

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: P274721

Luminaire Tested: **14CZ2-39HE-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: P274721
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: 14CZ2-39HE-RDP-UNV-L940-CD1-U
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI
Light Source: (196) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2174.0 lumens
Efficiency: N/A
Efficacy: 74.2 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

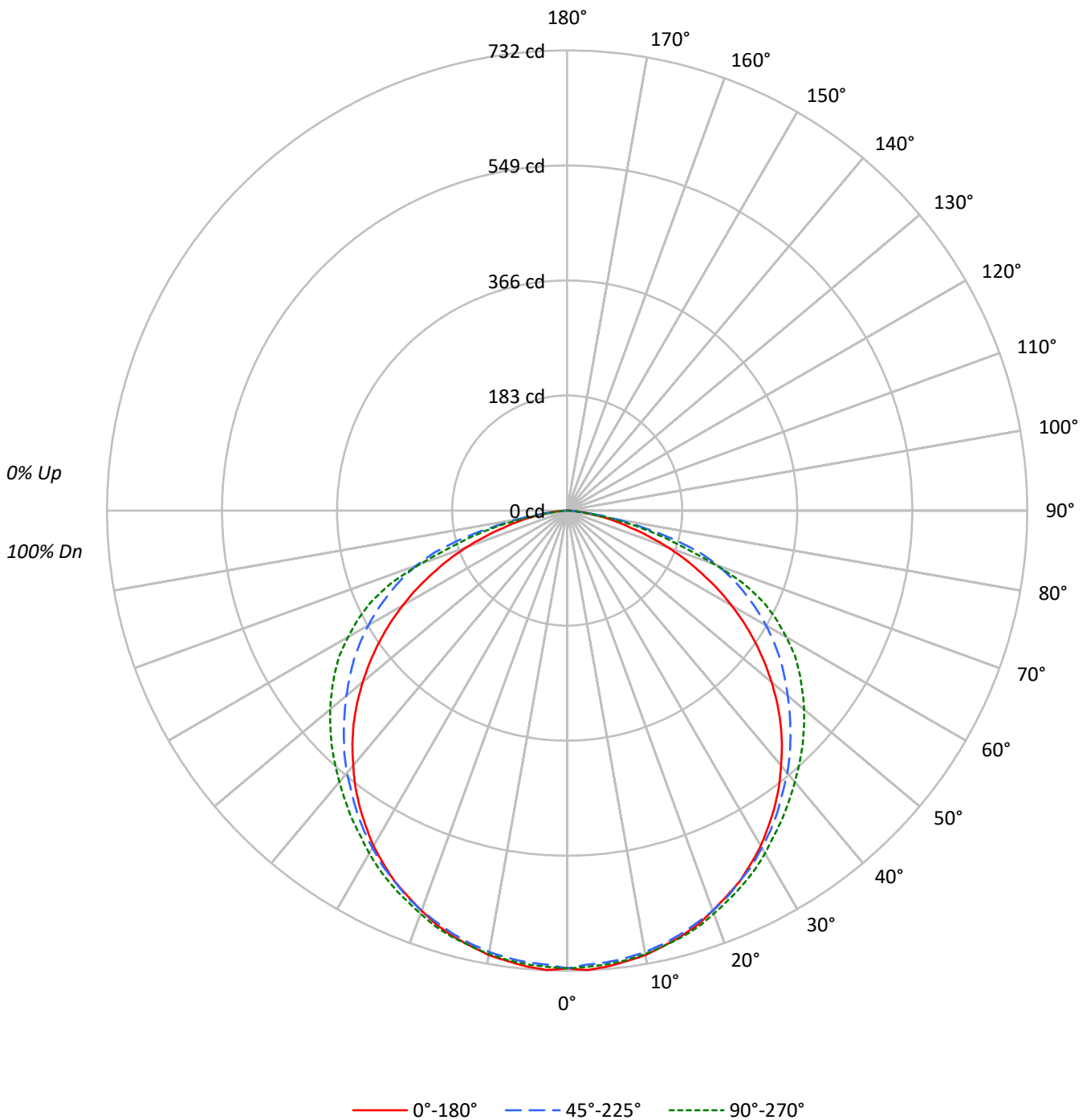
Input Watts (W): 29.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	1959	1959	1959
5°	1967	1948	1958
10°	1962	1948	1957
15°	1953	1943	1958
20°	1939	1939	1954
25°	1930	1930	1955
30°	1914	1925	1957
35°	1890	1918	1963
40°	1860	1914	1979
45°	1828	1912	2015
50°	1776	1919	2061
55°	1712	1943	2118
60°	1626	1964	2165
65°	1502	1989	2194
70°	1335	2003	1963
75°	1076	1800	1571
80°	841	1263	1026
85°	577	367	262



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.9	3.2
10°-20°	197.7	9.1
20°-30°	301.1	13.8
30°-40°	366.7	16.9
40°-50°	389.1	17.9
50°-60°	367.2	16.9
60°-70°	296.5	13.6
70°-80°	160.8	7.4
80°-90°	26.0	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°	567.7	26.1
0°-40°	934.4	43.0
0°-60°	1690.7	77.8
0°-90°	2174.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2174.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	728	728	728	728	728	
5°	728	726	721	726	725	69
15°	701	699	698	703	703	198
25°	650	648	650	657	658	299
35°	575	579	584	596	597	360
45°	480	487	502	521	530	370
55°	365	380	414	441	452	326
65°	236	265	312	338	344	234
75°	104	151	173	156	151	113
85°	19	20	12	10	8	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	728.1	728.1	728.1	728.1	728.1
2.5°	731.5	728.1	723.0	728.1	726.4
5°	728.1	726.4	721.3	726.4	724.7
7.5°	723.0	723.0	717.9	721.3	721.3
10°	717.9	716.2	712.9	717.9	716.2
12.5°	709.5	707.8	706.1	711.2	709.5
15°	701.0	699.3	697.6	702.7	702.7
17.5°	690.8	689.1	687.4	694.2	694.2
20°	677.2	677.2	677.2	684.0	682.3
22.5°	663.6	663.6	665.3	672.1	670.4
25°	650.1	648.4	650.1	656.8	658.5
27.5°	633.1	634.8	636.5	643.3	645.0
30°	616.1	617.8	619.5	628.0	629.7
32.5°	595.7	599.1	602.5	612.7	612.7
35°	575.4	578.8	583.9	595.7	597.4
37.5°	553.3	556.7	563.5	577.1	580.5
40°	529.5	534.6	544.8	558.4	563.5
42.5°	505.8	512.6	524.5	539.7	546.5
45°	480.3	487.1	502.4	521.1	529.5
47.5°	453.2	461.7	480.3	504.1	510.9
50°	424.3	436.2	458.3	483.7	492.2
52.5°	395.5	409.0	436.2	463.4	471.8
55°	364.9	380.2	414.1	441.3	451.5
57.5°	334.4	351.3	390.4	419.2	429.4
60°	302.1	322.5	364.9	393.8	402.3
62.5°	269.9	293.6	339.5	368.3	375.1
65°	235.9	264.8	312.3	337.8	344.5
67.5°	203.7	237.6	285.1	303.8	303.8
70°	169.7	207.1	254.6	259.7	249.5
72.5°	135.8	178.2	220.6	202.0	193.5
75°	103.5	151.1	173.1	156.1	151.1
77.5°	78.1	122.2	122.2	112.0	108.6
80°	54.3	93.3	81.5	71.3	66.2
82.5°	35.6	52.6	42.4	33.9	28.9
85°	18.7	20.4	11.9	10.2	8.5
87.5°	6.8	3.4	1.7	3.4	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)