

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: P393589

Luminaire Tested: **24EN-LD2-54-UNV-L92765-W2A-1-U (4000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393589  
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 (4000K)  
Description: 2X4 ENCOUNTER, 5400 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4508.2 lumens  
Efficiency: N/A  
Efficacy: 116.5 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

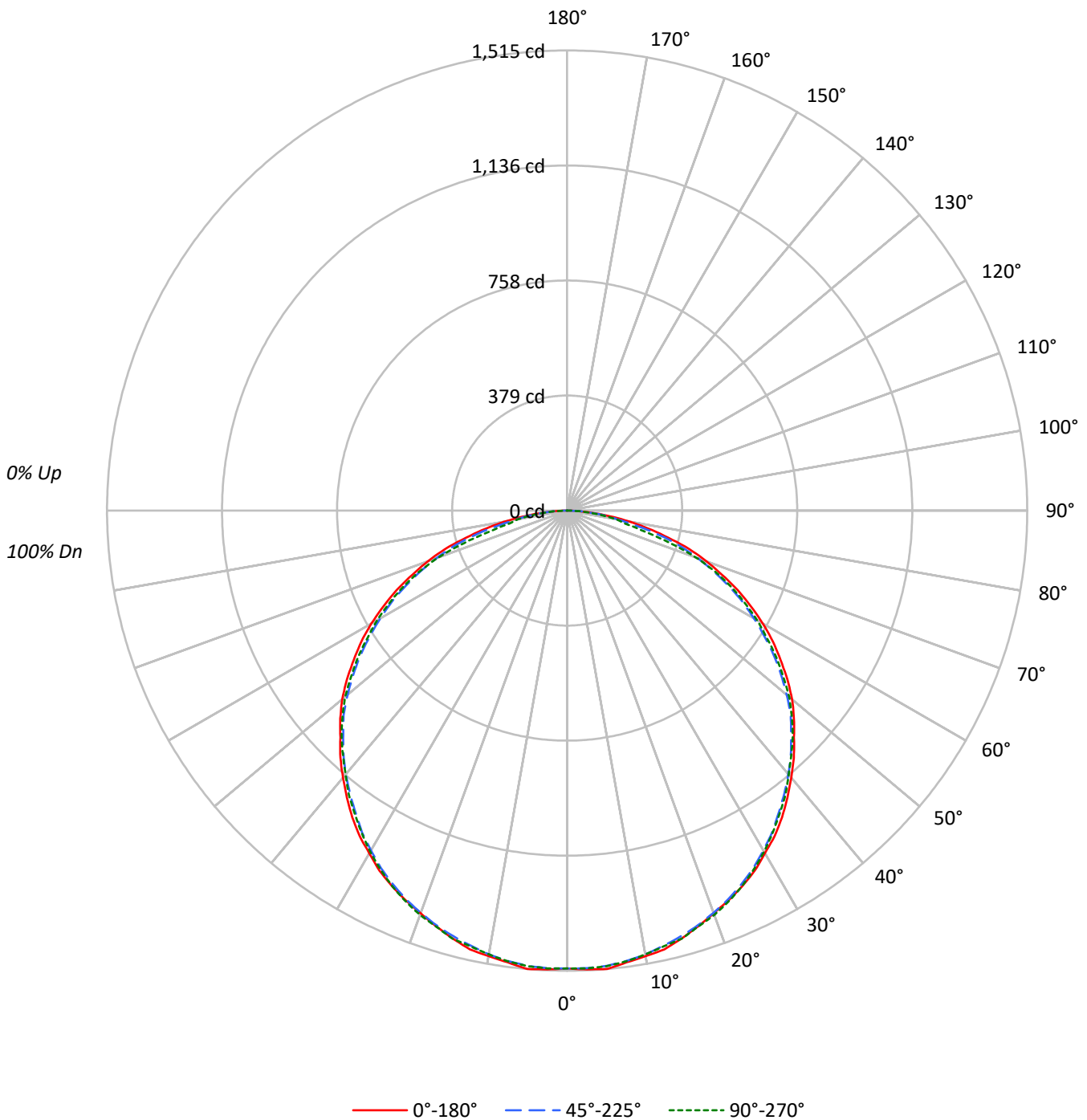
Input Watts (W): 38.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2029	2029	2029
5°	2046	2032	2033
10°	2035	2027	2027
15°	2031	2021	2032
20°	2020	2018	2028
25°	2026	2015	2025
30°	2024	2007	2015
35°	2025	1994	2002
40°	2016	1990	1993
45°	2010	1984	1999
50°	2024	1975	1998
55°	2012	1950	1971
60°	2003	1912	1943
65°	1972	1867	1901
70°	1916	1799	1777
75°	1788	1659	1346
80°	1602	1307	1262
85°	1289	1162	1059



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.0	3.2
10°-20°	410.3	9.1
20°-30°	626.0	13.9
30°-40°	764.0	16.9
40°-50°	808.4	17.9
50°-60°	750.1	16.6
60°-70°	588.6	13.1
70°-80°	330.4	7.3
80°-90°	87.6	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°	1179.3	26.2
0°-40°	1943.3	43.1
0°-60°	3501.7	77.7
0°-90°	4508.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4508.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1508	1508	1508	1508	1508	
5°	1515	1505	1504	1501	1505	143
15°	1458	1456	1451	1450	1459	411
25°	1365	1355	1357	1353	1364	629
35°	1233	1225	1214	1217	1219	771
45°	1056	1052	1043	1039	1050	817
55°	858	844	831	834	840	768
65°	620	603	586	586	597	611
75°	344	333	319	282	259	366
85°	84	76	75	70	69	97
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1507.7	1507.7	1507.7	1507.7	1507.7
2.5°	1511.8	1506.9	1507.7	1506.0	1508.5
5°	1515.1	1505.2	1504.4	1501.1	1505.2
7.5°	1500.2	1496.9	1495.3	1494.5	1496.9
10°	1489.5	1483.7	1483.7	1484.5	1483.7
12.5°	1479.6	1471.3	1467.2	1469.6	1469.6
15°	1458.1	1455.6	1450.6	1449.8	1458.9
17.5°	1434.9	1436.6	1431.6	1430.8	1435.7
20°	1410.9	1410.1	1409.3	1405.1	1416.7
22.5°	1388.6	1384.5	1385.3	1380.3	1391.9
25°	1364.6	1354.7	1357.2	1353.0	1363.8
27.5°	1337.3	1325.7	1327.4	1327.4	1331.5
30°	1302.6	1292.7	1291.8	1296.8	1296.8
32.5°	1271.2	1261.2	1256.3	1257.1	1258.7
35°	1233.1	1224.8	1214.1	1217.4	1219.1
37.5°	1190.9	1186.8	1174.4	1174.4	1180.2
40°	1147.9	1142.1	1133.0	1130.6	1134.7
42.5°	1104.9	1099.1	1090.0	1085.9	1092.5
45°	1056.1	1052.0	1042.9	1038.8	1050.3
47.5°	1013.1	1004.0	998.2	994.9	1003.2
50°	966.8	953.6	943.6	945.3	954.4
52.5°	913.9	901.5	887.4	890.7	895.7
55°	857.6	844.4	831.2	833.7	840.3
57.5°	803.9	790.6	770.0	774.1	779.1
60°	744.3	726.1	710.4	712.9	722.0
62.5°	681.5	666.6	650.9	652.5	660.8
65°	619.5	602.9	586.4	586.4	597.1
67.5°	551.6	540.1	521.9	521.9	528.5
70°	487.1	472.2	457.4	447.4	451.6
72.5°	421.8	403.6	392.0	367.2	356.5
75°	344.0	333.3	319.2	282.0	258.9
77.5°	273.7	268.0	240.7	201.8	191.9
80°	206.8	202.6	168.7	162.9	162.9
82.5°	141.4	137.3	127.4	117.4	115.8
85°	83.5	76.1	75.3	69.5	68.6
87.5°	27.3	31.4	29.8	30.6	30.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)