

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: P474816

Luminaire Tested: **22CZ2-100VHE-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474816  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-100VHE-UNV-L835-CD1-U  
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10020.6 lumens  
Efficiency: N/A  
Efficacy: 132.2 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

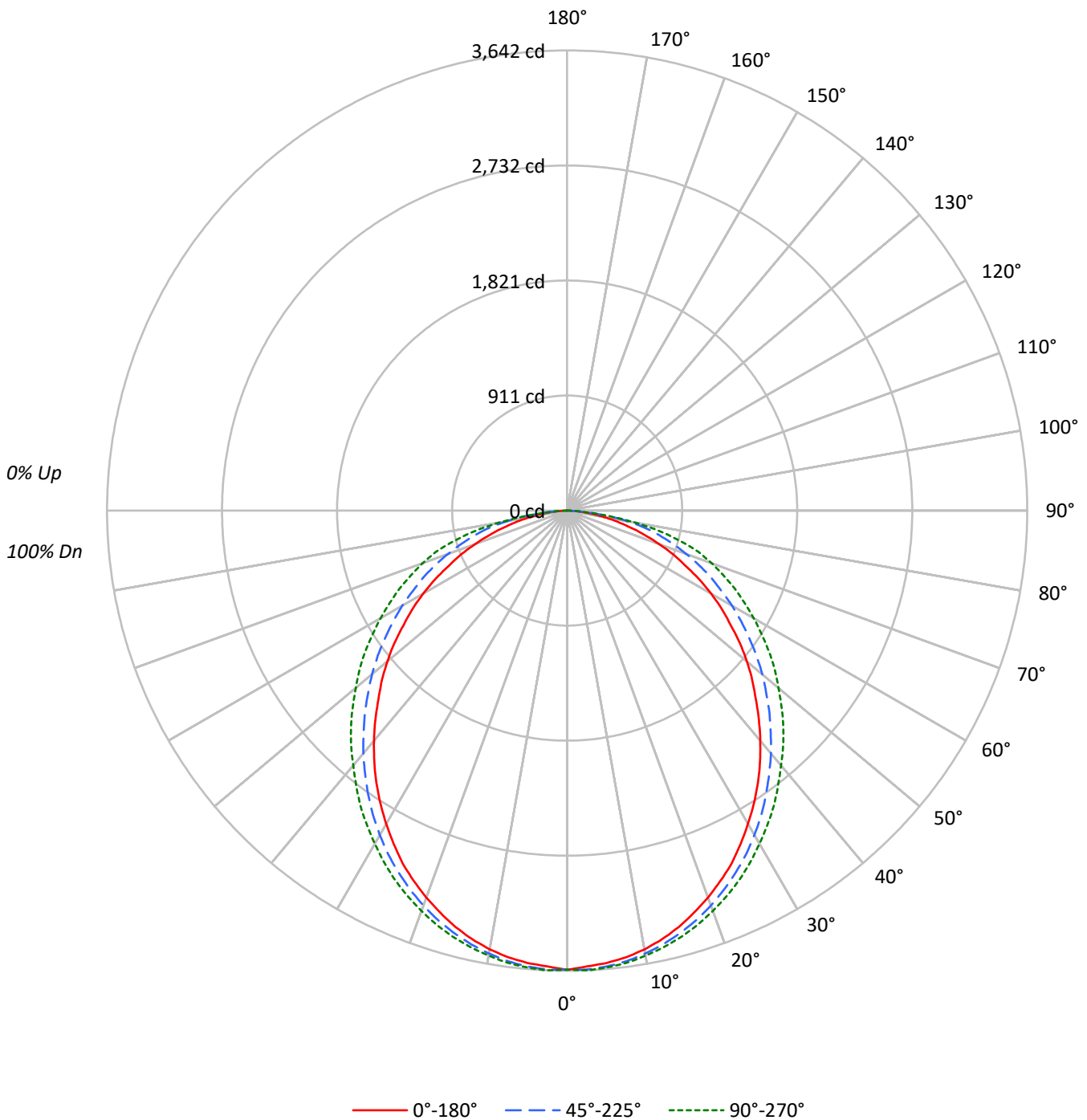
Input Watts (W): 75.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9779	9779	9779
5°	9708	9782	9805
10°	9635	9727	9774
15°	9504	9640	9729
20°	9333	9527	9655
25°	9149	9381	9576
30°	8896	9212	9463
35°	8647	9016	9371
40°	8354	8815	9254
45°	8035	8615	9211
50°	7775	8440	9141
55°	7412	8256	9160
60°	7078	8115	9186
65°	6580	8010	9331
70°	6082	7898	9564
75°	5439	7860	9622
80°	4562	7449	8401
85°	3532	5101	4773



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	343.3	3.4
10°-20°	974.6	9.7
20°-30°	1453.2	14.5
30°-40°	1715.5	17.1
40°-50°	1748.4	17.4
50°-60°	1576.8	15.7
60°-70°	1239.3	12.4
70°-80°	775.9	7.7
80°-90°	193.5	1.9
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°	2771.2	27.7
0°-40°	4486.7	44.8
0°-60°	7811.9	78.0
0°-90°	10020.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10020.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3634	3634	3634	3634	3634	
5°	3594	3602	3621	3630	3630	341
15°	3412	3426	3460	3486	3492	961
25°	3081	3105	3160	3208	3225	1417
35°	2632	2666	2745	2821	2853	1645
45°	2111	2158	2264	2374	2420	1633
55°	1580	1628	1760	1895	1952	1418
65°	1033	1097	1258	1398	1466	1030
75°	523	601	756	892	925	555
85°	114	146	165	165	155	138
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3634.0	3634.0	3634.0	3634.0	3634.0
2.5°	3610.7	3619.2	3636.1	3642.5	3642.5
5°	3593.8	3602.2	3621.3	3629.8	3629.8
7.5°	3566.2	3574.7	3598.0	3608.6	3610.7
10°	3526.0	3536.6	3559.9	3576.8	3576.8
12.5°	3475.2	3485.7	3515.4	3536.6	3538.7
15°	3411.6	3426.5	3460.3	3485.7	3492.1
17.5°	3337.5	3360.8	3398.9	3430.7	3437.0
20°	3259.2	3282.4	3326.9	3362.9	3371.4
22.5°	3172.3	3193.5	3246.4	3290.9	3301.5
25°	3081.3	3104.6	3159.6	3208.3	3225.3
27.5°	2973.3	3000.8	3066.4	3121.5	3138.4
30°	2863.1	2897.0	2964.8	3026.2	3045.3
32.5°	2750.9	2782.7	2858.9	2924.6	2950.0
35°	2632.3	2666.2	2744.6	2820.8	2852.6
37.5°	2507.4	2541.3	2626.0	2712.8	2742.4
40°	2378.2	2418.4	2509.5	2602.7	2634.4
42.5°	2246.9	2289.2	2384.5	2488.3	2530.7
45°	2111.4	2157.9	2263.8	2374.0	2420.5
47.5°	1988.5	2026.6	2136.8	2257.5	2301.9
50°	1857.2	1893.2	2016.1	2136.8	2183.4
52.5°	1723.8	1757.7	1889.0	2016.1	2073.2
55°	1579.8	1628.5	1759.8	1895.3	1952.5
57.5°	1452.7	1497.2	1632.8	1770.4	1825.5
60°	1315.1	1361.7	1507.8	1647.6	1706.9
62.5°	1177.4	1228.3	1376.5	1526.9	1581.9
65°	1033.4	1097.0	1257.9	1397.7	1465.5
67.5°	910.6	972.0	1130.9	1277.0	1336.3
70°	773.0	845.0	1003.8	1152.0	1215.6
72.5°	643.8	715.8	878.8	1027.1	1090.6
75°	523.1	601.4	756.0	891.6	925.4
77.5°	406.6	480.7	635.3	713.7	749.7
80°	294.4	366.4	480.7	533.7	542.1
82.5°	199.1	260.5	326.1	341.0	332.5
85°	114.4	146.1	165.2	165.2	154.6
87.5°	46.6	46.6	40.2	25.4	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)