

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: P474066

Luminaire Tested: **24CZ2-55-S-UNV-L840-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474066  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-55-S-UNV-L840-CD1-U  
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5668.8 lumens  
Efficiency: N/A  
Efficacy: 131.8 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

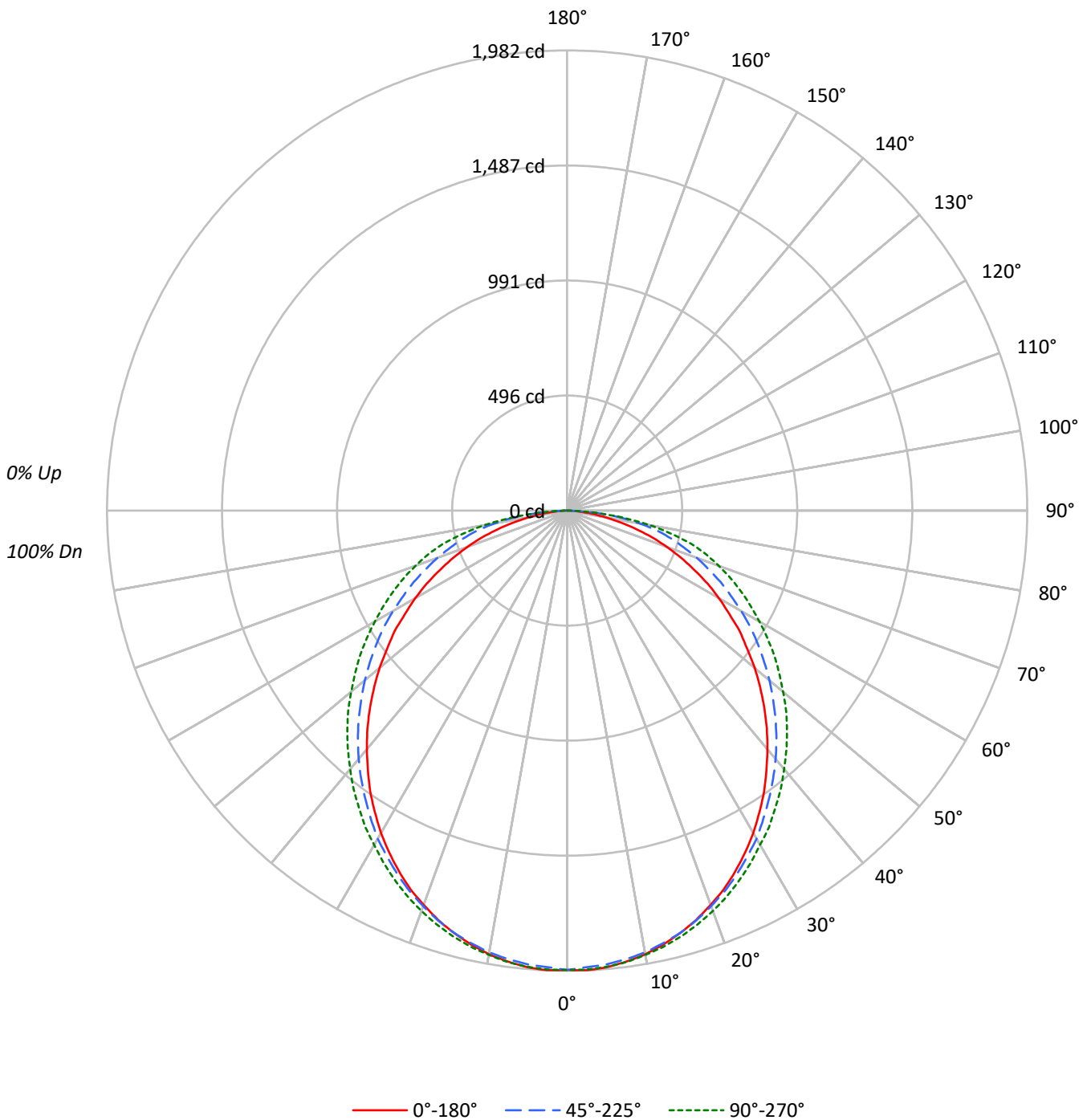
Input Watts (W): 43  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2662	2662	2662
5°	2666	2650	2664
10°	2651	2640	2655
15°	2624	2623	2645
20°	2588	2596	2628
25°	2545	2567	2607
30°	2491	2535	2582
35°	2429	2490	2568
40°	2357	2453	2553
45°	2286	2415	2548
50°	2208	2382	2542
55°	2130	2352	2556
60°	2032	2330	2573
65°	1924	2321	2635
70°	1795	2333	2729
75°	1598	2401	2875
80°	1306	2453	2806
85°	920	2141	2184



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	187.1	3.3
10°-20°	532.8	9.4
20°-30°	798.6	14.1
30°-40°	951.2	16.8
40°-50°	980.8	17.3
50°-60°	894.9	15.8
60°-70°	715.6	12.6
70°-80°	467.4	8.2
80°-90°	140.4	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°	1518.5	26.8
0°-40°	2469.7	43.6
0°-60°	4345.4	76.7
0°-90°	5668.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5668.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1979	1979	1979	1979	1979	
5°	1974	1970	1962	1974	1972	187
15°	1884	1885	1883	1899	1899	531
25°	1714	1717	1729	1754	1756	789
35°	1479	1489	1516	1554	1563	924
45°	1201	1223	1269	1322	1339	926
55°	908	934	1003	1069	1089	809
65°	604	645	729	801	828	599
75°	307	358	462	536	553	327
85°	60	107	139	142	142	76
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1978.7	1978.7	1978.7	1978.7	1978.7
2.5°	1981.5	1978.7	1968.4	1980.5	1978.7
5°	1974.0	1970.3	1961.9	1974.0	1972.2
7.5°	1959.1	1957.3	1948.9	1962.8	1961.0
10°	1940.5	1938.6	1932.1	1946.1	1943.3
12.5°	1914.4	1913.5	1908.8	1925.6	1923.7
15°	1883.7	1884.6	1882.8	1898.6	1898.6
17.5°	1848.3	1847.4	1851.1	1870.7	1868.8
20°	1807.3	1808.3	1812.9	1835.3	1835.3
22.5°	1764.5	1763.6	1773.8	1796.2	1798.0
25°	1714.2	1717.0	1729.1	1754.3	1756.1
27.5°	1660.2	1664.9	1679.8	1708.6	1711.4
30°	1603.4	1609.0	1631.4	1658.4	1662.1
32.5°	1541.0	1553.1	1573.6	1608.1	1617.4
35°	1478.6	1488.9	1515.9	1554.1	1563.4
37.5°	1409.7	1426.5	1457.2	1499.1	1511.2
40°	1341.8	1358.5	1396.7	1440.5	1453.5
42.5°	1272.9	1290.6	1334.3	1383.7	1397.6
45°	1201.2	1222.6	1269.1	1322.2	1339.0
47.5°	1127.6	1152.8	1203.0	1260.8	1279.4
50°	1055.0	1080.1	1137.9	1197.4	1214.2
52.5°	976.8	1008.4	1069.9	1134.1	1150.9
55°	907.9	933.9	1002.8	1068.9	1089.4
57.5°	826.9	862.2	935.8	1002.8	1022.4
60°	755.2	787.7	866.0	933.9	956.3
62.5°	682.5	716.0	794.3	871.5	892.0
65°	604.3	645.3	729.1	800.8	827.8
67.5°	529.8	572.7	658.3	734.7	762.6
70°	456.3	500.0	593.1	671.4	693.7
72.5°	383.6	429.3	526.1	602.4	628.5
75°	307.3	358.5	461.8	536.3	553.1
77.5°	235.6	292.4	396.7	446.9	459.1
80°	168.5	230.9	316.6	352.9	362.2
82.5°	110.8	171.3	236.5	256.1	253.3
85°	59.6	107.1	138.7	141.5	141.5
87.5°	23.3	42.8	43.8	33.5	31.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)