

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: P474193

Luminaire Tested: **24CZ2-95VHE-RDP-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474193
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-L830-CD1-U
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP
INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6170.1 lumens
Efficiency: N/A
Efficacy: 91.3 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

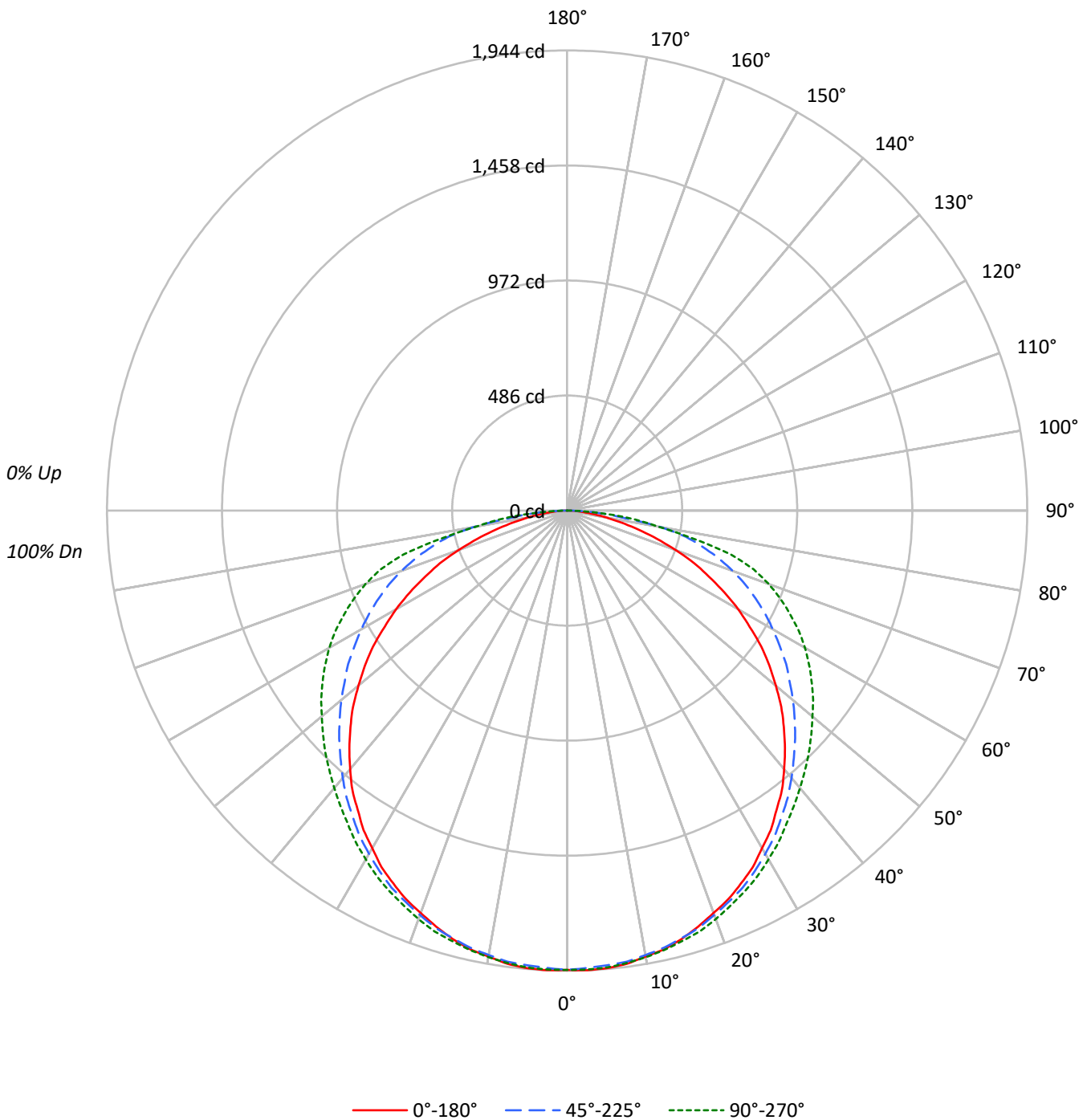
Input Watts (W): 67.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2611	2611	2611
5°	2621	2604	2617
10°	2613	2605	2618
15°	2609	2605	2622
20°	2590	2603	2629
25°	2581	2608	2635
30°	2558	2601	2644
35°	2533	2594	2654
40°	2505	2591	2687
45°	2463	2592	2748
50°	2409	2607	2832
55°	2347	2649	2958
60°	2249	2701	3121
65°	2105	2796	3313
70°	1914	2926	3563
75°	1622	3086	3723
80°	1282	3106	3011
85°	945	2364	2648



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.1	3.0
10°-20°	529.7	8.6
20°-30°	810.0	13.1
30°-40°	990.2	16.0
40°-50°	1055.5	17.1
50°-60°	1009.1	16.4
60°-70°	854.8	13.9
70°-80°	574.5	9.3
80°-90°	162.1	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°	1523.8	24.7
0°-40°	2514.1	40.7
0°-60°	4578.6	74.2
0°-90°	6170.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6170.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1940	1940	1940	1940	1940	
5°	1940	1937	1928	1937	1937	184
15°	1873	1873	1870	1885	1882	528
25°	1738	1744	1757	1772	1775	801
35°	1542	1555	1579	1610	1616	966
45°	1295	1316	1362	1420	1444	999
55°	1001	1037	1129	1218	1261	891
65°	661	728	878	995	1040	656
75°	312	425	594	695	716	334
85°	61	126	153	165	172	76
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1940.4	1940.4	1940.4	1940.4	1940.4
2.5°	1943.5	1943.5	1934.3	1940.4	1940.4
5°	1940.4	1937.4	1928.2	1937.4	1937.4
7.5°	1931.2	1928.2	1922.0	1931.2	1928.2
10°	1912.9	1912.9	1906.7	1915.9	1915.9
12.5°	1897.6	1894.5	1891.4	1903.7	1900.6
15°	1873.1	1873.1	1870.0	1885.3	1882.2
17.5°	1842.4	1845.5	1848.6	1860.8	1863.9
20°	1808.8	1814.9	1817.9	1836.3	1836.3
22.5°	1778.1	1781.2	1787.3	1805.7	1805.7
25°	1738.3	1744.4	1756.7	1772.0	1775.1
27.5°	1698.5	1701.6	1716.9	1738.3	1741.4
30°	1646.5	1655.6	1674.0	1698.5	1701.6
32.5°	1600.5	1609.7	1631.2	1655.6	1661.8
35°	1542.4	1554.6	1579.1	1609.7	1615.8
37.5°	1490.3	1499.5	1530.1	1563.8	1573.0
40°	1426.3	1444.4	1475.0	1514.8	1530.1
42.5°	1362.0	1380.4	1417.1	1468.9	1487.2
45°	1294.6	1316.1	1362.0	1420.2	1444.4
47.5°	1227.3	1251.8	1303.8	1371.2	1398.7
50°	1150.7	1181.3	1245.6	1322.2	1352.8
52.5°	1077.2	1114.0	1184.4	1270.1	1309.9
55°	1000.7	1037.4	1129.3	1218.1	1261.0
57.5°	914.9	963.9	1065.0	1166.0	1212.0
60°	835.6	881.3	1003.7	1114.0	1159.9
62.5°	749.9	811.1	942.5	1058.9	1104.8
65°	661.1	728.5	878.2	994.6	1040.5
67.5°	581.5	655.0	814.2	930.3	976.2
70°	486.6	578.4	743.8	859.8	905.8
72.5°	397.8	498.8	670.3	783.6	826.4
75°	312.0	425.3	593.7	694.8	716.2
77.5°	232.7	351.8	514.1	557.0	541.7
80°	165.4	281.7	400.8	379.4	388.6
82.5°	107.2	214.3	248.0	281.7	290.6
85°	61.2	125.5	153.1	165.4	171.5
87.5°	27.6	45.9	61.2	61.2	58.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)