

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: P393596

Luminaire Tested: **24EN-LD2-54-UNV-L93050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393596
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-L93050-W2A-1-U (3500K)
Description: 2X4 ENCOUNTER, 5400 LUMENS, VIVIDTUNE TUNABLE WHITE
Light Source: 2700K/6500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4583.9 lumens
Efficiency: N/A
Efficacy: 118.8 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

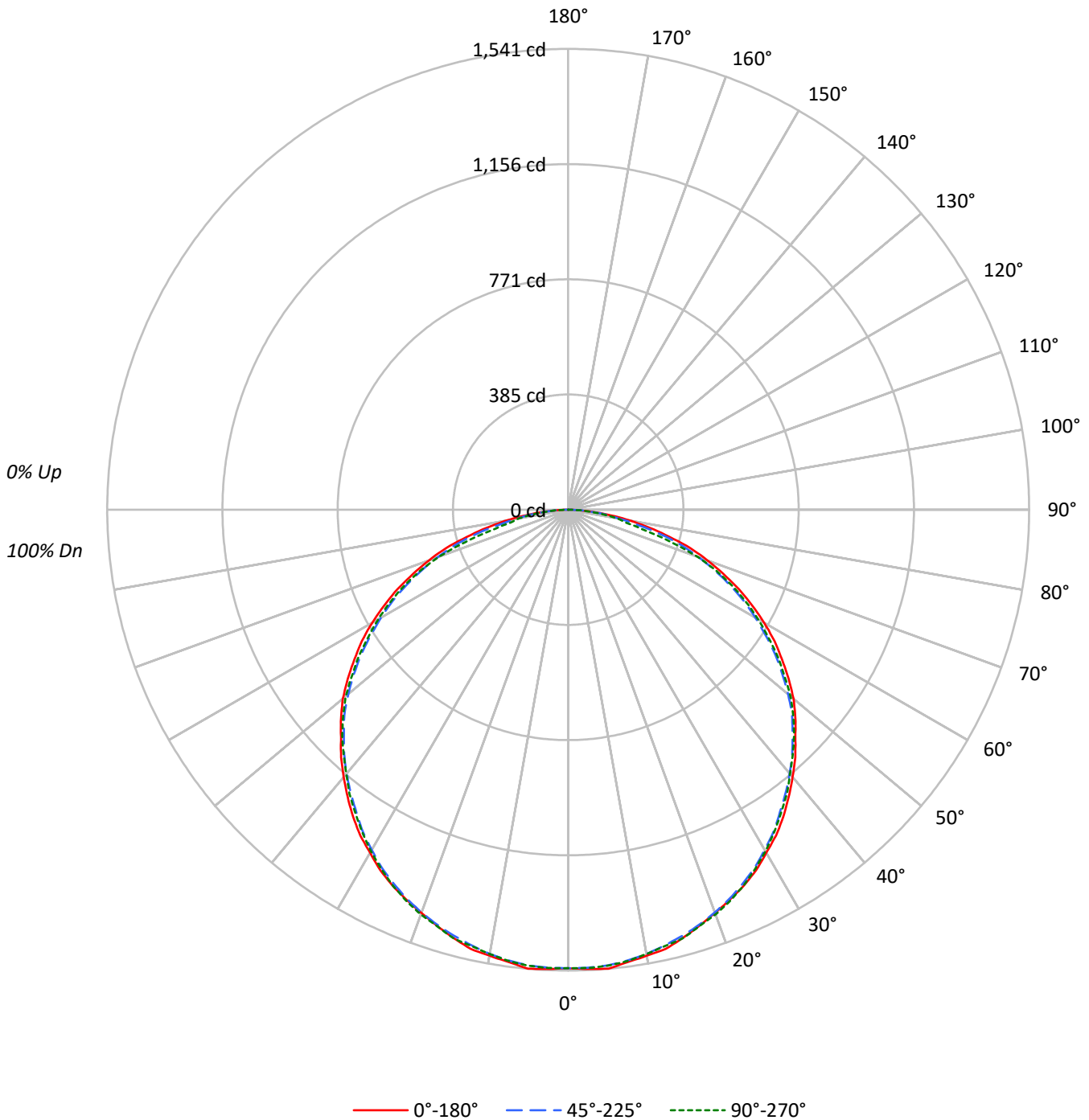
Input Watts (W): 38.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2063	2063	2063
5°	2081	2066	2067
10°	2069	2061	2061
15°	2065	2055	2066
20°	2054	2052	2063
25°	2060	2049	2059
30°	2058	2041	2049
35°	2059	2028	2036
40°	2050	2024	2027
45°	2043	2018	2032
50°	2058	2008	2031
55°	2046	1982	2004
60°	2037	1944	1975
65°	2005	1898	1933
70°	1948	1829	1806
75°	1818	1687	1368
80°	1629	1329	1284
85°	1311	1181	1078



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.4	3.2
10°-20°	417.2	9.1
20°-30°	636.6	13.9
30°-40°	776.8	16.9
40°-50°	821.9	17.9
50°-60°	762.7	16.6
60°-70°	598.4	13.1
70°-80°	335.9	7.3
80°-90°	89.0	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°	1199.1	26.2
0°-40°	1975.9	43.1
0°-60°	3560.5	77.7
0°-90°	4583.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4583.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1533	1533	1533	1533	1533	
5°	1541	1530	1530	1526	1530	146
15°	1483	1480	1475	1474	1483	418
25°	1388	1377	1380	1376	1387	639
35°	1254	1245	1234	1238	1240	784
45°	1074	1070	1060	1056	1068	831
55°	872	859	845	848	854	781
65°	630	613	596	596	607	621
75°	350	339	325	287	263	372
85°	85	77	76	71	70	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1533.0	1533.0	1533.0	1533.0	1533.0
2.5°	1537.2	1532.2	1533.0	1531.3	1533.9
5°	1540.6	1530.5	1529.6	1526.3	1530.5
7.5°	1525.4	1522.1	1520.4	1519.6	1522.1
10°	1514.5	1508.6	1508.6	1509.5	1508.6
12.5°	1504.4	1496.0	1491.8	1494.3	1494.3
15°	1482.6	1480.0	1475.0	1474.1	1483.4
17.5°	1459.0	1460.7	1455.6	1454.8	1459.8
20°	1434.6	1433.8	1432.9	1428.7	1440.5
22.5°	1411.9	1407.7	1408.6	1403.5	1415.3
25°	1387.5	1377.4	1380.0	1375.8	1386.7
27.5°	1359.8	1348.0	1349.7	1349.7	1353.9
30°	1324.5	1314.4	1313.5	1318.6	1318.6
32.5°	1292.5	1282.4	1277.4	1278.2	1279.9
35°	1253.8	1245.4	1234.5	1237.8	1239.5
37.5°	1210.9	1206.7	1194.1	1194.1	1200.0
40°	1167.2	1161.3	1152.1	1149.5	1153.8
42.5°	1123.5	1117.6	1108.3	1104.1	1110.9
45°	1073.9	1069.7	1060.4	1056.2	1068.0
47.5°	1030.1	1020.9	1015.0	1011.6	1020.0
50°	983.0	969.6	959.5	961.2	970.4
52.5°	929.2	916.6	902.3	905.7	910.7
55°	872.0	858.6	845.1	847.7	854.4
57.5°	817.4	803.9	782.9	787.1	792.2
60°	756.8	738.3	722.4	724.9	734.1
62.5°	692.9	677.8	661.8	663.5	671.9
65°	629.9	613.0	596.2	596.2	607.1
67.5°	560.9	549.1	530.6	530.6	537.4
70°	495.3	480.2	465.0	454.9	459.1
72.5°	428.9	410.4	398.6	373.4	362.4
75°	349.8	338.9	324.6	286.8	263.2
77.5°	278.3	272.5	244.7	205.2	195.1
80°	210.2	206.0	171.5	165.7	165.7
82.5°	143.8	139.6	129.5	119.4	117.7
85°	84.9	77.4	76.5	70.6	69.8
87.5°	27.8	32.0	30.3	31.1	31.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)