

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: P393679

Luminaire Tested: **24EN-LD2-70-UNV-L83050-W2A-1-U (5000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393679
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 (5000K)
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: 7144.7 lumens
Efficiency: N/A
Efficacy: 139.8 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

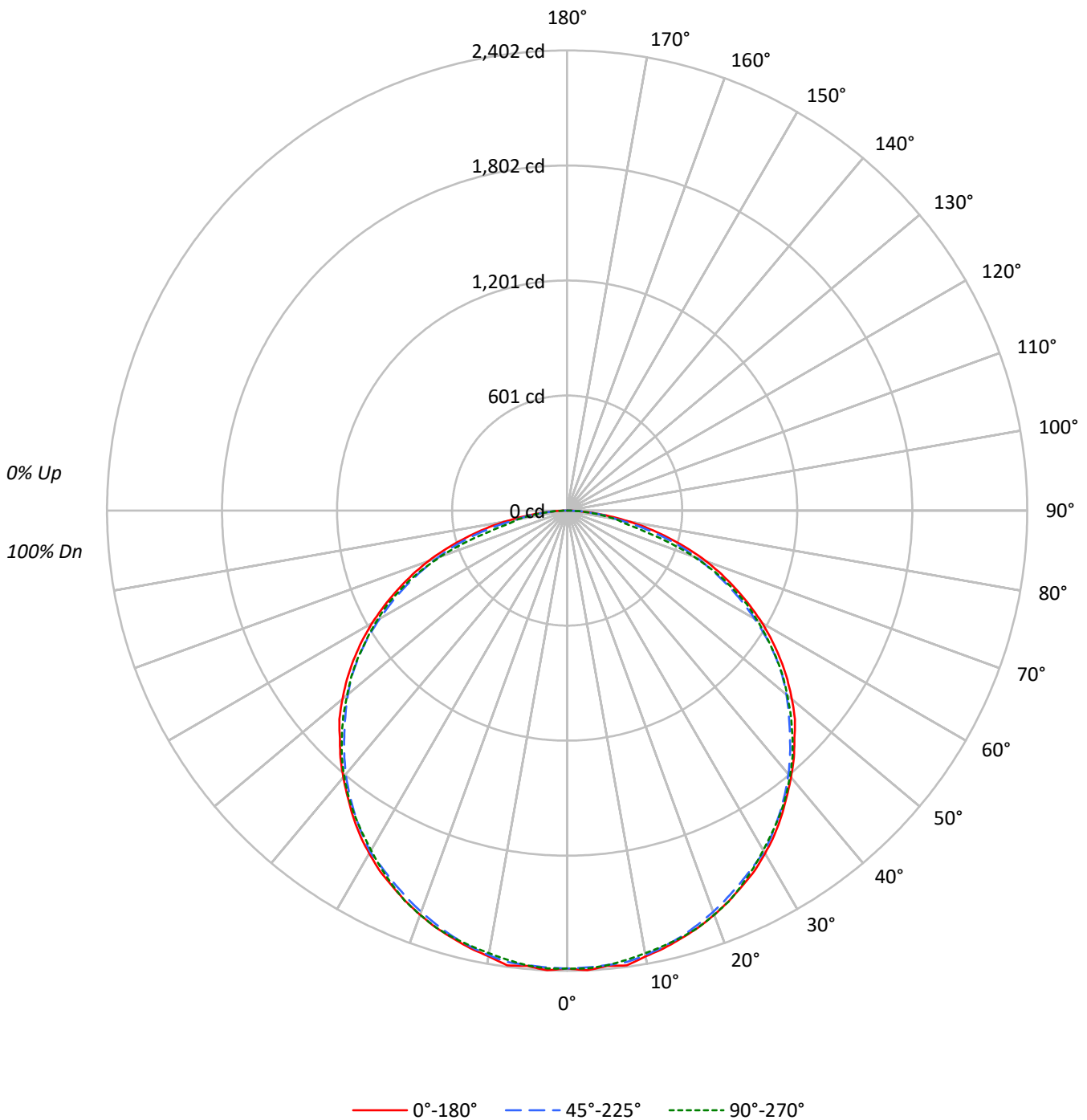
Input Watts (W): 51.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3216	3216	3216
5°	3223	3217	3219
10°	3228	3220	3206
15°	3219	3206	3213
20°	3215	3192	3214
25°	3210	3181	3202
30°	3210	3196	3180
35°	3201	3175	3181
40°	3193	3157	3180
45°	3193	3129	3164
50°	3206	3127	3137
55°	3195	3112	3119
60°	3164	3041	3082
65°	3104	2952	3013
70°	3034	2834	2769
75°	2849	2622	2156
80°	2526	2045	1998
85°	2013	1840	1698



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	226.6	3.2
10°-20°	649.9	9.1
20°-30°	992.4	13.9
30°-40°	1211.2	17.0
40°-50°	1280.4	17.9
50°-60°	1190.7	16.7
60°-70°	931.8	13.0
70°-80°	522.9	7.3
80°-90°	138.7	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°	1869.0	26.2
0°-40°	3080.2	43.1
0°-60°	5551.4	77.7
0°-90°	7144.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7144.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2390	2390	2390	2390	2390	
5°	2386	2383	2382	2380	2383	228
15°	2311	2304	2302	2291	2307	653
25°	2162	2151	2143	2155	2157	998
35°	1949	1941	1933	1926	1937	1220
45°	1678	1665	1644	1655	1663	1297
55°	1362	1344	1327	1320	1330	1216
65°	975	954	927	932	946	965
75°	548	528	504	445	415	579
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°	2390.3	2390.3	2390.3	2390.3	2390.3
2.5°	2401.5	2386.2	2387.2	2392.3	2392.3
5°	2386.2	2383.1	2382.1	2380.1	2383.1
7.5°	2394.3	2374.0	2377.0	2364.8	2365.8
10°	2362.7	2354.6	2356.6	2347.5	2346.4
12.5°	2339.3	2336.3	2331.2	2322.0	2327.1
15°	2310.8	2303.7	2301.6	2291.4	2306.7
17.5°	2281.2	2270.0	2267.0	2260.9	2281.2
20°	2245.6	2235.4	2229.3	2228.3	2244.6
22.5°	2205.8	2195.7	2186.5	2193.6	2207.9
25°	2162.0	2150.8	2142.7	2154.9	2156.9
27.5°	2119.2	2106.0	2097.8	2105.0	2104.0
30°	2066.3	2055.0	2057.1	2050.0	2046.9
32.5°	2011.2	2001.0	1996.0	1988.8	1991.9
35°	1949.1	1940.9	1932.8	1925.7	1936.9
37.5°	1882.9	1877.8	1866.6	1859.4	1876.7
40°	1817.7	1806.4	1797.3	1792.2	1810.5
42.5°	1751.4	1739.2	1722.9	1721.9	1741.2
45°	1678.1	1664.8	1644.4	1654.6	1662.8
47.5°	1612.9	1591.5	1569.1	1579.2	1584.3
50°	1531.4	1514.0	1493.7	1497.7	1498.7
52.5°	1448.8	1434.6	1415.2	1410.1	1419.3
55°	1362.2	1343.9	1326.6	1320.4	1329.6
57.5°	1270.5	1254.2	1231.8	1223.7	1235.9
60°	1175.8	1154.4	1129.9	1129.9	1145.2
62.5°	1075.9	1058.6	1029.1	1033.1	1055.5
65°	975.1	953.7	927.2	932.3	946.5
67.5°	874.2	852.8	821.2	828.3	834.4
70°	771.3	744.8	720.3	713.2	704.0
72.5°	660.2	635.8	619.5	580.8	565.5
75°	548.1	527.8	504.3	445.2	414.7
77.5°	438.1	424.9	387.2	317.9	305.7
80°	326.0	319.9	263.9	258.8	257.8
82.5°	222.1	218.0	200.7	186.5	183.4
85°	130.4	121.2	119.2	111.1	110.0
87.5°	44.8	48.9	47.9	48.9	47.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)