

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: P249590

Luminaire Tested: **LSR8B100D010 EC8B100940 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249590
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 EC8B100940 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9713.0 lumens
Efficiency: N/A
Efficacy: 91.4 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

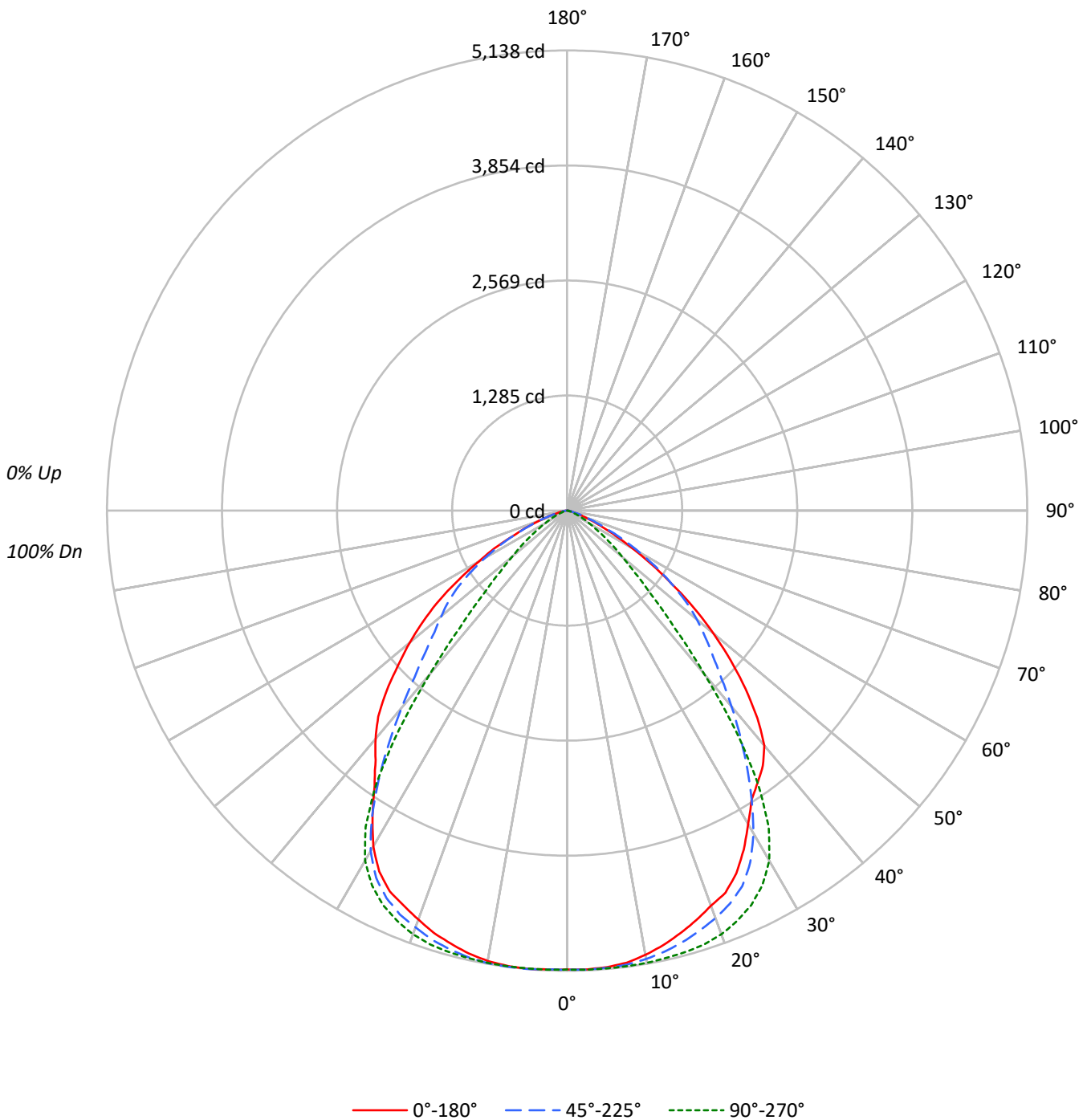
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79
3	96	88	81	76	94	86	80	75	84	78	74	81	77	73	79	75	72	70
4	89	80	72	67	87	78	72	66	76	70	66	74	69	65	72	67	64	62
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55
6	78	66	58	53	76	65	58	53	64	57	52	62	56	52	61	55	51	50
7	72	61	53	48	71	60	53	48	59	52	47	57	51	47	56	51	47	45
8	68	56	48	43	66	55	48	43	54	48	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	158030	158030	158030
5°	158377	158804	158974
10°	157709	160552	159863
15°	155962	162902	159828
20°	154091	165192	159417
25°	152091	165381	159580
30°	143887	160732	154170
35°	139588	139690	141143
40°	137862	96114	133985
45°	122838	57699	124517
50°	102144	38402	110059
55°	76605	26472	93314
60°	51916	17645	70405
65°	31317	11441	48368
70°	17365	6203	29762
75°	7863	2621	15405
80°	6837	2930	10744
85°	7784	3892	10720



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	489.1	5.0
10°-20°	1420.4	14.6
20°-30°	2155.9	22.2
30°-40°	2264.3	23.3
40°-50°	1697.6	17.5
50°-60°	1089.2	11.2
60°-70°	466.0	4.8
70°-80°	110.1	1.1
80°-90°	20.5	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°	4065.3	41.9
0°-40°	6329.6	65.2
0°-60°	9116.5	93.9
0°-90°	9713.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9713.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	5125	5125	5125	5125	5125	
5°	5116	5125	5130	5138	5136	486
15°	4885	4987	5103	5070	5006	1378
25°	4470	4627	4861	4773	4690	2042
35°	3708	3502	3711	3667	3749	2327
45°	2817	2302	1323	2236	2855	2157
55°	1425	1425	492	1485	1736	1293
65°	429	506	157	652	663	458
75°	66	77	22	132	129	96
85°	22	14	11	22	30	23
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°	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8
2.5°	5127.5	5133.0	5130.3	5130.3	5127.5	5130.3	5130.3	5135.8	5135.8	5130.3	5127.5
5°	5116.5	5122.0	5122.0	5116.5	5116.5	5130.3	5122.0	5127.5	5127.5	5124.8	5124.8
7.5°	5091.8	5091.8	5102.8	5094.5	5094.5	5102.8	5100.0	5105.5	5111.0	5113.8	5113.8
10°	5036.7	5042.3	5045.0	5045.0	5047.8	5056.0	5061.5	5072.5	5078.0	5083.5	5086.3
12.5°	4968.0	4976.2	4979.0	4976.2	4984.5	4995.5	5009.3	5023.0	5031.3	5042.3	5050.5
15°	4885.4	4885.4	4890.9	4899.2	4904.7	4921.2	4935.0	4951.5	4973.5	4987.3	5001.0
17.5°	4794.7	4800.2	4808.4	4808.4	4819.5	4846.9	4855.2	4880.0	4904.7	4918.5	4946.0
20°	4695.7	4701.1	4709.4	4714.9	4728.7	4750.7	4767.2	4789.2	4816.7	4841.5	4868.9
22.5°	4618.6	4607.6	4613.1	4618.6	4632.4	4651.7	4670.9	4698.4	4725.9	4750.7	4778.2
25°	4470.1	4472.8	4481.1	4486.6	4503.1	4519.6	4541.6	4574.6	4599.4	4626.9	4657.1
27.5°	4269.3	4272.0	4285.8	4285.8	4299.5	4327.0	4340.8	4368.3	4401.3	4428.8	4464.6
30°	4041.0	4046.4	4046.4	4057.5	4065.7	4079.5	4093.2	4120.7	4137.2	4162.0	4211.5
32.5°	3831.9	3837.4	3834.6	3831.9	3823.6	3820.9	3818.1	3823.6	3829.2	3837.4	3856.6
35°	3708.1	3694.3	3683.4	3664.1	3642.1	3614.6	3589.8	3556.8	3526.5	3501.8	3474.3
37.5°	3589.8	3587.1	3570.6	3543.0	3499.0	3449.5	3391.8	3320.2	3248.7	3171.7	3097.4
40°	3424.8	3416.5	3402.8	3364.3	3314.7	3254.2	3177.2	3089.2	2973.6	2855.3	2734.3
42.5°	3144.2	3146.9	3130.4	3100.1	3053.4	2995.6	2915.9	2819.6	2695.8	2555.5	2398.7
45°	2816.8	2816.8	2811.3	2786.6	2753.6	2706.8	2646.3	2566.5	2445.5	2302.4	2134.6
47.5°	2475.7	2478.5	2470.2	2464.8	2451.0	2420.7	2376.7	2316.2	2230.9	2093.3	1925.6
50°	2129.2	2129.2	2142.9	2140.1	2140.1	2129.2	2109.9	2074.1	1999.9	1889.8	1733.0
52.5°	1782.5	1788.0	1796.3	1807.3	1821.0	1843.0	1821.0	1804.5	1757.8	1672.5	1537.7
55°	1424.9	1430.4	1444.2	1463.4	1480.0	1502.0	1507.4	1507.4	1482.7	1424.9	1323.1
57.5°	1119.6	1111.3	1122.4	1138.9	1160.9	1182.9	1199.4	1218.6	1215.9	1177.4	1094.8
60°	841.8	844.5	852.7	869.3	885.8	905.0	927.0	943.5	951.8	932.6	880.3
62.5°	613.4	613.4	624.4	640.9	649.2	676.7	690.4	698.7	706.9	704.2	671.2
65°	429.2	434.6	440.1	448.4	456.6	473.1	481.4	497.9	503.4	506.2	481.4
67.5°	302.6	294.3	299.9	305.3	313.6	324.6	341.1	341.1	349.3	349.3	332.8
70°	192.6	192.6	195.3	203.5	209.1	211.8	217.3	222.8	231.1	228.3	228.3
72.5°	129.3	126.5	129.3	132.1	134.8	143.0	143.0	145.8	151.3	154.1	143.0
75°	66.0	68.8	74.2	71.5	79.8	74.2	77.0	85.3	82.5	77.0	77.0
77.5°	55.0	55.0	55.0	52.3	57.8	57.8	55.0	60.5	57.8	57.8	55.0
80°	38.5	41.3	38.5	35.7	38.5	35.7	35.7	35.7	35.7	35.7	33.0
82.5°	30.3	24.8	27.5	24.8	27.5	27.5	24.8	22.0	22.0	24.8	22.0
85°	22.0	16.5	19.3	19.3	16.5	16.5	16.5	16.5	16.5	13.7	13.7
87.5°	13.7	8.3	8.3	8.3	11.0	11.0	11.0	8.3	11.0	11.0	5.5
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°	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8
2.5°	5133.0	5130.3	5135.8	5133.0	5133.0	5130.3	5133.0	5130.3	5135.8	5124.8	5127.5
5°	5133.0	5127.5	5130.3	5133.0	5135.8	5130.3	5130.3	5130.3	5135.8	5130.3	5133.0
7.5°	5122.0	5119.3	5127.5	5133.0	5130.3	5127.5	5133.0	5130.3	5135.8	5133.0	5138.5
10°	5100.0	5102.8	5108.3	5116.5	5119.3	5122.0	5127.5	5127.5	5135.8	5124.8	5130.3
12.5°	5067.0	5078.0	5091.8	5097.2	5108.3	5108.3	5113.8	5116.5	5122.0	5119.3	5127.5
15°	5025.8	5039.5	5056.0	5069.8	5083.5	5091.8	5100.0	5102.8	5111.0	5102.8	5105.5
17.5°	4976.2	4992.7	5017.5	5034.0	5056.0	5064.3	5075.2	5080.8	5089.0	5083.5	5086.3
20°	4907.4	4926.7	4954.2	4979.0	4992.7	5012.0	5025.8	5034.0	5039.5	5034.0	5036.7
22.5°	4811.2	4838.7	4874.5	4893.7	4921.2	4937.7	4940.5	4959.7	4973.5	4959.7	4965.2
25°	4698.4	4725.9	4753.4	4794.7	4819.5	4838.7	4858.0	4860.7	4874.5	4871.7	4868.9
27.5°	4511.3	4547.1	4593.8	4626.9	4659.9	4690.2	4712.2	4717.6	4731.4	4725.9	4728.7
30°	4255.5	4294.1	4338.1	4390.3	4437.1	4467.3	4494.8	4514.1	4527.8	4519.6	4516.8
32.5°	3892.4	3930.9	3977.7	4029.9	4085.0	4128.9	4162.0	4186.8	4203.3	4197.7	4184.0
35°	3477.1	3488.0	3518.3	3559.6	3606.3	3653.1	3683.4	3710.8	3730.1	3735.6	3735.6
37.5°	3050.7	3014.9	2992.9	2992.9	3020.4	3039.6	3067.2	3083.7	3113.9	3124.9	3133.2
40°	2638.0	2555.5	2478.5	2420.7	2382.2	2379.5	2379.5	2387.7	2415.2	2451.0	2484.0
42.5°	2269.4	2137.4	2019.1	1911.8	1834.8	1790.8	1771.5	1774.3	1796.3	1829.3	1884.3
45°	1975.1	1810.0	1661.5	1532.2	1427.7	1358.9	1325.9	1323.1	1339.6	1378.1	1438.7
47.5°	1746.8	1570.7	1402.9	1254.4	1141.6	1067.3	1028.8	1017.8	1028.8	1064.5	1136.1
50°	1557.0	1375.4	1202.1	1048.1	927.0	850.0	814.2	800.5	814.2	844.5	916.0
52.5°	1380.9	1193.8	1031.6	883.0	753.7	687.7	649.2	640.9	649.2	684.9	742.7
55°	1177.4	1017.8	858.2	709.7	597.0	530.9	500.6	492.4	500.6	533.7	594.2
57.5°	976.6	839.0	698.7	563.9	467.7	409.8	382.4	371.3	390.6	412.6	484.1
60°	789.5	679.5	561.1	442.9	363.1	310.8	288.8	286.1	291.6	319.1	368.6
62.5°	619.0	528.2	434.6	338.4	272.3	250.3	222.8	220.1	225.6	242.0	280.6
65°	445.6	387.9	316.3	247.6	195.3	165.0	154.1	156.8	162.3	173.3	209.1
67.5°	310.8	269.6	220.1	173.3	134.8	121.0	110.0	107.3	110.0	129.3	148.5
70°	209.1	184.3	148.5	132.1	93.6	74.2	77.0	68.8	79.8	79.8	96.3
72.5°	137.5	121.0	99.0	77.0	66.0	52.3	52.3	49.5	55.0	57.8	71.5
75°	71.5	55.0	55.0	38.5	27.5	13.7	24.8	22.0	19.3	22.0	27.5
77.5°	49.5	41.3	38.5	30.3	27.5	22.0	22.0	22.0	22.0	24.8	27.5
80°	30.3	30.3	22.0	19.3	16.5	13.7	16.5	16.5	16.5	16.5	19.3
82.5°	19.3	16.5	16.5	13.7	13.7	11.0	11.0	11.0	11.0	11.0	16.5
85°	16.5	11.0	11.0	8.3	11.0	19.3	8.3	11.0	11.0	11.0	8.3
87.5°	5.5	8.3	8.3	8.3	5.5	2.8	5.5	8.3	8.3	13.7	11.0
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°	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8	5124.8
2.5°	5133.0	5135.8	5135.8	5133.0	5133.0	5127.5	5138.5	5130.3	5133.0	5144.0	5135.8
5°	5138.5	5141.3	5141.3	5138.5	5138.5	5138.5	5141.3	5141.3	5138.5	5135.8	5141.3
7.5°	5149.5	5146.8	5146.8	5141.3	5141.3	5135.8	5141.3	5133.0	5138.5	5133.0	5141.3
10°	5135.8	5138.5	5135.8	5133.0	5133.0	5130.3	5130.3	5122.0	5124.8	5116.5	5122.0
12.5°	5127.5	5124.8	5124.8	5119.3	5113.8	5108.3	5105.5	5097.2	5097.2	5078.0	5086.3
15°	5105.5	5108.3	5100.0	5089.0	5083.5	5069.8	5064.3	5053.2	5042.3	5028.5	5031.3
17.5°	5086.3	5078.0	5067.0	5056.0	5034.0	5023.0	5012.0	4995.5	4990.0	4973.5	4968.0
20°	5028.5	5023.0	5009.3	4990.0	4976.2	4951.5	4940.5	4924.0	4910.2	4893.7	4885.4
22.5°	4954.2	4948.7	4932.2	4913.0	4890.9	4880.0	4868.9	4838.7	4824.9	4808.4	4805.7
25°	4860.7	4852.4	4836.0	4813.9	4802.9	4772.7	4761.6	4739.6	4734.2	4717.6	4714.9
27.5°	4717.6	4706.7	4687.4	4659.9	4640.6	4621.4	4610.4	4593.8	4588.4	4571.8	4569.1
30°	4503.1	4489.3	4450.8	4439.8	4406.8	4387.5	4387.5	4365.5	4368.3	4357.3	4357.3
32.5°	4164.8	4142.7	4112.5	4090.4	4068.4	4057.5	4057.5	4049.2	4054.7	4054.7	4060.2
35°	3716.3	3686.1	3669.6	3655.8	3655.8	3666.8	3699.9	3708.1	3724.6	3738.4	3749.4
37.5°	3141.4	3138.7	3158.0	3174.5	3215.7	3262.5	3320.2	3369.8	3416.5	3449.5	3482.5
40°	2519.7	2588.5	2643.5	2720.6	2783.8	2874.6	2979.1	3064.4	3144.2	3202.0	3262.5
42.5°	1966.8	2054.8	2170.4	2283.2	2396.0	2519.7	2657.3	2775.6	2880.1	2959.9	3023.1
45°	1532.2	1653.2	1793.6	1936.6	2082.4	2236.4	2379.5	2500.5	2610.5	2693.1	2756.3
47.5°	1235.1	1367.2	1526.7	1683.5	1848.5	2010.8	2170.4	2274.9	2365.7	2431.7	2489.5
50°	1020.5	1160.9	1328.7	1507.4	1672.5	1834.8	1972.3	2074.1	2148.4	2206.2	2241.9
52.5°	852.7	1001.3	1180.1	1358.9	1523.9	1672.5	1796.3	1873.3	1933.8	1975.1	2008.1
55°	704.2	847.3	1015.1	1182.9	1345.2	1485.4	1587.2	1645.0	1691.7	1716.5	1735.7
57.5°	574.9	706.9	861.0	1015.1	1155.3	1270.9	1350.7	1408.4	1430.4	1449.7	1446.9
60°	451.2	574.9	715.2	847.3	968.3	1061.8	1119.6	1152.6	1169.1	1177.4	1171.8
62.5°	354.8	467.7	574.9	690.4	778.5	858.2	913.3	913.3	921.5	924.3	932.6
65°	264.1	349.3	442.9	528.2	599.6	651.9	682.2	690.4	701.5	698.7	693.2
67.5°	195.3	258.6	327.3	390.6	440.1	473.1	495.1	514.4	511.7	506.2	503.4
70°	134.8	176.1	236.6	275.1	310.8	343.9	349.3	352.1	354.8	357.6	352.1
72.5°	93.6	123.8	156.8	189.8	211.8	225.6	239.3	242.0	242.0	242.0	239.3
75°	46.8	63.3	93.6	107.3	126.5	132.1	143.0	143.0	151.3	140.3	137.5
77.5°	41.3	49.5	66.0	77.0	85.3	93.6	96.3	104.5	101.8	96.3	99.0
80°	24.8	30.3	41.3	46.8	57.8	60.5	63.3	66.0	63.3	66.0	66.0
82.5°	19.3	22.0	27.5	27.5	35.7	35.7	38.5	38.5	41.3	41.3	41.3
85°	11.0	19.3	16.5	33.0	22.0	22.0	27.5	33.0	27.5	27.5	33.0
87.5°	11.0	11.0	8.3	11.0	11.0	11.0	13.7	16.5	16.5	19.3	16.5
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: P249590

CATALOG NUMBER: LSR8B100D010 EC8B100940 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	5124.8	5124.8	5124.8	5124.8
2.5°	5133.0	5138.5	5130.3	5127.5
5°	5141.3	5141.3	5135.8	5135.8
7.5°	5141.3	5141.3	5133.0	5127.5
10°	5119.3	5119.3	5111.0	5105.5
12.5°	5078.0	5078.0	5075.2	5067.0
15°	5025.8	5025.8	5014.7	5006.5
17.5°	4954.2	4959.7	4946.0	4946.0
20°	4877.2	4874.5	4863.5	4858.0
22.5°	4797.4	4791.9	4789.2	4772.7
25°	4712.2	4706.7	4698.4	4690.2
27.5°	4566.4	4563.6	4555.3	4544.4
30°	4343.5	4340.8	4329.8	4329.8
32.5°	4054.7	4051.9	4041.0	4043.7
35°	3754.8	3765.9	3760.4	3749.4
37.5°	3504.5	3512.8	3518.3	3512.8
40°	3295.5	3320.2	3323.0	3328.5
42.5°	3072.7	3105.7	3116.7	3122.2
45°	2805.8	2836.1	2860.9	2855.3
47.5°	2533.5	2555.5	2577.5	2561.0
50°	2272.2	2285.9	2294.2	2294.2
52.5°	2024.6	2024.6	2021.9	2024.6
55°	1741.3	1741.3	1730.3	1735.7
57.5°	1444.2	1449.7	1441.4	1427.7
60°	1169.1	1155.3	1149.8	1141.6
62.5°	910.5	910.5	891.3	916.0
65°	682.2	674.0	665.7	662.9
67.5°	495.1	492.4	484.1	481.4
70°	349.3	338.4	335.6	330.1
72.5°	233.8	233.8	228.3	228.3
75°	143.0	129.3	126.5	129.3
77.5°	99.0	96.3	96.3	93.6
80°	66.0	63.3	68.8	60.5
82.5°	41.3	44.0	41.3	44.0
85°	27.5	33.0	30.3	30.3
87.5°	16.5	16.5	16.5	16.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)