

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: P273749

Luminaire Tested: **8RCG-4-56D-L935-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P273749
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-4-56D-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: 3959.2 lumens
Efficiency: N/A
Efficacy: 106.4 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

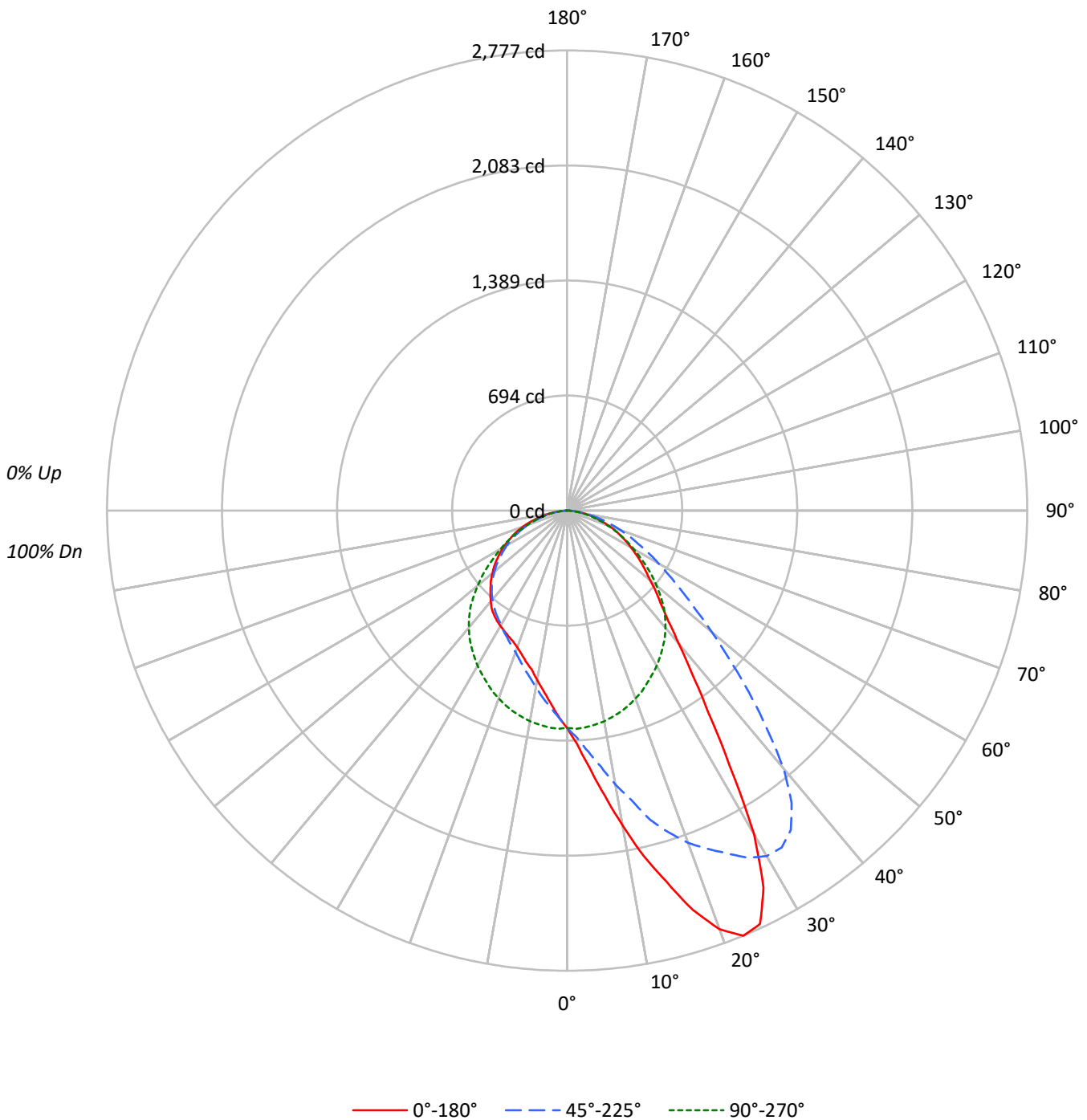
Input Watts (W): 37.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7824	7824	7824
5°	9330	7858	6963
10°	11678	7818	6289
15°	14323	7754	5855
20°	17064	7656	5575
25°	18119	7537	5512
30°	15529	7449	5541
35°	10801	7325	5599
40°	8135	7180	5581
45°	6755	6964	5511
50°	6050	6521	5462
55°	5657	6048	5393
60°	5306	5549	5337
65°	4988	5058	5165
70°	4677	4499	4921
75°	4190	3941	4512
80°	3668	3229	3888
85°	2874	2354	2614



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.0	3.3
10°-20°	414.4	10.5
20°-30°	697.2	17.6
30°-40°	788.0	19.9
40°-50°	705.8	17.8
50°-60°	569.7	14.4
60°-70°	396.9	10.0
70°-80°	208.4	5.3
80°-90°	49.9	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°	1240.6	31.3
0°-40°	2028.5	51.2
0°-60°	3304.0	83.5
0°-90°	3959.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3959.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1312	1312	1312	1312	1312	
5°	1558	1460	1312	1188	1163	160
15°	2320	1931	1256	990	948	670
25°	2753	2282	1145	851	838	1217
35°	1483	2353	1006	752	769	957
45°	801	1551	826	643	653	632
55°	544	842	582	497	519	488
65°	353	472	358	337	366	352
75°	182	224	171	170	196	194
85°	42	48	34	34	38	51
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°	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8
2.5°	1412.2	1410.8	1407.8	1410.2	1405.2	1398.2	1397.6	1391.2	1372.8	1371.4	1366.4
5°	1558.4	1553.2	1552.6	1552.0	1543.0	1531.0	1508.2	1506.2	1475.8	1460.4	1442.0
7.5°	1735.0	1733.0	1728.0	1722.2	1692.4	1677.8	1656.2	1628.2	1592.6	1558.4	1536.8
10°	1928.2	1949.2	1923.2	1905.4	1888.8	1857.6	1821.4	1776.4	1731.2	1678.4	1638.4
12.5°	2135.4	2143.0	2143.0	2126.4	2098.6	2047.0	1975.8	1925.0	1884.4	1787.8	1753.4
15°	2319.6	2358.4	2333.6	2276.4	2277.8	2232.6	2148.8	2056.6	2007.6	1930.8	1825.8
17.5°	2528.2	2535.2	2527.6	2474.2	2448.0	2382.6	2307.0	2221.2	2129.0	2035.6	1927.0
20°	2688.4	2684.4	2662.2	2637.4	2582.8	2534.6	2450.0	2351.4	2224.4	2132.8	2011.4
22.5°	2777.2	2770.2	2762.6	2743.0	2699.8	2647.0	2573.2	2463.4	2343.8	2209.2	2064.2
25°	2753.2	2761.4	2762.6	2757.0	2741.0	2710.0	2650.2	2564.4	2443.6	2281.6	2135.4
27.5°	2566.2	2587.2	2614.0	2631.8	2660.4	2679.4	2660.4	2606.4	2507.2	2362.2	2182.4
30°	2254.8	2229.4	2292.4	2371.8	2425.8	2521.2	2574.6	2577.8	2527.6	2407.4	2233.2
32.5°	1822.8	1864.0	1883.0	1985.4	2119.6	2229.4	2349.0	2455.0	2479.8	2410.0	2263.2
35°	1483.4	1518.2	1569.2	1620.0	1747.0	1856.4	2043.2	2206.0	2335.6	2352.8	2259.4
37.5°	1233.0	1253.2	1284.4	1338.4	1425.4	1560.8	1709.0	1920.6	2099.2	2225.0	2212.2
40°	1044.8	1049.8	1086.2	1124.8	1192.2	1299.0	1429.4	1611.0	1836.0	2031.2	2112.6
42.5°	903.8	916.4	926.6	963.4	1013.6	1087.4	1206.2	1348.6	1550.0	1782.0	1960.6
45°	800.8	813.4	823.0	847.8	886.0	940.0	1024.4	1161.8	1318.8	1550.6	1764.8
47.5°	729.6	728.4	736.6	756.2	783.6	826.8	889.2	980.6	1131.2	1325.0	1549.4
50°	652.0	662.2	664.8	679.4	699.8	729.6	779.2	854.2	972.4	1137.6	1339.8
52.5°	597.4	598.6	607.0	616.4	633.6	655.2	696.6	751.2	837.6	972.4	1154.2
55°	544.0	544.0	551.0	559.2	569.4	590.4	619.0	662.2	732.8	842.0	995.8
57.5°	494.4	497.0	503.4	505.2	514.2	528.8	553.6	587.8	641.8	730.2	857.4
60°	444.8	450.6	450.0	455.0	462.6	473.4	493.8	520.6	567.6	634.8	737.8
62.5°	401.6	399.8	399.8	406.2	413.8	424.0	435.4	457.6	495.8	553.6	637.4
65°	353.4	352.0	356.6	360.4	362.8	370.6	380.6	401.0	427.8	472.2	540.2
67.5°	311.4	307.6	310.8	312.0	316.4	322.8	333.0	345.8	367.4	404.8	459.4
70°	268.2	265.0	264.4	265.6	269.4	274.0	281.0	293.0	312.6	341.2	378.8
72.5°	223.8	221.8	221.8	225.0	226.2	228.8	233.2	244.0	258.6	278.4	312.6
75°	181.8	181.8	181.8	182.4	184.4	186.8	190.6	196.4	208.4	223.8	247.2
77.5°	143.6	144.2	143.0	142.4	145.6	146.8	147.4	153.8	160.8	172.2	190.6
80°	106.8	103.6	104.8	106.8	108.0	108.6	110.6	111.8	117.6	123.2	135.4
82.5°	72.4	70.0	70.0	73.0	73.0	73.8	75.6	77.6	78.8	83.8	89.0
85°	42.0	42.0	42.6	42.6	43.2	42.6	44.4	45.2	45.2	48.4	52.2
87.5°	19.0	17.8	18.4	19.0	18.4	19.0	19.8	20.4	21.0	21.6	22.2
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°	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8
2.5°	1362.6	1357.4	1352.4	1343.6	1335.8	1325.0	1322.0	1318.0	1306.6	1296.4	1288.8
5°	1435.0	1419.8	1397.6	1377.2	1360.6	1338.4	1325.8	1312.4	1293.4	1276.2	1262.2
7.5°	1504.4	1477.6	1446.4	1412.8	1380.4	1349.2	1324.4	1302.2	1277.4	1253.2	1234.8
10°	1590.2	1546.8	1498.6	1446.4	1402.0	1358.8	1322.6	1290.8	1256.4	1226.6	1201.8
12.5°	1688.0	1618.8	1547.6	1481.4	1426.8	1362.6	1316.8	1274.2	1234.2	1196.8	1168.2
15°	1761.0	1679.8	1601.0	1513.8	1433.8	1358.8	1306.6	1255.8	1210.6	1173.8	1138.2
17.5°	1833.6	1744.6	1644.2	1539.2	1445.2	1358.8	1287.6	1233.0	1177.6	1133.2	1098.8
20°	1893.2	1788.4	1670.8	1560.8	1454.0	1355.0	1274.8	1206.2	1145.2	1097.6	1057.6
22.5°	1944.8	1817.6	1695.0	1575.4	1453.4	1344.8	1251.4	1180.2	1112.8	1066.4	1023.2
25°	1977.2	1830.4	1708.4	1570.4	1437.6	1327.0	1225.4	1145.2	1079.2	1024.4	980.6
27.5°	2007.6	1828.4	1690.6	1541.8	1418.6	1308.6	1199.2	1113.4	1044.2	985.0	940.0
30°	2038.2	1831.6	1659.4	1512.6	1388.0	1273.6	1168.2	1081.6	1008.0	947.6	905.6
32.5°	2057.2	1829.6	1630.8	1471.8	1339.8	1241.8	1134.4	1044.2	968.0	908.8	868.8
35°	2062.4	1818.8	1597.0	1412.8	1287.0	1188.4	1098.8	1006.0	926.6	871.4	825.6
37.5°	2051.4	1799.2	1560.2	1359.4	1223.4	1125.6	1047.4	968.0	891.6	830.0	790.0
40°	2016.6	1780.2	1515.8	1302.2	1157.4	1063.8	999.6	922.2	847.2	789.4	752.4
42.5°	1949.8	1741.4	1466.8	1238.6	1088.6	995.2	937.4	875.8	805.8	752.4	715.6
45°	1832.8	1681.6	1417.8	1175.0	1021.4	924.6	872.6	825.6	761.4	708.6	676.8
47.5°	1683.6	1601.0	1347.4	1108.4	950.8	857.4	802.6	764.0	713.8	671.2	640.0
50°	1526.6	1496.6	1275.6	1039.8	880.2	789.4	737.2	702.8	669.2	626.6	598.6
52.5°	1345.4	1376.0	1191.6	968.6	808.4	719.4	671.2	645.8	615.8	582.8	559.2
55°	1177.6	1244.4	1092.4	887.2	737.2	652.0	605.6	581.6	563.8	537.6	516.6
57.5°	1015.0	1100.2	989.6	805.2	667.4	593.0	547.2	519.8	508.4	493.8	476.6
60°	873.2	957.2	877.6	722.6	596.8	526.8	487.4	465.2	453.8	444.2	430.2
62.5°	746.8	832.0	768.4	638.8	527.4	464.0	430.8	409.2	401.0	397.2	385.8
65°	633.0	706.0	661.6	551.0	462.0	404.8	373.6	358.4	350.2	348.2	340.6
67.5°	534.4	591.0	556.8	473.4	401.0	349.0	321.6	308.2	301.2	300.6	294.2
70°	437.8	490.0	465.2	391.4	331.2	292.4	269.4	258.0	254.2	253.6	250.4
72.5°	362.8	395.4	376.8	318.4	275.2	240.8	225.6	213.6	209.0	210.4	208.4
75°	279.6	307.0	295.6	253.0	215.4	192.6	178.6	171.0	167.2	169.0	166.6
77.5°	213.6	232.6	221.2	188.8	164.6	147.4	136.6	131.6	127.8	127.8	126.4
80°	151.8	162.0	156.4	138.6	119.4	105.4	97.2	94.0	92.2	91.6	90.8
82.5°	97.2	105.4	98.6	87.8	76.2	69.2	65.4	61.0	59.8	60.4	59.8
85°	54.6	57.8	55.2	47.6	42.6	38.8	36.2	34.4	33.0	33.6	32.4
87.5°	23.6	24.2	22.2	19.8	18.4	16.6	16.6	15.2	14.0	14.0	13.4
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°	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8	1311.8
2.5°	1284.4	1280.0	1273.6	1264.0	1256.4	1244.4	1244.4	1246.2	1246.2	1245.6	1244.4
5°	1250.8	1241.2	1229.8	1216.4	1202.4	1188.4	1186.0	1180.8	1177.0	1174.4	1171.2
7.5°	1216.4	1200.6	1184.6	1166.2	1150.4	1137.0	1127.4	1119.2	1114.0	1108.4	1104.0
10°	1181.4	1160.4	1140.8	1121.0	1099.4	1082.4	1071.6	1063.8	1058.2	1053.0	1050.6
12.5°	1140.2	1115.4	1093.2	1074.6	1050.6	1032.8	1022.6	1020.0	1013.0	1001.0	994.6
15°	1100.2	1077.8	1051.8	1023.2	1011.8	990.2	978.0	972.4	968.6	960.2	957.8
17.5°	1067.0	1037.2	1007.4	986.4	965.4	948.2	941.2	933.6	928.6	920.8	919.0
20°	1025.8	999.6	973.0	950.2	927.8	908.8	903.0	898.0	893.0	889.8	887.2
22.5°	983.8	957.8	936.8	915.8	891.6	880.8	874.4	868.8	865.6	863.6	861.2
25°	945.0	922.2	897.4	878.4	859.2	851.0	847.2	844.0	841.4	838.2	837.6
27.5°	910.8	885.2	864.4	845.8	832.0	825.0	820.4	818.6	818.6	819.8	820.4
30°	871.4	848.4	832.0	816.6	804.0	797.6	797.0	797.0	799.4	800.2	801.4
32.5°	835.0	817.2	800.8	786.2	777.2	773.4	776.6	776.6	778.6	780.4	783.0
35°	800.2	783.6	771.0	758.2	750.0	751.8	753.2	754.4	757.6	761.4	764.0
37.5°	767.0	751.8	738.4	728.4	723.2	727.0	730.2	732.8	736.6	739.8	742.4
40°	730.8	720.0	707.4	698.4	699.8	701.6	704.2	707.4	710.6	712.4	715.0
42.5°	697.2	685.8	676.8	669.8	671.8	674.4	675.6	676.8	680.6	684.4	685.8
45°	662.8	654.0	645.0	640.6	641.8	643.2	644.4	646.4	649.6	652.0	652.6
47.5°	624.0	617.8	612.0	607.0	609.4	608.8	610.8	614.6	615.8	617.2	621.0
50°	587.2	581.6	574.6	573.2	573.2	573.2	573.8	579.0	579.0	581.6	584.0
52.5°	546.6	543.4	539.6	537.0	535.8	535.8	539.0	540.8	542.2	546.0	548.4
55°	506.6	502.8	498.8	497.0	495.8	497.0	502.0	503.4	506.6	508.4	510.4
57.5°	464.6	462.0	458.8	457.6	457.6	458.2	462.0	465.2	465.8	472.2	474.8
60°	423.2	418.8	416.2	416.2	415.0	420.8	419.4	425.8	427.0	430.8	435.4
62.5°	380.6	374.4	373.6	373.6	376.2	376.8	379.4	381.4	385.2	390.2	393.4
65°	334.2	331.2	335.6	335.0	333.6	337.4	337.4	340.6	344.4	349.0	355.8
67.5°	291.0	288.6	289.8	289.2	291.0	293.6	295.6	298.0	302.6	307.6	312.0
70°	247.2	249.2	246.0	248.4	250.4	251.0	252.4	256.2	261.2	264.4	269.4
72.5°	204.6	204.0	205.2	206.0	207.8	209.0	210.4	214.8	220.6	223.0	226.8
75°	164.0	163.4	165.2	165.2	168.4	169.6	171.0	172.8	178.0	181.8	185.0
77.5°	127.2	127.8	127.2	129.6	128.4	129.0	132.8	134.8	135.4	143.6	145.0
80°	90.2	91.6	92.2	92.8	93.4	92.2	96.6	98.6	98.6	103.0	106.2
82.5°	58.4	59.2	61.0	61.6	61.6	63.6	63.0	64.2	66.0	67.4	71.8
85°	32.4	34.4	35.0	34.4	35.0	33.6	35.6	36.2	36.8	36.8	36.8
87.5°	12.8	13.4	12.8	13.4	12.8	13.4	13.4	12.0	12.0	14.0	11.4
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: P273749

CATALOG NUMBER: 8RCG-4-56D-L935-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1311.8	1311.8	1311.8	1311.8
2.5°	1240.0	1239.2	1243.8	1240.6
5°	1167.4	1169.4	1163.0	1163.0
7.5°	1102.0	1099.4	1100.2	1095.6
10°	1043.0	1039.0	1037.8	1038.4
12.5°	994.0	994.0	983.8	983.8
15°	957.8	945.6	944.4	948.2
17.5°	917.8	910.8	911.4	910.0
20°	887.2	883.4	882.8	878.4
22.5°	859.2	858.6	859.2	854.2
25°	837.0	840.2	837.6	837.6
27.5°	821.8	821.8	819.8	819.8
30°	804.0	803.4	804.6	804.6
32.5°	786.2	787.4	787.4	788.0
35°	767.8	768.4	770.2	769.0
37.5°	743.6	746.8	746.2	747.4
40°	715.6	717.6	716.8	716.8
42.5°	687.0	688.2	686.4	685.2
45°	655.2	654.0	655.8	653.4
47.5°	620.2	621.0	621.6	624.0
50°	585.4	589.2	589.2	588.6
52.5°	551.0	552.2	555.4	555.4
55°	515.4	516.6	518.0	518.6
57.5°	479.2	478.6	481.0	481.8
60°	440.4	440.4	445.6	447.4
62.5°	399.2	401.6	406.8	403.0
65°	359.0	364.2	363.6	366.0
67.5°	317.2	320.4	325.4	325.4
70°	274.6	277.8	280.2	282.2
72.5°	233.2	234.6	241.6	237.6
75°	189.4	193.8	197.6	195.8
77.5°	147.4	153.2	154.4	152.6
80°	110.6	110.0	113.8	113.2
82.5°	73.8	73.0	74.4	75.0
85°	39.4	41.4	38.8	38.2
87.5°	11.4	11.4	10.8	10.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)