

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: P248887

Luminaire Tested: **LD8B90D010 ER8B90835 8LBSW0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248887
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 8LBSW0B
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 3500 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7203.0 lumens
Efficiency: N/A
Efficacy: 83.7 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

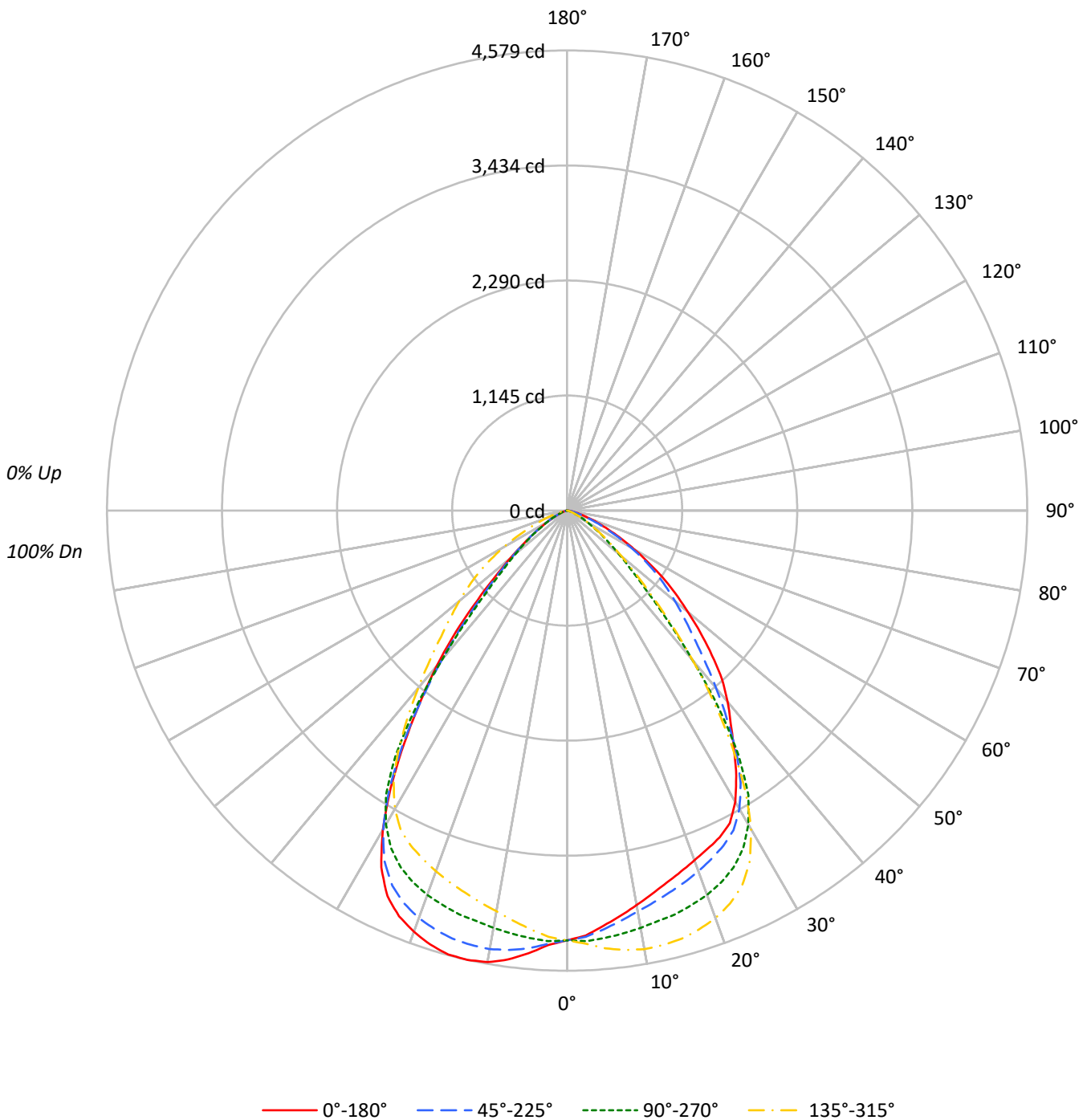
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	131862	131862	131862	131862
5°	128360	132171	136891	132171
10°	124810	131999	142852	131999
15°	122314	132782	145979	132782
20°	121482	133542	146353	133542
25°	122119	133272	144004	133272
30°	119101	128394	130702	128394
35°	108942	112007	106270	112007
40°	100019	77912	81361	77912
45°	88871	47530	54995	47530
50°	75221	31748	35260	31748
55°	62304	21666	22897	21666
60°	47519	14425	14549	14425
65°	33666	8989	8230	8989
70°	24280	6023	5464	6023
75°	15417	2990	2490	2990
80°	10761	2220	1847	2220
85°	9624	0	743	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	407.0	5.7
10°-20°	1178.6	16.4
20°-30°	1784.7	24.8
30°-40°	1788.7	24.8
40°-50°	1123.2	15.6
50°-60°	598.6	8.3
60°-70°	246.1	3.4
70°-80°	65.0	0.9
80°-90°	11.0	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°	3370.3	46.8
0°-40°	5159.1	71.6
0°-60°	6880.8	95.5
0°-90°	7203.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7203.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	4276	4276	4276	4276	4276	
5°	4147	4270	4422	4270	4147	391
15°	3831	4159	4573	4159	3831	1084
25°	3589	3917	4232	3917	3589	1646
35°	2894	2975	2823	2975	2894	1813
45°	2038	1090	1261	1090	2038	1567
55°	1159	403	426	403	1159	1033
65°	461	123	113	123	461	479
75°	129	25	21	25	129	147
85°	27	0	2	0	27	30
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°	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2
2.5°	4232.4	4228.2	4226.1	4230.3	4232.4	4240.7	4238.6	4242.8	4242.8	4244.9	4249.0
5°	4146.8	4144.6	4146.8	4146.8	4155.1	4163.4	4161.4	4167.6	4171.8	4182.3	4186.4
7.5°	4067.4	4067.4	4065.3	4073.6	4077.8	4090.4	4088.2	4098.7	4105.0	4115.4	4130.0
10°	3986.0	3986.0	3988.0	3994.3	3996.4	4015.2	4015.2	4029.8	4038.1	4048.6	4067.4
12.5°	3906.6	3906.6	3919.2	3915.0	3923.3	3937.9	3944.2	3958.8	3971.4	3992.2	4011.1
15°	3831.4	3831.4	3835.6	3846.0	3852.3	3871.1	3881.5	3898.3	3912.9	3933.8	3961.0
17.5°	3766.7	3764.7	3766.7	3779.3	3791.8	3808.5	3816.8	3837.7	3852.3	3879.5	3904.6
20°	3702.0	3706.2	3706.2	3716.6	3725.0	3745.8	3754.2	3777.2	3793.9	3818.9	3848.2
22.5°	3645.6	3643.6	3643.6	3658.2	3664.4	3683.2	3691.5	3712.4	3731.2	3752.1	3779.3
25°	3589.2	3585.0	3593.5	3595.5	3599.6	3620.5	3626.8	3641.4	3660.2	3679.1	3706.2
27.5°	3505.7	3501.6	3503.6	3512.0	3518.3	3534.9	3539.1	3553.8	3568.4	3585.0	3608.1
30°	3344.9	3340.8	3338.7	3353.3	3359.6	3372.1	3378.3	3403.4	3407.6	3426.4	3443.1
32.5°	3131.9	3129.9	3134.1	3146.6	3152.8	3169.6	3177.9	3192.5	3202.9	3213.4	3230.1
35°	2894.0	2889.8	2894.0	2906.5	2906.5	2921.1	2927.4	2933.6	2931.5	2933.6	2929.5
37.5°	2672.7	2670.5	2672.7	2678.9	2672.7	2678.9	2672.7	2660.1	2637.2	2612.1	2587.0
40°	2484.7	2486.8	2474.3	2482.6	2459.6	2455.5	2432.5	2401.2	2355.3	2305.2	2234.2
42.5°	2284.3	2278.0	2269.7	2273.8	2255.1	2240.4	2202.8	2163.2	2104.7	2021.2	1935.5
45°	2037.9	2035.8	2031.6	2029.6	2017.0	2002.4	1971.0	1925.1	1860.4	1774.8	1672.5
47.5°	1797.8	1791.5	1791.5	1793.5	1778.9	1776.9	1751.8	1712.2	1655.8	1572.2	1465.8
50°	1568.0	1566.0	1570.2	1578.5	1568.0	1563.9	1547.2	1520.1	1470.0	1399.0	1298.7
52.5°	1361.3	1359.3	1363.5	1373.9	1369.7	1373.9	1357.2	1336.3	1302.9	1234.0	1146.3
55°	1158.9	1158.9	1158.9	1171.3	1171.3	1171.3	1163.0	1150.5	1119.2	1069.0	987.7
57.5°	948.0	950.0	962.6	964.6	962.6	966.8	964.6	952.1	931.3	895.8	833.1
60°	770.5	770.5	776.8	783.0	780.9	783.0	783.0	776.8	755.9	726.7	676.5
62.5°	609.7	616.0	611.7	616.0	624.3	616.0	611.7	607.6	593.0	574.2	532.4
65°	461.4	465.6	465.6	467.7	463.5	465.6	457.3	451.0	442.7	421.8	394.7
67.5°	350.8	350.8	350.8	350.8	348.7	346.6	344.5	338.3	323.7	315.3	286.0
70°	269.3	256.8	256.8	256.8	256.8	258.9	252.7	244.3	240.1	225.5	204.6
72.5°	179.5	183.7	179.5	179.5	175.4	177.5	169.1	164.9	160.8	152.5	139.9
75°	129.4	119.0	123.2	125.3	119.0	123.2	114.8	106.5	106.5	100.2	93.9
77.5°	83.5	81.5	83.5	85.6	83.5	81.5	77.3	73.1	73.1	71.0	64.7
80°	60.6	58.4	58.4	58.4	56.4	58.4	54.3	54.3	50.1	48.0	43.8
82.5°	39.7	39.7	37.6	39.7	37.6	39.7	33.4	33.4	33.4	31.3	27.2
85°	27.2	22.9	22.9	25.1	20.9	25.1	22.9	20.9	18.8	18.8	16.7
87.5°	12.5	14.6	12.5	14.6	12.5	12.5	14.6	12.5	12.5	8.3	8.3
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2
2.5°	4255.3	4257.4	4257.4	4265.8	4269.9	4272.0	4272.0	4288.7	4282.5	4286.7	4290.8
5°	4194.8	4207.3	4211.5	4211.5	4234.4	4242.8	4251.1	4269.9	4272.0	4284.5	4299.1
7.5°	4136.3	4150.9	4159.3	4178.0	4192.7	4207.3	4232.4	4244.9	4257.4	4274.1	4292.9
10°	4079.9	4096.7	4113.3	4127.9	4150.9	4169.7	4186.4	4215.6	4230.3	4253.2	4278.3
12.5°	4025.7	4048.6	4063.2	4088.2	4113.3	4130.0	4155.1	4182.3	4205.2	4228.2	4257.4
15°	3977.6	4004.8	4021.5	4048.6	4075.8	4098.7	4125.9	4159.3	4176.0	4203.1	4230.3
17.5°	3925.4	3954.7	3975.6	4000.6	4034.0	4059.0	4082.0	4115.4	4136.3	4165.5	4196.9
20°	3871.1	3900.4	3925.4	3950.5	3983.9	4008.9	4036.1	4069.5	4092.4	4121.7	4146.8
22.5°	3806.4	3833.6	3860.7	3889.9	3923.3	3944.2	3975.6	4004.8	4029.8	4057.0	4082.0
25°	3722.9	3756.3	3777.2	3804.3	3831.4	3854.4	3887.8	3917.0	3937.9	3963.0	3986.0
27.5°	3624.7	3649.8	3666.5	3689.5	3716.6	3737.5	3762.5	3791.8	3812.7	3835.6	3852.3
30°	3457.7	3480.7	3495.3	3512.0	3539.1	3558.0	3578.8	3605.9	3620.5	3637.3	3651.9
32.5°	3238.4	3257.2	3265.6	3278.1	3297.0	3315.7	3332.5	3355.4	3361.7	3372.1	3372.1
35°	2921.1	2925.3	2923.2	2927.4	2935.7	2946.1	2960.7	2975.4	2983.7	2983.7	2977.5
37.5°	2549.4	2524.4	2497.3	2476.4	2470.1	2465.9	2474.3	2480.5	2488.9	2493.0	2482.6
40°	2163.2	2106.8	2046.2	1991.9	1954.3	1937.7	1931.4	1935.5	1935.5	1950.1	1950.1
42.5°	1831.2	1743.4	1653.7	1572.2	1517.9	1476.2	1457.4	1457.4	1459.5	1470.0	1476.2
45°	1555.6	1444.9	1340.5	1250.7	1175.5	1121.2	1096.2	1089.9	1087.9	1092.0	1106.6
47.5°	1344.7	1229.8	1121.2	1010.6	931.3	877.0	854.0	845.6	837.3	845.6	847.7
50°	1179.7	1060.7	945.9	835.2	751.7	703.6	674.4	661.8	659.8	659.8	664.0
52.5°	1029.3	918.7	803.9	691.2	603.4	557.5	530.4	524.1	515.7	524.1	524.1
55°	887.4	776.8	664.0	557.5	484.4	436.4	411.3	403.0	398.8	405.1	405.1
57.5°	732.9	638.9	534.6	438.5	365.4	332.0	313.2	302.8	300.6	304.8	300.6
60°	601.3	522.0	432.2	344.5	288.2	252.7	238.1	233.9	229.6	233.9	233.9
62.5°	476.0	409.3	336.1	269.3	221.3	196.3	179.5	179.5	177.5	177.5	179.5
65°	352.9	300.6	248.5	192.1	154.5	135.7	123.2	123.2	121.1	123.2	121.1
67.5°	256.8	221.3	179.5	139.9	110.7	100.2	91.9	85.6	89.8	85.6	83.5
70°	188.0	158.7	129.4	106.5	85.6	75.2	68.9	66.8	62.7	62.7	62.7
72.5°	125.3	106.5	87.7	68.9	56.4	45.9	43.8	39.7	35.5	37.6	41.8
75°	83.5	71.0	62.7	50.1	37.6	37.6	25.1	25.1	20.9	25.1	18.8
77.5°	58.4	48.0	37.6	31.3	25.1	22.9	16.7	16.7	14.6	14.6	14.6
80°	41.8	35.5	27.2	22.9	16.7	16.7	14.6	12.5	10.4	10.4	12.5
82.5°	25.1	18.8	18.8	16.7	10.4	8.3	6.3	8.3	4.2	4.2	4.2
85°	14.6	12.5	10.4	6.3	4.2	4.2	2.1	0.0	2.1	2.1	0.0
87.5°	8.3	4.2	4.2	2.1	0.0	2.1	2.1	0.0	0.0	0.0	4.2
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°	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2
2.5°	4301.3	4299.1	4303.4	4303.4	4315.9	4313.8	4320.0	4320.0	4315.9	4318.0	4326.3
5°	4315.9	4322.2	4334.6	4345.1	4363.9	4372.3	4382.7	4393.2	4395.2	4401.5	4407.8
7.5°	4315.9	4336.8	4351.4	4370.1	4395.2	4409.8	4432.8	4451.6	4459.9	4470.3	4482.9
10°	4307.5	4328.4	4355.5	4376.4	4407.8	4430.7	4453.7	4482.9	4495.4	4512.1	4528.9
12.5°	4290.8	4313.8	4343.0	4370.1	4405.6	4426.5	4455.7	4482.9	4501.7	4524.7	4543.5
15°	4265.8	4292.9	4320.0	4347.2	4384.7	4409.8	4437.0	4468.3	4487.1	4512.1	4528.9
17.5°	4226.1	4255.3	4280.4	4305.4	4340.9	4370.1	4395.2	4424.4	4443.3	4464.2	4487.1
20°	4178.0	4205.2	4232.4	4253.2	4288.7	4313.8	4340.9	4368.1	4382.7	4386.9	4422.4
22.5°	4117.5	4136.3	4157.2	4190.6	4211.5	4234.4	4259.5	4284.5	4299.1	4322.2	4334.6
25°	4017.2	4036.1	4059.0	4073.6	4098.7	4117.5	4142.6	4169.7	4178.0	4194.8	4207.3
27.5°	3877.4	3887.8	3898.3	3910.8	3925.4	3935.9	3950.5	3963.0	3971.4	3979.7	3988.0
30°	3656.0	3656.0	3656.0	3647.7	3654.0	3660.2	3662.3	3660.2	3660.2	3658.2	3658.2
32.5°	3363.7	3347.1	3328.2	3311.6	3305.3	3297.0	3292.7	3286.5	3276.1	3269.8	3271.9
35°	2969.1	2931.5	2908.6	2887.7	2871.0	2858.5	2852.2	2845.9	2843.9	2835.5	2827.1
37.5°	2476.4	2449.2	2432.5	2420.0	2405.4	2392.8	2394.9	2397.0	2403.2	2399.1	2401.2
40°	1954.3	1948.1	1954.3	1939.7	1935.5	1939.7	1950.1	1964.8	1973.2	1981.5	1996.1
42.5°	1486.6	1497.0	1511.7	1511.7	1517.9	1526.4	1538.8	1561.8	1574.3	1588.9	1605.7
45°	1119.2	1131.7	1150.5	1156.7	1160.9	1171.3	1186.0	1204.8	1213.1	1225.6	1240.2
47.5°	862.4	870.7	881.1	891.6	902.0	906.2	920.8	920.8	931.3	939.6	943.7
50°	672.3	680.7	689.0	695.3	699.5	705.8	709.9	716.2	718.2	722.4	724.5
52.5°	526.1	536.6	536.6	540.8	547.0	553.3	551.2	553.3	555.4	555.4	561.6
55°	411.3	411.3	417.6	417.6	421.8	419.7	421.8	421.8	421.8	421.8	423.9
57.5°	306.9	309.1	315.3	311.1	309.1	313.2	309.1	313.2	311.1	315.3	309.1
60°	235.9	235.9	238.1	238.1	240.1	240.1	240.1	238.1	238.1	235.9	235.9
62.5°	177.5	179.5	181.7	179.5	179.5	179.5	177.5	177.5	175.4	173.3	173.3
65°	119.0	117.0	121.1	117.0	119.0	119.0	117.0	119.0	112.8	114.8	112.8
67.5°	85.6	83.5	81.5	83.5	81.5	79.3	79.3	81.5	83.5	77.3	77.3
70°	56.4	58.4	56.4	58.4	60.6	60.6	58.4	56.4	58.4	54.3	56.4
72.5°	35.5	35.5	35.5	35.5	35.5	37.6	37.6	37.6	33.4	33.4	31.3
75°	16.7	22.9	18.8	16.7	22.9	22.9	20.9	20.9	18.8	18.8	18.8
77.5°	16.7	12.5	12.5	12.5	12.5	12.5	12.5	12.5	10.4	12.5	10.4
80°	8.3	8.3	8.3	6.3	8.3	8.3	10.4	8.3	8.3	6.3	10.4
82.5°	4.2	4.2	4.2	0.0	2.1	4.2	4.2	2.1	4.2	4.2	2.1
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: P248887

CATALOG NUMBER: LD8B90D010 ER8B90835 8LBSW0B

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2
2.5°	4324.2	4322.2	4324.2	4326.3	4324.2	4322.2	4324.2	4326.3	4318.0	4315.9	4320.0
5°	4416.1	4416.1	4420.2	4422.4	4420.2	4416.1	4416.1	4407.8	4401.5	4395.2	4393.2
7.5°	4495.4	4499.6	4503.8	4505.8	4503.8	4499.6	4495.4	4482.9	4470.3	4459.9	4451.6
10°	4543.5	4549.8	4558.1	4562.2	4558.1	4549.8	4543.5	4528.9	4512.1	4495.4	4482.9
12.5°	4564.4	4570.6	4581.0	4579.0	4581.0	4570.6	4564.4	4543.5	4524.7	4501.7	4482.9
15°	4549.8	4558.1	4568.5	4572.7	4568.5	4558.1	4549.8	4528.9	4512.1	4487.1	4468.3
17.5°	4503.8	4516.3	4522.6	4528.9	4522.6	4516.3	4503.8	4487.1	4464.2	4443.3	4424.4
20°	4441.1	4449.5	4457.9	4459.9	4457.9	4449.5	4441.1	4422.4	4386.9	4382.7	4368.1
22.5°	4351.4	4357.7	4376.4	4370.1	4376.4	4357.7	4351.4	4334.6	4322.2	4299.1	4284.5
25°	4221.9	4228.2	4230.3	4232.4	4230.3	4228.2	4221.9	4207.3	4194.8	4178.0	4169.7
27.5°	3998.5	3998.5	4002.6	4004.8	4002.6	3998.5	3998.5	3988.0	3979.7	3971.4	3963.0
30°	3660.2	3660.2	3660.2	3670.7	3660.2	3660.2	3660.2	3658.2	3658.2	3660.2	3660.2
32.5°	3269.8	3265.6	3261.5	3265.6	3261.5	3265.6	3269.8	3271.9	3269.8	3276.1	3286.5
35°	2827.1	2825.0	2831.3	2823.0	2831.3	2825.0	2827.1	2827.1	2835.5	2843.9	2845.9
37.5°	2403.2	2399.1	2407.4	2399.1	2407.4	2399.1	2403.2	2401.2	2399.1	2403.2	2397.0
40°	2000.3	2004.5	2004.5	2021.2	2004.5	2004.5	2000.3	1996.1	1981.5	1973.2	1964.8
42.5°	1614.0	1626.6	1622.4	1634.9	1622.4	1626.6	1614.0	1605.7	1588.9	1574.3	1561.8
45°	1248.6	1257.0	1257.0	1261.1	1257.0	1257.0	1248.6	1240.2	1225.6	1213.1	1204.8
47.5°	958.4	958.4	958.4	960.5	958.4	958.4	958.4	943.7	939.6	931.3	920.8
50°	728.7	730.8	732.9	735.0	732.9	730.8	728.7	724.5	722.4	718.2	716.2
52.5°	559.6	561.6	557.5	561.6	557.5	561.6	559.6	561.6	555.4	555.4	553.3
55°	423.9	421.8	423.9	425.9	423.9	421.8	423.9	423.9	421.8	421.8	421.8
57.5°	311.1	306.9	306.9	306.9	306.9	306.9	311.1	309.1	315.3	311.1	313.2
60°	231.8	233.9	233.9	235.9	233.9	233.9	231.8	235.9	235.9	238.1	238.1
62.5°	171.2	177.5	173.3	177.5	173.3	177.5	171.2	173.3	173.3	175.4	177.5
65°	110.7	110.7	110.7	112.8	110.7	110.7	110.7	112.8	114.8	112.8	119.0
67.5°	75.2	77.3	81.5	79.3	81.5	77.3	75.2	77.3	77.3	83.5	81.5
70°	60.6	54.3	54.3	60.6	54.3	54.3	60.6	56.4	54.3	58.4	56.4
72.5°	35.5	31.3	35.5	35.5	35.5	31.3	35.5	31.3	33.4	33.4	37.6
75°	18.8	16.7	14.6	20.9	14.6	16.7	18.8	18.8	18.8	18.8	20.9
77.5°	12.5	10.4	14.6	14.6	14.6	10.4	12.5	10.4	12.5	10.4	12.5
80°	6.3	8.3	6.3	10.4	6.3	8.3	6.3	10.4	6.3	8.3	8.3
82.5°	2.1	4.2	4.2	4.2	4.2	4.2	2.1	2.1	4.2	4.2	2.1
85°	0.0	4.2	2.1	2.1	2.1	4.2	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	0.0	0.0	2.1	0.0	0.0	2.1	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: P248887

CATALOG NUMBER: LD8B90D010 ER8B90835 8LBSW0B

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2
2.5°	4320.0	4313.8	4315.9	4303.4	4303.4	4299.1	4301.3	4290.8	4286.7	4282.5	4288.7
5°	4382.7	4372.3	4363.9	4345.1	4334.6	4322.2	4315.9	4299.1	4284.5	4272.0	4269.9
7.5°	4432.8	4409.8	4395.2	4370.1	4351.4	4336.8	4315.9	4292.9	4274.1	4257.4	4244.9
10°	4453.7	4430.7	4407.8	4376.4	4355.5	4328.4	4307.5	4278.3	4253.2	4230.3	4215.6
12.5°	4455.7	4426.5	4405.6	4370.1	4343.0	4313.8	4290.8	4257.4	4228.2	4205.2	4182.3
15°	4437.0	4409.8	4384.7	4347.2	4320.0	4292.9	4265.8	4230.3	4203.1	4176.0	4159.3
17.5°	4395.2	4370.1	4340.9	4305.4	4280.4	4255.3	4226.1	4196.9	4165.5	4136.3	4115.4
20°	4340.9	4313.8	4288.7	4253.2	4232.4	4205.2	4178.0	4146.8	4121.7	4092.4	4069.5
22.5°	4259.5	4234.4	4211.5	4190.6	4157.2	4136.3	4117.5	4082.0	4057.0	4029.8	4004.8
25°	4142.6	4117.5	4098.7	4073.6	4059.0	4036.1	4017.2	3986.0	3963.0	3937.9	3917.0
27.5°	3950.5	3935.9	3925.4	3910.8	3898.3	3887.8	3877.4	3852.3	3835.6	3812.7	3791.8
30°	3662.3	3660.2	3654.0	3647.7	3656.0	3656.0	3656.0	3651.9	3637.3	3620.5	3605.9
32.5°	3292.7	3297.0	3305.3	3311.6	3328.2	3347.1	3363.7	3372.1	3372.1	3361.7	3355.4
35°	2852.2	2858.5	2871.0	2887.7	2908.6	2931.5	2969.1	2977.5	2983.7	2983.7	2975.4
37.5°	2394.9	2392.8	2405.4	2420.0	2432.5	2449.2	2476.4	2482.6	2493.0	2488.9	2480.5
40°	1950.1	1939.7	1935.5	1939.7	1954.3	1948.1	1954.3	1950.1	1950.1	1935.5	1935.5
42.5°	1538.8	1526.4	1517.9	1511.7	1511.7	1497.0	1486.6	1476.2	1470.0	1459.5	1457.4
45°	1186.0	1171.3	1160.9	1156.7	1150.5	1131.7	1119.2	1106.6	1092.0	1087.9	1089.9
47.5°	920.8	906.2	902.0	891.6	881.1	870.7	862.4	847.7	845.6	837.3	845.6
50°	709.9	705.8	699.5	695.3	689.0	680.7	672.3	664.0	659.8	659.8	661.8
52.5°	551.2	553.3	547.0	540.8	536.6	536.6	526.1	524.1	524.1	515.7	524.1
55°	421.8	419.7	421.8	417.6	417.6	411.3	411.3	405.1	405.1	398.8	403.0
57.5°	309.1	313.2	309.1	311.1	315.3	309.1	306.9	300.6	304.8	300.6	302.8
60°	240.1	240.1	240.1	238.1	238.1	235.9	235.9	233.9	233.9	229.6	233.9
62.5°	177.5	179.5	179.5	179.5	181.7	179.5	177.5	179.5	177.5	177.5	179.5
65°	117.0	119.0	119.0	117.0	121.1	117.0	119.0	121.1	123.2	121.1	123.2
67.5°	79.3	79.3	81.5	83.5	81.5	83.5	85.6	83.5	85.6	89.8	85.6
70°	58.4	60.6	60.6	58.4	56.4	58.4	56.4	62.7	62.7	62.7	66.8
72.5°	37.6	37.6	35.5	35.5	35.5	35.5	35.5	41.8	37.6	35.5	39.7
75°	20.9	22.9	22.9	16.7	18.8	22.9	16.7	18.8	25.1	20.9	25.1
77.5°	12.5	12.5	12.5	12.5	12.5	12.5	16.7	14.6	14.6	14.6	16.7
80°	10.4	8.3	8.3	6.3	8.3	8.3	8.3	12.5	10.4	10.4	12.5
82.5°	4.2	4.2	2.1	0.0	4.2	4.2	4.2	4.2	4.2	4.2	8.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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: P248887

CATALOG NUMBER: LD8B90D010 ER8B90835 8LBSW0B

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2
2.5°	4272.0	4272.0	4269.9	4265.8	4257.4	4257.4	4255.3	4249.0	4244.9	4242.8	4242.8
5°	4251.1	4242.8	4234.4	4211.5	4211.5	4207.3	4194.8	4186.4	4182.3	4171.8	4167.6
7.5°	4232.4	4207.3	4192.7	4178.0	4159.3	4150.9	4136.3	4130.0	4115.4	4105.0	4098.7
10°	4186.4	4169.7	4150.9	4127.9	4113.3	4096.7	4079.9	4067.4	4048.6	4038.1	4029.8
12.5°	4155.1	4130.0	4113.3	4088.2	4063.2	4048.6	4025.7	4011.1	3992.2	3971.4	3958.8
15°	4125.9	4098.7	4075.8	4048.6	4021.5	4004.8	3977.6	3961.0	3933.8	3912.9	3898.3
17.5°	4082.0	4059.0	4034.0	4000.6	3975.6	3954.7	3925.4	3904.6	3879.5	3852.3	3837.7
20°	4036.1	4008.9	3983.9	3950.5	3925.4	3900.4	3871.1	3848.2	3818.9	3793.9	3777.2
22.5°	3975.6	3944.2	3923.3	3889.9	3860.7	3833.6	3806.4	3779.3	3752.1	3731.2	3712.4
25°	3887.8	3854.4	3831.4	3804.3	3777.2	3756.3	3722.9	3706.2	3679.1	3660.2	3641.4
27.5°	3762.5	3737.5	3716.6	3689.5	3666.5	3649.8	3624.7	3608.1	3585.0	3568.4	3553.8
30°	3578.8	3558.0	3539.1	3512.0	3495.3	3480.7	3457.7	3443.1	3426.4	3407.6	3403.4
32.5°	3332.5	3315.7	3297.0	3278.1	3265.6	3257.2	3238.4	3230.1	3213.4	3202.9	3192.5
35°	2960.7	2946.1	2935.7	2927.4	2923.2	2925.3	2921.1	2929.5	2933.6	2931.5	2933.6
37.5°	2474.3	2465.9	2470.1	2476.4	2497.3	2524.4	2549.4	2587.0	2612.1	2637.2	2660.1
40°	1931.4	1937.7	1954.3	1991.9	2046.2	2106.8	2163.2	2234.2	2305.2	2355.3	2401.2
42.5°	1457.4	1476.2	1517.9	1572.2	1653.7	1743.4	1831.2	1935.5	2021.2	2104.7	2163.2
45°	1096.2	1121.2	1175.5	1250.7	1340.5	1444.9	1555.6	1672.5	1774.8	1860.4	1925.1
47.5°	854.0	877.0	931.3	1010.6	1121.2	1229.8	1344.7	1465.8	1572.2	1655.8	1712.2
50°	674.4	703.6	751.7	835.2	945.9	1060.7	1179.7	1298.7	1399.0	1470.0	1520.1
52.5°	530.4	557.5	603.4	691.2	803.9	918.7	1029.3	1146.3	1234.0	1302.9	1336.3
55°	411.3	436.4	484.4	557.5	664.0	776.8	887.4	987.7	1069.0	1119.2	1150.5
57.5°	313.2	332.0	365.4	438.5	534.6	638.9	732.9	833.1	895.8	931.3	952.1
60°	238.1	252.7	288.2	344.5	432.2	522.0	601.3	676.5	726.7	755.9	776.8
62.5°	179.5	196.3	221.3	269.3	336.1	409.3	476.0	532.4	574.2	593.0	607.6
65°	123.2	135.7	154.5	192.1	248.5	300.6	352.9	394.7	421.8	442.7	451.0
67.5°	91.9	100.2	110.7	139.9	179.5	221.3	256.8	286.0	315.3	323.7	338.3
70°	68.9	75.2	85.6	106.5	129.4	158.7	188.0	204.6	225.5	240.1	244.3
72.5°	43.8	45.9	56.4	68.9	87.7	106.5	125.3	139.9	152.5	160.8	164.9
75°	25.1	37.6	37.6	50.1	62.7	71.0	83.5	93.9	100.2	106.5	106.5
77.5°	16.7	22.9	25.1	31.3	37.6	48.0	58.4	64.7	71.0	73.1	73.1
80°	14.6	16.7	16.7	22.9	27.2	35.5	41.8	43.8	48.0	50.1	54.3
82.5°	6.3	8.3	10.4	16.7	18.8	18.8	25.1	27.2	31.3	33.4	33.4
85°	2.1	4.2	4.2	6.3	10.4	12.5	14.6	16.7	18.8	18.8	20.9
87.5°	2.1	2.1	0.0	2.1	4.2	4.2	8.3	8.3	8.3	12.5	12.5
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: P248887

CATALOG NUMBER: LD8B90D010 ER8B90835 8LBSW0B

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2	4276.2
2.5°	4238.6	4240.7	4232.4	4230.3	4226.1	4228.2	4232.4
5°	4161.4	4163.4	4155.1	4146.8	4146.8	4144.6	4146.8
7.5°	4088.2	4090.4	4077.8	4073.6	4065.3	4067.4	4067.4
10°	4015.2	4015.2	3996.4	3994.3	3988.0	3986.0	3986.0
12.5°	3944.2	3937.9	3923.3	3915.0	3919.2	3906.6	3906.6
15°	3881.5	3871.1	3852.3	3846.0	3835.6	3831.4	3831.4
17.5°	3816.8	3808.5	3791.8	3779.3	3766.7	3764.7	3766.7
20°	3754.2	3745.8	3725.0	3716.6	3706.2	3706.2	3702.0
22.5°	3691.5	3683.2	3664.4	3658.2	3643.6	3643.6	3645.6
25°	3626.8	3620.5	3599.6	3595.5	3593.5	3585.0	3589.2
27.5°	3539.1	3534.9	3518.3	3512.0	3503.6	3501.6	3505.7
30°	3378.3	3372.1	3359.6	3353.3	3338.7	3340.8	3344.9
32.5°	3177.9	3169.6	3152.8	3146.6	3134.1	3129.9	3131.9
35°	2927.4	2921.1	2906.5	2906.5	2894.0	2889.8	2894.0
37.5°	2672.7	2678.9	2672.7	2678.9	2672.7	2670.5	2672.7
40°	2432.5	2455.5	2459.6	2482.6	2474.3	2486.8	2484.7
42.5°	2202.8	2240.4	2255.1	2273.8	2269.7	2278.0	2284.3
45°	1971.0	2002.4	2017.0	2029.6	2031.6	2035.8	2037.9
47.5°	1751.8	1776.9	1778.9	1793.5	1791.5	1791.5	1797.8
50°	1547.2	1563.9	1568.0	1578.5	1570.2	1566.0	1568.0
52.5°	1357.2	1373.9	1369.7	1373.9	1363.5	1359.3	1361.3
55°	1163.0	1171.3	1171.3	1171.3	1158.9	1158.9	1158.9
57.5°	964.6	966.8	962.6	964.6	962.6	950.0	948.0
60°	783.0	783.0	780.9	783.0	776.8	770.5	770.5
62.5°	611.7	616.0	624.3	616.0	611.7	616.0	609.7
65°	457.3	465.6	463.5	467.7	465.6	465.6	461.4
67.5°	344.5	346.6	348.7	350.8	350.8	350.8	350.8
70°	252.7	258.9	256.8	256.8	256.8	256.8	269.3
72.5°	169.1	177.5	175.4	179.5	179.5	183.7	179.5
75°	114.8	123.2	119.0	125.3	123.2	119.0	129.4
77.5°	77.3	81.5	83.5	85.6	83.5	81.5	83.5
80°	54.3	58.4	56.4	58.4	58.4	58.4	60.6
82.5°	33.4	39.7	37.6	39.7	37.6	39.7	39.7
85°	22.9	25.1	20.9	25.1	22.9	22.9	27.2
87.5°	14.6	12.5	12.5	14.6	12.5	14.6	12.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)