

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: P393710

Luminaire Tested: **24EN-LD2-74-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393710  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-40)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-74-UNV-L83050-W2A-1-U (4500K)  
Description: 2X4 ENCOUNTER, 7400 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7502.3 lumens  
Efficiency: N/A  
Efficacy: 136.4 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

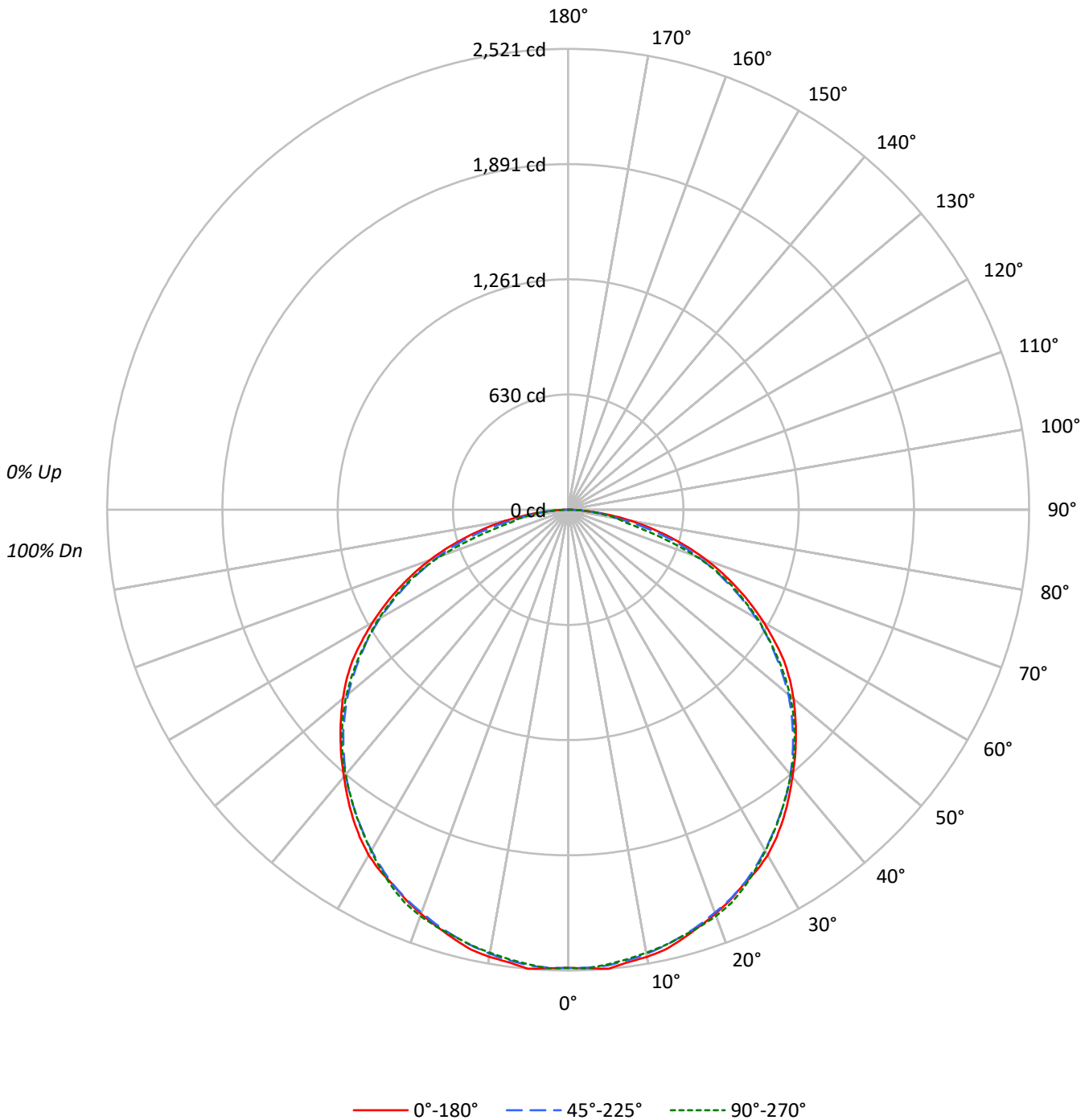
Input Watts (W): 55  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3373	3373	3373
5°	3405	3379	3372
10°	3393	3371	3362
15°	3383	3363	3364
20°	3369	3358	3387
25°	3362	3361	3382
30°	3390	3343	3349
35°	3375	3327	3330
40°	3350	3323	3325
45°	3350	3310	3333
50°	3366	3289	3317
55°	3381	3245	3269
60°	3325	3194	3226
65°	3263	3101	3153
70°	3163	2991	2923
75°	2990	2746	2254
80°	2665	2122	2082
85°	2090	1964	1808



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	237.7	3.2
10°-20°	682.7	9.1
20°-30°	1043.6	13.9
30°-40°	1272.3	17.0
40°-50°	1346.6	17.9
50°-60°	1248.0	16.6
60°-70°	979.1	13.1
70°-80°	546.2	7.3
80°-90°	146.1	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°	1964.0	26.2
0°-40°	3236.3	43.1
0°-60°	5830.9	77.7
0°-90°	7502.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7502.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2507	2507	2507	2507	2507	
5°	2521	2498	2502	2497	2497	239
15°	2428	2419	2414	2413	2415	685
25°	2265	2267	2264	2254	2278	1048
35°	2055	2031	2026	2033	2028	1285
45°	1761	1759	1740	1729	1752	1360
55°	1441	1403	1383	1386	1393	1282
65°	1025	1007	974	984	990	1013
75°	575	552	528	462	434	606
85°	135	128	127	119	117	161
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2506.9	2506.9	2506.9	2506.9	2506.9
2.5°	2511.0	2504.9	2507.9	2498.8	2511.0
5°	2521.2	2497.7	2501.8	2496.7	2496.7
7.5°	2496.7	2486.5	2486.5	2487.6	2480.4
10°	2483.5	2470.3	2467.2	2470.3	2461.1
12.5°	2464.2	2444.8	2442.8	2444.8	2440.7
15°	2428.5	2419.4	2414.3	2413.3	2415.3
17.5°	2389.9	2387.8	2382.7	2378.7	2391.9
20°	2353.2	2355.3	2345.1	2342.0	2365.4
22.5°	2312.5	2312.5	2308.4	2298.3	2329.8
25°	2264.7	2266.7	2263.6	2254.5	2277.9
27.5°	2228.0	2212.8	2209.7	2206.6	2218.9
30°	2182.2	2154.7	2151.7	2152.7	2155.8
32.5°	2122.2	2094.7	2089.6	2095.7	2091.6
35°	2055.0	2030.6	2025.5	2032.6	2027.5
37.5°	1982.7	1968.5	1962.4	1962.4	1960.3
40°	1907.4	1901.3	1892.1	1889.1	1893.2
42.5°	1836.2	1835.1	1815.8	1811.7	1827.0
45°	1760.8	1758.8	1739.5	1729.3	1751.7
47.5°	1685.5	1677.4	1656.0	1645.8	1671.3
50°	1608.2	1588.8	1571.5	1568.5	1584.8
52.5°	1527.8	1497.2	1476.9	1474.8	1491.1
55°	1441.2	1402.6	1383.2	1386.3	1393.4
57.5°	1338.4	1308.9	1289.6	1288.6	1292.6
60°	1235.6	1210.2	1186.8	1189.8	1199.0
62.5°	1130.8	1110.4	1081.9	1091.1	1091.1
65°	1025.0	1006.6	974.1	984.2	990.3
67.5°	917.1	896.7	865.2	870.2	876.3
70°	804.1	781.7	760.3	741.0	743.0
72.5°	690.1	665.7	651.4	602.6	588.3
75°	575.1	551.7	528.3	462.1	433.6
77.5°	458.0	444.8	400.0	328.8	318.6
80°	344.0	337.9	273.8	269.7	268.7
82.5°	238.2	228.0	208.7	196.4	193.4
85°	135.4	128.2	127.2	119.1	117.1
87.5°	47.8	50.9	51.9	51.9	51.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)