

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: P393599

Luminaire Tested: **24EN-LD2-54-UNV-L93050-W2A-1-U (5000K)**

Issue Date: 3/28/2020

Test Information

Test Method: LM-79-08
Report Number: P393599
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 (5000K)
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: 4808.6 lumens
Efficiency: N/A
Efficacy: 126.2 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

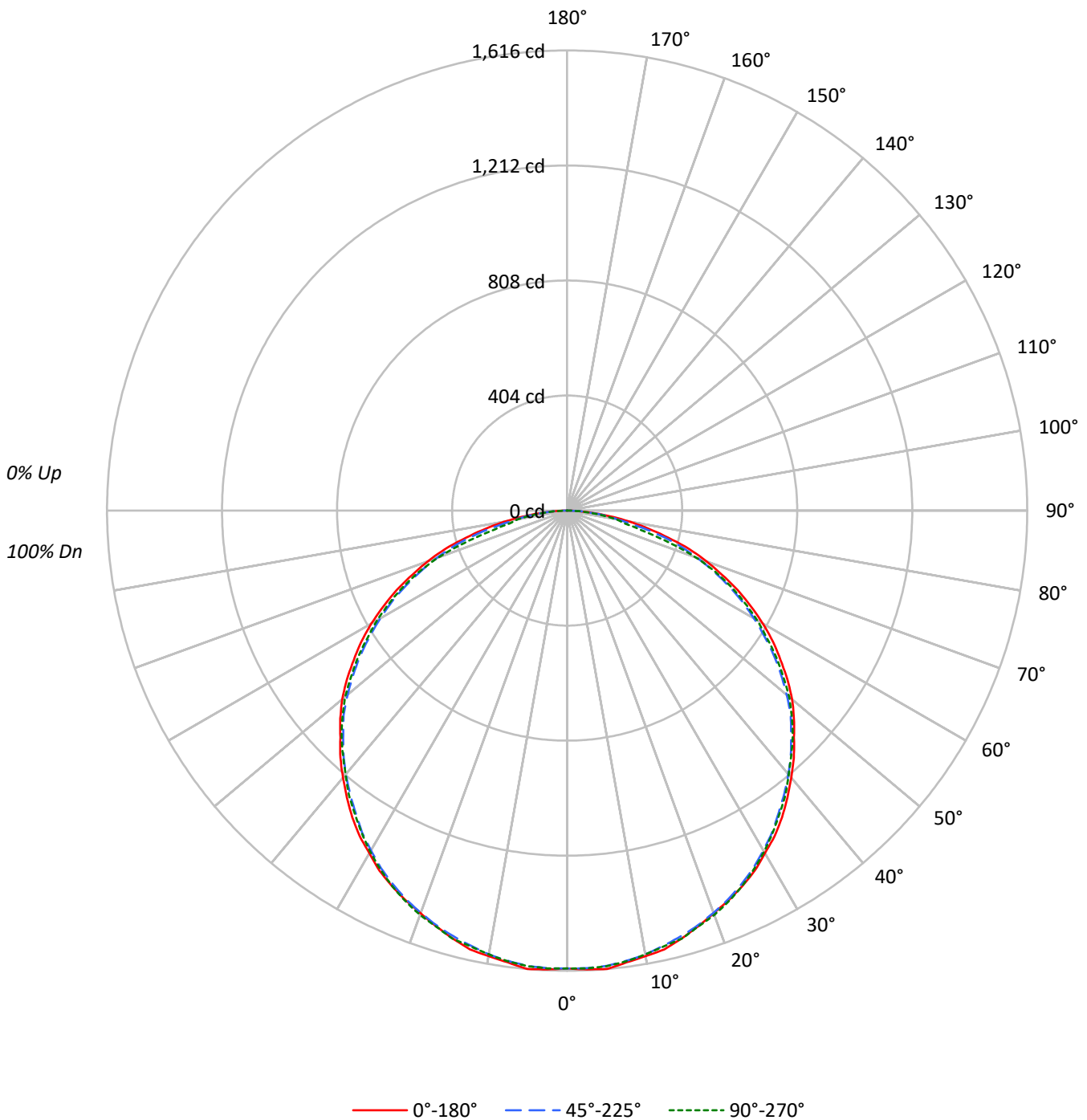
Input Watts (W): 38.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2164	2164	2164
5°	2183	2167	2168
10°	2171	2162	2162
15°	2166	2155	2168
20°	2155	2152	2164
25°	2161	2149	2160
30°	2159	2141	2149
35°	2160	2127	2136
40°	2151	2123	2126
45°	2144	2117	2132
50°	2159	2107	2131
55°	2146	2080	2103
60°	2136	2039	2072
65°	2103	1991	2028
70°	2044	1919	1895
75°	1908	1770	1435
80°	1709	1395	1347
85°	1376	1240	1130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.5	3.2
10°-20°	437.6	9.1
20°-30°	667.8	13.9
30°-40°	814.9	16.9
40°-50°	862.2	17.9
50°-60°	800.0	16.6
60°-70°	627.8	13.1
70°-80°	352.4	7.3
80°-90°	93.4	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°	1257.9	26.2
0°-40°	2072.8	43.1
0°-60°	3735.0	77.7
0°-90°	4808.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4808.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1608	1608	1608	1608	1608	
5°	1616	1606	1605	1601	1606	153
15°	1555	1553	1547	1546	1556	439
25°	1456	1445	1448	1443	1455	671
35°	1315	1306	1295	1298	1300	822
45°	1126	1122	1112	1108	1120	872
55°	915	901	887	889	896	819
65°	661	643	625	625	637	652
75°	367	356	340	301	276	390
85°	89	81	80	74	73	103
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1608.2	1608.2	1608.2	1608.2	1608.2
2.5°	1612.6	1607.3	1608.2	1606.4	1609.0
5°	1616.1	1605.5	1604.6	1601.1	1605.5
7.5°	1600.2	1596.7	1594.9	1594.0	1596.7
10°	1588.7	1582.6	1582.6	1583.5	1582.6
12.5°	1578.2	1569.3	1564.9	1567.6	1567.6
15°	1555.2	1552.6	1547.3	1546.4	1556.1
17.5°	1530.5	1532.3	1527.0	1526.1	1531.4
20°	1504.9	1504.1	1503.2	1498.8	1511.1
22.5°	1481.1	1476.7	1477.6	1472.3	1484.7
25°	1455.5	1445.0	1447.6	1443.2	1454.7
27.5°	1426.4	1414.1	1415.8	1415.8	1420.3
30°	1389.4	1378.8	1377.9	1383.2	1383.2
32.5°	1355.9	1345.3	1340.0	1340.9	1342.6
35°	1315.3	1306.5	1295.0	1298.5	1300.3
37.5°	1270.3	1265.9	1252.7	1252.7	1258.8
40°	1224.4	1218.2	1208.5	1205.9	1210.3
42.5°	1178.6	1172.4	1162.7	1158.3	1165.3
45°	1126.5	1122.1	1112.4	1108.0	1120.3
47.5°	1080.6	1070.9	1064.8	1061.2	1070.0
50°	1031.2	1017.1	1006.5	1008.3	1018.0
52.5°	974.8	961.5	946.5	950.1	955.4
55°	914.8	900.7	886.6	889.2	896.3
57.5°	857.4	843.3	821.3	825.7	831.0
60°	793.9	774.5	757.8	760.4	770.1
62.5°	726.9	711.0	694.3	696.0	704.8
65°	660.7	643.1	625.4	625.4	636.9
67.5°	588.4	576.0	556.6	556.6	563.7
70°	519.6	503.7	487.8	477.2	481.7
72.5°	449.9	430.5	418.1	391.7	380.2
75°	367.0	355.5	340.5	300.8	276.1
77.5°	292.0	285.8	256.7	215.2	204.7
80°	220.5	216.1	180.0	173.8	173.8
82.5°	150.8	146.4	135.9	125.3	123.5
85°	89.1	81.2	80.3	74.1	73.2
87.5°	29.1	33.5	31.8	32.6	32.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)