

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: P473850

Luminaire Tested: **24CZ2-130VHE-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473850
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-130VHE-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

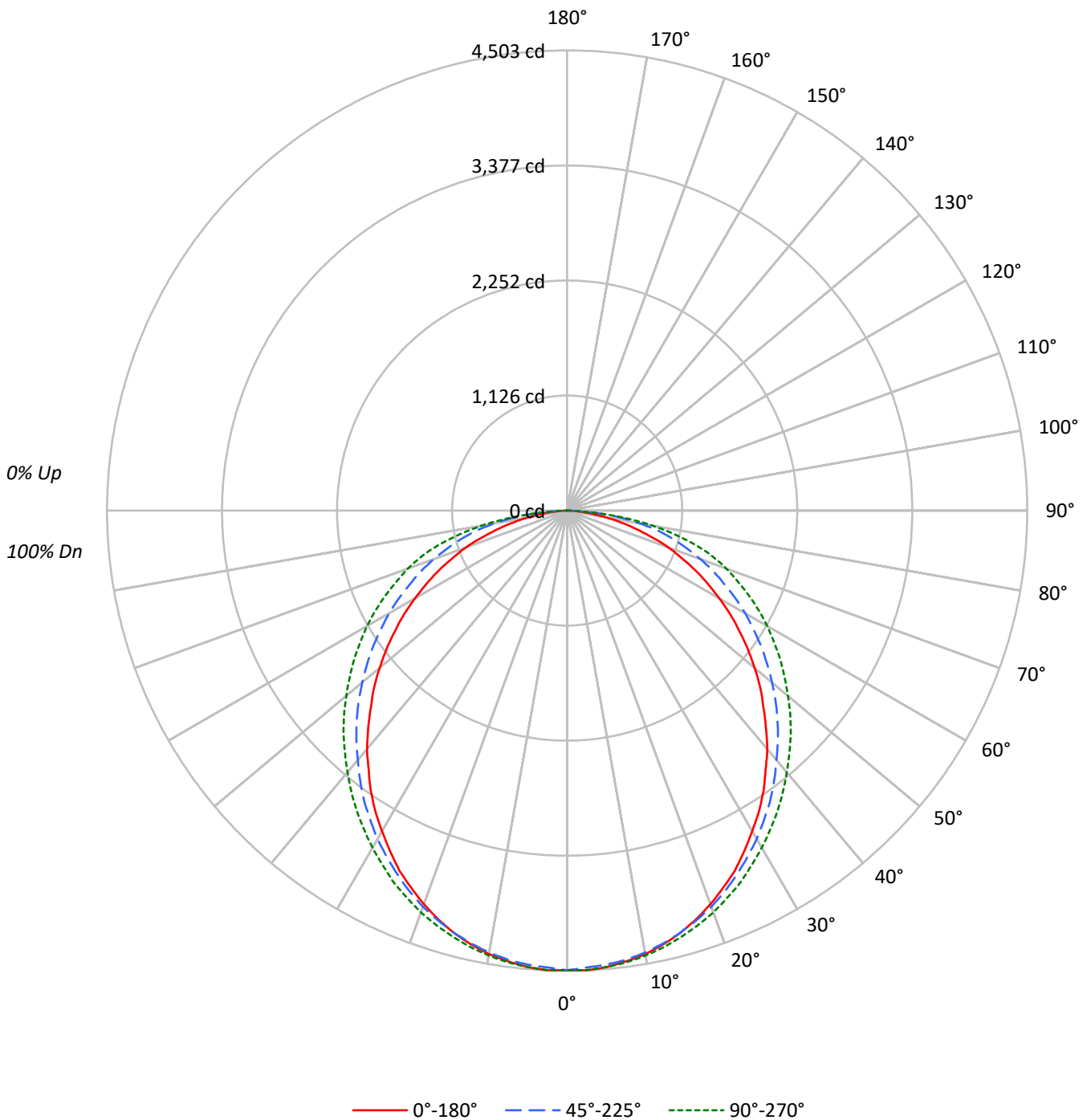
Lumens per Lamp: N/A
Luminaire Lumens: 13013.8 lumens
Efficiency: N/A
Efficacy: 141.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	6051	6051	6051
5°	6054	6023	6054
10°	6021	6001	6041
15°	5960	5957	6015
20°	5870	5906	5991
25°	5768	5834	5961
30°	5628	5765	5919
35°	5501	5691	5895
40°	5351	5598	5872
45°	5169	5541	5889
50°	5013	5479	5906
55°	4828	5440	5972
60°	4628	5414	6082
65°	4411	5395	6238
70°	4152	5450	6526
75°	3650	5563	6787
80°	3047	5604	6549
85°	2175	4804	4869



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	425.1	3.3
10°-20°	1210.9	9.3
20°-30°	1816.6	14.0
30°-40°	2168.8	16.7
40°-50°	2246.5	17.3
50°-60°	2068.1	15.9
60°-70°	1668.3	12.8
70°-80°	1090.0	8.4
80°-90°	319.6	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°	3452.6	26.5
0°-40°	5621.4	43.2
0°-60°	9936.0	76.3
0°-90°	13013.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13013.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4497	4497	4497	4497	4497	
5°	4482	4478	4459	4484	4482	425
15°	4278	4278	4276	4318	4318	1206
25°	3885	3894	3929	4001	4016	1786
35°	3349	3379	3465	3559	3589	2092
45°	2716	2784	2912	3042	3095	2100
55°	2058	2147	2319	2489	2546	1842
65°	1386	1480	1695	1888	1960	1370
75°	702	835	1070	1255	1306	749
85°	141	244	311	330	315	175
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4497.1	4497.1	4497.1	4497.1	4497.1
2.5°	4503.4	4497.1	4474.0	4501.3	4499.2
5°	4482.4	4478.2	4459.2	4484.5	4482.4
7.5°	4448.7	4446.6	4431.9	4459.2	4459.2
10°	4406.7	4402.5	4392.0	4423.5	4421.4
12.5°	4347.8	4345.7	4339.4	4377.2	4375.1
15°	4278.4	4278.4	4276.3	4318.4	4318.4
17.5°	4194.3	4196.4	4204.8	4253.2	4255.3
20°	4099.7	4108.1	4125.0	4179.6	4183.8
22.5°	3992.5	4009.3	4032.4	4093.4	4099.7
25°	3885.3	3893.7	3929.4	4000.9	4015.6
27.5°	3754.9	3776.0	3822.2	3895.8	3910.5
30°	3622.5	3651.9	3710.8	3786.5	3809.6
32.5°	3492.1	3517.4	3586.7	3672.9	3700.3
35°	3349.2	3378.6	3464.8	3559.4	3588.8
37.5°	3191.5	3237.7	3328.1	3437.5	3469.0
40°	3046.4	3088.5	3187.3	3309.2	3342.9
42.5°	2880.3	2932.9	3052.7	3176.8	3218.8
45°	2716.3	2783.6	2911.9	3042.2	3094.8
47.5°	2562.9	2617.5	2768.9	2916.1	2962.3
50°	2394.7	2457.7	2617.5	2773.1	2821.5
52.5°	2228.6	2304.3	2466.1	2630.1	2682.7
55°	2058.3	2146.6	2319.0	2489.3	2546.0
57.5°	1894.3	1982.6	2161.3	2342.1	2401.0
60°	1719.8	1814.4	2012.0	2186.5	2260.1
62.5°	1551.6	1646.2	1854.3	2043.6	2112.9
65°	1385.5	1480.1	1694.6	1888.0	1959.5
67.5°	1213.1	1316.1	1545.3	1732.4	1801.8
70°	1055.4	1154.2	1385.5	1585.2	1658.8
72.5°	874.6	992.3	1227.8	1425.4	1494.8
75°	702.2	834.7	1070.1	1255.1	1305.6
77.5°	542.4	674.9	910.3	1049.1	1080.6
80°	393.2	527.7	723.2	819.9	845.2
82.5°	254.4	393.2	523.5	588.7	597.1
85°	140.9	243.9	311.2	330.1	315.4
87.5°	50.5	92.5	90.4	73.6	58.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)