

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: P31393

Luminaire Tested: **2ALNG-228T5-UNV-EBT1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P31393
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2ALNG-228T5-UNV-EBT1-U
Description: METALUX 2X4 ARCLINE LFL FIXTURE WITH LENS
Light Source: (2) BIPIN T5 DOUBLE ENDED 28W LINEAR FLUORESCENT LAMP 3500K, 2900 EA
Ballast/Driver: -
ICN-2S28

Summary

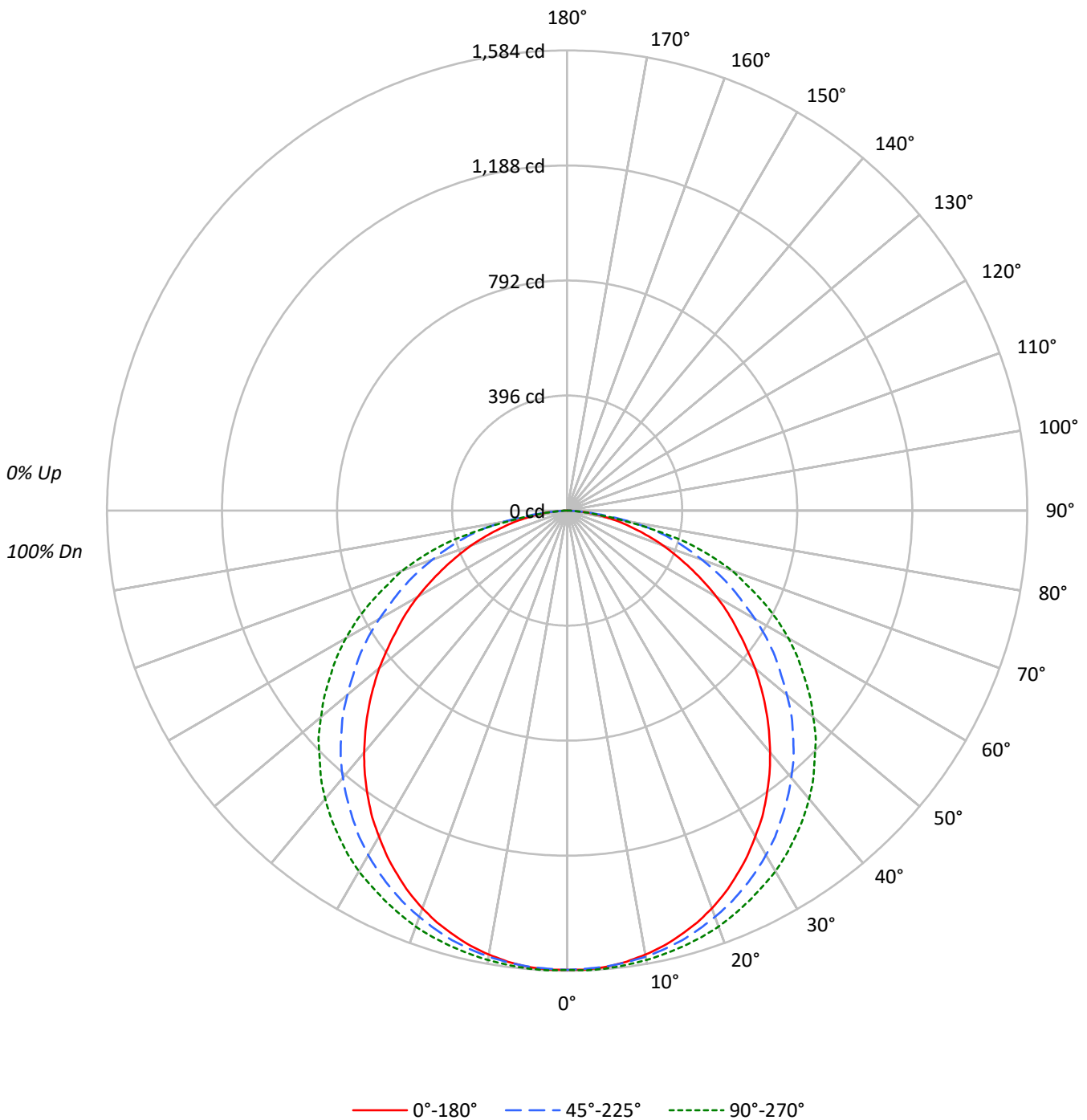
Lumens per Lamp: 2900 (2 lamps)
Luminaire Lumens: 4719.3 lumens
Efficiency: 81.4%
Efficacy: 76.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.35 / 1.41
Luminous Opening: Rectangular (W 1.75' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 61.6
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

TEST NUMBER: P31393

CATALOG NUMBER: 2ALNG-228T5-UNV-EBT1-U

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	97	97	97	97	95	95	95	95	90	90	90	87	87	87	83	83	83	83	83	83	83	83	81														
1	88	84	81	78	86	83	79	76	79	76	74	76	74	72	73	71	70	70	70	70	70	70	68														
2	80	73	68	63	78	72	66	62	69	64	61	66	62	59	64	61	58	58	58	58	58	58	56														
3	73	64	57	52	71	63	57	51	60	55	51	58	54	50	56	52	49	49	49	49	49	49	47														
4	67	57	49	44	65	56	49	44	54	48	43	52	46	42	50	45	42	42	42	42	42	42	40														
5	61	51	43	38	59	50	43	37	48	42	37	46	41	37	45	40	36	36	36	36	36	36	34														
6	56	45	38	33	55	45	38	33	43	37	32	42	36	32	40	36	32	32	32	32	32	32	30														
7	52	41	34	29	51	40	34	29	39	33	28	38	32	28	37	32	28	28	28	28	28	28	26														
8	49	37	30	26	47	37	30	26	36	30	25	35	29	25	34	29	25	25	25	25	25	25	24														
9	45	34	28	23	44	34	27	23	33	27	23	32	27	23	31	26	23	23	23	23	23	23	21														
10	43	32	25	21	42	31	25	21	30	25	21	30	24	21	29	24	21	21	21	21	21	21	19														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2537	2537	2537
5°	2538	2537	2548
10°	2529	2540	2560
15°	2512	2543	2578
20°	2488	2541	2602
25°	2449	2541	2624
30°	2399	2536	2657
35°	2345	2525	2684
40°	2277	2516	2715
45°	2197	2496	2734
50°	2107	2466	2761
55°	2000	2442	2786
60°	1906	2397	2824
65°	1773	2362	2829
70°	1651	2318	2834
75°	1482	2281	2660
80°	1303	2042	1756
85°	1123	1197	939



TEST NUMBER: P31393

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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	150.0	3.2	2.6	0°	1581	1581	1581	1581	1581	
10°-20°	432.5	9.2	7.5	5°	1576	1578	1575	1579	1582	150
20°-30°	661.5	14.0	11.4	15°	1512	1519	1531	1545	1552	427
30°-40°	805.6	17.1	13.9	25°	1383	1403	1435	1470	1482	637
40°-50°	843.9	17.9	14.6	35°	1197	1228	1289	1350	1370	748
50°-60°	772.4	16.4	13.3	45°	968	1012	1100	1179	1205	746
60°-70°	607.5	12.9	10.5	55°	715	767	873	963	996	641
70°-80°	364.8	7.7	6.3	65°	467	513	622	715	745	464
80°-90°	81.0	1.7	1.4	75°	239	282	368	419	429	256
90°-100°	0.0	0.0	0.0	85°	61	77	65	54	51	69
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°	1244.0	26.4	21.4							
0°-40°	2049.7	43.4	35.3							
0°-60°	3666.0	77.7	63.2							
0°-90°	4719.3	100.0	81.4							
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°	4719.3	100.0	81.4							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1581	1581	1581	1581	1581
2.5°	1581	1582	1578	1581	1584
5°	1576	1578	1575	1579	1582
7.5°	1566	1569	1568	1574	1577
10°	1552	1557	1559	1566	1571
12.5°	1535	1540	1546	1557	1562
15°	1512	1519	1531	1545	1552
17.5°	1487	1496	1511	1530	1539
20°	1457	1466	1488	1513	1524
22.5°	1423	1436	1464	1493	1504
25°	1383	1403	1435	1470	1482
27.5°	1342	1365	1404	1444	1458
30°	1295	1321	1369	1415	1434
32.5°	1250	1278	1332	1383	1404
35°	1197	1228	1289	1350	1370
37.5°	1144	1177	1246	1312	1335
40°	1087	1123	1201	1270	1296
42.5°	1028	1069	1154	1225	1254
45°	968	1012	1100	1179	1205
47.5°	906	948	1048	1129	1161
50°	844	889	988	1077	1106
52.5°	778	827	928	1021	1054
55°	715	767	873	963	996
57.5°	657	698	812	906	941
60°	594	633	747	847	880
62.5°	529	575	681	782	815
65°	467	513	622	715	745
67.5°	408	452	558	649	669
70°	352	396	494	579	604
72.5°	294	338	430	502	518
75°	239	282	368	419	429
77.5°	190	228	302	317	306
80°	141	178	221	209	190
82.5°	99	128	133	119	103
85°	61	77	65	54	51
87.5°	22	26	18	12	10
90°	0	0	0	0	0

(END OF REPORT)