

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: P271911

Luminaire Tested: **14CZ2-39-UNV-L940-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: P271911
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-L940-CD1-U
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 90CRI
Light Source: (112) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

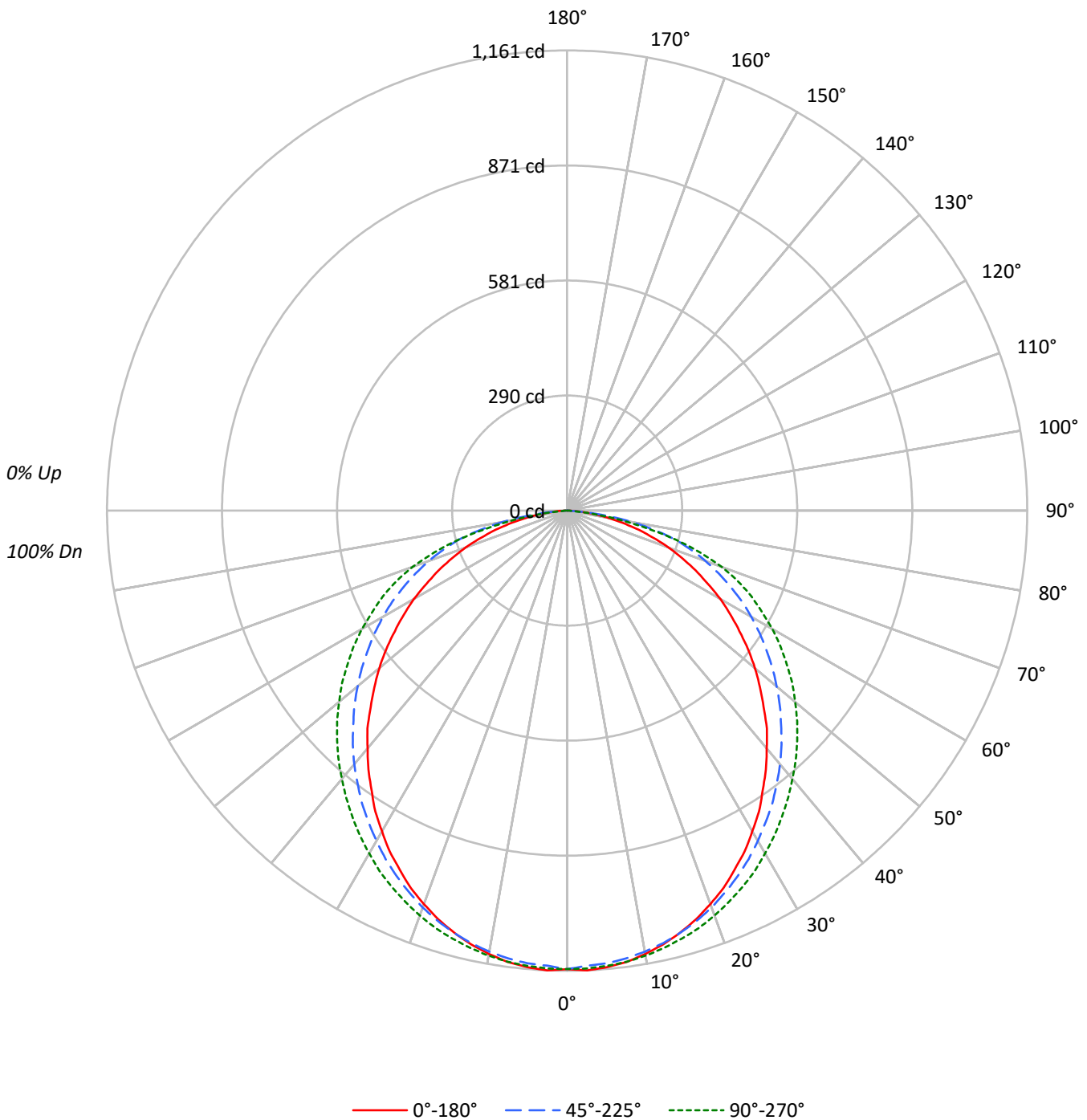
Lumens per Lamp: N/A
Luminaire Lumens: 3358.0 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	3113	3113	3113
5°	3123	3097	3115
10°	3104	3087	3116
15°	3071	3073	3114
20°	3025	3051	3113
25°	2968	3021	3110
30°	2904	2990	3104
35°	2826	2964	3102
40°	2751	2935	3106
45°	2667	2904	3123
50°	2589	2890	3144
55°	2491	2881	3172
60°	2402	2885	3216
65°	2279	2894	3266
70°	2138	2916	3264
75°	1938	2942	2951
80°	1590	2541	2100
85°	1179	1201	485



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.5	3.3
10°-20°	312.7	9.3
20°-30°	471.1	14.0
30°-40°	565.3	16.8
40°-50°	589.2	17.5
50°-60°	545.4	16.2
60°-70°	440.7	13.1
70°-80°	268.7	8.0
80°-90°	55.5	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°	893.2	26.6
0°-40°	1458.5	43.4
0°-60°	2593.1	77.2
0°-90°	3358.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3358.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1157	1157	1157	1157	1157	
5°	1156	1153	1146	1155	1153	110
15°	1102	1103	1103	1118	1118	311
25°	1000	1006	1018	1043	1048	461
35°	860	874	902	935	944	539
45°	701	722	763	806	821	542
55°	531	559	614	662	676	476
65°	358	393	454	500	513	354
75°	186	228	283	288	284	196
85°	38	57	39	22	16	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1156.8	1156.8	1156.8	1156.8	1156.8
2.5°	1161.3	1157.6	1149.4	1157.6	1156.1
5°	1156.1	1153.1	1146.4	1154.6	1153.1
7.5°	1148.6	1145.6	1139.6	1149.4	1147.9
10°	1135.9	1134.4	1129.9	1141.1	1140.4
12.5°	1120.9	1120.2	1117.9	1130.6	1129.9
15°	1102.2	1102.9	1102.9	1117.9	1117.9
17.5°	1081.2	1082.7	1085.7	1102.2	1104.4
20°	1056.5	1059.5	1065.5	1084.2	1087.2
22.5°	1031.0	1033.3	1042.3	1064.7	1067.7
25°	999.6	1005.6	1017.6	1043.0	1047.5
27.5°	969.7	974.9	991.4	1017.6	1025.1
30°	934.5	942.7	962.2	990.6	998.9
32.5°	900.8	909.7	932.2	965.2	972.6
35°	860.3	873.8	902.3	935.2	944.2
37.5°	823.6	836.4	868.6	904.5	915.0
40°	783.2	798.9	835.6	873.8	884.3
42.5°	745.8	760.7	800.4	839.4	853.6
45°	700.8	721.8	763.0	805.7	820.6
47.5°	659.7	680.6	727.8	773.5	787.0
50°	618.5	640.9	690.4	737.5	751.0
52.5°	575.8	599.8	652.9	700.1	715.8
55°	530.9	558.6	614.0	661.9	676.1
57.5°	488.2	516.6	575.8	624.5	638.7
60°	446.3	475.5	536.1	582.5	597.5
62.5°	399.8	434.3	497.2	542.9	554.1
65°	357.9	393.1	454.5	500.2	512.9
67.5°	313.7	351.9	413.3	455.2	467.2
70°	271.8	311.5	370.6	409.6	414.8
72.5°	226.9	267.3	327.2	351.9	351.9
75°	186.4	227.6	283.0	287.5	283.8
77.5°	142.3	187.9	223.9	214.9	205.9
80°	102.6	147.5	164.0	147.5	135.5
82.5°	68.9	107.1	98.8	78.6	69.6
85°	38.2	56.9	38.9	21.7	15.7
87.5°	14.2	12.7	3.7	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)