

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: P249775

Luminaire Tested: **LD8B175D010 ER8B175927 8LBSW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249775  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13955)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B175D010 ER8B175927 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
97 CRI 2700 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

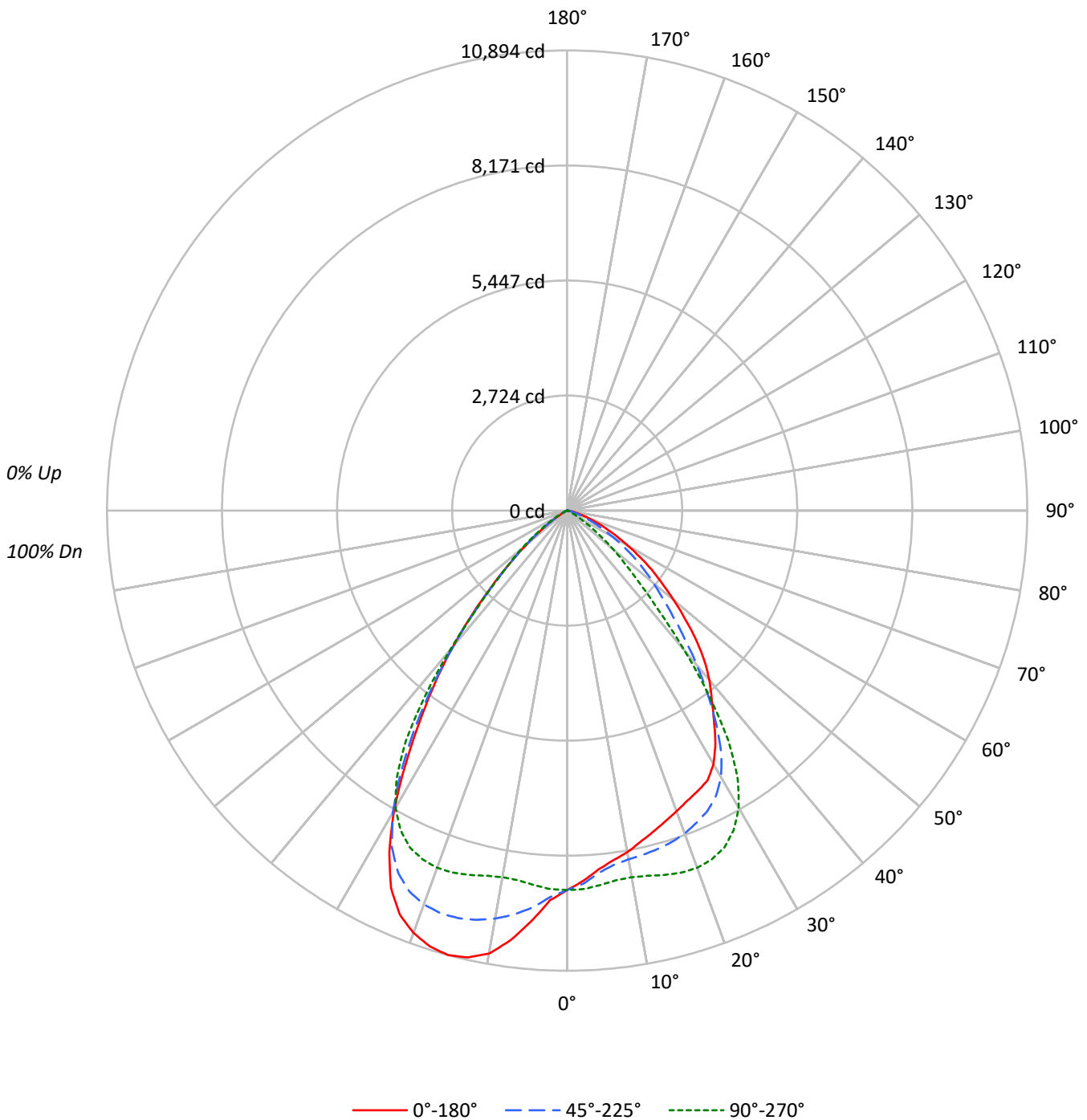
Lumens per Lamp: N/A  
Luminaire Lumens: 15193.1 lumens  
Efficiency: N/A  
Efficacy: 85.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct  
  
Input Watts (W): 177.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	863.6	5.7
10°-20°	2584.8	17.0
20°-30°	3958.3	26.1
30°-40°	3880.5	25.5
40°-50°	2336.8	15.4
50°-60°	1075.6	7.1
60°-70°	377.8	2.5
70°-80°	98.8	0.7
80°-90°	16.8	0.1
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°	7406.7	48.8
0°-40°	11287.2	74.3
0°-60°	14699.6	96.8
0°-90°	15193.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15193.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	8984	8984	8984	8984	8984	
5°	8526	8606	8900	9433	9756	805
15°	7871	8295	8929	9987	10894	2224
25°	7321	7850	8803	9466	9861	3372
35°	6058	6142	6650	6268	6066	3794
45°	4303	3543	2401	2418	2481	3300
55°	2443	1935	688	542	521	2180
65°	1037	718	109	55	59	1056
75°	269	155	8	0	0	326
85°	42	21	4	0	0	58
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°	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7
2.5°	8773.8	8782.2	8782.2	8782.2	8799.0	8803.4	8799.0	8803.4	8811.7	8841.0	8853.6
5°	8526.2	8513.6	8522.0	8517.7	8538.8	8551.4	8542.9	8555.5	8584.9	8606.0	8626.9
7.5°	8350.0	8350.0	8350.0	8358.2	8370.8	8396.1	8391.9	8400.2	8429.6	8459.0	8488.4
10°	8211.4	8207.2	8207.2	8228.1	8244.9	8274.3	8282.7	8307.9	8345.6	8383.4	8416.9
12.5°	8030.8	8035.1	8056.0	8077.0	8114.7	8160.9	8186.1	8219.8	8278.5	8341.4	8379.3
15°	7871.3	7875.4	7892.3	7934.2	7980.5	8035.1	8089.5	8144.1	8215.5	8295.3	8362.6
17.5°	7715.9	7720.1	7732.7	7779.0	7837.8	7909.1	7972.0	8043.4	8135.8	8228.1	8312.1
20°	7573.2	7569.1	7589.9	7632.0	7707.6	7774.6	7837.8	7921.7	8022.5	8135.8	8232.3
22.5°	7434.7	7434.7	7455.7	7497.7	7565.0	7632.0	7699.2	7787.2	7888.0	7997.3	8110.6
25°	7321.3	7317.1	7346.5	7367.6	7417.9	7485.1	7556.4	7627.8	7728.5	7850.4	7959.4
27.5°	7199.7	7195.5	7199.7	7224.9	7271.0	7321.3	7375.8	7439.0	7522.9	7623.7	7728.5
30°	6930.9	6935.1	6935.1	6956.2	6981.4	7035.9	7065.2	7128.2	7203.8	7287.8	7380.2
32.5°	6532.1	6536.2	6536.2	6544.7	6565.6	6590.9	6616.1	6662.2	6721.0	6792.3	6876.3
35°	6057.8	6057.8	6053.5	6057.8	6070.4	6070.4	6091.3	6070.4	6099.8	6141.8	6204.7
37.5°	5621.2	5612.7	5604.4	5596.0	5583.3	5562.4	5533.1	5482.6	5470.0	5453.2	5457.4
40°	5235.0	5230.8	5205.6	5184.6	5142.5	5092.2	5020.9	4932.8	4861.3	4777.4	4706.0
42.5°	4806.8	4802.5	4781.6	4743.7	4697.6	4622.1	4508.7	4391.2	4248.4	4122.6	3992.4
45°	4302.9	4315.5	4286.1	4244.2	4189.6	4118.2	3992.4	3849.5	3706.8	3543.2	3379.3
47.5°	3778.1	3774.0	3753.1	3727.8	3681.7	3610.4	3526.4	3371.1	3219.9	3068.8	2900.8
50°	3291.2	3274.4	3266.0	3240.9	3211.5	3152.8	3064.5	2938.5	2804.3	2661.5	2506.2
52.5°	2829.5	2829.5	2808.5	2791.7	2766.4	2720.2	2644.8	2544.1	2430.7	2296.2	2132.7
55°	2443.3	2434.8	2413.9	2392.9	2367.7	2338.2	2271.2	2187.2	2065.4	1935.3	1792.6
57.5°	2031.9	2027.6	2019.3	1994.1	1981.5	1952.1	1876.5	1792.6	1687.7	1574.3	1456.6
60°	1662.4	1645.6	1628.8	1612.0	1591.1	1561.7	1511.2	1439.9	1351.8	1251.0	1133.6
62.5°	1330.9	1356.0	1305.7	1305.7	1263.6	1238.4	1192.3	1150.3	1057.8	965.6	864.8
65°	1036.9	1036.9	1015.9	999.1	973.9	944.4	898.3	856.4	789.2	717.8	646.4
67.5°	793.5	789.2	768.3	751.5	730.4	713.6	680.1	629.7	579.4	520.6	461.7
70°	583.5	579.4	575.1	545.7	529.0	508.0	482.7	449.2	411.4	369.4	314.8
72.5°	419.7	419.7	407.2	394.7	377.9	361.0	335.9	314.8	281.4	251.9	214.1
75°	268.7	264.6	264.6	243.4	243.4	218.2	201.5	188.9	172.1	155.4	121.8
77.5°	193.2	188.9	184.7	176.3	168.0	159.5	146.9	130.2	117.4	100.7	88.1
80°	130.2	121.8	117.4	117.4	104.8	100.7	104.8	79.9	75.5	62.9	54.6
82.5°	79.9	79.9	75.5	75.5	71.3	67.2	54.6	54.6	50.4	46.1	37.8
85°	42.0	54.6	37.8	42.0	37.8	42.0	37.8	29.4	25.2	20.9	20.9
87.5°	25.2	16.8	16.8	25.2	20.9	16.8	16.8	16.8	12.6	8.4	8.4
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°	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7
2.5°	8845.3	8874.7	8870.4	8908.2	8920.8	8950.2	8950.2	8971.1	8983.7	9013.1	9038.4
5°	8635.4	8681.5	8694.1	8740.2	8778.2	8824.3	8853.6	8899.8	8941.7	9004.8	9063.6
7.5°	8505.2	8542.9	8568.1	8622.8	8664.8	8715.0	8765.4	8828.4	8887.2	8962.9	9046.8
10°	8442.2	8492.6	8530.3	8584.9	8635.4	8689.9	8740.2	8811.7	8878.8	8975.5	9067.7
12.5°	8425.5	8484.2	8530.3	8606.0	8656.3	8715.0	8773.8	8853.6	8925.0	9025.8	9130.7
15°	8425.5	8505.2	8568.1	8652.2	8710.9	8786.4	8849.5	8929.1	9009.0	9113.8	9214.5
17.5°	8408.7	8505.2	8584.9	8681.5	8757.0	8832.7	8912.4	8988.1	9071.9	9172.8	9286.0
20°	8341.4	8463.3	8559.7	8673.1	8752.8	8836.9	8916.6	9000.4	9088.8	9193.7	9290.2
22.5°	8224.0	8366.6	8475.9	8597.6	8689.9	8773.8	8853.6	8937.6	9034.2	9134.9	9235.7
25°	8068.6	8202.8	8320.5	8446.4	8538.8	8631.0	8706.7	8803.4	8891.4	8988.1	9067.7
27.5°	7833.5	7976.1	8089.5	8219.8	8303.6	8391.9	8454.8	8534.6	8618.6	8698.3	8761.4
30°	7480.9	7611.1	7728.5	7846.1	7930.0	7993.1	8060.2	8123.2	8177.8	8232.3	8286.9
32.5°	6964.4	7082.1	7195.5	7304.5	7371.8	7426.4	7476.6	7514.4	7543.8	7573.2	7577.3
35°	6255.1	6351.5	6423.0	6519.5	6582.6	6632.9	6632.9	6649.6	6645.5	6632.9	6620.3
37.5°	5461.7	5499.3	5528.7	5566.5	5570.7	5570.7	5545.7	5524.5	5491.0	5482.6	5457.4
40°	4634.7	4584.3	4546.3	4496.1	4466.7	4403.7	4349.2	4311.3	4256.8	4248.4	4240.0
42.5°	3849.5	3732.0	3627.1	3539.0	3438.2	3349.9	3270.3	3211.5	3169.6	3165.2	3169.6
45°	3211.5	3077.1	2921.7	2800.1	2686.7	2577.6	2472.6	2401.3	2363.5	2355.0	2363.5
47.5°	2728.8	2573.4	2422.2	2283.6	2162.0	2040.2	1935.3	1838.7	1792.6	1780.0	1775.8
50°	2346.8	2187.2	2027.6	1884.8	1750.6	1628.8	1498.6	1406.4	1347.6	1326.5	1309.7
52.5°	1973.1	1830.4	1666.6	1519.8	1385.3	1242.6	1108.4	1003.3	944.4	919.5	902.5
55°	1645.6	1503.0	1351.8	1209.0	1066.3	923.6	789.2	688.4	625.5	596.1	575.1
57.5°	1313.9	1179.7	1049.5	906.9	789.2	650.7	516.3	428.2	373.6	340.1	323.3
60°	1015.9	911.0	797.6	680.1	566.8	453.4	344.2	260.2	218.2	193.2	172.1
62.5°	768.3	680.1	604.5	503.7	415.6	318.9	235.1	168.0	130.2	109.2	100.7
65°	554.2	486.9	419.7	356.8	294.0	222.5	159.5	109.2	75.5	62.9	58.7
67.5°	394.7	340.1	289.6	247.6	201.5	159.5	113.4	75.5	58.7	50.4	46.1
70°	277.0	235.1	201.5	163.8	134.2	104.8	88.1	54.6	33.5	37.8	29.4
72.5°	184.7	155.4	138.6	113.4	92.2	75.5	54.6	37.8	37.8	29.4	25.2
75°	100.7	92.2	71.3	54.6	46.1	42.0	16.8	8.4	4.2	12.6	4.2
77.5°	71.3	62.9	54.6	46.1	37.8	29.4	16.8	16.8	12.6	16.8	8.4
80°	46.1	37.8	33.5	33.5	20.9	12.6	8.4	8.4	12.6	4.2	4.2
82.5°	29.4	25.2	20.9	20.9	20.9	12.6	12.6	12.6	12.6	8.4	8.4
85°	16.8	12.6	8.4	8.4	4.2	8.4	0.0	4.2	4.2	0.0	0.0
87.5°	8.4	4.2	4.2	4.2	4.2	0.0	0.0	4.2	0.0	4.2	0.0
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°	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7	8983.7
2.5°	9055.1	9071.9	9092.9	9109.7	9147.5	9155.8	9172.8	9189.6	9202.2	9214.5	9218.9
5°	9113.8	9177.0	9235.7	9298.6	9378.3	9433.0	9495.9	9550.5	9605.1	9651.3	9684.8
7.5°	9130.7	9227.1	9315.4	9424.6	9542.0	9642.9	9747.8	9852.8	9961.9	10045.9	10117.2
10°	9164.2	9281.8	9395.1	9525.3	9676.5	9810.7	9940.8	10079.4	10218.0	10335.5	10440.6
12.5°	9223.1	9353.1	9475.0	9617.7	9773.1	9924.1	10066.8	10222.1	10369.2	10499.3	10616.8
15°	9319.6	9441.3	9559.0	9693.2	9848.6	9987.2	10129.8	10280.9	10428.0	10562.2	10671.4
17.5°	9382.5	9495.9	9613.4	9735.2	9865.4	9991.2	10125.6	10260.0	10394.2	10516.1	10616.8
20°	9382.5	9491.7	9579.8	9689.1	9810.7	9919.9	10029.2	10146.6	10264.2	10364.8	10461.5
22.5°	9307.0	9411.9	9479.1	9563.1	9668.0	9760.4	9819.2	9949.3	10037.5	10125.6	10196.9
25°	9130.7	9206.3	9260.9	9319.6	9403.6	9466.5	9516.9	9592.4	9680.6	9714.3	9764.6
27.5°	8811.7	8866.2	8895.6	8908.2	8950.2	8983.7	8992.2	9025.8	9063.6	9071.9	9092.9
30°	8307.9	8312.1	8299.5	8295.3	8274.3	8249.2	8244.9	8240.7	8224.0	8207.2	8211.4
32.5°	7548.0	7527.0	7476.6	7422.2	7367.6	7308.8	7275.2	7233.2	7207.9	7182.9	7153.5
35°	6565.6	6515.3	6444.0	6376.8	6313.8	6267.6	6192.1	6166.8	6141.8	6108.1	6099.8
37.5°	5411.2	5381.9	5314.6	5264.3	5230.8	5209.8	5171.8	5146.9	5146.9	5134.3	5125.7
40°	4219.0	4210.7	4185.4	4198.0	4181.3	4189.6	4185.4	4176.9	4198.0	4198.0	4206.5
42.5°	3165.2	3169.6	3182.2	3190.5	3215.7	3219.9	3240.9	3240.9	3253.5	3266.0	3274.4
45°	2355.0	2372.0	2372.0	2388.7	2413.9	2418.1	2426.4	2430.7	2439.0	2460.0	2468.4
47.5°	1767.4	1771.5	1771.5	1775.8	1784.1	1792.6	1788.4	1792.6	1805.2	1796.7	1805.2
50°	1305.7	1309.7	1297.1	1284.5	1297.1	1297.1	1293.0	1280.4	1293.0	1276.2	1284.5
52.5°	890.1	885.7	873.1	877.5	869.0	864.8	864.8	856.4	856.4	856.4	839.6
55°	562.6	562.6	554.2	554.2	550.0	541.6	537.4	533.0	529.0	524.8	524.8
57.5°	314.8	318.9	306.6	302.2	306.6	302.2	294.0	294.0	294.0	281.4	289.6
60°	172.1	168.0	163.8	159.5	155.4	159.5	159.5	151.2	151.2	151.2	155.4
62.5°	92.2	92.2	88.1	88.1	83.9	83.9	92.2	79.9	83.9	79.9	83.9
65°	50.4	62.9	46.1	46.1	58.7	54.6	50.4	50.4	54.6	46.1	50.4
67.5°	54.6	37.8	33.5	37.8	33.5	33.5	33.5	42.0	37.8	29.4	37.8
70°	25.2	29.4	29.4	20.9	33.5	16.8	29.4	16.8	25.2	20.9	25.2
72.5°	25.2	25.2	25.2	16.8	25.2	16.8	20.9	20.9	16.8	16.8	25.2
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	8.4	8.4	4.2	4.2	4.2	4.2	8.4	8.4	8.4	0.0	4.2
80°	8.4	8.4	0.0	4.2	0.0	0.0	4.2	0.0	4.2	0.0	8.4
82.5°	4.2	8.4	4.2	4.2	8.4	8.4	8.4	4.2	4.2	4.2	4.2
85°	0.0	4.2	0.0	0.0	0.0	0.0	8.4	0.0	0.0	0.0	4.2
87.5°	0.0	4.2	0.0	0.0	0.0	0.0	4.2	4.2	0.0	0.0	0.0
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: P249775

CATALOG NUMBER: LD8B175D010 ER8B175927 8LBSW0LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	8983.7	8983.7	8983.7	8983.7
2.5°	9223.1	9227.1	9235.7	9231.5
5°	9710.0	9743.6	9760.4	9756.3
7.5°	10167.5	10226.5	10260.0	10260.0
10°	10520.2	10587.4	10637.7	10646.2
12.5°	10709.1	10784.8	10852.0	10835.0
15°	10763.7	10839.4	10906.4	10893.8
17.5°	10700.8	10776.3	10826.8	10818.2
20°	10528.6	10591.5	10642.1	10637.7
22.5°	10260.0	10314.6	10356.5	10352.2
25°	9806.6	9844.4	9877.9	9861.2
27.5°	9109.7	9122.3	9143.2	9118.1
30°	8182.0	8190.2	8198.8	8194.6
32.5°	7140.8	7136.6	7128.2	7119.8
35°	6087.2	6087.2	6091.3	6066.1
37.5°	5129.9	5125.7	5138.3	5125.7
40°	4214.8	4210.7	4227.4	4206.5
42.5°	3287.0	3299.6	3303.8	3303.8
45°	2472.6	2476.8	2481.0	2481.0
47.5°	1805.2	1809.3	1830.4	1805.2
50°	1276.2	1280.4	1284.5	1276.2
52.5°	843.8	848.0	843.8	831.2
55°	516.3	520.6	520.6	520.6
57.5°	277.0	281.4	281.4	277.0
60°	151.2	146.9	151.2	142.8
62.5°	79.9	88.1	83.9	75.5
65°	50.4	50.4	50.4	58.7
67.5°	42.0	33.5	37.8	29.4
70°	25.2	29.4	29.4	20.9
72.5°	20.9	20.9	20.9	25.2
75°	0.0	0.0	0.0	0.0
77.5°	8.4	8.4	8.4	4.2
80°	4.2	0.0	4.2	0.0
82.5°	4.2	4.2	8.4	4.2
85°	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)