

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: P294813

Luminaire Tested: **14CZ2-44-HRP-UNV-L940-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: P294813
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: 14CZ2-44-HRP-UNV-L940-CD1-U
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
Light Source: (112) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

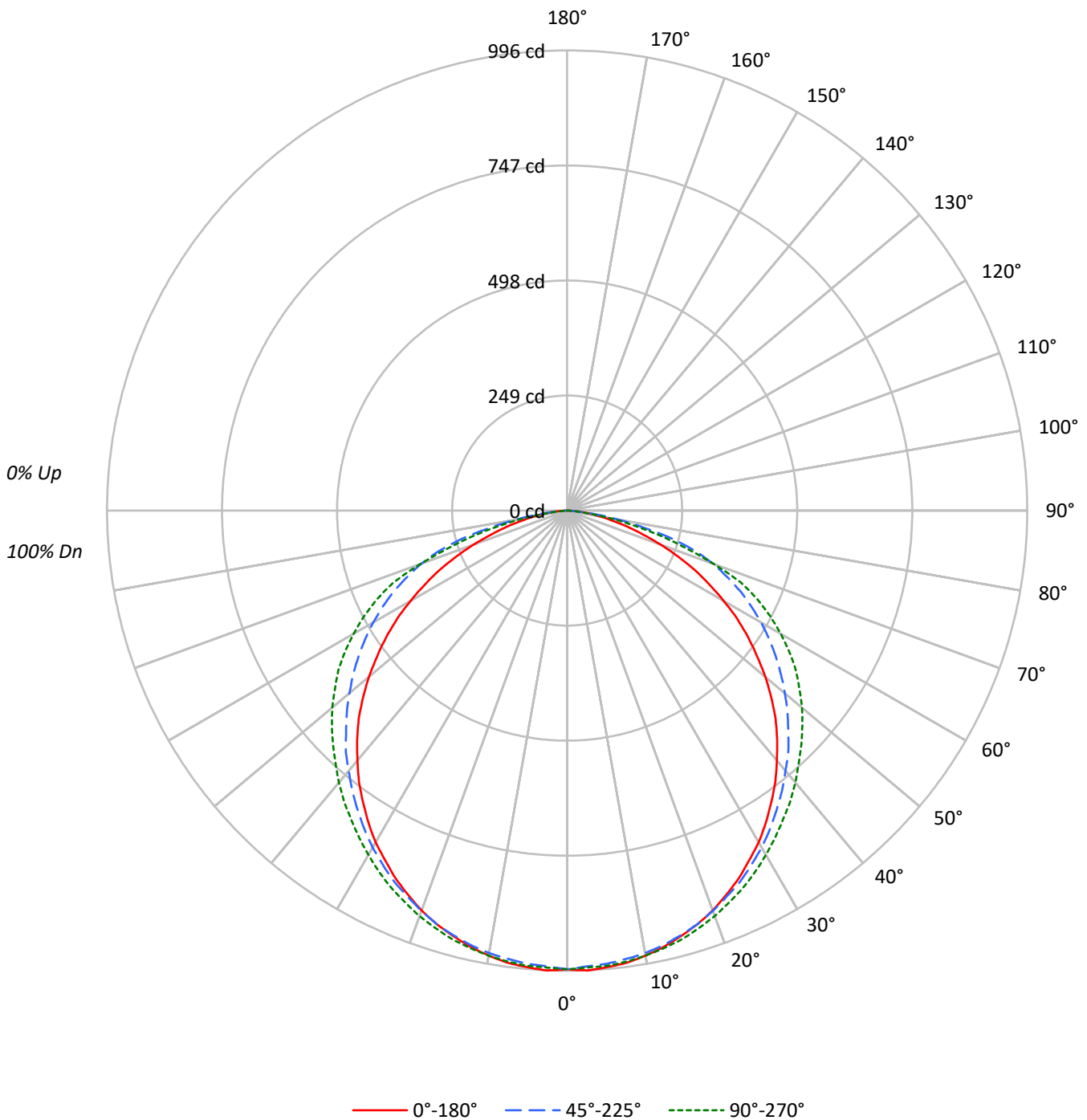
Lumens per Lamp: N/A
Luminaire Lumens: 2923.4 lumens
Efficiency: N/A
Efficacy: 76.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.29 / 1.39
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 38.3
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°	2672	2672	2672
5°	2679	2659	2672
10°	2673	2658	2673
15°	2656	2651	2676
20°	2638	2640	2675
25°	2609	2631	2675
30°	2577	2616	2673
35°	2530	2597	2679
40°	2480	2583	2700
45°	2428	2575	2729
50°	2344	2575	2779
55°	2243	2587	2838
60°	2108	2607	2875
65°	1943	2634	2891
70°	1692	2640	2662
75°	1395	2456	2150
80°	1097	1767	1438
85°	852	682	340



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.0	3.2
10°-20°	269.7	9.2
20°-30°	409.6	14.0
30°-40°	496.3	17.0
40°-50°	522.9	17.9
50°-60°	488.2	16.7
60°-70°	390.1	13.3
70°-80°	214.7	7.3
80°-90°	37.9	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°	773.3	26.5
0°-40°	1269.5	43.4
0°-60°	2280.6	78.0
0°-90°	2923.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2923.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	993	993	993	993	993	
5°	992	989	984	991	989	94
15°	953	953	951	961	961	269
25°	879	881	886	899	901	405
35°	770	778	791	811	815	482
45°	638	650	677	707	717	491
55°	478	502	552	590	605	427
65°	305	344	414	448	454	300
75°	134	192	236	212	207	144
85°	28	35	22	14	11	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	992.8	992.8	992.8	992.8	992.8
2.5°	996.5	993.7	987.3	992.8	990.0
5°	991.9	989.1	984.5	990.9	989.1
7.5°	987.3	983.6	979.0	986.4	984.5
10°	978.1	975.3	972.6	979.0	978.1
12.5°	967.0	966.1	963.4	970.7	969.8
15°	953.3	953.3	951.4	960.6	960.6
17.5°	938.6	937.6	938.6	948.7	947.7
20°	921.1	921.1	922.0	934.0	934.0
22.5°	899.9	900.9	903.6	918.3	917.4
25°	878.8	880.6	886.2	899.0	900.9
27.5°	853.1	857.7	864.1	879.7	881.6
30°	829.2	831.9	842.0	856.7	860.4
32.5°	800.7	806.2	817.2	833.8	838.4
35°	770.3	777.7	790.6	810.8	815.4
37.5°	740.0	746.4	763.9	785.0	793.3
40°	706.0	717.0	735.4	759.3	768.5
42.5°	672.9	683.9	708.7	733.6	741.8
45°	638.0	649.9	676.6	706.9	717.0
47.5°	599.3	613.1	647.1	679.3	690.4
50°	559.8	577.3	615.0	650.8	663.7
52.5°	518.5	540.5	583.7	621.4	633.4
55°	478.0	501.9	551.5	590.2	604.9
57.5°	436.6	462.4	518.5	562.6	570.9
60°	391.6	422.9	484.4	523.1	534.1
62.5°	347.5	383.3	449.5	486.3	495.5
65°	305.2	343.8	413.7	447.7	454.1
67.5°	259.2	305.2	374.1	405.4	407.2
70°	215.1	268.4	335.5	350.2	338.3
72.5°	171.9	228.9	290.5	278.5	268.4
75°	134.2	192.1	236.2	212.3	206.8
77.5°	99.3	157.2	169.1	156.3	146.2
80°	70.8	124.1	114.0	97.4	92.8
82.5°	48.7	78.1	62.5	48.7	42.3
85°	27.6	34.9	22.1	13.8	11.0
87.5°	12.0	8.3	4.6	3.7	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)