

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: P473828

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

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473828
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75HE-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,RIBBED LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7786.9 lumens
Efficiency: N/A
Efficacy: 140.6 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

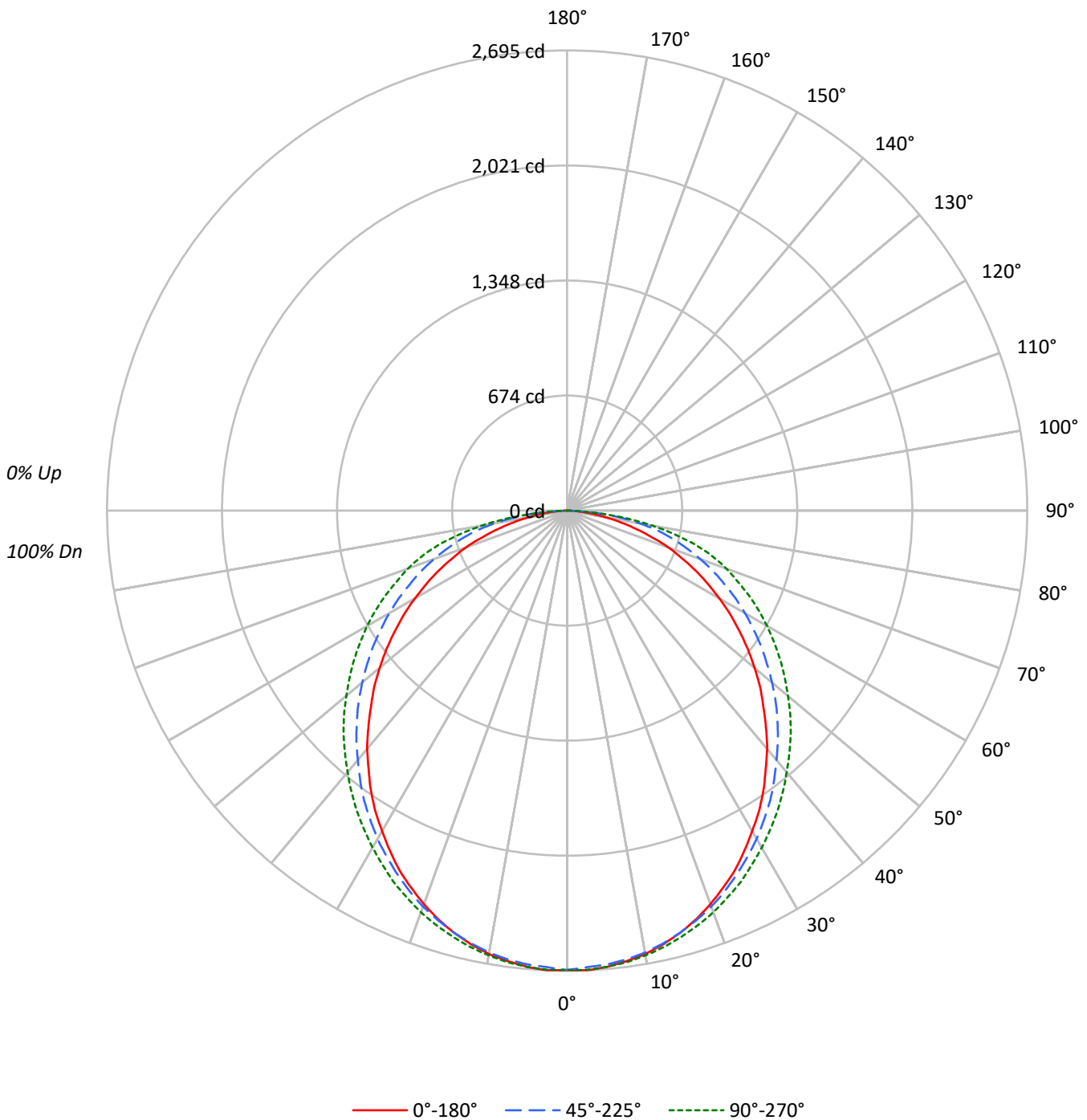
Input Watts (W): 55.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3621	3621	3621
5°	3622	3604	3622
10°	3603	3590	3615
15°	3566	3564	3599
20°	3512	3534	3584
25°	3451	3491	3567
30°	3368	3450	3542
35°	3292	3405	3527
40°	3202	3350	3513
45°	3093	3315	3524
50°	2999	3278	3534
55°	2889	3255	3574
60°	2769	3240	3639
65°	2639	3228	3733
70°	2484	3261	3905
75°	2184	3329	4061
80°	1822	3353	3918
85°	1301	2875	2913



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.4	3.3
10°-20°	724.5	9.3
20°-30°	1087.0	14.0
30°-40°	1297.7	16.7
40°-50°	1344.2	17.3
50°-60°	1237.5	15.9
60°-70°	998.2	12.8
70°-80°	652.2	8.4
80°-90°	191.2	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°	2065.9	26.5
0°-40°	3363.6	43.2
0°-60°	5945.2	76.3
0°-90°	7786.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7786.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2691	2691	2691	2691	2691	
5°	2682	2680	2668	2683	2682	255
15°	2560	2560	2559	2584	2584	721
25°	2325	2330	2351	2394	2403	1069
35°	2004	2022	2073	2130	2147	1252
45°	1625	1666	1742	1820	1852	1256
55°	1232	1284	1388	1490	1523	1102
65°	829	886	1014	1130	1172	820
75°	420	499	640	751	781	448
85°	84	146	186	198	189	105
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2690.9	2690.9	2690.9	2690.9	2690.9
2.5°	2694.6	2690.9	2677.0	2693.4	2692.1
5°	2682.0	2679.5	2668.2	2683.3	2682.0
7.5°	2661.9	2660.7	2651.9	2668.2	2668.2
10°	2636.8	2634.2	2628.0	2646.8	2645.6
12.5°	2601.5	2600.3	2596.5	2619.1	2617.9
15°	2560.0	2560.0	2558.8	2583.9	2583.9
17.5°	2509.7	2511.0	2516.0	2544.9	2546.2
20°	2453.1	2458.1	2468.2	2500.9	2503.4
22.5°	2388.9	2399.0	2412.8	2449.3	2453.1
25°	2324.8	2329.8	2351.2	2394.0	2402.8
27.5°	2246.8	2259.4	2287.0	2331.1	2339.9
30°	2167.5	2185.1	2220.4	2265.7	2279.5
32.5°	2089.5	2104.6	2146.1	2197.7	2214.1
35°	2004.0	2021.6	2073.2	2129.8	2147.4
37.5°	1909.6	1937.3	1991.4	2056.8	2075.7
40°	1822.8	1848.0	1907.1	1980.1	2000.2
42.5°	1723.5	1754.9	1826.6	1900.8	1926.0
45°	1625.3	1665.6	1742.3	1820.3	1851.8
47.5°	1533.5	1566.2	1656.8	1744.8	1772.5
50°	1432.9	1470.6	1566.2	1659.3	1688.2
52.5°	1333.5	1378.8	1475.6	1573.8	1605.2
55°	1231.6	1284.4	1387.6	1489.5	1523.4
57.5°	1133.5	1186.3	1293.2	1401.4	1436.6
60°	1029.0	1085.7	1203.9	1308.3	1352.3
62.5°	928.4	985.0	1109.6	1222.8	1264.3
65°	829.0	885.6	1013.9	1129.7	1172.5
67.5°	725.9	787.5	924.6	1036.6	1078.1
70°	631.5	690.6	829.0	948.5	992.6
72.5°	523.3	593.8	734.7	852.9	894.4
75°	420.2	499.4	640.3	751.0	781.2
77.5°	324.6	403.8	544.7	627.7	646.6
80°	235.2	315.8	432.8	490.6	505.7
82.5°	152.2	235.2	313.2	352.2	357.3
85°	84.3	145.9	186.2	197.5	188.7
87.5°	30.2	55.4	54.1	44.0	35.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)