

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: P393553

Luminaire Tested: **24EN-LD2-49-UNV-L83050-W2A-1-U (6500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393553  
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-L83050-W2A-1-U (6500K)  
Description: 2X4 ENCOUNTER, 4900 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5035.3 lumens  
Efficiency: N/A  
Efficacy: 146.0 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

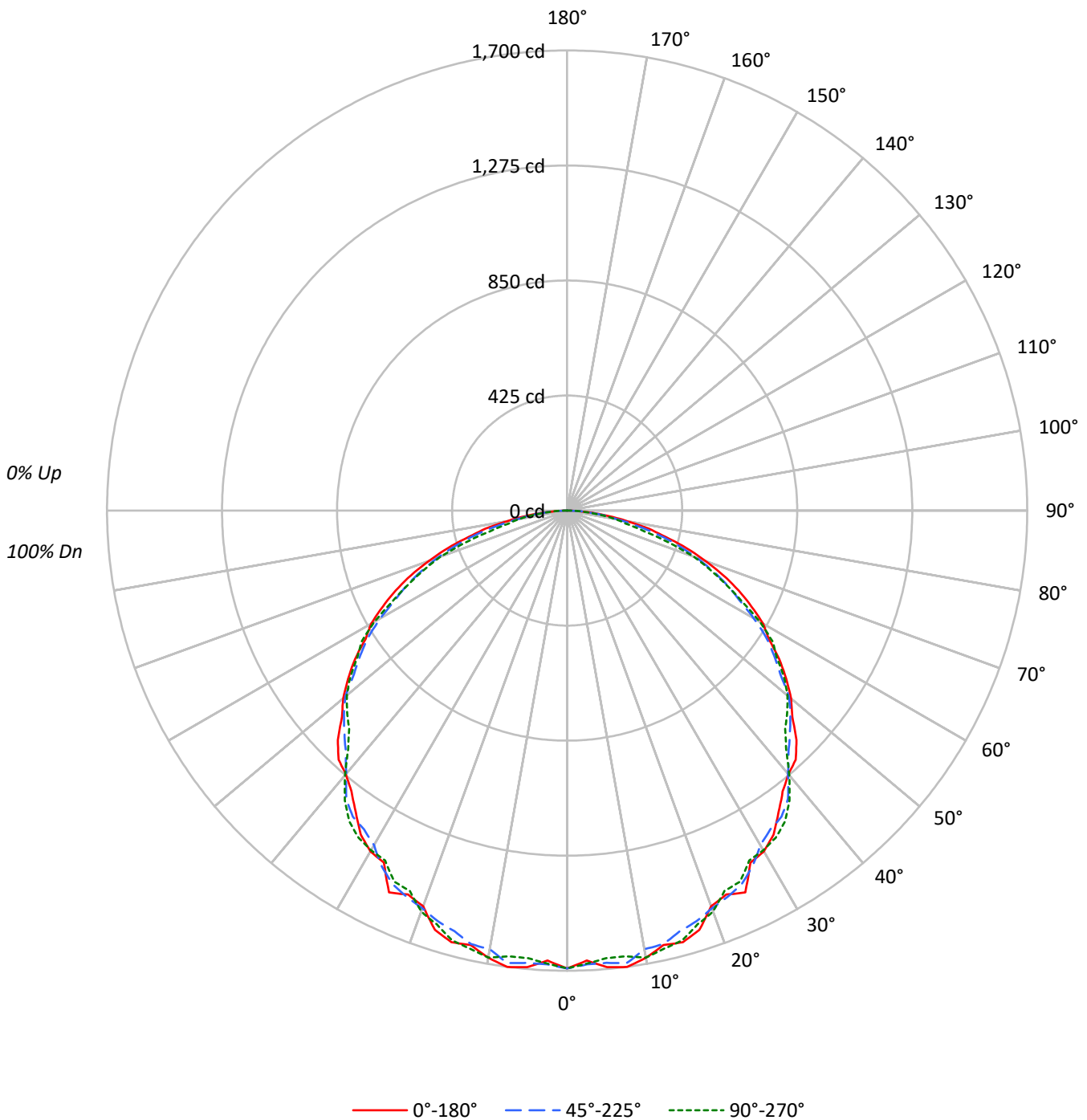
Input Watts (W): 34.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2276	2276	2276
5°	2287	2265	2242
10°	2291	2248	2291
15°	2299	2241	2289
20°	2228	2239	2257
25°	2311	2263	2245
30°	2259	2218	2251
35°	2236	2268	2304
40°	2233	2230	2242
45°	2280	2214	2167
50°	2261	2239	2224
55°	2244	2189	2218
60°	2248	2144	2213
65°	2225	2079	2063
70°	2132	2000	1956
75°	1955	1843	1536
80°	1729	1461	1413
85°	1431	1289	1195



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.1	3.2
10°-20°	459.7	9.1
20°-30°	696.6	13.8
30°-40°	857.6	17.0
40°-50°	902.1	17.9
50°-60°	839.3	16.7
60°-70°	656.0	13.0
70°-80°	367.6	7.3
80°-90°	97.3	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°	1315.4	26.1
0°-40°	2173.0	43.2
0°-60°	3914.4	77.7
0°-90°	5035.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5035.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1691	1691	1691	1691	1691	
5°	1693	1675	1677	1652	1660	161
15°	1651	1631	1609	1626	1643	462
25°	1557	1503	1524	1492	1512	700
35°	1361	1378	1381	1359	1403	854
45°	1198	1186	1164	1165	1139	918
55°	957	950	933	931	946	854
65°	699	679	653	657	648	688
75°	376	368	355	313	296	404
85°	93	84	84	75	77	107
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1691.3	1691.3	1691.3	1691.3	1691.3
2.5°	1663.8	1696.4	1678.1	1699.5	1675.0
5°	1693.4	1675.0	1677.1	1651.6	1659.7
7.5°	1700.5	1632.2	1686.2	1658.7	1660.7
10°	1677.1	1646.5	1645.5	1644.4	1677.1
12.5°	1644.4	1656.7	1640.4	1625.1	1657.7
15°	1650.6	1631.2	1608.8	1626.1	1643.4
17.5°	1624.1	1614.9	1590.4	1635.3	1602.7
20°	1555.8	1591.5	1564.0	1588.4	1576.2
22.5°	1535.4	1565.0	1545.6	1560.9	1520.1
25°	1556.8	1502.8	1524.2	1491.6	1512.0
27.5°	1466.1	1456.0	1482.4	1471.2	1457.0
30°	1453.9	1437.6	1427.4	1428.4	1448.8
32.5°	1419.3	1402.0	1396.9	1406.0	1433.5
35°	1361.2	1377.5	1380.6	1359.2	1403.0
37.5°	1308.2	1320.4	1340.8	1339.8	1349.0
40°	1271.5	1292.9	1269.5	1279.7	1276.6
42.5°	1249.1	1229.8	1210.4	1216.5	1197.2
45°	1198.2	1186.0	1163.5	1164.6	1139.1
47.5°	1127.9	1112.6	1118.7	1101.4	1102.4
50°	1080.0	1053.5	1069.8	1037.2	1062.7
52.5°	1019.9	1008.7	992.4	982.2	1009.7
55°	956.7	949.6	933.3	931.2	945.5
57.5°	883.4	877.2	872.1	871.1	899.7
60°	835.5	812.0	796.8	792.7	822.2
62.5°	768.2	758.0	717.3	726.5	729.5
65°	698.9	678.6	653.1	657.2	648.0
67.5°	624.6	587.9	581.8	582.8	572.6
70°	542.0	520.6	508.4	501.3	497.2
72.5°	463.6	446.3	432.0	413.7	395.3
75°	376.0	367.8	354.6	312.8	295.5
77.5°	308.7	299.5	271.0	225.2	222.1
80°	223.1	228.2	188.5	181.4	182.4
82.5°	157.9	153.8	140.6	131.4	126.3
85°	92.7	83.5	83.5	75.4	77.4
87.5°	30.6	34.6	34.6	33.6	32.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)