

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: P294814

Luminaire Tested: **14CZ2-44-HRP-UNV-L950-CD1-U**

Issue Date: 12/2/2019

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P294814  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 12/2/2019  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-44-HRP-UNV-L950-CD1-U  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS  
Light Source: (112) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

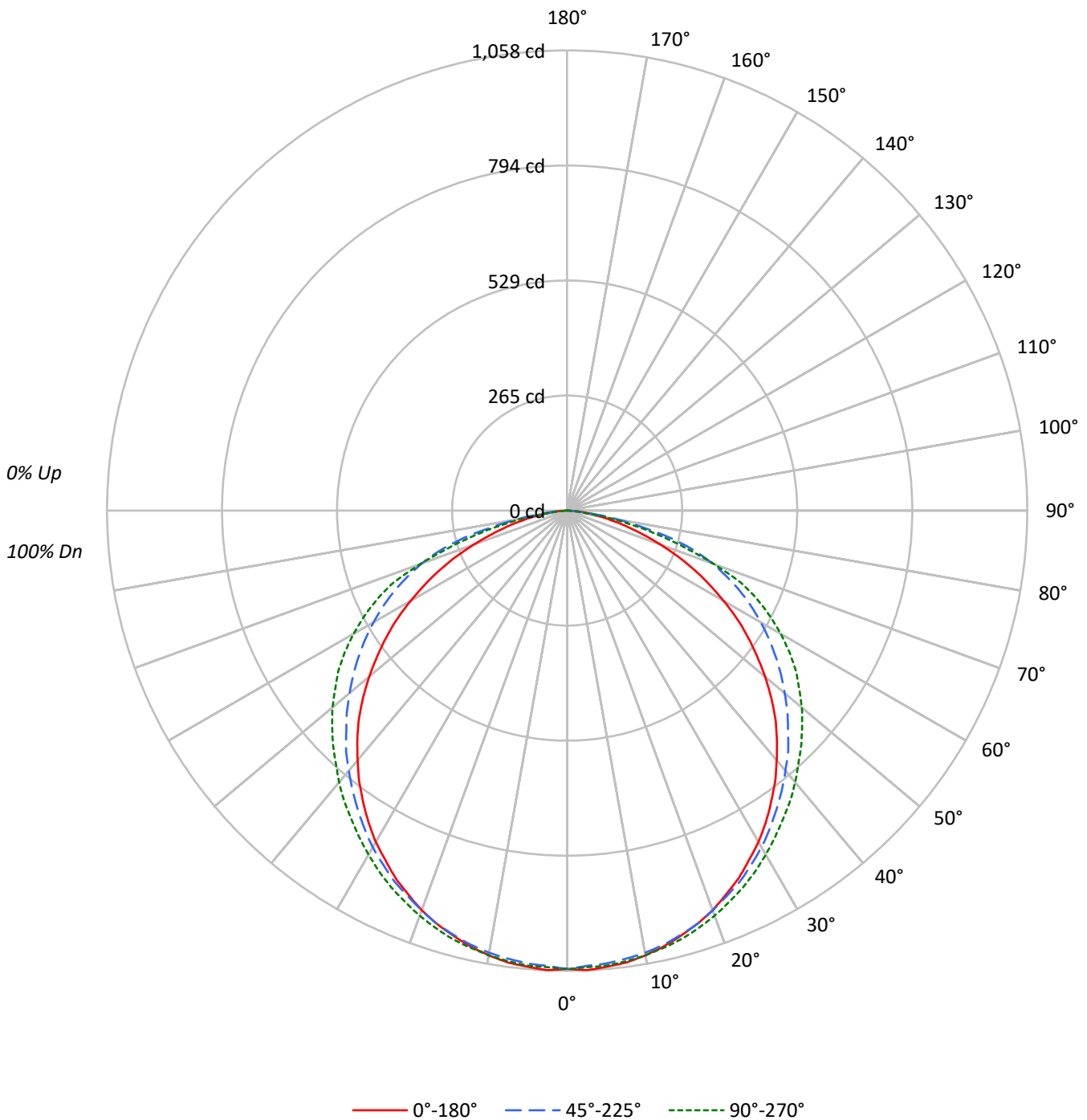
Lumens per Lamp: N/A  
Luminaire Lumens: 3102.9 lumens  
Efficiency: N/A  
Efficacy: 81.0 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 38.3  
Input Voltage (V): NR  
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	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	26	37	30	25	36	30	25	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2836	2836	2836
5°	2844	2823	2836
10°	2837	2821	2837
15°	2819	2813	2841
20°	2800	2802	2839
25°	2770	2793	2839
30°	2735	2777	2838
35°	2686	2757	2843
40°	2633	2742	2865
45°	2577	2733	2896
50°	2488	2733	2949
55°	2381	2746	3012
60°	2237	2767	3051
65°	2062	2796	3069
70°	1796	2802	2825
75°	1482	2608	2282
80°	1164	1875	1526
85°	905	722	361



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	99.8	3.2
10°-20°	286.3	9.2
20°-30°	434.7	14.0
30°-40°	526.7	17.0
40°-50°	555.1	17.9
50°-60°	518.2	16.7
60°-70°	414.1	13.3
70°-80°	227.9	7.3
80°-90°	40.2	1.3
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°	820.8	26.5
0°-40°	1347.5	43.4
0°-60°	2420.7	78.0
0°-90°	3102.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3102.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1054	1054	1054	1054	1054	
5°	1053	1050	1045	1052	1050	100
15°	1012	1012	1010	1020	1020	286
25°	933	935	941	954	956	429
35°	818	826	839	861	866	512
45°	677	690	718	750	761	521
55°	507	533	585	626	642	453
65°	324	365	439	475	482	319
75°	142	204	251	225	220	153
85°	29	37	23	15	12	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1053.8	1053.8	1053.8	1053.8	1053.8
2.5°	1057.7	1054.8	1047.9	1053.8	1050.8
5°	1052.8	1049.9	1045.0	1051.8	1049.9
7.5°	1047.9	1044.0	1039.1	1046.9	1045.0
10°	1038.2	1035.2	1032.3	1039.1	1038.2
12.5°	1026.5	1025.5	1022.6	1030.4	1029.4
15°	1011.8	1011.8	1009.9	1019.6	1019.6
17.5°	996.2	995.2	996.2	1006.9	1006.0
20°	977.7	977.7	978.6	991.3	991.3
22.5°	955.2	956.2	959.1	974.7	973.8
25°	932.8	934.7	940.6	954.3	956.2
27.5°	905.5	910.3	917.2	933.8	935.7
30°	880.1	883.0	893.8	909.4	913.3
32.5°	849.9	855.7	867.4	885.0	889.9
35°	817.7	825.5	839.1	860.6	865.5
37.5°	785.5	792.3	810.8	833.3	842.0
40°	749.4	761.1	780.6	805.9	815.7
42.5°	714.2	725.9	752.3	778.6	787.4
45°	677.1	689.8	718.1	750.3	761.1
47.5°	636.2	650.8	686.9	721.1	732.8
50°	594.2	612.8	652.8	690.8	704.5
52.5°	550.3	573.7	619.6	659.6	672.3
55°	507.4	532.7	585.4	626.4	642.0
57.5°	463.5	490.8	550.3	597.1	605.9
60°	415.7	448.8	514.2	555.2	566.9
62.5°	368.8	406.9	477.1	516.2	525.9
65°	323.9	364.9	439.1	475.2	482.0
67.5°	275.2	323.9	397.1	430.3	432.2
70°	228.3	284.9	356.1	371.7	359.1
72.5°	182.5	243.0	308.3	295.6	284.9
75°	142.5	203.9	250.8	225.4	219.5
77.5°	105.4	166.8	179.5	165.9	155.1
80°	75.1	131.7	121.0	103.4	98.5
82.5°	51.7	82.9	66.3	51.7	44.9
85°	29.3	37.1	23.4	14.6	11.7
87.5°	12.7	8.8	4.9	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)