

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: P271943

Luminaire Tested: **14CZ2-35-S-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: P271943
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: 14CZ2-35-S-UNV-L940-CD1-U
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (84) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

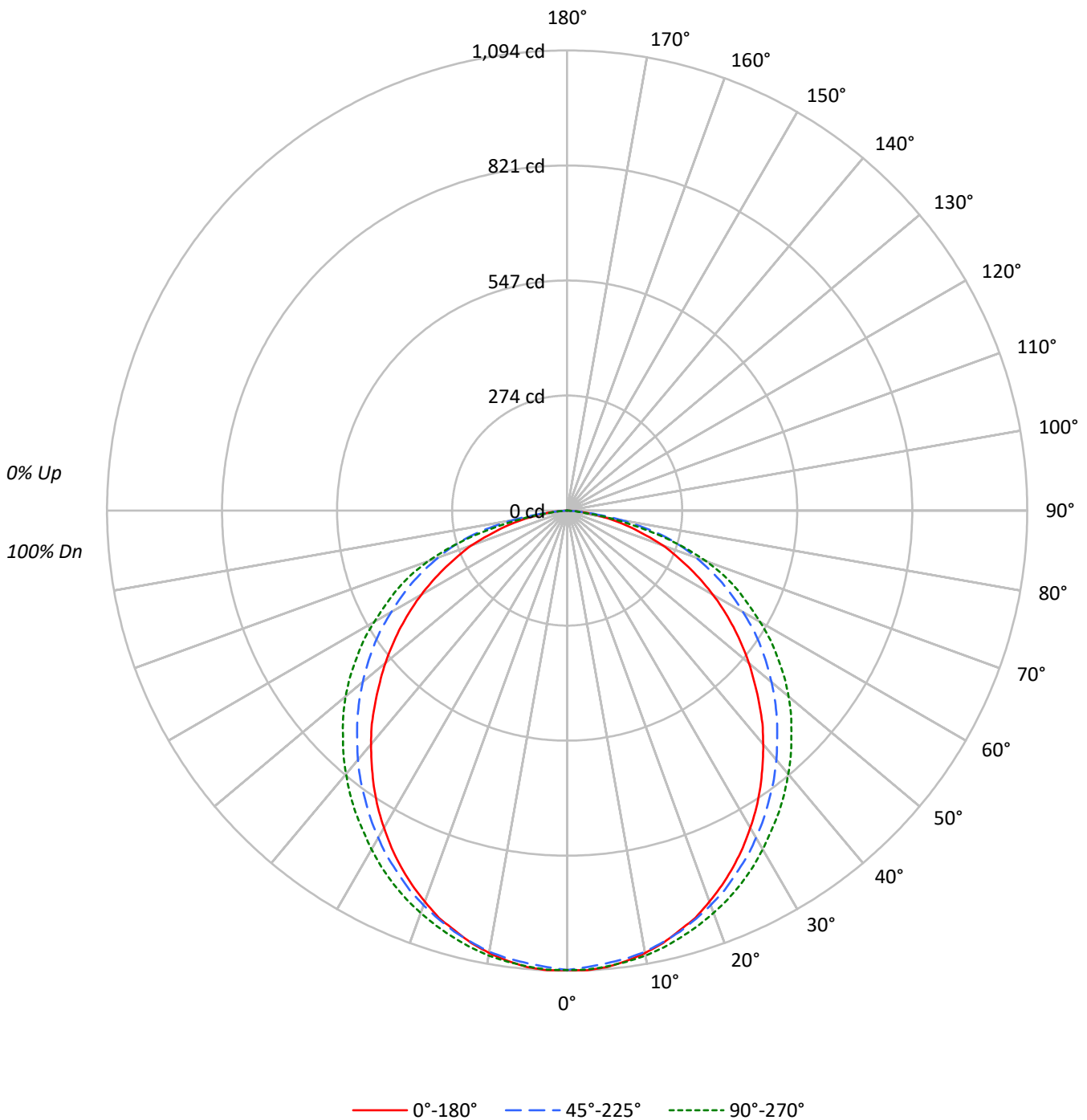
Lumens per Lamp: N/A
Luminaire Lumens: 3060.0 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	2940	2940	2940
5°	2942	2918	2938
10°	2919	2910	2935
15°	2878	2887	2925
20°	2833	2859	2915
25°	2775	2825	2906
30°	2706	2791	2890
35°	2632	2751	2881
40°	2547	2718	2873
45°	2454	2685	2869
50°	2363	2655	2877
55°	2264	2634	2868
60°	2155	2597	2850
65°	2029	2589	2850
70°	1910	2567	2769
75°	1656	2508	2366
80°	1340	2022	1576
85°	889	704	469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.2	3.4
10°-20°	293.5	9.6
20°-30°	440.3	14.4
30°-40°	525.2	17.2
40°-50°	543.0	17.7
50°-60°	495.7	16.2
60°-70°	390.1	12.7
70°-80°	227.1	7.4
80°-90°	41.8	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°	837.0	27.4
0°-40°	1362.2	44.5
0°-60°	2400.9	78.5
0°-90°	3060.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3060.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1092	1092	1092	1092	1092	
5°	1089	1086	1080	1089	1088	103
15°	1033	1035	1036	1050	1050	292
25°	935	939	951	974	979	430
35°	801	812	838	869	877	501
45°	645	666	706	745	754	498
55°	482	508	561	602	611	431
65°	319	352	407	438	448	316
75°	159	197	241	237	228	169
85°	29	41	23	18	15	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1092.4	1092.4	1092.4	1092.4	1092.4
2.5°	1093.9	1090.9	1086.3	1093.9	1092.4
5°	1089.3	1086.3	1080.2	1089.3	1087.8
7.5°	1080.2	1077.2	1074.2	1083.3	1081.7
10°	1068.1	1066.6	1065.1	1075.7	1074.2
12.5°	1052.9	1052.9	1051.4	1063.5	1063.5
15°	1033.2	1034.7	1036.2	1049.9	1049.9
17.5°	1015.0	1013.5	1018.0	1033.2	1034.7
20°	989.2	992.2	998.3	1016.5	1018.0
22.5°	963.4	966.4	977.1	995.3	999.8
25°	934.6	939.1	951.3	974.0	978.6
27.5°	904.2	910.3	927.0	951.3	955.8
30°	870.9	880.0	898.2	925.5	930.0
32.5°	837.5	846.6	869.3	896.7	902.7
35°	801.1	811.7	837.5	869.3	876.9
37.5°	763.1	776.8	807.1	839.0	848.1
40°	725.2	740.4	773.8	807.1	817.8
42.5°	687.3	702.5	738.9	776.8	787.4
45°	644.8	666.0	705.5	744.9	754.0
47.5°	603.8	626.6	670.6	710.0	722.2
50°	564.4	587.1	634.2	675.1	687.3
52.5°	523.4	547.7	597.8	640.2	650.9
55°	482.5	508.3	561.4	602.3	611.4
57.5°	441.5	468.8	523.4	562.9	573.5
60°	400.5	429.4	482.5	521.9	529.5
62.5°	359.6	389.9	444.5	479.4	487.0
65°	318.6	352.0	406.6	438.5	447.6
67.5°	279.2	312.5	365.6	396.0	403.6
70°	242.7	273.1	326.2	349.0	352.0
72.5°	197.2	235.2	286.7	298.9	291.3
75°	159.3	197.2	241.2	236.7	227.6
77.5°	121.4	159.3	188.1	173.0	160.8
80°	86.5	124.4	130.5	107.7	101.7
82.5°	56.1	86.5	72.8	56.1	45.5
85°	28.8	41.0	22.8	18.2	15.2
87.5°	9.1	6.1	3.0	3.0	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)