

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: P248581

Luminaire Tested: **LD8B90D010 ER8B90850 8LBSW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248581  
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 ER8B90850 8LBSW0H  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
80 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9550.0 lumens  
Efficiency: N/A  
Efficacy: 110.9 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

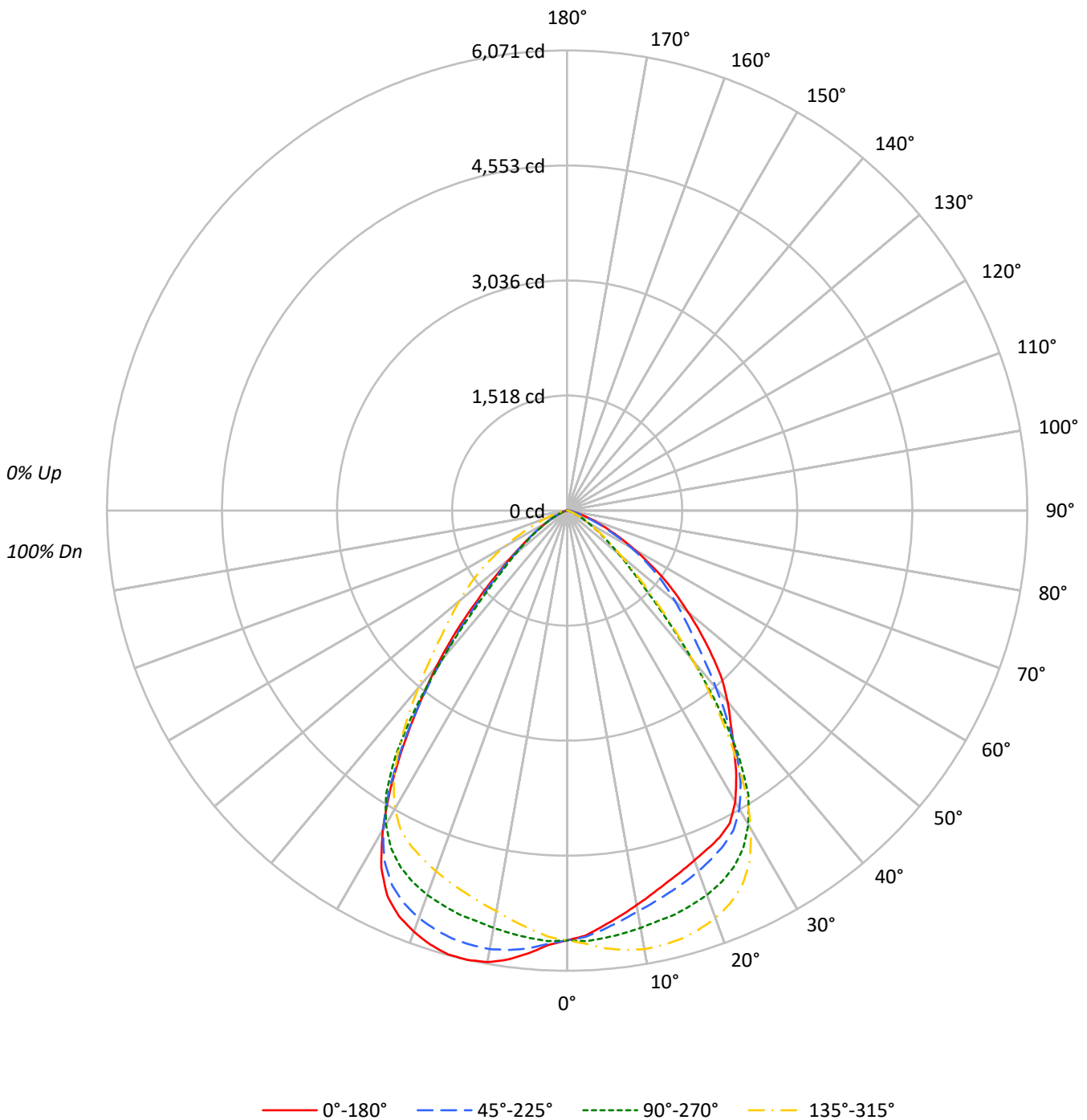
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	174826	174826	174826	174826
5°	170183	175237	181496	175237
10°	165475	175009	189397	175009
15°	162171	176049	193543	176049
20°	161067	177055	194044	177055
25°	161914	176697	190923	176697
30°	157909	170232	173291	170232
35°	144437	148499	140895	148499
40°	132609	103300	107873	103300
45°	117828	63020	72919	63020
50°	99735	42096	46749	42096
55°	82605	28725	30359	28725
60°	62999	19119	19291	19119
65°	44640	11915	10908	11915
70°	32196	7979	7240	7979
75°	20445	3967	3300	3967
80°	14260	2948	2451	2948
85°	12737	0	955	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	539.6	5.7
10°-20°	1562.7	16.4
20°-30°	2366.2	24.8
30°-40°	2371.5	24.8
40°-50°	1489.2	15.6
50°-60°	793.6	8.3
60°-70°	326.3	3.4
70°-80°	86.2	0.9
80°-90°	14.6	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°	4468.5	46.8
0°-40°	6840.1	71.6
0°-60°	9122.9	95.5
0°-90°	9550.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9550.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	5670	5670	5670	5670	5670	
5°	5498	5661	5863	5661	5498	518
15°	5080	5515	6063	5515	5080	1437
25°	4759	5193	5611	5193	4759	2183
35°	3837	3945	3743	3945	3837	2404
45°	2702	1445	1672	1445	2702	2078
55°	1536	534	565	534	1536	1370
65°	612	163	150	163	612	635
75°	172	33	28	33	172	194
85°	36	0	3	0	36	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°	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5
2.5°	5611.4	5605.8	5603.1	5608.7	5611.4	5622.5	5619.7	5625.2	5625.2	5628.1	5633.5
5°	5497.9	5495.1	5497.9	5497.9	5509.0	5520.0	5517.3	5525.6	5531.1	5545.0	5550.5
7.5°	5392.8	5392.8	5389.9	5401.0	5406.5	5423.2	5420.3	5434.2	5442.6	5456.3	5475.7
10°	5284.7	5284.7	5287.5	5295.8	5298.6	5323.5	5323.5	5342.8	5353.9	5367.8	5392.8
12.5°	5179.6	5179.6	5196.2	5190.6	5201.7	5221.0	5229.4	5248.7	5265.4	5293.1	5318.0
15°	5079.9	5079.9	5085.4	5099.2	5107.5	5132.5	5146.3	5168.5	5187.9	5215.6	5251.6
17.5°	4994.1	4991.3	4994.1	5010.7	5027.3	5049.4	5060.5	5088.2	5107.5	5143.6	5176.8
20°	4908.3	4913.8	4913.8	4927.6	4938.7	4966.4	4977.4	5008.0	5030.1	5063.2	5102.1
22.5°	4833.5	4830.8	4830.8	4850.1	4858.5	4883.3	4894.4	4922.0	4947.0	4974.7	5010.7
25°	4758.8	4753.2	4764.3	4767.1	4772.5	4800.2	4808.6	4827.9	4852.9	4877.8	4913.8
27.5°	4648.0	4642.5	4645.3	4656.3	4664.6	4686.7	4692.3	4711.7	4731.1	4753.2	4783.7
30°	4434.8	4429.3	4426.6	4446.0	4454.3	4470.8	4479.1	4512.4	4517.9	4542.8	4564.9
32.5°	4152.4	4149.7	4155.3	4171.8	4180.1	4202.4	4213.4	4232.8	4246.6	4260.5	4282.6
35°	3836.9	3831.3	3836.9	3853.6	3853.6	3872.9	3881.3	3889.5	3886.7	3889.5	3884.0
37.5°	3543.5	3540.7	3543.5	3551.7	3543.5	3551.7	3543.5	3526.9	3496.5	3463.2	3429.9
40°	3294.3	3297.0	3280.5	3291.6	3261.0	3255.6	3225.1	3183.6	3122.7	3056.3	2962.2
42.5°	3028.6	3020.3	3009.2	3014.7	2989.8	2970.4	2920.6	2868.0	2790.4	2679.8	2566.2
45°	2701.9	2699.2	2693.6	2690.9	2674.2	2654.8	2613.3	2552.4	2466.6	2353.1	2217.4
47.5°	2383.5	2375.2	2375.2	2378.0	2358.6	2355.8	2322.6	2270.0	2195.3	2084.5	1943.4
50°	2079.0	2076.2	2081.8	2092.9	2079.0	2073.5	2051.4	2015.4	1948.9	1854.8	1721.8
52.5°	1804.9	1802.2	1807.8	1821.6	1816.0	1821.6	1799.4	1771.8	1727.4	1636.0	1519.8
55°	1536.5	1536.5	1536.5	1553.0	1553.0	1553.0	1541.9	1525.4	1483.8	1417.4	1309.5
57.5°	1256.8	1259.6	1276.2	1278.9	1276.2	1281.8	1278.9	1262.3	1234.7	1187.7	1104.6
60°	1021.5	1021.5	1029.9	1038.2	1035.3	1038.2	1038.2	1029.9	1002.2	963.4	897.0
62.5°	808.3	816.7	811.1	816.7	827.7	816.7	811.1	805.6	786.2	761.3	705.9
65°	611.8	617.4	617.4	620.1	614.5	617.4	606.3	598.0	586.9	559.3	523.2
67.5°	465.1	465.1	465.1	465.1	462.3	459.5	456.8	448.5	429.1	418.1	379.2
70°	357.1	340.5	340.5	340.5	340.5	343.3	335.0	324.0	318.4	299.0	271.3
72.5°	238.0	243.6	238.0	238.0	232.6	235.3	224.2	218.7	213.2	202.1	185.5
75°	171.6	157.8	163.3	166.1	157.8	163.3	152.2	141.2	141.2	132.9	124.5
77.5°	110.8	108.0	110.8	113.5	110.8	108.0	102.4	96.9	96.9	94.1	85.8
80°	80.3	77.5	77.5	77.5	74.7	77.5	72.0	72.0	66.4	63.7	58.1
82.5°	52.6	52.6	49.8	52.6	49.8	52.6	44.3	44.3	44.3	41.5	36.0
85°	36.0	30.4	30.4	33.3	27.7	33.3	30.4	27.7	25.0	25.0	22.1
87.5°	16.6	19.4	16.6	19.4	16.6	16.6	19.4	16.6	16.6	11.1	11.1
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°	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5
2.5°	5641.8	5644.6	5644.6	5655.7	5661.2	5663.9	5663.9	5686.2	5677.9	5683.4	5688.9
5°	5561.6	5578.1	5583.7	5583.7	5614.2	5625.2	5636.3	5661.2	5663.9	5680.6	5700.0
7.5°	5484.0	5503.4	5514.6	5539.4	5558.8	5578.1	5611.4	5628.1	5644.6	5666.8	5691.6
10°	5409.3	5431.5	5453.6	5473.0	5503.4	5528.4	5550.5	5589.2	5608.7	5639.1	5672.3
12.5°	5337.4	5367.8	5387.2	5420.3	5453.6	5475.7	5509.0	5545.0	5575.4	5605.8	5644.6
15°	5273.7	5309.7	5331.8	5367.8	5403.8	5434.2	5470.2	5514.6	5536.7	5572.7	5608.7
17.5°	5204.4	5243.3	5270.9	5304.1	5348.4	5381.6	5412.1	5456.3	5484.0	5522.8	5564.4
20°	5132.5	5171.2	5204.4	5237.7	5282.0	5315.2	5351.2	5395.5	5425.9	5464.7	5497.9
22.5°	5046.7	5082.7	5118.6	5157.3	5201.7	5229.4	5270.9	5309.7	5342.8	5378.9	5412.1
25°	4935.9	4980.3	5008.0	5043.9	5079.9	5110.3	5154.6	5193.3	5221.0	5254.3	5284.7
27.5°	4805.8	4839.1	4861.2	4891.6	4927.6	4955.3	4988.5	5027.3	5055.0	5085.4	5107.5
30°	4584.3	4614.8	4634.2	4656.3	4692.3	4717.3	4745.0	4780.9	4800.2	4822.5	4841.8
32.5°	4293.6	4318.6	4329.6	4346.3	4371.2	4396.1	4418.3	4448.7	4457.0	4470.8	4470.8
35°	3872.9	3878.4	3875.7	3881.3	3892.3	3906.1	3925.5	3944.8	3955.9	3955.9	3947.7
37.5°	3380.1	3347.0	3310.9	3283.3	3274.9	3269.4	3280.5	3288.7	3299.9	3305.4	3291.6
40°	2868.0	2793.3	2713.0	2640.9	2591.1	2569.0	2560.7	2566.2	2566.2	2585.6	2585.6
42.5°	2427.9	2311.5	2192.6	2084.5	2012.5	1957.3	1932.3	1932.3	1935.0	1948.9	1957.3
45°	2062.4	1915.7	1777.2	1658.3	1558.6	1486.5	1453.4	1445.1	1442.3	1447.8	1467.2
47.5°	1782.8	1630.6	1486.5	1339.9	1234.7	1162.7	1132.3	1121.1	1110.1	1121.1	1124.0
50°	1564.1	1406.3	1254.1	1107.3	996.6	932.9	894.1	877.5	874.8	874.8	880.4
52.5°	1364.7	1218.1	1065.9	916.4	800.0	739.2	703.2	694.8	683.8	694.8	694.8
55°	1176.5	1029.9	880.4	739.2	642.2	578.6	545.3	534.3	528.7	537.0	537.0
57.5°	971.7	847.1	708.7	581.4	484.5	440.2	415.2	401.4	398.6	404.2	398.6
60°	797.3	692.1	573.0	456.8	382.1	335.0	315.6	310.0	304.5	310.0	310.0
62.5°	631.2	542.6	445.6	357.1	293.4	260.3	238.0	238.0	235.3	235.3	238.0
65°	467.9	398.6	329.4	254.7	204.9	179.9	163.3	163.3	160.6	163.3	160.6
67.5°	340.5	293.4	238.0	185.5	146.8	132.9	121.8	113.5	119.1	113.5	110.8
70°	249.2	210.3	171.6	141.2	113.5	99.7	91.4	88.5	83.1	83.1	83.1
72.5°	166.1	141.2	116.2	91.4	74.7	60.8	58.1	52.6	47.1	49.8	55.4
75°	110.8	94.1	83.1	66.4	49.8	49.8	33.3	33.3	27.7	33.3	25.0
77.5°	77.5	63.7	49.8	41.5	33.3	30.4	22.1	22.1	19.4	19.4	19.4
80°	55.4	47.1	36.0	30.4	22.1	22.1	19.4	16.6	13.8	13.8	16.6
82.5°	33.3	25.0	25.0	22.1	13.8	11.1	8.3	11.1	5.6	5.6	5.6
85°	19.4	16.6	13.8	8.3	5.6	5.6	2.7	0.0	2.7	2.7	0.0
87.5°	11.1	5.6	5.6	2.7	0.0	2.7	2.7	0.0	0.0	0.0	5.6
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°	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5
2.5°	5702.8	5700.0	5705.5	5705.5	5722.2	5719.3	5727.6	5727.6	5722.2	5724.9	5736.0
5°	5722.2	5730.5	5747.0	5760.9	5785.8	5796.9	5810.7	5824.6	5827.3	5835.7	5844.0
7.5°	5722.2	5749.9	5769.2	5794.1	5827.3	5846.7	5877.1	5902.1	5913.2	5926.9	5943.6
10°	5711.0	5738.7	5774.7	5802.4	5844.0	5874.4	5904.8	5943.6	5960.2	5982.3	6004.5
12.5°	5688.9	5719.3	5758.1	5794.1	5841.1	5868.8	5907.6	5943.6	5968.5	5999.0	6023.9
15°	5655.7	5691.6	5727.6	5763.7	5813.4	5846.7	5882.7	5924.2	5949.2	5982.3	6004.5
17.5°	5603.1	5641.8	5675.1	5708.3	5755.3	5794.1	5827.3	5866.1	5891.0	5918.7	5949.2
20°	5539.4	5575.4	5611.4	5639.1	5686.2	5719.3	5755.3	5791.3	5810.7	5816.3	5863.4
22.5°	5459.2	5484.0	5511.7	5556.0	5583.7	5614.2	5647.4	5680.6	5700.0	5730.5	5747.0
25°	5326.2	5351.2	5381.6	5401.0	5434.2	5459.2	5492.3	5528.4	5539.4	5561.6	5578.1
27.5°	5140.8	5154.6	5168.5	5185.0	5204.4	5218.3	5237.7	5254.3	5265.4	5276.4	5287.5
30°	4847.3	4847.3	4847.3	4836.2	4844.6	4852.9	4855.6	4852.9	4852.9	4850.1	4850.1
32.5°	4459.8	4437.7	4412.7	4390.6	4382.3	4371.2	4365.6	4357.3	4343.5	4335.2	4338.0
35°	3936.5	3886.7	3856.3	3828.6	3806.5	3789.9	3781.5	3773.2	3770.5	3759.4	3748.3
37.5°	3283.3	3247.3	3225.1	3208.5	3189.1	3172.5	3175.2	3178.1	3186.3	3180.8	3183.6
40°	2591.1	2582.8	2591.1	2571.8	2566.2	2571.8	2585.6	2605.0	2616.1	2627.2	2646.5
42.5°	1971.1	1984.8	2004.3	2004.3	2012.5	2023.7	2040.2	2070.8	2087.3	2106.6	2128.9
45°	1483.8	1500.5	1525.4	1533.6	1539.2	1553.0	1572.5	1597.3	1608.4	1625.0	1644.4
47.5°	1143.3	1154.4	1168.2	1182.1	1195.9	1201.5	1220.8	1220.8	1234.7	1245.8	1251.2
50°	891.4	902.5	913.5	921.8	927.4	935.7	941.2	949.5	952.3	957.8	960.6
52.5°	697.6	711.5	711.5	717.0	725.3	733.6	730.9	733.6	736.3	736.3	744.6
55°	545.3	545.3	553.7	553.7	559.3	556.4	559.3	559.3	559.3	559.3	562.0
57.5°	406.9	409.8	418.1	412.5	409.8	415.2	409.8	415.2	412.5	418.1	409.8
60°	312.8	312.8	315.6	315.6	318.4	318.4	318.4	315.6	315.6	312.8	312.8
62.5°	235.3	238.0	240.9	238.0	238.0	238.0	235.3	235.3	232.6	229.7	229.7
65°	157.8	155.1	160.6	155.1	157.8	157.8	155.1	157.8	149.5	152.2	149.5
67.5°	113.5	110.8	108.0	110.8	108.0	105.2	105.2	108.0	110.8	102.4	102.4
70°	74.7	77.5	74.7	77.5	80.3	80.3	77.5	74.7	77.5	72.0	74.7
72.5°	47.1	47.1	47.1	47.1	47.1	49.8	49.8	49.8	44.3	44.3	41.5
75°	22.1	30.4	25.0	22.1	30.4	30.4	27.7	27.7	25.0	25.0	25.0
77.5°	22.1	16.6	16.6	16.6	16.6	16.6	16.6	16.6	13.8	16.6	13.8
80°	11.1	11.1	11.1	8.3	11.1	11.1	13.8	11.1	11.1	8.3	13.8
82.5°	5.6	5.6	5.6	0.0	2.7	5.6	5.6	2.7	5.6	5.6	2.7
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: P248581

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBSW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5
2.5°	5733.2	5730.5	5733.2	5736.0	5733.2	5730.5	5733.2	5736.0	5724.9	5722.2	5727.6
5°	5855.0	5855.0	5860.5	5863.4	5860.5	5855.0	5855.0	5844.0	5835.7	5827.3	5824.6
7.5°	5960.2	5965.8	5971.3	5974.0	5971.3	5965.8	5960.2	5943.6	5926.9	5913.2	5902.1
10°	6023.9	6032.2	6043.3	6048.7	6043.3	6032.2	6023.9	6004.5	5982.3	5960.2	5943.6
12.5°	6051.6	6059.9	6073.7	6071.0	6073.7	6059.9	6051.6	6023.9	5999.0	5968.5	5943.6
15°	6032.2	6043.3	6057.1	6062.6	6057.1	6043.3	6032.2	6004.5	5982.3	5949.2	5924.2
17.5°	5971.3	5987.9	5996.2	6004.5	5996.2	5987.9	5971.3	5949.2	5918.7	5891.0	5866.1
20°	5888.2	5899.4	5910.4	5913.2	5910.4	5899.4	5888.2	5863.4	5816.3	5810.7	5791.3
22.5°	5769.2	5777.6	5802.4	5794.1	5802.4	5777.6	5769.2	5747.0	5730.5	5700.0	5680.6
25°	5597.5	5605.8	5608.7	5611.4	5608.7	5605.8	5597.5	5578.1	5561.6	5539.4	5528.4
27.5°	5301.4	5301.4	5306.8	5309.7	5306.8	5301.4	5301.4	5287.5	5276.4	5265.4	5254.3
30°	4852.9	4852.9	4852.9	4866.8	4852.9	4852.9	4852.9	4850.1	4850.1	4852.9	4852.9
32.5°	4335.2	4329.6	4324.2	4329.6	4324.2	4329.6	4335.2	4338.0	4335.2	4343.5	4357.3
35°	3748.3	3745.5	3753.9	3742.8	3753.9	3745.5	3748.3	3748.3	3759.4	3770.5	3773.2
37.5°	3186.3	3180.8	3191.9	3180.8	3191.9	3180.8	3186.3	3183.6	3180.8	3186.3	3178.1
40°	2652.1	2657.6	2657.6	2679.8	2657.6	2657.6	2652.1	2646.5	2627.2	2616.1	2605.0
42.5°	2139.9	2156.6	2151.0	2167.6	2151.0	2156.6	2139.9	2128.9	2106.6	2087.3	2070.8
45°	1655.4	1666.6	1666.6	1672.1	1666.6	1666.6	1655.4	1644.4	1625.0	1608.4	1597.3
47.5°	1270.6	1270.6	1270.6	1273.5	1270.6	1270.6	1270.6	1251.2	1245.8	1234.7	1220.8
50°	966.2	968.9	971.7	974.5	971.7	968.9	966.2	960.6	957.8	952.3	949.5
52.5°	741.9	744.6	739.2	744.6	739.2	744.6	741.9	744.6	736.3	736.3	733.6
55°	562.0	559.3	562.0	564.7	562.0	559.3	562.0	562.0	559.3	559.3	559.3
57.5°	412.5	406.9	406.9	406.9	406.9	406.9	412.5	409.8	418.1	412.5	415.2
60°	307.3	310.0	310.0	312.8	310.0	310.0	307.3	312.8	312.8	315.6	315.6
62.5°	227.0	235.3	229.7	235.3	229.7	235.3	227.0	229.7	229.7	232.6	235.3
65°	146.8	146.8	146.8	149.5	146.8	146.8	146.8	149.5	152.2	149.5	157.8
67.5°	99.7	102.4	108.0	105.2	108.0	102.4	99.7	102.4	102.4	110.8	108.0
70°	80.3	72.0	72.0	80.3	72.0	72.0	80.3	74.7	72.0	77.5	74.7
72.5°	47.1	41.5	47.1	47.1	47.1	41.5	47.1	41.5	44.3	44.3	49.8
75°	25.0	22.1	19.4	27.7	19.4	22.1	25.0	25.0	25.0	25.0	27.7
77.5°	16.6	13.8	19.4	19.4	19.4	13.8	16.6	13.8	16.6	13.8	16.6
80°	8.3	11.1	8.3	13.8	8.3	11.1	8.3	13.8	8.3	11.1	11.1
82.5°	2.7	5.6	5.6	5.6	5.6	5.6	2.7	2.7	5.6	5.6	2.7
85°	0.0	5.6	2.7	2.7	2.7	5.6	0.0	0.0	0.0	0.0	0.0
87.5°	2.7	0.0	0.0	2.7	0.0	0.0	2.7	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: P248581

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBSW0H

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5
2.5°	5727.6	5719.3	5722.2	5705.5	5705.5	5700.0	5702.8	5688.9	5683.4	5677.9	5686.2
5°	5810.7	5796.9	5785.8	5760.9	5747.0	5730.5	5722.2	5700.0	5680.6	5663.9	5661.2
7.5°	5877.1	5846.7	5827.3	5794.1	5769.2	5749.9	5722.2	5691.6	5666.8	5644.6	5628.1
10°	5904.8	5874.4	5844.0	5802.4	5774.7	5738.7	5711.0	5672.3	5639.1	5608.7	5589.2
12.5°	5907.6	5868.8	5841.1	5794.1	5758.1	5719.3	5688.9	5644.6	5605.8	5575.4	5545.0
15°	5882.7	5846.7	5813.4	5763.7	5727.6	5691.6	5655.7	5608.7	5572.7	5536.7	5514.6
17.5°	5827.3	5794.1	5755.3	5708.3	5675.1	5641.8	5603.1	5564.4	5522.8	5484.0	5456.3
20°	5755.3	5719.3	5686.2	5639.1	5611.4	5575.4	5539.4	5497.9	5464.7	5425.9	5395.5
22.5°	5647.4	5614.2	5583.7	5556.0	5511.7	5484.0	5459.2	5412.1	5378.9	5342.8	5309.7
25°	5492.3	5459.2	5434.2	5401.0	5381.6	5351.2	5326.2	5284.7	5254.3	5221.0	5193.3
27.5°	5237.7	5218.3	5204.4	5185.0	5168.5	5154.6	5140.8	5107.5	5085.4	5055.0	5027.3
30°	4855.6	4852.9	4844.6	4836.2	4847.3	4847.3	4847.3	4841.8	4822.5	4800.2	4780.9
32.5°	4365.6	4371.2	4382.3	4390.6	4412.7	4437.7	4459.8	4470.8	4470.8	4457.0	4448.7
35°	3781.5	3789.9	3806.5	3828.6	3856.3	3886.7	3936.5	3947.7	3955.9	3955.9	3944.8
37.5°	3175.2	3172.5	3189.1	3208.5	3225.1	3247.3	3283.3	3291.6	3305.4	3299.9	3288.7
40°	2585.6	2571.8	2566.2	2571.8	2591.1	2582.8	2591.1	2585.6	2585.6	2566.2	2566.2
42.5°	2040.2	2023.7	2012.5	2004.3	2004.3	1984.8	1971.1	1957.3	1948.9	1935.0	1932.3
45°	1572.5	1553.0	1539.2	1533.6	1525.4	1500.5	1483.8	1467.2	1447.8	1442.3	1445.1
47.5°	1220.8	1201.5	1195.9	1182.1	1168.2	1154.4	1143.3	1124.0	1121.1	1110.1	1121.1
50°	941.2	935.7	927.4	921.8	913.5	902.5	891.4	880.4	874.8	874.8	877.5
52.5°	730.9	733.6	725.3	717.0	711.5	711.5	697.6	694.8	694.8	683.8	694.8
55°	559.3	556.4	559.3	553.7	553.7	545.3	545.3	537.0	537.0	528.7	534.3
57.5°	409.8	415.2	409.8	412.5	418.1	409.8	406.9	398.6	404.2	398.6	401.4
60°	318.4	318.4	318.4	315.6	315.6	312.8	312.8	310.0	310.0	304.5	310.0
62.5°	235.3	238.0	238.0	238.0	240.9	238.0	235.3	238.0	235.3	235.3	238.0
65°	155.1	157.8	157.8	155.1	160.6	155.1	157.8	160.6	163.3	160.6	163.3
67.5°	105.2	105.2	108.0	110.8	108.0	110.8	113.5	110.8	113.5	119.1	113.5
70°	77.5	80.3	80.3	77.5	74.7	77.5	74.7	83.1	83.1	83.1	88.5
72.5°	49.8	49.8	47.1	47.1	47.1	47.1	47.1	55.4	49.8	47.1	52.6
75°	27.7	30.4	30.4	22.1	25.0	30.4	22.1	25.0	33.3	27.7	33.3
77.5°	16.6	16.6	16.6	16.6	16.6	16.6	22.1	19.4	19.4	19.4	22.1
80°	13.8	11.1	11.1	8.3	11.1	11.1	11.1	16.6	13.8	13.8	16.6
82.5°	5.6	5.6	2.7	0.0	5.6	5.6	5.6	5.6	5.6	5.6	11.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.7	2.7	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	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: P248581

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBSW0H

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5
2.5°	5663.9	5663.9	5661.2	5655.7	5644.6	5644.6	5641.8	5633.5	5628.1	5625.2	5625.2
5°	5636.3	5625.2	5614.2	5583.7	5583.7	5578.1	5561.6	5550.5	5545.0	5531.1	5525.6
7.5°	5611.4	5578.1	5558.8	5539.4	5514.6	5503.4	5484.0	5475.7	5456.3	5442.6	5434.2
10°	5550.5	5528.4	5503.4	5473.0	5453.6	5431.5	5409.3	5392.8	5367.8	5353.9	5342.8
12.5°	5509.0	5475.7	5453.6	5420.3	5387.2	5367.8	5337.4	5318.0	5293.1	5265.4	5248.7
15°	5470.2	5434.2	5403.8	5367.8	5331.8	5309.7	5273.7	5251.6	5215.6	5187.9	5168.5
17.5°	5412.1	5381.6	5348.4	5304.1	5270.9	5243.3	5204.4	5176.8	5143.6	5107.5	5088.2
20°	5351.2	5315.2	5282.0	5237.7	5204.4	5171.2	5132.5	5102.1	5063.2	5030.1	5008.0
22.5°	5270.9	5229.4	5201.7	5157.3	5118.6	5082.7	5046.7	5010.7	4974.7	4947.0	4922.0
25°	5154.6	5110.3	5079.9	5043.9	5008.0	4980.3	4935.9	4913.8	4877.8	4852.9	4827.9
27.5°	4988.5	4955.3	4927.6	4891.6	4861.2	4839.1	4805.8	4783.7	4753.2	4731.1	4711.7
30°	4745.0	4717.3	4692.3	4656.3	4634.2	4614.8	4584.3	4564.9	4542.8	4517.9	4512.4
32.5°	4418.3	4396.1	4371.2	4346.3	4329.6	4318.6	4293.6	4282.6	4260.5	4246.6	4232.8
35°	3925.5	3906.1	3892.3	3881.3	3875.7	3878.4	3872.9	3884.0	3889.5	3886.7	3889.5
37.5°	3280.5	3269.4	3274.9	3283.3	3310.9	3347.0	3380.1	3429.9	3463.2	3496.5	3526.9
40°	2560.7	2569.0	2591.1	2640.9	2713.0	2793.3	2868.0	2962.2	3056.3	3122.7	3183.6
42.5°	1932.3	1957.3	2012.5	2084.5	2192.6	2311.5	2427.9	2566.2	2679.8	2790.4	2868.0
45°	1453.4	1486.5	1558.6	1658.3	1777.2	1915.7	2062.4	2217.4	2353.1	2466.6	2552.4
47.5°	1132.3	1162.7	1234.7	1339.9	1486.5	1630.6	1782.8	1943.4	2084.5	2195.3	2270.0
50°	894.1	932.9	996.6	1107.3	1254.1	1406.3	1564.1	1721.8	1854.8	1948.9	2015.4
52.5°	703.2	739.2	800.0	916.4	1065.9	1218.1	1364.7	1519.8	1636.0	1727.4	1771.8
55°	545.3	578.6	642.2	739.2	880.4	1029.9	1176.5	1309.5	1417.4	1483.8	1525.4
57.5°	415.2	440.2	484.5	581.4	708.7	847.1	971.7	1104.6	1187.7	1234.7	1262.3
60°	315.6	335.0	382.1	456.8	573.0	692.1	797.3	897.0	963.4	1002.2	1029.9
62.5°	238.0	260.3	293.4	357.1	445.6	542.6	631.2	705.9	761.3	786.2	805.6
65°	163.3	179.9	204.9	254.7	329.4	398.6	467.9	523.2	559.3	586.9	598.0
67.5°	121.8	132.9	146.8	185.5	238.0	293.4	340.5	379.2	418.1	429.1	448.5
70°	91.4	99.7	113.5	141.2	171.6	210.3	249.2	271.3	299.0	318.4	324.0
72.5°	58.1	60.8	74.7	91.4	116.2	141.2	166.1	185.5	202.1	213.2	218.7
75°	33.3	49.8	49.8	66.4	83.1	94.1	110.8	124.5	132.9	141.2	141.2
77.5°	22.1	30.4	33.3	41.5	49.8	63.7	77.5	85.8	94.1	96.9	96.9
80°	19.4	22.1	22.1	30.4	36.0	47.1	55.4	58.1	63.7	66.4	72.0
82.5°	8.3	11.1	13.8	22.1	25.0	25.0	33.3	36.0	41.5	44.3	44.3
85°	2.7	5.6	5.6	8.3	13.8	16.6	19.4	22.1	25.0	25.0	27.7
87.5°	2.7	2.7	0.0	2.7	5.6	5.6	11.1	11.1	11.1	16.6	16.6
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: P248581

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBSW0H

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5	5669.5
2.5°	5619.7	5622.5	5611.4	5608.7	5603.1	5605.8	5611.4
5°	5517.3	5520.0	5509.0	5497.9	5497.9	5495.1	5497.9
7.5°	5420.3	5423.2	5406.5	5401.0	5389.9	5392.8	5392.8
10°	5323.5	5323.5	5298.6	5295.8	5287.5	5284.7	5284.7
12.5°	5229.4	5221.0	5201.7	5190.6	5196.2	5179.6	5179.6
15°	5146.3	5132.5	5107.5	5099.2	5085.4	5079.9	5079.9
17.5°	5060.5	5049.4	5027.3	5010.7	4994.1	4991.3	4994.1
20°	4977.4	4966.4	4938.7	4927.6	4913.8	4913.8	4908.3
22.5°	4894.4	4883.3	4858.5	4850.1	4830.8	4830.8	4833.5
25°	4808.6	4800.2	4772.5	4767.1	4764.3	4753.2	4758.8
27.5°	4692.3	4686.7	4664.6	4656.3	4645.3	4642.5	4648.0
30°	4479.1	4470.8	4454.3	4446.0	4426.6	4429.3	4434.8
32.5°	4213.4	4202.4	4180.1	4171.8	4155.3	4149.7	4152.4
35°	3881.3	3872.9	3853.6	3853.6	3836.9	3831.3	3836.9
37.5°	3543.5	3551.7	3543.5	3551.7	3543.5	3540.7	3543.5
40°	3225.1	3255.6	3261.0	3291.6	3280.5	3297.0	3294.3
42.5°	2920.6	2970.4	2989.8	3014.7	3009.2	3020.3	3028.6
45°	2613.3	2654.8	2674.2	2690.9	2693.6	2699.2	2701.9
47.5°	2322.6	2355.8	2358.6	2378.0	2375.2	2375.2	2383.5
50°	2051.4	2073.5	2079.0	2092.9	2081.8	2076.2	2079.0
52.5°	1799.4	1821.6	1816.0	1821.6	1807.8	1802.2	1804.9
55°	1541.9	1553.0	1553.0	1553.0	1536.5	1536.5	1536.5
57.5°	1278.9	1281.8	1276.2	1278.9	1276.2	1259.6	1256.8
60°	1038.2	1038.2	1035.3	1038.2	1029.9	1021.5	1021.5
62.5°	811.1	816.7	827.7	816.7	811.1	816.7	808.3
65°	606.3	617.4	614.5	620.1	617.4	617.4	611.8
67.5°	456.8	459.5	462.3	465.1	465.1	465.1	465.1
70°	335.0	343.3	340.5	340.5	340.5	340.5	357.1
72.5°	224.2	235.3	232.6	238.0	238.0	243.6	238.0
75°	152.2	163.3	157.8	166.1	163.3	157.8	171.6
77.5°	102.4	108.0	110.8	113.5	110.8	108.0	110.8
80°	72.0	77.5	74.7	77.5	77.5	77.5	80.3
82.5°	44.3	52.6	49.8	52.6	49.8	52.6	52.6
85°	30.4	33.3	27.7	33.3	30.4	30.4	36.0
87.5°	19.4	16.6	16.6	19.4	16.6	19.4	16.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)