

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: P248779

Luminaire Tested: **LD8B90D010 ER8B90835 8LBSW0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248779  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13958)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LD8B90D010 ER8B90835 8LBSW0GPH  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 3500 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8725.0 lumens  
Efficiency: N/A  
Efficacy: 101.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.23 / 1.15  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

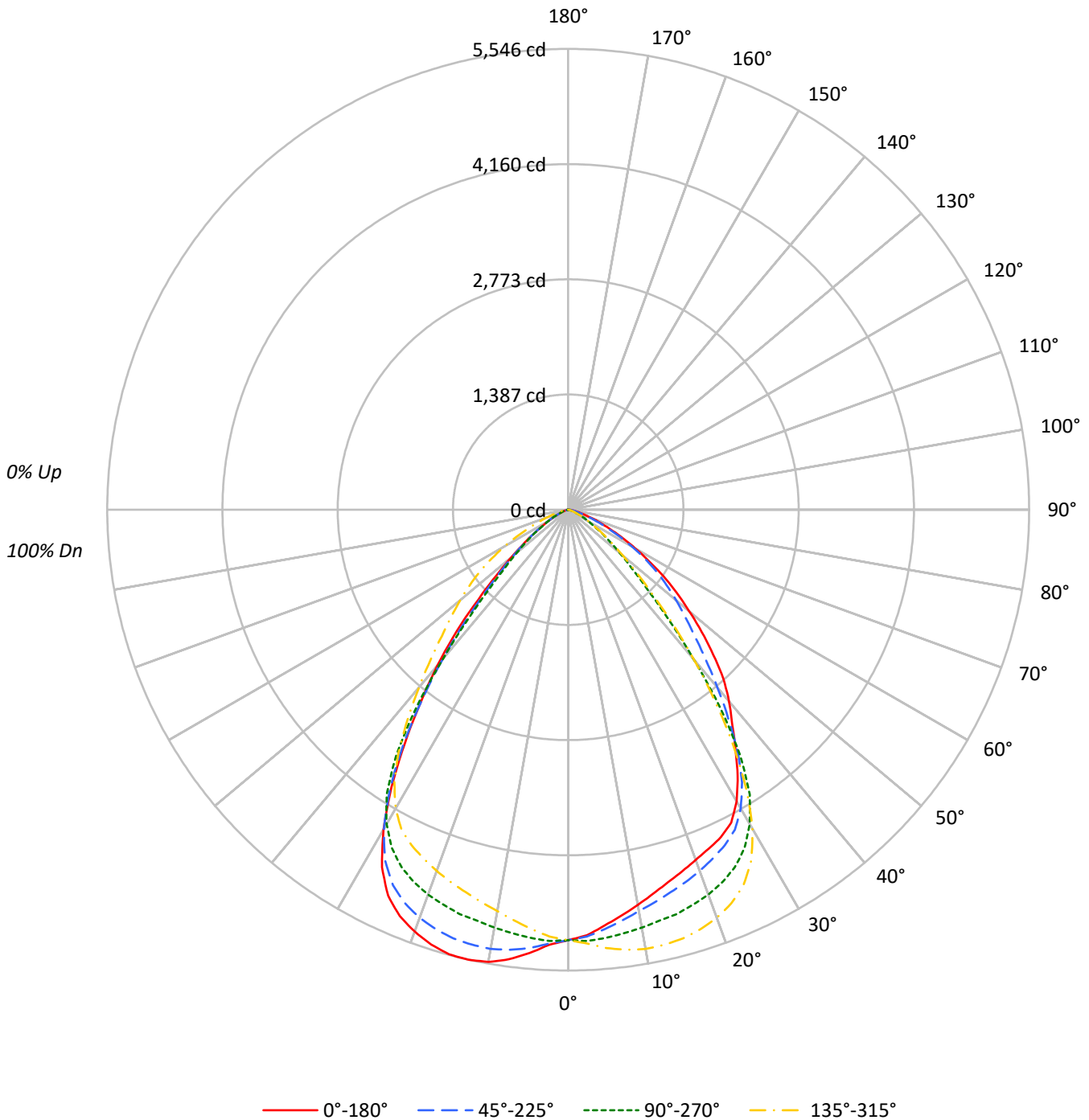
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	106	104	101	102	100	98	99	97	95	95	94	92	90					90			
2	105	99	94	89	102	97	92	88	93	90	86	90	87	84	87	85	83	81					81			
3	98	90	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72					72			
4	91	82	75	70	89	80	74	69	78	73	68	76	71	67	74	70	67	65					65			
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58					58			
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	55	53					53			
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48					48			
8	70	59	51	46	69	58	51	46	57	50	46	56	50	46	55	49	46	44					44			
9	66	54	47	42	65	54	47	42	53	47	42	52	46	42	51	46	42	40					40			
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	48	42	39	37					37			

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

	0°	90°	180°	270°
0°	159726	159726	159726	159726
5°	155482	160101	165815	160101
10°	151181	159892	173036	159892
15°	148160	160840	176824	160840
20°	147150	161760	177278	161760
25°	147927	161434	174431	161434
30°	144268	155527	158318	155527
35°	131962	135673	128724	135673
40°	121152	94375	98554	94375
45°	107649	57573	66617	57573
50°	91120	38460	42710	38460
55°	75465	26241	27736	26241
60°	57559	17472	17626	17472
65°	40780	10886	9967	10886
70°	29419	7294	6618	7294
75°	18682	3622	3014	3622
80°	13034	2699	2237	2699
85°	11640	0	885	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	493.0	5.7
10°-20°	1427.7	16.4
20°-30°	2161.8	24.8
30°-40°	2166.7	24.8
40°-50°	1360.6	15.6
50°-60°	725.0	8.3
60°-70°	298.2	3.4
70°-80°	78.8	0.9
80°-90°	13.3	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°	4082.5	46.8
0°-40°	6249.2	71.6
0°-60°	8334.8	95.5
0°-90°	8725.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8725.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	5180	5180	5180	5180	5180	
5°	5023	5172	5357	5172	5023	474
15°	4641	5038	5539	5038	4641	1313
25°	4348	4745	5127	4745	4348	1994
35°	3506	3604	3420	3604	3506	2196
45°	2468	1320	1528	1320	2468	1898
55°	1404	488	516	488	1404	1252
65°	559	149	137	149	559	580
75°	157	30	25	30	157	178
85°	33	0	2	0	33	36
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°	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8
2.5°	5126.7	5121.6	5119.1	5124.2	5126.7	5136.8	5134.3	5139.3	5139.3	5141.9	5146.9
5°	5023.0	5020.4	5023.0	5023.0	5033.1	5043.2	5040.7	5048.3	5053.3	5066.0	5071.0
7.5°	4926.9	4926.9	4924.3	4934.4	4939.5	4954.7	4952.1	4964.8	4972.4	4985.0	5002.7
10°	4828.2	4828.2	4830.7	4838.3	4840.9	4863.6	4863.6	4881.3	4891.4	4904.1	4926.9
12.5°	4732.1	4732.1	4747.3	4742.2	4752.3	4770.0	4777.6	4795.3	4810.5	4835.8	4858.6
15°	4641.0	4641.0	4646.1	4658.7	4666.3	4689.1	4701.7	4722.0	4739.7	4765.0	4797.9
17.5°	4562.6	4560.1	4562.6	4577.8	4593.0	4613.2	4623.3	4648.6	4666.3	4699.2	4729.6
20°	4484.2	4489.3	4489.3	4501.9	4512.0	4537.3	4547.4	4575.3	4595.5	4625.8	4661.3
22.5°	4416.0	4413.5	4413.5	4431.2	4438.7	4461.4	4471.5	4496.8	4519.6	4544.9	4577.8
25°	4347.7	4342.6	4352.8	4355.3	4360.3	4385.6	4393.2	4410.9	4433.6	4456.4	4489.3
27.5°	4246.5	4241.5	4244.0	4254.1	4261.7	4281.9	4287.0	4304.7	4322.4	4342.6	4370.5
30°	4051.7	4046.7	4044.2	4061.9	4069.5	4084.6	4092.2	4122.6	4127.6	4150.4	4170.6
32.5°	3793.7	3791.2	3796.3	3811.4	3819.0	3839.3	3849.4	3867.1	3879.7	3892.4	3912.6
35°	3505.5	3500.4	3505.5	3520.7	3520.7	3538.4	3546.0	3553.5	3551.0	3553.5	3548.5
37.5°	3237.4	3234.8	3237.4	3244.9	3237.4	3244.9	3237.4	3222.2	3194.4	3164.0	3133.6
40°	3009.7	3012.2	2997.1	3007.2	2979.3	2974.3	2946.5	2908.5	2852.9	2792.3	2706.3
42.5°	2767.0	2759.4	2749.3	2754.3	2731.6	2713.8	2668.3	2620.3	2549.4	2448.3	2344.5
45°	2468.5	2466.0	2460.9	2458.4	2443.2	2425.5	2387.5	2331.9	2253.5	2149.8	2025.8
47.5°	2177.6	2170.0	2170.0	2172.5	2154.8	2152.3	2121.9	2073.9	2005.7	1904.5	1775.5
50°	1899.4	1896.9	1902.0	1912.1	1899.4	1894.4	1874.2	1841.3	1780.6	1694.6	1573.1
52.5°	1649.0	1646.5	1651.6	1664.2	1659.1	1664.2	1644.0	1618.7	1578.2	1494.7	1388.5
55°	1403.7	1403.7	1403.7	1418.8	1418.8	1418.8	1408.7	1393.6	1355.6	1294.9	1196.4
57.5°	1148.3	1150.8	1166.0	1168.5	1166.0	1171.1	1168.5	1153.3	1128.1	1085.1	1009.2
60°	933.3	933.3	940.9	948.5	945.9	948.5	948.5	940.9	915.6	880.2	819.5
62.5°	738.5	746.1	741.0	746.1	756.2	746.1	741.0	736.0	718.3	695.5	644.9
65°	558.9	564.0	564.0	566.5	561.4	564.0	553.9	546.3	536.2	510.9	478.0
67.5°	424.9	424.9	424.9	424.9	422.3	419.8	417.3	409.7	392.1	382.0	346.5
70°	326.3	311.1	311.1	311.1	311.1	313.7	306.1	296.0	290.9	273.2	247.9
72.5°	217.5	222.6	217.5	217.5	212.5	215.0	204.9	199.8	194.8	184.7	169.5
75°	156.8	144.2	149.2	151.8	144.2	149.2	139.1	129.0	129.0	121.4	113.8
77.5°	101.2	98.7	101.2	103.7	101.2	98.7	93.6	88.5	88.5	86.0	78.4
80°	73.4	70.8	70.8	70.8	68.3	70.8	65.8	65.8	60.7	58.2	53.1
82.5°	48.1	48.1	45.5	48.1	45.5	48.1	40.5	40.5	40.5	37.9	32.9
85°	32.9	27.8	27.8	30.4	25.3	30.4	27.8	25.3	22.8	22.8	20.2
87.5°	15.2	17.7	15.2	17.7	15.2	15.2	17.7	15.2	15.2	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°	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8
2.5°	5154.5	5157.0	5157.0	5167.2	5172.2	5174.7	5174.7	5195.0	5187.4	5192.5	5197.5
5°	5081.2	5096.3	5101.4	5101.4	5129.2	5139.3	5149.4	5172.2	5174.7	5189.9	5207.6
7.5°	5010.3	5028.0	5038.2	5060.9	5078.6	5096.3	5126.7	5141.9	5157.0	5177.3	5200.0
10°	4942.0	4962.3	4982.5	5000.2	5028.0	5050.8	5071.0	5106.4	5124.2	5152.0	5182.3
12.5°	4876.3	4904.1	4921.8	4952.1	4982.5	5002.7	5033.1	5066.0	5093.8	5121.6	5157.0
15°	4818.1	4851.0	4871.2	4904.1	4937.0	4964.8	4997.7	5038.2	5058.4	5091.3	5124.2
17.5°	4754.8	4790.3	4815.6	4845.9	4886.4	4916.7	4944.6	4985.0	5010.3	5045.7	5083.7
20°	4689.1	4724.5	4754.8	4785.2	4825.7	4856.0	4888.9	4929.4	4957.2	4992.6	5023.0
22.5°	4610.7	4643.6	4676.4	4711.8	4752.3	4777.6	4815.6	4851.0	4881.3	4914.2	4944.6
25°	4509.5	4550.0	4575.3	4608.1	4641.0	4668.8	4709.3	4744.7	4770.0	4800.4	4828.2
27.5°	4390.7	4421.1	4441.2	4469.0	4501.9	4527.2	4557.5	4593.0	4618.3	4646.1	4666.3
30°	4188.3	4216.2	4233.9	4254.1	4287.0	4309.8	4335.1	4367.9	4385.6	4405.9	4423.6
32.5°	3922.7	3945.5	3955.6	3970.8	3993.6	4016.3	4036.6	4064.4	4072.0	4084.6	4084.6
35°	3538.4	3543.4	3540.9	3546.0	3556.1	3568.7	3586.4	3604.1	3614.1	3614.1	3606.7
37.5°	3088.1	3057.8	3024.9	2999.6	2992.0	2986.9	2997.1	3004.6	3014.8	3019.8	3007.2
40°	2620.3	2552.0	2478.6	2412.8	2367.3	2347.1	2339.5	2344.5	2344.5	2362.2	2362.2
42.5°	2218.1	2111.8	2003.2	1904.5	1838.7	1788.2	1765.4	1765.4	1767.9	1780.6	1788.2
45°	1884.3	1750.2	1623.7	1515.0	1423.9	1358.1	1327.8	1320.2	1317.7	1322.7	1340.4
47.5°	1628.8	1489.7	1358.1	1224.1	1128.1	1062.3	1034.5	1024.3	1014.2	1024.3	1026.9
50°	1429.0	1284.8	1145.8	1011.7	910.5	852.3	816.9	801.7	799.2	799.2	804.3
52.5°	1246.8	1112.9	973.8	837.2	730.9	675.3	642.4	634.8	624.7	634.8	634.8
55°	1074.9	940.9	804.3	675.3	586.7	528.6	498.2	488.1	483.0	490.6	490.6
57.5°	887.8	773.9	647.5	531.1	442.6	402.2	379.4	366.8	364.2	369.3	364.2
60°	728.4	632.3	523.5	417.3	349.1	306.1	288.4	283.3	278.2	283.3	283.3
62.5°	576.6	495.7	407.1	326.3	268.1	237.8	217.5	217.5	215.0	215.0	217.5
65°	427.4	364.2	301.0	232.7	187.2	164.4	149.2	149.2	146.7	149.2	146.7
67.5°	311.1	268.1	217.5	169.5	134.1	121.4	111.3	103.7	108.8	103.7	101.2
70°	227.7	192.2	156.8	129.0	103.7	91.1	83.5	80.9	75.9	75.9	75.9
72.5°	151.8	129.0	106.2	83.5	68.3	55.6	53.1	48.1	43.0	45.5	50.6
75°	101.2	86.0	75.9	60.7	45.5	45.5	30.4	30.4	25.3	30.4	22.8
77.5°	70.8	58.2	45.5	37.9	30.4	27.8	20.2	20.2	17.7	17.7	17.7
80°	50.6	43.0	32.9	27.8	20.2	20.2	17.7	15.2	12.6	12.6	15.2
82.5°	30.4	22.8	22.8	20.2	12.6	10.1	7.6	10.1	5.1	5.1	5.1
85°	17.7	15.2	12.6	7.6	5.1	5.1	2.5	0.0	2.5	2.5	0.0
87.5°	10.1	5.1	5.1	2.5	0.0	2.5	2.5	0.0	0.0	0.0	5.1
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):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8
2.5°	5210.2	5207.6	5212.7	5212.7	5227.9	5225.2	5232.8	5232.8	5227.9	5230.4	5240.4
5°	5227.9	5235.5	5250.5	5263.2	5285.9	5296.1	5308.7	5321.4	5323.9	5331.5	5339.1
7.5°	5227.9	5253.1	5270.8	5293.5	5323.9	5341.6	5369.4	5392.2	5402.3	5414.9	5430.1
10°	5217.6	5242.9	5275.8	5301.1	5339.1	5366.9	5394.7	5430.1	5445.3	5465.5	5485.8
12.5°	5197.5	5225.2	5260.6	5293.5	5336.5	5361.8	5397.2	5430.1	5452.9	5480.7	5503.5
15°	5167.2	5200.0	5232.8	5265.7	5311.2	5341.6	5374.5	5412.4	5435.2	5465.5	5485.8
17.5°	5119.1	5154.5	5184.9	5215.2	5258.1	5293.5	5323.9	5359.3	5382.1	5407.4	5435.2
20°	5060.9	5093.8	5126.7	5152.0	5195.0	5225.2	5258.1	5291.0	5308.7	5313.8	5356.8
22.5°	4987.6	5010.3	5035.6	5076.1	5101.4	5129.2	5159.6	5189.9	5207.6	5235.5	5250.5
25°	4866.1	4888.9	4916.7	4934.4	4964.8	4987.6	5017.9	5050.8	5060.9	5081.2	5096.3
27.5°	4696.7	4709.3	4722.0	4737.1	4754.8	4767.5	4785.2	4800.4	4810.5	4820.6	4830.7
30°	4428.5	4428.5	4428.5	4418.4	4426.0	4433.6	4436.1	4433.6	4433.6	4431.2	4431.2
32.5°	4074.5	4054.3	4031.5	4011.3	4003.7	3993.6	3988.5	3980.9	3968.3	3960.7	3963.2
35°	3596.5	3551.0	3523.2	3497.9	3477.7	3462.5	3454.9	3447.3	3444.8	3434.7	3424.5
37.5°	2999.6	2966.7	2946.5	2931.3	2913.6	2898.4	2900.9	2903.5	2911.0	2906.0	2908.5
40°	2367.3	2359.7	2367.3	2349.6	2344.5	2349.6	2362.2	2380.0	2390.1	2400.2	2417.9
42.5°	1800.8	1813.4	1831.2	1831.2	1838.7	1848.9	1864.0	1891.9	1907.0	1924.7	1945.0
45°	1355.6	1370.8	1393.6	1401.1	1406.2	1418.8	1436.6	1459.3	1469.4	1484.6	1502.3
47.5°	1044.6	1054.7	1067.3	1080.0	1092.6	1097.7	1115.4	1115.4	1128.1	1138.2	1143.2
50°	814.4	824.5	834.6	842.2	847.3	854.9	859.9	867.5	870.0	875.1	877.6
52.5°	637.3	650.0	650.0	655.0	662.6	670.2	667.7	670.2	672.7	672.7	680.3
55°	498.2	498.2	505.8	505.8	510.9	508.3	510.9	510.9	510.9	510.9	513.4
57.5°	371.8	374.4	382.0	376.9	374.4	379.4	374.4	379.4	376.9	382.0	374.4
60°	285.8	285.8	288.4	288.4	290.9	290.9	290.9	288.4	288.4	285.8	285.8
62.5°	215.0	217.5	220.1	217.5	217.5	217.5	215.0	215.0	212.5	209.9	209.9
65°	144.2	141.7	146.7	141.7	144.2	144.2	141.7	144.2	136.6	139.1	136.6
67.5°	103.7	101.2	98.7	101.2	98.7	96.1	96.1	98.7	101.2	93.6	93.6
70°	68.3	70.8	68.3	70.8	73.4	73.4	70.8	68.3	70.8	65.8	68.3
72.5°	43.0	43.0	43.0	43.0	43.0	45.5	45.5	45.5	40.5	40.5	37.9
75°	20.2	27.8	22.8	20.2	27.8	27.8	25.3	25.3	22.8	22.8	22.8
77.5°	20.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2	12.6	15.2	12.6
80°	10.1	10.1	10.1	7.6	10.1	10.1	12.6	10.1	10.1	7.6	12.6
82.5°	5.1	5.1	5.1	0.0	2.5	5.1	5.1	2.5	5.1	5.1	2.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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: P248779

CATALOG NUMBER: LD8B90D010 ER8B90835 8LBSW0GPH

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8
2.5°	5237.9	5235.5	5237.9	5240.4	5237.9	5235.5	5237.9	5240.4	5230.4	5227.9	5232.8
5°	5349.2	5349.2	5354.2	5356.8	5354.2	5349.2	5349.2	5339.1	5331.5	5323.9	5321.4
7.5°	5445.3	5450.4	5455.4	5457.9	5455.4	5450.4	5445.3	5430.1	5414.9	5402.3	5392.2
10°	5503.5	5511.1	5521.2	5526.2	5521.2	5511.1	5503.5	5485.8	5465.5	5445.3	5430.1
12.5°	5528.8	5536.4	5549.0	5546.5	5549.0	5536.4	5528.8	5503.5	5480.7	5452.9	5430.1
15°	5511.1	5521.2	5533.8	5538.9	5533.8	5521.2	5511.1	5485.8	5465.5	5435.2	5412.4
17.5°	5455.4	5470.6	5478.2	5485.8	5478.2	5470.6	5455.4	5435.2	5407.4	5382.1	5359.3
20°	5379.5	5389.7	5399.8	5402.3	5399.8	5389.7	5379.5	5356.8	5313.8	5308.7	5291.0
22.5°	5270.8	5278.4	5301.1	5293.5	5301.1	5278.4	5270.8	5250.5	5235.5	5207.6	5189.9
25°	5114.0	5121.6	5124.2	5126.7	5124.2	5121.6	5114.0	5096.3	5081.2	5060.9	5050.8
27.5°	4843.4	4843.4	4848.4	4851.0	4848.4	4843.4	4843.4	4830.7	4820.6	4810.5	4800.4
30°	4433.6	4433.6	4433.6	4446.3	4433.6	4433.6	4433.6	4431.2	4431.2	4433.6	4433.6
32.5°	3960.7	3955.6	3950.6	3955.6	3950.6	3955.6	3960.7	3963.2	3960.7	3968.3	3980.9
35°	3424.5	3422.0	3429.6	3419.5	3429.6	3422.0	3424.5	3424.5	3434.7	3444.8	3447.3
37.5°	2911.0	2906.0	2916.1	2906.0	2916.1	2906.0	2911.0	2908.5	2906.0	2911.0	2903.5
40°	2423.0	2428.0	2428.0	2448.3	2428.0	2428.0	2423.0	2417.9	2400.2	2390.1	2380.0
42.5°	1955.1	1970.3	1965.2	1980.4	1965.2	1970.3	1955.1	1945.0	1924.7	1907.0	1891.9
45°	1512.4	1522.6	1522.6	1527.6	1522.6	1522.6	1512.4	1502.3	1484.6	1469.4	1459.3
47.5°	1160.9	1160.9	1160.9	1163.5	1160.9	1160.9	1160.9	1143.2	1138.2	1128.1	1115.4
50°	882.7	885.2	887.8	890.3	887.8	885.2	882.7	877.6	875.1	870.0	867.5
52.5°	677.8	680.3	675.3	680.3	675.3	680.3	677.8	680.3	672.7	672.7	670.2
55°	513.4	510.9	513.4	515.9	513.4	510.9	513.4	513.4	510.9	510.9	510.9
57.5°	376.9	371.8	371.8	371.8	371.8	371.8	376.9	374.4	382.0	376.9	379.4
60°	280.8	283.3	283.3	285.8	283.3	283.3	280.8	285.8	285.8	288.4	288.4
62.5°	207.4	215.0	209.9	215.0	209.9	215.0	207.4	209.9	209.9	212.5	215.0
65°	134.1	134.1	134.1	136.6	134.1	134.1	134.1	136.6	139.1	136.6	144.2
67.5°	91.1	93.6	98.7	96.1	98.7	93.6	91.1	93.6	93.6	101.2	98.7
70°	73.4	65.8	65.8	73.4	65.8	65.8	73.4	68.3	65.8	70.8	68.3
72.5°	43.0	37.9	43.0	43.0	43.0	37.9	43.0	37.9	40.5	40.5	45.5
75°	22.8	20.2	17.7	25.3	17.7	20.2	22.8	22.8	22.8	22.8	25.3
77.5°	15.2	12.6	17.7	17.7	17.7	12.6	15.2	12.6	15.2	12.6	15.2
80°	7.6	10.1	7.6	12.6	7.6	10.1	7.6	12.6	7.6	10.1	10.1
82.5°	2.5	5.1	5.1	5.1	5.1	5.1	2.5	2.5	5.1	5.1	2.5
85°	0.0	5.1	2.5	2.5	2.5	5.1	0.0	0.0	0.0	0.0	0.0
87.5°	2.5	0.0	0.0	2.5	0.0	0.0	2.5	0.0	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: P248779

CATALOG NUMBER: LD8B90D010 ER8B90835 8LBSW0GPH

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8
2.5°	5232.8	5225.2	5227.9	5212.7	5212.7	5207.6	5210.2	5197.5	5192.5	5187.4	5195.0
5°	5308.7	5296.1	5285.9	5263.2	5250.5	5235.5	5227.9	5207.6	5189.9	5174.7	5172.2
7.5°	5369.4	5341.6	5323.9	5293.5	5270.8	5253.1	5227.9	5200.0	5177.3	5157.0	5141.9
10°	5394.7	5366.9	5339.1	5301.1	5275.8	5242.9	5217.6	5182.3	5152.0	5124.2	5106.4
12.5°	5397.2	5361.8	5336.5	5293.5	5260.6	5225.2	5197.5	5157.0	5121.6	5093.8	5066.0
15°	5374.5	5341.6	5311.2	5265.7	5232.8	5200.0	5167.2	5124.2	5091.3	5058.4	5038.2
17.5°	5323.9	5293.5	5258.1	5215.2	5184.9	5154.5	5119.1	5083.7	5045.7	5010.3	4985.0
20°	5258.1	5225.2	5195.0	5152.0	5126.7	5093.8	5060.9	5023.0	4992.6	4957.2	4929.4
22.5°	5159.6	5129.2	5101.4	5076.1	5035.6	5010.3	4987.6	4944.6	4914.2	4881.3	4851.0
25°	5017.9	4987.6	4964.8	4934.4	4916.7	4888.9	4866.1	4828.2	4800.4	4770.0	4744.7
27.5°	4785.2	4767.5	4754.8	4737.1	4722.0	4709.3	4696.7	4666.3	4646.1	4618.3	4593.0
30°	4436.1	4433.6	4426.0	4418.4	4428.5	4428.5	4428.5	4423.6	4405.9	4385.6	4367.9
32.5°	3988.5	3993.6	4003.7	4011.3	4031.5	4054.3	4074.5	4084.6	4084.6	4072.0	4064.4
35°	3454.9	3462.5	3477.7	3497.9	3523.2	3551.0	3596.5	3606.7	3614.1	3614.1	3604.1
37.5°	2900.9	2898.4	2913.6	2931.3	2946.5	2966.7	2999.6	3007.2	3019.8	3014.8	3004.6
40°	2362.2	2349.6	2344.5	2349.6	2367.3	2359.7	2367.3	2362.2	2362.2	2344.5	2344.5
42.5°	1864.0	1848.9	1838.7	1831.2	1831.2	1813.4	1800.8	1788.2	1780.6	1767.9	1765.4
45°	1436.6	1418.8	1406.2	1401.1	1393.6	1370.8	1355.6	1340.4	1322.7	1317.7	1320.2
47.5°	1115.4	1097.7	1092.6	1080.0	1067.3	1054.7	1044.6	1026.9	1024.3	1014.2	1024.3
50°	859.9	854.9	847.3	842.2	834.6	824.5	814.4	804.3	799.2	799.2	801.7
52.5°	667.7	670.2	662.6	655.0	650.0	650.0	637.3	634.8	634.8	624.7	634.8
55°	510.9	508.3	510.9	505.8	505.8	498.2	498.2	490.6	490.6	483.0	488.1
57.5°	374.4	379.4	374.4	376.9	382.0	374.4	371.8	364.2	369.3	364.2	366.8
60°	290.9	290.9	290.9	288.4	288.4	285.8	285.8	283.3	283.3	278.2	283.3
62.5°	215.0	217.5	217.5	217.5	220.1	217.5	215.0	217.5	215.0	215.0	217.5
65°	141.7	144.2	144.2	141.7	146.7	141.7	144.2	146.7	149.2	146.7	149.2
67.5°	96.1	96.1	98.7	101.2	98.7	101.2	103.7	101.2	103.7	108.8	103.7
70°	70.8	73.4	73.4	70.8	68.3	70.8	68.3	75.9	75.9	75.9	80.9
72.5°	45.5	45.5	43.0	43.0	43.0	43.0	43.0	50.6	45.5	43.0	48.1
75°	25.3	27.8	27.8	20.2	22.8	27.8	20.2	22.8	30.4	25.3	30.4
77.5°	15.2	15.2	15.2	15.2	15.2	15.2	20.2	17.7	17.7	17.7	20.2
80°	12.6	10.1	10.1	7.6	10.1	10.1	10.1	15.2	12.6	12.6	15.2
82.5°	5.1	5.1	2.5	0.0	5.1	5.1	5.1	5.1	5.1	5.1	10.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	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: P248779

CATALOG NUMBER: LD8B90D010 ER8B90835 8LBSW0GPH

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8
2.5°	5174.7	5174.7	5172.2	5167.2	5157.0	5157.0	5154.5	5146.9	5141.9	5139.3	5139.3
5°	5149.4	5139.3	5129.2	5101.4	5101.4	5096.3	5081.2	5071.0	5066.0	5053.3	5048.3
7.5°	5126.7	5096.3	5078.6	5060.9	5038.2	5028.0	5010.3	5002.7	4985.0	4972.4	4964.8
10°	5071.0	5050.8	5028.0	5000.2	4982.5	4962.3	4942.0	4926.9	4904.1	4891.4	4881.3
12.5°	5033.1	5002.7	4982.5	4952.1	4921.8	4904.1	4876.3	4858.6	4835.8	4810.5	4795.3
15°	4997.7	4964.8	4937.0	4904.1	4871.2	4851.0	4818.1	4797.9	4765.0	4739.7	4722.0
17.5°	4944.6	4916.7	4886.4	4845.9	4815.6	4790.3	4754.8	4729.6	4699.2	4666.3	4648.6
20°	4888.9	4856.0	4825.7	4785.2	4754.8	4724.5	4689.1	4661.3	4625.8	4595.5	4575.3
22.5°	4815.6	4777.6	4752.3	4711.8	4676.4	4643.6	4610.7	4577.8	4544.9	4519.6	4496.8
25°	4709.3	4668.8	4641.0	4608.1	4575.3	4550.0	4509.5	4489.3	4456.4	4433.6	4410.9
27.5°	4557.5	4527.2	4501.9	4469.0	4441.2	4421.1	4390.7	4370.5	4342.6	4322.4	4304.7
30°	4335.1	4309.8	4287.0	4254.1	4233.9	4216.2	4188.3	4170.6	4150.4	4127.6	4122.6
32.5°	4036.6	4016.3	3993.6	3970.8	3955.6	3945.5	3922.7	3912.6	3892.4	3879.7	3867.1
35°	3586.4	3568.7	3556.1	3546.0	3540.9	3543.4	3538.4	3548.5	3553.5	3551.0	3553.5
37.5°	2997.1	2986.9	2992.0	2999.6	3024.9	3057.8	3088.1	3133.6	3164.0	3194.4	3222.2
40°	2339.5	2347.1	2367.3	2412.8	2478.6	2552.0	2620.3	2706.3	2792.3	2852.9	2908.5
42.5°	1765.4	1788.2	1838.7	1904.5	2003.2	2111.8	2218.1	2344.5	2448.3	2549.4	2620.3
45°	1327.8	1358.1	1423.9	1515.0	1623.7	1750.2	1884.3	2025.8	2149.8	2253.5	2331.9
47.5°	1034.5	1062.3	1128.1	1224.1	1358.1	1489.7	1628.8	1775.5	1904.5	2005.7	2073.9
50°	816.9	852.3	910.5	1011.7	1145.8	1284.8	1429.0	1573.1	1694.6	1780.6	1841.3
52.5°	642.4	675.3	730.9	837.2	973.8	1112.9	1246.8	1388.5	1494.7	1578.2	1618.7
55°	498.2	528.6	586.7	675.3	804.3	940.9	1074.9	1196.4	1294.9	1355.6	1393.6
57.5°	379.4	402.2	442.6	531.1	647.5	773.9	887.8	1009.2	1085.1	1128.1	1153.3
60°	288.4	306.1	349.1	417.3	523.5	632.3	728.4	819.5	880.2	915.6	940.9
62.5°	217.5	237.8	268.1	326.3	407.1	495.7	576.6	644.9	695.5	718.3	736.0
65°	149.2	164.4	187.2	232.7	301.0	364.2	427.4	478.0	510.9	536.2	546.3
67.5°	111.3	121.4	134.1	169.5	217.5	268.1	311.1	346.5	382.0	392.1	409.7
70°	83.5	91.1	103.7	129.0	156.8	192.2	227.7	247.9	273.2	290.9	296.0
72.5°	53.1	55.6	68.3	83.5	106.2	129.0	151.8	169.5	184.7	194.8	199.8
75°	30.4	45.5	45.5	60.7	75.9	86.0	101.2	113.8	121.4	129.0	129.0
77.5°	20.2	27.8	30.4	37.9	45.5	58.2	70.8	78.4	86.0	88.5	88.5
80°	17.7	20.2	20.2	27.8	32.9	43.0	50.6	53.1	58.2	60.7	65.8
82.5°	7.6	10.1	12.6	20.2	22.8	22.8	30.4	32.9	37.9	40.5	40.5
85°	2.5	5.1	5.1	7.6	12.6	15.2	17.7	20.2	22.8	22.8	25.3
87.5°	2.5	2.5	0.0	2.5	5.1	5.1	10.1	10.1	10.1	15.2	15.2
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: P248779

CATALOG NUMBER: LD8B90D010 ER8B90835 8LBSW0GPH

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8	5179.8
2.5°	5134.3	5136.8	5126.7	5124.2	5119.1	5121.6	5126.7
5°	5040.7	5043.2	5033.1	5023.0	5023.0	5020.4	5023.0
7.5°	4952.1	4954.7	4939.5	4934.4	4924.3	4926.9	4926.9
10°	4863.6	4863.6	4840.9	4838.3	4830.7	4828.2	4828.2
12.5°	4777.6	4770.0	4752.3	4742.2	4747.3	4732.1	4732.1
15°	4701.7	4689.1	4666.3	4658.7	4646.1	4641.0	4641.0
17.5°	4623.3	4613.2	4593.0	4577.8	4562.6	4560.1	4562.6
20°	4547.4	4537.3	4512.0	4501.9	4489.3	4489.3	4484.2
22.5°	4471.5	4461.4	4438.7	4431.2	4413.5	4413.5	4416.0
25°	4393.2	4385.6	4360.3	4355.3	4352.8	4342.6	4347.7
27.5°	4287.0	4281.9	4261.7	4254.1	4244.0	4241.5	4246.5
30°	4092.2	4084.6	4069.5	4061.9	4044.2	4046.7	4051.7
32.5°	3849.4	3839.3	3819.0	3811.4	3796.3	3791.2	3793.7
35°	3546.0	3538.4	3520.7	3520.7	3505.5	3500.4	3505.5
37.5°	3237.4	3244.9	3237.4	3244.9	3237.4	3234.8	3237.4
40°	2946.5	2974.3	2979.3	3007.2	2997.1	3012.2	3009.7
42.5°	2668.3	2713.8	2731.6	2754.3	2749.3	2759.4	2767.0
45°	2387.5	2425.5	2443.2	2458.4	2460.9	2466.0	2468.5
47.5°	2121.9	2152.3	2154.8	2172.5	2170.0	2170.0	2177.6
50°	1874.2	1894.4	1899.4	1912.1	1902.0	1896.9	1899.4
52.5°	1644.0	1664.2	1659.1	1664.2	1651.6	1646.5	1649.0
55°	1408.7	1418.8	1418.8	1418.8	1403.7	1403.7	1403.7
57.5°	1168.5	1171.1	1166.0	1168.5	1166.0	1150.8	1148.3
60°	948.5	948.5	945.9	948.5	940.9	933.3	933.3
62.5°	741.0	746.1	756.2	746.1	741.0	746.1	738.5
65°	553.9	564.0	561.4	566.5	564.0	564.0	558.9
67.5°	417.3	419.8	422.3	424.9	424.9	424.9	424.9
70°	306.1	313.7	311.1	311.1	311.1	311.1	326.3
72.5°	204.9	215.0	212.5	217.5	217.5	222.6	217.5
75°	139.1	149.2	144.2	151.8	149.2	144.2	156.8
77.5°	93.6	98.7	101.2	103.7	101.2	98.7	101.2
80°	65.8	70.8	68.3	70.8	70.8	70.8	73.4
82.5°	40.5	48.1	45.5	48.1	45.5	48.1	48.1
85°	27.8	30.4	25.3	30.4	27.8	27.8	32.9
87.5°	17.7	15.2	15.2	17.7	15.2	17.7	15.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)