

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: P474244

Luminaire Tested: **24CZ2-100VHE-RDP-UNV-L835-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474244
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-100VHE-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: 6705.5 lumens
Efficiency: N/A
Efficacy: 94.3 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

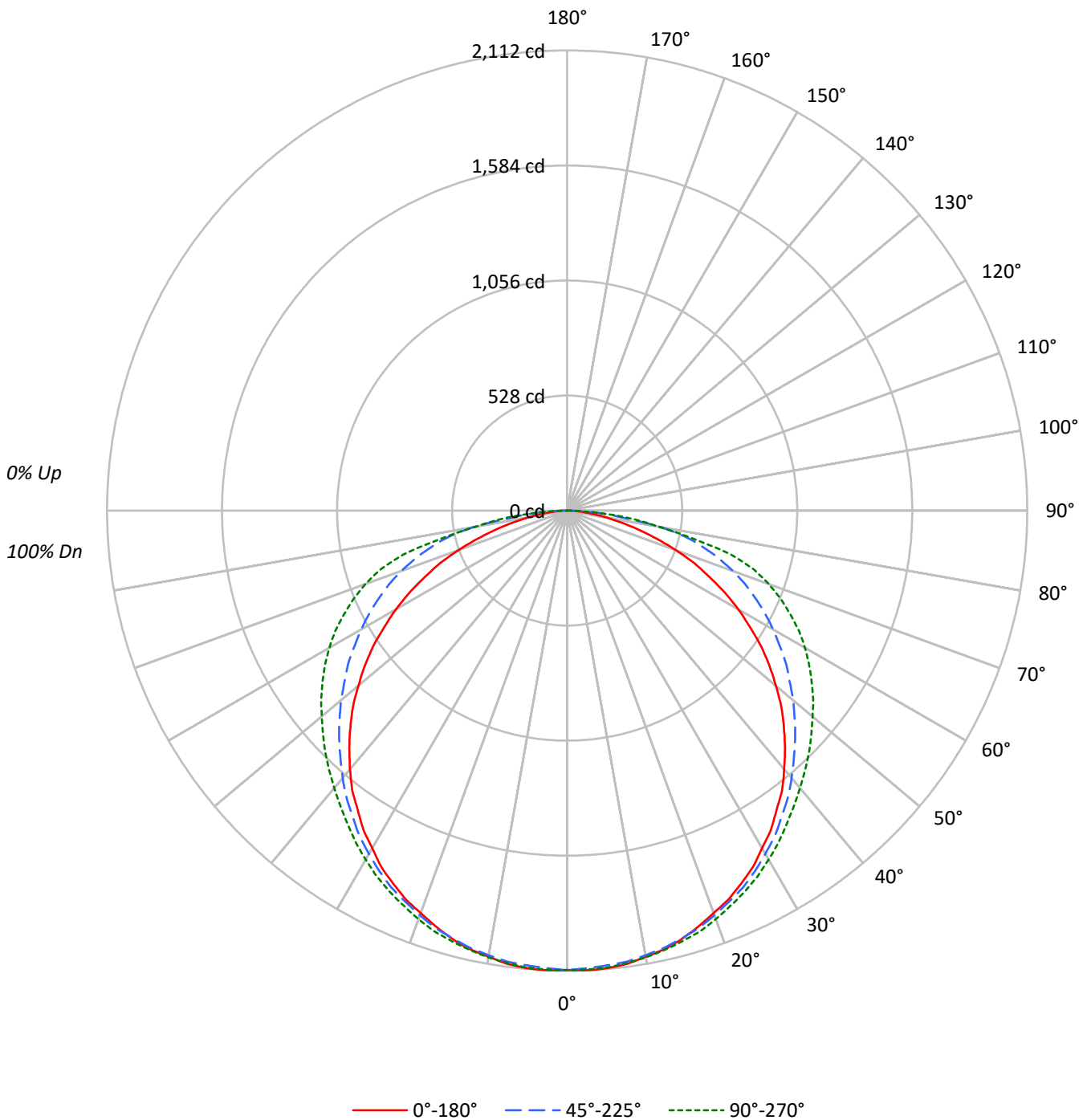
Input Watts (W): 71.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2837	2837	2837
5°	2848	2830	2844
10°	2840	2831	2845
15°	2835	2831	2849
20°	2815	2829	2857
25°	2805	2834	2864
30°	2780	2827	2873
35°	2753	2819	2884
40°	2723	2816	2921
45°	2677	2817	2987
50°	2618	2834	3077
55°	2551	2879	3215
60°	2444	2935	3392
65°	2287	3039	3600
70°	2080	3180	3872
75°	1763	3354	4047
80°	1392	3375	3272
85°	1028	2569	2878



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.0	3.0
10°-20°	575.7	8.6
20°-30°	880.3	13.1
30°-40°	1076.1	16.0
40°-50°	1147.0	17.1
50°-60°	1096.7	16.4
60°-70°	929.0	13.9
70°-80°	624.4	9.3
80°-90°	176.2	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°	1656.1	24.7
0°-40°	2732.2	40.7
0°-60°	4975.9	74.2
0°-90°	6705.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6705.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2109	2109	2109	2109	2109	
5°	2109	2105	2096	2105	2105	200
15°	2036	2036	2032	2049	2046	574
25°	1889	1896	1909	1926	1929	871
35°	1676	1690	1716	1749	1756	1050
45°	1407	1430	1480	1543	1570	1085
55°	1088	1127	1227	1324	1370	969
65°	718	792	954	1081	1131	713
75°	339	462	645	755	778	363
85°	67	136	166	180	186	82
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2108.8	2108.8	2108.8	2108.8	2108.8
2.5°	2112.1	2112.1	2102.1	2108.8	2108.8
5°	2108.8	2105.4	2095.5	2105.4	2105.4
7.5°	2098.8	2095.5	2088.8	2098.8	2095.5
10°	2078.8	2078.8	2072.2	2082.2	2082.2
12.5°	2062.2	2058.9	2055.5	2068.8	2065.5
15°	2035.6	2035.6	2032.2	2048.9	2045.6
17.5°	2002.3	2005.6	2008.9	2022.3	2025.6
20°	1965.7	1972.3	1975.7	1995.6	1995.6
22.5°	1932.4	1935.7	1942.4	1962.4	1962.4
25°	1889.1	1895.8	1909.1	1925.8	1929.1
27.5°	1845.9	1849.2	1865.9	1889.1	1892.5
30°	1789.3	1799.3	1819.3	1845.9	1849.2
32.5°	1739.4	1749.4	1772.7	1799.3	1806.0
35°	1676.2	1689.5	1716.1	1749.4	1756.0
37.5°	1619.6	1629.6	1662.9	1699.5	1709.5
40°	1550.1	1569.7	1603.0	1646.2	1662.9
42.5°	1480.2	1500.1	1540.1	1596.3	1616.3
45°	1407.0	1430.3	1480.2	1543.4	1569.7
47.5°	1333.8	1360.4	1416.9	1490.2	1520.1
50°	1250.6	1283.8	1353.7	1436.9	1470.2
52.5°	1170.7	1210.6	1287.2	1380.3	1423.6
55°	1087.5	1127.4	1227.3	1323.8	1370.4
57.5°	994.3	1047.6	1157.4	1267.2	1317.1
60°	908.1	957.7	1090.8	1210.6	1260.5
62.5°	815.0	881.5	1024.3	1150.7	1200.6
65°	718.5	791.7	954.4	1080.8	1130.8
67.5°	631.9	711.8	884.8	1011.0	1060.9
70°	528.8	628.6	808.3	934.4	984.3
72.5°	432.3	542.1	728.4	851.6	898.2
75°	339.1	462.2	645.2	755.1	778.4
77.5°	252.9	382.4	558.7	605.3	588.7
80°	179.7	306.2	435.6	412.3	422.3
82.5°	116.5	232.9	269.5	306.2	315.8
85°	66.6	136.4	166.4	179.7	186.4
87.5°	29.9	49.9	66.6	66.6	63.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)