

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: P393557

Luminaire Tested: **24EN-LD2-49-UNV-L92765-W2A-1-U (4000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393557  
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 (4000K)  
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: 4087.3 lumens  
Efficiency: N/A  
Efficacy: 118.1 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

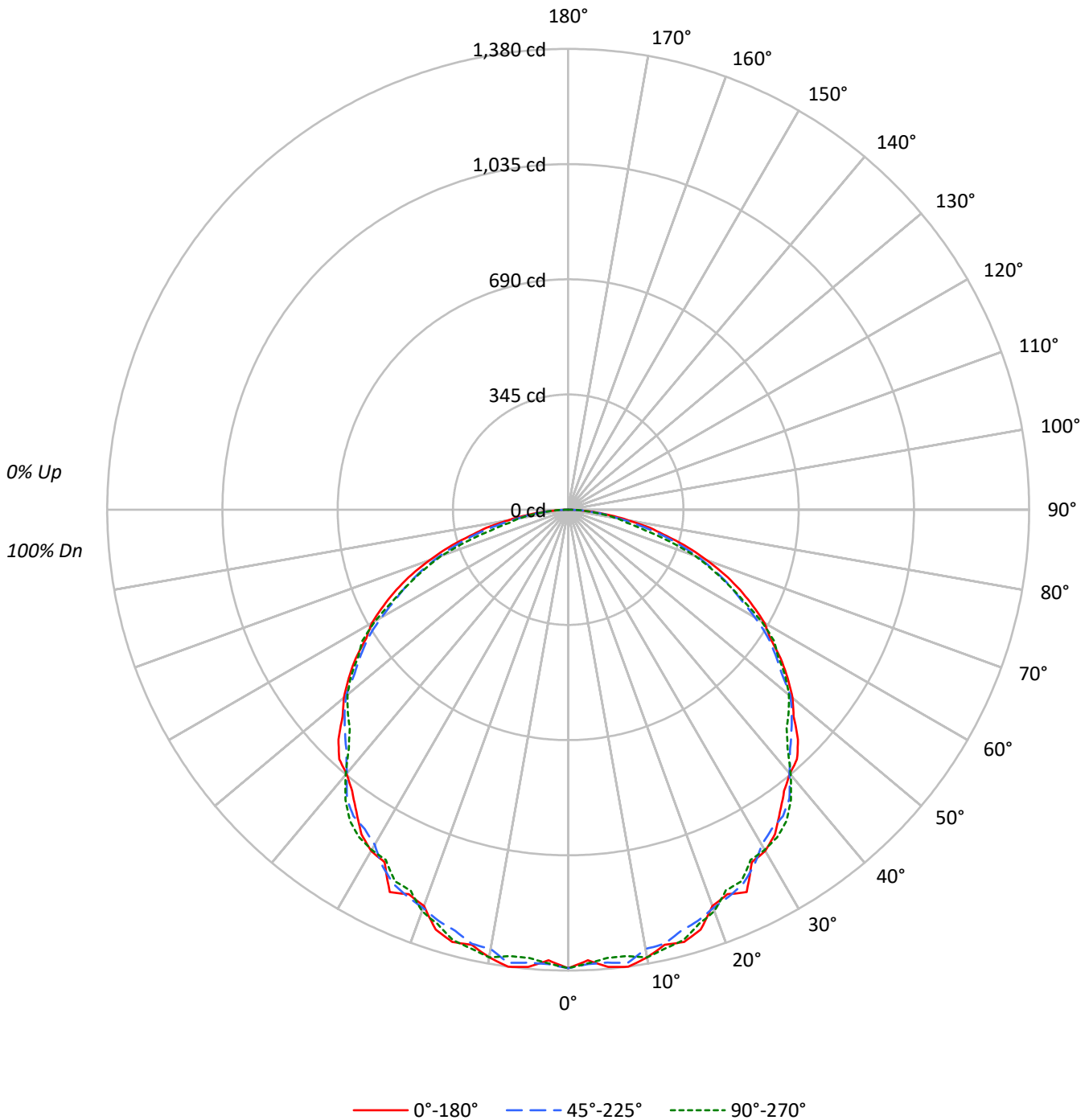
Input Watts (W): 34.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	1847	1847	1847
5°	1856	1839	1820
10°	1860	1825	1860
15°	1866	1819	1858
20°	1808	1818	1832
25°	1876	1837	1822
30°	1834	1800	1827
35°	1815	1841	1871
40°	1813	1810	1820
45°	1851	1797	1759
50°	1835	1818	1806
55°	1822	1777	1800
60°	1825	1740	1796
65°	1806	1688	1675
70°	1731	1624	1588
75°	1587	1496	1247
80°	1403	1185	1147
85°	1162	1047	971



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.2	3.2
10°-20°	373.1	9.1
20°-30°	565.5	13.8
30°-40°	696.1	17.0
40°-50°	732.2	17.9
50°-60°	681.3	16.7
60°-70°	532.5	13.0
70°-80°	298.4	7.3
80°-90°	79.0	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°	1067.7	26.1
0°-40°	1763.9	43.2
0°-60°	3177.4	77.7
0°-90°	4087.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4087.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1373	1373	1373	1373	1373	
5°	1374	1360	1361	1341	1347	131
15°	1340	1324	1306	1320	1334	375
25°	1264	1220	1237	1211	1227	568
35°	1105	1118	1121	1103	1139	693
45°	973	963	944	945	925	745
55°	777	771	758	756	768	693
65°	567	551	530	533	526	559
75°	305	299	288	254	240	328
85°	75	68	68	61	63	87
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1372.9	1372.9	1372.9	1372.9	1372.9
2.5°	1350.6	1377.0	1362.1	1379.5	1359.6
5°	1374.5	1359.6	1361.3	1340.6	1347.2
7.5°	1380.3	1324.9	1368.7	1346.4	1348.1
10°	1361.3	1336.5	1335.7	1334.8	1361.3
12.5°	1334.8	1344.8	1331.5	1319.1	1345.6
15°	1339.8	1324.1	1305.9	1320.0	1334.0
17.5°	1318.3	1310.9	1291.0	1327.4	1300.9
20°	1262.9	1291.8	1269.5	1289.3	1279.4
22.5°	1246.3	1270.3	1254.6	1267.0	1233.9
25°	1263.7	1219.9	1237.2	1210.8	1227.3
27.5°	1190.1	1181.8	1203.3	1194.2	1182.7
30°	1180.2	1166.9	1158.7	1159.5	1176.0
32.5°	1152.1	1138.0	1133.9	1141.3	1163.6
35°	1104.9	1118.2	1120.6	1103.3	1138.8
37.5°	1061.9	1071.8	1088.4	1087.6	1095.0
40°	1032.1	1049.5	1030.5	1038.8	1036.3
42.5°	1013.9	998.2	982.5	987.5	971.8
45°	972.6	962.7	944.5	945.3	924.6
47.5°	915.5	903.1	908.1	894.0	894.9
50°	876.7	855.2	868.4	841.9	862.6
52.5°	827.9	818.8	805.5	797.3	819.6
55°	776.6	770.8	757.6	755.9	767.5
57.5°	717.0	712.1	707.9	707.1	730.3
60°	678.2	659.1	646.7	643.4	667.4
62.5°	623.6	615.3	582.2	589.7	592.2
65°	567.3	550.8	530.1	533.4	526.0
67.5°	507.0	477.2	472.2	473.1	464.8
70°	440.0	422.6	412.7	406.9	403.6
72.5°	376.3	362.2	350.7	335.8	320.9
75°	305.2	298.6	287.8	253.9	239.8
77.5°	250.6	243.1	220.0	182.8	180.3
80°	181.1	185.3	153.0	147.2	148.0
82.5°	128.2	124.9	114.1	106.7	102.6
85°	75.3	67.8	67.8	61.2	62.9
87.5°	24.8	28.1	28.1	27.3	26.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)