

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: P393116

Luminaire Tested: **14EN-LD2-38-UNV-L93050-W2A-1-U (3500K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393116  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-53)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14EN-LD2-38-UNV-L93050-W2A-1-U (3500K)  
Description: 1X4 ENCOUNTER, 3800 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3173.0 lumens  
Efficiency: N/A  
Efficacy: 86.9 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

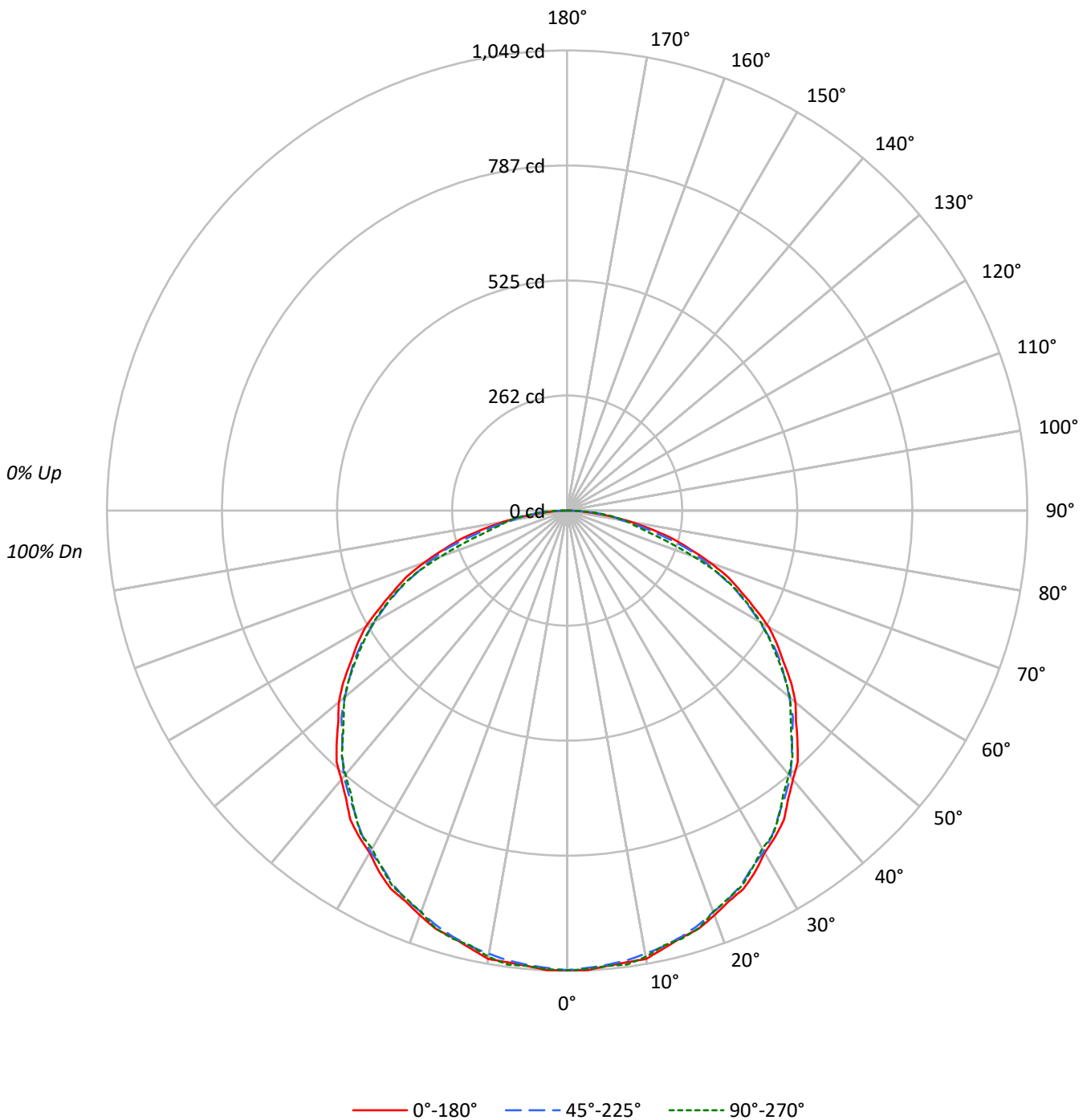
Input Watts (W): 36.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2820	2820	2820
5°	2814	2808	2814
10°	2836	2803	2822
15°	2807	2802	2814
20°	2810	2789	2789
25°	2824	2792	2801
30°	2798	2788	2765
35°	2829	2768	2771
40°	2812	2780	2762
45°	2826	2759	2749
50°	2845	2767	2778
55°	2825	2774	2746
60°	2856	2720	2743
65°	2784	2677	2699
70°	2726	2593	2415
75°	2597	2361	2002
80°	2267	1954	2125
85°	1661	2103	2130



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.2	3.1
10°-20°	284.6	9.0
20°-30°	434.1	13.7
30°-40°	530.3	16.7
40°-50°	564.0	17.8
50°-60°	529.5	16.7
60°-70°	420.0	13.2
70°-80°	239.3	7.5
80°-90°	72.0	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°	817.9	25.8
0°-40°	1348.2	42.5
0°-60°	2441.8	77.0
0°-90°	3173.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3173.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1048	1048	1048	1048	1048	
5°	1042	1048	1039	1043	1042	99
15°	1007	1009	1006	1007	1010	285
25°	951	942	940	941	944	437
35°	861	851	843	844	844	536
45°	742	738	725	726	722	573
55°	602	599	591	585	585	541
65°	437	435	420	422	424	435
75°	250	240	227	204	193	260
85°	54	60	68	68	69	66
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1047.8	1047.8	1047.8	1047.8	1047.8
2.5°	1048.6	1047.8	1043.6	1048.6	1046.1
5°	1041.9	1047.8	1039.4	1042.8	1041.9
7.5°	1038.5	1036.9	1034.3	1040.2	1043.6
10°	1037.7	1029.3	1025.9	1031.8	1032.7
12.5°	1021.7	1024.3	1017.5	1019.2	1015.8
15°	1007.4	1009.1	1005.8	1007.4	1010.0
17.5°	999.0	994.0	991.5	994.8	998.2
20°	981.4	982.2	973.8	978.0	973.8
22.5°	963.7	964.5	959.5	959.5	957.8
25°	951.1	941.8	940.2	941.0	943.5
27.5°	928.4	925.0	914.9	918.3	916.6
30°	900.6	904.0	897.3	890.5	889.7
32.5°	882.1	876.2	872.9	870.4	874.6
35°	861.1	851.0	842.6	843.5	843.5
37.5°	827.5	826.6	817.4	813.2	810.7
40°	800.6	797.2	791.3	785.4	786.3
42.5°	777.9	766.9	757.7	756.0	760.2
45°	742.5	738.3	724.9	725.7	722.4
47.5°	707.2	706.4	698.0	691.2	690.4
50°	679.5	671.1	661.0	659.3	663.5
52.5°	643.3	639.1	624.8	624.8	624.8
55°	602.1	598.7	591.2	585.3	585.3
57.5°	567.6	560.9	551.6	547.4	547.4
60°	530.6	520.5	505.4	507.1	509.6
62.5°	481.9	476.8	463.4	461.7	466.7
65°	437.3	434.8	420.5	422.1	423.8
67.5°	397.8	386.8	370.8	376.7	373.4
70°	346.5	340.6	329.6	317.9	306.9
72.5°	295.2	291.8	285.9	257.3	247.2
75°	249.8	240.5	227.1	203.5	192.6
77.5°	195.9	193.4	174.1	155.6	157.3
80°	146.3	148.0	126.1	133.7	137.1
82.5°	95.9	99.2	103.4	108.5	106.0
85°	53.8	59.7	68.1	68.1	69.0
87.5°	19.3	28.6	30.3	30.3	30.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)