

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: P393585

Luminaire Tested: **24EN-LD2-54-UNV-L83050-W2A-1-U (6500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393585  
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 (6500K)  
Description: 2X4 ENCOUNTER, 5400 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5553.9 lumens  
Efficiency: N/A  
Efficacy: 144.3 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

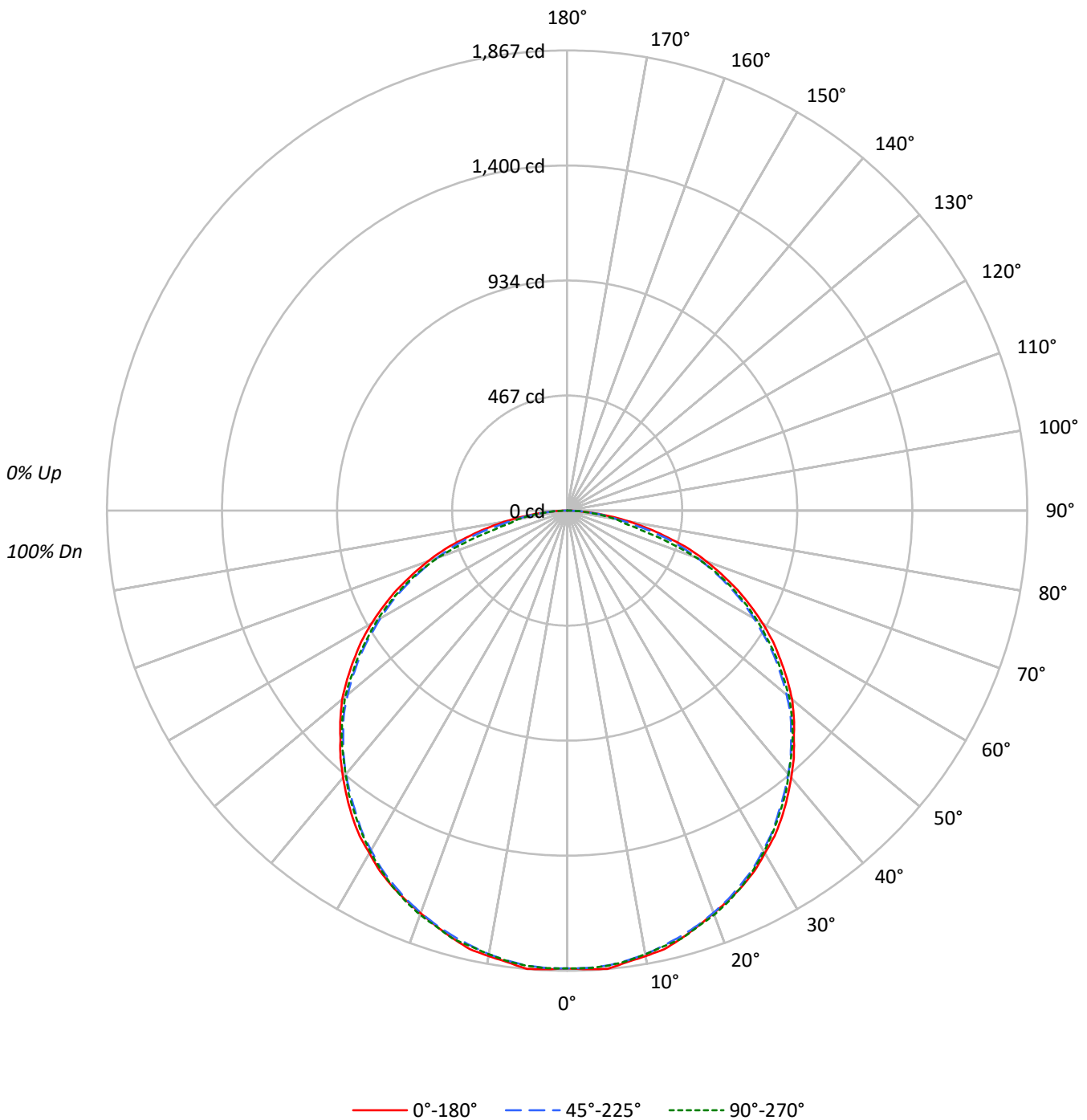
Input Watts (W): 38.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2499	2499	2499
5°	2521	2503	2504
10°	2507	2497	2497
15°	2502	2489	2504
20°	2489	2486	2499
25°	2496	2482	2494
30°	2493	2473	2482
35°	2495	2457	2467
40°	2484	2452	2455
45°	2476	2445	2462
50°	2493	2433	2461
55°	2479	2402	2428
60°	2468	2355	2394
65°	2429	2300	2342
70°	2361	2216	2188
75°	2203	2045	1658
80°	1974	1610	1555
85°	1589	1431	1306



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.1	3.2
10°-20°	505.5	9.1
20°-30°	771.3	13.9
30°-40°	941.2	16.9
40°-50°	995.9	17.9
50°-60°	924.0	16.6
60°-70°	725.1	13.1
70°-80°	407.0	7.3
80°-90°	107.9	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°	1452.9	26.2
0°-40°	2394.0	43.1
0°-60°	4313.9	77.7
0°-90°	5553.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5553.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1857	1857	1857	1857	1857	
5°	1867	1854	1853	1849	1854	177
15°	1796	1793	1787	1786	1797	507
25°	1681	1669	1672	1667	1680	775
35°	1519	1509	1496	1500	1502	950
45°	1301	1296	1285	1280	1294	1007
55°	1057	1040	1024	1027	1035	946
65°	763	743	722	722	736	753
75°	424	411	393	347	319	450
85°	103	94	93	86	85	119
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1857.4	1857.4	1857.4	1857.4	1857.4
2.5°	1862.5	1856.4	1857.4	1855.4	1858.4
5°	1866.6	1854.3	1853.3	1849.2	1854.3
7.5°	1848.2	1844.1	1842.1	1841.1	1844.1
10°	1835.0	1827.8	1827.8	1828.9	1827.8
12.5°	1822.7	1812.6	1807.5	1810.5	1810.5
15°	1796.3	1793.2	1787.1	1786.1	1797.3
17.5°	1767.7	1769.8	1763.7	1762.6	1768.7
20°	1738.2	1737.2	1736.1	1731.1	1745.3
22.5°	1710.7	1705.6	1706.6	1700.5	1714.7
25°	1681.1	1668.9	1672.0	1666.9	1680.1
27.5°	1647.5	1633.2	1635.3	1635.3	1640.4
30°	1604.7	1592.5	1591.5	1597.6	1597.6
32.5°	1566.0	1553.8	1547.7	1548.7	1550.7
35°	1519.1	1508.9	1495.7	1499.8	1501.8
37.5°	1467.2	1462.1	1446.8	1446.8	1453.9
40°	1414.2	1407.1	1395.8	1392.8	1397.9
42.5°	1361.2	1354.1	1342.9	1337.8	1345.9
45°	1301.1	1296.0	1284.8	1279.7	1294.0
47.5°	1248.1	1236.9	1229.8	1225.7	1235.9
50°	1191.1	1174.8	1162.5	1164.6	1175.8
52.5°	1125.8	1110.6	1093.2	1097.3	1103.4
55°	1056.6	1040.3	1024.0	1027.0	1035.2
57.5°	990.3	974.0	948.6	953.7	959.8
60°	917.0	894.6	875.2	878.3	889.5
62.5°	839.5	821.2	801.8	803.9	814.1
65°	763.1	742.8	722.4	722.4	735.6
67.5°	679.6	665.3	642.9	642.9	651.1
70°	600.1	581.8	563.4	551.2	556.3
72.5°	519.6	497.2	482.9	452.4	439.1
75°	423.8	410.6	393.3	347.4	318.9
77.5°	337.2	330.1	296.5	248.6	236.4
80°	254.7	249.6	207.8	200.7	200.7
82.5°	174.2	169.1	156.9	144.7	142.6
85°	102.9	93.7	92.7	85.6	84.6
87.5°	33.6	38.7	36.7	37.7	37.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)