

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: P474024

Luminaire Tested: **24CZ2-55HE-S-UNV-L835-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474024  
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-L835-CD1-U  
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,SMOOTH LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5836.5 lumens  
Efficiency: N/A  
Efficacy: 134.2 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

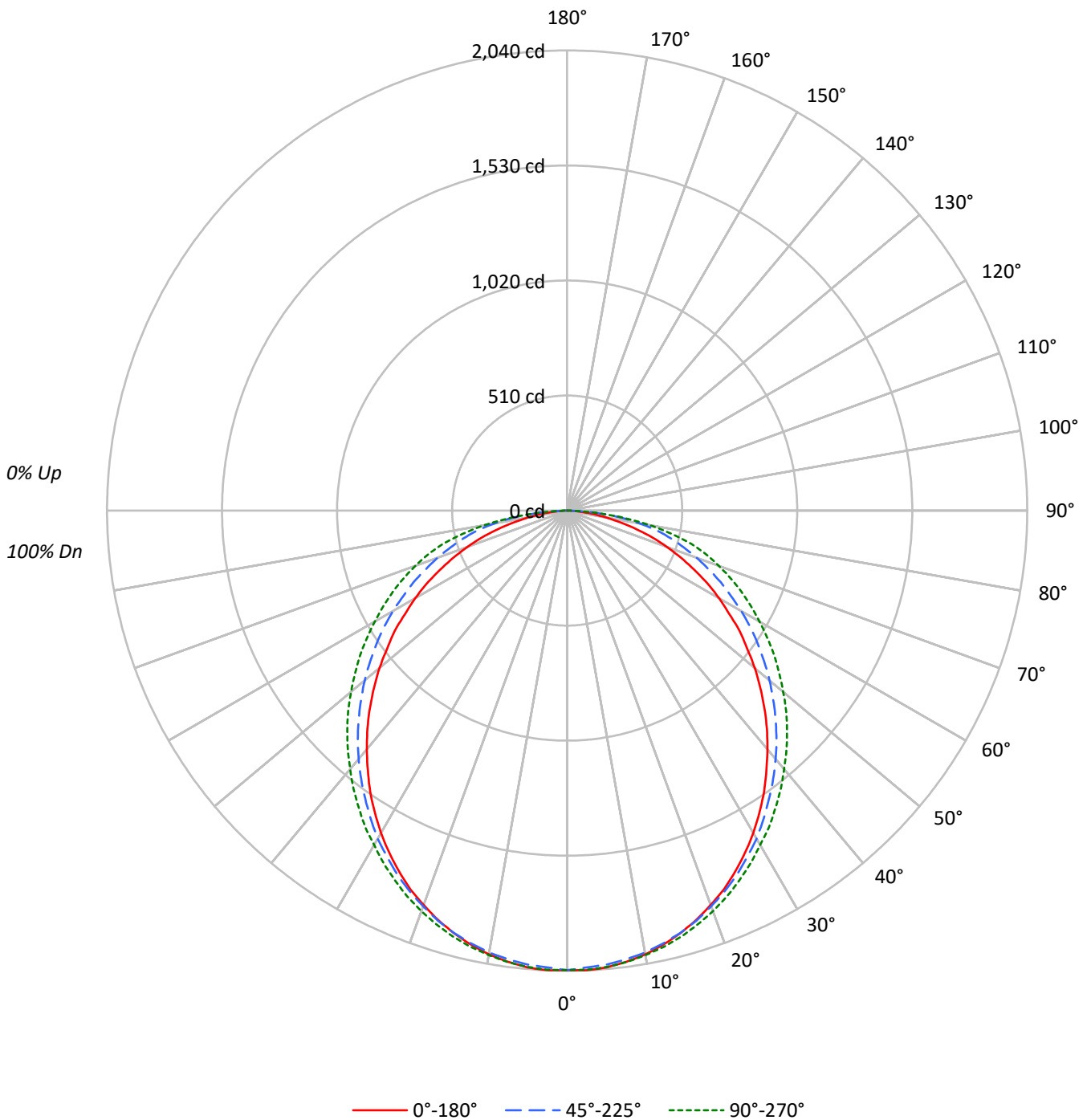
Input Watts (W): 43.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2741	2741	2741
5°	2745	2728	2742
10°	2730	2718	2734
15°	2701	2700	2723
20°	2664	2673	2706
25°	2620	2643	2684
30°	2565	2609	2659
35°	2501	2564	2644
40°	2426	2526	2628
45°	2353	2486	2623
50°	2274	2452	2617
55°	2193	2422	2631
60°	2092	2399	2650
65°	1981	2390	2713
70°	1848	2402	2810
75°	1645	2472	2961
80°	1344	2526	2889
85°	948	2205	2249



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	192.6	3.3
10°-20°	548.5	9.4
20°-30°	822.3	14.1
30°-40°	979.3	16.8
40°-50°	1009.8	17.3
50°-60°	921.4	15.8
60°-70°	736.8	12.6
70°-80°	481.3	8.2
80°-90°	144.5	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°	1563.4	26.8
0°-40°	2542.7	43.6
0°-60°	4473.9	76.7
0°-90°	5836.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5836.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2037	2037	2037	2037	2037	
5°	2032	2029	2020	2032	2030	193
15°	1939	1940	1938	1955	1955	547
25°	1765	1768	1780	1806	1808	813
35°	1522	1533	1561	1600	1610	951
45°	1237	1259	1307	1361	1379	954
55°	935	962	1032	1101	1122	833
65°	622	664	751	824	852	617
75°	316	369	476	552	570	336
85°	61	110	143	146	146	78
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2037.2	2037.2	2037.2	2037.2	2037.2
2.5°	2040.1	2037.2	2026.6	2039.1	2037.2
5°	2032.4	2028.6	2019.9	2032.4	2030.5
7.5°	2017.1	2015.1	2006.5	2020.9	2019.0
10°	1997.9	1996.0	1989.3	2003.6	2000.8
12.5°	1971.0	1970.1	1965.3	1982.5	1980.6
15°	1939.4	1940.4	1938.4	1954.7	1954.7
17.5°	1903.0	1902.0	1905.9	1926.0	1924.1
20°	1860.8	1861.8	1866.5	1889.6	1889.6
22.5°	1816.7	1815.7	1826.3	1849.3	1851.2
25°	1764.9	1767.8	1780.3	1806.2	1808.1
27.5°	1709.3	1714.1	1729.5	1759.2	1762.1
30°	1650.8	1656.6	1679.6	1707.4	1711.2
32.5°	1586.6	1599.1	1620.2	1655.6	1665.2
35°	1522.4	1532.9	1560.7	1600.0	1609.6
37.5°	1451.4	1468.7	1500.3	1543.5	1555.9
40°	1381.5	1398.7	1438.0	1483.1	1496.5
42.5°	1310.5	1328.7	1373.8	1424.6	1439.0
45°	1236.7	1258.7	1306.7	1361.3	1378.6
47.5°	1161.0	1186.8	1238.6	1298.1	1317.2
50°	1086.2	1112.1	1171.5	1232.9	1250.1
52.5°	1005.7	1038.2	1101.5	1167.7	1184.9
55°	934.7	961.6	1032.5	1100.6	1121.7
57.5°	851.3	887.7	963.5	1032.5	1052.6
60°	777.5	811.0	891.6	961.6	984.6
62.5°	702.7	737.2	817.8	897.3	918.4
65°	622.2	664.4	750.6	824.5	852.3
67.5°	545.5	589.6	677.8	756.4	785.2
70°	469.8	514.8	610.7	691.2	714.2
72.5°	395.0	442.0	541.7	620.3	647.1
75°	316.4	369.1	475.5	552.2	569.5
77.5°	242.5	301.0	408.4	460.2	472.6
80°	173.5	237.8	326.0	363.3	372.9
82.5°	114.1	176.4	243.5	263.6	260.8
85°	61.4	110.2	142.8	145.7	145.7
87.5°	24.0	44.1	45.1	34.5	32.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)