

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: P294805

Luminaire Tested: **14CZ2-39HE-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: P294805
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: 14CZ2-39HE-HRP-UNV-L940-CD1-U
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY ROUND PERF. LENS
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: 2569.4 lumens
Efficiency: N/A
Efficacy: 87.7 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

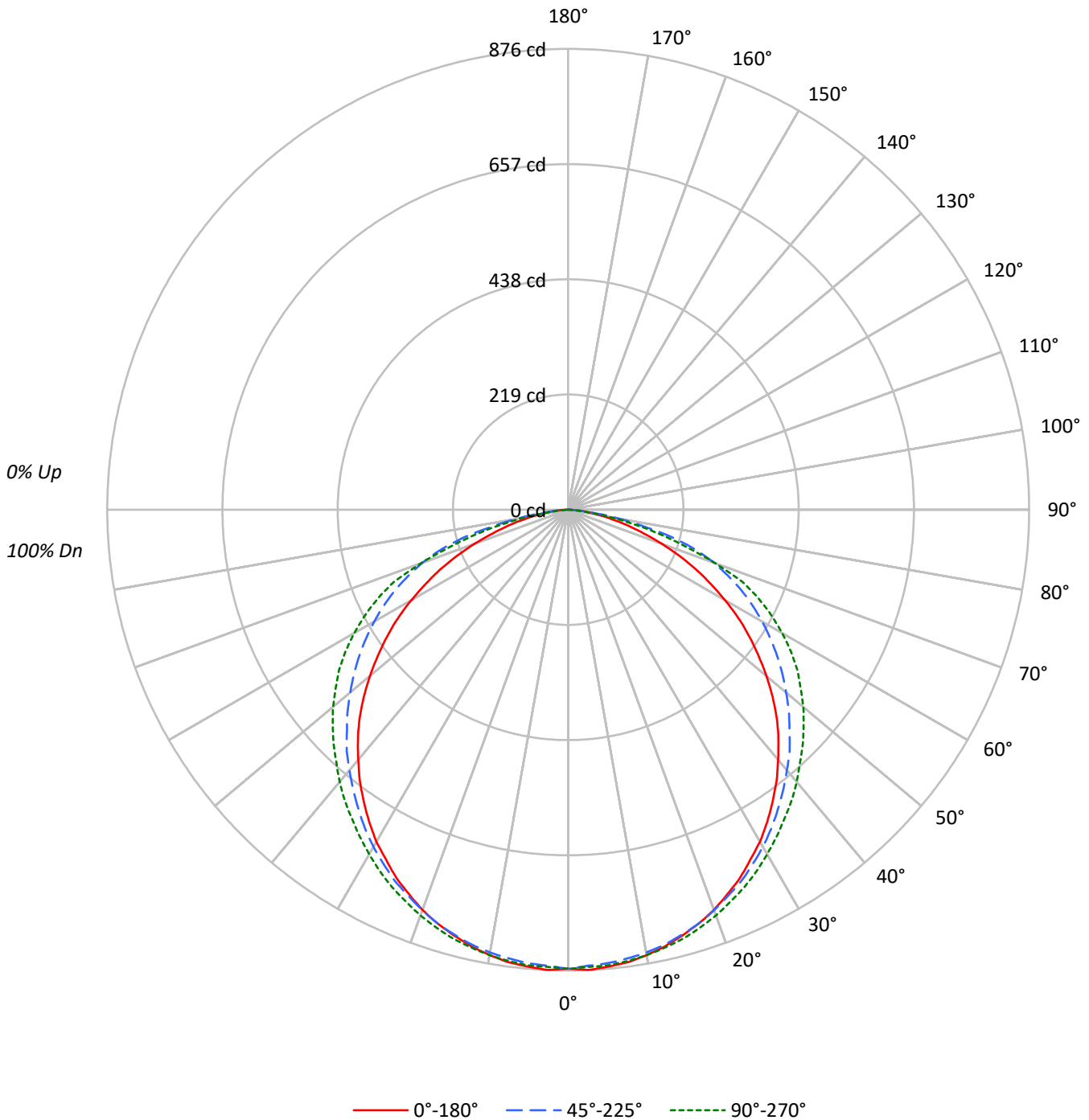
Input Watts (W): 29.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	2348	2348	2348
5°	2355	2337	2348
10°	2349	2336	2349
15°	2334	2330	2352
20°	2318	2321	2351
25°	2293	2313	2351
30°	2265	2300	2350
35°	2224	2282	2354
40°	2180	2271	2373
45°	2134	2263	2398
50°	2060	2263	2442
55°	1971	2274	2494
60°	1852	2292	2526
65°	1708	2315	2541
70°	1488	2320	2339
75°	1227	2158	1890
80°	964	1553	1265
85°	747	599	299



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.6	3.2
10°-20°	237.0	9.2
20°-30°	360.0	14.0
30°-40°	436.2	17.0
40°-50°	459.6	17.9
50°-60°	429.1	16.7
60°-70°	342.9	13.3
70°-80°	188.7	7.3
80°-90°	33.3	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°	679.6	26.5
0°-40°	1115.8	43.4
0°-60°	2004.5	78.0
0°-90°	2569.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2569.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	873	873	873	873	873	
5°	872	869	865	871	869	83
15°	838	838	836	844	844	236
25°	772	774	779	790	792	356
35°	677	684	695	713	717	424
45°	561	571	595	621	630	431
55°	420	441	485	519	532	375
65°	268	302	364	394	399	264
75°	118	169	208	187	182	127
85°	24	31	19	12	10	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	872.6	872.6	872.6	872.6	872.6
2.5°	875.8	873.4	867.7	872.6	870.2
5°	871.8	869.4	865.3	871.0	869.4
7.5°	867.7	864.5	860.5	866.9	865.3
10°	859.7	857.2	854.8	860.5	859.7
12.5°	850.0	849.2	846.7	853.2	852.4
15°	837.8	837.8	836.2	844.3	844.3
17.5°	824.9	824.1	824.9	833.8	833.0
20°	809.6	809.6	810.4	820.9	820.9
22.5°	791.0	791.8	794.2	807.1	806.3
25°	772.4	774.0	778.9	790.2	791.8
27.5°	749.8	753.8	759.5	773.2	774.8
30°	728.8	731.2	740.1	753.0	756.2
32.5°	703.7	708.6	718.3	732.8	736.9
35°	677.1	683.5	694.8	712.6	716.7
37.5°	650.4	656.1	671.4	690.0	697.3
40°	620.5	630.2	646.4	667.4	675.4
42.5°	591.4	601.1	622.9	644.7	652.0
45°	560.7	571.2	594.7	621.3	630.2
47.5°	526.8	538.9	568.8	597.1	606.8
50°	492.0	507.4	540.5	572.0	583.3
52.5°	455.7	475.1	513.1	546.2	556.7
55°	420.1	441.1	484.8	518.7	531.6
57.5°	383.8	406.4	455.7	494.5	501.7
60°	344.2	371.7	425.8	459.7	469.4
62.5°	305.4	336.9	395.1	427.4	435.5
65°	268.2	302.2	363.6	393.5	399.1
67.5°	227.8	268.2	328.8	356.3	357.9
70°	189.1	235.9	294.9	307.8	297.3
72.5°	151.1	201.2	255.3	244.8	235.9
75°	118.0	168.9	207.6	186.6	181.8
77.5°	87.3	138.2	148.7	137.4	128.5
80°	62.2	109.1	100.2	85.6	81.6
82.5°	42.8	68.7	54.9	42.8	37.2
85°	24.2	30.7	19.4	12.1	9.7
87.5°	10.5	7.3	4.0	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)