

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: P393572

Luminaire Tested: **24EN-LD2-54-UNV-L82765-W2A-1-U (3500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393572  
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-L82765-W2A-1-U (3500K)  
Description: 2X4 ENCOUNTER, 5400 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 3000K/5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5162.8 lumens  
Efficiency: N/A  
Efficacy: 133.1 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

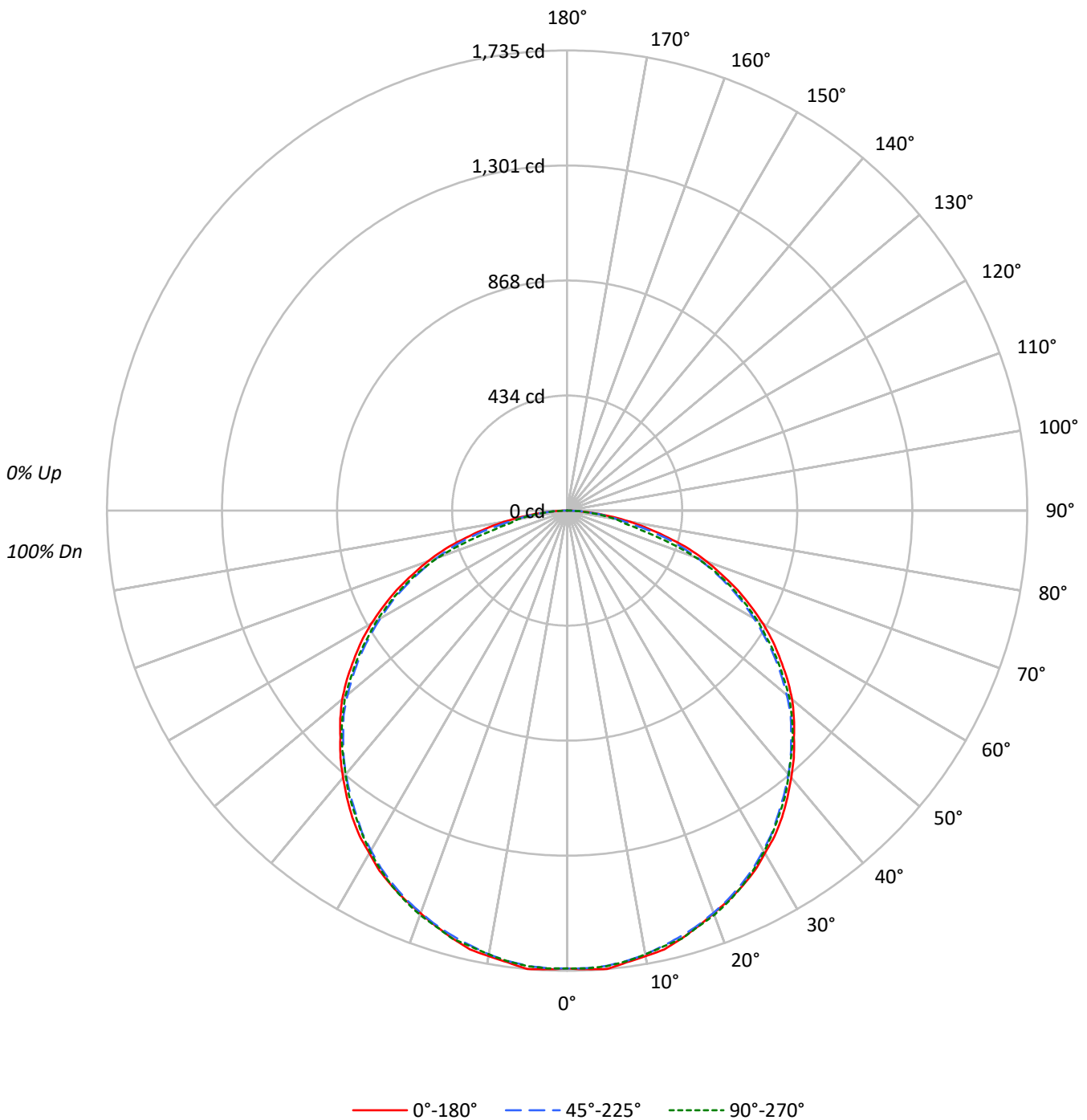
Input Watts (W): 38.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2323	2323	2323
5°	2343	2327	2328
10°	2331	2321	2321
15°	2326	2314	2327
20°	2314	2311	2323
25°	2320	2307	2319
30°	2318	2298	2307
35°	2319	2284	2293
40°	2309	2279	2282
45°	2301	2273	2289
50°	2318	2262	2288
55°	2304	2233	2257
60°	2294	2189	2225
65°	2259	2138	2177
70°	2194	2061	2034
75°	2048	1901	1541
80°	1835	1497	1446
85°	1477	1331	1213



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.7	3.2
10°-20°	469.9	9.1
20°-30°	716.9	13.9
30°-40°	874.9	16.9
40°-50°	925.7	17.9
50°-60°	859.0	16.6
60°-70°	674.0	13.1
70°-80°	378.4	7.3
80°-90°	100.3	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°	1350.5	26.2
0°-40°	2225.4	43.1
0°-60°	4010.1	77.7
0°-90°	5162.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5162.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1727	1727	1727	1727	1727	
5°	1735	1724	1723	1719	1724	164
15°	1670	1667	1661	1660	1671	471
25°	1563	1551	1554	1550	1562	720
35°	1412	1403	1390	1394	1396	883
45°	1210	1205	1194	1190	1203	936
55°	982	967	952	955	962	879
65°	709	690	672	672	684	700
75°	394	382	366	323	296	419
85°	96	87	86	80	79	111
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1726.6	1726.6	1726.6	1726.6	1726.6
2.5°	1731.3	1725.6	1726.6	1724.7	1727.5
5°	1735.1	1723.7	1722.8	1719.0	1723.7
7.5°	1718.1	1714.3	1712.4	1711.4	1714.3
10°	1705.8	1699.1	1699.1	1700.1	1699.1
12.5°	1694.4	1684.9	1680.2	1683.0	1683.0
15°	1669.8	1666.9	1661.2	1660.3	1670.7
17.5°	1643.2	1645.1	1639.5	1638.5	1644.2
20°	1615.8	1614.8	1613.9	1609.1	1622.4
22.5°	1590.2	1585.5	1586.4	1580.7	1594.0
25°	1562.7	1551.4	1554.2	1549.5	1561.8
27.5°	1531.5	1518.2	1520.1	1520.1	1524.9
30°	1491.7	1480.3	1479.4	1485.1	1485.1
32.5°	1455.7	1444.3	1438.7	1439.6	1441.5
35°	1412.1	1402.7	1390.4	1394.2	1396.0
37.5°	1363.8	1359.1	1344.9	1344.9	1351.5
40°	1314.6	1308.0	1297.5	1294.7	1299.4
42.5°	1265.3	1258.7	1248.3	1243.6	1251.1
45°	1209.5	1204.7	1194.3	1189.6	1202.8
47.5°	1160.2	1149.8	1143.2	1139.4	1148.8
50°	1107.2	1092.0	1080.7	1082.6	1093.0
52.5°	1046.6	1032.4	1016.3	1020.0	1025.7
55°	982.2	967.0	951.8	954.7	962.3
57.5°	920.6	905.4	881.8	886.5	892.2
60°	852.4	831.6	813.6	816.4	826.8
62.5°	780.4	763.4	745.4	747.3	756.7
65°	709.4	690.4	671.5	671.5	683.8
67.5°	631.7	618.5	597.6	597.6	605.2
70°	557.8	540.8	523.8	512.4	517.1
72.5°	483.0	462.2	448.9	420.5	408.2
75°	394.0	381.7	365.6	323.0	296.4
77.5°	313.5	306.9	275.6	231.1	219.7
80°	236.8	232.0	193.2	186.6	186.6
82.5°	162.0	157.2	145.9	134.5	132.6
85°	95.7	87.1	86.2	79.6	78.6
87.5°	31.3	36.0	34.1	35.0	35.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)