

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: P249162

Luminaire Tested: **LD8B200D010 ER8B200940 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249162
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: LD8B200D010 ER8B200940 8LBDW0H
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19518.0 lumens
Efficiency: N/A
Efficacy: 87.4 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

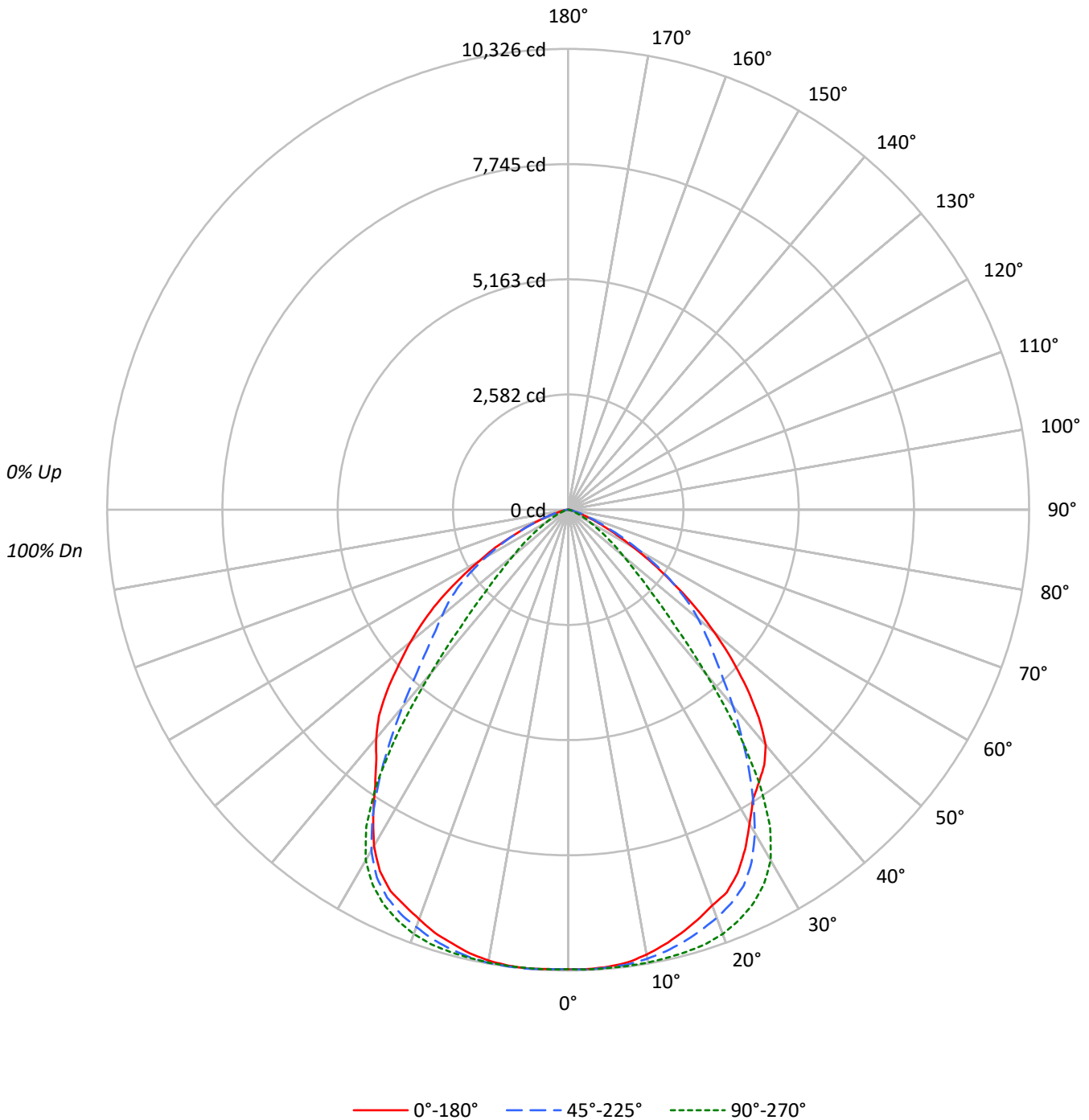
Input Watts (W): 223.3
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	317555	317555	317555
5°	318252	319112	319456
10°	316915	322626	321242
15°	313402	327347	321169
20°	309639	331947	320340
25°	305622	332330	320667
30°	289134	322985	309800
35°	280502	280705	283623
40°	277028	193138	269243
45°	246845	115948	250216
50°	205252	77169	221159
55°	153935	53197	187515
60°	104319	35449	141477
65°	62925	22991	97197
70°	34892	12460	59803
75°	15810	5266	30953
80°	13745	5878	21594
85°	15638	7784	21547



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	982.8	5.0
10°-20°	2854.2	14.6
20°-30°	4332.1	22.2
30°-40°	4550.0	23.3
40°-50°	3411.3	17.5
50°-60°	2188.8	11.2
60°-70°	936.3	4.8
70°-80°	221.2	1.1
80°-90°	41.1	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°	8169.2	41.9
0°-40°	12719.2	65.2
0°-60°	18319.3	93.9
0°-90°	19518.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19518.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	10298	10298	10298	10298	10298	
5°	10281	10298	10309	10326	10320	977
15°	9817	10022	10254	10188	10060	2769
25°	8982	9298	9768	9591	9425	4104
35°	7451	7037	7457	7368	7534	4677
45°	5660	4627	2659	4494	5738	4335
55°	2863	2863	990	2985	3488	2597
65°	862	1017	315	1310	1332	921
75°	133	155	44	265	260	193
85°	44	28	22	44	61	47
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°	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1
2.5°	10303.6	10314.7	10309.2	10309.2	10303.6	10309.2	10309.2	10320.3	10320.3	10309.2	10303.6
5°	10281.4	10292.5	10292.5	10281.4	10281.4	10309.2	10292.5	10303.6	10303.6	10298.1	10298.1
7.5°	10231.8	10231.8	10253.9	10237.3	10237.3	10253.9	10248.3	10259.4	10270.5	10276.0	10276.0
10°	10121.2	10132.3	10137.8	10137.8	10143.3	10159.9	10170.9	10193.1	10204.1	10215.2	10220.7
12.5°	9983.1	9999.6	10005.1	9999.6	10016.2	10038.3	10066.0	10093.6	10110.2	10132.3	10148.9
15°	9817.1	9817.1	9828.2	9844.8	9855.9	9889.1	9916.7	9949.8	9994.0	10021.8	10049.3
17.5°	9634.8	9645.9	9662.4	9662.4	9684.6	9739.8	9756.4	9806.2	9855.9	9883.5	9938.8
20°	9435.8	9446.8	9463.4	9474.5	9502.1	9546.3	9579.5	9623.7	9679.0	9728.8	9784.0
22.5°	9281.0	9258.9	9269.9	9281.0	9308.7	9347.4	9386.1	9441.3	9496.6	9546.3	9601.7
25°	8982.5	8988.0	9004.6	9015.6	9048.9	9082.0	9126.2	9192.5	9242.3	9297.6	9358.3
27.5°	8579.0	8584.5	8612.1	8612.1	8639.7	8695.1	8722.6	8778.0	8844.4	8899.6	8971.5
30°	8120.2	8131.2	8131.2	8153.4	8169.9	8197.6	8225.2	8280.5	8313.6	8363.4	8463.0
32.5°	7700.1	7711.1	7705.5	7700.1	7683.5	7677.9	7672.4	7683.5	7694.6	7711.1	7749.8
35°	7451.4	7423.7	7401.6	7362.9	7318.7	7263.4	7213.6	7147.3	7086.5	7036.7	6981.5
37.5°	7213.6	7208.1	7174.9	7119.6	7031.2	6931.8	6815.7	6671.9	6528.2	6373.4	6224.2
40°	6882.0	6865.3	6837.8	6760.4	6660.8	6539.2	6384.5	6207.6	5975.4	5737.7	5494.5
42.5°	6318.1	6323.7	6290.5	6229.7	6135.8	6019.6	5859.3	5665.9	5417.2	5135.2	4820.2
45°	5660.4	5660.4	5649.3	5599.5	5533.2	5439.2	5317.6	5157.4	4914.2	4626.6	4289.4
47.5°	4974.9	4980.4	4963.8	4952.9	4925.1	4864.4	4775.9	4654.3	4483.0	4206.5	3869.3
50°	4278.5	4278.5	4306.1	4300.5	4300.5	4278.5	4239.8	4167.8	4018.7	3797.5	3482.5
52.5°	3581.9	3593.0	3609.6	3631.7	3659.3	3703.5	3659.3	3626.2	3532.2	3360.8	3090.0
55°	2863.3	2874.4	2902.0	2940.7	2974.0	3018.2	3029.1	3029.1	2979.4	2863.3	2658.8
57.5°	2249.8	2233.2	2255.4	2288.5	2332.7	2376.9	2410.1	2448.8	2443.2	2365.9	2200.0
60°	1691.5	1697.0	1713.5	1746.8	1779.9	1818.6	1862.8	1896.0	1912.6	1873.9	1768.8
62.5°	1232.7	1232.7	1254.8	1287.9	1304.5	1359.8	1387.4	1404.1	1420.6	1415.0	1348.8
65°	862.4	873.3	884.4	901.1	917.6	950.7	967.3	1000.5	1011.6	1017.1	967.3
67.5°	608.1	591.5	602.6	613.5	630.1	652.3	685.5	685.5	702.0	702.0	668.8
70°	387.0	387.0	392.5	409.0	420.1	425.6	436.7	447.7	464.3	458.8	458.8
72.5°	259.8	254.3	259.8	265.4	270.9	287.4	287.4	293.0	304.0	309.6	287.4
75°	132.7	138.2	149.2	143.8	160.3	149.2	154.7	171.4	165.8	154.7	154.7
77.5°	110.5	110.5	110.5	105.1	116.0	116.0	110.5	121.6	116.0	116.0	110.5
80°	77.4	82.9	77.4	71.8	77.4	71.8	71.8	71.8	71.8	71.8	66.3
82.5°	60.9	49.8	55.3	49.8	55.3	55.3	49.8	44.2	44.2	49.8	44.2
85°	44.2	33.1	38.7	38.7	33.1	33.1	33.1	33.1	33.1	27.6	27.6
87.5°	27.6	16.6	16.6	16.6	22.0	22.0	22.0	16.6	22.0	22.0	11.1
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°	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1
2.5°	10314.7	10309.2	10320.3	10314.7	10314.7	10309.2	10314.7	10309.2	10320.3	10298.1	10303.6
5°	10314.7	10303.6	10309.2	10314.7	10320.3	10309.2	10309.2	10309.2	10320.3	10309.2	10314.7
7.5°	10292.5	10287.0	10303.6	10314.7	10309.2	10303.6	10314.7	10309.2	10320.3	10314.7	10325.7
10°	10248.3	10253.9	10264.9	10281.4	10287.0	10292.5	10303.6	10303.6	10320.3	10298.1	10309.2
12.5°	10182.0	10204.1	10231.8	10242.8	10264.9	10264.9	10276.0	10281.4	10292.5	10287.0	10303.6
15°	10099.1	10126.7	10159.9	10187.6	10215.2	10231.8	10248.3	10253.9	10270.5	10253.9	10259.4
17.5°	9999.6	10032.7	10082.5	10115.6	10159.9	10176.5	10198.5	10209.6	10226.3	10215.2	10220.7
20°	9861.3	9900.2	9955.3	10005.1	10032.7	10071.4	10099.1	10115.6	10126.7	10115.6	10121.2
22.5°	9667.9	9723.3	9795.1	9833.8	9889.1	9922.2	9927.8	9966.4	9994.0	9966.4	9977.5
25°	9441.3	9496.6	9551.9	9634.8	9684.6	9723.3	9761.9	9767.5	9795.1	9789.5	9784.0
27.5°	9065.4	9137.3	9231.2	9297.6	9363.9	9424.7	9469.0	9479.9	9507.7	9496.6	9502.1
30°	8551.3	8628.8	8717.2	8822.2	8916.2	8976.9	9032.2	9070.9	9098.5	9082.0	9076.5
32.5°	7821.7	7899.1	7993.1	8098.0	8208.7	8297.0	8363.4	8413.2	8446.3	8435.2	8407.6
35°	6987.1	7009.1	7070.0	7152.9	7246.8	7340.8	7401.6	7456.8	7495.5	7506.6	7506.6
37.5°	6130.2	6058.4	6014.2	6014.2	6069.4	6108.1	6163.4	6196.5	6257.4	6279.4	6296.1
40°	5301.0	5135.2	4980.4	4864.4	4787.0	4781.5	4781.5	4798.0	4853.3	4925.1	4991.5
42.5°	4560.3	4295.0	4057.3	3841.7	3687.0	3598.6	3559.9	3565.4	3609.6	3675.9	3786.4
45°	3968.9	3637.2	3338.7	3078.9	2868.9	2730.6	2664.4	2658.8	2692.0	2769.3	2891.0
47.5°	3510.1	3156.3	2819.1	2520.6	2294.0	2144.7	2067.4	2045.3	2067.4	2139.2	2282.9
50°	3128.7	2763.9	2415.6	2106.0	1862.8	1708.1	1636.2	1608.6	1636.2	1697.0	1840.7
52.5°	2774.9	2399.0	2072.9	1774.4	1514.6	1381.9	1304.5	1287.9	1304.5	1376.3	1492.5
55°	2365.9	2045.3	1724.6	1426.1	1199.6	1066.9	1006.0	989.5	1006.0	1072.4	1194.0
57.5°	1962.4	1685.9	1404.1	1133.2	939.7	823.6	768.4	746.2	784.9	829.1	972.9
60°	1586.4	1365.4	1127.6	890.0	729.7	624.6	580.4	574.8	585.9	641.2	740.7
62.5°	1243.8	1061.3	873.3	679.9	547.2	503.0	447.7	442.3	453.2	486.4	563.9
65°	895.5	779.5	635.7	497.5	392.5	331.6	309.6	315.1	326.1	348.3	420.1
67.5°	624.6	541.7	442.3	348.3	270.9	243.2	221.1	215.6	221.1	259.8	298.5
70°	420.1	370.3	298.5	265.4	188.0	149.2	154.7	138.2	160.3	160.3	193.4
72.5°	276.3	243.2	199.0	154.7	132.7	105.1	105.1	99.5	110.5	116.0	143.8
75°	143.8	110.5	110.5	77.4	55.3	27.6	49.8	44.2	38.7	44.2	55.3
77.5°	99.5	82.9	77.4	60.9	55.3	44.2	44.2	44.2	44.2	49.8	55.3
80°	60.9	60.9	44.2	38.7	33.1	27.6	33.1	33.1	33.1	33.1	38.7
82.5°	38.7	33.1	33.1	27.6	27.6	22.0	22.0	22.0	22.0	22.0	33.1
85°	33.1	22.0	22.0	16.6	22.0	38.7	16.6	22.0	22.0	22.0	16.6
87.5°	11.1	16.6	16.6	16.6	11.1	5.5	11.1	16.6	16.6	27.6	22.0
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°	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1	10298.1
2.5°	10314.7	10320.3	10320.3	10314.7	10314.7	10303.6	10325.7	10309.2	10314.7	10336.8	10320.3
5°	10325.7	10331.2	10331.2	10325.7	10325.7	10325.7	10331.2	10331.2	10325.7	10320.3	10331.2
7.5°	10347.9	10342.3	10342.3	10331.2	10331.2	10320.3	10331.2	10314.7	10325.7	10314.7	10331.2
10°	10320.3	10325.7	10320.3	10314.7	10314.7	10309.2	10309.2	10292.5	10298.1	10281.4	10292.5
12.5°	10303.6	10298.1	10298.1	10287.0	10276.0	10264.9	10259.4	10242.8	10242.8	10204.1	10220.7
15°	10259.4	10264.9	10248.3	10226.3	10215.2	10187.6	10176.5	10154.3	10132.3	10104.7	10110.2
17.5°	10220.7	10204.1	10182.0	10159.9	10115.6	10093.6	10071.4	10038.3	10027.2	9994.0	9983.1
20°	10104.7	10093.6	10066.0	10027.2	9999.6	9949.8	9927.8	9894.6	9866.9	9833.8	9817.1
22.5°	9955.3	9944.3	9911.1	9872.4	9828.2	9806.2	9784.0	9723.3	9695.5	9662.4	9656.8
25°	9767.5	9750.8	9717.7	9673.5	9651.3	9590.6	9568.4	9524.2	9513.2	9479.9	9474.5
27.5°	9479.9	9457.9	9419.2	9363.9	9325.2	9286.5	9264.5	9231.2	9220.2	9187.0	9181.6
30°	9048.9	9021.2	8943.8	8921.7	8855.3	8816.6	8816.6	8772.4	8778.0	8755.9	8755.9
32.5°	8369.0	8324.7	8263.9	8219.6	8175.4	8153.4	8153.4	8136.7	8147.8	8147.8	8158.9
35°	7467.9	7407.2	7373.9	7346.3	7346.3	7368.4	7434.8	7451.4	7484.5	7512.1	7534.3
37.5°	6312.6	6307.1	6345.8	6379.0	6461.9	6555.9	6671.9	6771.5	6865.3	6931.8	6998.0
40°	5063.4	5201.6	5312.1	5467.0	5594.0	5776.4	5986.5	6157.8	6318.1	6434.3	6555.9
42.5°	3952.3	4129.2	4361.4	4587.9	4814.6	5063.4	5339.8	5577.5	5787.5	5947.8	6074.9
45°	3078.9	3322.1	3604.1	3891.5	4184.5	4494.1	4781.5	5024.7	5245.8	5411.6	5538.8
47.5°	2481.9	2747.3	3067.8	3383.0	3714.6	4040.7	4361.4	4571.4	4753.8	4886.4	5002.6
50°	2050.7	2332.7	2669.9	3029.1	3360.8	3687.0	3963.3	4167.8	4317.2	4433.2	4505.0
52.5°	1713.5	2012.0	2371.4	2730.6	3062.3	3360.8	3609.6	3764.4	3886.0	3968.9	4035.2
55°	1415.0	1702.6	2039.8	2376.9	2703.0	2984.9	3189.4	3305.6	3399.5	3449.2	3487.9
57.5°	1155.3	1420.6	1730.2	2039.8	2321.6	2553.9	2714.1	2830.2	2874.4	2913.1	2907.5
60°	906.6	1155.3	1437.2	1702.6	1945.8	2133.6	2249.8	2316.1	2349.2	2365.9	2354.8
62.5°	713.1	939.7	1155.3	1387.4	1564.3	1724.6	1835.3	1835.3	1851.8	1857.3	1873.9
65°	530.6	702.0	890.0	1061.3	1205.0	1310.1	1370.9	1387.4	1409.6	1404.1	1393.0
67.5°	392.5	519.6	657.7	784.9	884.4	950.7	994.9	1033.7	1028.2	1017.1	1011.6
70°	270.9	353.8	475.4	552.8	624.6	691.0	702.0	707.5	713.1	718.6	707.5
72.5°	188.0	248.7	315.1	381.4	425.6	453.2	481.0	486.4	486.4	486.4	481.0
75°	94.0	127.1	188.0	215.6	254.3	265.4	287.4	287.4	304.0	281.9	276.3
77.5°	82.9	99.5	132.7	154.7	171.4	188.0	193.4	210.0	204.5	193.4	199.0
80°	49.8	60.9	82.9	94.0	116.0	121.6	127.1	132.7	127.1	132.7	132.7
82.5°	38.7	44.2	55.3	55.3	71.8	71.8	77.4	77.4	82.9	82.9	82.9
85°	22.0	38.7	33.1	66.3	44.2	44.2	55.3	66.3	55.3	55.3	66.3
87.5°	22.0	22.0	16.6	22.0	22.0	22.0	27.6	33.1	33.1	38.7	33.1
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: P249162

CATALOG NUMBER: LD8B200D010 ER8B200940 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	10298.1	10298.1	10298.1	10298.1
2.5°	10314.7	10325.7	10309.2	10303.6
5°	10331.2	10331.2	10320.3	10320.3
7.5°	10331.2	10331.2	10314.7	10303.6
10°	10287.0	10287.0	10270.5	10259.4
12.5°	10204.1	10204.1	10198.5	10182.0
15°	10099.1	10099.1	10076.9	10060.4
17.5°	9955.3	9966.4	9938.8	9938.8
20°	9800.6	9795.1	9773.0	9761.9
22.5°	9640.3	9629.3	9623.7	9590.6
25°	9469.0	9457.9	9441.3	9424.7
27.5°	9176.0	9170.5	9153.8	9131.8
30°	8728.2	8722.6	8700.6	8700.6
32.5°	8147.8	8142.3	8120.2	8125.8
35°	7545.3	7567.4	7556.4	7534.3
37.5°	7042.3	7058.9	7070.0	7058.9
40°	6622.2	6671.9	6677.5	6688.6
42.5°	6174.5	6240.7	6262.9	6273.9
45°	5638.2	5699.0	5748.8	5737.7
47.5°	5091.0	5135.2	5179.4	5146.3
50°	4565.9	4593.5	4610.1	4610.1
52.5°	4068.4	4068.4	4062.9	4068.4
55°	3499.0	3499.0	3477.0	3487.9
57.5°	2902.0	2913.1	2896.5	2868.9
60°	2349.2	2321.6	2310.5	2294.0
62.5°	1829.7	1829.7	1791.0	1840.7
65°	1370.9	1354.3	1337.7	1332.1
67.5°	994.9	989.5	972.9	967.3
70°	702.0	679.9	674.4	663.3
72.5°	469.9	469.9	458.8	458.8
75°	287.4	259.8	254.3	259.8
77.5°	199.0	193.4	193.4	188.0
80°	132.7	127.1	138.2	121.6
82.5°	82.9	88.5	82.9	88.5
85°	55.3	66.3	60.9	60.9
87.5°	33.1	33.1	33.1	33.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)