

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: P474255

Luminaire Tested: **24CZ2-155VHE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474255  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-155VHE-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: 10415.3 lumens  
Efficiency: N/A  
Efficacy: 91.4 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

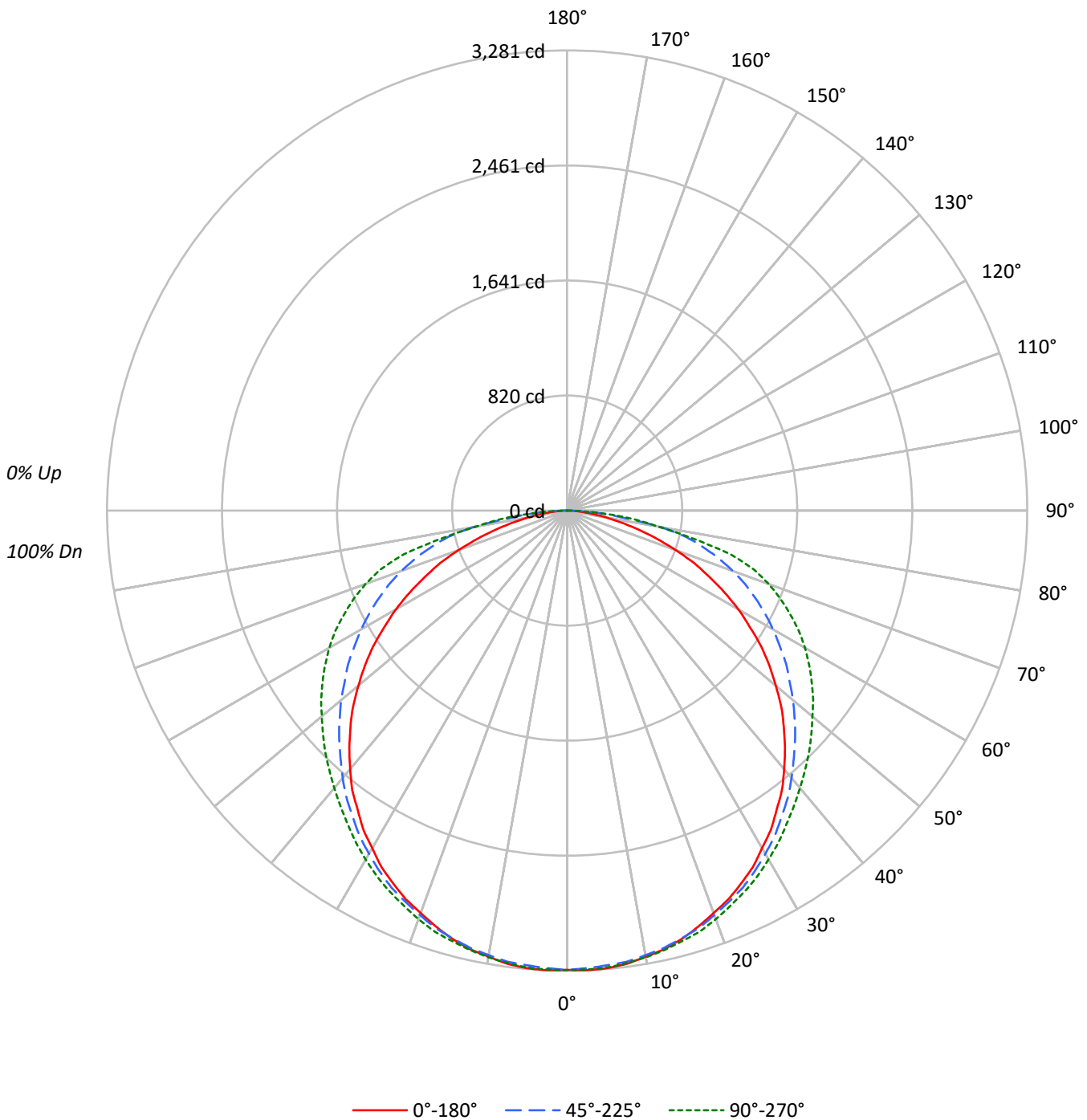
Input Watts (W): 114  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4407	4407	4407
5°	4424	4396	4417
10°	4412	4397	4419
15°	4404	4397	4426
20°	4372	4394	4438
25°	4356	4402	4448
30°	4318	4390	4463
35°	4276	4378	4480
40°	4229	4373	4537
45°	4158	4375	4639
50°	4066	4401	4780
55°	3963	4472	4993
60°	3796	4559	5269
65°	3553	4720	5592
70°	3231	4939	6015
75°	2738	5210	6285
80°	2163	5243	5082
85°	1596	3989	4469



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	310.7	3.0
10°-20°	894.2	8.6
20°-30°	1367.4	13.1
30°-40°	1671.5	16.0
40°-50°	1781.6	17.1
50°-60°	1703.4	16.4
60°-70°	1443.0	13.9
70°-80°	969.8	9.3
80°-90°	273.6	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°	2572.3	24.7
0°-40°	4243.8	40.7
0°-60°	7728.8	74.2
0°-90°	10415.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10415.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3276	3276	3276	3276	3276	
5°	3276	3270	3255	3270	3270	311
15°	3162	3162	3157	3182	3177	891
25°	2934	2945	2965	2991	2996	1352
35°	2604	2624	2666	2717	2728	1631
45°	2185	2222	2299	2397	2438	1686
55°	1689	1751	1906	2056	2128	1505
65°	1116	1230	1482	1679	1756	1108
75°	527	718	1002	1173	1209	564
85°	103	212	258	279	290	128
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3275.5	3275.5	3275.5	3275.5	3275.5
2.5°	3280.6	3280.6	3265.1	3275.5	3275.5
5°	3275.5	3270.3	3254.8	3270.3	3270.3
7.5°	3260.0	3254.8	3244.5	3260.0	3254.8
10°	3229.0	3229.0	3218.6	3234.1	3234.1
12.5°	3203.1	3197.9	3192.8	3213.4	3208.3
15°	3161.8	3161.8	3156.6	3182.4	3177.3
17.5°	3110.1	3115.2	3120.4	3141.1	3146.3
20°	3053.2	3063.6	3068.7	3099.7	3099.7
22.5°	3001.5	3006.7	3017.0	3048.0	3048.0
25°	2934.3	2944.7	2965.3	2991.2	2996.4
27.5°	2867.1	2872.3	2898.2	2934.3	2939.5
30°	2779.3	2794.8	2825.8	2867.1	2872.3
32.5°	2701.7	2717.2	2753.4	2794.8	2805.1
35°	2603.5	2624.2	2665.6	2717.2	2727.6
37.5°	2515.7	2531.2	2582.9	2639.7	2655.2
40°	2407.6	2438.1	2489.8	2557.0	2582.9
42.5°	2299.1	2330.1	2392.1	2479.5	2510.5
45°	2185.4	2221.6	2299.1	2397.3	2438.1
47.5°	2071.7	2113.0	2200.9	2314.6	2361.1
50°	1942.4	1994.1	2102.7	2231.9	2283.6
52.5°	1818.4	1880.4	1999.3	2144.0	2211.2
55°	1689.2	1751.2	1906.3	2056.2	2128.5
57.5°	1544.4	1627.1	1797.7	1968.3	2045.8
60°	1410.6	1487.6	1694.3	1880.4	1957.9
62.5°	1265.8	1369.2	1591.0	1787.4	1864.9
65°	1115.9	1229.7	1482.4	1678.8	1756.4
67.5°	981.6	1105.6	1374.4	1570.3	1647.8
70°	821.3	976.4	1255.5	1451.4	1528.9
72.5°	671.4	842.0	1131.5	1322.7	1395.1
75°	526.7	717.9	1002.2	1172.8	1209.0
77.5°	392.8	593.9	867.8	940.2	914.4
80°	279.1	475.5	676.6	640.4	655.9
82.5°	180.9	361.8	418.7	475.5	490.5
85°	103.4	211.9	258.4	279.1	289.5
87.5°	46.5	77.5	103.4	103.4	98.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)