

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: P392974

Luminaire Tested: **14EN-LD2-18-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P392974  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-49)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14EN-LD2-18-UNV-L83050-W2A-1-U (4500K)  
Description: 1X4 ENCOUNTER, 1800 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1781.6 lumens  
Efficiency: N/A  
Efficacy: 103.6 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

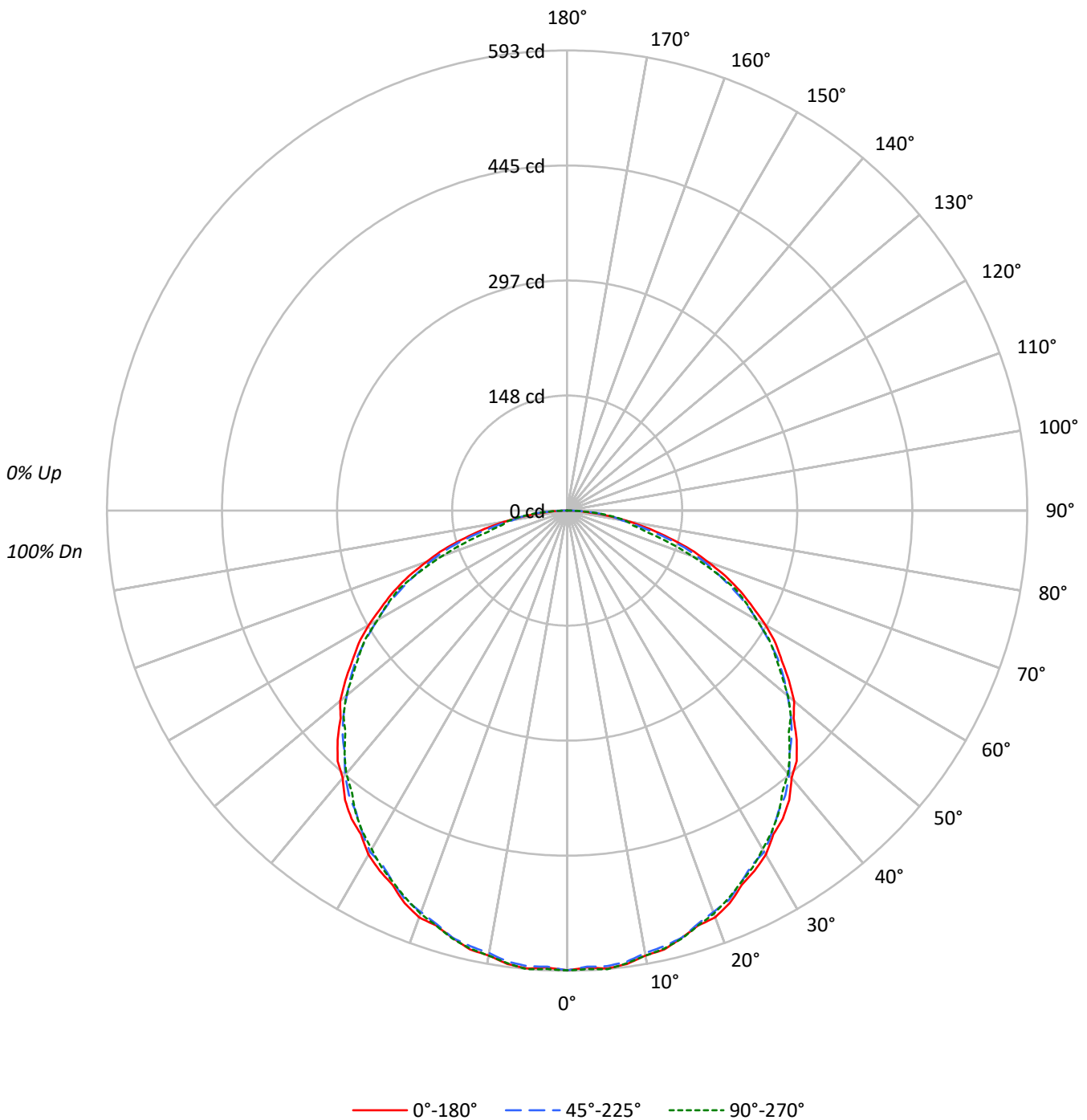
Input Watts (W): 17.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	61	68	64	60	57
4	82	69	60	53	79	68	60	53	65	58	52	63	57	52	61	55	51	49
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42
6	69	55	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	36
7	64	50	41	35	62	49	41	35	48	40	35	46	39	34	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	42	36	31	41	35	30	29
9	56	42	34	28	54	41	33	28	40	33	28	39	32	28	38	32	27	26
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°	1594	1594	1594
5°	1600	1592	1603
10°	1591	1582	1591
15°	1588	1588	1591
20°	1597	1577	1583
25°	1580	1572	1572
30°	1591	1578	1565
35°	1592	1558	1561
40°	1580	1563	1555
45°	1592	1557	1538
50°	1598	1551	1555
55°	1585	1552	1537
60°	1589	1523	1517
65°	1568	1484	1523
70°	1514	1449	1353
75°	1418	1323	1101
80°	1246	1103	1199
85°	911	1195	1195



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.1	3.1
10°-20°	160.9	9.0
20°-30°	245.0	13.7
30°-40°	298.8	16.8
40°-50°	316.8	17.8
50°-60°	296.3	16.6
60°-70°	234.4	13.2
70°-80°	133.0	7.5
80°-90°	40.4	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°	462.0	25.9
0°-40°	760.8	42.7
0°-60°	1373.9	77.1
0°-90°	1781.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1781.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	592	592	592	592	592	
5°	592	590	589	589	593	56
15°	570	569	570	566	571	161
25°	532	533	529	533	529	247
35°	484	481	474	476	475	302
45°	418	413	409	405	404	322
55°	338	336	331	327	328	303
65°	246	242	233	235	239	243
75°	136	133	127	113	106	145
85°	30	33	39	39	39	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	592.4	592.4	592.4	592.4	592.4
2.5°	589.3	594.4	588.3	596.4	591.4
5°	592.4	590.3	589.3	589.3	593.4
7.5°	589.3	586.3	586.3	584.2	588.3
10°	582.2	586.3	579.1	587.3	582.2
12.5°	579.1	576.1	575.1	575.1	578.1
15°	570.0	569.0	570.0	565.9	571.0
17.5°	560.8	565.9	558.8	565.9	560.8
20°	557.8	554.7	550.6	552.7	552.7
22.5°	547.6	541.5	543.5	539.4	541.5
25°	532.3	533.3	529.3	533.3	529.3
27.5°	523.2	522.1	515.0	518.1	518.1
30°	512.0	506.9	507.9	500.8	503.8
32.5°	494.7	494.7	491.6	491.6	490.6
35°	484.5	481.4	474.3	476.3	475.3
37.5°	470.2	463.1	462.1	456.0	456.0
40°	449.9	448.9	444.8	441.7	442.8
42.5°	437.7	433.6	424.4	426.5	424.4
45°	418.3	413.2	409.2	405.1	404.1
47.5°	395.9	395.9	390.8	387.8	390.8
50°	381.7	378.6	370.5	370.5	371.5
52.5°	360.3	356.2	351.2	348.1	348.1
55°	337.9	335.9	330.8	326.7	327.7
57.5°	318.6	314.5	306.4	306.4	308.4
60°	295.2	291.1	283.0	281.9	281.9
62.5°	269.7	267.7	259.5	258.5	261.6
65°	246.3	242.2	233.1	235.1	239.2
67.5°	220.9	214.8	207.6	209.7	205.6
70°	192.4	189.3	184.2	177.1	172.0
72.5°	166.9	161.8	158.8	144.5	138.4
75°	136.4	133.3	127.2	113.0	105.9
77.5°	108.9	106.9	96.7	84.5	85.5
80°	80.4	83.5	71.2	74.3	77.4
82.5°	53.9	55.0	58.0	61.1	61.1
85°	29.5	32.6	38.7	38.7	38.7
87.5°	12.2	15.3	17.3	17.3	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)