

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: 226P115

Luminaire Tested: **RDI-SYM-214T5RP**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 226P115
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: RDI-SYM-214T5RP
Description: 1 X 2 Recessed Direct-Indirect Luminaire with one
center mounted curved acrylic diffuser with curved perf.
Light Source: Two - F14T5/835 - 1350 Lumens ea. - 14 Watts ea.
Ballast/Driver: Energy Savings ES-2-T5-14-120-F Electronic L.O.B.F.= 88.5%

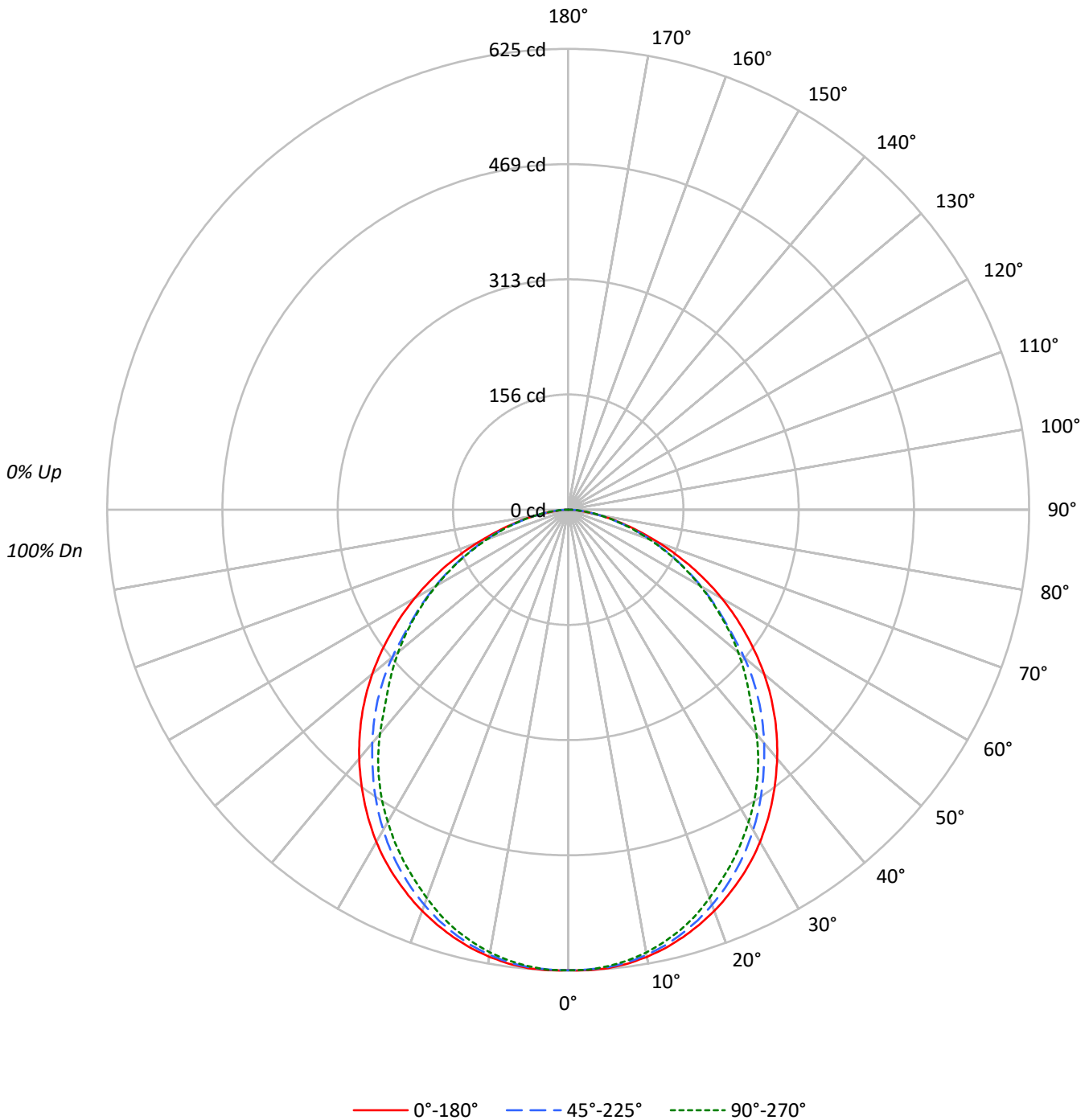
Summary

Lumens per Lamp: 1350 (2 lamps)
Luminaire Lumens: 1554.5 lumens
Efficiency: 57.6%
Efficacy: 51.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.17 / 1.29
Luminous Opening: Rectangular (W 0.86' x L: 1.9' x H: 0')
CIE Type: Direct

Input Watts (W): 30
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	69	69	69	69	67	67	67	67	64	64	64	61	61	61	59	59	59	58
1	63	60	58	56	61	59	57	55	57	55	53	54	53	52	52	51	50	49
2	58	53	49	46	56	52	49	46	50	47	45	48	46	44	46	44	43	41
3	53	47	42	39	51	46	42	38	44	41	38	43	40	37	41	39	37	35
4	48	42	37	33	47	41	36	33	40	36	32	38	35	32	37	34	32	30
5	45	37	32	29	43	37	32	29	36	31	28	34	31	28	33	30	28	26
6	41	34	29	25	40	33	29	25	32	28	25	31	28	25	30	27	24	23
7	38	31	26	22	37	30	26	22	29	25	22	29	25	22	28	24	22	21
8	36	28	23	20	35	28	23	20	27	23	20	26	23	20	26	22	20	19
9	33	26	21	18	33	26	21	18	25	21	18	24	21	18	24	20	18	17
10	31	24	19	16	31	24	19	16	23	19	16	23	19	16	22	19	16	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4115	4115	4115
5°	4127	4118	4108
10°	4118	4102	4079
15°	4095	4061	4022
20°	4060	3998	3928
25°	4014	3918	3829
30°	3958	3816	3721
35°	3879	3690	3595
40°	3791	3553	3415
45°	3686	3402	3219
50°	3553	3188	3085
55°	3379	2942	2914
60°	3171	2750	2723
65°	2887	2527	2505
70°	2512	2282	2244
75°	2087	1970	1975
80°	1635	1646	1688
85°	1119	1315	1345



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	59.1	3.8	2.2	0°	625	625	625	625	625	
10°-20°	167.7	10.8	6.2	5°	624	622	623	622	621	59
20°-30°	248.3	16.0	9.2	15°	600	598	596	593	590	169
30°-40°	288.7	18.6	10.7	25°	552	547	539	532	527	254
40°-50°	283.3	18.2	10.5	35°	482	474	459	451	447	302
50°-60°	238.2	15.3	8.8	45°	396	383	365	349	346	305
60°-70°	165.3	10.6	6.1	55°	294	280	256	254	254	263
70°-80°	83.4	5.4	3.1	65°	185	171	162	161	161	183
80°-90°	20.5	1.3	0.8	75°	82	76	77	78	78	88
90°-100°	0.0	0.0	0.0	85°	15	16	17	18	18	18
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	1
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	475.1	30.6	17.6	165°	0	0	0	0	0	0
0°-40°	763.9	49.1	28.3	175°	0	0	0	0	0	0
0°-60°	1285.3	82.7	47.6	180°	0	0	0	0	0	0
0°-90°	1554.5	100.0	57.6							
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°	1554.5	100.0	57.6							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	624.7	624.7	624.7	624.7	624.7
2.5°	625.3	623.9	624.2	624.2	624.6
5°	624.1	622.5	622.8	621.6	621.3
7.5°	620.8	619.0	619.0	618.0	616.8
10°	615.7	613.9	613.2	611.7	609.8
12.5°	609.0	606.9	605.4	603.0	600.6
15°	600.4	598.0	595.5	592.7	589.7
17.5°	590.4	587.4	583.8	579.9	576.4
20°	579.1	575.5	570.3	564.8	560.3
22.5°	566.3	562.2	555.4	548.4	543.7
25°	552.3	547.3	539.1	531.7	526.8
27.5°	537.1	531.3	521.2	513.5	508.6
30°	520.3	513.6	501.7	493.7	489.2
32.5°	501.8	494.4	480.9	472.7	469.2
35°	482.3	473.9	458.9	451.1	447.1
37.5°	461.7	452.2	436.0	428.4	423.3
40°	440.8	429.9	413.2	403.7	397.1
42.5°	418.8	406.8	389.7	377.3	369.3
45°	395.7	382.7	365.2	349.3	345.5
47.5°	371.8	358.1	339.1	325.3	323.6
50°	346.7	332.5	311.1	302.3	301.0
52.5°	320.8	306.3	282.0	278.6	277.6
55°	294.2	279.7	256.2	254.5	253.7
57.5°	267.7	253.1	232.4	230.7	230.0
60°	240.7	226.5	208.7	207.3	206.7
62.5°	212.9	198.8	184.9	184.2	183.5
65°	185.2	170.9	162.1	161.4	160.7
67.5°	157.5	143.0	140.1	138.8	138.2
70°	130.4	118.2	118.5	117.1	116.5
72.5°	104.9	96.2	97.4	96.8	96.1
75°	82.0	76.2	77.4	77.7	77.6
77.5°	61.5	57.9	59.7	60.3	60.3
80°	43.1	41.6	43.4	44.4	44.5
82.5°	27.4	27.6	29.3	29.9	29.9
85°	14.8	16.1	17.4	17.7	17.8
87.5°	6.5	7.0	8.0	8.6	8.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)