

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: P474254

Luminaire Tested: **24CZ2-150VHE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474254
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-150VHE-RDP-UNV-L835-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10068.9 lumens
Efficiency: N/A
Efficacy: 91.8 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

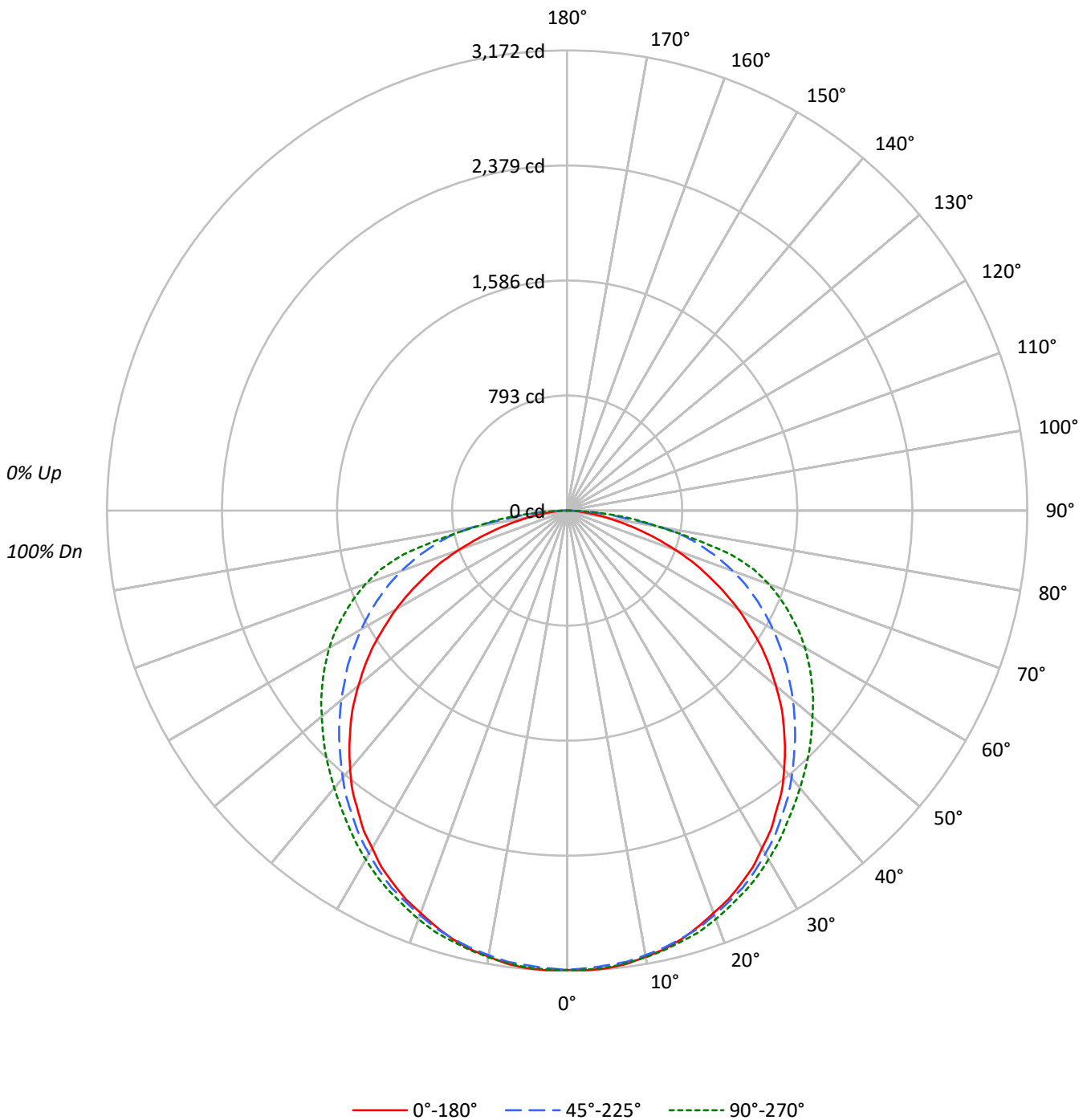
Input Watts (W): 109.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4260	4260	4260
5°	4277	4250	4270
10°	4265	4251	4272
15°	4258	4251	4279
20°	4226	4248	4291
25°	4211	4256	4300
30°	4174	4244	4314
35°	4134	4233	4331
40°	4088	4228	4386
45°	4020	4229	4485
50°	3931	4255	4621
55°	3831	4323	4827
60°	3670	4408	5093
65°	3435	4563	5406
70°	3124	4775	5815
75°	2647	5037	6076
80°	2091	5068	4913
85°	1542	3856	4319



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	300.4	3.0
10°-20°	864.5	8.6
20°-30°	1321.9	13.1
30°-40°	1615.9	16.0
40°-50°	1722.4	17.1
50°-60°	1646.8	16.4
60°-70°	1395.0	13.9
70°-80°	937.6	9.3
80°-90°	264.5	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°	2486.7	24.7
0°-40°	4102.7	40.7
0°-60°	7471.8	74.2
0°-90°	10068.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10068.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3166	3166	3166	3166	3166	
5°	3166	3162	3146	3162	3162	301
15°	3057	3057	3052	3077	3072	862
25°	2837	2847	2867	2892	2897	1307
35°	2517	2537	2577	2627	2637	1577
45°	2113	2148	2223	2318	2357	1630
55°	1633	1693	1843	1988	2058	1454
65°	1079	1189	1433	1623	1698	1071
75°	509	694	969	1134	1169	545
85°	100	205	250	270	280	124
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3166.5	3166.5	3166.5	3166.5	3166.5
2.5°	3171.5	3171.5	3156.5	3166.5	3166.5
5°	3166.5	3161.5	3146.5	3161.5	3161.5
7.5°	3151.5	3146.5	3136.6	3151.5	3146.5
10°	3121.6	3121.6	3111.6	3126.6	3126.6
12.5°	3096.6	3091.6	3086.6	3106.6	3101.6
15°	3056.6	3056.6	3051.6	3076.6	3071.6
17.5°	3006.6	3011.6	3016.6	3036.6	3041.6
20°	2951.7	2961.7	2966.7	2996.6	2996.6
22.5°	2901.7	2906.7	2916.7	2946.7	2946.7
25°	2836.7	2846.7	2866.7	2891.7	2896.7
27.5°	2771.8	2776.8	2801.8	2836.7	2841.7
30°	2686.8	2701.8	2731.8	2771.8	2776.8
32.5°	2611.9	2626.9	2661.9	2701.8	2711.8
35°	2516.9	2536.9	2576.9	2626.9	2636.9
37.5°	2432.0	2447.0	2497.0	2551.9	2566.9
40°	2327.6	2357.0	2407.0	2472.0	2497.0
42.5°	2222.6	2252.6	2312.6	2397.0	2427.0
45°	2112.7	2147.7	2222.6	2317.6	2357.0
47.5°	2002.8	2042.7	2127.7	2237.6	2282.6
50°	1877.8	1927.8	2032.7	2157.7	2207.6
52.5°	1757.9	1817.9	1932.8	2072.7	2137.7
55°	1633.0	1693.0	1842.9	1987.8	2057.7
57.5°	1493.1	1573.0	1737.9	1902.8	1977.8
60°	1363.7	1438.1	1638.0	1817.9	1892.8
62.5°	1223.7	1323.7	1538.0	1727.9	1802.9
65°	1078.8	1188.8	1433.1	1623.0	1697.9
67.5°	948.9	1068.8	1328.7	1518.1	1593.0
70°	794.0	943.9	1213.7	1403.1	1478.1
72.5°	649.1	814.0	1093.8	1278.7	1348.7
75°	509.2	694.1	968.9	1133.8	1168.8
77.5°	379.8	574.1	839.0	908.9	884.0
80°	269.8	459.7	654.1	619.1	634.1
82.5°	174.9	349.8	404.7	459.7	474.2
85°	99.9	204.9	249.8	269.8	279.8
87.5°	45.0	75.0	99.9	99.9	94.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)