

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: A1708561A001(277V)

Luminaire Tested: **14RTC3435**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: A1708561A001(277V)
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA A1708561B001
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14RTC3435
Description:
Light Source: -
Ballast/Driver: -

Summary

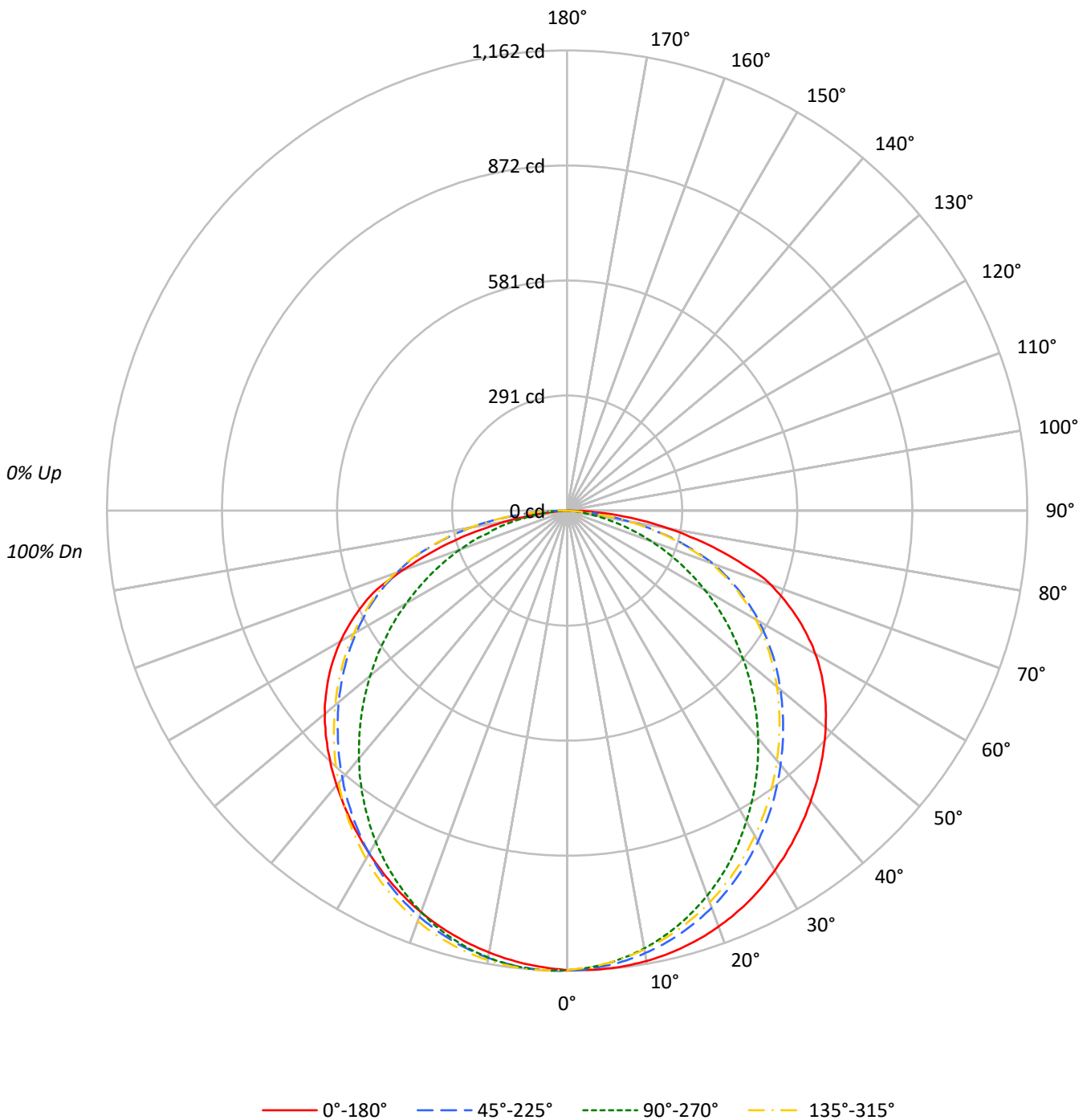
Lumens per Lamp: 3571.142 (1 lamp)
Luminaire Lumens: 3571.1 lumens
Efficiency: 100.0%
Efficacy: 126.5 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.2 / 1.39
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 28.234
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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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	63	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	38	30	25	37	29	24	36	29	24	35	29	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	3930	3930	3930	3930
5°	3945	3902	3910	3943
10°	3972	3860	3896	3941
15°	3998	3800	3889	3923
20°	4029	3726	3888	3887
25°	4062	3643	3893	3839
30°	4103	3541	3907	3777
35°	4153	3433	3941	3699
40°	4230	3316	4002	3615
45°	4339	3190	4093	3522
50°	4489	3046	4206	3420
55°	4680	2896	4341	3300
60°	4898	2722	4476	3177
65°	5143	2513	4584	3032
70°	5422	2244	4396	2854
75°	5336	1864	3889	2606
80°	5048	1361	3024	2256
85°	4693	645	1177	1884



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	90°	180°	270°	360°	Flux
0°-10°	109.8	3.1	3.1	0°	1161	1161	1161	1161	1161	
10°-20°	314.3	8.8	8.8	5°	1161	1148	1150	1160	1161	111
20°-30°	476.5	13.3	13.3	15°	1141	1084	1109	1119	1141	322
30°-40°	577.7	16.2	16.2	25°	1087	975	1042	1028	1087	502
40°-50°	612.8	17.2	17.2	35°	1005	831	954	895	1005	630
50°-60°	585.0	16.4	16.4	45°	906	666	855	735	906	700
60°-70°	491.9	13.8	13.8	55°	793	490	735	559	793	709
70°-80°	315.6	8.8	8.8	65°	642	314	572	378	642	634
80°-90°	87.5	2.5	2.5	75°	408	142	297	199	408	429
90°-100°	0.0	0.0	0.0	85°	121	17	30	48	121	136
100°-110°	0.0	0.0	0.0	90°	3	0	0	7	3	
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°	900.6	25.2	25.2							
0°-40°	1478.3	41.4	41.4							
0°-60°	2676.1	74.9	74.9							
0°-90°	3571.1	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°	3571.1	100.0	100.0							



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CANDELA DISTRIBUTION (FULL):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
0°	1160.6	1160.6	1160.6	1160.6	1160.6	1160.6	1160.6	1160.6	1160.6	1160.6	1160.6
1°	1160.4	1162.4	1159.9	1158.9	1158.2	1158.9	1158.4	1162.8	1162.2	1161.6	1161.2
2°	1161.0	1161.2	1158.4	1157.1	1155.8	1157.0	1156.7	1162.3	1162.4	1162.5	1162.2
3°	1161.2	1160.3	1156.5	1154.6	1153.0	1154.9	1154.8	1161.6	1162.2	1161.9	1162.4
4°	1161.3	1158.7	1153.3	1152.0	1149.8	1152.2	1152.7	1160.8	1161.2	1161.5	1162.2
5°	1160.7	1156.6	1150.6	1148.0	1146.2	1149.5	1150.2	1159.2	1159.9	1160.0	1161.5
6°	1160.7	1154.4	1147.1	1144.4	1141.8	1146.0	1147.5	1157.7	1158.4	1158.6	1160.5
7°	1159.7	1151.7	1143.3	1139.1	1137.6	1142.5	1144.2	1155.3	1156.3	1156.2	1158.9
8°	1158.2	1148.6	1138.6	1134.8	1132.2	1138.7	1141.0	1153.1	1153.5	1153.4	1156.9
9°	1156.8	1145.4	1133.7	1128.4	1126.9	1134.3	1137.2	1150.2	1150.3	1150.0	1154.4
10°	1155.2	1141.3	1128.2	1122.6	1120.8	1129.9	1133.2	1147.1	1146.7	1146.2	1151.5
11°	1153.0	1137.4	1122.3	1115.6	1114.5	1124.9	1128.9	1143.5	1142.8	1141.4	1147.9
12°	1150.3	1132.9	1116.3	1108.4	1107.6	1119.6	1124.4	1139.4	1138.2	1137.2	1144.2
13°	1147.2	1127.9	1109.3	1100.7	1100.5	1114.3	1120.0	1135.2	1133.2	1131.2	1139.8
14°	1144.4	1122.9	1102.2	1092.6	1092.8	1108.0	1114.6	1130.8	1127.9	1125.3	1134.6
15°	1140.6	1116.9	1094.7	1083.9	1084.8	1101.9	1109.3	1125.6	1121.9	1119.0	1129.0
16°	1136.7	1111.4	1086.5	1075.1	1076.5	1095.6	1103.9	1120.5	1115.5	1112.3	1123.7
17°	1132.6	1104.6	1078.0	1065.2	1067.7	1088.6	1098.5	1114.9	1108.9	1104.4	1116.8
18°	1128.0	1098.2	1069.4	1055.6	1058.8	1081.7	1092.0	1109.0	1101.0	1097.3	1110.7
19°	1123.2	1090.9	1060.2	1045.3	1048.8	1074.5	1085.9	1103.1	1094.0	1087.7	1102.9
20°	1118.0	1083.8	1050.7	1034.1	1039.0	1066.8	1079.1	1096.5	1085.3	1078.7	1095.9
21°	1112.5	1076.2	1040.5	1023.3	1027.3	1059.1	1072.4	1089.9	1078.0	1069.1	1087.3
22°	1106.8	1068.0	1030.3	1011.7	1017.7	1050.6	1065.1	1082.8	1067.9	1059.4	1078.9
23°	1100.4	1059.6	1019.6	999.8	1005.6	1041.3	1057.6	1075.6	1059.5	1049.2	1070.3
24°	1094.4	1051.1	1007.6	987.8	995.9	1033.3	1050.0	1068.3	1049.3	1037.9	1061.0
25°	1087.2	1042.0	996.4	975.0	983.2	1023.6	1042.1	1060.3	1039.1	1027.5	1051.3
26°	1080.4	1033.0	984.6	961.0	972.4	1015.1	1034.0	1051.8	1028.8	1015.8	1041.3
27°	1073.0	1023.7	972.7	948.8	959.2	1004.5	1025.9	1043.3	1017.9	1003.9	1031.0
28°	1065.3	1013.7	960.5	933.8	946.7	995.6	1016.7	1033.6	1007.0	991.6	1020.3
29°	1057.2	1003.8	947.9	920.0	934.2	984.8	1008.8	1025.4	995.8	978.9	1009.1
30°	1049.3	993.7	935.2	905.6	921.6	974.8	999.2	1015.2	984.1	966.1	997.5
31°	1039.8	982.4	922.0	891.1	908.4	964.6	991.0	1005.7	972.5	952.9	986.0
32°	1032.6	972.6	908.7	876.2	895.1	953.7	981.4	995.9	960.1	939.1	973.6
33°	1023.0	961.0	895.3	861.3	881.6	943.5	972.0	986.0	947.9	923.8	961.5
34°	1014.7	951.2	881.5	846.1	868.0	932.8	963.1	975.9	935.3	910.5	948.9
35°	1004.6	938.9	867.6	830.6	854.4	921.9	953.5	965.7	922.4	894.8	935.8
36°	996.4	928.7	853.6	814.9	840.2	910.9	944.0	955.1	907.9	881.3	922.8
37°	986.0	916.4	839.0	799.1	826.0	899.8	934.7	944.6	895.9	864.7	909.3
38°	977.4	906.0	824.7	782.9	811.5	888.8	925.0	934.0	881.2	850.8	895.7
39°	966.9	893.5	810.1	766.5	797.3	877.6	915.3	923.1	868.6	833.7	881.8
40°	957.0	881.9	795.4	750.3	782.7	866.2	905.4	912.0	853.4	817.9	866.6
41°	947.0	870.5	779.3	733.8	768.2	854.0	895.5	900.8	840.6	801.4	853.6
42°	936.8	858.6	765.8	717.1	753.5	843.6	885.7	890.0	825.1	785.1	837.7
43°	926.7	846.8	749.6	700.2	738.9	831.1	875.6	878.9	810.6	769.1	824.4
44°	916.6	835.0	735.9	681.9	722.8	820.6	864.0	866.6	796.0	752.0	808.4



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CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
45°	906.2	823.3	719.5	666.2	709.1	807.9	854.8	856.5	781.3	735.4	794.8
46°	895.7	811.1	705.8	647.6	693.2	797.4	843.2	843.9	766.8	718.3	778.6
47°	885.0	799.2	689.1	632.1	679.5	784.7	833.2	833.7	752.0	701.1	763.5
48°	874.6	786.9	674.1	613.1	663.3	772.8	821.3	821.1	737.0	684.1	748.2
49°	863.4	774.6	658.9	597.3	649.8	760.9	810.8	810.4	722.2	666.9	733.2
50°	852.1	762.2	644.0	578.2	633.7	748.9	798.5	797.7	707.3	649.3	717.8
51°	840.6	749.5	629.1	560.9	619.1	736.5	787.7	787.1	692.2	631.8	702.6
52°	829.3	736.6	614.1	543.2	604.2	724.0	774.5	773.9	677.3	614.0	687.5
53°	817.5	723.6	599.2	525.6	589.5	711.4	761.8	761.8	662.3	596.3	672.1
54°	805.3	710.3	584.3	507.9	574.8	698.3	748.8	749.7	647.5	578.6	657.1
55°	792.7	696.8	569.4	490.5	560.1	685.3	735.4	737.3	632.6	559.0	641.9
56°	778.8	681.5	554.7	472.7	545.5	671.7	721.8	724.6	617.6	542.8	626.8
57°	766.8	668.6	539.9	455.1	530.9	657.9	707.2	711.6	602.8	523.1	611.6
58°	752.1	652.8	525.3	437.3	516.2	643.9	692.3	698.6	587.7	506.8	596.4
59°	739.4	639.2	510.7	419.6	501.6	629.2	676.7	685.0	571.8	487.0	581.4
60°	723.2	622.3	495.8	401.9	486.8	614.2	660.9	671.2	558.3	469.1	565.0
61°	709.5	608.1	481.0	384.1	471.9	598.9	644.6	657.1	542.0	451.0	551.3
62°	692.2	590.2	466.0	366.4	455.7	583.0	627.2	642.4	528.8	432.8	534.9
63°	676.0	573.4	451.2	348.8	442.0	566.6	609.6	627.4	512.3	414.9	520.0
64°	659.3	556.0	436.0	331.2	425.7	548.2	591.1	612.0	498.9	396.6	505.0
65°	641.9	538.3	420.8	313.7	411.8	532.7	572.1	595.9	482.4	378.4	489.7
66°	623.9	520.1	403.9	296.1	395.3	513.5	553.5	579.6	468.8	360.3	474.4
67°	605.3	501.4	389.6	277.2	381.1	497.0	532.4	562.8	452.1	342.2	459.0
68°	586.0	481.8	372.3	261.3	363.9	476.3	505.5	545.4	437.0	324.1	443.6
69°	566.2	463.1	357.6	242.3	347.9	459.5	472.4	526.0	421.6	306.1	428.0
70°	547.7	443.4	339.8	226.7	332.0	436.6	444.0	509.3	405.8	288.3	412.0
71°	525.9	417.2	324.9	208.3	315.9	410.6	412.0	488.7	390.0	270.3	396.0
72°	496.5	388.4	306.6	192.8	299.5	382.1	385.9	471.4	374.0	252.5	379.5
73°	465.3	361.9	289.6	174.8	283.0	354.2	354.9	449.3	357.7	235.0	363.1
74°	436.8	334.8	272.4	159.9	266.3	327.3	328.9	425.8	341.5	208.5	346.3
75°	407.9	307.6	255.2	142.5	249.7	300.5	297.3	394.6	324.9	199.2	329.4
76°	378.8	277.7	237.3	127.0	232.4	273.9	270.9	368.4	308.1	182.2	312.1
77°	349.3	252.6	207.6	111.8	208.1	246.6	239.6	338.3	291.5	165.3	294.7
78°	317.0	222.9	197.2	97.2	192.1	219.4	207.8	311.2	274.3	147.5	277.1
79°	290.3	195.6	174.8	83.1	169.5	192.5	182.3	283.7	257.2	132.7	259.3
80°	258.9	168.5	152.4	69.8	147.2	165.5	155.1	256.2	239.6	115.7	241.3
81°	230.9	143.2	129.4	57.7	124.1	137.5	130.1	229.8	220.4	101.4	221.7
82°	202.7	117.5	107.8	44.5	102.6	111.9	103.0	200.3	198.1	87.4	199.5
83°	175.5	92.6	84.1	34.2	79.3	86.7	78.5	172.1	173.3	73.1	176.7
84°	147.2	66.5	62.8	24.5	57.8	60.5	53.1	145.9	150.4	60.3	152.3
85°	120.8	53.0	41.7	16.6	36.8	36.1	30.3	119.9	127.4	48.5	129.2
86°	94.2	18.5	20.6	10.0	16.1	14.3	9.5	94.4	104.2	37.1	106.0
87°	69.5	2.0	4.4	4.1	1.8	1.5	1.1	69.4	81.0	27.5	82.5
88°	54.1	0.0	0.0	0.0	0.0	0.0	0.0	45.1	57.0	19.2	59.8
89°	21.9	0.0	0.0	0.0	0.0	0.0	0.0	21.3	34.0	12.4	35.8



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CATALOG NUMBER: 14RTC3435

CANDELA DISTRIBUTION (continued):

	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°
90°	3.2	0.0	0.0	0.0	0.0	0.0	0.0	4.9	14.0	6.6	15.5



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CANDELA DISTRIBUTION (continued):

	330°	360°
0°	1160.6	1160.6
1°	1161.2	1160.4
2°	1161.7	1161.0
3°	1162.2	1161.2
4°	1162.3	1161.3
5°	1161.8	1160.7
6°	1161.0	1160.7
7°	1159.9	1159.7
8°	1158.2	1158.2
9°	1156.4	1156.8
10°	1154.2	1155.2
11°	1151.6	1153.0
12°	1148.8	1150.3
13°	1145.3	1147.2
14°	1141.5	1144.4
15°	1137.5	1140.6
16°	1132.8	1136.7
17°	1128.0	1132.6
18°	1122.8	1128.0
19°	1117.5	1123.2
20°	1111.1	1118.0
21°	1104.6	1112.5
22°	1098.3	1106.8
23°	1091.1	1100.4
24°	1084.0	1094.4
25°	1076.3	1087.2
26°	1068.4	1080.4
27°	1059.8	1073.0
28°	1051.3	1065.3
29°	1042.4	1057.2
30°	1033.2	1049.3
31°	1023.5	1039.8
32°	1013.9	1032.6
33°	1003.8	1023.0
34°	993.4	1014.7
35°	983.4	1004.6
36°	972.6	996.4
37°	961.3	986.0
38°	951.3	977.4
39°	939.0	966.9
40°	929.0	957.0
41°	916.4	947.0
42°	906.2	936.8
43°	893.7	926.7
44°	882.2	916.6



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CANDELA DISTRIBUTION (continued):

	330°	360°
45°	870.7	906.2
46°	859.0	895.7
47°	847.3	885.0
48°	835.3	874.6
49°	823.3	863.4
50°	811.2	852.1
51°	799.3	840.6
52°	786.8	829.3
53°	774.2	817.5
54°	761.7	805.3
55°	748.8	792.7
56°	736.1	778.8
57°	722.3	766.8
58°	708.8	752.1
59°	694.9	739.4
60°	679.1	723.2
61°	665.8	709.5
62°	649.2	692.2
63°	635.3	676.0
64°	617.8	659.3
65°	602.7	641.9
66°	584.2	623.9
67°	566.8	605.3
68°	548.7	586.0
69°	530.2	566.2
70°	511.2	547.7
71°	491.6	525.9
72°	472.4	496.5
73°	452.7	465.3
74°	426.5	436.8
75°	397.1	407.9
76°	370.0	378.8
77°	342.5	349.3
78°	312.1	317.0
79°	287.1	290.3
80°	256.5	258.9
81°	229.9	230.9
82°	202.6	202.7
83°	174.4	175.5
84°	148.1	147.2
85°	122.5	120.8
86°	95.6	94.2
87°	72.2	69.5
88°	47.1	54.1
89°	24.1	21.9



TEST NUMBER: A1708561A001(277V)

CATALOG NUMBER: 14RTC3435

CANDELA DISTRIBUTION (continued):

	330°	360°
90°	6.2	3.2

(END OF REPORT)