

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: P393711

Luminaire Tested: **24EN-LD2-74-UNV-L83050-W2A-1-U (5000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393711  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-40)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-74-UNV-L83050-W2A-1-U (5000K)  
Description: 2X4 ENCOUNTER, 7400 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7510.0 lumens  
Efficiency: N/A  
Efficacy: 137.0 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

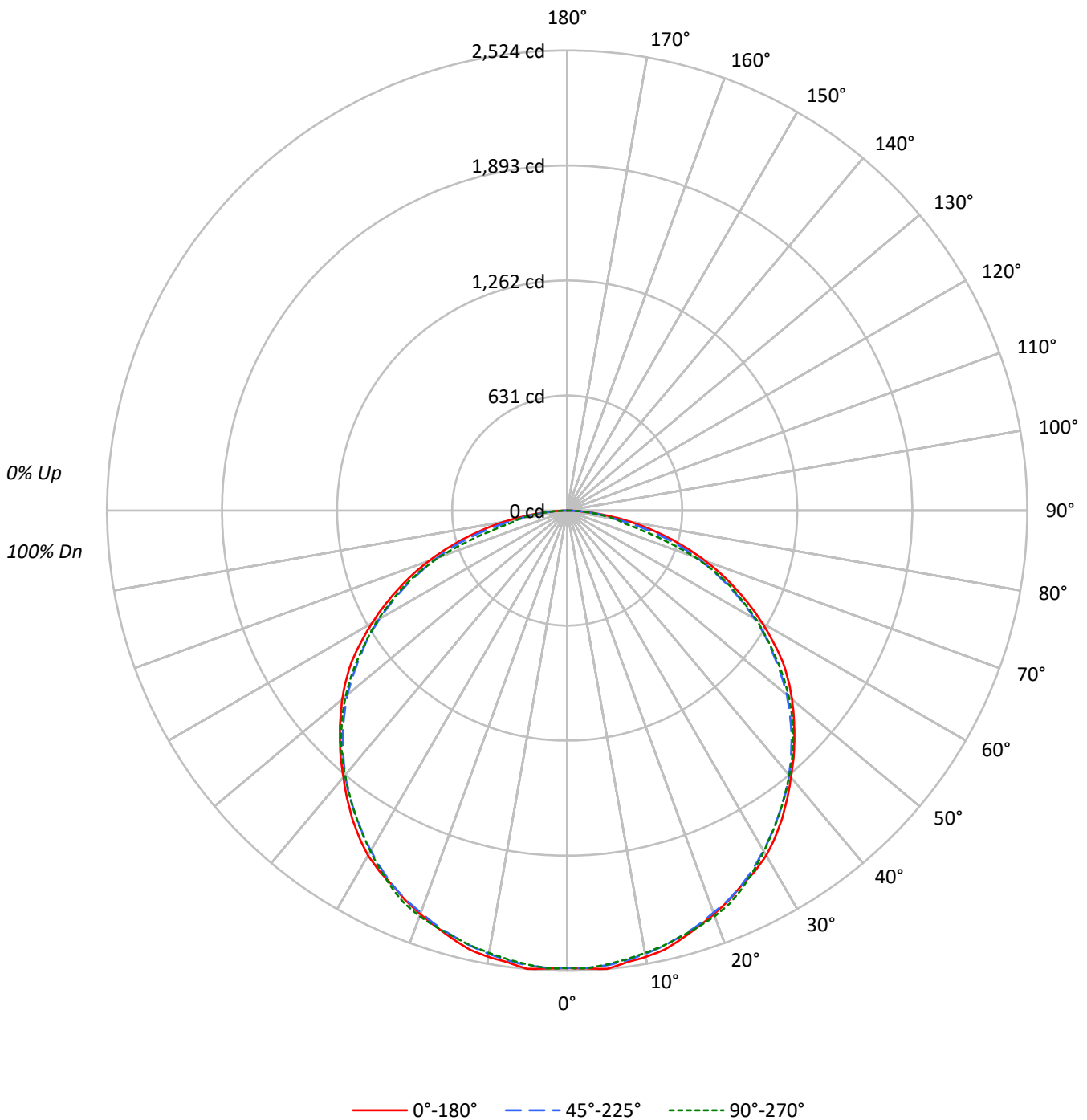
Input Watts (W): 54.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	85	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	68	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°	3377	3377	3377
5°	3409	3383	3376
10°	3396	3374	3366
15°	3386	3366	3368
20°	3373	3361	3390
25°	3366	3364	3385
30°	3394	3346	3353
35°	3379	3330	3334
40°	3354	3327	3329
45°	3354	3313	3337
50°	3370	3293	3321
55°	3384	3248	3272
60°	3328	3197	3230
65°	3266	3104	3156
70°	3166	2994	2926
75°	2993	2749	2256
80°	2669	2124	2084
85°	2092	1967	1809



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	237.9	3.2
10°-20°	683.4	9.1
20°-30°	1044.6	13.9
30°-40°	1273.6	17.0
40°-50°	1348.0	17.9
50°-60°	1249.3	16.6
60°-70°	980.1	13.1
70°-80°	546.8	7.3
80°-90°	146.2	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°	1966.0	26.2
0°-40°	3239.6	43.1
0°-60°	5836.9	77.7
0°-90°	7510.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7510.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2510	2510	2510	2510	2510	
5°	2524	2500	2504	2499	2499	239
15°	2431	2422	2417	2416	2418	686
25°	2267	2269	2266	2257	2280	1049
35°	2057	2033	2028	2035	2030	1286
45°	1763	1761	1741	1731	1754	1361
55°	1443	1404	1385	1388	1395	1283
65°	1026	1008	975	985	991	1014
75°	576	552	529	463	434	606
85°	136	128	127	119	117	162
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2509.5	2509.5	2509.5	2509.5	2509.5
2.5°	2513.5	2507.4	2510.5	2501.3	2513.5
5°	2523.7	2500.3	2504.4	2499.3	2499.3
7.5°	2499.3	2489.1	2489.1	2490.1	2483.0
10°	2486.0	2472.8	2469.7	2472.8	2463.6
12.5°	2466.7	2447.3	2445.3	2447.3	2443.2
15°	2431.0	2421.8	2416.7	2415.7	2417.8
17.5°	2392.3	2390.3	2385.2	2381.1	2394.3
20°	2355.6	2357.7	2347.5	2344.4	2367.8
22.5°	2314.9	2314.9	2310.8	2300.6	2332.2
25°	2267.0	2269.0	2266.0	2256.8	2280.2
27.5°	2230.3	2215.0	2212.0	2208.9	2221.1
30°	2184.4	2156.9	2153.9	2154.9	2158.0
32.5°	2124.3	2096.8	2091.7	2097.8	2093.8
35°	2057.1	2032.6	2027.5	2034.7	2029.6
37.5°	1984.7	1970.5	1964.4	1964.4	1962.3
40°	1909.4	1903.2	1894.1	1891.0	1895.1
42.5°	1838.0	1837.0	1817.7	1813.6	1828.9
45°	1762.6	1760.6	1741.2	1731.1	1753.5
47.5°	1687.2	1679.1	1657.7	1647.5	1673.0
50°	1609.8	1590.4	1573.1	1570.1	1586.4
52.5°	1529.3	1498.8	1478.4	1476.3	1492.6
55°	1442.7	1404.0	1384.6	1387.7	1394.8
57.5°	1339.8	1310.3	1290.9	1289.9	1294.0
60°	1236.9	1211.4	1188.0	1191.1	1200.2
62.5°	1132.0	1111.6	1083.1	1092.2	1092.2
65°	1026.0	1007.7	975.1	985.2	991.4
67.5°	918.0	897.6	866.0	871.1	877.2
70°	804.9	782.5	761.1	741.7	743.8
72.5°	690.8	666.3	652.1	603.2	588.9
75°	575.7	552.2	528.8	462.6	434.0
77.5°	458.5	445.2	400.4	329.1	318.9
80°	344.4	338.3	274.1	270.0	269.0
82.5°	238.4	228.2	208.9	196.6	193.6
85°	135.5	128.4	127.4	119.2	117.2
87.5°	47.9	50.9	52.0	52.0	52.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)