

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: P474776

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

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474776  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-44VHE-UNV-L830-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4254.5 lumens  
Efficiency: N/A  
Efficacy: 140.9 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

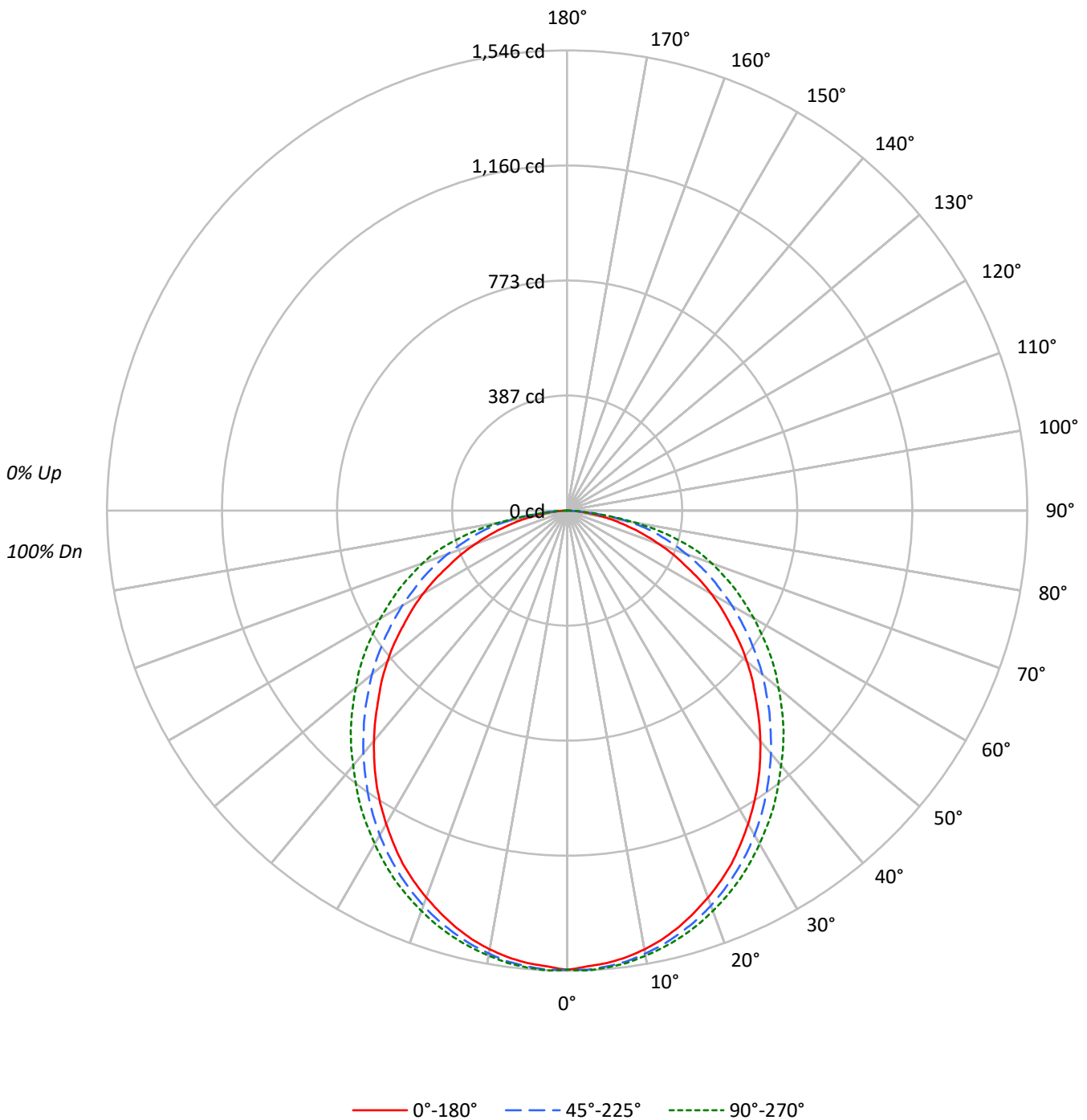
Input Watts (W): 30.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4152	4152	4152
5°	4122	4153	4163
10°	4091	4130	4150
15°	4035	4093	4131
20°	3963	4045	4099
25°	3884	3983	4066
30°	3777	3911	4017
35°	3671	3828	3979
40°	3547	3743	3929
45°	3411	3658	3911
50°	3301	3584	3881
55°	3147	3506	3889
60°	3005	3446	3900
65°	2794	3401	3962
70°	2582	3353	4061
75°	2309	3337	4085
80°	1937	3163	3567
85°	1501	2164	2025



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.8	3.4
10°-20°	413.8	9.7
20°-30°	617.0	14.5
30°-40°	728.4	17.1
40°-50°	742.4	17.4
50°-60°	669.5	15.7
60°-70°	526.2	12.4
70°-80°	329.4	7.7
80°-90°	82.1	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°	1176.6	27.7
0°-40°	1904.9	44.8
0°-60°	3316.8	78.0
0°-90°	4254.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4254.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1543	1543	1543	1543	1543	
5°	1526	1529	1538	1541	1541	145
15°	1448	1455	1469	1480	1483	408
25°	1308	1318	1342	1362	1369	601
35°	1118	1132	1165	1198	1211	698
45°	896	916	961	1008	1028	693
55°	671	691	747	805	829	602
65°	439	466	534	593	622	437
75°	222	255	321	378	393	236
85°	49	62	70	70	66	59
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1542.9	1542.9	1542.9	1542.9	1542.9
2.5°	1533.0	1536.6	1543.8	1546.5	1546.5
5°	1525.8	1529.4	1537.5	1541.1	1541.1
7.5°	1514.1	1517.7	1527.6	1532.1	1533.0
10°	1497.1	1501.5	1511.4	1518.6	1518.6
12.5°	1475.5	1480.0	1492.6	1501.5	1502.4
15°	1448.5	1454.8	1469.2	1480.0	1482.7
17.5°	1417.0	1426.9	1443.1	1456.6	1459.3
20°	1383.8	1393.7	1412.5	1427.8	1431.4
22.5°	1346.9	1355.9	1378.4	1397.2	1401.7
25°	1308.2	1318.1	1341.5	1362.2	1369.4
27.5°	1262.4	1274.1	1301.9	1325.3	1332.5
30°	1215.6	1230.0	1258.8	1284.9	1292.9
32.5°	1168.0	1181.5	1213.8	1241.7	1252.5
35°	1117.6	1132.0	1165.3	1197.6	1211.1
37.5°	1064.6	1079.0	1114.9	1151.8	1164.4
40°	1009.7	1026.8	1065.5	1105.0	1118.5
42.5°	954.0	972.0	1012.4	1056.5	1074.5
45°	896.4	916.2	961.2	1007.9	1027.7
47.5°	844.3	860.5	907.2	958.5	977.4
50°	788.5	803.8	856.0	907.2	927.0
52.5°	731.9	746.3	802.0	856.0	880.2
55°	670.8	691.4	747.2	804.7	829.0
57.5°	616.8	635.7	693.2	751.7	775.1
60°	558.4	578.1	640.2	699.5	724.7
62.5°	499.9	521.5	584.4	648.3	671.7
65°	438.8	465.7	534.1	593.4	622.2
67.5°	386.6	412.7	480.1	542.2	567.4
70°	328.2	358.8	426.2	489.1	516.1
72.5°	273.3	303.9	373.1	436.1	463.1
75°	222.1	255.4	321.0	378.5	392.9
77.5°	172.6	204.1	269.7	303.0	318.3
80°	125.0	155.5	204.1	226.6	230.2
82.5°	84.5	110.6	138.5	144.8	141.2
85°	48.6	62.0	70.1	70.1	65.6
87.5°	19.8	19.8	17.1	10.8	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)