

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: P274709

Luminaire Tested: **14CZ2-35-RDP-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: P274709  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-35-RDP-UNV-L940-CD1-U  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 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: 1943.0 lumens  
Efficiency: N/A  
Efficacy: 62.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

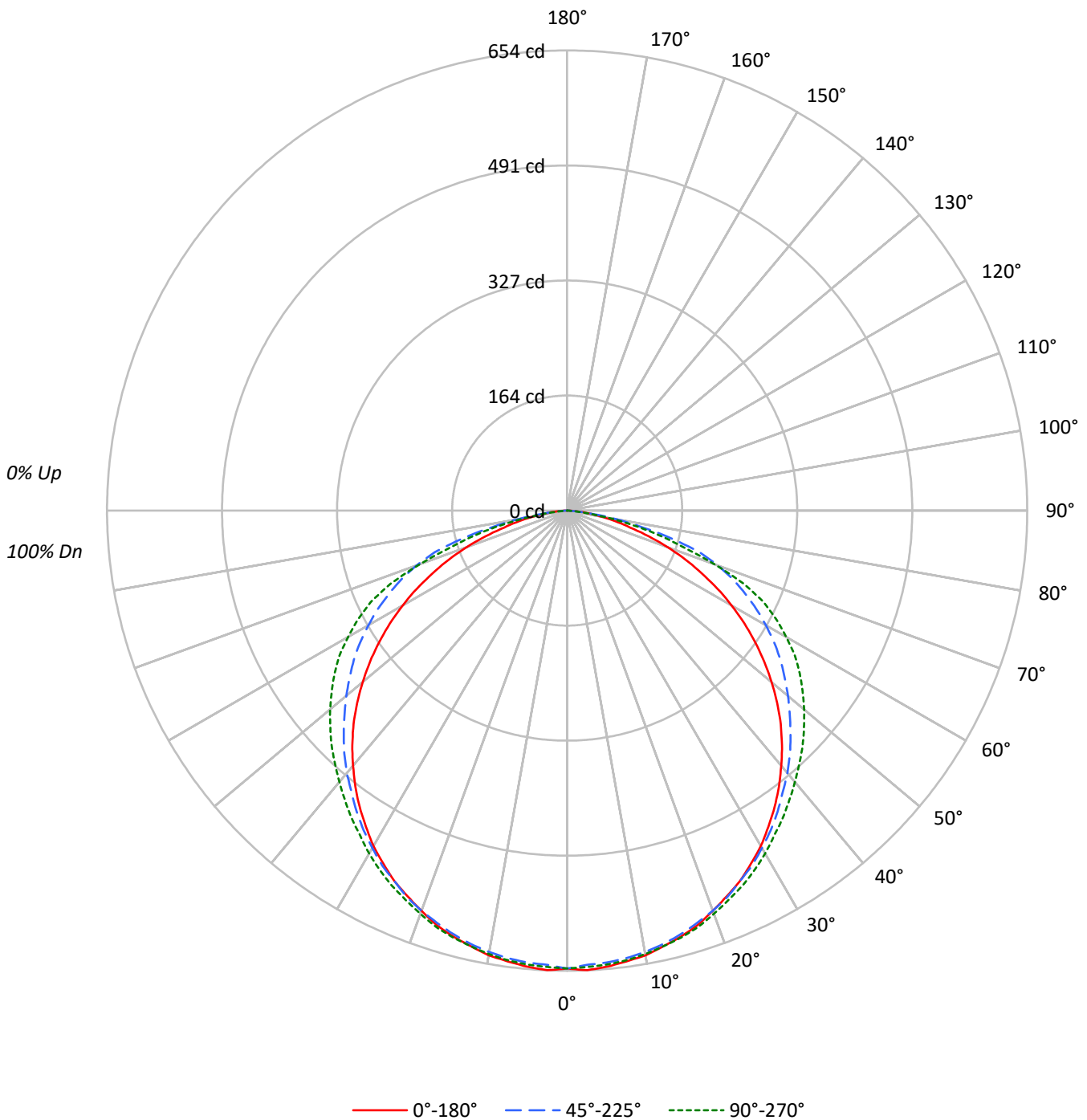
Input Watts (W): 31.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	93	91	88	90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	1751	1751	1751
5°	1758	1742	1750
10°	1753	1741	1749
15°	1745	1737	1750
20°	1733	1733	1746
25°	1725	1725	1748
30°	1711	1720	1749
35°	1689	1714	1754
40°	1663	1710	1769
45°	1634	1709	1801
50°	1587	1715	1842
55°	1530	1736	1893
60°	1453	1755	1935
65°	1343	1777	1961
70°	1194	1790	1755
75°	962	1608	1404
80°	752	1128	917
85°	516	327	235



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.6	3.2
10°-20°	176.7	9.1
20°-30°	269.1	13.8
30°-40°	327.7	16.9
40°-50°	347.7	17.9
50°-60°	328.2	16.9
60°-70°	265.0	13.6
70°-80°	143.7	7.4
80°-90°	23.2	1.2
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°	507.4	26.1
0°-40°	835.2	43.0
0°-60°	1511.0	77.8
0°-90°	1943.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1943.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	651	651	651	651	651	
5°	651	649	645	649	648	62
15°	626	625	624	628	628	177
25°	581	580	581	587	589	267
35°	514	517	522	532	534	321
45°	429	435	449	466	473	331
55°	326	340	370	394	404	291
65°	211	237	279	302	308	209
75°	92	135	155	140	135	101
85°	17	18	11	9	8	21
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	650.8	650.8	650.8	650.8	650.8
2.5°	653.8	650.8	646.2	650.8	649.2
5°	650.8	649.2	644.7	649.2	647.7
7.5°	646.2	646.2	641.7	644.7	644.7
10°	641.7	640.1	637.1	641.7	640.1
12.5°	634.1	632.6	631.0	635.6	634.1
15°	626.5	625.0	623.5	628.0	628.0
17.5°	617.4	615.9	614.4	620.4	620.4
20°	605.3	605.3	605.3	611.3	609.8
22.5°	593.1	593.1	594.6	600.7	599.2
25°	581.0	579.5	581.0	587.0	588.6
27.5°	565.8	567.3	568.8	574.9	576.4
30°	550.6	552.2	553.7	561.3	562.8
32.5°	532.4	535.5	538.5	547.6	547.6
35°	514.2	517.3	521.8	532.4	534.0
37.5°	494.5	497.6	503.6	515.8	518.8
40°	473.3	477.8	486.9	499.1	503.6
42.5°	452.0	458.1	468.7	482.4	488.4
45°	429.3	435.4	449.0	465.7	473.3
47.5°	405.0	412.6	429.3	450.5	456.6
50°	379.2	389.8	409.6	432.3	439.9
52.5°	353.4	365.6	389.8	414.1	421.7
55°	326.1	339.8	370.1	394.4	403.5
57.5°	298.8	314.0	348.9	374.7	383.8
60°	270.0	288.2	326.1	351.9	359.5
62.5°	241.2	262.4	303.4	329.2	335.2
65°	210.9	236.6	279.1	301.9	307.9
67.5°	182.0	212.4	254.8	271.5	271.5
70°	151.7	185.1	227.5	232.1	223.0
72.5°	121.4	159.3	197.2	180.5	172.9
75°	92.5	135.0	154.7	139.6	135.0
77.5°	69.8	109.2	109.2	100.1	97.1
80°	48.5	83.4	72.8	63.7	59.2
82.5°	31.9	47.0	37.9	30.3	25.8
85°	16.7	18.2	10.6	9.1	7.6
87.5°	6.1	3.0	1.5	3.0	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)