

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: P473836

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

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P473836  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-55VHE-UNV-L835-CD1-U  
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

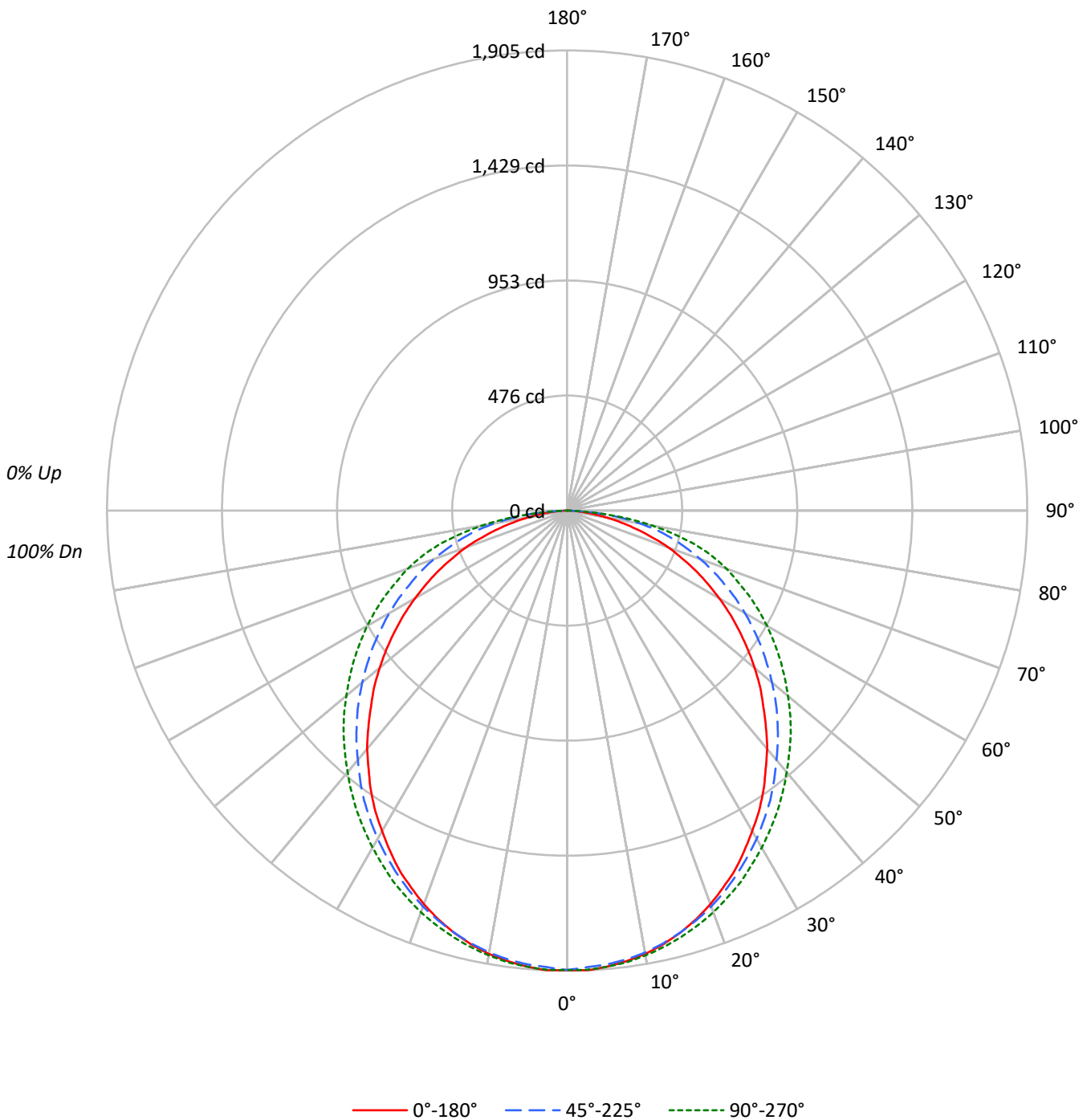
Lumens per Lamp: N/A  
Luminaire Lumens: 5503.9 lumens  
Efficiency: N/A  
Efficacy: 148.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 37.1  
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°	2559	2559	2559
5°	2560	2547	2560
10°	2546	2538	2555
15°	2521	2519	2544
20°	2483	2498	2534
25°	2439	2467	2521
30°	2380	2438	2503
35°	2327	2407	2493
40°	2263	2368	2483
45°	2186	2343	2491
50°	2120	2317	2498
55°	2042	2301	2526
60°	1957	2290	2572
65°	1866	2282	2638
70°	1756	2305	2760
75°	1544	2353	2871
80°	1289	2370	2769
85°	920	2032	2059



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	179.8	3.3
10°-20°	512.1	9.3
20°-30°	768.3	14.0
30°-40°	917.3	16.7
40°-50°	950.1	17.3
50°-60°	874.7	15.9
60°-70°	705.6	12.8
70°-80°	461.0	8.4
80°-90°	135.2	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°	1460.2	26.5
0°-40°	2377.4	43.2
0°-60°	4202.2	76.3
0°-90°	5503.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5503.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1902	1902	1902	1902	1902	
5°	1896	1894	1886	1897	1896	180
15°	1810	1810	1809	1826	1826	510
25°	1643	1647	1662	1692	1698	756
35°	1416	1429	1465	1505	1518	885
45°	1149	1177	1232	1287	1309	888
55°	870	908	981	1053	1077	779
65°	586	626	717	798	829	579
75°	297	353	453	531	552	317
85°	60	103	132	140	133	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1901.9	1901.9	1901.9	1901.9	1901.9
2.5°	1904.6	1901.9	1892.2	1903.7	1902.8
5°	1895.7	1893.9	1885.9	1896.6	1895.7
7.5°	1881.5	1880.6	1874.4	1885.9	1885.9
10°	1863.7	1861.9	1857.5	1870.8	1869.9
12.5°	1838.8	1837.9	1835.3	1851.3	1850.4
15°	1809.5	1809.5	1808.6	1826.4	1826.4
17.5°	1773.9	1774.8	1778.4	1798.8	1799.7
20°	1733.9	1737.5	1744.6	1767.7	1769.5
22.5°	1688.5	1695.7	1705.4	1731.2	1733.9
25°	1643.2	1646.8	1661.9	1692.1	1698.3
27.5°	1588.1	1597.0	1616.5	1647.6	1653.9
30°	1532.1	1544.5	1569.4	1601.4	1611.2
32.5°	1476.9	1487.6	1516.9	1553.4	1564.9
35°	1416.5	1428.9	1465.4	1505.4	1517.8
37.5°	1349.8	1369.3	1407.6	1453.8	1467.1
40°	1288.4	1306.2	1348.0	1399.6	1413.8
42.5°	1218.2	1240.4	1291.1	1343.5	1361.3
45°	1148.8	1177.3	1231.5	1286.6	1308.9
47.5°	1083.9	1107.0	1171.0	1233.3	1252.8
50°	1012.8	1039.4	1107.0	1172.8	1193.3
52.5°	942.5	974.5	1043.0	1112.4	1134.6
55°	870.5	907.8	980.8	1052.8	1076.8
57.5°	801.1	838.5	914.1	990.5	1015.4
60°	727.3	767.4	850.9	924.7	955.9
62.5°	656.2	696.2	784.3	864.3	893.6
65°	586.0	626.0	716.7	798.5	828.7
67.5°	513.1	556.6	653.5	732.7	762.0
70°	446.4	488.2	586.0	670.4	701.6
72.5°	369.9	419.7	519.3	602.9	632.2
75°	297.0	353.0	452.6	530.8	552.2
77.5°	229.4	285.4	385.0	443.7	457.0
80°	166.3	223.2	305.9	346.8	357.4
82.5°	107.6	166.3	221.4	249.0	252.5
85°	59.6	103.1	131.6	139.6	133.4
87.5°	21.3	39.1	38.2	31.1	24.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)