

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: P248554

Luminaire Tested: **LD8B90D010 ER8B90830 8LBSW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248554
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 ER8B90830 8LBSW0H
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9066.0 lumens
Efficiency: N/A
Efficacy: 105.3 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

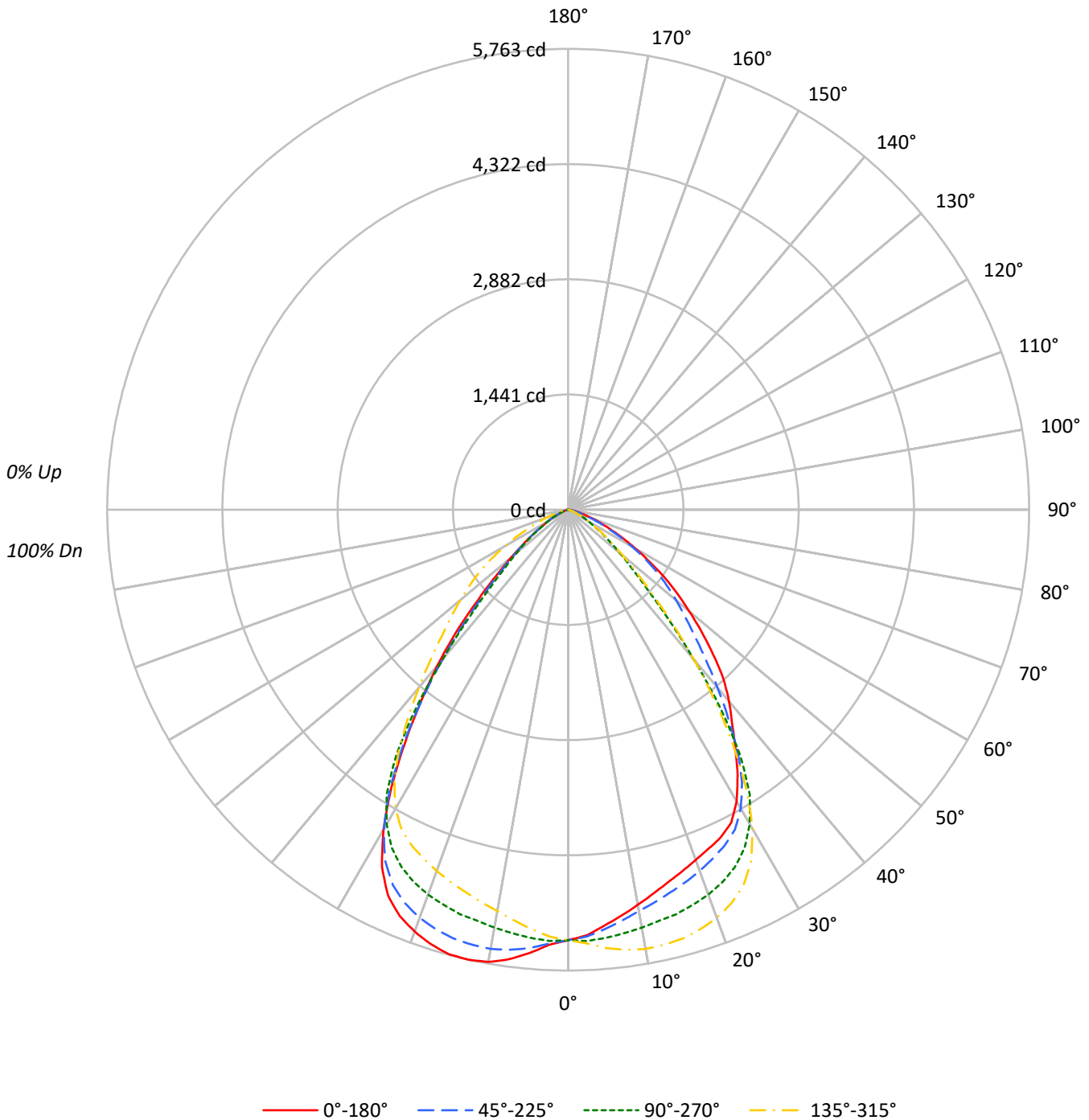
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	165967	165967	165967	165967
5°	161559	166357	172297	166357
10°	157089	166138	179800	166138
15°	153951	167126	183736	167126
20°	152903	168080	184209	168080
25°	153707	167742	181246	167742
30°	149904	161605	164507	161605
35°	137119	140974	133754	140974
40°	125890	98063	102406	98063
45°	111857	59823	69221	59823
50°	94679	39961	44380	39961
55°	78416	27268	28822	27268
60°	59810	18150	18311	18150
65°	42378	11310	10354	11310
70°	30564	7573	6879	7573
75°	19408	3765	3133	3765
80°	13549	2806	2326	2806
85°	12100	0	920	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	512.3	5.7
10°-20°	1483.5	16.4
20°-30°	2246.3	24.8
30°-40°	2251.3	24.8
40°-50°	1413.7	15.6
50°-60°	753.4	8.3
60°-70°	309.8	3.4
70°-80°	81.9	0.9
80°-90°	13.8	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°	4242.1	46.8
0°-40°	6493.4	71.6
0°-60°	8660.5	95.5
0°-90°	9066.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9066.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	5382	5382	5382	5382	5382	
5°	5219	5374	5566	5374	5219	492
15°	4822	5235	5755	5235	4822	1364
25°	4518	4930	5327	4930	4518	2072
35°	3642	3745	3553	3745	3642	2282
45°	2565	1372	1587	1372	2565	1973
55°	1459	507	536	507	1459	1300
65°	581	155	142	155	581	602
75°	163	32	26	32	163	185
85°	34	0	3	0	34	38
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°	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2
2.5°	5327.0	5321.7	5319.1	5324.4	5327.0	5337.5	5334.9	5340.1	5340.1	5342.8	5348.0
5°	5219.3	5216.6	5219.3	5219.3	5229.8	5240.3	5237.7	5245.6	5250.8	5264.0	5269.2
7.5°	5119.4	5119.4	5116.7	5127.2	5132.5	5148.3	5145.6	5158.8	5166.7	5179.8	5198.2
10°	5016.9	5016.9	5019.5	5027.4	5030.1	5053.7	5053.7	5072.1	5082.6	5095.8	5119.4
12.5°	4917.1	4917.1	4932.9	4927.6	4938.0	4956.4	4964.3	4982.7	4998.5	5024.8	5048.5
15°	4822.4	4822.4	4827.7	4840.8	4848.7	4872.4	4885.5	4906.6	4925.0	4951.2	4985.4
17.5°	4741.0	4738.4	4741.0	4756.7	4772.5	4793.5	4804.0	4830.3	4848.7	4882.9	4914.5
20°	4659.5	4664.8	4664.8	4677.9	4688.4	4714.7	4725.2	4754.2	4775.1	4806.6	4843.5
22.5°	4588.5	4585.9	4585.9	4604.3	4612.2	4635.8	4646.3	4672.6	4696.3	4722.6	4756.7
25°	4517.6	4512.3	4522.9	4525.5	4530.7	4557.0	4564.9	4583.2	4606.9	4630.6	4664.8
27.5°	4412.4	4407.2	4409.8	4420.3	4428.2	4449.2	4454.5	4472.9	4491.3	4512.3	4541.3
30°	4210.0	4204.9	4202.3	4220.6	4228.5	4244.2	4252.1	4283.7	4288.9	4312.6	4333.6
32.5°	3942.0	3939.4	3944.7	3960.4	3968.3	3989.4	3999.9	4018.3	4031.3	4044.5	4065.5
35°	3642.5	3637.2	3642.5	3658.3	3658.3	3676.7	3684.5	3692.3	3689.7	3692.3	3687.1
37.5°	3363.9	3361.2	3363.9	3371.7	3363.9	3371.7	3363.9	3348.1	3319.3	3287.7	3256.1
40°	3127.4	3130.0	3114.3	3124.8	3095.8	3090.6	3061.7	3022.2	2964.4	2901.4	2812.0
42.5°	2875.1	2867.2	2856.7	2861.9	2838.3	2819.8	2772.6	2722.7	2649.0	2544.0	2436.1
45°	2565.0	2562.4	2557.1	2554.5	2538.7	2520.3	2480.8	2423.0	2341.6	2233.9	2105.0
47.5°	2262.7	2254.8	2254.8	2257.4	2239.0	2236.5	2204.9	2155.0	2084.0	1978.9	1844.9
50°	1973.6	1971.0	1976.3	1986.8	1973.6	1968.4	1947.4	1913.2	1850.2	1760.8	1634.6
52.5°	1713.4	1710.8	1716.1	1729.2	1723.9	1729.2	1708.2	1682.0	1639.9	1553.1	1442.8
55°	1458.6	1458.6	1458.6	1474.3	1474.3	1474.3	1463.8	1448.1	1408.6	1345.5	1243.1
57.5°	1193.1	1195.7	1211.5	1214.1	1211.5	1216.8	1214.1	1198.3	1172.1	1127.5	1048.6
60°	969.8	969.8	977.7	985.6	982.8	985.6	985.6	977.7	951.4	914.6	851.5
62.5°	767.4	775.3	770.0	775.3	785.8	775.3	770.0	764.8	746.4	722.7	670.1
65°	580.8	586.1	586.1	588.7	583.4	586.1	575.6	567.7	557.2	530.9	496.7
67.5°	441.6	441.6	441.6	441.6	438.9	436.3	433.7	425.8	407.4	396.9	360.0
70°	339.0	323.2	323.2	323.2	323.2	325.9	318.0	307.5	302.2	283.8	257.6
72.5°	226.0	231.3	226.0	226.0	220.8	223.4	212.9	207.6	202.4	191.9	176.1
75°	162.9	149.8	155.0	157.7	149.8	155.0	144.5	134.0	134.0	126.1	118.2
77.5°	105.1	102.5	105.1	107.7	105.1	102.5	97.2	91.9	91.9	89.3	81.5
80°	76.3	73.6	73.6	73.6	71.0	73.6	68.4	68.4	63.1	60.5	55.2
82.5°	50.0	50.0	47.3	50.0	47.3	50.0	42.1	42.1	42.1	39.4	34.2
85°	34.2	28.9	28.9	31.6	26.3	31.6	28.9	26.3	23.7	23.7	21.0
87.5°	15.8	18.4	15.8	18.4	15.8	15.8	18.4	15.8	15.8	10.5	10.5
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°	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2
2.5°	5355.9	5358.5	5358.5	5369.1	5374.3	5376.9	5376.9	5398.0	5390.1	5395.4	5400.6
5°	5279.8	5295.4	5300.7	5300.7	5329.6	5340.1	5350.6	5374.3	5376.9	5392.7	5411.1
7.5°	5206.1	5224.5	5235.1	5258.7	5277.1	5295.4	5327.0	5342.8	5358.5	5379.6	5403.2
10°	5135.1	5156.2	5177.2	5195.6	5224.5	5248.2	5269.2	5305.9	5324.4	5353.3	5384.8
12.5°	5066.9	5095.8	5114.1	5145.6	5177.2	5198.2	5229.8	5264.0	5292.8	5321.7	5358.5
15°	5006.4	5040.6	5061.6	5095.8	5129.9	5158.8	5193.0	5235.1	5256.1	5290.3	5324.4
17.5°	4940.6	4977.5	5003.8	5035.3	5077.4	5108.8	5137.8	5179.8	5206.1	5242.9	5282.4
20°	4872.4	4909.2	4940.6	4972.2	5014.3	5045.8	5080.0	5122.0	5150.9	5187.7	5219.3
22.5°	4790.9	4825.1	4859.2	4896.0	4938.0	4964.3	5003.8	5040.6	5072.1	5106.3	5137.8
25°	4685.8	4727.9	4754.2	4788.2	4822.4	4851.3	4893.4	4930.1	4956.4	4988.0	5016.9
27.5°	4562.3	4593.8	4614.8	4643.7	4677.9	4704.2	4735.7	4772.5	4798.8	4827.7	4848.7
30°	4352.0	4381.0	4399.3	4420.3	4454.5	4478.2	4504.5	4538.6	4557.0	4578.0	4596.4
32.5°	4076.0	4099.7	4110.2	4126.0	4149.7	4173.3	4194.4	4223.2	4231.1	4244.2	4244.2
35°	3676.7	3681.8	3679.2	3684.5	3695.0	3708.1	3726.5	3744.9	3755.4	3755.4	3747.6
37.5°	3208.8	3177.3	3143.1	3116.9	3109.0	3103.7	3114.3	3122.1	3132.7	3137.8	3124.8
40°	2722.7	2651.7	2575.5	2507.1	2459.8	2438.8	2430.9	2436.1	2436.1	2454.5	2454.5
42.5°	2304.8	2194.4	2081.4	1978.9	1910.5	1858.1	1834.4	1834.4	1837.0	1850.2	1858.1
45°	1957.9	1818.6	1687.2	1574.2	1479.6	1411.2	1379.7	1371.8	1369.2	1374.4	1392.8
47.5°	1692.5	1547.9	1411.2	1272.0	1172.1	1103.8	1074.9	1064.3	1053.8	1064.3	1067.0
50°	1484.9	1335.1	1190.5	1051.2	946.1	885.6	848.8	833.0	830.4	830.4	835.7
52.5°	1295.6	1156.4	1011.8	869.9	759.5	701.7	667.5	659.6	649.1	659.6	659.6
55°	1116.9	977.7	835.7	701.7	609.7	549.3	517.7	507.2	501.9	509.8	509.8
57.5°	922.5	804.1	672.8	551.9	459.9	417.9	394.2	381.1	378.4	383.7	378.4
60°	756.9	657.0	544.0	433.7	362.7	318.0	299.6	294.3	289.0	294.3	294.3
62.5°	599.2	515.1	423.1	339.0	278.5	247.1	226.0	226.0	223.4	223.4	226.0
65°	444.2	378.4	312.7	241.8	194.5	170.8	155.0	155.0	152.4	155.0	152.4
67.5°	323.2	278.5	226.0	176.1	139.3	126.1	115.6	107.7	113.0	107.7	105.1
70°	236.6	199.7	162.9	134.0	107.7	94.7	86.8	84.0	78.9	78.9	78.9
72.5°	157.7	134.0	110.3	86.8	71.0	57.8	55.2	50.0	44.7	47.3	52.6
75°	105.1	89.3	78.9	63.1	47.3	47.3	31.6	31.6	26.3	31.6	23.7
77.5°	73.6	60.5	47.3	39.4	31.6	28.9	21.0	21.0	18.4	18.4	18.4
80°	52.6	44.7	34.2	28.9	21.0	21.0	18.4	15.8	13.1	13.1	15.8
82.5°	31.6	23.7	23.7	21.0	13.1	10.5	7.9	10.5	5.3	5.3	5.3
85°	18.4	15.8	13.1	7.9	5.3	5.3	2.6	0.0	2.6	2.6	0.0
87.5°	10.5	5.3	5.3	2.6	0.0	2.6	2.6	0.0	0.0	0.0	5.3
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°	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2
2.5°	5413.8	5411.1	5416.4	5416.4	5432.2	5429.5	5437.4	5437.4	5432.2	5434.8	5445.3
5°	5432.2	5440.1	5455.8	5469.0	5492.5	5503.1	5516.2	5529.4	5532.0	5539.9	5547.8
7.5°	5432.2	5458.5	5476.8	5500.4	5532.0	5550.4	5579.3	5603.0	5613.5	5626.6	5642.4
10°	5421.6	5447.9	5482.0	5508.3	5547.8	5576.7	5605.6	5642.4	5658.1	5679.1	5700.2
12.5°	5400.6	5429.5	5466.2	5500.4	5545.1	5571.4	5608.2	5642.4	5666.0	5694.9	5718.6
15°	5369.1	5403.2	5437.4	5471.5	5518.8	5550.4	5584.6	5624.0	5647.7	5679.1	5700.2
17.5°	5319.1	5355.9	5387.5	5419.0	5463.7	5500.4	5532.0	5568.8	5592.5	5618.8	5647.7
20°	5258.7	5292.8	5327.0	5353.3	5398.0	5429.5	5463.7	5497.8	5516.2	5521.5	5566.2
22.5°	5182.5	5206.1	5232.4	5274.5	5300.7	5329.6	5361.2	5392.7	5411.1	5440.1	5455.8
25°	5056.3	5080.0	5108.8	5127.2	5158.8	5182.5	5214.0	5248.2	5258.7	5279.8	5295.4
27.5°	4880.3	4893.4	4906.6	4922.3	4940.6	4953.8	4972.2	4988.0	4998.5	5009.0	5019.5
30°	4601.6	4601.6	4601.6	4591.1	4599.0	4606.9	4609.5	4606.9	4606.9	4604.3	4604.3
32.5°	4233.7	4212.8	4189.1	4168.1	4160.2	4149.7	4144.4	4136.5	4123.4	4115.5	4118.1
35°	3737.0	3689.7	3660.9	3634.6	3613.6	3597.8	3589.9	3582.0	3579.4	3568.9	3558.3
37.5°	3116.9	3082.7	3061.7	3045.9	3027.5	3011.7	3014.3	3017.0	3024.8	3019.6	3022.2
40°	2459.8	2451.9	2459.8	2441.4	2436.1	2441.4	2454.5	2473.0	2483.5	2494.0	2512.4
42.5°	1871.2	1884.2	1902.7	1902.7	1910.5	1921.1	1936.8	1965.8	1981.5	1999.9	2021.0
45°	1408.6	1424.4	1448.1	1455.9	1461.2	1474.3	1492.8	1516.4	1526.8	1542.6	1561.0
47.5°	1085.4	1095.9	1109.0	1122.2	1135.3	1140.6	1159.0	1159.0	1172.1	1182.6	1187.8
50°	846.2	856.7	867.2	875.1	880.4	888.3	893.5	901.4	904.0	909.3	911.9
52.5°	662.2	675.4	675.4	680.6	688.5	696.4	693.8	696.4	699.0	699.0	706.9
55°	517.7	517.7	525.6	525.6	530.9	528.2	530.9	530.9	530.9	530.9	533.5
57.5°	386.3	389.0	396.9	391.6	389.0	394.2	389.0	394.2	391.6	396.9	389.0
60°	296.9	296.9	299.6	299.6	302.2	302.2	302.2	299.6	299.6	296.9	296.9
62.5°	223.4	226.0	228.7	226.0	226.0	226.0	223.4	223.4	220.8	218.1	218.1
65°	149.8	147.2	152.4	147.2	149.8	149.8	147.2	149.8	141.9	144.5	141.9
67.5°	107.7	105.1	102.5	105.1	102.5	99.8	99.8	102.5	105.1	97.2	97.2
70°	71.0	73.6	71.0	73.6	76.3	76.3	73.6	71.0	73.6	68.4	71.0
72.5°	44.7	44.7	44.7	44.7	44.7	47.3	47.3	47.3	42.1	42.1	39.4
75°	21.0	28.9	23.7	21.0	28.9	28.9	26.3	26.3	23.7	23.7	23.7
77.5°	21.0	15.8	15.8	15.8	15.8	15.8	15.8	15.8	13.1	15.8	13.1
80°	10.5	10.5	10.5	7.9	10.5	10.5	13.1	10.5	10.5	7.9	13.1
82.5°	5.3	5.3	5.3	0.0	2.6	5.3	5.3	2.6	5.3	5.3	2.6
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: P248554

CATALOG NUMBER: LD8B90D010 ER8B90830 8LBSWOH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2
2.5°	5442.7	5440.1	5442.7	5445.3	5442.7	5440.1	5442.7	5445.3	5434.8	5432.2	5437.4
5°	5558.3	5558.3	5563.5	5566.2	5563.5	5558.3	5558.3	5547.8	5539.9	5532.0	5529.4
7.5°	5658.1	5663.4	5668.6	5671.2	5668.6	5663.4	5658.1	5642.4	5626.6	5613.5	5603.0
10°	5718.6	5726.5	5737.0	5742.2	5737.0	5726.5	5718.6	5700.2	5679.1	5658.1	5642.4
12.5°	5744.9	5752.8	5765.9	5763.3	5765.9	5752.8	5744.9	5718.6	5694.9	5666.0	5642.4
15°	5726.5	5737.0	5750.1	5755.4	5750.1	5737.0	5726.5	5700.2	5679.1	5647.7	5624.0
17.5°	5668.6	5684.4	5692.3	5700.2	5692.3	5684.4	5668.6	5647.7	5618.8	5592.5	5568.8
20°	5589.8	5600.4	5610.9	5613.5	5610.9	5600.4	5589.8	5566.2	5521.5	5516.2	5497.8
22.5°	5476.8	5484.7	5508.3	5500.4	5508.3	5484.7	5476.8	5455.8	5440.1	5411.1	5392.7
25°	5313.8	5321.7	5324.4	5327.0	5324.4	5321.7	5313.8	5295.4	5279.8	5258.7	5248.2
27.5°	5032.7	5032.7	5037.9	5040.6	5037.9	5032.7	5032.7	5019.5	5009.0	4998.5	4988.0
30°	4606.9	4606.9	4606.9	4620.1	4606.9	4606.9	4606.9	4604.3	4604.3	4606.9	4606.9
32.5°	4115.5	4110.2	4105.0	4110.2	4105.0	4110.2	4115.5	4118.1	4115.5	4123.4	4136.5
35°	3558.3	3555.7	3563.6	3553.1	3563.6	3555.7	3558.3	3558.3	3568.9	3579.4	3582.0
37.5°	3024.8	3019.6	3030.1	3019.6	3030.1	3019.6	3024.8	3022.2	3019.6	3024.8	3017.0
40°	2517.7	2522.9	2522.9	2544.0	2522.9	2522.9	2517.7	2512.4	2494.0	2483.5	2473.0
42.5°	2031.5	2047.3	2042.0	2057.8	2042.0	2047.3	2031.5	2021.0	1999.9	1981.5	1965.8
45°	1571.5	1582.1	1582.1	1587.3	1582.1	1582.1	1571.5	1561.0	1542.6	1526.8	1516.4
47.5°	1206.2	1206.2	1206.2	1208.9	1206.2	1206.2	1206.2	1187.8	1182.6	1172.1	1159.0
50°	917.2	919.8	922.5	925.1	922.5	919.8	917.2	911.9	909.3	904.0	901.4
52.5°	704.3	706.9	701.7	706.9	701.7	706.9	704.3	706.9	699.0	699.0	696.4
55°	533.5	530.9	533.5	536.1	533.5	530.9	533.5	533.5	530.9	530.9	530.9
57.5°	391.6	386.3	386.3	386.3	386.3	386.3	391.6	389.0	396.9	391.6	394.2
60°	291.7	294.3	294.3	296.9	294.3	294.3	291.7	296.9	296.9	299.6	299.6
62.5°	215.5	223.4	218.1	223.4	218.1	223.4	215.5	218.1	218.1	220.8	223.4
65°	139.3	139.3	139.3	141.9	139.3	139.3	139.3	141.9	144.5	141.9	149.8
67.5°	94.7	97.2	102.5	99.8	102.5	97.2	94.7	97.2	97.2	105.1	102.5
70°	76.3	68.4	68.4	76.3	68.4	68.4	76.3	71.0	68.4	73.6	71.0
72.5°	44.7	39.4	44.7	44.7	44.7	39.4	44.7	39.4	42.1	42.1	47.3
75°	23.7	21.0	18.4	26.3	18.4	21.0	23.7	23.7	23.7	23.7	26.3
77.5°	15.8	13.1	18.4	18.4	18.4	13.1	15.8	13.1	15.8	13.1	15.8
80°	7.9	10.5	7.9	13.1	7.9	10.5	7.9	13.1	7.9	10.5	10.5
82.5°	2.6	5.3	5.3	5.3	5.3	5.3	2.6	2.6	5.3	5.3	2.6
85°	0.0	5.3	2.6	2.6	2.6	5.3	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	0.0	0.0	2.6	0.0	0.0	2.6	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: P248554

CATALOG NUMBER: LD8B90D010 ER8B90830 8LBSWOH

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2
2.5°	5437.4	5429.5	5432.2	5416.4	5416.4	5411.1	5413.8	5400.6	5395.4	5390.1	5398.0
5°	5516.2	5503.1	5492.5	5469.0	5455.8	5440.1	5432.2	5411.1	5392.7	5376.9	5374.3
7.5°	5579.3	5550.4	5532.0	5500.4	5476.8	5458.5	5432.2	5403.2	5379.6	5358.5	5342.8
10°	5605.6	5576.7	5547.8	5508.3	5482.0	5447.9	5421.6	5384.8	5353.3	5324.4	5305.9
12.5°	5608.2	5571.4	5545.1	5500.4	5466.2	5429.5	5400.6	5358.5	5321.7	5292.8	5264.0
15°	5584.6	5550.4	5518.8	5471.5	5437.4	5403.2	5369.1	5324.4	5290.3	5256.1	5235.1
17.5°	5532.0	5500.4	5463.7	5419.0	5387.5	5355.9	5319.1	5282.4	5242.9	5206.1	5179.8
20°	5463.7	5429.5	5398.0	5353.3	5327.0	5292.8	5258.7	5219.3	5187.7	5150.9	5122.0
22.5°	5361.2	5329.6	5300.7	5274.5	5232.4	5206.1	5182.5	5137.8	5106.3	5072.1	5040.6
25°	5214.0	5182.5	5158.8	5127.2	5108.8	5080.0	5056.3	5016.9	4988.0	4956.4	4930.1
27.5°	4972.2	4953.8	4940.6	4922.3	4906.6	4893.4	4880.3	4848.7	4827.7	4798.8	4772.5
30°	4609.5	4606.9	4599.0	4591.1	4601.6	4601.6	4601.6	4596.4	4578.0	4557.0	4538.6
32.5°	4144.4	4149.7	4160.2	4168.1	4189.1	4212.8	4233.7	4244.2	4244.2	4231.1	4223.2
35°	3589.9	3597.8	3613.6	3634.6	3660.9	3689.7	3737.0	3747.6	3755.4	3755.4	3744.9
37.5°	3014.3	3011.7	3027.5	3045.9	3061.7	3082.7	3116.9	3124.8	3137.8	3132.7	3122.1
40°	2454.5	2441.4	2436.1	2441.4	2459.8	2451.9	2459.8	2454.5	2454.5	2436.1	2436.1
42.5°	1936.8	1921.1	1910.5	1902.7	1902.7	1884.2	1871.2	1858.1	1850.2	1837.0	1834.4
45°	1492.8	1474.3	1461.2	1455.9	1448.1	1424.4	1408.6	1392.8	1374.4	1369.2	1371.8
47.5°	1159.0	1140.6	1135.3	1122.2	1109.0	1095.9	1085.4	1067.0	1064.3	1053.8	1064.3
50°	893.5	888.3	880.4	875.1	867.2	856.7	846.2	835.7	830.4	830.4	833.0
52.5°	693.8	696.4	688.5	680.6	675.4	675.4	662.2	659.6	659.6	649.1	659.6
55°	530.9	528.2	530.9	525.6	525.6	517.7	517.7	509.8	509.8	501.9	507.2
57.5°	389.0	394.2	389.0	391.6	396.9	389.0	386.3	378.4	383.7	378.4	381.1
60°	302.2	302.2	302.2	299.6	299.6	296.9	296.9	294.3	294.3	289.0	294.3
62.5°	223.4	226.0	226.0	226.0	228.7	226.0	223.4	226.0	223.4	223.4	226.0
65°	147.2	149.8	149.8	147.2	152.4	147.2	149.8	152.4	155.0	152.4	155.0
67.5°	99.8	99.8	102.5	105.1	102.5	105.1	107.7	105.1	107.7	113.0	107.7
70°	73.6	76.3	76.3	73.6	71.0	73.6	71.0	78.9	78.9	78.9	84.0
72.5°	47.3	47.3	44.7	44.7	44.7	44.7	44.7	52.6	47.3	44.7	50.0
75°	26.3	28.9	28.9	21.0	23.7	28.9	21.0	23.7	31.6	26.3	31.6
77.5°	15.8	15.8	15.8	15.8	15.8	15.8	21.0	18.4	18.4	18.4	21.0
80°	13.1	10.5	10.5	7.9	10.5	10.5	10.5	15.8	13.1	13.1	15.8
82.5°	5.3	5.3	2.6	0.0	5.3	5.3	5.3	5.3	5.3	5.3	10.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	2.6	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.3	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: P248554

CATALOG NUMBER: LD8B90D010 ER8B90830 8LBSW0H

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2
2.5°	5376.9	5376.9	5374.3	5369.1	5358.5	5358.5	5355.9	5348.0	5342.8	5340.1	5340.1
5°	5350.6	5340.1	5329.6	5300.7	5300.7	5295.4	5279.8	5269.2	5264.0	5250.8	5245.6
7.5°	5327.0	5295.4	5277.1	5258.7	5235.1	5224.5	5206.1	5198.2	5179.8	5166.7	5158.8
10°	5269.2	5248.2	5224.5	5195.6	5177.2	5156.2	5135.1	5119.4	5095.8	5082.6	5072.1
12.5°	5229.8	5198.2	5177.2	5145.6	5114.1	5095.8	5066.9	5048.5	5024.8	4998.5	4982.7
15°	5193.0	5158.8	5129.9	5095.8	5061.6	5040.6	5006.4	4985.4	4951.2	4925.0	4906.6
17.5°	5137.8	5108.8	5077.4	5035.3	5003.8	4977.5	4940.6	4914.5	4882.9	4848.7	4830.3
20°	5080.0	5045.8	5014.3	4972.2	4940.6	4909.2	4872.4	4843.5	4806.6	4775.1	4754.2
22.5°	5003.8	4964.3	4938.0	4896.0	4859.2	4825.1	4790.9	4756.7	4722.6	4696.3	4672.6
25°	4893.4	4851.3	4822.4	4788.2	4754.2	4727.9	4685.8	4664.8	4630.6	4606.9	4583.2
27.5°	4735.7	4704.2	4677.9	4643.7	4614.8	4593.8	4562.3	4541.3	4512.3	4491.3	4472.9
30°	4504.5	4478.2	4454.5	4420.3	4399.3	4381.0	4352.0	4333.6	4312.6	4288.9	4283.7
32.5°	4194.4	4173.3	4149.7	4126.0	4110.2	4099.7	4076.0	4065.5	4044.5	4031.3	4018.3
35°	3726.5	3708.1	3695.0	3684.5	3679.2	3681.8	3676.7	3687.1	3692.3	3689.7	3692.3
37.5°	3114.3	3103.7	3109.0	3116.9	3143.1	3177.3	3208.8	3256.1	3287.7	3319.3	3348.1
40°	2430.9	2438.8	2459.8	2507.1	2575.5	2651.7	2722.7	2812.0	2901.4	2964.4	3022.2
42.5°	1834.4	1858.1	1910.5	1978.9	2081.4	2194.4	2304.8	2436.1	2544.0	2649.0	2722.7
45°	1379.7	1411.2	1479.6	1574.2	1687.2	1818.6	1957.9	2105.0	2233.9	2341.6	2423.0
47.5°	1074.9	1103.8	1172.1	1272.0	1411.2	1547.9	1692.5	1844.9	1978.9	2084.0	2155.0
50°	848.8	885.6	946.1	1051.2	1190.5	1335.1	1484.9	1634.6	1760.8	1850.2	1913.2
52.5°	667.5	701.7	759.5	869.9	1011.8	1156.4	1295.6	1442.8	1553.1	1639.9	1682.0
55°	517.7	549.3	609.7	701.7	835.7	977.7	1116.9	1243.1	1345.5	1408.6	1448.1
57.5°	394.2	417.9	459.9	551.9	672.8	804.1	922.5	1048.6	1127.5	1172.1	1198.3
60°	299.6	318.0	362.7	433.7	544.0	657.0	756.9	851.5	914.6	951.4	977.7
62.5°	226.0	247.1	278.5	339.0	423.1	515.1	599.2	670.1	722.7	746.4	764.8
65°	155.0	170.8	194.5	241.8	312.7	378.4	444.2	496.7	530.9	557.2	567.7
67.5°	115.6	126.1	139.3	176.1	226.0	278.5	323.2	360.0	396.9	407.4	425.8
70°	86.8	94.7	107.7	134.0	162.9	199.7	236.6	257.6	283.8	302.2	307.5
72.5°	55.2	57.8	71.0	86.8	110.3	134.0	157.7	176.1	191.9	202.4	207.6
75°	31.6	47.3	47.3	63.1	78.9	89.3	105.1	118.2	126.1	134.0	134.0
77.5°	21.0	28.9	31.6	39.4	47.3	60.5	73.6	81.5	89.3	91.9	91.9
80°	18.4	21.0	21.0	28.9	34.2	44.7	52.6	55.2	60.5	63.1	68.4
82.5°	7.9	10.5	13.1	21.0	23.7	23.7	31.6	34.2	39.4	42.1	42.1
85°	2.6	5.3	5.3	7.9	13.1	15.8	18.4	21.0	23.7	23.7	26.3
87.5°	2.6	2.6	0.0	2.6	5.3	5.3	10.5	10.5	10.5	15.8	15.8
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: P248554

CATALOG NUMBER: LD8B90D010 ER8B90830 8LBSW0H

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2	5382.2
2.5°	5334.9	5337.5	5327.0	5324.4	5319.1	5321.7	5327.0
5°	5237.7	5240.3	5229.8	5219.3	5219.3	5216.6	5219.3
7.5°	5145.6	5148.3	5132.5	5127.2	5116.7	5119.4	5119.4
10°	5053.7	5053.7	5030.1	5027.4	5019.5	5016.9	5016.9
12.5°	4964.3	4956.4	4938.0	4927.6	4932.9	4917.1	4917.1
15°	4885.5	4872.4	4848.7	4840.8	4827.7	4822.4	4822.4
17.5°	4804.0	4793.5	4772.5	4756.7	4741.0	4738.4	4741.0
20°	4725.2	4714.7	4688.4	4677.9	4664.8	4664.8	4659.5
22.5°	4646.3	4635.8	4612.2	4604.3	4585.9	4585.9	4588.5
25°	4564.9	4557.0	4530.7	4525.5	4522.9	4512.3	4517.6
27.5°	4454.5	4449.2	4428.2	4420.3	4409.8	4407.2	4412.4
30°	4252.1	4244.2	4228.5	4220.6	4202.3	4204.9	4210.0
32.5°	3999.9	3989.4	3968.3	3960.4	3944.7	3939.4	3942.0
35°	3684.5	3676.7	3658.3	3658.3	3642.5	3637.2	3642.5
37.5°	3363.9	3371.7	3363.9	3371.7	3363.9	3361.2	3363.9
40°	3061.7	3090.6	3095.8	3124.8	3114.3	3130.0	3127.4
42.5°	2772.6	2819.8	2838.3	2861.9	2856.7	2867.2	2875.1
45°	2480.8	2520.3	2538.7	2554.5	2557.1	2562.4	2565.0
47.5°	2204.9	2236.5	2239.0	2257.4	2254.8	2254.8	2262.7
50°	1947.4	1968.4	1973.6	1986.8	1976.3	1971.0	1973.6
52.5°	1708.2	1729.2	1723.9	1729.2	1716.1	1710.8	1713.4
55°	1463.8	1474.3	1474.3	1474.3	1458.6	1458.6	1458.6
57.5°	1214.1	1216.8	1211.5	1214.1	1211.5	1195.7	1193.1
60°	985.6	985.6	982.8	985.6	977.7	969.8	969.8
62.5°	770.0	775.3	785.8	775.3	770.0	775.3	767.4
65°	575.6	586.1	583.4	588.7	586.1	586.1	580.8
67.5°	433.7	436.3	438.9	441.6	441.6	441.6	441.6
70°	318.0	325.9	323.2	323.2	323.2	323.2	339.0
72.5°	212.9	223.4	220.8	226.0	226.0	231.3	226.0
75°	144.5	155.0	149.8	157.7	155.0	149.8	162.9
77.5°	97.2	102.5	105.1	107.7	105.1	102.5	105.1
80°	68.4	73.6	71.0	73.6	73.6	73.6	76.3
82.5°	42.1	50.0	47.3	50.0	47.3	50.0	50.0
85°	28.9	31.6	26.3	31.6	28.9	28.9	34.2
87.5°	18.4	15.8	15.8	18.4	15.8	18.4	15.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)