

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: P273716

Luminaire Tested: **8RCG-4-34D-L835-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P273716  
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-4-34D-L835-A  
Description: RCG SERIES DIRECT RECESSED LED LUMINAIRE WITH ASYMMETRIC FLUSH LENS  
Light Source: (168) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

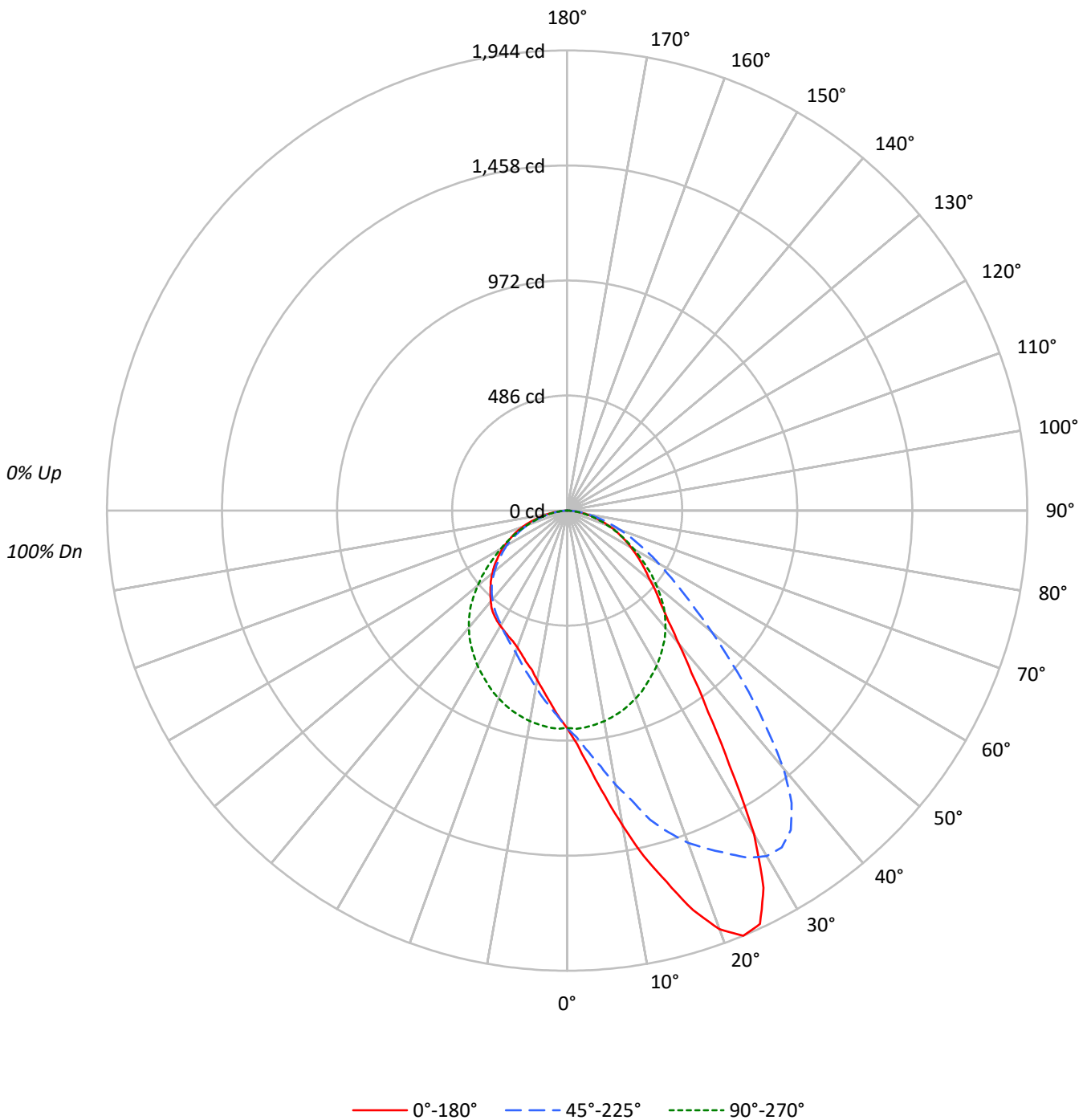
Lumens per Lamp: N/A  
Luminaire Lumens: 2771.6 lumens  
Efficiency: N/A  
Efficacy: 121.6 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.5  
Luminous Opening: Rectangular (W 7.88' x L: 0.23' x H: 0')  
CIE Type: Direct

Input Watts (W): 22.8  
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



TEST NUMBER: P273716  
CATALOG NUMBER: 8RCG-4-34D-L835-A

### Luminous Intensity Polar Plot





TEST NUMBER: P273716

CATALOG NUMBER: 8RCG-4-34D-L835-A

**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	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°	5477	5477	5477
5°	6531	5501	4875
10°	8175	5473	4403
15°	10027	5429	4099
20°	11945	5360	3902
25°	12683	5275	3859
30°	10871	5215	3879
35°	7561	5127	3920
40°	5695	5027	3907
45°	4729	4875	3858
50°	4235	4565	3823
55°	3960	4232	3775
60°	3715	3884	3736
65°	3492	3542	3616
70°	3275	3149	3446
75°	2931	2756	3157
80°	2569	2260	2720
85°	2012	1642	1820



TEST NUMBER: P273716

CATALOG NUMBER: 8RCG-4-34D-L835-A

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.3	3.3
10°-20°	290.1	10.5
20°-30°	488.1	17.6
30°-40°	551.6	19.9
40°-50°	494.1	17.8
50°-60°	398.8	14.4
60°-70°	277.9	10.0
70°-80°	145.8	5.3
80°-90°	35.0	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°	868.4	31.3
0°-40°	1420.0	51.2
0°-60°	2312.9	83.5
0°-90°	2771.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2771.6	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	918	918	918	918	918	
5°	1091	1022	919	832	814	112
15°	1624	1352	879	693	664	469
25°	1927	1597	802	596	586	852
35°	1038	1647	704	526	538	670
45°	561	1086	578	450	457	442
55°	381	589	407	348	363	342
65°	247	331	251	236	256	246
75°	127	157	120	119	137	136
85°	29	34	24	24	27	36
90°	0	0	0	0	0	



TEST NUMBER: P273716

CATALOG NUMBER: 8RCG-4-34D-L835-A

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2
2.5°	988.6	987.6	985.4	987.2	983.6	978.8	978.4	973.8	961.0	960.0	956.6
5°	1090.8	1087.4	1086.8	1086.4	1080.2	1071.8	1055.8	1054.4	1033.0	1022.4	1009.4
7.5°	1214.6	1213.2	1209.6	1205.6	1184.8	1174.6	1159.4	1139.8	1115.0	1090.8	1075.8
10°	1349.8	1364.4	1346.2	1333.8	1322.2	1300.4	1275.0	1243.4	1211.8	1175.0	1147.0
12.5°	1494.8	1500.2	1500.2	1488.6	1469.0	1433.0	1383.2	1347.6	1319.2	1251.4	1227.4
15°	1623.8	1651.0	1633.6	1593.6	1594.6	1563.0	1504.2	1439.6	1405.4	1351.6	1278.2
17.5°	1769.8	1774.6	1769.4	1732.0	1713.8	1668.0	1615.0	1555.0	1490.4	1425.0	1349.0
20°	1882.0	1879.2	1863.6	1846.4	1808.0	1774.2	1715.0	1646.2	1557.2	1493.0	1408.0
22.5°	1944.2	1939.2	1934.0	1920.2	1890.0	1853.0	1801.4	1724.4	1640.8	1546.4	1445.0
25°	1927.2	1933.0	1934.0	1930.0	1918.8	1897.0	1855.2	1795.2	1710.6	1597.2	1494.8
27.5°	1796.4	1811.2	1829.8	1842.4	1862.4	1875.6	1862.4	1824.6	1755.2	1653.6	1527.8
30°	1578.4	1560.6	1604.8	1660.4	1698.2	1764.8	1802.2	1804.4	1769.4	1685.2	1563.4
32.5°	1276.0	1304.8	1318.2	1389.8	1483.8	1560.6	1644.4	1718.6	1736.0	1687.0	1584.2
35°	1038.4	1062.8	1098.4	1134.0	1223.0	1299.6	1430.4	1544.2	1635.0	1647.0	1581.6
37.5°	863.0	877.4	899.2	937.0	997.8	1092.6	1196.4	1344.4	1469.4	1557.6	1548.6
40°	731.4	735.0	760.4	787.4	834.6	909.4	1000.6	1127.8	1285.2	1421.8	1478.8
42.5°	632.6	641.6	648.6	674.4	709.6	761.2	844.4	944.0	1085.0	1247.4	1372.4
45°	560.6	569.4	576.2	593.4	620.2	658.0	717.2	813.2	923.2	1085.6	1235.4
47.5°	510.8	509.8	515.6	529.4	548.6	578.8	622.4	686.4	792.0	927.6	1084.6
50°	456.4	463.6	465.4	475.6	489.8	510.8	545.4	598.0	680.6	796.4	937.8
52.5°	418.2	419.0	424.8	431.6	443.6	458.6	487.6	525.8	586.4	680.6	808.0
55°	380.8	380.8	385.8	391.6	398.6	413.4	433.4	463.6	513.0	589.4	697.2
57.5°	346.2	348.0	352.4	353.6	360.0	370.2	387.6	411.6	449.4	511.2	600.2
60°	311.4	315.4	315.0	318.6	323.8	331.4	345.6	364.4	397.2	444.4	516.6
62.5°	281.2	279.8	279.8	284.2	289.6	296.8	304.8	320.4	347.0	387.6	446.2
65°	247.4	246.4	249.6	252.2	254.0	259.4	266.4	280.8	299.4	330.6	378.2
67.5°	218.0	215.4	217.6	218.4	221.6	226.0	233.2	242.0	257.2	283.4	321.6
70°	187.8	185.6	185.0	186.0	188.6	191.8	196.6	205.0	218.8	239.0	265.2
72.5°	156.6	155.2	155.2	157.4	158.4	160.2	163.2	170.8	181.0	194.8	218.8
75°	127.2	127.2	127.2	127.6	129.0	130.8	133.4	137.4	146.0	156.6	173.0
77.5°	100.6	101.0	100.2	99.6	101.8	102.8	103.2	107.6	112.6	120.6	133.4
80°	74.8	72.6	73.4	74.8	75.6	76.0	77.4	78.4	82.4	86.4	94.8
82.5°	50.8	49.0	49.0	51.2	51.2	51.6	53.0	54.2	55.2	58.8	62.2
85°	29.4	29.4	29.8	29.8	30.2	29.8	31.2	31.6	31.6	33.8	36.4
87.5°	13.4	12.4	13.0	13.4	13.0	13.4	13.8	14.2	14.6	15.2	15.6
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: P273716

CATALOG NUMBER: 8RCG-4-34D-L835-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2
2.5°	953.8	950.2	946.8	940.6	935.2	927.6	925.4	922.8	914.8	907.6	902.2
5°	1004.6	993.8	978.4	964.0	952.6	937.0	928.0	918.8	905.4	893.4	883.6
7.5°	1053.0	1034.4	1012.6	989.0	966.4	944.6	927.2	911.6	894.2	877.4	864.4
10°	1113.2	1082.8	1049.0	1012.6	981.4	951.2	925.8	903.6	879.6	858.6	841.2
12.5°	1181.6	1133.2	1083.4	1037.0	998.8	953.8	921.8	892.0	864.0	837.8	817.8
15°	1232.8	1175.8	1120.6	1059.8	1003.6	951.2	914.8	879.2	847.6	821.8	796.8
17.5°	1283.6	1221.2	1151.0	1077.6	1011.6	951.2	901.4	863.0	824.4	793.2	769.2
20°	1325.4	1252.0	1169.6	1092.6	1018.0	948.6	892.4	844.4	801.6	768.4	740.4
22.5°	1361.4	1272.4	1186.6	1102.8	1017.4	941.4	876.0	826.2	779.0	746.6	716.2
25°	1384.0	1281.2	1195.8	1099.4	1006.4	929.0	857.8	801.6	755.4	717.2	686.4
27.5°	1405.4	1280.0	1183.4	1079.4	993.0	916.0	839.6	779.4	731.0	689.6	658.0
30°	1426.8	1282.2	1161.6	1058.8	971.6	891.6	817.8	757.2	705.6	663.4	634.0
32.5°	1440.2	1280.8	1141.6	1030.4	937.8	869.4	794.2	731.0	677.6	636.2	608.2
35°	1443.6	1273.2	1118.0	989.0	901.0	832.0	769.2	704.2	648.6	610.0	578.0
37.5°	1436.2	1259.4	1092.2	951.6	856.4	788.0	733.2	677.6	624.2	581.0	553.0
40°	1411.6	1246.2	1061.0	911.6	810.2	744.8	699.8	645.6	593.0	552.6	526.8
42.5°	1365.0	1219.0	1026.8	867.0	762.2	696.8	656.2	613.0	564.2	526.8	501.0
45°	1283.0	1177.2	992.6	822.6	715.0	647.4	610.8	578.0	533.0	496.0	473.8
47.5°	1178.6	1120.6	943.2	775.8	665.6	600.2	562.0	534.8	499.6	469.8	448.0
50°	1068.6	1047.8	893.0	727.8	616.2	552.6	516.0	492.0	468.4	438.6	419.0
52.5°	941.8	963.2	834.2	678.0	566.0	503.6	469.8	452.0	431.2	408.0	391.6
55°	824.4	871.2	764.8	621.0	516.0	456.4	424.0	407.0	394.6	376.4	361.6
57.5°	710.4	770.2	692.8	563.6	467.2	415.0	383.0	364.0	356.0	345.6	333.6
60°	611.2	670.0	614.4	505.8	417.8	368.8	341.2	325.6	317.6	311.0	301.2
62.5°	522.8	582.4	537.8	447.2	369.2	324.8	301.6	286.6	280.8	278.0	270.0
65°	443.2	494.2	463.2	385.8	323.4	283.4	261.6	251.0	245.2	243.8	238.4
67.5°	374.2	413.8	389.8	331.4	280.8	244.2	225.2	215.8	210.8	210.4	206.0
70°	306.6	343.0	325.6	274.0	231.8	204.6	188.6	180.6	178.0	177.6	175.2
72.5°	254.0	276.8	263.8	222.8	192.6	168.6	158.0	149.4	146.4	147.2	146.0
75°	195.8	214.8	206.8	177.0	150.8	134.8	125.0	119.6	117.0	118.4	116.6
77.5°	149.4	162.8	154.8	132.2	115.2	103.2	95.6	92.0	89.4	89.4	88.6
80°	106.4	113.4	109.4	97.0	83.6	73.8	68.0	65.8	64.6	64.0	63.6
82.5°	68.0	73.8	69.0	61.4	53.4	48.4	45.8	42.8	41.8	42.2	41.8
85°	38.2	40.4	38.8	33.4	29.8	27.2	25.4	24.0	23.2	23.6	22.6
87.5°	16.4	17.0	15.6	13.8	13.0	11.6	11.6	10.6	9.8	9.8	9.4
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: P273716

CATALOG NUMBER: 8RCG-4-34D-L835-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2	918.2
2.5°	899.2	896.0	891.6	884.8	879.6	871.2	871.2	872.4	872.4	872.0	871.2
5°	875.6	868.8	860.8	851.6	841.8	832.0	830.2	826.6	824.0	822.2	820.0
7.5°	851.6	840.4	829.2	816.4	805.2	796.0	789.2	783.4	779.8	775.8	772.8
10°	827.0	812.4	798.6	784.8	769.6	757.6	750.0	744.8	740.8	737.2	735.4
12.5°	798.2	780.8	765.2	752.4	735.4	723.0	715.8	714.0	709.2	700.8	696.2
15°	770.2	754.6	736.4	716.2	708.2	693.2	684.6	680.6	678.0	672.2	670.4
17.5°	747.0	726.0	705.2	690.4	675.8	663.8	658.8	653.6	650.0	644.6	643.4
20°	718.0	699.8	681.2	665.2	649.6	636.2	632.2	628.6	625.0	622.8	621.0
22.5°	688.6	670.4	655.8	641.0	624.2	616.6	612.2	608.2	606.0	604.6	602.8
25°	661.6	645.6	628.2	614.8	601.4	595.8	593.0	590.8	589.0	586.8	586.4
27.5°	637.6	619.8	605.0	592.2	582.4	577.4	574.4	573.0	573.0	574.0	574.4
30°	610.0	594.0	582.4	571.6	562.8	558.4	557.8	557.8	559.6	560.2	561.0
32.5°	584.6	572.2	560.6	550.4	544.2	541.4	543.6	543.6	545.0	546.4	548.2
35°	560.2	548.6	539.6	530.8	525.0	526.4	527.2	528.0	530.4	533.0	534.8
37.5°	537.0	526.4	517.0	509.8	506.2	509.0	511.2	513.0	515.6	517.8	519.6
40°	511.6	504.0	495.2	489.0	489.8	491.2	493.0	495.2	497.4	498.8	500.6
42.5°	488.0	480.0	473.8	469.0	470.2	472.0	473.0	473.8	476.4	479.2	480.0
45°	464.0	457.8	451.6	448.4	449.4	450.2	451.2	452.4	454.6	456.4	457.0
47.5°	436.8	432.4	428.4	424.8	426.6	426.2	427.6	430.2	431.2	432.0	434.6
50°	411.0	407.0	402.2	401.2	401.2	401.2	401.8	405.2	405.2	407.0	408.8
52.5°	382.6	380.4	377.8	376.0	375.0	375.0	377.2	378.6	379.4	382.2	384.0
55°	354.6	352.0	349.2	348.0	347.0	348.0	351.4	352.4	354.6	356.0	357.2
57.5°	325.2	323.4	321.2	320.4	320.4	320.8	323.4	325.6	326.2	330.6	332.4
60°	296.2	293.2	291.4	291.4	290.6	294.6	293.6	298.0	299.0	301.6	304.8
62.5°	266.4	262.0	261.6	261.6	263.4	263.8	265.6	267.0	269.6	273.2	275.4
65°	234.0	231.8	235.0	234.4	233.6	236.2	236.2	238.4	241.2	244.2	249.2
67.5°	203.8	202.0	202.8	202.4	203.8	205.6	206.8	208.6	211.8	215.4	218.4
70°	173.0	174.4	172.2	174.0	175.2	175.8	176.6	179.2	182.8	185.0	188.6
72.5°	143.2	142.8	143.8	144.2	145.4	146.4	147.2	150.4	154.4	156.2	158.8
75°	114.8	114.4	115.6	115.6	117.8	118.8	119.6	121.0	124.6	127.2	129.4
77.5°	89.0	89.4	89.0	90.8	89.8	90.4	93.0	94.4	94.8	100.6	101.4
80°	63.2	64.0	64.6	65.0	65.4	64.6	67.6	69.0	69.0	72.0	74.2
82.5°	41.0	41.4	42.8	43.2	43.2	44.4	44.0	45.0	46.2	47.2	50.2
85°	22.6	24.0	24.4	24.0	24.4	23.6	25.0	25.4	25.8	25.8	25.8
87.5°	8.8	9.4	8.8	9.4	8.8	9.4	9.4	8.4	8.4	9.8	8.0
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: P273716

CATALOG NUMBER: 8RCG-4-34D-L835-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	918.2	918.2	918.2	918.2
2.5°	868.0	867.6	870.6	868.4
5°	817.2	818.6	814.2	814.2
7.5°	771.4	769.6	770.2	767.0
10°	730.0	727.4	726.6	727.0
12.5°	695.8	695.8	688.6	688.6
15°	670.4	662.0	661.2	663.8
17.5°	642.4	637.6	638.0	637.0
20°	621.0	618.4	618.0	614.8
22.5°	601.4	601.0	601.4	598.0
25°	586.0	588.2	586.4	586.4
27.5°	575.2	575.2	574.0	574.0
30°	562.8	562.4	563.2	563.2
32.5°	550.4	551.2	551.2	551.6
35°	537.4	537.8	539.2	538.4
37.5°	520.6	522.8	522.4	523.2
40°	501.0	502.2	501.8	501.8
42.5°	481.0	481.8	480.4	479.6
45°	458.6	457.8	459.2	457.4
47.5°	434.2	434.6	435.2	436.8
50°	409.8	412.4	412.4	412.0
52.5°	385.8	386.6	388.8	388.8
55°	360.8	361.6	362.6	363.0
57.5°	335.4	335.0	336.8	337.2
60°	308.4	308.4	311.8	313.2
62.5°	279.4	281.2	284.8	282.0
65°	251.4	255.0	254.4	256.2
67.5°	222.0	224.2	227.8	227.8
70°	192.2	194.4	196.2	197.6
72.5°	163.2	164.2	169.0	166.4
75°	132.6	135.6	138.4	137.0
77.5°	103.2	107.2	108.2	106.8
80°	77.4	77.0	79.6	79.2
82.5°	51.6	51.2	52.0	52.4
85°	27.6	29.0	27.2	26.6
87.5°	8.0	8.0	7.6	7.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)