

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: P249705

Luminaire Tested: **LD8B175D010 ER8B175827 8LBSW0LI**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P249705  
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 ER8B175827 8LBSW0LI  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 2700 CCT WITH SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18196.0 lumens  
Efficiency: N/A  
Efficacy: 102.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.15  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

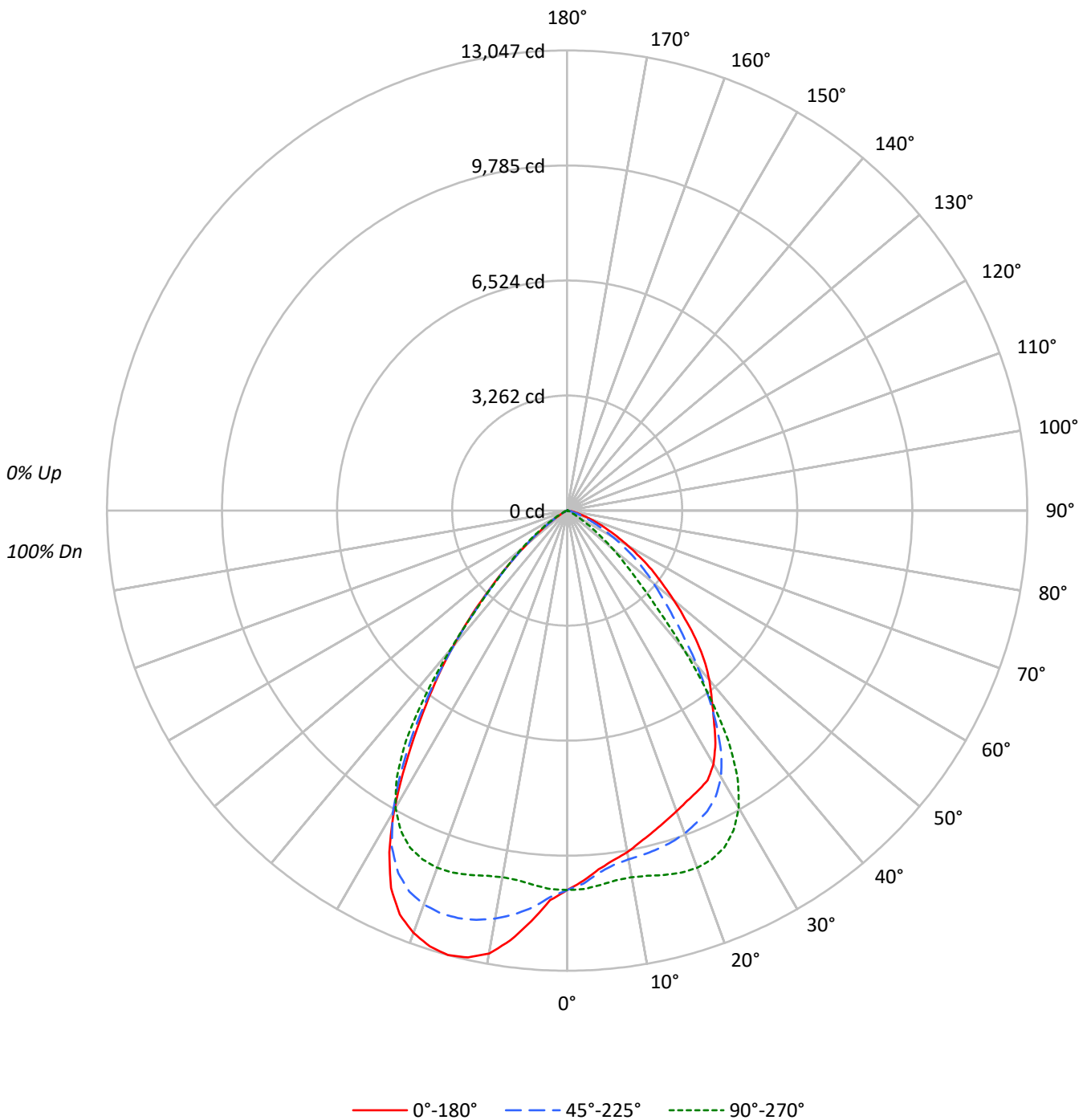
Input Watts (W): 177.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	109	106	103	110	107	104	102	103	100	98	99	97	96	95	94	93	91					91			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82					82			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73					73			
4	92	83	76	71	90	81	75	70	79	74	70	77	72	69	75	71	68	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	69	65	61	60					60			
6	80	70	63	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54					54			
7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49					49			
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45					45			
9	67	55	48	44	66	55	48	44	54	48	43	53	47	43	52	47	43	42					42			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	43	40	38					38			

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

	0°	90°	180°
0°	331777	331777	331777
5°	316082	329934	361686
10°	307932	330442	399241
15°	300949	341393	416511
20°	297635	353729	418074
25°	298334	358726	401832
30°	295564	346407	349451
35°	273112	299795	273485
40°	252376	207851	202795
45°	224735	125416	129576
50°	189094	80801	73326
55°	157317	44326	33520
60°	122790	19223	10540
65°	90615	9544	5137
70°	63012	5896	2254
75°	38340	1203	0
80°	27667	1794	0
85°	17796	1769	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1034.3	5.7
10°-20°	3095.7	17.0
20°-30°	4740.7	26.1
30°-40°	4647.4	25.5
40°-50°	2798.7	15.4
50°-60°	1288.2	7.1
60°-70°	452.5	2.5
70°-80°	118.4	0.7
80°-90°	20.2	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°	8870.7	48.8
0°-40°	13518.1	74.3
0°-60°	17605.0	96.8
0°-90°	18196.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18196.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	10759	10759	10759	10759	10759	
5°	10211	10307	10659	11297	11685	965
15°	9427	9935	10694	11961	13047	2663
25°	8768	9402	10543	11338	11810	4039
35°	7255	7356	7964	7506	7265	4544
45°	5153	4243	2876	2896	2971	3952
55°	2926	2318	824	649	624	2611
65°	1242	860	131	65	70	1265
75°	322	186	10	0	0	390
85°	50	25	5	0	0	69
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°	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3
2.5°	10507.9	10518.0	10518.0	10518.0	10538.1	10543.3	10538.1	10543.3	10553.2	10588.4	10603.5
5°	10211.3	10196.2	10206.4	10201.2	10226.4	10241.6	10231.4	10246.5	10281.7	10306.9	10332.0
7.5°	10000.3	10000.3	10000.3	10010.2	10025.3	10055.5	10050.5	10060.5	10095.7	10130.8	10166.0
10°	9834.3	9829.3	9829.3	9854.4	9874.4	9909.6	9919.8	9950.0	9995.1	10040.4	10080.6
12.5°	9618.0	9623.2	9648.2	9673.5	9718.6	9773.9	9804.1	9844.4	9914.8	9990.1	10035.4
15°	9427.0	9432.0	9452.3	9502.3	9557.8	9623.2	9688.4	9753.8	9839.3	9934.9	10015.4
17.5°	9241.0	9245.9	9261.0	9316.5	9386.9	9472.3	9547.7	9633.1	9743.8	9854.4	9954.9
20°	9070.0	9065.1	9090.1	9140.4	9231.0	9311.3	9386.9	9487.4	9608.1	9743.8	9859.3
22.5°	8904.1	8904.1	8929.3	8979.6	9060.1	9140.4	9220.9	9326.4	9447.1	9577.9	9713.6
25°	8768.3	8763.3	8798.5	8823.8	8884.0	8964.5	9050.0	9135.4	9256.1	9402.0	9532.6
27.5°	8622.6	8617.6	8622.6	8652.8	8708.1	8768.3	8833.7	8909.2	9009.8	9130.5	9256.1
30°	8300.8	8305.8	8305.8	8331.0	8361.2	8426.4	8461.6	8537.1	8627.6	8728.2	8838.9
32.5°	7823.2	7828.1	7828.1	7838.3	7863.3	7893.5	7923.8	7979.0	8049.4	8134.8	8235.4
35°	7255.1	7255.1	7249.9	7255.1	7270.2	7270.2	7295.3	7270.2	7305.4	7355.7	7431.0
37.5°	6732.2	6722.0	6712.1	6701.9	6686.8	6661.8	6626.6	6566.2	6551.1	6531.0	6536.0
40°	6269.6	6264.7	6234.5	6209.2	6158.9	6098.7	6013.2	5907.7	5822.2	5721.6	5636.2
42.5°	5756.8	5751.7	5726.6	5681.3	5626.0	5535.6	5399.8	5259.1	5088.2	4937.3	4781.5
45°	5153.4	5168.5	5133.3	5083.0	5017.6	4932.1	4781.5	4610.3	4439.4	4243.4	4047.2
47.5°	4524.9	4519.9	4494.9	4464.7	4409.4	4323.9	4223.4	4037.3	3856.2	3675.4	3474.2
50°	3941.7	3921.6	3911.5	3881.5	3846.3	3775.9	3670.2	3519.3	3358.5	3187.6	3001.5
52.5°	3388.7	3388.7	3363.5	3343.4	3313.2	3258.0	3167.5	3046.9	2911.1	2750.1	2554.1
55°	2926.2	2916.1	2891.0	2865.8	2835.6	2800.4	2720.1	2619.5	2473.6	2317.8	2146.9
57.5°	2433.5	2428.3	2418.4	2388.2	2373.1	2337.9	2247.4	2146.9	2021.2	1885.5	1744.6
60°	1991.0	1971.0	1950.7	1930.6	1905.6	1870.4	1810.0	1724.5	1618.9	1498.3	1357.6
62.5°	1593.9	1623.9	1563.7	1563.7	1513.4	1483.2	1427.9	1377.6	1266.9	1156.4	1035.8
65°	1241.9	1241.9	1216.6	1196.6	1166.3	1131.2	1075.9	1025.6	945.1	859.7	774.2
67.5°	950.3	945.1	920.1	900.0	874.8	854.7	814.5	754.1	693.9	623.5	553.0
70°	698.9	693.9	688.7	653.5	633.5	608.4	578.2	538.1	492.7	442.5	377.1
72.5°	502.7	502.7	487.8	472.7	452.6	432.3	402.3	377.1	336.9	301.7	256.4
75°	321.8	316.8	316.8	291.6	291.6	261.4	241.3	226.2	206.1	186.0	145.9
77.5°	231.4	226.2	221.2	211.1	201.2	191.0	175.9	155.8	140.7	120.6	105.5
80°	155.8	145.9	140.7	140.7	125.6	120.6	125.6	95.6	90.4	75.3	65.4
82.5°	95.6	95.6	90.4	90.4	85.5	80.5	65.4	65.4	60.4	55.3	45.3
85°	50.3	65.4	45.3	50.3	45.3	50.3	45.3	35.2	30.2	25.0	25.0
87.5°	30.2	20.1	20.1	30.2	25.0	20.1	20.1	20.1	15.1	10.1	10.1
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°	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3
2.5°	10593.6	10628.8	10623.6	10668.9	10684.0	10719.2	10719.2	10744.2	10759.3	10794.5	10824.7
5°	10342.1	10397.4	10412.5	10467.7	10513.1	10568.3	10603.5	10658.8	10709.0	10784.6	10854.9
7.5°	10186.3	10231.4	10261.6	10327.0	10377.3	10437.5	10498.0	10573.3	10643.7	10734.3	10834.9
10°	10110.8	10171.2	10216.3	10281.7	10342.1	10407.5	10467.7	10553.2	10633.7	10749.4	10859.9
12.5°	10090.7	10161.1	10216.3	10306.9	10367.2	10437.5	10507.9	10603.5	10689.0	10809.6	10935.4
15°	10090.7	10186.3	10261.6	10362.2	10432.6	10523.0	10598.5	10693.9	10789.5	10915.2	11035.8
17.5°	10070.6	10186.3	10281.7	10397.4	10487.8	10578.5	10673.9	10764.5	10864.9	10985.7	11121.3
20°	9990.1	10136.0	10251.5	10387.2	10482.9	10583.4	10679.0	10779.4	10885.2	11010.8	11126.5
22.5°	9849.4	10020.3	10151.1	10296.8	10407.5	10507.9	10603.5	10704.1	10819.8	10940.4	11061.1
25°	9663.3	9824.1	9965.1	10115.7	10226.4	10337.0	10427.6	10543.3	10648.8	10764.5	10859.9
27.5°	9381.7	9552.6	9688.4	9844.4	9944.8	10050.5	10125.9	10221.5	10322.1	10417.5	10493.0
30°	8959.5	9115.4	9256.1	9396.8	9497.4	9572.9	9653.2	9728.7	9794.1	9859.3	9924.7
32.5°	8341.0	8481.9	8617.6	8748.2	8828.7	8894.1	8954.3	8999.7	9034.9	9070.0	9075.0
35°	7491.4	7606.9	7692.4	7808.1	7883.6	7943.8	7943.8	7963.9	7958.9	7943.8	7928.7
37.5°	6541.2	6586.3	6621.4	6666.8	6671.7	6671.7	6641.7	6616.5	6576.3	6566.2	6536.0
40°	5550.7	5490.3	5445.0	5384.7	5349.6	5274.0	5208.8	5163.5	5098.1	5088.2	5078.0
42.5°	4610.3	4469.6	4344.0	4238.5	4117.8	4012.1	3916.7	3846.3	3796.0	3790.8	3796.0
45°	3846.3	3685.3	3499.3	3353.6	3217.8	3087.0	2961.4	2875.9	2830.6	2820.5	2830.6
47.5°	3268.1	3082.0	2901.0	2735.0	2589.3	2443.4	2317.8	2202.1	2146.9	2131.8	2126.8
50°	2810.5	2619.5	2428.3	2257.4	2096.6	1950.7	1794.8	1684.3	1614.0	1588.7	1568.7
52.5°	2363.1	2192.2	1996.0	1820.1	1659.1	1488.1	1327.4	1201.5	1131.2	1101.2	1080.9
55°	1971.0	1800.0	1618.9	1448.0	1277.1	1106.1	945.1	824.5	749.1	714.0	688.7
57.5°	1573.6	1412.8	1257.0	1086.1	945.1	779.4	618.4	512.8	447.4	407.3	387.2
60°	1216.6	1091.0	955.3	814.5	678.8	543.0	412.2	311.7	261.4	231.4	206.1
62.5°	920.1	814.5	723.9	603.2	497.7	382.0	281.7	201.2	155.8	130.8	120.6
65°	663.7	583.2	502.7	427.3	352.0	266.5	191.0	130.8	90.4	75.3	70.4
67.5°	472.7	407.3	346.8	296.6	241.3	191.0	135.8	90.4	70.4	60.4	55.3
70°	331.7	281.7	241.3	196.2	160.8	125.6	105.5	65.4	40.1	45.3	35.2
72.5°	221.2	186.0	166.0	135.8	110.5	90.4	65.4	45.3	45.3	35.2	30.2
75°	120.6	110.5	85.5	65.4	55.3	50.3	20.1	10.1	5.0	15.1	5.0
77.5°	85.5	75.3	65.4	55.3	45.3	35.2	20.1	20.1	15.1	20.1	10.1
80°	55.3	45.3	40.1	40.1	25.0	15.1	10.1	10.1	15.1	5.0	5.0
82.5°	35.2	30.2	25.0	25.0	25.0	15.1	15.1	15.1	15.1	10.1	10.1
85°	20.1	15.1	10.1	10.1	5.0	10.1	0.0	5.0	5.0	0.0	0.0
87.5°	10.1	5.0	5.0	5.0	5.0	0.0	0.0	5.0	0.0	5.0	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



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**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3	10759.3
2.5°	10844.8	10864.9	10890.1	10910.2	10955.5	10965.5	10985.7	11005.8	11020.9	11035.8	11041.0
5°	10915.2	10990.7	11061.1	11136.4	11232.0	11297.4	11372.7	11438.1	11503.5	11558.8	11598.9
7.5°	10935.4	11050.9	11156.7	11287.3	11428.0	11548.8	11674.4	11800.1	11930.9	12031.4	12116.9
10°	10975.6	11116.3	11252.1	11407.9	11589.0	11749.8	11905.6	12071.6	12237.5	12378.3	12504.1
12.5°	11046.0	11201.8	11347.7	11518.6	11704.7	11885.5	12056.5	12242.5	12418.6	12574.5	12715.2
15°	11161.6	11307.3	11448.3	11609.1	11795.1	11961.1	12132.0	12312.9	12489.0	12649.8	12780.6
17.5°	11237.0	11372.7	11513.4	11659.3	11815.2	11966.0	12126.8	12287.8	12448.6	12594.5	12715.2
20°	11237.0	11367.8	11473.3	11604.1	11749.8	11880.6	12011.4	12152.1	12292.8	12413.5	12529.1
22.5°	11146.5	11272.1	11352.6	11453.2	11578.8	11689.6	11759.9	11915.7	12021.3	12126.8	12212.3
25°	10935.4	11025.9	11091.3	11161.6	11262.2	11337.5	11398.0	11488.4	11593.9	11634.3	11694.5
27.5°	10553.2	10618.6	10653.8	10668.9	10719.2	10759.3	10769.5	10809.6	10854.9	10864.9	10890.1
30°	9950.0	9954.9	9939.8	9934.9	9909.6	9879.6	9874.4	9869.5	9849.4	9829.3	9834.3
32.5°	9039.8	9014.8	8954.3	8889.2	8823.8	8753.4	8713.1	8662.8	8632.5	8602.5	8567.4
35°	7863.3	7803.1	7717.6	7637.1	7561.8	7506.3	7415.9	7385.7	7355.7	7315.3	7305.4
37.5°	6480.7	6445.5	6365.0	6304.8	6264.7	6239.4	6194.1	6164.1	6164.1	6149.0	6138.8
40°	5052.8	5042.9	5012.6	5027.8	5007.7	5017.6	5012.6	5002.5	5027.8	5027.8	5037.9
42.5°	3790.8	3796.0	3811.1	3821.1	3851.3	3856.2	3881.5	3881.5	3896.6	3911.5	3921.6
45°	2820.5	2840.7	2840.7	2860.8	2891.0	2896.0	2905.9	2911.1	2921.0	2946.3	2956.2
47.5°	2116.6	2121.6	2121.6	2126.8	2136.7	2146.9	2141.9	2146.9	2162.0	2151.8	2162.0
50°	1563.7	1568.7	1553.5	1538.4	1553.5	1553.5	1548.6	1533.5	1548.6	1528.5	1538.4
52.5°	1066.0	1060.8	1045.7	1050.9	1040.7	1035.8	1035.8	1025.6	1025.6	1025.6	1005.6
55°	673.8	673.8	663.7	663.7	658.7	648.6	643.6	638.4	633.5	628.5	628.5
57.5°	377.1	382.0	367.1	361.9	367.1	361.9	352.0	352.0	352.0	336.9	346.8
60°	206.1	201.2	196.2	191.0	186.0	191.0	191.0	181.1	181.1	181.1	186.0
62.5°	110.5	110.5	105.5	105.5	100.6	100.6	110.5	95.6	100.6	95.6	100.6
65°	60.4	75.3	55.3	55.3	70.4	65.4	60.4	60.4	65.4	55.3	60.4
67.5°	65.4	45.3	40.1	45.3	40.1	40.1	40.1	50.3	45.3	35.2	45.3
70°	30.2	35.2	35.2	25.0	40.1	20.1	35.2	20.1	30.2	25.0	30.2
72.5°	30.2	30.2	30.2	20.1	30.2	20.1	25.0	25.0	20.1	20.1	30.2
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°	10.1	10.1	5.0	5.0	5.0	5.0	10.1	10.1	10.1	0.0	5.0
80°	10.1	10.1	0.0	5.0	0.0	0.0	5.0	0.0	5.0	0.0	10.1
82.5°	5.0	10.1	5.0	5.0	10.1	10.1	10.1	5.0	5.0	5.0	5.0
85°	0.0	5.0	0.0	0.0	0.0	0.0	10.1	0.0	0.0	0.0	5.0
87.5°	0.0	5.0	0.0	0.0	0.0	0.0	5.0	5.0	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: P249705

CATALOG NUMBER: LD8B175D010 ER8B175827 8LBSW0LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	10759.3	10759.3	10759.3	10759.3
2.5°	11046.0	11050.9	11061.1	11056.1
5°	11629.1	11669.5	11689.6	11684.6
7.5°	12177.1	12247.7	12287.8	12287.8
10°	12599.5	12680.0	12740.2	12750.4
12.5°	12825.7	12916.3	12996.8	12976.6
15°	12891.1	12981.7	13062.0	13046.9
17.5°	12815.8	12906.2	12966.6	12956.5
20°	12609.6	12685.0	12745.4	12740.2
22.5°	12287.8	12353.2	12403.5	12398.3
25°	11744.8	11790.1	11830.3	11810.2
27.5°	10910.2	10925.3	10950.3	10920.3
30°	9799.1	9809.0	9819.2	9814.2
32.5°	8552.3	8547.1	8537.1	8527.0
35°	7290.3	7290.3	7295.3	7265.0
37.5°	6143.8	6138.8	6154.0	6138.8
40°	5047.8	5042.9	5062.9	5037.9
42.5°	3936.7	3951.8	3956.8	3956.8
45°	2961.4	2966.4	2971.3	2971.3
47.5°	2162.0	2166.9	2192.2	2162.0
50°	1528.5	1533.5	1538.4	1528.5
52.5°	1010.5	1015.7	1010.5	995.4
55°	618.4	623.5	623.5	623.5
57.5°	331.7	336.9	336.9	331.7
60°	181.1	175.9	181.1	170.9
62.5°	95.6	105.5	100.6	90.4
65°	60.4	60.4	60.4	70.4
67.5°	50.3	40.1	45.3	35.2
70°	30.2	35.2	35.2	25.0
72.5°	25.0	25.0	25.0	30.2
75°	0.0	0.0	0.0	0.0
77.5°	10.1	10.1	10.1	5.0
80°	5.0	0.0	5.0	0.0
82.5°	5.0	5.0	10.1	5.0
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)