

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: P393114

Luminaire Tested: **14EN-LD2-38-UNV-L93050-W2A-1-U (2700K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P393114  
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 (2700K)  
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: 3257.9 lumens  
Efficiency: N/A  
Efficacy: 89.3 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

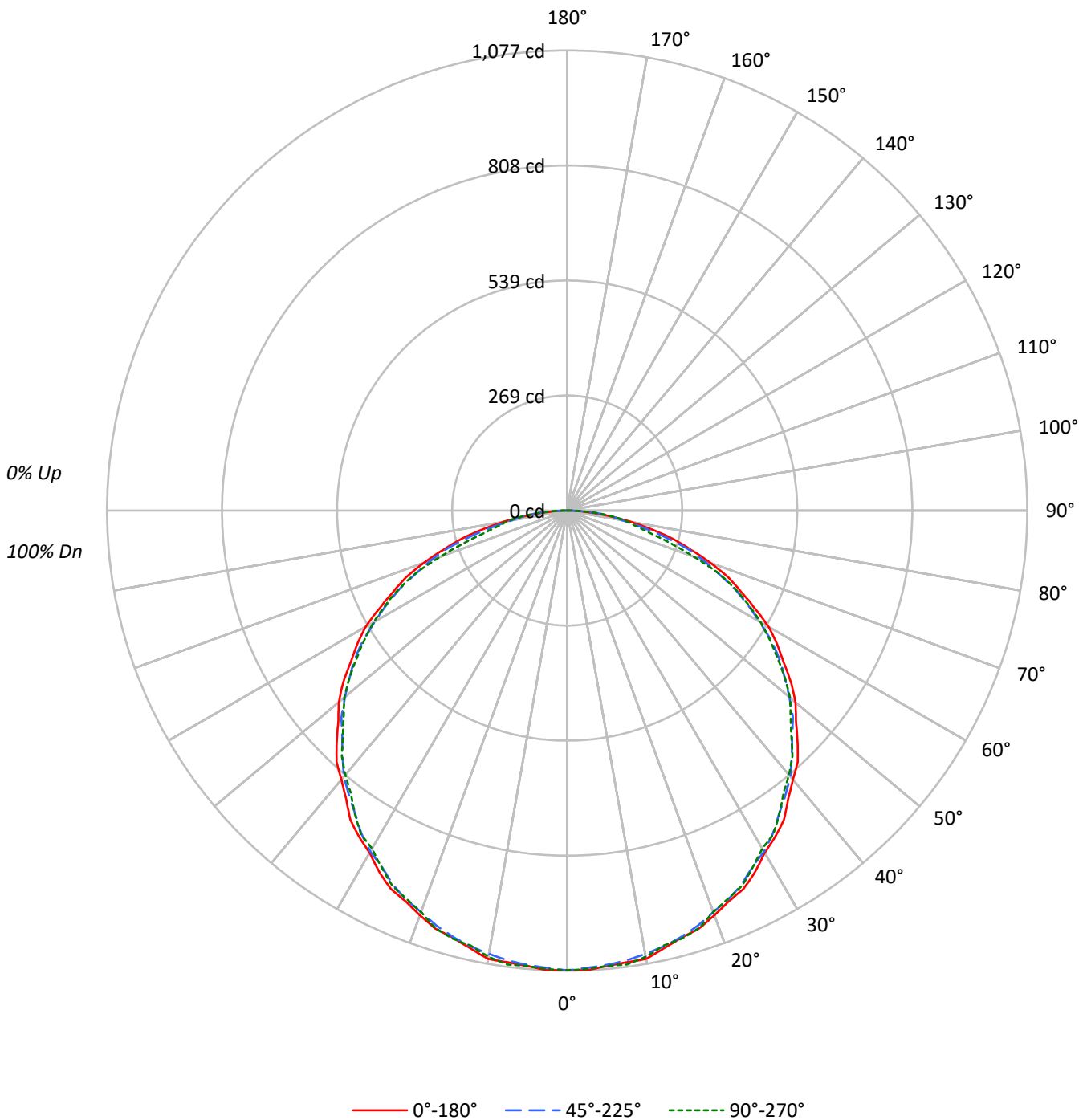
Input Watts (W): 36.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2895	2895	2895
5°	2890	2883	2890
10°	2911	2878	2897
15°	2882	2877	2889
20°	2885	2863	2863
25°	2899	2866	2877
30°	2873	2863	2838
35°	2905	2842	2845
40°	2888	2854	2836
45°	2901	2833	2823
50°	2921	2841	2852
55°	2900	2848	2819
60°	2932	2793	2816
65°	2859	2749	2771
70°	2799	2663	2480
75°	2666	2424	2056
80°	2328	2007	2180
85°	1707	2158	2186



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.8	3.1
10°-20°	292.2	9.0
20°-30°	445.7	13.7
30°-40°	544.5	16.7
40°-50°	579.1	17.8
50°-60°	543.7	16.7
60°-70°	431.2	13.2
70°-80°	245.7	7.5
80°-90°	73.9	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°	839.8	25.8
0°-40°	1384.3	42.5
0°-60°	2507.1	77.0
0°-90°	3257.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3257.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1076	1076	1076	1076	1076	
5°	1070	1076	1067	1071	1070	102
15°	1034	1036	1033	1034	1037	293
25°	976	967	965	966	969	449
35°	884	874	865	866	866	550
45°	762	758	744	745	742	589
55°	618	615	607	601	601	556
65°	449	446	432	433	435	446
75°	256	247	233	209	198	267
85°	55	61	70	70	71	68
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1075.8	1075.8	1075.8	1075.8	1075.8
2.5°	1076.7	1075.8	1071.5	1076.7	1074.1
5°	1069.8	1075.8	1067.2	1070.7	1069.8
7.5°	1066.3	1064.6	1062.0	1068.1	1071.5
10°	1065.5	1056.8	1053.4	1059.4	1060.3
12.5°	1049.1	1051.7	1044.8	1046.5	1043.0
15°	1034.4	1036.1	1032.7	1034.4	1037.0
17.5°	1025.8	1020.6	1018.0	1021.4	1024.9
20°	1007.6	1008.5	999.9	1004.2	999.9
22.5°	989.5	990.4	985.2	985.2	983.4
25°	976.5	967.0	965.3	966.2	968.8
27.5°	953.2	949.8	939.4	942.9	941.1
30°	924.7	928.2	921.3	914.4	913.5
32.5°	905.7	899.7	896.2	893.7	898.0
35°	884.2	873.8	865.2	866.0	866.0
37.5°	849.6	848.8	839.3	834.9	832.3
40°	822.0	818.5	812.5	806.4	807.3
42.5°	798.7	787.4	778.0	776.2	780.5
45°	762.4	758.1	744.3	745.1	741.7
47.5°	726.1	725.3	716.6	709.7	708.9
50°	697.7	689.0	678.7	676.9	681.2
52.5°	660.5	656.2	641.5	641.5	641.5
55°	618.2	614.8	607.0	600.9	600.9
57.5°	582.8	575.9	566.4	562.1	562.1
60°	544.8	534.5	518.9	520.6	523.2
62.5°	494.7	489.6	475.8	474.0	479.2
65°	449.0	446.4	431.7	433.4	435.2
67.5°	408.4	397.2	380.8	386.8	383.4
70°	355.7	349.7	338.5	326.4	315.2
72.5°	303.1	299.6	293.6	264.2	253.8
75°	256.4	246.9	233.1	209.0	197.7
77.5°	201.2	198.6	178.7	159.7	161.5
80°	150.2	152.0	129.5	137.3	140.7
82.5°	98.4	101.9	106.2	111.4	108.8
85°	55.3	61.3	69.9	69.9	70.8
87.5°	19.9	29.4	31.1	31.1	31.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)