

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: P393697

Luminaire Tested: **24EN-LD2-70-UNV-L93050-W2A-1-U (6500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393697  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-39)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-70-UNV-L93050-W2A-1-U (6500K)  
Description: 2X4 ENCOUNTER, 7000 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6186.0 lumens  
Efficiency: N/A  
Efficacy: 122.5 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

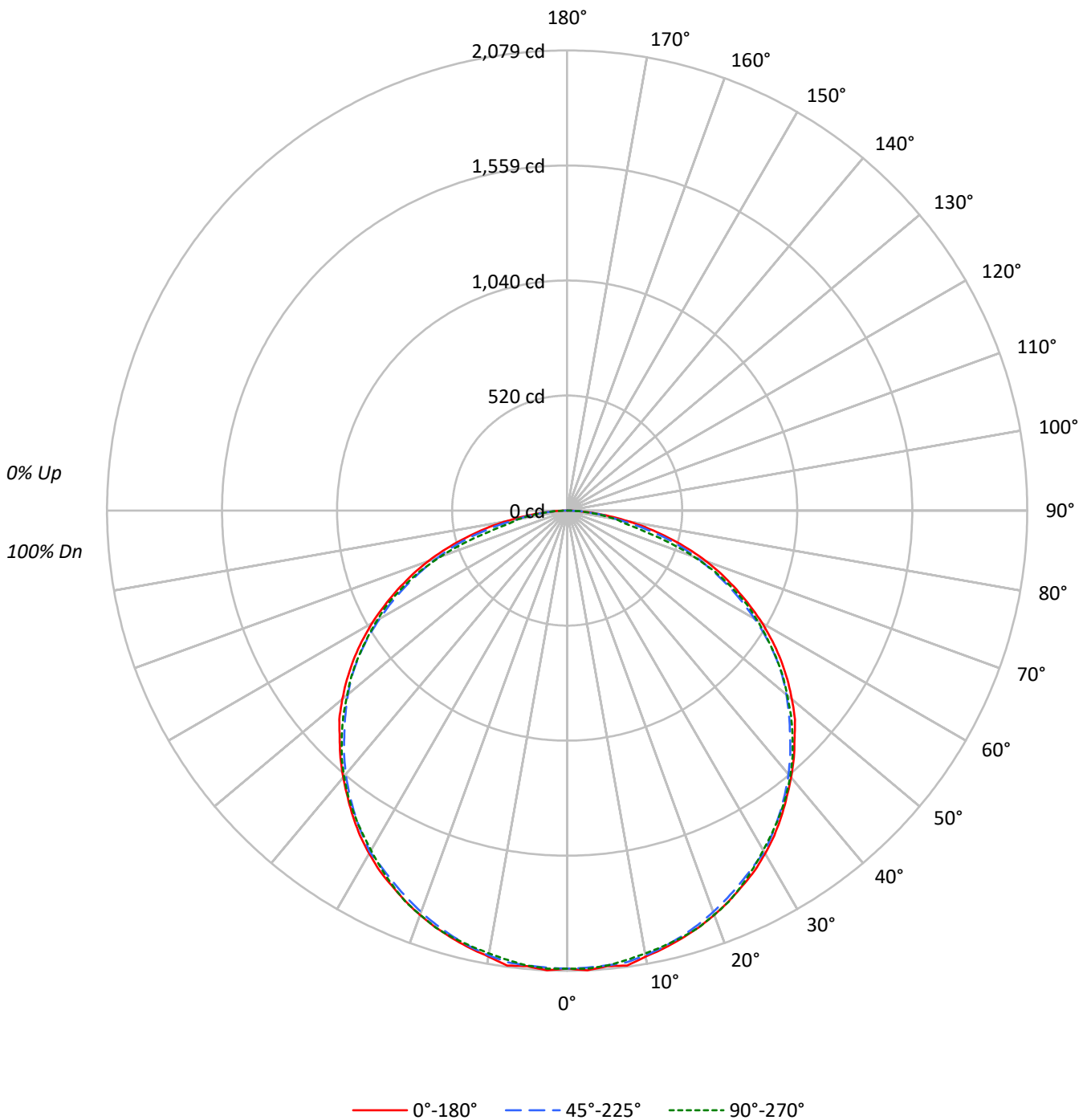
Input Watts (W): 50.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2784	2784	2784
5°	2790	2786	2787
10°	2795	2788	2776
15°	2787	2776	2782
20°	2784	2764	2783
25°	2779	2754	2772
30°	2779	2767	2753
35°	2772	2749	2755
40°	2764	2733	2753
45°	2765	2709	2739
50°	2775	2707	2716
55°	2767	2694	2700
60°	2739	2633	2668
65°	2688	2556	2609
70°	2627	2454	2398
75°	2467	2270	1866
80°	2187	1771	1729
85°	1743	1593	1471



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	196.2	3.2
10°-20°	562.7	9.1
20°-30°	859.2	13.9
30°-40°	1048.7	17.0
40°-50°	1108.6	17.9
50°-60°	1031.0	16.7
60°-70°	806.8	13.0
70°-80°	452.7	7.3
80°-90°	120.1	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°	1618.2	26.2
0°-40°	2666.9	43.1
0°-60°	4806.4	77.7
0°-90°	6186.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6186.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2070	2070	2070	2070	2070	
5°	2066	2063	2062	2061	2063	197
15°	2001	1994	1993	1984	1997	565
25°	1872	1862	1855	1866	1868	864
35°	1688	1680	1673	1667	1677	1056
45°	1453	1441	1424	1433	1440	1123
55°	1179	1164	1149	1143	1151	1053
65°	844	826	803	807	820	835
75°	475	457	437	386	359	501
85°	113	105	103	96	95	132
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2069.5	2069.5	2069.5	2069.5	2069.5
2.5°	2079.2	2066.0	2066.9	2071.3	2071.3
5°	2066.0	2063.3	2062.5	2060.7	2063.3
7.5°	2073.0	2055.4	2058.1	2047.5	2048.3
10°	2045.7	2038.6	2040.4	2032.5	2031.6
12.5°	2025.4	2022.8	2018.4	2010.4	2014.8
15°	2000.7	1994.5	1992.8	1984.0	1997.2
17.5°	1975.1	1965.4	1962.8	1957.5	1975.1
20°	1944.3	1935.4	1930.1	1929.3	1943.4
22.5°	1909.9	1901.0	1893.1	1899.3	1911.6
25°	1871.9	1862.2	1855.2	1865.7	1867.5
27.5°	1834.9	1823.4	1816.3	1822.5	1821.6
30°	1789.0	1779.3	1781.1	1774.9	1772.2
32.5°	1741.4	1732.5	1728.1	1722.0	1724.6
35°	1687.6	1680.5	1673.4	1667.3	1677.0
37.5°	1630.2	1625.8	1616.1	1609.9	1624.9
40°	1573.8	1564.0	1556.1	1551.7	1567.6
42.5°	1516.4	1505.8	1491.7	1490.8	1507.6
45°	1452.9	1441.4	1423.8	1432.6	1439.7
47.5°	1396.4	1377.9	1358.5	1367.3	1371.7
50°	1325.9	1310.9	1293.2	1296.8	1297.6
52.5°	1254.4	1242.1	1225.3	1220.9	1228.8
55°	1179.4	1163.6	1148.6	1143.3	1151.2
57.5°	1100.0	1085.9	1066.5	1059.5	1070.0
60°	1018.0	999.5	978.3	978.3	991.5
62.5°	931.5	916.6	891.0	894.5	913.9
65°	844.2	825.7	802.8	807.2	819.5
67.5°	756.9	738.4	711.0	717.2	722.5
70°	667.8	644.9	623.7	617.5	609.6
72.5°	571.6	550.5	536.3	502.8	489.6
75°	474.6	457.0	436.7	385.5	359.0
77.5°	379.3	367.9	335.2	275.2	264.6
80°	282.3	277.0	228.5	224.1	223.2
82.5°	192.3	188.8	173.8	161.4	158.8
85°	112.9	105.0	103.2	96.2	95.3
87.5°	38.8	42.3	41.5	42.3	41.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)