

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: P393670

Luminaire Tested: **24EN-LD2-70-UNV-L82765-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393670  
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-L82765-W2A-1-U (4500K)  
Description: 2X4 ENCOUNTER, 7000 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 3000K/5000K CCT, CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6744.8 lumens  
Efficiency: N/A  
Efficacy: 131.7 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

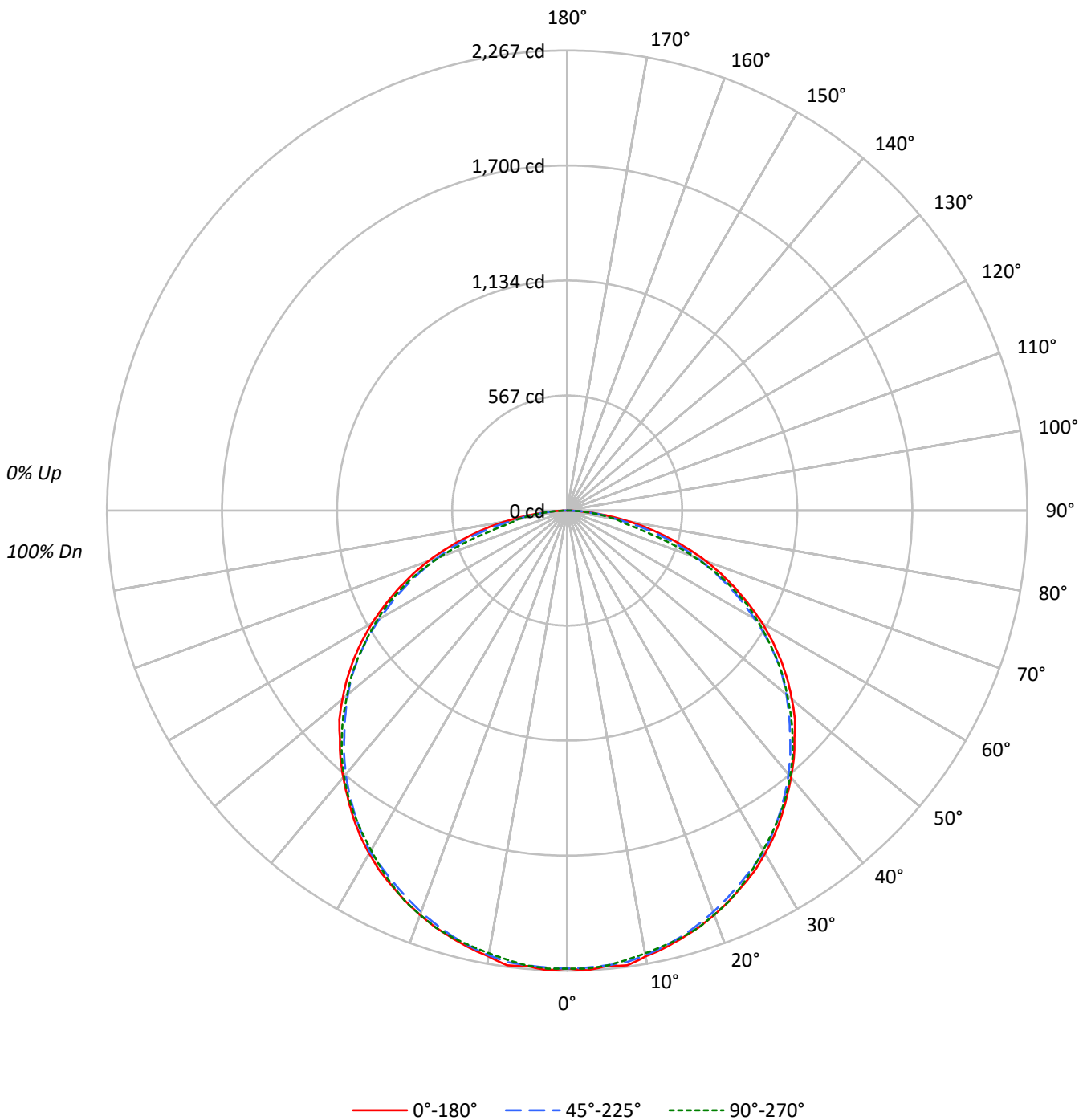
Input Watts (W): 51.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3036	3036	3036
5°	3042	3037	3039
10°	3047	3039	3026
15°	3039	3027	3033
20°	3035	3013	3034
25°	3030	3003	3023
30°	3031	3017	3002
35°	3022	2997	3003
40°	3014	2980	3002
45°	3014	2954	2987
50°	3026	2951	2962
55°	3017	2938	2944
60°	2987	2870	2909
65°	2931	2787	2845
70°	2864	2675	2615
75°	2690	2475	2035
80°	2385	1930	1885
85°	1900	1737	1604



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	213.9	3.2
10°-20°	613.6	9.1
20°-30°	936.8	13.9
30°-40°	1143.4	17.0
40°-50°	1208.7	17.9
50°-60°	1124.1	16.7
60°-70°	879.7	13.0
70°-80°	493.6	7.3
80°-90°	130.9	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°	1764.4	26.2
0°-40°	2907.8	43.1
0°-60°	5240.6	77.7
0°-90°	6744.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6744.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2256	2256	2256	2256	2256	
5°	2253	2250	2249	2247	2250	215
15°	2181	2175	2173	2163	2178	616
25°	2041	2030	2023	2034	2036	942
35°	1840	1832	1825	1818	1828	1151
45°	1584	1572	1552	1562	1570	1225
55°	1286	1269	1252	1246	1255	1148
65°	920	900	875	880	894	911
75°	518	498	476	420	392	546
85°	123	114	112	105	104	144
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2256.5	2256.5	2256.5	2256.5	2256.5
2.5°	2267.0	2252.6	2253.6	2258.4	2258.4
5°	2252.6	2249.7	2248.8	2246.8	2249.7
7.5°	2260.3	2241.1	2243.9	2232.4	2233.4
10°	2230.5	2222.8	2224.7	2216.1	2215.1
12.5°	2208.4	2205.5	2200.7	2192.0	2196.8
15°	2181.4	2174.7	2172.8	2163.2	2177.6
17.5°	2153.5	2143.0	2140.1	2134.3	2153.5
20°	2119.9	2110.3	2104.5	2103.5	2118.9
22.5°	2082.4	2072.7	2064.1	2070.8	2084.3
25°	2041.0	2030.4	2022.7	2034.3	2036.2
27.5°	2000.6	1988.1	1980.4	1987.1	1986.2
30°	1950.6	1940.0	1941.9	1935.2	1932.3
32.5°	1898.7	1889.0	1884.2	1877.5	1880.4
35°	1840.0	1832.3	1824.6	1817.9	1828.4
37.5°	1777.5	1772.7	1762.1	1755.3	1771.7
40°	1715.9	1705.3	1696.7	1691.9	1709.2
42.5°	1653.4	1641.8	1626.5	1625.5	1643.8
45°	1584.1	1571.6	1552.4	1562.0	1569.7
47.5°	1522.6	1502.4	1481.2	1490.8	1495.6
50°	1445.6	1429.3	1410.0	1413.9	1414.9
52.5°	1367.7	1354.3	1336.0	1331.2	1339.8
55°	1286.0	1268.7	1252.3	1246.5	1255.2
57.5°	1199.4	1184.0	1162.9	1155.2	1166.7
60°	1110.0	1089.8	1066.7	1066.7	1081.1
62.5°	1015.7	999.3	971.4	975.3	996.5
65°	920.5	900.3	875.3	880.1	893.5
67.5°	825.2	805.1	775.2	782.0	787.7
70°	728.1	703.1	680.0	673.3	664.6
72.5°	623.3	600.2	584.8	548.2	533.8
75°	517.5	498.2	476.1	420.3	391.5
77.5°	413.6	401.1	365.5	300.1	288.5
80°	307.8	302.0	249.1	244.3	243.3
82.5°	209.7	205.8	189.5	176.0	173.1
85°	123.1	114.5	112.5	104.8	103.9
87.5°	42.3	46.2	45.2	46.2	45.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)