

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: P474199

Luminaire Tested: **24CZ2-125VHE-RDP-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474199
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-125VHE-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: 8044.5 lumens
Efficiency: N/A
Efficacy: 91.6 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

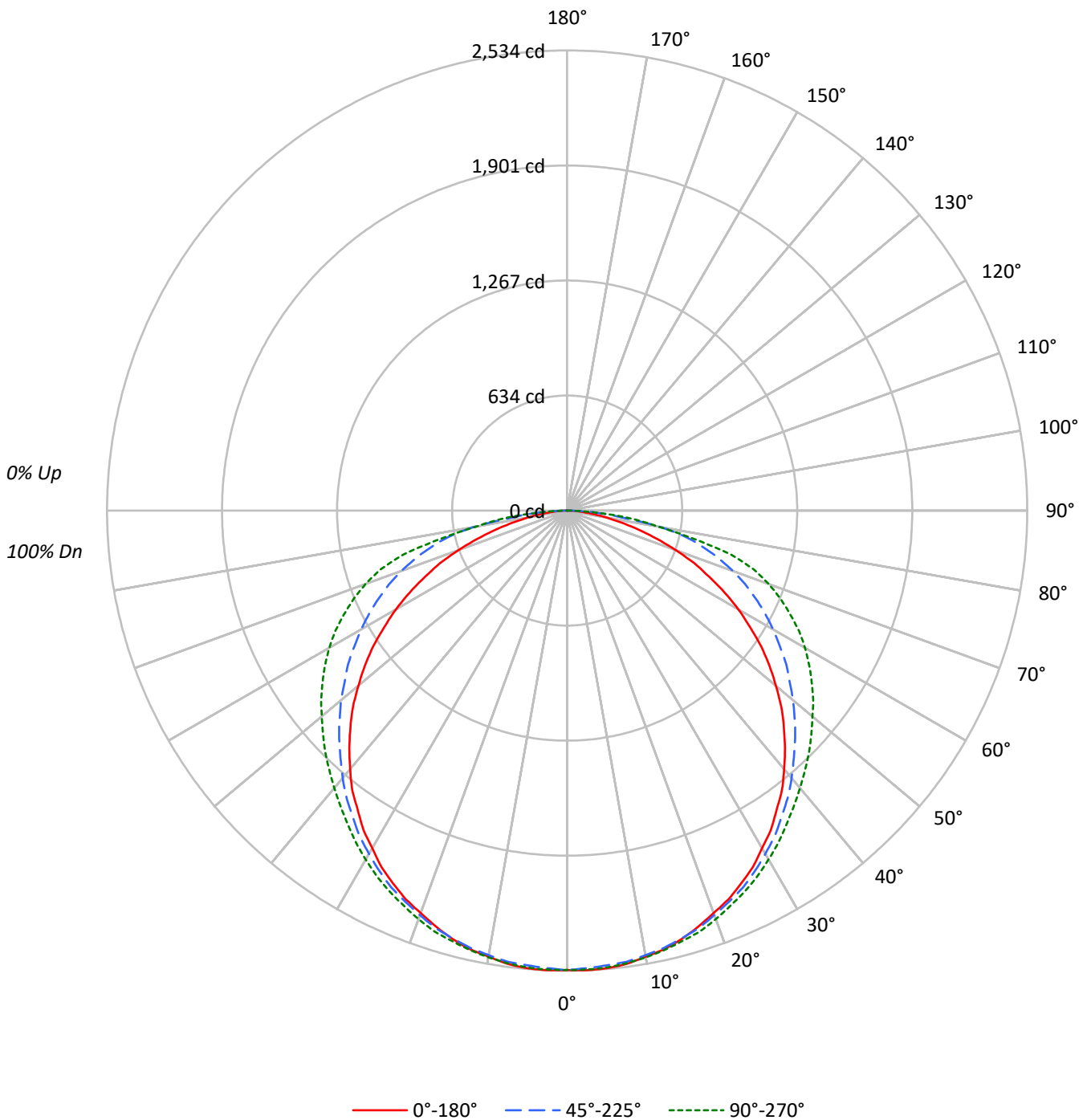
Input Watts (W): 87.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3404	3404	3404
5°	3417	3395	3412
10°	3407	3396	3413
15°	3402	3396	3418
20°	3377	3394	3428
25°	3365	3400	3436
30°	3335	3391	3447
35°	3303	3382	3460
40°	3266	3378	3504
45°	3212	3379	3583
50°	3140	3399	3692
55°	3061	3454	3856
60°	2932	3522	4070
65°	2744	3645	4319
70°	2496	3815	4646
75°	2115	4024	4854
80°	1671	4049	3925
85°	1232	3081	3452



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.0	3.0
10°-20°	690.7	8.6
20°-30°	1056.1	13.1
30°-40°	1291.0	16.0
40°-50°	1376.1	17.1
50°-60°	1315.7	16.4
60°-70°	1114.5	13.9
70°-80°	749.0	9.3
80°-90°	211.4	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°	1986.8	24.7
0°-40°	3277.8	40.7
0°-60°	5969.5	74.2
0°-90°	8044.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8044.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2530	2530	2530	2530	2530	
5°	2530	2526	2514	2526	2526	240
15°	2442	2442	2438	2458	2454	689
25°	2266	2274	2290	2310	2314	1045
35°	2011	2027	2059	2099	2107	1260
45°	1688	1716	1776	1852	1883	1302
55°	1305	1353	1472	1588	1644	1162
65°	862	950	1145	1297	1357	856
75°	407	554	774	906	934	436
85°	80	164	200	216	224	99
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2529.9	2529.9	2529.9	2529.9	2529.9
2.5°	2533.9	2533.9	2521.9	2529.9	2529.9
5°	2529.9	2525.9	2513.9	2525.9	2525.9
7.5°	2517.9	2513.9	2505.9	2517.9	2513.9
10°	2494.0	2494.0	2486.0	2497.9	2497.9
12.5°	2474.0	2470.0	2466.0	2482.0	2478.0
15°	2442.1	2442.1	2438.1	2458.0	2454.0
17.5°	2402.1	2406.1	2410.1	2426.1	2430.1
20°	2358.2	2366.2	2370.2	2394.1	2394.1
22.5°	2318.3	2322.3	2330.3	2354.2	2354.2
25°	2266.4	2274.4	2290.4	2310.3	2314.3
27.5°	2214.5	2218.5	2238.5	2266.4	2270.4
30°	2146.6	2158.6	2182.6	2214.5	2218.5
32.5°	2086.7	2098.7	2126.7	2158.6	2166.6
35°	2010.9	2026.9	2058.8	2098.7	2106.7
37.5°	1943.0	1955.0	1994.9	2038.8	2050.8
40°	1859.6	1883.1	1923.1	1975.0	1994.9
42.5°	1775.8	1799.7	1847.6	1915.1	1939.0
45°	1687.9	1715.9	1775.8	1851.6	1883.1
47.5°	1600.1	1632.0	1699.9	1787.7	1823.7
50°	1500.3	1540.2	1624.0	1723.9	1763.8
52.5°	1404.5	1452.4	1544.2	1656.0	1707.9
55°	1304.7	1352.6	1472.3	1588.1	1644.0
57.5°	1192.9	1256.8	1388.5	1520.2	1580.1
60°	1089.5	1149.0	1308.7	1452.4	1512.3
62.5°	977.7	1057.5	1228.8	1380.5	1440.4
65°	861.9	949.8	1145.0	1296.7	1356.6
67.5°	758.1	853.9	1061.5	1212.8	1272.7
70°	634.4	754.1	969.7	1121.0	1180.9
72.5°	518.6	650.3	873.9	1021.6	1077.5
75°	406.8	554.5	774.1	905.8	933.8
77.5°	303.4	458.7	670.3	726.2	706.2
80°	215.6	367.3	522.6	494.6	506.6
82.5°	139.7	279.5	323.4	367.3	378.9
85°	79.8	163.7	199.6	215.6	223.6
87.5°	35.9	59.9	79.8	79.8	75.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)