

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: P248644

Luminaire Tested: **LD8B90D010 ER8B90930 8LBSW0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P248644  
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 ER8B90930 8LBSW0H  
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF  
RECESSED DOWNLIGHT  
97 CRI 3000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7785.3 lumens  
Efficiency: N/A  
Efficacy: 90.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.23 / 1.15  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

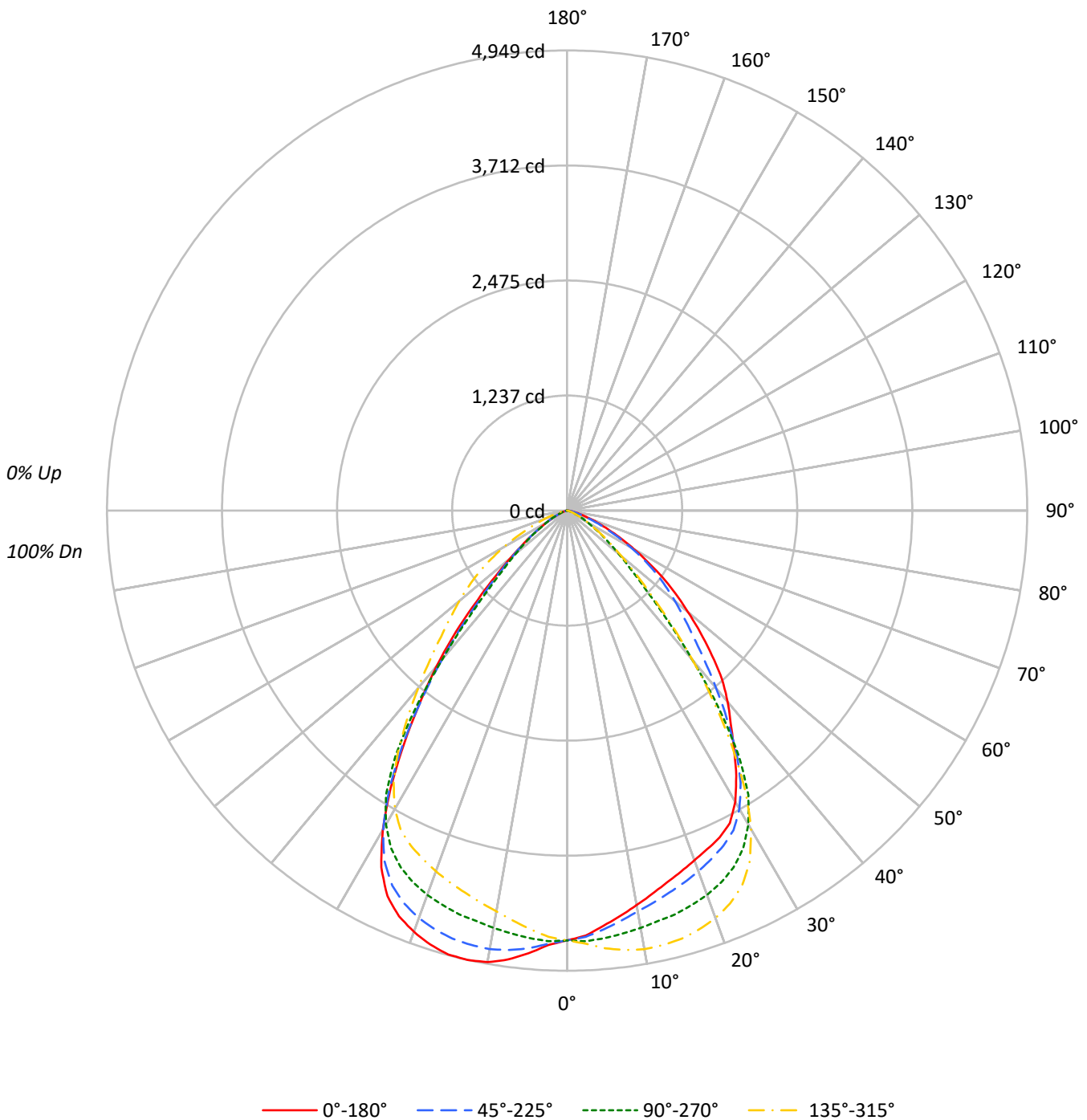
Input Watts (W): 86.1  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	Luminaire represents a point source (luminous area is zero).			
5°	No luminance values can be calculated.			
10°				
15°				
20°				
25°				
30°				
35°				
40°				
45°				
50°				
55°				
60°				
65°				
70°				
75°				
80°				
85°				



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	439.9	5.7
10°-20°	1273.9	16.4
20°-30°	1929.0	24.8
30°-40°	1933.3	24.8
40°-50°	1214.0	15.6
50°-60°	647.0	8.3
60°-70°	266.0	3.4
70°-80°	70.3	0.9
80°-90°	11.9	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°	3642.8	46.8
0°-40°	5576.2	71.6
0°-60°	7437.1	95.5
0°-90°	7785.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7785.3	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	4622	4622	4622	4622	4622	
5°	4482	4615	4780	4615	4482	423
15°	4141	4496	4942	4496	4141	1171
25°	3879	4234	4575	4234	3879	1779
35°	3128	3216	3051	3216	3128	1960
45°	2203	1178	1363	1178	2203	1694
55°	1253	436	460	436	1253	1117
65°	499	133	122	133	499	517
75°	140	27	22	27	140	158
85°	29	0	2	0	29	32
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°	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9
2.5°	4574.6	4570.0	4567.7	4572.3	4574.6	4583.5	4581.3	4585.8	4585.8	4588.1	4592.5
5°	4482.0	4479.7	4482.0	4482.0	4491.1	4500.0	4497.8	4504.6	4509.0	4520.4	4524.8
7.5°	4396.2	4396.2	4394.0	4403.0	4407.5	4421.1	4418.8	4430.1	4436.9	4448.1	4463.9
10°	4308.2	4308.2	4310.5	4317.2	4319.5	4339.8	4339.8	4355.6	4364.6	4375.9	4396.2
12.5°	4222.5	4222.5	4236.0	4231.4	4240.5	4256.3	4263.1	4278.9	4292.4	4315.0	4335.4
15°	4141.2	4141.2	4145.8	4157.0	4163.7	4184.1	4195.3	4213.5	4229.3	4251.8	4281.2
17.5°	4071.2	4069.0	4071.2	4084.8	4098.4	4116.4	4125.4	4147.9	4163.7	4193.1	4220.2
20°	4001.3	4005.9	4005.9	4017.1	4026.1	4048.7	4057.7	4082.6	4100.6	4127.6	4159.4
22.5°	3940.3	3938.2	3938.2	3953.9	3960.7	3981.0	3990.0	4012.5	4032.9	4055.4	4084.8
25°	3879.4	3874.8	3883.9	3886.2	3890.7	3913.3	3920.0	3935.8	3956.1	3976.5	4005.9
27.5°	3789.1	3784.7	3787.0	3795.9	3802.7	3820.7	3825.3	3841.1	3856.9	3874.8	3899.7
30°	3615.3	3610.9	3608.6	3624.4	3631.3	3644.7	3651.4	3678.6	3683.0	3703.4	3721.4
32.5°	3385.2	3383.0	3387.4	3401.0	3407.7	3425.9	3434.9	3450.7	3461.9	3473.2	3491.2
35°	3127.9	3123.3	3127.9	3141.5	3141.5	3157.3	3164.0	3170.7	3168.5	3170.7	3166.3
37.5°	2888.7	2886.5	2888.7	2895.4	2888.7	2895.4	2888.7	2875.1	2850.4	2823.2	2796.1
40°	2685.6	2687.8	2674.4	2683.3	2658.5	2654.0	2629.2	2595.3	2545.7	2491.5	2414.9
42.5°	2469.0	2462.2	2453.2	2457.7	2437.4	2421.5	2380.9	2338.1	2274.8	2184.6	2092.0
45°	2202.7	2200.4	2195.8	2193.7	2180.1	2164.3	2130.3	2080.8	2010.8	1918.3	1807.7
47.5°	1943.1	1936.3	1936.3	1938.5	1922.7	1920.5	1893.4	1850.5	1789.7	1699.3	1584.3
50°	1694.8	1692.6	1697.1	1706.2	1694.8	1690.4	1672.3	1642.9	1588.8	1512.1	1403.7
52.5°	1471.4	1469.2	1473.8	1485.0	1480.4	1485.0	1466.9	1444.4	1408.2	1333.8	1239.0
55°	1252.6	1252.6	1252.6	1266.1	1266.1	1266.1	1257.0	1243.5	1209.7	1155.5	1067.5
57.5°	1024.6	1026.8	1040.4	1042.6	1040.4	1044.9	1042.6	1029.1	1006.5	968.2	900.5
60°	832.8	832.8	839.5	846.4	844.0	846.4	846.4	839.5	817.0	785.4	731.2
62.5°	658.9	665.8	661.2	665.8	674.7	665.8	661.2	656.8	641.0	620.6	575.4
65°	498.7	503.3	503.3	505.6	501.0	503.3	494.2	487.5	478.4	455.9	426.5
67.5°	379.2	379.2	379.2	379.2	376.9	374.6	372.4	365.7	349.9	340.8	309.2
70°	291.1	277.6	277.6	277.6	277.6	279.9	273.1	264.1	259.5	243.7	221.2
72.5°	194.0	198.6	194.0	194.0	189.6	191.8	182.8	178.2	173.8	164.8	151.2
75°	139.9	128.7	133.1	135.4	128.7	133.1	124.1	115.1	115.1	108.3	101.6
77.5°	90.2	88.1	90.2	92.5	90.2	88.1	83.5	78.9	78.9	76.7	70.0
80°	65.5	63.1	63.1	63.1	61.0	63.1	58.7	58.7	54.1	51.9	47.4
82.5°	42.9	42.9	40.6	42.9	40.6	42.9	36.1	36.1	36.1	33.9	29.4
85°	29.4	24.8	24.8	27.1	22.5	27.1	24.8	22.5	20.3	20.3	18.0
87.5°	13.6	15.8	13.6	15.8	13.6	13.6	15.8	13.6	13.6	9.0	9.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9
2.5°	4599.4	4601.6	4601.6	4610.7	4615.2	4617.4	4617.4	4635.4	4628.7	4633.2	4637.7
5°	4534.0	4547.4	4551.9	4551.9	4576.8	4585.8	4594.8	4615.2	4617.4	4631.0	4646.8
7.5°	4470.7	4486.5	4495.5	4515.8	4531.6	4547.4	4574.6	4588.1	4601.6	4619.6	4639.9
10°	4409.8	4427.8	4445.9	4461.7	4486.5	4506.9	4524.8	4556.4	4572.3	4597.1	4624.1
12.5°	4351.2	4375.9	4391.7	4418.8	4445.9	4463.9	4491.1	4520.4	4545.2	4570.0	4601.6
15°	4299.3	4328.5	4346.6	4375.9	4405.3	4430.1	4459.5	4495.5	4513.6	4543.0	4572.3
17.5°	4242.8	4274.4	4297.0	4324.0	4360.1	4387.1	4412.0	4448.1	4470.7	4502.3	4536.1
20°	4184.1	4215.7	4242.8	4269.9	4306.0	4333.0	4362.4	4398.5	4423.4	4454.9	4482.0
22.5°	4114.2	4143.6	4172.8	4204.3	4240.5	4263.1	4297.0	4328.5	4355.6	4384.9	4412.0
25°	4023.8	4060.0	4082.6	4111.8	4141.2	4166.0	4202.2	4233.7	4256.3	4283.5	4308.2
27.5°	3917.8	3944.9	3963.0	3987.7	4017.1	4039.6	4066.7	4098.4	4120.9	4145.8	4163.7
30°	3737.2	3762.1	3777.9	3795.9	3825.3	3845.6	3868.2	3897.5	3913.3	3931.3	3947.2
32.5°	3500.2	3520.6	3529.6	3543.1	3563.5	3583.7	3601.9	3626.7	3633.5	3644.7	3644.7
35°	3157.3	3161.8	3159.5	3164.0	3173.1	3184.3	3200.1	3215.9	3224.9	3224.9	3218.3
37.5°	2755.5	2728.5	2699.1	2676.6	2669.8	2665.3	2674.4	2681.0	2690.2	2694.5	2683.3
40°	2338.1	2277.2	2211.6	2153.0	2112.3	2094.4	2087.5	2092.0	2092.0	2107.8	2107.8
42.5°	1979.2	1884.4	1787.4	1699.3	1640.7	1595.6	1575.2	1575.2	1577.5	1588.8	1595.6
45°	1681.4	1561.7	1448.8	1351.8	1270.5	1211.9	1184.8	1178.1	1175.8	1180.3	1196.1
47.5°	1453.4	1329.3	1211.9	1092.3	1006.5	947.9	923.0	914.0	905.0	914.0	916.3
50°	1275.1	1146.4	1022.4	902.7	812.4	760.5	728.9	715.3	713.2	713.2	717.7
52.5°	1112.6	993.0	868.9	747.0	652.2	602.5	573.3	566.4	557.5	566.4	566.4
55°	959.1	839.5	717.7	602.5	523.5	471.7	444.6	435.6	431.0	437.8	437.8
57.5°	792.2	690.5	577.8	474.0	394.9	358.8	338.5	327.2	325.0	329.5	325.0
60°	650.0	564.2	467.1	372.4	311.4	273.1	257.3	252.8	248.2	252.8	252.8
62.5°	514.5	442.3	363.3	291.1	239.2	212.2	194.0	194.0	191.8	191.8	194.0
65°	381.4	325.0	268.6	207.6	167.0	146.6	133.1	133.1	130.9	133.1	130.9
67.5°	277.6	239.2	194.0	151.2	119.6	108.3	99.3	92.5	97.1	92.5	90.2
70°	203.1	171.5	139.9	115.1	92.5	81.3	74.5	72.2	67.7	67.7	67.7
72.5°	135.4	115.1	94.7	74.5	61.0	49.5	47.4	42.9	38.3	40.6	45.2
75°	90.2	76.7	67.7	54.1	40.6	40.6	27.1	27.1	22.5	27.1	20.3
77.5°	63.1	51.9	40.6	33.9	27.1	24.8	18.0	18.0	15.8	15.8	15.8
80°	45.2	38.3	29.4	24.8	18.0	18.0	15.8	13.6	11.2	11.2	13.6
82.5°	27.1	20.3	20.3	18.0	11.2	9.0	6.7	9.0	4.6	4.6	4.6
85°	15.8	13.6	11.2	6.7	4.6	4.6	2.2	0.0	2.2	2.2	0.0
87.5°	9.0	4.6	4.6	2.2	0.0	2.2	2.2	0.0	0.0	0.0	4.6
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°	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9
2.5°	4649.0	4646.8	4651.3	4651.3	4664.8	4662.5	4669.3	4669.3	4664.8	4667.1	4676.0
5°	4664.8	4671.7	4685.1	4696.4	4716.6	4725.8	4737.0	4748.3	4750.6	4757.3	4764.1
7.5°	4664.8	4687.3	4703.2	4723.4	4750.6	4766.4	4791.2	4811.6	4820.5	4831.7	4845.3
10°	4655.7	4678.3	4707.6	4730.2	4764.1	4788.9	4813.7	4845.3	4858.9	4876.9	4895.0
12.5°	4637.7	4662.5	4694.1	4723.4	4761.8	4784.4	4815.9	4845.3	4865.7	4890.5	4910.8
15°	4610.7	4639.9	4669.3	4698.7	4739.3	4766.4	4795.8	4829.5	4849.9	4876.9	4895.0
17.5°	4567.7	4599.4	4626.5	4653.5	4691.8	4723.4	4750.6	4782.2	4802.5	4825.1	4849.9
20°	4515.8	4545.2	4574.6	4597.1	4635.4	4662.5	4691.8	4721.2	4737.0	4741.6	4779.9
22.5°	4450.5	4470.7	4493.3	4529.4	4551.9	4576.8	4603.9	4631.0	4646.8	4671.7	4685.1
25°	4342.1	4362.4	4387.1	4403.0	4430.1	4450.5	4477.5	4506.9	4515.8	4534.0	4547.4
27.5°	4190.9	4202.2	4213.5	4227.0	4242.8	4254.1	4269.9	4283.5	4292.4	4301.4	4310.5
30°	3951.6	3951.6	3951.6	3942.6	3949.4	3956.1	3958.4	3956.1	3956.1	3953.9	3953.9
32.5°	3635.6	3617.7	3597.3	3579.4	3572.5	3563.5	3559.0	3552.2	3540.9	3534.2	3536.4
35°	3209.1	3168.5	3143.7	3121.2	3103.2	3089.6	3082.8	3076.0	3073.8	3064.8	3055.6
37.5°	2676.6	2647.2	2629.2	2615.6	2599.8	2586.3	2588.5	2590.9	2597.6	2593.1	2595.3
40°	2112.3	2105.6	2112.3	2096.6	2092.0	2096.6	2107.8	2123.7	2132.7	2141.7	2157.5
42.5°	1606.8	1618.1	1634.0	1634.0	1640.7	1649.8	1663.2	1688.1	1701.6	1717.4	1735.5
45°	1209.7	1223.2	1243.5	1250.3	1254.7	1266.1	1281.9	1302.2	1311.1	1324.7	1340.5
47.5°	932.1	941.1	952.3	963.6	974.9	979.4	995.2	995.2	1006.5	1015.6	1020.0
50°	726.7	735.7	744.7	751.5	756.0	762.8	767.3	774.1	776.3	780.9	783.1
52.5°	568.7	580.0	580.0	584.5	591.2	598.1	595.8	598.1	600.3	600.3	607.0
55°	444.6	444.6	451.3	451.3	455.9	453.6	455.9	455.9	455.9	455.9	458.2
57.5°	331.7	334.1	340.8	336.3	334.1	338.5	334.1	338.5	336.3	340.8	334.1
60°	255.0	255.0	257.3	257.3	259.5	259.5	259.5	257.3	257.3	255.0	255.0
62.5°	191.8	194.0	196.4	194.0	194.0	194.0	191.8	191.8	189.6	187.3	187.3
65°	128.7	126.4	130.9	126.4	128.7	128.7	126.4	128.7	121.9	124.1	121.9
67.5°	92.5	90.2	88.1	90.2	88.1	85.8	85.8	88.1	90.2	83.5	83.5
70°	61.0	63.1	61.0	63.1	65.5	65.5	63.1	61.0	63.1	58.7	61.0
72.5°	38.3	38.3	38.3	38.3	38.3	40.6	40.6	40.6	36.1	36.1	33.9
75°	18.0	24.8	20.3	18.0	24.8	24.8	22.5	22.5	20.3	20.3	20.3
77.5°	18.0	13.6	13.6	13.6	13.6	13.6	13.6	13.6	11.2	13.6	11.2
80°	9.0	9.0	9.0	6.7	9.0	9.0	11.2	9.0	9.0	6.7	11.2
82.5°	4.6	4.6	4.6	0.0	2.2	4.6	4.6	2.2	4.6	4.6	2.2
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: P248644

CATALOG NUMBER: LD8B90D010 ER8B90930 8LBSW0H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9
2.5°	4673.8	4671.7	4673.8	4676.0	4673.8	4671.7	4673.8	4676.0	4667.1	4664.8	4669.3
5°	4773.1	4773.1	4777.6	4779.9	4777.6	4773.1	4773.1	4764.1	4757.3	4750.6	4748.3
7.5°	4858.9	4863.5	4867.9	4870.1	4867.9	4863.5	4858.9	4845.3	4831.7	4820.5	4811.6
10°	4910.8	4917.6	4926.6	4931.1	4926.6	4917.6	4910.8	4895.0	4876.9	4858.9	4845.3
12.5°	4933.4	4940.1	4951.3	4949.2	4951.3	4940.1	4933.4	4910.8	4890.5	4865.7	4845.3
15°	4917.6	4926.6	4937.9	4942.4	4937.9	4926.6	4917.6	4895.0	4876.9	4849.9	4829.5
17.5°	4867.9	4881.5	4888.2	4895.0	4888.2	4881.5	4867.9	4849.9	4825.1	4802.5	4782.2
20°	4800.1	4809.3	4818.3	4820.5	4818.3	4809.3	4800.1	4779.9	4741.6	4737.0	4721.2
22.5°	4703.2	4710.0	4730.2	4723.4	4730.2	4710.0	4703.2	4685.1	4671.7	4646.8	4631.0
25°	4563.3	4570.0	4572.3	4574.6	4572.3	4570.0	4563.3	4547.4	4534.0	4515.8	4506.9
27.5°	4321.8	4321.8	4326.3	4328.5	4326.3	4321.8	4321.8	4310.5	4301.4	4292.4	4283.5
30°	3956.1	3956.1	3956.1	3967.4	3956.1	3956.1	3956.1	3953.9	3953.9	3956.1	3956.1
32.5°	3534.2	3529.6	3525.1	3529.6	3525.1	3529.6	3534.2	3536.4	3534.2	3540.9	3552.2
35°	3055.6	3053.5	3060.2	3051.2	3060.2	3053.5	3055.6	3055.6	3064.8	3073.8	3076.0
37.5°	2597.6	2593.1	2602.1	2593.1	2602.1	2593.1	2597.6	2595.3	2593.1	2597.6	2590.9
40°	2162.1	2166.6	2166.6	2184.6	2166.6	2166.6	2162.1	2157.5	2141.7	2132.7	2123.7
42.5°	1744.5	1758.1	1753.5	1767.0	1753.5	1758.1	1744.5	1735.5	1717.4	1701.6	1688.1
45°	1349.6	1358.7	1358.7	1363.1	1358.7	1358.7	1349.6	1340.5	1324.7	1311.1	1302.2
47.5°	1035.8	1035.8	1035.8	1038.2	1035.8	1035.8	1035.8	1020.0	1015.6	1006.5	995.2
50°	787.6	789.9	792.2	794.5	792.2	789.9	787.6	783.1	780.9	776.3	774.1
52.5°	604.8	607.0	602.5	607.0	602.5	607.0	604.8	607.0	600.3	600.3	598.1
55°	458.2	455.9	458.2	460.4	458.2	455.9	458.2	458.2	455.9	455.9	455.9
57.5°	336.3	331.7	331.7	331.7	331.7	331.7	336.3	334.1	340.8	336.3	338.5
60°	250.5	252.8	252.8	255.0	252.8	252.8	250.5	255.0	255.0	257.3	257.3
62.5°	185.1	191.8	187.3	191.8	187.3	191.8	185.1	187.3	187.3	189.6	191.8
65°	119.6	119.6	119.6	121.9	119.6	119.6	119.6	121.9	124.1	121.9	128.7
67.5°	81.3	83.5	88.1	85.8	88.1	83.5	81.3	83.5	83.5	90.2	88.1
70°	65.5	58.7	58.7	65.5	58.7	58.7	65.5	61.0	58.7	63.1	61.0
72.5°	38.3	33.9	38.3	38.3	38.3	33.9	38.3	33.9	36.1	36.1	40.6
75°	20.3	18.0	15.8	22.5	15.8	18.0	20.3	20.3	20.3	20.3	22.5
77.5°	13.6	11.2	15.8	15.8	15.8	11.2	13.6	11.2	13.6	11.2	13.6
80°	6.7	9.0	6.7	11.2	6.7	9.0	6.7	11.2	6.7	9.0	9.0
82.5°	2.2	4.6	4.6	4.6	4.6	4.6	2.2	2.2	4.6	4.6	2.2
85°	0.0	4.6	2.2	2.2	2.2	4.6	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	0.0	0.0	2.2	0.0	0.0	2.2	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: P248644

CATALOG NUMBER: LD8B90D010 ER8B90930 8LBSW0H

**CANDELA DISTRIBUTION (continued):**

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9
2.5°	4669.3	4662.5	4664.8	4651.3	4651.3	4646.8	4649.0	4637.7	4633.2	4628.7	4635.4
5°	4737.0	4725.8	4716.6	4696.4	4685.1	4671.7	4664.8	4646.8	4631.0	4617.4	4615.2
7.5°	4791.2	4766.4	4750.6	4723.4	4703.2	4687.3	4664.8	4639.9	4619.6	4601.6	4588.1
10°	4813.7	4788.9	4764.1	4730.2	4707.6	4678.3	4655.7	4624.1	4597.1	4572.3	4556.4
12.5°	4815.9	4784.4	4761.8	4723.4	4694.1	4662.5	4637.7	4601.6	4570.0	4545.2	4520.4
15°	4795.8	4766.4	4739.3	4698.7	4669.3	4639.9	4610.7	4572.3	4543.0	4513.6	4495.5
17.5°	4750.6	4723.4	4691.8	4653.5	4626.5	4599.4	4567.7	4536.1	4502.3	4470.7	4448.1
20°	4691.8	4662.5	4635.4	4597.1	4574.6	4545.2	4515.8	4482.0	4454.9	4423.4	4398.5
22.5°	4603.9	4576.8	4551.9	4529.4	4493.3	4470.7	4450.5	4412.0	4384.9	4355.6	4328.5
25°	4477.5	4450.5	4430.1	4403.0	4387.1	4362.4	4342.1	4308.2	4283.5	4256.3	4233.7
27.5°	4269.9	4254.1	4242.8	4227.0	4213.5	4202.2	4190.9	4163.7	4145.8	4120.9	4098.4
30°	3958.4	3956.1	3949.4	3942.6	3951.6	3951.6	3951.6	3947.2	3931.3	3913.3	3897.5
32.5°	3559.0	3563.5	3572.5	3579.4	3597.3	3617.7	3635.6	3644.7	3644.7	3633.5	3626.7
35°	3082.8	3089.6	3103.2	3121.2	3143.7	3168.5	3209.1	3218.3	3224.9	3224.9	3215.9
37.5°	2588.5	2586.3	2599.8	2615.6	2629.2	2647.2	2676.6	2683.3	2694.5	2690.2	2681.0
40°	2107.8	2096.6	2092.0	2096.6	2112.3	2105.6	2112.3	2107.8	2107.8	2092.0	2092.0
42.5°	1663.2	1649.8	1640.7	1634.0	1634.0	1618.1	1606.8	1595.6	1588.8	1577.5	1575.2
45°	1281.9	1266.1	1254.7	1250.3	1243.5	1223.2	1209.7	1196.1	1180.3	1175.8	1178.1
47.5°	995.2	979.4	974.9	963.6	952.3	941.1	932.1	916.3	914.0	905.0	914.0
50°	767.3	762.8	756.0	751.5	744.7	735.7	726.7	717.7	713.2	713.2	715.3
52.5°	595.8	598.1	591.2	584.5	580.0	580.0	568.7	566.4	566.4	557.5	566.4
55°	455.9	453.6	455.9	451.3	451.3	444.6	444.6	437.8	437.8	431.0	435.6
57.5°	334.1	338.5	334.1	336.3	340.8	334.1	331.7	325.0	329.5	325.0	327.2
60°	259.5	259.5	259.5	257.3	257.3	255.0	255.0	252.8	252.8	248.2	252.8
62.5°	191.8	194.0	194.0	194.0	196.4	194.0	191.8	194.0	191.8	191.8	194.0
65°	126.4	128.7	128.7	126.4	130.9	126.4	128.7	130.9	133.1	130.9	133.1
67.5°	85.8	85.8	88.1	90.2	88.1	90.2	92.5	90.2	92.5	97.1	92.5
70°	63.1	65.5	65.5	63.1	61.0	63.1	61.0	67.7	67.7	67.7	72.2
72.5°	40.6	40.6	38.3	38.3	38.3	38.3	38.3	45.2	40.6	38.3	42.9
75°	22.5	24.8	24.8	18.0	20.3	24.8	18.0	20.3	27.1	22.5	27.1
77.5°	13.6	13.6	13.6	13.6	13.6	13.6	18.0	15.8	15.8	15.8	18.0
80°	11.2	9.0	9.0	6.7	9.0	9.0	9.0	13.6	11.2	11.2	13.6
82.5°	4.6	4.6	2.2	0.0	4.6	4.6	4.6	4.6	4.6	4.6	9.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	2.2	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	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: P248644

CATALOG NUMBER: LD8B90D010 ER8B90930 8LBSW0H

**CANDELA DISTRIBUTION (continued):**

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9
2.5°	4617.4	4617.4	4615.2	4610.7	4601.6	4601.6	4599.4	4592.5	4588.1	4585.8	4585.8
5°	4594.8	4585.8	4576.8	4551.9	4551.9	4547.4	4534.0	4524.8	4520.4	4509.0	4504.6
7.5°	4574.6	4547.4	4531.6	4515.8	4495.5	4486.5	4470.7	4463.9	4448.1	4436.9	4430.1
10°	4524.8	4506.9	4486.5	4461.7	4445.9	4427.8	4409.8	4396.2	4375.9	4364.6	4355.6
12.5°	4491.1	4463.9	4445.9	4418.8	4391.7	4375.9	4351.2	4335.4	4315.0	4292.4	4278.9
15°	4459.5	4430.1	4405.3	4375.9	4346.6	4328.5	4299.3	4281.2	4251.8	4229.3	4213.5
17.5°	4412.0	4387.1	4360.1	4324.0	4297.0	4274.4	4242.8	4220.2	4193.1	4163.7	4147.9
20°	4362.4	4333.0	4306.0	4269.9	4242.8	4215.7	4184.1	4159.4	4127.6	4100.6	4082.6
22.5°	4297.0	4263.1	4240.5	4204.3	4172.8	4143.6	4114.2	4084.8	4055.4	4032.9	4012.5
25°	4202.2	4166.0	4141.2	4111.8	4082.6	4060.0	4023.8	4005.9	3976.5	3956.1	3935.8
27.5°	4066.7	4039.6	4017.1	3987.7	3963.0	3944.9	3917.8	3899.7	3874.8	3856.9	3841.1
30°	3868.2	3845.6	3825.3	3795.9	3777.9	3762.1	3737.2	3721.4	3703.4	3683.0	3678.6
32.5°	3601.9	3583.7	3563.5	3543.1	3529.6	3520.6	3500.2	3491.2	3473.2	3461.9	3450.7
35°	3200.1	3184.3	3173.1	3164.0	3159.5	3161.8	3157.3	3166.3	3170.7	3168.5	3170.7
37.5°	2674.4	2665.3	2669.8	2676.6	2699.1	2728.5	2755.5	2796.1	2823.2	2850.4	2875.1
40°	2087.5	2094.4	2112.3	2153.0	2211.6	2277.2	2338.1	2414.9	2491.5	2545.7	2595.3
42.5°	1575.2	1595.6	1640.7	1699.3	1787.4	1884.4	1979.2	2092.0	2184.6	2274.8	2338.1
45°	1184.8	1211.9	1270.5	1351.8	1448.8	1561.7	1681.4	1807.7	1918.3	2010.8	2080.8
47.5°	923.0	947.9	1006.5	1092.3	1211.9	1329.3	1453.4	1584.3	1699.3	1789.7	1850.5
50°	728.9	760.5	812.4	902.7	1022.4	1146.4	1275.1	1403.7	1512.1	1588.8	1642.9
52.5°	573.3	602.5	652.2	747.0	868.9	993.0	1112.6	1239.0	1333.8	1408.2	1444.4
55°	444.6	471.7	523.5	602.5	717.7	839.5	959.1	1067.5	1155.5	1209.7	1243.5
57.5°	338.5	358.8	394.9	474.0	577.8	690.5	792.2	900.5	968.2	1006.5	1029.1
60°	257.3	273.1	311.4	372.4	467.1	564.2	650.0	731.2	785.4	817.0	839.5
62.5°	194.0	212.2	239.2	291.1	363.3	442.3	514.5	575.4	620.6	641.0	656.8
65°	133.1	146.6	167.0	207.6	268.6	325.0	381.4	426.5	455.9	478.4	487.5
67.5°	99.3	108.3	119.6	151.2	194.0	239.2	277.6	309.2	340.8	349.9	365.7
70°	74.5	81.3	92.5	115.1	139.9	171.5	203.1	221.2	243.7	259.5	264.1
72.5°	47.4	49.5	61.0	74.5	94.7	115.1	135.4	151.2	164.8	173.8	178.2
75°	27.1	40.6	40.6	54.1	67.7	76.7	90.2	101.6	108.3	115.1	115.1
77.5°	18.0	24.8	27.1	33.9	40.6	51.9	63.1	70.0	76.7	78.9	78.9
80°	15.8	18.0	18.0	24.8	29.4	38.3	45.2	47.4	51.9	54.1	58.7
82.5°	6.7	9.0	11.2	18.0	20.3	20.3	27.1	29.4	33.9	36.1	36.1
85°	2.2	4.6	4.6	6.7	11.2	13.6	15.8	18.0	20.3	20.3	22.5
87.5°	2.2	2.2	0.0	2.2	4.6	4.6	9.0	9.0	9.0	13.6	13.6
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: P248644

CATALOG NUMBER: LD8B90D010 ER8B90930 8LBSW0H

**CANDELA DISTRIBUTION (continued):**

	330°	335°	340°	345°	350°	355°	360°
0°	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9	4621.9
2.5°	4581.3	4583.5	4574.6	4572.3	4567.7	4570.0	4574.6
5°	4497.8	4500.0	4491.1	4482.0	4482.0	4479.7	4482.0
7.5°	4418.8	4421.1	4407.5	4403.0	4394.0	4396.2	4396.2
10°	4339.8	4339.8	4319.5	4317.2	4310.5	4308.2	4308.2
12.5°	4263.1	4256.3	4240.5	4231.4	4236.0	4222.5	4222.5
15°	4195.3	4184.1	4163.7	4157.0	4145.8	4141.2	4141.2
17.5°	4125.4	4116.4	4098.4	4084.8	4071.2	4069.0	4071.2
20°	4057.7	4048.7	4026.1	4017.1	4005.9	4005.9	4001.3
22.5°	3990.0	3981.0	3960.7	3953.9	3938.2	3938.2	3940.3
25°	3920.0	3913.3	3890.7	3886.2	3883.9	3874.8	3879.4
27.5°	3825.3	3820.7	3802.7	3795.9	3787.0	3784.7	3789.1
30°	3651.4	3644.7	3631.3	3624.4	3608.6	3610.9	3615.3
32.5°	3434.9	3425.9	3407.7	3401.0	3387.4	3383.0	3385.2
35°	3164.0	3157.3	3141.5	3141.5	3127.9	3123.3	3127.9
37.5°	2888.7	2895.4	2888.7	2895.4	2888.7	2886.5	2888.7
40°	2629.2	2654.0	2658.5	2683.3	2674.4	2687.8	2685.6
42.5°	2380.9	2421.5	2437.4	2457.7	2453.2	2462.2	2469.0
45°	2130.3	2164.3	2180.1	2193.7	2195.8	2200.4	2202.7
47.5°	1893.4	1920.5	1922.7	1938.5	1936.3	1936.3	1943.1
50°	1672.3	1690.4	1694.8	1706.2	1697.1	1692.6	1694.8
52.5°	1466.9	1485.0	1480.4	1485.0	1473.8	1469.2	1471.4
55°	1257.0	1266.1	1266.1	1266.1	1252.6	1252.6	1252.6
57.5°	1042.6	1044.9	1040.4	1042.6	1040.4	1026.8	1024.6
60°	846.4	846.4	844.0	846.4	839.5	832.8	832.8
62.5°	661.2	665.8	674.7	665.8	661.2	665.8	658.9
65°	494.2	503.3	501.0	505.6	503.3	503.3	498.7
67.5°	372.4	374.6	376.9	379.2	379.2	379.2	379.2
70°	273.1	279.9	277.6	277.6	277.6	277.6	291.1
72.5°	182.8	191.8	189.6	194.0	194.0	198.6	194.0
75°	124.1	133.1	128.7	135.4	133.1	128.7	139.9
77.5°	83.5	88.1	90.2	92.5	90.2	88.1	90.2
80°	58.7	63.1	61.0	63.1	63.1	63.1	65.5
82.5°	36.1	42.9	40.6	42.9	40.6	42.9	42.9
85°	24.8	27.1	22.5	27.1	24.8	24.8	29.4
87.5°	15.8	13.6	13.6	15.8	13.6	15.8	13.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)