

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: P249161

Luminaire Tested: **LD8B175D010 ER8B175940 8LBDW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249161
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: LD8B175D010 ER8B175940 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: 16558.0 lumens
Efficiency: N/A
Efficacy: 93.4 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

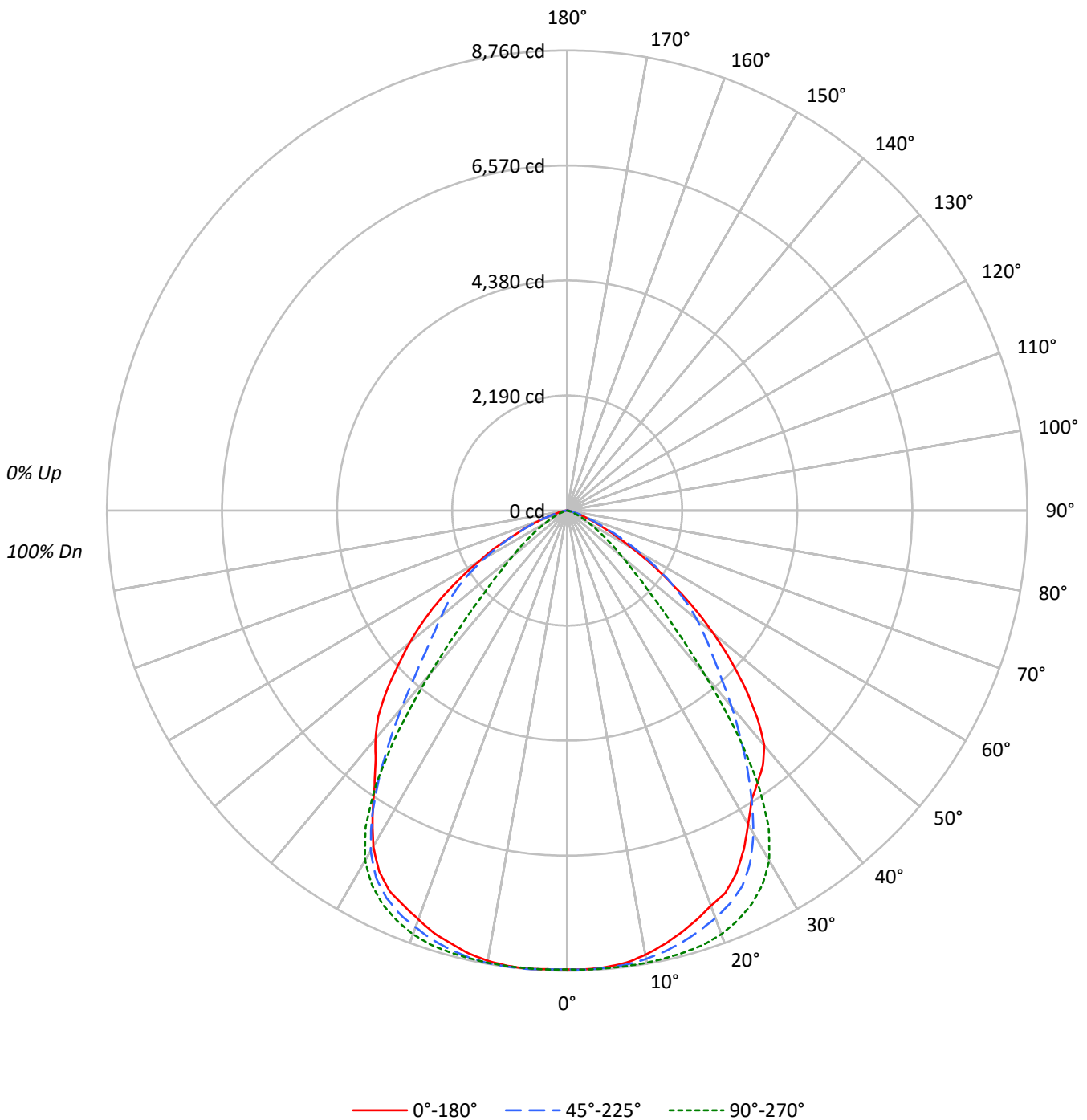
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	269395	269395	269395
5°	269988	270715	271006
10°	268851	273698	272524
15°	265873	277701	272463
20°	262680	281605	271760
25°	259271	281931	272036
30°	245287	274004	262817
35°	237964	238133	240610
40°	235015	163850	228409
45°	209407	98365	212272
50°	174122	65464	187622
55°	130592	45127	159080
60°	88500	30078	120021
65°	53381	19504	82458
70°	29599	10576	50733
75°	13415	4468	26259
80°	11649	4990	18326
85°	13268	6616	18256



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	833.8	5.0
10°-20°	2421.4	14.6
20°-30°	3675.2	22.2
30°-40°	3860.0	23.3
40°-50°	2894.0	17.5
50°-60°	1856.8	11.2
60°-70°	794.3	4.8
70°-80°	187.7	1.1
80°-90°	34.9	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°	6930.3	41.9
0°-40°	10790.3	65.2
0°-60°	15541.1	93.9
0°-90°	16558.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16558.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	8736	8736	8736	8736	8736	
5°	8722	8736	8746	8760	8755	829
15°	8328	8502	8699	8643	8535	2349
25°	7620	7888	8286	8136	7995	3481
35°	6321	5970	6326	6251	6392	3967
45°	4802	3925	2256	3812	4868	3677
55°	2429	2429	839	2532	2959	2203
65°	732	863	267	1111	1130	781
75°	113	131	38	225	220	164
85°	38	23	19	38	52	40
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°	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3
2.5°	8741.0	8750.4	8745.7	8745.7	8741.0	8745.7	8745.7	8755.1	8755.1	8745.7	8741.0
5°	8722.2	8731.6	8731.6	8722.2	8722.2	8745.7	8731.6	8741.0	8741.0	8736.3	8736.3
7.5°	8680.1	8680.1	8698.8	8684.8	8684.8	8698.8	8694.1	8703.5	8712.9	8717.6	8717.6
10°	8586.2	8595.7	8600.4	8600.4	8605.1	8619.1	8628.5	8647.3	8656.6	8666.0	8670.7
12.5°	8469.1	8483.1	8487.8	8483.1	8497.2	8515.9	8539.4	8562.8	8576.9	8595.7	8609.8
15°	8328.3	8328.3	8337.7	8351.8	8361.2	8389.3	8412.8	8440.9	8478.4	8501.9	8525.3
17.5°	8173.6	8183.0	8197.0	8197.0	8215.9	8262.7	8276.8	8319.0	8361.2	8384.6	8431.6
20°	8004.8	8014.1	8028.3	8037.7	8061.1	8098.6	8126.7	8164.2	8211.2	8253.4	8300.2
22.5°	7873.5	7854.8	7864.1	7873.5	7897.0	7929.8	7962.6	8009.4	8056.4	8098.6	8145.5
25°	7620.2	7624.9	7639.0	7648.3	7676.6	7704.7	7742.2	7798.4	7840.7	7887.6	7939.1
27.5°	7278.0	7282.7	7306.1	7306.1	7329.5	7376.4	7399.8	7446.7	7503.1	7549.9	7610.9
30°	6888.8	6898.0	6898.0	6916.9	6930.9	6954.4	6977.8	7024.7	7052.8	7095.1	7179.5
32.5°	6532.4	6541.7	6537.0	6532.4	6518.3	6513.5	6508.8	6518.3	6527.7	6541.7	6574.5
35°	6321.4	6297.8	6279.1	6246.3	6208.8	6161.9	6119.6	6063.4	6011.8	5969.6	5922.7
37.5°	6119.6	6114.9	6086.8	6039.9	5964.9	5880.5	5782.1	5660.1	5538.1	5406.9	5280.3
40°	5838.3	5824.2	5800.8	5735.1	5650.7	5547.5	5416.3	5266.2	5069.2	4867.6	4661.3
42.5°	5359.9	5364.6	5336.5	5284.9	5205.3	5106.7	4970.7	4806.6	4595.6	4356.4	4089.2
45°	4801.9	4801.9	4792.5	4750.3	4694.1	4614.3	4511.2	4375.2	4168.9	3925.0	3638.9
47.5°	4220.4	4225.1	4211.0	4201.7	4178.2	4126.7	4051.6	3948.5	3803.1	3568.6	3282.5
50°	3629.6	3629.6	3653.0	3648.3	3648.3	3629.6	3596.8	3535.8	3409.2	3221.6	2954.4
52.5°	3038.7	3048.1	3062.2	3080.9	3104.3	3141.9	3104.3	3076.2	2996.5	2851.1	2621.4
55°	2429.1	2438.5	2461.9	2494.7	2522.9	2560.5	2569.8	2569.8	2527.5	2429.1	2255.6
57.5°	1908.6	1894.5	1913.3	1941.4	1979.0	2016.5	2044.6	2077.4	2072.7	2007.1	1866.4
60°	1435.0	1439.7	1453.7	1481.9	1510.0	1542.8	1580.3	1608.5	1622.6	1589.7	1500.6
62.5°	1045.8	1045.8	1064.5	1092.6	1106.7	1153.6	1177.0	1191.1	1205.1	1200.4	1144.2
65°	731.6	740.9	750.3	764.4	778.4	806.5	820.6	848.7	858.2	862.9	820.6
67.5°	515.9	501.8	511.2	520.5	534.6	553.4	581.5	581.5	595.5	595.5	567.4
70°	328.3	328.3	333.0	347.0	356.4	361.1	370.5	379.8	393.9	389.2	389.2
72.5°	220.4	215.7	220.4	225.1	229.8	243.8	243.8	248.5	257.9	262.6	243.8
75°	112.6	117.3	126.6	122.0	136.0	126.6	131.3	145.4	140.7	131.3	131.3
77.5°	93.7	93.7	93.7	89.2	98.4	98.4	93.7	103.2	98.4	98.4	93.7
80°	65.6	70.3	65.6	60.9	65.6	60.9	60.9	60.9	60.9	60.9	56.2
82.5°	51.6	42.2	46.9	42.2	46.9	46.9	42.2	37.5	37.5	42.2	37.5
85°	37.5	28.1	32.8	32.8	28.1	28.1	28.1	28.1	28.1	23.4	23.4
87.5°	23.4	14.1	14.1	14.1	18.7	18.7	18.7	14.1	18.7	18.7	9.4
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°	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3
2.5°	8750.4	8745.7	8755.1	8750.4	8750.4	8745.7	8750.4	8745.7	8755.1	8736.3	8741.0
5°	8750.4	8741.0	8745.7	8750.4	8755.1	8745.7	8745.7	8745.7	8755.1	8745.7	8750.4
7.5°	8731.6	8726.9	8741.0	8750.4	8745.7	8741.0	8750.4	8745.7	8755.1	8750.4	8759.7
10°	8694.1	8698.8	8708.2	8722.2	8726.9	8731.6	8741.0	8741.0	8755.1	8736.3	8745.7
12.5°	8637.9	8656.6	8680.1	8689.4	8708.2	8708.2	8717.6	8722.2	8731.6	8726.9	8741.0
15°	8567.5	8590.9	8619.1	8642.6	8666.0	8680.1	8694.1	8698.8	8712.9	8698.8	8703.5
17.5°	8483.1	8511.2	8553.4	8581.5	8619.1	8633.2	8651.9	8661.3	8675.4	8666.0	8670.7
20°	8365.8	8398.8	8445.6	8487.8	8511.2	8544.0	8567.5	8581.5	8590.9	8581.5	8586.2
22.5°	8201.7	8248.7	8309.6	8342.4	8389.3	8417.5	8422.2	8455.0	8478.4	8455.0	8464.4
25°	8009.4	8056.4	8103.3	8173.6	8215.9	8248.7	8281.5	8286.2	8309.6	8304.9	8300.2
27.5°	7690.6	7751.6	7831.2	7887.6	7943.8	7995.4	8033.0	8042.3	8065.8	8056.4	8061.1
30°	7254.4	7320.2	7395.2	7484.3	7564.0	7615.5	7662.5	7695.3	7718.7	7704.7	7700.0
32.5°	6635.5	6701.2	6780.9	6869.9	6963.8	7038.7	7095.1	7137.3	7165.4	7156.0	7132.6
35°	5927.4	5946.1	5997.8	6068.1	6147.8	6227.5	6279.1	6325.9	6358.8	6368.2	6368.2
37.5°	5200.6	5139.6	5102.1	5102.1	5148.9	5181.7	5228.7	5256.8	5308.4	5327.1	5341.2
40°	4497.1	4356.4	4225.1	4126.7	4061.1	4056.4	4056.4	4070.4	4117.3	4178.2	4234.5
42.5°	3868.7	3643.6	3442.0	3259.1	3127.9	3052.8	3020.0	3024.7	3062.2	3118.5	3212.2
45°	3367.0	3085.6	2832.4	2612.0	2433.8	2316.5	2260.3	2255.6	2283.7	2349.3	2452.6
47.5°	2977.8	2677.6	2391.6	2138.3	1946.1	1819.5	1753.8	1735.1	1753.8	1814.8	1936.7
50°	2654.2	2344.7	2049.3	1786.6	1580.3	1449.1	1388.0	1364.6	1388.0	1439.7	1561.5
52.5°	2354.0	2035.2	1758.5	1505.3	1284.9	1172.3	1106.7	1092.6	1106.7	1167.6	1266.2
55°	2007.1	1735.1	1463.1	1209.8	1017.6	905.1	853.5	839.4	853.5	909.8	1012.9
57.5°	1664.8	1430.3	1191.1	961.3	797.2	698.7	651.8	633.0	665.8	703.4	825.3
60°	1345.8	1158.3	956.6	755.0	619.0	529.9	492.4	487.7	497.1	544.0	628.3
62.5°	1055.2	900.4	740.9	576.8	464.2	426.7	379.8	375.2	384.5	412.6	478.4
65°	759.7	661.3	539.3	422.0	333.0	281.3	262.6	267.3	276.6	295.5	356.4
67.5°	529.9	459.5	375.2	295.5	229.8	206.3	187.6	182.9	187.6	220.4	253.2
70°	356.4	314.2	253.2	225.1	159.5	126.6	131.3	117.3	136.0	136.0	164.1
72.5°	234.4	206.3	168.8	131.3	112.6	89.2	89.2	84.4	93.7	98.4	122.0
75°	122.0	93.7	93.7	65.6	46.9	23.4	42.2	37.5	32.8	37.5	46.9
77.5°	84.4	70.3	65.6	51.6	46.9	37.5	37.5	37.5	37.5	42.2	46.9
80°	51.6	51.6	37.5	32.8	28.1	23.4	28.1	28.1	28.1	28.1	32.8
82.5°	32.8	28.1	28.1	23.4	23.4	18.7	18.7	18.7	18.7	18.7	28.1
85°	28.1	18.7	18.7	14.1	18.7	32.8	14.1	18.7	18.7	18.7	14.1
87.5°	9.4	14.1	14.1	14.1	9.4	4.7	9.4	14.1	14.1	23.4	18.7
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°	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3	8736.3
2.5°	8750.4	8755.1	8755.1	8750.4	8750.4	8741.0	8759.7	8745.7	8750.4	8769.1	8755.1
5°	8759.7	8764.4	8764.4	8759.7	8759.7	8759.7	8764.4	8764.4	8759.7	8755.1	8764.4
7.5°	8778.6	8773.8	8773.8	8764.4	8764.4	8755.1	8764.4	8750.4	8759.7	8750.4	8764.4
10°	8755.1	8759.7	8755.1	8750.4	8750.4	8745.7	8745.7	8731.6	8736.3	8722.2	8731.6
12.5°	8741.0	8736.3	8736.3	8726.9	8717.6	8708.2	8703.5	8689.4	8689.4	8656.6	8670.7
15°	8703.5	8708.2	8694.1	8675.4	8666.0	8642.6	8633.2	8614.4	8595.7	8572.2	8576.9
17.5°	8670.7	8656.6	8637.9	8619.1	8581.5	8562.8	8544.0	8515.9	8506.5	8478.4	8469.1
20°	8572.2	8562.8	8539.4	8506.5	8483.1	8440.9	8422.2	8394.0	8370.5	8342.4	8328.3
22.5°	8445.6	8436.2	8408.1	8375.2	8337.7	8319.0	8300.2	8248.7	8225.2	8197.0	8192.3
25°	8286.2	8272.1	8244.0	8206.4	8187.6	8136.1	8117.3	8079.8	8070.5	8042.3	8037.7
27.5°	8042.3	8023.6	7990.7	7943.8	7911.0	7878.2	7859.5	7831.2	7821.9	7793.7	7789.1
30°	7676.6	7653.1	7587.4	7568.7	7512.4	7479.6	7479.6	7442.0	7446.7	7428.0	7428.0
32.5°	7099.8	7062.2	7010.6	6973.1	6935.6	6916.9	6916.9	6902.8	6912.2	6912.2	6921.6
35°	6335.4	6283.8	6255.6	6232.2	6232.2	6250.9	6307.2	6321.4	6349.5	6372.9	6391.7
37.5°	5355.2	5350.6	5383.5	5411.6	5481.9	5561.6	5660.1	5744.5	5824.2	5880.5	5936.7
40°	4295.5	4412.7	4506.5	4637.9	4745.6	4900.4	5078.6	5224.0	5359.9	5458.5	5561.6
42.5°	3352.9	3503.0	3700.0	3892.2	4084.5	4295.5	4530.0	4731.6	4909.8	5045.8	5153.6
45°	2612.0	2818.3	3057.5	3301.4	3549.9	3812.5	4056.4	4262.7	4450.3	4590.9	4698.8
47.5°	2105.5	2330.6	2602.6	2869.9	3151.3	3427.9	3700.0	3878.2	4032.8	4145.4	4244.0
50°	1739.7	1979.0	2265.0	2569.8	2851.1	3127.9	3362.3	3535.8	3662.4	3760.9	3821.8
52.5°	1453.7	1706.9	2011.8	2316.5	2597.9	2851.1	3062.2	3193.5	3296.6	3367.0	3423.2
55°	1200.4	1444.4	1730.4	2016.5	2293.1	2532.2	2705.7	2804.3	2883.9	2926.1	2959.0
57.5°	980.1	1205.1	1467.8	1730.4	1969.5	2166.6	2302.5	2401.0	2438.5	2471.3	2466.6
60°	769.1	980.1	1219.2	1444.4	1650.7	1810.1	1908.6	1964.8	1993.0	2007.1	1997.7
62.5°	604.9	797.2	980.1	1177.0	1327.1	1463.1	1556.9	1556.9	1570.9	1575.6	1589.7
65°	450.1	595.5	755.0	900.4	1022.2	1111.4	1163.0	1177.0	1195.8	1191.1	1181.7
67.5°	333.0	440.8	558.0	665.8	750.3	806.5	844.0	877.0	872.3	862.9	858.2
70°	229.8	300.2	403.3	468.9	529.9	586.2	595.5	600.2	604.9	609.6	600.2
72.5°	159.5	211.0	267.3	323.6	361.1	384.5	408.0	412.6	412.6	412.6	408.0
75°	79.7	107.9	159.5	182.9	215.7	225.1	243.8	243.8	257.9	239.1	234.4
77.5°	70.3	84.4	112.6	131.3	145.4	159.5	164.1	178.2	173.5	164.1	168.8
80°	42.2	51.6	70.3	79.7	98.4	103.2	107.9	112.6	107.9	112.6	112.6
82.5°	32.8	37.5	46.9	46.9	60.9	60.9	65.6	65.6	70.3	70.3	70.3
85°	18.7	32.8	28.1	56.2	37.5	37.5	46.9	56.2	46.9	46.9	56.2
87.5°	18.7	18.7	14.1	18.7	18.7	18.7	23.4	28.1	28.1	32.8	28.1
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: P249161

CATALOG NUMBER: LD8B175D010 ER8B175940 8LBDW0H

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	8736.3	8736.3	8736.3	8736.3
2.5°	8750.4	8759.7	8745.7	8741.0
5°	8764.4	8764.4	8755.1	8755.1
7.5°	8764.4	8764.4	8750.4	8741.0
10°	8726.9	8726.9	8712.9	8703.5
12.5°	8656.6	8656.6	8651.9	8637.9
15°	8567.5	8567.5	8548.7	8534.7
17.5°	8445.6	8455.0	8431.6	8431.6
20°	8314.3	8309.6	8290.9	8281.5
22.5°	8178.3	8168.9	8164.2	8136.1
25°	8033.0	8023.6	8009.4	7995.4
27.5°	7784.4	7779.7	7765.6	7746.9
30°	7404.5	7399.8	7381.1	7381.1
32.5°	6912.2	6907.5	6888.8	6893.5
35°	6401.0	6419.8	6410.4	6391.7
37.5°	5974.3	5988.4	5997.8	5988.4
40°	5617.9	5660.1	5664.8	5674.2
42.5°	5238.1	5294.3	5313.1	5322.4
45°	4783.1	4834.8	4877.0	4867.6
47.5°	4318.9	4356.4	4393.9	4365.8
50°	3873.5	3896.9	3911.0	3911.0
52.5°	3451.4	3451.4	3446.7	3451.4
55°	2968.4	2968.4	2949.7	2959.0
57.5°	2461.9	2471.3	2457.2	2433.8
60°	1993.0	1969.5	1960.1	1946.1
62.5°	1552.2	1552.2	1519.4	1561.5
65°	1163.0	1148.9	1134.8	1130.1
67.5°	844.0	839.4	825.3	820.6
70°	595.5	576.8	572.1	562.7
72.5°	398.6	398.6	389.2	389.2
75°	243.8	220.4	215.7	220.4
77.5°	168.8	164.1	164.1	159.5
80°	112.6	107.9	117.3	103.2
82.5°	70.3	75.0	70.3	75.0
85°	46.9	56.2	51.6	51.6
87.5°	28.1	28.1	28.1	28.1
90°	0.0	0.0	0.0	0.0

(END OF REPORT)