

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: P294810

Luminaire Tested: **14CZ2-39-HRP-UNV-L950-CD1-U**

Issue Date: 12/2/2019

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: P294810
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-18)
Test Lab: INNOVATIONS CENTER(G3)
Issue Date: 12/2/2019
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39-HRP-UNV-L950-CD1-U
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
Light Source: (112) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

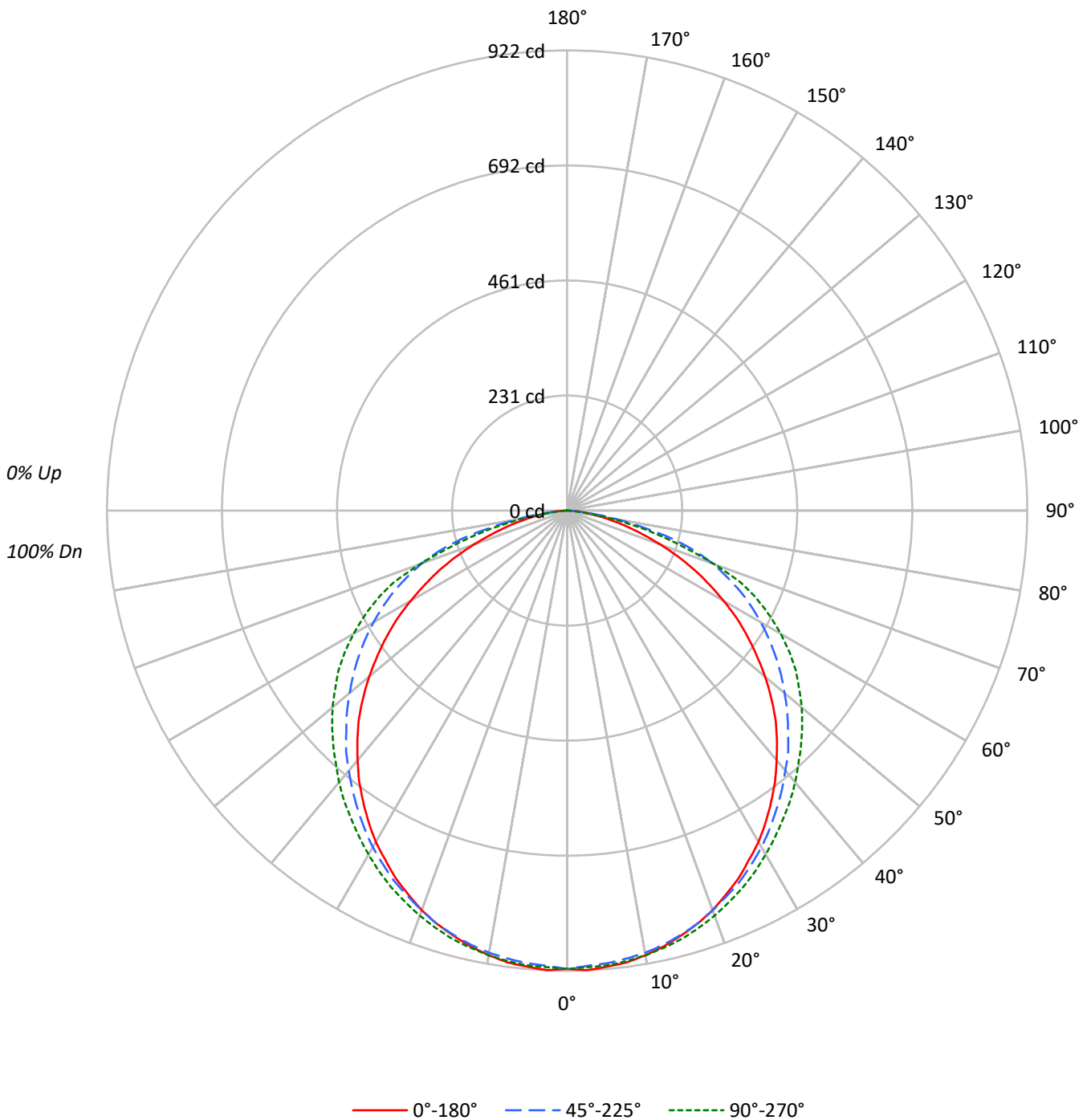
Lumens per Lamp: N/A
Luminaire Lumens: 2703.8 lumens
Efficiency: N/A
Efficacy: 83.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	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	38	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2471	2471	2471
5°	2478	2460	2471
10°	2472	2458	2472
15°	2456	2451	2475
20°	2440	2442	2474
25°	2413	2434	2474
30°	2383	2420	2473
35°	2341	2402	2477
40°	2294	2389	2497
45°	2245	2381	2524
50°	2168	2381	2570
55°	2074	2393	2624
60°	1949	2412	2659
65°	1798	2436	2674
70°	1565	2441	2462
75°	1290	2272	1989
80°	1015	1633	1331
85°	787	630	315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.9	3.2
10°-20°	249.4	9.2
20°-30°	378.8	14.0
30°-40°	459.0	17.0
40°-50°	483.6	17.9
50°-60°	451.5	16.7
60°-70°	360.8	13.3
70°-80°	198.5	7.3
80°-90°	35.1	1.3
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°	715.2	26.5
0°-40°	1174.1	43.4
0°-60°	2109.3	78.0
0°-90°	2703.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2703.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	918	918	918	918	918	
5°	917	915	911	916	915	87
15°	882	882	880	888	888	249
25°	813	814	820	832	833	374
35°	712	719	731	750	754	446
45°	590	601	626	654	663	454
55°	442	464	510	546	559	395
65°	282	318	383	414	420	278
75°	124	178	218	196	191	134
85°	26	32	20	13	10	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	918.2	918.2	918.2	918.2	918.2
2.5°	921.6	919.1	913.1	918.2	915.7
5°	917.4	914.8	910.6	916.5	914.8
7.5°	913.1	909.7	905.5	912.3	910.6
10°	904.6	902.1	899.5	905.5	904.6
12.5°	894.4	893.6	891.0	897.8	897.0
15°	881.6	881.6	879.9	888.5	888.5
17.5°	868.0	867.2	868.0	877.4	876.5
20°	851.9	851.9	852.7	863.8	863.8
22.5°	832.3	833.2	835.7	849.3	848.5
25°	812.8	814.5	819.6	831.5	833.2
27.5°	789.0	793.2	799.2	813.6	815.3
30°	766.9	769.4	778.8	792.4	795.8
32.5°	740.5	745.6	755.8	771.1	775.4
35°	712.5	719.3	731.2	749.9	754.1
37.5°	684.4	690.4	706.5	726.1	733.7
40°	652.9	663.1	680.2	702.3	710.8
42.5°	622.3	632.5	655.5	678.5	686.1
45°	590.0	601.1	625.7	653.8	663.1
47.5°	554.3	567.1	598.5	628.3	638.5
50°	517.8	533.9	568.8	601.9	613.8
52.5°	479.5	499.9	539.9	574.7	585.8
55°	442.1	464.2	510.1	545.8	559.4
57.5°	403.8	427.6	479.5	520.3	528.0
60°	362.2	391.1	448.1	483.8	494.0
62.5°	321.4	354.5	415.7	449.8	458.3
65°	282.3	318.0	382.6	414.0	420.0
67.5°	239.8	282.3	346.0	374.9	376.6
70°	198.9	248.3	310.3	323.9	312.9
72.5°	159.0	211.7	268.7	257.6	248.3
75°	124.1	177.7	218.5	196.4	191.3
77.5°	91.8	145.4	156.4	144.5	135.2
80°	65.5	114.8	105.4	90.1	85.9
82.5°	45.1	72.3	57.8	45.1	39.1
85°	25.5	32.3	20.4	12.8	10.2
87.5°	11.1	7.7	4.3	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)