

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: P474844

Luminaire Tested: **22CZ2-95VHE-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474844
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-95VHE-UNV-L840-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

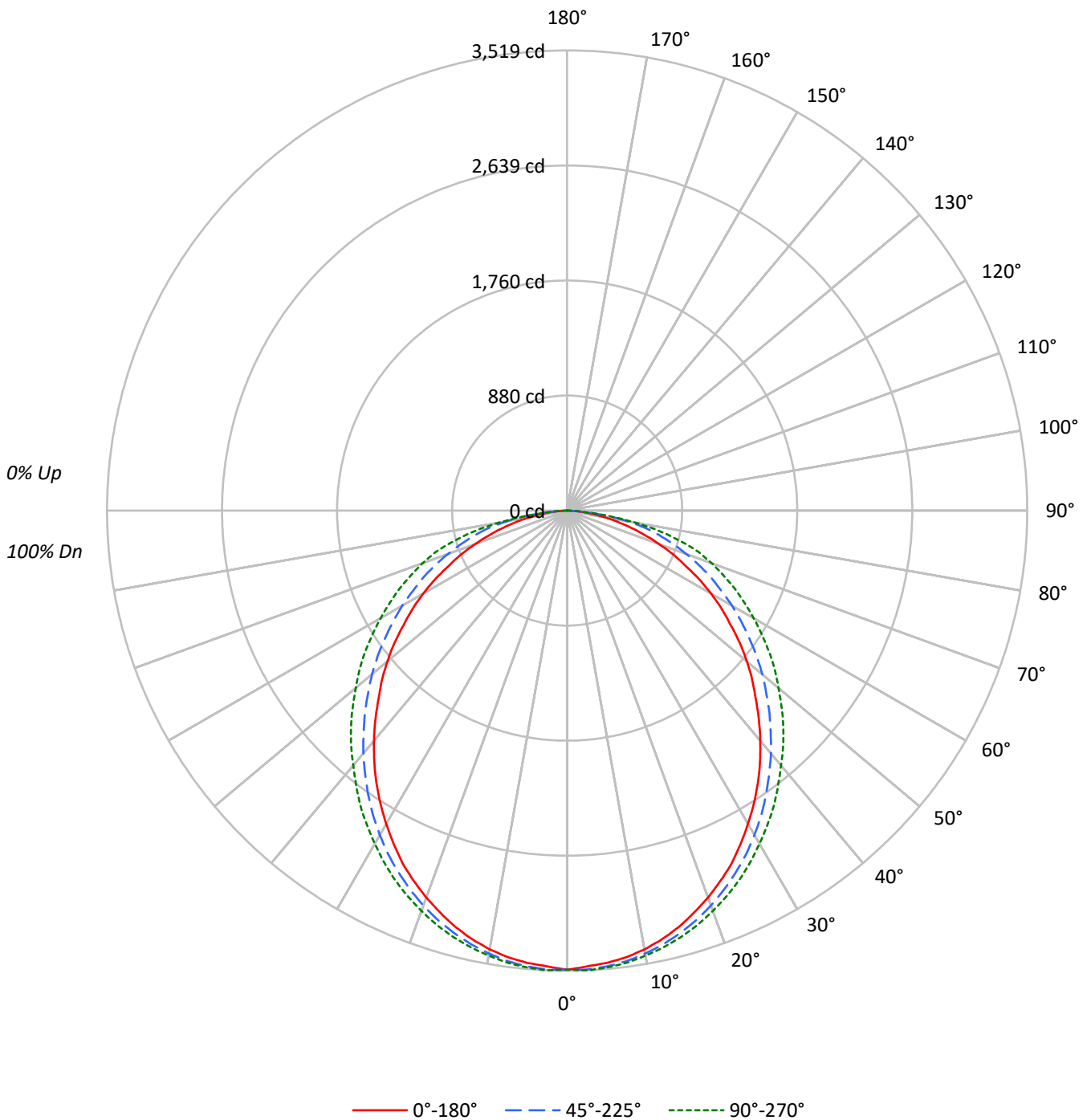
Lumens per Lamp: N/A
Luminaire Lumens: 9682.2 lumens
Efficiency: N/A
Efficacy: 136.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 71.2
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°	9449	9449	9449
5°	9380	9452	9474
10°	9309	9399	9443
15°	9183	9315	9400
20°	9018	9206	9328
25°	8840	9065	9253
30°	8596	8901	9143
35°	8355	8712	9054
40°	8072	8518	8942
45°	7763	8324	8901
50°	7513	8155	8832
55°	7162	7978	8851
60°	6839	7841	8876
65°	6358	7739	9016
70°	5877	7631	9241
75°	5255	7595	9297
80°	4407	7198	8117
85°	3412	4928	4613



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	331.7	3.4
10°-20°	941.7	9.7
20°-30°	1404.1	14.5
30°-40°	1657.6	17.1
40°-50°	1689.4	17.4
50°-60°	1523.5	15.7
60°-70°	1197.5	12.4
70°-80°	749.7	7.7
80°-90°	186.9	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°	2677.6	27.7
0°-40°	4335.2	44.8
0°-60°	7548.1	78.0
0°-90°	9682.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9682.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3511	3511	3511	3511	3511	
5°	3472	3481	3499	3507	3507	329
15°	3296	3311	3344	3368	3374	929
25°	2977	3000	3053	3100	3116	1369
35°	2543	2576	2652	2726	2756	1589
45°	2040	2085	2187	2294	2339	1578
55°	1526	1574	1700	1831	1887	1370
65°	998	1060	1215	1350	1416	996
75°	505	581	730	861	894	537
85°	110	141	160	160	149	133
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3511.3	3511.3	3511.3	3511.3	3511.3
2.5°	3488.7	3496.9	3513.3	3519.4	3519.4
5°	3472.4	3480.6	3499.0	3507.2	3507.2
7.5°	3445.8	3454.0	3476.5	3486.7	3488.7
10°	3406.9	3417.1	3439.6	3456.0	3456.0
12.5°	3357.8	3368.0	3396.7	3417.1	3419.2
15°	3296.4	3310.7	3343.5	3368.0	3374.2
17.5°	3224.8	3247.3	3284.1	3314.8	3321.0
20°	3149.1	3171.6	3214.6	3249.3	3257.5
22.5°	3065.2	3085.6	3136.8	3179.8	3190.0
25°	2977.2	2999.7	3052.9	3100.0	3116.3
27.5°	2872.8	2899.4	2962.9	3016.1	3032.4
30°	2766.4	2799.2	2864.7	2924.0	2942.4
32.5°	2658.0	2688.7	2762.3	2825.8	2850.3
35°	2543.4	2576.1	2651.9	2725.5	2756.2
37.5°	2422.7	2455.4	2537.3	2621.2	2649.8
40°	2297.9	2336.7	2424.7	2514.8	2545.5
42.5°	2171.0	2211.9	2304.0	2404.3	2445.2
45°	2040.0	2085.1	2187.4	2293.8	2338.8
47.5°	1921.4	1958.2	2064.6	2181.2	2224.2
50°	1794.5	1829.3	1948.0	2064.6	2109.6
52.5°	1665.6	1698.3	1825.2	1948.0	2003.2
55°	1526.5	1573.5	1700.4	1831.3	1886.6
57.5°	1403.7	1446.7	1577.6	1710.6	1763.8
60°	1270.7	1315.7	1456.9	1591.9	1649.2
62.5°	1137.7	1186.8	1330.0	1475.3	1528.5
65°	998.5	1059.9	1215.4	1350.5	1416.0
67.5°	879.9	939.2	1092.7	1233.8	1291.1
70°	746.9	816.4	969.9	1113.1	1174.5
72.5°	622.0	691.6	849.2	992.4	1053.8
75°	505.4	581.1	730.5	861.4	894.2
77.5°	392.9	464.5	613.9	689.6	724.3
80°	284.4	354.0	464.5	515.6	523.8
82.5°	192.3	251.7	315.1	329.4	321.3
85°	110.5	141.2	159.6	159.6	149.4
87.5°	45.0	45.0	38.9	24.6	14.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)