

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: P474299

Luminaire Tested: **24CZ2-125VHE-RDP-UNV-L840-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474299
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-L840-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8494.6 lumens
Efficiency: N/A
Efficacy: 96.7 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

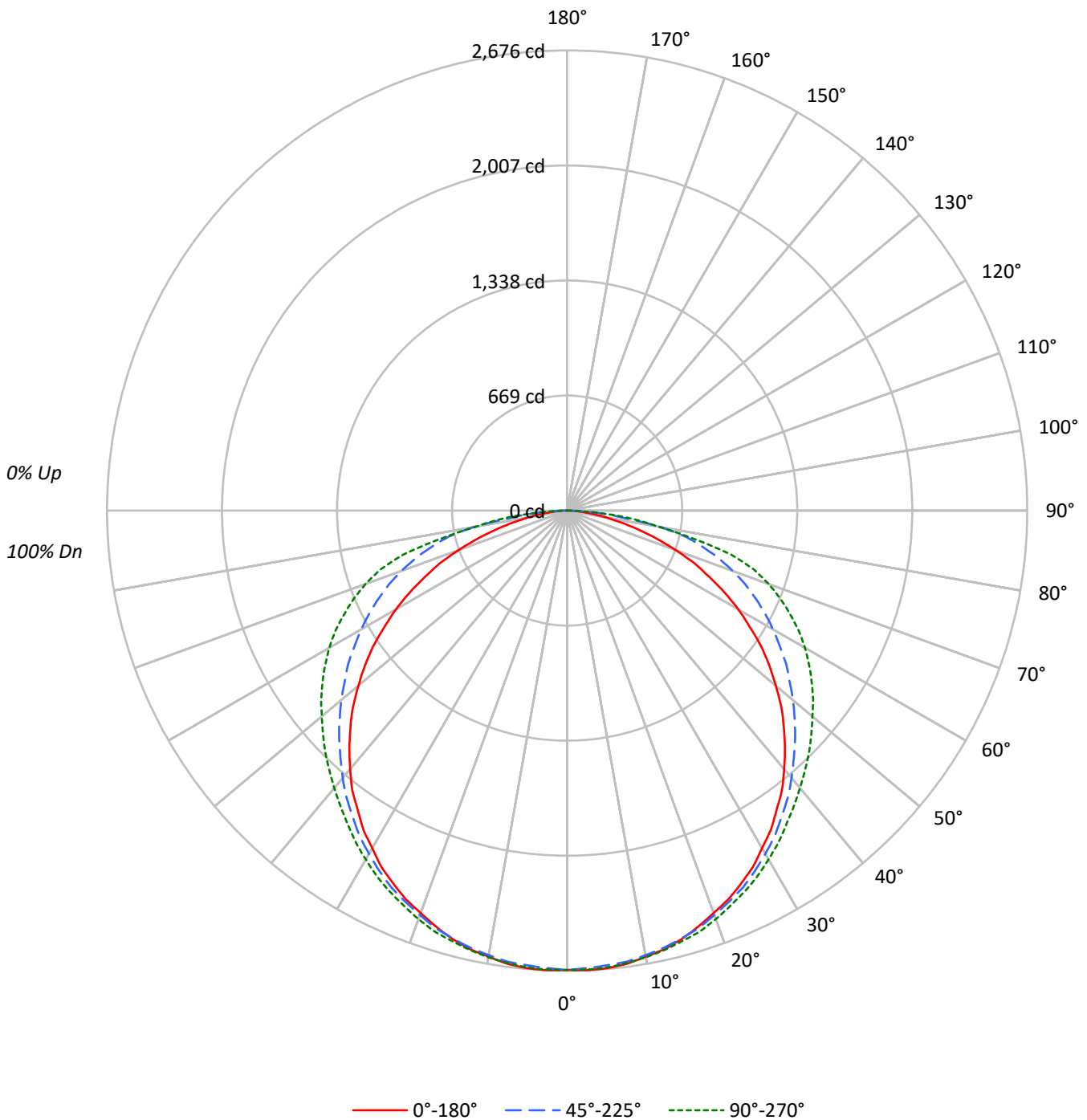
Input Watts (W): 87.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3594	3594	3594
5°	3608	3585	3602
10°	3598	3587	3604
15°	3592	3586	3610
20°	3566	3584	3620
25°	3553	3590	3628
30°	3522	3581	3640
35°	3488	3571	3654
40°	3449	3567	3700
45°	3392	3568	3784
50°	3316	3590	3899
55°	3232	3647	4072
60°	3096	3719	4297
65°	2898	3849	4561
70°	2635	4028	4906
75°	2233	4249	5126
80°	1764	4276	4145
85°	1301	3254	3645



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	253.4	3.0
10°-20°	729.3	8.6
20°-30°	1115.2	13.1
30°-40°	1363.3	16.0
40°-50°	1453.1	17.1
50°-60°	1389.3	16.4
60°-70°	1176.9	13.9
70°-80°	791.0	9.3
80°-90°	223.2	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°	2097.9	24.7
0°-40°	3461.2	40.7
0°-60°	6303.6	74.2
0°-90°	8494.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8494.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2672	2672	2672	2672	2672	
5°	2672	2667	2655	2667	2667	254
15°	2579	2579	2574	2596	2591	727
25°	2393	2402	2418	2440	2444	1103
35°	2123	2140	2174	2216	2225	1330
45°	1782	1812	1875	1955	1988	1375
55°	1378	1428	1555	1677	1736	1227
65°	910	1003	1209	1369	1432	904
75°	430	586	817	956	986	460
85°	84	173	211	228	236	104
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2671.5	2671.5	2671.5	2671.5	2671.5
2.5°	2675.7	2675.7	2663.0	2671.5	2671.5
5°	2671.5	2667.2	2654.6	2667.2	2667.2
7.5°	2658.8	2654.6	2646.2	2658.8	2654.6
10°	2633.5	2633.5	2625.1	2637.7	2637.7
12.5°	2612.4	2608.2	2604.0	2620.9	2616.7
15°	2578.7	2578.7	2574.5	2595.6	2591.4
17.5°	2536.6	2540.8	2545.0	2561.8	2566.1
20°	2490.2	2498.6	2502.8	2528.1	2528.1
22.5°	2448.0	2452.2	2460.7	2486.0	2486.0
25°	2393.2	2401.7	2418.5	2439.6	2443.8
27.5°	2338.4	2342.6	2363.7	2393.2	2397.4
30°	2266.8	2279.4	2304.7	2338.4	2342.6
32.5°	2203.5	2216.2	2245.7	2279.4	2287.8
35°	2123.4	2140.3	2174.0	2216.2	2224.6
37.5°	2051.8	2064.4	2106.6	2152.9	2165.6
40°	1963.6	1988.5	2030.7	2085.5	2106.6
42.5°	1875.1	1900.4	1951.0	2022.2	2047.5
45°	1782.4	1811.9	1875.1	1955.2	1988.5
47.5°	1689.6	1723.4	1795.0	1887.8	1925.7
50°	1584.2	1626.4	1714.9	1820.3	1862.5
52.5°	1483.1	1533.7	1630.6	1748.6	1803.5
55°	1377.7	1428.3	1554.7	1677.0	1736.0
57.5°	1259.6	1327.1	1466.2	1605.3	1668.6
60°	1150.4	1213.3	1381.9	1533.7	1596.9
62.5°	1032.4	1116.7	1297.6	1457.8	1521.0
65°	910.2	1002.9	1209.0	1369.2	1432.5
67.5°	800.6	901.7	1120.9	1280.7	1343.9
70°	669.9	796.3	1024.0	1183.8	1247.0
72.5°	547.6	686.7	922.8	1078.8	1137.8
75°	429.6	585.6	817.4	956.5	986.0
77.5°	320.4	484.4	707.8	766.8	745.7
80°	227.6	387.8	551.8	522.3	535.0
82.5°	147.5	295.1	341.5	387.8	400.1
85°	84.3	172.8	210.8	227.6	236.1
87.5°	37.9	63.2	84.3	84.3	80.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)