

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: P474039

Luminaire Tested: **24CZ2-75VHE-S-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474039
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75VHE-S-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7638.9 lumens
Efficiency: N/A
Efficacy: 148.6 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

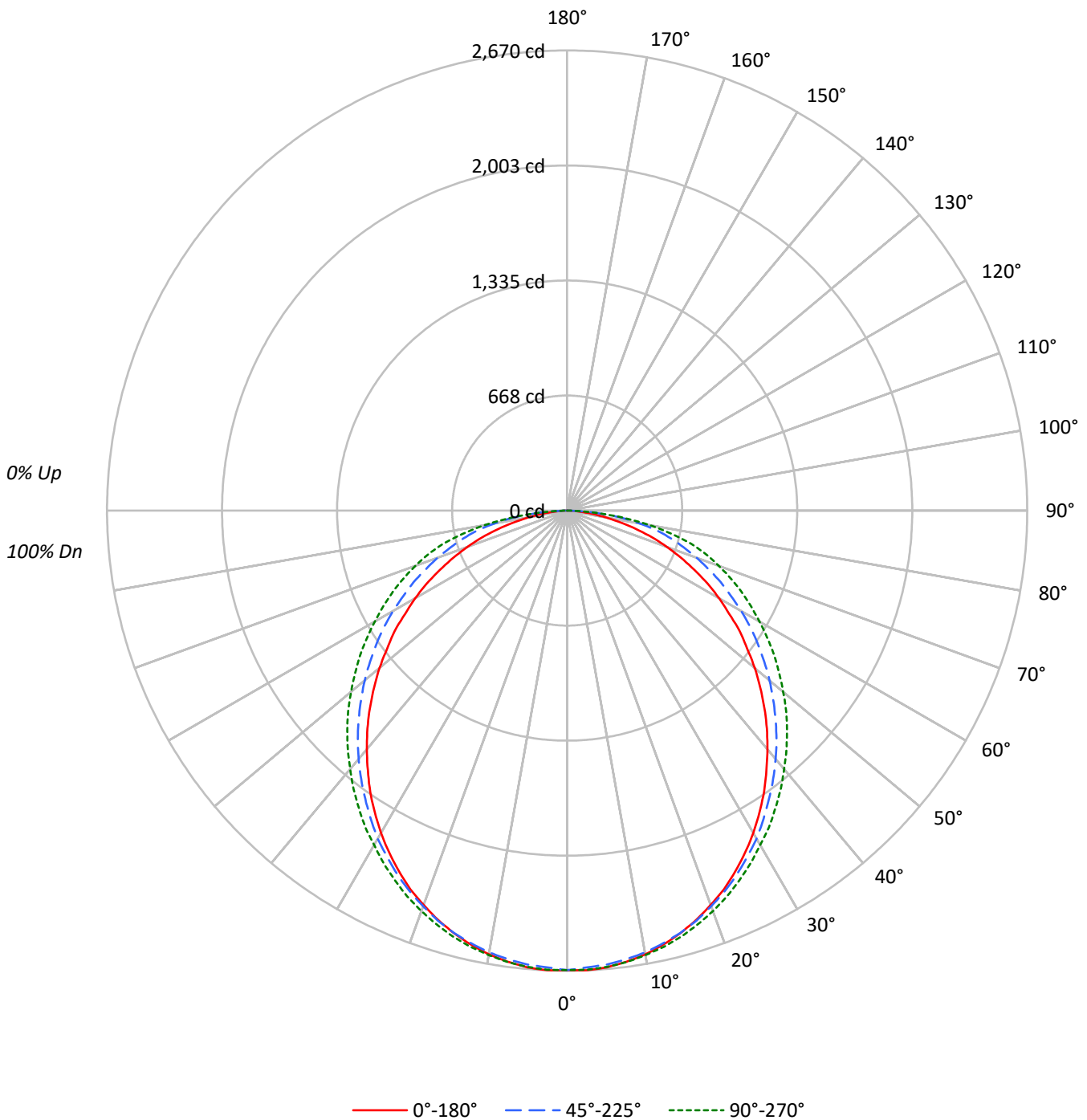
Input Watts (W): 51.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3587	3587	3587
5°	3593	3571	3589
10°	3573	3557	3578
15°	3536	3534	3564
20°	3487	3498	3541
25°	3429	3459	3513
30°	3357	3415	3480
35°	3273	3355	3460
40°	3176	3306	3440
45°	3080	3254	3433
50°	2976	3210	3425
55°	2870	3170	3444
60°	2738	3140	3468
65°	2592	3128	3551
70°	2419	3144	3677
75°	2153	3235	3874
80°	1760	3305	3782
85°	1240	2887	2944



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.1	3.3
10°-20°	717.9	9.4
20°-30°	1076.2	14.1
30°-40°	1281.7	16.8
40°-50°	1321.6	17.3
50°-60°	1206.0	15.8
60°-70°	964.3	12.6
70°-80°	629.9	8.2
80°-90°	189.1	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°	2046.2	26.8
0°-40°	3327.9	43.6
0°-60°	5855.5	76.7
0°-90°	7638.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7638.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2666	2666	2666	2666	2666	
5°	2660	2655	2644	2660	2658	252
15°	2538	2540	2537	2558	2558	716
25°	2310	2314	2330	2364	2366	1063
35°	1992	2006	2043	2094	2107	1245
45°	1619	1648	1710	1782	1804	1248
55°	1223	1258	1351	1440	1468	1090
65°	814	870	982	1079	1116	807
75°	414	483	622	723	745	440
85°	80	144	187	191	191	102
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2666.3	2666.3	2666.3	2666.3	2666.3
2.5°	2670.1	2666.3	2652.5	2668.8	2666.3
5°	2660.0	2655.0	2643.7	2660.0	2657.5
7.5°	2639.9	2637.4	2626.1	2645.0	2642.5
10°	2614.9	2612.3	2603.6	2622.4	2618.6
12.5°	2579.7	2578.5	2572.2	2594.8	2592.3
15°	2538.3	2539.6	2537.1	2558.4	2558.4
17.5°	2490.6	2489.4	2494.4	2520.7	2518.2
20°	2435.4	2436.7	2443.0	2473.1	2473.1
22.5°	2377.7	2376.5	2390.3	2420.4	2422.9
25°	2310.0	2313.7	2330.0	2363.9	2366.4
27.5°	2237.2	2243.5	2263.5	2302.4	2306.2
30°	2160.6	2168.2	2198.3	2234.7	2239.7
32.5°	2076.6	2092.9	2120.5	2166.9	2179.5
35°	1992.5	2006.3	2042.7	2094.1	2106.7
37.5°	1899.7	1922.2	1963.6	2020.1	2036.4
40°	1808.1	1830.6	1882.1	1941.1	1958.6
42.5°	1715.2	1739.1	1798.0	1864.5	1883.3
45°	1618.6	1647.5	1710.2	1781.7	1804.3
47.5°	1519.5	1553.4	1621.1	1698.9	1724.0
50°	1421.6	1455.5	1533.3	1613.6	1636.2
52.5°	1316.2	1358.9	1441.7	1528.3	1550.8
55°	1223.4	1258.5	1351.3	1440.4	1468.0
57.5°	1114.2	1161.9	1261.0	1351.3	1377.7
60°	1017.6	1061.5	1166.9	1258.5	1288.6
62.5°	919.7	964.9	1070.3	1174.4	1202.0
65°	814.3	869.5	982.5	1079.1	1115.5
67.5°	713.9	771.7	887.1	990.0	1027.6
70°	614.8	673.8	799.3	904.7	934.8
72.5°	516.9	578.4	708.9	811.8	846.9
75°	414.1	483.1	622.3	722.7	745.3
77.5°	317.4	394.0	534.5	602.3	618.6
80°	227.1	311.2	426.6	475.5	488.1
82.5°	149.3	230.9	318.7	345.1	341.3
85°	80.3	144.3	187.0	190.7	190.7
87.5°	31.4	57.7	59.0	45.2	42.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)