

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: P393493

Luminaire Tested: **24EN-LD2-40-UNV-L92765-W2A-1-U (4000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393493  
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-L92765-W2A-1-U (4000K)  
Description: 2X4 ENCOUNTER, 4000 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3350.1 lumens  
Efficiency: N/A  
Efficacy: 119.6 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

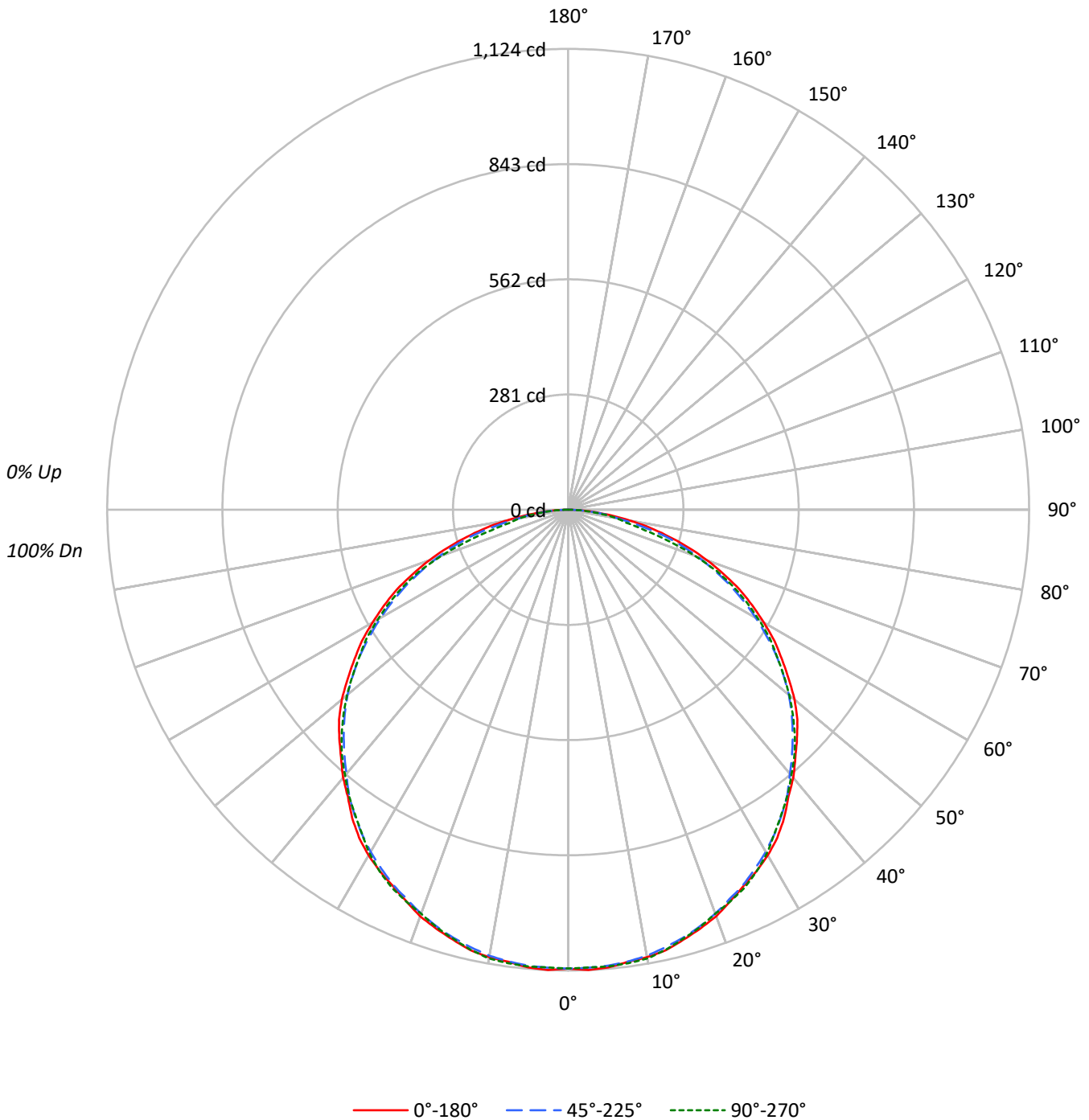
Input Watts (W): 28  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1506	1506	1506
5°	1514	1508	1510
10°	1514	1510	1519
15°	1513	1506	1509
20°	1511	1502	1502
25°	1503	1499	1510
30°	1512	1497	1505
35°	1508	1492	1489
40°	1499	1477	1486
45°	1501	1473	1487
50°	1508	1470	1473
55°	1492	1453	1455
60°	1482	1422	1444
65°	1469	1382	1414
70°	1415	1324	1288
75°	1324	1234	1006
80°	1179	955	942
85°	932	881	792



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.2	3.2
10°-20°	305.4	9.1
20°-30°	466.3	13.9
30°-40°	568.9	17.0
40°-50°	600.7	17.9
50°-60°	557.0	16.6
60°-70°	436.3	13.0
70°-80°	244.2	7.3
80°-90°	65.2	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°	877.9	26.2
0°-40°	1446.8	43.2
0°-60°	2604.4	77.7
0°-90°	3350.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3350.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1119	1119	1119	1119	1119	
5°	1121	1121	1116	1117	1118	106
15°	1086	1081	1081	1078	1083	307
25°	1012	1012	1010	1008	1017	468
35°	918	910	908	907	906	574
45°	789	782	774	772	782	609
55°	636	628	620	620	620	569
65°	462	447	434	437	444	454
75°	255	247	237	206	194	270
85°	60	58	57	54	51	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1119.0	1119.0	1119.0	1119.0	1119.0
2.5°	1123.9	1121.5	1118.2	1119.0	1117.3
5°	1120.6	1120.6	1116.5	1117.3	1118.2
7.5°	1112.4	1113.2	1111.5	1108.2	1115.7
10°	1108.2	1102.4	1104.9	1098.3	1111.5
12.5°	1100.8	1091.7	1093.3	1088.4	1099.1
15°	1085.9	1080.9	1080.9	1078.5	1083.4
17.5°	1071.0	1067.7	1066.1	1067.7	1067.7
20°	1055.3	1052.8	1048.7	1052.0	1048.7
22.5°	1033.0	1034.6	1028.0	1035.4	1033.8
25°	1012.3	1012.3	1009.8	1008.2	1017.3
27.5°	994.1	988.3	986.7	983.3	994.9
30°	973.4	962.7	963.5	958.5	968.5
32.5°	948.6	936.2	937.0	932.1	936.2
35°	918.0	909.7	908.1	907.3	906.4
37.5°	882.4	881.6	877.5	880.0	878.3
40°	853.5	851.8	841.1	843.6	846.1
42.5°	819.6	817.1	808.0	809.7	816.3
45°	789.0	781.5	774.1	772.5	781.5
47.5°	757.6	746.0	739.4	734.4	743.5
50°	720.3	710.4	702.2	697.2	703.8
52.5°	677.3	669.1	660.8	659.1	661.6
55°	636.0	627.7	619.5	619.5	620.3
57.5°	596.3	585.5	573.1	575.6	582.2
60°	550.8	540.9	528.5	528.5	536.7
62.5°	506.1	493.7	481.3	483.0	491.3
65°	461.5	447.4	434.2	436.7	444.1
67.5°	410.2	397.8	385.4	388.7	392.8
70°	359.8	347.4	336.6	333.3	327.5
72.5°	308.5	298.6	289.5	271.3	262.2
75°	254.7	247.3	237.4	205.9	193.5
77.5°	205.1	199.3	177.0	148.0	143.9
80°	152.2	152.2	123.2	120.7	121.6
82.5°	103.4	101.7	93.5	87.7	85.2
85°	60.4	57.9	57.1	53.8	51.3
87.5°	19.8	23.2	23.2	22.3	23.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)