

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: P393675

Luminaire Tested: **24EN-LD2-70-UNV-L83050-W2A-1-U (3000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393675  
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-L83050-W2A-1-U (3000K)  
Description: 2X4 ENCOUNTER, 7000 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6899.8 lumens  
Efficiency: N/A  
Efficacy: 132.4 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

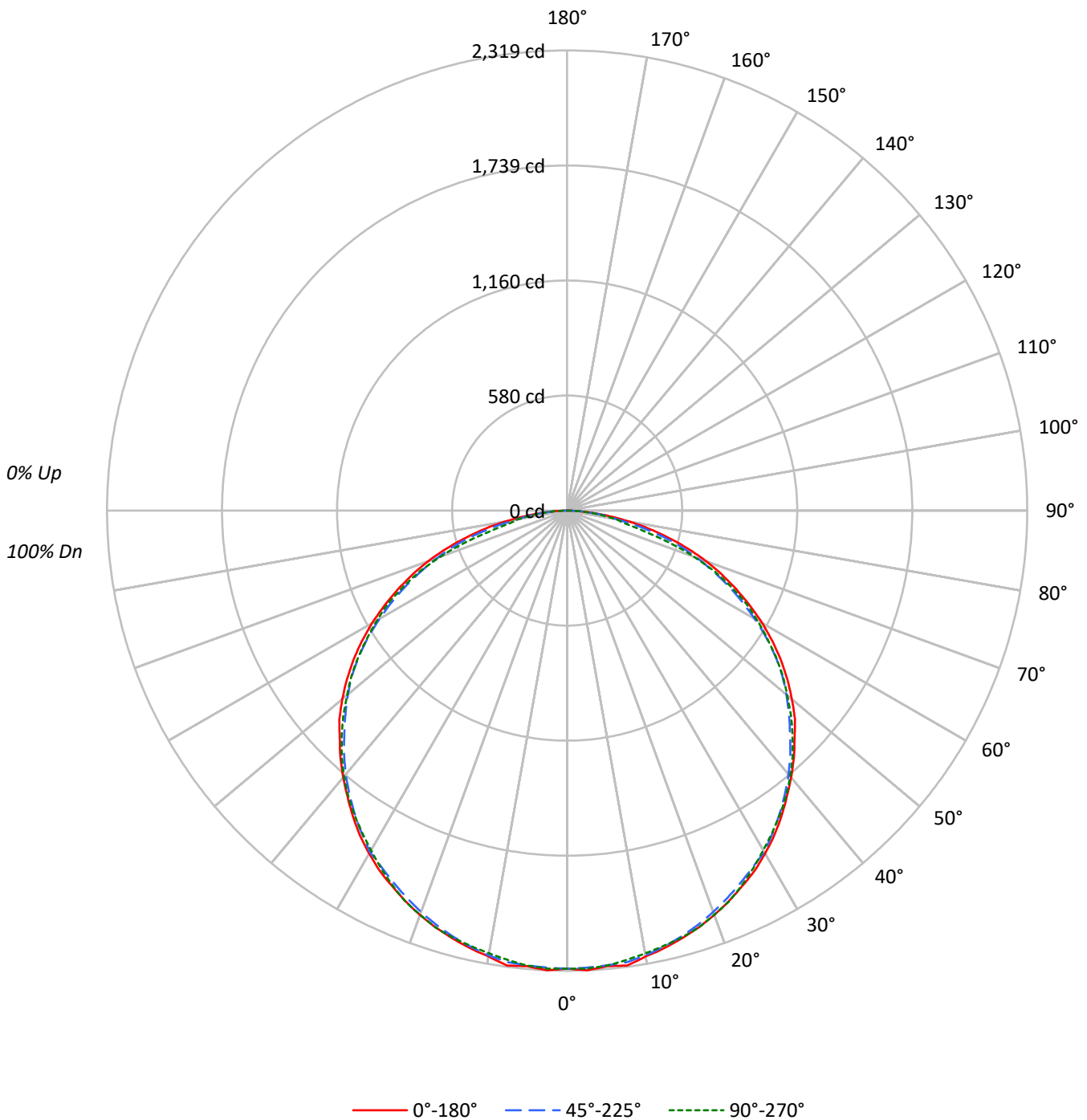
Input Watts (W): 52.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3106	3106	3106
5°	3112	3107	3108
10°	3117	3109	3096
15°	3109	3096	3103
20°	3105	3083	3104
25°	3100	3072	3092
30°	3100	3086	3071
35°	3092	3066	3072
40°	3083	3049	3071
45°	3084	3022	3056
50°	3096	3019	3030
55°	3086	3005	3012
60°	3056	2936	2976
65°	2998	2851	2910
70°	2930	2737	2675
75°	2752	2532	2082
80°	2440	1974	1929
85°	1944	1777	1641



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	218.9	3.2
10°-20°	627.7	9.1
20°-30°	958.4	13.9
30°-40°	1169.7	17.0
40°-50°	1236.5	17.9
50°-60°	1149.9	16.7
60°-70°	899.9	13.0
70°-80°	505.0	7.3
80°-90°	133.9	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°	1804.9	26.2
0°-40°	2974.6	43.1
0°-60°	5361.1	77.7
0°-90°	6899.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6899.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2308	2308	2308	2308	2308	
5°	2304	2302	2300	2298	2302	220
15°	2232	2225	2223	2213	2228	630
25°	2088	2077	2069	2081	2083	964
35°	1882	1874	1866	1860	1870	1178
45°	1621	1608	1588	1598	1606	1253
55°	1316	1298	1281	1275	1284	1174
65°	942	921	895	900	914	932
75°	529	510	487	430	400	559
85°	126	117	115	107	106	147
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2308.3	2308.3	2308.3	2308.3	2308.3
2.5°	2319.2	2304.4	2305.4	2310.3	2310.3
5°	2304.4	2301.5	2300.5	2298.5	2301.5
7.5°	2312.3	2292.6	2295.5	2283.7	2284.7
10°	2281.8	2273.9	2275.9	2267.0	2266.0
12.5°	2259.1	2256.2	2251.3	2242.4	2247.3
15°	2231.6	2224.7	2222.7	2212.9	2227.7
17.5°	2203.1	2192.2	2189.3	2183.4	2203.1
20°	2168.6	2158.8	2152.9	2151.9	2167.6
22.5°	2130.2	2120.4	2111.5	2118.4	2132.2
25°	2087.9	2077.1	2069.2	2081.0	2083.0
27.5°	2046.6	2033.8	2025.9	2032.8	2031.8
30°	1995.4	1984.6	1986.6	1979.7	1976.7
32.5°	1942.3	1932.5	1927.6	1920.7	1923.6
35°	1882.3	1874.4	1866.5	1859.7	1870.5
37.5°	1818.3	1813.4	1802.6	1795.7	1812.4
40°	1755.4	1744.5	1735.7	1730.8	1748.5
42.5°	1691.4	1679.6	1663.9	1662.9	1681.6
45°	1620.6	1607.8	1588.1	1597.9	1605.8
47.5°	1557.6	1536.9	1515.3	1525.1	1530.0
50°	1478.9	1462.1	1442.5	1446.4	1447.4
52.5°	1399.2	1385.4	1366.7	1361.8	1370.6
55°	1315.5	1297.8	1281.1	1275.2	1284.1
57.5°	1227.0	1211.2	1189.6	1181.7	1193.5
60°	1135.5	1114.8	1091.2	1091.2	1106.0
62.5°	1039.0	1022.3	993.8	997.7	1019.4
65°	941.6	921.0	895.4	900.3	914.1
67.5°	844.2	823.6	793.1	799.9	805.9
70°	744.8	719.3	695.7	688.8	679.9
72.5°	637.6	614.0	598.2	560.8	546.1
75°	529.4	509.7	487.1	430.0	400.5
77.5°	423.1	410.3	373.9	307.0	295.2
80°	314.9	309.0	254.8	249.9	248.9
82.5°	214.5	210.6	193.8	180.1	177.1
85°	125.9	117.1	115.1	107.3	106.3
87.5°	43.3	47.2	46.2	47.2	46.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)