

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: P249167

Luminaire Tested: **LSR8B100D010 EC8B100950 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249167
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13957)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B100D010 EC8B100950 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10171.0 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.26 / 1.18
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

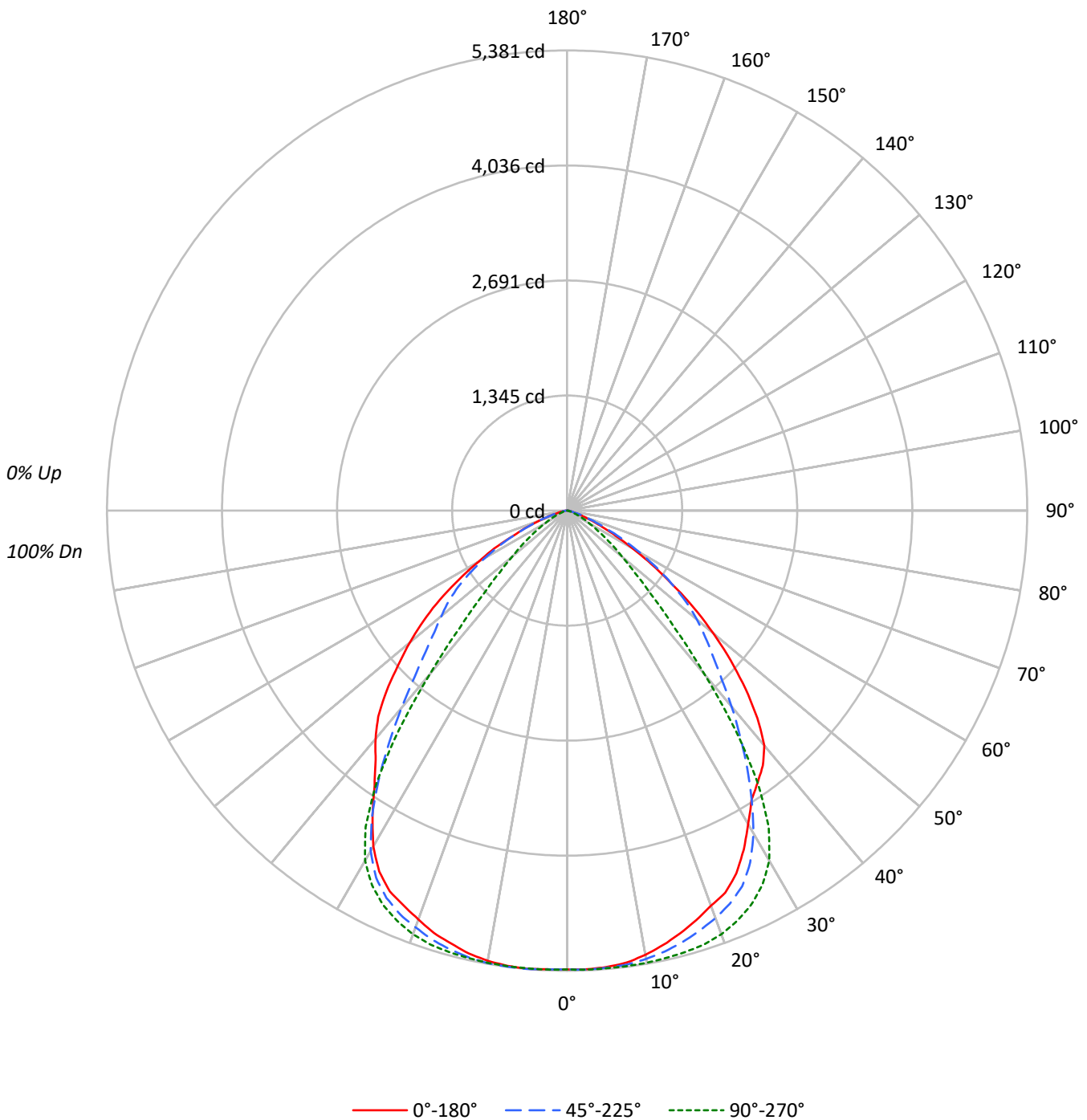
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90					90			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79					79			
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70					70			
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50					50			
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45					45			
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41					41			
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37					37			
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	165480	165480	165480
5°	165846	166292	166471
10°	165146	168124	167403
15°	163317	170583	167365
20°	161356	172979	166932
25°	159260	173179	167103
30°	150670	168309	161441
35°	146172	146278	147799
40°	144363	100647	140305
45°	128634	60420	130391
50°	106960	40211	115250
55°	80217	27719	97717
60°	54358	18471	73723
65°	32790	11981	50652
70°	18176	6491	31159
75°	8233	2740	16132
80°	7156	3072	11259
85°	8138	4069	11216



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	512.2	5.0
10°-20°	1487.4	14.6
20°-30°	2257.5	22.2
30°-40°	2371.1	23.3
40°-50°	1777.7	17.5
50°-60°	1140.6	11.2
60°-70°	487.9	4.8
70°-80°	115.3	1.1
80°-90°	21.4	0.2
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°	4257.0	41.9
0°-40°	6628.1	65.2
0°-60°	9546.3	93.9
0°-90°	10171.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10171.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5366	5366	5366	5366	5366	
5°	5358	5366	5372	5381	5378	509
15°	5116	5222	5343	5309	5243	1443
25°	4681	4845	5090	4998	4911	2138
35°	3883	3667	3886	3840	3926	2437
45°	2950	2411	1386	2342	2990	2259
55°	1492	1492	516	1556	1818	1353
65°	449	530	164	683	694	480
75°	69	81	23	138	135	101
85°	23	14	12	23	32	24
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°	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4
2.5°	5369.3	5375.1	5372.2	5372.2	5369.3	5372.2	5372.2	5378.0	5378.0	5372.2	5369.3
5°	5357.8	5363.5	5363.5	5357.8	5357.8	5372.2	5363.5	5369.3	5369.3	5366.4	5366.4
7.5°	5331.9	5331.9	5343.4	5334.8	5334.8	5343.4	5340.5	5346.3	5352.0	5354.9	5354.9
10°	5274.2	5280.0	5282.9	5282.9	5285.8	5294.4	5300.2	5311.7	5317.4	5323.2	5326.1
12.5°	5202.3	5210.9	5213.8	5210.9	5219.5	5231.0	5245.5	5259.9	5268.5	5280.0	5288.7
15°	5115.8	5115.8	5121.6	5130.2	5136.0	5153.3	5167.7	5184.9	5208.0	5222.4	5236.8
17.5°	5020.8	5026.6	5035.2	5035.2	5046.7	5075.5	5084.1	5110.1	5136.0	5150.4	5179.2
20°	4917.1	4922.8	4931.5	4937.3	4951.6	4974.7	4991.9	5015.0	5043.8	5069.8	5098.5
22.5°	4836.4	4824.9	4830.6	4836.4	4850.8	4871.0	4891.2	4919.9	4948.7	4974.7	5003.5
25°	4680.8	4683.7	4692.4	4698.1	4715.4	4732.7	4755.8	4790.3	4816.2	4845.1	4876.7
27.5°	4470.6	4473.5	4487.9	4487.9	4502.2	4531.1	4545.4	4574.3	4608.9	4637.6	4675.1
30°	4231.5	4237.2	4237.2	4248.8	4257.4	4271.8	4286.2	4315.0	4332.3	4358.2	4410.1
32.5°	4012.6	4018.3	4015.4	4012.6	4003.9	4001.0	3998.2	4003.9	4009.7	4018.3	4038.5
35°	3883.0	3868.5	3857.0	3836.9	3813.8	3785.0	3759.1	3724.5	3692.8	3666.9	3638.1
37.5°	3759.1	3756.2	3738.9	3710.1	3664.0	3612.2	3551.7	3476.8	3401.9	3321.2	3243.5
40°	3586.3	3577.6	3563.2	3522.9	3471.0	3407.7	3327.0	3234.8	3113.8	2990.0	2863.3
42.5°	3292.4	3295.3	3278.0	3246.3	3197.4	3136.9	3053.3	2952.6	2822.9	2676.0	2511.8
45°	2949.7	2949.7	2943.9	2918.0	2883.4	2834.4	2771.1	2687.5	2560.8	2411.0	2235.3
47.5°	2592.5	2595.4	2586.7	2581.0	2566.5	2534.9	2488.8	2425.4	2336.1	2192.1	2016.3
50°	2229.6	2229.6	2243.9	2241.0	2241.0	2229.6	2209.4	2171.9	2094.2	1978.9	1814.8
52.5°	1866.6	1872.4	1881.0	1892.5	1906.9	1929.9	1906.9	1889.6	1840.6	1751.3	1610.2
55°	1492.1	1497.9	1512.3	1532.4	1549.8	1572.8	1578.5	1578.5	1552.6	1492.1	1385.5
57.5°	1172.4	1163.7	1175.3	1192.6	1215.6	1238.6	1255.9	1276.1	1273.2	1232.9	1146.5
60°	881.4	884.3	892.9	910.3	927.5	947.7	970.7	988.0	996.7	976.5	921.8
62.5°	642.4	642.4	653.9	671.1	679.8	708.6	723.0	731.7	740.3	737.4	702.8
65°	449.4	455.1	460.9	469.5	478.1	495.4	504.1	521.4	527.1	530.0	504.1
67.5°	316.9	308.2	314.0	319.7	328.4	339.9	357.2	357.2	365.8	365.8	348.5
70°	201.6	201.6	204.5	213.1	218.9	221.8	227.6	233.3	242.0	239.1	239.1
72.5°	135.4	132.5	135.4	138.3	141.2	149.8	149.8	152.7	158.4	161.3	149.8
75°	69.1	72.0	77.7	74.9	83.5	77.7	80.6	89.3	86.4	80.6	80.6
77.5°	57.6	57.6	57.6	54.8	60.5	60.5	57.6	63.4	60.5	60.5	57.6
80°	40.3	43.2	40.3	37.4	40.3	37.4	37.4	37.4	37.4	37.4	34.5
82.5°	31.7	25.9	28.8	25.9	28.8	28.8	25.9	23.0	23.0	25.9	23.0
85°	23.0	17.3	20.2	20.2	17.3	17.3	17.3	17.3	17.3	14.4	14.4
87.5°	14.4	8.7	8.7	8.7	11.5	11.5	11.5	8.7	11.5	11.5	5.8
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°	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4
2.5°	5375.1	5372.2	5378.0	5375.1	5375.1	5372.2	5375.1	5372.2	5378.0	5366.4	5369.3
5°	5375.1	5369.3	5372.2	5375.1	5378.0	5372.2	5372.2	5372.2	5378.0	5372.2	5375.1
7.5°	5363.5	5360.6	5369.3	5375.1	5372.2	5369.3	5375.1	5372.2	5378.0	5375.1	5380.8
10°	5340.5	5343.4	5349.2	5357.8	5360.6	5363.5	5369.3	5369.3	5378.0	5366.4	5372.2
12.5°	5305.9	5317.4	5331.9	5337.6	5349.2	5349.2	5354.9	5357.8	5363.5	5360.6	5369.3
15°	5262.7	5277.1	5294.4	5308.8	5323.2	5331.9	5340.5	5343.4	5352.0	5343.4	5346.3
17.5°	5210.9	5228.1	5254.1	5271.3	5294.4	5303.1	5314.5	5320.3	5329.0	5323.2	5326.1
20°	5138.8	5159.1	5187.8	5213.8	5228.1	5248.3	5262.7	5271.3	5277.1	5271.3	5274.2
22.5°	5038.0	5066.9	5104.3	5124.5	5153.3	5170.6	5173.4	5193.6	5208.0	5193.6	5199.4
25°	4919.9	4948.7	4977.6	5020.8	5046.7	5066.9	5087.0	5089.9	5104.3	5101.4	5098.5
27.5°	4724.0	4761.5	4810.5	4845.1	4879.6	4911.3	4934.4	4940.1	4954.5	4948.7	4951.6
30°	4456.1	4496.5	4542.6	4597.3	4646.3	4678.0	4706.8	4726.9	4741.3	4732.7	4729.8
32.5°	4076.0	4116.3	4165.3	4220.0	4277.6	4323.6	4358.2	4384.2	4401.5	4395.7	4381.3
35°	3641.0	3652.5	3684.2	3727.4	3776.3	3825.3	3857.0	3885.8	3906.0	3911.7	3911.7
37.5°	3194.5	3157.1	3134.0	3134.0	3162.8	3183.0	3211.8	3229.1	3260.8	3272.3	3280.9
40°	2762.4	2676.0	2595.4	2534.9	2494.6	2491.7	2491.7	2500.3	2529.1	2566.5	2601.1
42.5°	2376.4	2238.2	2114.3	2002.0	1921.3	1875.2	1855.1	1858.0	1881.0	1915.6	1973.1
45°	2068.2	1895.4	1739.8	1604.4	1495.0	1423.0	1388.4	1385.5	1402.8	1443.1	1506.5
47.5°	1829.1	1644.8	1469.1	1313.5	1195.4	1117.6	1077.3	1065.8	1077.3	1114.7	1189.7
50°	1630.4	1440.3	1258.8	1097.5	970.7	890.1	852.6	838.2	852.6	884.3	959.2
52.5°	1446.0	1250.1	1080.2	924.7	789.3	720.1	679.8	671.1	679.8	717.2	777.8
55°	1232.9	1065.8	898.7	743.2	625.1	556.0	524.2	515.6	524.2	558.8	622.2
57.5°	1022.6	878.6	731.7	590.5	489.7	429.2	400.4	388.8	409.0	432.1	507.0
60°	826.7	711.5	587.6	463.8	380.2	325.5	302.4	299.5	305.3	334.2	386.0
62.5°	648.1	553.1	455.1	354.3	285.2	262.1	233.3	230.5	236.2	253.5	293.8
65°	466.7	406.2	331.3	259.2	204.5	172.8	161.3	164.2	169.9	181.5	218.9
67.5°	325.5	282.3	230.5	181.5	141.2	126.7	115.2	112.3	115.2	135.4	155.6
70°	218.9	193.0	155.6	138.3	98.0	77.7	80.6	72.0	83.5	83.5	100.8
72.5°	144.0	126.7	103.7	80.6	69.1	54.8	54.8	51.9	57.6	60.5	74.9
75°	74.9	57.6	57.6	40.3	28.8	14.4	25.9	23.0	20.2	23.0	28.8
77.5°	51.9	43.2	40.3	31.7	28.8	23.0	23.0	23.0	23.0	25.9	28.8
80°	31.7	31.7	23.0	20.2	17.3	14.4	17.3	17.3	17.3	17.3	20.2
82.5°	20.2	17.3	17.3	14.4	14.4	11.5	11.5	11.5	11.5	11.5	17.3
85°	17.3	11.5	11.5	8.7	11.5	20.2	8.7	11.5	11.5	11.5	8.7
87.5°	5.8	8.7	8.7	8.7	5.8	2.9	5.8	8.7	8.7	14.4	11.5
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4	5366.4
2.5°	5375.1	5378.0	5378.0	5375.1	5375.1	5369.3	5380.8	5372.2	5375.1	5386.6	5378.0
5°	5380.8	5383.7	5383.7	5380.8	5380.8	5380.8	5383.7	5383.7	5380.8	5378.0	5383.7
7.5°	5392.4	5389.5	5389.5	5383.7	5383.7	5378.0	5383.7	5375.1	5380.8	5375.1	5383.7
10°	5378.0	5380.8	5378.0	5375.1	5375.1	5372.2	5372.2	5363.5	5366.4	5357.8	5363.5
12.5°	5369.3	5366.4	5366.4	5360.6	5354.9	5349.2	5346.3	5337.6	5337.6	5317.4	5326.1
15°	5346.3	5349.2	5340.5	5329.0	5323.2	5308.8	5303.1	5291.5	5280.0	5265.6	5268.5
17.5°	5326.1	5317.4	5305.9	5294.4	5271.3	5259.9	5248.3	5231.0	5225.2	5208.0	5202.3
20°	5265.6	5259.9	5245.5	5225.2	5210.9	5184.9	5173.4	5156.2	5141.7	5124.5	5115.8
22.5°	5187.8	5182.0	5164.8	5144.6	5121.6	5110.1	5098.5	5066.9	5052.4	5035.2	5032.3
25°	5089.9	5081.2	5064.0	5040.9	5029.4	4997.7	4986.2	4963.1	4957.4	4940.1	4937.3
27.5°	4940.1	4928.6	4908.4	4879.6	4859.4	4839.3	4827.8	4810.5	4804.7	4787.4	4784.6
30°	4715.4	4701.0	4660.7	4649.2	4614.6	4594.4	4594.4	4571.4	4574.3	4562.8	4562.8
32.5°	4361.1	4338.1	4306.4	4283.3	4260.3	4248.8	4248.8	4240.1	4245.9	4245.9	4251.7
35°	3891.6	3859.9	3842.6	3828.2	3828.2	3839.7	3874.3	3883.0	3900.3	3914.6	3926.2
37.5°	3289.5	3286.7	3306.9	3324.1	3367.3	3416.3	3476.8	3528.7	3577.6	3612.2	3646.7
40°	2638.6	2710.6	2768.2	2848.9	2915.1	3010.1	3119.6	3208.9	3292.4	3353.0	3416.3
42.5°	2059.6	2151.7	2272.8	2390.8	2508.9	2638.6	2782.6	2906.5	3015.9	3099.4	3165.7
45°	1604.4	1731.2	1878.1	2027.9	2180.6	2341.9	2491.7	2618.4	2733.6	2820.0	2886.3
47.5°	1293.3	1431.6	1598.7	1762.9	1935.7	2105.6	2272.8	2382.2	2477.2	2546.4	2606.9
50°	1068.6	1215.6	1391.3	1578.5	1751.3	1921.3	2065.3	2171.9	2249.7	2310.2	2347.6
52.5°	892.9	1048.5	1235.8	1423.0	1595.8	1751.3	1881.0	1961.7	2025.0	2068.2	2102.8
55°	737.4	887.2	1062.9	1238.6	1408.6	1555.5	1662.0	1722.6	1771.5	1797.4	1817.6
57.5°	602.1	740.3	901.6	1062.9	1209.8	1330.8	1414.4	1474.8	1497.9	1518.0	1515.1
60°	472.4	602.1	748.9	887.2	1014.0	1111.9	1172.4	1206.9	1224.2	1232.9	1227.1
62.5°	371.6	489.7	602.1	723.0	815.2	898.7	956.4	956.4	965.0	967.9	976.5
65°	276.5	365.8	463.8	553.1	627.9	682.7	714.4	723.0	734.6	731.7	725.9
67.5°	204.5	270.8	342.8	409.0	460.9	495.4	518.5	538.7	535.8	530.0	527.1
70°	141.2	184.4	247.7	288.1	325.5	360.1	365.8	368.7	371.6	374.5	368.7
72.5°	98.0	129.6	164.2	198.8	221.8	236.2	250.6	253.5	253.5	253.5	250.6
75°	49.0	66.3	98.0	112.3	132.5	138.3	149.8	149.8	158.4	146.9	144.0
77.5°	43.2	51.9	69.1	80.6	89.3	98.0	100.8	109.5	106.6	100.8	103.7
80°	25.9	31.7	43.2	49.0	60.5	63.4	66.3	69.1	66.3	69.1	69.1
82.5°	20.2	23.0	28.8	28.8	37.4	37.4	40.3	40.3	43.2	43.2	43.2
85°	11.5	20.2	17.3	34.5	23.0	23.0	28.8	34.5	28.8	28.8	34.5
87.5°	11.5	11.5	8.7	11.5	11.5	11.5	14.4	17.3	17.3	20.2	17.3
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: P249167

CATALOG NUMBER: LSR8B100D010 EC8B100950 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5366.4	5366.4	5366.4	5366.4
2.5°	5375.1	5380.8	5372.2	5369.3
5°	5383.7	5383.7	5378.0	5378.0
7.5°	5383.7	5383.7	5375.1	5369.3
10°	5360.6	5360.6	5352.0	5346.3
12.5°	5317.4	5317.4	5314.5	5305.9
15°	5262.7	5262.7	5251.2	5242.6
17.5°	5187.8	5193.6	5179.2	5179.2
20°	5107.2	5104.3	5092.8	5087.0
22.5°	5023.7	5017.9	5015.0	4997.7
25°	4934.4	4928.6	4919.9	4911.3
27.5°	4781.7	4778.8	4770.1	4758.7
30°	4548.3	4545.4	4534.0	4534.0
32.5°	4245.9	4243.0	4231.5	4234.4
35°	3931.9	3943.5	3937.7	3926.2
37.5°	3669.8	3678.4	3684.2	3678.4
40°	3450.9	3476.8	3479.7	3485.5
42.5°	3217.6	3252.1	3263.7	3269.4
45°	2938.1	2969.8	2995.8	2990.0
47.5°	2652.9	2676.0	2699.0	2681.8
50°	2379.3	2393.7	2402.4	2402.4
52.5°	2120.1	2120.1	2117.2	2120.1
55°	1823.4	1823.4	1811.9	1817.6
57.5°	1512.3	1518.0	1509.4	1495.0
60°	1224.2	1209.8	1204.0	1195.4
62.5°	953.5	953.5	933.3	959.2
65°	714.4	705.7	697.1	694.2
67.5°	518.5	515.6	507.0	504.1
70°	365.8	354.3	351.4	345.6
72.5°	244.9	244.9	239.1	239.1
75°	149.8	135.4	132.5	135.4
77.5°	103.7	100.8	100.8	98.0
80°	69.1	66.3	72.0	63.4
82.5°	43.2	46.1	43.2	46.1
85°	28.8	34.5	31.7	31.7
87.5°	17.3	17.3	17.3	17.3
90°	0.0	0.0	0.0	0.0

(END OF REPORT)