.0
60°	131.9	128.7	125.6	122.3	119.1	122.3	122.3	115.9	115.9	115.9	119.1
62.5°	70.7	70.7	67.6	67.6	64.4	64.4	70.7	61.2	64.4	61.2	64.4
65°	38.7	48.2	35.4	35.4	45.0	41.9	38.7	38.7	41.9	35.4	38.7
67.5°	41.9	29.0	25.7	29.0	25.7	25.7	25.7	32.2	29.0	22.5	29.0
70°	19.3	22.5	22.5	16.0	25.7	12.8	22.5	12.8	19.3	16.0	19.3
72.5°	19.3	19.3	19.3	12.8	19.3	12.8	16.0	16.0	12.8	12.8	19.3
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°	6.5	6.5	3.2	3.2	3.2	3.2	6.5	6.5	6.5	0.0	3.2
80°	6.5	6.5	0.0	3.2	0.0	0.0	3.2	0.0	3.2	0.0	6.5
82.5°	3.2	6.5	3.2	3.2	6.5	6.5	6.5	3.2	3.2	3.2	3.2
85°	0.0	3.2	0.0	0.0	0.0	0.0	6.5	0.0	0.0	0.0	3.2
87.5°	0.0	3.2	0.0	0.0	0.0	0.0	3.2	3.2	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: P249730

CATALOG NUMBER: LSR8B100D010 EC8B100850 8LBSWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	6886.3	6886.3	6886.3	6886.3
2.5°	7069.8	7072.9	7079.4	7076.2
5°	7443.0	7468.8	7481.7	7478.5
7.5°	7793.7	7838.9	7864.6	7864.6
10°	8064.1	8115.6	8154.1	8160.6
12.5°	8208.8	8266.9	8318.4	8305.4
15°	8250.7	8308.7	8360.1	8350.4
17.5°	8202.5	8260.4	8299.0	8292.5
20°	8070.6	8118.8	8157.4	8154.1
22.5°	7864.6	7906.4	7938.6	7935.3
25°	7517.0	7546.0	7571.7	7558.9
27.5°	6982.9	6992.5	7008.6	6989.4
30°	6271.7	6278.1	6284.6	6281.4
32.5°	5473.7	5470.4	5464.0	5457.5
35°	4666.0	4666.0	4669.2	4649.9
37.5°	3932.2	3929.1	3938.7	3929.1
40°	3230.8	3227.6	3240.4	3224.4
42.5°	2519.6	2529.3	2532.5	2532.5
45°	1895.4	1898.6	1901.7	1901.7
47.5°	1383.7	1386.9	1403.1	1383.7
50°	978.3	981.5	984.6	978.3
52.5°	646.8	650.1	646.8	637.1
55°	395.8	399.1	399.1	399.1
57.5°	212.3	215.6	215.6	212.3
60°	115.9	112.6	115.9	109.4
62.5°	61.2	67.6	64.4	57.9
65°	38.7	38.7	38.7	45.0
67.5°	32.2	25.7	29.0	22.5
70°	19.3	22.5	22.5	16.0
72.5°	16.0	16.0	16.0	19.3
75°	0.0	0.0	0.0	0.0
77.5°	6.5	6.5	6.5	3.2
80°	3.2	0.0	3.2	0.0
82.5°	3.2	3.2	6.5	3.2
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)