

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: P249149

Luminaire Tested: **LSR8B100D010 EC8B100935 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249149
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 EC8B100935 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 3500 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9406.0 lumens
Efficiency: N/A
Efficacy: 88.5 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

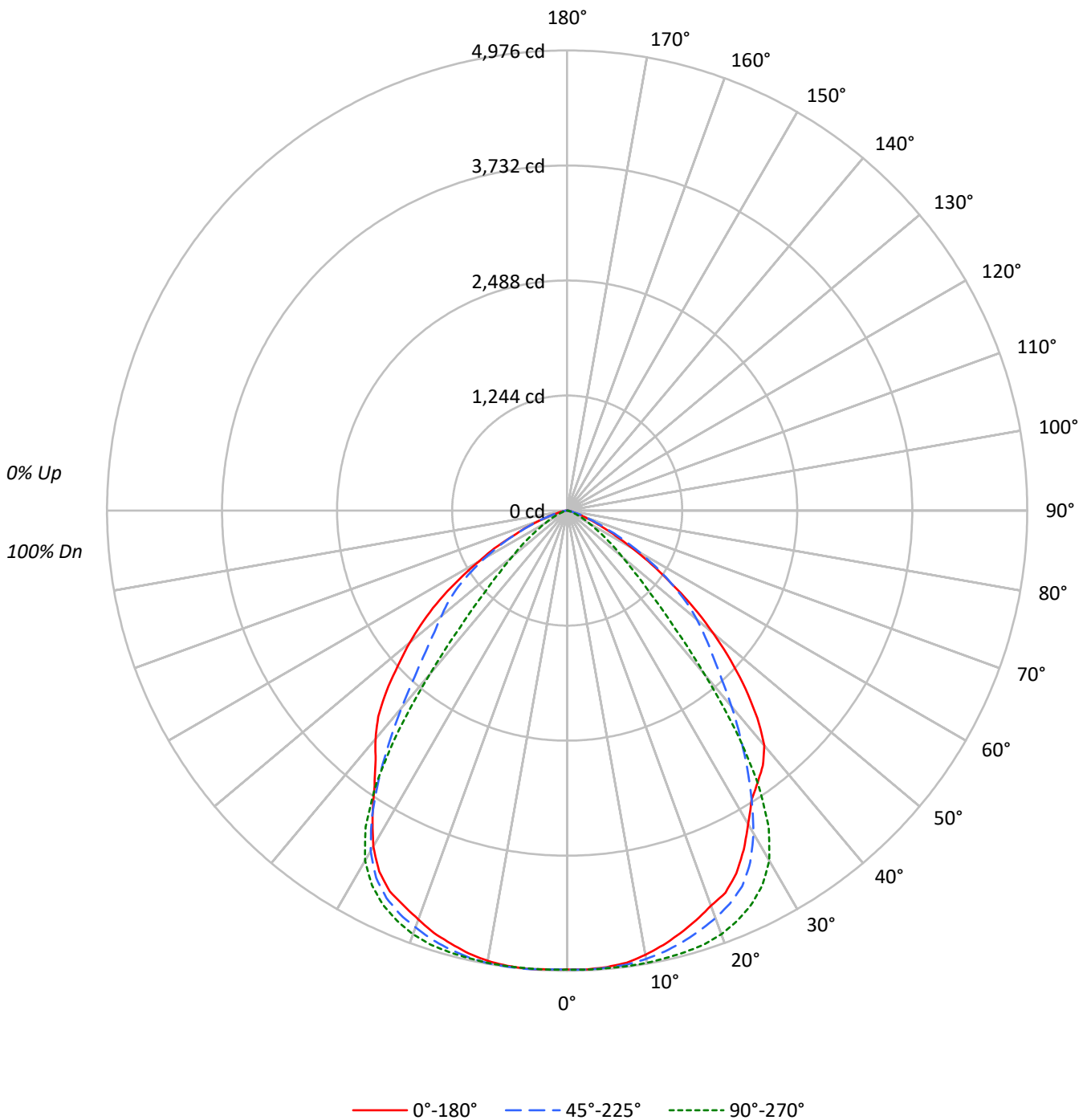
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	153034	153034	153034
5°	153371	153783	153950
10°	152724	155480	154810
15°	151033	157753	154778
20°	149221	159971	154376
25°	147284	160155	154534
30°	139340	155651	149295
35°	135177	135274	136682
40°	133502	93075	129751
45°	118957	55876	120584
50°	98915	37189	106581
55°	74185	25639	90368
60°	50269	17083	68179
65°	30324	11083	46843
70°	16815	6005	28815
75°	7613	2538	14917
80°	6624	2841	10406
85°	7536	3750	10367



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	473.6	5.0
10°-20°	1375.5	14.6
20°-30°	2087.7	22.2
30°-40°	2192.7	23.3
40°-50°	1644.0	17.5
50°-60°	1054.8	11.2
60°-70°	451.2	4.8
70°-80°	106.6	1.1
80°-90°	19.8	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°	3936.8	41.9
0°-40°	6129.6	65.2
0°-60°	8828.3	93.9
0°-90°	9406.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9406.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4963	4963	4963	4963	4963	
5°	4955	4963	4968	4976	4974	471
15°	4731	4830	4942	4910	4848	1334
25°	4329	4481	4707	4622	4542	1978
35°	3591	3391	3594	3551	3631	2254
45°	2728	2230	1281	2166	2765	2089
55°	1380	1380	477	1438	1681	1252
65°	416	490	152	631	642	444
75°	64	75	21	128	125	93
85°	21	13	11	21	29	22
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°	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8
2.5°	4965.5	4970.8	4968.1	4968.1	4965.5	4968.1	4968.1	4973.5	4973.5	4968.1	4965.5
5°	4954.8	4960.1	4960.1	4954.8	4954.8	4968.1	4960.1	4965.5	4965.5	4962.8	4962.8
7.5°	4930.9	4930.9	4941.5	4933.5	4933.5	4941.5	4938.8	4944.1	4949.5	4952.2	4952.2
10°	4877.5	4882.9	4885.6	4885.6	4888.2	4896.2	4901.5	4912.2	4917.5	4922.8	4925.5
12.5°	4811.0	4818.9	4821.6	4818.9	4827.0	4837.6	4850.9	4864.2	4872.3	4882.9	4890.9
15°	4731.0	4731.0	4736.4	4744.4	4749.7	4765.7	4779.0	4795.0	4816.3	4829.6	4842.9
17.5°	4643.1	4648.5	4656.4	4656.4	4667.1	4693.7	4701.7	4725.7	4749.7	4763.0	4789.7
20°	4547.3	4552.5	4560.6	4565.9	4579.2	4600.5	4616.5	4637.8	4664.5	4688.4	4715.0
22.5°	4472.6	4462.0	4467.3	4472.6	4486.0	4504.6	4523.3	4549.9	4576.5	4600.5	4627.2
25°	4328.8	4331.5	4339.5	4344.7	4360.8	4376.8	4398.1	4430.0	4454.0	4480.6	4509.9
27.5°	4134.3	4137.0	4150.3	4150.3	4163.6	4190.3	4203.6	4230.2	4262.2	4288.8	4323.5
30°	3913.3	3918.5	3918.5	3929.2	3937.2	3950.5	3963.8	3990.5	4006.5	4030.4	4078.4
32.5°	3710.8	3716.1	3713.4	3710.8	3702.8	3700.1	3697.4	3702.8	3708.1	3716.1	3734.7
35°	3590.9	3577.6	3566.9	3548.3	3527.0	3500.3	3476.3	3444.4	3415.1	3391.1	3364.5
37.5°	3476.3	3473.7	3457.7	3431.0	3388.4	3340.5	3284.6	3215.3	3146.0	3071.4	2999.5
40°	3316.5	3308.5	3295.2	3257.9	3210.0	3151.4	3076.8	2991.5	2879.6	2765.1	2647.9
42.5°	3044.8	3047.5	3031.5	3002.2	2956.9	2900.9	2823.7	2730.5	2610.6	2474.7	2322.9
45°	2727.8	2727.8	2722.5	2698.5	2666.5	2621.2	2562.6	2485.4	2368.2	2229.6	2067.1
47.5°	2397.5	2400.1	2392.1	2386.8	2373.5	2344.2	2301.6	2243.0	2160.4	2027.2	1864.7
50°	2061.9	2061.9	2075.2	2072.5	2072.5	2061.9	2043.2	2008.5	1936.6	1830.1	1678.3
52.5°	1726.2	1731.5	1739.5	1750.2	1763.5	1784.8	1763.5	1747.5	1702.2	1619.6	1489.1
55°	1379.9	1385.2	1398.5	1417.2	1433.2	1454.5	1459.8	1459.8	1435.8	1379.9	1281.3
57.5°	1084.2	1076.2	1086.9	1102.9	1124.2	1145.5	1161.5	1180.1	1177.4	1140.1	1060.2
60°	815.1	817.8	825.8	841.8	857.8	876.4	897.7	913.7	921.7	903.1	852.4
62.5°	594.1	594.1	604.7	620.7	628.7	655.3	668.6	676.6	684.6	681.9	650.0
65°	415.6	420.9	426.2	434.2	442.2	458.2	466.2	482.1	487.5	490.2	466.2
67.5°	293.1	285.0	290.4	295.7	303.7	314.4	330.3	330.3	338.3	338.3	322.3
70°	186.5	186.5	189.2	197.1	202.5	205.1	210.5	215.7	223.8	221.1	221.1
72.5°	125.2	122.5	125.2	127.9	130.6	138.5	138.5	141.2	146.5	149.2	138.5
75°	63.9	66.6	71.9	69.3	77.2	71.9	74.6	82.6	79.9	74.6	74.6
77.5°	53.3	53.3	53.3	50.6	55.9	55.9	53.3	58.6	55.9	55.9	53.3
80°	37.3	40.0	37.3	34.6	37.3	34.6	34.6	34.6	34.6	34.6	31.9
82.5°	29.3	24.0	26.7	24.0	26.7	26.7	24.0	21.3	21.3	24.0	21.3
85°	21.3	16.0	18.6	18.6	16.0	16.0	16.0	16.0	16.0	13.3	13.3
87.5°	13.3	8.0	8.0	8.0	10.6	10.6	10.6	8.0	10.6	10.6	5.3
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°	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8
2.5°	4970.8	4968.1	4973.5	4970.8	4970.8	4968.1	4970.8	4968.1	4973.5	4962.8	4965.5
5°	4970.8	4965.5	4968.1	4970.8	4973.5	4968.1	4968.1	4968.1	4973.5	4968.1	4970.8
7.5°	4960.1	4957.4	4965.5	4970.8	4968.1	4965.5	4970.8	4968.1	4973.5	4970.8	4976.1
10°	4938.8	4941.5	4946.8	4954.8	4957.4	4960.1	4965.5	4965.5	4973.5	4962.8	4968.1
12.5°	4906.9	4917.5	4930.9	4936.1	4946.8	4946.8	4952.2	4954.8	4960.1	4957.4	4965.5
15°	4866.9	4880.2	4896.2	4909.5	4922.8	4930.9	4938.8	4941.5	4949.5	4941.5	4944.1
17.5°	4818.9	4834.9	4858.9	4874.9	4896.2	4904.2	4914.8	4920.2	4928.2	4922.8	4925.5
20°	4752.3	4771.0	4797.6	4821.6	4834.9	4853.5	4866.9	4874.9	4880.2	4874.9	4877.5
22.5°	4659.1	4685.8	4720.4	4739.0	4765.7	4781.7	4784.3	4803.0	4816.3	4803.0	4808.3
25°	4549.9	4576.5	4603.2	4643.1	4667.1	4685.8	4704.4	4707.1	4720.4	4717.7	4715.0
27.5°	4368.7	4403.4	4448.6	4480.6	4512.6	4541.9	4563.2	4568.5	4581.9	4576.5	4579.2
30°	4121.0	4158.3	4201.0	4251.5	4296.8	4326.1	4352.8	4371.4	4384.7	4376.8	4374.1
32.5°	3769.4	3806.7	3852.0	3902.6	3955.9	3998.4	4030.4	4054.4	4070.4	4065.1	4051.8
35°	3367.2	3377.8	3407.1	3447.1	3492.3	3537.6	3566.9	3593.5	3612.2	3617.5	3617.5
37.5°	2954.2	2919.6	2898.3	2898.3	2924.9	2943.6	2970.2	2986.2	3015.5	3026.1	3034.2
40°	2554.6	2474.7	2400.1	2344.2	2306.9	2304.3	2304.3	2312.2	2338.9	2373.5	2405.5
42.5°	2197.7	2069.8	1955.3	1851.4	1776.8	1734.2	1715.6	1718.2	1739.5	1771.5	1824.7
45°	1912.7	1752.8	1609.0	1483.8	1382.5	1315.9	1284.0	1281.3	1297.3	1334.6	1393.2
47.5°	1691.6	1521.1	1358.6	1214.7	1105.5	1033.6	996.3	985.7	996.3	1030.9	1100.2
50°	1507.8	1332.0	1164.1	1014.9	897.7	823.2	788.5	775.2	788.5	817.8	887.0
52.5°	1337.2	1156.1	999.0	855.1	729.9	666.0	628.7	620.7	628.7	663.3	719.3
55°	1140.1	985.7	831.1	687.3	578.1	514.1	484.8	476.9	484.8	516.8	575.4
57.5°	945.7	812.5	676.6	546.1	452.9	396.9	370.3	359.6	378.2	399.6	468.8
60°	764.5	658.0	543.4	428.9	351.6	301.0	279.7	277.0	282.4	309.0	356.9
62.5°	599.4	511.5	420.9	327.7	263.7	242.4	215.7	213.1	218.4	234.4	271.7
65°	431.6	375.6	306.3	239.7	189.2	159.8	149.2	151.9	157.2	167.8	202.5
67.5°	301.0	261.0	213.1	167.8	130.6	117.2	106.6	103.9	106.6	125.2	143.9
70°	202.5	178.5	143.9	127.9	90.6	71.9	74.6	66.6	77.2	77.2	93.2
72.5°	133.2	117.2	95.9	74.6	63.9	50.6	50.6	48.0	53.3	55.9	69.3
75°	69.3	53.3	53.3	37.3	26.7	13.3	24.0	21.3	18.6	21.3	26.7
77.5°	48.0	40.0	37.3	29.3	26.7	21.3	21.3	21.3	21.3	24.0	26.7
80°	29.3	29.3	21.3	18.6	16.0	13.3	16.0	16.0	16.0	16.0	18.6
82.5°	18.6	16.0	16.0	13.3	13.3	10.6	10.6	10.6	10.6	10.6	16.0
85°	16.0	10.6	10.6	8.0	10.6	18.6	8.0	10.6	10.6	10.6	8.0
87.5°	5.3	8.0	8.0	8.0	5.3	2.7	5.3	8.0	8.0	13.3	10.6
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°	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8	4962.8
2.5°	4970.8	4973.5	4973.5	4970.8	4970.8	4965.5	4976.1	4968.1	4970.8	4981.4	4973.5
5°	4976.1	4978.8	4978.8	4976.1	4976.1	4976.1	4978.8	4978.8	4976.1	4973.5	4978.8
7.5°	4986.8	4984.1	4984.1	4978.8	4978.8	4973.5	4978.8	4970.8	4976.1	4970.8	4978.8
10°	4973.5	4976.1	4973.5	4970.8	4970.8	4968.1	4968.1	4960.1	4962.8	4954.8	4960.1
12.5°	4965.5	4962.8	4962.8	4957.4	4952.2	4946.8	4944.1	4936.1	4936.1	4917.5	4925.5
15°	4944.1	4946.8	4938.8	4928.2	4922.8	4909.5	4904.2	4893.5	4882.9	4869.6	4872.3
17.5°	4925.5	4917.5	4906.9	4896.2	4874.9	4864.2	4853.5	4837.6	4832.2	4816.3	4811.0
20°	4869.6	4864.2	4850.9	4832.2	4818.9	4795.0	4784.3	4768.4	4755.0	4739.0	4731.0
22.5°	4797.6	4792.3	4776.3	4757.7	4736.4	4725.7	4715.0	4685.8	4672.4	4656.4	4653.8
25°	4707.1	4699.1	4683.1	4661.8	4651.1	4621.8	4611.1	4589.8	4584.5	4568.5	4565.9
27.5°	4568.5	4557.9	4539.2	4512.6	4493.9	4475.3	4464.7	4448.6	4443.4	4427.3	4424.7
30°	4360.8	4347.4	4310.1	4299.5	4267.5	4248.9	4248.9	4227.6	4230.2	4219.6	4219.6
32.5°	4033.1	4011.8	3982.5	3961.2	3939.8	3929.2	3929.2	3921.2	3926.5	3926.5	3931.9
35°	3598.9	3569.6	3553.6	3540.3	3540.3	3550.9	3582.9	3590.9	3606.9	3620.2	3630.9
37.5°	3042.1	3039.5	3058.1	3074.1	3114.1	3159.4	3215.3	3263.3	3308.5	3340.5	3372.4
40°	2440.1	2506.7	2560.0	2634.6	2695.8	2783.7	2885.0	2967.5	3044.8	3100.8	3159.4
42.5°	1904.6	1989.9	2101.8	2211.0	2320.2	2440.1	2573.3	2687.9	2789.1	2866.3	2927.6
45°	1483.8	1601.0	1736.9	1875.4	2016.6	2165.8	2304.3	2421.5	2528.0	2607.9	2669.2
47.5°	1196.1	1323.9	1478.4	1630.3	1790.1	1947.3	2101.8	2203.0	2290.9	2354.8	2410.8
50°	988.3	1124.2	1286.7	1459.8	1619.6	1776.8	1910.0	2008.5	2080.5	2136.4	2171.0
52.5°	825.8	969.6	1142.8	1315.9	1475.8	1619.6	1739.5	1814.1	1872.7	1912.7	1944.6
55°	681.9	820.5	983.0	1145.5	1302.6	1438.5	1537.0	1593.0	1638.3	1662.2	1680.9
57.5°	556.8	684.6	833.8	983.0	1118.8	1230.7	1308.0	1363.9	1385.2	1403.9	1401.2
60°	436.9	556.8	692.6	820.5	937.7	1028.2	1084.2	1116.2	1132.1	1140.1	1134.8
62.5°	343.6	452.9	556.8	668.6	753.9	831.1	884.4	884.4	892.4	895.1	903.1
65°	255.7	338.3	428.9	511.5	580.7	631.3	660.7	668.6	679.3	676.6	671.3
67.5°	189.2	250.4	317.0	378.2	426.2	458.2	479.5	498.2	495.5	490.2	487.5
70°	130.6	170.5	229.1	266.4	301.0	333.0	338.3	341.0	343.6	346.3	341.0
72.5°	90.6	119.9	151.9	183.8	205.1	218.4	231.8	234.4	234.4	234.4	231.8
75°	45.3	61.3	90.6	103.9	122.5	127.9	138.5	138.5	146.5	135.8	133.2
77.5°	40.0	48.0	63.9	74.6	82.6	90.6	93.2	101.2	98.6	93.2	95.9
80°	24.0	29.3	40.0	45.3	55.9	58.6	61.3	63.9	61.3	63.9	63.9
82.5°	18.6	21.3	26.7	26.7	34.6	34.6	37.3	37.3	40.0	40.0	40.0
85°	10.6	18.6	16.0	31.9	21.3	21.3	26.7	31.9	26.7	26.7	31.9
87.5°	10.6	10.6	8.0	10.6	10.6	10.6	13.3	16.0	16.0	18.6	16.0
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: P249149

CATALOG NUMBER: LSR8B100D010 EC8B100935 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4962.8	4962.8	4962.8	4962.8
2.5°	4970.8	4976.1	4968.1	4965.5
5°	4978.8	4978.8	4973.5	4973.5
7.5°	4978.8	4978.8	4970.8	4965.5
10°	4957.4	4957.4	4949.5	4944.1
12.5°	4917.5	4917.5	4914.8	4906.9
15°	4866.9	4866.9	4856.2	4848.3
17.5°	4797.6	4803.0	4789.7	4789.7
20°	4723.1	4720.4	4709.8	4704.4
22.5°	4645.8	4640.5	4637.8	4621.8
25°	4563.2	4557.9	4549.9	4541.9
27.5°	4422.1	4419.4	4411.4	4400.7
30°	4206.2	4203.6	4192.9	4192.9
32.5°	3926.5	3923.9	3913.3	3915.9
35°	3636.2	3646.9	3641.5	3630.9
37.5°	3393.8	3401.8	3407.1	3401.8
40°	3191.3	3215.3	3218.0	3223.3
42.5°	2975.6	3007.5	3018.2	3023.5
45°	2717.1	2746.5	2770.4	2765.1
47.5°	2453.4	2474.7	2496.0	2480.1
50°	2200.4	2213.7	2221.7	2221.7
52.5°	1960.6	1960.6	1958.0	1960.6
55°	1686.2	1686.2	1675.6	1680.9
57.5°	1398.5	1403.9	1395.8	1382.5
60°	1132.1	1118.8	1113.5	1105.5
62.5°	881.8	881.8	863.1	887.0
65°	660.7	652.7	644.6	642.0
67.5°	479.5	476.9	468.8	466.2
70°	338.3	327.7	325.0	319.6
72.5°	226.4	226.4	221.1	221.1
75°	138.5	125.2	122.5	125.2
77.5°	95.9	93.2	93.2	90.6
80°	63.9	61.3	66.6	58.6
82.5°	40.0	42.6	40.0	42.6
85°	26.7	31.9	29.3	29.3
87.5°	16.0	16.0	16.0	16.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)