

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: P31446

Luminaire Tested: **2ALNG-232T8-SDL-UNV-EB81-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P31446
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2ALNG-232T8-SDL-UNV-EB81-U
Description: METALUX 2X4 ARCLINE LFL FIXTURE WITH LENS AND OVERLAY
Light Source: (2) BIPIN T8 DOUBLE ENDED 32W LINEAR FLUORESCENT LAMP 3500K, 2950 EA
Ballast/Driver: -
GE232-MAX-N/ULTRA

Summary

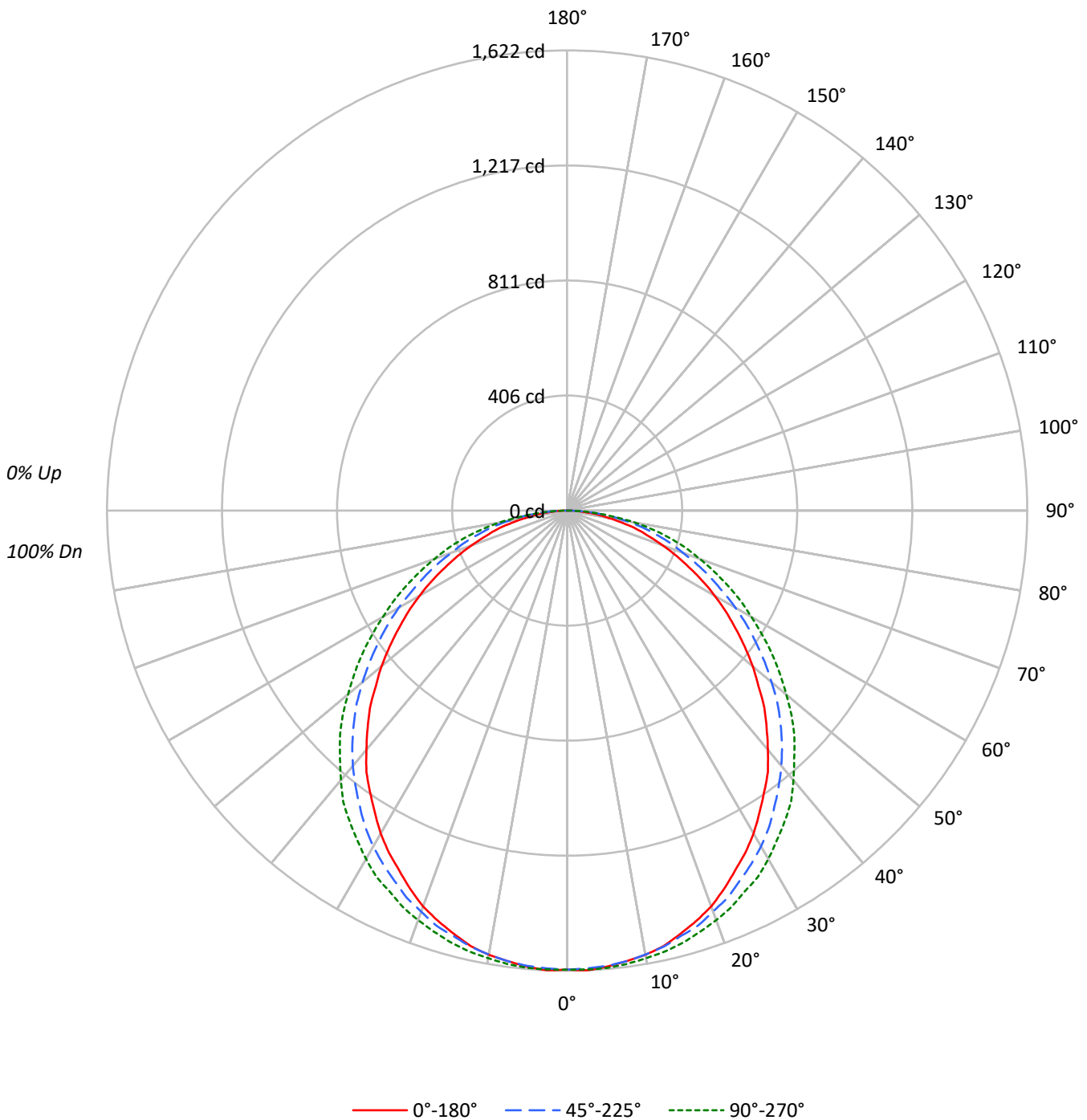
Lumens per Lamp: 2950 (2 lamps)
Luminaire Lumens: 4583.9 lumens
Efficiency: 77.7%
Efficacy: 90.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.37
Luminous Opening: Rectangular (W 1.77' x L: 3.77' x H: 0')
CIE Type: Direct

Input Watts (W): 50.5
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: P31446

CATALOG NUMBER: 2ALNG-232T8-SDL-UNV-EB81-U

Luminous Intensity Polar Plot





TEST NUMBER: P31446

CATALOG NUMBER: 2ALNG-232T8-SDL-UNV-EB81-U

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	50	30	10	0	
RCR																						
0	92	92	92	92	90	90	90	90	86	86	86	83	83	83	79	79	79	79	79	79	78	
1	84	81	77	74	82	79	76	73	75	73	71	72	70	68	70	68	66	70	68	66	65	
2	77	70	65	60	75	69	64	60	66	62	58	63	60	57	61	58	56	61	58	56	54	
3	70	62	55	50	68	60	54	50	58	53	49	56	51	48	54	50	47	54	50	47	45	
4	64	55	48	42	62	53	47	42	52	46	41	50	45	41	48	44	40	48	44	40	39	
5	59	49	42	36	57	48	41	36	46	40	36	45	40	35	43	39	35	43	39	35	33	
6	54	44	37	32	53	43	37	32	42	36	31	40	35	31	39	35	31	39	35	31	29	
7	50	40	33	28	49	39	33	28	38	32	28	37	32	28	36	31	27	36	31	27	26	
8	47	36	30	25	46	36	29	25	35	29	25	34	29	25	33	28	25	33	28	25	23	
9	44	33	27	23	43	33	27	23	32	26	22	31	26	22	30	26	22	30	26	22	21	
10	41	31	25	20	40	30	24	20	30	24	20	29	24	20	28	23	20	28	23	20	19	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2608	2608	2608
5°	2612	2607	2618
10°	2603	2601	2622
15°	2577	2590	2632
20°	2547	2580	2635
25°	2490	2561	2634
30°	2446	2544	2639
35°	2383	2507	2631
40°	2317	2473	2611
45°	2241	2426	2583
50°	2142	2360	2528
55°	2038	2285	2479
60°	1938	2212	2415
65°	1812	2125	2380
70°	1687	2045	2342
75°	1588	2018	2336
80°	1383	1977	2256
85°	1184	1776	1868



TEST NUMBER: P31446

CATALOG NUMBER: 2ALNG-232T8-SDL-UNV-EB81-U

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	153.3	3.3	2.6	0°	1618	1618	1618	1618	1618	
10°-20°	439.2	9.6	7.4	5°	1614	1613	1611	1614	1618	153
20°-30°	664.8	14.5	11.3	15°	1544	1546	1552	1566	1577	436
30°-40°	797.3	17.4	13.5	25°	1400	1414	1440	1471	1481	646
40°-50°	817.1	17.8	13.8	35°	1211	1230	1274	1320	1337	758
50°-60°	723.5	15.8	12.3	45°	983	1009	1064	1114	1133	756
60°-70°	549.4	12.0	9.3	55°	725	756	813	863	882	650
70°-80°	335.7	7.3	5.7	65°	475	502	557	607	624	473
80°-90°	103.4	2.3	1.8	75°	255	271	324	359	375	267
90°-100°	0.0	0.0	0.0	85°	64	85	96	100	101	75
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°	1257.3	27.4	21.3							
0°-40°	2054.7	44.8	34.8							
0°-60°	3595.3	78.4	60.9							
0°-90°	4583.9	100.0	77.7							
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°	4583.9	100.0	77.7							



TEST NUMBER: P31446

CATALOG NUMBER: 2ALNG-232T8-SDL-UNV-EB81-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1618	1618	1618	1618	1618
2.5°	1622	1621	1615	1615	1619
5°	1614	1613	1611	1614	1618
7.5°	1602	1601	1602	1604	1612
10°	1590	1586	1589	1595	1602
12.5°	1572	1568	1574	1582	1592
15°	1544	1546	1552	1566	1577
17.5°	1516	1517	1534	1547	1557
20°	1485	1488	1504	1525	1536
22.5°	1444	1453	1477	1499	1513
25°	1400	1414	1440	1471	1481
27.5°	1360	1376	1405	1439	1456
30°	1314	1327	1367	1405	1418
32.5°	1262	1280	1324	1363	1377
35°	1211	1230	1274	1320	1337
37.5°	1162	1178	1225	1273	1296
40°	1101	1121	1175	1225	1241
42.5°	1041	1065	1121	1172	1185
45°	983	1009	1064	1114	1133
47.5°	915	943	1006	1055	1074
50°	854	881	941	992	1008
52.5°	789	819	878	925	946
55°	725	756	813	863	882
57.5°	664	693	750	801	816
60°	601	628	686	733	749
62.5°	539	567	618	668	690
65°	475	502	557	607	624
67.5°	417	444	496	544	560
70°	358	385	434	484	497
72.5°	303	326	382	420	438
75°	255	271	324	359	375
77.5°	201	224	271	299	309
80°	149	175	213	234	243
82.5°	107	128	156	162	166
85°	64	85	96	100	101
87.5°	30	42	44	43	42
90°	0	0	0	0	0

(END OF REPORT)