

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: P271909

Luminaire Tested: **14CZ2-39-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: P271909
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39-UNV-L930-CD1-U
Description: 1'X4' TROFFER LED MODULE, RIBBED 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: 3243.0 lumens
Efficiency: N/A
Efficacy: 100.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

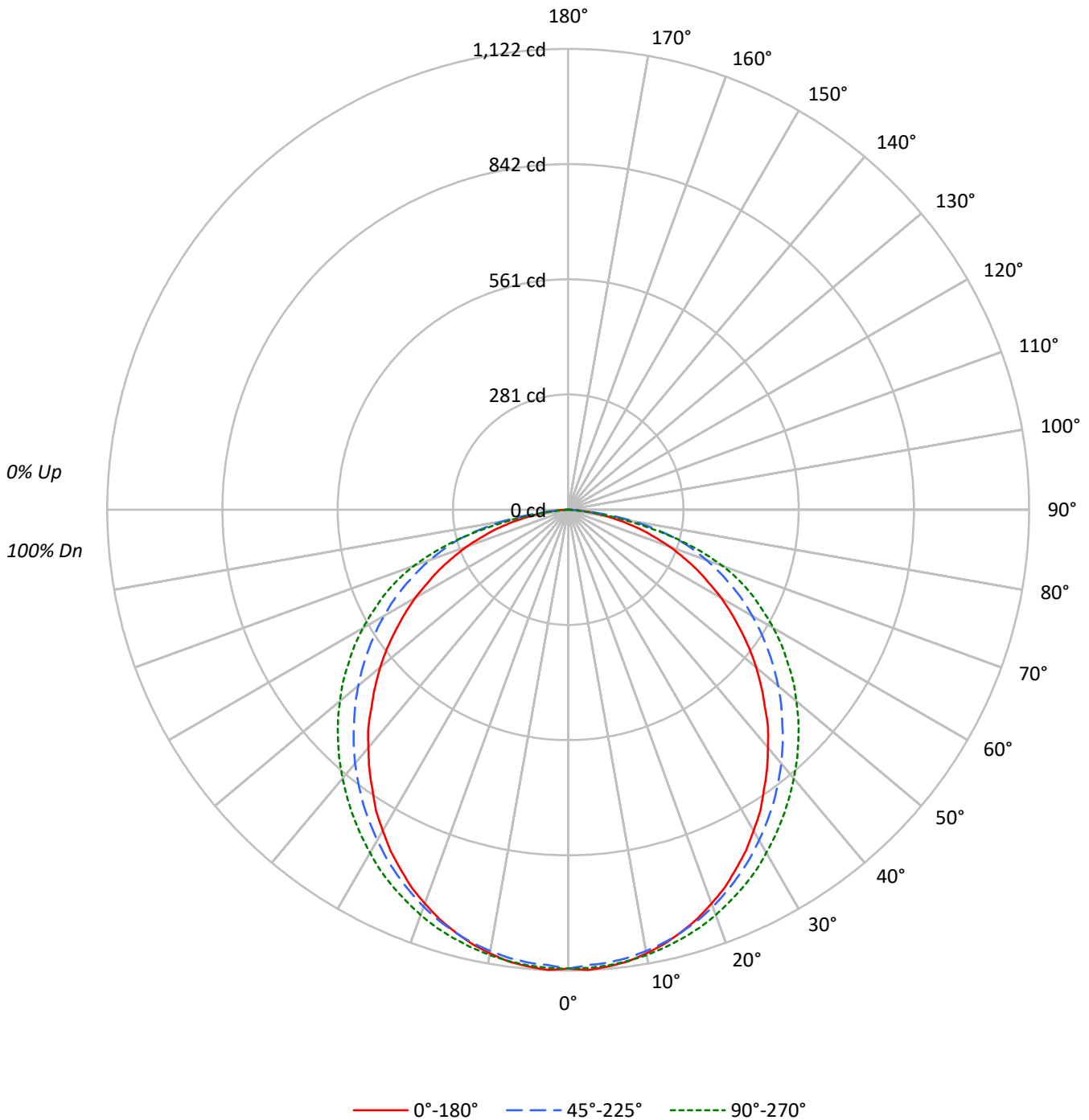
Input Watts (W): 32.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	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	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3006	3006	3006
5°	3016	2991	3008
10°	2998	2982	3009
15°	2965	2968	3008
20°	2922	2947	3007
25°	2866	2918	3004
30°	2804	2887	2997
35°	2730	2863	2996
40°	2657	2835	3000
45°	2576	2804	3016
50°	2501	2791	3036
55°	2405	2782	3064
60°	2320	2787	3106
65°	2201	2795	3154
70°	2065	2816	3152
75°	1873	2842	2850
80°	1536	2455	2029
85°	1139	1161	469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.7	3.3
10°-20°	302.0	9.3
20°-30°	454.9	14.0
30°-40°	545.9	16.8
40°-50°	569.0	17.5
50°-60°	526.8	16.2
60°-70°	425.6	13.1
70°-80°	259.5	8.0
80°-90°	53.6	1.7
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°	862.6	26.6
0°-40°	1408.6	43.4
0°-60°	2504.3	77.2
0°-90°	3243.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3243.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1117	1117	1117	1117	1117	
5°	1116	1114	1107	1115	1114	106
15°	1064	1065	1065	1080	1080	300
25°	965	971	983	1007	1012	445
35°	831	844	871	903	912	520
45°	677	697	737	778	792	523
55°	513	539	593	639	653	459
65°	346	380	439	483	495	342
75°	180	220	273	278	274	189
85°	37	55	38	21	15	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1117.2	1117.2	1117.2	1117.2	1117.2
2.5°	1121.6	1117.9	1110.0	1117.9	1116.5
5°	1116.5	1113.6	1107.1	1115.1	1113.6
7.5°	1109.3	1106.4	1100.6	1110.0	1108.5
10°	1097.0	1095.5	1091.2	1102.0	1101.3
12.5°	1082.5	1081.8	1079.6	1091.9	1091.2
15°	1064.4	1065.2	1065.2	1079.6	1079.6
17.5°	1044.2	1045.6	1048.5	1064.4	1066.6
20°	1020.3	1023.2	1029.0	1047.1	1050.0
22.5°	995.7	997.9	1006.6	1028.3	1031.2
25°	965.4	971.2	982.7	1007.3	1011.6
27.5°	936.4	941.5	957.4	982.7	990.0
30°	902.5	910.4	929.2	956.7	964.6
32.5°	869.9	878.6	900.3	932.1	939.3
35°	830.9	843.9	871.4	903.2	911.9
37.5°	795.4	807.7	838.8	873.5	883.7
40°	756.4	771.6	807.0	843.9	854.0
42.5°	720.2	734.7	773.0	810.6	824.4
45°	676.8	697.1	736.9	778.1	792.5
47.5°	637.1	657.3	702.9	747.0	760.0
50°	597.3	619.0	666.7	712.3	725.3
52.5°	556.1	579.2	630.6	676.1	691.3
55°	512.7	539.4	593.0	639.2	653.0
57.5°	471.5	499.0	556.1	603.1	616.8
60°	431.0	459.2	517.8	562.6	577.1
62.5°	386.1	419.4	480.2	524.3	535.1
65°	345.7	379.6	438.9	483.0	495.3
67.5°	303.0	339.9	399.2	439.7	451.2
70°	262.5	300.8	357.9	395.5	400.6
72.5°	219.1	258.2	316.0	339.9	339.9
75°	180.1	219.8	273.3	277.7	274.1
77.5°	137.4	181.5	216.2	207.5	198.9
80°	99.1	142.5	158.4	142.5	130.9
82.5°	66.5	103.4	95.5	75.9	67.3
85°	36.9	55.0	37.6	21.0	15.2
87.5°	13.7	12.3	3.6	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)