

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: P248662

Luminaire Tested: **LD8B90D010 ER8B90830 8LBSW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P248662
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 8LBSW0WMH
Description: PORTFOLIO 8 INCH SINGLE WALL WASH DISTRIBUTION 60 DEGREE CUTOFF
RECESSED DOWNLIGHT
80 CRI 3000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8987.0 lumens
Efficiency: N/A
Efficacy: 104.4 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

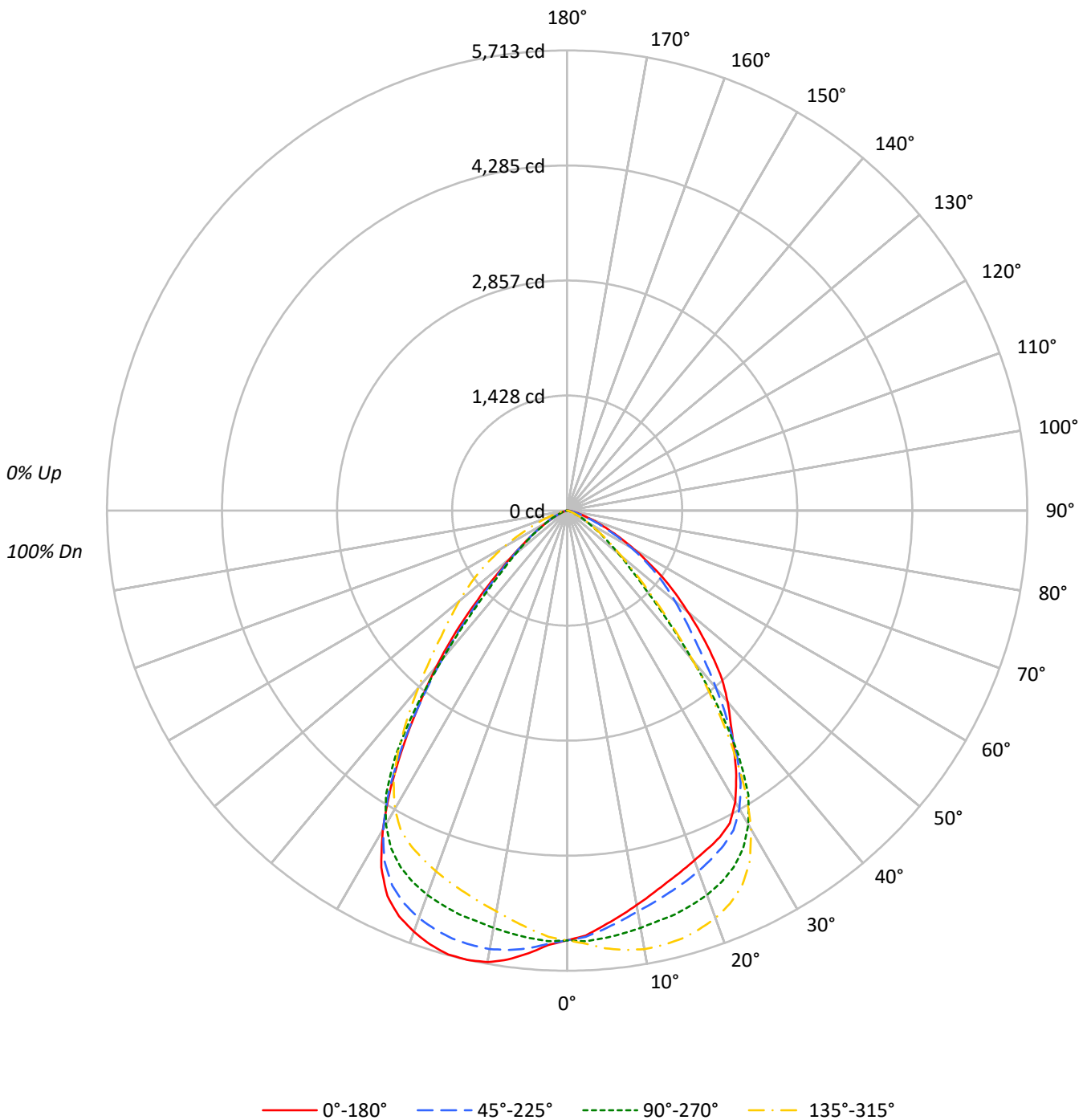
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P248662

CATALOG NUMBER: LD8B90D010 ER8B90830 8LBSW0WMH

Luminous Intensity Polar Plot





TEST NUMBER: P248662

CATALOG NUMBER: LD8B90D010 ER8B90830 8LBSW0WMH

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°	164521	164521	164521	164521
5°	160150	164908	170795	164908
10°	155721	164692	178234	164692
15°	152610	165670	182133	165670
20°	151571	166617	182604	166617
25°	152367	166283	179668	166283
30°	148601	160195	163075	160195
35°	135922	139747	132590	139747
40°	124791	97209	101512	97209
45°	110881	59304	68619	59304
50°	93854	39616	43991	39616
55°	77734	27031	28569	27031
60°	59286	17996	18150	17996
65°	42006	11215	10266	11215
70°	30303	7510	6816	7510
75°	19241	3729	3110	3729
80°	13425	2788	2309	2788
85°	11994	0	920	0



TEST NUMBER: P248662

CATALOG NUMBER: LD8B90D010 ER8B90830 8LBSW0WMH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	507.8	5.7
10°-20°	1470.6	16.4
20°-30°	2226.7	24.8
30°-40°	2231.7	24.8
40°-50°	1401.4	15.6
50°-60°	746.8	8.3
60°-70°	307.1	3.4
70°-80°	81.1	0.9
80°-90°	13.7	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°	4205.1	46.8
0°-40°	6436.8	71.6
0°-60°	8585.0	95.5
0°-90°	8987.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8987.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	5335	5335	5335	5335	5335	
5°	5174	5328	5518	5328	5174	488
15°	4780	5190	5705	5190	4780	1352
25°	4478	4887	5281	4887	4478	2054
35°	3611	3712	3522	3712	3611	2262
45°	2543	1360	1574	1360	2543	1955
55°	1446	503	531	503	1446	1289
65°	576	154	141	154	576	597
75°	162	31	26	31	162	183
85°	34	0	3	0	34	37
90°	0	0	0	0	0	



TEST NUMBER: P248662

CATALOG NUMBER: LD8B90D010 ER8B90830 8LBSW0WMH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3
2.5°	5280.6	5275.4	5272.8	5278.0	5280.6	5291.0	5288.4	5293.6	5293.6	5296.3	5301.4
5°	5173.8	5171.1	5173.8	5173.8	5184.2	5194.6	5192.0	5199.9	5205.0	5218.1	5223.2
7.5°	5074.8	5074.8	5072.2	5082.6	5087.8	5103.5	5100.8	5113.9	5121.7	5134.7	5152.9
10°	4973.2	4973.2	4975.8	4983.6	4986.3	5009.6	5009.6	5027.9	5038.3	5051.4	5074.8
12.5°	4874.2	4874.2	4889.9	4884.6	4895.0	4913.2	4921.1	4939.3	4955.0	4981.0	5004.5
15°	4780.4	4780.4	4785.6	4798.6	4806.4	4829.9	4842.9	4863.8	4882.0	4908.1	4942.0
17.5°	4699.6	4697.1	4699.6	4715.3	4731.0	4751.8	4762.2	4788.2	4806.4	4840.3	4871.6
20°	4618.9	4624.2	4624.2	4637.1	4647.5	4673.6	4684.0	4712.7	4733.5	4764.7	4801.3
22.5°	4548.6	4546.0	4546.0	4564.2	4572.0	4595.4	4605.8	4631.9	4655.4	4681.4	4715.3
25°	4478.2	4473.0	4483.5	4486.0	4491.2	4517.2	4525.1	4543.3	4566.8	4590.3	4624.2
27.5°	4374.0	4368.8	4371.4	4381.8	4389.6	4410.4	4415.7	4433.9	4452.2	4473.0	4501.7
30°	4173.4	4168.2	4165.6	4183.9	4191.7	4207.2	4215.1	4246.4	4251.5	4275.0	4295.8
32.5°	3907.6	3905.1	3910.3	3925.9	3933.7	3954.6	3965.0	3983.2	3996.2	4009.3	4030.1
35°	3610.7	3605.5	3610.7	3626.4	3626.4	3644.6	3652.4	3660.2	3657.6	3660.2	3655.0
37.5°	3334.6	3331.9	3334.6	3342.3	3334.6	3342.3	3334.6	3319.0	3290.3	3259.0	3227.7
40°	3100.1	3102.7	3087.1	3097.5	3068.8	3063.6	3035.0	2995.9	2938.6	2876.1	2787.5
42.5°	2850.0	2842.2	2831.8	2837.0	2813.6	2795.3	2748.4	2699.0	2625.9	2521.8	2414.9
45°	2542.6	2540.0	2534.8	2532.2	2516.6	2498.3	2459.2	2401.9	2321.2	2214.4	2086.7
47.5°	2243.0	2235.2	2235.2	2237.8	2219.5	2217.0	2185.7	2136.2	2065.9	1961.7	1828.8
50°	1956.4	1953.8	1959.1	1969.5	1956.4	1951.3	1930.4	1896.6	1834.0	1745.5	1620.3
52.5°	1698.5	1695.9	1701.2	1714.2	1708.9	1714.2	1693.4	1667.3	1625.6	1539.6	1430.2
55°	1445.9	1445.9	1445.9	1461.4	1461.4	1461.4	1451.0	1435.5	1396.3	1333.8	1232.3
57.5°	1182.7	1185.3	1201.0	1203.5	1201.0	1206.2	1203.5	1187.9	1161.9	1117.7	1039.5
60°	961.3	961.3	969.1	977.0	974.3	977.0	977.0	969.1	943.1	906.6	844.1
62.5°	760.7	768.5	763.3	768.5	778.9	768.5	763.3	758.1	739.9	716.4	664.3
65°	575.7	581.0	581.0	583.5	578.3	581.0	570.6	562.7	552.3	526.3	492.4
67.5°	437.7	437.7	437.7	437.7	435.0	432.5	429.9	422.1	403.8	393.4	356.9
70°	336.1	320.4	320.4	320.4	320.4	323.1	315.3	304.9	299.6	281.4	255.3
72.5°	224.0	229.3	224.0	224.0	218.9	221.4	211.0	205.8	200.6	190.2	174.6
75°	161.5	148.5	153.7	156.3	148.5	153.7	143.3	132.9	132.9	125.0	117.2
77.5°	104.2	101.7	104.2	106.8	104.2	101.7	96.4	91.1	91.1	88.6	80.7
80°	75.6	72.9	72.9	72.9	70.3	72.9	67.8	67.8	62.5	59.9	54.7
82.5°	49.5	49.5	46.9	49.5	46.9	49.5	41.7	41.7	41.7	39.0	33.9
85°	33.9	28.6	28.6	31.3	26.1	31.3	28.6	26.1	23.5	23.5	20.8
87.5°	15.7	18.2	15.7	18.2	15.7	15.7	18.2	15.7	15.7	10.4	10.4
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: P248662

CATALOG NUMBER: LD8B90D010 ER8B90830 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3
2.5°	5309.2	5311.8	5311.8	5322.3	5327.5	5330.0	5330.0	5351.0	5343.1	5348.4	5353.5
5°	5233.8	5249.3	5254.6	5254.6	5283.2	5293.6	5304.0	5327.5	5330.0	5345.7	5363.9
7.5°	5160.7	5179.0	5189.5	5212.8	5231.1	5249.3	5280.6	5296.3	5311.8	5332.7	5356.1
10°	5090.4	5111.3	5132.1	5150.3	5179.0	5202.4	5223.2	5259.7	5278.0	5306.7	5337.9
12.5°	5022.7	5051.4	5069.6	5100.8	5132.1	5152.9	5184.2	5218.1	5246.7	5275.4	5311.8
15°	4962.8	4996.7	5017.5	5051.4	5085.2	5113.9	5147.8	5189.5	5210.3	5244.2	5278.0
17.5°	4897.6	4934.2	4960.2	4991.4	5033.1	5064.3	5093.1	5134.7	5160.7	5197.2	5236.3
20°	4829.9	4866.4	4897.6	4928.9	4970.6	5001.8	5035.7	5077.4	5106.0	5142.5	5173.8
22.5°	4749.2	4783.1	4816.8	4853.3	4895.0	4921.1	4960.2	4996.7	5027.9	5061.8	5093.1
25°	4645.0	4686.7	4712.7	4746.5	4780.4	4809.0	4850.7	4887.2	4913.2	4944.6	4973.2
27.5°	4522.5	4553.8	4574.6	4603.2	4637.1	4663.2	4694.4	4731.0	4757.0	4785.6	4806.4
30°	4314.0	4342.8	4361.0	4381.8	4415.7	4439.2	4465.2	4499.0	4517.2	4538.2	4556.4
32.5°	4040.5	4064.0	4074.4	4090.0	4113.5	4136.9	4157.8	4186.4	4194.3	4207.2	4207.2
35°	3644.6	3649.8	3647.2	3652.4	3662.8	3675.8	3694.0	3712.3	3722.7	3722.7	3715.0
37.5°	3180.8	3149.6	3115.8	3089.7	3081.9	3076.6	3087.1	3094.8	3105.4	3110.5	3097.5
40°	2699.0	2628.6	2553.0	2485.3	2438.4	2417.6	2409.8	2414.9	2414.9	2433.1	2433.1
42.5°	2284.7	2175.3	2063.3	1961.7	1893.9	1841.9	1818.4	1818.4	1821.0	1834.0	1841.9
45°	1940.8	1802.7	1672.5	1560.5	1466.7	1398.9	1367.7	1359.9	1357.3	1362.5	1380.7
47.5°	1677.7	1534.5	1398.9	1260.9	1161.9	1094.2	1065.5	1055.0	1044.6	1055.0	1057.7
50°	1471.9	1323.4	1180.2	1042.1	937.8	877.9	841.4	825.8	823.2	823.2	828.5
52.5°	1284.3	1146.3	1003.0	862.3	752.9	695.6	661.7	653.9	643.5	653.9	653.9
55°	1107.1	969.1	828.5	695.6	604.3	544.5	513.2	502.8	497.5	505.4	505.4
57.5°	914.5	797.1	667.0	547.1	455.9	414.2	390.7	377.8	375.1	380.3	375.1
60°	750.3	651.3	539.3	429.9	359.5	315.3	297.0	291.8	286.5	291.8	291.8
62.5°	593.9	510.6	419.4	336.1	276.1	244.9	224.0	224.0	221.4	221.4	224.0
65°	440.3	375.1	310.0	239.7	192.8	169.3	153.7	153.7	151.1	153.7	151.1
67.5°	320.4	276.1	224.0	174.6	138.1	125.0	114.6	106.8	112.1	106.8	104.2
70°	234.5	197.9	161.5	132.9	106.8	93.8	86.0	83.3	78.2	78.2	78.2
72.5°	156.3	132.9	109.4	86.0	70.3	57.3	54.7	49.5	44.3	46.9	52.1
75°	104.2	88.6	78.2	62.5	46.9	46.9	31.3	31.3	26.1	31.3	23.5
77.5°	72.9	59.9	46.9	39.0	31.3	28.6	20.8	20.8	18.2	18.2	18.2
80°	52.1	44.3	33.9	28.6	20.8	20.8	18.2	15.7	13.0	13.0	15.7
82.5°	31.3	23.5	23.5	20.8	13.0	10.4	7.8	10.4	5.3	5.3	5.3
85°	18.2	15.7	13.0	7.8	5.3	5.3	2.6	0.0	2.6	2.6	0.0
87.5°	10.4	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



TEST NUMBER: P248662

CATALOG NUMBER: LD8B90D010 ER8B90830 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3
2.5°	5366.6	5363.9	5369.2	5369.2	5384.8	5382.2	5390.0	5390.0	5384.8	5387.4	5397.8
5°	5384.8	5392.7	5408.2	5421.3	5444.7	5455.2	5468.2	5481.2	5483.8	5491.6	5499.5
7.5°	5384.8	5410.9	5429.1	5452.5	5483.8	5502.0	5530.7	5554.2	5564.6	5577.5	5593.2
10°	5374.3	5400.4	5434.3	5460.3	5499.5	5528.1	5556.7	5593.2	5608.8	5629.6	5650.6
12.5°	5353.5	5382.2	5418.6	5452.5	5496.8	5522.8	5559.3	5593.2	5616.7	5645.3	5668.8
15°	5322.3	5356.1	5390.0	5423.9	5470.7	5502.0	5535.9	5575.0	5598.4	5629.6	5650.6
17.5°	5272.8	5309.2	5340.6	5371.8	5416.0	5452.5	5483.8	5520.3	5543.8	5569.8	5598.4
20°	5212.8	5246.7	5280.6	5306.7	5351.0	5382.2	5416.0	5449.9	5468.2	5473.4	5517.7
22.5°	5137.4	5160.7	5186.8	5228.5	5254.6	5283.2	5314.5	5345.7	5363.9	5392.7	5408.2
25°	5012.2	5035.7	5064.3	5082.6	5113.9	5137.4	5168.6	5202.4	5212.8	5233.8	5249.3
27.5°	4837.8	4850.7	4863.8	4879.4	4897.6	4910.7	4928.9	4944.6	4955.0	4965.4	4975.8
30°	4561.5	4561.5	4561.5	4551.1	4559.0	4566.8	4569.4	4566.8	4566.8	4564.2	4564.2
32.5°	4196.8	4176.0	4152.6	4131.8	4123.9	4113.5	4108.3	4100.4	4087.5	4079.6	4082.2
35°	3704.4	3657.6	3629.0	3602.9	3582.1	3566.4	3558.6	3550.8	3548.2	3537.8	3527.3
37.5°	3089.7	3055.8	3035.0	3019.4	3001.1	2985.5	2988.0	2990.7	2998.5	2993.3	2995.9
40°	2438.4	2430.6	2438.4	2420.2	2414.9	2420.2	2433.1	2451.5	2461.9	2472.3	2490.5
42.5°	1854.9	1867.8	1886.2	1886.2	1893.9	1904.4	1919.9	1948.7	1964.2	1982.5	2003.4
45°	1396.3	1412.0	1435.5	1443.2	1448.5	1461.4	1479.8	1503.1	1513.5	1529.2	1547.4
47.5°	1075.9	1086.3	1099.3	1112.4	1125.4	1130.6	1148.9	1148.9	1161.9	1172.3	1177.5
50°	838.9	849.3	859.7	867.5	872.7	880.6	885.7	893.5	896.1	901.4	903.9
52.5°	656.5	669.5	669.5	674.7	682.5	690.3	687.8	690.3	692.9	692.9	700.7
55°	513.2	513.2	521.0	521.0	526.3	523.6	526.3	526.3	526.3	526.3	528.9
57.5°	382.9	385.6	393.4	388.2	385.6	390.7	385.6	390.7	388.2	393.4	385.6
60°	294.3	294.3	297.0	297.0	299.6	299.6	299.6	297.0	297.0	294.3	294.3
62.5°	221.4	224.0	226.7	224.0	224.0	224.0	221.4	221.4	218.9	216.2	216.2
65°	148.5	145.9	151.1	145.9	148.5	148.5	145.9	148.5	140.7	143.3	140.7
67.5°	106.8	104.2	101.7	104.2	101.7	99.0	99.0	101.7	104.2	96.4	96.4
70°	70.3	72.9	70.3	72.9	75.6	75.6	72.9	70.3	72.9	67.8	70.3
72.5°	44.3	44.3	44.3	44.3	44.3	46.9	46.9	46.9	41.7	41.7	39.0
75°	20.8	28.6	23.5	20.8	28.6	28.6	26.1	26.1	23.5	23.5	23.5
77.5°	20.8	15.7	15.7	15.7	15.7	15.7	15.7	15.7	13.0	15.7	13.0
80°	10.4	10.4	10.4	7.8	10.4	10.4	13.0	10.4	10.4	7.8	13.0
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: P248662

CATALOG NUMBER: LD8B90D010 ER8B90830 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°	185°	190°	195°	200°	205°	210°	215°
0°	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3
2.5°	5395.2	5392.7	5395.2	5397.8	5395.2	5392.7	5395.2	5397.8	5387.4	5384.8	5390.0
5°	5509.9	5509.9	5515.0	5517.7	5515.0	5509.9	5509.9	5499.5	5491.6	5483.8	5481.2
7.5°	5608.8	5614.1	5619.2	5621.8	5619.2	5614.1	5608.8	5593.2	5577.5	5564.6	5554.2
10°	5668.8	5676.6	5687.0	5692.2	5687.0	5676.6	5668.8	5650.6	5629.6	5608.8	5593.2
12.5°	5694.8	5702.7	5715.6	5713.1	5715.6	5702.7	5694.8	5668.8	5645.3	5616.7	5593.2
15°	5676.6	5687.0	5700.0	5705.2	5700.0	5687.0	5676.6	5650.6	5629.6	5598.4	5575.0
17.5°	5619.2	5634.9	5642.7	5650.6	5642.7	5634.9	5619.2	5598.4	5569.8	5543.8	5520.3
20°	5541.1	5551.6	5562.0	5564.6	5562.0	5551.6	5541.1	5517.7	5473.4	5468.2	5449.9
22.5°	5429.1	5437.0	5460.3	5452.5	5460.3	5437.0	5429.1	5408.2	5392.7	5363.9	5345.7
25°	5267.5	5275.4	5278.0	5280.6	5278.0	5275.4	5267.5	5249.3	5233.8	5212.8	5202.4
27.5°	4988.8	4988.8	4994.0	4996.7	4994.0	4988.8	4988.8	4975.8	4965.4	4955.0	4944.6
30°	4566.8	4566.8	4566.8	4579.9	4566.8	4566.8	4566.8	4564.2	4564.2	4566.8	4566.8
32.5°	4079.6	4074.4	4069.2	4074.4	4069.2	4074.4	4079.6	4082.2	4079.6	4087.5	4100.4
35°	3527.3	3524.7	3532.6	3522.2	3532.6	3524.7	3527.3	3527.3	3537.8	3548.2	3550.8
37.5°	2998.5	2993.3	3003.7	2993.3	3003.7	2993.3	2998.5	2995.9	2993.3	2998.5	2990.7
40°	2495.8	2500.9	2500.9	2521.8	2500.9	2500.9	2495.8	2490.5	2472.3	2461.9	2451.5
42.5°	2013.8	2029.4	2024.2	2039.8	2024.2	2029.4	2013.8	2003.4	1982.5	1964.2	1948.7
45°	1557.8	1568.3	1568.3	1573.5	1568.3	1568.3	1557.8	1547.4	1529.2	1513.5	1503.1
47.5°	1195.7	1195.7	1195.7	1198.4	1195.7	1195.7	1195.7	1177.5	1172.3	1161.9	1148.9
50°	909.2	911.8	914.5	917.0	914.5	911.8	909.2	903.9	901.4	896.1	893.5
52.5°	698.2	700.7	695.6	700.7	695.6	700.7	698.2	700.7	692.9	692.9	690.3
55°	528.9	526.3	528.9	531.4	528.9	526.3	528.9	528.9	526.3	526.3	526.3
57.5°	388.2	382.9	382.9	382.9	382.9	382.9	388.2	385.6	393.4	388.2	390.7
60°	289.2	291.8	291.8	294.3	291.8	291.8	289.2	294.3	294.3	297.0	297.0
62.5°	213.6	221.4	216.2	221.4	216.2	221.4	213.6	216.2	216.2	218.9	221.4
65°	138.1	138.1	138.1	140.7	138.1	138.1	138.1	140.7	143.3	140.7	148.5
67.5°	93.8	96.4	101.7	99.0	101.7	96.4	93.8	96.4	96.4	104.2	101.7
70°	75.6	67.8	67.8	75.6	67.8	67.8	75.6	70.3	67.8	72.9	70.3
72.5°	44.3	39.0	44.3	44.3	44.3	39.0	44.3	39.0	41.7	41.7	46.9
75°	23.5	20.8	18.2	26.1	18.2	20.8	23.5	23.5	23.5	23.5	26.1
77.5°	15.7	13.0	18.2	18.2	18.2	13.0	15.7	13.0	15.7	13.0	15.7
80°	7.8	10.4	7.8	13.0	7.8	10.4	7.8	13.0	7.8	10.4	10.4
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: P248662

CATALOG NUMBER: LD8B90D010 ER8B90830 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	220°	225°	230°	235°	240°	245°	250°	255°	260°	265°	270°
0°	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3
2.5°	5390.0	5382.2	5384.8	5369.2	5369.2	5363.9	5366.6	5353.5	5348.4	5343.1	5351.0
5°	5468.2	5455.2	5444.7	5421.3	5408.2	5392.7	5384.8	5363.9	5345.7	5330.0	5327.5
7.5°	5530.7	5502.0	5483.8	5452.5	5429.1	5410.9	5384.8	5356.1	5332.7	5311.8	5296.3
10°	5556.7	5528.1	5499.5	5460.3	5434.3	5400.4	5374.3	5337.9	5306.7	5278.0	5259.7
12.5°	5559.3	5522.8	5496.8	5452.5	5418.6	5382.2	5353.5	5311.8	5275.4	5246.7	5218.1
15°	5535.9	5502.0	5470.7	5423.9	5390.0	5356.1	5322.3	5278.0	5244.2	5210.3	5189.5
17.5°	5483.8	5452.5	5416.0	5371.8	5340.6	5309.2	5272.8	5236.3	5197.2	5160.7	5134.7
20°	5416.0	5382.2	5351.0	5306.7	5280.6	5246.7	5212.8	5173.8	5142.5	5106.0	5077.4
22.5°	5314.5	5283.2	5254.6	5228.5	5186.8	5160.7	5137.4	5093.1	5061.8	5027.9	4996.7
25°	5168.6	5137.4	5113.9	5082.6	5064.3	5035.7	5012.2	4973.2	4944.6	4913.2	4887.2
27.5°	4928.9	4910.7	4897.6	4879.4	4863.8	4850.7	4837.8	4806.4	4785.6	4757.0	4731.0
30°	4569.4	4566.8	4559.0	4551.1	4561.5	4561.5	4561.5	4556.4	4538.2	4517.2	4499.0
32.5°	4108.3	4113.5	4123.9	4131.8	4152.6	4176.0	4196.8	4207.2	4207.2	4194.3	4186.4
35°	3558.6	3566.4	3582.1	3602.9	3629.0	3657.6	3704.4	3715.0	3722.7	3722.7	3712.3
37.5°	2988.0	2985.5	3001.1	3019.4	3035.0	3055.8	3089.7	3097.5	3110.5	3105.4	3094.8
40°	2433.1	2420.2	2414.9	2420.2	2438.4	2430.6	2438.4	2433.1	2433.1	2414.9	2414.9
42.5°	1919.9	1904.4	1893.9	1886.2	1886.2	1867.8	1854.9	1841.9	1834.0	1821.0	1818.4
45°	1479.8	1461.4	1448.5	1443.2	1435.5	1412.0	1396.3	1380.7	1362.5	1357.3	1359.9
47.5°	1148.9	1130.6	1125.4	1112.4	1099.3	1086.3	1075.9	1057.7	1055.0	1044.6	1055.0
50°	885.7	880.6	872.7	867.5	859.7	849.3	838.9	828.5	823.2	823.2	825.8
52.5°	687.8	690.3	682.5	674.7	669.5	669.5	656.5	653.9	653.9	643.5	653.9
55°	526.3	523.6	526.3	521.0	521.0	513.2	513.2	505.4	505.4	497.5	502.8
57.5°	385.6	390.7	385.6	388.2	393.4	385.6	382.9	375.1	380.3	375.1	377.8
60°	299.6	299.6	299.6	297.0	297.0	294.3	294.3	291.8	291.8	286.5	291.8
62.5°	221.4	224.0	224.0	224.0	226.7	224.0	221.4	224.0	221.4	221.4	224.0
65°	145.9	148.5	148.5	145.9	151.1	145.9	148.5	151.1	153.7	151.1	153.7
67.5°	99.0	99.0	101.7	104.2	101.7	104.2	106.8	104.2	106.8	112.1	106.8
70°	72.9	75.6	75.6	72.9	70.3	72.9	70.3	78.2	78.2	78.2	83.3
72.5°	46.9	46.9	44.3	44.3	44.3	44.3	44.3	52.1	46.9	44.3	49.5
75°	26.1	28.6	28.6	20.8	23.5	28.6	20.8	23.5	31.3	26.1	31.3
77.5°	15.7	15.7	15.7	15.7	15.7	15.7	20.8	18.2	18.2	18.2	20.8
80°	13.0	10.4	10.4	7.8	10.4	10.4	10.4	15.7	13.0	13.0	15.7
82.5°	5.3	5.3	2.6	0.0	5.3	5.3	5.3	5.3	5.3	5.3	10.4
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: P248662

CATALOG NUMBER: LD8B90D010 ER8B90830 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	275°	280°	285°	290°	295°	300°	305°	310°	315°	320°	325°
0°	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3
2.5°	5330.0	5330.0	5327.5	5322.3	5311.8	5311.8	5309.2	5301.4	5296.3	5293.6	5293.6
5°	5304.0	5293.6	5283.2	5254.6	5254.6	5249.3	5233.8	5223.2	5218.1	5205.0	5199.9
7.5°	5280.6	5249.3	5231.1	5212.8	5189.5	5179.0	5160.7	5152.9	5134.7	5121.7	5113.9
10°	5223.2	5202.4	5179.0	5150.3	5132.1	5111.3	5090.4	5074.8	5051.4	5038.3	5027.9
12.5°	5184.2	5152.9	5132.1	5100.8	5069.6	5051.4	5022.7	5004.5	4981.0	4955.0	4939.3
15°	5147.8	5113.9	5085.2	5051.4	5017.5	4996.7	4962.8	4942.0	4908.1	4882.0	4863.8
17.5°	5093.1	5064.3	5033.1	4991.4	4960.2	4934.2	4897.6	4871.6	4840.3	4806.4	4788.2
20°	5035.7	5001.8	4970.6	4928.9	4897.6	4866.4	4829.9	4801.3	4764.7	4733.5	4712.7
22.5°	4960.2	4921.1	4895.0	4853.3	4816.8	4783.1	4749.2	4715.3	4681.4	4655.4	4631.9
25°	4850.7	4809.0	4780.4	4746.5	4712.7	4686.7	4645.0	4624.2	4590.3	4566.8	4543.3
27.5°	4694.4	4663.2	4637.1	4603.2	4574.6	4553.8	4522.5	4501.7	4473.0	4452.2	4433.9
30°	4465.2	4439.2	4415.7	4381.8	4361.0	4342.8	4314.0	4295.8	4275.0	4251.5	4246.4
32.5°	4157.8	4136.9	4113.5	4090.0	4074.4	4064.0	4040.5	4030.1	4009.3	3996.2	3983.2
35°	3694.0	3675.8	3662.8	3652.4	3647.2	3649.8	3644.6	3655.0	3660.2	3657.6	3660.2
37.5°	3087.1	3076.6	3081.9	3089.7	3115.8	3149.6	3180.8	3227.7	3259.0	3290.3	3319.0
40°	2409.8	2417.6	2438.4	2485.3	2553.0	2628.6	2699.0	2787.5	2876.1	2938.6	2995.9
42.5°	1818.4	1841.9	1893.9	1961.7	2063.3	2175.3	2284.7	2414.9	2521.8	2625.9	2699.0
45°	1367.7	1398.9	1466.7	1560.5	1672.5	1802.7	1940.8	2086.7	2214.4	2321.2	2401.9
47.5°	1065.5	1094.2	1161.9	1260.9	1398.9	1534.5	1677.7	1828.8	1961.7	2065.9	2136.2
50°	841.4	877.9	937.8	1042.1	1180.2	1323.4	1471.9	1620.3	1745.5	1834.0	1896.6
52.5°	661.7	695.6	752.9	862.3	1003.0	1146.3	1284.3	1430.2	1539.6	1625.6	1667.3
55°	513.2	544.5	604.3	695.6	828.5	969.1	1107.1	1232.3	1333.8	1396.3	1435.5
57.5°	390.7	414.2	455.9	547.1	667.0	797.1	914.5	1039.5	1117.7	1161.9	1187.9
60°	297.0	315.3	359.5	429.9	539.3	651.3	750.3	844.1	906.6	943.1	969.1
62.5°	224.0	244.9	276.1	336.1	419.4	510.6	593.9	664.3	716.4	739.9	758.1
65°	153.7	169.3	192.8	239.7	310.0	375.1	440.3	492.4	526.3	552.3	562.7
67.5°	114.6	125.0	138.1	174.6	224.0	276.1	320.4	356.9	393.4	403.8	422.1
70°	86.0	93.8	106.8	132.9	161.5	197.9	234.5	255.3	281.4	299.6	304.9
72.5°	54.7	57.3	70.3	86.0	109.4	132.9	156.3	174.6	190.2	200.6	205.8
75°	31.3	46.9	46.9	62.5	78.2	88.6	104.2	117.2	125.0	132.9	132.9
77.5°	20.8	28.6	31.3	39.0	46.9	59.9	72.9	80.7	88.6	91.1	91.1
80°	18.2	20.8	20.8	28.6	33.9	44.3	52.1	54.7	59.9	62.5	67.8
82.5°	7.8	10.4	13.0	20.8	23.5	23.5	31.3	33.9	39.0	41.7	41.7
85°	2.6	5.3	5.3	7.8	13.0	15.7	18.2	20.8	23.5	23.5	26.1
87.5°	2.6	2.6	0.0	2.6	5.3	5.3	10.4	10.4	10.4	15.7	15.7
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: P248662

CATALOG NUMBER: LD8B90D010 ER8B90830 8LBSW0WMH

CANDELA DISTRIBUTION (continued):

	330°	335°	340°	345°	350°	355°	360°
0°	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3	5335.3
2.5°	5288.4	5291.0	5280.6	5278.0	5272.8	5275.4	5280.6
5°	5192.0	5194.6	5184.2	5173.8	5173.8	5171.1	5173.8
7.5°	5100.8	5103.5	5087.8	5082.6	5072.2	5074.8	5074.8
10°	5009.6	5009.6	4986.3	4983.6	4975.8	4973.2	4973.2
12.5°	4921.1	4913.2	4895.0	4884.6	4889.9	4874.2	4874.2
15°	4842.9	4829.9	4806.4	4798.6	4785.6	4780.4	4780.4
17.5°	4762.2	4751.8	4731.0	4715.3	4699.6	4697.1	4699.6
20°	4684.0	4673.6	4647.5	4637.1	4624.2	4624.2	4618.9
22.5°	4605.8	4595.4	4572.0	4564.2	4546.0	4546.0	4548.6
25°	4525.1	4517.2	4491.2	4486.0	4483.5	4473.0	4478.2
27.5°	4415.7	4410.4	4389.6	4381.8	4371.4	4368.8	4374.0
30°	4215.1	4207.2	4191.7	4183.9	4165.6	4168.2	4173.4
32.5°	3965.0	3954.6	3933.7	3925.9	3910.3	3905.1	3907.6
35°	3652.4	3644.6	3626.4	3626.4	3610.7	3605.5	3610.7
37.5°	3334.6	3342.3	3334.6	3342.3	3334.6	3331.9	3334.6
40°	3035.0	3063.6	3068.8	3097.5	3087.1	3102.7	3100.1
42.5°	2748.4	2795.3	2813.6	2837.0	2831.8	2842.2	2850.0
45°	2459.2	2498.3	2516.6	2532.2	2534.8	2540.0	2542.6
47.5°	2185.7	2217.0	2219.5	2237.8	2235.2	2235.2	2243.0
50°	1930.4	1951.3	1956.4	1969.5	1959.1	1953.8	1956.4
52.5°	1693.4	1714.2	1708.9	1714.2	1701.2	1695.9	1698.5
55°	1451.0	1461.4	1461.4	1461.4	1445.9	1445.9	1445.9
57.5°	1203.5	1206.2	1201.0	1203.5	1201.0	1185.3	1182.7
60°	977.0	977.0	974.3	977.0	969.1	961.3	961.3
62.5°	763.3	768.5	778.9	768.5	763.3	768.5	760.7
65°	570.6	581.0	578.3	583.5	581.0	581.0	575.7
67.5°	429.9	432.5	435.0	437.7	437.7	437.7	437.7
70°	315.3	323.1	320.4	320.4	320.4	320.4	336.1
72.5°	211.0	221.4	218.9	224.0	224.0	229.3	224.0
75°	143.3	153.7	148.5	156.3	153.7	148.5	161.5
77.5°	96.4	101.7	104.2	106.8	104.2	101.7	104.2
80°	67.8	72.9	70.3	72.9	72.9	72.9	75.6
82.5°	41.7	49.5	46.9	49.5	46.9	49.5	49.5
85°	28.6	31.3	26.1	31.3	28.6	28.6	33.9
87.5°	18.2	15.7	15.7	18.2	15.7	18.2	15.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)