

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: P474293

Luminaire Tested: **24CZ2-95VHE-RDP-UNV-L840-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474293
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-95VHE-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: 6515.4 lumens
Efficiency: N/A
Efficacy: 96.4 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

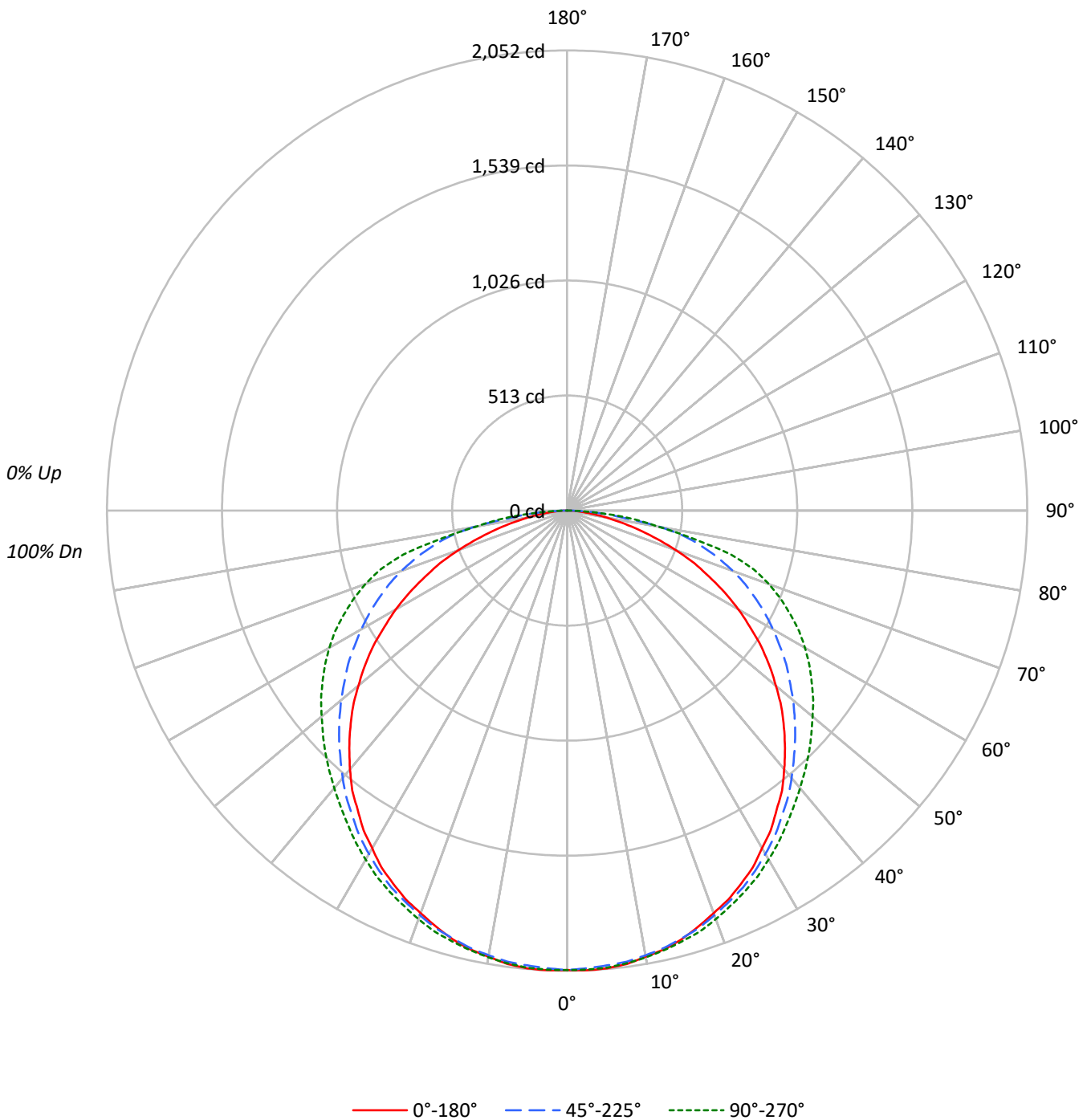
Input Watts (W): 67.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2757	2757	2757
5°	2767	2750	2763
10°	2760	2751	2764
15°	2755	2751	2769
20°	2735	2749	2776
25°	2725	2754	2783
30°	2701	2746	2792
35°	2675	2739	2803
40°	2645	2736	2838
45°	2601	2737	2902
50°	2543	2753	2990
55°	2479	2797	3123
60°	2375	2852	3296
65°	2223	2952	3498
70°	2021	3090	3762
75°	1713	3260	3932
80°	1353	3280	3179
85°	999	2496	2796



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.4	3.0
10°-20°	559.4	8.6
20°-30°	855.4	13.1
30°-40°	1045.6	16.0
40°-50°	1114.5	17.1
50°-60°	1065.6	16.4
60°-70°	902.7	13.9
70°-80°	606.7	9.3
80°-90°	171.2	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°	1609.1	24.7
0°-40°	2654.8	40.7
0°-60°	4834.8	74.2
0°-90°	6515.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6515.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2049	2049	2049	2049	2049	
5°	2049	2046	2036	2046	2046	195
15°	1978	1978	1975	1991	1988	558
25°	1836	1842	1855	1871	1874	846
35°	1629	1642	1668	1700	1706	1020
45°	1367	1390	1438	1500	1525	1054
55°	1057	1096	1192	1286	1332	941
65°	698	769	927	1050	1099	693
75°	330	449	627	734	756	353
85°	65	133	162	175	181	80
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2049.0	2049.0	2049.0	2049.0	2049.0
2.5°	2052.2	2052.2	2042.5	2049.0	2049.0
5°	2049.0	2045.8	2036.1	2045.8	2045.8
7.5°	2039.3	2036.1	2029.6	2039.3	2036.1
10°	2019.9	2019.9	2013.4	2023.1	2023.1
12.5°	2003.7	2000.5	1997.3	2010.2	2007.0
15°	1977.9	1977.9	1974.6	1990.8	1987.6
17.5°	1945.5	1948.8	1952.0	1964.9	1968.2
20°	1910.0	1916.4	1919.7	1939.1	1939.1
22.5°	1877.6	1880.9	1887.3	1906.7	1906.7
25°	1835.6	1842.1	1855.0	1871.2	1874.4
27.5°	1793.6	1796.8	1813.0	1835.6	1838.8
30°	1738.6	1748.3	1767.7	1793.6	1796.8
32.5°	1690.1	1699.8	1722.4	1748.3	1754.8
35°	1628.7	1641.6	1667.5	1699.8	1706.3
37.5°	1573.7	1583.4	1615.7	1651.3	1661.0
40°	1506.1	1525.2	1557.5	1599.6	1615.7
42.5°	1438.2	1457.6	1496.4	1551.1	1570.5
45°	1367.1	1389.7	1438.2	1499.6	1525.2
47.5°	1295.9	1321.8	1376.8	1447.9	1477.0
50°	1215.1	1247.4	1315.3	1396.2	1428.5
52.5°	1137.5	1176.3	1250.7	1341.2	1383.2
55°	1056.7	1095.5	1192.5	1286.2	1331.5
57.5°	966.1	1017.9	1124.6	1231.3	1279.8
60°	882.4	930.6	1059.9	1176.3	1224.8
62.5°	791.9	856.5	995.2	1118.1	1166.6
65°	698.1	769.2	927.3	1050.2	1098.7
67.5°	614.0	691.6	859.8	982.3	1030.8
70°	513.8	610.8	785.4	907.9	956.4
72.5°	420.0	526.7	707.8	827.4	872.7
75°	329.5	449.1	627.0	733.7	756.3
77.5°	245.7	371.5	542.9	588.2	572.0
80°	174.6	297.5	423.3	400.6	410.3
82.5°	113.2	226.3	261.9	297.5	306.8
85°	64.7	132.6	161.7	174.6	181.1
87.5°	29.1	48.5	64.7	64.7	61.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)