

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: P273746

Luminaire Tested: **8RCG-4-56D-L930-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P273746
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-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

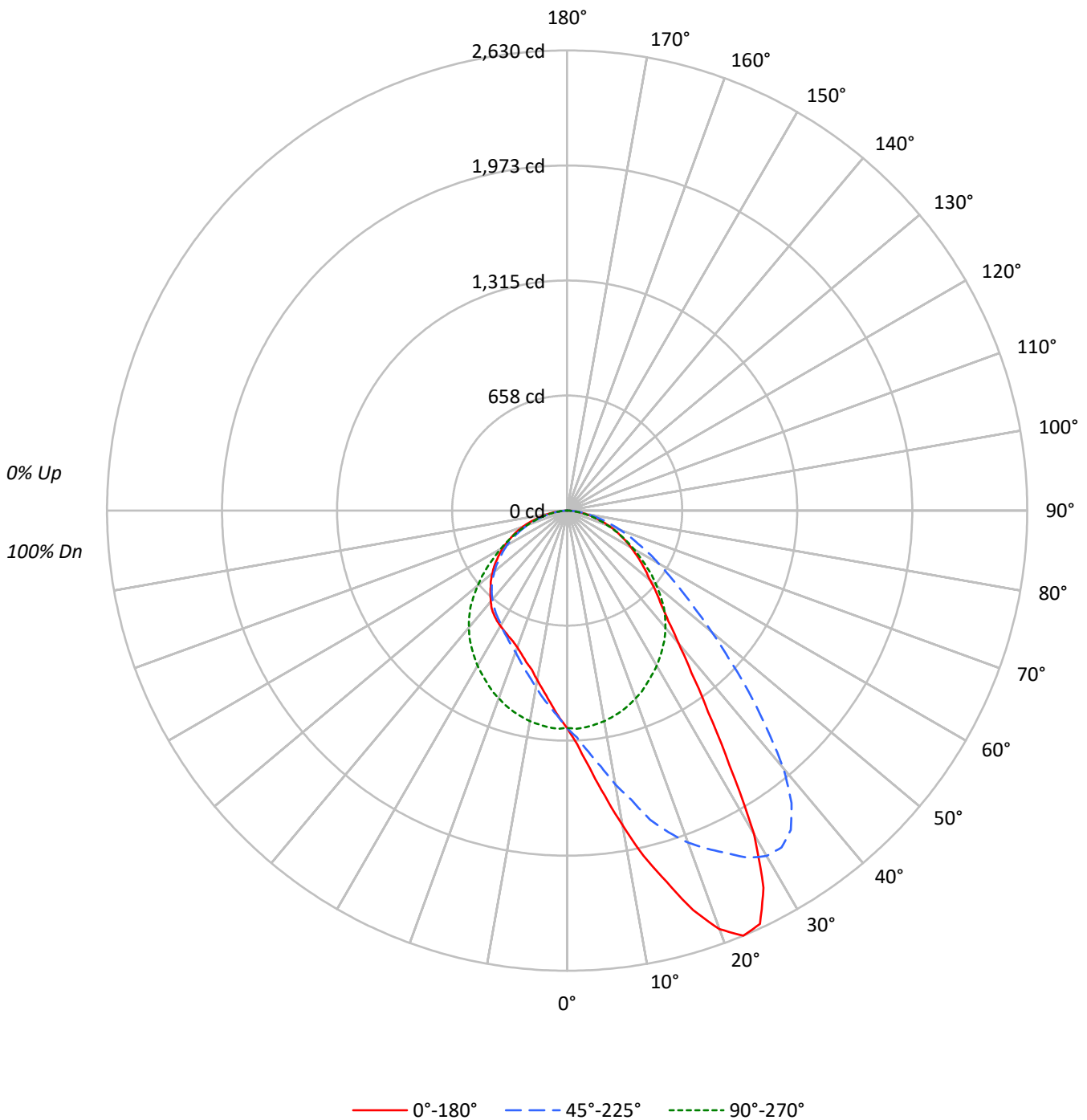
Lumens per Lamp: N/A
Luminaire Lumens: 3749.0 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Spacing Criteria (0/90/45): 1.37 / 1.23 / 1.5
Luminous Opening: Rectangular (W 7.88' x L: 0.23' x H: 0')
CIE Type: Direct

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	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°	7409	7409	7409
5°	8835	7441	6593
10°	11058	7402	5956
15°	13564	7343	5544
20°	16157	7250	5278
25°	17157	7136	5220
30°	14705	7054	5247
35°	10227	6936	5302
40°	7703	6799	5285
45°	6395	6594	5218
50°	5729	6176	5170
55°	5357	5725	5106
60°	5024	5256	5053
65°	4722	4790	4892
70°	4429	4262	4660
75°	3968	3729	4272
80°	3476	3057	3682
85°	2724	2217	2477



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.2	3.3
10°-20°	392.4	10.5
20°-30°	660.2	17.6
30°-40°	746.1	19.9
40°-50°	668.3	17.8
50°-60°	539.4	14.4
60°-70°	375.9	10.0
70°-80°	197.3	5.3
80°-90°	47.3	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°	1174.7	31.3
0°-40°	1920.9	51.2
0°-60°	3128.6	83.5
0°-90°	3749.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3749.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1242	1242	1242	1242	1242	
5°	1476	1383	1243	1125	1101	152
15°	2197	1828	1189	938	898	634
25°	2607	2160	1084	806	793	1153
35°	1405	2228	953	712	728	906
45°	758	1468	782	609	619	598
55°	515	797	551	471	491	462
65°	335	447	339	320	347	333
75°	172	212	162	161	185	184
85°	40	46	32	32	36	48
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°	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2
2.5°	1337.2	1336.0	1333.0	1335.4	1330.6	1324.0	1323.4	1317.4	1299.8	1298.6	1293.8
5°	1475.6	1470.8	1470.2	1469.6	1461.2	1449.8	1428.0	1426.2	1397.4	1383.0	1365.4
7.5°	1643.0	1641.2	1636.2	1630.8	1602.6	1588.8	1568.2	1541.8	1508.2	1475.6	1455.2
10°	1825.8	1845.8	1821.0	1804.2	1788.6	1759.0	1724.8	1682.0	1639.4	1589.4	1551.4
12.5°	2022.0	2029.2	2029.2	2013.6	1987.2	1938.4	1871.0	1822.8	1784.4	1692.8	1660.4
15°	2196.6	2233.2	2209.8	2155.6	2156.8	2114.2	2034.6	1947.4	1901.0	1828.2	1729.0
17.5°	2394.0	2400.6	2393.4	2342.8	2318.2	2256.2	2184.6	2103.2	2016.0	1927.6	1824.6
20°	2545.6	2542.0	2521.0	2497.4	2445.8	2400.0	2320.0	2226.6	2106.2	2019.6	1904.6
22.5°	2629.8	2623.2	2616.0	2597.4	2556.4	2506.4	2436.6	2332.6	2219.4	2091.8	1954.6
25°	2607.0	2614.8	2616.0	2610.6	2595.6	2566.0	2509.6	2428.2	2314.0	2160.4	2022.0
27.5°	2430.0	2450.0	2475.2	2492.0	2519.2	2537.2	2519.2	2468.0	2374.0	2236.8	2066.6
30°	2135.2	2111.2	2170.6	2246.0	2297.0	2387.4	2437.8	2440.8	2393.4	2279.6	2114.8
32.5°	1726.0	1765.0	1783.2	1880.0	2007.0	2111.2	2224.2	2324.8	2348.2	2282.0	2143.0
35°	1404.6	1437.6	1485.8	1534.0	1654.4	1757.8	1934.8	2088.8	2211.6	2227.8	2139.4
37.5°	1167.4	1186.8	1216.2	1267.4	1349.8	1478.0	1618.2	1818.6	1987.8	2106.8	2094.8
40°	989.4	994.2	1028.4	1065.2	1129.0	1230.0	1353.4	1525.6	1738.6	1923.4	2000.4
42.5°	855.8	867.8	877.4	912.4	959.8	1029.6	1142.2	1277.0	1467.8	1687.4	1856.6
45°	758.2	770.4	779.4	802.8	839.0	890.0	970.2	1100.0	1248.8	1468.4	1671.2
47.5°	690.8	689.6	697.4	716.2	742.0	783.0	842.0	928.6	1071.2	1254.8	1467.2
50°	617.4	627.0	629.4	643.4	662.6	690.8	737.8	808.8	920.8	1077.2	1268.6
52.5°	565.6	566.8	574.8	583.8	600.0	620.4	659.6	711.4	793.2	920.8	1092.8
55°	515.2	515.2	521.8	529.6	539.2	559.0	586.2	627.0	693.8	797.4	943.0
57.5°	468.2	470.6	476.6	478.4	486.8	500.6	524.2	556.6	607.8	691.4	811.8
60°	421.2	426.6	426.0	430.8	438.2	448.4	467.6	492.8	537.4	601.2	698.6
62.5°	380.4	378.6	378.6	384.6	391.8	401.4	412.2	433.2	469.4	524.2	603.6
65°	334.6	333.4	337.6	341.2	343.6	350.8	360.4	379.8	405.0	447.2	511.6
67.5°	294.8	291.2	294.2	295.4	299.6	305.8	315.4	327.4	347.8	383.4	435.2
70°	254.0	251.0	250.4	251.6	255.2	259.4	266.0	277.4	296.0	323.2	358.6
72.5°	211.8	210.0	210.0	213.0	214.2	216.6	220.8	231.0	245.0	263.6	296.0
75°	172.2	172.2	172.2	172.8	174.6	177.0	180.6	186.0	197.4	211.8	234.0
77.5°	136.0	136.6	135.4	134.8	137.8	139.0	139.6	145.6	152.2	163.0	180.6
80°	101.2	98.0	99.2	101.2	102.4	103.0	104.8	106.0	111.4	116.8	128.2
82.5°	68.6	66.2	66.2	69.2	69.2	69.8	71.6	73.4	74.6	79.4	84.2
85°	39.8	39.8	40.4	40.4	41.0	40.4	42.2	42.8	42.8	45.8	49.4
87.5°	18.0	16.8	17.4	18.0	17.4	18.0	18.6	19.2	19.8	20.4	21.0
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°	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2
2.5°	1290.2	1285.4	1280.6	1272.2	1265.0	1254.8	1251.8	1248.2	1237.2	1227.6	1220.4
5°	1358.8	1344.4	1323.4	1304.0	1288.4	1267.4	1255.4	1242.8	1224.6	1208.4	1195.2
7.5°	1424.4	1399.2	1369.6	1337.8	1307.2	1277.6	1254.2	1233.0	1209.6	1186.8	1169.2
10°	1505.8	1464.8	1419.0	1369.6	1327.6	1286.6	1252.4	1222.2	1189.8	1161.4	1138.0
12.5°	1598.4	1532.8	1465.4	1402.8	1351.0	1290.2	1247.0	1206.6	1168.6	1133.2	1106.2
15°	1667.6	1590.6	1516.0	1433.4	1357.6	1286.6	1237.2	1189.2	1146.4	1111.6	1077.8
17.5°	1736.2	1652.0	1556.8	1457.6	1368.4	1286.6	1219.2	1167.4	1115.2	1073.0	1040.6
20°	1792.8	1693.4	1582.2	1478.0	1377.0	1283.0	1207.2	1142.2	1084.4	1039.4	1001.4
22.5°	1841.6	1721.2	1605.0	1491.8	1376.4	1273.4	1185.0	1117.6	1053.8	1009.8	968.8
25°	1872.2	1733.2	1617.6	1487.0	1361.2	1256.6	1160.2	1084.4	1021.8	970.2	928.6
27.5°	1901.0	1731.4	1600.8	1460.0	1343.2	1239.2	1135.6	1054.4	988.8	932.8	890.0
30°	1930.0	1734.4	1571.2	1432.2	1314.4	1206.0	1106.2	1024.2	954.4	897.2	857.6
32.5°	1948.0	1732.6	1544.2	1393.8	1268.6	1176.0	1074.2	988.8	916.6	860.6	822.6
35°	1952.8	1722.4	1512.4	1337.8	1218.6	1125.4	1040.6	952.6	877.4	825.0	781.8
37.5°	1942.6	1703.6	1477.4	1287.2	1158.4	1065.8	991.8	916.6	844.4	786.0	748.0
40°	1909.6	1685.6	1435.2	1233.0	1095.8	1007.4	946.6	873.2	802.2	747.4	712.6
42.5°	1846.4	1649.0	1389.0	1173.0	1030.8	942.4	887.6	829.2	763.0	712.6	677.6
45°	1735.6	1592.4	1342.6	1112.8	967.0	875.6	826.2	781.8	721.0	671.0	641.0
47.5°	1594.2	1516.0	1275.8	1049.6	900.2	811.8	760.0	723.4	675.8	635.6	606.0
50°	1445.6	1417.2	1207.8	984.6	833.4	747.4	698.0	665.6	633.6	593.4	566.8
52.5°	1274.0	1302.8	1128.4	917.2	765.4	681.2	635.6	611.4	583.2	551.8	529.6
55°	1115.2	1178.4	1034.4	840.2	698.0	617.4	573.6	550.6	533.8	509.2	489.2
57.5°	961.0	1041.8	937.0	762.4	631.8	561.4	518.2	492.2	481.4	467.6	451.4
60°	826.8	906.4	831.0	684.2	565.0	498.8	461.6	440.6	429.6	420.6	407.4
62.5°	707.2	787.8	727.6	604.8	499.4	439.4	408.0	387.6	379.8	376.2	365.2
65°	599.4	668.6	626.4	521.8	437.6	383.4	353.8	339.4	331.6	329.8	322.6
67.5°	506.2	559.6	527.2	448.4	379.8	330.4	304.6	291.8	285.2	284.6	278.6
70°	414.6	464.0	440.6	370.8	313.6	276.8	255.2	244.4	240.8	240.2	237.2
72.5°	343.6	374.4	356.8	301.6	260.6	228.0	213.6	202.2	198.0	199.2	197.4
75°	264.8	290.6	279.8	239.6	204.0	182.4	169.2	161.8	158.2	160.0	157.6
77.5°	202.2	220.2	209.4	178.8	155.8	139.6	129.4	124.6	121.0	121.0	119.8
80°	143.8	153.4	148.0	131.2	113.2	99.8	92.0	89.0	87.2	86.6	86.0
82.5°	92.0	99.8	93.2	83.0	72.2	65.6	62.0	57.8	56.6	57.2	56.6
85°	51.8	54.8	52.4	45.2	40.4	36.8	34.4	32.4	31.2	31.8	30.6
87.5°	22.2	22.8	21.0	18.6	17.4	15.6	15.6	14.4	13.2	13.2	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



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CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2	1242.2
2.5°	1216.2	1212.0	1206.0	1197.0	1189.8	1178.4	1178.4	1180.2	1180.2	1179.6	1178.4
5°	1184.4	1175.4	1164.4	1151.8	1138.6	1125.4	1123.0	1118.2	1114.6	1112.2	1109.2
7.5°	1151.8	1136.8	1121.8	1104.4	1089.2	1076.6	1067.6	1059.8	1055.0	1049.6	1045.4
10°	1118.8	1098.8	1080.2	1061.6	1041.2	1024.8	1014.6	1007.4	1002.0	997.2	994.8
12.5°	1079.6	1056.2	1035.0	1017.6	994.8	978.0	968.2	965.8	959.2	947.8	941.8
15°	1041.8	1020.6	996.0	968.8	958.0	937.6	926.2	920.8	917.2	909.4	907.0
17.5°	1010.4	982.2	953.8	934.0	914.2	897.8	891.2	884.0	879.2	872.0	870.2
20°	971.4	946.6	921.4	899.6	878.6	860.6	855.2	850.4	845.6	842.6	840.2
22.5°	931.6	907.0	887.0	867.2	844.4	834.0	828.0	822.6	819.6	817.8	815.4
25°	894.8	873.2	849.8	831.6	813.6	805.8	802.2	799.2	796.8	793.8	793.2
27.5°	862.4	838.4	818.4	801.0	787.8	781.2	777.0	775.2	775.2	776.4	777.0
30°	825.0	803.4	787.8	773.4	761.2	755.2	754.6	754.6	757.0	757.6	758.8
32.5°	790.8	774.0	758.2	744.4	736.0	732.4	735.4	735.4	737.2	739.0	741.4
35°	757.6	742.0	730.0	718.0	710.2	712.0	713.2	714.4	717.4	721.0	723.4
37.5°	726.4	712.0	699.2	689.6	684.8	688.4	691.4	693.8	697.4	700.4	703.0
40°	692.0	681.8	669.8	661.4	662.6	664.4	666.8	669.8	672.8	674.6	677.0
42.5°	660.2	649.4	641.0	634.2	636.2	638.6	639.8	641.0	644.6	648.2	649.4
45°	627.6	619.2	610.8	606.6	607.8	609.0	610.2	612.0	615.0	617.4	618.0
47.5°	591.0	585.0	579.6	574.8	577.2	576.6	578.4	582.0	583.2	584.4	588.0
50°	556.0	550.6	544.0	542.8	542.8	542.8	543.4	548.2	548.2	550.6	553.0
52.5°	517.6	514.6	511.0	508.6	507.4	507.4	510.4	512.2	513.4	517.0	519.4
55°	479.6	476.0	472.4	470.6	469.4	470.6	475.4	476.6	479.6	481.4	483.2
57.5°	440.0	437.6	434.4	433.2	433.2	433.8	437.6	440.6	441.2	447.2	449.6
60°	400.8	396.6	394.2	394.2	393.0	398.4	397.2	403.2	404.4	408.0	412.2
62.5°	360.4	354.4	353.8	353.8	356.2	356.8	359.2	361.0	364.6	369.6	372.6
65°	316.6	313.6	317.8	317.2	316.0	319.6	319.6	322.6	326.2	330.4	337.0
67.5°	275.6	273.2	274.4	273.8	275.6	278.0	279.8	282.2	286.4	291.2	295.4
70°	234.0	236.0	232.8	235.4	237.2	237.8	239.0	242.6	247.4	250.4	255.2
72.5°	193.8	193.2	194.4	195.0	196.8	198.0	199.2	203.4	208.8	211.2	214.8
75°	155.2	154.6	156.4	156.4	159.4	160.6	161.8	163.6	168.6	172.2	175.2
77.5°	120.4	121.0	120.4	122.8	121.6	122.2	125.8	127.6	128.2	136.0	137.2
80°	85.4	86.6	87.2	87.8	88.4	87.2	91.4	93.2	93.2	97.4	100.6
82.5°	55.4	56.0	57.8	58.4	58.4	60.2	59.6	60.8	62.6	63.8	68.0
85°	30.6	32.4	33.0	32.4	33.0	31.8	33.8	34.4	35.0	35.0	35.0
87.5°	12.0	12.6	12.0	12.6	12.0	12.6	12.6	11.4	11.4	13.2	10.8
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: P273746

CATALOG NUMBER: 8RCG-4-56D-L930-A

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1242.2	1242.2	1242.2	1242.2
2.5°	1174.2	1173.6	1177.8	1174.8
5°	1105.6	1107.4	1101.2	1101.2
7.5°	1043.6	1041.2	1041.8	1037.6
10°	987.6	984.0	982.8	983.4
12.5°	941.2	941.2	931.6	931.6
15°	907.0	895.4	894.2	897.8
17.5°	869.0	862.4	863.0	861.8
20°	840.2	836.6	835.8	831.6
22.5°	813.6	813.0	813.6	808.8
25°	792.6	795.6	793.2	793.2
27.5°	778.2	778.2	776.4	776.4
30°	761.2	760.6	761.8	761.8
32.5°	744.4	745.6	745.6	746.2
35°	727.0	727.6	729.4	728.2
37.5°	704.2	707.2	706.6	707.8
40°	677.6	679.4	678.8	678.8
42.5°	650.6	651.8	650.0	648.8
45°	620.4	619.2	621.0	618.6
47.5°	587.4	588.0	588.6	591.0
50°	554.2	557.8	557.8	557.2
52.5°	521.8	523.0	526.0	526.0
55°	488.0	489.2	490.4	491.0
57.5°	453.8	453.2	455.6	456.2
60°	417.0	417.0	421.8	423.6
62.5°	378.0	380.4	385.2	381.6
65°	340.0	344.8	344.2	346.6
67.5°	300.2	303.4	308.2	308.2
70°	260.0	263.0	265.4	267.2
72.5°	220.8	222.0	228.6	225.0
75°	179.4	183.6	187.2	185.4
77.5°	139.6	145.0	146.2	144.4
80°	104.8	104.2	107.8	107.2
82.5°	69.8	69.2	70.4	71.0
85°	37.4	39.2	36.8	36.2
87.5°	10.8	10.8	10.2	9.6
90°	0.0	0.0	0.0	0.0

(END OF REPORT)