

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: P393582

Luminaire Tested: **24EN-LD2-54-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393582
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 (4500K)
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: 5548.2 lumens
Efficiency: N/A
Efficacy: 143.7 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

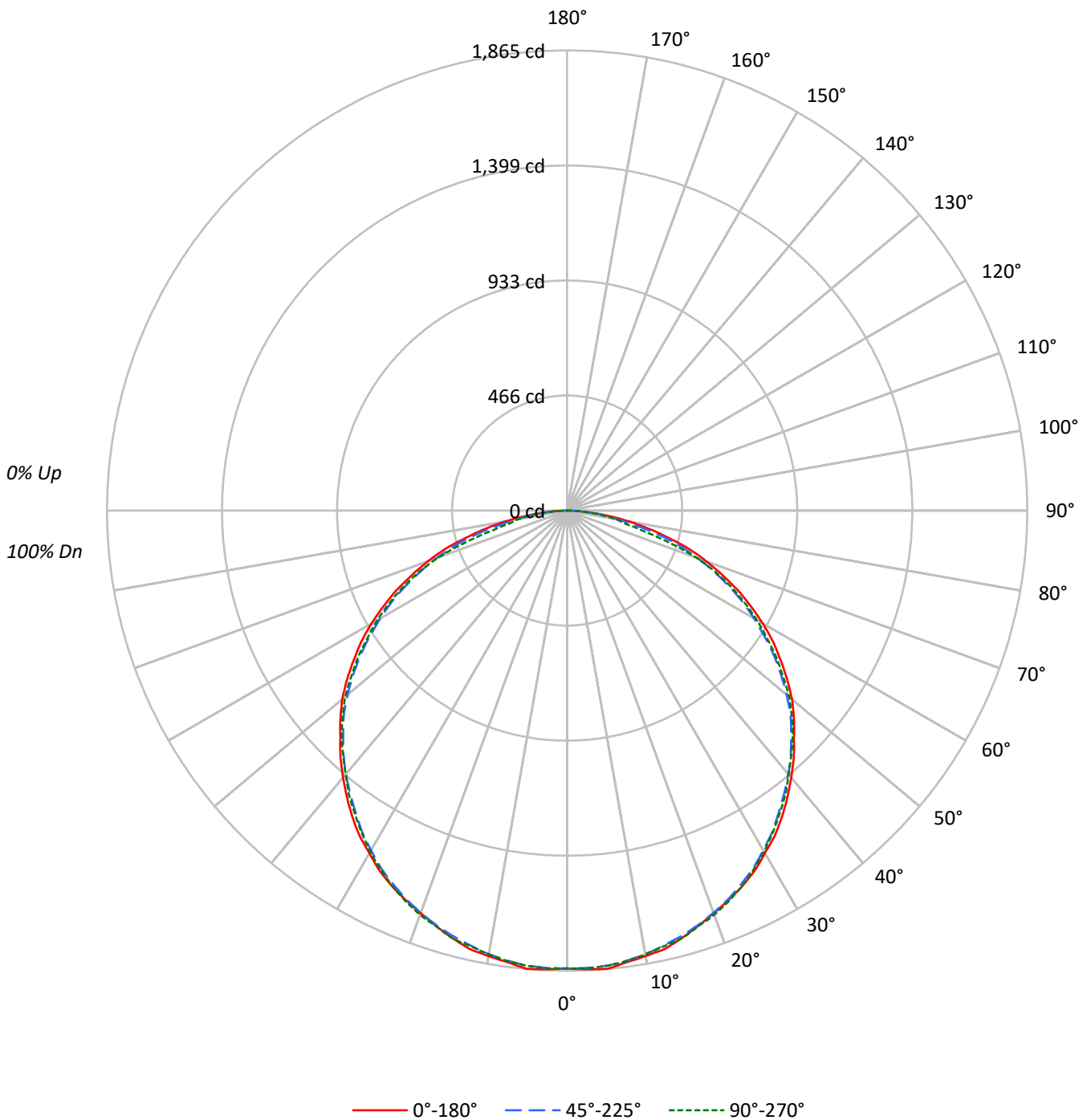
Input Watts (W): 38.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2497	2497	2497
5°	2519	2501	2502
10°	2504	2495	2495
15°	2500	2487	2501
20°	2486	2483	2496
25°	2493	2480	2492
30°	2491	2470	2479
35°	2493	2454	2464
40°	2481	2449	2453
45°	2473	2442	2460
50°	2491	2431	2459
55°	2476	2400	2426
60°	2465	2353	2391
65°	2427	2297	2340
70°	2358	2214	2186
75°	2201	2043	1656
80°	1972	1609	1554
85°	1587	1430	1304



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.0	3.2
10°-20°	505.0	9.1
20°-30°	770.5	13.9
30°-40°	940.2	16.9
40°-50°	994.8	17.9
50°-60°	923.1	16.6
60°-70°	724.3	13.1
70°-80°	406.6	7.3
80°-90°	107.8	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°	1451.4	26.2
0°-40°	2391.6	43.1
0°-60°	4309.5	77.7
0°-90°	5548.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5548.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1856	1856	1856	1856	1856	
5°	1865	1852	1851	1847	1852	177
15°	1794	1791	1785	1784	1795	506
25°	1679	1667	1670	1665	1678	774
35°	1518	1507	1494	1498	1500	949
45°	1300	1295	1284	1278	1293	1006
55°	1056	1039	1023	1026	1034	945
65°	762	742	722	722	735	752
75°	423	410	393	347	319	450
85°	103	94	93	86	84	119
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1855.5	1855.5	1855.5	1855.5	1855.5
2.5°	1860.6	1854.5	1855.5	1853.5	1856.5
5°	1864.7	1852.4	1851.4	1847.4	1852.4
7.5°	1846.3	1842.3	1840.2	1839.2	1842.3
10°	1833.1	1826.0	1826.0	1827.0	1826.0
12.5°	1820.9	1810.7	1805.6	1808.7	1808.7
15°	1794.4	1791.4	1785.3	1784.2	1795.4
17.5°	1765.9	1768.0	1761.9	1760.8	1766.9
20°	1736.4	1735.4	1734.4	1729.3	1743.5
22.5°	1708.9	1703.8	1704.9	1698.8	1713.0
25°	1679.4	1667.2	1670.3	1665.2	1678.4
27.5°	1645.8	1631.6	1633.6	1633.6	1638.7
30°	1603.1	1590.9	1589.8	1595.9	1595.9
32.5°	1564.4	1552.2	1546.1	1547.1	1549.1
35°	1517.6	1507.4	1494.2	1498.2	1500.3
37.5°	1465.7	1460.6	1445.3	1445.3	1452.4
40°	1412.7	1405.6	1394.4	1391.4	1396.5
42.5°	1359.8	1352.7	1341.5	1336.4	1344.5
45°	1299.8	1294.7	1283.5	1278.4	1292.6
47.5°	1246.8	1235.6	1228.5	1224.4	1234.6
50°	1189.8	1173.6	1161.3	1163.4	1174.6
52.5°	1124.7	1109.4	1092.1	1096.2	1102.3
55°	1055.5	1039.2	1022.9	1026.0	1034.1
57.5°	989.3	973.0	947.6	952.7	958.8
60°	916.0	893.7	874.3	877.4	888.6
62.5°	838.7	820.4	801.0	803.1	813.2
65°	762.4	742.0	721.6	721.6	734.9
67.5°	678.9	664.6	642.2	642.2	650.4
70°	599.5	581.2	562.9	550.6	555.7
72.5°	519.1	496.7	482.4	451.9	438.7
75°	423.4	410.2	392.9	347.1	318.6
77.5°	336.9	329.8	296.2	248.3	236.1
80°	254.5	249.4	207.6	200.5	200.5
82.5°	174.0	169.0	156.7	144.5	142.5
85°	102.8	93.6	92.6	85.5	84.5
87.5°	33.6	38.7	36.6	37.7	37.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)