

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: P271951

Luminaire Tested: **14CZ2-44-S-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: P271951
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-L940-CD1-U
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (112) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

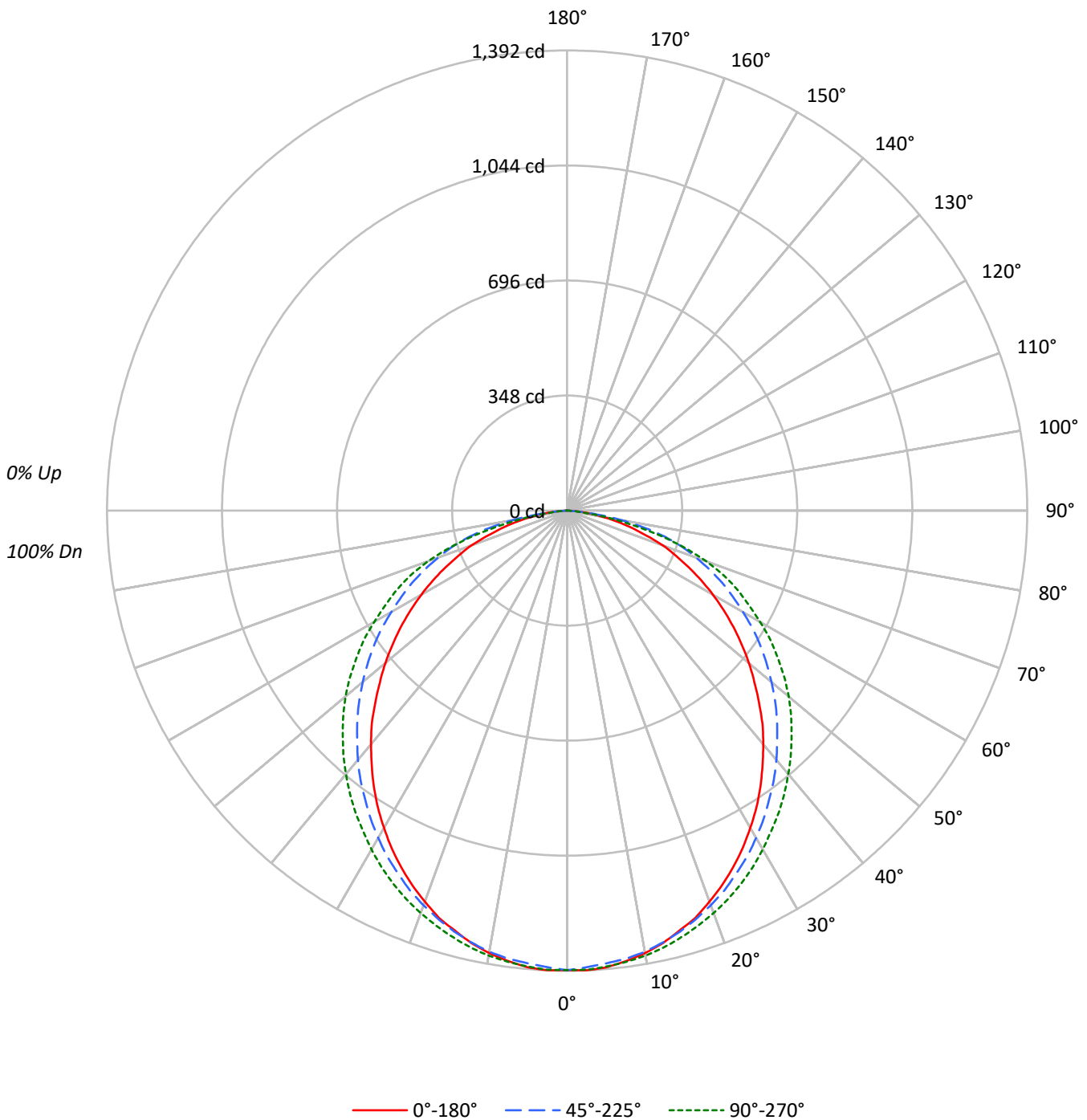
Lumens per Lamp: N/A
Luminaire Lumens: 3894.0 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3741	3741	3741
5°	3744	3713	3739
10°	3714	3703	3735
15°	3663	3674	3722
20°	3605	3638	3710
25°	3531	3594	3698
30°	3443	3552	3677
35°	3349	3501	3666
40°	3242	3459	3655
45°	3123	3417	3652
50°	3007	3378	3661
55°	2881	3352	3651
60°	2743	3305	3626
65°	2581	3294	3627
70°	2430	3266	3524
75°	2108	3192	3011
80°	1705	2572	2005
85°	1133	895	596



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.3	3.4
10°-20°	373.5	9.6
20°-30°	560.3	14.4
30°-40°	668.4	17.2
40°-50°	691.0	17.7
50°-60°	630.9	16.2
60°-70°	496.5	12.7
70°-80°	289.0	7.4
80°-90°	53.2	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°	1065.1	27.4
0°-40°	1733.5	44.5
0°-60°	3055.3	78.5
0°-90°	3894.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3894.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1386	1382	1375	1386	1384	131
15°	1315	1317	1319	1336	1336	371
25°	1189	1195	1210	1240	1245	548
35°	1019	1033	1066	1106	1116	637
45°	820	848	898	948	960	634
55°	614	647	714	766	778	549
65°	405	448	517	558	570	403
75°	203	251	307	301	290	215
85°	37	52	29	23	19	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1390.1	1390.1	1390.1	1390.1	1390.1
2.5°	1392.0	1388.2	1382.4	1392.0	1390.1
5°	1386.2	1382.4	1374.6	1386.2	1384.3
7.5°	1374.6	1370.8	1366.9	1378.5	1376.6
10°	1359.2	1357.3	1355.3	1368.9	1366.9
12.5°	1339.9	1339.9	1338.0	1353.4	1353.4
15°	1314.8	1316.7	1318.7	1336.0	1336.0
17.5°	1291.6	1289.7	1295.5	1314.8	1316.7
20°	1258.8	1262.7	1270.4	1293.6	1295.5
22.5°	1226.0	1229.8	1243.4	1266.5	1272.3
25°	1189.3	1195.1	1210.5	1239.5	1245.3
27.5°	1150.7	1158.4	1179.6	1210.5	1216.3
30°	1108.2	1119.8	1143.0	1177.7	1183.5
32.5°	1065.7	1077.3	1106.3	1141.0	1148.8
35°	1019.4	1032.9	1065.7	1106.3	1115.9
37.5°	971.1	988.5	1027.1	1067.7	1079.3
40°	922.9	942.2	984.6	1027.1	1040.6
42.5°	874.6	893.9	940.2	988.5	1002.0
45°	820.5	847.6	897.8	948.0	959.6
47.5°	768.4	797.4	853.4	903.6	919.0
50°	718.2	747.2	807.0	859.2	874.6
52.5°	666.1	697.0	760.7	814.7	828.3
55°	614.0	646.8	714.4	766.5	778.1
57.5°	561.8	596.6	666.1	716.3	729.8
60°	509.7	546.4	614.0	664.2	673.8
62.5°	457.6	496.2	565.7	610.1	619.7
65°	405.4	447.9	517.4	558.0	569.6
67.5°	355.2	397.7	465.3	503.9	513.6
70°	308.9	347.5	415.1	444.1	447.9
72.5°	251.0	299.3	364.9	380.3	370.7
75°	202.7	251.0	307.0	301.2	289.6
77.5°	154.5	202.7	239.4	220.1	204.7
80°	110.0	158.3	166.0	137.1	129.4
82.5°	71.4	110.0	92.7	71.4	57.9
85°	36.7	52.1	29.0	23.2	19.3
87.5°	11.6	7.7	3.9	3.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)