

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: P393036

Luminaire Tested: **14EN-LD2-28-UNV-L83050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393036  
Test Lab: INNOVATION CENTER (G3)  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14EN-LD2-28-UNV-L83050-W2A-1-U (3500K)  
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: 2796.9 lumens  
Efficiency: N/A  
Efficacy: 96.1 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

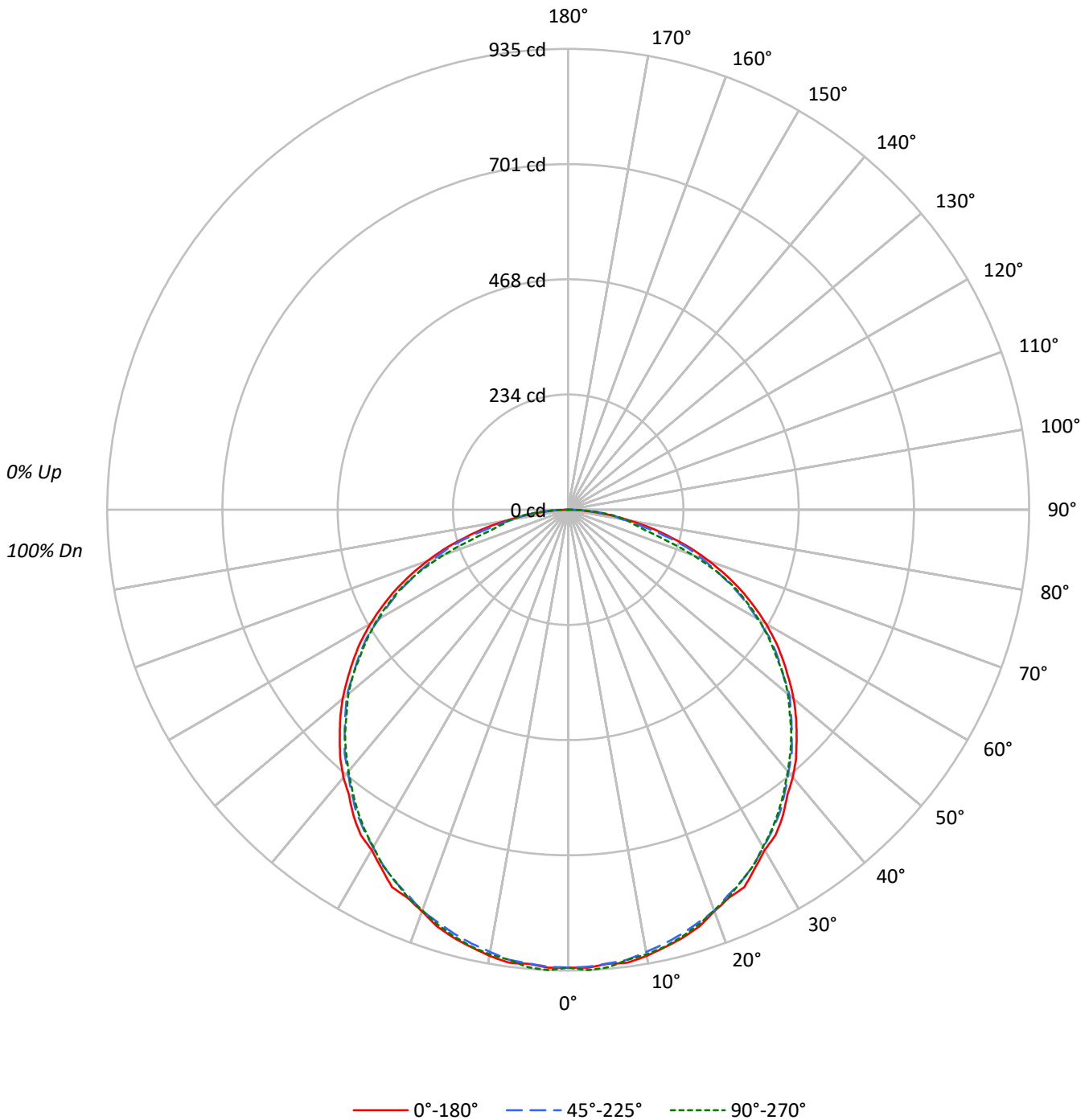
Input Watts (W): 29.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2500	2500	2500
5°	2499	2496	2518
10°	2511	2489	2503
15°	2505	2482	2496
20°	2483	2480	2477
25°	2509	2470	2467
30°	2476	2458	2455
35°	2493	2461	2447
40°	2491	2441	2434
45°	2493	2439	2436
50°	2499	2453	2436
55°	2496	2430	2411
60°	2492	2384	2406
65°	2464	2337	2369
70°	2384	2266	2116
75°	2235	2090	1684
80°	1953	1720	1875
85°	1482	1883	1883



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.1	3.2
10°-20°	252.5	9.0
20°-30°	384.4	13.7
30°-40°	468.8	16.8
40°-50°	497.4	17.8
50°-60°	465.6	16.6
60°-70°	367.9	13.2
70°-80°	208.2	7.4
80°-90°	63.9	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°	725.0	25.9
0°-40°	1193.8	42.7
0°-60°	2156.9	77.1
0°-90°	2796.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2796.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	929	929	929	929	929	
5°	925	926	924	930	932	88
15°	899	892	891	896	896	253
25°	845	836	832	830	831	387
35°	759	758	749	741	745	474
45°	655	652	641	638	640	506
55°	532	529	518	518	514	475
65°	387	382	367	372	372	381
75°	215	209	201	175	162	228
85°	48	52	61	61	61	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	929	929	929	929	929
2.5°	930	931	928	929	935
5°	925	926	924	930	932
7.5°	927	922	921	923	921
10°	919	918	911	913	916
12.5°	909	907	902	907	908
15°	899	892	891	896	896
17.5°	886	886	878	878	882
20°	867	870	866	866	865
22.5°	852	850	847	855	851
25°	845	836	832	830	831
27.5°	820	822	813	809	814
30°	797	796	791	793	790
32.5°	783	774	771	769	769
35°	759	758	749	741	745
37.5°	730	730	722	720	719
40°	709	702	695	696	693
42.5°	684	679	671	663	667
45°	655	652	641	638	640
47.5°	627	620	613	613	609
50°	597	591	586	580	582
52.5°	564	563	549	546	550
55°	532	529	518	518	514
57.5°	499	494	485	482	481
60°	463	457	443	440	447
62.5°	425	419	406	407	410
65°	387	382	367	372	372
67.5°	346	338	325	327	324
70°	303	298	288	277	269
72.5°	261	255	250	224	211
75°	215	209	201	175	162
77.5°	173	168	150	132	135
80°	126	132	111	118	121
82.5°	86	87	91	96	94
85°	48	52	61	61	61
87.5°	18	26	27	28	28
90°	0	0	0	0	0

(END OF REPORT)