

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: P393592

Luminaire Tested: **24EN-LD2-54-UNV-L92765-W2A-1-U (5700K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393592  
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 (5700K)  
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: 4665.4 lumens  
Efficiency: N/A  
Efficacy: 120.9 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

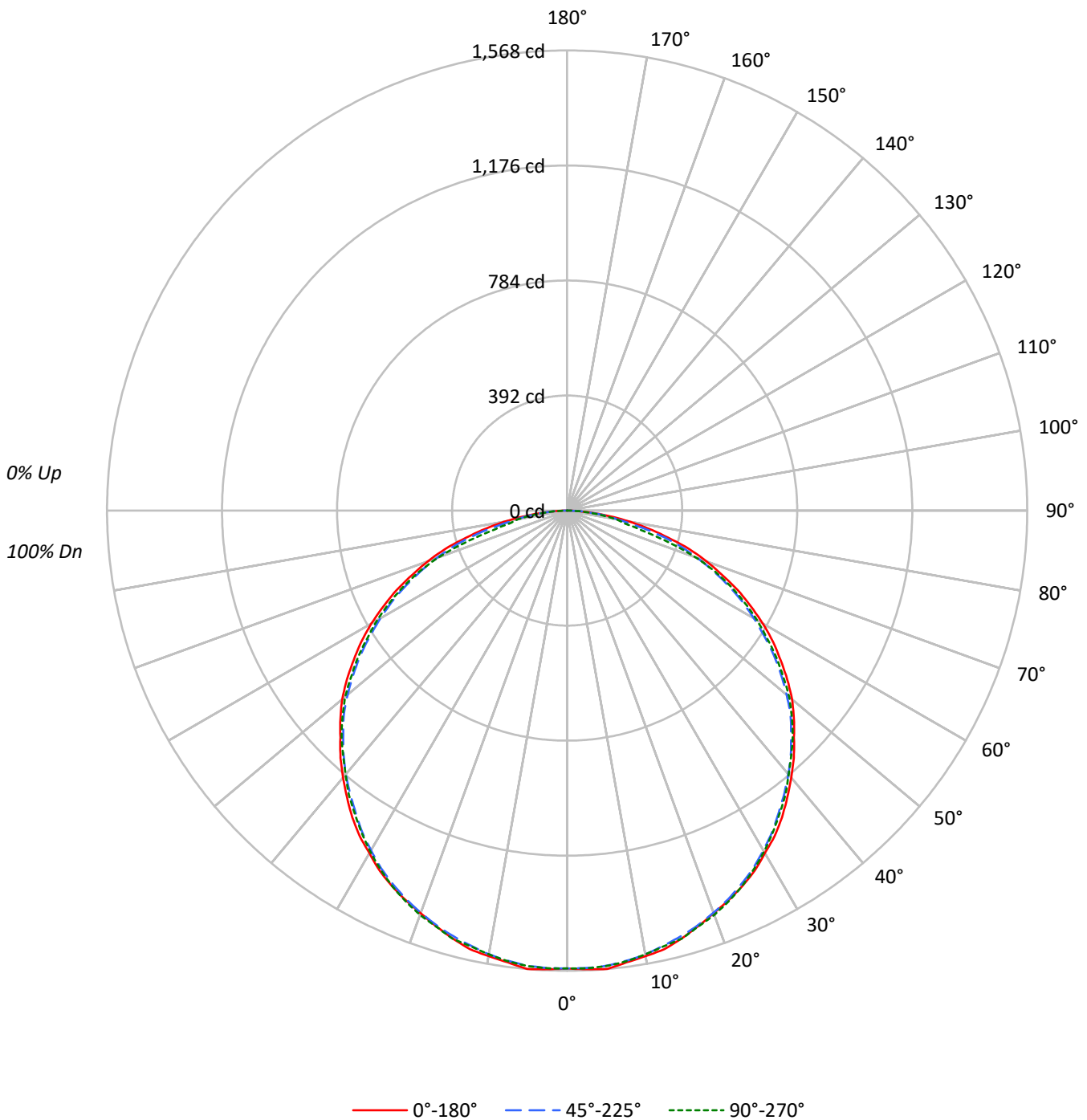
Input Watts (W): 38.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2099	2099	2099
5°	2118	2103	2104
10°	2106	2098	2098
15°	2102	2091	2103
20°	2091	2088	2099
25°	2097	2085	2095
30°	2094	2077	2085
35°	2096	2064	2072
40°	2086	2059	2063
45°	2080	2054	2068
50°	2094	2044	2067
55°	2082	2018	2040
60°	2073	1978	2011
65°	2041	1932	1967
70°	1983	1862	1838
75°	1851	1718	1393
80°	1658	1353	1306
85°	1334	1203	1096



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	148.0	3.2
10°-20°	424.6	9.1
20°-30°	647.9	13.9
30°-40°	790.6	16.9
40°-50°	836.5	17.9
50°-60°	776.2	16.6
60°-70°	609.1	13.1
70°-80°	341.9	7.3
80°-90°	90.6	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°	1220.4	26.2
0°-40°	2011.0	43.1
0°-60°	3623.7	77.7
0°-90°	4665.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4665.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1560	1560	1560	1560	1560	
5°	1568	1558	1557	1553	1558	148
15°	1509	1506	1501	1500	1510	426
25°	1412	1402	1404	1400	1411	651
35°	1276	1268	1256	1260	1262	798
45°	1093	1089	1079	1075	1087	846
55°	888	874	860	863	870	794
65°	641	624	607	607	618	632
75°	356	345	330	292	268	378
85°	86	79	78	72	71	100
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1560.2	1560.2	1560.2	1560.2	1560.2
2.5°	1564.5	1559.4	1560.2	1558.5	1561.1
5°	1567.9	1557.7	1556.8	1553.4	1557.7
7.5°	1552.5	1549.1	1547.4	1546.6	1549.1
10°	1541.4	1535.4	1535.4	1536.3	1535.4
12.5°	1531.1	1522.6	1518.3	1520.9	1520.9
15°	1508.9	1506.3	1501.2	1500.3	1509.8
17.5°	1484.9	1486.6	1481.5	1480.7	1485.8
20°	1460.1	1459.3	1458.4	1454.1	1466.1
22.5°	1437.0	1432.7	1433.6	1428.4	1440.4
25°	1412.2	1401.9	1404.5	1400.2	1411.3
27.5°	1383.9	1372.0	1373.7	1373.7	1377.9
30°	1348.0	1337.7	1336.9	1342.0	1342.0
32.5°	1315.5	1305.2	1300.1	1300.9	1302.6
35°	1276.1	1267.5	1256.4	1259.8	1261.5
37.5°	1232.4	1228.2	1215.3	1215.3	1221.3
40°	1187.9	1182.0	1172.5	1170.0	1174.3
42.5°	1143.4	1137.4	1128.0	1123.8	1130.6
45°	1092.9	1088.7	1079.2	1075.0	1087.0
47.5°	1048.4	1039.0	1033.0	1029.6	1038.2
50°	1000.5	986.8	976.5	978.3	987.7
52.5°	945.7	932.9	918.3	921.8	926.9
55°	887.5	873.8	860.1	862.7	869.6
57.5°	831.9	818.2	796.8	801.1	806.2
60°	770.3	751.5	735.2	737.8	747.2
62.5°	705.2	689.8	673.6	675.3	683.8
65°	641.0	623.9	606.8	606.8	617.9
67.5°	570.9	558.9	540.1	540.1	546.9
70°	504.1	488.7	473.3	463.0	467.3
72.5°	436.5	417.7	405.7	380.0	368.9
75°	356.0	344.9	330.4	291.9	267.9
77.5°	283.3	277.3	249.1	208.8	198.6
80°	214.0	209.7	174.6	168.6	168.6
82.5°	146.4	142.1	131.8	121.5	119.8
85°	86.4	78.7	77.9	71.9	71.0
87.5°	28.2	32.5	30.8	31.7	31.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)