

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: P271946

Luminaire Tested: **14CZ2-39-S-UNV-L935-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: P271946
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39-S-UNV-L935-CD1-U
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (112) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3358.0 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

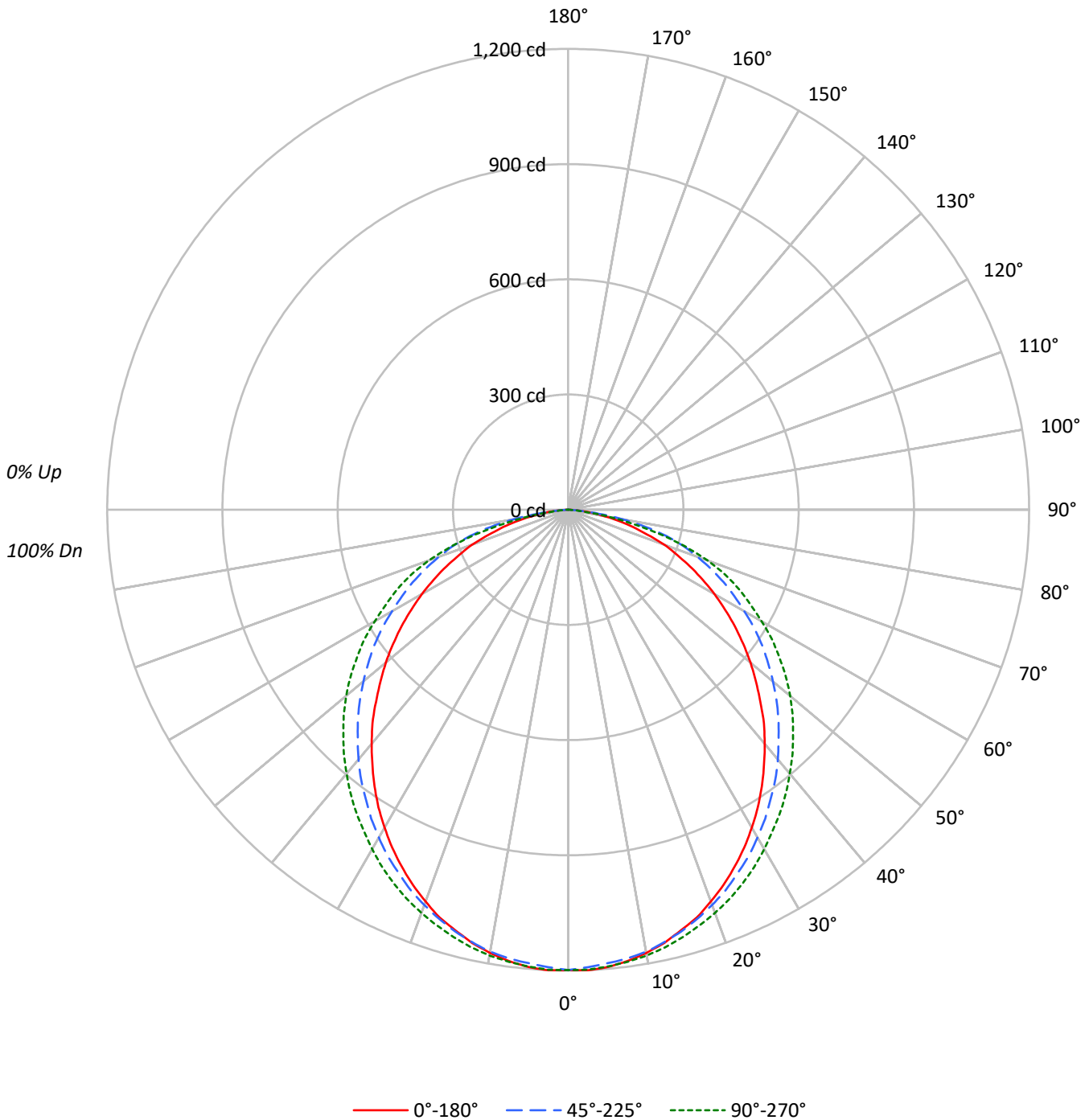
Input Watts (W): 32.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84					84			
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70					70			
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58					58			
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50					50			
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43					43			
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38					38			
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3226	3226	3226
5°	3229	3202	3225
10°	3203	3194	3221
15°	3159	3168	3210
20°	3109	3137	3199
25°	3045	3100	3189
30°	2970	3063	3171
35°	2888	3019	3161
40°	2796	2983	3152
45°	2693	2946	3149
50°	2593	2913	3157
55°	2484	2890	3148
60°	2365	2849	3127
65°	2226	2841	3128
70°	2096	2817	3039
75°	1817	2752	2596
80°	1471	2219	1729
85°	976	772	513



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.2	3.4
10°-20°	322.1	9.6
20°-30°	483.2	14.4
30°-40°	576.4	17.2
40°-50°	595.9	17.7
50°-60°	544.0	16.2
60°-70°	428.1	12.7
70°-80°	249.2	7.4
80°-90°	45.9	1.4
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°	918.5	27.4
0°-40°	1494.9	44.5
0°-60°	2634.7	78.5
0°-90°	3358.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3358.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1199	1199	1199	1199	1199	
5°	1195	1192	1185	1195	1194	113
15°	1134	1136	1137	1152	1152	320
25°	1026	1031	1044	1069	1074	472
35°	879	891	919	954	962	549
45°	708	731	774	818	828	546
55°	529	558	616	661	671	473
65°	350	386	446	481	491	347
75°	175	216	265	260	250	186
85°	32	45	25	20	17	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1198.8	1198.8	1198.8	1198.8	1198.8
2.5°	1200.4	1197.1	1192.1	1200.4	1198.8
5°	1195.4	1192.1	1185.4	1195.4	1193.8
7.5°	1185.4	1182.1	1178.8	1188.8	1187.1
10°	1172.1	1170.4	1168.8	1180.4	1178.8
12.5°	1155.5	1155.5	1153.8	1167.1	1167.1
15°	1133.8	1135.5	1137.1	1152.1	1152.1
17.5°	1113.8	1112.2	1117.2	1133.8	1135.5
20°	1085.5	1088.9	1095.5	1115.5	1117.2
22.5°	1057.2	1060.6	1072.2	1092.2	1097.2
25°	1025.6	1030.6	1043.9	1068.9	1073.9
27.5°	992.3	999.0	1017.3	1043.9	1048.9
30°	955.7	965.7	985.6	1015.6	1020.6
32.5°	919.0	929.0	954.0	984.0	990.6
35°	879.1	890.7	919.0	954.0	962.3
37.5°	837.5	852.4	885.7	920.7	930.7
40°	795.8	812.5	849.1	885.7	897.4
42.5°	754.2	770.9	810.8	852.4	864.1
45°	707.6	730.9	774.2	817.5	827.5
47.5°	662.6	687.6	735.9	779.2	792.5
50°	619.4	644.3	695.9	740.9	754.2
52.5°	574.4	601.0	656.0	702.6	714.3
55°	529.4	557.8	616.0	661.0	671.0
57.5°	484.5	514.5	574.4	617.7	629.3
60°	439.5	471.2	529.4	572.7	581.1
62.5°	394.6	427.9	487.8	526.1	534.4
65°	349.6	386.3	446.2	481.2	491.2
67.5°	306.3	343.0	401.2	434.5	442.9
70°	266.4	299.7	358.0	382.9	386.3
72.5°	216.4	258.1	314.7	328.0	319.7
75°	174.8	216.4	264.7	259.7	249.7
77.5°	133.2	174.8	206.5	189.8	176.5
80°	94.9	136.5	143.2	118.2	111.6
82.5°	61.6	94.9	79.9	61.6	49.9
85°	31.6	45.0	25.0	20.0	16.6
87.5°	10.0	6.7	3.3	3.3	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)