

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: P273725

Luminaire Tested: **8RCG-4-34D-L930-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P273725  
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-L930-A  
Description: RCG SERIES DIRECT RECESSED LED LUMINAIRE WITH ASYMMETRIC FLUSH LENS  
Light Source: (168) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

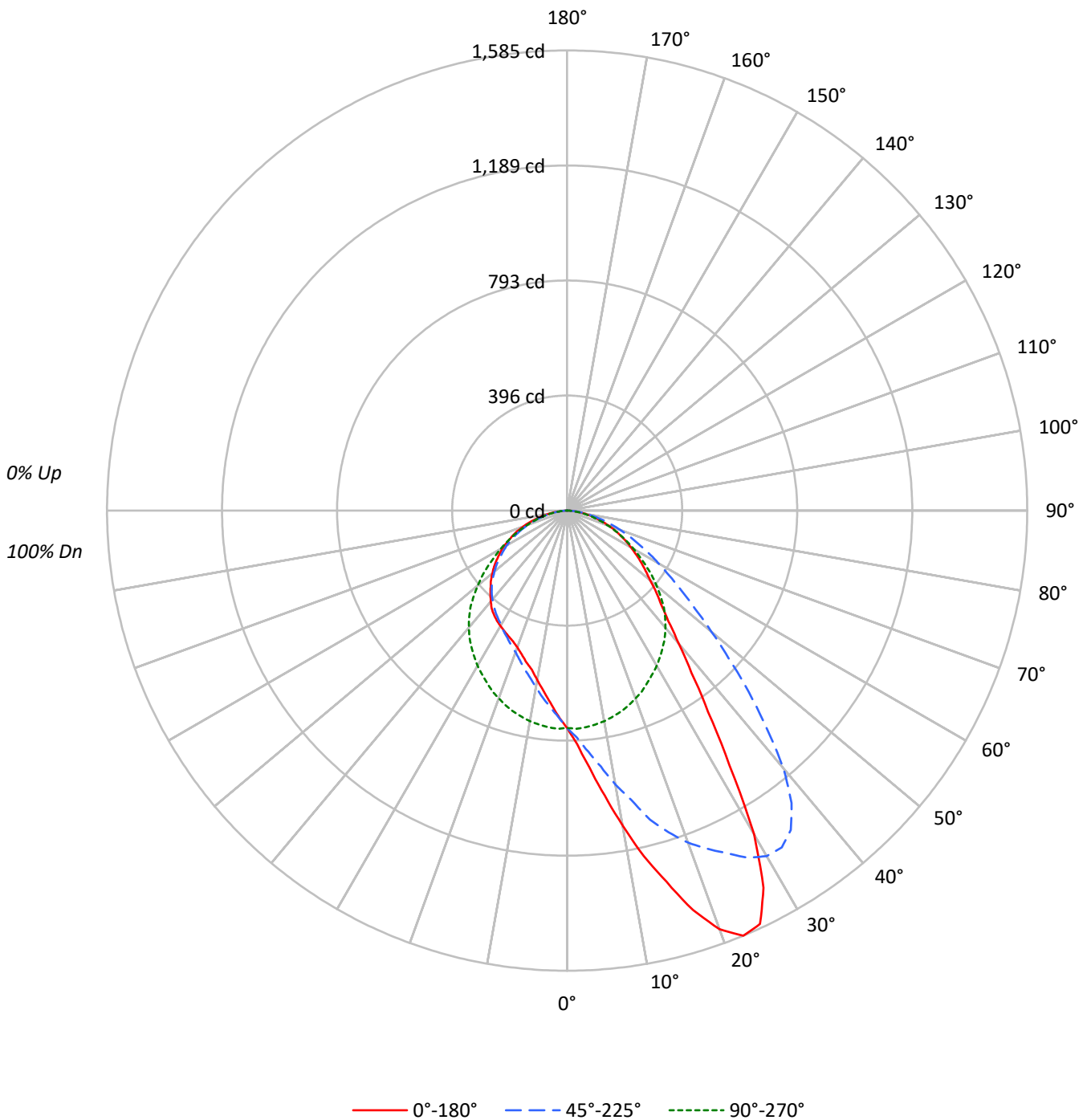
Lumens per Lamp: N/A  
Luminaire Lumens: 2259.7 lumens  
Efficiency: N/A  
Efficacy: 99.1 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.5  
Luminous Opening: Rectangular (W 7.88' x L: 0.23' x H: 0')  
CIE Type: Direct

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: P273725  
CATALOG NUMBER: 8RCG-4-34D-L930-A

### Luminous Intensity Polar Plot





TEST NUMBER: P273725

CATALOG NUMBER: 8RCG-4-34D-L930-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°	4465	4465	4465
5°	5325	4484	3974
10°	6664	4461	3589
15°	8175	4426	3342
20°	9739	4369	3181
25°	10341	4301	3146
30°	8864	4252	3163
35°	6164	4181	3195
40°	4644	4099	3186
45°	3855	3975	3145
50°	3454	3723	3116
55°	3228	3450	3078
60°	3030	3168	3047
65°	2845	2888	2950
70°	2668	2567	2808
75°	2392	2249	2576
80°	2095	1841	2219
85°	1642	1341	1492



TEST NUMBER: P273725

CATALOG NUMBER: 8RCG-4-34D-L930-A

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.6	3.3
10°-20°	236.5	10.5
20°-30°	397.9	17.6
30°-40°	449.7	19.9
40°-50°	402.8	17.8
50°-60°	325.1	14.4
60°-70°	226.6	10.0
70°-80°	118.9	5.3
80°-90°	28.5	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°	708.0	31.3
0°-40°	1157.7	51.2
0°-60°	1885.7	83.5
0°-90°	2259.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2259.7	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	749	749	749	749	749	
5°	889	834	749	678	664	91
15°	1324	1102	717	565	541	382
25°	1571	1302	654	486	478	695
35°	847	1343	574	429	439	546
45°	457	885	471	367	373	360
55°	310	481	332	284	296	279
65°	202	270	205	193	209	201
75°	104	128	98	97	112	111
85°	24	28	20	19	22	29
90°	0	0	0	0	0	



TEST NUMBER: P273725

CATALOG NUMBER: 8RCG-4-34D-L930-A

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	748.6	748.6	748.6	748.6	748.6	748.6	748.6	748.6	748.6	748.6	748.6
2.5°	806.0	805.2	803.4	804.8	802.0	798.0	797.6	794.0	783.4	782.8	779.8
5°	889.4	886.4	886.2	885.8	880.6	873.8	860.8	859.6	842.2	833.6	823.0
7.5°	990.2	989.2	986.2	983.0	966.0	957.6	945.2	929.2	909.0	889.4	877.0
10°	1100.4	1112.4	1097.6	1087.4	1078.0	1060.2	1039.6	1013.8	988.0	958.0	935.0
12.5°	1218.8	1223.0	1223.0	1213.6	1197.8	1168.4	1127.8	1098.6	1075.4	1020.4	1000.8
15°	1324.0	1346.0	1332.0	1299.2	1300.0	1274.2	1226.4	1173.8	1145.8	1102.0	1042.2
17.5°	1443.0	1446.8	1442.6	1412.0	1397.2	1359.8	1316.6	1267.8	1215.2	1161.8	1099.8
20°	1534.4	1532.2	1519.4	1505.2	1474.2	1446.6	1398.2	1342.0	1269.6	1217.2	1148.0
22.5°	1585.0	1581.2	1576.8	1565.6	1540.8	1510.8	1468.6	1406.0	1337.8	1260.8	1178.2
25°	1571.4	1576.0	1576.8	1573.4	1564.4	1546.6	1512.6	1463.6	1394.6	1302.2	1218.8
27.5°	1464.6	1476.6	1491.8	1502.0	1518.4	1529.2	1518.4	1487.6	1431.0	1348.2	1245.6
30°	1287.0	1272.4	1308.4	1353.6	1384.6	1439.0	1469.4	1471.2	1442.6	1374.0	1274.6
32.5°	1040.2	1063.8	1074.8	1133.2	1209.6	1272.4	1340.6	1401.2	1415.4	1375.4	1291.6
35°	846.6	866.6	895.6	924.6	997.2	1059.6	1166.2	1259.0	1333.0	1342.8	1289.4
37.5°	703.6	715.2	733.0	763.8	813.6	890.8	975.4	1096.2	1198.0	1269.8	1262.6
40°	596.4	599.2	619.8	642.0	680.4	741.4	815.8	919.6	1048.0	1159.2	1205.6
42.5°	515.8	523.0	528.8	549.8	578.6	620.6	688.4	769.6	884.6	1017.0	1119.0
45°	457.0	464.2	469.8	483.8	505.6	536.4	584.8	663.0	752.6	885.0	1007.2
47.5°	416.4	415.6	420.4	431.6	447.2	472.0	507.4	559.6	645.6	756.2	884.4
50°	372.2	378.0	379.4	387.8	399.4	416.4	444.6	487.4	555.0	649.2	764.6
52.5°	341.0	341.6	346.4	351.8	361.6	374.0	397.6	428.8	478.0	555.0	658.8
55°	310.4	310.4	314.4	319.2	325.0	337.0	353.2	378.0	418.2	480.6	568.4
57.5°	282.2	283.6	287.2	288.4	293.4	301.8	316.0	335.6	366.4	416.8	489.4
60°	254.0	257.2	256.8	259.8	264.0	270.2	281.8	297.0	324.0	362.4	421.2
62.5°	229.2	228.2	228.2	231.8	236.2	242.0	248.4	261.2	283.0	316.0	363.8
65°	201.6	201.0	203.4	205.6	207.2	211.4	217.2	228.8	244.2	269.6	308.4
67.5°	177.8	175.6	177.4	178.0	180.6	184.2	190.0	197.4	209.6	231.0	262.2
70°	153.0	151.2	150.8	151.6	153.8	156.4	160.4	167.2	178.4	194.8	216.2
72.5°	127.6	126.6	126.6	128.4	129.2	130.6	133.2	139.2	147.6	158.8	178.4
75°	103.8	103.8	103.8	104.2	105.2	106.6	108.8	112.0	119.0	127.6	141.0
77.5°	82.0	82.4	81.6	81.2	83.0	83.8	84.2	87.8	91.8	98.2	108.8
80°	61.0	59.2	59.8	61.0	61.6	62.0	63.2	63.8	67.2	70.4	77.2
82.5°	41.4	39.8	39.8	41.8	41.8	42.0	43.2	44.2	45.0	47.8	50.8
85°	24.0	24.0	24.4	24.4	24.6	24.4	25.4	25.8	25.8	27.6	29.8
87.5°	10.8	10.2	10.6	10.8	10.6	10.8	11.2	11.6	12.0	12.4	12.6
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: P273725

CATALOG NUMBER: 8RCG-4-34D-L930-A

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	748.6	748.6	748.6	748.6	748.6	748.6	748.6	748.6	748.6	748.6	748.6
2.5°	777.6	774.8	771.8	766.8	762.4	756.2	754.4	752.2	745.8	740.0	735.6
5°	819.0	810.4	797.6	786.0	776.6	763.8	756.6	749.0	738.2	728.4	720.4
7.5°	858.6	843.4	825.6	806.4	787.8	770.0	756.0	743.2	729.0	715.2	704.8
10°	907.6	882.8	855.2	825.6	800.2	775.4	754.8	736.6	717.2	700.0	686.0
12.5°	963.4	923.8	883.2	845.6	814.4	777.6	751.6	727.2	704.4	683.0	666.6
15°	1005.2	958.6	913.6	864.0	818.4	775.4	745.8	716.8	691.0	670.0	649.6
17.5°	1046.4	995.6	938.4	878.6	824.8	775.4	734.8	703.6	672.2	646.8	627.2
20°	1080.6	1020.6	953.6	890.8	830.0	773.4	727.6	688.4	653.6	626.4	603.6
22.5°	1110.0	1037.4	967.4	899.2	829.6	767.6	714.2	673.6	635.2	608.6	584.0
25°	1128.4	1044.6	975.0	896.2	820.4	757.4	699.4	653.6	616.0	584.8	559.6
27.5°	1145.8	1043.6	964.8	880.0	809.6	746.8	684.4	635.4	596.0	562.2	536.4
30°	1163.2	1045.4	947.0	863.2	792.2	726.8	666.6	617.4	575.2	540.8	516.8
32.5°	1174.2	1044.2	930.8	840.0	764.6	708.8	647.4	596.0	552.4	518.6	495.8
35°	1177.0	1038.2	911.6	806.4	734.6	678.2	627.2	574.2	528.8	497.2	471.2
37.5°	1170.8	1026.8	890.4	775.8	698.2	642.4	597.8	552.4	508.8	473.8	450.8
40°	1151.0	1016.0	865.0	743.2	660.6	607.2	570.6	526.4	483.6	450.6	429.4
42.5°	1112.8	993.8	837.2	707.0	621.4	568.0	535.0	499.8	460.0	429.4	408.4
45°	1046.0	959.8	809.2	670.6	582.8	527.8	498.0	471.2	434.6	404.4	386.2
47.5°	960.8	913.6	769.0	632.6	542.6	489.4	458.2	436.0	407.4	383.0	365.2
50°	871.2	854.2	728.0	593.4	502.4	450.6	420.8	401.2	382.0	357.6	341.6
52.5°	767.8	785.2	680.2	552.8	461.4	410.6	383.0	368.6	351.4	332.6	319.2
55°	672.2	710.2	623.6	506.4	420.8	372.2	345.6	331.8	321.8	306.8	294.8
57.5°	579.2	627.8	564.8	459.6	380.8	338.4	312.4	296.8	290.2	281.8	272.0
60°	498.4	546.2	501.0	412.4	340.6	300.6	278.2	265.6	259.0	253.6	245.6
62.5°	426.2	474.8	438.6	364.6	301.0	264.8	246.0	233.6	228.8	226.8	220.2
65°	361.2	403.0	377.6	314.4	263.6	231.0	213.2	204.6	199.8	198.8	194.4
67.5°	305.0	337.4	317.8	270.2	228.8	199.2	183.6	176.0	172.0	171.6	168.0
70°	250.0	279.6	265.6	223.4	189.0	166.8	153.8	147.2	145.0	144.8	143.0
72.5°	207.2	225.6	215.0	181.8	157.0	137.4	128.8	121.8	119.4	120.0	119.0
75°	159.6	175.2	168.6	144.4	123.0	110.0	102.0	97.6	95.4	96.4	95.0
77.5°	121.8	132.8	126.2	107.8	94.0	84.2	78.0	75.0	73.0	73.0	72.2
80°	86.6	92.4	89.2	79.0	68.2	60.2	55.4	53.6	52.6	52.2	51.8
82.5°	55.4	60.2	56.2	50.0	43.6	39.6	37.4	34.8	34.0	34.4	34.0
85°	31.2	33.0	31.6	27.2	24.4	22.2	20.6	19.6	18.8	19.2	18.4
87.5°	13.4	13.8	12.6	11.2	10.6	9.4	9.4	8.8	8.0	8.0	7.6
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: P273725

CATALOG NUMBER: 8RCG-4-34D-L930-A

**CANDELA DISTRIBUTION (continued):**

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	748.6	748.6	748.6	748.6	748.6	748.6	748.6	748.6	748.6	748.6	748.6
2.5°	733.0	730.6	726.8	721.4	717.2	710.2	710.2	711.2	711.2	711.0	710.2
5°	713.8	708.4	701.8	694.2	686.2	678.2	676.8	674.0	671.8	670.4	668.4
7.5°	694.2	685.2	676.2	665.6	656.6	649.0	643.4	638.8	635.8	632.6	630.0
10°	674.4	662.4	651.0	639.8	627.6	617.8	611.6	607.2	604.0	601.0	599.6
12.5°	650.8	636.6	623.8	613.4	599.6	589.4	583.6	582.2	578.2	571.2	567.6
15°	627.8	615.2	600.4	584.0	577.4	565.2	558.2	555.0	552.8	548.0	546.6
17.5°	609.0	592.0	575.0	563.0	551.0	541.2	537.2	532.8	530.0	525.6	524.4
20°	585.4	570.6	555.4	542.2	529.6	518.6	515.4	512.6	509.6	507.8	506.4
22.5°	561.4	546.6	534.6	522.6	508.8	502.8	499.2	495.8	494.0	493.0	491.4
25°	539.4	526.4	512.2	501.2	490.4	485.6	483.6	481.6	480.2	478.4	478.0
27.5°	519.8	505.2	493.4	482.8	474.8	470.8	468.2	467.2	467.2	468.0	468.2
30°	497.2	484.2	474.8	466.0	458.8	455.2	454.8	454.8	456.4	456.6	457.4
32.5°	476.6	466.4	457.0	448.6	443.6	441.4	443.2	443.2	444.4	445.4	446.8
35°	456.6	447.2	440.0	432.8	428.0	429.2	429.8	430.6	432.4	434.6	436.0
37.5°	437.8	429.2	421.4	415.6	412.8	415.0	416.8	418.2	420.4	422.2	423.6
40°	417.2	411.0	403.8	398.6	399.4	400.4	401.8	403.8	405.6	406.6	408.0
42.5°	398.0	391.4	386.2	382.4	383.4	384.8	385.6	386.2	388.4	390.6	391.4
45°	378.4	373.2	368.2	365.6	366.4	367.0	367.8	368.8	370.8	372.2	372.6
47.5°	356.2	352.6	349.4	346.4	347.8	347.4	348.6	350.8	351.4	352.2	354.4
50°	335.2	331.8	328.0	327.2	327.2	327.2	327.6	330.4	330.4	331.8	333.4
52.5°	312.0	310.2	308.0	306.6	305.8	305.8	307.6	308.6	309.4	311.6	313.0
55°	289.0	287.0	284.8	283.6	283.0	283.6	286.6	287.2	289.0	290.2	291.2
57.5°	265.2	263.6	261.8	261.2	261.2	261.6	263.6	265.6	265.8	269.6	271.0
60°	241.6	239.0	237.6	237.6	236.8	240.2	239.4	243.0	243.8	246.0	248.4
62.5°	217.2	213.6	213.2	213.2	214.8	215.0	216.6	217.6	219.8	222.8	224.6
65°	190.8	189.0	191.6	191.2	190.4	192.6	192.6	194.4	196.6	199.2	203.2
67.5°	166.2	164.6	165.4	165.0	166.2	167.6	168.6	170.2	172.6	175.6	178.0
70°	141.0	142.2	140.4	141.8	143.0	143.2	144.0	146.2	149.0	150.8	153.8
72.5°	116.8	116.4	117.2	117.6	118.6	119.4	120.0	122.6	125.8	127.4	129.4
75°	93.6	93.2	94.4	94.4	96.2	96.8	97.6	98.6	101.6	103.8	105.6
77.5°	72.6	73.0	72.6	74.0	73.2	73.6	75.8	76.8	77.2	82.0	82.8
80°	51.6	52.2	52.6	53.0	53.4	52.6	55.2	56.2	56.2	58.8	60.6
82.5°	33.4	33.8	34.8	35.2	35.2	36.2	36.0	36.6	37.8	38.4	41.0
85°	18.4	19.6	20.0	19.6	20.0	19.2	20.4	20.6	21.0	21.0	21.0
87.5°	7.2	7.6	7.2	7.6	7.2	7.6	7.6	6.8	6.8	8.0	6.6
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: P273725

CATALOG NUMBER: 8RCG-4-34D-L930-A

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	748.6	748.6	748.6	748.6
2.5°	707.6	707.4	709.8	708.0
5°	666.4	667.4	663.8	663.8
7.5°	629.0	627.6	627.8	625.4
10°	595.2	593.0	592.4	592.6
12.5°	567.2	567.2	561.4	561.4
15°	546.6	539.8	539.0	541.2
17.5°	523.8	519.8	520.2	519.4
20°	506.4	504.2	503.8	501.2
22.5°	490.4	490.0	490.4	487.4
25°	477.8	479.6	478.0	478.0
27.5°	469.0	469.0	468.0	468.0
30°	458.8	458.4	459.2	459.2
32.5°	448.6	449.4	449.4	449.8
35°	438.2	438.6	439.6	438.8
37.5°	424.4	426.2	425.8	426.6
40°	408.4	409.6	409.2	409.2
42.5°	392.2	392.8	391.8	391.0
45°	374.0	373.2	374.4	372.8
47.5°	354.0	354.4	354.8	356.2
50°	334.0	336.2	336.2	335.8
52.5°	314.4	315.2	317.0	317.0
55°	294.2	294.8	295.6	296.0
57.5°	273.4	273.2	274.6	275.0
60°	251.4	251.4	254.2	255.4
62.5°	227.8	229.2	232.2	230.0
65°	205.0	207.8	207.4	209.0
67.5°	181.0	182.8	185.8	185.8
70°	156.6	158.6	160.0	161.0
72.5°	133.2	133.8	137.8	135.6
75°	108.0	110.6	112.8	111.8
77.5°	84.2	87.4	88.2	87.0
80°	63.2	62.8	65.0	64.6
82.5°	42.0	41.8	42.4	42.8
85°	22.4	23.6	22.2	21.8
87.5°	6.6	6.6	6.2	5.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)