

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: P475363

Luminaire Tested: **14CZ2-39-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475363
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39-UNV-L840-CD1-U
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3994.3 lumens
Efficiency: N/A
Efficacy: 134.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.29 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

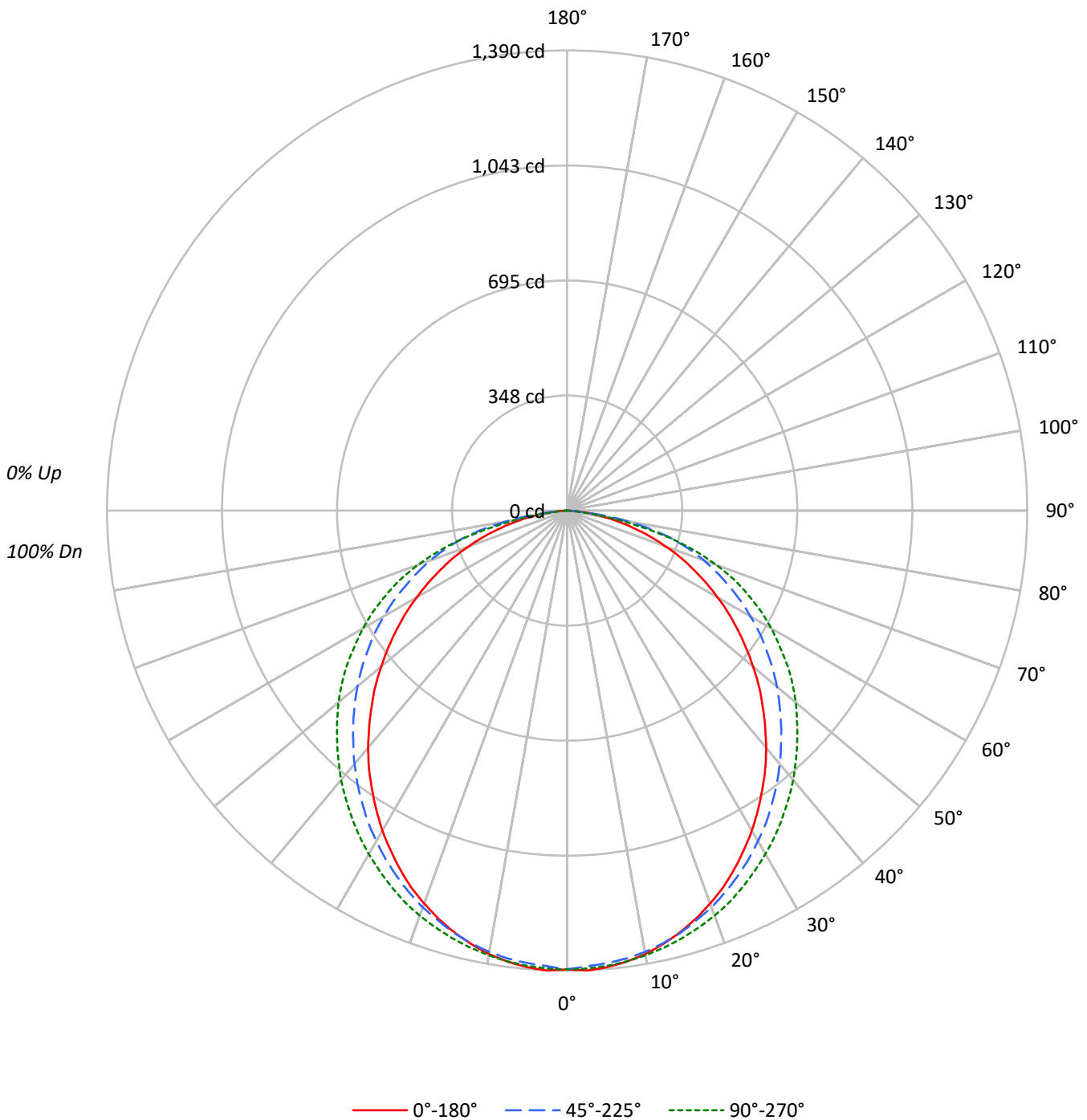
Input Watts (W): 29.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37					37			
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	29	55	42	34	28	41	33	28	40	33	28	39	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3729	3729	3729
5°	3740	3707	3729
10°	3717	3699	3728
15°	3674	3680	3726
20°	3617	3652	3729
25°	3548	3618	3725
30°	3468	3582	3723
35°	3376	3545	3723
40°	3286	3511	3732
45°	3178	3478	3741
50°	3070	3462	3776
55°	2954	3447	3808
60°	2823	3443	3835
65°	2680	3434	3843
70°	2495	3453	3770
75°	2213	3409	3381
80°	1857	2851	2301
85°	1303	1115	269



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.1	3.3
10°-20°	374.2	9.4
20°-30°	563.8	14.1
30°-40°	676.8	16.9
40°-50°	704.5	17.6
50°-60°	651.0	16.3
60°-70°	521.4	13.1
70°-80°	312.0	7.8
80°-90°	59.5	1.5
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°	1069.1	26.8
0°-40°	1745.8	43.7
0°-60°	3101.4	77.6
0°-90°	3994.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3994.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1386	1386	1386	1386	1386	
5°	1384	1381	1372	1382	1380	131
15°	1319	1319	1321	1338	1338	372
25°	1195	1202	1218	1249	1254	550
35°	1028	1043	1079	1122	1133	643
45°	835	860	914	968	983	645
55°	630	664	735	792	812	563
65°	421	464	539	592	604	417
75°	213	266	328	332	325	227
85°	42	62	36	15	9	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1385.7	1385.7	1385.7	1385.7	1385.7
2.5°	1390.4	1386.4	1377.7	1386.4	1384.4
5°	1384.4	1381.0	1372.3	1382.3	1380.3
7.5°	1374.3	1371.6	1364.9	1375.7	1373.6
10°	1360.3	1358.3	1353.6	1365.6	1364.3
12.5°	1340.9	1341.5	1338.9	1353.6	1352.2
15°	1318.8	1318.8	1320.8	1337.5	1337.5
17.5°	1292.7	1294.0	1298.0	1320.1	1320.8
20°	1263.2	1266.6	1275.3	1298.0	1302.1
22.5°	1231.8	1235.8	1247.9	1274.6	1280.6
25°	1195.0	1201.7	1218.4	1249.2	1254.5
27.5°	1156.2	1166.2	1187.0	1220.4	1227.1
30°	1116.0	1126.8	1152.8	1189.0	1198.3
32.5°	1072.6	1086.6	1118.1	1156.2	1166.9
35°	1027.7	1043.1	1079.2	1122.1	1133.4
37.5°	982.9	999.6	1040.4	1086.6	1098.0
40°	935.4	954.8	999.6	1047.1	1062.5
42.5°	885.2	906.6	956.1	1008.3	1023.0
45°	835.0	859.8	914.0	968.2	982.9
47.5°	786.2	811.6	870.5	926.7	942.1
50°	733.3	762.8	827.0	882.5	901.9
52.5°	681.8	714.6	782.2	838.4	857.8
55°	629.6	663.7	734.7	791.5	811.6
57.5°	578.8	614.9	689.8	746.0	760.1
60°	524.6	564.0	639.7	696.5	712.6
62.5°	473.7	514.5	590.8	645.7	661.1
65°	420.9	464.3	539.3	592.1	603.5
67.5°	371.3	414.8	490.4	535.9	547.3
70°	317.1	365.3	438.9	477.7	479.1
72.5°	265.6	314.5	386.1	410.8	407.5
75°	212.8	266.3	327.9	332.5	325.2
77.5°	165.3	218.8	260.9	246.2	231.5
80°	119.8	172.0	184.0	161.3	148.5
82.5°	79.0	120.4	111.1	79.6	68.2
85°	42.2	61.6	36.1	14.7	8.7
87.5°	16.1	10.7	4.0	3.3	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)