

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: P393692

Luminaire Tested: **24EN-LD2-70-UNV-L93050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393692  
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 (3500K)  
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: 5896.9 lumens  
Efficiency: N/A  
Efficacy: 115.2 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

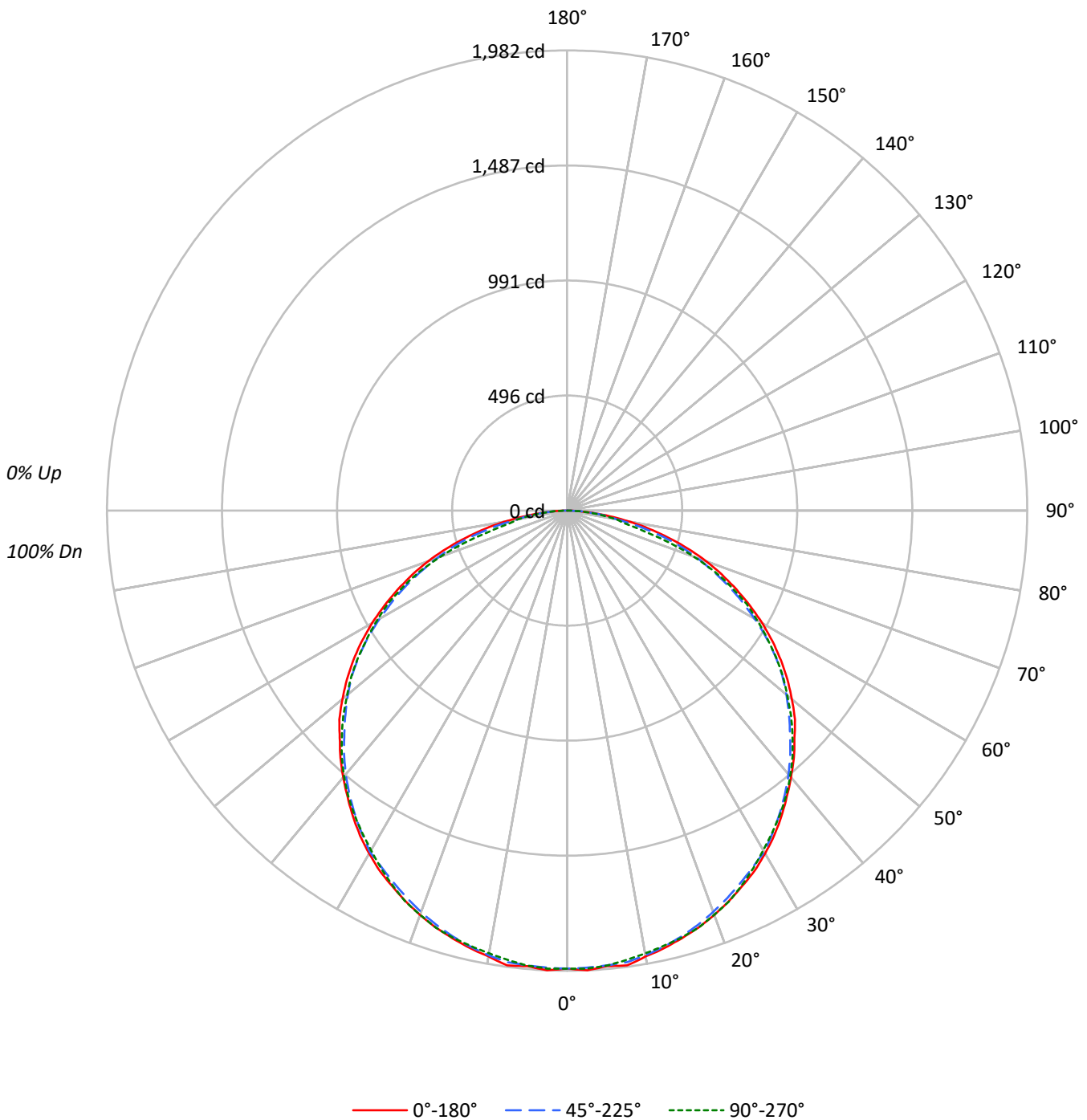
Input Watts (W): 51.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2654	2654	2654
5°	2660	2655	2657
10°	2664	2657	2646
15°	2657	2646	2652
20°	2654	2634	2653
25°	2649	2625	2643
30°	2650	2638	2625
35°	2642	2620	2626
40°	2635	2605	2625
45°	2635	2583	2611
50°	2646	2581	2589
55°	2637	2568	2574
60°	2611	2510	2544
65°	2562	2436	2487
70°	2504	2339	2286
75°	2352	2164	1779
80°	2085	1688	1649
85°	1661	1519	1402



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.1	3.2
10°-20°	536.4	9.1
20°-30°	819.1	13.9
30°-40°	999.7	17.0
40°-50°	1056.8	17.9
50°-60°	982.8	16.7
60°-70°	769.1	13.0
70°-80°	431.6	7.3
80°-90°	114.5	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°	1542.6	26.2
0°-40°	2542.3	43.1
0°-60°	4581.8	77.7
0°-90°	5896.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5896.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1973	1973	1973	1973	1973	
5°	1970	1967	1966	1964	1967	188
15°	1907	1901	1900	1891	1904	539
25°	1784	1775	1768	1779	1780	823
35°	1609	1602	1595	1589	1599	1007
45°	1385	1374	1357	1366	1372	1071
55°	1124	1109	1095	1090	1097	1004
65°	805	787	765	769	781	796
75°	452	436	416	368	342	478
85°	108	100	98	92	91	126
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1972.8	1972.8	1972.8	1972.8	1972.8
2.5°	1982.1	1969.5	1970.3	1974.5	1974.5
5°	1969.5	1966.9	1966.1	1964.4	1966.9
7.5°	1976.2	1959.4	1961.9	1951.8	1952.6
10°	1950.1	1943.4	1945.1	1937.5	1936.7
12.5°	1930.8	1928.2	1924.0	1916.5	1920.7
15°	1907.2	1901.3	1899.7	1891.2	1903.9
17.5°	1882.8	1873.6	1871.1	1866.0	1882.8
20°	1853.4	1845.0	1839.9	1839.1	1852.6
22.5°	1820.6	1812.2	1804.6	1810.5	1822.3
25°	1784.4	1775.2	1768.5	1778.6	1780.2
27.5°	1749.1	1738.2	1731.5	1737.4	1736.5
30°	1705.4	1696.2	1697.8	1691.9	1689.4
32.5°	1660.0	1651.6	1647.4	1641.5	1644.0
35°	1608.7	1602.0	1595.2	1589.4	1598.6
37.5°	1554.0	1549.8	1540.6	1534.7	1549.0
40°	1500.2	1491.0	1483.4	1479.2	1494.3
42.5°	1445.6	1435.5	1422.0	1421.2	1437.1
45°	1385.0	1374.1	1357.3	1365.7	1372.4
47.5°	1331.2	1313.5	1295.0	1303.4	1307.6
50°	1263.9	1249.6	1232.8	1236.2	1237.0
52.5°	1195.8	1184.0	1168.0	1163.8	1171.4
55°	1124.3	1109.2	1094.9	1089.8	1097.4
57.5°	1048.6	1035.2	1016.7	1010.0	1020.0
60°	970.4	952.8	932.6	932.6	945.2
62.5°	888.0	873.7	849.3	852.7	871.2
65°	804.8	787.1	765.2	769.4	781.2
67.5°	721.5	703.9	677.8	683.7	688.7
70°	636.6	614.7	594.5	588.6	581.1
72.5°	544.9	524.7	511.3	479.3	466.7
75°	452.4	435.6	416.3	367.5	342.3
77.5°	361.6	350.7	319.6	262.4	252.3
80°	269.1	264.1	217.8	213.6	212.8
82.5°	183.3	180.0	165.7	153.9	151.4
85°	107.6	100.1	98.4	91.7	90.8
87.5°	37.0	40.4	39.5	40.4	39.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)