

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: P393646

Luminaire Tested: **24EN-LD2-67-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393646  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-38)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-67-UNV-L83050-W2A-1-U (4500K)  
Description: 2X4 ENCOUNTER, 6700 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6775.9 lumens  
Efficiency: N/A  
Efficacy: 140.3 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

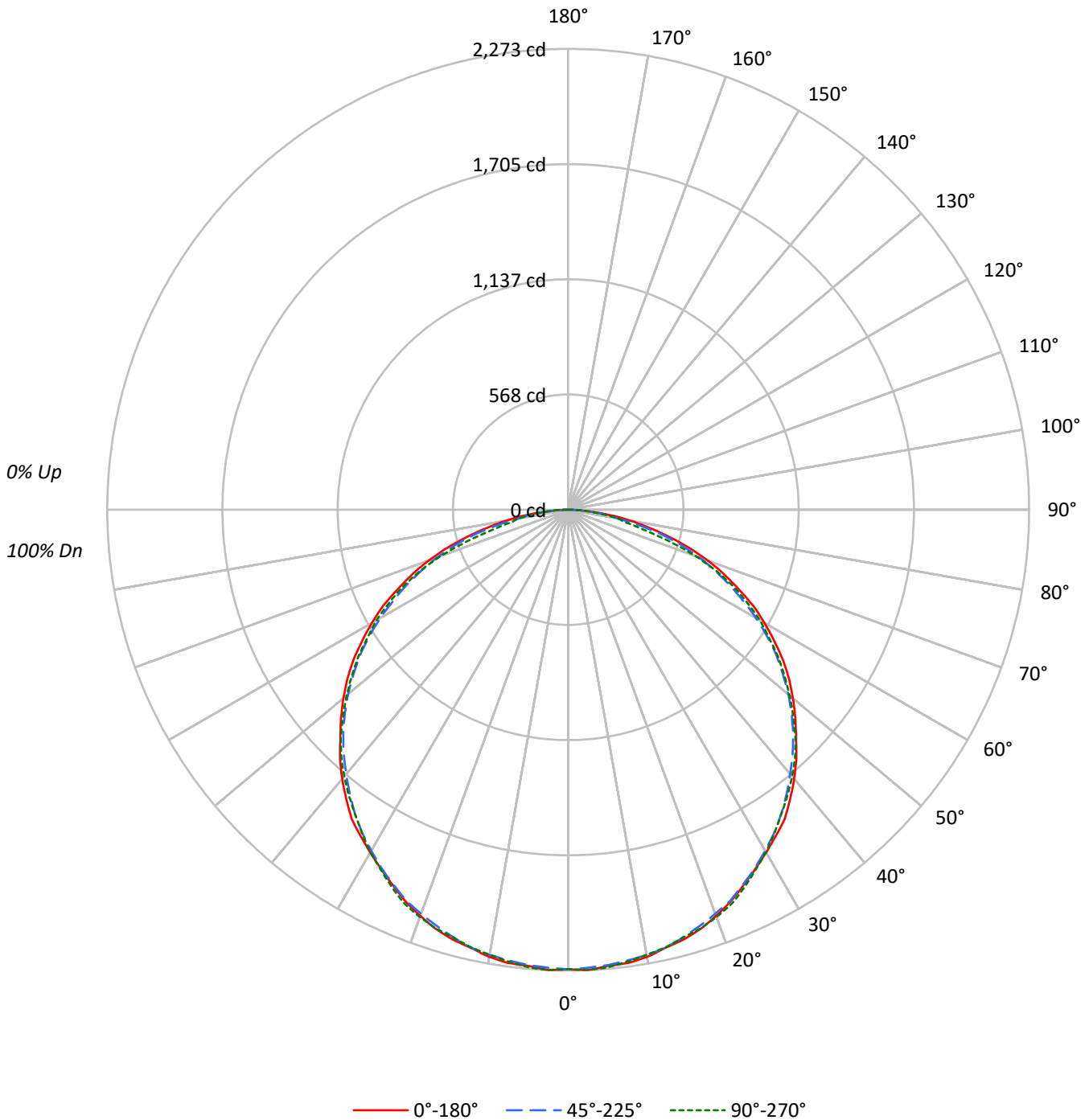
Input Watts (W): 48.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	42	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°	3050	3050	3050
5°	3051	3045	3060
10°	3061	3047	3045
15°	3058	3043	3044
20°	3053	3036	3062
25°	3036	3028	3052
30°	3033	3017	3030
35°	3058	3009	3009
40°	3045	2991	3018
45°	3023	2985	3016
50°	3027	2966	2983
55°	3032	2942	2963
60°	3007	2879	2942
65°	2949	2797	2868
70°	2875	2699	2631
75°	2672	2508	2026
80°	2414	1916	1908
85°	1933	1760	1602



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.6	3.2
10°-20°	617.4	9.1
20°-30°	942.8	13.9
30°-40°	1148.8	17.0
40°-50°	1216.2	17.9
50°-60°	1126.7	16.6
60°-70°	884.7	13.1
70°-80°	493.1	7.3
80°-90°	131.5	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°	1774.8	26.2
0°-40°	2923.5	43.1
0°-60°	5266.5	77.7
0°-90°	6775.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6775.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2267	2267	2267	2267	2267	
5°	2259	2263	2254	2251	2266	215
15°	2195	2187	2184	2180	2185	620
25°	2045	2047	2040	2043	2056	944
35°	1862	1839	1832	1824	1832	1161
45°	1589	1586	1568	1570	1585	1229
55°	1293	1271	1254	1247	1263	1153
65°	926	907	878	890	901	918
75°	514	497	482	414	390	545
85°	125	115	114	105	104	146
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2266.7	2266.7	2266.7	2266.7	2266.7
2.5°	2272.8	2262.6	2261.6	2263.6	2271.8
5°	2258.6	2262.6	2254.5	2251.4	2265.7
7.5°	2255.5	2253.5	2242.3	2235.1	2247.4
10°	2240.2	2237.2	2230.1	2218.9	2229.0
12.5°	2213.8	2215.8	2212.8	2200.5	2211.7
15°	2195.4	2187.3	2184.3	2180.2	2185.3
17.5°	2169.0	2152.7	2153.7	2159.8	2165.9
20°	2132.3	2118.1	2120.1	2131.3	2138.5
22.5°	2092.6	2086.5	2087.6	2091.6	2104.9
25°	2044.8	2046.8	2039.7	2042.8	2056.0
27.5°	1998.0	2005.1	1992.9	1989.8	2001.0
30°	1952.2	1955.2	1942.0	1934.9	1950.2
32.5°	1906.4	1899.3	1890.1	1879.9	1892.1
35°	1861.6	1839.2	1832.1	1823.9	1832.1
37.5°	1797.5	1779.2	1768.0	1769.0	1776.1
40°	1733.4	1713.0	1702.8	1711.0	1718.1
42.5°	1665.2	1646.8	1637.7	1643.8	1656.0
45°	1588.8	1585.8	1568.5	1570.5	1584.8
47.5°	1518.6	1514.5	1494.2	1494.2	1504.3
50°	1446.3	1435.1	1416.8	1410.7	1425.0
52.5°	1373.0	1353.7	1334.4	1332.3	1344.5
55°	1292.6	1271.3	1254.0	1246.8	1263.1
57.5°	1205.1	1184.7	1162.4	1162.4	1172.5
60°	1117.6	1093.1	1069.7	1070.8	1093.1
62.5°	1029.0	1004.6	972.0	978.1	996.5
65°	926.2	906.9	878.4	889.6	900.8
67.5°	831.6	810.2	780.7	790.9	790.9
70°	730.8	703.3	686.0	674.8	668.7
72.5°	624.9	599.5	587.3	546.6	529.3
75°	514.0	496.7	482.4	414.3	389.8
77.5°	408.1	399.0	360.3	301.3	287.0
80°	311.5	304.3	247.3	245.3	246.3
82.5°	212.7	204.6	189.3	177.1	171.0
85°	125.2	115.0	114.0	104.8	103.8
87.5°	41.7	45.8	47.8	46.8	47.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)