

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: P182394

Luminaire Tested: **24FR-69-UNV-L827-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P182394
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26767)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24FR-69-UNV-L827-CD1-U
Description: METALUX 2X4 FR TROFFER LED FIXTURE

Light Source: EATON LED 2700K
Ballast/Driver: OSRAM ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6436.0 lumens
Efficiency: N/A
Efficacy: 94.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.32
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

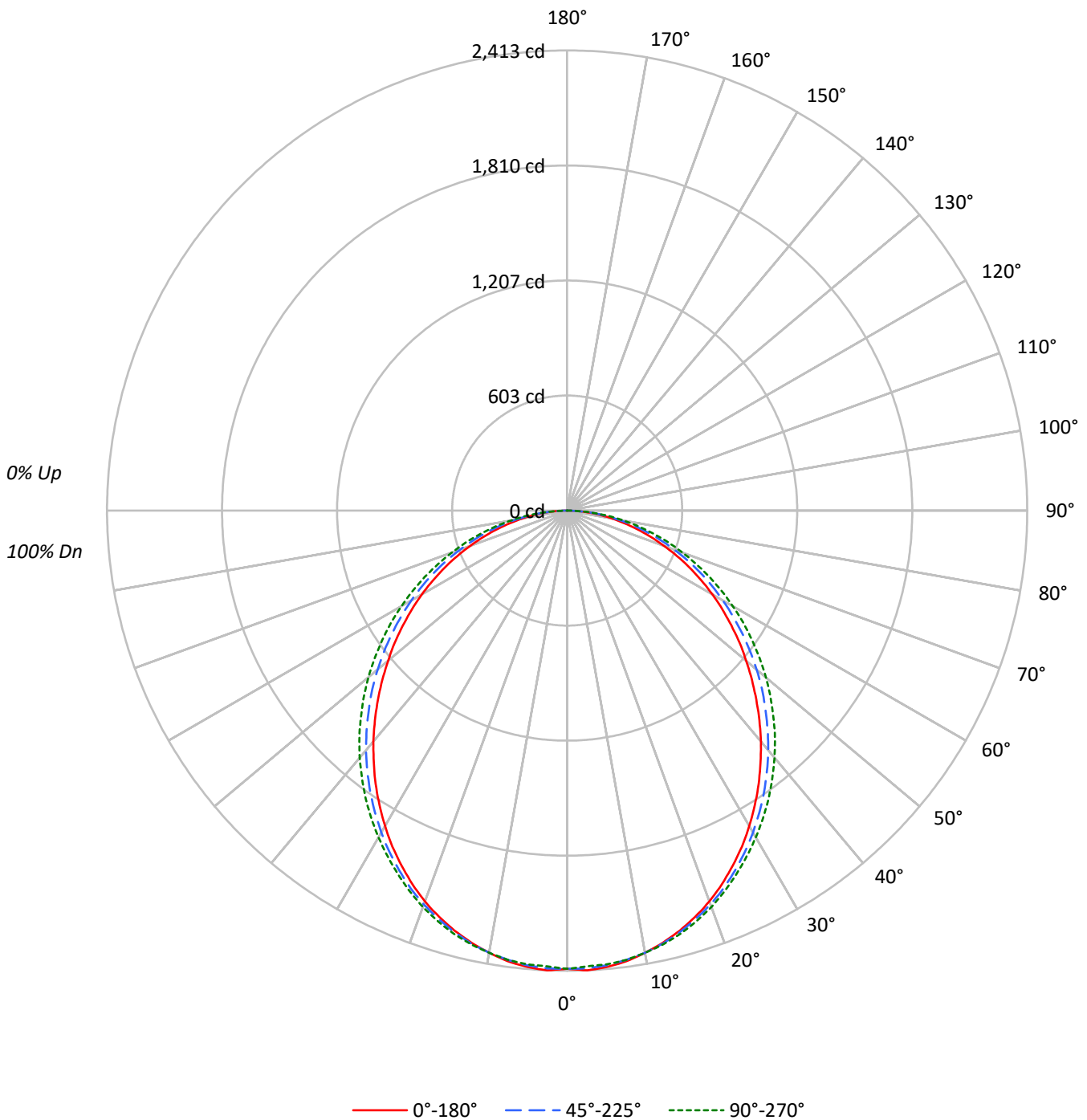
Input Watts (W): 68.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70
3	90	80	71	65	88	78	70	64	75	69	63	72	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	50
5	76	63	54	48	74	62	54	47	60	52	47	58	51	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3233	3233	3233
5°	3245	3232	3226
10°	3217	3217	3217
15°	3176	3187	3200
20°	3123	3147	3167
25°	3050	3091	3121
30°	2968	3028	3074
35°	2876	2957	3026
40°	2776	2882	2972
45°	2669	2798	2910
50°	2563	2716	2848
55°	2466	2625	2774
60°	2366	2537	2699
65°	2257	2450	2622
70°	2126	2351	2527
75°	1996	2245	2439
80°	1847	2111	2327
85°	1649	1959	2127



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	227.0	3.5
10°-20°	644.0	10.0
20°-30°	956.4	14.9
30°-40°	1122.2	17.4
40°-50°	1132.2	17.6
50°-60°	1000.2	15.5
60°-70°	759.9	11.8
70°-80°	454.7	7.1
80°-90°	139.3	2.2
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°	1827.4	28.4
0°-40°	2949.6	45.8
0°-60°	5082.0	79.0
0°-90°	6436.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6436.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2402	2402	2402	2402	2402	
5°	2402	2384	2393	2390	2389	228
15°	2280	2269	2288	2294	2297	643
25°	2054	2051	2082	2093	2102	946
35°	1751	1757	1800	1825	1842	1094
45°	1402	1418	1471	1514	1530	1083
55°	1051	1068	1119	1167	1183	941
65°	709	726	769	808	824	702
75°	384	402	432	457	469	407
85°	107	116	127	135	138	120
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2402.5	2402.5	2402.5	2402.5	2402.5
2.5°	2413.4	2394.8	2402.5	2399.5	2391.7
5°	2402.5	2384.0	2393.3	2390.2	2388.6
7.5°	2384.0	2366.9	2376.2	2376.2	2376.2
10°	2354.6	2340.6	2354.6	2354.6	2354.6
12.5°	2320.5	2308.1	2325.1	2326.7	2329.8
15°	2280.3	2269.4	2288.0	2294.2	2297.3
17.5°	2233.8	2224.5	2244.6	2253.9	2257.0
20°	2181.2	2171.9	2198.2	2204.4	2212.1
22.5°	2120.8	2116.2	2144.0	2150.2	2159.5
25°	2054.2	2051.1	2082.1	2092.9	2102.2
27.5°	1986.1	1984.6	2018.6	2032.6	2041.9
30°	1910.3	1911.8	1949.0	1966.0	1978.4
32.5°	1831.3	1836.0	1876.2	1896.3	1911.8
35°	1750.8	1757.0	1800.4	1825.1	1842.2
37.5°	1665.7	1675.0	1721.4	1750.8	1767.9
40°	1580.5	1591.4	1640.9	1671.9	1692.0
42.5°	1492.3	1506.2	1555.8	1596.0	1613.0
45°	1402.5	1418.0	1470.6	1514.0	1529.5
47.5°	1314.3	1334.4	1385.5	1428.8	1445.9
50°	1224.5	1243.1	1297.3	1342.1	1360.7
52.5°	1140.9	1157.9	1209.0	1255.5	1272.5
55°	1051.1	1068.1	1119.2	1167.2	1182.7
57.5°	966.0	981.5	1031.0	1079.0	1094.5
60°	879.3	894.8	942.8	986.1	1003.1
62.5°	794.1	809.6	857.6	897.9	913.3
65°	709.0	726.0	769.4	808.1	823.6
67.5°	625.4	642.4	682.7	719.8	732.2
70°	540.3	558.8	597.5	631.6	642.4
72.5°	461.3	479.9	513.9	543.4	557.3
75°	383.9	402.5	431.9	456.7	469.1
77.5°	309.6	328.2	351.4	371.5	382.4
80°	238.4	255.4	272.5	292.6	300.3
82.5°	170.3	184.2	198.1	213.6	219.8
85°	106.8	116.1	126.9	134.7	137.8
87.5°	46.4	52.6	54.2	55.7	54.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)