

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: P392987

Luminaire Tested: **14EN-LD2-18-UNV-L93050-W2A-1-U (3000K)**

Issue Date: 3/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P392987  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-563-49)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14EN-LD2-18-UNV-L93050-W2A-1-U (3000K)  
Description: 1X4 ENCOUNTER, 1800 LUMENS, VIVIDTUNE TUNABLE WHITE  
Light Source: 2700K/6500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1438.4 lumens  
Efficiency: N/A  
Efficacy: 83.1 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

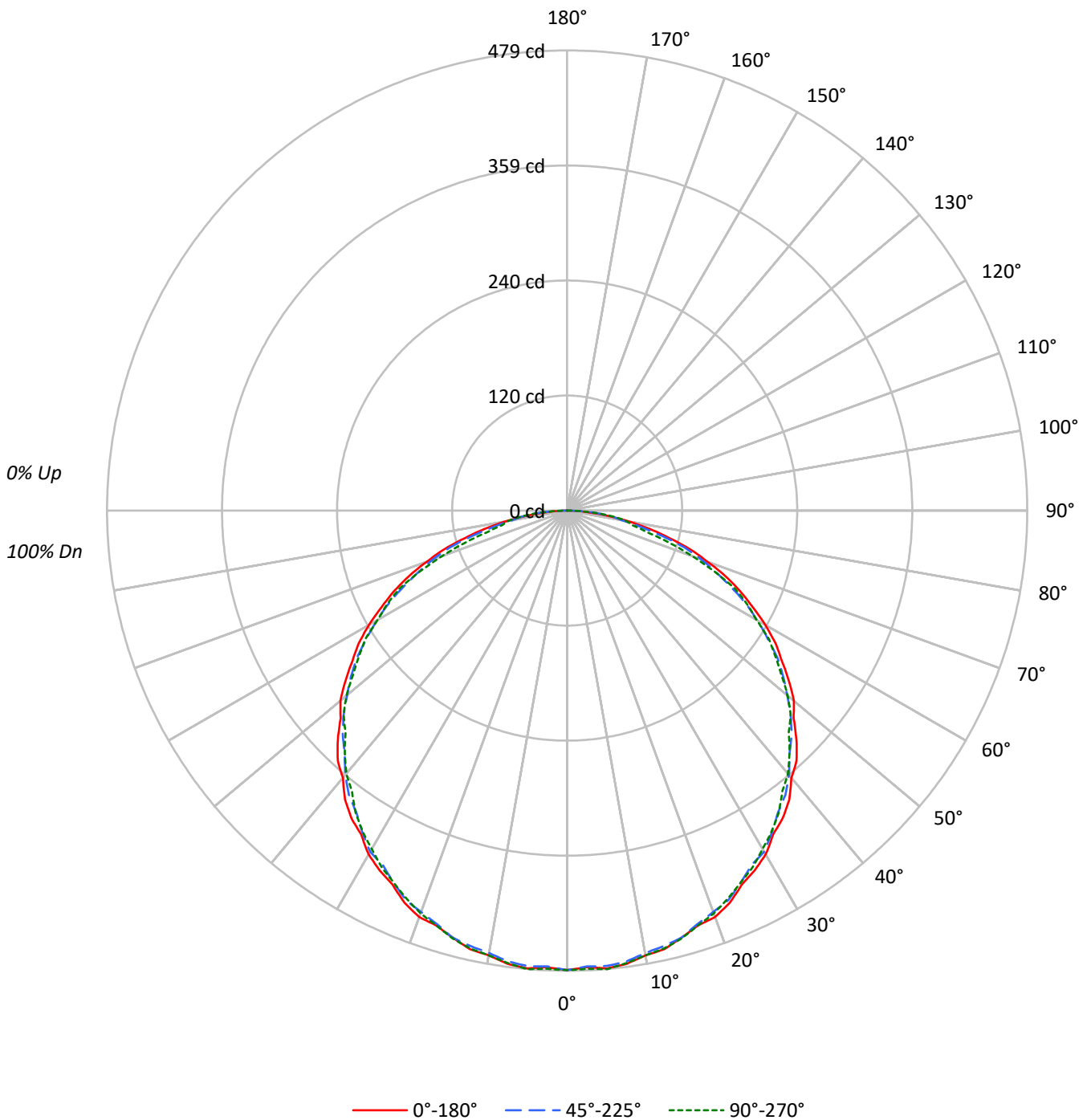
Input Watts (W): 17.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1287	1287	1287
5°	1292	1285	1294
10°	1284	1278	1284
15°	1282	1282	1284
20°	1290	1273	1278
25°	1276	1269	1269
30°	1284	1274	1264
35°	1285	1258	1261
40°	1276	1261	1256
45°	1285	1257	1241
50°	1290	1252	1256
55°	1280	1253	1241
60°	1283	1229	1225
65°	1266	1198	1230
70°	1222	1170	1093
75°	1145	1068	889
80°	1006	891	969
85°	735	963	963



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.3	3.1
10°-20°	129.9	9.0
20°-30°	197.8	13.7
30°-40°	241.2	16.8
40°-50°	255.8	17.8
50°-60°	239.2	16.6
60°-70°	189.2	13.2
70°-80°	107.4	7.5
80°-90°	32.6	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°	373.0	25.9
0°-40°	614.2	42.7
0°-60°	1109.2	77.1
0°-90°	1438.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1438.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	478	478	478	478	478	
5°	478	477	476	476	479	45
15°	460	459	460	457	461	130
25°	430	431	427	431	427	199
35°	391	389	383	385	384	244
45°	338	334	330	327	326	260
55°	273	271	267	264	265	245
65°	199	196	188	190	193	196
75°	110	108	103	91	86	117
85°	24	26	31	31	31	30
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	478.3	478.3	478.3	478.3	478.3
2.5°	475.8	479.9	475.0	481.5	477.4
5°	478.3	476.6	475.8	475.8	479.1
7.5°	475.8	473.3	473.3	471.7	475.0
10°	470.0	473.3	467.6	474.1	470.0
12.5°	467.6	465.1	464.3	464.3	466.8
15°	460.2	459.4	460.2	456.9	461.0
17.5°	452.8	456.9	451.1	456.9	452.8
20°	450.3	447.9	444.6	446.2	446.2
22.5°	442.1	437.2	438.8	435.5	437.2
25°	429.8	430.6	427.3	430.6	427.3
27.5°	422.4	421.6	415.8	418.3	418.3
30°	413.3	409.2	410.1	404.3	406.8
32.5°	399.4	399.4	396.9	396.9	396.1
35°	391.2	388.7	382.9	384.6	383.8
37.5°	379.6	373.9	373.1	368.1	368.1
40°	363.2	362.4	359.1	356.6	357.5
42.5°	353.4	350.1	342.7	344.3	342.7
45°	337.7	333.6	330.3	327.1	326.2
47.5°	319.7	319.7	315.6	313.1	315.6
50°	308.2	305.7	299.1	299.1	299.9
52.5°	290.9	287.6	283.5	281.0	281.0
55°	272.8	271.2	267.1	263.8	264.6
57.5°	257.2	253.9	247.3	247.3	249.0
60°	238.3	235.0	228.4	227.6	227.6
62.5°	217.8	216.1	209.5	208.7	211.2
65°	198.9	195.6	188.2	189.8	193.1
67.5°	178.3	173.4	167.6	169.3	166.0
70°	155.3	152.8	148.7	143.0	138.9
72.5°	134.8	130.7	128.2	116.7	111.8
75°	110.1	107.6	102.7	91.2	85.5
77.5°	87.9	86.3	78.1	68.2	69.0
80°	64.9	67.4	57.5	60.0	62.5
82.5°	43.6	44.4	46.8	49.3	49.3
85°	23.8	26.3	31.2	31.2	31.2
87.5°	9.9	12.3	14.0	14.0	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)