

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: P473844

Luminaire Tested: **24CZ2-100VHE-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473844
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-100VHE-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: 10007.8 lumens
Efficiency: N/A
Efficacy: 140.8 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

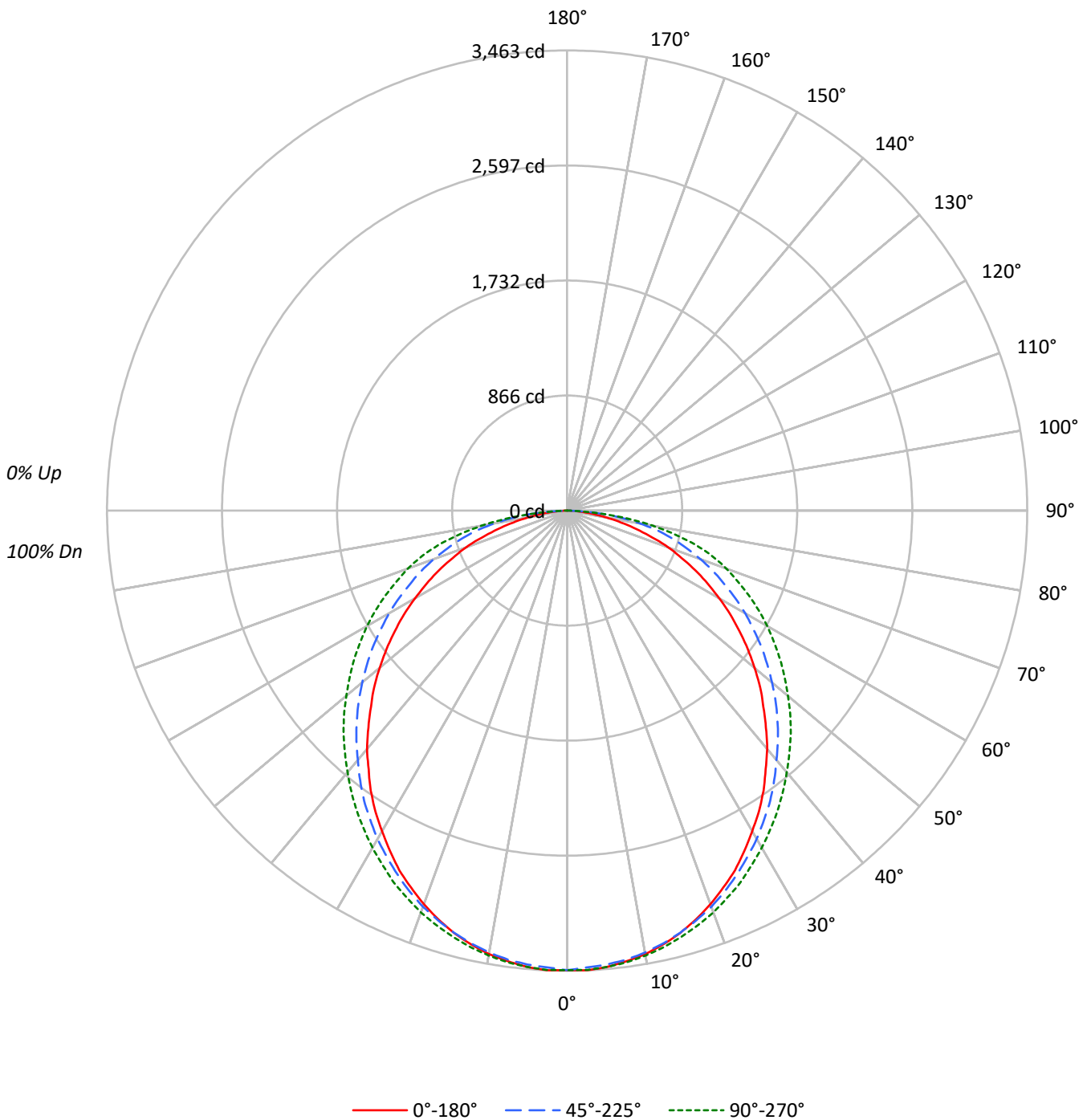
Input Watts (W): 71.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4653	4653	4653
5°	4656	4632	4656
10°	4630	4614	4645
15°	4583	4581	4626
20°	4514	4542	4607
25°	4436	4486	4585
30°	4328	4434	4552
35°	4231	4377	4533
40°	4115	4305	4515
45°	3975	4261	4528
50°	3855	4213	4542
55°	3713	4183	4593
60°	3559	4164	4677
65°	3392	4149	4798
70°	3193	4192	5019
75°	2807	4278	5219
80°	2342	4310	5036
85°	1672	3694	3744



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	326.9	3.3
10°-20°	931.2	9.3
20°-30°	1397.0	14.0
30°-40°	1667.9	16.7
40°-50°	1727.6	17.3
50°-60°	1590.4	15.9
60°-70°	1282.9	12.8
70°-80°	838.2	8.4
80°-90°	245.7	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°	2655.1	26.5
0°-40°	4322.9	43.2
0°-60°	7640.9	76.3
0°-90°	10007.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10007.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3458	3458	3458	3458	3458	
5°	3447	3444	3429	3449	3447	327
15°	3290	3290	3289	3321	3321	927
25°	2988	2994	3022	3077	3088	1374
35°	2576	2598	2664	2737	2760	1609
45°	2089	2141	2239	2340	2380	1615
55°	1583	1651	1783	1914	1958	1417
65°	1066	1138	1303	1452	1507	1054
75°	540	642	823	965	1004	576
85°	108	188	239	254	242	134
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3458.3	3458.3	3458.3	3458.3	3458.3
2.5°	3463.2	3458.3	3440.6	3461.6	3460.0
5°	3447.0	3443.8	3429.2	3448.6	3447.0
7.5°	3421.2	3419.5	3408.2	3429.2	3429.2
10°	3388.8	3385.6	3377.5	3401.7	3400.1
12.5°	3343.5	3341.9	3337.1	3366.2	3364.6
15°	3290.2	3290.2	3288.6	3320.9	3320.9
17.5°	3225.5	3227.1	3233.6	3270.8	3272.4
20°	3152.8	3159.2	3172.2	3214.2	3217.4
22.5°	3070.3	3083.2	3101.0	3147.9	3152.8
25°	2987.8	2994.3	3021.8	3076.8	3088.1
27.5°	2887.6	2903.8	2939.3	2995.9	3007.3
30°	2785.7	2808.4	2853.7	2911.9	2929.6
32.5°	2685.5	2704.9	2758.3	2824.6	2845.6
35°	2575.6	2598.2	2664.5	2737.2	2759.9
37.5°	2454.3	2489.9	2559.4	2643.5	2667.7
40°	2342.7	2375.1	2451.1	2544.8	2570.7
42.5°	2215.0	2255.4	2347.6	2443.0	2475.3
45°	2088.9	2140.6	2239.3	2339.5	2379.9
47.5°	1970.9	2012.9	2129.3	2242.5	2278.1
50°	1841.5	1890.0	2012.9	2132.6	2169.7
52.5°	1713.8	1772.0	1896.5	2022.6	2063.0
55°	1582.8	1650.8	1783.3	1914.3	1957.9
57.5°	1456.7	1524.6	1662.1	1801.1	1846.4
60°	1322.5	1395.3	1547.3	1681.5	1738.1
62.5°	1193.2	1266.0	1426.0	1571.5	1624.9
65°	1065.5	1138.2	1303.1	1451.9	1506.9
67.5°	932.9	1012.1	1188.3	1332.2	1385.6
70°	811.6	887.6	1065.5	1219.1	1275.7
72.5°	672.6	763.1	944.2	1096.2	1149.5
75°	540.0	641.9	823.0	965.2	1004.0
77.5°	417.1	519.0	700.1	806.8	831.0
80°	302.3	405.8	556.2	630.6	650.0
82.5°	195.6	302.3	402.6	452.7	459.2
85°	108.3	187.5	239.3	253.8	242.5
87.5°	38.8	71.1	69.5	56.6	45.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)