

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: P393457

Luminaire Tested: **24EN-LD2-34-UNV-L83050-W2A-1-U (6500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393457  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-32)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-34-UNV-L83050-W2A-1-U (6500K)  
Description: 2X4 ENCOUNTER, 3400 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3525.9 lumens  
Efficiency: N/A  
Efficacy: 149.4 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

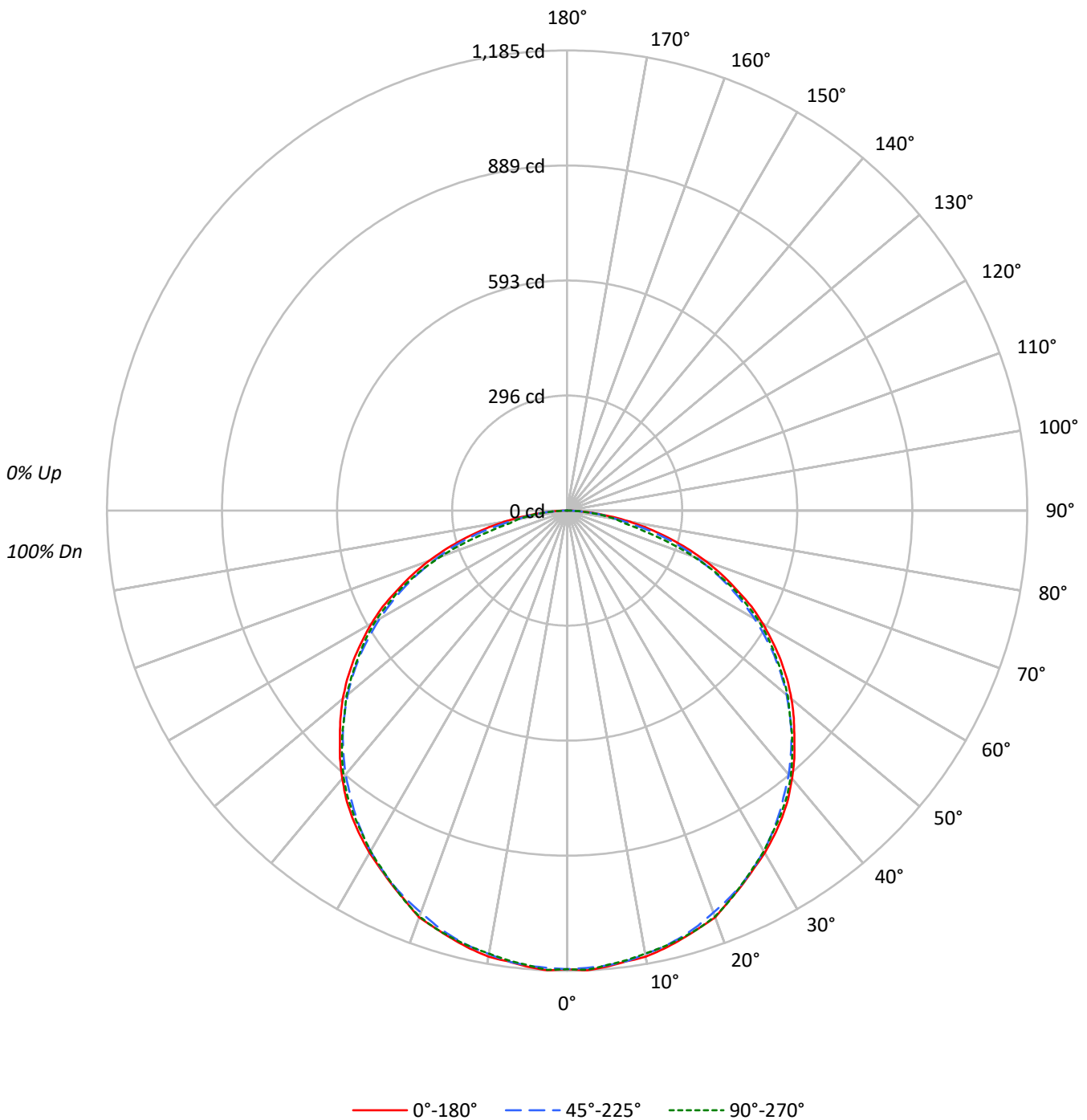
Input Watts (W): 23.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1589	1589	1589
5°	1592	1588	1587
10°	1594	1584	1583
15°	1591	1584	1588
20°	1596	1577	1593
25°	1581	1578	1578
30°	1581	1574	1574
35°	1585	1565	1573
40°	1582	1559	1573
45°	1574	1555	1559
50°	1578	1544	1553
55°	1575	1527	1539
60°	1566	1500	1535
65°	1531	1460	1495
70°	1491	1399	1367
75°	1398	1292	1075
80°	1255	1010	995
85°	991	912	834



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.8	3.2
10°-20°	321.2	9.1
20°-30°	490.0	13.9
30°-40°	597.9	17.0
40°-50°	632.6	17.9
50°-60°	586.3	16.6
60°-70°	460.5	13.1
70°-80°	256.9	7.3
80°-90°	68.6	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°	923.1	26.2
0°-40°	1521.0	43.1
0°-60°	2739.9	77.7
0°-90°	3525.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3525.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1181	1181	1181	1181	1181	
5°	1179	1178	1176	1175	1175	112
15°	1142	1139	1137	1134	1140	323
25°	1065	1063	1063	1061	1063	492
35°	965	958	953	951	958	604
45°	827	824	817	817	819	640
55°	671	660	651	650	656	600
65°	481	472	458	462	470	477
75°	269	259	249	217	207	285
85°	64	59	59	55	54	75
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1180.9	1180.9	1180.9	1180.9	1180.9
2.5°	1184.9	1180.9	1178.8	1180.9	1183.9
5°	1178.8	1177.8	1175.8	1174.8	1174.8
7.5°	1170.7	1172.7	1170.7	1167.6	1167.6
10°	1166.6	1164.6	1159.5	1158.4	1158.4
12.5°	1155.4	1152.3	1150.3	1146.2	1150.3
15°	1142.1	1139.1	1137.1	1134.0	1140.1
17.5°	1127.9	1120.8	1120.8	1120.8	1127.9
20°	1114.6	1104.4	1101.4	1103.4	1112.6
22.5°	1088.1	1084.1	1083.1	1085.1	1089.2
25°	1064.7	1062.7	1062.7	1060.6	1062.7
27.5°	1040.3	1040.3	1038.2	1036.2	1037.2
30°	1017.8	1014.8	1012.8	1010.7	1012.8
32.5°	992.4	987.3	983.2	982.2	984.2
35°	964.9	957.7	952.6	950.6	957.7
37.5°	935.3	925.1	919.0	919.0	929.2
40°	900.7	889.5	887.4	886.4	895.6
42.5°	866.0	857.9	852.8	853.8	857.9
45°	827.3	824.3	817.1	817.1	819.2
47.5°	791.7	787.6	777.4	779.4	777.4
50°	754.0	746.8	737.7	734.6	741.7
52.5°	714.2	706.1	694.9	692.8	698.9
55°	671.4	660.2	651.1	650.0	656.1
57.5°	626.6	615.4	604.2	604.2	614.4
60°	581.8	570.6	557.3	557.3	570.6
62.5°	534.9	522.7	508.4	511.5	519.6
65°	480.9	471.7	458.5	461.5	469.7
67.5°	431.0	420.8	406.5	410.6	410.6
70°	379.0	365.8	355.6	349.5	347.4
72.5°	324.0	312.8	305.7	283.2	277.1
75°	269.0	258.8	248.6	217.0	206.8
77.5°	216.0	208.9	188.5	154.9	150.8
80°	162.0	158.9	130.4	128.4	128.4
82.5°	110.0	108.0	97.8	92.7	91.7
85°	64.2	59.1	59.1	55.0	54.0
87.5°	22.4	23.4	25.5	24.5	23.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)