

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: P393034

Luminaire Tested: **14EN-LD2-28-UNV-L83050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393034  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-51)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14EN-LD2-28-UNV-L83050-W2A-1-U (2700K)  
Description: 1X4 ENCOUNTER, 2800 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2698.5 lumens  
Efficiency: N/A  
Efficacy: 95.0 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

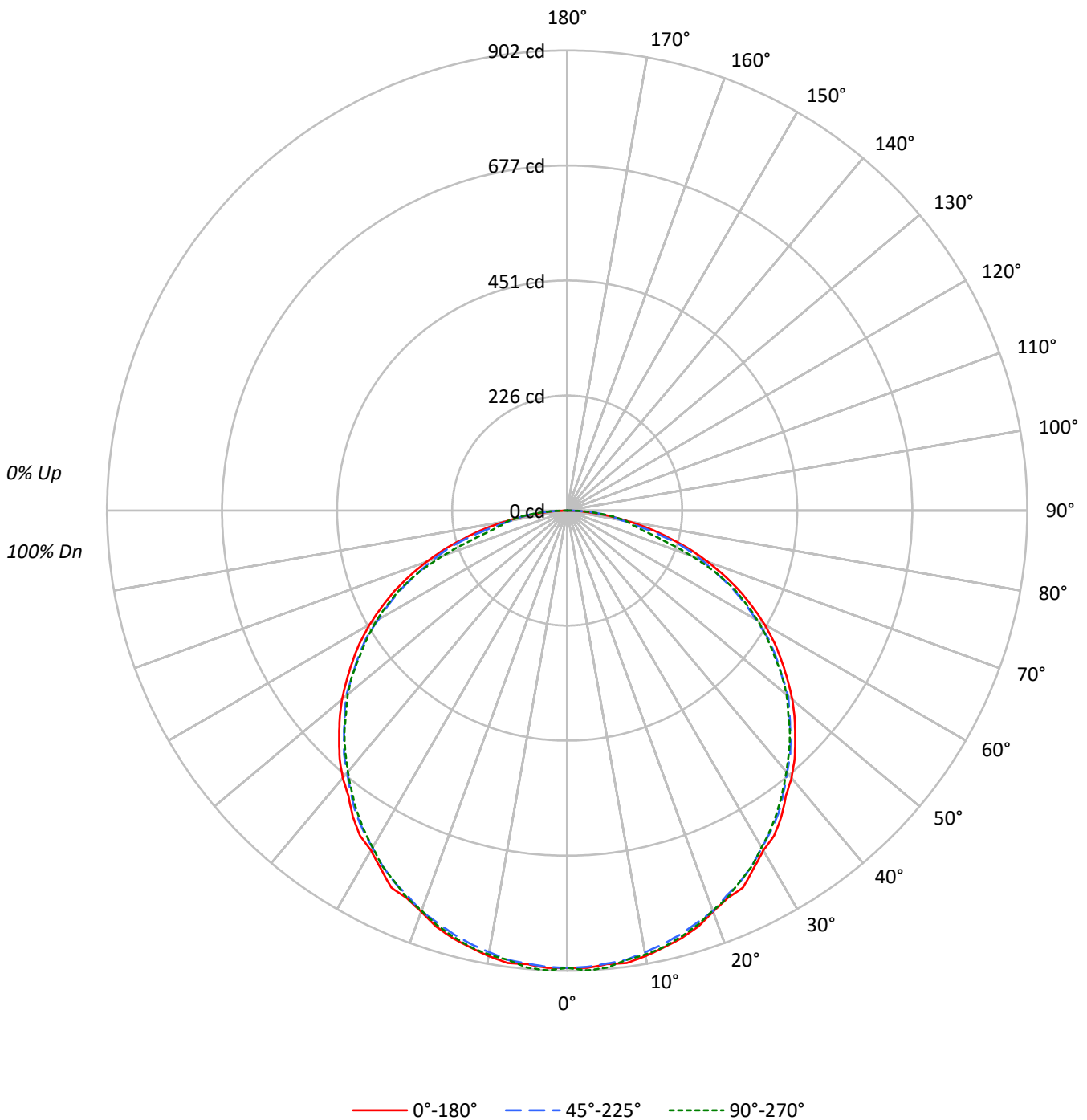
Input Watts (W): 28.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2412	2412	2412
5°	2411	2408	2429
10°	2423	2402	2415
15°	2416	2395	2408
20°	2395	2393	2390
25°	2421	2383	2381
30°	2389	2371	2368
35°	2406	2374	2361
40°	2403	2356	2349
45°	2405	2354	2350
50°	2411	2367	2351
55°	2408	2345	2327
60°	2404	2300	2321
65°	2378	2255	2285
70°	2300	2186	2042
75°	2156	2016	1625
80°	1884	1660	1808
85°	1430	1819	1819



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.0	3.2
10°-20°	243.6	9.0
20°-30°	370.9	13.7
30°-40°	452.3	16.8
40°-50°	479.9	17.8
50°-60°	449.2	16.6
60°-70°	355.0	13.2
70°-80°	200.9	7.4
80°-90°	61.6	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°	699.5	25.9
0°-40°	1151.8	42.7
0°-60°	2081.0	77.1
0°-90°	2698.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2698.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	896	896	896	896	896	
5°	892	893	892	897	899	85
15°	867	861	860	864	864	245
25°	815	807	803	801	802	373
35°	732	731	723	715	719	457
45°	632	629	618	616	618	488
55°	513	510	500	500	496	459
65°	373	369	354	359	359	368
75°	207	202	194	169	156	220
85°	46	50	59	59	59	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	896.3	896.3	896.3	896.3	896.3
2.5°	897.3	898.2	895.4	896.3	902.1
5°	892.5	893.4	891.5	897.3	899.2
7.5°	894.4	889.6	888.6	890.5	888.6
10°	886.7	885.7	879.0	880.9	883.8
12.5°	877.0	875.1	870.3	875.1	876.1
15°	867.4	860.6	859.7	864.5	864.5
17.5°	854.8	854.8	847.1	847.1	851.0
20°	836.5	839.4	835.5	835.5	834.6
22.5°	822.0	820.1	817.2	824.9	821.1
25°	815.3	806.6	802.7	800.8	801.8
27.5°	791.2	793.1	784.4	780.5	785.4
30°	769.0	768.0	763.2	765.1	762.2
32.5°	755.5	746.8	743.9	741.9	741.9
35°	732.3	731.3	722.7	714.9	718.8
37.5°	704.3	704.3	696.6	694.7	693.7
40°	684.1	677.3	670.6	671.5	668.6
42.5°	659.9	655.1	647.4	639.7	643.5
45°	632.0	629.1	618.5	615.6	617.5
47.5°	604.9	598.2	591.4	591.4	587.6
50°	576.0	570.2	565.4	559.6	561.5
52.5°	544.2	543.2	529.7	526.8	530.7
55°	513.3	510.4	499.8	499.8	495.9
57.5°	481.4	476.6	467.9	465.0	464.1
60°	446.7	440.9	427.4	424.5	431.3
62.5°	410.0	404.3	391.7	392.7	395.6
65°	373.4	368.6	354.1	358.9	358.9
67.5°	333.8	326.1	313.6	315.5	312.6
70°	292.3	287.5	277.9	267.3	259.5
72.5°	251.8	246.0	241.2	216.1	203.6
75°	207.4	201.6	193.9	168.8	156.3
77.5°	166.9	162.1	144.7	127.4	130.3
80°	121.6	127.4	107.1	113.8	116.7
82.5°	83.0	83.9	87.8	92.6	90.7
85°	46.3	50.2	58.9	58.9	58.9
87.5°	17.4	25.1	26.1	27.0	27.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)