

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: P393723

Luminaire Tested: **24EN-LD2-74-UNV-L93050-W2A-1-U (3000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393723  
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-L93050-W2A-1-U (3000K)  
Description: 2X4 ENCOUNTER, 7400 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6057.0 lumens  
Efficiency: N/A  
Efficacy: 109.7 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

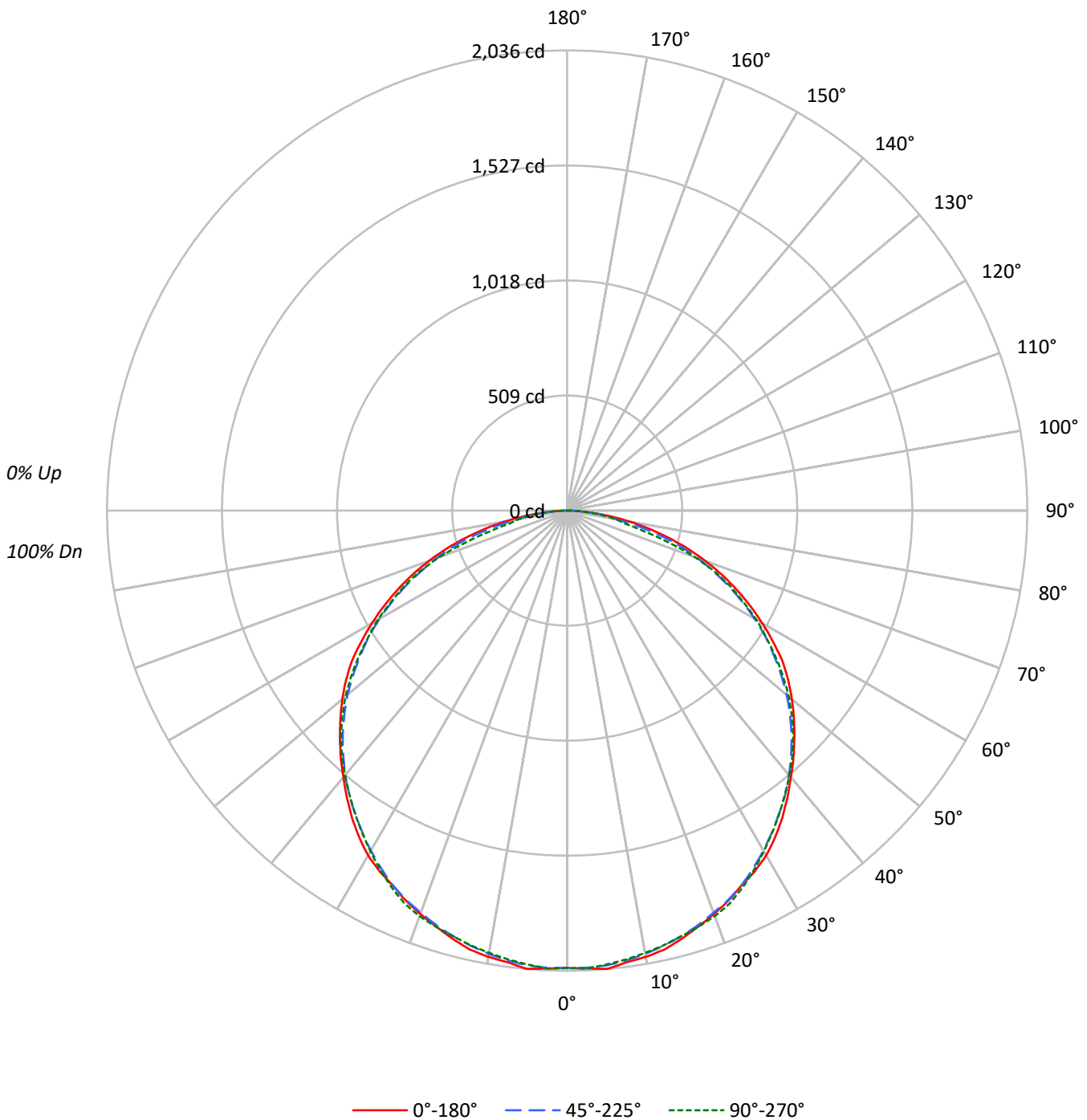
Input Watts (W): 55.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2723	2723	2723
5°	2749	2728	2722
10°	2739	2721	2715
15°	2731	2715	2716
20°	2720	2711	2734
25°	2714	2713	2730
30°	2737	2699	2704
35°	2725	2686	2689
40°	2705	2683	2684
45°	2705	2672	2691
50°	2718	2656	2678
55°	2730	2620	2639
60°	2685	2578	2605
65°	2635	2504	2546
70°	2554	2415	2360
75°	2414	2217	1820
80°	2152	1712	1681
85°	1687	1585	1459



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.9	3.2
10°-20°	551.2	9.1
20°-30°	842.5	13.9
30°-40°	1027.2	17.0
40°-50°	1087.2	17.9
50°-60°	1007.6	16.6
60°-70°	790.5	13.1
70°-80°	441.0	7.3
80°-90°	117.9	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°	1585.6	26.2
0°-40°	2612.8	43.1
0°-60°	4707.6	77.7
0°-90°	6057.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6057.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2024	2024	2024	2024	2024	
5°	2036	2017	2020	2016	2016	193
15°	1961	1953	1949	1948	1950	553
25°	1828	1830	1828	1820	1839	846
35°	1659	1639	1635	1641	1637	1038
45°	1422	1420	1404	1396	1414	1098
55°	1164	1132	1117	1119	1125	1035
65°	828	813	786	795	800	818
75°	464	445	426	373	350	489
85°	109	104	103	96	94	130
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2024.0	2024.0	2024.0	2024.0	2024.0
2.5°	2027.2	2022.3	2024.8	2017.4	2027.2
5°	2035.5	2016.6	2019.8	2015.7	2015.7
7.5°	2015.7	2007.5	2007.5	2008.3	2002.6
10°	2005.1	1994.4	1991.9	1994.4	1987.0
12.5°	1989.4	1973.8	1972.2	1973.8	1970.5
15°	1960.7	1953.3	1949.2	1948.4	1950.0
17.5°	1929.5	1927.8	1923.7	1920.4	1931.1
20°	1899.9	1901.5	1893.3	1890.8	1909.7
22.5°	1867.0	1867.0	1863.7	1855.5	1881.0
25°	1828.4	1830.0	1827.6	1820.2	1839.1
27.5°	1798.8	1786.5	1784.0	1781.5	1791.4
30°	1761.8	1739.6	1737.2	1738.0	1740.5
32.5°	1713.3	1691.1	1687.0	1692.0	1688.7
35°	1659.1	1639.4	1635.3	1641.0	1636.9
37.5°	1600.8	1589.3	1584.3	1584.3	1582.7
40°	1539.9	1535.0	1527.6	1525.2	1528.4
42.5°	1482.4	1481.6	1466.0	1462.7	1475.0
45°	1421.6	1420.0	1404.4	1396.1	1414.2
47.5°	1360.8	1354.2	1337.0	1328.8	1349.3
50°	1298.4	1282.7	1268.8	1266.3	1279.5
52.5°	1233.4	1208.8	1192.4	1190.7	1203.9
55°	1163.6	1132.4	1116.7	1119.2	1125.0
57.5°	1080.6	1056.8	1041.1	1040.3	1043.6
60°	997.6	977.1	958.2	960.6	968.0
62.5°	913.0	896.5	873.5	880.9	880.9
65°	827.5	812.7	786.4	794.6	799.6
67.5°	740.4	724.0	698.5	702.6	707.5
70°	649.2	631.1	613.8	598.2	599.9
72.5°	557.1	537.4	525.9	486.5	475.0
75°	464.3	445.4	426.5	373.1	350.1
77.5°	369.8	359.1	322.9	265.4	257.2
80°	277.7	272.8	221.0	217.8	216.9
82.5°	192.3	184.1	168.5	158.6	156.1
85°	109.3	103.5	102.7	96.1	94.5
87.5°	38.6	41.1	41.9	41.9	41.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)