

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: P393481

Luminaire Tested: **24EN-LD2-40-UNV-L82765-W2A-1-U (6500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393481  
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 (6500K)  
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: 3908.2 lumens  
Efficiency: N/A  
Efficacy: 141.1 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

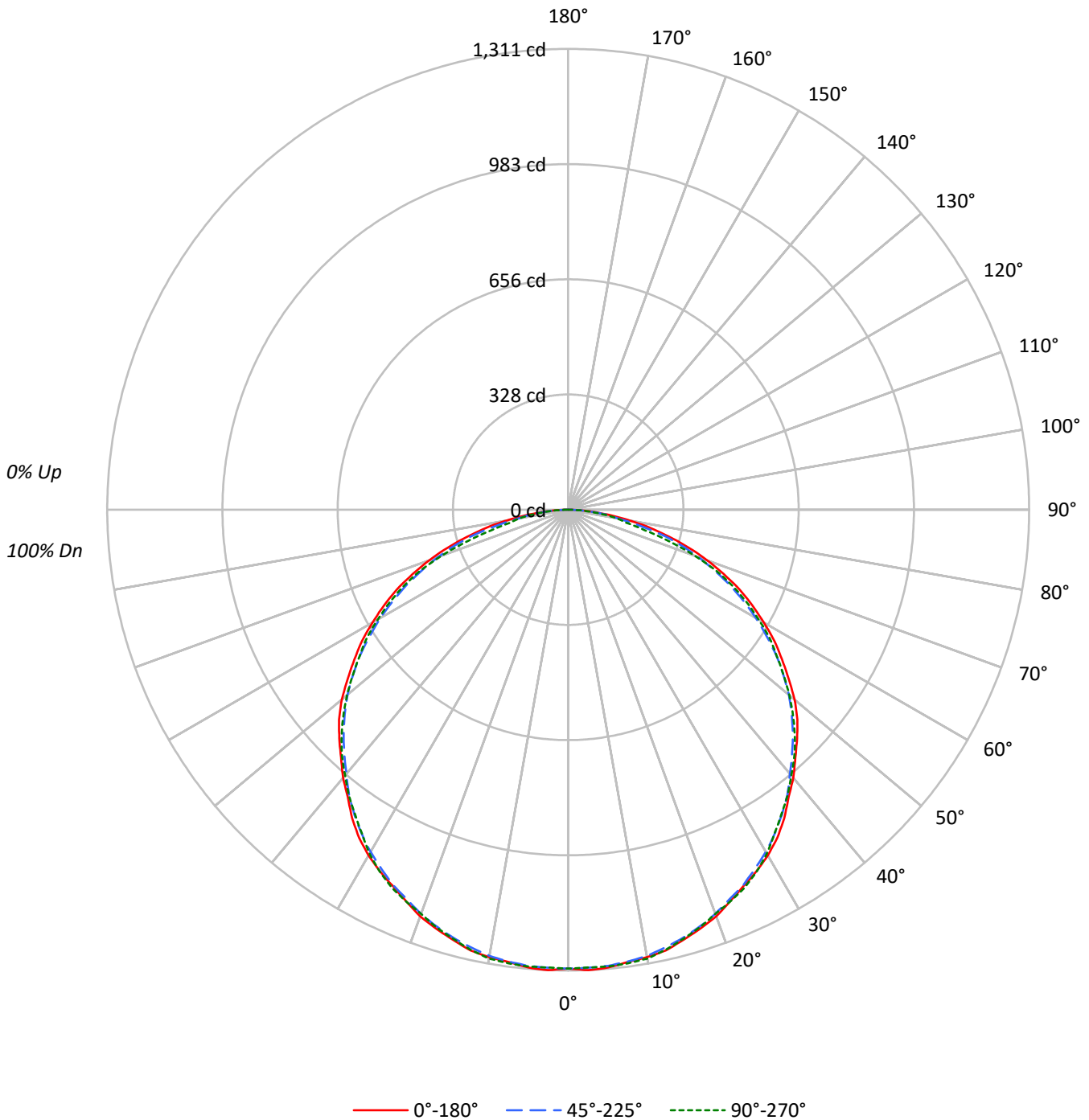
Input Watts (W): 27.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1756	1756	1756
5°	1766	1759	1762
10°	1766	1761	1772
15°	1765	1757	1761
20°	1763	1752	1752
25°	1753	1749	1762
30°	1764	1746	1755
35°	1759	1740	1737
40°	1749	1723	1734
45°	1751	1718	1735
50°	1759	1715	1719
55°	1740	1695	1697
60°	1729	1659	1685
65°	1714	1613	1649
70°	1651	1545	1503
75°	1545	1439	1174
80°	1375	1114	1099
85°	1087	1028	923



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.9	3.2
10°-20°	356.3	9.1
20°-30°	544.0	13.9
30°-40°	663.7	17.0
40°-50°	700.7	17.9
50°-60°	649.7	16.6
60°-70°	509.0	13.0
70°-80°	284.8	7.3
80°-90°	76.0	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°	1024.2	26.2
0°-40°	1687.8	43.2
0°-60°	3038.3	77.7
0°-90°	3908.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3908.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1305	1305	1305	1305	1305	
5°	1307	1307	1302	1304	1304	124
15°	1267	1261	1261	1258	1264	358
25°	1181	1181	1178	1176	1187	546
35°	1071	1061	1059	1058	1057	669
45°	920	912	903	901	912	711
55°	742	732	723	723	724	664
65°	538	522	506	509	518	529
75°	297	288	277	240	226	315
85°	70	68	67	63	60	82
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1305.4	1305.4	1305.4	1305.4	1305.4
2.5°	1311.2	1308.3	1304.4	1305.4	1303.5
5°	1307.3	1307.3	1302.5	1303.5	1304.4
7.5°	1297.7	1298.6	1296.7	1292.9	1301.5
10°	1292.9	1286.1	1289.0	1281.3	1296.7
12.5°	1284.2	1273.6	1275.5	1269.7	1282.2
15°	1266.8	1261.0	1261.0	1258.1	1263.9
17.5°	1249.4	1245.6	1243.7	1245.6	1245.6
20°	1231.1	1228.2	1223.4	1227.3	1223.4
22.5°	1205.1	1207.0	1199.3	1208.0	1206.0
25°	1180.9	1180.9	1178.0	1176.1	1186.7
27.5°	1159.7	1153.0	1151.0	1147.2	1160.7
30°	1135.6	1123.1	1124.0	1118.2	1129.8
32.5°	1106.6	1092.2	1093.1	1087.4	1092.2
35°	1071.0	1061.3	1059.4	1058.4	1057.4
37.5°	1029.5	1028.5	1023.7	1026.6	1024.6
40°	995.7	993.8	981.2	984.1	987.0
42.5°	956.1	953.2	942.6	944.6	952.3
45°	920.4	911.8	903.1	901.1	911.8
47.5°	883.8	870.3	862.5	856.8	867.4
50°	840.4	828.8	819.1	813.3	821.1
52.5°	790.2	780.5	770.9	769.0	771.9
55°	741.9	732.3	722.7	722.7	723.6
57.5°	695.6	683.1	668.6	671.5	679.2
60°	642.6	631.0	616.5	616.5	626.2
62.5°	590.5	576.0	561.5	563.5	573.1
65°	538.4	522.0	506.5	509.4	518.1
67.5°	478.6	464.1	449.6	453.5	458.3
70°	419.7	405.2	392.7	388.8	382.1
72.5°	359.9	348.3	337.7	316.5	305.8
75°	297.2	288.5	276.9	240.2	225.8
77.5°	239.3	232.5	206.5	172.7	167.9
80°	177.5	177.5	143.8	140.9	141.8
82.5°	120.6	118.7	109.0	102.3	99.4
85°	70.4	67.5	66.6	62.7	59.8
87.5°	23.2	27.0	27.0	26.1	27.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)