

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: P393666

Luminaire Tested: **24EN-LD2-70-UNV-L82765-W2A-1-U (2700K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393666  
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-L82765-W2A-1-U (2700K)  
Description: 2X4 ENCOUNTER, 7000 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 3000K/5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6370.3 lumens  
Efficiency: N/A  
Efficacy: 123.9 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

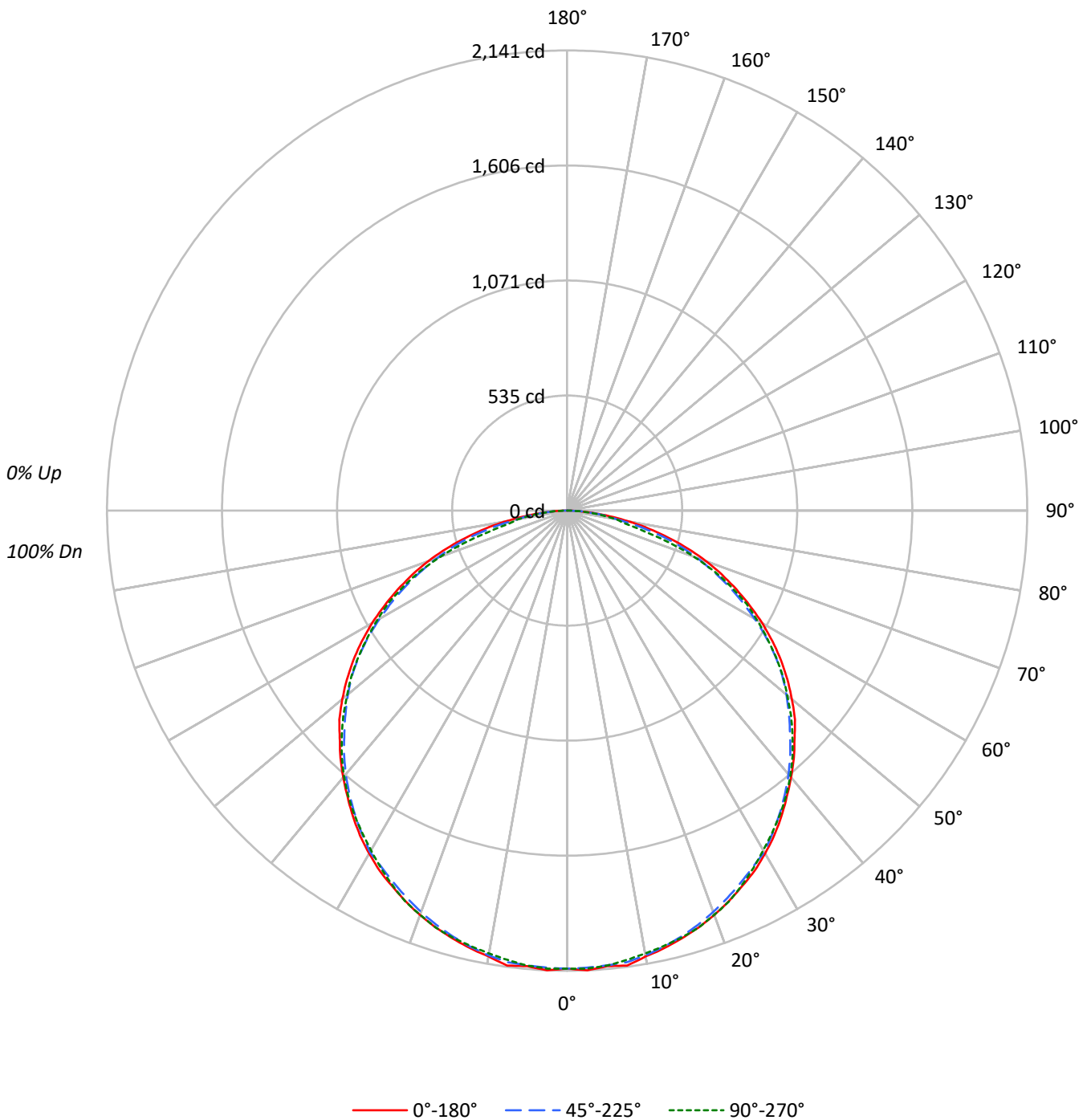
Input Watts (W): 51.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2868	2868	2868
5°	2873	2869	2870
10°	2878	2871	2858
15°	2870	2858	2865
20°	2867	2846	2866
25°	2862	2836	2855
30°	2862	2850	2835
35°	2854	2831	2837
40°	2846	2815	2835
45°	2847	2790	2821
50°	2858	2788	2797
55°	2849	2775	2781
60°	2821	2711	2748
65°	2768	2632	2687
70°	2705	2527	2469
75°	2541	2338	1922
80°	2252	1823	1781
85°	1795	1641	1514



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	202.1	3.2
10°-20°	579.5	9.1
20°-30°	884.8	13.9
30°-40°	1079.9	17.0
40°-50°	1141.6	17.9
50°-60°	1061.7	16.7
60°-70°	830.8	13.0
70°-80°	466.2	7.3
80°-90°	123.6	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°	1666.4	26.2
0°-40°	2746.3	43.1
0°-60°	4949.6	77.7
0°-90°	6370.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6370.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2131	2131	2131	2131	2131	
5°	2128	2125	2124	2122	2125	203
15°	2060	2054	2052	2043	2057	582
25°	1928	1918	1910	1921	1923	890
35°	1738	1731	1723	1717	1727	1087
45°	1496	1484	1466	1475	1483	1157
55°	1215	1198	1183	1177	1186	1084
65°	869	850	827	831	844	860
75°	489	471	450	397	370	516
85°	116	108	106	99	98	136
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2131.2	2131.2	2131.2	2131.2	2131.2
2.5°	2141.2	2127.5	2128.5	2133.0	2133.0
5°	2127.5	2124.8	2123.9	2122.1	2124.8
7.5°	2134.8	2116.6	2119.4	2108.5	2109.4
10°	2106.6	2099.4	2101.2	2093.0	2092.1
12.5°	2085.8	2083.0	2078.5	2070.3	2074.9
15°	2060.3	2054.0	2052.1	2043.1	2056.7
17.5°	2034.0	2024.0	2021.3	2015.8	2034.0
20°	2002.2	1993.1	1987.6	1986.7	2001.3
22.5°	1966.8	1957.7	1949.5	1955.8	1968.6
25°	1927.7	1917.7	1910.4	1921.3	1923.1
27.5°	1889.5	1877.7	1870.5	1876.8	1875.9
30°	1842.3	1832.3	1834.1	1827.8	1825.0
32.5°	1793.2	1784.2	1779.6	1773.3	1776.0
35°	1737.8	1730.6	1723.3	1716.9	1726.9
37.5°	1678.8	1674.2	1664.2	1657.9	1673.3
40°	1620.6	1610.6	1602.5	1597.9	1614.3
42.5°	1561.6	1550.7	1536.2	1535.2	1552.5
45°	1496.2	1484.4	1466.2	1475.3	1482.6
47.5°	1438.0	1419.0	1399.0	1408.1	1412.6
50°	1365.4	1349.9	1331.8	1335.4	1336.3
52.5°	1291.8	1279.1	1261.8	1257.3	1265.4
55°	1214.6	1198.2	1182.8	1177.3	1185.5
57.5°	1132.8	1118.3	1098.3	1091.0	1101.9
60°	1048.3	1029.3	1007.4	1007.4	1021.1
62.5°	959.3	943.9	917.5	921.1	941.1
65°	869.4	850.3	826.7	831.2	843.9
67.5°	779.4	760.4	732.2	738.6	744.0
70°	687.7	664.1	642.3	635.9	627.7
72.5°	588.7	566.9	552.3	517.8	504.2
75°	488.7	470.6	449.7	397.0	369.7
77.5°	390.6	378.8	345.2	283.4	272.5
80°	290.7	285.2	235.3	230.7	229.8
82.5°	198.0	194.4	179.0	166.2	163.5
85°	116.3	108.1	106.3	99.0	98.1
87.5°	40.0	43.6	42.7	43.6	42.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)