

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: P474016

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

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474016
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-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

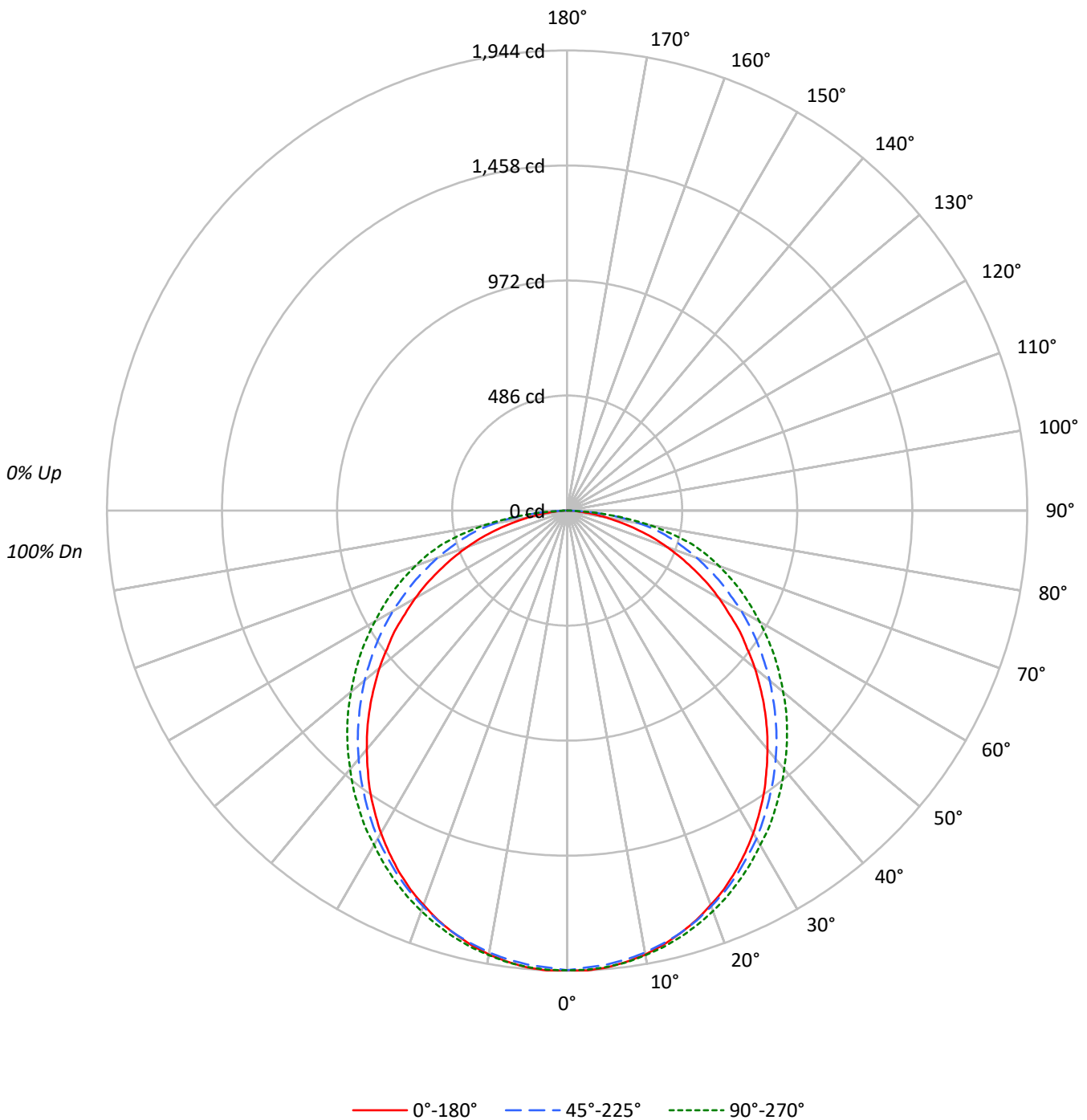
Lumens per Lamp: N/A
Luminaire Lumens: 5563.1 lumens
Efficiency: N/A
Efficacy: 129.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	2613	2613	2613
5°	2616	2600	2614
10°	2602	2591	2606
15°	2575	2574	2595
20°	2540	2547	2579
25°	2498	2519	2559
30°	2445	2487	2534
35°	2383	2443	2520
40°	2313	2408	2505
45°	2243	2370	2500
50°	2167	2337	2494
55°	2090	2308	2508
60°	1994	2287	2525
65°	1888	2278	2586
70°	1762	2290	2678
75°	1567	2356	2822
80°	1282	2407	2755
85°	903	2103	2144



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.6	3.3
10°-20°	522.8	9.4
20°-30°	783.7	14.1
30°-40°	933.5	16.8
40°-50°	962.5	17.3
50°-60°	878.3	15.8
60°-70°	702.3	12.6
70°-80°	458.7	8.2
80°-90°	137.7	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°	1490.2	26.8
0°-40°	2423.6	43.6
0°-60°	4264.4	76.7
0°-90°	5563.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5563.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1942	1942	1942	1942	1942	
5°	1937	1934	1925	1937	1935	184
15°	1849	1850	1848	1863	1863	521
25°	1682	1685	1697	1722	1723	775
35°	1451	1461	1488	1525	1534	906
45°	1179	1200	1246	1298	1314	909
55°	891	916	984	1049	1069	794
65°	593	633	716	786	812	588
75°	302	352	453	526	543	320
85°	58	105	136	139	139	74
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1941.8	1941.8	1941.8	1941.8	1941.8
2.5°	1944.5	1941.8	1931.7	1943.6	1941.8
5°	1937.2	1933.6	1925.3	1937.2	1935.4
7.5°	1922.6	1920.8	1912.5	1926.2	1924.4
10°	1904.3	1902.5	1896.1	1909.8	1907.1
12.5°	1878.7	1877.8	1873.2	1889.7	1887.9
15°	1848.6	1849.5	1847.7	1863.2	1863.2
17.5°	1813.8	1812.9	1816.6	1835.8	1834.0
20°	1773.6	1774.6	1779.1	1801.1	1801.1
22.5°	1731.6	1730.7	1740.7	1762.7	1764.5
25°	1682.3	1685.0	1696.9	1721.6	1723.4
27.5°	1629.3	1633.8	1648.5	1676.8	1679.5
30°	1573.5	1579.0	1600.9	1627.4	1631.1
32.5°	1512.3	1524.2	1544.3	1578.1	1587.2
35°	1451.1	1461.1	1487.6	1525.1	1534.2
37.5°	1383.5	1399.9	1430.1	1471.2	1483.1
40°	1316.8	1333.2	1370.7	1413.6	1426.4
42.5°	1249.1	1266.5	1309.4	1357.9	1371.6
45°	1178.8	1199.8	1245.5	1297.6	1314.0
47.5°	1106.6	1131.3	1180.6	1237.3	1255.5
50°	1035.3	1060.0	1116.6	1175.1	1191.6
52.5°	958.6	989.6	1049.9	1113.0	1129.4
55°	890.9	916.5	984.1	1049.0	1069.1
57.5°	811.4	846.2	918.3	984.1	1003.3
60°	741.1	773.1	849.8	916.5	938.4
62.5°	669.8	702.7	779.5	855.3	875.4
65°	593.0	633.2	715.5	785.8	812.3
67.5°	519.9	562.0	646.0	721.0	748.4
70°	447.8	490.7	582.1	658.8	680.8
72.5°	376.5	421.3	516.3	591.2	616.8
75°	301.5	351.8	453.2	526.3	542.8
77.5°	231.2	286.9	389.3	438.6	450.5
80°	165.4	226.6	310.7	346.3	355.5
82.5°	108.7	168.1	232.1	251.3	248.5
85°	58.5	105.1	136.2	138.9	138.9
87.5°	22.8	42.0	42.9	32.9	31.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)