

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: P393197

Luminaire Tested: **14EN-LD2-51-UNV-L83050-W2A-1-U (4000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393197  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-56)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14EN-LD2-51-UNV-L83050-W2A-1-U (4000K)  
Description: 1X4 ENCOUNTER, 5100 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5103.5 lumens  
Efficiency: N/A  
Efficacy: 99.5 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.27 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

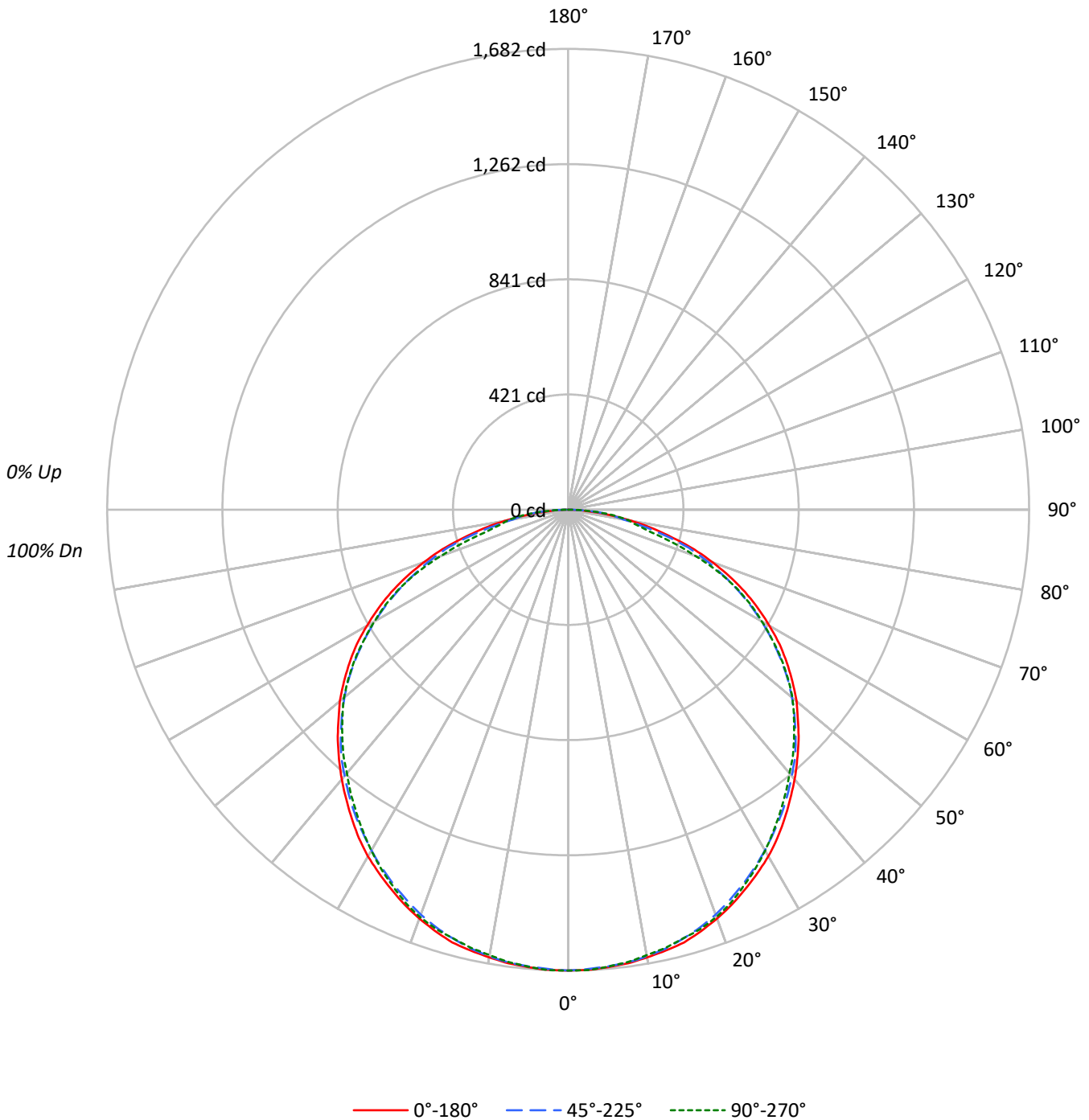
Input Watts (W): 51.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	60	68	64	59	57
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	54	49	44	42
6	69	55	46	40	67	54	46	39	53	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4526	4526	4526
5°	4528	4519	4522
10°	4533	4522	4511
15°	4555	4516	4513
20°	4547	4504	4529
25°	4538	4479	4499
30°	4540	4462	4465
35°	4523	4457	4427
40°	4515	4456	4413
45°	4525	4464	4437
50°	4553	4461	4473
55°	4570	4434	4452
60°	4562	4383	4394
65°	4534	4291	4316
70°	4409	4172	3903
75°	4104	3843	3195
80°	3626	3175	3470
85°	2606	3412	3473



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.6	3.1
10°-20°	458.6	9.0
20°-30°	697.7	13.7
30°-40°	852.3	16.7
40°-50°	907.8	17.8
50°-60°	851.3	16.7
60°-70°	675.7	13.2
70°-80°	384.6	7.5
80°-90°	115.8	2.3
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°	1315.8	25.8
0°-40°	2168.1	42.5
0°-60°	3927.3	77.0
0°-90°	5103.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5103.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1682	1682	1682	1682	1682	
5°	1676	1681	1673	1684	1674	159
15°	1635	1628	1621	1623	1620	461
25°	1528	1514	1508	1505	1515	705
35°	1377	1370	1357	1355	1348	862
45°	1189	1187	1173	1165	1166	917
55°	974	965	945	941	949	870
65°	712	698	674	679	678	702
75°	395	385	370	327	307	420
85°	84	94	110	110	112	106
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1682.1	1682.1	1682.1	1682.1	1682.1
2.5°	1681.1	1688.1	1678.1	1686.1	1682.1
5°	1676.1	1681.1	1673.1	1684.1	1674.1
7.5°	1670.1	1673.1	1667.1	1677.1	1665.1
10°	1659.0	1661.0	1655.0	1663.0	1651.0
12.5°	1648.0	1645.0	1640.9	1644.0	1637.9
15°	1634.9	1627.9	1620.9	1622.9	1619.9
17.5°	1612.8	1603.8	1598.8	1596.8	1604.8
20°	1587.7	1576.7	1572.7	1570.7	1581.7
22.5°	1560.6	1546.5	1541.5	1539.5	1552.6
25°	1528.5	1514.4	1508.4	1505.4	1515.4
27.5°	1495.3	1480.3	1473.2	1471.2	1478.3
30°	1461.2	1444.1	1436.1	1435.1	1437.1
32.5°	1421.0	1408.0	1395.9	1396.9	1392.9
35°	1376.8	1369.8	1356.7	1354.7	1347.7
37.5°	1330.6	1330.6	1313.6	1316.6	1303.5
40°	1285.4	1286.4	1268.4	1269.4	1256.3
42.5°	1237.2	1240.3	1225.2	1217.2	1214.1
45°	1189.0	1187.0	1173.0	1164.9	1165.9
47.5°	1136.8	1136.8	1120.7	1113.7	1116.7
50°	1087.6	1083.6	1065.5	1059.5	1068.5
52.5°	1031.4	1026.3	1008.3	1001.2	1010.3
55°	974.1	965.1	945.0	941.0	949.0
57.5°	914.9	902.8	880.7	878.7	882.7
60°	847.6	837.5	814.4	810.4	816.5
62.5°	782.3	768.3	745.2	745.2	751.2
65°	712.0	698.0	673.9	678.9	677.9
67.5°	637.7	623.6	602.6	604.6	593.5
70°	560.4	544.3	530.2	511.2	496.1
72.5°	482.0	465.0	459.9	415.8	400.7
75°	394.7	384.6	369.6	327.4	307.3
77.5°	317.3	307.3	280.2	248.1	253.1
80°	234.0	236.0	204.9	216.9	223.9
82.5°	153.7	158.7	165.7	174.7	176.7
85°	84.4	94.4	110.5	109.5	112.5
87.5°	33.1	44.2	48.2	50.2	47.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)