

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: P393678

Luminaire Tested: **24EN-LD2-70-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393678
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 (4500K)
Description: 2X4 ENCOUNTER, 7000 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7137.4 lumens
Efficiency: N/A
Efficacy: 139.4 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

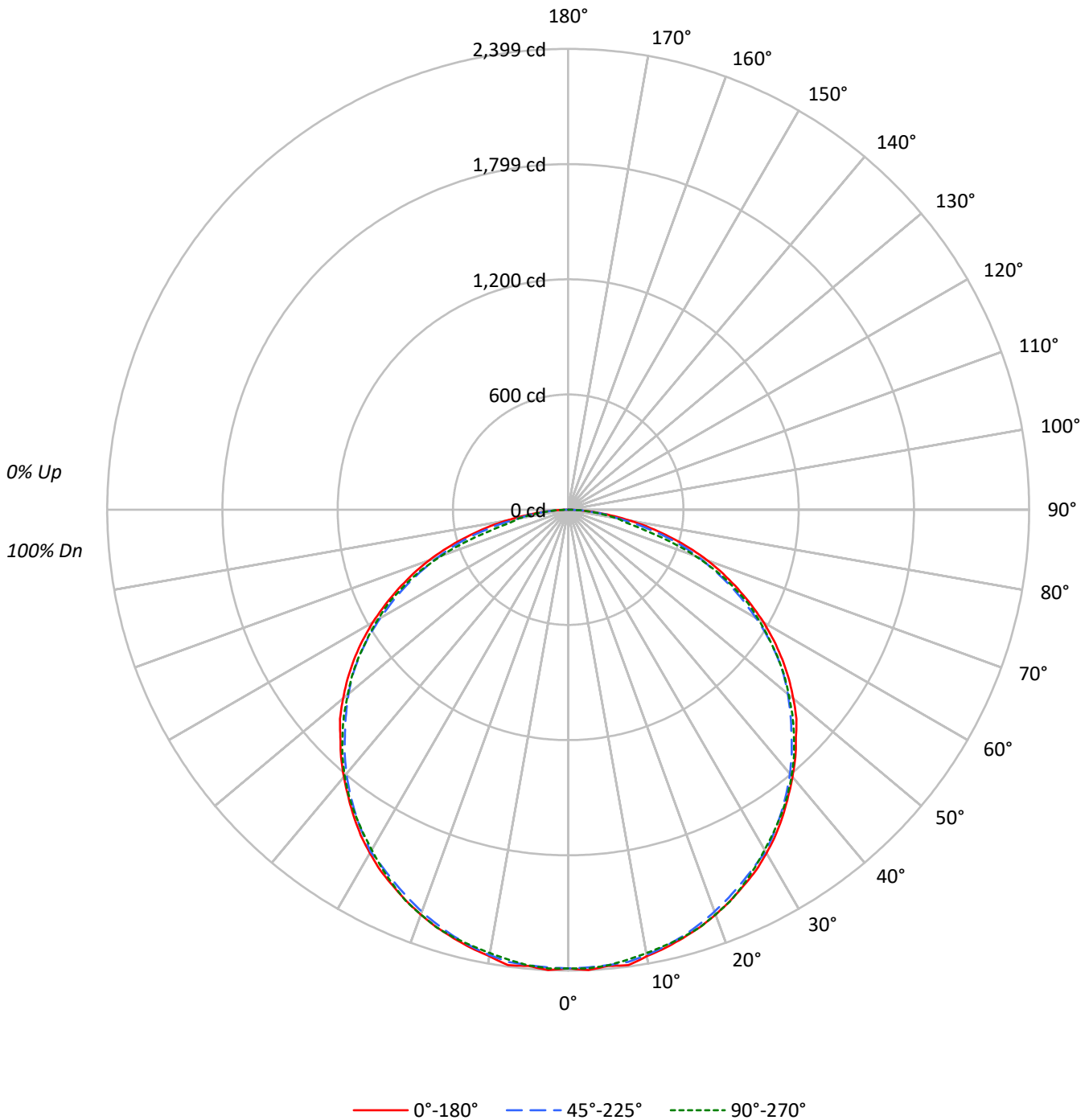
Input Watts (W): 51.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3213	3213	3213
5°	3219	3214	3215
10°	3225	3216	3203
15°	3215	3203	3210
20°	3212	3189	3211
25°	3206	3178	3199
30°	3207	3193	3177
35°	3198	3171	3178
40°	3189	3153	3177
45°	3190	3126	3161
50°	3202	3123	3134
55°	3192	3109	3116
60°	3161	3038	3078
65°	3101	2949	3011
70°	3031	2831	2767
75°	2847	2619	2154
80°	2524	2042	1995
85°	2012	1839	1697



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.4	3.2
10°-20°	649.3	9.1
20°-30°	991.4	13.9
30°-40°	1210.0	17.0
40°-50°	1279.1	17.9
50°-60°	1189.5	16.7
60°-70°	930.9	13.0
70°-80°	522.3	7.3
80°-90°	138.5	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°	1867.1	26.2
0°-40°	3077.0	43.1
0°-60°	5545.7	77.7
0°-90°	7137.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7137.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2388	2388	2388	2388	2388	
5°	2384	2381	2380	2378	2381	228
15°	2308	2301	2299	2289	2304	652
25°	2160	2149	2140	2153	2155	997
35°	1947	1939	1931	1924	1935	1218
45°	1676	1663	1643	1653	1661	1296
55°	1361	1342	1325	1319	1328	1215
65°	974	953	926	931	946	964
75°	548	527	504	445	414	578
85°	130	121	119	111	110	152
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2387.8	2387.8	2387.8	2387.8	2387.8
2.5°	2399.0	2383.7	2384.8	2389.9	2389.9
5°	2383.7	2380.7	2379.7	2377.6	2380.7
7.5°	2391.9	2371.5	2374.6	2362.4	2363.4
10°	2360.3	2352.2	2354.2	2345.1	2344.1
12.5°	2336.9	2333.9	2328.8	2319.6	2324.7
15°	2308.4	2301.3	2299.3	2289.1	2304.4
17.5°	2278.9	2267.7	2264.7	2258.6	2278.9
20°	2243.3	2233.1	2227.0	2226.0	2242.3
22.5°	2203.6	2193.4	2184.3	2191.4	2205.6
25°	2159.8	2148.6	2140.5	2152.7	2154.7
27.5°	2117.1	2103.8	2095.7	2102.8	2101.8
30°	2064.1	2053.0	2055.0	2047.9	2044.8
32.5°	2009.2	1999.0	1993.9	1986.8	1989.8
35°	1947.1	1939.0	1930.8	1923.7	1934.9
37.5°	1880.9	1875.9	1864.7	1857.5	1874.8
40°	1815.8	1804.6	1795.4	1790.4	1808.7
42.5°	1749.6	1737.4	1721.1	1720.1	1739.5
45°	1676.4	1663.1	1642.8	1652.9	1661.1
47.5°	1611.2	1589.8	1567.5	1577.6	1582.7
50°	1529.8	1512.5	1492.1	1496.2	1497.2
52.5°	1447.3	1433.1	1413.8	1408.7	1417.8
55°	1360.8	1342.5	1325.2	1319.1	1328.3
57.5°	1269.2	1252.9	1230.6	1222.4	1234.6
60°	1174.6	1153.2	1128.8	1128.8	1144.0
62.5°	1074.8	1057.5	1028.0	1032.1	1054.5
65°	974.1	952.7	926.2	931.3	945.6
67.5°	873.3	851.9	820.4	827.5	833.6
70°	770.5	744.0	719.6	712.5	703.3
72.5°	659.6	635.1	618.8	580.2	564.9
75°	547.6	527.2	503.8	444.8	414.3
77.5°	437.7	424.4	386.8	317.6	305.3
80°	325.7	319.6	263.6	258.5	257.5
82.5°	221.9	217.8	200.5	186.3	183.2
85°	130.3	121.1	119.1	110.9	109.9
87.5°	44.8	48.9	47.8	48.9	47.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)