

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: P271907

Luminaire Tested: **14CZ2-35-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: P271907
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: 14CZ2-35-UNV-L940-CD1-U
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 90CRI
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

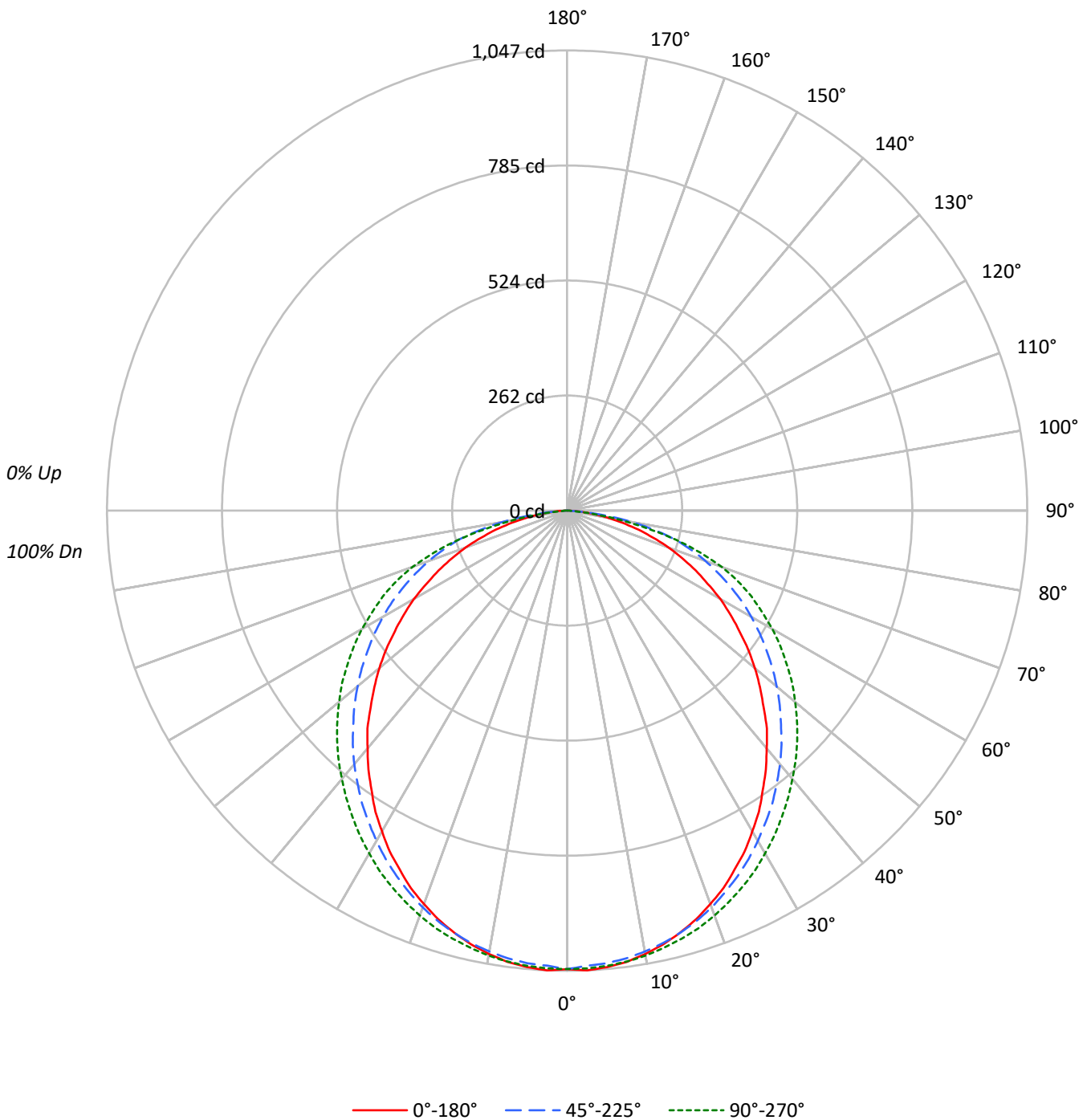
Lumens per Lamp: N/A
Luminaire Lumens: 3028.0 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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°	2807	2807	2807
5°	2816	2792	2809
10°	2799	2784	2810
15°	2769	2771	2808
20°	2728	2751	2808
25°	2676	2725	2805
30°	2618	2696	2799
35°	2549	2673	2797
40°	2481	2647	2801
45°	2405	2618	2816
50°	2335	2606	2835
55°	2246	2597	2860
60°	2166	2602	2900
65°	2055	2609	2945
70°	1928	2629	2943
75°	1748	2653	2661
80°	1433	2292	1894
85°	1062	1084	438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.7	3.3
10°-20°	282.0	9.3
20°-30°	424.8	14.0
30°-40°	509.7	16.8
40°-50°	531.3	17.5
50°-60°	491.8	16.2
60°-70°	397.4	13.1
70°-80°	242.3	8.0
80°-90°	50.0	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°	805.5	26.6
0°-40°	1315.2	43.4
0°-60°	2338.3	77.2
0°-90°	3028.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3028.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1043	1043	1043	1043	1043	
5°	1042	1040	1034	1041	1040	99
15°	994	994	994	1008	1008	280
25°	901	907	918	940	945	415
35°	776	788	814	843	851	486
45°	632	651	688	726	740	488
55°	479	504	554	597	610	429
65°	323	354	410	451	462	319
75°	168	205	255	259	256	177
85°	34	51	35	20	14	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1043.2	1043.2	1043.2	1043.2	1043.2
2.5°	1047.2	1043.8	1036.4	1043.8	1042.5
5°	1042.5	1039.8	1033.7	1041.1	1039.8
7.5°	1035.7	1033.0	1027.6	1036.4	1035.1
10°	1024.3	1022.9	1018.8	1029.0	1028.3
12.5°	1010.7	1010.1	1008.0	1019.5	1018.8
15°	993.9	994.5	994.5	1008.0	1008.0
17.5°	975.0	976.3	979.0	993.9	995.9
20°	952.7	955.4	960.8	977.7	980.4
22.5°	929.7	931.8	939.9	960.1	962.8
25°	901.4	906.8	917.6	940.5	944.6
27.5°	874.4	879.1	893.9	917.6	924.3
30°	842.6	850.1	867.6	893.3	900.7
32.5°	812.2	820.3	840.6	870.3	877.1
35°	775.8	787.9	813.6	843.3	851.4
37.5°	742.7	754.2	783.2	815.6	825.1
40°	706.2	720.4	753.5	787.9	797.4
42.5°	672.5	686.0	721.8	756.9	769.7
45°	632.0	650.9	688.0	726.5	740.0
47.5°	594.8	613.7	656.3	697.5	709.6
50°	557.7	578.0	622.5	665.1	677.2
52.5°	519.2	540.8	588.8	631.3	645.5
55°	478.7	503.7	553.6	596.9	609.7
57.5°	440.2	465.9	519.2	563.1	575.9
60°	402.4	428.7	483.4	525.3	538.8
62.5°	360.5	391.6	448.3	489.5	499.6
65°	322.7	354.5	409.8	451.0	462.5
67.5°	282.9	317.3	372.7	410.5	421.3
70°	245.1	280.9	334.2	369.3	374.1
72.5°	204.6	241.0	295.1	317.3	317.3
75°	168.1	205.3	255.2	259.3	255.9
77.5°	128.3	169.5	201.9	193.8	185.7
80°	92.5	133.0	147.9	133.0	122.2
82.5°	62.1	96.6	89.1	70.9	62.8
85°	34.4	51.3	35.1	19.6	14.2
87.5°	12.8	11.5	3.4	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)