

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: P474771

Luminaire Tested: **22CZ2-44HE-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474771  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-44HE-UNV-L830-CD1-U  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,RIBBED LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4407.0 lumens  
Efficiency: N/A  
Efficacy: 134.4 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

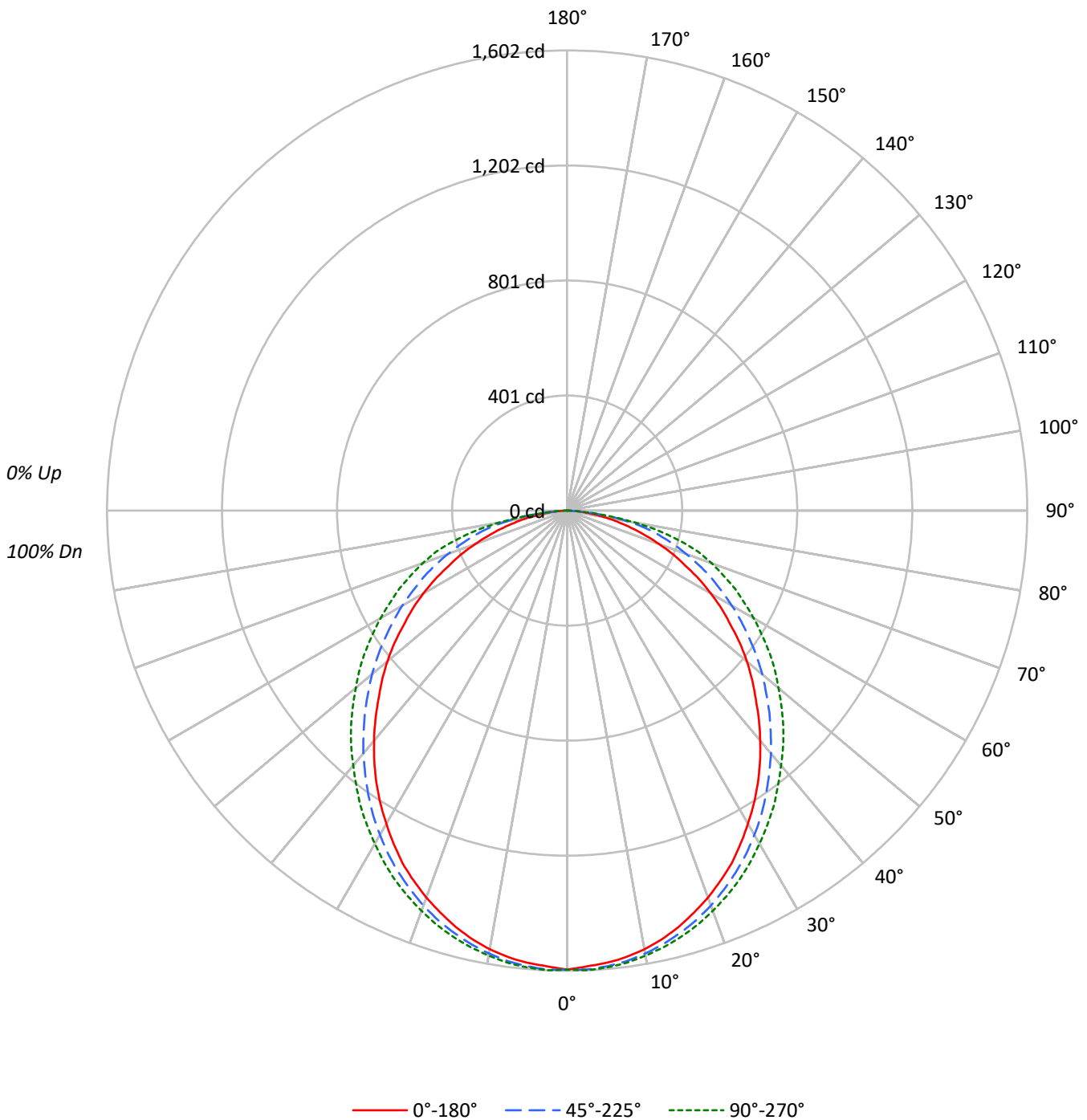
Input Watts (W): 32.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	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	36	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	29	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°	4301	4301	4301
5°	4269	4302	4312
10°	4237	4278	4298
15°	4180	4240	4279
20°	4105	4190	4246
25°	4024	4126	4211
30°	3913	4052	4162
35°	3803	3965	4121
40°	3674	3877	4070
45°	3534	3789	4051
50°	3419	3712	4020
55°	3260	3631	4029
60°	3113	3569	4040
65°	2894	3522	4104
70°	2674	3474	4206
75°	2391	3457	4232
80°	2007	3276	3694
85°	1553	2242	2100



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	151.0	3.4
10°-20°	428.6	9.7
20°-30°	639.1	14.5
30°-40°	754.5	17.1
40°-50°	768.9	17.4
50°-60°	693.4	15.7
60°-70°	545.0	12.4
70°-80°	341.2	7.7
80°-90°	85.1	1.9
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°	1218.7	27.7
0°-40°	1973.2	44.8
0°-60°	3435.6	78.0
0°-90°	4407.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4407.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1598	1598	1598	1598	1598	
5°	1580	1584	1593	1596	1596	150
15°	1500	1507	1522	1533	1536	423
25°	1355	1365	1390	1411	1418	623
35°	1158	1173	1207	1241	1254	723
45°	929	949	996	1044	1064	718
55°	695	716	774	834	859	624
65°	454	482	553	615	644	453
75°	230	264	332	392	407	244
85°	50	64	73	73	68	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1598.2	1598.2	1598.2	1598.2	1598.2
2.5°	1588.0	1591.7	1599.1	1601.9	1601.9
5°	1580.5	1584.2	1592.6	1596.3	1596.3
7.5°	1568.4	1572.1	1582.4	1587.0	1588.0
10°	1550.7	1555.4	1565.6	1573.1	1573.1
12.5°	1528.3	1533.0	1546.0	1555.4	1556.3
15°	1500.4	1506.9	1521.8	1533.0	1535.8
17.5°	1467.8	1478.1	1494.8	1508.8	1511.6
20°	1433.3	1443.6	1463.2	1479.0	1482.7
22.5°	1395.2	1404.5	1427.8	1447.3	1452.0
25°	1355.1	1365.4	1389.6	1411.0	1418.4
27.5°	1307.6	1319.7	1348.6	1372.8	1380.3
30°	1259.2	1274.1	1303.9	1330.9	1339.3
32.5°	1209.8	1223.8	1257.3	1286.2	1297.4
35°	1157.7	1172.6	1207.0	1240.6	1254.5
37.5°	1102.7	1117.6	1154.9	1193.1	1206.1
40°	1045.9	1063.6	1103.7	1144.6	1158.6
42.5°	988.2	1006.8	1048.7	1094.3	1113.0
45°	928.6	949.0	995.6	1044.0	1064.5
47.5°	874.5	891.3	939.7	992.8	1012.4
50°	816.8	832.6	886.6	939.7	960.2
52.5°	758.1	773.0	830.8	886.6	911.8
55°	694.8	716.2	774.0	833.6	858.7
57.5°	638.9	658.5	718.1	778.6	802.8
60°	578.4	598.9	663.1	724.6	750.7
62.5°	517.8	540.2	605.4	671.5	695.7
65°	454.5	482.4	553.2	614.7	644.5
67.5°	400.5	427.5	497.3	561.6	587.7
70°	339.9	371.6	441.5	506.7	534.6
72.5°	283.1	314.8	386.5	451.7	479.6
75°	230.0	264.5	332.5	392.1	407.0
77.5°	178.8	211.4	279.4	313.9	329.7
80°	129.5	161.1	211.4	234.7	238.4
82.5°	87.5	114.6	143.4	149.9	146.2
85°	50.3	64.3	72.6	72.6	68.0
87.5°	20.5	20.5	17.7	11.2	6.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)