

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: P474600

Luminaire Tested: **24CZ2-130VHE-SQR-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474600
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-130VHE-SQR-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SQUARE LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11931.3 lumens
Efficiency: N/A
Efficacy: 129.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

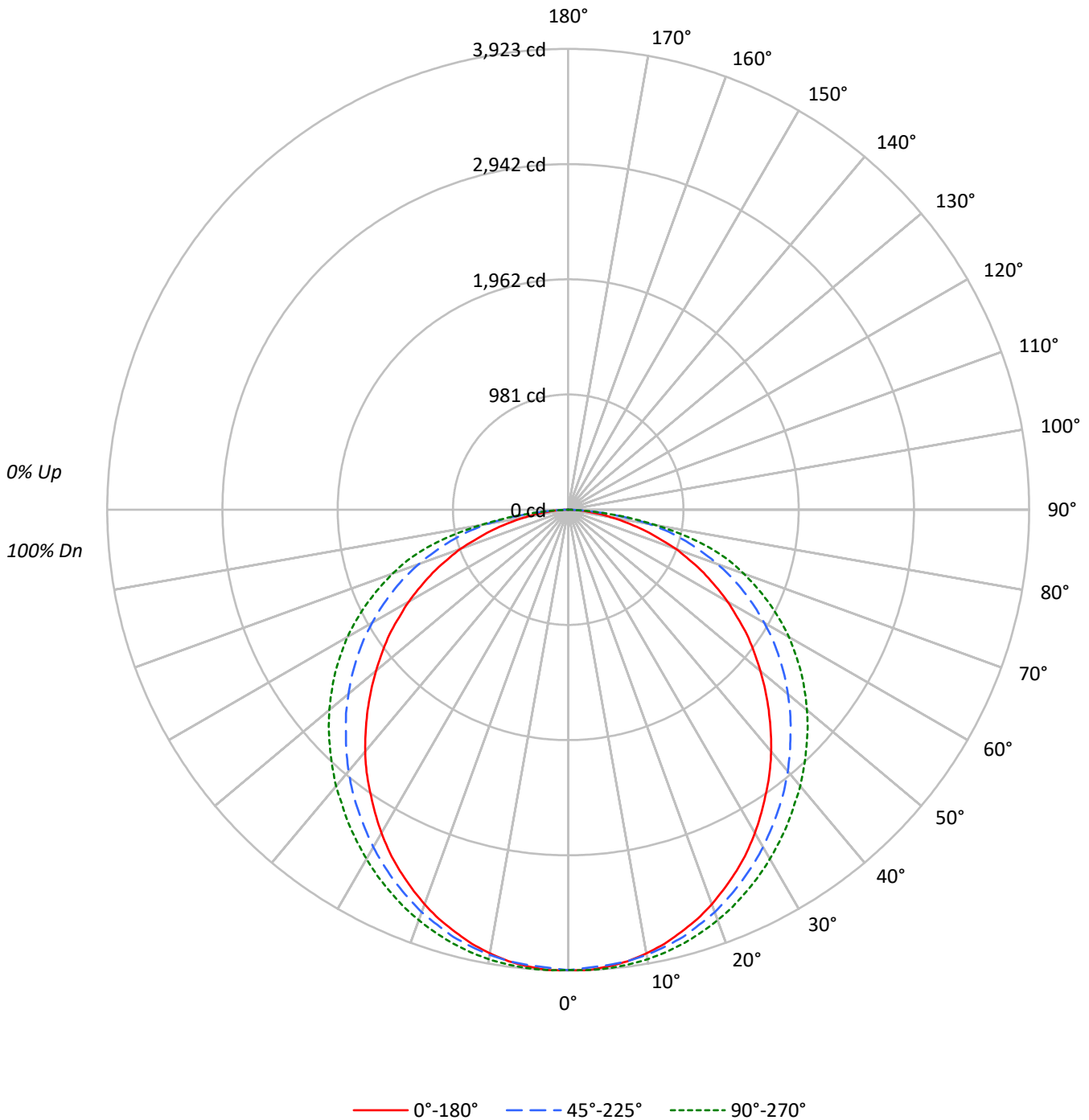
Input Watts (W): 92.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10546	10546	10546
5°	10545	10514	10586
10°	10480	10516	10620
15°	10366	10493	10637
20°	10235	10442	10650
25°	10068	10369	10652
30°	9873	10306	10667
35°	9650	10245	10708
40°	9441	10211	10794
45°	9184	10185	10910
50°	8938	10214	11108
55°	8728	10284	11357
60°	8433	10361	11675
65°	8096	10486	12028
70°	7678	10633	12508
75°	6877	10781	12922
80°	5790	10812	11726
85°	4295	8182	7710



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	371.4	3.1
10°-20°	1064.4	8.9
20°-30°	1611.3	13.5
30°-40°	1949.1	16.3
40°-50°	2057.4	17.2
50°-60°	1940.2	16.3
60°-70°	1599.6	13.4
70°-80°	1049.3	8.8
80°-90°	288.5	2.4
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°	3047.0	25.5
0°-40°	4996.2	41.9
0°-60°	8993.8	75.4
0°-90°	11931.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11931.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3919	3919	3919	3919	3919	
5°	3904	3904	3892	3919	3919	371
15°	3721	3742	3766	3810	3818	1050
25°	3391	3433	3492	3564	3587	1562
35°	2937	3014	3118	3225	3260	1839
45°	2413	2522	2676	2819	2867	1862
55°	1860	1992	2192	2356	2421	1657
65°	1271	1424	1647	1822	1889	1255
75°	661	831	1037	1201	1243	699
85°	139	240	265	257	250	173
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3919.0	3919.0	3919.0	3919.0	3919.0
2.5°	3922.9	3919.0	3901.9	3924.8	3922.9
5°	3903.8	3903.8	3892.4	3919.0	3919.0
7.5°	3877.1	3879.0	3875.2	3905.7	3905.7
10°	3835.2	3842.8	3848.5	3882.8	3886.6
12.5°	3785.6	3799.0	3810.4	3852.3	3856.1
15°	3720.8	3741.8	3766.5	3810.4	3818.0
17.5°	3654.1	3678.9	3705.6	3762.7	3772.3
20°	3574.0	3602.6	3646.5	3703.6	3718.9
22.5°	3484.4	3524.5	3570.2	3638.8	3657.9
25°	3391.0	3433.0	3492.1	3564.5	3587.4
27.5°	3290.0	3339.6	3406.3	3490.2	3514.9
30°	3177.5	3234.7	3316.7	3406.3	3433.0
32.5°	3059.4	3126.1	3217.6	3316.7	3347.2
35°	2937.4	3013.6	3118.5	3225.2	3259.5
37.5°	2817.3	2893.5	3017.4	3129.9	3162.3
40°	2687.7	2771.5	2906.9	3027.0	3072.7
42.5°	2550.4	2649.5	2792.5	2925.9	2969.8
45°	2413.2	2521.8	2676.2	2819.2	2866.8
47.5°	2274.0	2394.1	2563.8	2708.6	2763.9
50°	2134.9	2262.6	2439.9	2596.2	2653.4
52.5°	1993.8	2127.3	2319.8	2485.6	2537.1
55°	1860.4	1991.9	2192.1	2356.0	2420.8
57.5°	1706.0	1854.7	2066.3	2232.1	2295.0
60°	1566.9	1711.7	1925.2	2100.6	2169.2
62.5°	1416.3	1564.9	1789.9	1965.2	2032.0
65°	1271.4	1423.9	1646.9	1822.3	1889.0
67.5°	1115.1	1275.2	1504.0	1673.6	1738.4
70°	975.9	1126.5	1351.5	1524.9	1589.7
72.5°	806.3	977.9	1193.2	1364.8	1435.3
75°	661.4	831.1	1036.9	1200.9	1242.8
77.5°	508.9	678.6	882.5	989.3	1017.9
80°	373.6	533.7	697.7	754.8	756.7
82.5°	251.6	392.7	486.1	514.7	510.8
85°	139.1	240.2	265.0	257.3	249.7
87.5°	57.2	80.1	64.8	45.7	36.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)