

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: P249530

Luminaire Tested: **LD8B175D010 ER8B175830 8LBDW0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249530
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 ER8B175830 8LBDW0MW
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 3000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17676.0 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

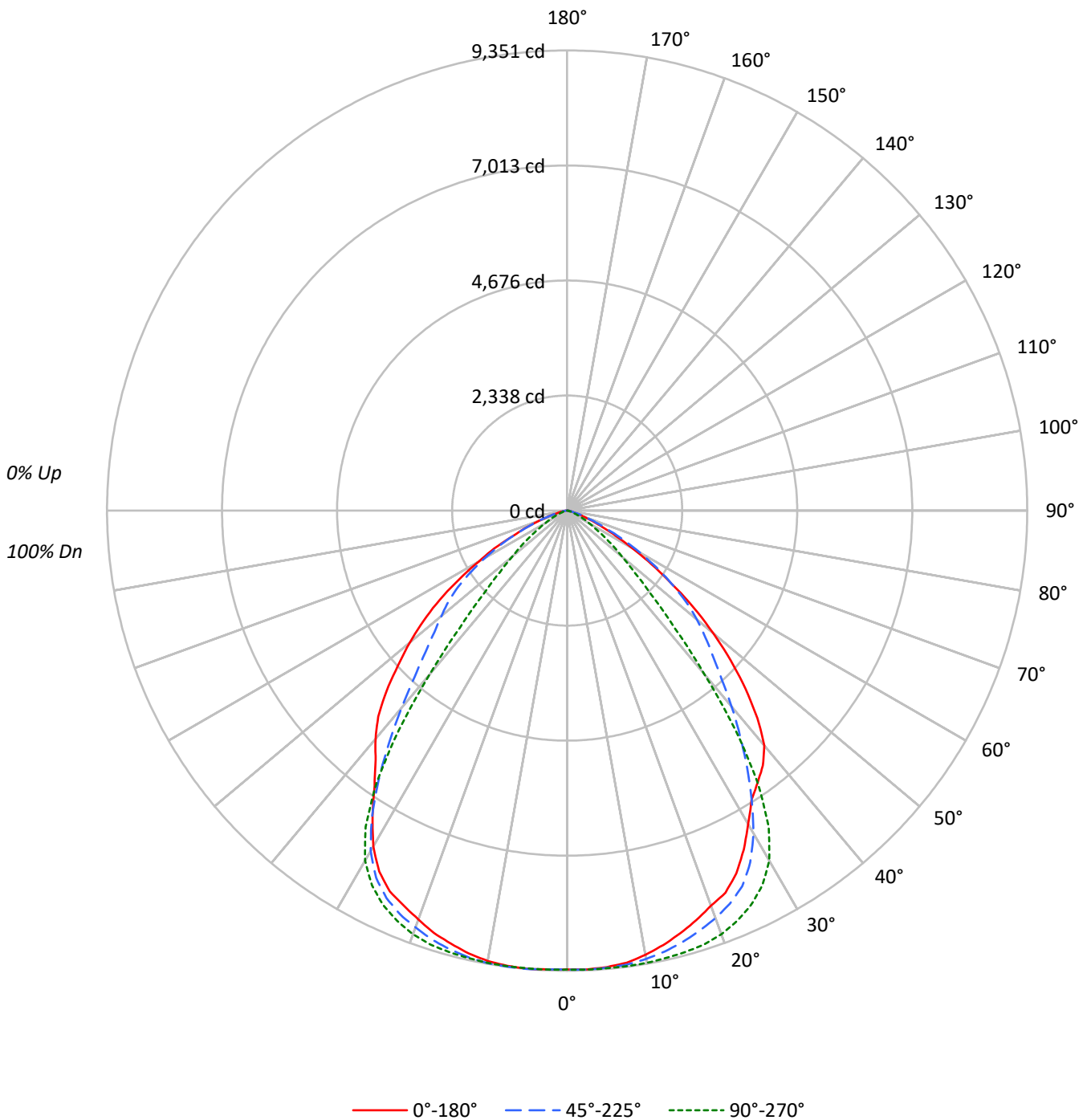
Input Watts (W): 177.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	287586	287586	287586
5°	288217	288994	289306
10°	287006	292179	290926
15°	283824	296454	290860
20°	280417	300621	290110
25°	276779	300967	290406
30°	261848	292506	280563
35°	254031	254215	256858
40°	250883	174911	243830
45°	223549	105006	226602
50°	185880	69887	200286
55°	139409	48176	169822
60°	94470	32107	128125
65°	56986	20824	88025
70°	31592	11288	54159
75°	14321	4778	28034
80°	12448	5327	19551
85°	14188	7076	19495



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	890.1	5.0
10°-20°	2584.8	14.6
20°-30°	3923.3	22.2
30°-40°	4120.6	23.3
40°-50°	3089.4	17.5
50°-60°	1982.2	11.2
60°-70°	848.0	4.8
70°-80°	200.3	1.1
80°-90°	37.3	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°	7398.2	41.9
0°-40°	11518.8	65.2
0°-60°	16590.4	93.9
0°-90°	17676.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17676.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	9326	9326	9326	9326	9326	
5°	9311	9326	9336	9351	9346	884
15°	8891	9076	9286	9226	9111	2508
25°	8135	8420	8846	8686	8535	3716
35°	6748	6373	6753	6673	6823	4235
45°	5126	4190	2408	4070	5196	3926
55°	2593	2593	896	2703	3159	2352
65°	781	921	285	1186	1206	834
75°	120	140	40	240	235	175
85°	40	25	20	40	55	42
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°	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2
2.5°	9331.2	9341.3	9336.2	9336.2	9331.2	9336.2	9336.2	9346.3	9346.3	9336.2	9331.2
5°	9311.1	9321.2	9321.2	9311.1	9311.1	9336.2	9321.2	9331.2	9331.2	9326.2	9326.2
7.5°	9266.2	9266.2	9286.2	9271.2	9271.2	9286.2	9281.1	9291.2	9301.2	9306.2	9306.2
10°	9166.0	9176.0	9181.1	9181.1	9186.1	9201.0	9211.1	9231.2	9241.1	9251.1	9256.1
12.5°	9040.9	9055.9	9060.9	9055.9	9070.9	9090.9	9116.0	9141.0	9156.1	9176.0	9191.1
15°	8890.6	8890.6	8900.7	8915.7	8925.8	8955.8	8980.8	9010.8	9050.9	9076.0	9100.9
17.5°	8725.5	8735.6	8750.5	8750.5	8770.6	8820.6	8835.6	8880.7	8925.8	8950.8	9000.9
20°	8545.3	8555.3	8570.3	8580.4	8605.4	8645.4	8675.4	8715.5	8765.6	8810.6	8860.6
22.5°	8405.1	8385.1	8395.0	8405.1	8430.2	8465.2	8500.3	8550.2	8600.3	8645.4	8695.5
25°	8134.8	8139.8	8154.8	8164.8	8194.9	8224.9	8265.0	8325.0	8370.1	8420.2	8475.2
27.5°	7769.4	7774.4	7799.4	7799.4	7824.4	7874.5	7899.5	7949.5	8009.7	8059.7	8124.8
30°	7353.9	7363.8	7363.8	7383.9	7398.8	7423.9	7448.9	7499.0	7529.0	7574.1	7664.3
32.5°	6973.4	6983.4	6978.3	6973.4	6958.4	6953.3	6948.3	6958.4	6968.4	6983.4	7018.4
35°	6748.2	6723.1	6703.1	6668.1	6628.0	6577.9	6532.8	6472.8	6417.7	6372.6	6322.6
37.5°	6532.8	6527.8	6497.8	6447.7	6367.6	6277.6	6172.5	6042.3	5912.1	5771.9	5636.8
40°	6232.5	6217.4	6192.4	6122.4	6032.2	5922.1	5782.0	5621.8	5411.5	5196.2	4976.0
42.5°	5721.8	5726.9	5696.9	5641.7	5556.7	5451.5	5306.4	5131.2	4905.9	4650.5	4365.3
45°	5126.2	5126.2	5116.1	5071.1	5011.0	4925.9	4815.8	4670.6	4450.4	4190.0	3884.6
47.5°	4505.4	4510.4	4495.4	4485.4	4460.3	4405.3	4325.2	4215.1	4059.9	3809.5	3504.2
50°	3874.7	3874.7	3899.7	3894.7	3894.7	3874.7	3839.7	3774.5	3639.4	3439.1	3153.8
52.5°	3243.9	3253.9	3269.0	3289.0	3313.9	3354.0	3313.9	3283.9	3198.8	3043.6	2798.4
55°	2593.1	2603.1	2628.1	2663.2	2693.3	2733.3	2743.3	2743.3	2698.2	2593.1	2407.9
57.5°	2037.5	2022.4	2042.5	2072.5	2112.6	2152.6	2182.6	2217.7	2212.6	2142.6	1992.4
60°	1531.8	1536.9	1551.8	1581.9	1612.0	1647.0	1687.0	1717.1	1732.1	1697.1	1601.9
62.5°	1116.4	1116.4	1136.3	1166.3	1181.4	1231.5	1256.5	1271.6	1286.5	1281.5	1221.5
65°	781.0	790.9	801.0	816.0	831.0	861.0	876.0	906.1	916.1	921.1	876.0
67.5°	550.7	535.6	545.7	555.6	570.7	590.8	620.8	620.8	635.7	635.7	605.7
70°	350.4	350.4	355.5	370.4	380.5	385.5	395.5	405.4	420.5	415.5	415.5
72.5°	235.3	230.3	235.3	240.3	245.3	260.3	260.3	265.3	275.4	280.4	260.3
75°	120.2	125.2	135.1	130.2	145.2	135.1	140.1	155.2	150.2	140.1	140.1
77.5°	100.1	100.1	100.1	95.2	105.1	105.1	100.1	110.1	105.1	105.1	100.1
80°	70.1	75.1	70.1	65.0	70.1	65.0	65.0	65.0	65.0	65.0	60.0
82.5°	55.1	45.1	50.1	45.1	50.1	50.1	45.1	40.1	40.1	45.1	40.1
85°	40.1	30.0	35.0	35.0	30.0	30.0	30.0	30.0	30.0	25.0	25.0
87.5°	25.0	15.1	15.1	15.1	20.0	20.0	20.0	15.1	20.0	20.0	10.0
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°	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2
2.5°	9341.3	9336.2	9346.3	9341.3	9341.3	9336.2	9341.3	9336.2	9346.3	9326.2	9331.2
5°	9341.3	9331.2	9336.2	9341.3	9346.3	9336.2	9336.2	9336.2	9346.3	9336.2	9341.3
7.5°	9321.2	9316.2	9331.2	9341.3	9336.2	9331.2	9341.3	9336.2	9346.3	9341.3	9351.2
10°	9281.1	9286.2	9296.2	9311.1	9316.2	9321.2	9331.2	9331.2	9346.3	9326.2	9336.2
12.5°	9221.1	9241.1	9266.2	9276.1	9296.2	9296.2	9306.2	9311.1	9321.2	9316.2	9331.2
15°	9146.0	9171.0	9201.0	9226.1	9251.1	9266.2	9281.1	9286.2	9301.2	9286.2	9291.2
17.5°	9055.9	9085.9	9131.0	9161.0	9201.0	9216.1	9236.1	9246.1	9261.2	9251.1	9256.1
20°	8930.7	8965.8	9015.8	9060.9	9085.9	9120.9	9146.0	9161.0	9171.0	9161.0	9166.0
22.5°	8755.5	8805.6	8870.7	8905.7	8955.8	8985.8	8990.8	9025.9	9050.9	9025.9	9035.9
25°	8550.2	8600.3	8650.4	8725.5	8770.6	8805.6	8840.7	8845.7	8870.7	8865.6	8860.6
27.5°	8209.8	8275.0	8360.0	8420.2	8480.2	8535.3	8575.3	8585.3	8610.4	8600.3	8605.4
30°	7744.3	7814.4	7894.5	7989.6	8074.7	8129.7	8179.8	8214.9	8239.9	8224.9	8219.9
32.5°	7083.5	7153.6	7238.7	7333.8	7434.0	7514.0	7574.1	7619.2	7649.2	7639.2	7614.2
35°	6327.7	6347.6	6402.8	6477.8	6562.9	6648.0	6703.1	6753.1	6788.1	6798.2	6798.2
37.5°	5551.7	5486.7	5446.6	5446.6	5496.6	5531.6	5581.7	5611.7	5666.8	5686.8	5701.9
40°	4800.7	4650.5	4510.4	4405.3	4335.3	4330.2	4330.2	4345.2	4395.3	4460.3	4520.5
42.5°	4130.0	3889.6	3674.4	3479.2	3339.1	3258.9	3223.9	3228.9	3269.0	3329.0	3429.1
45°	3594.3	3294.0	3023.6	2788.3	2598.1	2472.9	2412.9	2407.9	2437.9	2508.0	2618.2
47.5°	3178.8	2858.4	2553.0	2282.7	2077.5	1942.3	1872.2	1852.3	1872.2	1937.3	2067.5
50°	2833.4	2503.1	2187.7	1907.3	1687.0	1546.9	1481.8	1456.8	1481.8	1536.9	1667.0
52.5°	2513.0	2172.6	1877.3	1606.9	1371.6	1251.5	1181.4	1166.3	1181.4	1246.5	1351.7
55°	2142.6	1852.3	1561.9	1291.5	1086.4	966.2	911.1	896.1	911.1	971.2	1081.3
57.5°	1777.2	1526.8	1271.6	1026.2	851.1	745.8	695.9	675.8	710.8	750.9	881.1
60°	1436.7	1236.5	1021.2	806.0	660.8	565.7	525.6	520.6	530.6	580.7	670.8
62.5°	1126.4	961.2	790.9	615.8	495.6	455.5	405.4	400.5	410.5	440.5	510.7
65°	811.0	705.9	575.7	450.5	355.5	300.3	280.4	285.4	295.3	315.4	380.5
67.5°	565.7	490.6	400.5	315.4	245.3	220.2	200.3	195.2	200.3	235.3	270.3
70°	380.5	335.4	270.3	240.3	170.3	135.1	140.1	125.2	145.2	145.2	175.2
72.5°	250.2	220.2	180.2	140.1	120.2	95.2	95.2	90.2	100.1	105.1	130.2
75°	130.2	100.1	100.1	70.1	50.1	25.0	45.1	40.1	35.0	40.1	50.1
77.5°	90.2	75.1	70.1	55.1	50.1	40.1	40.1	40.1	40.1	45.1	50.1
80°	55.1	55.1	40.1	35.0	30.0	25.0	30.0	30.0	30.0	30.0	35.0
82.5°	35.0	30.0	30.0	25.0	25.0	20.0	20.0	20.0	20.0	20.0	30.0
85°	30.0	20.0	20.0	15.1	20.0	35.0	15.1	20.0	20.0	20.0	15.1
87.5°	10.0	15.1	15.1	15.1	10.0	5.0	10.0	15.1	15.1	25.0	20.0
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°	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2	9326.2
2.5°	9341.3	9346.3	9346.3	9341.3	9341.3	9331.2	9351.2	9336.2	9341.3	9361.2	9346.3
5°	9351.2	9356.2	9356.2	9351.2	9351.2	9351.2	9356.2	9356.2	9351.2	9346.3	9356.2
7.5°	9371.3	9366.3	9366.3	9356.2	9356.2	9346.3	9356.2	9341.3	9351.2	9341.3	9356.2
10°	9346.3	9351.2	9346.3	9341.3	9341.3	9336.2	9336.2	9321.2	9326.2	9311.1	9321.2
12.5°	9331.2	9326.2	9326.2	9316.2	9306.2	9296.2	9291.2	9276.1	9276.1	9241.1	9256.1
15°	9291.2	9296.2	9281.1	9261.2	9251.1	9226.1	9216.1	9196.0	9176.0	9151.0	9156.1
17.5°	9256.1	9241.1	9221.1	9201.0	9161.0	9141.0	9120.9	9090.9	9080.9	9050.9	9040.9
20°	9151.0	9141.0	9116.0	9080.9	9055.9	9010.8	8990.8	8960.8	8935.7	8905.7	8890.6
22.5°	9015.8	9005.8	8975.8	8940.7	8900.7	8880.7	8860.6	8805.6	8780.5	8750.5	8745.5
25°	8845.7	8830.6	8800.6	8760.5	8740.5	8685.5	8665.4	8625.3	8615.4	8585.3	8580.4
27.5°	8585.3	8565.3	8530.3	8480.2	8445.1	8410.1	8390.1	8360.0	8350.1	8320.0	8315.1
30°	8194.9	8169.8	8099.7	8079.8	8019.6	7984.6	7984.6	7944.5	7949.5	7929.6	7929.6
32.5°	7579.1	7539.1	7484.0	7443.9	7403.9	7383.9	7383.9	7368.8	7378.9	7378.9	7388.9
35°	6763.1	6708.1	6678.0	6653.0	6653.0	6673.0	6733.1	6748.2	6778.2	6803.2	6823.3
37.5°	5716.8	5711.9	5746.9	5777.0	5852.0	5937.2	6042.3	6132.4	6217.4	6277.6	6337.6
40°	4585.5	4710.7	4810.8	4951.0	5066.0	5231.3	5421.5	5576.7	5721.8	5827.1	5937.2
42.5°	3579.3	3739.5	3949.8	4155.0	4360.2	4585.5	4835.9	5051.1	5241.3	5386.5	5501.6
45°	2788.3	3008.6	3264.0	3524.3	3789.6	4069.9	4330.2	4550.5	4750.7	4900.9	5016.1
47.5°	2247.7	2488.0	2778.3	3063.7	3364.0	3659.4	3949.8	4140.0	4305.1	4425.3	4530.5
50°	1857.2	2112.6	2417.9	2743.3	3043.6	3339.1	3589.3	3774.5	3909.7	4014.8	4079.9
52.5°	1551.8	1822.2	2147.6	2472.9	2773.3	3043.6	3269.0	3409.1	3519.2	3594.3	3654.3
55°	1281.5	1541.9	1847.3	2152.6	2447.9	2703.2	2888.4	2993.6	3078.6	3123.7	3158.8
57.5°	1046.3	1286.5	1566.9	1847.3	2102.5	2312.8	2458.0	2563.1	2603.1	2638.2	2633.2
60°	821.0	1046.3	1301.6	1541.9	1762.1	1932.3	2037.5	2097.5	2127.5	2142.6	2132.5
62.5°	645.8	851.1	1046.3	1256.5	1416.7	1561.9	1662.1	1662.1	1677.0	1682.0	1697.1
65°	480.5	635.7	806.0	961.2	1091.3	1186.4	1241.5	1256.5	1276.6	1271.6	1261.5
67.5°	355.5	470.6	595.7	710.8	801.0	861.0	901.0	936.2	931.2	921.1	916.1
70°	245.3	320.4	430.5	500.6	565.7	625.8	635.7	640.7	645.8	650.8	640.7
72.5°	170.3	225.3	285.4	345.4	385.5	410.5	435.6	440.5	440.5	440.5	435.6
75°	85.1	115.1	170.3	195.2	230.3	240.3	260.3	260.3	275.4	255.3	250.2
77.5°	75.1	90.2	120.2	140.1	155.2	170.3	175.2	190.2	185.2	175.2	180.2
80°	45.1	55.1	75.1	85.1	105.1	110.1	115.1	120.2	115.1	120.2	120.2
82.5°	35.0	40.1	50.1	50.1	65.0	65.0	70.1	70.1	75.1	75.1	75.1
85°	20.0	35.0	30.0	60.0	40.1	40.1	50.1	60.0	50.1	50.1	60.0
87.5°	20.0	20.0	15.1	20.0	20.0	20.0	25.0	30.0	30.0	35.0	30.0
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: P249530

CATALOG NUMBER: LD8B175D010 ER8B175830 8LBDW0MW

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	9326.2	9326.2	9326.2	9326.2
2.5°	9341.3	9351.2	9336.2	9331.2
5°	9356.2	9356.2	9346.3	9346.3
7.5°	9356.2	9356.2	9341.3	9331.2
10°	9316.2	9316.2	9301.2	9291.2
12.5°	9241.1	9241.1	9236.1	9221.1
15°	9146.0	9146.0	9125.9	9111.0
17.5°	9015.8	9025.9	9000.9	9000.9
20°	8875.7	8870.7	8850.7	8840.7
22.5°	8730.5	8720.5	8715.5	8685.5
25°	8575.3	8565.3	8550.2	8535.3
27.5°	8310.0	8305.0	8289.9	8270.0
30°	7904.5	7899.5	7879.5	7879.5
32.5°	7378.9	7373.9	7353.9	7358.9
35°	6833.2	6853.3	6843.2	6823.3
37.5°	6377.6	6392.7	6402.8	6392.7
40°	5997.2	6042.3	6047.3	6057.3
42.5°	5591.8	5651.8	5671.9	5681.8
45°	5106.1	5161.2	5206.3	5196.2
47.5°	4610.5	4650.5	4690.6	4660.6
50°	4135.0	4160.0	4175.0	4175.0
52.5°	3684.5	3684.5	3679.5	3684.5
55°	3168.8	3168.8	3148.8	3158.8
57.5°	2628.1	2638.2	2623.1	2598.1
60°	2127.5	2102.5	2092.5	2077.5
62.5°	1657.0	1657.0	1622.0	1667.0
65°	1241.5	1226.5	1211.4	1206.4
67.5°	901.0	896.1	881.1	876.0
70°	635.7	615.8	610.7	600.7
72.5°	425.5	425.5	415.5	415.5
75°	260.3	235.3	230.3	235.3
77.5°	180.2	175.2	175.2	170.3
80°	120.2	115.1	125.2	110.1
82.5°	75.1	80.1	75.1	80.1
85°	50.1	60.0	55.1	55.1
87.5°	30.0	30.0	30.0	30.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)