

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: P271945

Luminaire Tested: **14CZ2-39-S-UNV-L930-CD1-U**

Issue Date: 3/3/2020

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: P271945  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-39-S-UNV-L930-CD1-U  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 90CRI  
Light Source: (112) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

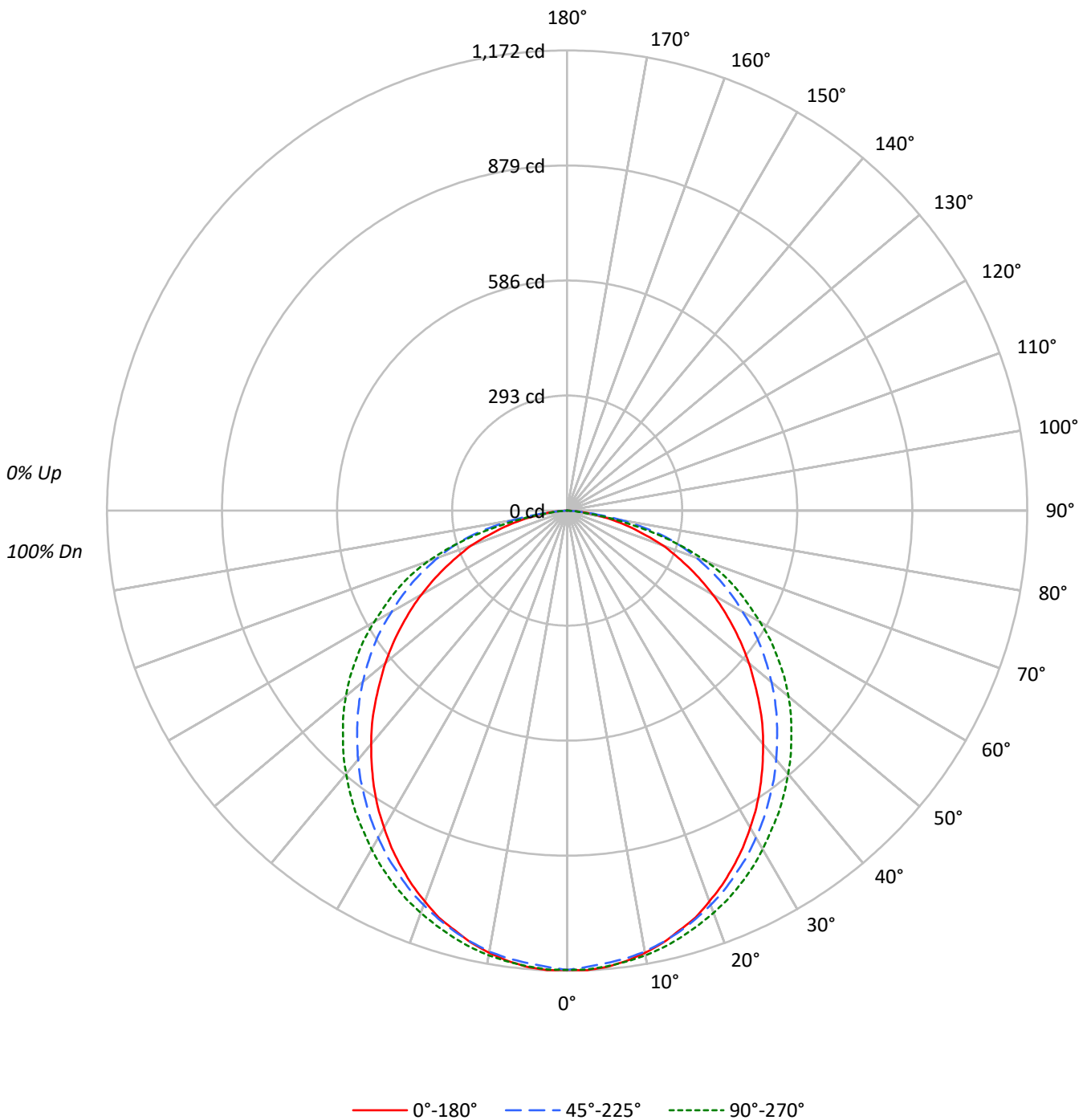
Lumens per Lamp: N/A  
Luminaire Lumens: 3277.0 lumens  
Efficiency: N/A  
Efficacy: 101.5 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 32.3  
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	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	3148	3148	3148
5°	3151	3125	3147
10°	3125	3117	3143
15°	3083	3092	3132
20°	3034	3062	3122
25°	2972	3025	3112
30°	2898	2989	3095
35°	2818	2946	3085
40°	2728	2911	3077
45°	2628	2875	3073
50°	2530	2843	3081
55°	2424	2821	3072
60°	2308	2781	3052
65°	2173	2772	3052
70°	2046	2748	2965
75°	1774	2686	2534
80°	1435	2165	1688
85°	954	753	500



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.5	3.4
10°-20°	314.3	9.6
20°-30°	471.5	14.4
30°-40°	562.5	17.2
40°-50°	581.5	17.7
50°-60°	530.9	16.2
60°-70°	417.8	12.7
70°-80°	243.2	7.4
80°-90°	44.8	1.4
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°	896.3	27.4
0°-40°	1458.8	44.5
0°-60°	2571.2	78.5
0°-90°	3277.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3277.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1167	1163	1157	1167	1165	111
15°	1106	1108	1110	1124	1124	312
25°	1001	1006	1019	1043	1048	461
35°	858	869	897	931	939	536
45°	690	713	756	798	808	533
55°	517	544	601	645	655	462
65°	341	377	435	470	479	339
75°	171	211	258	254	244	181
85°	31	44	24	20	16	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1169.8	1169.8	1169.8	1169.8	1169.8
2.5°	1171.5	1168.2	1163.3	1171.5	1169.8
5°	1166.6	1163.3	1156.8	1166.6	1165.0
7.5°	1156.8	1153.6	1150.3	1160.1	1158.5
10°	1143.8	1142.2	1140.6	1152.0	1150.3
12.5°	1127.6	1127.6	1126.0	1139.0	1139.0
15°	1106.5	1108.1	1109.7	1124.3	1124.3
17.5°	1087.0	1085.3	1090.2	1106.5	1108.1
20°	1059.4	1062.6	1069.1	1088.6	1090.2
22.5°	1031.7	1035.0	1046.4	1065.8	1070.7
25°	1000.9	1005.7	1018.7	1043.1	1048.0
27.5°	968.4	974.9	992.7	1018.7	1023.6
30°	932.6	942.4	961.9	991.1	996.0
32.5°	896.9	906.6	931.0	960.2	966.7
35°	857.9	869.3	896.9	931.0	939.1
37.5°	817.3	831.9	864.4	898.5	908.2
40°	776.6	792.9	828.6	864.4	875.8
42.5°	736.0	752.3	791.3	831.9	843.3
45°	690.5	713.3	755.5	797.8	807.5
47.5°	646.7	671.0	718.1	760.4	773.4
50°	604.4	628.8	679.2	723.0	736.0
52.5°	560.5	586.5	640.2	685.7	697.0
55°	516.7	544.3	601.2	645.0	654.8
57.5°	472.8	502.1	560.5	602.8	614.2
60°	428.9	459.8	516.7	558.9	567.0
62.5°	385.1	417.6	476.1	513.4	521.6
65°	341.2	376.9	435.4	469.6	479.3
67.5°	299.0	334.7	391.6	424.1	432.2
70°	260.0	292.5	349.3	373.7	376.9
72.5°	211.2	251.8	307.1	320.1	312.0
75°	170.6	211.2	258.3	253.5	243.7
77.5°	130.0	170.6	201.5	185.2	172.2
80°	92.6	133.2	139.7	115.4	108.9
82.5°	60.1	92.6	78.0	60.1	48.7
85°	30.9	43.9	24.4	19.5	16.2
87.5°	9.7	6.5	3.2	3.2	1.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)