

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: P253109

Luminaire Tested: **14RTC-40-UNV-L835-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P253109  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1803-679-1)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14RTC-40-UNV-L835-CD1-U  
Description: 1X4 RTC  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3868.0 lumens  
Efficiency: N/A  
Efficacy: 130.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.41  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

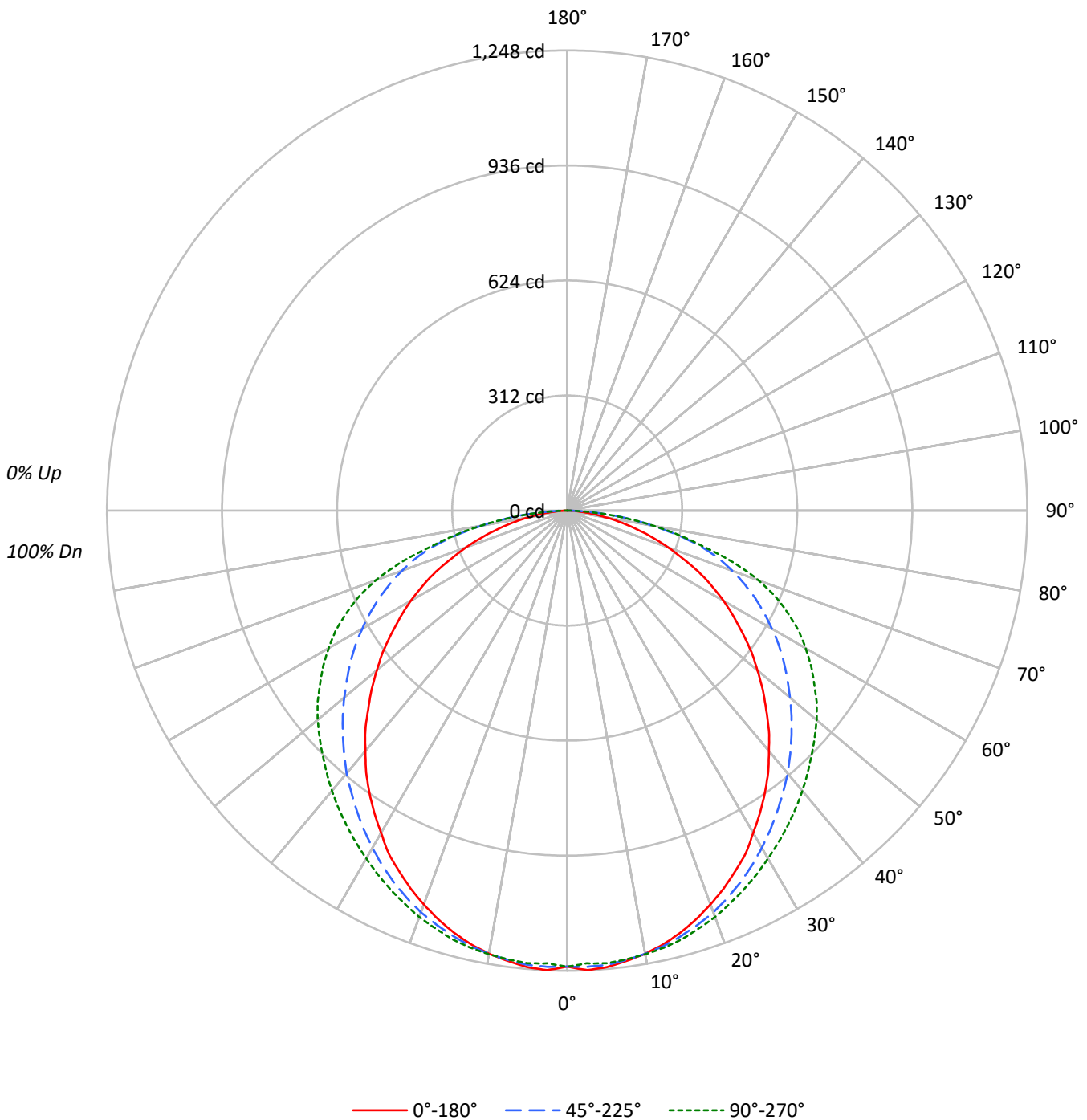
Input Watts (W): 29.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
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	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	73	80	75	71	77	73	69	67
3	88	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	60	54	49	47
5	74	61	51	44	72	59	51	44	57	49	44	55	48	43	53	47	43	40
6	68	54	45	38	66	53	45	38	52	44	38	50	43	38	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	27	37	31	26	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3328	3328	3328
5°	3357	3341	3329
10°	3334	3334	3338
15°	3302	3327	3353
20°	3255	3320	3359
25°	3204	3303	3366
30°	3136	3282	3386
35°	3071	3266	3425
40°	2991	3268	3486
45°	2905	3275	3569
50°	2821	3304	3698
55°	2727	3368	3838
60°	2638	3455	4019
65°	2503	3585	4213
70°	2293	3749	4346
75°	2036	3913	4055
80°	1671	3645	3716
85°	1170	2952	2813



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.2	3.0
10°-20°	336.0	8.7
20°-30°	509.3	13.2
30°-40°	618.6	16.0
40°-50°	659.8	17.1
50°-60°	634.0	16.4
60°-70°	539.3	13.9
70°-80°	353.2	9.1
80°-90°	100.6	2.6
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°	962.6	24.9
0°-40°	1581.1	40.9
0°-60°	2874.9	74.3
0°-90°	3868.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3868.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1237	1237	1237	1237	1237	
5°	1243	1231	1237	1232	1232	118
15°	1185	1178	1194	1199	1204	334
25°	1079	1081	1112	1125	1134	497
35°	935	946	994	1024	1043	584
45°	763	791	860	912	938	590
55°	581	627	718	788	818	521
65°	393	458	563	636	662	387
75°	196	282	376	392	390	208
85°	38	94	96	91	91	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1236.9	1236.9	1236.9	1236.9	1236.9	1236.9	1236.9	1236.9	1236.9	1236.9	1236.9
2.5°	1247.5	1246.0	1241.4	1236.9	1235.4	1233.8	1233.8	1232.3	1232.3	1233.8	1238.4
5°	1242.9	1241.4	1236.9	1233.8	1230.8	1230.8	1230.8	1229.3	1229.3	1230.8	1236.9
7.5°	1232.3	1232.3	1227.8	1224.7	1221.7	1221.7	1221.7	1220.2	1220.2	1223.2	1229.3
10°	1220.2	1220.2	1215.6	1212.6	1211.1	1211.1	1211.1	1209.6	1211.1	1212.6	1220.2
12.5°	1205.0	1205.0	1200.4	1197.4	1197.4	1197.4	1195.9	1195.9	1197.4	1200.4	1209.6
15°	1185.3	1183.8	1182.2	1179.2	1177.7	1177.7	1179.2	1179.2	1180.7	1186.8	1194.4
17.5°	1162.5	1162.5	1161.0	1158.0	1158.0	1158.0	1158.0	1159.5	1162.5	1168.6	1177.7
20°	1136.7	1138.2	1136.7	1133.7	1135.2	1135.2	1136.7	1138.2	1141.3	1148.8	1159.5
22.5°	1109.4	1110.9	1107.9	1106.4	1107.9	1109.4	1109.4	1112.4	1117.0	1126.1	1136.7
25°	1079.0	1080.6	1079.0	1077.5	1079.0	1080.6	1082.1	1083.6	1091.2	1100.3	1112.4
27.5°	1048.7	1047.2	1045.7	1045.7	1048.7	1050.2	1051.7	1056.3	1062.3	1074.5	1085.1
30°	1009.2	1010.7	1010.7	1010.7	1013.8	1016.8	1019.9	1022.9	1032.0	1044.1	1056.3
32.5°	972.8	972.8	974.3	975.8	980.4	981.9	984.9	991.0	1001.6	1013.8	1025.9
35°	934.9	934.9	936.4	937.9	942.5	945.5	948.5	957.6	968.3	981.9	994.1
37.5°	895.4	896.9	896.9	901.5	906.0	909.1	912.1	922.7	934.9	950.0	962.2
40°	851.4	852.9	855.9	860.5	866.6	871.1	875.7	887.8	900.0	916.7	930.3
42.5°	810.4	810.4	815.0	819.5	827.1	830.1	836.2	851.4	865.1	880.2	895.4
45°	763.4	767.9	771.0	778.5	786.1	790.7	798.3	813.5	828.6	845.3	860.5
47.5°	719.4	723.9	728.5	734.5	745.2	751.2	757.3	775.5	790.7	810.4	825.6
50°	673.8	678.4	684.5	692.0	702.7	710.3	717.8	737.6	752.7	772.5	789.2
52.5°	629.8	631.3	638.9	648.0	660.2	669.3	676.9	698.1	716.3	736.1	752.7
55°	581.3	585.8	593.4	604.0	617.7	626.8	635.9	657.1	675.3	696.6	717.8
57.5°	535.7	538.8	547.9	558.5	573.7	584.3	594.9	617.7	637.4	660.2	681.4
60°	490.2	491.7	502.3	514.5	531.2	544.8	553.9	578.2	597.9	620.7	642.0
62.5°	441.6	444.7	455.3	470.5	490.2	502.3	511.4	535.7	558.5	581.3	602.5
65°	393.1	396.1	408.2	426.5	446.2	458.3	470.5	496.3	517.5	540.3	563.0
67.5°	340.0	344.5	358.2	377.9	402.2	414.3	426.5	452.3	475.0	497.8	520.5
70°	291.4	297.5	311.1	332.4	356.6	368.8	382.4	409.8	434.0	455.3	476.5
72.5°	242.8	248.9	265.6	288.4	312.6	326.3	338.4	362.7	388.5	409.8	431.0
75°	195.8	201.8	220.1	244.3	270.1	282.3	295.9	320.2	341.5	359.7	376.4
77.5°	151.8	157.8	177.6	201.8	227.6	241.3	251.9	274.7	294.4	302.0	306.6
80°	107.8	113.8	135.1	160.9	185.2	198.8	209.4	223.1	230.7	232.2	235.2
82.5°	69.8	77.4	98.6	122.9	144.2	151.8	153.3	159.4	165.4	163.9	165.4
85°	37.9	45.5	63.7	82.0	89.5	94.1	94.1	95.6	98.6	95.6	95.6
87.5°	15.2	19.7	28.8	33.4	34.9	36.4	36.4	34.9	34.9	31.9	31.9
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):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°
0°	1236.9	1236.9	1236.9	1236.9	1236.9	1236.9	1236.9	1236.9	1236.9	1236.9
2.5°	1242.9	1239.9	1238.4	1236.9	1235.4	1233.8	1232.3	1230.8	1229.3	1229.3
5°	1239.9	1236.9	1235.4	1233.8	1232.3	1230.8	1230.8	1232.3	1232.3	1232.3
7.5°	1233.8	1229.3	1229.3	1227.8	1227.8	1226.2	1226.2	1227.8	1227.8	1227.8
10°	1224.7	1221.7	1221.7	1220.2	1220.2	1218.7	1218.7	1220.2	1220.2	1221.7
12.5°	1214.1	1211.1	1211.1	1211.1	1211.1	1209.6	1211.1	1212.6	1212.6	1214.1
15°	1198.9	1197.4	1198.9	1198.9	1198.9	1198.9	1198.9	1202.0	1202.0	1203.5
17.5°	1183.8	1182.2	1183.8	1185.3	1185.3	1185.3	1185.3	1186.8	1188.3	1188.3
20°	1162.5	1162.5	1164.0	1165.5	1167.1	1165.5	1167.1	1170.1	1171.6	1173.1
22.5°	1139.7	1139.7	1142.8	1144.3	1144.3	1145.8	1147.3	1150.4	1153.4	1153.4
25°	1115.5	1117.0	1121.5	1123.0	1124.6	1124.6	1127.6	1130.6	1133.7	1133.7
27.5°	1089.7	1094.2	1097.2	1100.3	1101.8	1103.3	1104.8	1109.4	1112.4	1112.4
30°	1062.3	1065.4	1071.4	1076.0	1076.0	1077.5	1080.6	1086.6	1089.7	1089.7
32.5°	1032.0	1038.1	1044.1	1048.7	1050.2	1053.2	1057.8	1063.9	1065.4	1066.9
35°	1001.6	1007.7	1015.3	1021.4	1024.4	1027.4	1032.0	1038.1	1041.1	1042.6
37.5°	971.3	978.9	988.0	994.1	997.1	1001.6	1006.2	1013.8	1016.8	1018.3
40°	939.4	948.5	957.6	965.2	969.8	972.8	978.9	988.0	991.0	992.5
42.5°	906.0	918.2	928.8	937.9	940.9	945.5	953.1	960.7	963.7	965.2
45°	872.6	886.3	896.9	907.5	912.1	916.7	925.8	933.3	937.9	937.9
47.5°	839.3	854.4	866.6	877.2	883.3	887.8	896.9	906.0	909.1	910.6
50°	805.9	821.0	836.2	846.8	852.9	859.0	868.1	877.2	880.2	883.3
52.5°	771.0	787.7	802.8	815.0	821.0	827.1	837.7	846.8	851.4	852.9
55°	736.1	752.7	767.9	781.6	787.7	795.2	805.9	815.0	818.0	818.0
57.5°	699.6	717.8	733.0	746.7	754.3	760.3	771.0	780.1	783.1	784.6
60°	663.2	681.4	696.6	710.3	716.3	723.9	733.0	742.1	746.7	746.7
62.5°	623.7	642.0	657.1	672.3	676.9	684.5	695.1	701.1	705.7	708.7
65°	582.8	601.0	616.2	629.8	635.9	642.0	652.6	660.2	661.7	661.7
67.5°	540.3	555.5	570.6	584.3	590.4	596.4	605.5	611.6	613.1	613.1
70°	494.7	509.9	523.6	535.7	540.3	546.3	550.9	553.9	555.5	552.4
72.5°	447.7	458.3	468.9	472.0	472.0	472.0	473.5	473.5	473.5	478.1
75°	382.4	387.0	391.5	391.5	391.5	391.5	394.6	393.1	394.6	390.0
77.5°	308.1	309.6	315.7	314.2	314.2	314.2	315.7	314.2	314.2	314.2
80°	238.3	236.8	241.3	239.8	236.8	236.8	239.8	236.8	236.8	239.8
82.5°	166.9	166.9	166.9	163.9	163.9	160.9	163.9	160.9	162.4	163.9
85°	97.1	92.6	95.6	91.1	91.1	89.5	91.1	88.0	88.0	91.1
87.5°	28.8	25.8	28.8	27.3	24.3	24.3	24.3	22.8	22.8	24.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)