

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: P393598

Luminaire Tested: **24EN-LD2-54-UNV-L93050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393598  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-36)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24EN-LD2-54-UNV-L93050-W2A-1-U (4500K)  
Description: 2X4 ENCOUNTER, 5400 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4786.5 lumens  
Efficiency: N/A  
Efficacy: 125.6 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

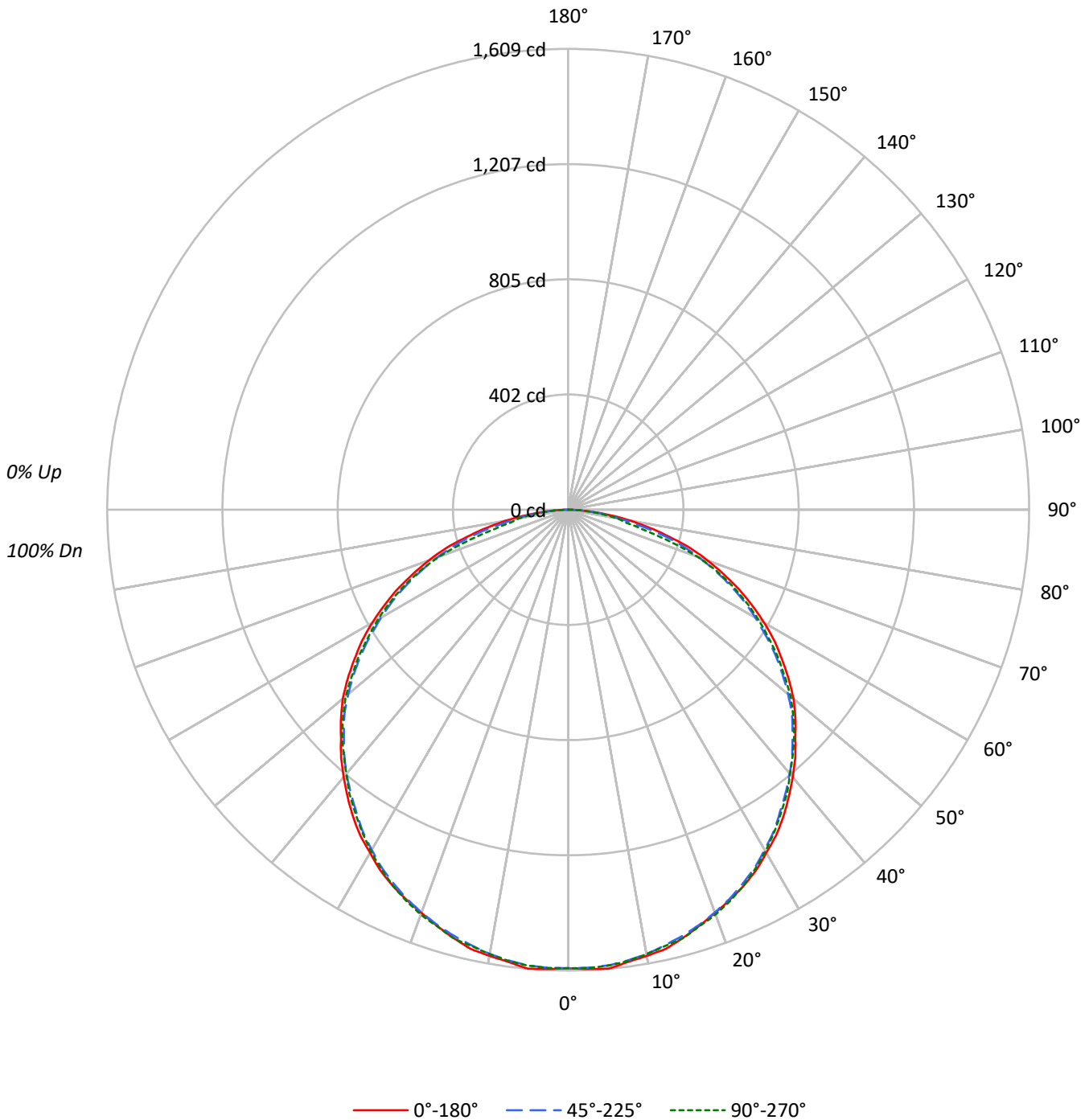
Input Watts (W): 38.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	84	79	74	81	77	73	78	74	71	69
3	90	79	70	64	87	77	69	63	74	67	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°	2154	2154	2154
5°	2173	2157	2158
10°	2161	2152	2152
15°	2156	2145	2158
20°	2145	2142	2154
25°	2151	2139	2150
30°	2149	2131	2139
35°	2150	2117	2126
40°	2141	2113	2116
45°	2134	2107	2122
50°	2149	2097	2121
55°	2136	2070	2093
60°	2127	2030	2063
65°	2094	1982	2018
70°	2035	1910	1886
75°	1899	1762	1429
80°	1701	1388	1340
85°	1369	1233	1125



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.8	3.2
10°-20°	435.6	9.1
20°-30°	664.7	13.9
30°-40°	811.1	16.9
40°-50°	858.2	17.9
50°-60°	796.4	16.6
60°-70°	624.9	13.1
70°-80°	350.8	7.3
80°-90°	93.0	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°	1252.1	26.2
0°-40°	2063.2	43.1
0°-60°	3717.8	77.7
0°-90°	4786.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4786.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1601	1601	1601	1601	1601	
5°	1609	1598	1597	1594	1598	152
15°	1548	1545	1540	1539	1549	437
25°	1449	1438	1441	1436	1448	668
35°	1309	1300	1289	1292	1294	818
45°	1121	1117	1107	1103	1115	868
55°	911	896	882	885	892	815
65°	658	640	623	623	634	649
75°	365	354	339	299	275	388
85°	89	81	80	74	73	103
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1600.7	1600.7	1600.7	1600.7	1600.7
2.5°	1605.1	1599.9	1600.7	1599.0	1601.6
5°	1608.6	1598.1	1597.2	1593.7	1598.1
7.5°	1592.8	1589.3	1587.6	1586.7	1589.3
10°	1581.4	1575.3	1575.3	1576.2	1575.3
12.5°	1570.9	1562.1	1557.7	1560.4	1560.4
15°	1548.1	1545.4	1540.2	1539.3	1548.9
17.5°	1523.5	1525.2	1520.0	1519.1	1524.4
20°	1498.0	1497.1	1496.3	1491.9	1504.2
22.5°	1474.3	1469.9	1470.8	1465.5	1477.8
25°	1448.8	1438.3	1440.9	1436.5	1448.0
27.5°	1419.9	1407.6	1409.3	1409.3	1413.7
30°	1383.0	1372.4	1371.6	1376.8	1376.8
32.5°	1349.6	1339.1	1333.8	1334.7	1336.4
35°	1309.2	1300.4	1289.0	1292.5	1294.3
37.5°	1264.4	1260.0	1246.9	1246.9	1253.0
40°	1218.8	1212.6	1203.0	1200.3	1204.7
42.5°	1173.1	1167.0	1157.3	1152.9	1159.9
45°	1121.3	1116.9	1107.3	1102.9	1115.2
47.5°	1075.7	1066.0	1059.8	1056.3	1065.1
50°	1026.5	1012.4	1001.9	1003.6	1013.3
52.5°	970.3	957.1	942.2	945.7	951.0
55°	910.6	896.5	882.5	885.1	892.1
57.5°	853.5	839.4	817.5	821.9	827.2
60°	790.3	771.0	754.3	756.9	766.6
62.5°	723.5	707.7	691.1	692.8	701.6
65°	657.7	640.1	622.6	622.6	634.0
67.5°	585.7	573.4	554.1	554.1	561.1
70°	517.2	501.4	485.6	475.0	479.4
72.5°	447.8	428.5	416.2	389.9	378.5
75°	365.3	353.9	338.9	299.4	274.8
77.5°	290.6	284.5	255.5	214.3	203.7
80°	219.5	215.1	179.1	173.0	173.0
82.5°	150.2	145.8	135.2	124.7	122.9
85°	88.7	80.8	79.9	73.8	72.9
87.5°	29.0	33.4	31.6	32.5	32.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)