

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: P248392

Luminaire Tested: **LD8B90D010 ER8B90935 8LBDW0LI**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248392
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13956)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B90D010 ER8B90935 8LBDW0LI
Description: PORTFOLIO 8 INCH DOUBLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
90 CRI 3500 CCT WITH SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8448.0 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.33 / 1.2
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

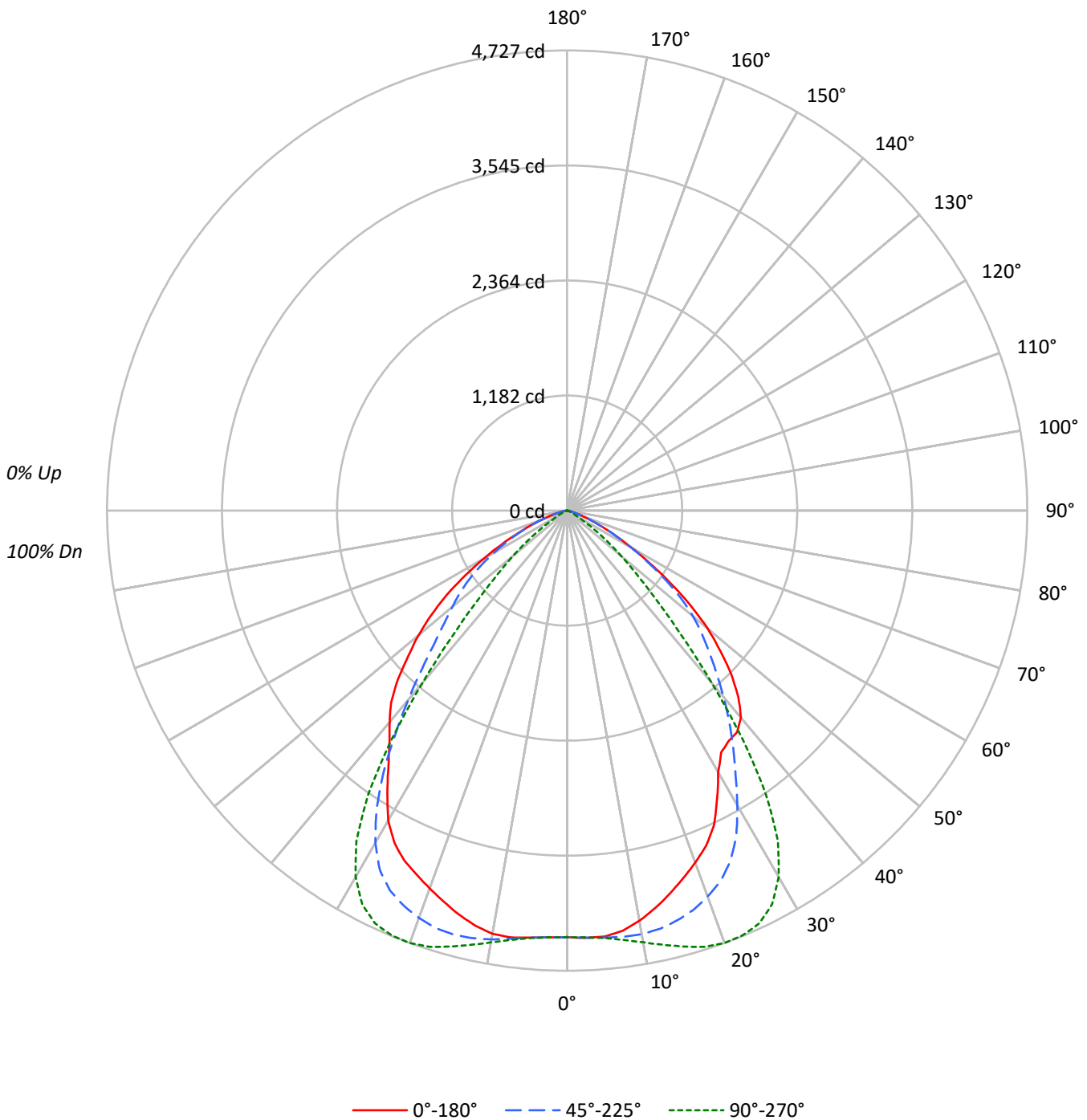
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90					90			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70					70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62					62			
5	84	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56					56			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45					45			
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41					41			
9	64	52	45	40	63	51	44	40	50	44	39	49	44	39	48	43	39	38					38			
10	60	48	41	36	59	48	41	36	47	41	36	46	40	36	45	40	36	34					34			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	135140	135140	135140
5°	135947	136449	136306
10°	133950	141014	138246
15°	130033	148003	137162
20°	126257	155111	135494
25°	121412	159087	134865
30°	110491	154725	130869
35°	108844	134066	120405
40°	111805	92983	114144
45°	104082	56199	107326
50°	90280	34704	95639
55°	69282	18134	81164
60°	47198	7314	61259
65°	29361	3736	42261
70°	15940	2308	25795
75°	8316	1108	15250
80°	3711	1243	8257
85°	2477	814	7395



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.5	5.0
10°-20°	1248.5	14.8
20°-30°	1904.8	22.5
30°-40°	1987.6	23.5
40°-50°	1493.0	17.7
50°-60°	918.6	10.9
60°-70°	373.8	4.4
70°-80°	88.1	1.0
80°-90°	12.1	0.1
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°	3574.7	42.3
0°-40°	5562.4	65.8
0°-60°	7974.0	94.4
0°-90°	8448.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8448.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	4382	4382	4382	4382	4382	
5°	4392	4404	4408	4404	4404	416
15°	4073	4359	4636	4508	4296	1147
25°	3568	3968	4676	4306	3964	1622
35°	2891	2973	3561	3292	3198	1826
45°	2387	2066	1289	1924	2461	1821
55°	1289	1224	337	1224	1510	1158
65°	402	407	51	547	579	420
75°	70	70	9	123	128	84
85°	7	7	2	16	21	10
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°	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5
2.5°	4394.2	4387.2	4394.2	4394.2	4396.5	4391.9	4394.2	4396.5	4391.9	4391.9	4391.9
5°	4391.9	4387.2	4391.9	4389.5	4394.2	4394.2	4398.9	4398.9	4403.5	4403.5	4410.5
7.5°	4354.6	4345.4	4354.6	4361.6	4366.2	4375.6	4387.2	4396.5	4405.8	4415.1	4426.7
10°	4277.9	4277.9	4284.9	4298.8	4312.7	4329.0	4350.0	4373.2	4396.5	4417.4	4438.4
12.5°	4182.5	4175.5	4189.5	4208.1	4229.0	4254.6	4287.2	4322.1	4359.3	4401.1	4433.7
15°	4073.2	4066.2	4082.5	4101.1	4126.7	4163.9	4203.5	4250.0	4303.5	4359.3	4412.8
17.5°	3961.5	3959.2	3975.4	4001.1	4022.0	4061.5	4112.7	4168.5	4229.0	4303.5	4373.2
20°	3847.5	3845.2	3861.5	3882.4	3910.3	3947.6	3998.7	4063.8	4136.0	4219.7	4301.1
22.5°	3728.9	3731.2	3745.2	3768.4	3791.7	3831.2	3884.7	3949.9	4028.9	4119.7	4210.4
25°	3568.4	3556.8	3575.4	3598.6	3638.1	3670.7	3721.9	3791.7	3873.1	3968.5	4075.5
27.5°	3335.7	3333.4	3349.7	3370.6	3405.5	3445.1	3500.9	3573.0	3659.1	3763.8	3868.4
30°	3103.1	3107.8	3114.8	3135.7	3159.0	3198.5	3254.3	3314.9	3396.2	3496.3	3607.9
32.5°	2944.9	2944.9	2954.3	2968.2	2984.5	3005.4	3045.0	3089.2	3152.0	3221.8	3303.2
35°	2891.4	2882.2	2891.4	2893.8	2896.1	2900.8	2907.7	2921.7	2942.6	2972.9	3003.1
37.5°	2868.2	2861.2	2861.2	2851.9	2840.3	2826.3	2807.7	2786.8	2763.5	2733.3	2710.0
40°	2777.5	2772.8	2768.2	2758.9	2733.3	2705.4	2675.1	2626.3	2572.8	2498.3	2423.9
42.5°	2603.0	2598.4	2596.0	2577.4	2554.1	2521.6	2486.7	2435.5	2368.1	2272.7	2165.7
45°	2386.7	2377.4	2370.4	2354.1	2337.8	2309.9	2277.4	2230.8	2163.3	2065.7	1937.7
47.5°	2135.5	2130.8	2128.5	2121.5	2105.2	2088.9	2068.0	2030.8	1970.3	1877.2	1744.7
50°	1881.9	1872.6	1877.2	1874.9	1867.9	1856.3	1842.3	1816.8	1770.2	1686.5	1565.5
52.5°	1591.1	1591.1	1588.8	1595.8	1598.1	1595.8	1598.1	1570.2	1530.6	1467.8	1365.5
55°	1288.7	1288.7	1295.7	1305.0	1314.3	1316.6	1314.3	1302.7	1274.7	1223.6	1132.8
57.5°	1004.9	1000.3	1014.2	1028.2	1037.5	1046.8	1039.8	1030.5	1014.2	972.3	902.6
60°	765.3	765.3	774.6	783.9	793.2	802.5	800.2	797.9	783.9	756.0	700.2
62.5°	562.9	565.3	565.3	572.3	581.5	590.9	597.8	590.9	583.9	565.3	528.0
65°	402.4	400.1	402.4	409.4	416.4	425.7	430.4	428.0	421.0	407.1	379.2
67.5°	269.8	267.5	276.8	279.1	283.8	293.1	290.8	293.1	290.8	279.1	255.9
70°	176.8	172.1	176.8	174.5	181.5	183.8	188.4	190.7	188.4	181.5	174.5
72.5°	109.3	107.0	109.3	111.7	114.0	116.3	121.0	121.0	118.6	114.0	104.7
75°	69.8	62.8	65.1	60.5	65.1	65.1	69.8	72.1	69.8	69.8	65.1
77.5°	41.9	41.9	41.9	41.9	41.9	41.9	41.9	44.2	46.5	41.9	39.6
80°	20.9	20.9	23.3	23.3	23.3	25.6	23.3	23.3	23.3	25.6	18.6
82.5°	16.3	13.9	13.9	13.9	16.3	13.9	13.9	13.9	13.9	13.9	13.9
85°	7.0	9.3	7.0	4.7	7.0	7.0	9.3	7.0	7.0	7.0	9.3
87.5°	2.3	2.3	0.0	0.0	0.0	2.3	0.0	2.3	2.3	4.7	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5
2.5°	4394.2	4389.5	4389.5	4387.2	4391.9	4387.2	4389.5	4387.2	4387.2	4391.9	4387.2
5°	4410.5	4412.8	4408.1	4405.8	4412.8	4412.8	4412.8	4408.1	4408.1	4410.5	4408.1
7.5°	4433.7	4438.4	4440.7	4443.0	4447.7	4450.0	4450.0	4447.7	4445.4	4452.4	4443.0
10°	4459.3	4466.3	4480.3	4487.3	4498.9	4498.9	4503.5	4503.5	4498.9	4503.5	4501.2
12.5°	4450.0	4491.9	4515.1	4531.4	4547.7	4561.6	4566.3	4568.6	4566.3	4575.6	4566.3
15°	4466.3	4501.2	4538.4	4566.3	4596.5	4612.8	4617.5	4636.1	4640.8	4643.1	4629.1
17.5°	4440.7	4503.5	4543.0	4584.9	4629.1	4659.4	4687.3	4698.9	4701.3	4705.9	4687.3
20°	4382.5	4452.4	4512.8	4573.3	4624.5	4671.0	4694.3	4726.8	4717.5	4736.2	4710.5
22.5°	4303.5	4382.5	4459.3	4538.4	4591.9	4647.8	4696.6	4719.8	4731.5	4731.5	4703.5
25°	4177.8	4270.9	4354.6	4436.0	4517.5	4584.9	4640.8	4675.7	4682.7	4680.3	4647.8
27.5°	3982.4	4082.5	4180.2	4273.2	4373.2	4452.4	4517.5	4559.3	4571.0	4571.0	4536.1
30°	3712.6	3819.6	3915.0	4026.6	4129.0	4217.4	4308.1	4345.4	4366.2	4366.2	4326.7
32.5°	3391.6	3482.3	3570.7	3680.0	3791.7	3891.7	3977.8	4028.9	4054.6	4052.2	4017.3
35°	3042.7	3086.8	3154.3	3235.7	3335.7	3428.8	3512.5	3561.4	3605.6	3603.3	3570.7
37.5°	2693.7	2682.1	2689.1	2719.3	2782.1	2847.3	2912.4	2958.9	2996.1	3012.4	3005.4
40°	2351.8	2291.3	2233.1	2212.2	2216.8	2240.1	2275.0	2309.9	2351.8	2372.7	2382.0
42.5°	2044.7	1942.4	1840.0	1763.3	1719.0	1705.1	1721.4	1733.0	1758.6	1788.8	1819.1
45°	1798.2	1660.9	1526.0	1407.4	1332.9	1288.7	1279.4	1288.7	1302.7	1332.9	1372.5
47.5°	1595.8	1435.2	1284.1	1151.5	1042.1	984.0	967.7	963.1	977.0	1004.9	1058.4
50°	1416.6	1256.1	1088.7	935.1	821.2	756.0	732.8	723.4	739.7	760.7	809.5
52.5°	1221.2	1063.1	890.9	742.0	623.4	556.0	530.4	516.4	525.7	553.6	602.5
55°	1009.6	863.0	707.2	553.6	439.6	376.9	346.6	337.3	346.6	376.9	425.7
57.5°	797.9	674.6	544.3	400.1	297.7	235.0	204.7	195.4	221.0	232.6	283.8
60°	623.4	523.4	411.7	293.1	204.7	155.8	125.6	118.6	130.3	151.2	193.1
62.5°	467.6	404.7	316.4	209.3	151.2	100.0	83.7	76.8	83.7	100.0	132.6
65°	339.6	290.8	221.0	153.5	102.3	74.4	55.8	51.2	58.2	69.8	97.7
67.5°	232.6	195.4	153.5	107.0	69.8	46.5	39.6	39.6	41.9	51.2	72.1
70°	151.2	128.0	97.7	69.8	46.5	34.9	30.2	25.6	30.2	37.2	48.8
72.5°	95.4	81.4	62.8	48.8	34.9	25.6	20.9	18.6	23.3	27.9	37.2
75°	58.2	44.2	32.6	25.6	18.6	18.6	18.6	9.3	11.6	18.6	23.3
77.5°	34.9	30.2	25.6	20.9	16.3	9.3	9.3	9.3	11.6	13.9	20.9
80°	18.6	16.3	11.6	11.6	9.3	7.0	9.3	7.0	4.7	11.6	13.9
82.5°	11.6	9.3	9.3	9.3	11.6	4.7	7.0	4.7	7.0	9.3	7.0
85°	7.0	7.0	7.0	4.7	11.6	4.7	4.7	2.3	2.3	4.7	4.7
87.5°	0.0	2.3	2.3	0.0	2.3	0.0	2.3	2.3	2.3	2.3	2.3
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°	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5	4382.5
2.5°	4389.5	4387.2	4389.5	4387.2	4387.2	4387.2	4389.5	4389.5	4387.2	4387.2	4391.9
5°	4408.1	4408.1	4408.1	4405.8	4403.5	4403.5	4408.1	4408.1	4401.1	4408.1	4408.1
7.5°	4447.7	4440.7	4447.7	4438.4	4433.7	4436.0	4438.4	4433.7	4429.1	4431.4	4431.4
10°	4498.9	4491.9	4491.9	4484.9	4477.9	4473.3	4468.6	4457.0	4445.4	4443.0	4433.7
12.5°	4559.3	4547.7	4540.8	4526.8	4515.1	4498.9	4484.9	4466.3	4443.0	4426.7	4410.5
15°	4619.8	4601.2	4584.9	4561.6	4536.1	4508.1	4477.9	4447.7	4410.5	4377.9	4350.0
17.5°	4668.7	4643.1	4612.8	4575.6	4538.4	4496.5	4452.4	4408.1	4354.6	4312.7	4280.2
20°	4684.9	4647.8	4608.2	4559.3	4510.5	4452.4	4396.5	4338.4	4277.9	4233.7	4196.5
22.5°	4664.0	4619.8	4571.0	4519.8	4454.6	4391.9	4326.7	4259.2	4205.7	4145.3	4110.4
25°	4605.9	4552.4	4498.9	4438.4	4375.6	4305.8	4236.0	4166.2	4101.1	4068.5	4024.3
27.5°	4487.3	4429.1	4370.9	4308.1	4236.0	4166.2	4094.1	4026.6	3970.8	3926.6	3901.1
30°	4277.9	4210.4	4143.0	4075.5	4012.7	3940.6	3873.1	3817.3	3761.4	3726.5	3701.0
32.5°	3956.8	3896.4	3828.9	3763.8	3705.7	3645.1	3589.3	3540.5	3500.9	3477.6	3459.0
35°	3524.2	3463.7	3412.5	3366.0	3317.1	3291.6	3256.7	3228.7	3212.5	3203.2	3200.8
37.5°	2979.8	2944.9	2928.7	2919.4	2910.1	2903.1	2907.7	2919.4	2928.7	2944.9	2963.6
40°	2398.3	2428.5	2437.9	2470.4	2500.6	2540.2	2584.4	2635.6	2677.4	2730.9	2768.2
42.5°	1867.9	1923.8	1988.9	2058.7	2133.1	2205.2	2293.6	2375.0	2449.5	2516.9	2575.1
45°	1435.2	1521.3	1619.0	1719.0	1819.1	1923.8	2030.8	2130.8	2219.2	2291.3	2351.8
47.5°	1118.9	1214.3	1339.9	1463.2	1584.1	1707.4	1826.0	1930.7	2005.2	2075.0	2128.5
50°	886.3	995.6	1132.8	1274.7	1407.4	1537.6	1663.2	1760.9	1835.4	1891.2	1930.7
52.5°	686.2	816.5	956.1	1105.0	1246.8	1388.7	1505.0	1595.8	1656.3	1705.1	1735.3
55°	511.8	639.7	788.6	942.1	1086.3	1223.6	1332.9	1412.0	1465.5	1493.4	1509.7
57.5°	369.9	486.2	635.0	788.6	918.8	1049.1	1137.5	1209.6	1239.8	1256.1	1263.1
60°	269.8	376.9	509.4	642.0	765.3	870.0	946.8	995.6	1018.9	1028.2	1025.8
62.5°	197.7	290.8	404.7	516.4	616.4	702.5	763.0	795.5	807.2	811.8	804.9
65°	151.2	223.3	321.0	407.1	483.9	546.6	590.9	611.8	618.8	616.4	611.8
67.5°	111.7	167.5	239.6	304.7	360.6	409.4	432.7	451.3	455.9	449.0	442.0
70°	79.1	123.3	174.5	218.7	260.5	288.5	314.0	316.4	316.4	314.0	309.4
72.5°	55.8	86.1	118.6	148.9	174.5	195.4	204.7	211.7	209.3	207.0	202.4
75°	37.2	53.5	86.1	93.1	116.3	123.3	132.6	132.6	134.9	128.0	128.0
77.5°	23.3	37.2	51.2	60.5	69.8	79.1	83.7	83.7	86.1	83.7	83.7
80°	13.9	23.3	27.9	41.9	41.9	48.8	51.2	53.5	48.8	55.8	48.8
82.5°	9.3	13.9	20.9	20.9	25.6	30.2	30.2	32.6	32.6	30.2	30.2
85°	7.0	9.3	11.6	13.9	13.9	16.3	13.9	13.9	16.3	18.6	16.3
87.5°	2.3	4.7	2.3	4.7	4.7	9.3	7.0	7.0	7.0	9.3	9.3
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: P248392

CATALOG NUMBER: LD8B90D010 ER8B90935 8LBDWOLI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	4382.5	4382.5	4382.5	4382.5
2.5°	4387.2	4389.5	4387.2	4387.2
5°	4408.1	4405.8	4408.1	4403.5
7.5°	4424.4	4424.4	4422.1	4422.1
10°	4424.4	4415.1	4415.1	4415.1
12.5°	4389.5	4377.9	4370.9	4366.2
15°	4329.0	4308.1	4298.8	4296.5
17.5°	4250.0	4231.3	4219.7	4212.7
20°	4159.2	4140.6	4126.7	4129.0
22.5°	4080.1	4059.2	4049.9	4045.2
25°	4001.1	3975.4	3968.5	3963.8
27.5°	3873.1	3859.2	3852.2	3845.2
30°	3677.7	3670.7	3659.1	3675.4
32.5°	3452.1	3440.4	3431.1	3438.1
35°	3203.2	3196.2	3203.2	3198.5
37.5°	2975.2	2982.2	2991.5	2996.1
40°	2796.1	2821.7	2831.0	2835.6
42.5°	2617.0	2647.2	2665.8	2677.4
45°	2396.0	2426.2	2447.1	2461.1
47.5°	2168.0	2193.6	2214.5	2212.2
50°	1961.0	1974.9	1984.2	1993.6
52.5°	1751.6	1751.6	1753.9	1753.9
55°	1514.4	1509.7	1507.4	1509.7
57.5°	1253.8	1249.2	1246.8	1239.8
60°	1016.6	1002.6	993.3	993.3
62.5°	795.5	779.3	772.3	770.0
65°	597.8	595.5	581.5	579.2
67.5°	432.7	423.4	414.1	416.4
70°	304.7	290.8	290.8	286.1
72.5°	197.7	190.7	188.4	188.4
75°	123.3	123.3	118.6	128.0
77.5°	81.4	81.4	79.1	81.4
80°	48.8	48.8	48.8	46.5
82.5°	30.2	32.6	30.2	30.2
85°	16.3	18.6	13.9	20.9
87.5°	9.3	11.6	9.3	11.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)