

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: P393554

Luminaire Tested: **24EN-LD2-49-UNV-L92765-W2A-1-U (2700K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393554  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-35)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-49-UNV-L92765-W2A-1-U (2700K)  
Description: 2X4 ENCOUNTER, 4900 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3709.0 lumens  
Efficiency: N/A  
Efficacy: 107.8 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

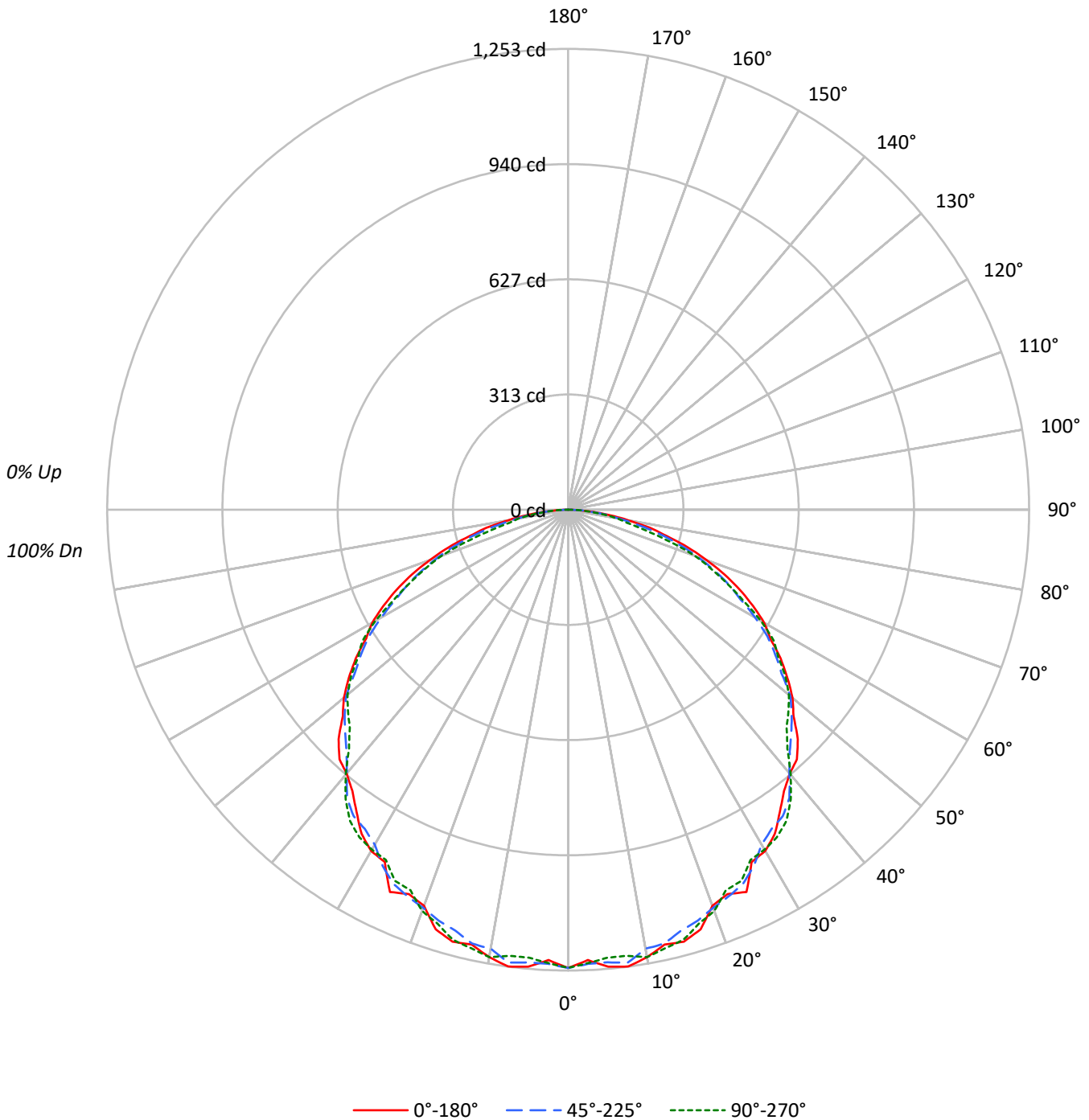
Input Watts (W): 34.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1676	1676	1676
5°	1685	1668	1651
10°	1688	1656	1688
15°	1694	1651	1686
20°	1641	1649	1662
25°	1703	1667	1653
30°	1664	1634	1658
35°	1647	1670	1697
40°	1645	1642	1652
45°	1679	1631	1597
50°	1665	1649	1639
55°	1653	1613	1634
60°	1656	1579	1630
65°	1639	1532	1520
70°	1571	1473	1441
75°	1439	1358	1131
80°	1274	1075	1041
85°	1054	949	880



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.2	3.2
10°-20°	338.6	9.1
20°-30°	513.1	13.8
30°-40°	631.7	17.0
40°-50°	664.5	17.9
50°-60°	618.3	16.7
60°-70°	483.2	13.0
70°-80°	270.8	7.3
80°-90°	71.6	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°	968.9	26.1
0°-40°	1600.7	43.2
0°-60°	2883.4	77.7
0°-90°	3709.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3709.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1246	1246	1246	1246	1246	
5°	1247	1234	1235	1217	1223	119
15°	1216	1202	1185	1198	1211	340
25°	1147	1107	1123	1099	1114	516
35°	1003	1015	1017	1001	1033	629
45°	883	874	857	858	839	676
55°	705	700	688	686	696	629
65°	515	500	481	484	477	507
75°	277	271	261	230	218	297
85°	68	62	62	56	57	79
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1245.8	1245.8	1245.8	1245.8	1245.8
2.5°	1225.6	1249.6	1236.1	1251.8	1233.8
5°	1247.3	1233.8	1235.3	1216.6	1222.6
7.5°	1252.6	1202.3	1242.1	1221.8	1223.3
10°	1235.3	1212.8	1212.1	1211.3	1235.3
12.5°	1211.3	1220.3	1208.3	1197.1	1221.1
15°	1215.8	1201.6	1185.0	1197.8	1210.6
17.5°	1196.3	1189.5	1171.5	1204.6	1180.5
20°	1146.0	1172.3	1152.0	1170.0	1161.0
22.5°	1131.0	1152.8	1138.5	1149.8	1119.8
25°	1146.8	1107.0	1122.8	1098.7	1113.7
27.5°	1080.0	1072.5	1092.0	1083.7	1073.2
30°	1071.0	1059.0	1051.5	1052.2	1067.2
32.5°	1045.5	1032.7	1028.9	1035.7	1056.0
35°	1002.7	1014.7	1016.9	1001.2	1033.4
37.5°	963.6	972.7	987.7	986.9	993.7
40°	936.6	952.4	935.1	942.6	940.4
42.5°	920.1	905.9	891.6	896.1	881.8
45°	882.6	873.6	857.1	857.8	839.1
47.5°	830.8	819.6	824.1	811.3	812.0
50°	795.5	776.0	788.0	764.0	782.8
52.5°	751.3	743.0	731.0	723.5	743.7
55°	704.7	699.5	687.5	686.0	696.5
57.5°	650.7	646.2	642.4	641.7	662.7
60°	615.4	598.2	586.9	583.9	605.7
62.5°	565.9	558.4	528.4	535.1	537.4
65°	514.8	499.8	481.1	484.1	477.3
67.5°	460.1	433.0	428.5	429.3	421.8
70°	399.3	383.5	374.5	369.2	366.2
72.5°	341.5	328.7	318.2	304.7	291.2
75°	276.9	270.9	261.2	230.4	217.6
77.5°	227.4	220.6	199.6	165.9	163.6
80°	164.4	168.1	138.8	133.6	134.3
82.5°	116.3	113.3	103.6	96.8	93.1
85°	68.3	61.5	61.5	55.5	57.0
87.5°	22.5	25.5	25.5	24.8	24.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)