

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P273791

Luminaire Tested: **8RCG-4-100D-L935-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P273791  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8RCG-4-100D-L935-A  
Description: RCG SERIES DIRECT RECESSED LED LUMINAIRE WITH ASYMMETRIC FLUSH LENS  
Light Source: (168) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7045.5 lumens  
Efficiency: N/A  
Efficacy: 102.4 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.5  
Luminous Opening: Rectangular (W 7.88' x L: 0.23' x H: 0')  
CIE Type: Direct

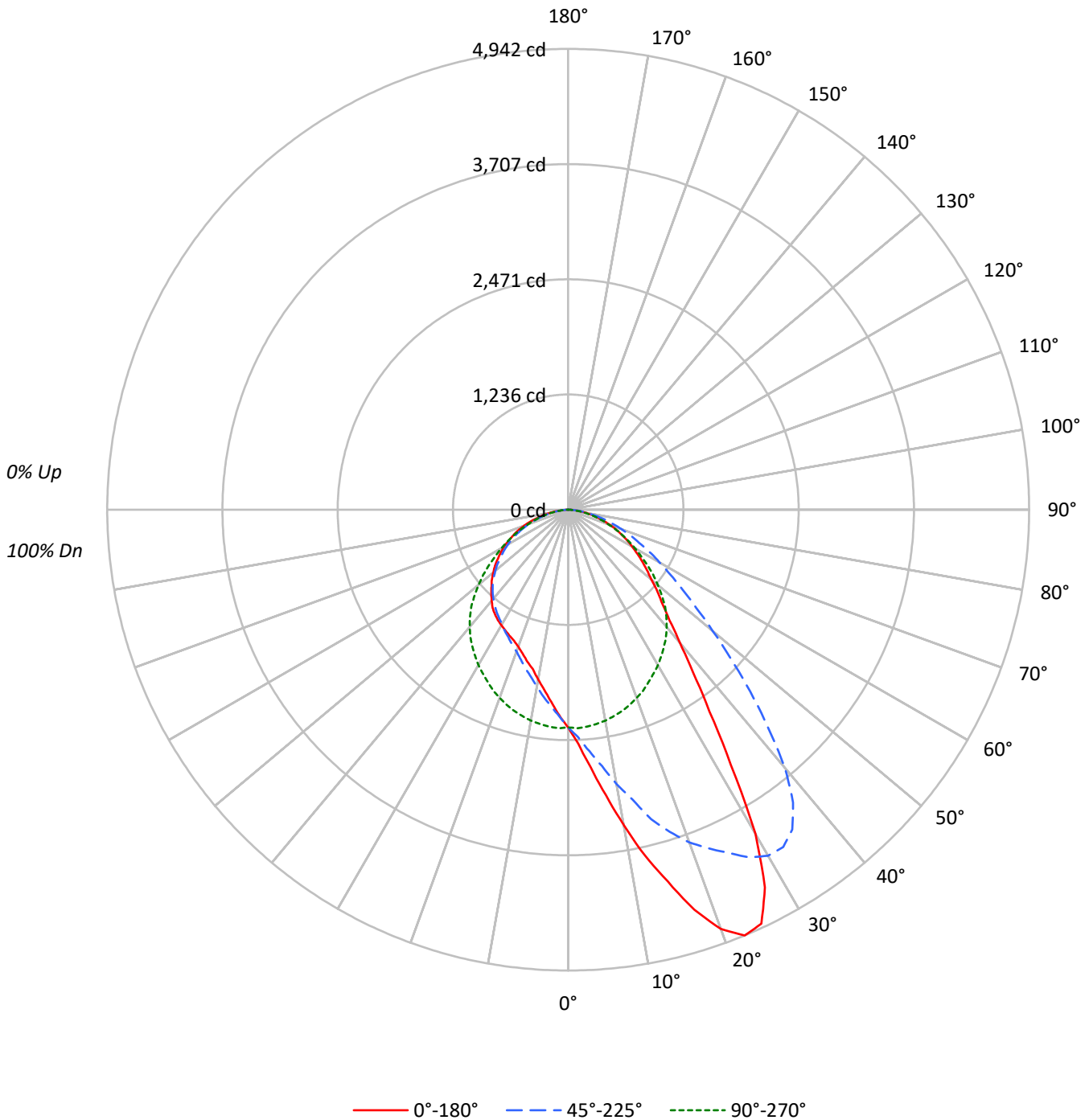
Input Watts (W): 68.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	87					85				
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	74					72				
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64					62				
4	84	73	65	58	82	72	64	58	69	62	57	67	61	56	65	60	56					53				
5	78	66	57	51	76	64	56	50	62	55	50	60	54	49	59	53	49					47				
6	72	59	51	44	70	58	50	44	56	49	44	55	48	43	53	48	43					41				
7	67	54	45	39	65	53	45	39	52	44	39	50	44	39	49	43	38					36				
8	62	49	41	35	61	49	41	35	47	40	35	46	39	35	45	39	35					33				
9	58	45	37	32	57	45	37	32	43	36	32	42	36	31	41	36	31					29				
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28					27				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	13922	13922	13922
5°	16602	13982	12391
10°	20781	13912	11192
15°	25490	13799	10419
20°	30365	13625	9921
25°	32242	13412	9810
30°	27635	13256	9861
35°	19219	13035	9964
40°	14476	12777	9933
45°	12020	12393	9806
50°	10767	11606	9717
55°	10066	10761	9596
60°	9443	9875	9498
65°	8874	9001	9193
70°	8322	8008	8758
75°	7453	7010	8029
80°	6526	5750	6918
85°	5105	4174	4640



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	229.6	3.3
10°-20°	737.4	10.5
20°-30°	1240.7	17.6
30°-40°	1402.2	19.9
40°-50°	1255.9	17.8
50°-60°	1013.8	14.4
60°-70°	706.4	10.0
70°-80°	370.8	5.3
80°-90°	88.8	1.3
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°	2207.6	31.3
0°-40°	3609.8	51.2
0°-60°	5879.5	83.5
0°-90°	7045.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7045.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2334	2334	2334	2334	2334	
5°	2773	2599	2335	2115	2070	285
15°	4128	3436	2235	1762	1687	1192
25°	4899	4060	2038	1514	1491	2166
35°	2640	4187	1790	1338	1368	1703
45°	1425	2760	1469	1145	1163	1124
55°	968	1499	1035	884	923	869
65°	629	840	638	601	651	626
75°	323	398	304	302	348	346
85°	75	86	61	60	68	90
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°	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2
2.5°	2513.0	2510.8	2505.0	2509.6	2500.6	2488.0	2487.0	2475.6	2442.8	2440.6	2431.6
5°	2773.0	2764.0	2763.0	2761.8	2746.0	2724.4	2683.8	2680.4	2626.0	2599.0	2566.2
7.5°	3087.4	3084.0	3075.0	3064.8	3011.8	2985.8	2947.2	2897.4	2834.2	2773.0	2734.6
10°	3431.2	3468.6	3422.2	3390.6	3361.2	3305.8	3241.2	3161.0	3080.8	2986.8	2915.6
12.5°	3800.0	3813.6	3813.6	3784.2	3734.4	3642.8	3516.2	3425.6	3353.2	3181.4	3120.2
15°	4128.0	4197.0	4152.8	4051.0	4053.4	3973.0	3823.8	3659.8	3572.6	3435.8	3249.2
17.5°	4499.0	4511.4	4497.8	4402.8	4356.4	4240.0	4105.4	3952.6	3788.6	3622.4	3429.0
20°	4784.0	4777.2	4737.6	4693.4	4596.2	4510.2	4359.8	4184.6	3958.4	3795.4	3579.4
22.5°	4942.2	4929.8	4916.2	4881.2	4804.2	4710.4	4579.2	4383.6	4171.0	3931.2	3673.4
25°	4899.2	4914.0	4916.2	4906.0	4877.8	4822.4	4716.0	4563.4	4348.4	4060.2	3800.0
27.5°	4566.8	4604.0	4651.6	4683.2	4734.2	4768.0	4734.2	4638.0	4461.6	4203.8	3883.6
30°	4012.6	3967.4	4079.4	4220.8	4316.8	4486.4	4581.4	4587.2	4497.8	4284.0	3974.2
32.5°	3243.6	3317.0	3351.0	3533.0	3771.8	3967.4	4180.0	4368.8	4413.0	4288.6	4027.4
35°	2639.6	2701.8	2792.4	2882.8	3109.0	3303.6	3636.0	3925.6	4156.2	4186.8	4020.6
37.5°	2194.0	2230.2	2285.6	2381.8	2536.8	2777.6	3041.2	3417.8	3735.6	3959.4	3936.8
40°	1859.2	1868.4	1932.8	2001.8	2121.6	2311.6	2543.6	2867.0	3267.4	3614.6	3759.2
42.5°	1608.2	1630.8	1649.0	1714.6	1803.8	1935.0	2146.6	2399.8	2758.4	3171.2	3489.0
45°	1425.0	1447.6	1464.6	1508.6	1576.6	1672.6	1823.0	2067.4	2346.8	2759.6	3140.6
47.5°	1298.4	1296.0	1310.8	1345.8	1394.4	1471.4	1582.2	1745.0	2013.0	2358.0	2757.2
50°	1160.4	1178.4	1183.0	1209.0	1245.2	1298.4	1386.6	1520.0	1730.4	2024.4	2384.0
52.5°	1063.0	1065.4	1080.0	1097.0	1127.6	1166.0	1239.6	1336.8	1490.6	1730.4	2053.8
55°	968.0	968.0	980.6	995.2	1013.4	1050.6	1101.6	1178.4	1304.0	1498.6	1772.2
57.5°	879.8	884.4	895.8	899.2	915.0	941.0	985.0	1046.2	1142.2	1299.4	1525.6
60°	791.6	801.8	800.8	809.8	823.4	842.6	878.8	926.2	1010.0	1129.8	1313.0
62.5°	714.8	711.4	711.4	722.6	736.2	754.4	774.8	814.2	882.2	985.0	1134.4
65°	628.8	626.6	634.4	641.2	645.8	659.4	677.4	713.6	761.2	840.2	961.4
67.5°	554.2	547.4	553.0	555.2	563.2	574.6	592.6	615.2	653.6	720.4	817.6
70°	477.2	471.6	470.4	472.8	479.6	487.4	499.8	521.4	556.4	607.4	674.0
72.5°	398.0	394.8	394.8	400.4	402.6	407.2	415.0	434.2	460.2	495.4	556.4
75°	323.4	323.4	323.4	324.6	328.0	332.4	339.2	349.4	371.0	398.0	440.0
77.5°	255.6	256.8	254.4	253.4	259.0	261.2	262.4	273.6	286.2	306.4	339.2
80°	190.0	184.4	186.6	190.0	192.2	193.4	196.8	199.0	209.2	219.4	240.8
82.5°	129.0	124.4	124.4	130.0	130.0	131.2	134.6	138.0	140.2	149.2	158.4
85°	74.6	74.6	75.8	75.8	77.0	75.8	79.2	80.2	80.2	86.0	92.8
87.5°	34.0	31.6	32.8	34.0	32.8	34.0	35.0	36.2	37.4	38.4	39.6
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):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2
2.5°	2424.8	2415.8	2406.6	2390.8	2377.2	2358.0	2352.4	2345.6	2325.2	2307.2	2293.6
5°	2553.6	2526.6	2487.0	2450.8	2421.4	2381.8	2359.2	2335.4	2301.4	2271.0	2246.0
7.5°	2677.0	2629.4	2574.0	2514.0	2456.4	2401.0	2356.8	2317.4	2273.2	2230.2	2197.4
10°	2829.6	2752.8	2666.8	2574.0	2494.8	2418.0	2353.6	2297.0	2235.8	2182.8	2138.6
12.5°	3003.8	2880.6	2753.8	2636.2	2539.0	2424.8	2343.4	2267.6	2196.4	2129.6	2078.6
15°	3133.8	2989.0	2848.8	2694.0	2551.4	2418.0	2325.2	2234.8	2154.4	2088.8	2025.6
17.5°	3262.8	3104.4	2925.8	2739.2	2571.8	2418.0	2291.4	2194.0	2095.6	2016.4	1955.4
20°	3369.0	3182.4	2973.2	2777.6	2587.6	2411.2	2268.6	2146.6	2038.0	1953.2	1881.8
22.5°	3460.8	3234.6	3016.2	2803.6	2586.4	2393.0	2226.8	2100.2	1980.2	1897.8	1820.8
25°	3518.4	3257.2	3040.0	2794.6	2558.2	2361.4	2180.4	2038.0	1920.4	1823.0	1745.0
27.5°	3572.6	3253.8	3008.4	2743.6	2524.2	2328.6	2134.2	1981.4	1858.2	1753.0	1672.6
30°	3627.0	3259.4	2953.0	2691.6	2470.0	2266.4	2078.6	1924.8	1793.6	1686.2	1611.6
32.5°	3660.8	3256.0	2902.0	2619.2	2384.0	2209.8	2018.8	1858.2	1722.4	1617.2	1546.0
35°	3670.0	3236.8	2842.0	2514.0	2290.2	2114.8	1955.4	1790.2	1649.0	1550.6	1469.2
37.5°	3650.8	3201.8	2776.4	2419.0	2177.0	2003.0	1863.8	1722.4	1586.8	1477.0	1405.8
40°	3588.6	3167.8	2697.4	2317.4	2059.4	1893.2	1779.0	1641.0	1507.6	1404.6	1339.0
42.5°	3469.8	3098.8	2610.2	2204.2	1937.4	1771.0	1668.2	1558.4	1434.0	1339.0	1273.4
45°	3261.6	2992.4	2523.2	2091.2	1817.4	1645.6	1552.8	1469.2	1354.8	1261.0	1204.4
47.5°	2995.8	2848.8	2397.6	1972.4	1691.8	1525.6	1428.4	1359.4	1270.0	1194.2	1138.8
50°	2716.6	2663.4	2269.8	1850.2	1566.4	1404.6	1312.0	1250.8	1190.8	1115.2	1065.4
52.5°	2394.2	2448.6	2120.6	1723.6	1438.6	1280.2	1194.2	1149.0	1095.8	1037.0	995.2
55°	2095.6	2214.4	1944.2	1578.8	1312.0	1160.4	1077.8	1034.8	1003.2	956.8	919.4
57.5°	1806.2	1957.6	1760.8	1433.0	1187.4	1055.2	973.8	925.2	904.8	878.8	848.2
60°	1554.0	1703.2	1561.8	1285.8	1062.0	937.6	867.4	827.8	807.4	790.6	765.6
62.5°	1328.8	1480.4	1367.4	1136.6	938.6	825.6	766.8	728.4	713.6	706.8	686.4
65°	1126.4	1256.4	1177.4	980.6	822.2	720.4	665.0	637.8	623.2	619.8	606.2
67.5°	951.2	1051.8	990.8	842.6	713.6	620.8	572.2	548.6	536.0	535.0	523.6
70°	779.2	872.0	827.8	696.6	589.2	520.2	479.6	459.2	452.4	451.2	445.6
72.5°	645.8	703.4	670.6	566.6	489.8	428.6	401.4	380.0	372.0	374.4	371.0
75°	497.6	546.2	525.8	450.2	383.4	342.6	317.8	304.2	297.4	300.8	296.4
77.5°	380.0	414.0	393.6	335.8	293.0	262.4	243.2	234.2	227.4	227.4	225.0
80°	270.2	288.4	278.2	246.6	212.6	187.8	173.0	167.4	164.0	162.8	161.8
82.5°	173.0	187.8	175.2	156.0	135.8	123.2	116.4	108.6	106.4	107.4	106.4
85°	97.2	103.0	98.4	84.8	75.8	69.0	64.4	61.0	58.8	60.0	57.6
87.5°	41.8	43.0	39.6	35.0	32.8	29.4	29.4	27.2	24.8	24.8	23.8
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°	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2	2334.2
2.5°	2285.6	2277.8	2266.4	2249.4	2235.8	2214.4	2214.4	2217.8	2217.8	2216.6	2214.4
5°	2225.8	2208.8	2188.4	2164.6	2139.8	2114.8	2110.4	2101.4	2094.6	2090.0	2084.4
7.5°	2164.6	2136.4	2108.0	2075.2	2047.0	2023.2	2006.4	1991.6	1982.6	1972.4	1964.4
10°	2102.4	2065.2	2030.0	1995.0	1956.6	1926.0	1906.8	1893.2	1883.0	1874.0	1869.4
12.5°	2029.0	1984.8	1945.2	1912.4	1869.4	1837.8	1819.6	1815.2	1802.8	1781.2	1770.0
15°	1957.6	1918.0	1871.8	1820.8	1800.4	1762.0	1740.6	1730.4	1723.6	1708.8	1704.4
17.5°	1898.8	1845.8	1792.6	1755.2	1718.0	1687.4	1675.0	1661.4	1652.4	1638.8	1635.4
20°	1825.4	1779.0	1731.4	1690.8	1651.2	1617.2	1607.0	1598.0	1589.0	1583.4	1578.8
22.5°	1750.8	1704.4	1667.0	1629.6	1586.8	1567.4	1556.2	1546.0	1540.4	1537.0	1532.4
25°	1681.8	1641.0	1596.8	1563.0	1529.0	1514.4	1507.6	1502.0	1497.4	1491.8	1490.6
27.5°	1620.6	1575.4	1538.0	1505.2	1480.4	1468.0	1460.0	1456.6	1456.6	1459.0	1460.0
30°	1550.6	1509.8	1480.4	1453.2	1430.6	1419.4	1418.2	1418.2	1422.8	1423.8	1426.2
32.5°	1486.0	1454.4	1425.0	1399.0	1383.2	1376.4	1382.0	1382.0	1385.4	1388.8	1393.4
35°	1423.8	1394.4	1371.8	1349.2	1334.6	1338.0	1340.2	1342.4	1348.0	1354.8	1359.4
37.5°	1365.0	1338.0	1314.2	1296.0	1287.0	1293.8	1299.4	1304.0	1310.8	1316.4	1321.0
40°	1300.6	1281.4	1258.8	1243.0	1245.2	1248.6	1253.0	1258.8	1264.4	1267.8	1272.4
42.5°	1240.6	1220.2	1204.4	1192.0	1195.4	1200.0	1202.2	1204.4	1211.2	1218.0	1220.2
45°	1179.6	1163.8	1148.0	1140.0	1142.2	1144.6	1146.8	1150.2	1155.8	1160.4	1161.4
47.5°	1110.6	1099.2	1089.2	1080.0	1084.6	1083.4	1086.8	1093.6	1095.8	1098.2	1105.0
50°	1045.0	1034.8	1022.4	1020.2	1020.2	1020.2	1021.2	1030.2	1030.2	1034.8	1039.4
52.5°	972.6	967.0	960.2	955.6	953.4	953.4	959.0	962.4	964.6	971.4	976.0
55°	901.4	894.6	887.8	884.4	882.2	884.4	893.4	895.8	901.4	904.8	908.2
57.5°	826.8	822.2	816.6	814.2	814.2	815.4	822.2	827.8	829.0	840.2	844.8
60°	753.2	745.2	740.8	740.8	738.6	748.6	746.4	757.8	760.0	766.8	774.8
62.5°	677.4	666.2	665.0	665.0	669.6	670.6	675.2	678.6	685.4	694.4	700.0
65°	594.8	589.2	597.2	596.0	593.8	600.6	600.6	606.2	613.0	620.8	633.4
67.5°	518.0	513.4	515.8	514.6	518.0	522.4	525.8	530.4	538.4	547.4	555.2
70°	440.0	443.4	437.6	442.2	445.6	446.8	449.0	455.8	464.8	470.4	479.6
72.5°	364.2	363.0	365.2	366.4	369.8	372.0	374.4	382.2	392.4	397.0	403.8
75°	291.8	290.6	294.0	294.0	299.8	302.0	304.2	307.6	316.6	323.4	329.2
77.5°	226.2	227.4	226.2	230.8	228.4	229.6	236.4	239.8	240.8	255.6	257.8
80°	160.6	162.8	164.0	165.2	166.2	164.0	172.0	175.2	175.2	183.2	188.8
82.5°	104.0	105.2	108.6	109.8	109.8	113.0	112.0	114.2	117.6	119.8	127.8
85°	57.6	61.0	62.2	61.0	62.2	60.0	63.4	64.4	65.6	65.6	65.6
87.5°	22.6	23.8	22.6	23.8	22.6	23.8	23.8	21.4	21.4	24.8	20.4
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: P273791

CATALOG NUMBER: 8RCG-4-100D-L935-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	2334.2	2334.2	2334.2	2334.2
2.5°	2206.4	2205.4	2213.2	2207.6
5°	2077.6	2081.0	2069.6	2069.6
7.5°	1961.0	1956.6	1957.6	1949.8
10°	1855.8	1849.2	1846.8	1848.0
12.5°	1768.8	1768.8	1750.8	1750.8
15°	1704.4	1682.8	1680.6	1687.4
17.5°	1633.0	1620.6	1621.8	1619.6
20°	1578.8	1572.0	1570.8	1563.0
22.5°	1529.0	1528.0	1529.0	1520.0
25°	1489.4	1495.2	1490.6	1490.6
27.5°	1462.4	1462.4	1459.0	1459.0
30°	1430.6	1429.6	1431.8	1431.8
32.5°	1399.0	1401.2	1401.2	1402.4
35°	1366.2	1367.4	1370.8	1368.4
37.5°	1323.2	1328.8	1327.8	1330.0
40°	1273.4	1276.8	1275.8	1275.8
42.5°	1222.6	1224.8	1221.4	1219.2
45°	1166.0	1163.8	1167.2	1162.6
47.5°	1103.8	1105.0	1106.0	1110.6
50°	1041.6	1048.4	1048.4	1047.2
52.5°	980.6	982.8	988.4	988.4
55°	917.2	919.4	921.8	922.8
57.5°	852.8	851.6	856.2	857.2
60°	783.8	783.8	792.8	796.2
62.5°	710.2	714.8	723.8	717.0
65°	639.0	648.0	647.0	651.4
67.5°	564.4	570.0	579.0	579.0
70°	488.6	494.2	498.8	502.2
72.5°	415.0	417.4	429.8	423.0
75°	337.0	345.0	351.8	348.4
77.5°	262.4	272.6	274.8	271.4
80°	196.8	195.6	202.4	201.4
82.5°	131.2	130.0	132.4	133.4
85°	70.2	73.6	69.0	67.8
87.5°	20.4	20.4	19.2	18.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)