

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: P393591

Luminaire Tested: **24EN-LD2-54-UNV-L92765-W2A-1-U (5000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393591  
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-L92765-W2A-1-U (5000K)  
Description: 2X4 ENCOUNTER, 5400 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4594.7 lumens  
Efficiency: N/A  
Efficacy: 118.7 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

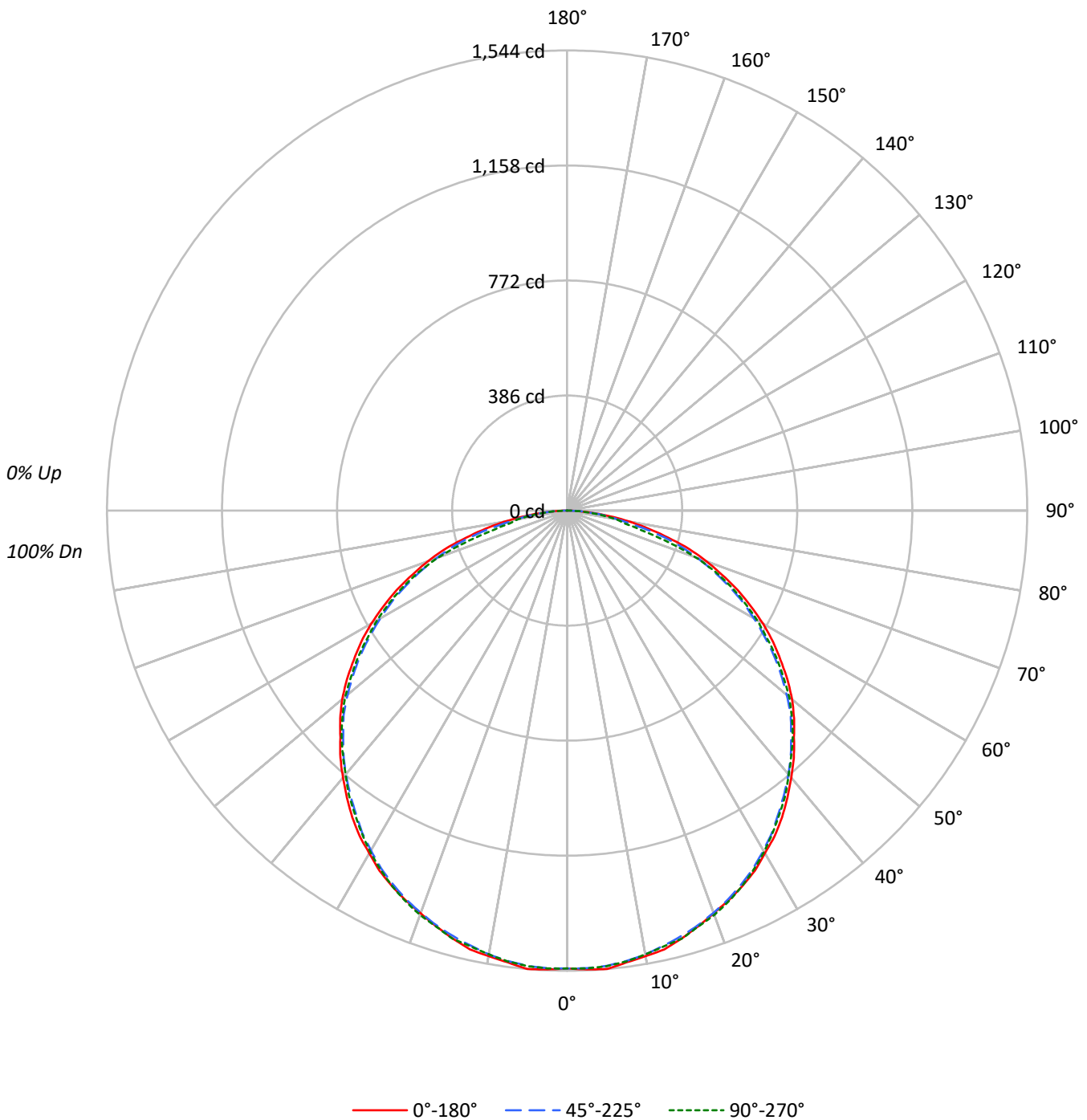
Input Watts (W): 38.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2067	2067	2067
5°	2086	2071	2072
10°	2074	2066	2066
15°	2070	2059	2071
20°	2059	2057	2067
25°	2065	2053	2063
30°	2063	2046	2053
35°	2064	2032	2041
40°	2055	2028	2031
45°	2048	2022	2037
50°	2062	2013	2036
55°	2050	1987	2009
60°	2041	1949	1980
65°	2010	1903	1938
70°	1953	1834	1810
75°	1823	1692	1371
80°	1633	1333	1287
85°	1314	1184	1081



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.7	3.2
10°-20°	418.2	9.1
20°-30°	638.1	13.9
30°-40°	778.6	16.9
40°-50°	823.9	17.9
50°-60°	764.4	16.6
60°-70°	599.9	13.1
70°-80°	336.7	7.3
80°-90°	89.3	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°	1201.9	26.2
0°-40°	1980.6	43.1
0°-60°	3568.9	77.7
0°-90°	4594.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4594.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1537	1537	1537	1537	1537	
5°	1544	1534	1533	1530	1534	146
15°	1486	1484	1478	1478	1487	419
25°	1391	1381	1383	1379	1390	641
35°	1257	1248	1237	1241	1242	786
45°	1076	1072	1063	1059	1070	833
55°	874	861	847	850	856	782
65°	631	614	598	598	609	623
75°	351	340	325	287	264	373
85°	85	78	77	71	70	99
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1536.6	1536.6	1536.6	1536.6	1536.6
2.5°	1540.8	1535.8	1536.6	1534.9	1537.4
5°	1544.2	1534.1	1533.2	1529.9	1534.1
7.5°	1529.0	1525.6	1524.0	1523.1	1525.6
10°	1518.1	1512.2	1512.2	1513.0	1512.2
12.5°	1507.9	1499.5	1495.3	1497.8	1497.8
15°	1486.0	1483.5	1478.4	1477.6	1486.9
17.5°	1462.4	1464.1	1459.1	1458.2	1463.3
20°	1438.0	1437.1	1436.3	1432.1	1443.9
22.5°	1415.2	1411.0	1411.9	1406.8	1418.6
25°	1390.8	1380.7	1383.2	1379.0	1389.9
27.5°	1363.0	1351.2	1352.9	1352.9	1357.1
30°	1327.6	1317.5	1316.6	1321.7	1321.7
32.5°	1295.5	1285.4	1280.4	1281.2	1282.9
35°	1256.8	1248.3	1237.4	1240.7	1242.4
37.5°	1213.8	1209.6	1196.9	1196.9	1202.8
40°	1169.9	1164.0	1154.8	1152.2	1156.5
42.5°	1126.1	1120.2	1110.9	1106.7	1113.5
45°	1076.4	1072.2	1062.9	1058.7	1070.5
47.5°	1032.6	1023.3	1017.4	1014.0	1022.4
50°	985.3	971.9	961.7	963.4	972.7
52.5°	931.4	918.8	904.4	907.8	912.9
55°	874.1	860.6	847.1	849.6	856.4
57.5°	819.3	805.8	784.7	789.0	794.0
60°	758.6	740.1	724.1	726.6	735.9
62.5°	694.5	679.4	663.4	665.0	673.5
65°	631.3	614.5	597.6	597.6	608.6
67.5°	562.2	550.4	531.9	531.9	538.6
70°	496.5	481.3	466.1	456.0	460.2
72.5°	429.9	411.3	399.5	374.2	363.3
75°	350.6	339.7	325.4	287.4	263.8
77.5°	279.0	273.1	245.3	205.7	195.6
80°	210.7	206.5	172.0	166.1	166.1
82.5°	144.1	139.9	129.8	119.7	118.0
85°	85.1	77.5	76.7	70.8	70.0
87.5°	27.8	32.0	30.3	31.2	31.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)