

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: 227P124

Luminaire Tested: **SM-354-TBW**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 227P124
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: SM-354-TBW
Description: Cricket Series Luminaire with a white thin blade
baffle.
Light Source: Three - F54T5/830 H0 - 4400 Lumens ea. - 54 Watts ea.
Ballast/Driver: Two - Triad B254PUNV-D Electronic

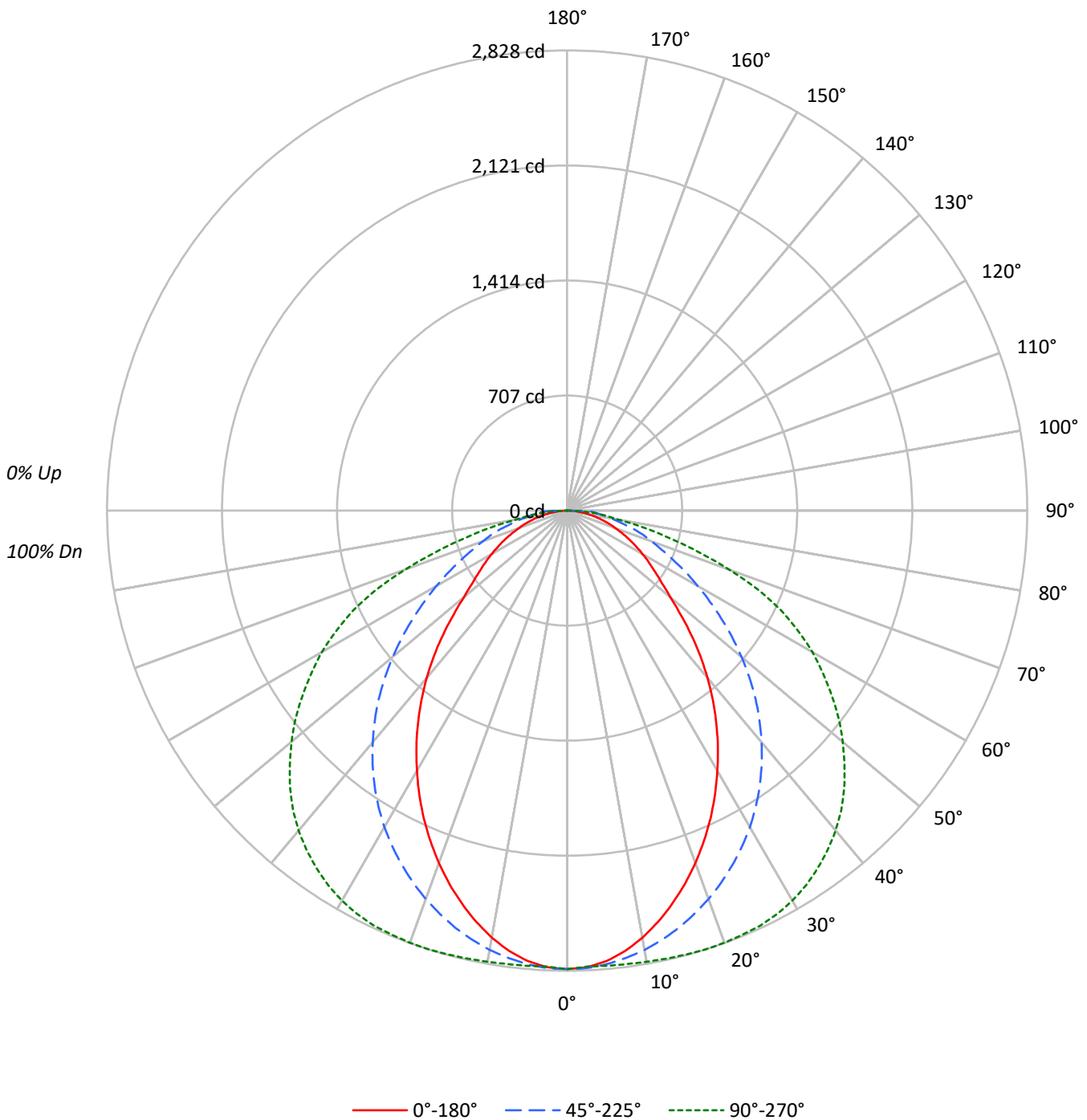
Summary

Lumens per Lamp: 4400 (3 lamps)
Luminaire Lumens: 7296.3 lumens
Efficiency: 55.3%
Efficacy: 48.0 lumens/watt
Spacing Criteria (0/90/45): 1.02 / 1.45 / 1.31
Luminous Opening: Rectangular w/ Sides (W: 0.47' x L: 3.76' x H: 0.1')
CIE Type: Direct

Input Watts (W): 152
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	66	66	66	66	64	64	64	64	61	61	61	59	59	59	56	56	56	55
1	60	58	55	53	59	56	54	52	54	52	51	52	50	49	50	49	48	46
2	55	50	47	43	53	49	46	43	47	44	42	46	43	41	44	42	40	39
3	50	44	40	36	49	43	39	36	42	38	35	40	37	35	39	36	34	33
4	46	39	35	31	45	39	34	31	37	33	30	36	33	30	35	32	29	28
5	42	35	30	27	41	35	30	27	34	29	26	32	29	26	31	28	26	25
6	39	32	27	23	38	31	27	23	30	26	23	29	26	23	29	25	23	22
7	36	29	24	21	35	28	24	21	28	24	21	27	23	20	26	23	20	19
8	34	26	22	19	33	26	22	19	25	21	18	25	21	18	24	21	18	17
9	32	24	20	17	31	24	20	17	23	19	17	23	19	17	22	19	16	15
10	30	22	18	15	29	22	18	15	22	18	15	21	18	15	21	17	15	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17164	17164	17164
5°	16952	16858	16855
10°	16406	16462	16781
15°	15653	16010	16847
20°	14791	15509	17001
25°	13841	14968	17199
30°	12787	14390	17338
35°	11672	13721	17370
40°	10438	12943	17319
45°	9045	12060	17110
50°	7596	11032	16713
55°	6773	9886	16183
60°	6242	8742	15506
65°	5754	7603	14350
70°	5261	6698	11879
75°	4774	5856	8526
80°	4115	4940	4991
85°	3055	4358	3177



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	265.3	3.6	2.0	0°	2818	2818	2818	2818	2818	
10°-20°	750.2	10.3	5.7	5°	2779	2785	2798	2816	2808	262
20°-30°	1117.6	15.3	8.5	15°	2500	2546	2654	2781	2824	702
30°-40°	1312.0	18.0	9.9	25°	2085	2173	2403	2685	2813	957
40°-50°	1296.5	17.8	9.8	35°	1599	1729	2064	2466	2684	997
50°-60°	1103.1	15.1	8.4	45°	1078	1236	1637	2117	2409	831
60°-70°	822.4	11.3	6.2	55°	662	781	1156	1658	1987	598
70°-80°	460.1	6.3	3.5	65°	422	491	719	1180	1450	419
80°-90°	169.2	2.3	1.3	75°	223	266	406	607	650	236
90°-100°	0.0	0.0	0.0	85°	57	107	183	258	156	63
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	3
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°	2133.1	29.2	16.2	165°	0	0	0	0	0	0
0°-40°	3445.1	47.2	26.1	175°	0	0	0	0	0	0
0°-60°	5844.7	80.1	44.3	180°	0	0	0	0	0	0
0°-90°	7296.3	100.0	55.3							
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°	7296.3	100.0	55.3							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2818	2818	2818	2818	2818
2.5°	2809	2812	2814	2818	2805
5°	2779	2785	2798	2816	2808
7.5°	2730	2743	2773	2809	2811
10°	2665	2688	2741	2800	2815
12.5°	2587	2621	2701	2792	2820
15°	2500	2546	2654	2781	2824
17.5°	2406	2462	2599	2764	2828
20°	2304	2370	2540	2741	2826
22.5°	2197	2274	2475	2716	2820
25°	2085	2173	2403	2685	2813
27.5°	1968	2067	2327	2644	2795
30°	1846	1957	2246	2593	2768
32.5°	1724	1845	2158	2535	2731
35°	1599	1729	2064	2466	2684
37.5°	1471	1609	1964	2390	2630
40°	1342	1486	1859	2305	2567
42.5°	1212	1362	1750	2215	2494
45°	1078	1236	1637	2117	2409
47.5°	946	1109	1519	2011	2311
50°	827	989	1399	1897	2211
52.5°	736	879	1278	1780	2105
55°	662	781	1156	1658	1987
57.5°	597	696	1039	1538	1865
60°	536	620	928	1421	1742
62.5°	478	552	821	1303	1599
65°	422	491	719	1180	1450
67.5°	368	432	630	1059	1270
70°	317	374	551	910	1057
72.5°	269	319	484	751	845
75°	223	266	406	607	650
77.5°	178	219	330	491	481
80°	135	178	276	369	314
82.5°	96	140	221	306	236
85°	57	107	183	258	156
87.5°	20	80	150	202	64
90°	0	0	0	0	0
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	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
115°	0	0	0	0	0
117.5°	0	0	0	0	0
120°	0	0	0	0	0
122.5°	0	0	0	0	0
125°	0	0	0	0	0
127.5°	0	0	0	0	0
130°	0	0	0	0	0
132.5°	0	0	0	0	0
135°	0	0	0	0	0
137.5°	0	0	0	0	0
140°	0	0	0	0	0
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)