

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: P473974

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

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P473974  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-55HE-S-UNV-L830-CD1-U  
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5632.2 lumens  
Efficiency: N/A  
Efficacy: 129.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

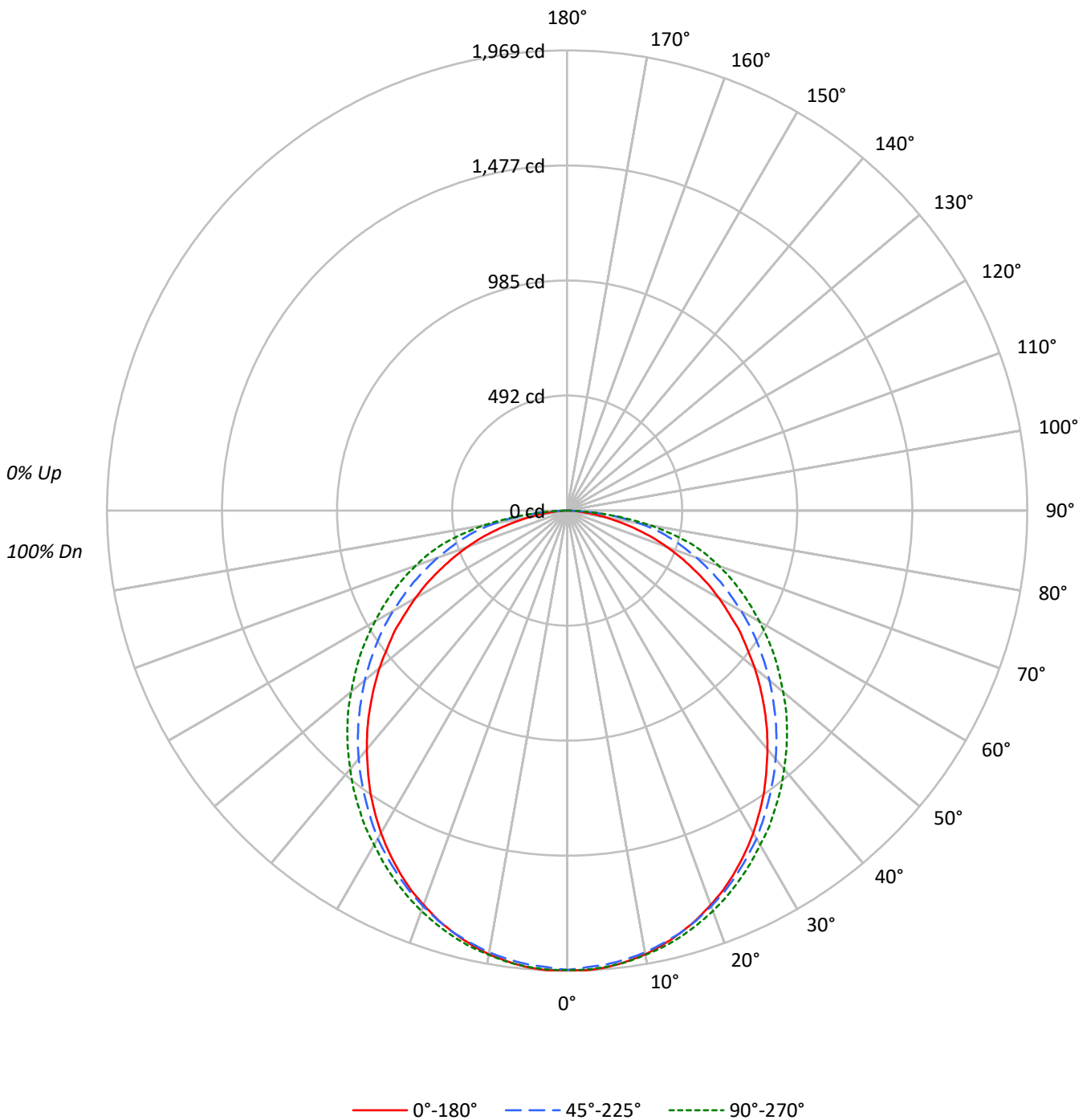
Input Watts (W): 43.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	99	95	105	101	97	93	97	93	90		93	90	87		89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74		81	76	72		78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62		71	65	61		68	64	59	57
4	82	69	60	54	79	68	60	53	66	58	52		63	57	52		61	55	51	49
5	75	62	53	46	73	61	52	46	59	51	45		57	50	45		55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40		51	44	39		50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35		47	40	35		45	39	34	32
8	60	46	38	32	58	45	37	31	44	37	31		43	36	31		42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28		39	33	28		38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26		37	30	25		36	30	25	24

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

	0°	45°	90°
0°	2645	2645	2645
5°	2649	2633	2646
10°	2634	2623	2638
15°	2607	2606	2628
20°	2571	2579	2611
25°	2529	2551	2590
30°	2475	2518	2566
35°	2413	2474	2551
40°	2341	2437	2536
45°	2271	2399	2531
50°	2194	2366	2525
55°	2116	2337	2539
60°	2019	2315	2557
65°	1911	2306	2618
70°	1783	2318	2711
75°	1587	2386	2857
80°	1297	2437	2789
85°	914	2127	2171



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.9	3.3
10°-20°	529.3	9.4
20°-30°	793.5	14.1
30°-40°	945.0	16.8
40°-50°	974.4	17.3
50°-60°	889.2	15.8
60°-70°	711.0	12.6
70°-80°	464.4	8.2
80°-90°	139.4	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°	1508.7	26.8
0°-40°	2453.7	43.6
0°-60°	4317.3	76.7
0°-90°	5632.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5632.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1966	1966	1966	1966	1966	
5°	1961	1958	1949	1961	1959	186
15°	1872	1872	1871	1886	1886	528
25°	1703	1706	1718	1743	1745	784
35°	1469	1479	1506	1544	1553	918
45°	1193	1215	1261	1314	1330	920
55°	902	928	996	1062	1082	803
65°	600	641	724	796	822	595
75°	305	356	459	533	550	324
85°	59	106	138	141	141	75
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1965.9	1965.9	1965.9	1965.9	1965.9
2.5°	1968.7	1965.9	1955.7	1967.7	1965.9
5°	1961.3	1957.6	1949.2	1961.3	1959.4
7.5°	1946.5	1944.6	1936.3	1950.2	1948.3
10°	1928.0	1926.1	1919.6	1933.5	1930.7
12.5°	1902.1	1901.1	1896.5	1913.2	1911.3
15°	1871.5	1872.5	1870.6	1886.3	1886.3
17.5°	1836.4	1835.4	1839.1	1858.6	1856.7
20°	1795.7	1796.6	1801.2	1823.4	1823.4
22.5°	1753.1	1752.2	1762.4	1784.6	1786.4
25°	1703.2	1705.9	1718.0	1742.9	1744.8
27.5°	1649.5	1654.1	1668.9	1697.6	1700.4
30°	1593.1	1598.6	1620.8	1647.6	1651.3
32.5°	1531.1	1543.1	1563.5	1597.7	1606.9
35°	1469.1	1479.3	1506.1	1544.0	1553.3
37.5°	1400.6	1417.3	1447.8	1489.5	1501.5
40°	1333.1	1349.8	1387.7	1431.2	1444.1
42.5°	1264.6	1282.2	1325.7	1374.7	1388.6
45°	1193.4	1214.7	1260.9	1313.7	1330.3
47.5°	1120.3	1145.3	1195.3	1252.6	1271.1
50°	1048.2	1073.1	1130.5	1189.7	1206.4
52.5°	970.5	1001.9	1063.0	1126.8	1143.5
55°	902.0	927.9	996.4	1062.0	1082.4
57.5°	821.5	856.7	929.8	996.4	1015.8
60°	750.3	782.7	860.4	927.9	950.1
62.5°	678.1	711.4	789.1	865.9	886.3
65°	600.4	641.1	724.4	795.6	822.4
67.5°	526.4	569.0	654.1	729.9	757.7
70°	453.3	496.8	589.3	667.0	689.2
72.5°	381.2	426.5	522.7	598.6	624.5
75°	305.3	356.2	458.9	532.9	549.5
77.5°	234.1	290.5	394.1	444.1	456.1
80°	167.4	229.4	314.5	350.6	359.9
82.5°	110.1	170.2	235.0	254.4	251.6
85°	59.2	106.4	137.8	140.6	140.6
87.5°	23.1	42.6	43.5	33.3	31.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)