

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: P249095

Luminaire Tested: **LSR8B100D010 EC8B100830 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249095
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 EC8B100830 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
80 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10606.0 lumens
Efficiency: N/A
Efficacy: 99.8 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

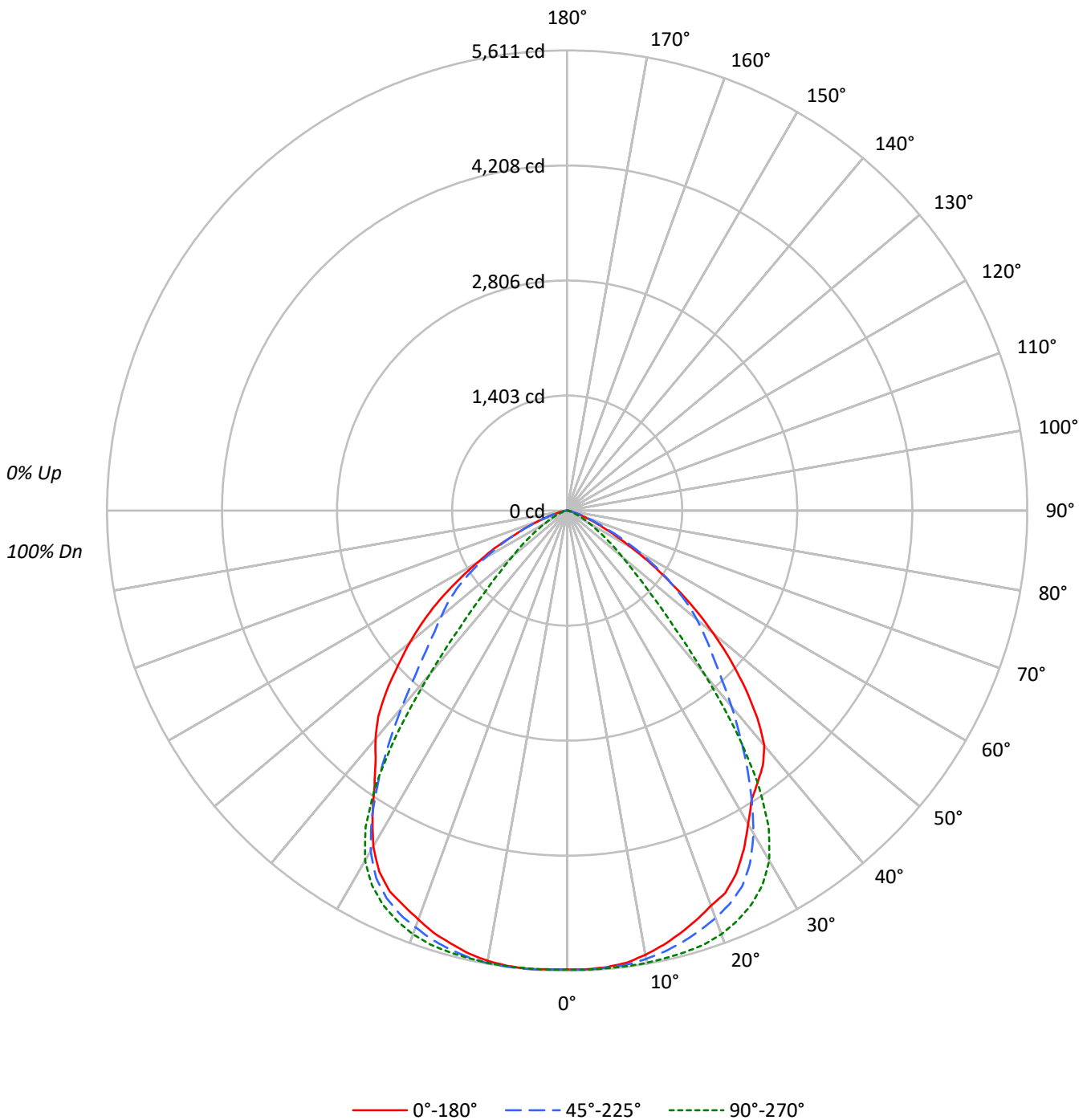
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	172557	172557	172557
5°	172937	173405	173591
10°	172210	175313	174561
15°	170302	177878	174523
20°	168257	180379	174072
25°	166072	180586	174251
30°	157115	175509	168345
35°	152425	152534	154119
40°	150534	104950	146303
45°	134133	63006	135969
50°	111532	41933	120177
55°	83647	28908	101894
60°	56683	19267	76881
65°	34191	12492	52819
70°	18961	6771	32493
75°	8590	2859	16823
80°	7458	3196	11738
85°	8491	4246	11711



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	534.1	5.0
10°-20°	1551.0	14.6
20°-30°	2354.1	22.2
30°-40°	2472.5	23.3
40°-50°	1853.7	17.5
50°-60°	1189.4	11.2
60°-70°	508.8	4.8
70°-80°	120.2	1.1
80°-90°	22.4	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°	4439.1	41.9
0°-40°	6911.6	65.2
0°-60°	9954.6	93.9
0°-90°	10606.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10606.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5596	5596	5596	5596	5596	
5°	5587	5596	5602	5611	5608	531
15°	5335	5446	5572	5536	5467	1505
25°	4881	5052	5308	5212	5121	2230
35°	4049	3824	4052	4004	4094	2541
45°	3076	2514	1445	2442	3118	2356
55°	1556	1556	538	1622	1895	1411
65°	469	553	171	712	724	500
75°	72	84	24	144	141	105
85°	24	15	12	24	33	25
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°	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9
2.5°	5598.9	5605.0	5602.0	5602.0	5598.9	5602.0	5602.0	5608.0	5608.0	5602.0	5598.9
5°	5586.9	5592.9	5592.9	5586.9	5586.9	5602.0	5592.9	5598.9	5598.9	5595.9	5595.9
7.5°	5559.9	5559.9	5571.9	5562.9	5562.9	5571.9	5568.9	5574.9	5580.9	5584.0	5584.0
10°	5499.8	5505.8	5508.8	5508.8	5511.9	5520.8	5526.8	5538.9	5544.9	5550.9	5553.9
12.5°	5424.8	5433.7	5436.7	5433.7	5442.8	5454.7	5469.8	5484.8	5493.8	5505.8	5514.9
15°	5334.6	5334.6	5340.6	5349.6	5355.7	5373.7	5388.7	5406.7	5430.7	5445.8	5460.8
17.5°	5235.5	5241.5	5250.5	5250.5	5262.6	5292.5	5301.6	5328.6	5355.7	5370.7	5400.7
20°	5127.4	5133.3	5142.4	5148.4	5163.4	5187.4	5205.4	5229.5	5259.5	5286.6	5316.6
22.5°	5043.2	5031.3	5037.2	5043.2	5058.3	5079.3	5100.3	5130.3	5160.4	5187.4	5217.5
25°	4881.0	4884.0	4893.1	4899.0	4917.1	4935.1	4959.2	4995.2	5022.2	5052.3	5085.3
27.5°	4661.8	4664.8	4679.8	4679.8	4694.8	4724.9	4739.9	4769.9	4806.0	4836.0	4875.1
30°	4412.5	4418.5	4418.5	4430.5	4439.5	4454.5	4469.5	4499.6	4517.6	4544.6	4598.7
32.5°	4184.2	4190.2	4187.2	4184.2	4175.2	4172.2	4169.2	4175.2	4181.2	4190.2	4211.2
35°	4049.1	4034.0	4022.0	4001.0	3977.0	3946.9	3919.9	3883.8	3850.8	3823.7	3793.7
37.5°	3919.9	3916.8	3898.8	3868.8	3820.7	3766.7	3703.6	3625.5	3547.4	3463.3	3382.2
40°	3739.6	3730.6	3715.6	3673.6	3619.5	3553.4	3469.3	3373.2	3247.0	3117.9	2985.7
42.5°	3433.2	3436.2	3418.2	3385.2	3334.2	3271.0	3183.9	3078.8	2943.7	2790.4	2619.3
45°	3075.8	3075.8	3069.8	3042.7	3006.7	2955.7	2889.6	2802.5	2670.3	2514.1	2330.9
47.5°	2703.3	2706.4	2697.3	2691.4	2676.3	2643.3	2595.2	2529.2	2436.0	2285.8	2102.6
50°	2324.9	2324.9	2339.9	2336.9	2336.9	2324.9	2303.9	2264.8	2183.7	2063.6	1892.4
52.5°	1946.4	1952.4	1961.5	1973.4	1988.4	2012.5	1988.4	1970.4	1919.4	1826.2	1679.1
55°	1555.9	1561.9	1576.9	1598.0	1616.0	1640.1	1646.0	1646.0	1619.0	1555.9	1444.8
57.5°	1222.5	1213.5	1225.5	1243.6	1267.6	1291.6	1309.6	1330.7	1327.6	1285.6	1195.5
60°	919.1	922.2	931.1	949.2	967.2	988.2	1012.3	1030.3	1039.3	1018.3	961.2
62.5°	669.8	669.8	681.8	699.8	708.9	738.9	753.9	763.0	771.9	768.9	732.9
65°	468.6	474.6	480.6	489.6	498.6	516.6	525.6	543.7	549.7	552.7	525.6
67.5°	330.4	321.4	327.4	333.4	342.4	354.5	372.5	372.5	381.4	381.4	363.4
70°	210.3	210.3	213.3	222.3	228.3	231.3	237.3	243.3	252.3	249.3	249.3
72.5°	141.2	138.2	141.2	144.2	147.2	156.2	156.2	159.2	165.2	168.2	156.2
75°	72.1	75.1	81.1	78.1	87.1	81.1	84.1	93.1	90.1	84.1	84.1
77.5°	60.0	60.0	60.0	57.1	63.1	63.1	60.0	66.1	63.1	63.1	60.0
80°	42.0	45.1	42.0	39.0	42.0	39.0	39.0	39.0	39.0	39.0	36.0
82.5°	33.1	27.0	30.1	27.0	30.1	30.1	27.0	24.0	24.0	27.0	24.0
85°	24.0	18.0	21.0	21.0	18.0	18.0	18.0	18.0	18.0	15.0	15.0
87.5°	15.0	9.0	9.0	9.0	12.0	12.0	12.0	9.0	12.0	12.0	6.0
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°	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9
2.5°	5605.0	5602.0	5608.0	5605.0	5605.0	5602.0	5605.0	5602.0	5608.0	5595.9	5598.9
5°	5605.0	5598.9	5602.0	5605.0	5608.0	5602.0	5602.0	5602.0	5608.0	5602.0	5605.0
7.5°	5592.9	5589.9	5598.9	5605.0	5602.0	5598.9	5605.0	5602.0	5608.0	5605.0	5610.9
10°	5568.9	5571.9	5577.9	5586.9	5589.9	5592.9	5598.9	5598.9	5608.0	5595.9	5602.0
12.5°	5532.9	5544.9	5559.9	5565.9	5577.9	5577.9	5584.0	5586.9	5592.9	5589.9	5598.9
15°	5487.8	5502.8	5520.8	5535.9	5550.9	5559.9	5568.9	5571.9	5580.9	5571.9	5574.9
17.5°	5433.7	5451.7	5478.8	5496.8	5520.8	5529.9	5541.8	5547.9	5556.9	5550.9	5553.9
20°	5358.6	5379.7	5409.7	5436.7	5451.7	5472.8	5487.8	5496.8	5502.8	5496.8	5499.8
22.5°	5253.5	5283.6	5322.6	5343.6	5373.7	5391.7	5394.7	5415.7	5430.7	5415.7	5421.7
25°	5130.3	5160.4	5190.5	5235.5	5262.6	5283.6	5304.6	5307.6	5322.6	5319.6	5316.6
27.5°	4926.1	4965.2	5016.2	5052.3	5088.3	5121.4	5145.4	5151.4	5166.4	5160.4	5163.4
30°	4646.7	4688.8	4736.9	4793.9	4845.0	4878.0	4908.1	4929.1	4944.1	4935.1	4932.1
32.5°	4250.3	4292.3	4343.4	4400.4	4460.6	4508.6	4544.6	4571.7	4589.7	4583.7	4568.7
35°	3796.7	3808.7	3841.8	3886.8	3937.9	3988.9	4022.0	4052.0	4073.0	4079.0	4079.0
37.5°	3331.1	3292.1	3268.1	3268.1	3298.1	3319.1	3349.2	3367.2	3400.2	3412.2	3421.3
40°	2880.5	2790.4	2706.4	2643.3	2601.3	2598.2	2598.2	2607.2	2637.3	2676.3	2712.4
42.5°	2478.1	2333.9	2204.7	2087.6	2003.5	1955.4	1934.4	1937.4	1961.5	1997.5	2057.5
45°	2156.7	1976.5	1814.3	1673.1	1558.9	1483.8	1447.8	1444.8	1462.8	1504.8	1571.0
47.5°	1907.4	1715.1	1531.9	1369.7	1246.6	1165.4	1123.4	1111.4	1123.4	1162.4	1240.5
50°	1700.1	1501.9	1312.6	1144.4	1012.3	928.2	889.1	874.1	889.1	922.2	1000.2
52.5°	1507.9	1303.6	1126.4	964.2	823.0	750.9	708.9	699.8	708.9	747.9	811.0
55°	1285.6	1111.4	937.2	774.9	651.8	579.7	546.7	537.7	546.7	582.8	648.8
57.5°	1066.4	916.1	763.0	615.8	510.7	447.5	417.5	405.5	426.5	450.5	528.7
60°	862.0	741.9	612.7	483.6	396.5	339.4	315.4	312.4	318.4	348.4	402.5
62.5°	675.9	576.7	474.6	369.5	297.4	273.3	243.3	240.3	246.3	264.3	306.4
65°	486.6	423.6	345.4	270.3	213.3	180.2	168.2	171.2	177.2	189.3	228.3
67.5°	339.4	294.4	240.3	189.3	147.2	132.1	120.2	117.2	120.2	141.2	162.2
70°	228.3	201.2	162.2	144.2	102.2	81.1	84.1	75.1	87.1	87.1	105.1
72.5°	150.2	132.1	108.1	84.1	72.1	57.1	57.1	54.1	60.0	63.1	78.1
75°	78.1	60.0	60.0	42.0	30.1	15.0	27.0	24.0	21.0	24.0	30.1
77.5°	54.1	45.1	42.0	33.1	30.1	24.0	24.0	24.0	24.0	27.0	30.1
80°	33.1	33.1	24.0	21.0	18.0	15.0	18.0	18.0	18.0	18.0	21.0
82.5°	21.0	18.0	18.0	15.0	15.0	12.0	12.0	12.0	12.0	12.0	18.0
85°	18.0	12.0	12.0	9.0	12.0	21.0	9.0	12.0	12.0	12.0	9.0
87.5°	6.0	9.0	9.0	9.0	6.0	3.0	6.0	9.0	9.0	15.0	12.0
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°	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9	5595.9
2.5°	5605.0	5608.0	5608.0	5605.0	5605.0	5598.9	5610.9	5602.0	5605.0	5617.0	5608.0
5°	5610.9	5613.9	5613.9	5610.9	5610.9	5610.9	5613.9	5613.9	5610.9	5608.0	5613.9
7.5°	5623.0	5620.0	5620.0	5613.9	5613.9	5608.0	5613.9	5605.0	5610.9	5605.0	5613.9
10°	5608.0	5610.9	5608.0	5605.0	5605.0	5602.0	5602.0	5592.9	5595.9	5586.9	5592.9
12.5°	5598.9	5595.9	5595.9	5589.9	5584.0	5577.9	5574.9	5565.9	5565.9	5544.9	5553.9
15°	5574.9	5577.9	5568.9	5556.9	5550.9	5535.9	5529.9	5517.8	5505.8	5490.8	5493.8
17.5°	5553.9	5544.9	5532.9	5520.8	5496.8	5484.8	5472.8	5454.7	5448.7	5430.7	5424.8
20°	5490.8	5484.8	5469.8	5448.7	5433.7	5406.7	5394.7	5376.7	5361.6	5343.6	5334.6
22.5°	5409.7	5403.7	5385.7	5364.6	5340.6	5328.6	5316.6	5283.6	5268.5	5250.5	5247.5
25°	5307.6	5298.6	5280.6	5256.5	5244.5	5211.5	5199.4	5175.4	5169.4	5151.4	5148.4
27.5°	5151.4	5139.4	5118.4	5088.3	5067.3	5046.3	5034.3	5016.2	5010.2	4992.2	4989.2
30°	4917.1	4902.1	4860.0	4848.0	4811.9	4790.9	4790.9	4766.9	4769.9	4757.9	4757.9
32.5°	4547.7	4523.6	4490.6	4466.5	4442.5	4430.5	4430.5	4421.5	4427.5	4427.5	4433.5
35°	4058.0	4025.0	4006.9	3992.0	3992.0	4003.9	4040.0	4049.1	4067.1	4082.1	4094.1
37.5°	3430.2	3427.3	3448.3	3466.3	3511.4	3562.4	3625.5	3679.6	3730.6	3766.7	3802.7
40°	2751.4	2826.5	2886.6	2970.7	3039.7	3138.9	3253.0	3346.1	3433.2	3496.4	3562.4
42.5°	2147.6	2243.8	2370.0	2493.1	2616.2	2751.4	2901.6	3030.8	3144.9	3232.0	3301.1
45°	1673.1	1805.2	1958.5	2114.6	2273.8	2442.1	2598.2	2730.4	2850.6	2940.7	3009.7
47.5°	1348.7	1492.9	1667.0	1838.3	2018.5	2195.7	2370.0	2484.1	2583.2	2655.3	2718.4
50°	1114.4	1267.6	1450.8	1646.0	1826.2	2003.5	2153.7	2264.8	2345.9	2409.0	2448.0
52.5°	931.1	1093.3	1288.6	1483.8	1664.0	1826.2	1961.5	2045.5	2111.6	2156.7	2192.7
55°	768.9	925.2	1108.4	1291.6	1468.8	1622.0	1733.1	1796.2	1847.3	1874.3	1895.3
57.5°	627.8	771.9	940.2	1108.4	1261.6	1387.8	1474.8	1537.9	1561.9	1583.0	1580.0
60°	492.6	627.8	781.0	925.2	1057.3	1159.4	1222.5	1258.6	1276.6	1285.6	1279.6
62.5°	387.5	510.7	627.8	753.9	850.1	937.2	997.3	997.3	1006.2	1009.3	1018.3
65°	288.3	381.4	483.6	576.7	654.8	711.9	745.0	753.9	766.0	763.0	756.9
67.5°	213.3	282.4	357.4	426.5	480.6	516.6	540.6	561.7	558.7	552.7	549.7
70°	147.2	192.3	258.3	300.4	339.4	375.5	381.4	384.5	387.5	390.5	384.5
72.5°	102.2	135.2	171.2	207.3	231.3	246.3	261.4	264.3	264.3	264.3	261.4
75°	51.1	69.1	102.2	117.2	138.2	144.2	156.2	156.2	165.2	153.2	150.2
77.5°	45.1	54.1	72.1	84.1	93.1	102.2	105.1	114.1	111.1	105.1	108.1
80°	27.0	33.1	45.1	51.1	63.1	66.1	69.1	72.1	69.1	72.1	72.1
82.5°	21.0	24.0	30.1	30.1	39.0	39.0	42.0	42.0	45.1	45.1	45.1
85°	12.0	21.0	18.0	36.0	24.0	24.0	30.1	36.0	30.1	30.1	36.0
87.5°	12.0	12.0	9.0	12.0	12.0	12.0	15.0	18.0	18.0	21.0	18.0
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: P249095

CATALOG NUMBER: LSR8B100D010 EC8B100830 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5595.9	5595.9	5595.9	5595.9
2.5°	5605.0	5610.9	5602.0	5598.9
5°	5613.9	5613.9	5608.0	5608.0
7.5°	5613.9	5613.9	5605.0	5598.9
10°	5589.9	5589.9	5580.9	5574.9
12.5°	5544.9	5544.9	5541.8	5532.9
15°	5487.8	5487.8	5475.8	5466.8
17.5°	5409.7	5415.7	5400.7	5400.7
20°	5325.6	5322.6	5310.6	5304.6
22.5°	5238.5	5232.5	5229.5	5211.5
25°	5145.4	5139.4	5130.3	5121.4
27.5°	4986.2	4983.2	4974.2	4962.2
30°	4742.9	4739.9	4727.9	4727.9
32.5°	4427.5	4424.5	4412.5	4415.5
35°	4100.1	4112.1	4106.1	4094.1
37.5°	3826.7	3835.8	3841.8	3835.8
40°	3598.5	3625.5	3628.5	3634.5
42.5°	3355.2	3391.2	3403.2	3409.2
45°	3063.8	3096.8	3123.9	3117.9
47.5°	2766.4	2790.4	2814.5	2796.5
50°	2481.1	2496.1	2505.1	2505.1
52.5°	2210.8	2210.8	2207.8	2210.8
55°	1901.3	1901.3	1889.4	1895.3
57.5°	1576.9	1583.0	1573.9	1558.9
60°	1276.6	1261.6	1255.5	1246.6
62.5°	994.3	994.3	973.2	1000.2
65°	745.0	735.9	726.9	723.9
67.5°	540.6	537.7	528.7	525.6
70°	381.4	369.5	366.5	360.4
72.5°	255.3	255.3	249.3	249.3
75°	156.2	141.2	138.2	141.2
77.5°	108.1	105.1	105.1	102.2
80°	72.1	69.1	75.1	66.1
82.5°	45.1	48.1	45.1	48.1
85°	30.1	36.0	33.1	33.1
87.5°	18.0	18.0	18.0	18.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)