

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: P473950

Luminaire Tested: **24CZ2-130VHE-UNV-L850-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473950
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-130VHE-UNV-L850-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13261.0 lumens
Efficiency: N/A
Efficacy: 143.8 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

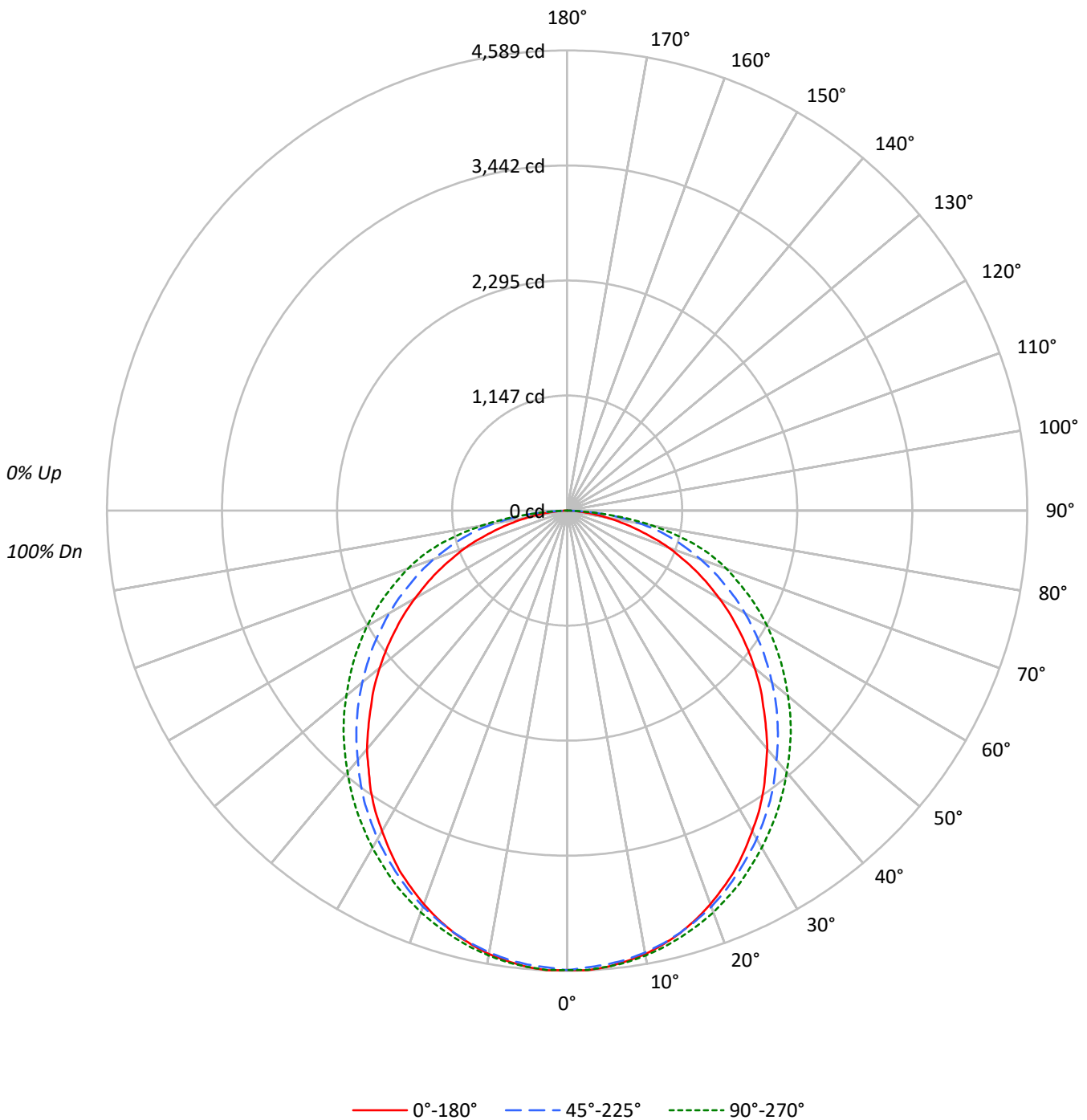
Input Watts (W): 92.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6166	6166	6166
5°	6169	6137	6169
10°	6135	6114	6155
15°	6073	6070	6130
20°	5982	6018	6104
25°	5878	5944	6075
30°	5735	5875	6031
35°	5606	5799	6007
40°	5452	5704	5983
45°	5267	5646	6001
50°	5108	5583	6018
55°	4920	5543	6086
60°	4716	5517	6197
65°	4495	5497	6357
70°	4231	5554	6650
75°	3720	5669	6916
80°	3104	5711	6673
85°	2215	4895	4962



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	433.2	3.3
10°-20°	1233.9	9.3
20°-30°	1851.1	14.0
30°-40°	2210.0	16.7
40°-50°	2289.2	17.3
50°-60°	2107.4	15.9
60°-70°	1699.9	12.8
70°-80°	1110.7	8.4
80°-90°	325.6	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°	3518.2	26.5
0°-40°	5728.2	43.2
0°-60°	10124.7	76.3
0°-90°	13261.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13261.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4582	4582	4582	4582	4582	
5°	4568	4563	4544	4570	4568	433
15°	4360	4360	4358	4400	4400	1228
25°	3959	3968	4004	4077	4092	1820
35°	3413	3443	3531	3627	3657	2132
45°	2768	2836	2967	3100	3154	2140
55°	2097	2187	2363	2537	2594	1877
65°	1412	1508	1727	1924	1997	1396
75°	716	850	1090	1279	1330	764
85°	144	248	317	336	321	178
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4582.5	4582.5	4582.5	4582.5	4582.5
2.5°	4589.0	4582.5	4559.0	4586.8	4584.7
5°	4567.5	4563.2	4544.0	4569.7	4567.5
7.5°	4533.3	4531.1	4516.1	4544.0	4544.0
10°	4490.4	4486.1	4475.4	4507.5	4505.4
12.5°	4430.4	4428.3	4421.9	4460.4	4458.3
15°	4359.7	4359.7	4357.6	4400.4	4400.4
17.5°	4274.0	4276.2	4284.7	4334.0	4336.2
20°	4177.6	4186.2	4203.3	4259.0	4263.3
22.5°	4068.4	4085.5	4109.1	4171.2	4177.6
25°	3959.1	3967.7	4004.1	4076.9	4091.9
27.5°	3826.3	3847.7	3894.8	3969.8	3984.8
30°	3691.3	3721.3	3781.3	3858.4	3882.0
32.5°	3558.5	3584.2	3654.9	3742.7	3770.6
35°	3412.8	3442.8	3530.6	3627.0	3657.0
37.5°	3252.1	3299.2	3391.4	3502.8	3534.9
40°	3104.3	3147.1	3247.8	3372.1	3406.4
42.5°	2935.0	2988.6	3110.7	3237.1	3280.0
45°	2767.9	2836.5	2967.2	3100.0	3153.6
47.5°	2611.5	2667.2	2821.5	2971.5	3018.6
50°	2440.2	2504.4	2667.2	2825.8	2875.1
52.5°	2270.9	2348.0	2513.0	2680.1	2733.7
55°	2097.4	2187.4	2363.0	2536.6	2594.4
57.5°	1930.3	2020.3	2202.4	2386.6	2446.6
60°	1752.5	1848.9	2050.2	2228.1	2303.0
62.5°	1581.1	1677.5	1889.6	2082.4	2153.1
65°	1411.8	1508.2	1726.7	1923.8	1996.7
67.5°	1236.1	1341.1	1574.6	1765.3	1836.0
70°	1075.5	1176.2	1411.8	1615.3	1690.3
72.5°	891.2	1011.2	1251.1	1452.5	1523.2
75°	715.6	850.5	1090.5	1279.0	1330.4
77.5°	552.7	687.7	927.6	1069.0	1101.2
80°	400.6	537.7	737.0	835.5	861.2
82.5°	259.2	400.6	533.4	599.9	608.4
85°	143.5	248.5	317.1	336.4	321.4
87.5°	51.4	94.3	92.1	75.0	60.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)