

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: P474574

Luminaire Tested: **24CZ2-55HE-SQR-UNV-L830-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474574  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-55HE-SQR-UNV-L830-CD1-U  
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SQUARE LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5245.9 lumens  
Efficiency: N/A  
Efficacy: 120.6 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

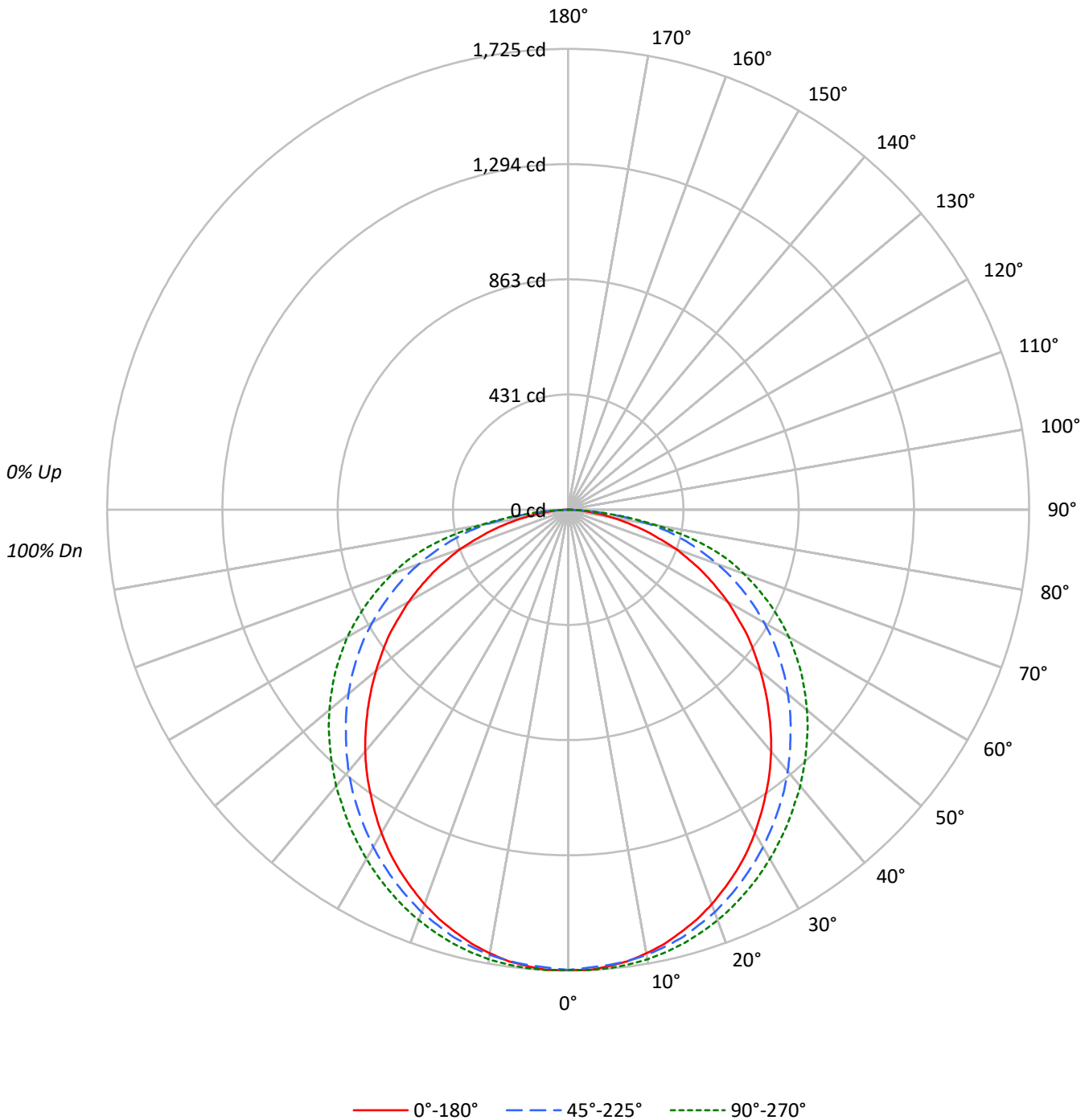
Input Watts (W): 43.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4637	4637	4637
5°	4636	4623	4655
10°	4608	4624	4670
15°	4558	4614	4677
20°	4500	4591	4682
25°	4427	4559	4683
30°	4341	4531	4690
35°	4243	4504	4708
40°	4151	4490	4746
45°	4038	4478	4797
50°	3930	4491	4884
55°	3838	4522	4994
60°	3708	4556	5133
65°	3559	4611	5289
70°	3376	4675	5500
75°	3023	4740	5681
80°	2546	4753	5156
85°	1890	3597	3390



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.3	3.1
10°-20°	468.0	8.9
20°-30°	708.4	13.5
30°-40°	857.0	16.3
40°-50°	904.6	17.2
50°-60°	853.1	16.3
60°-70°	703.3	13.4
70°-80°	461.4	8.8
80°-90°	126.8	2.4
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°	1339.7	25.5
0°-40°	2196.7	41.9
0°-60°	3954.4	75.4
0°-90°	5245.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5245.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1723	1723	1723	1723	1723	
5°	1716	1716	1711	1723	1723	163
15°	1636	1645	1656	1675	1679	462
25°	1491	1509	1535	1567	1577	687
35°	1292	1325	1371	1418	1433	808
45°	1061	1109	1177	1240	1260	819
55°	818	876	964	1036	1064	729
65°	559	626	724	801	831	552
75°	291	365	456	528	546	307
85°	61	106	116	113	110	76
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1723.1	1723.1	1723.1	1723.1	1723.1
2.5°	1724.8	1723.1	1715.6	1725.6	1724.8
5°	1716.4	1716.4	1711.4	1723.1	1723.1
7.5°	1704.7	1705.5	1703.8	1717.3	1717.3
10°	1686.2	1689.6	1692.1	1707.2	1708.9
12.5°	1664.5	1670.3	1675.4	1693.8	1695.5
15°	1636.0	1645.2	1656.1	1675.4	1678.7
17.5°	1606.6	1617.5	1629.3	1654.4	1658.6
20°	1571.4	1584.0	1603.3	1628.4	1635.1
22.5°	1532.0	1549.6	1569.8	1599.9	1608.3
25°	1491.0	1509.4	1535.4	1567.2	1577.3
27.5°	1446.6	1468.3	1497.7	1534.6	1545.4
30°	1397.1	1422.2	1458.3	1497.7	1509.4
32.5°	1345.1	1374.5	1414.7	1458.3	1471.7
35°	1291.5	1325.0	1371.1	1418.1	1433.1
37.5°	1238.7	1272.2	1326.7	1376.2	1390.4
40°	1181.7	1218.6	1278.1	1330.9	1351.0
42.5°	1121.4	1165.0	1227.8	1286.5	1305.8
45°	1061.0	1108.8	1176.7	1239.5	1260.5
47.5°	999.8	1052.6	1127.2	1190.9	1215.2
50°	938.7	994.8	1072.8	1141.5	1166.6
52.5°	876.6	935.3	1020.0	1092.9	1115.5
55°	818.0	875.8	963.8	1035.9	1064.4
57.5°	750.1	815.5	908.5	981.4	1009.1
60°	688.9	752.6	846.5	923.6	953.8
62.5°	622.7	688.1	787.0	864.1	893.4
65°	559.0	626.1	724.1	801.2	830.6
67.5°	490.3	560.7	661.3	735.8	764.3
70°	429.1	495.3	594.2	670.5	699.0
72.5°	354.5	429.9	524.6	600.1	631.1
75°	290.8	365.4	455.9	528.0	546.4
77.5°	223.8	298.4	388.0	435.0	447.5
80°	164.3	234.7	306.7	331.9	332.7
82.5°	110.6	172.6	213.7	226.3	224.6
85°	61.2	105.6	116.5	113.1	109.8
87.5°	25.1	35.2	28.5	20.1	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)