

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: P475346

Luminaire Tested: **14CZ2-44-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475346
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-44-UNV-L830-CD1-U
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4363.6 lumens
Efficiency: N/A
Efficacy: 126.1 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

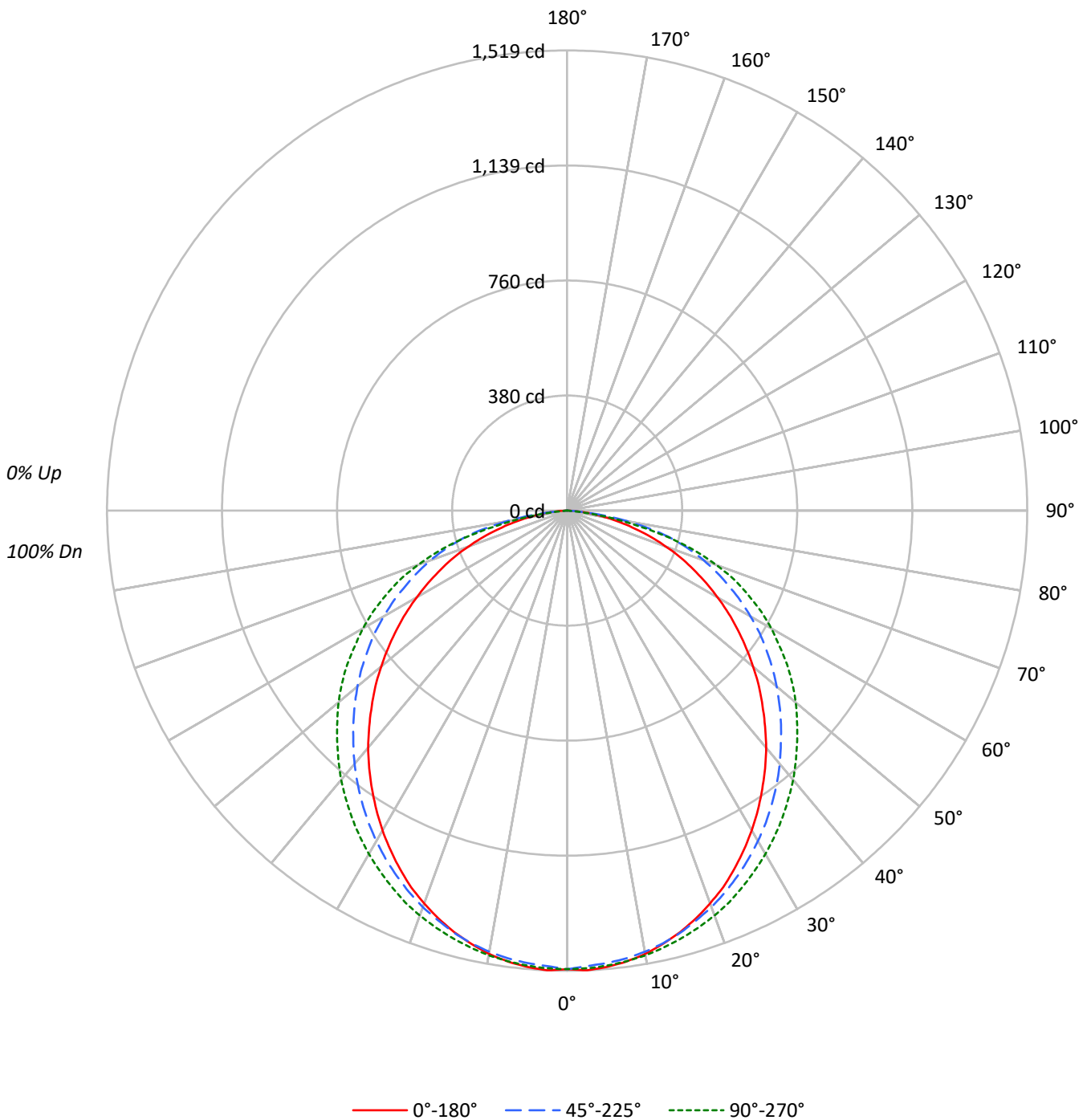
Input Watts (W): 34.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4074	4074	4074
5°	4085	4050	4073
10°	4060	4041	4073
15°	4014	4020	4071
20°	3952	3990	4073
25°	3876	3952	4069
30°	3788	3913	4068
35°	3688	3873	4068
40°	3590	3836	4077
45°	3471	3800	4086
50°	3354	3782	4125
55°	3227	3765	4160
60°	3084	3761	4190
65°	2928	3751	4198
70°	2726	3773	4118
75°	2416	3724	3693
80°	2027	3115	2515
85°	1420	1220	293



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	143.2	3.3
10°-20°	408.8	9.4
20°-30°	615.9	14.1
30°-40°	739.3	16.9
40°-50°	769.7	17.6
50°-60°	711.2	16.3
60°-70°	569.7	13.1
70°-80°	340.8	7.8
80°-90°	65.0	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°	1167.9	26.8
0°-40°	1907.2	43.7
0°-60°	3388.1	77.6
0°-90°	4363.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4363.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1514	1514	1514	1514	1514	
5°	1512	1509	1499	1510	1508	144
15°	1441	1441	1443	1461	1461	406
25°	1306	1313	1331	1365	1370	601
35°	1123	1140	1179	1226	1238	703
45°	912	939	998	1058	1074	704
55°	688	725	803	865	887	615
65°	460	507	589	647	659	456
75°	232	291	358	363	355	248
85°	46	67	40	16	10	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1513.8	1513.8	1513.8	1513.8	1513.8
2.5°	1518.9	1514.5	1505.0	1514.5	1512.3
5°	1512.3	1508.7	1499.2	1510.1	1507.9
7.5°	1501.4	1498.4	1491.1	1502.8	1500.6
10°	1486.0	1483.8	1478.7	1491.9	1490.4
12.5°	1464.8	1465.5	1462.6	1478.7	1477.2
15°	1440.7	1440.7	1442.9	1461.2	1461.2
17.5°	1412.2	1413.6	1418.0	1442.2	1442.9
20°	1380.0	1383.7	1393.2	1418.0	1422.4
22.5°	1345.7	1350.1	1363.2	1392.4	1399.0
25°	1305.5	1312.8	1331.0	1364.7	1370.5
27.5°	1263.1	1274.0	1296.7	1333.2	1340.5
30°	1219.2	1230.9	1259.4	1298.9	1309.1
32.5°	1171.7	1187.1	1221.4	1263.1	1274.8
35°	1122.7	1139.5	1179.0	1225.8	1238.2
37.5°	1073.8	1092.0	1136.6	1187.1	1199.5
40°	1021.9	1043.1	1092.0	1143.9	1160.7
42.5°	967.0	990.4	1044.5	1101.5	1117.6
45°	912.2	939.3	998.5	1057.7	1073.8
47.5°	858.9	886.6	951.0	1012.4	1029.2
50°	801.1	833.3	903.4	964.1	985.3
52.5°	744.8	780.6	854.5	915.9	937.1
55°	687.8	725.1	802.6	864.7	886.6
57.5°	632.3	671.7	753.6	815.0	830.4
60°	573.1	616.2	698.8	760.9	778.5
62.5°	517.5	562.1	645.4	705.4	722.2
65°	459.8	507.3	589.1	646.9	659.3
67.5°	405.7	453.2	535.8	585.5	597.9
70°	346.5	399.1	479.5	521.9	523.4
72.5°	290.2	343.5	421.8	448.8	445.1
75°	232.4	290.9	358.2	363.3	355.2
77.5°	180.5	239.0	285.1	269.0	252.9
80°	130.8	187.9	201.0	176.2	162.3
82.5°	86.3	131.6	121.3	87.0	74.6
85°	46.0	67.2	39.5	16.1	9.5
87.5°	17.5	11.7	4.4	3.7	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)