

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: P393546

Luminaire Tested: **24EN-LD2-49-UNV-L83050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393546  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-35)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-49-UNV-L83050-W2A-1-U (2700K)  
Description: 2X4 ENCOUNTER, 4900 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4768.2 lumens  
Efficiency: N/A  
Efficacy: 139.0 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

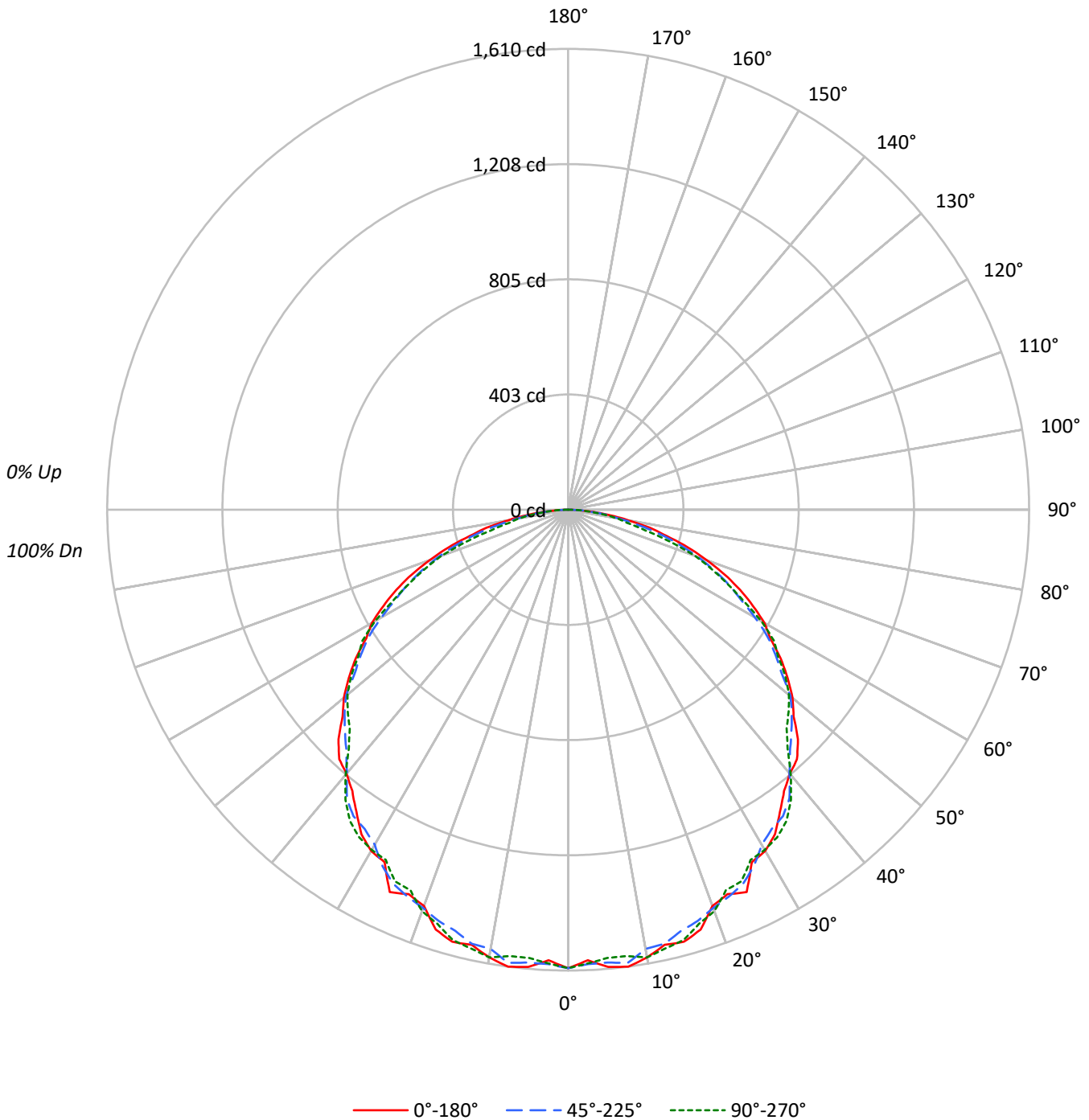
Input Watts (W): 34.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2155	2155	2155
5°	2166	2145	2123
10°	2170	2129	2170
15°	2177	2122	2168
20°	2110	2121	2137
25°	2189	2143	2126
30°	2139	2100	2132
35°	2117	2147	2182
40°	2115	2112	2123
45°	2159	2097	2053
50°	2141	2121	2106
55°	2125	2073	2100
60°	2129	2030	2095
65°	2107	1969	1954
70°	2019	1894	1852
75°	1851	1746	1455
80°	1637	1383	1338
85°	1355	1221	1132



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.7	3.2
10°-20°	435.3	9.1
20°-30°	659.7	13.8
30°-40°	812.1	17.0
40°-50°	854.2	17.9
50°-60°	794.8	16.7
60°-70°	621.2	13.0
70°-80°	348.1	7.3
80°-90°	92.1	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°	1245.6	26.1
0°-40°	2057.8	43.2
0°-60°	3706.8	77.7
0°-90°	4768.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4768.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1602	1602	1602	1602	1602	
5°	1604	1586	1588	1564	1572	153
15°	1563	1545	1524	1540	1556	437
25°	1474	1423	1443	1412	1432	663
35°	1289	1304	1307	1287	1329	808
45°	1135	1123	1102	1103	1079	869
55°	906	899	884	882	895	809
65°	662	643	618	622	614	652
75°	356	348	336	296	280	382
85°	88	79	79	71	73	101
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1601.6	1601.6	1601.6	1601.6	1601.6
2.5°	1575.6	1606.4	1589.1	1609.3	1586.2
5°	1603.5	1586.2	1588.1	1564.0	1571.7
7.5°	1610.3	1545.6	1596.8	1570.7	1572.7
10°	1588.1	1559.2	1558.2	1557.2	1588.1
12.5°	1557.2	1568.8	1553.4	1538.9	1569.8
15°	1563.0	1544.7	1523.5	1539.9	1556.3
17.5°	1537.9	1529.2	1506.1	1548.5	1517.7
20°	1473.3	1507.1	1481.0	1504.2	1492.6
22.5°	1454.0	1482.0	1463.6	1478.1	1439.5
25°	1474.2	1423.1	1443.4	1412.5	1431.8
27.5°	1388.4	1378.7	1403.8	1393.2	1379.7
30°	1376.8	1361.4	1351.7	1352.7	1372.0
32.5°	1344.0	1327.6	1322.8	1331.5	1357.5
35°	1289.0	1304.4	1307.3	1287.1	1328.6
37.5°	1238.8	1250.4	1269.7	1268.7	1277.4
40°	1204.1	1224.4	1202.2	1211.8	1208.9
42.5°	1182.9	1164.5	1146.2	1152.0	1133.7
45°	1134.6	1123.1	1101.8	1102.8	1078.7
47.5°	1068.1	1053.6	1059.4	1043.0	1043.9
50°	1022.7	997.6	1013.1	982.2	1006.3
52.5°	965.8	955.2	939.7	930.1	956.1
55°	906.0	899.2	883.8	881.8	895.4
57.5°	836.5	830.7	825.9	824.9	851.9
60°	791.2	769.0	754.5	750.6	778.6
62.5°	727.5	717.8	679.2	687.9	690.8
65°	661.9	642.6	618.5	622.3	613.6
67.5°	591.4	556.7	550.9	551.9	542.2
70°	513.3	493.0	481.4	474.7	470.8
72.5°	439.0	422.6	409.1	391.7	374.4
75°	356.0	348.3	335.8	296.2	279.8
77.5°	292.3	283.7	256.6	213.2	210.3
80°	211.3	216.1	178.5	171.7	172.7
82.5°	149.5	145.7	133.1	124.5	119.6
85°	87.8	79.1	79.1	71.4	73.3
87.5°	28.9	32.8	32.8	31.8	30.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)