

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: P271919

Luminaire Tested: **14CZ2-39HE-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: P271919
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39HE-UNV-L940-CD1-U
Description: 1'X4' TROFFER LED MODULE,RIBBED LENS, 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: 3387.0 lumens
Efficiency: N/A
Efficacy: 115.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

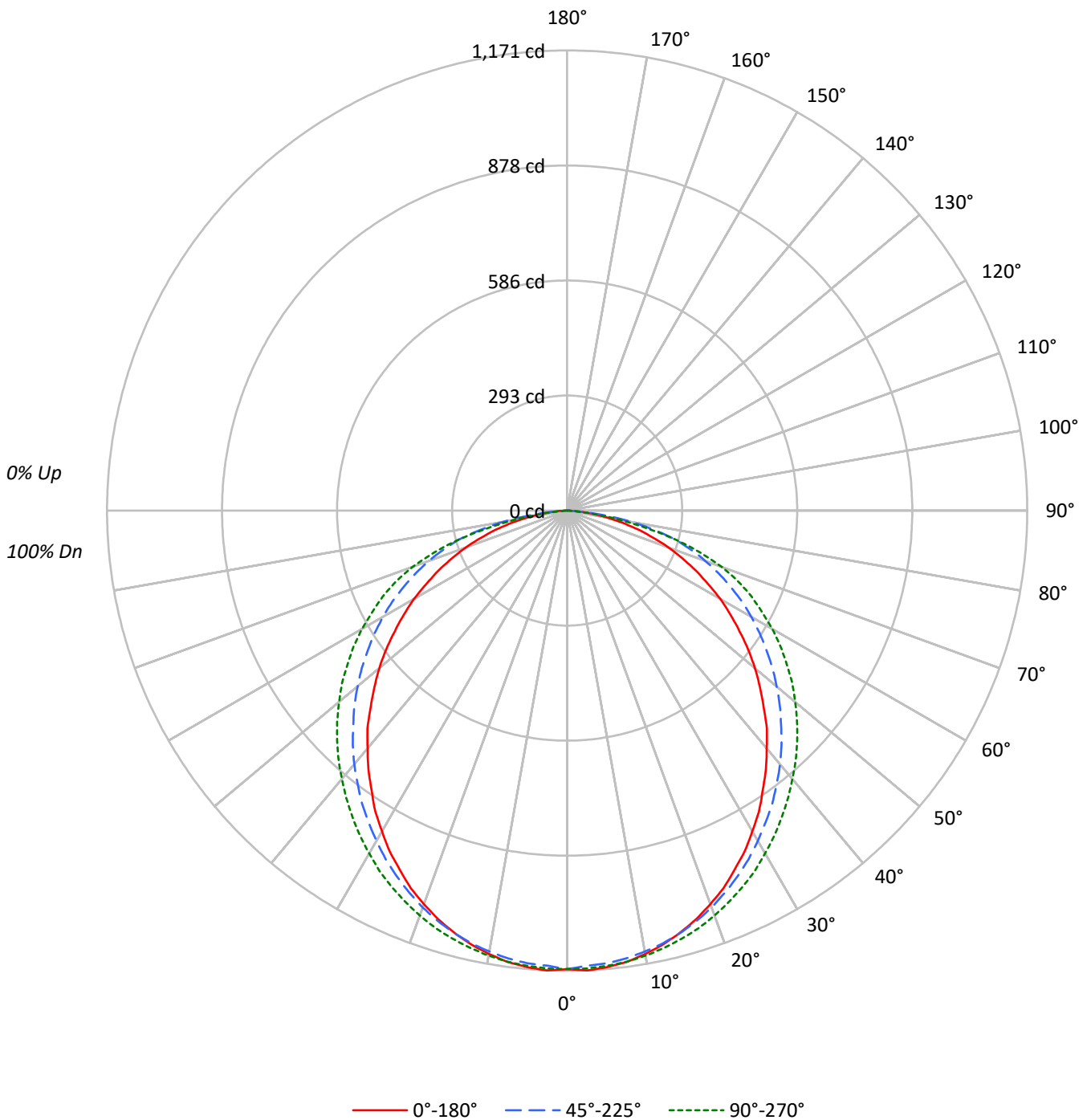
Input Watts (W): 29.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	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	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	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	39	31	26	37	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3140	3140	3140
5°	3150	3123	3142
10°	3131	3114	3143
15°	3097	3099	3141
20°	3052	3078	3140
25°	2994	3048	3137
30°	2929	3016	3131
35°	2851	2990	3128
40°	2775	2961	3133
45°	2690	2929	3150
50°	2611	2915	3171
55°	2512	2905	3200
60°	2422	2910	3244
65°	2299	2919	3294
70°	2157	2941	3292
75°	1956	2968	2976
80°	1604	2563	2118
85°	1189	1213	491



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.4	3.3
10°-20°	315.4	9.3
20°-30°	475.1	14.0
30°-40°	570.2	16.8
40°-50°	594.3	17.5
50°-60°	550.2	16.2
60°-70°	444.5	13.1
70°-80°	271.0	8.0
80°-90°	56.0	1.7
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°	901.0	26.6
0°-40°	1471.1	43.4
0°-60°	2615.5	77.2
0°-90°	3387.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3387.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1167	1167	1167	1167	1167	
5°	1166	1163	1156	1165	1163	111
15°	1112	1112	1112	1128	1128	313
25°	1008	1014	1026	1052	1057	465
35°	868	881	910	943	952	544
45°	707	728	770	813	828	546
55°	536	563	619	668	682	480
65°	361	396	458	504	517	357
75°	188	230	286	290	286	197
85°	38	57	39	22	16	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1166.8	1166.8	1166.8	1166.8	1166.8
2.5°	1171.4	1167.6	1159.3	1167.6	1166.1
5°	1166.1	1163.1	1156.3	1164.6	1163.1
7.5°	1158.5	1155.5	1149.5	1159.3	1157.8
10°	1145.7	1144.2	1139.6	1151.0	1150.2
12.5°	1130.6	1129.8	1127.6	1140.4	1139.6
15°	1111.7	1112.5	1112.5	1127.6	1127.6
17.5°	1090.6	1092.1	1095.1	1111.7	1114.0
20°	1065.6	1068.7	1074.7	1093.6	1096.6
22.5°	1040.0	1042.2	1051.3	1073.9	1077.0
25°	1008.2	1014.3	1026.4	1052.0	1056.6
27.5°	978.0	983.3	999.9	1026.4	1033.9
30°	942.5	950.8	970.5	999.2	1007.5
32.5°	908.5	917.6	940.3	973.5	981.0
35°	867.8	881.4	910.1	943.3	952.3
37.5°	830.8	843.6	876.1	912.3	922.9
40°	790.0	805.8	842.8	881.4	891.9
42.5°	752.2	767.3	807.3	846.6	861.0
45°	706.9	728.0	769.6	812.6	827.7
47.5°	665.4	686.5	734.1	780.2	793.7
50°	623.8	646.5	696.3	743.9	757.5
52.5°	580.8	604.9	658.6	706.1	722.0
55°	535.5	563.4	619.3	667.6	682.0
57.5°	492.4	521.1	580.8	629.9	644.2
60°	450.1	479.6	540.7	587.6	602.7
62.5°	403.3	438.0	501.5	547.5	558.9
65°	361.0	396.5	458.4	504.5	517.3
67.5°	316.4	355.0	416.9	459.2	471.3
70°	274.1	314.2	373.8	413.1	418.4
72.5°	228.8	269.6	330.0	355.0	355.0
75°	188.1	229.6	285.5	290.0	286.2
77.5°	143.5	189.6	225.8	216.8	207.7
80°	103.5	148.8	165.4	148.8	136.7
82.5°	69.5	108.0	99.7	79.3	70.2
85°	38.5	57.4	39.3	21.9	15.9
87.5°	14.3	12.8	3.8	3.8	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)