

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: P253108

Luminaire Tested: **14RTC-24-UNV-L835-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P253108  
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-24-UNV-L835-CD1-U  
Description: 1X4 RTC  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2549.0 lumens  
Efficiency: N/A  
Efficacy: 129.4 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

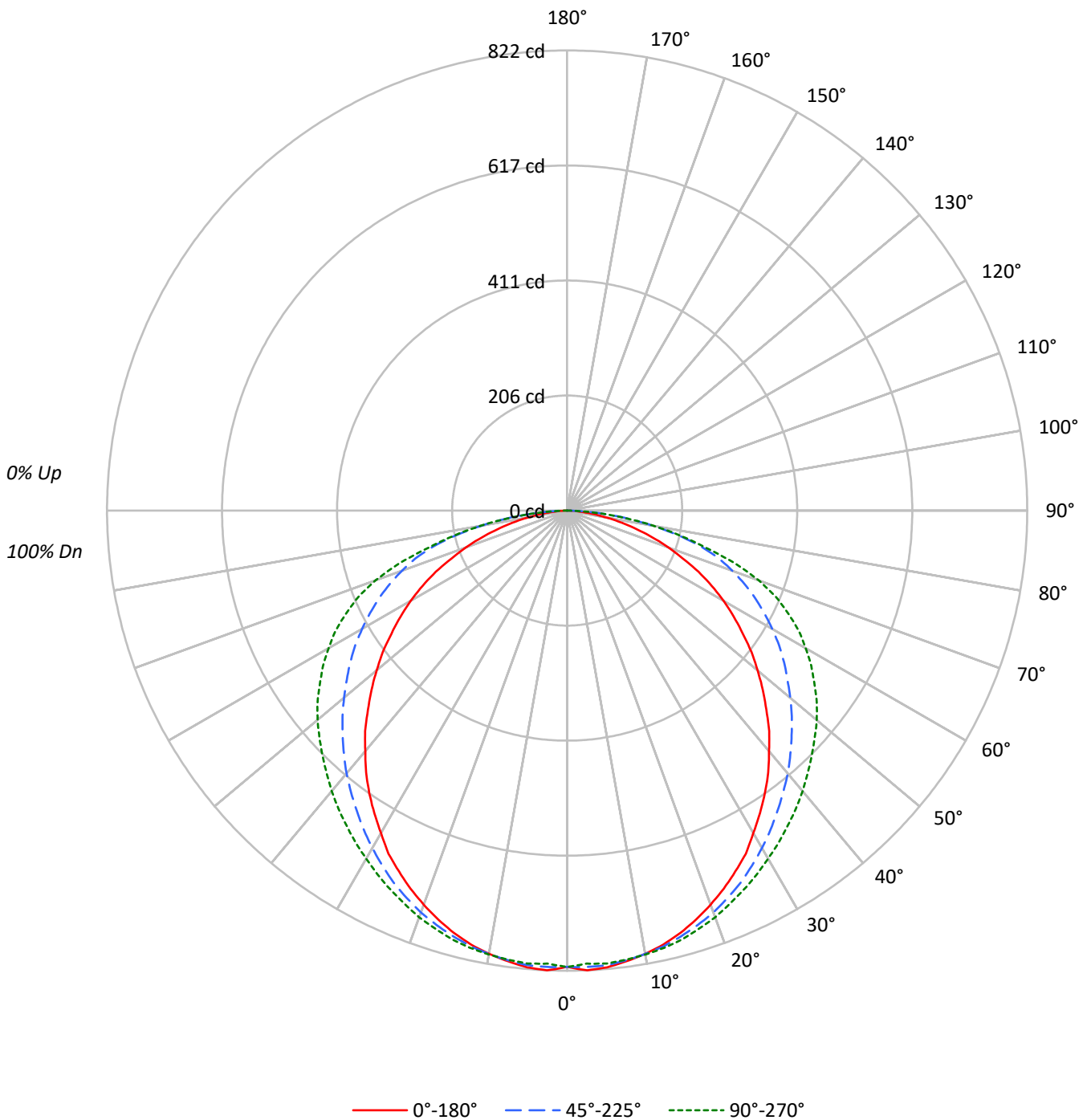
Input Watts (W): 19.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2193	2193	2193
5°	2213	2202	2194
10°	2197	2197	2200
15°	2176	2193	2210
20°	2145	2188	2214
25°	2111	2177	2218
30°	2067	2163	2231
35°	2024	2152	2257
40°	1971	2154	2298
45°	1915	2158	2352
50°	1859	2177	2437
55°	1797	2220	2529
60°	1738	2277	2648
65°	1649	2362	2777
70°	1511	2471	2864
75°	1341	2578	2672
80°	1100	2402	2448
85°	772	1945	1853



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.2	3.0
10°-20°	221.5	8.7
20°-30°	335.6	13.2
30°-40°	407.7	16.0
40°-50°	434.8	17.1
50°-60°	417.8	16.4
60°-70°	355.4	13.9
70°-80°	232.8	9.1
80°-90°	66.3	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°	634.3	24.9
0°-40°	1042.0	40.9
0°-60°	1894.6	74.3
0°-90°	2549.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2549.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	815	815	815	815	815	
5°	819	811	815	812	812	78
15°	781	776	787	790	793	220
25°	711	712	733	741	747	328
35°	616	623	655	675	687	385
45°	503	521	567	601	618	389
55°	383	413	473	519	539	343
65°	259	302	371	419	436	255
75°	129	186	248	258	257	137
85°	25	62	63	60	60	32
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°	815.1	815.1	815.1	815.1	815.1	815.1	815.1	815.1	815.1	815.1	815.1
2.5°	822.1	821.1	818.1	815.1	814.1	813.1	813.1	812.1	812.1	813.1	816.1
5°	819.1	818.1	815.1	813.1	811.1	811.1	811.1	810.1	810.1	811.1	815.1
7.5°	812.1	812.1	809.1	807.1	805.1	805.1	805.1	804.1	804.1	806.1	810.1
10°	804.1	804.1	801.1	799.1	798.1	798.1	798.1	797.1	798.1	799.1	804.1
12.5°	794.1	794.1	791.1	789.1	789.1	789.1	788.1	788.1	789.1	791.1	797.1
15°	781.1	780.1	779.1	777.1	776.1	776.1	777.1	777.1	778.1	782.1	787.1
17.5°	766.1	766.1	765.1	763.1	763.1	763.1	763.1	764.1	766.1	770.1	776.1
20°	749.1	750.1	749.1	747.1	748.1	748.1	749.1	750.1	752.1	757.1	764.1
22.5°	731.1	732.1	730.1	729.1	730.1	731.1	731.1	733.1	736.1	742.1	749.1
25°	711.1	712.1	711.1	710.1	711.1	712.1	713.1	714.1	719.1	725.1	733.1
27.5°	691.1	690.1	689.1	689.1	691.1	692.1	693.1	696.1	700.1	708.1	715.1
30°	665.1	666.1	666.1	666.1	668.1	670.1	672.1	674.1	680.1	688.1	696.1
32.5°	641.1	641.1	642.1	643.1	646.1	647.1	649.1	653.1	660.1	668.1	676.1
35°	616.1	616.1	617.1	618.1	621.1	623.1	625.1	631.1	638.1	647.1	655.1
37.5°	590.1	591.1	591.1	594.1	597.1	599.1	601.1	608.1	616.1	626.1	634.1
40°	561.1	562.1	564.1	567.1	571.1	574.1	577.1	585.1	593.1	604.1	613.1
42.5°	534.1	534.1	537.1	540.1	545.1	547.1	551.1	561.1	570.1	580.1	590.1
45°	503.1	506.1	508.1	513.1	518.1	521.1	526.1	536.1	546.1	557.1	567.1
47.5°	474.1	477.1	480.1	484.1	491.1	495.1	499.1	511.1	521.1	534.1	544.1
50°	444.1	447.1	451.1	456.1	463.1	468.1	473.1	486.1	496.1	509.1	520.1
52.5°	415.0	416.0	421.0	427.0	435.1	441.1	446.1	460.1	472.1	485.1	496.1
55°	383.0	386.0	391.0	398.0	407.0	413.0	419.0	433.1	445.1	459.1	473.1
57.5°	353.0	355.0	361.0	368.0	378.0	385.0	392.0	407.0	420.0	435.1	449.1
60°	323.0	324.0	331.0	339.0	350.0	359.0	365.0	381.0	394.0	409.0	423.0
62.5°	291.0	293.0	300.0	310.0	323.0	331.0	337.0	353.0	368.0	383.0	397.0
65°	259.0	261.0	269.0	281.0	294.0	302.0	310.0	327.0	341.0	356.0	371.0
67.5°	224.0	227.0	236.0	249.0	265.0	273.0	281.0	298.0	313.0	328.0	343.0
70°	192.0	196.0	205.0	219.0	235.0	243.0	252.0	270.0	286.0	300.0	314.0
72.5°	160.0	164.0	175.0	190.0	206.0	215.0	223.0	239.0	256.0	270.0	284.0
75°	129.0	133.0	145.0	161.0	178.0	186.0	195.0	211.0	225.0	237.0	248.0
77.5°	100.0	104.0	117.0	133.0	150.0	159.0	166.0	181.0	194.0	199.0	202.0
80°	71.0	75.0	89.0	106.0	122.0	131.0	138.0	147.0	152.0	153.0	155.0
82.5°	46.0	51.0	65.0	81.0	95.0	100.0	101.0	105.0	109.0	108.0	109.0
85°	25.0	30.0	42.0	54.0	59.0	62.0	62.0	63.0	65.0	63.0	63.0
87.5°	10.0	13.0	19.0	22.0	23.0	24.0	24.0	23.0	23.0	21.0	21.0
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°	815.1	815.1	815.1	815.1	815.1	815.1	815.1	815.1	815.1	815.1
2.5°	819.1	817.1	816.1	815.1	814.1	813.1	812.1	811.1	810.1	810.1
5°	817.1	815.1	814.1	813.1	812.1	811.1	811.1	812.1	812.1	812.1
7.5°	813.1	810.1	810.1	809.1	809.1	808.1	808.1	809.1	809.1	809.1
10°	807.1	805.1	805.1	804.1	804.1	803.1	803.1	804.1	804.1	805.1
12.5°	800.1	798.1	798.1	798.1	798.1	797.1	798.1	799.1	799.1	800.1
15°	790.1	789.1	790.1	790.1	790.1	790.1	790.1	792.1	792.1	793.1
17.5°	780.1	779.1	780.1	781.1	781.1	781.1	781.1	782.1	783.1	783.1
20°	766.1	766.1	767.1	768.1	769.1	768.1	769.1	771.1	772.1	773.1
22.5°	751.1	751.1	753.1	754.1	754.1	755.1	756.1	758.1	760.1	760.1
25°	735.1	736.1	739.1	740.1	741.1	741.1	743.1	745.1	747.1	747.1
27.5°	718.1	721.1	723.1	725.1	726.1	727.1	728.1	731.1	733.1	733.1
30°	700.1	702.1	706.1	709.1	709.1	710.1	712.1	716.1	718.1	718.1
32.5°	680.1	684.1	688.1	691.1	692.1	694.1	697.1	701.1	702.1	703.1
35°	660.1	664.1	669.1	673.1	675.1	677.1	680.1	684.1	686.1	687.1
37.5°	640.1	645.1	651.1	655.1	657.1	660.1	663.1	668.1	670.1	671.1
40°	619.1	625.1	631.1	636.1	639.1	641.1	645.1	651.1	653.1	654.1
42.5°	597.1	605.1	612.1	618.1	620.1	623.1	628.1	633.1	635.1	636.1
45°	575.1	584.1	591.1	598.1	601.1	604.1	610.1	615.1	618.1	618.1
47.5°	553.1	563.1	571.1	578.1	582.1	585.1	591.1	597.1	599.1	600.1
50°	531.1	541.1	551.1	558.1	562.1	566.1	572.1	578.1	580.1	582.1
52.5°	508.1	519.1	529.1	537.1	541.1	545.1	552.1	558.1	561.1	562.1
55°	485.1	496.1	506.1	515.1	519.1	524.1	531.1	537.1	539.1	539.1
57.5°	461.1	473.1	483.1	492.1	497.1	501.1	508.1	514.1	516.1	517.1
60°	437.1	449.1	459.1	468.1	472.1	477.1	483.1	489.1	492.1	492.1
62.5°	411.0	423.0	433.1	443.1	446.1	451.1	458.1	462.1	465.1	467.1
65°	384.0	396.0	406.0	415.0	419.0	423.0	430.1	435.1	436.1	436.1
67.5°	356.0	366.0	376.0	385.0	389.0	393.0	399.0	403.0	404.0	404.0
70°	326.0	336.0	345.0	353.0	356.0	360.0	363.0	365.0	366.0	364.0
72.5°	295.0	302.0	309.0	311.0	311.0	311.0	312.0	312.0	312.0	315.0
75°	252.0	255.0	258.0	258.0	258.0	258.0	260.0	259.0	260.0	257.0
77.5°	203.0	204.0	208.0	207.0	207.0	207.0	208.0	207.0	207.0	207.0
80°	157.0	156.0	159.0	158.0	156.0	156.0	158.0	156.0	156.0	158.0
82.5°	110.0	110.0	110.0	108.0	108.0	106.0	108.0	106.0	107.0	108.0
85°	64.0	61.0	63.0	60.0	60.0	59.0	60.0	58.0	58.0	60.0
87.5°	19.0	17.0	19.0	18.0	16.0	16.0	16.0	15.0	15.0	16.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)