

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: P393574

Luminaire Tested: **24EN-LD2-54-UNV-L82765-W2A-1-U (4500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393574
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 (4500K)
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: 5243.0 lumens
Efficiency: N/A
Efficacy: 135.8 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

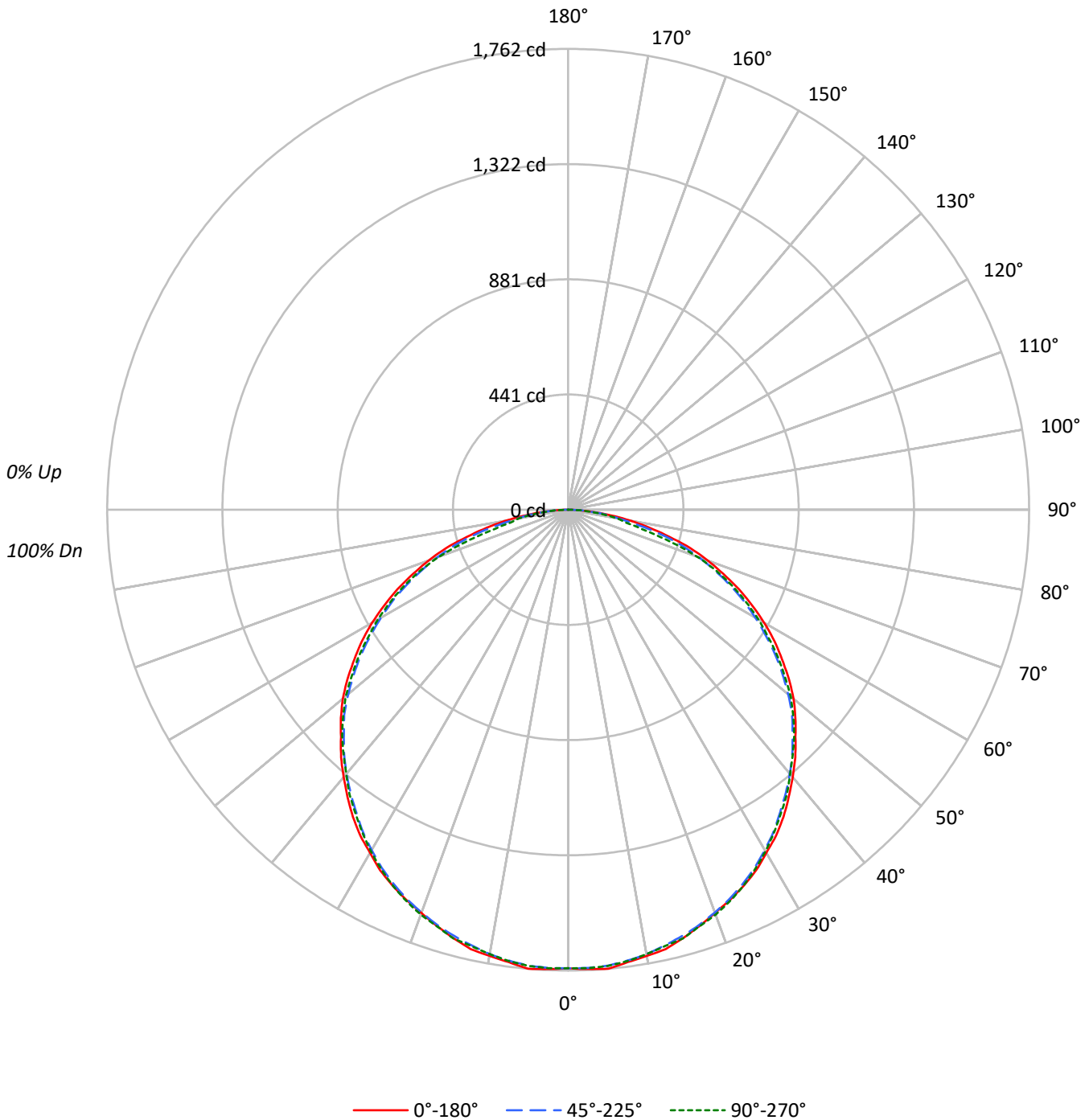
Input Watts (W): 38.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2359	2359	2359
5°	2380	2363	2364
10°	2367	2357	2357
15°	2362	2350	2363
20°	2350	2347	2359
25°	2356	2343	2355
30°	2354	2334	2343
35°	2356	2319	2329
40°	2345	2314	2318
45°	2337	2308	2324
50°	2354	2297	2323
55°	2340	2267	2292
60°	2329	2223	2260
65°	2294	2171	2211
70°	2229	2092	2066
75°	2080	1930	1565
80°	1863	1520	1468
85°	1499	1351	1232



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	166.3	3.2
10°-20°	477.2	9.1
20°-30°	728.1	13.9
30°-40°	888.5	16.9
40°-50°	940.1	17.9
50°-60°	872.3	16.6
60°-70°	684.5	13.1
70°-80°	384.2	7.3
80°-90°	101.8	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°	1371.5	26.2
0°-40°	2260.0	43.1
0°-60°	4072.4	77.7
0°-90°	5243.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5243.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1753	1753	1753	1753	1753	
5°	1762	1750	1750	1746	1750	167
15°	1696	1693	1687	1686	1697	479
25°	1587	1576	1578	1574	1586	731
35°	1434	1424	1412	1416	1418	896
45°	1228	1223	1213	1208	1222	951
55°	997	982	967	970	977	893
65°	720	701	682	682	694	710
75°	400	388	371	328	301	425
85°	97	88	88	81	80	112
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1753.4	1753.4	1753.4	1753.4	1753.4
2.5°	1758.2	1752.5	1753.4	1751.5	1754.4
5°	1762.1	1750.5	1749.6	1745.7	1750.5
7.5°	1744.8	1740.9	1739.0	1738.0	1740.9
10°	1732.3	1725.5	1725.5	1726.5	1725.5
12.5°	1720.7	1711.1	1706.3	1709.2	1709.2
15°	1695.7	1692.8	1687.0	1686.1	1696.7
17.5°	1668.8	1670.7	1664.9	1664.0	1669.7
20°	1640.9	1639.9	1639.0	1634.1	1647.6
22.5°	1614.9	1610.1	1611.1	1605.3	1618.8
25°	1587.0	1575.5	1578.4	1573.6	1586.1
27.5°	1555.3	1541.8	1543.7	1543.7	1548.5
30°	1514.9	1503.3	1502.4	1508.1	1508.1
32.5°	1478.3	1466.8	1461.0	1462.0	1463.9
35°	1434.1	1424.5	1412.0	1415.8	1417.7
37.5°	1385.0	1380.2	1365.8	1365.8	1372.5
40°	1335.0	1328.3	1317.7	1314.8	1319.6
42.5°	1285.0	1278.3	1267.7	1262.9	1270.6
45°	1228.3	1223.4	1212.9	1208.1	1221.5
47.5°	1178.2	1167.7	1160.9	1157.1	1166.7
50°	1124.4	1109.0	1097.4	1099.4	1110.0
52.5°	1062.8	1048.4	1032.0	1035.9	1041.7
55°	997.4	982.0	966.6	969.5	977.2
57.5°	934.9	919.5	895.5	900.3	906.0
60°	865.6	844.5	826.2	829.1	839.7
62.5°	792.5	775.2	757.0	758.9	768.5
65°	720.4	701.2	681.9	681.9	694.4
67.5°	641.5	628.1	606.9	606.9	614.6
70°	566.5	549.2	531.9	520.3	525.2
72.5°	490.5	469.4	455.9	427.1	414.5
75°	400.1	387.6	371.3	328.0	301.1
77.5°	318.4	311.6	279.9	234.7	223.1
80°	240.5	235.6	196.2	189.5	189.5
82.5°	164.5	159.7	148.1	136.6	134.7
85°	97.1	88.5	87.5	80.8	79.8
87.5°	31.7	36.5	34.6	35.6	35.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)