

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: A1707061B001(277V)

Luminaire Tested: **22RTC3440**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: A1707061B001(277V)
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA A1707061B001
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22RTC3440
Description:
Light Source: -
Ballast/Driver: -

Summary

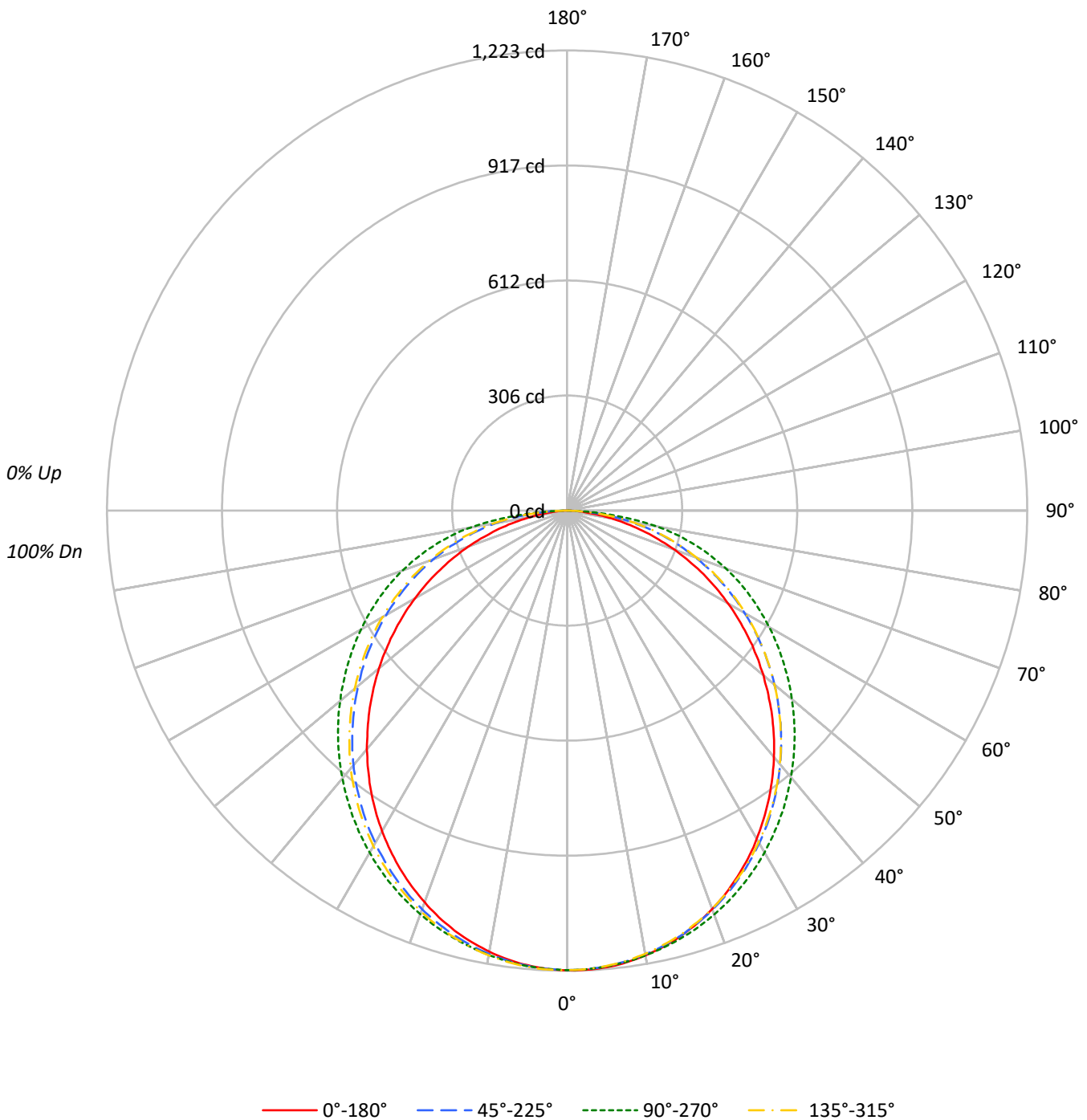
Lumens per Lamp: 3581.148 (1 lamp)
Luminaire Lumens: 3581.2 lumens
Efficiency: 100.0%
Efficacy: 128.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1.83' x L: 1.83' x H: 0')
CIE Type: Direct

Input Watts (W): 27.934
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



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CATALOG NUMBER: 22RTC3440

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	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	89	82	76	95	88	81	75	84	78	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	48																												
5	75	62	53	46	73	61	52	45	58	51	45	56	50	44	55	49	44	42																												
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	36																												
7	64	50	41	35	62	49	41	35	48	40	35	46	40	34	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	41	34	28	40	33	28	39	33	28	38	32	28	26																												
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23																												

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	3926	3926	3926	3926
5°	3929	3923	3913	3920
10°	3918	3917	3886	3915
15°	3893	3913	3845	3908
20°	3854	3909	3789	3904
25°	3805	3902	3725	3900
30°	3739	3895	3651	3894
35°	3668	3886	3568	3898
40°	3588	3883	3476	3899
45°	3500	3886	3371	3914
50°	3406	3900	3264	3935
55°	3294	3933	3138	3986
60°	3178	3984	3003	4069
65°	3038	4080	2836	4196
70°	2858	4209	2624	4376
75°	2584	4376	2311	4607
80°	2208	4461	1836	4855
85°	1578	3780	1191	4252



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	90°	180°	270°	360°	Flux
0°-10°	115.4	3.2	3.2	0°	1222	1222	1222	1222	1222	
10°-20°	329.8	9.2	9.2	5°	1218	1216	1213	1215	1218	116
20°-30°	497.8	13.9	13.9	15°	1170	1176	1156	1174	1170	330
30°-40°	598.5	16.7	16.7	25°	1073	1100	1050	1100	1073	494
40°-50°	622.5	17.4	17.4	35°	935	990	909	993	935	585
50°-60°	572.9	16.0	16.0	45°	770	855	742	861	770	594
60°-70°	460.1	12.8	12.8	55°	588	702	560	711	588	526
70°-80°	295.2	8.2	8.2	65°	400	536	373	552	400	395
80°-90°	88.9	2.5	2.5	75°	208	352	186	371	208	220
90°-100°	0.0	0.0	0.0	85°	43	102	32	115	43	54
100°-110°	0.0	0.0	0.0	90°	2	0	0	0	2	
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°	943.0	26.3	26.3							
0°-40°	1541.5	43.0	43.0							
0°-60°	2736.9	76.4	76.4							
0°-90°	3581.2	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°	3581.2	100.0	100.0							



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5	1221.5
1°	1222.7	1220.9	1220.8	1220.8	1220.8	1221.3	1221.3	1220.5	1220.8	1220.6	1221.2
2°	1221.9	1220.2	1219.9	1220.3	1219.9	1221.0	1220.2	1219.4	1220.3	1219.8	1220.9
3°	1221.2	1219.1	1218.9	1219.2	1218.6	1219.3	1218.1	1218.2	1219.0	1218.8	1220.2
4°	1219.9	1217.5	1217.4	1217.9	1216.8	1217.1	1215.6	1215.8	1217.7	1217.2	1218.7
5°	1217.9	1215.1	1215.1	1215.8	1214.4	1214.6	1212.9	1213.4	1215.6	1215.0	1216.9
6°	1215.8	1212.7	1212.8	1213.5	1211.9	1211.4	1209.5	1210.7	1212.9	1213.0	1214.6
7°	1212.7	1209.5	1209.6	1211.1	1208.6	1208.4	1205.6	1207.1	1210.3	1209.8	1212.1
8°	1208.8	1205.7	1206.2	1207.8	1205.4	1204.4	1200.9	1203.2	1206.5	1207.1	1208.9
9°	1204.9	1201.8	1202.5	1204.4	1200.9	1199.8	1196.0	1199.1	1203.1	1203.1	1205.2
10°	1200.6	1197.1	1198.1	1200.2	1196.6	1195.2	1190.8	1193.9	1198.5	1199.5	1201.3
11°	1195.3	1192.0	1193.5	1196.4	1191.6	1189.5	1184.3	1188.6	1194.4	1194.8	1197.3
12°	1189.8	1186.4	1188.0	1191.4	1186.7	1183.8	1177.5	1182.6	1189.1	1190.6	1192.3
13°	1183.7	1180.0	1183.2	1186.5	1181.2	1177.3	1171.2	1176.4	1184.2	1185.3	1187.2
14°	1177.2	1173.6	1177.0	1181.5	1175.2	1170.7	1163.2	1169.4	1178.0	1179.9	1181.6
15°	1169.9	1166.7	1171.3	1175.8	1169.2	1163.6	1155.6	1162.3	1171.8	1174.5	1175.4
16°	1162.4	1159.1	1164.3	1170.0	1162.7	1155.9	1146.6	1154.8	1165.2	1168.8	1169.6
17°	1154.3	1151.1	1157.9	1163.7	1155.4	1147.4	1138.5	1146.3	1158.6	1162.4	1162.6
18°	1145.8	1142.6	1149.6	1157.0	1148.3	1138.8	1128.0	1137.7	1151.4	1155.8	1156.5
19°	1136.7	1133.7	1142.0	1149.9	1140.6	1129.6	1118.5	1128.4	1144.0	1148.8	1148.4
20°	1126.9	1124.7	1133.7	1142.7	1132.4	1120.5	1107.8	1118.9	1136.3	1141.4	1141.4
21°	1117.0	1113.8	1125.4	1134.6	1123.0	1110.5	1097.1	1108.2	1127.9	1133.7	1132.8
22°	1106.7	1103.9	1116.5	1126.8	1115.0	1099.6	1086.2	1099.0	1119.3	1125.6	1124.4
23°	1095.9	1093.2	1107.1	1118.3	1104.8	1089.2	1074.7	1087.5	1110.3	1117.4	1115.6
24°	1083.5	1082.3	1097.5	1109.3	1096.0	1077.8	1062.6	1077.4	1100.9	1108.8	1106.5
25°	1072.9	1071.2	1087.3	1100.2	1085.3	1067.1	1050.3	1064.9	1091.3	1099.6	1097.0
26°	1059.8	1059.4	1077.2	1090.6	1076.0	1055.2	1037.8	1054.2	1080.3	1090.7	1087.0
27°	1048.4	1047.5	1066.5	1080.7	1064.4	1043.4	1024.5	1041.4	1070.9	1080.8	1077.1
28°	1034.5	1035.2	1055.4	1070.7	1053.2	1031.1	1011.4	1028.8	1059.1	1070.9	1066.8
29°	1022.5	1022.5	1044.1	1060.2	1041.9	1018.4	997.5	1016.5	1049.1	1060.7	1055.9
30°	1007.5	1009.5	1032.5	1049.4	1030.4	1005.3	983.7	1003.2	1036.7	1049.2	1044.8
31°	993.6	996.3	1020.5	1037.3	1018.3	991.9	969.5	990.0	1025.1	1039.3	1033.4
32°	979.3	982.7	1008.4	1026.9	1006.1	978.5	954.8	976.4	1013.3	1027.1	1021.6
33°	965.0	968.6	995.6	1014.3	993.7	964.5	939.9	962.7	1000.9	1016.9	1009.7
34°	949.7	954.3	981.7	1003.4	980.9	950.7	924.6	948.4	988.6	1004.3	997.4
35°	934.8	939.8	969.6	990.3	968.0	936.0	909.3	933.9	975.9	993.4	984.7
36°	919.3	924.9	955.2	978.9	954.8	921.4	893.5	918.9	963.0	980.1	972.1
37°	903.6	909.9	941.5	965.1	941.2	906.1	876.4	904.2	949.9	967.8	959.1
38°	887.7	894.6	927.5	952.0	927.6	891.2	861.3	889.2	936.4	955.2	944.9
39°	871.5	878.9	913.4	938.8	913.4	875.7	843.5	873.9	922.7	942.6	932.5
40°	855.1	861.7	899.0	925.4	899.3	858.9	828.5	858.8	908.8	929.3	917.3
41°	838.4	847.3	884.6	911.5	884.9	844.2	810.0	841.0	894.6	916.2	904.8
42°	821.6	829.7	869.7	897.7	870.2	826.6	793.3	826.5	880.2	902.7	889.1
43°	804.7	814.6	854.8	883.6	855.5	811.7	776.1	808.8	865.8	888.8	875.0
44°	787.4	796.3	839.5	869.3	840.5	793.9	758.9	792.6	851.1	875.1	860.5



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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	770.0	781.1	824.1	854.9	825.1	778.9	741.7	776.1	836.2	861.0	845.6
46°	752.7	762.7	808.5	840.2	808.4	760.7	723.9	759.2	821.2	846.8	830.8
47°	733.5	745.7	792.9	825.4	794.1	743.9	706.5	742.7	804.6	832.5	815.6
48°	717.1	728.6	776.9	810.4	777.0	727.0	688.6	725.8	790.7	817.8	800.5
49°	697.6	711.1	760.8	795.2	762.7	709.7	670.7	708.5	773.7	803.2	784.9
50°	681.2	693.7	744.8	779.9	745.2	692.2	652.8	691.4	759.5	787.0	769.4
51°	661.4	676.0	728.6	764.6	730.6	675.3	634.8	674.0	742.3	773.4	753.8
52°	645.0	658.4	712.1	749.2	712.9	657.7	616.6	656.8	728.0	757.0	738.1
53°	624.9	640.8	694.0	733.5	696.6	640.2	596.8	639.6	710.6	741.8	722.0
54°	608.1	622.8	678.8	716.2	680.0	622.7	580.0	621.9	695.9	726.7	706.1
55°	587.9	604.8	660.6	701.8	663.5	605.2	560.0	604.3	678.2	711.3	689.9
56°	569.2	586.8	645.4	684.6	646.9	587.2	543.1	586.4	661.9	695.8	672.3
57°	550.7	568.7	626.9	670.0	630.2	569.4	523.0	569.1	645.5	680.2	657.4
58°	531.9	550.7	611.4	652.4	613.4	551.4	506.0	551.2	629.1	664.6	639.5
59°	513.3	532.4	592.7	637.7	596.6	533.7	485.8	533.4	612.6	648.8	624.6
60°	494.3	514.1	575.5	619.8	579.4	515.6	467.1	515.4	595.6	633.0	606.2
61°	475.4	495.8	558.2	603.5	562.4	497.5	448.3	497.6	579.1	617.0	591.1
62°	456.4	477.5	540.9	587.0	545.3	479.5	429.8	478.0	562.3	600.9	572.8
63°	437.4	457.4	523.5	570.2	528.0	461.3	410.9	461.6	545.3	584.8	555.8
64°	418.5	440.5	505.9	553.5	510.7	443.2	392.1	441.8	528.4	568.1	538.9
65°	399.5	420.4	488.1	536.4	493.1	423.2	372.9	425.4	511.2	551.7	521.6
66°	380.2	403.6	470.3	519.2	473.8	406.4	354.2	405.5	493.9	535.1	504.4
67°	359.4	383.4	452.4	501.9	457.6	386.5	335.6	389.1	476.4	518.1	487.1
68°	342.0	365.0	434.3	484.2	437.9	369.9	316.6	369.2	458.9	500.9	469.4
69°	321.4	346.3	416.1	466.1	419.7	349.7	297.9	350.9	441.3	483.5	451.6
70°	304.1	327.7	397.6	447.9	401.3	333.1	279.2	332.5	423.5	465.7	433.5
71°	283.3	309.2	379.0	429.5	382.8	313.1	260.4	314.4	405.5	446.1	415.6
72°	264.2	290.6	360.2	409.1	363.9	294.6	241.9	296.2	385.6	429.5	397.0
73°	245.4	271.8	341.3	391.7	344.8	276.2	219.7	278.2	368.9	409.2	378.4
74°	226.7	253.6	322.2	370.4	325.6	257.9	204.2	259.9	348.6	392.0	359.5
75°	208.1	235.2	303.0	352.4	306.3	239.4	186.1	241.8	331.7	371.0	340.6
76°	189.7	216.9	283.5	330.0	286.7	221.2	168.1	223.6	311.1	353.0	321.4
77°	171.6	198.7	263.8	311.2	266.5	203.1	150.7	204.9	292.0	330.5	301.9
78°	153.8	180.7	241.7	288.2	246.0	185.1	131.9	187.1	272.7	309.6	282.1
79°	136.2	163.1	208.9	266.5	220.7	167.3	116.7	169.5	252.7	288.0	261.5
80°	119.3	145.6	201.4	241.0	202.6	149.7	99.2	152.3	232.2	262.3	240.1
81°	103.2	127.4	178.4	213.7	179.1	132.8	84.6	134.7	211.7	234.6	216.5
82°	86.3	111.2	154.4	186.5	152.7	114.7	70.5	119.0	185.5	203.5	190.3
83°	71.5	95.3	129.0	157.0	126.8	97.1	56.2	102.0	159.5	175.0	163.8
84°	56.3	78.6	105.1	129.4	102.5	80.4	43.7	86.2	132.0	143.8	135.2
85°	42.8	63.0	80.2	102.5	78.7	62.0	32.3	70.3	106.3	115.3	108.6
86°	31.3	53.0	57.0	73.2	54.6	43.7	21.9	52.0	81.1	86.2	81.1
87°	21.3	29.8	36.5	54.0	34.4	27.7	13.8	36.4	55.9	59.4	56.6
88°	12.9	16.3	19.3	27.1	15.3	14.2	7.3	20.6	33.4	34.7	31.8
89°	6.4	5.2	2.9	4.0	0.7	2.7	2.2	8.5	14.1	9.8	11.1



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CATALOG NUMBER: 22RTC3440

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
90°	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	330°	360°
0°	1221.5	1221.5
1°	1221.9	1222.7
2°	1221.4	1221.9
3°	1220.4	1221.2
4°	1219.0	1219.9
5°	1216.9	1217.9
6°	1214.1	1215.8
7°	1211.2	1212.7
8°	1207.5	1208.8
9°	1203.4	1204.9
10°	1199.1	1200.6
11°	1193.8	1195.3
12°	1188.5	1189.8
13°	1182.7	1183.7
14°	1176.0	1177.2
15°	1169.2	1169.9
16°	1161.7	1162.4
17°	1154.0	1154.3
18°	1145.7	1145.8
19°	1137.2	1136.7
20°	1127.7	1126.9
21°	1117.2	1117.0
22°	1107.8	1106.7
23°	1097.0	1095.9
24°	1087.1	1083.5
25°	1075.0	1072.9
26°	1065.0	1059.8
27°	1052.4	1048.4
28°	1040.1	1034.5
29°	1027.7	1022.5
30°	1015.0	1007.5
31°	1001.9	993.6
32°	988.7	979.3
33°	974.9	965.0
34°	961.1	949.7
35°	946.7	934.8
36°	932.2	919.3
37°	915.7	903.6
38°	902.1	887.7
39°	886.1	871.5
40°	871.3	855.1
41°	854.7	838.4
42°	839.9	821.6
43°	822.5	804.7
44°	806.2	787.4



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CATALOG NUMBER: 22RTC3440

CANDELA DISTRIBUTION (continued):

	330°	360°
45°	789.7	770.0
46°	773.2	752.7
47°	756.6	733.5
48°	739.5	717.1
49°	722.3	697.6
50°	705.3	681.2
51°	688.0	661.4
52°	670.8	645.0
53°	653.2	624.9
54°	635.8	608.1
55°	618.1	587.9
56°	600.2	569.2
57°	582.7	550.7
58°	564.6	531.9
59°	546.8	513.3
60°	527.0	494.3
61°	510.7	475.4
62°	491.0	456.4
63°	474.5	437.4
64°	454.7	418.5
65°	438.0	399.5
66°	418.2	380.2
67°	401.6	359.4
68°	381.5	342.0
69°	363.1	321.4
70°	344.6	304.1
71°	326.3	283.3
72°	307.8	264.2
73°	289.4	245.4
74°	270.7	226.7
75°	252.3	208.1
76°	234.0	189.7
77°	208.0	171.6
78°	196.4	153.8
79°	178.4	136.2
80°	160.7	119.3
81°	142.6	103.2
82°	126.1	86.3
83°	108.5	71.5
84°	91.9	56.3
85°	74.1	42.8
86°	54.3	31.3
87°	38.0	21.3
88°	21.4	12.9
89°	8.5	6.4



TEST NUMBER: A1707061B001(277V)

CATALOG NUMBER: 22RTC3440

CANDELA DISTRIBUTION (continued):

	330°	360°
90°	0.4	1.5

(END OF REPORT)