

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: P393693

Luminaire Tested: **24EN-LD2-70-UNV-L93050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393693  
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 (4000K)  
Description: 2X4 ENCOUNTER, 7000 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6125.4 lumens  
Efficiency: N/A  
Efficacy: 120.3 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

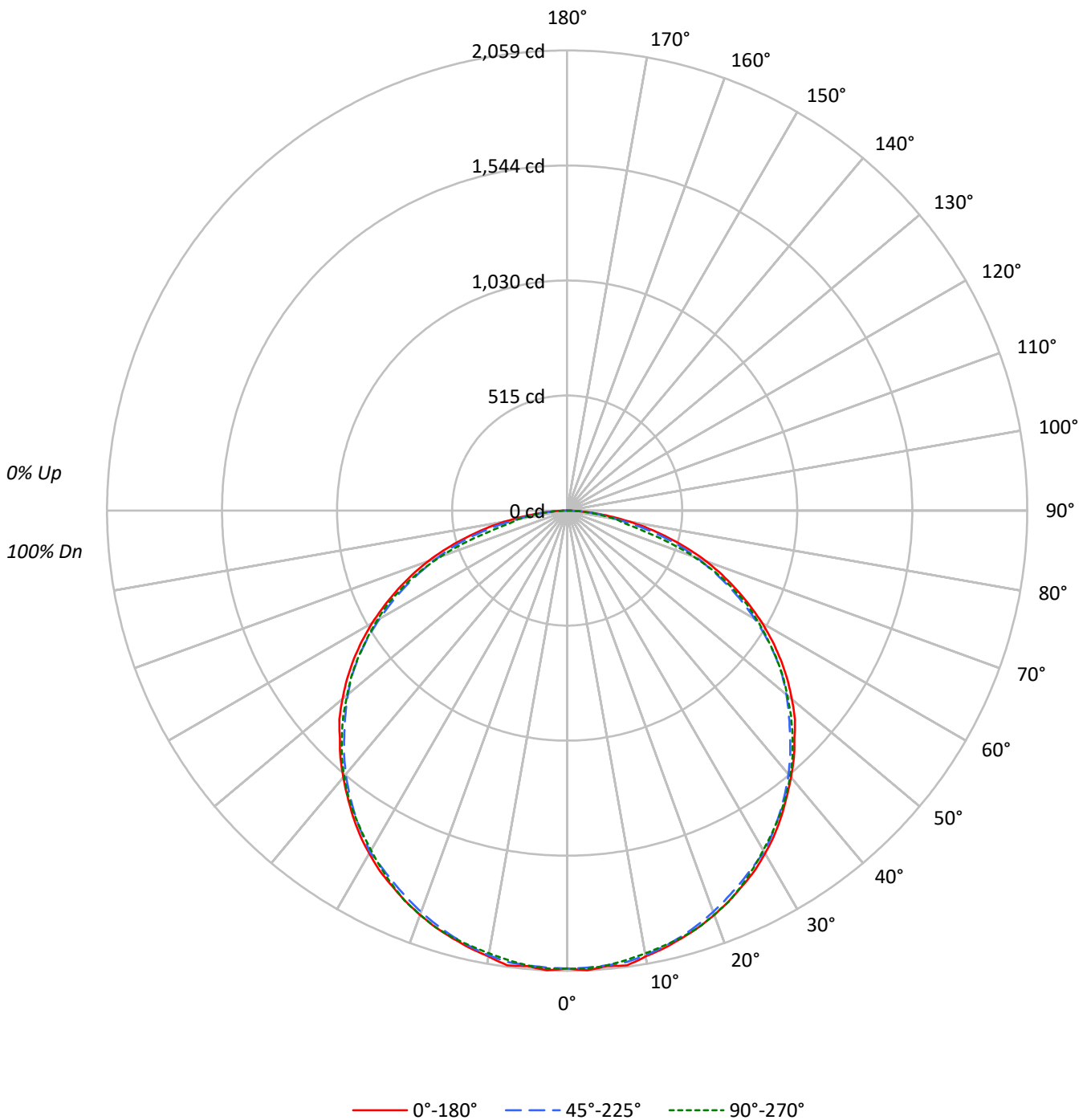
Input Watts (W): 50.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2757	2757	2757
5°	2763	2758	2759
10°	2768	2760	2748
15°	2760	2749	2755
20°	2757	2737	2755
25°	2752	2727	2745
30°	2752	2740	2726
35°	2745	2722	2727
40°	2737	2706	2726
45°	2738	2683	2713
50°	2748	2681	2690
55°	2740	2668	2674
60°	2713	2607	2642
65°	2661	2531	2584
70°	2601	2430	2375
75°	2443	2248	1848
80°	2166	1753	1712
85°	1726	1578	1456



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.3	3.2
10°-20°	557.2	9.1
20°-30°	850.8	13.9
30°-40°	1038.4	17.0
40°-50°	1097.7	17.9
50°-60°	1020.9	16.7
60°-70°	798.9	13.0
70°-80°	448.3	7.3
80°-90°	118.9	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°	1602.3	26.2
0°-40°	2640.7	43.1
0°-60°	4759.4	77.7
0°-90°	6125.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6125.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2049	2049	2049	2049	2049	
5°	2046	2043	2042	2040	2043	195
15°	1981	1975	1973	1964	1978	560
25°	1854	1844	1837	1848	1849	855
35°	1671	1664	1657	1651	1660	1046
45°	1439	1427	1410	1419	1426	1112
55°	1168	1152	1137	1132	1140	1043
65°	836	818	795	799	812	827
75°	470	452	432	382	356	496
85°	112	104	102	95	94	131
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2049.2	2049.2	2049.2	2049.2	2049.2
2.5°	2058.9	2045.8	2046.6	2051.0	2051.0
5°	2045.8	2043.1	2042.3	2040.5	2043.1
7.5°	2052.7	2035.3	2037.9	2027.4	2028.3
10°	2025.7	2018.7	2020.4	2012.6	2011.7
12.5°	2005.6	2002.9	1998.6	1990.7	1995.1
15°	1981.1	1975.0	1973.2	1964.5	1977.6
17.5°	1955.8	1946.2	1943.6	1938.3	1955.8
20°	1925.2	1916.5	1911.2	1910.4	1924.3
22.5°	1891.1	1882.4	1874.5	1880.7	1892.9
25°	1853.6	1844.0	1837.0	1847.5	1849.2
27.5°	1816.9	1805.5	1798.5	1804.7	1803.8
30°	1771.5	1761.9	1763.6	1757.5	1754.9
32.5°	1724.3	1715.6	1711.2	1705.1	1707.7
35°	1671.0	1664.0	1657.0	1650.9	1660.5
37.5°	1614.2	1609.9	1600.3	1594.1	1609.0
40°	1558.3	1548.7	1540.9	1536.5	1552.2
42.5°	1501.6	1491.1	1477.1	1476.2	1492.8
45°	1438.7	1427.3	1409.8	1418.6	1425.6
47.5°	1382.8	1364.4	1345.2	1353.9	1358.3
50°	1312.9	1298.0	1280.6	1284.1	1284.9
52.5°	1242.1	1229.9	1213.3	1208.9	1216.8
55°	1167.9	1152.2	1137.3	1132.1	1139.9
57.5°	1089.3	1075.3	1056.1	1049.1	1059.6
60°	1008.0	989.7	968.7	968.7	981.8
62.5°	922.4	907.6	882.2	885.7	905.0
65°	835.9	817.6	794.9	799.3	811.5
67.5°	749.5	731.1	704.0	710.2	715.4
70°	661.2	638.5	617.6	611.5	603.6
72.5°	566.0	545.1	531.1	497.9	484.8
75°	469.9	452.5	432.4	381.7	355.5
77.5°	375.6	364.3	331.9	272.5	262.1
80°	279.5	274.3	226.2	221.9	221.0
82.5°	190.4	186.9	172.1	159.9	157.2
85°	111.8	103.9	102.2	95.2	94.3
87.5°	38.4	41.9	41.1	41.9	41.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)