

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: P393070

Luminaire Tested: **14EN-LD2-33-UNV-L83050-W2A-1-U (4500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393070  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-52)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14EN-LD2-33-UNV-L83050-W2A-1-U (4500K)  
Description: 1X4 ENCOUNTER, 3300 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3363.9 lumens  
Efficiency: N/A  
Efficacy: 108.5 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

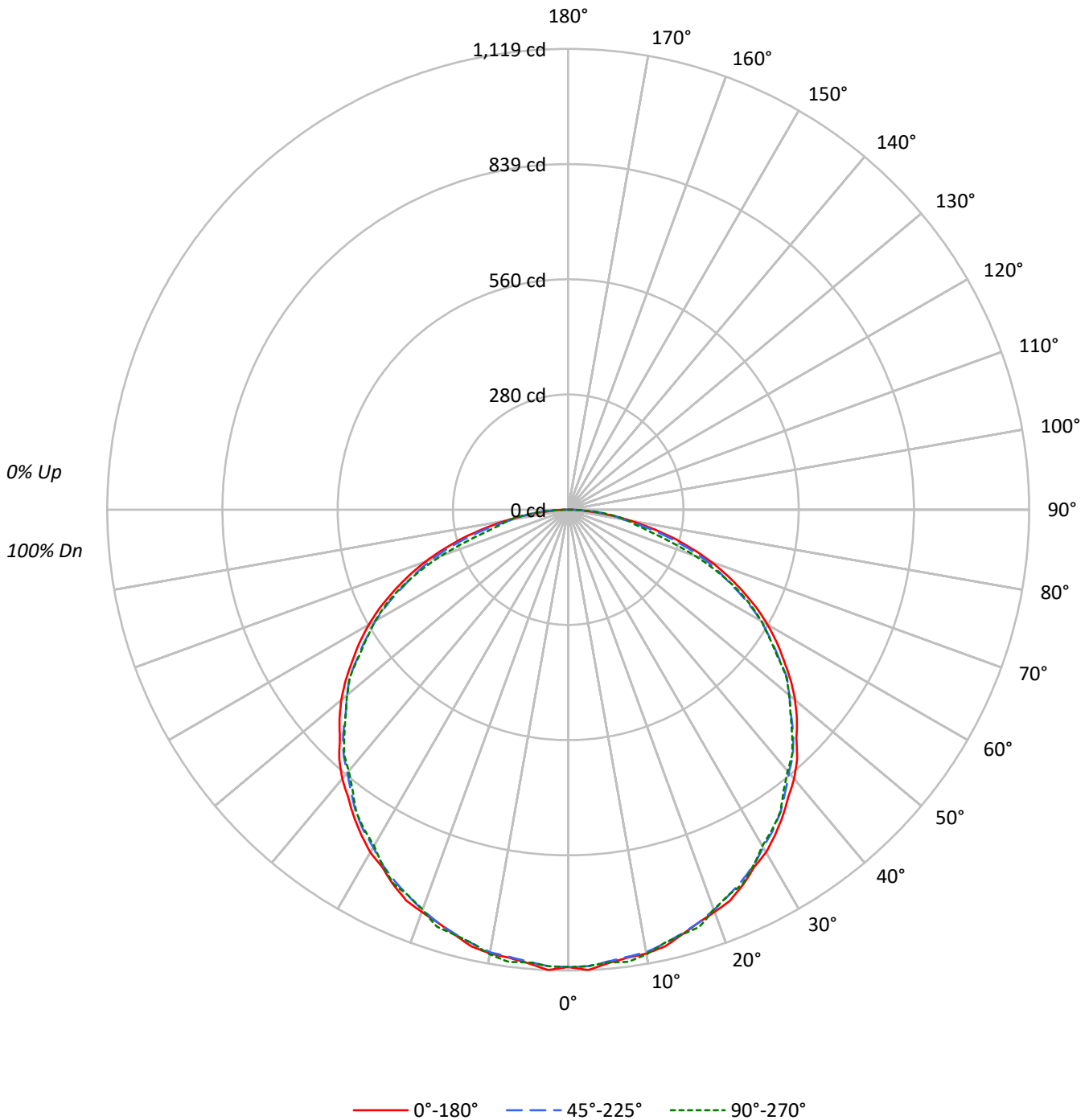
Input Watts (W): 31  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	95	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	34	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°	2988	2988	2988
5°	2986	2975	2980
10°	2990	2981	2995
15°	2975	2969	2975
20°	2976	2961	2958
25°	2983	2956	2977
30°	2985	2941	2929
35°	2983	2949	2946
40°	2996	2928	2910
45°	2982	2940	2925
50°	3008	2932	2932
55°	2999	2922	2908
60°	3007	2909	2914
65°	2968	2812	2858
70°	2899	2779	2595
75°	2720	2530	2117
80°	2382	2114	2255
85°	1760	2263	2263



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.1	3.1
10°-20°	301.7	9.0
20°-30°	460.1	13.7
30°-40°	561.9	16.7
40°-50°	597.8	17.8
50°-60°	561.3	16.7
60°-70°	445.9	13.3
70°-80°	253.6	7.5
80°-90°	76.4	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°	866.9	25.8
0°-40°	1428.8	42.5
0°-60°	2587.9	76.9
0°-90°	3363.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3363.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1110	1110	1110	1110	1110	
5°	1105	1105	1101	1107	1103	105
15°	1068	1072	1066	1070	1068	302
25°	1005	1003	995	996	1003	463
35°	908	903	898	894	897	569
45°	784	783	772	770	768	607
55°	639	635	623	622	620	573
65°	466	459	442	449	449	461
75°	262	254	243	214	204	275
85°	57	62	73	71	73	71
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1110.4	1110.4	1110.4	1110.4	1110.4
2.5°	1118.6	1110.4	1109.4	1110.4	1109.4
5°	1105.4	1105.4	1101.3	1107.4	1103.3
7.5°	1097.2	1101.3	1095.2	1101.3	1107.4
10°	1094.2	1093.1	1091.1	1090.1	1096.2
12.5°	1086.0	1080.9	1078.9	1082.0	1077.9
15°	1067.7	1071.8	1065.7	1069.7	1067.7
17.5°	1051.4	1056.5	1051.4	1053.5	1061.6
20°	1039.2	1040.2	1034.1	1035.1	1033.1
22.5°	1027.0	1018.8	1014.8	1015.8	1013.8
25°	1004.6	1002.6	995.4	996.5	1002.6
27.5°	978.1	980.2	974.1	973.0	974.1
30°	960.8	955.7	946.6	947.6	942.5
32.5°	935.4	929.3	924.2	919.1	921.1
35°	907.9	902.8	897.7	893.7	896.7
37.5°	878.4	875.3	865.2	864.1	859.0
40°	852.9	843.8	833.6	830.5	828.5
42.5°	822.4	817.3	807.1	802.0	805.1
45°	783.7	782.7	772.5	770.5	768.5
47.5°	753.2	746.1	732.8	733.9	731.8
50°	718.6	712.5	700.3	696.2	700.3
52.5°	680.9	677.9	668.7	664.6	667.7
55°	639.2	635.1	622.9	621.9	619.9
57.5°	600.5	594.4	581.2	577.1	579.1
60°	558.8	552.7	540.5	534.4	541.5
62.5°	515.0	506.9	493.6	494.7	498.7
65°	466.2	459.0	441.7	448.9	448.9
67.5°	418.3	411.2	397.0	397.0	390.8
70°	368.5	359.3	353.2	338.9	329.8
72.5°	315.5	306.4	299.2	274.8	261.6
75°	261.6	254.5	243.3	213.7	203.6
77.5°	205.6	203.6	186.3	163.9	166.9
80°	153.7	156.7	136.4	144.5	145.5
82.5°	104.8	104.8	107.9	114.0	114.0
85°	57.0	62.1	73.3	71.2	73.3
87.5°	21.4	30.5	33.6	31.6	31.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)