

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: P473778

Luminaire Tested: **24CZ2-75HE-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473778
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75HE-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, HIGH EFFICIENCY,RIBBED LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7514.3 lumens
Efficiency: N/A
Efficacy: 135.6 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

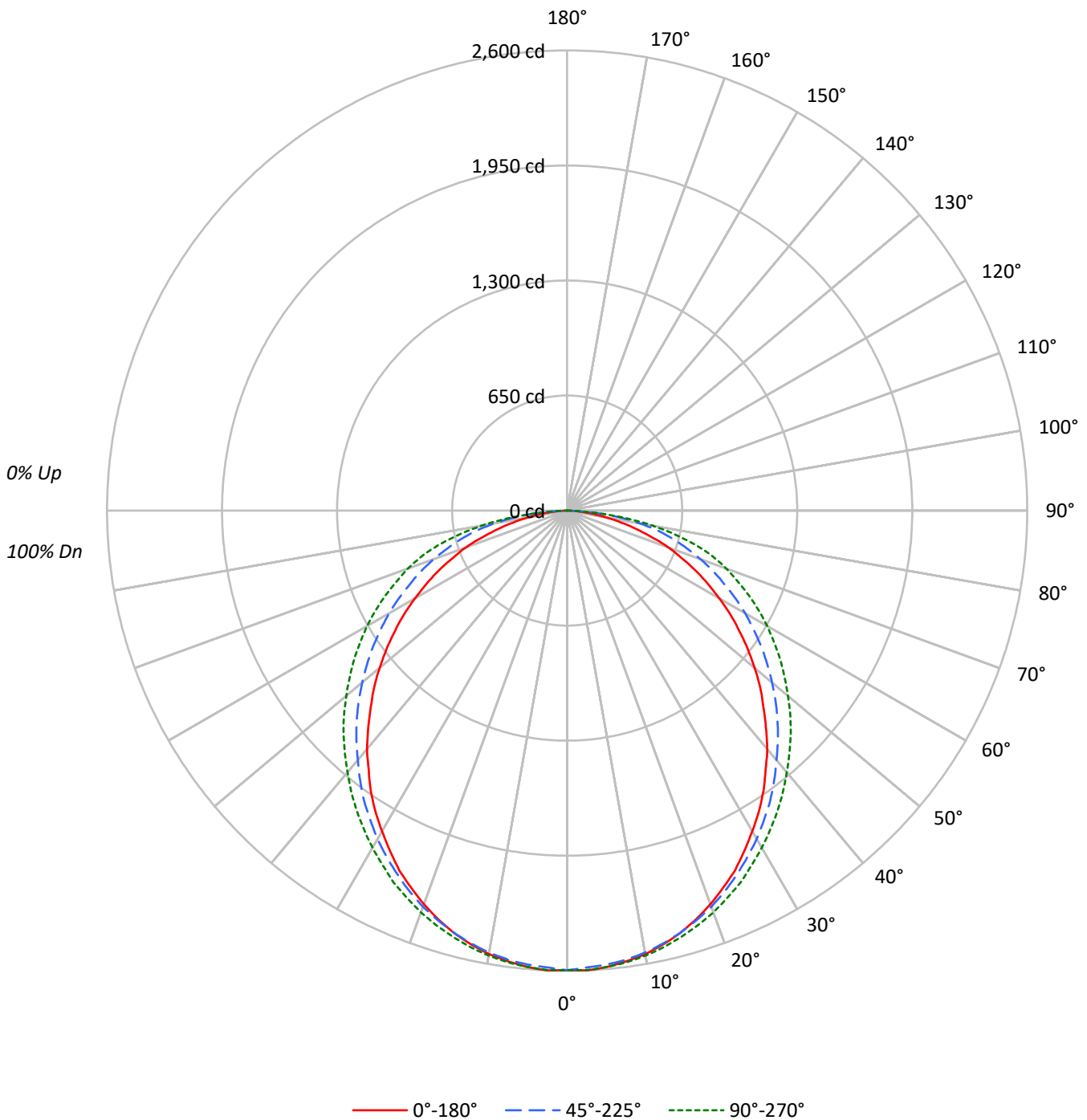
Input Watts (W): 55.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3494	3494	3494
5°	3496	3478	3496
10°	3476	3465	3488
15°	3441	3439	3473
20°	3389	3410	3459
25°	3331	3368	3442
30°	3250	3329	3418
35°	3176	3286	3404
40°	3090	3232	3390
45°	2984	3199	3400
50°	2894	3164	3410
55°	2788	3141	3449
60°	2672	3126	3512
65°	2547	3115	3602
70°	2397	3147	3768
75°	2108	3212	3919
80°	1759	3236	3781
85°	1255	2774	2811



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.5	3.3
10°-20°	699.2	9.3
20°-30°	1048.9	14.0
30°-40°	1252.3	16.7
40°-50°	1297.1	17.3
50°-60°	1194.2	15.9
60°-70°	963.3	12.8
70°-80°	629.4	8.4
80°-90°	184.5	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°	1993.6	26.5
0°-40°	3245.9	43.2
0°-60°	5737.2	76.3
0°-90°	7514.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7514.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2597	2597	2597	2597	2597	
5°	2588	2586	2575	2589	2588	246
15°	2470	2470	2469	2494	2494	696
25°	2243	2248	2269	2310	2319	1032
35°	1934	1951	2001	2055	2072	1208
45°	1568	1607	1681	1757	1787	1212
55°	1188	1240	1339	1437	1470	1064
65°	800	855	978	1090	1131	791
75°	406	482	618	725	754	433
85°	81	141	180	191	182	101
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2596.7	2596.7	2596.7	2596.7	2596.7
2.5°	2600.3	2596.7	2583.3	2599.1	2597.9
5°	2588.2	2585.7	2574.8	2589.4	2588.2
7.5°	2568.8	2567.5	2559.0	2574.8	2574.8
10°	2544.5	2542.0	2536.0	2554.2	2553.0
12.5°	2510.5	2509.3	2505.6	2527.5	2526.3
15°	2470.4	2470.4	2469.2	2493.5	2493.5
17.5°	2421.9	2423.1	2427.9	2455.9	2457.1
20°	2367.2	2372.1	2381.8	2413.4	2415.8
22.5°	2305.3	2315.0	2328.4	2363.6	2367.2
25°	2243.4	2248.3	2268.9	2310.2	2318.7
27.5°	2168.1	2180.3	2207.0	2249.5	2258.0
30°	2091.7	2108.7	2142.7	2186.4	2199.7
32.5°	2016.4	2031.0	2071.0	2120.8	2136.6
35°	1933.8	1950.8	2000.6	2055.2	2072.2
37.5°	1842.8	1869.5	1921.7	1984.8	2003.0
40°	1759.0	1783.3	1840.4	1910.8	1930.2
42.5°	1663.1	1693.5	1762.7	1834.3	1858.6
45°	1568.4	1607.3	1681.3	1756.6	1787.0
47.5°	1479.8	1511.4	1598.8	1683.8	1710.5
50°	1382.7	1419.1	1511.4	1601.2	1629.1
52.5°	1286.8	1330.5	1424.0	1518.7	1549.0
55°	1188.5	1239.5	1339.0	1437.3	1470.1
57.5°	1093.8	1144.8	1248.0	1352.4	1386.4
60°	993.0	1047.7	1161.8	1262.5	1305.0
62.5°	895.9	950.5	1070.7	1180.0	1220.0
65°	800.0	854.6	978.5	1090.1	1131.4
67.5°	700.5	759.9	892.3	1000.3	1040.4
70°	609.4	666.5	800.0	915.3	957.8
72.5°	505.0	573.0	709.0	823.1	863.1
75°	405.5	481.9	617.9	724.7	753.9
77.5°	313.2	389.7	525.6	605.8	624.0
80°	227.0	304.7	417.6	473.4	488.0
82.5°	146.9	227.0	302.3	339.9	344.8
85°	81.3	140.8	179.7	190.6	182.1
87.5°	29.1	53.4	52.2	42.5	34.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)