

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: P253115

Luminaire Tested: **22RTC-40-UNV-L840-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P253115
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1803-679-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22RTC-40-UNV-L840-CD1-U
Description: 2X2 RTC
Light Source: -
Ballast/Driver: -

Summary

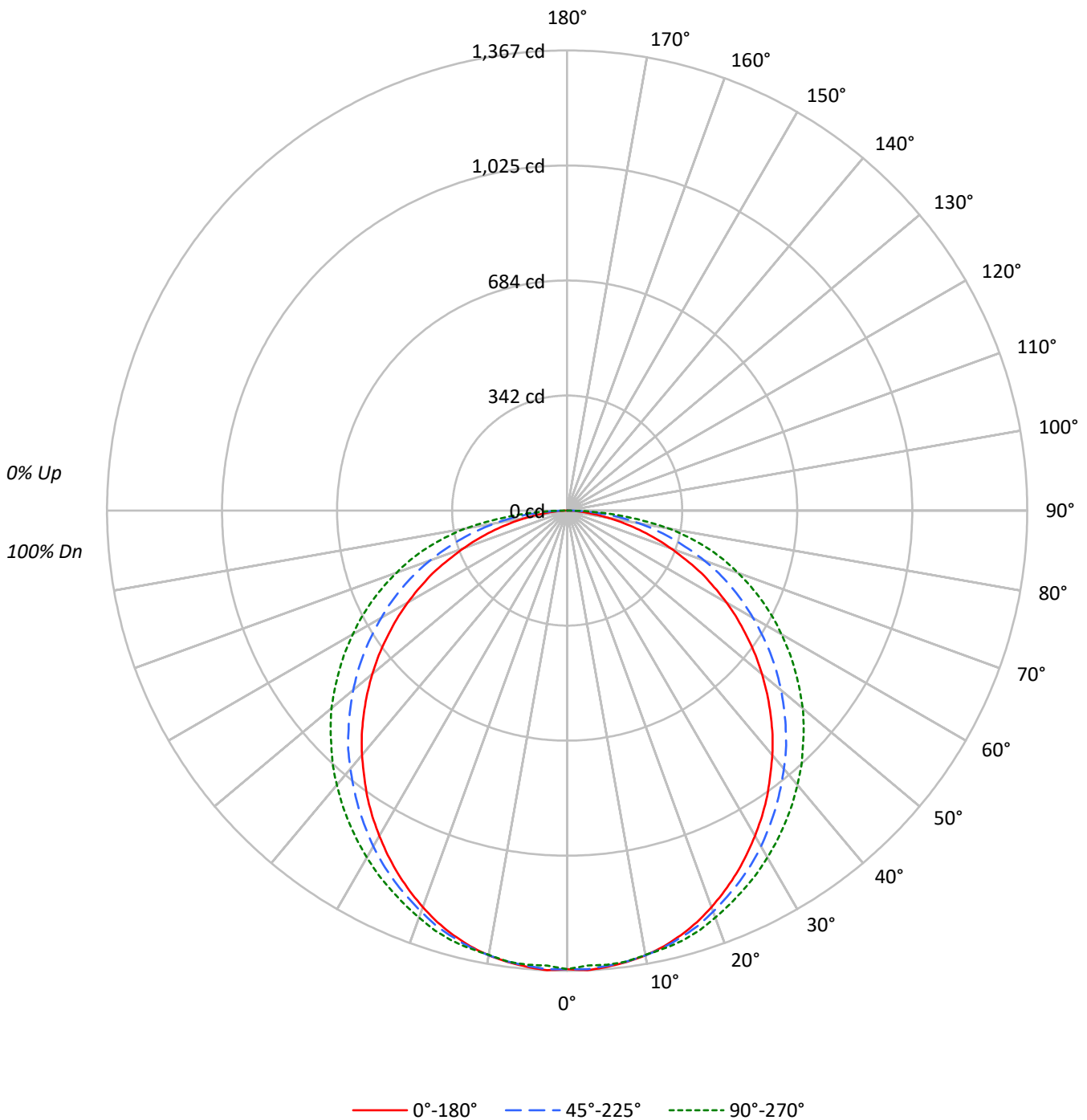
Lumens per Lamp: N/A
Luminaire Lumens: 4093.6 lumens
Efficiency: N/A
Efficacy: 129.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.3 / 1.39
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 31.7
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	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	63	86	76	68	62	73	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	68	59	52	65	58	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	45	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3666	3666	3666
5°	3675	3667	3658
10°	3666	3666	3662
15°	3638	3655	3685
20°	3591	3631	3685
25°	3533	3607	3686
30°	3468	3580	3697
35°	3404	3548	3713
40°	3331	3518	3739
45°	3251	3495	3770
50°	3163	3471	3826
55°	3059	3456	3875
60°	2944	3434	3956
65°	2805	3433	4082
70°	2578	3416	4242
75°	2314	3374	4498
80°	1920	3375	4761
85°	1352	3143	4452



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.1	3.2
10°-20°	370.4	9.0
20°-30°	560.1	13.7
30°-40°	676.6	16.5
40°-50°	710.9	17.4
50°-60°	659.9	16.1
60°-70°	533.0	13.0
70°-80°	343.4	8.4
80°-90°	110.1	2.7
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°	1059.6	25.9
0°-40°	1736.3	42.4
0°-60°	3107.1	75.9
0°-90°	4093.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4093.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1362	1362	1362	1362	1362	
5°	1361	1361	1358	1354	1354	129
15°	1306	1307	1312	1320	1323	368
25°	1190	1196	1215	1234	1242	548
35°	1036	1047	1080	1114	1130	647
45°	854	872	918	970	991	659
55°	652	676	737	801	826	583
65°	440	469	539	610	641	433
75°	223	256	324	393	433	236
85°	44	66	102	129	144	55
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°	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2
2.5°	1366.8	1366.8	1366.8	1365.2	1366.8	1366.8	1365.2	1365.2	1363.7	1363.7	1363.7
5°	1360.6	1360.6	1359.0	1359.0	1360.6	1360.6	1359.0	1359.0	1357.5	1357.5	1357.5
7.5°	1352.7	1352.7	1352.7	1352.7	1352.7	1352.7	1351.2	1351.2	1351.2	1352.7	1351.2
10°	1341.7	1341.7	1341.7	1341.7	1341.7	1341.7	1341.7	1340.1	1340.1	1341.7	1341.7
12.5°	1326.1	1327.7	1326.1	1326.1	1327.7	1327.7	1326.1	1326.1	1326.1	1329.2	1329.2
15°	1305.8	1305.8	1305.8	1305.8	1307.3	1307.3	1307.3	1308.8	1308.8	1311.9	1311.9
17.5°	1282.1	1282.1	1282.1	1282.1	1283.7	1285.3	1285.3	1286.9	1288.4	1291.6	1293.2
20°	1253.9	1255.5	1253.9	1255.5	1257.1	1258.7	1258.7	1260.2	1263.4	1266.5	1268.1
22.5°	1222.6	1224.1	1224.1	1225.7	1227.3	1228.9	1228.9	1232.0	1235.2	1238.3	1241.5
25°	1189.8	1191.3	1191.3	1192.8	1194.4	1195.9	1197.5	1200.7	1205.4	1210.1	1214.8
27.5°	1153.7	1155.2	1155.2	1158.4	1160.0	1161.5	1164.6	1167.7	1174.0	1178.7	1185.0
30°	1116.0	1117.6	1117.6	1119.2	1122.3	1125.5	1128.6	1133.3	1137.9	1144.2	1152.1
32.5°	1076.9	1078.4	1078.4	1079.9	1084.7	1087.8	1089.4	1095.7	1102.0	1108.2	1116.0
35°	1036.1	1036.1	1036.1	1040.8	1044.0	1047.1	1048.7	1056.4	1064.3	1072.2	1079.9
37.5°	990.7	992.2	992.2	998.4	1003.2	1006.3	1009.5	1015.8	1025.1	1033.0	1040.8
40°	948.3	948.3	948.3	953.0	959.3	962.5	967.1	973.4	984.4	992.2	1001.6
42.5°	902.9	904.5	904.5	909.1	915.4	918.5	923.3	931.1	942.0	951.5	962.5
45°	854.2	855.8	855.8	862.1	868.4	871.5	877.7	885.6	896.6	907.5	918.5
47.5°	805.7	805.7	808.8	816.7	821.3	826.0	829.2	840.2	851.1	863.7	874.7
50°	755.6	755.6	760.3	764.9	772.8	777.5	782.2	793.1	805.7	816.7	829.2
52.5°	705.3	705.3	708.5	716.3	722.6	727.3	732.1	744.5	757.1	769.6	783.8
55°	652.0	655.2	658.3	663.0	670.9	675.5	681.8	694.4	708.5	721.0	736.7
57.5°	600.3	601.9	605.0	614.5	619.1	623.8	630.1	642.7	656.8	672.5	686.5
60°	547.1	547.1	551.8	558.1	567.4	572.1	580.0	592.5	606.6	622.2	638.0
62.5°	492.2	493.8	500.1	509.4	514.1	522.0	528.3	540.8	556.5	570.5	589.3
65°	440.5	440.5	445.2	456.1	460.8	468.7	474.9	489.1	504.7	520.4	539.2
67.5°	380.9	384.1	388.7	399.7	409.1	415.4	421.6	437.3	453.0	468.7	487.5
70°	327.6	330.7	335.4	343.3	352.7	359.0	365.2	379.4	396.5	415.4	434.2
72.5°	275.8	277.4	282.1	290.0	299.4	307.2	313.5	327.6	343.3	359.0	377.8
75°	222.6	225.7	230.4	238.3	247.6	255.5	260.2	274.3	290.0	305.6	324.5
77.5°	172.4	175.6	180.3	188.0	197.5	202.2	208.5	222.6	238.3	253.9	271.2
80°	123.9	127.0	131.6	139.5	148.9	153.7	159.8	172.4	186.6	200.6	217.8
82.5°	79.9	81.5	87.8	94.1	103.4	108.1	112.8	125.4	137.9	150.5	163.0
85°	43.8	43.8	47.0	53.3	61.1	65.9	69.0	76.8	86.2	94.1	101.8
87.5°	15.6	15.6	17.2	20.3	23.5	25.1	26.6	29.8	34.5	39.2	43.8
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°	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2	1362.2
2.5°	1362.2	1360.6	1359.0	1357.5	1355.9	1355.9	1354.3	1352.7	1352.7	1352.7
5°	1357.5	1355.9	1355.9	1354.3	1354.3	1354.3	1354.3	1352.7	1352.7	1354.3
7.5°	1351.2	1351.2	1351.2	1351.2	1351.2	1351.2	1351.2	1351.2	1351.2	1351.2
10°	1341.7	1341.7	1341.7	1340.1	1340.1	1340.1	1340.1	1340.1	1340.1	1340.1
12.5°	1329.2	1329.2	1329.2	1330.8	1330.8	1330.8	1330.8	1332.4	1332.4	1332.4
15°	1315.1	1316.7	1316.7	1318.2	1319.8	1319.8	1321.4	1321.4	1322.9	1322.9
17.5°	1296.3	1297.9	1301.0	1302.6	1302.6	1304.2	1305.8	1307.3	1307.3	1307.3
20°	1272.8	1276.0	1277.5	1280.6	1280.6	1282.1	1283.7	1285.3	1286.9	1286.9
22.5°	1246.2	1249.3	1253.9	1257.1	1257.1	1258.7	1261.8	1263.4	1264.9	1264.9
25°	1219.5	1224.1	1227.3	1232.0	1233.6	1235.2	1238.3	1239.9	1241.5	1241.5
27.5°	1191.3	1194.4	1200.7	1205.4	1207.0	1208.5	1213.2	1216.4	1216.4	1218.0
30°	1158.4	1164.6	1170.9	1175.6	1177.2	1180.3	1185.0	1188.2	1189.8	1189.8
32.5°	1123.9	1130.2	1137.9	1144.2	1147.4	1149.0	1155.2	1158.4	1160.0	1161.5
35°	1087.8	1095.7	1105.1	1111.3	1114.4	1117.6	1123.9	1127.0	1130.2	1130.2
37.5°	1051.7	1061.2	1069.0	1078.4	1081.5	1084.7	1091.0	1094.1	1097.2	1098.8
40°	1014.2	1023.5	1033.0	1042.4	1045.5	1050.2	1054.9	1059.6	1062.7	1064.3
42.5°	975.0	984.4	995.3	1004.7	1011.0	1014.2	1020.4	1025.1	1028.2	1029.8
45°	932.7	943.6	954.6	965.5	970.2	973.4	981.3	987.5	990.7	990.7
47.5°	888.7	901.3	913.8	924.8	931.1	934.2	942.0	946.7	951.5	953.0
50°	844.9	859.0	871.5	882.5	888.7	893.5	901.3	905.9	910.7	913.8
52.5°	797.8	813.6	826.0	838.6	844.9	849.5	859.0	865.3	868.4	870.0
55°	752.4	768.0	782.2	794.7	801.0	804.1	815.1	821.3	824.5	826.0
57.5°	703.8	719.5	733.5	746.1	754.0	760.3	768.0	775.9	779.0	782.2
60°	655.2	670.9	686.5	700.7	706.9	711.6	722.6	728.9	733.5	735.1
62.5°	605.0	623.8	638.0	652.0	659.9	664.6	674.1	681.8	688.1	689.7
65°	554.9	572.1	587.9	603.5	609.8	616.1	625.4	634.8	639.6	641.1
67.5°	504.7	522.0	537.6	551.8	559.6	565.8	576.8	584.7	590.9	590.9
70°	451.4	468.7	485.9	500.1	507.8	514.1	525.1	532.9	539.2	539.2
72.5°	393.4	415.4	431.1	446.7	453.0	460.8	470.3	479.6	485.9	489.1
75°	340.1	357.4	373.1	388.7	393.4	404.4	415.4	424.8	431.1	432.6
77.5°	285.3	302.5	318.2	332.3	338.5	344.8	357.4	363.6	369.9	371.5
80°	232.0	247.6	263.4	274.3	279.0	285.3	293.1	299.4	304.0	307.2
82.5°	172.4	183.4	192.8	200.6	203.8	208.5	216.3	219.4	222.6	225.7
85°	106.6	114.4	120.7	127.0	128.6	133.2	137.9	139.5	142.6	144.2
87.5°	45.4	51.7	54.9	56.4	58.0	61.1	65.9	65.9	69.0	67.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)