

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: A1706983B001(277V)

Luminaire Tested: **22RTC4835**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: A1706983B001(277V)
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA A1706983B001
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22RTC4835
Description:
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: 4670.646 (1 lamp)
Luminaire Lumens: 4670.6 lumens
Efficiency: 100.0%
Efficacy: 128.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

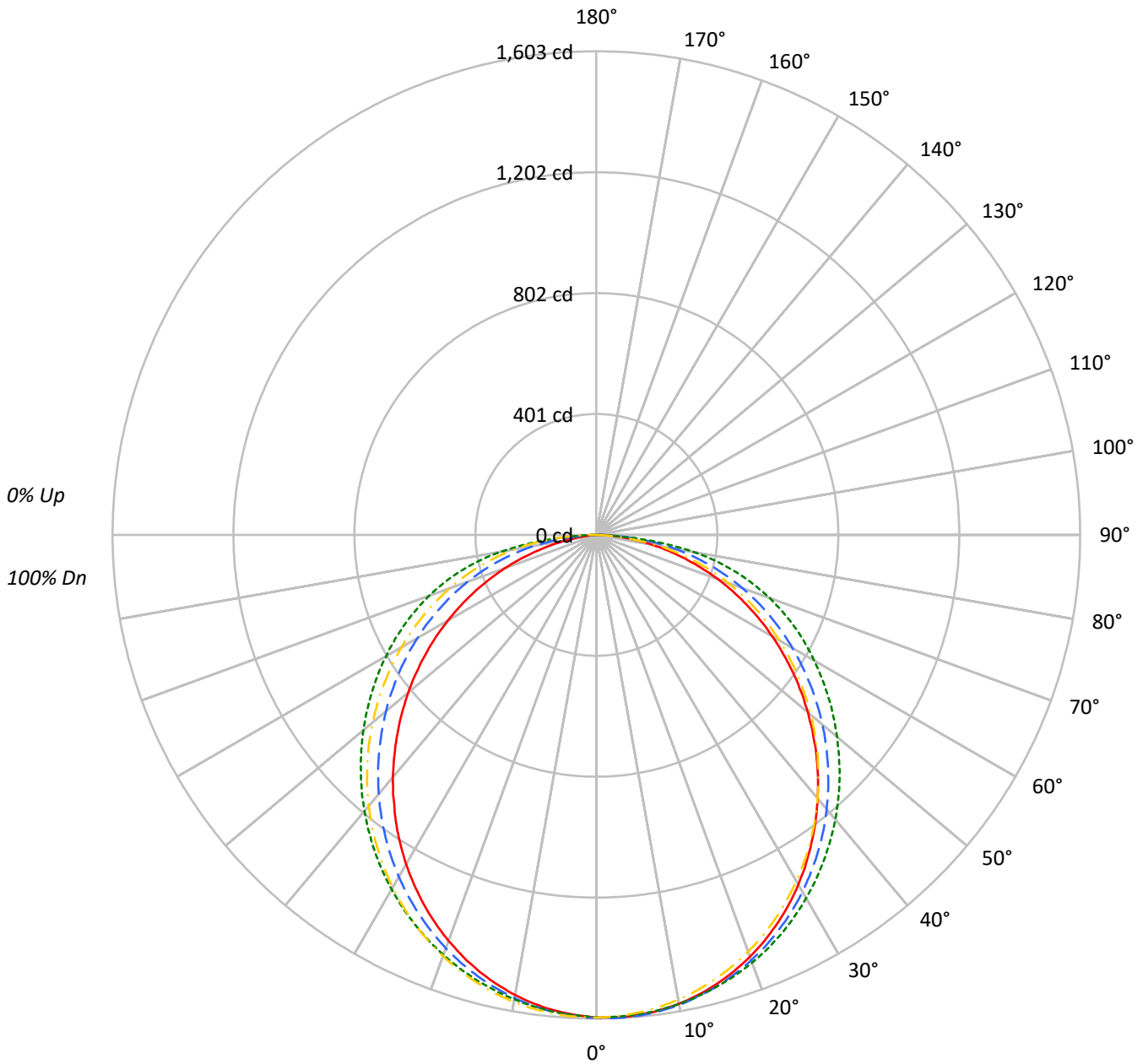
Input Watts (W): 36.345
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: A1706983B001(277V)

CATALOG NUMBER: 22RTC4835

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270° - - - 135°-315°



TEST NUMBER: A1706983B001(277V)

CATALOG NUMBER: 22RTC4835

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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	90	82	76	95	88	81	76	84	79	74	81	76	72	78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	49
5	75	62	53	46	73	61	52	46	58	51	45	56	50	45	55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	37
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	36	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	5142	5142	5142	5142
5°	5155	5146	5106	5121
10°	5149	5152	5055	5102
15°	5127	5155	4987	5086
20°	5090	5161	4896	5067
25°	5035	5164	4794	5049
30°	4967	5158	4677	5035
35°	4879	5161	4546	5024
40°	4786	5166	4403	5017
45°	4686	5180	4239	5016
50°	4579	5210	4069	5038
55°	4453	5257	3870	5084
60°	4329	5359	3649	5164
65°	4190	5521	3380	5319
70°	4021	5741	3026	5536
75°	3798	5973	2517	5801
80°	3456	6097	1760	5932
85°	3039	5001	752	4927



TEST NUMBER: A1706983B001(277V)

CATALOG NUMBER: 22RTC4835

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	90°	180°	270°	360°	Flux
0°-10°	151.2	3.2	3.2	0°	1600	1600	1600	1600	1600	
10°-20°	431.7	9.2	9.2	5°	1598	1595	1582	1587	1598	152
20°-30°	651.3	13.9	13.9	15°	1541	1549	1499	1528	1541	435
30°-40°	782.1	16.7	16.7	25°	1420	1456	1352	1424	1420	654
40°-50°	812.1	17.4	17.4	35°	1243	1315	1159	1280	1243	778
50°-60°	745.7	16.0	16.0	45°	1031	1140	932	1104	1031	795
60°-70°	598.5	12.8	12.8	55°	795	938	691	907	795	711
70°-80°	384.2	8.2	8.2	65°	551	726	444	699	551	545
80°-90°	113.9	2.4	2.4	75°	306	481	203	467	306	322
90°-100°	0.0	0.0	0.0	85°	82	136	20	134	82	97
100°-110°	0.0	0.0	0.0	90°	13	0	0	0	13	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	1234.2	26.4	26.4							
0°-40°	2016.3	43.2	43.2							
0°-60°	3574.0	76.5	76.5							
0°-90°	4670.6	100.0	100.0							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	4670.6	100.0	100.0							



TEST NUMBER: A1706983B001(277V)

CATALOG NUMBER: 22RTC4835

CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	1599.8	1599.8	1599.8	1599.8	1599.8	1599.8	1599.8	1599.8	1599.8	1599.8	1599.8
1°	1600.1	1604.0	1601.5	1598.4	1598.2	1598.8	1597.0	1601.0	1599.6	1596.7	1598.8
2°	1600.5	1604.1	1601.5	1598.5	1597.3	1597.2	1594.5	1598.4	1597.4	1595.1	1597.9
3°	1600.3	1603.9	1601.3	1597.9	1595.6	1594.7	1591.1	1595.6	1594.9	1593.0	1596.6
4°	1599.4	1602.6	1600.2	1596.7	1593.8	1592.0	1587.1	1592.0	1591.9	1590.6	1594.6
5°	1597.6	1601.1	1598.5	1595.0	1590.8	1588.1	1582.5	1587.9	1588.5	1587.2	1592.2
6°	1595.0	1598.2	1596.6	1592.8	1587.5	1583.8	1577.2	1582.8	1584.2	1583.6	1589.2
7°	1592.1	1595.5	1593.3	1590.1	1583.1	1578.8	1571.2	1577.0	1579.3	1579.1	1585.4
8°	1587.5	1591.3	1590.2	1586.8	1579.0	1573.2	1564.4	1570.9	1573.9	1574.8	1581.3
9°	1583.3	1587.2	1586.0	1582.8	1573.5	1567.0	1556.9	1564.1	1568.1	1569.1	1576.4
10°	1577.5	1581.5	1581.8	1578.6	1568.4	1560.1	1548.8	1556.6	1561.4	1563.2	1571.3
11°	1572.0	1576.2	1576.0	1573.4	1561.8	1552.3	1540.0	1548.2	1554.5	1557.2	1565.3
12°	1564.6	1569.1	1570.3	1568.2	1555.0	1544.2	1529.6	1538.5	1546.9	1550.7	1558.9
13°	1558.0	1562.6	1564.0	1562.1	1547.8	1535.4	1520.5	1529.9	1538.7	1543.5	1552.0
14°	1549.3	1554.3	1557.0	1555.9	1539.9	1526.1	1508.8	1519.0	1530.2	1535.5	1544.6
15°	1540.7	1546.0	1549.8	1549.2	1531.9	1516.0	1498.6	1509.3	1520.4	1528.5	1536.1
16°	1531.3	1537.1	1541.9	1542.2	1523.1	1505.3	1485.5	1496.9	1512.1	1519.5	1527.7
17°	1521.4	1527.4	1533.7	1534.7	1514.1	1494.1	1474.1	1486.1	1501.4	1511.3	1518.8
18°	1510.9	1517.1	1524.9	1526.2	1504.6	1482.3	1459.6	1472.8	1492.1	1501.0	1509.7
19°	1499.7	1506.5	1515.7	1517.6	1494.5	1469.9	1445.7	1459.6	1480.2	1492.2	1500.0
20°	1488.0	1495.0	1505.9	1508.8	1483.6	1457.0	1431.4	1446.3	1470.0	1481.4	1489.6
21°	1475.4	1483.1	1495.3	1499.0	1472.7	1443.7	1416.5	1432.1	1456.9	1470.3	1478.9
22°	1462.6	1470.8	1484.4	1489.1	1461.0	1428.6	1401.2	1417.8	1444.6	1460.1	1467.6
23°	1448.9	1457.5	1473.1	1478.5	1448.7	1415.4	1385.2	1402.7	1432.1	1448.1	1456.0
24°	1434.7	1444.2	1461.3	1466.4	1435.8	1399.3	1368.8	1387.5	1418.8	1436.0	1443.7
25°	1419.8	1430.1	1447.7	1456.1	1422.7	1384.0	1351.7	1371.7	1405.2	1423.8	1431.1
26°	1404.7	1415.3	1436.2	1442.6	1409.4	1368.4	1334.4	1355.3	1391.3	1411.0	1418.2
27°	1388.9	1400.5	1421.4	1431.3	1395.5	1352.0	1316.6	1338.8	1376.8	1398.3	1404.7
28°	1372.7	1384.8	1407.7	1417.1	1379.5	1335.0	1298.2	1321.6	1362.1	1384.9	1391.0
29°	1355.7	1368.7	1393.7	1404.8	1366.1	1318.0	1279.3	1304.0	1346.8	1370.7	1376.7
30°	1338.4	1352.4	1378.9	1389.7	1349.3	1300.5	1260.2	1286.3	1331.3	1356.5	1362.2
31°	1319.1	1334.1	1363.6	1375.8	1335.1	1282.6	1240.5	1267.7	1315.5	1342.2	1345.7
32°	1302.5	1318.2	1348.0	1361.4	1317.5	1264.3	1220.6	1249.0	1299.1	1327.4	1331.7
33°	1282.2	1298.6	1332.1	1346.1	1302.5	1245.2	1200.3	1230.1	1282.3	1311.7	1314.6
34°	1263.0	1281.9	1315.6	1330.6	1284.2	1225.9	1179.6	1210.6	1265.7	1296.3	1300.0
35°	1243.4	1261.8	1299.0	1315.3	1268.5	1206.5	1158.6	1190.6	1248.3	1280.5	1281.9
36°	1223.5	1244.6	1281.8	1298.9	1249.4	1186.8	1137.3	1169.1	1231.0	1264.1	1266.6
37°	1203.3	1223.6	1264.6	1282.7	1231.6	1166.8	1113.5	1148.7	1213.0	1246.1	1248.1
38°	1183.0	1205.5	1246.7	1265.8	1213.5	1146.4	1093.7	1128.0	1194.8	1230.7	1232.2
39°	1161.9	1183.6	1228.6	1248.9	1194.7	1125.4	1069.7	1107.0	1176.5	1212.3	1212.7
40°	1140.7	1163.4	1210.1	1231.3	1176.2	1102.6	1049.4	1086.0	1156.0	1195.8	1194.7
41°	1119.1	1142.6	1191.4	1213.6	1157.1	1083.2	1024.7	1064.6	1138.6	1177.2	1176.5
42°	1097.5	1121.8	1172.4	1195.1	1137.7	1059.8	1001.9	1042.9	1117.8	1160.5	1158.0
43°	1075.5	1100.5	1153.0	1177.1	1118.0	1039.9	978.9	1021.1	1100.0	1141.1	1139.2
44°	1053.2	1079.0	1131.6	1158.4	1098.2	1015.8	955.8	999.0	1078.4	1122.7	1120.0



TEST NUMBER: A1706983B001(277V)

CATALOG NUMBER: 22RTC4835

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	1030.8	1057.3	1113.3	1139.5	1077.8	995.6	932.5	976.8	1060.2	1103.6	1100.7
46°	1008.1	1035.5	1091.5	1120.3	1057.6	971.2	909.0	954.4	1038.4	1085.0	1081.0
47°	983.2	1013.2	1072.9	1099.4	1037.2	949.0	885.4	931.8	1018.0	1065.7	1061.2
48°	962.3	990.8	1050.5	1081.4	1016.4	926.0	861.6	909.4	997.6	1046.9	1041.1
49°	936.9	968.1	1031.5	1060.0	995.5	903.3	837.6	886.6	977.0	1027.0	1020.8
50°	915.7	945.4	1008.6	1041.9	974.4	880.2	813.8	863.5	956.5	1007.5	1000.4
51°	889.9	920.7	989.3	1020.0	953.2	857.2	789.7	840.6	935.3	987.8	979.8
52°	868.5	899.6	966.0	1001.5	931.8	834.0	765.7	817.4	914.1	967.9	959.2
53°	842.6	874.2	944.7	979.1	908.4	810.6	739.3	792.1	892.8	948.0	938.4
54°	820.9	853.2	922.9	960.7	888.7	787.2	717.1	770.9	871.8	927.7	917.4
55°	794.7	827.7	901.2	938.1	865.0	763.6	690.6	745.6	850.5	907.3	896.1
56°	770.6	804.2	879.2	917.6	845.2	740.2	668.3	724.2	829.0	887.1	873.0
57°	746.5	780.7	857.3	896.9	821.3	716.6	641.7	698.7	807.2	867.0	853.6
58°	722.2	757.0	835.1	875.9	801.2	692.9	619.3	677.3	785.6	846.5	830.2
59°	697.9	733.3	813.0	855.0	777.1	669.1	592.3	651.4	763.9	826.0	810.5
60°	673.5	709.4	790.7	833.7	755.0	645.3	567.7	627.8	742.1	803.3	787.0
61°	649.0	685.6	768.3	812.7	732.8	621.4	543.2	604.3	720.3	784.9	767.3
62°	624.7	661.7	745.9	791.2	710.5	597.7	518.5	580.7	698.5	762.2	743.7
63°	600.0	637.8	723.2	769.7	687.7	573.7	493.8	557.0	674.3	743.3	722.0
64°	575.5	613.9	700.5	747.9	665.0	549.8	469.1	533.3	652.1	720.6	700.0
65°	550.9	589.7	677.6	726.0	642.0	523.7	444.4	509.5	630.0	699.4	678.0
66°	526.3	565.7	654.6	703.6	619.0	501.9	419.8	485.8	607.3	678.1	655.8
67°	501.7	541.7	631.5	679.2	595.4	475.8	395.3	462.1	585.0	656.0	633.8
68°	477.1	517.7	608.0	658.1	571.9	454.0	370.6	438.3	562.2	634.3	611.4
69°	452.3	493.6	582.0	632.6	545.8	427.8	346.1	414.8	539.2	611.8	588.8
70°	427.9	469.5	560.3	610.9	523.8	405.8	322.0	391.0	515.8	589.1	565.9
71°	403.3	445.3	533.9	584.2	497.0	379.5	297.8	367.2	492.3	566.1	543.0
72°	376.4	419.2	511.7	559.4	474.1	355.6	273.9	343.5	468.4	541.8	519.8
73°	354.2	397.2	484.4	533.9	446.5	331.7	250.0	319.9	444.3	517.9	496.2
74°	327.7	370.9	461.4	507.8	423.2	307.7	221.7	296.3	419.6	493.0	472.2
75°	305.8	349.0	433.4	481.0	394.6	283.7	202.7	272.9	394.8	467.1	448.0
76°	279.6	322.6	407.6	453.5	370.5	259.9	180.1	249.4	369.4	440.2	423.4
77°	258.0	301.0	381.2	424.8	340.4	236.2	158.2	221.2	343.3	413.1	398.2
78°	232.4	274.9	354.5	396.0	312.4	213.1	135.0	200.4	316.4	382.9	370.3
79°	211.5	253.3	326.5	365.5	283.5	190.0	116.3	179.9	289.2	356.2	346.0
80°	186.7	227.7	298.3	329.4	250.4	167.3	95.1	155.8	261.1	320.5	316.6
81°	165.1	205.0	270.7	292.0	208.3	145.5	77.6	135.1	227.1	285.3	289.5
82°	142.1	180.6	236.0	251.6	181.2	122.0	61.3	114.5	193.9	249.5	261.3
83°	121.7	158.5	199.5	213.9	148.5	100.3	45.1	92.2	160.7	208.5	228.6
84°	101.0	135.3	166.5	173.8	113.9	74.6	31.7	70.0	125.7	171.5	193.0
85°	82.4	113.7	133.7	135.6	80.3	53.3	20.4	48.6	93.0	133.6	159.3
86°	65.3	92.1	101.4	97.4	51.6	30.4	10.8	28.2	61.4	94.8	123.6
87°	53.6	68.8	68.5	65.7	26.8	13.7	4.1	12.4	34.1	65.2	90.3
88°	34.7	53.5	40.4	32.8	3.3	1.3	0.0	1.5	10.8	32.2	60.0
89°	22.9	26.5	16.2	1.8	0.0	0.0	0.0	0.0	0.1	4.4	34.1



TEST NUMBER: A1706983B001(277V)

CATALOG NUMBER: 22RTC4835

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
90°	13.4	10.8	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0



TEST NUMBER: A1706983B001(277V)

CATALOG NUMBER: 22RTC4835

CANDELA DISTRIBUTION (continued):

	330°	360°
0°	1599.8	1599.8
1°	1600.1	1600.1
2°	1599.5	1600.5
3°	1598.6	1600.3
4°	1596.8	1599.4
5°	1594.7	1597.6
6°	1591.5	1595.0
7°	1588.1	1592.1
8°	1583.4	1587.5
9°	1578.5	1583.3
10°	1572.7	1577.5
11°	1566.2	1572.0
12°	1559.1	1564.6
13°	1551.6	1558.0
14°	1543.3	1549.3
15°	1534.6	1540.7
16°	1525.2	1531.3
17°	1515.3	1521.4
18°	1504.9	1510.9
19°	1493.7	1499.7
20°	1482.0	1488.0
21°	1468.7	1475.4
22°	1457.1	1462.6
23°	1442.8	1448.9
24°	1430.3	1434.7
25°	1415.0	1419.8
26°	1401.6	1404.7
27°	1385.4	1388.9
28°	1369.7	1372.7
29°	1353.7	1355.7
30°	1337.0	1338.4
31°	1320.1	1319.1
32°	1302.8	1302.5
33°	1285.1	1282.2
34°	1266.9	1263.0
35°	1248.3	1243.4
36°	1229.6	1223.5
37°	1210.2	1203.3
38°	1190.9	1183.0
39°	1171.1	1161.9
40°	1151.0	1140.7
41°	1130.5	1119.1
42°	1109.8	1097.5
43°	1088.7	1075.5
44°	1065.6	1053.2



TEST NUMBER: A1706983B001(277V)

CATALOG NUMBER: 22RTC4835

CANDELA DISTRIBUTION (continued):

	330°	360°
45°	1046.1	1030.8
46°	1022.5	1008.1
47°	1002.8	983.2
48°	978.8	962.3
49°	956.8	936.9
50°	934.4	915.7
51°	911.8	889.9
52°	889.3	868.5
53°	866.6	842.6
54°	843.8	820.9
55°	820.9	794.7
56°	797.7	770.6
57°	774.7	746.5
58°	751.6	722.2
59°	728.2	697.9
60°	705.0	673.5
61°	681.5	649.0
62°	656.0	624.7
63°	634.8	600.0
64°	609.0	575.5
65°	587.6	550.9
66°	561.8	526.3
67°	540.5	501.7
68°	514.9	477.1
69°	491.4	452.3
70°	467.7	427.9
71°	444.0	403.3
72°	420.4	376.4
73°	397.0	354.2
74°	373.3	327.7
75°	349.7	305.8
76°	326.1	279.6
77°	302.8	258.0
78°	279.5	232.4
79°	256.2	211.5
80°	233.2	186.7
81°	208.7	165.1
82°	187.3	142.1
83°	164.3	121.7
84°	143.2	101.0
85°	122.1	82.4
86°	99.9	65.3
87°	79.0	53.6
88°	55.3	34.7
89°	34.5	22.9



TEST NUMBER: A1706983B001(277V)

CATALOG NUMBER: 22RTC4835

CANDELA DISTRIBUTION (continued):

	330°	360°
90°	19.2	13.4

(END OF REPORT)