

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: P393550

Luminaire Tested: **24EN-LD2-49-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393550  
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 (4500K)  
Description: 2X4 ENCOUNTER, 4900 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5030.2 lumens  
Efficiency: N/A  
Efficacy: 145.4 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

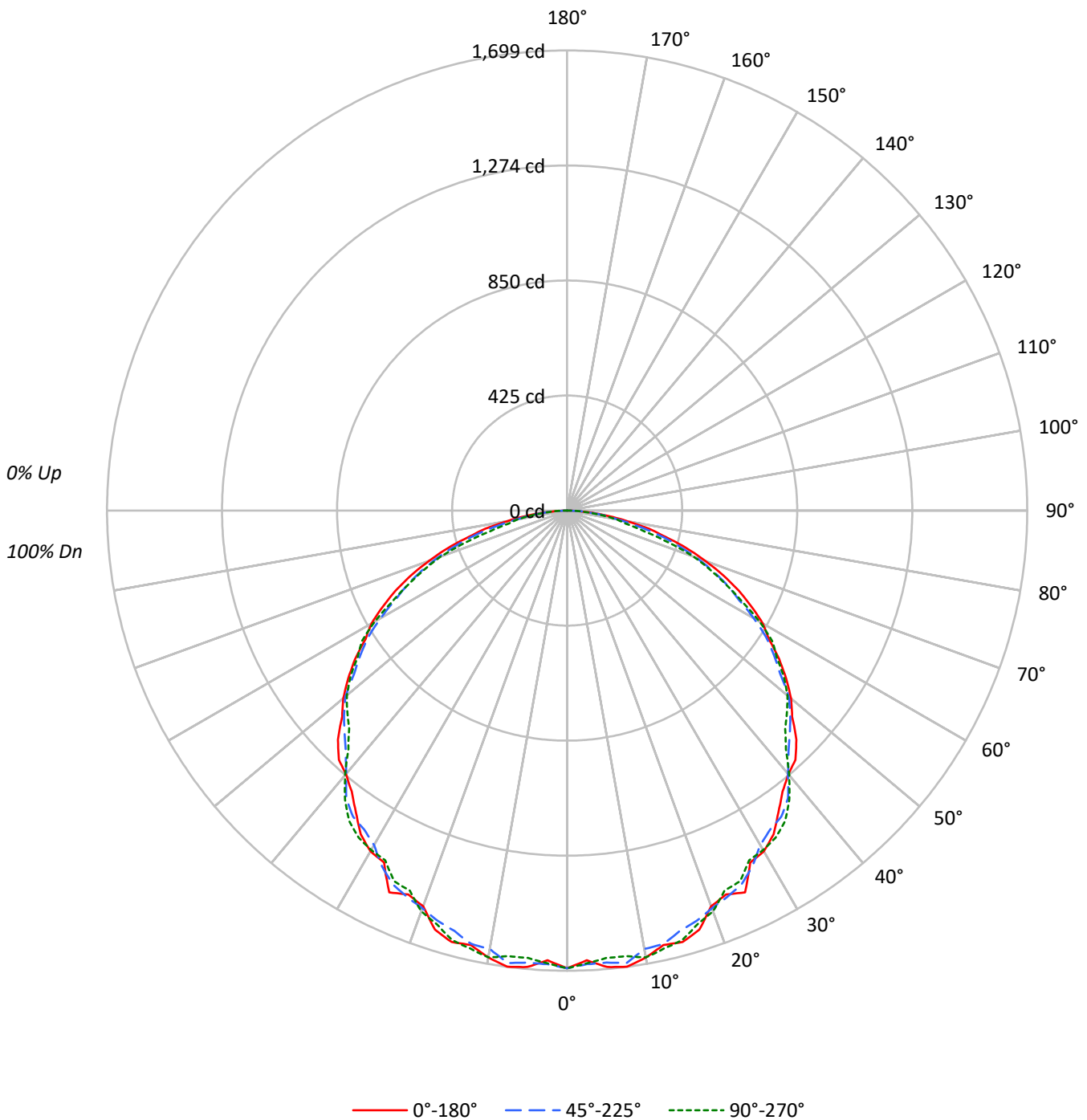
Input Watts (W): 34.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83					83			
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69					69			
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32					32			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29					29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	38	31	25	37	30	25	36	30	25	35	29	25	23					23			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2273	2273	2273
5°	2285	2263	2239
10°	2289	2246	2289
15°	2297	2239	2287
20°	2225	2237	2255
25°	2309	2261	2242
30°	2257	2215	2249
35°	2234	2265	2302
40°	2231	2227	2240
45°	2278	2212	2165
50°	2258	2237	2222
55°	2242	2187	2216
60°	2246	2142	2210
65°	2223	2077	2061
70°	2130	1998	1954
75°	1953	1841	1535
80°	1727	1459	1412
85°	1430	1289	1195



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.0	3.2
10°-20°	459.2	9.1
20°-30°	695.9	13.8
30°-40°	856.7	17.0
40°-50°	901.1	17.9
50°-60°	838.5	16.7
60°-70°	655.3	13.0
70°-80°	367.2	7.3
80°-90°	97.2	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°	1314.1	26.1
0°-40°	2170.8	43.2
0°-60°	3910.4	77.7
0°-90°	5030.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5030.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1690	1690	1690	1690	1690	
5°	1692	1673	1675	1650	1658	161
15°	1649	1630	1607	1624	1642	461
25°	1555	1501	1523	1490	1510	699
35°	1360	1376	1379	1358	1402	853
45°	1197	1185	1162	1163	1138	917
55°	956	949	932	930	944	853
65°	698	678	652	656	647	687
75°	376	367	354	312	295	403
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°	1689.6	1689.6	1689.6	1689.6	1689.6
2.5°	1662.1	1694.7	1676.4	1697.7	1673.3
5°	1691.6	1673.3	1675.3	1649.9	1658.0
7.5°	1698.8	1630.6	1684.5	1657.0	1659.1
10°	1675.3	1644.8	1643.8	1642.8	1675.3
12.5°	1642.8	1655.0	1638.7	1623.4	1656.0
15°	1648.9	1629.5	1607.1	1624.4	1641.8
17.5°	1622.4	1613.3	1588.8	1633.6	1601.0
20°	1554.2	1589.8	1562.4	1586.8	1574.6
22.5°	1533.9	1563.4	1544.0	1559.3	1518.6
25°	1555.2	1501.3	1522.7	1490.1	1510.5
27.5°	1464.7	1454.5	1480.9	1469.7	1455.5
30°	1452.4	1436.2	1426.0	1427.0	1447.3
32.5°	1417.8	1400.5	1395.4	1404.6	1432.1
35°	1359.8	1376.1	1379.2	1357.8	1401.5
37.5°	1306.9	1319.1	1339.5	1338.4	1347.6
40°	1270.2	1291.6	1268.2	1278.4	1275.3
42.5°	1247.9	1228.5	1209.2	1215.3	1195.9
45°	1197.0	1184.7	1162.4	1163.4	1137.9
47.5°	1126.7	1111.5	1117.6	1100.3	1101.3
50°	1078.9	1052.4	1068.7	1036.1	1061.6
52.5°	1018.8	1007.6	991.4	981.2	1008.7
55°	955.7	948.6	932.3	930.3	944.5
57.5°	882.5	876.3	871.3	870.2	898.7
60°	834.6	811.2	795.9	791.9	821.4
62.5°	767.4	757.3	716.5	725.7	728.8
65°	698.2	677.9	652.4	656.5	647.3
67.5°	623.9	587.3	581.2	582.2	572.0
70°	541.5	520.1	507.9	500.8	496.7
72.5°	463.1	445.8	431.6	413.2	394.9
75°	375.6	367.4	354.2	312.5	295.2
77.5°	308.4	299.2	270.7	224.9	221.9
80°	222.9	228.0	188.3	181.2	182.2
82.5°	157.8	153.7	140.5	131.3	126.2
85°	92.6	83.5	83.5	75.3	77.4
87.5°	30.5	34.6	34.6	33.6	32.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)