

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: P474200

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

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474200
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-130VHE-RDP-UNV-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8414.3 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

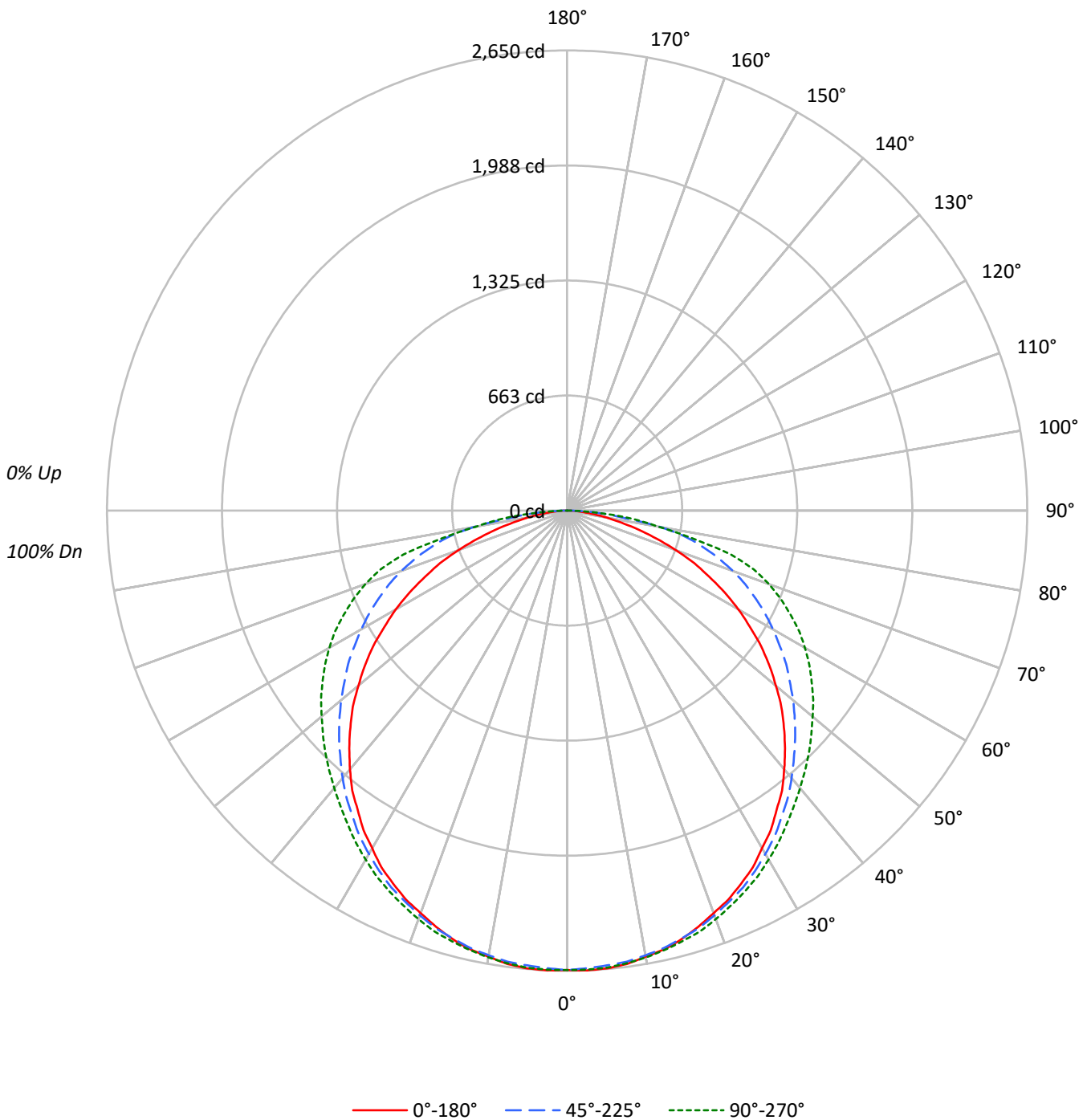
Input Watts (W): 92.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3560	3560	3560
5°	3574	3551	3568
10°	3564	3553	3570
15°	3558	3552	3576
20°	3532	3550	3586
25°	3519	3556	3594
30°	3488	3547	3605
35°	3455	3537	3619
40°	3416	3533	3665
45°	3359	3534	3748
50°	3285	3556	3862
55°	3201	3613	4034
60°	3067	3683	4257
65°	2870	3813	4517
70°	2610	3990	4859
75°	2212	4209	5077
80°	1747	4235	4106
85°	1289	3223	3609



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.0	3.0
10°-20°	722.4	8.6
20°-30°	1104.7	13.1
30°-40°	1350.4	16.0
40°-50°	1439.3	17.1
50°-60°	1376.1	16.4
60°-70°	1165.7	13.9
70°-80°	783.5	9.3
80°-90°	221.1	2.6
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°	2078.1	24.7
0°-40°	3428.5	40.7
0°-60°	6244.0	74.2
0°-90°	8414.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8414.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2646	2646	2646	2646	2646	
5°	2646	2642	2630	2642	2642	251
15°	2554	2554	2550	2571	2567	720
25°	2371	2379	2396	2416	2421	1093
35°	2103	2120	2154	2195	2204	1318
45°	1766	1795	1857	1937	1970	1362
55°	1365	1415	1540	1661	1720	1215
65°	902	993	1198	1356	1419	895
75°	426	580	810	948	977	456
85°	84	171	209	226	234	103
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2646.2	2646.2	2646.2	2646.2	2646.2
2.5°	2650.4	2650.4	2637.8	2646.2	2646.2
5°	2646.2	2642.0	2629.5	2642.0	2642.0
7.5°	2633.7	2629.5	2621.1	2633.7	2629.5
10°	2608.6	2608.6	2600.3	2612.8	2612.8
12.5°	2587.7	2583.6	2579.4	2596.1	2591.9
15°	2554.3	2554.3	2550.2	2571.0	2566.9
17.5°	2512.6	2516.7	2520.9	2537.6	2541.8
20°	2466.6	2475.0	2479.2	2504.2	2504.2
22.5°	2424.9	2429.1	2437.4	2462.5	2462.5
25°	2370.6	2378.9	2395.6	2416.5	2420.7
27.5°	2316.3	2320.5	2341.4	2370.6	2374.8
30°	2245.3	2257.8	2282.9	2316.3	2320.5
32.5°	2182.7	2195.2	2224.4	2257.8	2266.2
35°	2103.3	2120.0	2153.5	2195.2	2203.6
37.5°	2032.4	2044.9	2086.6	2132.6	2145.1
40°	1945.1	1969.7	2011.5	2065.8	2086.6
42.5°	1857.4	1882.4	1932.6	2003.1	2028.2
45°	1765.5	1794.8	1857.4	1936.7	1969.7
47.5°	1673.7	1707.1	1778.0	1869.9	1907.5
50°	1569.3	1611.0	1698.7	1803.1	1844.9
52.5°	1469.0	1519.1	1615.2	1732.1	1786.4
55°	1364.6	1414.8	1540.0	1661.1	1719.6
57.5°	1247.7	1314.5	1452.3	1590.1	1652.8
60°	1139.6	1201.8	1368.8	1519.1	1581.8
62.5°	1022.6	1106.2	1285.3	1444.0	1506.6
65°	901.6	993.4	1197.6	1356.3	1418.9
67.5°	793.0	893.2	1110.3	1268.6	1331.2
70°	663.5	788.8	1014.3	1172.6	1235.2
72.5°	542.4	680.2	914.1	1068.6	1127.0
75°	425.5	580.0	809.7	947.5	976.7
77.5°	317.4	479.8	701.1	759.6	738.7
80°	225.5	384.2	546.6	517.4	529.9
82.5°	146.2	292.3	338.2	384.2	396.3
85°	83.5	171.2	208.8	225.5	233.8
87.5°	37.6	62.6	83.5	83.5	79.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)