

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: P393579

Luminaire Tested: **24EN-LD2-54-UNV-L83050-W2A-1-U (3000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393579  
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-L83050-W2A-1-U (3000K)  
Description: 2X4 ENCOUNTER, 5400 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5363.5 lumens  
Efficiency: N/A  
Efficacy: 136.5 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

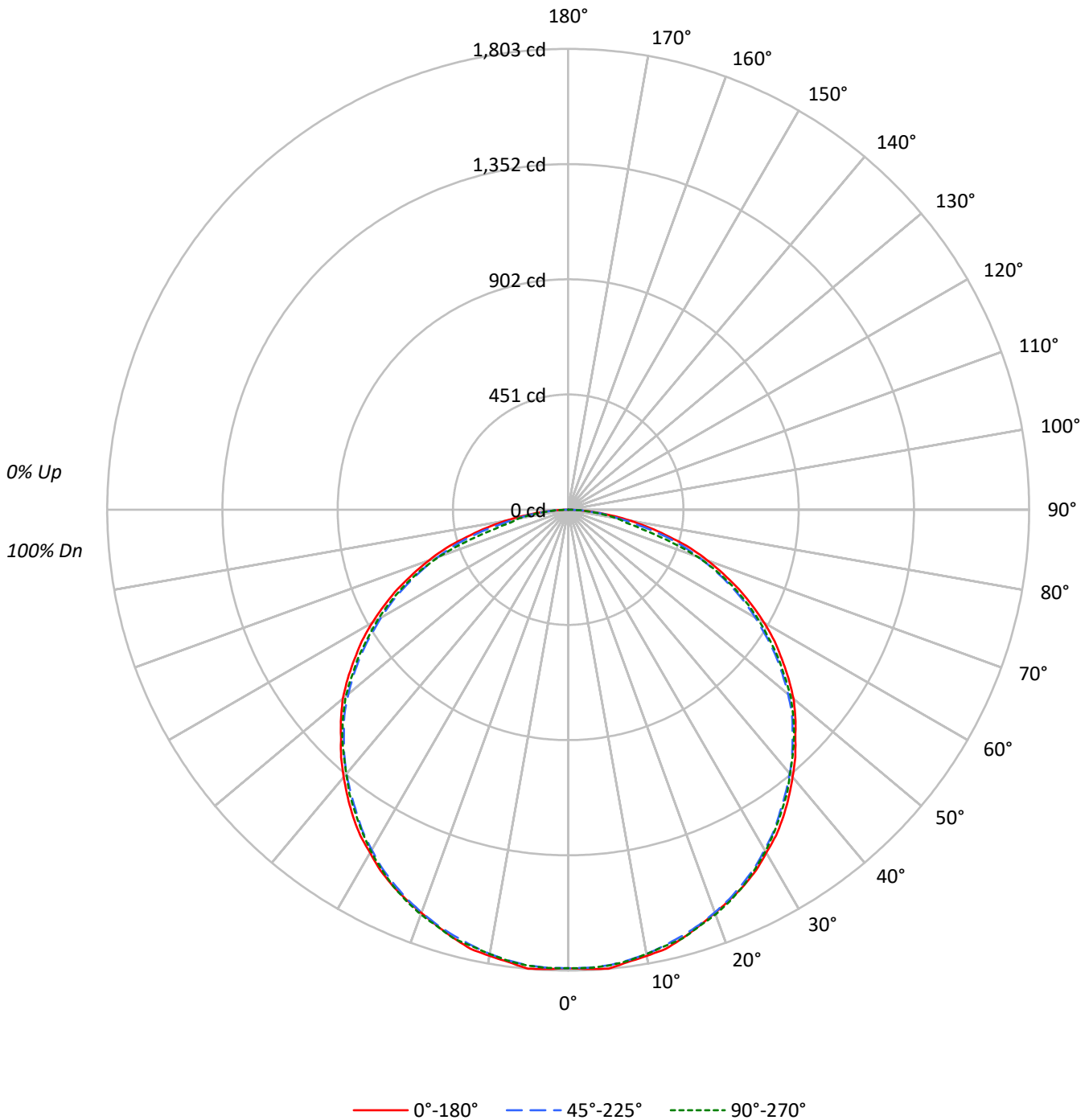
Input Watts (W): 39.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	70	64	87	77	69	63	74	67	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°	2413	2413	2413
5°	2435	2417	2419
10°	2421	2412	2412
15°	2416	2404	2418
20°	2403	2401	2413
25°	2410	2397	2409
30°	2408	2388	2397
35°	2410	2372	2382
40°	2399	2368	2371
45°	2391	2361	2378
50°	2408	2350	2377
55°	2394	2320	2345
60°	2383	2274	2312
65°	2346	2221	2262
70°	2280	2140	2113
75°	2128	1974	1601
80°	1906	1555	1502
85°	1535	1382	1261



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.1	3.2
10°-20°	488.1	9.1
20°-30°	744.8	13.9
30°-40°	908.9	16.9
40°-50°	961.7	17.9
50°-60°	892.4	16.6
60°-70°	700.2	13.1
70°-80°	393.1	7.3
80°-90°	104.2	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°	1403.1	26.2
0°-40°	2312.0	43.1
0°-60°	4166.1	77.7
0°-90°	5363.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5363.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1794	1794	1794	1794	1794	
5°	1803	1791	1790	1786	1791	171
15°	1735	1732	1726	1725	1736	490
25°	1624	1612	1615	1610	1622	748
35°	1467	1457	1444	1448	1450	917
45°	1256	1252	1241	1236	1250	972
55°	1020	1005	989	992	1000	913
65°	737	717	698	698	710	727
75°	409	396	380	336	308	435
85°	99	90	90	83	82	115
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1793.7	1793.7	1793.7	1793.7	1793.7
2.5°	1798.7	1792.8	1793.7	1791.8	1794.7
5°	1802.6	1790.8	1789.8	1785.9	1790.8
7.5°	1784.9	1780.9	1779.0	1778.0	1780.9
10°	1772.1	1765.2	1765.2	1766.2	1765.2
12.5°	1760.3	1750.4	1745.5	1748.5	1748.5
15°	1734.7	1731.7	1725.8	1724.9	1735.7
17.5°	1707.1	1709.1	1703.2	1702.2	1708.1
20°	1678.6	1677.6	1676.6	1671.7	1685.5
22.5°	1652.0	1647.1	1648.1	1642.2	1656.0
25°	1623.5	1611.7	1614.7	1609.7	1622.5
27.5°	1591.0	1577.3	1579.2	1579.2	1584.2
30°	1549.7	1537.9	1536.9	1542.8	1542.8
32.5°	1512.3	1500.5	1494.6	1495.6	1497.6
35°	1467.1	1457.2	1444.4	1448.4	1450.3
37.5°	1416.9	1412.0	1397.2	1397.2	1404.1
40°	1365.7	1358.8	1348.0	1345.1	1350.0
42.5°	1314.6	1307.7	1296.8	1291.9	1299.8
45°	1256.5	1251.6	1240.8	1235.8	1249.6
47.5°	1205.3	1194.5	1187.6	1183.7	1193.5
50°	1150.2	1134.5	1122.7	1124.7	1135.5
52.5°	1087.3	1072.5	1055.8	1059.7	1065.6
55°	1020.4	1004.6	988.9	991.8	999.7
57.5°	956.4	940.7	916.1	921.0	926.9
60°	885.6	863.9	845.2	848.2	859.0
62.5°	810.8	793.1	774.4	776.3	786.2
65°	737.0	717.3	697.6	697.6	710.4
67.5°	656.3	642.5	620.9	620.9	628.7
70°	579.5	561.8	544.1	532.3	537.2
72.5°	501.8	480.2	466.4	436.9	424.1
75°	409.3	396.5	379.8	335.5	308.0
77.5°	325.7	318.8	286.3	240.1	228.3
80°	246.0	241.1	200.7	193.8	193.8
82.5°	168.3	163.3	151.5	139.7	137.8
85°	99.4	90.5	89.5	82.7	81.7
87.5°	32.5	37.4	35.4	36.4	36.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)