

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: P473766

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

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473766
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-55-UNV-L830-CD1-U
Description: 2'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: 5263.0 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

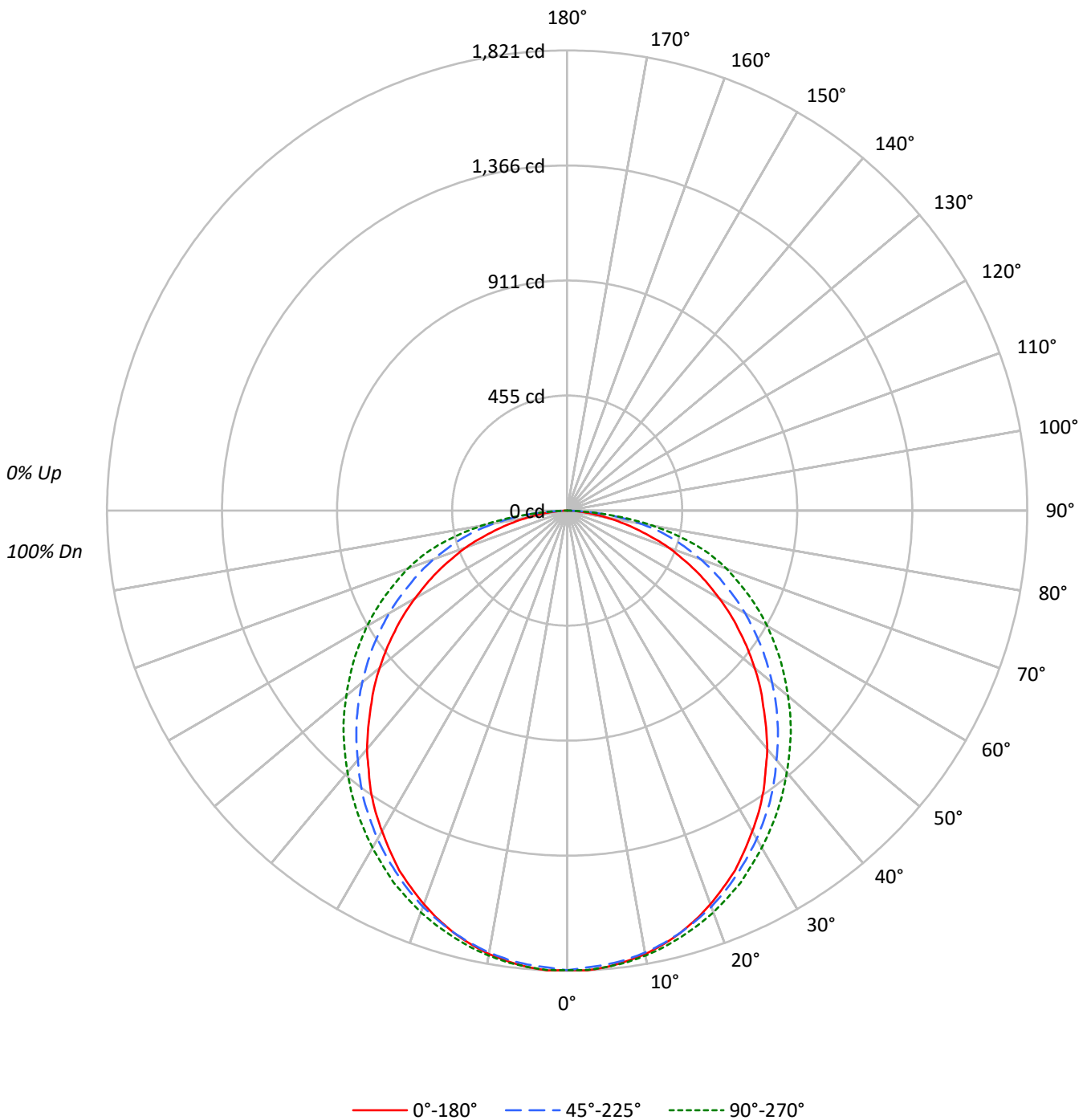
Input Watts (W): 43
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	88	81	75	84	78	74	81	76	72	78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	37
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2447	2447	2447
5°	2448	2436	2448
10°	2435	2427	2443
15°	2410	2409	2433
20°	2374	2389	2423
25°	2333	2359	2411
30°	2276	2332	2394
35°	2225	2302	2384
40°	2164	2264	2374
45°	2090	2241	2382
50°	2027	2216	2388
55°	1953	2200	2415
60°	1872	2190	2460
65°	1784	2182	2523
70°	1679	2204	2639
75°	1476	2250	2745
80°	1232	2266	2648
85°	880	1942	1968



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.9	3.3
10°-20°	489.7	9.3
20°-30°	734.7	14.0
30°-40°	877.1	16.7
40°-50°	908.5	17.3
50°-60°	836.4	15.9
60°-70°	674.7	12.8
70°-80°	440.8	8.4
80°-90°	129.2	2.5
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°	1396.3	26.5
0°-40°	2273.4	43.2
0°-60°	4018.3	76.3
0°-90°	5263.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5263.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1819	1819	1819	1819	1819	
5°	1813	1811	1803	1814	1813	172
15°	1730	1730	1729	1746	1746	488
25°	1571	1575	1589	1618	1624	722
35°	1354	1366	1401	1440	1451	846
45°	1098	1126	1178	1230	1252	849
55°	832	868	938	1007	1030	745
65°	560	599	685	764	792	554
75°	284	338	433	508	528	303
85°	57	99	126	134	128	71
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1818.7	1818.7	1818.7	1818.7	1818.7
2.5°	1821.3	1818.7	1809.4	1820.4	1819.6
5°	1812.8	1811.1	1803.4	1813.6	1812.8
7.5°	1799.2	1798.3	1792.3	1803.4	1803.4
10°	1782.1	1780.4	1776.2	1788.9	1788.1
12.5°	1758.3	1757.5	1754.9	1770.2	1769.4
15°	1730.3	1730.3	1729.4	1746.4	1746.4
17.5°	1696.3	1697.1	1700.5	1720.1	1720.9
20°	1658.0	1661.4	1668.2	1690.3	1692.0
22.5°	1614.6	1621.4	1630.8	1655.5	1658.0
25°	1571.3	1574.7	1589.1	1618.0	1624.0
27.5°	1518.6	1527.1	1545.8	1575.5	1581.5
30°	1465.0	1476.9	1500.7	1531.3	1540.7
32.5°	1412.3	1422.5	1450.5	1485.4	1496.5
35°	1354.5	1366.4	1401.2	1439.5	1451.4
37.5°	1290.7	1309.4	1346.0	1390.2	1402.9
40°	1232.0	1249.0	1289.0	1338.3	1351.9
42.5°	1164.9	1186.1	1234.6	1284.7	1301.7
45°	1098.5	1125.7	1177.6	1230.3	1251.6
47.5°	1036.5	1058.6	1119.8	1179.3	1198.0
50°	968.4	994.0	1058.6	1121.5	1141.0
52.5°	901.3	931.9	997.4	1063.7	1084.9
55°	832.4	868.1	937.8	1006.7	1029.7
57.5°	766.1	801.8	874.1	947.2	971.0
60°	695.5	733.8	813.7	884.3	914.0
62.5°	627.5	665.8	749.9	826.5	854.5
65°	560.3	598.6	685.3	763.5	792.4
67.5°	490.6	532.3	624.9	700.6	728.7
70°	426.8	466.8	560.3	641.1	670.9
72.5°	353.7	401.3	496.6	576.5	604.5
75°	284.0	337.6	432.8	507.6	528.0
77.5°	219.4	272.9	368.2	424.3	437.0
80°	159.0	213.4	292.5	331.6	341.8
82.5°	102.9	159.0	211.7	238.1	241.5
85°	57.0	98.6	125.8	133.5	127.5
87.5°	20.4	37.4	36.6	29.8	23.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)