

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: METALUX

Report Number: P32140

Luminaire Tested: **2ALNG-354T5-UNV-EBT1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P32140  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2ALNG-354T5-UNV-EBT1-U  
Description: METALUX 2X4 ARCLINE LFL FIXTURE WITH LENS  
Light Source: (3) BIPIN T5 DOUBLE ENDED LINEAR FLUORESCENT LAMP 3500K  
GE F54T5-SPX35-ECO 54 WATTS  
Ballast/Driver: -  
ICN-4S54-90C-2LS-G

**Summary**

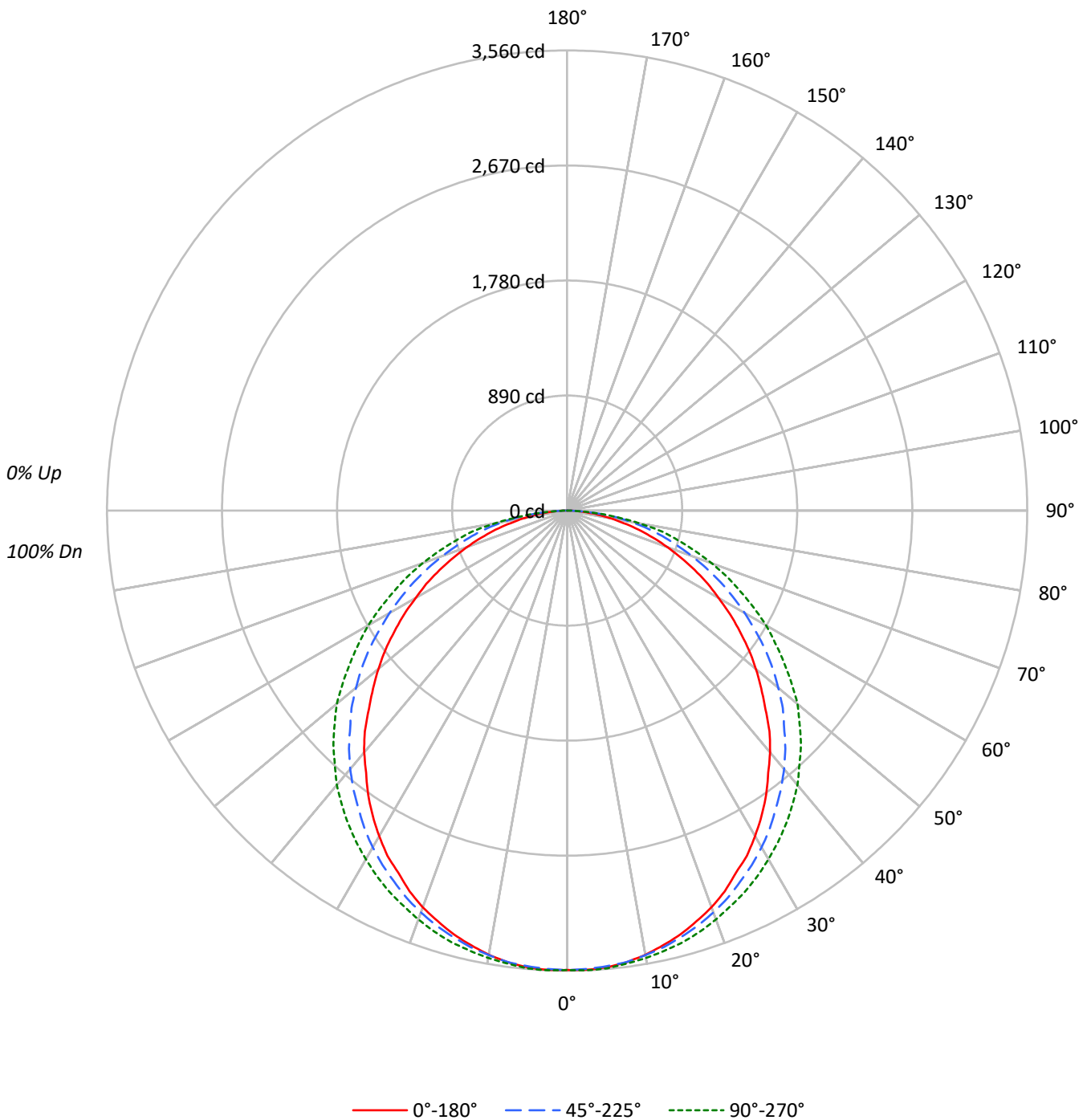
Lumens per Lamp: 4400 (3 lamps)  
Luminaire Lumens: 10325.2 lumens  
Efficiency: 78.2%  
Efficacy: 61.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.3 / 1.38  
Luminous Opening: Rectangular (W 1.75' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 168.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	93	93	93	93	91	91	91	91	87	87	87		83	83	83		80	80	80	78
1	85	81	78	74	83	79	76	73	76	73	71		73	71	69		70	68	67	65
2	77	70	65	60	75	69	64	60	66	62	58		63	60	57		61	58	56	54
3	70	62	55	50	68	60	54	49	58	53	49		56	51	48		54	50	47	45
4	64	55	48	42	62	53	47	42	52	46	41		50	45	41		48	44	40	38
5	59	49	42	36	57	48	41	36	46	40	36		45	39	35		43	39	35	33
6	54	44	37	32	53	43	36	31	42	36	31		40	35	31		39	34	31	29
7	50	40	33	28	49	39	32	28	38	32	28		37	31	27		36	31	27	26
8	47	36	29	25	46	36	29	25	35	29	25		34	28	24		33	28	24	23
9	44	33	27	22	43	33	27	22	32	26	22		31	26	22		30	25	22	20
10	41	31	24	20	40	30	24	20	29	24	20		29	24	20		28	23	20	19

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

	0°	45°	90°
0°	5704	5704	5704
5°	5711	5699	5726
10°	5685	5690	5727
15°	5638	5671	5743
20°	5577	5649	5748
25°	5472	5609	5761
30°	5388	5573	5770
35°	5259	5512	5788
40°	5117	5467	5806
45°	4922	5387	5805
50°	4760	5322	5806
55°	4563	5228	5726
60°	4339	5093	5703
65°	4131	4966	5608
70°	3856	4799	5569
75°	3546	4724	5505
80°	3169	4592	5258
85°	2669	4050	4105



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	337.0	3.3	2.6	0°	3555	3555	3555	3555	3555	
10°-20°	965.7	9.4	7.3	5°	3546	3544	3538	3549	3555	337
20°-30°	1463.1	14.2	11.1	15°	3394	3404	3414	3442	3457	957
30°-40°	1764.2	17.1	13.4	25°	3091	3123	3168	3230	3254	1427
40°-50°	1831.6	17.7	13.9	35°	2685	2730	2814	2918	2955	1677
50°-60°	1658.4	16.1	12.6	45°	2169	2243	2374	2505	2558	1678
60°-70°	1282.7	12.4	9.7	55°	1631	1710	1869	2006	2047	1460
70°-80°	789.0	7.6	6.0	65°	1088	1154	1308	1439	1477	1078
80°-90°	233.5	2.3	1.8	75°	572	632	762	860	888	606
90°-100°	0.0	0.0	0.0	85°	145	185	220	222	223	169
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	2765.8	26.8	21.0							
0°-40°	4530.0	43.9	34.3							
0°-60°	8019.9	77.7	60.8							
0°-90°	10325.2	100.0	78.2							
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°	10325.2	100.0	78.2							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3555	3555	3555	3555	3555
2.5°	3556	3558	3550	3558	3560
5°	3546	3544	3538	3549	3555
7.5°	3524	3524	3523	3533	3534
10°	3489	3493	3492	3511	3515
12.5°	3443	3454	3459	3481	3487
15°	3394	3404	3414	3442	3457
17.5°	3331	3348	3367	3400	3416
20°	3266	3279	3308	3349	3366
22.5°	3188	3207	3245	3295	3310
25°	3091	3123	3168	3230	3254
27.5°	3011	3035	3092	3159	3189
30°	2908	2934	3008	3083	3114
32.5°	2800	2833	2918	3007	3038
35°	2685	2730	2814	2918	2955
37.5°	2555	2614	2717	2824	2865
40°	2443	2495	2610	2721	2772
42.5°	2317	2375	2499	2620	2660
45°	2169	2243	2374	2505	2558
47.5°	2036	2119	2263	2391	2439
50°	1907	1985	2132	2267	2326
52.5°	1773	1847	2004	2143	2186
55°	1631	1710	1869	2006	2047
57.5°	1496	1568	1723	1862	1909
60°	1352	1435	1587	1727	1777
62.5°	1228	1291	1444	1581	1628
65°	1088	1154	1308	1439	1477
67.5°	954	1018	1165	1288	1337
70°	822	892	1023	1145	1187
72.5°	696	755	891	1002	1034
75°	572	632	762	860	888
77.5°	447	519	634	725	754
80°	343	393	497	567	569
82.5°	237	292	367	385	386
85°	145	185	220	222	223
87.5°	66	76	81	83	77
90°	0	0	0	0	0

(END OF REPORT)