

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: A1708561B002(120V)

Luminaire Tested: **14RTC3440**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: A1708561B002(120V)
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA A1708561B002
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14RTC3440
Description:
Light Source: -
Ballast/Driver: -

Summary

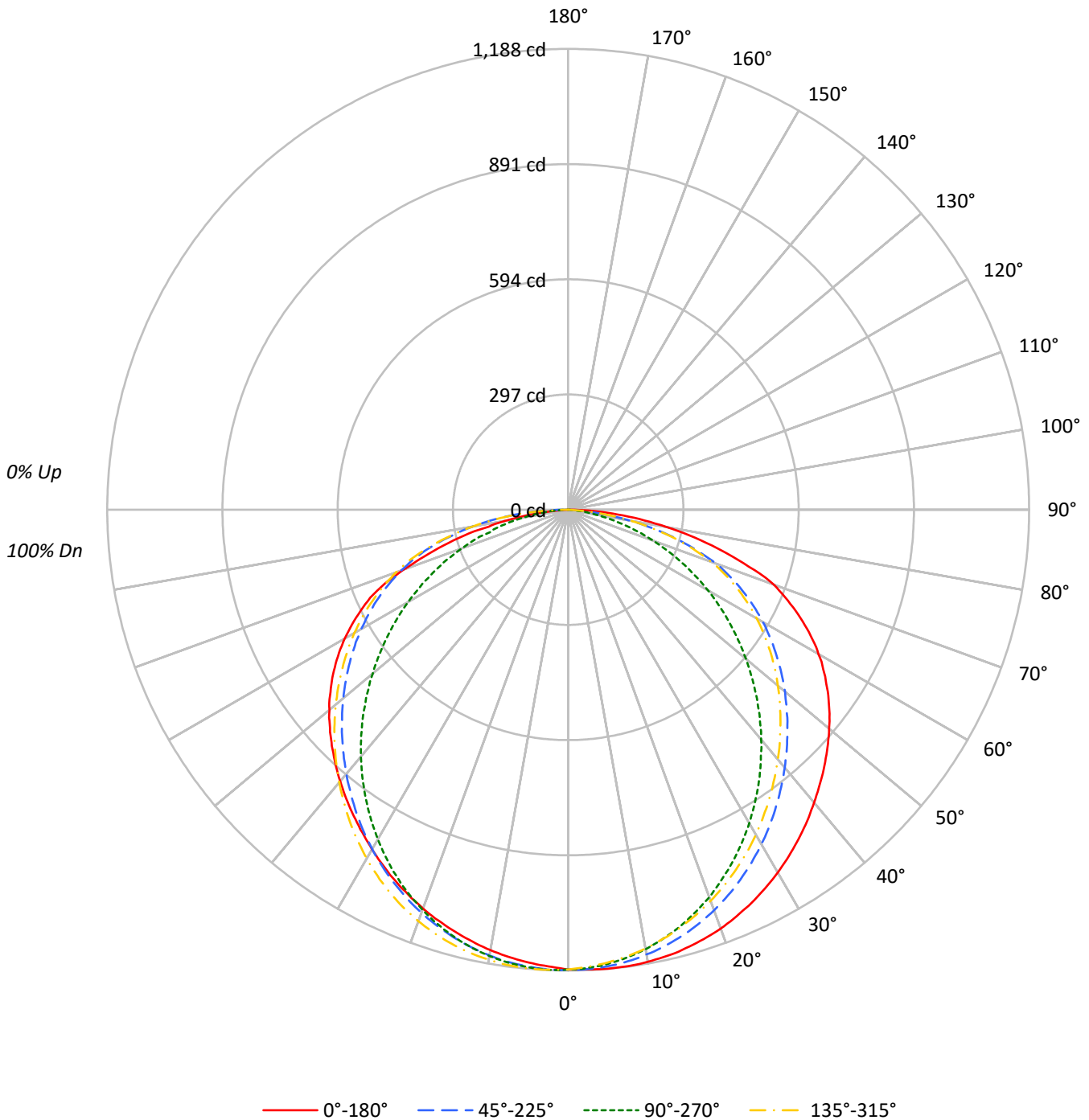
Lumens per Lamp: 3643.581 (1 lamp)
Luminaire Lumens: 3643.6 lumens
Efficiency: 100.0%
Efficacy: 131.5 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.2 / 1.39
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 27.703
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: 14RTC3440

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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82				82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67				67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	68	63	58	56				56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47				47
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41				41
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35				35
7	63	50	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31				31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28				28
9	55	41	33	27	54	41	33	27	40	32	27	38	32	27	37	31	27	25				25
10	52	38	30	25	50	38	30	25	37	29	25	36	29	24	35	29	24	22				22

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	4014	4014	4014	4014
5°	4037	3993	3983	4025
10°	4070	3955	3964	4017
15°	4103	3900	3949	3995
20°	4141	3830	3942	3956
25°	4178	3744	3941	3900
30°	4223	3649	3953	3836
35°	4281	3542	3982	3758
40°	4357	3418	4040	3672
45°	4472	3296	4125	3578
50°	4625	3149	4233	3466
55°	4822	2995	4366	3353
60°	5046	2817	4503	3231
65°	5294	2588	4621	3088
70°	5576	2308	4463	2895
75°	5394	1927	3999	2648
80°	5045	1396	3202	2322
85°	4487	633	1472	1927



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	90°	180°	270°	360°	Flux
0°-10°	112.2	3.1	3.1	0°	1186	1186	1186	1186	1186	
10°-20°	321.1	8.8	8.8	5°	1188	1175	1172	1184	1188	113
20°-30°	486.7	13.4	13.4	15°	1170	1112	1126	1140	1170	331
30°-40°	590.0	16.2	16.2	25°	1118	1002	1055	1044	1118	516
40°-50°	625.8	17.2	17.2	35°	1036	857	963	909	1036	649
50°-60°	596.8	16.4	16.4	45°	934	688	862	747	934	721
60°-70°	501.6	13.8	13.8	55°	817	507	740	568	817	730
70°-80°	321.0	8.8	8.8	65°	661	323	577	385	661	652
80°-90°	88.6	2.4	2.4	75°	412	147	306	202	412	435
90°-100°	0.0	0.0	0.0	85°	116	16	38	50	116	130
100°-110°	0.0	0.0	0.0	90°	1	0	0	7	1	
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°	919.9	25.2	25.2							
0°-40°	1509.9	41.4	41.4							
0°-60°	2732.4	75.0	75.0							
0°-90°	3643.6	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°	3643.6	100.0	100.0							



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CATALOG NUMBER: 14RTC3440

CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5	1185.5
1°	1185.2	1187.6	1186.3	1185.0	1183.0	1182.9	1182.3	1187.0	1187.6	1187.0	1185.9
2°	1186.0	1187.0	1184.8	1183.3	1180.8	1180.8	1179.6	1186.3	1187.0	1187.3	1186.7
3°	1187.1	1186.5	1183.6	1181.0	1177.9	1178.3	1177.2	1185.2	1186.0	1186.8	1187.3
4°	1187.3	1185.4	1181.2	1178.6	1174.5	1175.5	1175.0	1183.5	1185.0	1185.7	1187.1
5°	1187.7	1183.9	1178.9	1174.9	1171.2	1172.4	1171.7	1181.4	1183.3	1184.2	1186.5
6°	1187.3	1182.3	1175.5	1171.1	1166.7	1168.7	1168.7	1179.1	1181.1	1181.9	1185.3
7°	1187.2	1179.9	1172.3	1166.6	1162.4	1165.2	1165.1	1176.8	1178.0	1179.4	1183.4
8°	1186.5	1177.6	1167.7	1161.5	1157.3	1160.5	1161.4	1173.7	1175.4	1176.4	1181.8
9°	1185.1	1174.7	1163.1	1156.0	1151.4	1156.5	1157.2	1170.8	1171.5	1172.7	1178.8
10°	1183.7	1170.8	1157.6	1150.2	1145.4	1151.1	1153.0	1166.3	1167.7	1168.3	1175.7
11°	1181.4	1167.6	1152.3	1143.3	1138.9	1146.6	1148.4	1162.0	1162.7	1163.6	1172.2
12°	1179.4	1163.1	1146.2	1136.6	1131.5	1140.2	1143.0	1157.8	1157.9	1158.5	1168.3
13°	1177.0	1158.6	1139.5	1128.7	1124.8	1135.0	1137.8	1152.8	1152.5	1152.6	1163.4
14°	1174.5	1153.3	1132.5	1120.9	1116.3	1128.3	1132.3	1148.2	1146.4	1146.2	1158.6
15°	1170.4	1148.2	1125.3	1112.4	1108.8	1121.6	1126.4	1142.2	1139.9	1139.5	1153.0
16°	1166.9	1142.5	1117.7	1103.3	1099.4	1114.9	1120.4	1136.6	1132.4	1132.0	1147.1
17°	1162.8	1136.4	1109.5	1092.9	1091.3	1107.8	1113.8	1130.4	1125.8	1124.0	1140.8
18°	1158.8	1129.7	1100.6	1083.9	1081.1	1100.2	1108.2	1123.8	1117.4	1116.2	1133.7
19°	1154.0	1122.8	1091.7	1072.8	1071.3	1092.8	1101.1	1117.3	1110.2	1107.0	1126.6
20°	1149.2	1115.6	1082.3	1063.0	1061.2	1084.8	1094.0	1110.2	1101.2	1098.0	1118.9
21°	1143.3	1108.0	1072.4	1050.9	1050.9	1076.7	1086.4	1102.7	1092.8	1087.1	1110.6
22°	1137.7	1099.9	1062.0	1039.3	1039.9	1068.4	1079.2	1095.7	1083.0	1077.9	1102.2
23°	1130.9	1091.6	1051.5	1026.9	1028.8	1059.5	1071.0	1087.0	1073.9	1066.9	1093.2
24°	1124.7	1082.9	1040.3	1014.9	1017.1	1050.8	1063.6	1079.7	1062.9	1056.8	1083.0
25°	1118.3	1074.0	1028.9	1002.0	1005.5	1041.4	1054.9	1070.8	1052.5	1044.0	1074.3
26°	1110.9	1065.1	1016.0	988.8	993.6	1031.8	1047.3	1062.8	1041.7	1033.5	1062.6
27°	1103.6	1055.7	1004.4	975.4	981.1	1022.5	1037.6	1053.8	1030.8	1020.0	1053.1
28°	1096.2	1045.7	991.7	961.5	968.8	1012.3	1029.2	1043.8	1019.1	1007.5	1041.1
29°	1088.5	1036.0	979.4	947.5	955.9	1001.9	1020.1	1035.1	1007.5	994.3	1030.7
30°	1080.0	1025.6	966.3	933.2	942.7	991.7	1011.0	1024.5	995.6	981.1	1017.9
31°	1071.4	1015.1	953.1	918.0	929.5	980.4	1001.3	1015.5	983.1	967.1	1005.9
32°	1063.0	1004.5	939.6	903.1	915.8	970.4	992.0	1004.4	970.8	953.1	993.7
33°	1053.9	992.4	925.7	887.8	902.2	958.7	982.8	995.2	957.7	938.8	980.9
34°	1044.7	982.7	911.5	872.2	888.2	949.1	973.1	983.6	944.6	924.1	968.1
35°	1035.6	970.1	897.6	856.9	873.5	936.8	963.4	974.0	931.4	909.2	954.8
36°	1026.1	959.9	882.6	840.7	860.5	926.7	954.1	962.1	916.5	894.0	941.3
37°	1016.6	947.3	868.5	824.4	844.6	914.1	944.1	951.3	904.4	878.5	927.5
38°	1007.0	936.7	853.7	806.5	831.4	902.9	934.4	940.0	889.0	863.1	913.5
39°	996.0	924.2	838.8	791.5	815.3	891.4	924.2	929.2	875.2	847.0	899.1
40°	985.8	912.1	823.8	773.2	801.8	880.2	914.0	917.7	861.0	830.7	884.8
41°	975.6	900.0	808.6	757.6	785.7	868.7	903.9	906.1	846.4	814.2	870.0
42°	965.3	888.5	793.2	738.9	772.2	857.1	893.4	895.0	831.8	797.9	855.4
43°	955.0	876.0	777.6	723.2	755.5	845.4	882.9	883.2	817.2	780.9	840.5
44°	944.4	864.1	762.3	704.2	740.7	833.5	871.4	871.8	802.4	764.1	825.4



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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	933.8	852.0	745.6	688.2	725.7	821.9	861.5	860.6	787.7	747.1	810.2
46°	922.9	839.8	731.5	669.3	710.6	810.0	849.4	848.7	772.7	728.1	795.1
47°	912.2	827.3	714.3	651.3	695.3	797.9	839.3	836.8	757.5	712.6	779.4
48°	900.7	814.6	700.1	633.6	680.1	785.6	826.7	825.0	742.6	693.4	764.0
49°	889.7	801.7	683.3	615.8	665.0	773.4	816.6	813.3	727.3	677.4	747.1
50°	878.0	789.3	669.2	597.8	649.8	761.1	803.5	801.2	712.1	658.0	732.9
51°	866.4	775.8	652.2	579.8	634.8	748.8	792.7	789.1	697.1	640.2	716.0
52°	854.4	762.8	637.0	561.7	619.8	735.6	778.9	776.6	681.7	622.2	701.8
53°	842.2	749.4	621.6	543.6	604.7	722.6	766.0	763.1	666.8	604.3	685.0
54°	829.6	735.5	606.0	525.5	589.6	709.6	753.2	751.7	651.2	586.3	669.3
55°	816.9	720.6	590.8	507.3	574.9	694.9	739.5	737.8	636.2	568.0	653.8
56°	802.1	706.1	575.5	489.1	559.4	681.4	725.6	726.1	621.4	550.1	638.4
57°	789.8	691.5	560.1	470.8	544.4	667.2	711.2	711.8	604.7	531.8	622.8
58°	774.8	676.1	544.9	452.4	529.5	652.7	696.1	699.5	591.0	513.6	607.3
59°	761.5	660.8	529.7	434.2	514.3	638.0	680.9	684.6	574.6	495.5	592.1
60°	745.1	645.2	514.3	416.0	499.2	623.0	665.0	670.7	560.9	477.1	576.8
61°	730.8	628.3	498.9	397.7	484.0	607.6	648.3	656.1	544.5	458.7	561.4
62°	713.3	611.3	483.6	379.4	467.4	591.6	631.6	641.5	531.1	438.6	545.9
63°	696.2	593.6	467.8	359.3	452.0	575.1	613.7	626.7	514.5	422.1	530.7
64°	678.8	575.8	452.2	342.9	436.6	558.3	595.4	611.1	500.5	402.1	515.4
65°	660.7	557.4	436.3	323.0	421.1	540.8	576.7	595.2	484.1	385.4	498.4
66°	642.1	538.3	420.3	305.0	405.4	523.4	558.4	578.9	469.0	365.4	484.2
67°	622.6	518.9	404.1	286.9	389.4	505.3	535.8	562.0	453.3	348.9	467.1
68°	602.8	498.8	386.1	268.7	373.1	486.2	510.7	544.9	437.9	328.9	452.8
69°	582.7	479.6	371.0	250.9	357.0	468.0	479.3	527.4	422.4	310.6	435.3
70°	563.2	457.1	352.4	233.1	340.6	445.3	450.8	509.3	406.6	292.4	420.5
71°	537.9	427.6	336.8	215.5	324.0	420.9	418.3	488.8	390.8	274.5	402.6
72°	505.0	395.2	317.8	198.1	307.6	390.5	390.3	471.6	374.6	256.4	386.0
73°	472.7	369.5	301.9	181.0	290.9	364.2	362.2	448.7	358.4	238.6	369.2
74°	442.6	338.0	282.4	163.9	273.8	334.8	334.0	426.6	342.1	209.0	352.0
75°	412.3	311.7	264.2	147.3	256.6	310.9	305.7	397.0	325.5	202.4	334.8
76°	381.6	280.3	246.0	131.1	239.2	281.6	277.2	370.6	309.1	185.3	317.4
77°	350.8	254.1	222.4	115.3	208.2	257.2	248.6	340.8	292.0	168.1	299.7
78°	319.6	222.4	202.5	100.2	196.2	227.5	209.3	314.3	275.2	151.4	281.9
79°	289.1	196.7	179.2	84.2	175.0	202.6	191.5	287.6	258.1	135.2	263.9
80°	258.7	166.1	155.4	71.6	150.7	173.4	164.2	260.6	240.6	119.1	245.8
81°	227.4	140.0	133.1	57.8	129.5	147.3	138.6	234.7	221.2	103.2	227.0
82°	198.8	113.7	108.2	48.5	107.8	121.5	111.6	205.8	197.9	89.1	201.5
83°	170.8	86.3	83.6	33.7	84.3	94.1	85.3	179.6	175.0	74.4	178.4
84°	142.0	61.6	61.2	24.3	62.4	69.3	61.3	151.9	152.6	61.6	153.3
85°	115.5	36.8	39.5	16.3	41.2	53.9	37.9	128.0	130.0	49.6	129.4
86°	88.5	13.8	19.3	9.6	20.0	20.0	15.7	100.8	107.1	37.8	105.5
87°	64.8	0.8	2.5	4.1	3.1	2.0	1.1	75.8	83.0	28.4	81.7
88°	38.9	0.0	0.0	0.0	0.0	0.0	0.0	51.6	60.4	19.3	58.5
89°	16.6	0.0	0.0	0.0	0.0	0.0	0.0	28.3	37.7	11.9	35.3



TEST NUMBER: A1708561B002(120V)

CATALOG NUMBER: 14RTC3440

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
90°	1.2	0.0	0.0	0.0	0.0	0.0	0.0	9.2	17.5	6.6	14.9



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CATALOG NUMBER: 14RTC3440

CANDELA DISTRIBUTION (continued):

	330°	360°
0°	1185.5	1185.5
1°	1186.0	1185.2
2°	1186.9	1186.0
3°	1187.4	1187.1
4°	1187.7	1187.3
5°	1187.7	1187.7
6°	1186.8	1187.3
7°	1186.0	1187.2
8°	1184.8	1186.5
9°	1183.1	1185.1
10°	1181.0	1183.7
11°	1177.9	1181.4
12°	1175.5	1179.4
13°	1172.5	1177.0
14°	1168.5	1174.5
15°	1164.4	1170.4
16°	1160.0	1166.9
17°	1155.1	1162.8
18°	1150.0	1158.8
19°	1144.3	1154.0
20°	1138.4	1149.2
21°	1131.9	1143.3
22°	1125.2	1137.7
23°	1118.4	1130.9
24°	1110.7	1124.7
25°	1102.8	1118.3
26°	1094.9	1110.9
27°	1086.3	1103.6
28°	1076.9	1096.2
29°	1068.6	1088.5
30°	1058.2	1080.0
31°	1049.1	1071.4
32°	1038.4	1063.0
33°	1029.2	1053.9
34°	1017.7	1044.7
35°	1008.1	1035.6
36°	996.3	1026.1
37°	985.0	1016.6
38°	973.9	1007.0
39°	962.8	996.0
40°	951.1	985.8
41°	939.6	975.6
42°	927.8	965.3
43°	916.2	955.0
44°	904.4	944.4



TEST NUMBER: A1708561B002(120V)

CATALOG NUMBER: 14RTC3440

CANDELA DISTRIBUTION (continued):

	330°	360°
45°	892.1	933.8
46°	880.2	922.9
47°	868.0	912.2
48°	855.8	900.7
49°	843.6	889.7
50°	831.3	878.0
51°	818.5	866.4
52°	805.9	854.4
53°	791.9	842.2
54°	780.0	829.6
55°	765.7	816.9
56°	753.4	802.1
57°	738.5	789.8
58°	725.7	774.8
59°	709.9	761.5
60°	696.6	745.1
61°	679.9	730.8
62°	664.7	713.3
63°	648.6	696.2
64°	632.1	678.8
65°	615.2	660.7
66°	597.5	642.1
67°	579.7	622.6
68°	561.1	602.8
69°	542.0	582.7
70°	522.8	563.2
71°	502.7	537.9
72°	483.3	505.0
73°	459.2	472.7
74°	433.0	442.6
75°	400.1	412.3
76°	374.4	381.6
77°	343.1	350.8
78°	314.2	319.6
79°	285.2	289.1
80°	256.2	258.7
81°	228.7	227.4
82°	198.3	198.8
83°	171.8	170.8
84°	143.3	142.0
85°	119.0	115.5
86°	91.8	88.5
87°	67.0	64.8
88°	42.9	38.9
89°	20.5	16.6



TEST NUMBER: A1708561B002(120V)

CATALOG NUMBER: 14RTC3440

CANDELA DISTRIBUTION (continued):

	330°	360°
90°	3.7	1.2

(END OF REPORT)