

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: P393577

Luminaire Tested: **24EN-LD2-54-UNV-L82765-W2A-1-U (6500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393577
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-36)
Test Lab: INNOVATION CENTER
Issue Date: 3/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24EN-LD2-54-UNV-L82765-W2A-1-U (6500K)
Description: 2X4 ENCOUNTER, 5400 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 3000K/5000K CCT, CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5259.3 lumens
Efficiency: N/A
Efficacy: 137.3 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.28 / 1.4
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

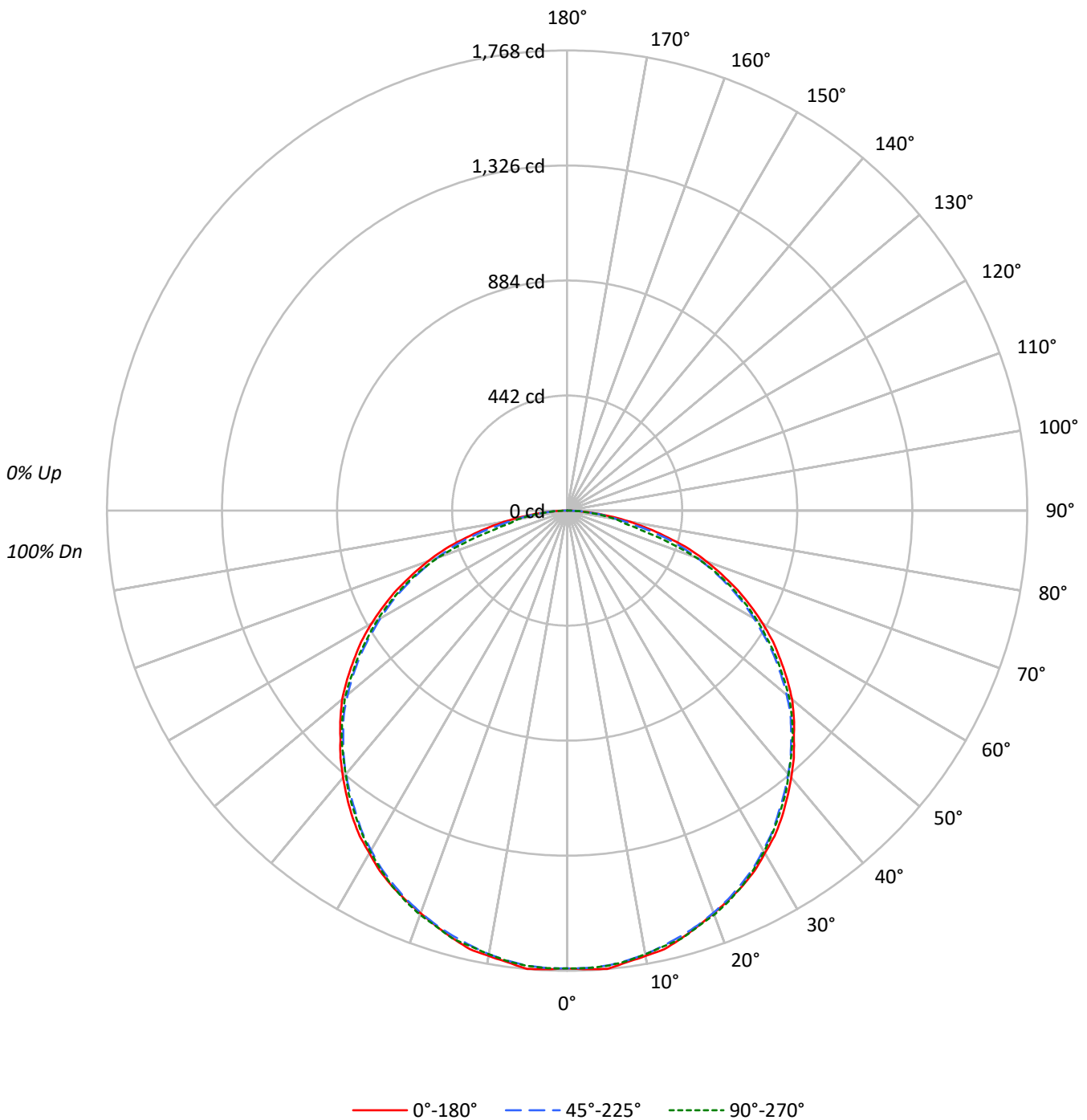
Input Watts (W): 38.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2367	2367	2367
5°	2387	2370	2372
10°	2374	2365	2365
15°	2369	2357	2371
20°	2357	2354	2366
25°	2363	2351	2362
30°	2361	2341	2350
35°	2363	2326	2336
40°	2352	2322	2325
45°	2344	2315	2332
50°	2361	2304	2331
55°	2347	2274	2300
60°	2337	2230	2267
65°	2301	2178	2218
70°	2236	2099	2072
75°	2087	1936	1570
80°	1869	1525	1473
85°	1504	1355	1237



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.8	3.2
10°-20°	478.7	9.1
20°-30°	730.3	13.9
30°-40°	891.2	16.9
40°-50°	943.0	17.9
50°-60°	875.0	16.6
60°-70°	686.6	13.1
70°-80°	385.4	7.3
80°-90°	102.2	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1375.8	26.2
0°-40°	2267.0	43.1
0°-60°	4085.1	77.7
0°-90°	5259.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5259.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1759	1759	1759	1759	1759	
5°	1768	1756	1755	1751	1756	167
15°	1701	1698	1692	1691	1702	480
25°	1592	1580	1583	1578	1591	734
35°	1438	1429	1416	1420	1422	899
45°	1232	1227	1217	1212	1225	954
55°	1000	985	970	972	980	896
65°	723	703	684	684	697	713
75°	401	389	372	329	302	427
85°	97	89	88	81	80	113
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1758.9	1758.9	1758.9	1758.9	1758.9
2.5°	1763.7	1757.9	1758.9	1756.9	1759.8
5°	1767.6	1756.0	1755.0	1751.1	1756.0
7.5°	1750.2	1746.3	1744.4	1743.4	1746.3
10°	1737.6	1730.9	1730.9	1731.9	1730.9
12.5°	1726.1	1716.4	1711.6	1714.5	1714.5
15°	1701.0	1698.1	1692.3	1691.3	1701.9
17.5°	1674.0	1675.9	1670.1	1669.1	1674.9
20°	1646.0	1645.0	1644.1	1639.2	1652.7
22.5°	1619.9	1615.1	1616.1	1610.3	1623.8
25°	1592.0	1580.4	1583.3	1578.4	1591.0
27.5°	1560.1	1546.6	1548.5	1548.5	1553.4
30°	1519.6	1508.0	1507.0	1512.8	1512.8
32.5°	1482.9	1471.4	1465.6	1466.5	1468.5
35°	1438.5	1428.9	1416.4	1420.2	1422.1
37.5°	1389.3	1384.5	1370.0	1370.0	1376.8
40°	1339.2	1332.4	1321.8	1318.9	1323.7
42.5°	1289.0	1282.2	1271.6	1266.8	1274.5
45°	1232.1	1227.3	1216.6	1211.8	1225.3
47.5°	1181.9	1171.3	1164.5	1160.7	1170.3
50°	1127.9	1112.4	1100.9	1102.8	1113.4
52.5°	1066.1	1051.7	1035.3	1039.1	1044.9
55°	1000.5	985.1	969.6	972.5	980.3
57.5°	937.8	922.4	898.2	903.1	908.9
60°	868.3	847.1	828.8	831.7	842.3
62.5°	795.0	777.6	759.3	761.2	770.9
65°	722.7	703.4	684.1	684.1	696.6
67.5°	643.5	630.0	608.8	608.8	616.5
70°	568.3	550.9	533.5	522.0	526.8
72.5°	492.1	470.8	457.3	428.4	415.8
75°	401.4	388.8	372.4	329.0	302.0
77.5°	319.4	312.6	280.8	235.4	223.8
80°	241.2	236.4	196.8	190.1	190.1
82.5°	165.0	160.2	148.6	137.0	135.1
85°	97.4	88.8	87.8	81.0	80.1
87.5°	31.8	36.7	34.7	35.7	35.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)