

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: P393690

Luminaire Tested: **24EN-LD2-70-UNV-L93050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393690  
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 (2700K)  
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: 6054.7 lumens  
Efficiency: N/A  
Efficacy: 118.3 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

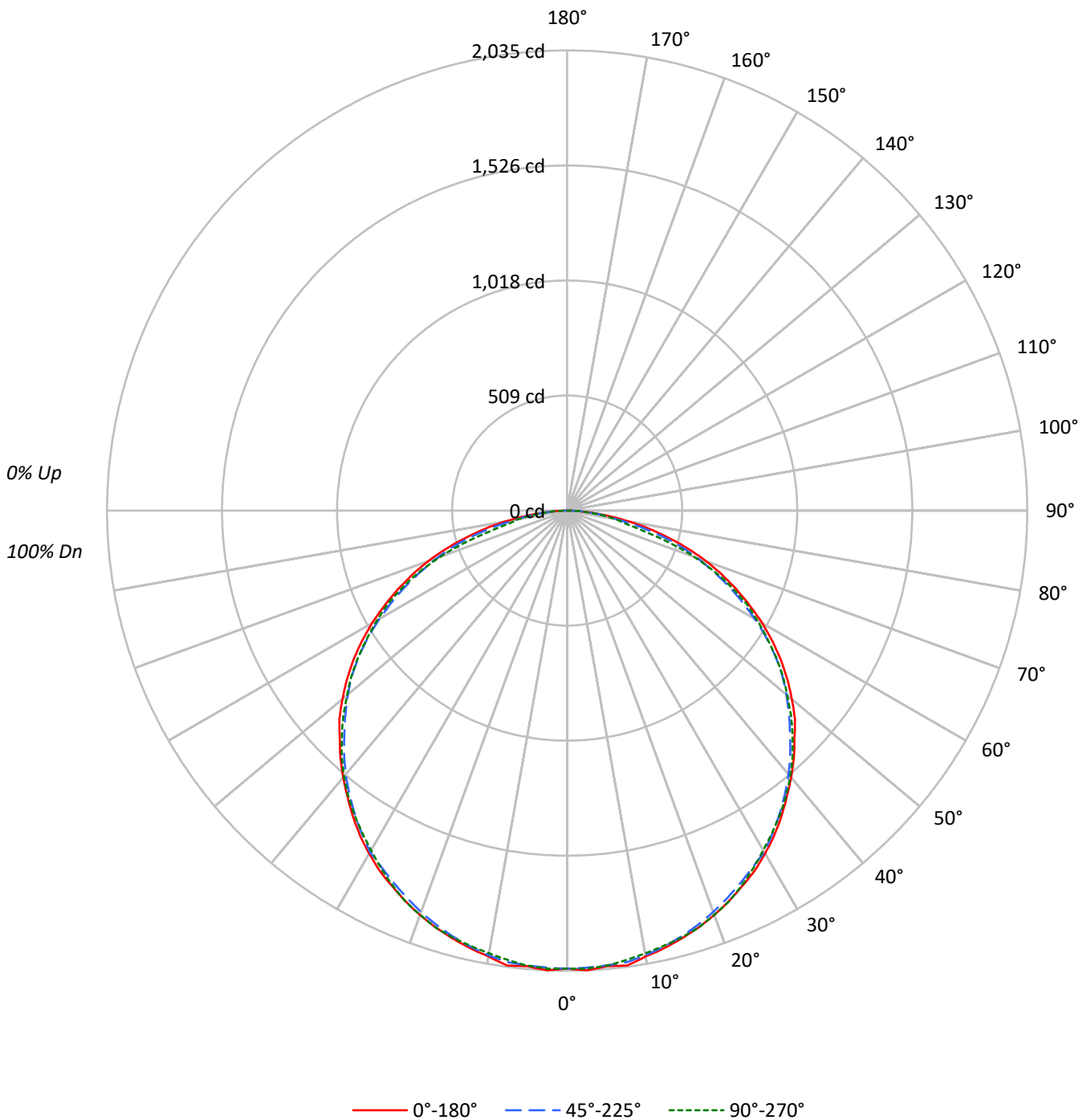
Input Watts (W): 51.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2725	2725	2725
5°	2731	2727	2728
10°	2736	2729	2717
15°	2728	2717	2723
20°	2725	2705	2724
25°	2720	2696	2714
30°	2720	2708	2695
35°	2713	2690	2696
40°	2706	2675	2695
45°	2706	2652	2681
50°	2716	2650	2659
55°	2708	2637	2643
60°	2681	2577	2612
65°	2631	2501	2554
70°	2571	2401	2347
75°	2415	2222	1827
80°	2141	1733	1692
85°	1706	1559	1440



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	192.1	3.2
10°-20°	550.8	9.1
20°-30°	841.0	13.9
30°-40°	1026.4	17.0
40°-50°	1085.1	17.9
50°-60°	1009.1	16.7
60°-70°	789.7	13.0
70°-80°	443.1	7.3
80°-90°	117.5	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°	1583.8	26.2
0°-40°	2610.3	43.1
0°-60°	4704.5	77.7
0°-90°	6054.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6054.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2026	2026	2026	2026	2026	
5°	2022	2020	2019	2017	2020	193
15°	1958	1952	1950	1942	1955	553
25°	1832	1823	1816	1826	1828	846
35°	1652	1645	1638	1632	1641	1034
45°	1422	1411	1394	1402	1409	1100
55°	1154	1139	1124	1119	1127	1030
65°	826	808	786	790	802	818
75°	464	447	427	377	351	491
85°	110	103	101	94	93	129
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2025.6	2025.6	2025.6	2025.6	2025.6
2.5°	2035.1	2022.2	2023.0	2027.3	2027.3
5°	2022.2	2019.6	2018.7	2017.0	2019.6
7.5°	2029.1	2011.8	2014.4	2004.0	2004.9
10°	2002.3	1995.4	1997.1	1989.3	1988.5
12.5°	1982.4	1979.8	1975.5	1967.8	1972.1
15°	1958.3	1952.2	1950.5	1941.9	1954.8
17.5°	1933.2	1923.7	1921.1	1916.0	1933.2
20°	1903.0	1894.4	1889.2	1888.3	1902.1
22.5°	1869.3	1860.7	1852.9	1859.0	1871.1
25°	1832.2	1822.7	1815.8	1826.2	1827.9
27.5°	1795.9	1784.7	1777.8	1783.8	1783.0
30°	1751.0	1741.5	1743.3	1737.2	1734.6
32.5°	1704.4	1695.8	1691.5	1685.4	1688.0
35°	1651.7	1644.8	1637.9	1631.9	1641.4
37.5°	1595.6	1591.3	1581.8	1575.8	1590.4
40°	1540.4	1530.9	1523.1	1518.8	1534.3
42.5°	1484.2	1473.9	1460.1	1459.2	1475.6
45°	1422.1	1410.8	1393.6	1402.2	1409.1
47.5°	1366.8	1348.7	1329.7	1338.3	1342.6
50°	1297.7	1283.1	1265.8	1269.2	1270.1
52.5°	1227.8	1215.7	1199.3	1195.0	1202.8
55°	1154.4	1138.9	1124.2	1119.0	1126.8
57.5°	1076.7	1062.9	1043.9	1037.0	1047.3
60°	996.4	978.3	957.5	957.5	970.5
62.5°	911.8	897.1	872.1	875.5	894.5
65°	826.3	808.2	785.7	790.0	802.1
67.5°	740.8	722.7	695.9	702.0	707.1
70°	653.6	631.2	610.4	604.4	596.6
72.5°	559.5	538.8	525.0	492.2	479.2
75°	464.5	447.3	427.4	377.3	351.4
77.5°	371.3	360.1	328.1	269.4	259.0
80°	276.3	271.1	223.6	219.3	218.4
82.5°	188.2	184.8	170.1	158.0	155.4
85°	110.5	102.7	101.0	94.1	93.3
87.5°	38.0	41.4	40.6	41.4	40.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)