

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: P31275

Luminaire Tested: **ALN-154T5-UNV-EBT1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P31275
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: ALN-154T5-UNV-EBT1-U
Description: METALUX 1X4 ARCLINE LFL FIXTURE WITH LENS
Light Source: (1) BIPIN T5 DOUBLE ENDED 54W LINEAR FLUORESCENT LAMP 3500K, 4800 EA
Ballast/Driver: -
QHE254T5HO/UNV PSN HT

Summary

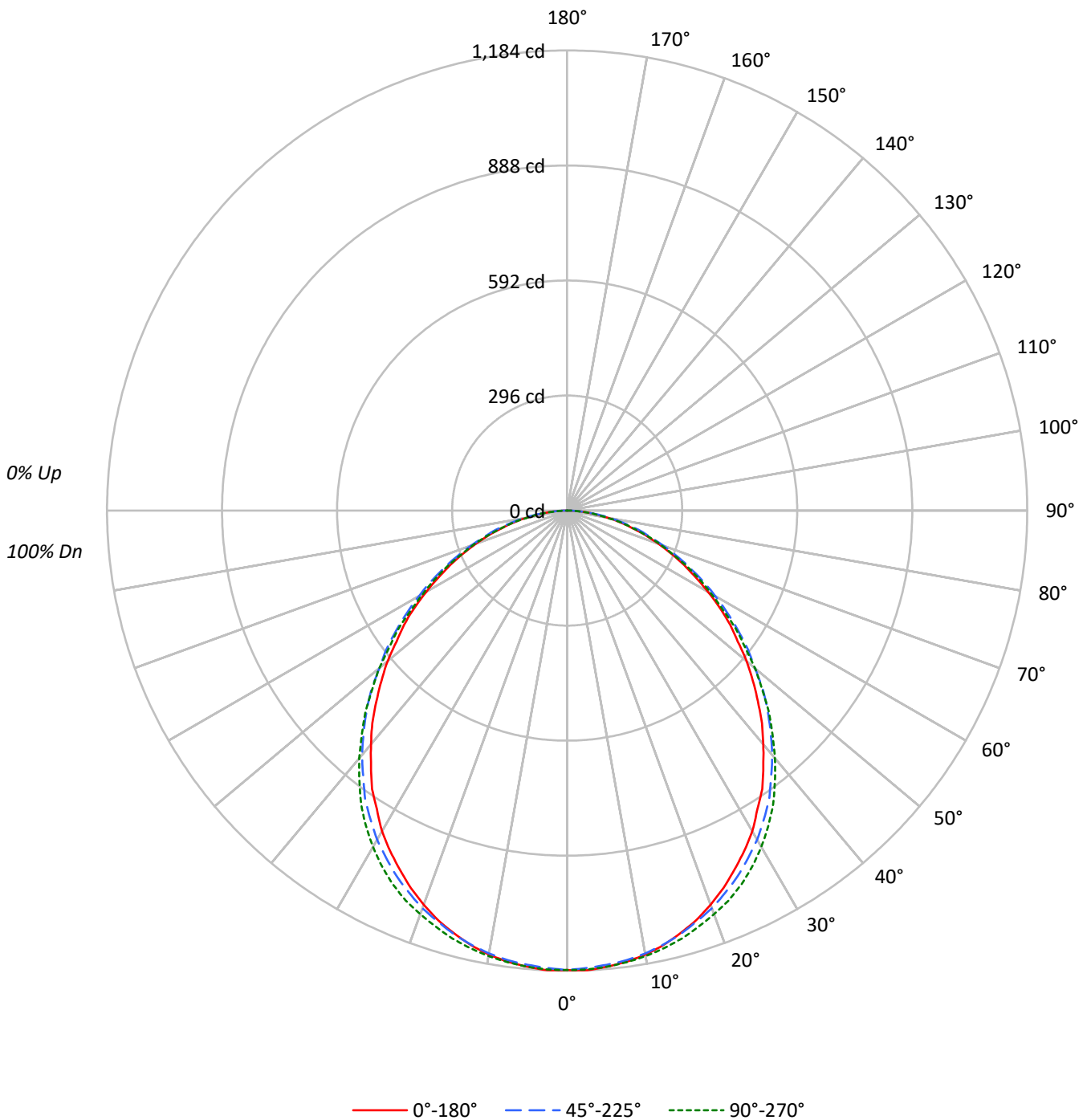
Lumens per Lamp: 4800 (1 lamp)
Luminaire Lumens: 3089.1 lumens
Efficiency: 64.4%
Efficacy: 52.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.33
Luminous Opening: Rectangular (W 0.77' x L: 3.77' x H: 0')
CIE Type: Direct

Input Watts (W): 59
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	77	77	77	77	75	75	75	75	72	72	72	68	68	68	66	66	66	64
1	70	67	65	62	68	66	63	61	63	61	59	60	59	57	58	57	56	54
2	64	59	55	51	62	58	54	50	55	52	49	53	50	48	51	49	47	46
3	59	52	47	43	57	51	46	42	49	45	41	47	44	41	46	43	40	39
4	54	46	41	36	52	45	40	36	44	39	36	42	38	35	41	37	35	33
5	49	41	36	31	48	41	35	31	39	35	31	38	34	31	37	33	30	29
6	46	37	32	28	44	37	31	27	36	31	27	34	30	27	33	30	27	25
7	42	34	28	24	41	33	28	24	32	28	24	31	27	24	31	27	24	23
8	40	31	26	22	39	31	25	22	30	25	22	29	25	21	28	24	21	20
9	37	28	23	20	36	28	23	20	27	23	20	27	22	19	26	22	19	18
10	35	26	21	18	34	26	21	18	25	21	18	25	21	18	24	20	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4377	4377	4377
5°	4379	4360	4379
10°	4362	4351	4377
15°	4317	4325	4371
20°	4252	4292	4355
25°	4164	4241	4335
30°	4075	4182	4272
35°	3956	4096	4177
40°	3795	3969	4022
45°	3635	3823	3844
50°	3474	3629	3635
55°	3306	3461	3422
60°	3103	3259	3170
65°	2909	3049	2979
70°	2707	2848	2772
75°	2475	2704	2518
80°	2261	2452	2197
85°	1997	2039	1870



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	111.8	3.6	2.3	0°	1182	1182	1182	1182	1182	
10°-20°	319.2	10.3	6.6	5°	1178	1179	1173	1178	1178	112
20°-30°	478.8	15.5	10.0	15°	1126	1127	1128	1138	1140	317
30°-40°	563.1	18.2	11.7	25°	1019	1026	1038	1055	1061	470
40°-50°	556.5	18.0	11.6	35°	875	884	906	920	924	545
50°-60°	472.5	15.3	9.8	45°	694	712	730	732	734	536
60°-70°	339.7	11.0	7.1	55°	512	524	536	534	530	456
70°-80°	192.5	6.2	4.0	65°	332	343	348	343	340	329
80°-90°	55.1	1.8	1.1	75°	173	182	189	179	176	185
90°-100°	0.0	0.0	0.0	85°	47	52	48	44	44	54
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°	909.8	29.5	19.0							
0°-40°	1472.8	47.7	30.7							
0°-60°	2501.8	81.0	52.1							
0°-90°	3089.1	100.0	64.4							
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°	3089.1	100.0	64.4							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1182	1182	1182	1182	1182
2.5°	1184	1183	1178	1182	1182
5°	1178	1179	1173	1178	1178
7.5°	1171	1170	1167	1171	1172
10°	1160	1160	1157	1163	1164
12.5°	1145	1145	1144	1153	1153
15°	1126	1127	1128	1138	1140
17.5°	1105	1107	1108	1122	1123
20°	1079	1083	1089	1102	1105
22.5°	1051	1057	1064	1080	1086
25°	1019	1026	1038	1055	1061
27.5°	987	995	1008	1026	1032
30°	953	960	978	994	999
32.5°	911	924	942	961	963
35°	875	884	906	920	924
37.5°	829	842	862	878	878
40°	785	799	821	829	832
42.5°	742	756	775	784	782
45°	694	712	730	732	734
47.5°	648	663	684	684	680
50°	603	617	630	635	631
52.5°	553	570	586	585	576
55°	512	524	536	534	530
57.5°	466	479	488	482	475
60°	419	433	440	436	428
62.5°	373	385	395	386	385
65°	332	343	348	343	340
67.5°	290	300	305	299	294
70°	250	260	263	257	256
72.5°	212	219	223	217	215
75°	173	182	189	179	176
77.5°	140	149	150	144	142
80°	106	116	115	108	103
82.5°	75	83	82	75	74
85°	47	52	48	44	44
87.5°	24	22	22	19	20
90°	0	0	0	0	0

(END OF REPORT)