

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: P393477

Luminaire Tested: **24EN-LD2-40-UNV-L82765-W2A-1-U (4000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393477  
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 (4000K)  
Description: 2X4 ENCOUNTER, 4000 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 3000K/5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3783.9 lumens  
Efficiency: N/A  
Efficacy: 134.7 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

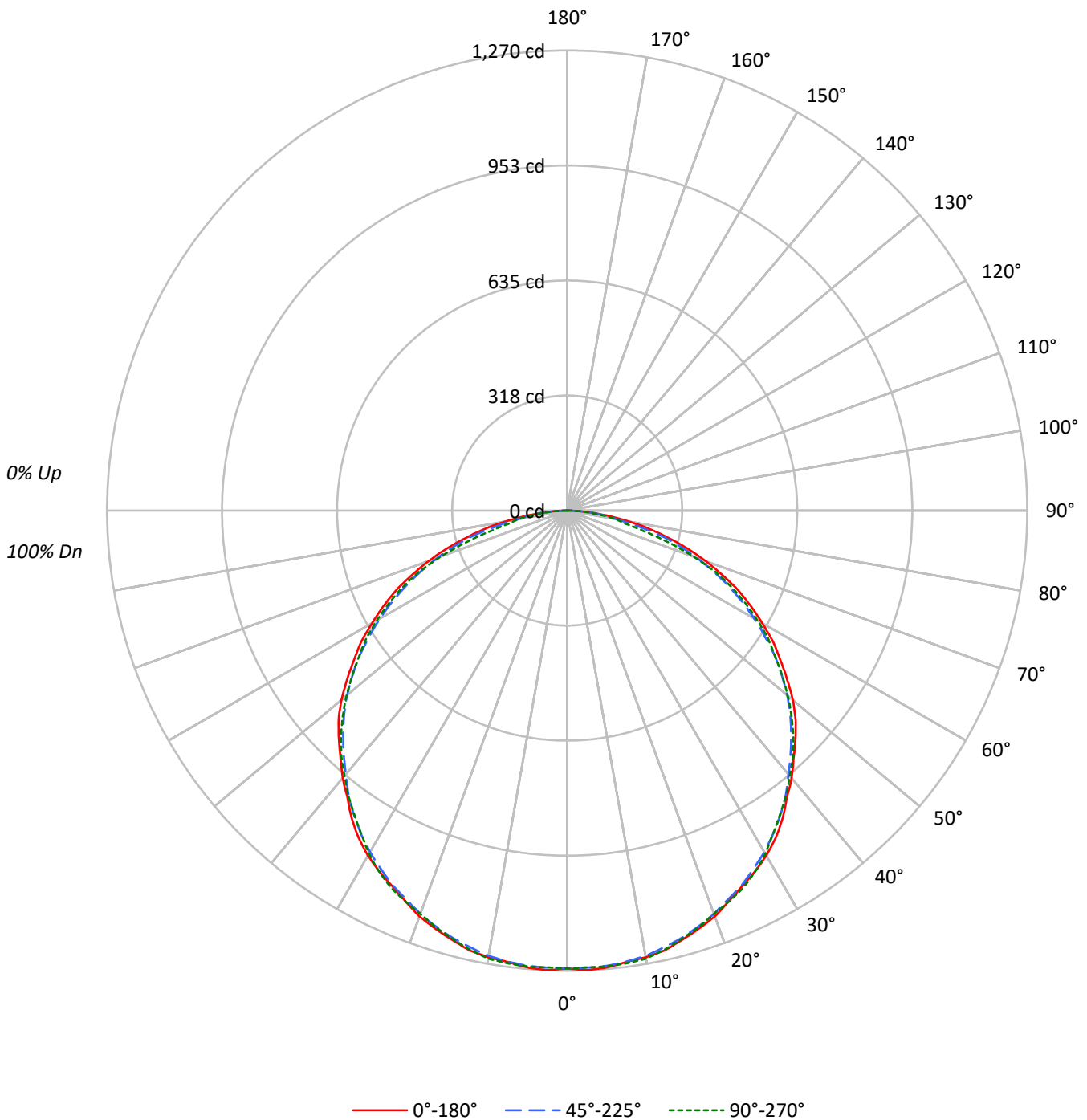
Input Watts (W): 28.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1701	1701	1701
5°	1710	1703	1706
10°	1710	1705	1715
15°	1708	1701	1705
20°	1707	1696	1696
25°	1697	1693	1706
30°	1708	1691	1700
35°	1703	1685	1682
40°	1693	1669	1678
45°	1696	1664	1680
50°	1703	1660	1664
55°	1685	1641	1643
60°	1674	1606	1632
65°	1660	1561	1597
70°	1599	1496	1455
75°	1496	1394	1136
80°	1332	1079	1064
85°	1053	996	894



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	120.0	3.2
10°-20°	344.9	9.1
20°-30°	526.7	13.9
30°-40°	642.6	17.0
40°-50°	678.5	17.9
50°-60°	629.1	16.6
60°-70°	492.8	13.0
70°-80°	275.8	7.3
80°-90°	73.6	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°	991.6	26.2
0°-40°	1634.2	43.2
0°-60°	2941.7	77.7
0°-90°	3783.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3783.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1264	1264	1264	1264	1264	
5°	1266	1266	1261	1262	1263	120
15°	1226	1221	1221	1218	1224	346
25°	1143	1143	1141	1139	1149	529
35°	1037	1028	1026	1025	1024	648
45°	891	883	874	872	883	688
55°	718	709	700	700	701	643
65°	521	505	490	493	502	512
75°	288	279	268	233	219	305
85°	68	65	64	61	58	80
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1263.9	1263.9	1263.9	1263.9	1263.9
2.5°	1269.5	1266.7	1263.0	1263.9	1262.0
5°	1265.8	1265.8	1261.1	1262.0	1263.0
7.5°	1256.4	1257.4	1255.5	1251.8	1260.2
10°	1251.8	1245.2	1248.0	1240.5	1255.5
12.5°	1243.3	1233.1	1234.9	1229.3	1241.5
15°	1226.5	1220.9	1220.9	1218.1	1223.7
17.5°	1209.7	1206.0	1204.1	1206.0	1206.0
20°	1192.0	1189.2	1184.5	1188.2	1184.5
22.5°	1166.7	1168.6	1161.1	1169.5	1167.7
25°	1143.4	1143.4	1140.6	1138.7	1149.0
27.5°	1122.8	1116.3	1114.4	1110.7	1123.8
30°	1099.5	1087.3	1088.3	1082.7	1093.9
32.5°	1071.5	1057.5	1058.4	1052.8	1057.5
35°	1036.9	1027.6	1025.7	1024.8	1023.8
37.5°	996.7	995.8	991.1	993.9	992.1
40°	964.0	962.2	950.0	952.8	955.6
42.5°	925.7	922.9	912.7	914.5	922.0
45°	891.2	882.8	874.4	872.5	882.8
47.5°	855.7	842.6	835.1	829.5	839.8
50°	813.6	802.4	793.1	787.5	795.0
52.5°	765.1	755.7	746.4	744.5	747.3
55°	718.4	709.0	699.7	699.7	700.6
57.5°	673.5	661.4	647.4	650.2	657.6
60°	622.1	610.9	596.9	596.9	606.3
62.5°	571.7	557.7	543.7	545.5	554.9
65°	521.3	505.4	490.4	493.2	501.6
67.5°	463.3	449.3	435.3	439.0	443.7
70°	406.4	392.3	380.2	376.5	369.9
72.5°	348.4	337.2	327.0	306.4	296.1
75°	287.7	279.3	268.1	232.6	218.6
77.5°	231.7	225.1	199.9	167.2	162.5
80°	171.9	171.9	139.2	136.4	137.3
82.5°	116.8	114.9	105.6	99.0	96.2
85°	68.2	65.4	64.5	60.7	57.9
87.5°	22.4	26.2	26.2	25.2	26.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)