

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: P393568

Luminaire Tested: **24EN-LD2-49-UNV-L93050-W2A-1-U (5700K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393568  
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-L93050-W2A-1-U (5700K)  
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: 4359.6 lumens  
Efficiency: N/A  
Efficacy: 127.8 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

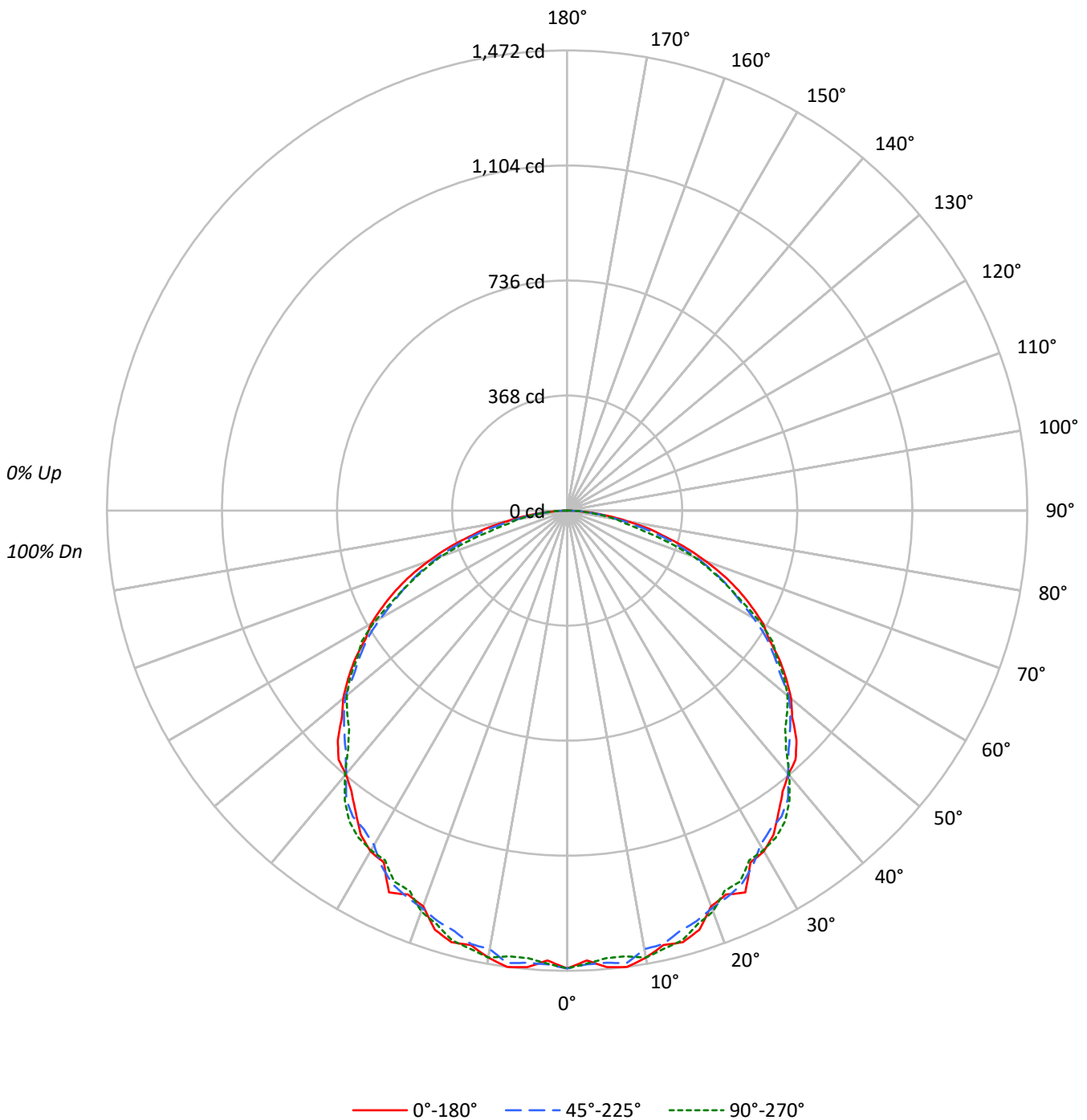
Input Watts (W): 34.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1970	1970	1970
5°	1980	1961	1941
10°	1984	1946	1984
15°	1991	1940	1982
20°	1929	1939	1954
25°	2001	1959	1943
30°	1956	1920	1949
35°	1936	1963	1995
40°	1934	1931	1941
45°	1974	1917	1877
50°	1957	1939	1926
55°	1943	1895	1920
60°	1947	1856	1916
65°	1927	1800	1786
70°	1846	1732	1694
75°	1692	1596	1330
80°	1497	1265	1223
85°	1240	1116	1034



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.8	3.2
10°-20°	398.0	9.1
20°-30°	603.2	13.8
30°-40°	742.5	17.0
40°-50°	781.0	17.9
50°-60°	726.7	16.7
60°-70°	568.0	13.0
70°-80°	318.3	7.3
80°-90°	84.2	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°	1138.9	26.1
0°-40°	1881.4	43.2
0°-60°	3389.1	77.7
0°-90°	4359.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4359.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1464	1464	1464	1464	1464	
5°	1466	1450	1452	1430	1437	140
15°	1429	1412	1393	1408	1423	400
25°	1348	1301	1320	1292	1309	606
35°	1179	1193	1195	1177	1215	739
45°	1037	1027	1007	1008	986	794
55°	828	822	808	806	819	739
65°	605	588	566	569	561	596
75°	326	318	307	271	256	349
85°	80	72	72	65	67	92
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1464.4	1464.4	1464.4	1464.4	1464.4
2.5°	1440.5	1468.8	1452.9	1471.4	1450.3
5°	1466.1	1450.3	1452.0	1430.0	1437.0
7.5°	1472.3	1413.2	1460.0	1436.1	1437.9
10°	1452.0	1425.6	1424.7	1423.8	1452.0
12.5°	1423.8	1434.4	1420.3	1407.0	1435.3
15°	1429.1	1412.3	1392.9	1407.9	1422.9
17.5°	1406.1	1398.2	1377.0	1415.8	1387.6
20°	1347.0	1377.9	1354.1	1375.3	1364.7
22.5°	1329.4	1355.0	1338.2	1351.5	1316.2
25°	1347.9	1301.2	1319.7	1291.5	1309.1
27.5°	1269.4	1260.6	1283.5	1273.8	1261.5
30°	1258.8	1244.7	1235.9	1236.8	1254.4
32.5°	1228.8	1213.8	1209.4	1217.4	1241.2
35°	1178.6	1192.7	1195.3	1176.8	1214.7
37.5°	1132.7	1143.3	1160.9	1160.0	1168.0
40°	1100.9	1119.4	1099.2	1108.0	1105.3
42.5°	1081.5	1064.8	1048.0	1053.3	1036.5
45°	1037.4	1026.8	1007.4	1008.3	986.2
47.5°	976.5	963.3	968.6	953.6	954.5
50°	935.1	912.1	926.3	898.0	920.1
52.5°	883.0	873.3	859.2	850.4	874.2
55°	828.3	822.2	808.0	806.3	818.6
57.5°	764.8	759.5	755.1	754.2	778.9
60°	723.4	703.1	689.8	686.3	711.9
62.5°	665.1	656.3	621.0	629.0	631.6
65°	605.2	587.5	565.5	569.0	561.0
67.5°	540.8	509.0	503.7	504.6	495.8
70°	469.3	450.8	440.2	434.0	430.5
72.5°	401.4	386.4	374.0	358.2	342.3
75°	325.5	318.5	307.0	270.8	255.8
77.5°	267.3	259.4	234.7	195.0	192.3
80°	193.2	197.6	163.2	157.0	157.9
82.5°	136.7	133.2	121.7	113.8	109.4
85°	80.3	72.3	72.3	65.3	67.0
87.5°	26.5	30.0	30.0	29.1	28.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)