

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: P393480

Luminaire Tested: **24EN-LD2-40-UNV-L82765-W2A-1-U (5700K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393480  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-33)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-40-UNV-L82765-W2A-1-U (5700K)  
Description: 2X4 ENCOUNTER, 4000 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 3000K/5000K CCT, CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3904.1 lumens  
Efficiency: N/A  
Efficacy: 140.9 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

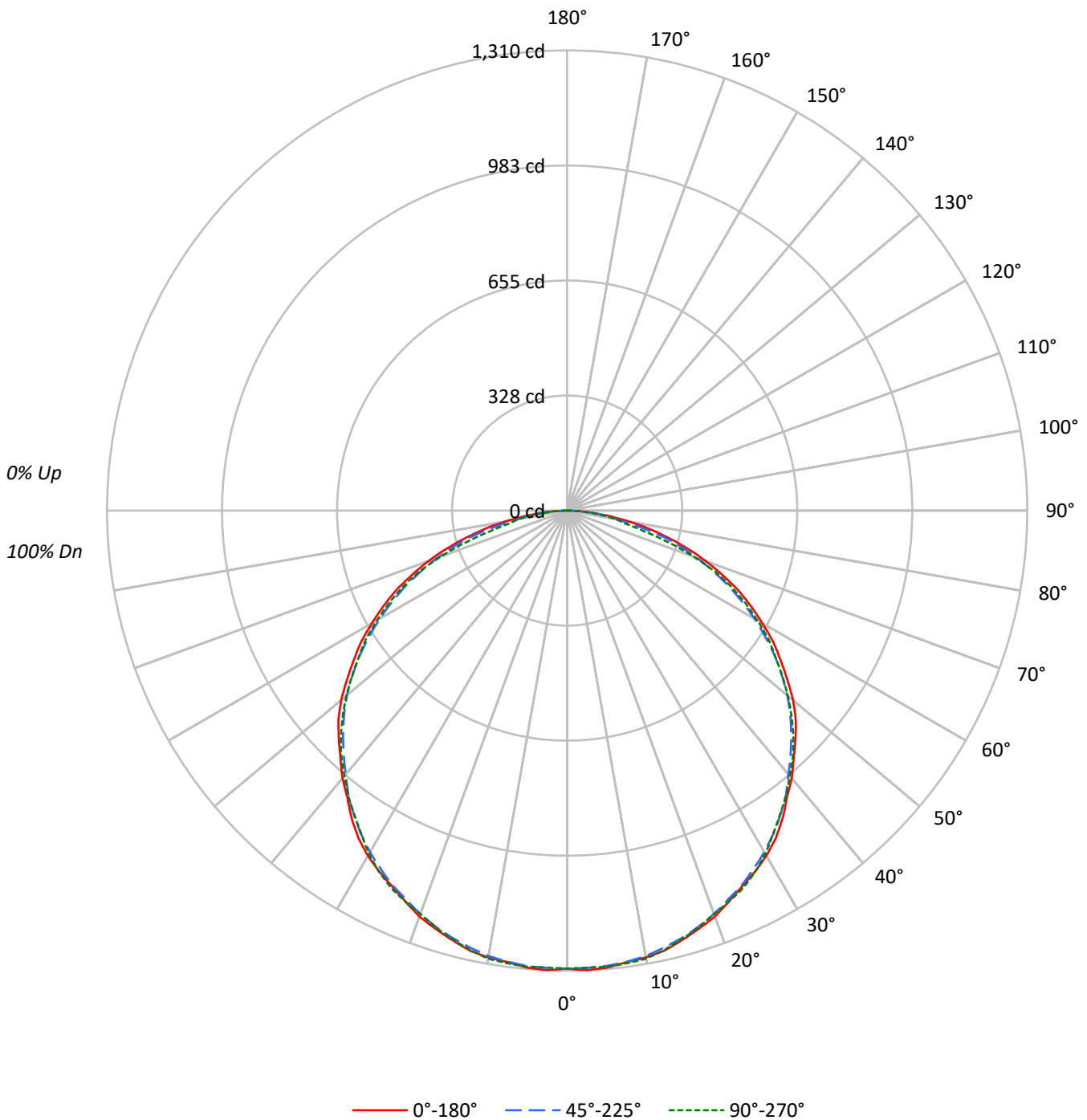
Input Watts (W): 27.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	80	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	42	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	36	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1755	1755	1755
5°	1764	1757	1760
10°	1765	1759	1770
15°	1763	1755	1759
20°	1761	1750	1750
25°	1751	1747	1760
30°	1762	1744	1753
35°	1757	1738	1735
40°	1747	1722	1732
45°	1750	1717	1733
50°	1757	1713	1717
55°	1739	1693	1696
60°	1727	1657	1683
65°	1712	1611	1648
70°	1650	1543	1502
75°	1543	1438	1172
80°	1374	1113	1098
85°	1087	1027	923



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.8	3.2
10°-20°	355.9	9.1
20°-30°	543.4	13.9
30°-40°	663.0	17.0
40°-50°	700.0	17.9
50°-60°	649.1	16.6
60°-70°	508.5	13.0
70°-80°	284.5	7.3
80°-90°	75.9	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°	1023.1	26.2
0°-40°	1686.1	43.2
0°-60°	3035.2	77.7
0°-90°	3904.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3904.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1304	1304	1304	1304	1304	
5°	1306	1306	1301	1302	1303	124
15°	1266	1260	1260	1257	1263	357
25°	1180	1180	1177	1175	1186	545
35°	1070	1060	1058	1057	1056	669
45°	920	911	902	900	911	710
55°	741	732	722	722	723	664
65°	538	521	506	509	518	529
75°	297	288	277	240	226	315
85°	70	68	66	63	60	82
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1304.0	1304.0	1304.0	1304.0	1304.0
2.5°	1309.8	1306.9	1303.1	1304.0	1302.1
5°	1306.0	1306.0	1301.2	1302.1	1303.1
7.5°	1296.3	1297.3	1295.4	1291.5	1300.2
10°	1291.5	1284.8	1287.7	1279.9	1295.4
12.5°	1282.8	1272.2	1274.2	1268.4	1280.9
15°	1265.5	1259.7	1259.7	1256.8	1262.6
17.5°	1248.1	1244.3	1242.4	1244.3	1244.3
20°	1229.8	1226.9	1222.1	1226.0	1222.1
22.5°	1203.8	1205.7	1198.0	1206.7	1204.8
25°	1179.7	1179.7	1176.8	1174.9	1185.5
27.5°	1158.5	1151.8	1149.8	1146.0	1159.5
30°	1134.4	1121.9	1122.8	1117.1	1128.6
32.5°	1105.5	1091.0	1092.0	1086.2	1091.0
35°	1069.8	1060.2	1058.3	1057.3	1056.3
37.5°	1028.4	1027.4	1022.6	1025.5	1023.6
40°	994.7	992.7	980.2	983.1	986.0
42.5°	955.1	952.3	941.6	943.6	951.3
45°	919.5	910.8	902.1	900.2	910.8
47.5°	882.9	869.4	861.7	855.9	866.5
50°	839.5	827.9	818.3	812.5	820.2
52.5°	789.4	779.7	770.1	768.2	771.1
55°	741.2	731.5	721.9	721.9	722.9
57.5°	694.9	682.4	667.9	670.8	678.5
60°	641.9	630.3	615.9	615.9	625.5
62.5°	589.9	575.4	560.9	562.9	572.5
65°	537.8	521.4	506.0	508.9	517.6
67.5°	478.1	463.6	449.1	453.0	457.8
70°	419.3	404.8	392.3	388.4	381.7
72.5°	359.5	347.9	337.3	316.1	305.5
75°	296.9	288.2	276.6	240.0	225.5
77.5°	239.0	232.3	206.3	172.5	167.7
80°	177.3	177.3	143.6	140.7	141.7
82.5°	120.5	118.5	108.9	102.2	99.3
85°	70.4	67.5	66.5	62.6	59.8
87.5°	23.1	27.0	27.0	26.0	27.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)