

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: P271949

Luminaire Tested: **14CZ2-44-S-UNV-L930-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: P271949
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: 14CZ2-44-S-UNV-L930-CD1-U
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (112) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

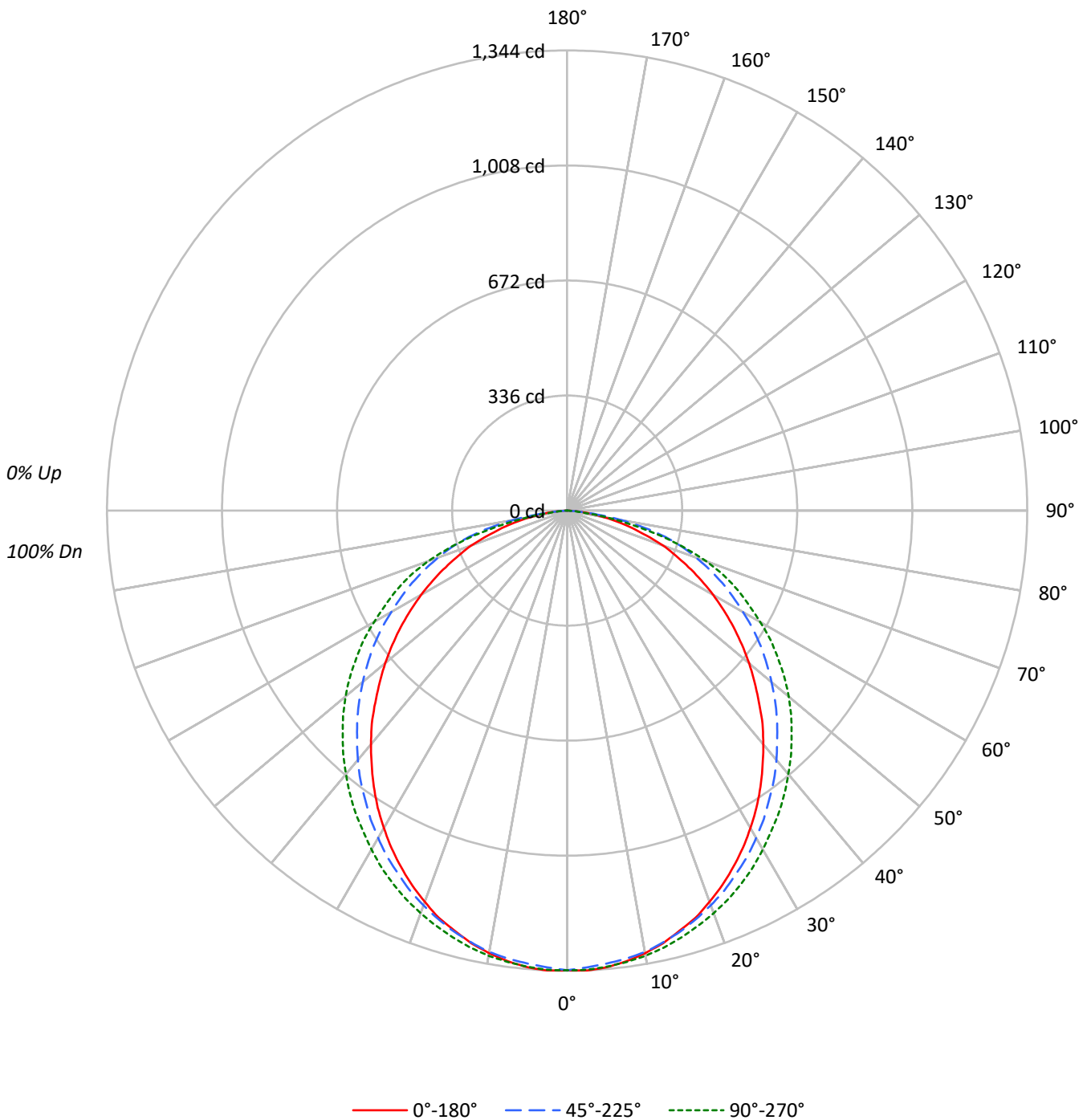
Lumens per Lamp: N/A
Luminaire Lumens: 3761.0 lumens
Efficiency: N/A
Efficacy: 98.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	3613	3613	3613
5°	3617	3586	3612
10°	3587	3577	3607
15°	3538	3548	3595
20°	3482	3514	3583
25°	3411	3472	3571
30°	3326	3430	3552
35°	3234	3381	3541
40°	3131	3341	3531
45°	3016	3300	3527
50°	2904	3263	3536
55°	2782	3237	3526
60°	2650	3192	3503
65°	2493	3182	3503
70°	2348	3154	3404
75°	2036	3083	2908
80°	1647	2486	1936
85°	1093	865	574



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.8	3.4
10°-20°	360.8	9.6
20°-30°	541.2	14.4
30°-40°	645.5	17.2
40°-50°	667.4	17.7
50°-60°	609.3	16.2
60°-70°	479.5	12.7
70°-80°	279.1	7.4
80°-90°	51.4	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°	1028.7	27.4
0°-40°	1674.3	44.5
0°-60°	2950.9	78.5
0°-90°	3761.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3761.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1343	1343	1343	1343	1343	
5°	1339	1335	1328	1339	1337	127
15°	1270	1272	1274	1290	1290	358
25°	1149	1154	1169	1197	1203	529
35°	985	998	1029	1068	1078	615
45°	792	819	867	916	927	612
55°	593	625	690	740	752	530
65°	392	433	500	539	550	389
75°	196	242	296	291	280	208
85°	35	50	28	22	19	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1342.6	1342.6	1342.6	1342.6	1342.6
2.5°	1344.5	1340.7	1335.2	1344.5	1342.6
5°	1338.9	1335.2	1327.7	1338.9	1337.0
7.5°	1327.7	1324.0	1320.2	1331.4	1329.6
10°	1312.8	1310.9	1309.0	1322.1	1320.2
12.5°	1294.1	1294.1	1292.3	1307.2	1307.2
15°	1269.9	1271.8	1273.6	1290.4	1290.4
17.5°	1247.5	1245.6	1251.2	1269.9	1271.8
20°	1215.8	1219.5	1227.0	1249.4	1251.2
22.5°	1184.1	1187.8	1200.9	1223.3	1228.9
25°	1148.7	1154.3	1169.2	1197.2	1202.8
27.5°	1111.4	1118.8	1139.4	1169.2	1174.8
30°	1070.4	1081.6	1103.9	1137.5	1143.1
32.5°	1029.3	1040.5	1068.5	1102.1	1109.5
35°	984.6	997.6	1029.3	1068.5	1077.8
37.5°	938.0	954.7	992.0	1031.2	1042.4
40°	891.3	910.0	951.0	992.0	1005.1
42.5°	844.7	863.4	908.1	954.7	967.8
45°	792.5	818.6	867.1	915.6	926.8
47.5°	742.2	770.1	824.2	872.7	887.6
50°	693.7	721.7	779.5	829.8	844.7
52.5°	643.3	673.2	734.7	786.9	800.0
55°	593.0	624.7	690.0	740.3	751.5
57.5°	542.6	576.2	643.3	691.8	704.9
60°	492.3	527.7	593.0	641.5	650.8
62.5°	441.9	479.2	546.4	589.3	598.6
65°	391.6	432.6	499.8	538.9	550.1
67.5°	343.1	384.1	449.4	486.7	496.0
70°	298.4	335.7	400.9	428.9	432.6
72.5°	242.4	289.0	352.4	367.4	358.0
75°	195.8	242.4	296.5	290.9	279.7
77.5°	149.2	195.8	231.2	212.6	197.7
80°	106.3	152.9	160.4	132.4	124.9
82.5°	69.0	106.3	89.5	69.0	55.9
85°	35.4	50.3	28.0	22.4	18.6
87.5°	11.2	7.5	3.7	3.7	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)